A000A01A-GAT
This Owner's Manual should be considered a part of the car and remain with it when it is sold for the use of the next owner.

ORIGINAL:	NAME:	
ADDRESS:	STREET:	
	TOWN:	
	COUNTRY:	
	P.CODE:	
SUBSEQUENT:	NAME:	
ADDRESS:	STREET:	
	TOWN:	
	COUNTRY:	
	P.CODE:	









A030A01JM-GAT

Operation Maintenance Specifications



A030A01JM

All information in the Owner's Manual is current at the time of publication. Hyundai reserves the right to make changes at any time as part of our policy of continual product improvement may be carried out.

This manual applies to current Hyundai **TUESON** models and explanations of optional as well as standard equipment are included. As a result, you may find material in this manual that does not apply to your specific vehicle.

Please note that some **TUCSON** models are equipped with Right-Hand Drive (RHD). The explanations and illustrations for some operations in RHD models are opposite of those written in this manual.

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#### A020A01A-AAT

# **RESPONSIBILITY FOR MAINTENANCE**

The maintenance requirements for your new Hyundai are found in Section 5. As the owner, it is your responsibility to see that all maintenance operations specified by the manufacturer are carried out at the appropriate intervals. When the vehicle is used in severe driving conditions, more frequent maintenance is required for some operations. Maintenance requirements for severe operating conditions are also included in Section 5.





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A040A01A-AAT

## **FOREWORD**

Thank you for choosing Hyundai. We are pleased to welcome you to the growing number of discriminating people who drive Hyundais. The advanced engineering and high-quality construction of each Hyundai we build is something of which we're very proud.

Your Owner's Manual will introduce you to the features and operation of your new Hyundai. It is suggested that you read it carefully because the information it contains can contribute greatly to the satisfaction you receive from your new car.

The manufacturer also recommends that all service and maintenance on your car be performed by an authorized Hyundai dealer. Hyundai dealers are prepared to provide high-quality service, maintenance and any other assistance that may be required.

A050A05A-AAT

# HYUNDAI MOTOR COMPANY

**Note:** Because future owners will also need the information included in this manual, if you sell this Hyundai, please leave the manual in the vehicle for their use. Thank you.



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## **CAUTION:**

Severe engine and transaxle damage may result from the use of poor quality fuels and lubricants that do not meet Hyundai specifications. You must always use high quality fuels and lubricants that meet the specifications listed on Page 9-4 in the Vehicle Specifications section of the Owner's Manual.

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**-**











# CAUTION: MODIFICATIONS TO YOUR HYUNDAI

# Modification of components may void the manufacturer's warranty

Your Hyundai should not be modified in any way. Modifications may adversely affect the safety, durability and performance of your Hyundai. Components which are subjected to modification or are added to the vehicle resulting in consequential damage are not covered by the vehicle manufacturer's warranty.





# TWO-WAY RADIO OR CELLULAR TELEPHONE INSTALLATION

Your vehicle is equipped with electronic fuel injection and other electronic components. It is possible for an improperly installed/adjusted two-way radio or cellular telephone to adversely affect electronic systems. For this reason, we recommend that you carefully follow the radio manufacturer's instructions or consult your Hyundai dealer for precautionary measures or special instructions if you choose to install one of these devices.



A090A01A-AAT

# SAFETY AND VEHICLE DAMAGE WARNING

This manual includes information titled as WARNING, CAUTION and NOTE. These titles indicate the following:



# WARNING:

This indicates that a condition may result in harm, serious injury or death to you or other persons if the warning is not heeded. Follow the advice provided with the warning.



# **CAUTION:**

This indicates that a condition may result in damage to your vehicle or its equipment if the caution is not heeded. Follow the advice provided with the caution.

# NOTE:

This indicates that interesting or helpful information is being provided.









A100A01L-GAT

# GUIDE TO HYUNDAI GENUINE PARTS

# 1. What are Hyundai Genuine Parts?

Hyundai Genuine Parts are the same parts used by Hyundai Motor Company to manufacture vehicles. They are designed and tested for the optimum safety, performance, and reliability to our customers.

# 2. Why should you use genuine parts?

Hyundai Genuine Parts are engineered and built to meet rigid manufacturing requirements. Using imi-

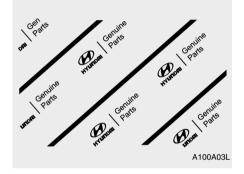
tation, counterfeit or used salvage parts are not covered under the Hyundai New Vehicle Limited Warranty or any other Hyundai warranty. In addition, any damage to or failure of Genuine Hyundai Parts caused by the installation or failure of an imitation, counterfeit or used salvage part is not covered by Hyundai Motor Company.

# 3. How can you tell if you purchasing Hyundai Genuine Parts?

Look for the Hyundai Genuine Parts Logo on the package (see below).

The export specifications are written in English only.

Hyundai Genuine Parts are only sold through authorized Hyundai Dealership and Service Center.



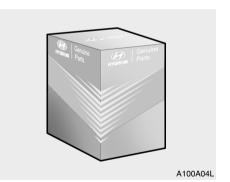




A100A01L



A100A02L







# **TABLE OF CONTENTS**

1 **FEATURES OF YOUR HYUNDAI** 2 **DRIVING YOUR HYUNDAI** 3 WHAT TO DO IN AN EMERGENCY **CORROSION PREVENTION & APPEARANCE CARE** 5 **VEHICLE MAINTENANCE REQUIREMENTS** 6 **DO-IT-YOURSELF MAINTENANCE** 7 **EMISSION CONTROL SYSTEMS** 8 **CONSUMER INFORMATION VEHICLE SPECIFICATIONS** 9 **INDEX** 10

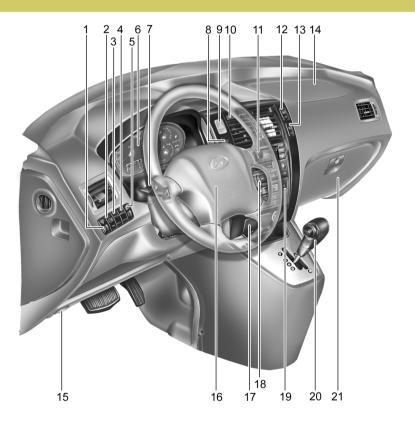
SECTION

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# INSTRUMENTS AND CONTROLS (LEFT-HAND DRIVE)

B250A01JM-GAT



B250A01JM

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- 2. Rear Fog Light Switch (If installed)
- 3. Traction Control System (If installed)
- 4. 4WD Lock Switch
- 5. Headlight Leveling Device Switch (If installed)
- 6. Instrument Cluster
- 7. Multi-Function Light Switch
- 8. Front Window Defroster (If installed)
- 9. Hazard Warning Light Switch
- 10. Digital Clock
- 11. Windshield Wiper/Washer Switch

- Rear Defroster and Outside Rearview Mirror Heater Switch (If installed)
- 13. Front Fog Light Switch (If installed)
- 14. Passenger's Airbag (If installed)
- 15. Hood Release Lever
- 16. Horn and Driver's Airbag (If installed)
- 17. Ashtray
- 18. Cruise Control Switch (If installed)
- 19. Heating/Air Conditioning Control Panel (If installed)
- 20. Shift Lever (If installed)
- 21. Glove Box



# CAUTION:

When installing a container of liquid air freshener inside the vehicle, do not place it near the instrument cluster nor on the instrument panel surface. If there is any leakage from the air freshener onto these areas (Instrument cluster, instrument panel or air ventilator), it may damage these parts. If the liquid from the air freshener does leak onto these areas, wash them with water immediately.

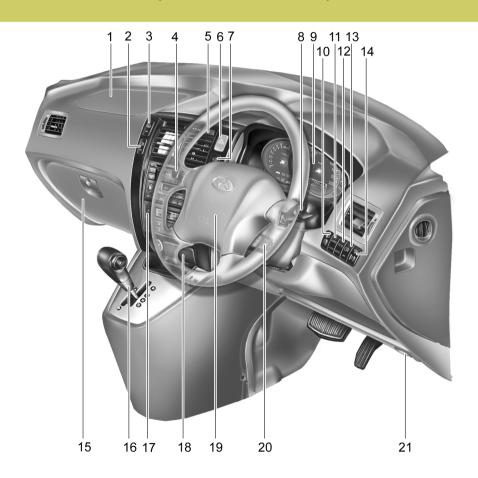






# INSTRUMENTS AND CONTROLS (RIGHT-HAND DRIVE)

B250A01JM-GAT



B250B01JM



- 2. Front Fog Light Switch (If installed)
- Rear Defroster and Outside Rearview Mirror Heater Switch (If installed)
- 4. Windshield Wiper/Washer Switch
- 5. Digital Clock
- 6. Hazard Warning Light Switch
- 7. Front Window Defroster (If installed)
- 8. Multi-Function Light Switch
- 9. Instrument Cluster
- 10. Panel Brightness Control Knob (Rheostat Switch)

- 11. 4WD Lock Switch
- 12. Traction Control System (If installed)
- 13. Rear Fog Light Switch (If installed)
- 14. Headlight Leveling Device System (If installed)
- 15. Glove Box
- 16. Shift Lever (If installed)
- 17. Heating/Air Conditioning Control Panel (If installed)
- 18. Ashtray
- 19. Horn and Driver's Airbag (If installed)
- 20. Cruise Control Switch (If installed)
- 21. Hood Release Lever



# **CAUTION:**

When installing a container of liquid air freshener inside the vehicle, do not place it near the instrument cluster nor on the instrument panel surface. If there is any leakage from the air freshener onto these areas (Instrument cluster, instrument panel or air ventilator), it may damage these parts. If the liquid from the air freshener does leak onto these areas, wash them with water immediately.





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#### B255A01JM-GAT

# INDICATOR SYMBOLS ON THE INSTRUMENT PANEL



Turn Signal Indicator Lights



ABS Service Reminder Indicator (If installed)



TCS OFF Traction Control Indicator Light (If installed)





Electronic Stability Program Indicator Lights (If installed)



High Beam Indicator Light



Low Oil Pressure Warning Light



Parking Brake/Brake Fluid Level Warning Light



Charging System Warning Light



Door Ajar Warning Light and Chime (If installed)



Low Fuel Level Warning Light



Tail Gate Open Warning Light



SRS (Airbag) Service Reminder Indicator (SRI)(If installed)



Malfunction Indicator Light (If installed)



4WD System Warning Light (If installed)



4WD Lock Indicator Light (If installed)



Seat Belt Reminder Light and Chime



Immobilizer Warning Light (If Installed)



Cruise Indicator (If installed)



Diesel Preheat Indicator Light-Amber (Diesel Engine)



Fuel Filter Warning Light-Red (Diesel Engine)

<sup>\*</sup> More detailed explanations of these items will be found beginning on page 1-48.

# **FEATURES OF YOUR HYUNDAI**

ruei Recommendations	1-∠
Breaking In Your New Hyundai	1-3
Keys (Immobilizer System)	1-5
Door Locks (Theft-Alarm System)	1-8, 1-11
Power Windows	1-14
Seats	1-15
Seat Belts	1-21
Child Restraint System	1-28
Supplemental Restraint (AIRBAG) System	1-38
nstrument Cluster and Indicator Lights	1-46
Warning and Indicator Lights	1-48
Multi-function Light Switch	1-59
Windshield Wiper/Washer Switch	1-61
Sunroof	1-68
Mirror	1-73
How to use luggage room	1-80
Hood Release	
Cruise Control	
Heating and Cooling Control	
Stereo Sound System	
Audio System	1-110
Antenna	1-147

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# **FUEL RECOMMENDATIONS**

#### B010A02O-GAT

# **Use Unleaded Gasoline**



Unleaded gasoline with a Pump Octane Rating of 87 (Research Octane Number 91) or higher must be used in Hyundai vehicle. If leaded gasoline is used, it will cause the catalytic converter to become ineffective and the emission control system to malfunction.

This can also result in increased maintenance expense. To avoid accidental use of leaded fuel, the large nozzle used with leaded gasoline at service stations can not be inserted into fuel tank opening of Hyundai vehicle.

# NOTE:

- o For some countries, Hyundai vehicles are designed to use leaded gasoline. When you are going to use leaded gasoline, ask to Hyundai dealer whether leaded gasoline in your vehicle is available or not.
- o Octane rating of leaded gasoline is same with unleaded one.

## **Use Diesel**

Diesel fuel of 52 to 54 cetane is used in Hyundai vehicle. If two types of diesel fuel are available, use summer or winter fuel properly according to the following temperature conditions.

- o Above -5°C (23°F) ... Summer type diesel fuel.
- o Below -5°C (23°F) ... Winter type diesel fuel.

Watch the fuel level in the tank very carefully: If the engine stops through fuel failure, the circuits must be completely purged to permit restarting.



Do not let any gasoline or water enter the tank. This would make it necessary to drain it out and to bleed the lines to avoid jamming the injection pump and damaging the engine.

#### B010B01A-AAT

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# What About Gasohol?

Gasohol (a mixture of 90% unleaded gasoline and 10% ethanol or grain alcohol) may be used in your Hyundai. However, if your engine develops drive ability problems, the use of 100% unleaded gasoline is recommended. Fuels with unspecified quantities of alcohol, or alcohols other than ethanol, should not be used.







# B010D01S-AAT

### Do not Use Methanol

Fuels containing methanol (wood alcohol) should not be used in your Hyundai. This type of fuel can reduce vehicle performance and damage components of the fuel system.



# **CAUTION:**

Your Hyundai's New Vehicle Limited Warranty may not cover damage to the fuel system and performance problems that are caused by the use of methanol or fuels containing methanol.

#### B010E01A-AAT

# **Gasolines for Cleaner Air**

To help contribute to cleaner air, Hyundai recommends that you use gasolines treated with detergent additives, which help prevent deposit formation in the engine. These gasolines will help the engine run cleaner and enhance performance of the Emission Control System.

#### B010F01A-AAT

# **Operation in Foreign Countries**

If you are going to drive your Hyundai in another country, be sure to:

- o Observe all regulations regarding registration and insurance.
- o Determine that acceptable fuel is available.

# BREAKING IN YOUR NEW \( \begin{array}{c} 3 \\ HYUNDAI \end{array}

B020A01S-GAT

# During the First 2,000 Km (1,200 Miles) (Gasoline Engine)

No formal 'break-in' procedure is required with your new Hyundai. However, you can contribute to the economical operation and durability of your Hyundai by observing the following recommendations during the first 2,000 km (1,200 miles).

- Don't drive faster than 88 km/h (55 mph).
- While driving, keep your engine speed (rpm, or revolutions per minute) between 2,000 rpm and 4,000 rpm.
- Use moderate acceleration. Don't start, depress the accelerator pedal fully.
- o For the first 300 km (200 miles), try to avoid hard stops.









- o Don't lug the engine (in other words, don't drive so slowly in too high a gear that the engine "bucks": shift to a lower gear).
- o Whether going fast or slow, vary your speed from time to time.
- o Don't let the engine idle longer than 3 minutes at one time.
- Don't tow a trailer during the first 2,000 km (1,200 miles) of operation.

B020B01FC-GAT

# During the First 1,000 Km (600 Miles)(Diesel Engine)

No formal 'break-in' procedure is required with your new Hyundai. However, you can contribute to the economical operation and durability of your Hyundai by observing the following recommendations during the first 1,000 km (600 miles).

- o While driving, keep your engine speed (rpm, or revolutions per minute) within 3,000 rpm.
- o While driving, keep under three quarters of maximum speed.
- Use moderate acceleration. Don't start, depress the accelerator pedal fully.
- For the first 300 km (200 miles), try to avoid hard stops.

- o Don't lug the engine (in other words, don't drive so slowly in too high a gear that the engine "bucks": shift to a lower gear).
- o Whether going fast or slow, vary your speed from time to time.
- o Don't let the engine idle longer than 3 minutes at one time.
- o Don't tow a trailer during the first 1,000 km (600 miles) of operation.





# **KEYS**

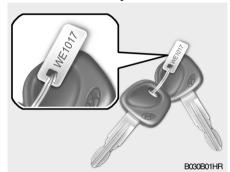
#### B030A01A-AAT



For greater convenience, the same key operates all the locks in your Hyundai. However, because the doors can be locked without a key, carrying a spare key is recommended in case you accidentally lock one key inside the car.

#### B030B01A-AAT

# **Record Your Key Number**



A code number is stamped on the number plate that came with the keys to your Hyundai. This key number plate should not be left with the keys but kept in a safe place, not in the vehicle. The key number should also be recorded in a place where it can be found in an emergency.

If you need additional keys, or if you should lose your keys, your authorized Hyundai dealer can make new keys if you can supply the key number.

# B880A01O-GAT

# (If installed)

The immobilizer system is an anti-theft device, designed to deter automobile theft.

**IMMOBILIZER SYSTEM** 

#### B885B01O-GAT

# Keys



All of the locks fitted to the vehicle are operated by the same key. However, since it is possible to lock the doors without the use of the key, care should be exercised to ensure that the key does not become locked inside the vehicle by mistake.







# NOTE:

If you make your own duplicate key, you will not be able to cancel the system or start the engine.

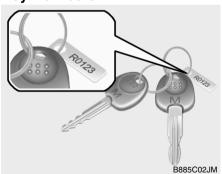


# **CAUTION:**

- o The password should be recorded and kept in a safe place in case the need to order further keys arises.
- o If you forget the password, consult your authorized Hyundai dealer.

B885C02A-GAT

# **Key Numbers**



The vehicle key number is recorded upon a metal tag attached to the keys when the vehicle is first delivered to you.

The key number should be recorded and kept in a safe place in case the need to order further keys arises. New keys are available from any Hyundai dealer by quoting the relevant key number.

In the interest of security, the metal tag attached to the keys which bears the key number should be removed from the key ring after you receive your new vehicle. In addition, key numbers cannot be provided by Hyundai for security reasons.

If you need additional keys or if you should lose your keys, your authorized Hyundai dealer can make new keys.

B880D01JM-GAT

# Limp home procedures (Gasoline Engine)



In case the immobilizer system is out of order, you cannot start the engine without the limp home procedures with ignition key.

The following procedure is how to start the engine with the function of the limp home (0, 1, 2, 3 as a sample password).

## NOTE:

You can get the limp home password when the vehicle is first delivered to you. If you do not have the password, consult your authorized Hyundai dealer.





- 1. To set the password, you may turn the ignition key "ON" and then turn it "OFF" according to the digit numbers. For example, turn the ignition key once for digit number "1", and twice for "2", and so on. However, for the digit number "0", you must turn the ignition key for 10 times.
- 2. Wait for 3~10 seconds.
- You may set the remaining number of digits by following the same procedures 1 and 2.
- 4. If all of four digits have been tried successfully, from this time, you have to start your engine within 10 seconds. If you start your engine after 10 seconds, your engine will not start.

After doing the limp home procedure, you have to consult with your authorized Hyundai dealer as soon as possible.



# CAUTION:

If you cannot start your engine in spite of limp home procedure, have your vehicle towed by an authorized Hyundai dealer. B885D01JM-GAT

# Limp home procedures (Diesel Engine)



Immobilizer warning indicator B885D01JM

In case the immobilizer warning indicator blinks for five seconds when the ignition key is turned to "ON" position, this indicates that the immobilizer system is out of order. And you cannot start the engine without the limp home procedures with ignition key.

The following procedure is how to start the engine with the function of the limp home (0, 1, 2, 3 as a sample password).

# NOTE:

You can get the limp home password when the vehicle is first delivered to you. If you do not have the password, consult your authorized Hyundai dealer.

- 1. To set the password you may turn the ignition key "ON" and then turn it "OFF" according to the digit numbers, then the immobilizer indicator will blink along with the operation of the ignition key. For example, turn the ignition key once for digit number "1", and twice for "2", and so on. However, for the digit number "0", you must turn the ignition key for 10 times.
- 2. Wait for 3~10 seconds.
- 3. You may set the remaining number of digits by following the same procedures 1 and 2.
- 4. If all of four digits have been tried successfully, turn the ignition key "ON" and check that the immobilizer indicator illuminates. From this time, you have to start your engine within 30 seconds. If you start your engine after 30 seconds, your engine will not start.





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## NOTE:

If the engine dies while driving after limp home procedure, you can start your engine within 8 seconds without limp home procedure again.

5. If the immobilizer indicator blinks for five seconds, you have to try the limp home procedure again from the beginning.

After doing the limp home procedure, you have to consult with your authorized Hyundai dealer as soon as possible.



# CAUTION:

If you cannot start your engine in spite of limp home procedure, have your vehicle towed by an authorized Hyundai dealer.

#### B030C01Y-AAT

# ILLUMINATED IGNITION SWITCH (If installed)



Whenever a door is opened, the ignition switch will be illuminated for your convenience, provided the ignition switch is not in the "ON" position.

The light will go off approximately 10 seconds after closing the door or when the ignition switch is turned on.

# **DOOR LOCKS**

B040A01A-AAT



# **WARNING:**

- o Unlocked doors can be dangerous. Before you drive away (especially if there are children in
  the car), be sure that all the doors
  are securely closed and locked
  so that the doors cannot be inadvertently opened from the inside.
  This helps ensure that the doors
  will not be opened accidentally.
  Also, when combined with the
  proper use of seat belts, locking
  the doors helps keep occupants
  from being ejected from the car
  in case of an accident.
- o Before opening the door, always look for and avoid oncoming traffic.



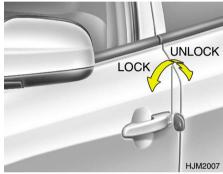




9

#### B040B01A-AAT

# Locking and Unlocking Front Doors with a Key



- o The door can be locked or unlocked with a key.
- o Lock the door by turning the key toward the front of the vehicle and unlock it by turning the key toward the rear.

#### B040C01O-GAT

# **Locking from the Outside**



The doors can be locked without a key. To lock the doors, first push the inside lock switch to the "LOCK" position so that the red mark on the switch is not visible, then close the door.

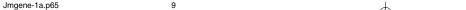
# NOTE:

- o If your vehicle is equipped with central door locking system, the door will not lock if the key is left in the ignition switch when the front doors are closed.
- When locking the door this way, be careful not to lock the door with the ignition key left in the vehicle.

o To reduce the chances of theft, always remove the ignition key, close all windows, and lock all doors and tail gate when leaving your vehicle unattended.









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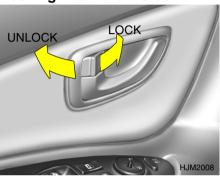


# **1** FEATURES OF YOUR HYUNDAI

10

#### B040D01S-AAT

# **Locking From the Inside**



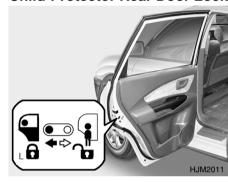
To lock the doors from the inside, simply close the door and push the lock switch to the "LOCK" position. When this is done, neither the outside nor the inside door handles can be used.

# NOTE:

When the door is locked, the red mark on the switch is not visible.

#### B040E03A-AAT

# **Child-Protector Rear Door Lock**



Your Hyundai is equipped with a "childprotector" rear door lock assembly. When the lock mechanism is engaged, the rear door cannot be opened from the inside. It's use is recommended whenever there are small children in the rear seat.

To engage the child-protector feature so that the door cannot be opened from the inside, move the child-protector lever to the " "position and close the door. Move the lever to the opposite direction of the " "position when normal door operation is desired.

If you wish to be able to open the door from the outside, the outside door handle will function normally.

## B040G01HP-AAT

# **Central Door Locks**



The central door locking switch is located on the driver's arm rest. It is operated by depressing the door lock switch.







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# **THEFT-ALARM SYSTEM**

# NOTE:

- o When pushing the front portion of the driver's door lock switch. all vehicle doors will lock. If any door is open when the switch is depressed, the door will remain locked when closed.
- o When pushing the rear portion of the switch, all vehicle doors will unlock.
- o The central door locking is operated by turning the key toward the front or rear of the vehicle.

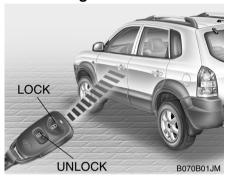
B070A01A-AAT

# (If installed)

This system is designed to provide protection from unauthorized entry into the car. This system is operated in three stages: the first is the "Armed" stage, the second is the "Alarm" stage, and the third is the "Disarmed" stage. If triggered, the system provides an audible alarm with blinking of the turn signal lights.

#### B070B01O-AAT

# **Armed Stage**



Park the car and stop the engine. Arm the system as described below.

- 1) Remove the ignition key from the ignition switch.
- 2) Make sure that the engine hood and tail gate are closed and latched.
- 3) Lock the doors using the transmitter of the keyless entry system.

After completion of the steps above, the turn signal lights will blink once to indicate that the system is armed.











12

## NOTE:

- If any door, tail gate or engine hood remains open, the system will not be armed.
- 2) If this happens, rearm the system as described above.



# **CAUTION:**

Do not arm the system until all passengers have left the car. If the system is armed while a passenger(s) remains in the car, the alarm may be activated when the remaining passenger(s) leaves the car.

B070C01O-AAT

# **Alarm Stage**

The alarm will be activated if any of the following occurs while the car is parked and the system is armed.

- 1) A front or rear door is opened without using the transmitter.
- 2) The tail gate is opened without using the transmitter.
- 3) The engine hood is opened.

The siren will sound and the turn signal lights will blink continuously for 27 seconds (E.C only/ Except E.C: This happens 3 times). To turn off the system, unlock the door or tail gate with the transmitter.



# CAUTION:

Avoid trying to start the engine while the system is armed.

B070D01HP-AAT

# **Disarmed Stage**



B070D01JN

The system will be disarmed when the driver's or passenger's door is unlocked by depressing the "UNLOCK" button on the transmitter.

After completing the step above, the turn signal lights will blink twice to indicate that the system is disarmed.

If any door, tail gate or engine hood is not opened within 30 seconds, the system will be rearmed.







# CAUTION:

Only the transmitter can disarm the armed stage. If the transmitter does not disarm the system, it is necessary to take the following steps;

- Unlock the door with the key, which will cause, the alarm to be activated.
- 2. Insert the key in the ignition key cylinder and turn the ignition key to "ON" position.
- 3. Wait for 30 seconds.

After completing the steps above, the system will be disarmed.

B070F01A-GAT

# KEYLESS ENTRY SYSTEM (If installed) Locking doors

- 1. Close all doors.
- 2. Push the 'LOCK' button on the transmitter.
- 3. At the same time all doors lock, the turn signal lights will blink once to indicate that the system is armed.

# **Unlocking doors**

- 1. Push the 'UNLOCK' button on the transmitter.
- 2. At the same time all doors unlock, the turn signal lights will blink twice to indicate that the system is disarmed.

B070E02HP-GAT

# Replacing the battery

When the transmitter's battery begins to get weak, it may take several pushes on the button to lock or unlock the doors, and the LED will not light. Replace the battery as soon as possible.

Battery type: CR2032

Replacement instructions:



 Carefully separate the case with a blade screwdriver as shown in the illustration.







14

# Battery Case B070E01JM

2. Remove the old battery from the case and note the polarity. Make sure the polarity of the new battery is the same(+side facing up), then insert it in the transmitter.

# **POWER WINDOWS**





The power windows operate when the ignition key is in the "ON" position. The main switches are located on the driver's armrest and control the front and rear windows on both sides of the vehicle. The windows may be opened by depressing the appropriate window switch and closed by pulling up the switch. To open the window on the driver's side, press the switch halfway down. The window moves as long as the switch is operated. To fully open the driver's window automatically, press the switch fully down. In automatic operation, the window will fully open even if you let go of the switch. To stop at the desired opening, pull up and release the switch.



In order to prevent operation of the passenger front and rear windows, a window lock switch is provided on the armrest of the driver's door. To disable the power windows, press the window lock switch. To revert to normal operation, press the window lock switch a second time.

# NOTE:

The power windows can be operated for 30 seconds after the ignition key is turned to the "ACC" or "LOCK" positions, or removed from the ignition switch.

If the front doors are opened during this 30 second period, the power windows can no longer be oper-

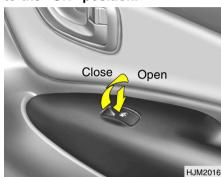
Ψ





# **SEATS**

# ated without the ignition key turned to the "ON" position.







# **WARNING:**

Never attempt to adjust the seat while the vehicle is moving. This could result in loss of control or an accident which may cause death, serious injury, or property damage.

B080B02FC-AAT

# FRONT SEATS Adjusting Seat Forward and Rearward



rear, pull the lock release lever upward. This will release the seat on its track so you can move it forward or rearward to the desired position. When you find the position you want, release the lever and slide the seat forward or rearward on its track until it locks into the desired position and cannot be





# WARNING:

- 1) Be careful that someone's head. hands and body are not trapped by a closing window.
- 2) Never try to operate the main switch on the driver's door and the individual door window switch in opposing directions at the same time. If this is done, the window will stop and cannot be opened or closed.
- 3) Do not leave children alone in the car. Always remove the ignition key for their safety.







moved further.





## WARNING:

To ensure the seat is locked securely, attempt to move the seat forward or rearward without using the lock release lever.

B080C01A-AAT

# **Adjusting Seatback Angle**



To recline the seatback, lean forward to take your weight off it, then pull up on the recliner control lever at the outside edge of the seat. Now lean back until the desired seatback angle is achieved. To lock the seatback into position, release the recliner control lever.



# **WARNING:**

To minimize risk of severe injury in the event of a collision or a sudden stop, both the driver and passenger seatbacks should always be in an upright position while the vehicle is in motion. The protection provided by the seat belts and airbags in a frontal collision may be reduced significantly when the seatbacks are reclined. There is greater risk that the driver and passenger will slide under the seat belt which may result in serious injury if a crash occurs when the seatbacks are reclined.

The seat belt cannot provide full protection to an occupant if the seatback is reclined.

B080D01JM-GAT

# **Adjustable Headrests**



Headrests are designed to help reduce the risk of neck injuries.

To raise the headrest, pull it up. To lower it, push it down while pressing the lock knob. To remove the headrest, raise it as far as it can go then press the lock knob while pulling upward.







# WARNING:

o For maximum effectiveness in case of an accident the headrest should be adjusted so the top of the headrest is at the same height as the top of the occupant's ears. For this reason, the use of a cushion that holds the body away from the seatback should not be recommended.



o Do not operate vehicle with the headrests removed as injury to the occupants may occur in the event of an accident. Headrests may provide protection against neck injuries when properly adjusted.

17

o Do not adjust the headrest height while the vehicle is in motion.

#### B080F01S-AAT

# Seat Cushion Height Adjustment (Driver's Seat Only)



To raise or lower the front part of the seat cushion, turn the front knob forward or rearward. To raise or lower the rear part of the seat cushion, turn the rear knob forward or rearward.

#### B080H01JM-GAT

## Seatback table



Seatback table is made by folding the front passenger seat.

It is useful to operate a notebook on the seatback table, etc.

# To operate seatback table

- 1. Lower the headrest.
- 2. With the recliner control lever pulled up, fold the seatback forward to the flat position.
- 3. When returning the seatback to the upright position, ensure the seatback is completely locked into place.







18



# **WARNING:**

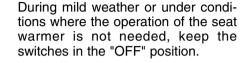
- o Do not sit on the seatback table.
- o Do not use the seatback table when the vehicle is in motion.
- o Do not leave items on the seatback table when the vehicle is in motion.



B100A01JM-GAT

# **WARNING:**

To avoid the possibility of injury in case of an accident or a sudden stop, the tray should be kept closed when the car is in motion.

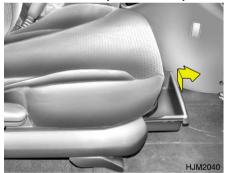


# NOTE:

- The seat warmer will not operate if ambient temperature is higher than 28°C ± 3.5°C.
- o If the seat warmer doesn't works when ambient temperature is lower than 24°C, it must be checked at authorized dealer.



# **UNDER TRAY (If installed)**



The tray is located under the front passenger seat. It is opened by up and pulling forward.



The seat warmer is provided to warm the front seats during cold weather. With the ignition key in the "ON" position, push either of the switches to warm the driver's seat or the passenger's seat.



# **WARNING:**

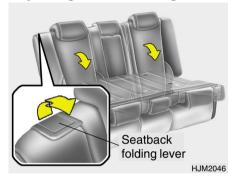
Be very careful not to injure by low temperature burn or an attack of fever as following occupants; infants, children, old man, drunken man, people who is taken sleeping drug or cold remedy.







# **REAR SEAT Adjusting Seatback Angle**



To recline the seatback, pull the seatback folding lever and release it after the desired seatback angle is achieved.

When you recline the seatback to desired position, always be sure it has locked into position.



# CAUTION:

When reclining the seatback, you should adjust the seatback folding lever while standing.

19

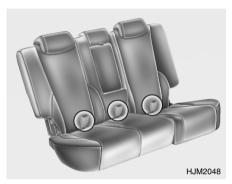
B085B01JM-AAT

# Folding Rear Seatback and Seat Cushion

For greater convenience, the entire seatback and seat cushion may be folded down and up.



- 1. Pull the seatback folding lever then push down the seatback.
- 2. Be sure it has locked into position to listen an audible "Click".



# NOTE:

- o Before folding the seatback, place the rear seat belt buckles in the buckle pouch on the seatback. This will prevent the seat belt buckles from becoming covered by the seat cushion when it is returned to the seating position.
- o The rear seat belt buckles must be removed from the buckle clips by pressing release button when in use.



Be careful to load the luggage on the folded seatback. It may cause damage seatback.







# **1** FEATURES OF YOUR HYUNDAI

## 20

- To return the seatback to its normal position, pull the seatback folding lever and reverse the above procedure.
- When you return the seatback to its upright position, always be sure it is locked into position by pulling and pushing on the top of the seatback.



# WARNING:

o The purpose of the fold-down rear seat back is to allow you to carry more objects than could otherwise be accommodated. Never allow passengers to sit on the cargo area while the car is moving. This is not a proper seating position and no seat belts are available for use when the seat back is folded down.

This could result in serious injury or death in case of an accident or a sudden stop. Objects should not extend higher than the top of the front seatbacks. This could allow cargo to slide forward and cause injury or damage during sudden stops.

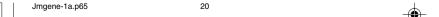
- o When you return the rear seatback to its upright position after being folded down, be careful not to damage the seatbelt webbing or buckle. In addition, do not allow the seatbelt webbing or buckle to get caught or pinched in the rear seat.
- o When you return the rear seatback to its upright position, be sure it is locked into position to attempt move it.
- o Never attempt to fold or return seat while the vehicle is moving.

# B140A01B-GAT REAR SEAT WARNING



For the safety of all passengers, luggage or other cargo should not be piled higher than the top of the seatback.







# **SEAT BELTS**

B150A02A-GAT

# **SEAT BELT PRECAUTIONS**

All occupants of the vehicle should wear their seat belts at all times. Indeed, your province's laws may require that some or all occupants of the vehicle use seat belts.

The possibility of injury or the severity of injury in an accident will be decreased if this elementary safety precaution is observed. In addition, follow the other instructions provided in this section.

B150B01Y-GAT

# Infant or Small Child

Some countries require the use of child restraint systems for infants and small children. Whether this is required by law or not, it is strongly recommended that a child restraint seat or infant restraint system be used for infants or small children weighing less than 18 kilograms (40 pounds).

# NOTE:

Small children are best protected in an accident when properly restrained by a child restraint system.

B150C01A-AAT

# Larger Children

Children who are too large for child restraint systems should always occupy the rear seat and use the available lap/shoulder belts. The lap portion should be fastened snug on the hips and as low as possible. Check belt fit periodically. A child's squirming could move the belt out of position. If the larger child (over age 13) is in the front seat, the child should be securely restrained by the seat belt. Under no circumstances should the child be allowed to stand or kneel on the seat. Children are afforded the most safety in the event of an accident when they are restrained by a proper restraint system in the rear seat. NEVER place a child under the age of 13 in the front seat. Never allow children to ride in the front passenger seat.







B150D01A-AAT

# **Pregnant Women**

The use of a seat belt is recommended for pregnant women to lessen the chance of injury in an accident. When a seat belt is used, the lap belt portion should be placed as low and snugly as possible on the hips, not across the abdomen. For specific recommendations, consult a physician.

B150E01A-AAT

# **Injured Person**

A seat belt should be used when an injured person is being transported. When this is necessary, you should consult a physician for recommendations.

B150F01A-AAT

## One Person Per Belt

Two people (including children) should never attempt to use a single seat belt. This could increase the severity of injuries in case of an accident.

B150G01A-AAT

## Do Not Lie Down

To reduce the chance of injuries in the event of an accident and to achieve maximum effectiveness of the restraint system, all passengers should be sitting up and the front seats should be in an upright position when the car is moving. A seat belt cannot operate properly if the person is lying down in the rear seat or if the front seat is in a reclined position.



# WARNING:

Sitting in a reclined position or lying down when your vehicle is in motion can be dangerous. Even if you buckle up, your seat belts can't do their job when you're reclined. The shoulder belt can't do its job because it won't be against your body. Instead, it will be in front of you. In a crash you could go into it with great force, receiving serious neck or other injuries.

The lap belt can't do its job either. In a crash the belt could go up over your abdomen. The belt forces would be applied there, not at your strong pelvic bones.

This could cause serious internal injuries.

For proper protection when the vehicle is in motion, have the seatback upright. Then sit well back in the seat and wear your seat belt properly.







B160A01A-AAT

## **CARE OF SEAT BELTS**

Seat belt systems should never be disassembled or modified. In addition, care should be taken to assure that seat belts and belt hardware are not damaged by seat hinges, doors or other abuse.



# **WARNING:**

When you return the rear seatback to its upright position after the rear seatback was folded down, be careful not to damage the seat belt webbing or buckle. Be sure that the webbing or buckle does not get caught or pinched in the rear seat.

B160B01A-AAT

# **Periodic Inspection**

It is recommended that all seat belts be inspected periodically for wear or damage of any kind. Parts of the system that are damaged should be replaced as soon as possible. B160C01A-AAT

# **Keep Belts Clean and Dry**

Seat belts should be kept clean and dry. If belts become dirty, they can be cleaned by using a mild soap solution and warm water. Bleach, dye, strong detergents or abrasives should not be used because they may damage and weaken the fabric.

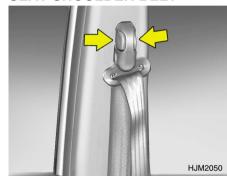
B160D01A-AAT

# When to Replace Seat Belts

The entire seat belt assembly or assemblies should be replaced if the vehicle has been involved in an accident. This should be done even if no damage is visible. Additional questions concerning seat belt operation should be directed to your Hyundai Dealer.

B170A04A-AAT

# HEIGHT ADJUSTABLE FRONT SEAT SHOULDER BELT



You can adjust the height of the shoulder belt anchor to one of the 4 positions for maximum comfort and safety. If the height of the adjusting seat belt is too near your neck, you will not be getting the most effective protection. The shoulder portion should be adjusted so that it lies across your chest and midway over your shoulder nearest the door and not your neck.







To adjust the height of the seat belt anchor, lower or raise the height adjuster into an appropriate position. To raise the height adjuster, pull it up. To lower it, push it down while pressing the height adjuster button.

Release the button to lock the anchor into position. Try sliding the height adjuster to make sure that it has locked into the position.



### **WARNING:**

- o The height adjuster must be in the locked position when the vehicle is moving.
- o The misadjustment of height of the shoulder belt could reduce the effectiveness of the seat belt in a crash.

B180A02A-GAT

# SEAT BELTS 3-Point System with Webbing Clamp Locking Retractor (If installed) To Fasten Your Belt



To fasten your seat belt, pull it out of the retractor and insert the metal tab into the buckle. There will be an audible "click" when the tab locks into the buckle.

The seat belt automatically adjusts to the proper length only after the lap belt is adjusted manually so that it fits snugly around your hips. If you lean forward in a slow, easy motion, the belt will extend and let you move around. If there is a sudden stop or impact, however, the belt will lock into position. It will also lock if you try to lean forward too quickly. Check to make sure that the belt is properly locked and that the belt is not twisted.

B180A01Y-GAT

# SEAT BELTS 3-Point System with Emergency Locking Retractor (If installed) To Fasten Your Belt



To fasten your seat belt, pull it out of the retractor and insert the metal tab into the buckle. There will be an audible "click" when the tab locks into the buckle.







The seat belt automatically adjusts to the proper length only after the lap belt is adjusted manually so that it fits snugly around your hips. If you lean forward in a slow, easy motion, the belt will extend and let you move around. If there is a sudden stop or impact, however, the belt will lock into position. It will also lock if you try to lean forward too quickly. Check to make sure that the belt is properly locked and that the belt is not twisted.

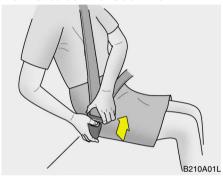
## B200A01S-GAT Adjusting Your Seat Belt



You should place the belt as low as possible on your hips, not on your waist. If the belt is located too high on your body, you could slide under it in case of accident or a sudden stop. This could result of death, serious injury or property damage. Both arms should not be under or over the belt. Rather, one should be over and the other under, as shown in the illustration.

Never wear the seat belt under the arm nearest the door.

### To Release the Seat Belt



The seat belt is released by pressing the release button in the locking buckle. When it is released, the belt should automatically draw back into the retractor.

If this does not happen, check the belt to be sure it is not twisted, then try again.







B220A01A-AAT

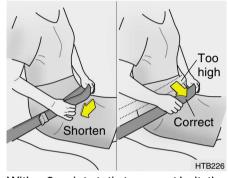
### SEAT BELTS (2-Point Static Type) (Rear Seat Center) To Fasten Your Seat Belt



To fasten a 2-point static type belt, insert the metal tab into the locking buckle. There will be an audible "click" when the tab locks into the buckle. Check to make sure the belt is properly locked and that the belt is not twisted.

#### B220B01A-AAT

### **Adjusting Your Seat Belt**



With a 2-point static type seat belt, the length must be adjusted manually so it fits snugly around your body. Fasten the belt and pull on the loose end to tighten. The belt should be placed as low as possible on your hips, not on your waist. If the belt is too high, it could increase the possibility of your being injured in an accident.

#### B220C01A-AAT

### To Release the Seat Belt



When you want to release the seat belt, press the button in the locking buckle.



### **WARNING:**

The center lap belt latching mechanism is different from those for the rear seat shoulder belts. When fastening the rear seat shoulder belts or the center lap belt, make sure they are inserted into the correct buckles to obtain maximum protection from the seat belt system and assure proper operation.

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B220A01JM-GAT

### SEAT BELTS - Rear Seat Center's 3-Point System With Emergency Locking Retractor (If installed)



- 1. Before fastening the rear seat center belt, confirm the metal tab (a) and buckle (b) are latched together.
- 2. After confirming that (a) and (b) are latched, pull the seat belt out of the retractor and insert the metal tab (c) into the buckle (d).

There will be an audible "click" when the tab locks in the buckle. The seat belt automatically adjusts to the proper length only after the lap belt is adjusted manually so that it fits snugly around your hips. If you lean forward in a slow, easy motion, the belt will extend and let you move around. If there is a sudden stop or impact, the belt will lock into position. It will also lock if you try to lean forward too quickly.





### WARNING:

- o When using the rear seat center belt, you must lock all metal tabs and buckles. If any metal tab or buckle is not locked, it will increase the chance of injury in the event of collision.
- Never unlock the metal tab (a) and the buckle (b) with the following exceptions.
  - (1)In case of folding rear seatbacks down.
  - (2)If transporting an object on the rear seat may cause damage to the rear seat center belt.







o In case of unlocking metal tab (a)

o Lock the metal tab (a) and the

ing rear seatbacks up.

buckle (b) immediately after fold-

make noise while driving.

and the buckle (b), place metal

(a) in the seat belt clip not to

B220C01Y-GAT

## To Release the Seat Belt (If installed)



When you want to release the seat belt, press the button in the locking buckle.



### WARNING:

The center belt latching mechanism is different from those for the rear seat shoulder belts. When fastening the rear seat shoulder belts or the rear seat center belt, make sure they are inserted into the correct buckles to obtain maximum protection from the seat belt system and assure proper operation.

### **CHILD RESTRAINT SYSTEM**

B230A04P-GAT

### (If installed)

Children riding in the car should sit in the rear seat and must always be properly restrained to minimize the risk of injury in an accident, sudden stop or sudden maneuver. According to accident statistics, children are safer when properly restrained in the rear seats than in the front seat. Larger children not in a child restraint should use one of the seat belts provided. You are required by law to use safety restraints for children. If small children ride in your vehicle you must put them in a child restraint system (safety seat). Children could be injured or killed in a crash if their restraints are not properly secured. For small children and babies, a child seat or infant seat must be used. Before buying a particular child restraint system, make sure it fits your car and seat belts, and fits your child. Follow all the instructions provided by the manufacturer when installing the child restraint system.







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### **WARNING:**

- o A child restraint system must be placed in the rear seat. Never install a child or infant seat on the front passenger's seat. Should an accident occur and cause the passenger side airbag to deploy, it could severely iniure or kill an infant or child seated in an infant or child seat. Thus, only use a child restraint in the rear seat of your vehicle.
- Since a safety belt or child restraint system can become very hot if it is left in a closed vehicle. be sure to check the seat cover and buckles before placing a child there.
- o When the child restraint system is not in use, store it in the luggage compartment or fasten it with a safety belt so that it will not be thrown forward in the case of a sudden stop or an accident.

- o Children who are too large to be in a child restraint should sit in the rear seat and be restrained with the available lap/shoulder belts. Never allow children to ride in the front passanger seat.
- o Always make sure that the shoulder belt portion of the outboard lap/shoulder belt is positioned midway over the shoulder, never across the neck or behind the back. Moving the child closer to the center of the each seat may help provide a good shoulder belt fit. The lap belt portion of the lap/shoulder belt or the center seat lap belt must always be positioned as low as possible on the child's hips and as snug as possible.
- o If the seat belt will not properly fit the child, Hyundai recommends the use of an approved booster seat in the rear seat in order to raise the child's seating height so that the seat belt will properly fit the child.

- o Never allow a child to stand up or kneel on the seat.
- o Never use an infant carrier or child safety seat that "hooks" over a seatback; it may not provide adequate security in an accident.
- o Never allow a child to be held in a person's arms while they are in a moving vehicle, as this could result in serious injury to the child in the event of an accident or a sudden stop. Holding a child in a moving vehicle does not provide the child with any means of protection during an accident, even if the person holding the child is wearing a seat belt.
- o If the child restaint seat is not anchored properly, the risk of a child being seriously injured or killed in a collision greatly increases.

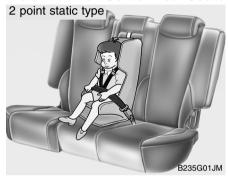






### B235G01Y-GAT

### Installation on Center Rear Seats



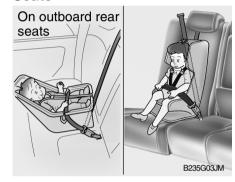


Use the center seat belt for the rear to secure the child restraint system as illustrated. After installation of the child restraint system, rock the child seat back and forth, and side to side to ensure that it is properly secured by the seat belt.

If the child seat moves, readjust the length of the seat belt. Then, if equipped, insert the child restraint tether strap hook into the child restraint hook holder and tighten to secure the seat. Always refer to the child restraint system manufacturer's recommendation before installing the child restraint system in your vehicle.

B230G02A-GAT

### Installation on the Outboard Rear Seats



To install a child restraint system on the outboard rear seats, extend the shoulder/lap belt from its retractor. Buckle the seat belt and allow the seat belt to take up any slack. Make sure that the lap portion of the belt is tight around the child restraint system and the shoulder portion of the belt is positioned so that it cannot interfere with the child's head or neck. After installation of the child restraint system, try to move it in all directions to be sure the child restraint system is securely installed.

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If you need to tighten the belt, pull more webbing toward the retractor.

### NOTE:

- Before installing the child restraint system, read the instructions supplied by the child restraint system manufacturer.
- o If the seat belt does not operate as described, have the system checked immediately by your authorized Hyundai dealer.



### **WARNING:**

Do not install any child restraint system in the front passenger seat. Should an accident occur and cause the passenger's side airbag to deploy, it could severely injure or kill an infant or child seated in an infant or child seat. Therefore, only use a child restraint system in the rear seat of your vehicle.

31

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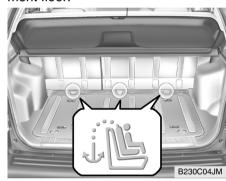
## Using a Child Restraint System with "Tether Anchorage" system (If installed)

For small children and babies, the use of a child seat or infant seat is strongly recommended. This child seat or infant seat should be of appropriate size for the child and should be installed in accordance with the manufacturer's instructions. It is further recommended that the seat be placed in the vehicle's rear seat since this can make an important contribution to safety. Your vehicle is provided with three child restraint hook holders for installing the child seat or infant seat.

B230C04O-GAT

## Securing a child Restraint System with "Tether Anchorage" System

Three child restraint hook holders are located on the rear luggage compartment floor.



This symbol indicates the location of each user ready tether anchorage.







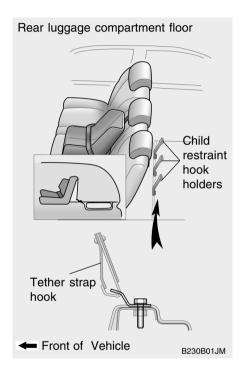
### **1** FEATURES OF YOUR HYUNDAI

32

### To install the child restraint seat



1. Open the tether anchor cover on the rear luggage compartment floor.



- 2. Route the child restraint seat strap over the seatback.
  - For vehicles with adjustable headrests, route the tether strap under the headrest and between the headrest posts, otherwise route the tether strap over the top of the seatback.
- 3. Connect the tether strap hook to the child restraint hook holder and tighten to secure the seat.



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### **WARNING:**

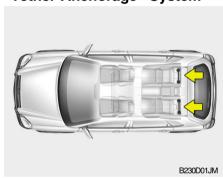
To install the Child Restraint Seat, for safety reasons the Seat should be positioned rearmost with the seatback in a vertical position, not reclined.





B230D01JM-GAT

## Using a Child Restraint System with "ISOFIX" System and "Tether Anchorage" System



ISOFIX is a standardised method of fitting child seats that eliminates the need to use the standard adult seat belt to secure the seat in the vehicle. This enables a much more secure and positive location with the added benefit of easier and quicker installation.



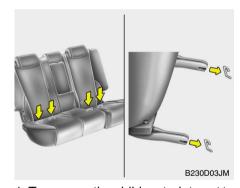
On each side of the rear seat, between the cushion and backrest, are located a pair of ISOFIX anchorage points together with a top tether mounting on the luggage compartment. During the installing, the seat has to be engaged at the anchorage-points in a way you can hear it clicking (check by pulling!) and has to be fixed with the Top Tetherbelt on the belonging point in the luggage compartment. The installing and the use of a child-seat has to be done according to the installing-manual, which is added to the ISOFIX-seat.

### NOTE:

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An ISOFIX-child-seat can only be installed if the seat has a vehicle-specific approval according to ECE-R44. Before using the ISOFIX-child-seat, which was bought for another car, ask your Hyundai-dealer whether this seat-type is approved and recommended for your Hyundai.

### To secure the child restraint seat



 To engage the child restraint seat to the ISOFIX anchor, insert the child restraint seat latch into the ISOFIX anchor. Listen for the audible "click" sound.









 Connect the tether strap hook to the child restraint hook holder and tighten to secure the seat. Refer to "Securing a Child Restraint System with the Tether Anchorage System" on page 1-31.



### WARNING:

o Do not install a child safety seat at the center of the rear seat using the vehicle's ISOFIX anchors. The ISOFIX anchors are only provided for the left and right outboard rear seating positions. Do not misuse the ISOFIX anchors by attempting to attach a child sefety seat in the middle of the rear seat position to the ISOFIX anchors. In a crash, the child seat ISOFIX attachments may not be strong enough to secure the child restraint seat properly in the center of the rear seat and may break, causing serious injury or death.

- o Do not mount more than one child restraint to a single tether or to a child restraint lower anchorage point. The improper increased load may cause the anchorage points or tether anchor to break, causing serious injury or death.
- o Attach the ISOFIX or ISOFIX-compatible child seat only to the appropriate locations shown.
- Always follow the installation and use instructions provided by the manufacturer of the child restraint.

3230H01JM-GAT

## Child Seat Restraint Suitability For Seat Position

Use child safety seats that have been officially approved and are appropriate for your children.

When using the child safety seats, refer to the following table.

	Seating Position		
Age Group	Front	Rear	Rear
	Passenger	Outboard	Center
0 : Up to 10 kg	Х	L1, L2,	Х
(0 ~ 9 months)		L3, L4	
0+: Up to 13 kg	х	L1, L2,	х
(0 ~ 2 years)		L3, L4	
I: 9kg to 18kg	х	10.15	х
(9 months ~		L3, L5,	
4 years)		L6, L7, L8	
II & III: 15kg to			
36kg	Х	L6, L9	Х
(4 ~ 12 years)			

- L1 : Suitable for Bebe confort ELIOS (E2 037014) approved for the use in this mass group
- L2: Suitable for PegPerego primo Viaggio (E13 030010) approved for the use in this mass group





L3 : Suitable for Bebe confort iSEOS (E2 039014) approved for the use in this mass group

### NOTE:

Use it after adjusting headrest to lowest level.

- L4 : Suitable for GRACO Autobaby (E11 03. 44.160/E11 03.44.161) approved for the use in this mass group
- L5 : Suitable for Romer Lord Plus (E1 03301136) approved for the use in this mass group
- L6 : Suitable for Euro Kids Star (E1 03301128/E1 03301129) approved for the use in this mass group
- L7: Suitable for BeSafe iZi COMFORT (E4 03443206) approved for this use in this mass group

### NOTE:

Use it after removing headrest or adjusting headrest to lowest level.

- L8 : Suitable for MAXI-COSI Priori XP (E1 03301153) approved for the use in this mass group
- L9: Suitable for Bebe confort HiPSOS (E2 031011) approved for this use in this mass group

## NOTE: Use it after removing headrest.

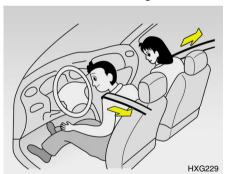
X : Seat position not suitable for children in this mass group

B180B01JM-GAT

## Pre-tensioner Seat Belt (If installed)

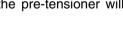
Your Hyundai vehicle is equipped with driver's and front passenger's pretensioner seat belts. The purpose of the pre-tensioner is to make sure that the seat belts fit tightly against the occupant's body in certain frontal collisions.

The pre-tensioner seat belts can be activated with the airbags.



When the vehicle stops suddenly, or if the occupant tries to lean forward too quickly, the seat belt retractor will lock into position. In certain frontal collisions, the pre-tensioner will activate



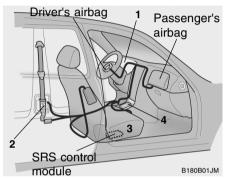




### **1** FEATURES OF YOUR HYUNDAI

36

and pull the seat belt into tighter contact against the occupant's body.



The seat belt pre-tensioner system consists mainly of the following components.

Their locations are shown in the illustration.

- 1. SRS airbag warning light
- 2. Retractor pre-tensioner assembly
- 3. Buckle pre-tensioner assembly
- 4. SRS control module



### WARNING:

To obtain maximum benefit from a pre-tensioner seat belt:

- 1. The seat belt must be worn correctly.
- 2. The seat belt must be adjusted to the correct position.

### NOTE:

- o Both the driver's and front passenger's pre-tensioner seat belts will be activated in certain frontal collisions. The pre-tensioner seat belts can be activated with the airbags. The pre-tensioners will be activated even if the seat belts are not being worn at the time of the collision.
- o When the pre-tensioner seat belts are activated, a loud noise may be heard and fine dust, which may appear to be smoke, may be visible in the passenger compartment. These are normal operating conditions and are not hazardous.
- o Although it is harmless, the fine dust may cause skin irritation and should not be breathed for prolonged periods. Wash your hands and face thoroughly after an accident in which the pretensioner seat belts were activated.







### CAUTION:

- o Because the sensor that activates the SRS airbag is connected with pre-tensioner seat belt, the SRS airbag warning light on the instrument panel will come on for approximately 6 seconds after the ignition key has been turned to the "ON" position, and then it should turn off.
- o If pre-tensioner seat belt is not working properly, this warning light will illuminate even if there is no malfunction of the SRS airbag. If the SRS airbag warning light does not illuminate when the ignition key is turned to "ON", or if it remains illuminated after coming for approximately 6 seconds, or if it illuminates while the vehicle is being driven, please have an authorized Hyundai dealer inspect the pre-tensioner seat belts and SRS airbag system as soon as possible.



### **WARNING:**

- o Pre-tensioners are designed to operate only one time. After activation, pre-tensioner seat belts must be replaced. All seat belts, of any type, should always be replaced after they have been worn during a collision.
- o The pre-tensioner seat belt assembly mechanisms become hot during activation. Do not touch the pre-tensioner seat belt assemblies for several minutes after they have been activated.
- Do not attempt to inspect or replace the pre-tensioner seat belts yourself. This must be done by an authorized Hyundai dealer.
- o Do not strike the pre-tensioner seat belt assemblies.
- o Do not attempt to service or repair the pre-tensioner seat belt system in any manner.

- o Improper handling of the pretensioner seat belt assemblies, and failure to heed the warnings to not strike, modify, insp-ect, replace, service or repair the pretensioner seat belt assemblies may lead to improper operation or inadvertent activation and serious injury.
- o Always wear seat belts when driving or riding in a motor vehicle.









## SUPPLEMENTAL RESTRAINT (AIRBAG) SYSTEM (SRS)

B240A03F-GAT (If installed)



Your Hyundai is equipped with a Supplemental Restraint (Airbag) System. The indications of the system's presence are the letters "SRS AIR BAG" embossed on the airbag pad cover in the steering wheel and the passenger's side front panel pad above the glove box.

The Hyundai SRS consists of airbags installed under the pad covers in the center of the steering wheel and the passenger's side front panel above the glove box. The purpose of the SRS is to provide the vehicle's driver and/or

the front passenger with additional protection than that offered by the seatbelt system alone, in case of a frontal impact of sufficient severity.

### NOTE:

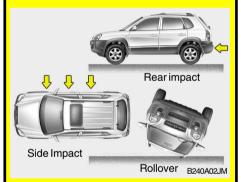
Be sure to read information about the SRS on the labels provided on the backside of the sun visor and in the glove box.



### **WARNING:**

o As its name implies, the SRS is designed to work with, and be supplemental to, the driver's and the passenger's three point seat belt systems and is not a substitute for them. Therefore your seat belts must be worn at all times while the vehicle is in motion. The airbags deploy only in certain frontal impact conditions severe enough to likely cause significant injury to the vehicle occupants.

o The SRS is designed to deploy the airbags only when an impact is sufficiently severe and when the impact angle is less than 30° from the forward longitudinal axis of the vehicle and will not deploy in side, rear or rollover impacts. Additionally, the airbags will only deploy once. Thus, seat belts must be worn at all times.



 Front airbags are not intended to deploy in side-impact, rear-impact or rollover crashes. In addition, airbags will not deploy in frontal crashes below the deployment threshold speed.

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- o The driver should sit back as far as possible while still maintaining control of the vehicle. If you are sitting too close to the airbag, it can cause death or serious injury when it inflates.
- o No objects should be placed over or near the airbag modules on the steering wheel, instrument panel, and the front passenger's panel above the glove box, because any such object could cause harm if the vehicle is in a crash severe enough to cause the airbags to deploy.
- o If the airbags deploy, they must be replaced by an authorized Hyundai dealer.
- o Do not tamper with or disconnect SRS wiring, or other components of the SRS system. Doing so could result in injury, due to accidental firing of the airbags or by rendering the SRS inoperative.

- o Do not install a child restraint system in the front passenger seat position. A child restraint system must never be placed in the front seat. The infant or child could be severely injured or killed by an airbag deployment in case of an accident.
- o Do not allow children to ride in the front passenger seat. If older children (teenagers and older) must ride in the front seat, make sure they are always properly belted and that the seat is moved back as far as possible.
- o For maximum safety protection in all types of crashes, all occupants including the driver should always wear their seat belts whether or not an airbag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash. Do not sit or lean unnecessarily close to the airbag while the vehicle is in motion.

o The SRS airbag system must deploy very rapidly to provide protection in a crash. If an occupant is out of position because of not wearing a seat belt, the airbag may forcefully contact the occupant causing serious or fatal injuries.







### **1** FEATURES OF YOUR HYUNDAI

40

#### B240B01JM-GAT

### **SRS Components and Functions**

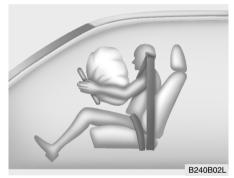


The SRS consists of the following components:

- Driver's Airbag Module
- Passenger's Airbag Module
- SRS Service Reminder Indicator (SRI)
- SRS Control Module (SRSCM)

The SRSCM continually monitors all elements while the ignition is 'ON' to determine if a frontal or near-frontal impact is severe enough to require airbag deployment.

The SRS service reminder indicator (SRI) on the instrument panel will come on for about 6 seconds after the ignition key is turned to the 'ON' position or after the engine is started, after which the SRI should go out.



The airbag modules are located both in the center of the steering wheel and in the front passenger's panel above the glove box.

When the SRSCM detects a considerable impact to the front of the vehicle, it will automatically deploy the airbags.

Upon deployment, tear seams molded directly into the pad covers will separate under pressure from the expansion of the airbags. Further opening of the covers then allows full inflation of the airbags.

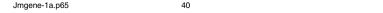


A fully inflated airbag in combination with a properly worn seat belt slows the driver's or the passenger's forward motion, thus reducing the risk of head or chest injury.

After complete inflation, the airbag immediately starts deflating, enabling the driver to maintain forward visibility.









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### **CAUTION:**

When installing the container of liquid air freshener inside the vehicle, do not place it near the instrument cluster nor on the instrument panel pad surface. If there is any leakage from the air freshener onto these areas (Instrument cluster, instrument panel pad or air ventilator), it may damage these parts. If the liquid from the air freshener does leak onto these areas, wash them with water immediately.



### WARNING:

o When the SRS is activated, there may be a loud noise and fine dust will be released through the vehicle. These conditions are normal and are not hazardous. However, the fine dust generated during airbag deployment may cause skin irritation. Wash your hands and face thoroughly with lukewarm water and a mild soap after an accident in which the airbags were deployed.

- o The SRS can function only when the ignition key is in the 'ON' position. If the SRS SRI does not come on, or continuously remains on, after coming on for about 6 seconds when the ignition key is turned to the 'ON' position, or after the engine is started, comes on while driving. the SRS is not working properly. If this occurs, have your vehicle immediately inspected by your Hyundai dealer.
- o Before you replace a fuse or disconnect a battery terminal, turn the ignition key to the 'LOCK' position or remove the ignition key. Never remove or replace the air bag related fuse(s) when the ignition key is in the 'ON' position. Failure to heed this warning will cause the SRS SRI to illuminate.



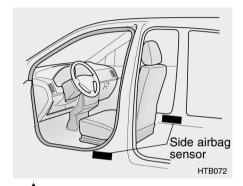




### B990B04Y-AAT Side Impact Airbag (If installed)



Your Hyundai is equipped with a side impact airbag in each front seat. The purpose of the airbag is to provide the vehicle's driver and/or the front passenger with additional protection than that offered by the seat belt alone. The side impact airbags are designed to deploy only during certain side-impact collisions, depending on the crash severity, angle, speed and point of impact. The side impact air bags are not designed to deploy in all side impact situations.





### **WARNING:**

o The side impact airbag is supplemental to the driver's and the passenger's seat belt systems and is not a substitute for them. Therefore your seat belts must be worn at all times while the vehicle is in motion. The airbags deploy only in certain side impact conditions severe enough to cause significant injury to the vehicle occupants.

- o For best protection from the side impact airbag system and to avoid being injured by the deploying side impact airbag, both front seat occupants should sit in an upright position with the seat belt properly fastened. The driver's hands should be placed on the steering wheel at the 9:00 and 3:00 o'clock positions. The passenger's arms and hands should be placed on their laps.
- o Do not use any accessory seat covers.
- Use of seat covers could reduce or prevent the effectiveness of the system.
- o Do not install any accessories on the side or near the side impact airbag.
- o Do not use excessive force on the side of the seat.
- Do not place any objects over the airbag or between the airbag and yourself.

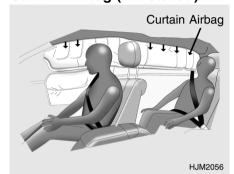






- o Do not place any objects (an umbrella, bag, etc.) between the front door and the front seat. Such objects may become dangerous projectiles and cause injury if the supplemental side impact air bag inflates.
- o To prevent unexpected deployment of the side impact air bag that may result in personal injury, avoid impact to the side airbag sensor when the ignition key is on.

### B990C01LZ-GAT Curtain Airbag (If installed)



Curtain airbags are located along both sides of the roof rails above the front and rear doors.

It is designed to help protect the heads of the front seat occupants and the rear outboard seat occupants in certain side impact collisions. The curtain airbags are designed to deploy only during certain side impact collisions, depending on the crash severity, angle, speed and impact. The curtain airbags are not designed to deploy in all side impact situations, collisions from the front or rear of the vehicle or in most rollover situations.









B240C01JM-GAT

### **SRS Care**

The SRS is virtually maintenance-free and so there are no parts you can safely service by yourself. If the SRS SRI (Service Reminder Indicator) does not come on, or continuously remains on, have your vehicle immediately inspected by your Hyundai dealer.

Any work on the SRS system, such as removing, installing, repairing, or any work on the steering wheel must be performed by a qualified Hyundai technician. Improper handling of the SRS system may result in serious personal injury.





### **WARNING:**

- o Extreme Hazard! Do not use a rearward facing child restraint on a seat protected by an airbag in front of it.
- o Modification to SRS components or wiring, including the addition of any kind of badges to the pad covers or modifications to the body structure, can adversely affect SRS performance and lead to possible injury.

- o For cleaning the airbag pad covers, use only a soft, dry cloth or one which has been moistened with plain water. Solvents or cleaners could adversely affect the airbag covers and proper deployment of the system.
- o No objects should be placed over or near the airbag modules on the steering wheel, instrument panel, and the front passenger's panel above the glove box, because any such object could cause harm if the vehicle is in a crash severe enough to cause the airbags to inflate.
- o If the airbags inflate, they must be replaced by an authorized Hyundai dealer.
- o Do not tamper with or disconnect SRS wiring, or other components of the SRS system. Doing so could result in injury, due to accidental firing of the airbags or by rendering the SRS inoperative.







- o Do not install a child restraint system in the front passenger seat position.
- A child restraint system must never be placed in the front seat.
   The infant or child could be severely injured by an airbag deployment in case of an accident.
- o If components of the airbag system must be discarded, or if the vehicle must be scrapped, certain safety precautions must be observed. Your Hyundai dealer knows these precautions and can give you the necessary information. Failure to follow these precautions and procedures could increase the risk of personal injury.
- o If you sell your vehicle, make certain that this manual is transferred to the new owner.
- o If your car was flooded and has soaked carpeting or water on flooring, you shouldn't try to start engine; have the car towed to authorized Hyundai dealer.

 Do not replace the bumper or the bumper guard with the one other than the Hyundai genuine parts.
 Otherwise, it can adversely affect SRS performance and lead to unexpected injury.



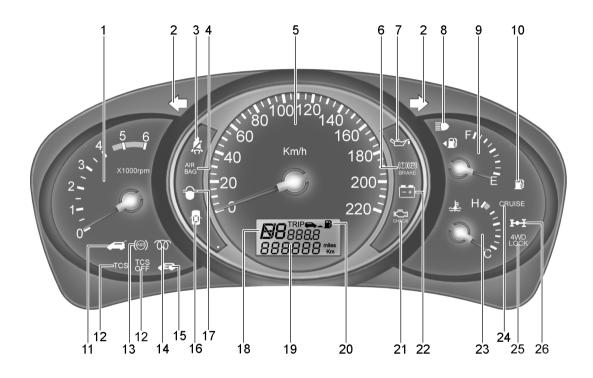






### 46 INSTRUMENT CLUSTER AND INDICATOR LIGHTS

B260A01JM-GAT



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**-**

- 1. Tachometer
- 2. Turn Signal Indicator Light
- 3. Seat Belt Warning Light
- 4. Supplemental Restraint (AirBag) System Service Reminder Indicator (SRI) (If installed)
- 5. Speedometer
- 6. Parking Brake/Low Brake Fluid Level Warning Light
- 7. Low Oil Pressure Warning Light
- 8. High Beam Indicator Light
- 9. Fuel Gauge
- 10. Low Fuel Warning Light
- 11. Tail Gate Open Warning Light
- 12. Traction Control Indicator Light (If installed)/ Electronic Stability Program (ESP) Indicator Light (If installed)

- 13. ABS Service Reminder Indicator (If installed)
- 14. Diesel Preheat Indicator Light (Diesel Engine)
- 15. Immobilizer Warning Light (Diesel Engine) (If installed)
- 16. Door Ajar Warning Light
- 17. Fuel Filter Warning Light (Diesel Engine)
- 18. Automatic Transaxle Position Indicator Light (If installed)
- 19. Odometer/Trip odometer
- 20. Trip Computer (If installed)
- 21. Malfunction Indicator Light (MIL) (If installed)
- 22. Charging System Warning Light
- 23. Coolant Temperature Gauge
- 24. Cruise Indicator (If installed)
- 25. 4WD Lock Indicator Light (If installed)
- 26. 4WD System Warning Light (If installed)







### WARNING AND INDICATOR LIGHTS

B260D01A-AAT



## Turn Signal Indicator Lights

The blinking green arrows on the instrument panel show the direction indicated by the turn signals. If the arrow comes on but does not blink, blinks more rapidly than normal, or does not illuminate at all, a malfunction in the turn signal system is indicated. Your dealer should be consulted for repairs.

B260P02Y-GAT



## ABS Service Reminder Indicator (If installed)

When the key is turned to the "ON" position, the Anti-Lock Brake System SRI will come on and then go off in a few seconds. If the ABS SRI remains on, comes on while driving, or does not come on when the key is turned to the "ON" position, this indicates that there may be a problem with the ABS.

If this occurs, have your vehicle checked by your Hyundai dealer as soon as possible. The normal braking system will still be operational, but without the assistance of the anti-lock brake system.

B265C01O-AAT



The traction control indicators change operation according to the ignition switch position and whether the system is in operation or not.

They will illuminate when the ignition key is turned to the "ON" position, but should go out after three seconds. If the TCS or TCS-OFF indicator stays on, take your car to your authorized Hyundai dealer and have the system checked. See section 2 for more information about the TCS.





### **WARNING:**

If the both ABS SRI and Parking Brake/Brake fluid level warning lights remain "ON" or come on while driving, there may be a problem with E.B.D (Electronic Brake Force Distribution).

If this occurs, avoid sudden stops and have your vehicle checked by your Hyundai dealer as soon as possible.





B265C01LZ-AAT

## ESP OFF Electronic Stability Program Indicator Lights (If installed)

The electronic stability program indicators change operation according to the ignition switch position and whether the system is in operation or not.

They will illuminate when the ignition key is turned to the "ON" position, but should go out after three seconds. If the ESP or ESP-OFF indicator stays on, take your car to your authorized Hyundai dealer and have the system checked. See section 2 for more information about the ESP.

B260F01A-AAT



### High Beam Indicator Light

The high beam indicator light comes on whenever the headlights are switched to the high beam or flash position. B260G01A-AAT



## Low Oil Pressure Warning Light



### CAUTION:

If the oil pressure warning light stays on while the engine is running, serious engine damage may result. The oil pressure warning light comes on whenever there is insufficient oil pressure. In normal operation, it should come on when the ignition switch is turned on, then go out when the engine is started.

If the oil pressure warning light stays on while the engine is running, there is a serious malfunction.

If this happens, stop the car as soon as it is safe to do so, turn off the engine and check the oil level. If the oil level is low, fill engine oil to the proper level and start the engine again. If the light stays on with the engine running, turn the engine off immediately. In any instance

where the oil light stays on when the engine is running, the engine should be checked by an authorized Hyundai dealer before the car is driven again.

B260H02O-GAT



Parking Brake/Low Brake Fluid Level Warning Light

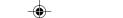


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### **WARNING:**

If you suspect brake trouble, have your brakes checked by a Hyundai dealer as soon as possible. Driving your car with a problem in either the brake electrical system or brake hydraulic system is dangerous, and could result in a serious injury or death.





### **Warning Light Operation**

The parking brake/brake fluid level warning light should come on when the parking brake is applied and the ignition switch is turned to "ON" or "START". After the engine is started. the light should go out when the parking brake is released.

If the parking brake is not applied, the warning light should come on when the ignition switch is turned to "ON" or "START", then go out when the engine starts. If the light comes on at any other time, you should slow the vehicle and bring it to a complete stop in a safe location off the roadway.

The brake fluid level warning light indicates that the brake fluid level in the brake master cylinder is low and hydraulic brake fluid conforming to DOT 3 or DOT 4 specifications should be added. After adding fluid, if no other trouble is found, the car should be immediately and carefully driven to a Hyundai dealer for inspection. If further trouble is experienced, the vehicle should not be driven at all but taken to a dealer by a professional towing service or some other safe method.

Your Hyundai is equipped with dualdiagonal braking systems. This means you still have braking on two wheels even if one of the dual systems should fail. With only one of the dual systems working, more than normal pedal travel and greater pedal pressure are reguired to stop the car. Also, the car will not stop in as short a distance with only half of the brake system working. If the brakes fail while you are driving, shift to a lower gear for additional engine braking and stop the car as soon as it is safe to do so.

### **CAUTION (Diesel):**

The parking brake/ low brake fluid warning light should come on when the vacuum level in brake booster descends to about 275 mmHg or below. The brake system is designed to stop the vehicle with reserve assist if brake pedal is held down. This reserve is greatly reduced each time you release the brake. Without vacuum assist vour vehicle can still be stopped by pushing much harder on brake pedal, however the stopping distance may be much longer. If the light comes on at any other time, you should slow the vehicle and bring it to a complete stop in a safe location off the roadway.

After starting the engine, do not drive the vehicle until the vacuum level is above 275 mmHg below atmosphere and warning light has turned off. If further trouble is experienced, the vehicle should not be driven at all but taken to a dealer by a professional towing service.







B260J01S-GAT



## Charging System Warning Light

The charging system warning light should come on when the ignition is turned on, then go out when the engine is running. If the light stays on while the engine is running, there is a malfunction in the electrical charging system. If the light comes on while you are driving, stop, turn off the engine and check under the hood. First, make certain the generator drive belt is in place. If it is, check the tension of the belt.

And then, have the system checked by your Hyundai dealer.



### CAUTION:

If the drive belt (generator belt) is loosen, broken, or mission while the vehicle is driving, there may be a serious malfunction, engine could overheat because this belt also drives the water pump.

B260L01Y-AAT



## Door Ajar Warning Light and Chime (If installed)

The door ajar warning light warns you that a door is not completely closed and the chime warns you that the driver's side front door is not completely closed.

### NOTE:

To remind you not to lock the key inside the car, the warning light comes on whenever the key is in the "LOCK" position and a door is open. The warning chime only sounds whenever the key is in the "LOCK" position and the driver's side front door is open. The chime sounds and the light remains on until the key is removed from the ignition.

B260M01A-AAT



## Low Fuel Level Warning Light

The low fuel level warning light comes on when the fuel tank is approaching empty. When it comes on, you should add fuel as soon as possible. Driving with the fuel level warning light on or with the fuel level below "E" can cause the engine to misfire and damage the catalytic converter.

B260B01B-AAT



## Tail Gate Open Warning Light

This light remains on unless the tailgate is completely closed and latched.









B260B01JM-AAT



### SRS (Airbag) Service Reminder Indicator (SRI) (If installed)

The SRS service reminder indicator (SRI) comes on for about 6 seconds after key is turned to the "ON" position or after the engine is started, after which it will go out.

This light also comes on when the SRS is not working properly. If the SRI does not come on, or continuously remains on after operating for about 6 seconds when you turned the ignition key to the "ON" position or started the engine, or if it comes on while driving, have the SRS inspected by an authorized Hyundai Dealer.

B260N01A-AAT



### **Malfunction Indicator** Light (If installed)

This light illuminates when there is a malfunction of an exhaust gas related component, and the system is not functioning properly so that the exhaust gas regulation values are not satisfied. This light will also illuminate when the ignition key is turned to the "ON" position, and will go out in a few seconds. If it illuminates while driving, or does not illuminate when the ignition key is turned to the "ON" position, take your car to vour nearest authorized Hvundai dealer and have the system checked.



### **4WD System Warning** Light (If installed)

When the key is turned to the "ON" position, the 4WD(Four Wheel Drive) system warning light will come on and then go off in a few seconds.



**CAUTION:** 

If the 4WD system warning light ( 🖼 ) blinks while driving, this indicates that there is a malfunction in the 4WD system. If this occurs, have your vehicle checked by an authorized Hyundai dealer as soon as possible.







B260V01JM-GAT



### **4WD Lock Indicator Light** (If installed)

4WD (Four Wheel Drive) lock indicator light in the instrument cluster is illuminated when the 4WD lock switch is pushed.

The purpose of this switch is to increase the drive power when driving on dry road surface, wet pavement snow-covered roads and/or off-road. 4WD lock indicator light is turned off by pushing the switch once again



### **CAUTION:**

Do not use 4WD lock switch on dry paved roads or highway, it can cause noise, vibration or damage of 4WD related parts.

B260E01HP-GAT



### **Seat Belt Warning Light**

The seat belt warning light blinks for about 6 seconds when the ignition key is turned from the "OFF" position to "ON" or "START".

B260U01TB-GAT



### **Immobilizer Warning** Light (If Installed)

This indicator light comes on for some seconds after the ignition key is turned to the "ON" position. At this time, you can start the engine. The light goes out after the engine is running. In case this light goes out before you start the engine, you must turn to the "LOCK" position and restart the engine. In case this light blinks for five seconds when the ignition key is turned to "ON" position, this indicates that the immobilizer system is out of order. At this time, refer to the explanation of the Limp home procedure (See page 1-5) or consult to the Hyundai dealer.

B260Q01E-GAT



### **Cruise Indicator Light** (If installed)

The cruise indicator light in the instrument cluster is illuminated when the cruise control main switch on the end of the barrel is pushed.

The indicator light does not illuminate when the cruise control main switch is pushed a second time.

Information about the use of cruise control is beginning on page 1-88.

B260S01B-GAT



### **Diesel Preheat Indicator** Light (Diesel Engine)

The indicator light illuminates amber when the ignition switch is placed at the "ON" position. The engine can be started after the preheat indicator light goes off. The illuminating time varies with the water temperature, air temperature and battery condition.











### NOTE:

If the engine were not started within 10 seconds after the preheating is completed, turn the ignition key once more to the "LOCK" position, and then to the "ON" position, in order to preheat again.

B265A01B-GAT



## Fuel Filter Warning Light (Diesel Engine)

This light illuminates when the ignition switch is set to the 'ON' position and goes off after the engine has started. If it lights up while the engine is running, it indicates that water has accumulated inside the fuel filter. If this happens, remove the water from the fuel filter. (Refer to "6-33 page".)

B900A01A-GAT

## ACOUSTIC WARNING SOUND (If installed)

The acoustic warning chime sounds when the tail lights are on and the driver's side door is open. This prevents the battery from discharging by warning when the car is left with the tail lights on. The chime sounds until the tail lights are turned off.

B270A01A-GAT

## BRAKE PAD WEAR WARNING SOUND (If installed)

The front disc brake pads have wear indicators that should make a high-pitched squealing or scraping noise when new pads are needed. The sound may come and go or be heard all the time when the vehicle is moving. It may also be heard when the brake pedal is pushed down firmly. Excessive rotor damage will result if the worn pads are not replaced. See your Hyundai dealer immediately.

B270B01O-GAT

## PARKING START WARNING SOUND (If installed)

If the vehicle is driven at 3km/h(2mph) for more 2~3 than seconds, the warning chime will sound continuously when the parking brake engaged.

B260E01O-GAT

## SEAT BELT WARNING SOUND (If installed)

The seat belt warning chime sounds for 6 seconds when the driver's seat belt is not fastend.







### **INSTRUMENT CLUSTER**

B280A01A-AAT

### **FUEL GAUGE**



The needle on the gauge indicates the approximate fuel level in the fuel tank. The fuel capacity is given in Section 9.

B290A02A-AAT

## ENGINE COOLANT TEMPERATURE GAUGE



### WARNING:

Never remove the radiator cap when the engine is hot. The engine coolant is under pressure and could erupt and cause severe burns. Wait until the engine is cool before removing the radiator cap.

The needle on the engine coolant temperature gauge should stay in the normal range. If it moves across the dial to "H" (Hot), pull over and stop as soon as possible and turn off the engine. Then open the hood and, after the engine has cooled, check the coolant level and the water pump drive belt. If you suspect cooling system trouble, have your cooling system checked by Hyundai dealer as soon as possible.





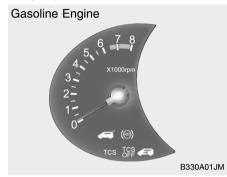




### **1** FEATURES OF YOUR HYUNDA

56

### B330A02A-AAT TACHOMETER



Diesel Engine

3

x1000rpm

cs TCS TCS

HJM2179

The tachometer registers the speed of your engine in revolutions per minute (rpm).



### CAUTION:

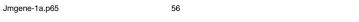
The engine should not be raced to such a speed that the needle enters the red zone on the tachometer face. This can cause severe engine damage and may void your warranty.

### B300A01Y-GAT SPEEDOMETER



Your Hyundai's speedometer is calibrated in kilometers per hour or miles per hour.







### TRIP COMPUTER

57

B310B01JM-GAT

### **ODOMETER/TRIP ODOMETER**



B310B01JM

### 1. Odometer

The odometer records the total driving distance in kilometers or miles, and is useful for keeping a record for maintenance intervals.

It is normal for a new vehicle to have the odometer indicating less than 50 km.

### NOTE:

Any alteration of the odometer may void your warranty coverage.





### 2. Trip odometer

This mode indicates the drive distance travelled since the last drive time reset.





The trip computer is a microcomputercontrolled driver information gauge that displays information related to driving, such as a tripmeter, average fuel consumption and distance to empty on the LCD.

### **Trip Computer Switch**

- The trip computer switch is used to zero the multi-functional display mode.
- Pushing in the trip computer switch behind the right side of the steering wheel changes the display as fol-

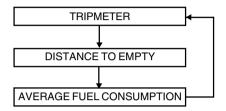




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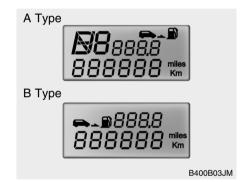
lows:



### 1. Tripmeter

o This mode indicates the total distance travelled since the last tripmeter reset. Total distance is

- also reset to zero if the battery is disconnected.
- o Pressing the trip computer switch for more than 1 second, when the tripmeter is being displayed, clears the tripmeter to zero.
- o The meter's working range is from 0 to 999.9 kms.



### 2. Distance to Empty

- This mode indicates the estimated distance to empty from the current fuel in the fuel tank and distance to empty symbol.
- o When refueling with more than 8

- liters, the trip computer will recognize refueling.
- o For an accurate distance to empty, drive more than 500 m.
- o When the distance to empty is less than 50 km, the symbol will always come on and the distance to empty digits will indicate "----" with flash until more fuel is added.

### NOTE:

- o The distance to empty can differ from the actual tripmeter according to driving conditions.
- The distance to empty can vary according to the driving conditions, driving pattern or vehicle



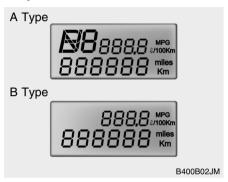
Jmgene-1a.p65

58

4/12/04, 4:48 PM



### speed.



### 3. Average Fuel Consumption

- o This mode calculates the average fuel consumption from the total fuel used and the distance since the last average consumption reset.
- o The total fuel used is calculated from the fuel consumption input.
- o For an accurate calculation, drive more than 500 m.
- o The meter's working range is from 0.0 to 99.9 L/100 km.

## MULTI-FUNCTION LIGHT SWITCH

B340A01A-AAT

### COMBINATION TURN SIGNAL, HEADLIGHT AND HIGH-BEAM SWITCH

### **Turn Signal Operation**

Pulling down on the lever causes the turn signals on the left side of the car to blink. Pushing upwards on the lever causes the turn signals on the right side of the car to blink. As the turn is completed, the lever will automatically return to the center position and turn off the turn signals at the same time. If either turn signal indicator light blinks more rapidly than usual, goes on but does not blink, or does not go on at all, there is a malfunction in the system. Check for a burned-out fuse or bulb or see your Hyundai dealer.

B340B01A-AAT

### **Lane Change Signal**



To indicate a lane change, move the lever up or down to a point where it begins flashing.

The lever will automatically return to the center position when released.

•





#### B340C03L-AAT

#### **Headlight Switch**



To operate the headlights, turn the barrel on the end of the multi-function switch. The first position turns on the parking lights, sidelights, tail lights and instrument panel lights. The second position turns on the headlights.

#### NOTE:

The ignition must be in the "ON" position to turn on the headlights.

#### Parking light auto cut

If you do not turn the parking lights "OFF" after driving, the parking lights will automatically shut "OFF" when the driver's door is opened.

To turn them "ON" again, you must simply turn the ignition key to the "ON" position.

#### B340F01A-GAT

### Daytime Running Lights (If installed)

Your Hyundai is equipped with daytime running lights. The daytime running lights are used to improve visibility for oncoming traffic. Your vehicle daytime running lights are designed to remain on continuously when the engine is operating even though the headlight switch is in the "OFF" position. However, the daytime running lights will be off while the parking brake is applied.

#### B340D01A-AAT

### **High-beam Switch**

To turn on the headlight high beams, push the lever forward (away from you). The High Beam Indicator Light will come on at the same time. For low beams, pull the lever back toward you.

#### B340E01A-AAT

#### **Headlight Flasher**



To flash the headlights, pull the switch lever toward you, then release it. The headlights can be flashed even though the headlight switch is in the "OFF" position.







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#### B340G01L-GAT

#### Auto Light (If installed)



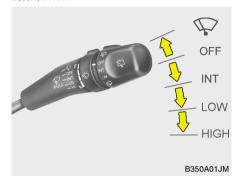
HJM2085

To operate the automatic light feature, turn the barrel on the end of the multifunction switch. If you set the multifunction switch to "AUTO", the tail lights and headlights will be turned automatically on or off according to external illumination.

61

### WINDSHIELD WIPER AND WASHER SWITCH

B350A01A-AAT



The windshield wiper switch has three positions:

- 1. Intermittent wiper operation
- 2. Low-speed operation
- 3. High-speed operation

#### NOTE:

To prevent damage to the wiper system, do not attempt to wipe away heavy accumulations of snow or ice. Accumulated snow and ice should be removed manually. If there is only a light layer of snow or ice, operate the heater in the defrost mode to melt the snow or ice before using the wiper.

#### B350B01O-GAT

#### **Windshield Washer Operation**



To use the windshield washer, pull the wiper/washer lever toward the steering wheel. When the washer lever is operated, the wipers automatically make two passes across the windshield. The washer continues to operate until the lever is released.

#### NOTE:

- o Do not operate the washer more than 15 seconds at a time or when the fluid reservoir is empty.
- o In icy or freezing weather, be sure the wiper blades are not frozen to the glass prior to operating the wipers.

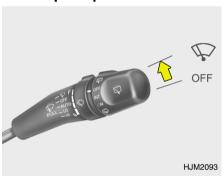






 In areas where water freezes in winter, use windshield washer antifreeze.

#### **Mist Wiper Operation**



If a single wipe is desired in mist, push the windshield wiper and washer control lever upwards.

#### B350C01O-AAT

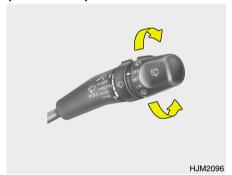
### Adjustable Intermittent Wiper Operation



To use the intermittent wiper feature, place the wiper switch in the "INT" position. With the switch in this position, the interval between wipes can be varied from approximately 1 to 18 seconds by turning the interval adjuster barrel. This is also varied automatically depending on your road speed.

#### B390A01E-AAT

### Rear Window Wiper And Washer (If installed)



- 1. \(\hat{\pi}\): The rear window wiper starts to operate three times after the washer fluid sprays onto the rear window.
- 2.OFF
- 3.INT: The interval between wipes operates every 5 seconds intermittently.
- 4.ON: The rear window wiper starts to operate continuously.
- 5. The washer fluid will be sprayed onto the rear window and the wiper operates while the rear window wiper barrel is placed in this position.







# Do not operate the washer continuously for more than 15 seconds or when the fluid reservoir is empty; this could damage the system. Do not op-

erate the wiper when the window is dry; this can result in scratching as well as premature wiper blade wear.

For the reason stated above, do not operate the washer when the washer fluid reservoir is empty.

## FRONT FOG LIGHT SWITCH (If installed)

**FOG LIGHT SWITCH** 



To turn on the front fog lights, push the switch. They will light when the headlight switch is in the second position and the ignition key is in the "ON" position.

## B360A01Y-GAT REAR FOG LIGHT SWITCH (If installed)



To turn on the rear fog lights, push the switch. They will come on when the headlight switch is in the second position and the key is in the "ON" position.









#### THAZARD WARNING SYSTEM

#### B370A01A-AAT



The hazard warning system should be used whenever you find it necessary to stop the car in a hazardous location. When you must make such an emergency stop, always pull off the road as far as possible.

The hazard warning lights are turned on by pushing in the hazard switch. This causes all turn signal lights to blink. The hazard warning lights will operate even though the key is not in the ignition.

To turn the hazard warning lights off, push the switch a second time.

### WINDOW DEFROSTER SWITCH

#### B385A01JM-AAT

### Front Window Defroster Switch (If installed)



The front window defroster is turned on by pushing in the switch. To turn the defroster off, push the switch a second time. The front window defroster automatically turns itself off after about 20 minutes.

#### B380A01Y-AAT

### Rear Window Defroster Switch (If installed)



The rear window defroster and heated outside rear view mirrors are turned on by pushing in the switch. At the same time, the rear window defroster indicator light on the switch is turned on. To turn the defroster off, push the switch a second time. The rear window defroster automatically turns itself off after about 15 minutes. To restart the defroster cycle, push in on the switch again after it has turned itself off.









#### FEATURES OF YOUR HYUNDAI 1

### INSTRUMENT PANEL LIGHT CONTROL (RHEOSTAT)

65

B410A01A-AAT

### (If installed)



The instrument panel lights can be made brighter or dimmer by turning the instrument panel light control knob.

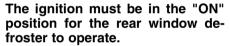
#### **DIGITAL CLOCK**

## $\sqrt{\mathbf{C}}$

#### CAUTION:

Do not clean the inner side of the rear window glass with an abrasive type of glass cleaner or use a scraper to remove foreign deposits from the inner surface of the glass as this may cause damage to the defroster elements.

#### NOTE:







There are three control buttons for the digital clock. Their functions are:

**HOUR** - Push "H" to advance the hour indicated.

**MIN** - Push "M" to advance the minute indicated.

**RESET** - Push "R" to reset minutes to ":00" to facilitate resetting the clock to the correct time. When this is done:

Pressing "R" between 10:30 and 11:29 changes the readout to 11:00. Pressing "R" between 11:30 and 12:29 changes the readout to 12:00.





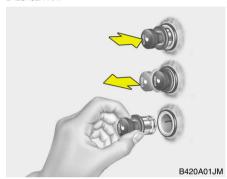






#### 66 CIGARETTE LIGHTER

#### B420A02A-AAT



For the cigarette lighter to work, the key must be in the "ACC" position or the "ON" position.

To use the cigarette lighter, push it all the way into its socket. When the element has heated, the lighter will pop out to the "ready" position.

Do not hold the cigarette lighter pressed in. This can damage the heating element and create a fire hazard.

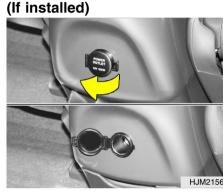
If it is necessary to replace the cigarette lighter, use only a genuine Hyundai replacement or its approved equivalent.

### CAUTION:

Do not use electric accessories or equipment other than the Hyundai genuine parts in this socket.

#### **POWER OUTLET**

#### B500D01JM-GAT



These are located in the quarter trim and on the rear main console.

These supply 12V electric power to operate electric accessories or equipment only when the key is in the "ON" or "ACC" position.



#### **CAUTION:**

Do not use the power outlet to connect electric accessories or equipment other than those designed to operate on 12 volts.







### <del>-</del>

#### **ASHTRAY**

B430A01E-AAT

#### **Front Ashtray**



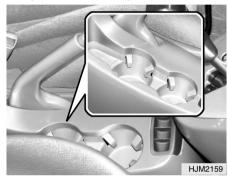
The front ashtray may be opened by pushing and releasing the ashtray lid. To remove the ashtray to empty or clean it, lift the ashtray upward and pull it out. The ashtray light will only illuminate when the external lights are on (If installed).

67

#### **DRINK HOLDER**

B450A02O-AAT

#### FRONT DRINK HOLDER



The drink holder is located on the main console for holding cups or cans.

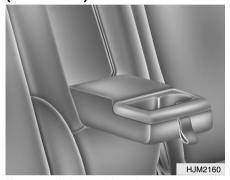


#### **WARNING:**

- o Use caution when using the drink holders. A spilled beverage that is very hot can injure you or your passengers. Spilled liquids can damage interior trim and electrical components.
- o Do not place objects other than cups or cans in the drink holder. This objects can be thrown out in the event of a sudden stop or an accident, possibly injuring the passengers in the vehicle.

#### B450B01JM-AAT

### REAR DRINK HOLDER (If installed)



The rear drink holders is located in the rear seat arm rest for holding cups or cans.

The rear drink holder can be used by pulling the rear seat armrest.



#### WARNING:

Do not place objects other than cups or cans in the drink holder. This objects can be thrown out in the event of a sudden stop or an accident, possibly injuring the passengers in the vehicle.







#### **1** FEATURES OF YOUR HYUNDAI

68

#### **SUNROOF**

## B460A01Y-AAT (If installed) Sun Shade



Your HYUNDAI is equipped with a sliding sunshade which you can manually adjust to let in light with the sunroof closed, or to block sunlight.



#### B460B01JM-GAT

#### **Opening the Sunroof System**



If your vehicle is equipped with this feature, you can slide or tilt your sunroof with the sunroof control buttons located on the overhead console.

The sunroof can only be opened, closed, or tilted when the ignition switch is in the "ON" position.

### Sliding the sunroof Autoslide open

To use the autoslide feature, momentarily (more than 1 second) press the SLIDE OPEN button on the overhead console. The sunroof will slide all the way open. To stop the sunroof sliding at any point, press any sunroof control button.

#### Manual slide open

Press the SLIDE OPEN button on the overhead console for less than 0.5 second.



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To close the sunroof, press the CLOSE button on the overhead console and hold it until the sunroof is closed.



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#### **WARNING:**

- Do not close a sunroof if anyone's hands, arms or body are between the sliding glass and the sunroof sash, as this could result in injury.
- o Do not place your head or arms out of the sunroof opening at any time.



#### **CAUTION:**

- Do not open the sunroof in severely cold temperature or when it is covered with ice or snow.
- o Periodically remove any dirt that may have accumulated on the quide rails.
- o Do not press any sunroof control button longer than necessary. Damage to the motor or system components could occur.



#### **Tilting the Sunroof System**



#### Auto tilt open

To use the autotilt feature, momentarily (more than 1 second) press the TILT UP button on the overhead console. The sunroof will tilt all the way open. To stop the sunroof tilting at any point, press any sunroof control button.

#### Manual tilt open

Press the TILT UP button on the overhead console for less than 0.5 second.

#### Close

To close the sunroof, press the CLOSE button on the overhead console and hold it until the sunroof is closed.

#### NOTE:

After washing the car or after there is rain, be sure to wipe off any water that is on the sunroof before operating it.









#### B460D03B-GAT

#### **Manual Operation of Sunroof**

If the sunroof does not electrically operate:



1. Remove the rectangular plastic interior light lens in the front overhead console by using a flat blade screwdriver as shown.



2. Remove the mounting screws of the front overhead console with a (+) driver.



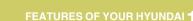
- 3. Insert the hexagonal head wrench provided with the vehicle into the socket. This wrench can be found in the vehicle's glove box.
- 4. Turn the wrench clockwise to open or counterclockwise to close the sunroof.







4/12/04, 4:48 PM



#### **INTERIOR LIGHT**

71

B460E01JM-GAT

#### Resetting the sunroof

Whenever the vehicle battery is disconnected or discharged, or you use the emergency handle to operate the sunroof, you have to reset your sunroof system as follows:

- 1. Turn the ignition key to the ON position.
- 2. According to the position of the sunroof, do as follows.
  - In case that the sunroof has closed completely or been tilted: Press the TILT UP button for 1 second.
  - 2) In case that the sunroof has slideopened: Press and hold the CLOSE button for more than 5 seconds until the sunroof has closed completely. And then press the TILT UP button for 1 second
- 3. Then, release it.

4. Press and hold the TILT UP button once again until the sunroof has returned to the original position of TILT UP after it is raised a little higher than the maximum TILT UP position. When this is complete, the sunroof system is reset.

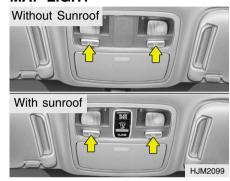


#### CAUTION:

If the sunroof is not reset, it may not be operated properly.

B480B01Y-AAT

#### **MAP LIGHT**



Push in the map light switch to turn the light on or off. This light produces a spot beam for convenient use as a map light at night or as a personal light for the driver and the passenger.









### B490A01JM-AAT INTERIOR LIGHT



The interior courtesy light has two buttons. The two buttons are:

#### o DOOR

In the "DOOR" position, the interior courtesy light comes on when any door is opened regardless of the ignition key position. The light goes out gradually 6 seconds after the door is closed.

#### o ON

In the "ON" position, the light stays on at all times. Do not leave this button pressed for an extended period of time when the vehicle is not running.

#### **SPECTACLE CASE**

### B491A02O-GAT (If installed)



The spectacle case is located on the front overhead console.

Push the end of the cover to open the spectacle case.



#### WARNING:

Do not keep objects such as sharp or unsuitable things inside the spectacle case. Such objects can be thrown out in the event of a sudden stop or an accident, possibly injuring the passengers in the vehicle.

#### **GLOVE BOX**

#### B500A01Y-AAT





#### **WARNING:**

To avoid the possibility of injury in case of an accident or a sudden stop, the glove box door should be kept closed when the car is in motion.

- o To open the glove box, pull on the glove box release lever.
- o The glove box door can be locked (and unlocked) with the key.

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#### **OUTSIDE REARVIEW MIRROR**

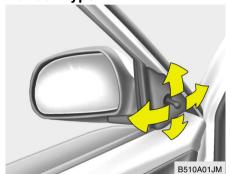
B500B01O-AAT

#### Illuminated Glove Box

Opening the glove box will automatically turn on the light when the multifunction switch is turned to the first/second position.



### **Manual Type**



The outside rearview mirrors are equipped with a remote control for your convenience. It is operated by the control lever in the bottom front corner of the window.

Before driving away, always check that your mirrors are positioned so you can see behind you, both to the left and right sides, as well as directly behind your vehicle. When using the mirror, always exercise caution when attempting to judge the distance of vehicles behind or along side of you.



If the mirror control is jammed with ice, do not attempt to break it free using the control handle or by manipulating the face of the mirror. Use an approved spray de-icer (not radiator antifreeze) to release the frozen mechanism or move the vehicle to a warm place and allow the ice to melt.





### **Electric Type (If installed)**



The outside rearview mirrors can be adjusted to your preferred rear vision, both directly behind the vehicle, and to the rear of the left and right sides.

The remote control outside rearview mirror switch controls the adjustments for both right and left outside mirrors.

### To adjust the position of either mirror:

 Move the selecting switch to the right or left to activate the adjustable mechanism for the corresponding door mirror. 2. Adjust mirror angle by depressing the appropriate perimeter switch as illustrated.



#### CAUTION:

- o Do not operate the switch continuously for an unnecessary length of time.
- o Scraping ice from the mirror face could cause permanent damage. To remove any ice, use a sponge, soft cloth or approved de-icer.



### OUTSIDE REARVIEW MIRROR HEATER (If installed)



The outside rearview mirror heater is actuated in connection with the rear window defroster. To heat the outside rearview mirror glass, push in the switch for the rear window defroster. The rearview mirror glass will be heated for defrosting or defogging and will give you improved rear vision in inclement weather conditions. Push the switch again to turn the heater off. The outside rearview mirror heater automatically turns itself off after 15 minutes.



#### **WARNING:**

Be careful when judging the size or distance of any object seen in the passenger side rearview mirror. It is a convex mirror with a curved surface. Any objects seen in this mirror are closer than they appear.

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#### B510C01A-AAT

#### **FOLDING THE OUTSIDE REAR-VIEW MIRRORS**



To fold the outside rearview mirrors, push them towards the rear.

The outside rearview mirrors can be folded rearward for parking in narrow areas.



#### WARNING:

Do not adjust or fold the outside rearview mirrors while the vehicle is moving. This could result in loss of control, and an accident causing death, serious injury or property damage.

#### **DAY/NIGHT INSIDE REAR-VIEW MIRROR**

B520A01A-AAT



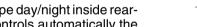
Your Hyundai is equipped with a day/ night inside rearview mirror. The "night" position is selected by flipping the tab at the bottom of the mirror toward you. In the "night" position, the glare of headlights of cars behind you is reduced.

#### B520B01O-GAT

#### (Electric type) (If installed)



The electric type day/night inside rearview mirror controls automatically the glare of headlights of the car behind you. Adjust the rearview mirror to the desired position.









B520C01JM-GAT

## AUTOMATIC DIMMING REAR VIEW MIRROR WITH COMPASS (If installed)



Automatic dimming rear view mirror controls automatically the glare of headlights of the car behind you when it turned on by pushing the "MIRROR" button.

It is turned off by pushing the button once more.



#### A CAUTION:

When cleaning the mirror, use a paper towel or similar material dampened with glass cleaner. Do not spray glass cleaner directly on the mirror as that may cause the liquid cleaner to enter the mirror housing.

#### 1.To operate Compass feature

Compass is a convenient feature which displays compass heading of vehicle.

#### 2."COMP" switch

Push the "COMP" lower part of mirror, then the vehicle's directional heading will be displayed. Pushing the "COMP" again will turn off the display.

Heading display

- E : East

- W : West - S : South

- N : North

ex) NE: North East

#### 3. Calibration procedure

If the display read "C", calibrate the compass.

- Driving the vehicle in a circle at less than 8km/h 3 times or until the compass heading appears.
- Driving in a circle in right-handed direction and opposite direction are possible, and if the calibration is completed, the compass heading will appear.
- Keep driving in a circle until a compass heading appears.



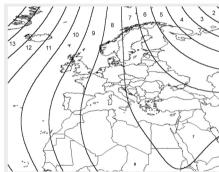




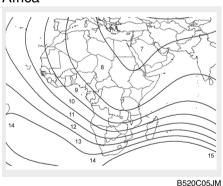
#### 4. Setting the compass zone

1. Find your current location and variance zone number on the zone map.

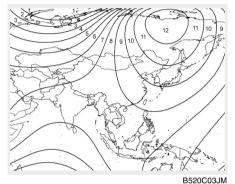
#### Europe



Africa



Asia



South America



than 3 seconds. The current zone number will appear in the display.

3. Press the "COMP" button until the new zone number appears in the display. After you stop pressing the button in, the display will show a compass direction within a few seconds.



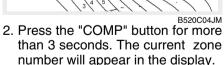
#### **CAUTION:**

- 1. Do not install the ski rack, antenna, etc. which are attached to the vehicle by means of a magnet. They affect the operation of the compass.
- 2. If the compass deviates from the correct indication soon after repeated adjustment, have the compass checked at an authorized dealer.
- 3. The compass may not indicate the correct compass point in tunnels or while driving up or down a steep hill.

(The compass returns to the correct compass point when the vehicle moves to an area where the geomagnetism is stabilized.)



B520C01JM

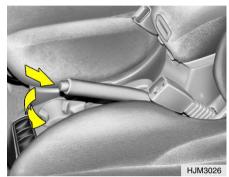






#### 78 PARKING BRAKE

#### B530A01A-AAT

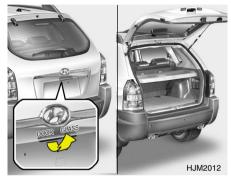


Always engage the parking brake before leaving the car. This also turns on the parking brake indicator light when the key is in the "ON" or "START" position. Before driving away, be sure that the parking brake is fully released and the indicator light is off.

- o To engage the parking brake, pull the lever up as far as possible.
- o To release the parking brake, pull up the lever and press the thumb button. Then, while holding the button in, lower the brake lever.

#### **TAIL GATE**

B540A01JM-AAT



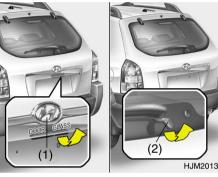


The tail gate should always be kept completely closed while the vehicle is in motion. If it is left open or ajar, poisonous exhaust gases may enter the car resulting in serious illness or death to the occupants. See additional warnings concerning exhaust gases on page 2-2.

- o Pull and raise the "DOOR" release lever to open the tail gate.
- To close, lower the door, then press down on it until it locks. To be sure the door is securely fastened, always try to pull it up again.

B540B01JM-AAT

#### **Tail gate Window**



- o Pull the "GLASS" release lever (1) to open the tailgate window glass, and raise the window open lever (2).
- To close the tail gate window, lower the tail gate window, and it will close by itself.

To be sure the tail gate window is securely fastened, always try to pull it up again.

#### NOTE:

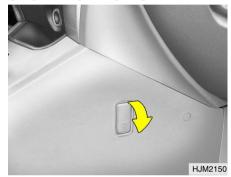
The tail gate window lock is operated in connection with the tail gate lock. To open the tail gate window make sure the tailgate is unlocked with a key or the central door locking switch.

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#### B540A01JM-GAT SHOPPING BAG HOLDER





Shoping bag holders are located in the front console and backside of the rear seat. When not in use, return it to the original position.

#### **CAUTION:**

- o Do not hang a bag beyond 3 kg. It may cause damage to the shopping bag holder holder.
- o Return it to the original position after using the shopping bag holder.



#### LUGGAGE COMPARTMENT LIGHT



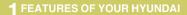
Luggage compartment light has a 3position switch. The three positions are:

- o In the "DOOR" position, the luggage compartment light comes on when the tail gate is opened, then goes out when it is closed.
- o In the "ON" position, the light stays on at all times.
- o In the "OFF" position, the light stays off at all times.









#### B545A01JM-GAT

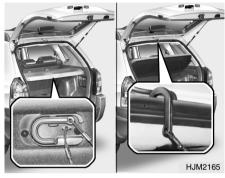
#### **HOW TO USE LUGGAGE ROOM**

B650A01JM-GAT

#### Cargo Area Cover (If installed)



Nothing should be carried on top of the luggage cover. Loose materials could result in injury to vehicle occupants during sudden braking.



Before use the luggage under tray, hang the cargo area cover hook to the weather strip. Place the cargo area cover hook in the former place while not in use.

#### B545B01JM-GA7

#### **Luggage Under Tray**



There is a multipurpose receipt space under the luggage mat.

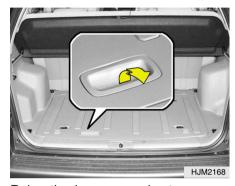


Before use the luggage under tray, remove the luggage mat. And turn the lever toward "UNLOCK".









Raise the luggage under tray cover with holding the grip. After using it lock the luggage under tray cover to turn the lever toward "LOCK".

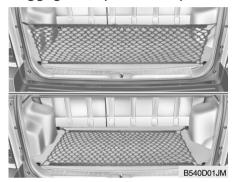
81

#### **Luggage Side Trim**



There are multipurpose receipts to accept small commodities in the luggage side trim.

### B540D02HP-GAT Luggage Net (If Installed)



Some objects can be kept in the net in the luggage compartment.

Use the luggage net on the floor or at the back of the luggage compartment to prevent objects from sliding.



#### CAUTION:

To prevent damage to the goods or the vehicle, care should be taken when carrying fragile or bulky objects in the luggage compartment.







#### **ROOF RACK**



#### WARNING:

Avoid eye injury. DO NOT overstretch. ALWAYS keep face and body out of recoil path. DO NOT use when strap has visible signs of wear or damage.





If your Hyundai has a roof rack, you can load things on top of your vehicle. Crossrails and fixing components to adapt the roof rack on your vehicle may be obtained from an authorized Hyundai dealer.



#### **CAUTION:**

 The following specifications are recommended when loading cargo or luggage.

ROOF RACK

75 kg (165 lb) EVENLY DISTRIBUTED

- o Loading cargo or luggage above 75 kg (165 lb) on the roof rack may damage your vehicle.
  When you carry large objects, never let them hang over the rear or the sides of your vehicle.
- To prevent damage or loss of cargo as you are driving, check frequently to make sure the luggage carrier and cargo are still securely fastened.
- o Always drive your vehicle at a moderate speed.
- o To use the roof rails as a roof rack, you must fit the roof rails with two or more crossrails or equivalent before carrying cargo or lugguage on the roof.
- o When crossrail is adapted, you can load things on the roof rack.
- o Loading cargo or luggage over specification on the roof rack may damage stability of your vehicle.
- In case the sunroof is equipped, do not position roof rack loads that could interfere with opening of the sunroof.







#### HIGH-MOUNTED REAR STOP LIGHT

B550A01A-AAT
(If installed)



In addition to the lower-mounted rear stoplights on either side of the car, the high mounted rear stoplight in the center of the rear window also lights when the brakes are applied.

### REMOTE FUEL-FILLER LID RELEASE

B560A02A-AAT



The fuel-filler lid may be opened from inside the vehicle by pulling up on the fuel-filler lid opener located on the front floor area on the left side of the car.

#### NOTE:

If the fuel-filler lid will not open because ice has formed around it, tap lightly or push on the lid to break the ice and release the lid. Do not pry on the lid. If necessary, spray around the lid with an approved de-icer fluid (do not use radiator anti-freeze), or move the vehicle to a warm place and allow the ice to melt.



#### **WARNING:**

Fuel vapors are dangerous. Before refueling, always stop the engine and never allow sparks or open flames near the filler area. If you need to replace the filler cap, use a genuine Hyundai replacement part. If you open the fuel filler cap during high ambient temperatures, a slight "pressure sound" may be heard. This is normal and not a cause for concern.

Whenever you open the fuel filler cap, turn it slowly.











#### **1** FEATURES OF YOUR HYUNDA

#### 84 HOOD RELEASE

#### B570A03A-GAT



1. Pull the release knob to unlatch the hood.





- 2. Push the secondary latch lever to the left and lift the hood.
- 3. Hold the hood open with the support rod.



Before closing the hood, return the support rod to its clip to prevent it from rattling. Lower the hood until it is about 1 ft. (30 cm) above the closed position and let it drop. Make sure that it locks into place.



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### CAUTION:

Make sure that the support rod has been released prior to closing the hood.







#### **SUN VISOR**



#### **WARNING:**

- o Always double check to be sure that the hood is firmly latched before driving away. If it is not latched, the hood could open while the vehicle is being driven, causing a total loss of visibility, which might result in an accident.
- o The support rod must be inserted completely into the hole provided in the hood whenever you inspect the engine compartment. This will prevent the hood from falling and possibly injuring you.
- o Do not move the vehicle with the hood in the raised position, as vision is obstructed and the hood could fall or be damaged.





Your Hyundai is equipped with sun visors to give the driver and front passenger either frontal or sideward shade. To reduce glare or to shut out direct rays of the sun, turn the sun visor down.

A vanity mirror is provided on the back of the sun visor for the driver and front passenger.

#### NOTE:

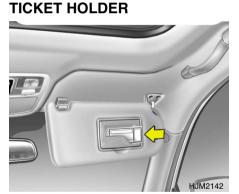
The Supplemental Restraint System (SRS) label containing useful information can be found on the back of each sun visor.



#### WARNING:

Do not place the sun visor in such a manner that it obscures visibility of the roadway, traffic or other objects.

#### B580C01LZ-AAT



The ticket holder is provided on the front of the sun visor for holding a tollgate ticket.







#### **1** FEATURES OF YOUR HYUNDA

#### 86 FRONT DOOR EDGE WARN-ING LIGHT

B620A01S-AAT
(If installed)



A red light comes on when the front door is opened. The purpose of this light is to assist when you get in or out, and also to warn passing vehicles.

#### HORN

B610A01A-GAT



Press the center hub of the steering wheel to sound the horn.

#### **REAR SEAT ARM REST**

B611A01Y-AAT
(If installed)



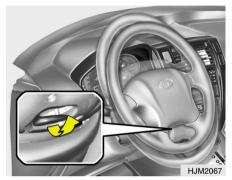
The rear seat arm rest is located in the center of the rear seat back.





### STEERING WHEEL TILT LEVER

B600A01A-AAT



#### To Adjust the Steering Wheel:

- 1. Push the lever downward to unlock.
- 2. Raise or lower the steering wheel to the desired position.
- 3. After adjustment, securely tighten the lever by pulling it upward.



#### WARNING:

Do not attempt to adjust the steering wheel while driving as this may result in loss of control of the vehicle which may cause serious injury or death.

#### HEADLIGHT LEVELING DE-VICE SYSTEM

B340G01O -GAT

(If installed)



To adjust the headlight beam level according to the number of the passengers and the loading weight in the luggage area, turn the beam leveling switch.

The higher the number of the switch position, the lower the headlight beam level. Always keep the headlight beam at the proper leveling position, or headlights may dazzle other road users.

Listed below are the examples of proper switch settings. For loading conditions other than those listed below, adjust the switch position so that the beam level may be the nearest as the condition obtained according to the list.

Loading condition	Switch position
Driver only	0
Driver + Front passenger	0
Driver + Front passenger	4
+ Farthest Rear Seat Full	'
Full Passengers	1
Full passengers +	
Maximum Permissible	2
Loading	
Driver + Maximum	3
permissible loading	3



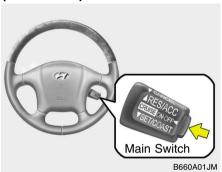






#### 88 CRUISE CONTROL

### B660A01S-GAT (If installed)



The cruise control system provides automatic speed control for your comfort when driving on freeways, tollroads, or other noncongested highways. This is designed to function above approximately 40 km/h (25 mph).

#### B660B01E-GAT

#### To Set the Cruise Speed



- 1. Push in the cruise control main switch on the end of the barrel. The "CRUISE" indicator light in the instrument cluster will be illuminated. This turns the system on.
- 2. Accelerate to the desired cruising speed above 40 km/h (25 mph).
- Push the control switch downward to "SET (COAST)" and release it.
- 4. Remove your foot from the accelerator pedal and the desired speed will automatically be maintained.

5. To increase speed, depress the accelerator pedal enough for the vehicle to exceed the preset speed. When you remove your foot from the accelerator pedal, the vehicle will return to the speed you have set.



#### **WARNING:**

To avoid accidental cruise control engagement, keep the cruise control main switch off when not using the cruise control.

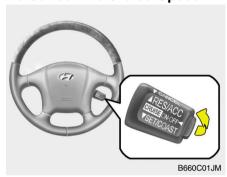






#### B660C03E-AAT

#### To Cancel the Cruise Speed



To disengage the cruise control system, pull the control switch toward the steering wheel to the "CANCEL" position. Additionally, the following actions will disengage the system:

- o Depress the brake pedal.
- o Depress the clutch pedal (Manual transaxle).
- o Shift the selector lever to "P" or "N" position (Automatic transaxle).
- o Decrease the vehicle speed to less than 40 km/h (25 mph).
- o Release the main switch.

#### B660D01E-AAT

#### To Resume the Preset Speed



The vehicle will automatically resume the speed set prior to cancellation when you push the control switch upward to the "RESUME (ACCEL)" position and release it, providing the vehicle speed is above 40 km/h (25 mph).

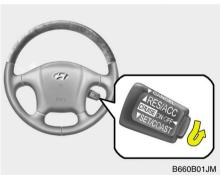
#### B660E01E-AAT

#### To Reset at a Faster Speed

- Push the control switch upward to the "RESUME (ACCEL)" position and hold it.
- 2. Accelerate to desired speed and release the control switch. While the control switch is held, the vehicle will gradually gain speed.

#### B660F02E-AAT

#### To Reset at a Slower Speed











- Push the control switch downward to "SET (COAST)" and hold it. The vehicle will decelerate.
- When the desired speed is obtained, release the control switch. While the control switch is pushed, the vehicle speed will gradually decrease.



#### WARNING:

- o Keep the main switch off when not using the cruise control.
- o Use the cruise control system only when traveling on open highways in good weather.
- o Do not use the cruise control when it may not be safe to keep the car at a constant speed, for instance, driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads or over 6% up-hill or downhill roads.

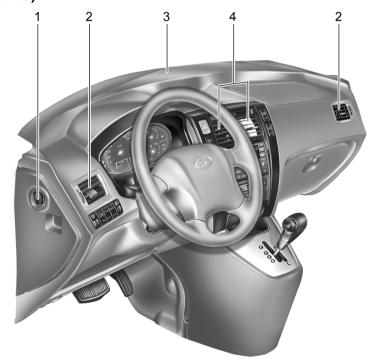
- o Pay particular attention to the driving conditions whenever using the cruise control system.
- o During cruise-control driving with a manual transaxle vehicle, do not shift into neutral without depressing the clutch pedal, or the engine will be overrevved. If this happens, depress the clutch pedal or release the main switch.
- o With the cruise control engaged, when the brake pedal is applied, it is normal to hear the cruise control system deactivate. This is an indication of normal system operation.
- o During normal cruise control operation, when the "SET (COAST)" is activated or reactivated after applying the brakes, the cruise control will energize after approximately 3 seconds. This delay is normal.





#### **HEATING AND COOLING CONTROL**

### B710A01JM-GAT (If installed)



- 1. Side Defroster Nozzle
- 2. Side Ventilator
- 3. Windshield Defroster Nozzle
- 4. Center Ventilator

#### B710B02O-AAT

#### **CENTER VENTILATOR**

The center ventilators are located in the middle of the dashboard. To change the direction of the air flow, move the knob in the center of the vent up-and-down and side-to-side. The vents are opened when the vent knob is moved to "\$\subseteq " position. The vents are closed when the vent knob is moved to "\$\subseteq " Keep these vents clear of any obstructions.

#### B710C01JM-AAT

#### SIDE VENTILATOR

The side ventilators are located on each side of the dash board. To change the direction of the air flow, move the knob in the center of the vent up-and-down and side-to-side. The vents are opened when the vent knob is moved to "\$\subseteq " position. The vents are closed when the vent knob is moved to "\$\subseteq" | See these vents clear of any obstructions.

B710A02JM

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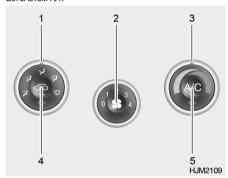


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#### FEATURES OF YOUR HYUNDAI

#### 92 HEATING AND VENTILA-TION

B670A01JM-AAT



There are three controls and two switches for the heating and cooling system. They are:

- 1. Air flow control
- 2. Fan speed control
- 3. Temperature control
- 4. Air intake control switch
- 5. Air conditioning switch

B670B01A-AAT

### Fan Speed Control (Blower Control)



HJM2116

This is used to turn the blower fan on and off and to select the fan speed. The blower fan speed, and therefore the volume of air delivered from the system, may be controlled manually by setting the blower control between the "1" and "4" position.

B670C02E-AAT

#### **Air Intake Control**



HJM2118

This is used to select fresh outside air or recirculating inside air.

To change the air intake control mode, (Fresh mode, Recirculation mode) push the control button.

FRESH MODE ( ): The indicator light on the button goes off when the air intake control is fresh mode.

RECIRCULATION MODE (): The indicator light on the button is illuminated when the air intake control is recirculation mode.







With the "Fresh" mode selected, air enters the vehicle from the outside and is heated or cooled according to the function selected.

With the "Recirculation" mode selected, air from within the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

#### NOTE:

- o It should be noted that prolonged operation of the heating in "Recirculation" mode ( ) will give rise to fogging of the windshield and side windows and the air within the passenger compartment will become stale. In addition, prolonged use of the air conditioning with the "Recirculation" mode ( ) selected may result in the air within the passenger compartment becoming excessively dry.
- o When the ignition switch is turned "ON" the air intake control will change to "Fresh" mode (♠) in floor, floor-defrost and defrost position. This is normal operation.

### B670D01L-GAT Air Flow Control



HJM2110

This is used to direct the flow of air. Air can be directed to the floor, dashboard outlets, or windshield. Five symbols are used to represent Face, Bi-Level, Floor, Floor-Defrost and Defrost air position.



Face-Level

Selecting the "Face" mode will cause air to be discharged through the face level vents.









#### **†** FEATURES OF YOUR HYUNDA

94





Air is discharged through the face vents and the floor vents. This makes it possible to have cooler air from the dashboard vents and warmer air from the floor outlets at the same time.



Floor-Level

Air is discharged through the floor vents, windshield defroster nozzle, side defroster nozzle and side ventilator.



### Floor-Defrost Level

Air is discharged through the windshield defroster nozzle, the floor vents, side defroster nozzle and side ventilator.

If the "Floor-Defrost" mode is selected, the A/C will be turned on automatically and "Fresh" mode will be activated.



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#### **Defrost-Level**

Air is discharged through the windshield defroster nozzle, side defroster nozzle and side ventilator.

If the "Defrost" mode is selected, the A/ C will be turned turn on automatically and "Fresh" mode will be activated to improve windshield defrosting.

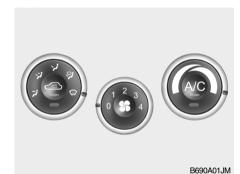
#### B670E02A-AAT

#### **Temperature Control**



This control is used to adjust the degree of heating or cooling desired.

#### B690A01E-AAT



For normal heating operation, set the air intake control to the fresh air ( ) position and the air flow control to the floor ( ) position.

For faster heating, the air intake control should be set in the recirculate ( ) position.

If the windows fog up, set the air flow control to the defrost ( ) position. (The A/C will be on automatically and "Fresh" mode will be activated.)

For maximum heat, move the temperature control to "Warm".









### 96 BI-LEVEL HEATING

**VENTILATION** 

### **DEFROSTING/DEFOGGING**





B700A01JM

Your Hyundai is equipped with bi-level heating controls. To use this feature:

- o Set the air flow control at the bi-level (v) position.
- o Adjust the fan speed control to the desired speed.
- o Set the temperature control between "Cool" and "Warm".





B710A01JM

To operate the ventilation system:

- o Set the air intake control to "Fresh" mode ( ).
  o To direct all intake air to the dash-
- o To direct all intake air to the dashboard vents, set the airflow control to "Face" (→).
- o Adjust the fan speed control to the desired speed.
- o Set the temperature control between "Cool" and "Warm".

B720A04S-AAT



B720A01JM

Use the heating/ventilation system to defrost or defog the windshield:

## To remove interior fog on the windshield:

- Set the air flow control to the defrost (\(\frac{\pm}{m}\)) position. (The A/C will be turned on automatically and "Fresh" mode will be activated.)
- o Set the temperature control to the desired position.
- o Set the fan speed control between "1" and "4" position.















- o Set the air flow control to the defrost (\(\psi\)) position. (The A/C will be turned on automatically and "Fresh" mode will be activated.)
- o Set the temperature control to the warm.
- o Set the fan speed control to position "3" or "4".

### NOTE:

When the A/C is operated continuously on the floor-defrost level () or defrost level (), it may cause fog to form on the exterior windshield by the temperature difference. At this time set the air flow control to the face level position () and fan speed control to the low position.

#### B730A01L-AAT

## **Operation Tips**

- o To keep dust or unpleasant fumes from entering the car through the ventilation system, temporarily set the air intake control to (). Be sure to return the control to () when the irritation has passed to keep fresh air in the vehicle. This will help keep the driver alert and comfortable.
- Air for the heating/cooling system is drawn in through the grilles just ahead of the windshield. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- o To prevent interior fog on the windshield, set the air intake control to the fresh air () position, fan speed to the desired position, turn on the air conditioning system, and adjust temperature control to desired temperature.





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### 98 AIR CONDITIONING SYSTEM

#### B740A01S-AAT

## Air Conditioning Switch (If installed)



The air conditioning is turned on or off by pushing the A/C button on the heating/air conditioning control panel.

B740B01S-AAT

## Air Conditioning Operation for Cooling



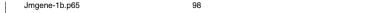
To use the air conditioning to cool the interior:

- o Set the side vent control to "OFF", to shut off outside air entry.
- o Turn on the fan control switch.
- Turn on the air conditioning switch by pushing the switch. The air conditioning indicator light should come on at the same time.
- o Set the air intake control to "Fresh" mode ( ).

- o Set the temperature control to "Cool". ("Cool" provides maximum cooling. The temperature may be moderated by moving the control toward "Warm".)
- o Adjust the fan control to the desired speed. For greater cooling, turn the fan control to one of the higher speeds or temporarily select the "Recirculation ()")" position on the air intake control.









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B740C01S-AAT

### **Dehumidified Heating**

For dehumidified heating:

- o Turn on the fan control switch.
- o Turn on the air conditioning switch. The air conditioning indicator light should come on at the same time.
- o Set the air intake control to the "Fresh" mode (♠).
- o Set the air flow control to the "Face" (デ).
- Adjust the fan control to the desired speed.
- o For more rapid action, set the fan at one of the higher speeds.
- Adjust the temperature control to provide the desired amount of warmth.

B740D01A-AAT

### **Operation Tips**

- o If the interior of the car is hot when you first get in, open the windows for a few minutes to expel the hot air.
- o When you are using the air conditioning system, keep all windows closed to keep hot air out.
- o When moving slowly, as in heavy traffic, shift to a lower gear. This increases engine speed, which in turn increases the speed of the air conditioning compressor.
- On steep grades, turn the air conditioning off to avoid the possibility of the engine over-heating.
- o During winter months or in periods when the air conditioning is not used regularly, run the air conditioning once every month for a few minutes. This will help circulate the lubricants and keep your system in peak operating condition.







## AUTOMATIC HEATING AND COOLING CONTROL SYSTEM

#### B970A01Y-AAT

## (If installed)

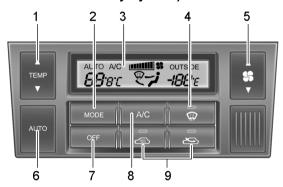
Your Hyundai is equipped with an automatic heating and cooling control system controlled by simply setting the desired temperature.

#### B970B01JM-GAT

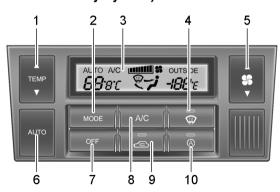
## **Heating and Cooling Controls**

- 1. Temperature Control Switch
- 2. Air Flow Control Switch
- 3. Display Window
- 4. Defroster Switch
- 5. Blower Fan Control Switch
- 6. AUTO (Automatic Control) Switch
- 7. OFF Switch
- 8. Air Conditioning Switch
- 9. Air Intake Control Switch
- 10.Air Quality System Switch (If installed)

### TYPE A (Without A.Q.S: Air Quality System)



### TYPE B (With A.Q.S: Air Quality System)



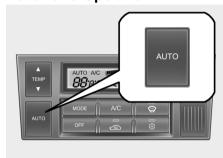
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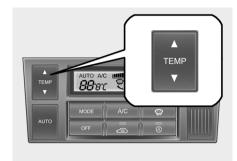
### **Automatic Operation**



HJM2124

The FATC (Full Automatic Temperature Control) system automatically controls heating and cooling by doing as follows:

Push the "AUTO" button. The indicator light will illuminate confirming that
the Face, Floor and/or Bi-Level
modes as well as the blower speed
and air conditioner will be controlled
automatically.



HJM2126

2. Push the "TEMP" button to set the desired temperature.

The temperature will increase to the maximum  $32^{\circ}C(90^{\circ}F)$  by pushing the " $\blacktriangle$ " button. Each push of the button will cause the temperature to increase by  $0.5^{\circ}C(1^{\circ}F)$ .

The temperature will decrease to the minimum 17°C(62°F) by pushing the "▼" button. Each push of the button will cause the temperature to decrease by 0.5°C(1°F).

### NOTE:

 If the battery has been discharged or disconnected, the temperature mode will reset to Centigrade degrees.

This is a normal condition and you can change the temperature mode from Centigrade to Farenheit as follows;

Press the "TEMP" down button and "AUTO" button simultaneously for 3 secs. The display shows that the unit of temperature is adjusted to Centigrade or Fahrenheit.

 $(^{\circ}C\rightarrow^{\circ}F \text{ or } ^{\circ}F\rightarrow^{\circ}C)$ 



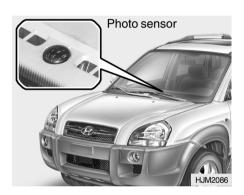




### FEATURES OF YOUR HYUNDA

102

 Never place anything covering the sensor which is located on the instrument panel to ensure better control of the heating and cooling system.



B980A01Y-AAT

### **MANUAL OPERATION**

The heating and cooling system can be controlled manually as well by pushing buttons other than the "AUTO" button. In this state, the system sequentially works according to the order of buttons selected.

The function of the buttons which are not selected will be controlled automatically.

Press the "AUTO" button in order to convert to automatic control of the system.

B980B01Y-AAT

## **Fan Speed Control Switch**



HJM2123

The fan speed can be set to the desired speed by pressing the appropriate fan speed control button. The higher the fan speed is, the more air is delivered. Pressing the "OFF" button turns off the fan.

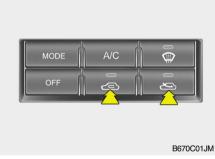






B670C02Y-AAT

## Air Intake Control Switch (Without A.Q.S)



This is used to select fresh outside air or recirculation inside air.

To change the air intake control mode, (Fresh mode, Recirculation mode) push the control button.

FRESH MODE ( ): The indicator light on the button goes on when the air intake control is fresh mode.

**RECIRCULATION MODE** ( ): The indicator light on the button is illuminated when the air intake control is recirculation mode.

With the "Fresh" mode selected, air enters the vehicle from the outside and is heated or cooled according to the function selected.

With the "Recirculation" mode selected, and air from within the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

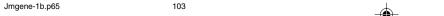
### NOTE:

o It should be noted that prolonged operation of the heating system in "recirculation" mode will give rise to fogging of the windshield and side windows and the air within the passenger compartment will become stale. In addition, prolonged use of the air conditioning with the "Recirculation" mode selected may result in the air within the passenger compartment becoming excessively dry.

o When the ignition switch is turned "ON" the air intake control will change to "-" mode (regardless of switch position). This is normal operation. The air intake control operates in "AUTO" mode when turning the ignition to the ON position if the "AUTO" mode was used before shutting off the engine.









B980C01JM-GAT

## Air Intake Control Switch (With A.Q.S) (If installed)



This is used to select fresh outside air or recirculate inside air automatically.

\_\_ : OFF \_\_ : ON

Fresh Mode:

Air enters the vehicle from the outside and is heated or cooled according to the function selected.

## Recirculation Mode:

Air from within the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

## Exhaust Gas Cutoff Mode:

Air enters the vehicle from the outside. But if exhaust gas enters the vehicle from the outside, the exhaust gas cutoff mode ( ) is automatically converted to the ( ) mode, to prevent exhaust gas from entering the vehicle.

### NOTE:

- o It should be noted that prolonged operation of the heating system in recirculation mode ( ) will give rise to misting of the windshield and side windows and the air within the passenger compartment will become stale. In addition, prolonged use of the air conditioning with the recirculation mode ( ) selected may result in the air within the passenger compartment becoming excessively dry.
- o When the ignition switch is turned "ON" the air intake control will change to ( ) mode except for the case you turned "OFF" the ignition switch in A.Q.S mode ( ) beforehand. It is normal operation. The air intake control is

operated in "AUTO" mode when turning the ignition to the "ON" position if the "AUTO" mode was used before shutting off the engine.



### **CAUTION:**

If the windows fog up with the Recirculation or A.Q.S mode selected, set the air intake control to the Fresh air position or A.Q.S control to "OFF".

B980D01Y-AAT

## **Heating and Cooling System Off**

Press the "OFF" button to stop the operation of the heating and cooling system.



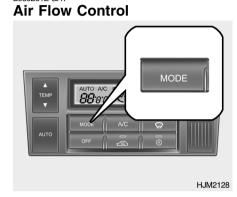




### FEATURES OF YOUR HYUNDAI

105

## B980E01E-GAT



This is used to direct the flow of air. Air can be directed to the floor, dashboard outlets, or windshield. Four symbols are used to represent Face, Bi-Level, Floor and Floor-Defrost air position.



Face-Level
When selecting the "Face" mode, the indicator light will come on, causing air to be discharged through the face level vents.



When selecting the "Bi-Level" mode, the indicator light will come on and the air will be discharged through the face vents and the floor vents.



Ψ





### **1** FEATURES OF YOUR HYUNDA

106



## Floor-Level

When selecting the "Floor-Level" mode, the indicator light will come on and the air will be discharged through the floor vents, windshield defroster nozzle, side defroster nozzle and side ventilator.



## Floor-Defrost Level

When selecting the "Floor-Defrost" mode, the indicator light will come on and the air will be discharged through the windshield defrost vents, the floor vents and side defroster nozzle and side ventilator.

#### B980F01JM-GAT

### **Defrost Switch**

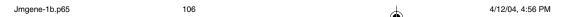


B980F01JM

When the "Defrost" button is pressed, the ( ) mode will be automatically selected and the air will be discharged through the windshield defrost nozzle, side defroster nozzle and side ventilator. To assist in defrosting, the air conditioning will operate if ambient temperature is higher than 2°C, and automatically turns off if the ambient temperature drops below 2°C.





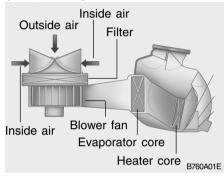


### FEATURES OF YOUR HYUNDAI

107

## AIR CONDITIONER FILTER (IN FRONT OF BLOWER UNIT)

B760A03E-GAT
(If installed)



The air conditioner filter is located in front of the blower unit behind the glove box.

It operates to decrease the amount of pollutants entering the car.

To replace the air conditioner filter, refer to the page 6-26.



### **CAUTION:**

- o Replace the filter every 20,000 km (12,000 miles) or once a year. If the car is being driven in severe conditions such as dusty, rough roads, more frequent air conditioner filter inspections and changes are required.
- When the air flow rate is decreased, it must be checked by an authorized dealer.





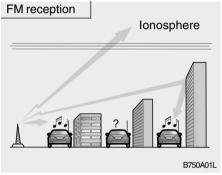
Jmgene-1b.p65 107





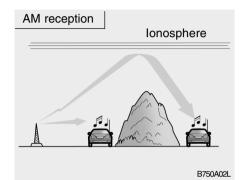
### 108 STEREO SOUND SYSTEM

## B750A02A-AAT How Car Audio Works

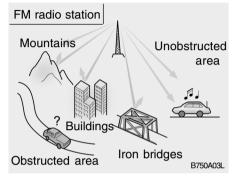


AM and FM radio signals are broadcast from transmitter towers located around your city. They are intercepted by the radio antenna on your car. This signal is then received by the radio and sent to your car speakers.

When a strong radio signal has reached your vehicle, the precise engineering of your audio system ensures the best possible quality reproduction. However, in some cases the signal coming to your vehicle may not be strong and clear. This can be due to factors such as the distance from the radio station, closeness of other strong radio stations or the presence of buildings, bridges or other large obstructions in the area.



AM broadcasts can be received at greater distances than FM broadcasts. This is because AM radio waves are transmitted at low frequencies. These long, low frequency radio waves can follow the curvature of the earth rather than travelling straight out into the atmosphere. In addition, they curve around obstructions so that they can provide better signal coverage.



FM broadcasts are transmitted at high frequencies and do not bend to follow the earth's surface. Because of this, FM broadcasts generally begin to fade at short distances from the station. Also, FM signals are easily affected by buildings, mountains, or other obstructions. These can result in certain listening conditions which might lead you to believe a problem exists with your radio. The following conditions are normal and do not indicate radio trouble:

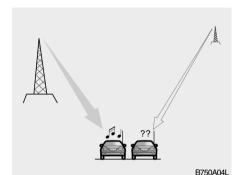


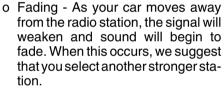






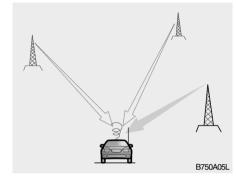
4/12/04, 4:56 PM





o Flutter/Static - Weak FM signals or large obstructions between the transmitter and your radio can disturb the signal causing static or fluttering noises to occur. Reducing the treble level may lessen this effect until the disturbance clears.

109



- o Station Swapping As a FM signal weakens, another more powerful signal near the same frequency may begin to play. This is because your radio is designed to lock onto the clearest signal. If this occurs, select another station with a stronger signal
- o Multi-Path Cancellation Radio signals being received from several directions can cause distortion or fluttering. This can be caused by a direct and reflected signal from the same station, or by signals from two stations with close frequencies. If this occurs, select another station until the condition has passed.

B750B02Y-AAT

## Using a cellular phone or a twoway radio

When a cellular phone is used inside the vehicle, noise may be produced from the audio equipment. This does not mean that something is wrong with the audio equipment. In such a case, use the cellular phone at a place as far as possible from the audio equipment.



### **CAUTION:**

When using a communication system such as a cellular phone or a radio inside the vehicle, a separate external antenna must be fitted. When a cellular phone or a radio set is used with an internal antenna alone, it may interfere with the vehicle's electrical system and adversely affect safe operation of the vehicle.

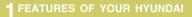


### **WARNING:**

Don't use a cellular phone when you are driving, you must stop at a safe place to use a cellular phone.



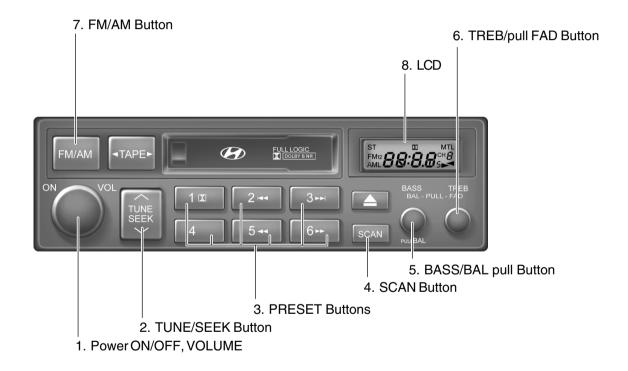




## 110 AUDIO SYSTEM

K240A01TB-GAT

## STEREO RADIO OPERATION (K240) (If installed)



K240A01JM

4/12/04, 4:56 PM

K240B01TB-GAT

### 1. POWER ON/OFF, VOLUME

Press this button to turn on/off the audio when the ignition switch is at ACC or ON position. Once the system is on, you can increase or decrease the volume by rotating the knob clockwise or counter-clockwise. Press this button again to turn it off.

### 2. TUNE

Press the  $\land$  button not more than 0.5 second then frequency is increased. Likewise press the  $\lor$  button not more than 0.5 second to decrease the frequency.

With the button held down for 0.5 sec or more, the beep sound will be heard and frequency will increase or decrease rapidly. if you release the button after the beep sound, seek function is in operation.

### o SEEK

Press the \button for over 0.5 second and release the button after beep sound, then it will tune to the next receivable higher frequency station. Likewise, press the \button for over 0.5 second and release the button after the beep sound, then it will tune to the next receivable lower frequency station. if the selected station is in the preset memory, memorized channel will be on the display too.

### 3. PRESET

Press any of these buttons not more than 2 seconds to listen to the station in memory. Press the preset button for 2 seconds or more, then the current station will be stored into the memory of the preset button with the sound.

### 4. SCAN Button

When this button is pressed, the frequency will be increased to be tuned to the next receivable station one after another, receiving each station for 5 seconds. if the desirable station is tuned, press this button (scan) again to cancel scan function.

### 5. BASS/BAL- pull

Press to pop the knob out, To increase the bass, rotate the knob clockwise, while to decrease the Bass, rotate the knob counterclockwise. Further pull the popped-ed knob for the balance control. Rotate the knob clockwise to emphasize right speaker sound. (Left speaker sound will be attenuated) When the control knob is turned counter-clockwise, left speaker sound will be emphasized. (Right speaker will be attenuated)





### 6. TREB/pull-FAD

Press the pop the knob out and turn clockwise to increase the treble or counterclockwise to decrease the treble. Further pull the popped-up knob for the Fader control. Turn the control knob counter clockwise to emphasize front speaker sound.

(Rear speaker sound will be attenuated) When the control knob is turned clockwise, rear speaker sound will be emphasized. (Front speaker sound will be attenuated)

### 7. FM/AM Button

FM/AM band button, which is used to change the band repeatedly in the following manner.

 $\begin{tabular}{ll} FM1 \to FM2 \to AM \to FM1 \\ (FM1 \to FM2 \to M \to L \to FM1 : Europe) \\ \end{tabular}$ 

### 8. LCD

LCD shows the following information; band of FM1/FM2/AM frequency, preset channel number, ST in case of FM Stereo.



### **CAUTION:**

- Do not place beverages close to the audio system. The playback mechanism may be damaged if you spill them.
- Do not impact on the audio system, or the playback mechanism could be damaged.

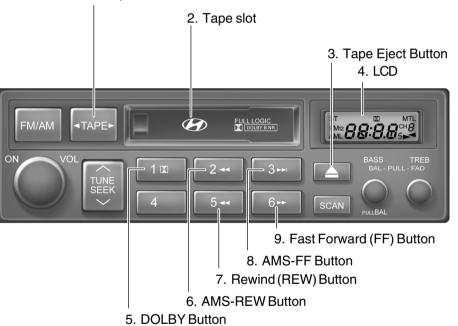




K240C01TB-GAT

## **CASSETTE TAPE PLAYER OPERATION (K240) (If installed)**

1. Tape mode and side selection Button



K240C01JM

113 4/12/04, 4:56 PM Jmgene-1b.p65





K240D01TB-GAT

## 1. Tape mode and side selection Button

Press this button to play the tape when it is in the cassette deck. Once the tape mode is selected, you can play the reverse side of the tape by merely depressing the button again.

### 2. Cassette tape loading slot

Insert the tape into the loading slot as the open side faces the right. The player will pull the tape in and automatically begin playback even when the audio power is off and the ignition switch is either in the position of "ACC" or "ON".

## 3. Tape Eject Button (▲)

Press this button to eject the cassette tape. Tape will be ejected even when the ignition switch is in the position of "OFF".

### 4. LCD

LCD shows the operating conditions of the cassette in play. It informs the driver of playing status, tape direction, FF or REW, MTL in metallic tape use, and Dolby etc.

### 5. Dolby Button

When you play the Dolby recorded tape, press this button to reduce the background noise. If you press this button clist displayed. One more press will let the clist disappear from the dis-play.

### 6. AMS-REW Button (◄◄)

Press button to rewind the tape quickly and start replay at the beginning of the current music. During the AMS-RE-WINDING. "REW" sign blinks on the display.

Press the button once more to stop REWINDING and start play again.

## 7. Rewind button (◄◄)

You can rewind the tape to the beginning of the tape by pressing the " ◀◀ " button during the play ("REW" is shown on the display). Tape play starts when the "◀◀" button is pressed again during the REW mode.

### 8. AMS-FF Button (▶▶)

Press button to fast forward the tape and start play at the beginning of next music segment. During the AMS-FF, "FF"sign blinks on the display.

Press the button again to stop FF action and start play.

## 9. Fast Forward Button (▶▶)

You can fast forward the tape to the end of the tape by pressing the "▶▶" button during the play. (Then "FF" is shown on the display). Tape play starts when the ▶▶ button is pressed again during the FF mode.



### CAUTION:

- Do not insert anything like coins into the player slot as damage to the unit may occur.
- Do not place beverages close to the audio system. The playback mechanism may be damaged if you spill them.
- Do not impact on the audio system, or the playback mechanism could be damaged.

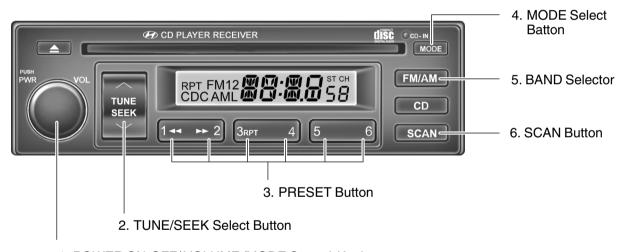






K260A01JM-GA

## STEREO RADIO OPERATION (K260) (If installed)



1. POWER ON-OFF/ VOLUME / MODE Control Knob

K260A01JM

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K260B01JM-GAT

## 1. POWER ON-OFF Control Knob

The radio unit may be operated when the ignition key is in the "ACC" or "ON" position. Press the knob to switch the power on. The LCD shows the radio frequency in the radio mode or the CD track indicator in the CD mode. To switch the power off, press the knob again.

### **VOLUME Control**

Rotate the knob clockwise to increase the volume and turn the knob counter-clockwise to reduce the volume.

### **MODE Control**

After pressing the MODE select button, rotate the knob clockwise or counter-clockwise for the desired tone quality.

## 2. TUNE (Manual) Select Button

Press the  $(\land)$  side or  $(\lor)$  side to increase or to decrease the frequency. Press either button and hold down to continuously scroll. Release button once the desired station is reached.

# **SEEK Operation (Automatic Channel Selection)**

Press the TUNE select button for 1 sec or more. Releasing it will automatically tune to the next available station with a beep sound.

When the ( $\land$ ) side is pressed longer than 1 second, releasing will automatically tune to the next higher frequency and when the ( $\lor$ ) side is pressed longer than 1 second, releasing will automatically tune to the next lower frequency.

## 3. PRESET STATION SELECT Button

Six (6) stations for AM, FM1 or FM2 respectively can be preset in the electronic memory circuit on this unit.

### **HOW TO PRESET STATIONS**

Six AM and twelve FM stations may be programmed into the memory of the radio. Then, by simply pressing the band select button and/or one of the six station select buttons, you may recall any of these stations instantly. To program the stations, follow these steps:

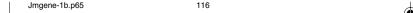
- o Press band selector to set the band for AM, FM1 or FM2.
- o Select the desired station to be stored by seek, scan or manual tuning.
- Determine the preset station select button you wish to use to access that station.
- o Press the station select button for more than two seconds. A select button indicator will show in the display indicating which select button you have depressed. The frequency display will flash after it has been stored into the memory.

You should then release the button, and proceed to program the next desired station. A total of 18 stations can be programmed by selecting one AM and two FM stations per button.

 When completed, any preset station may be recalled by selecting AM, FM1 or FM2 band and the appropriate station button.







### 4.MODE Select Button

Pressing the MODE button changes the BASS, TREBLE, FADER, BAL-ANCE mode.

The mode selected is shown on the display.

After selecting the each mode, rotate the volume control knob clockwise or counterclockwise.

### **BASS Control**

To increase the bass, rotate the knob clockwise, while to decrease the bass, rotate the knob counterclockwise.

### **TREBLE Control**

Turn to the left or right for the desired treble tone.

## **FAD (Fader Control)**

Turn the control knob clockwise to emphasize rear speaker sound (front speaker sound will be attenuated). When the control knob is turned counterclockwise, front speaker sound will be emphasized (rear speaker sound will be attenuated).

### **BALANCE Control**

Rotate the knob clockwise to emphasize right speaker sound. (Left speaker sound will be attenuated) When the control knob is turned counter clockwise, left speaker sound will be emphasized (Right speaker sound will be attenuated).



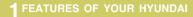
### CAUTION:

- Do not place beverages close to the audio system. The playback mechanism may be damaged if you spill them.
- o Do not impact on the audio system, or the playback mechanism could be damaged.





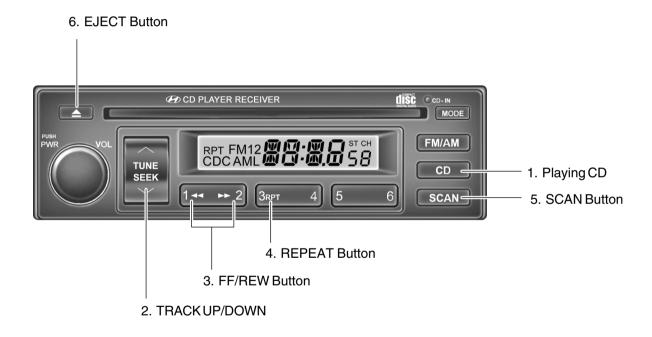




118

K260C01.IM-GAT

## **COMPACT DISC PLAYER OPERATION (K260) (If installed)**



K260B01JM

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B260D02O-AAT

### 1. Playing CD

- Insert the CD with the label facing upward.
- o Insert the CD to start CD playback, during radio operation.
- When a disc is in the CD deck, if you press the play button, the CD player will begin playing even if the radio is being used.
- The CD player can be used when the ignition switch is in either the "ON" or "ACC" position.

### 2. TRACK UP/DOWN

- o The desired track on the disc currently being played can be selected using the track number.
- o Press ∧ once to skip forward to the beginning of the next track. Press ∨ once to skip back to the beginning of the track.

## 3. FF/REW (►► / ◀◀ )

If you want to fast forward or reverse through the compact disc track, push and hold the FF ( ▶▶) or REW (◀◀) button. When you release the button, the compact disc player will resume playing.

### 4. REPEAT Button

- o To repeat the track you are currently listening to, press the RPT button. To cancel, press again.
- If you do not release RPT operation when the track ends, it will automatically be replayed.
  - This process will be continued until you push the button again.

### 5. SCAN Button

- o Press the SCAN button to playback the first 10 seconds of each track.
- Press the SCAN button again within 10 sec. when you have reached the desired track.

### 6. EJECT Button

When the EJECT button ≜ is pressed with a CD loaded, the CD will eject.

#### NOTE:

- o If the CD does not operate properly or if the ER2 fault code is displayed, use one of two methods to reset the CD deck function.
  - Remove the audio fuse for 5 minutes. Then, reinstall the audio fuse.
  - Diconnect the negative terminal of the battery and wait 5 minutes.
     Then reconnect the negative battery terminal.
- To assure proper operation of the unit, keep the vehicle interior temperature within a normal range by using the vehicle's air conditioning or heating system.
- When replacing the fuse, replace it with a fuse having the correct capacity.







120

- o The preset station frequencies are all erased when the car battery is disconnected. Therefore, all data will have to be set again if this should occur.
- Do not add any oil to the rotating parts. Keep magnets, screwdrivers and other metallic objects away from the tape mechanism and head.
- o This equipment is designed to be used only in a 12 volt DC battery system with negative ground.
- o This unit is made of precision parts. Do not attempt to disassemble or adjust any parts.
- When driving your vehicle, be sure to keep the volume of the unit set low enough to allow you to hear sounds coming from the outside.
- Do not expose this equipment (including the speakers) to water or excessive moisture.



### CAUTION:

- Do not insert warped or poor quality discs into the CD player as damage to the unit may occur.
- Do not insert anything like coins into the player slot as damage to the unit may occur.
- Do not place beverages close to the audio system. The playback mechanism may be damaged if you spill them.
- o Do not impact on the audio system, or the playback mechanism could be damaged.
- Driving on the off-roads or other vibrations may skip your compact disc.
  - Do not use the audio system on off-roads as the discs could be scratched and damaged.
- o Do not grip or pull out the disc with your hand while the disc is being pulled into the unit by the self loading mechanism. These can cause poor disc scratching to occur or trouble in the compact disc player.

 Avoid using CD-Recordable or CD-Rewritable as the player could not be operated in recording way of the CD maker. When using the compact disc player, genuine CDs are recommended.





M280A01JM

HMP280A01TB-GAT

## STEREO RADIO OPERATION (M280) (If installed)

4. SCAN Button

4. SCAN Button

TUNE/SEEK Select Knob (JOY STICK)

8. Adjustment Mode Select Button (A.MODE)

1. POWER ON-OFF VOLUME Control Knob

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HMP280B01TB-GAT

### 1. POWER ON-OFF Control

- o The radio unit may be operated when the ignition key is in the "ACC" or "ON" position. Press the button to switch the power on. The display shows the radio frequency in the radio mode, the tape direction indicator in the tape mode or CD MP3 track in either the CD MP3 mode or CD AUTO CHANGER mode. To switch the power off, press the button again.
- o Push the FMAM, TAPE or CDMP3 to turn on that function without pushing Power ON OFF control knob.

### **VOLUME Control**

Rotate the knob clockwise to increase the volume and turn the knob counterclockwise to reduce the volume.

#### 2. BAND Selector

Jmgene-1b.p65

Pressing the band selector FMAM changes the AM. FM1 and FM2 bands. The mode selected is shown on the display.

### 3. TUNE (Manual) Select Knob

Push the TUNE select knob (JOY STICK) upwards or downwards to increase or decrease the frequency. Release the knob when the station is selected.

## **SEEK Operation** (Automatic Channel Selection)

Push the TUNE select knob (JOY STICK) to the right or left, the frequency will be automatically tuned to the next higher or lower available station.



## WARNING:

Don't touch the button and joy stick switch while driving. It can cause death or serious injury in case of an accident.

### 4. SCAN

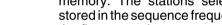
When the scan button is pressed, the frequency will increase and the receivable stations will be tuned in one after another, receiving each station for 5 seconds. To stop scanning, press the scan button again.

### 5. Best Station Memory (BSM)

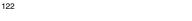
When the BSM button is pressed the six channels from the highest field intensity are selected next and stored in memory. The stations selected are stored in the sequence frequency from the first preset key.



Six (6) stations for AM, FM and FM2 respectively can be preset in the electronic memory circuit.







### **HOW TO PRESET STATIONS**

Six AM and twelve FM stations may be programmed into the memory of the radio. Then, by simply pressing the band select button and/or one of the six station select buttons, you may recall any of these stations instantly. To program the stations, follow these steps:

- o Press band selector to set the band for AM. FM and FM2.
- o Select the desired station to be stored by seek, scan or manual tuning.
- o Determine the preset station select button you wish to use to access that station.
- o Press the station select button for more than two seconds. Beep sound will be heard while depressig the button. You should then release the button, and proceed to program the next desired station. A total of 18 stations can be programmed by selecting one AM and two FM station per button.
- When completed, any preset station may be recalled by selecting AM, FM or FM2 band and the appropriate station button.

### 7. EQUALIZER (EQ)

Press the EQ button to select the CLAS-SIC, JAZZ, ROCK and DEFEAT MODE for the desired tone quality. Each press of the button changes the display as follows:

$$\begin{array}{c} \mathsf{CLASSIC} \to \mathsf{JAZZ} \to \mathsf{ROCK} \to \mathsf{DEFEAT} \\ \uparrow & | \end{array}$$

## 8. Adjustment Mode select Button (A.MODE).

Pressing the A.MODE button changes the BASS, BALANCE, TREBLE and FADER mode.

The mode selected is shown on the display.

After selecting the each mode, rotate the volume control knob clockwise or counterclockwise

### **BASS Control**

To increase the bass, rotate the knob clockwise, while to decrease the bass, rotate the knob counterclockwise.

## **BALANCE Control**

Rotate the knob clockwise to emphasize right speaker sound. (Left speaker

sound will be attenuated) When the control knob is turned counter clockwise, left speaker sound will be emphasized (Right speaker sound will be attenuated).

### **TREBLE Control**

Turn to the left or right for the desired treble tone.

### **FAD (Fader Control)**

Turn the control knob clockwise to emphasize rear speaker sound (front speaker sound will be attenuated). When the control knob is turned counterclockwise, front speaker sound will be emphasized (rear speaker sound will be attenuated).



### **CAUTION:**

- Do not place beverages close to the audio system. The playback mechanism may be damaged if you spill them.
- o Do not impact on the audio system, or the playback mechanism could be damaged.

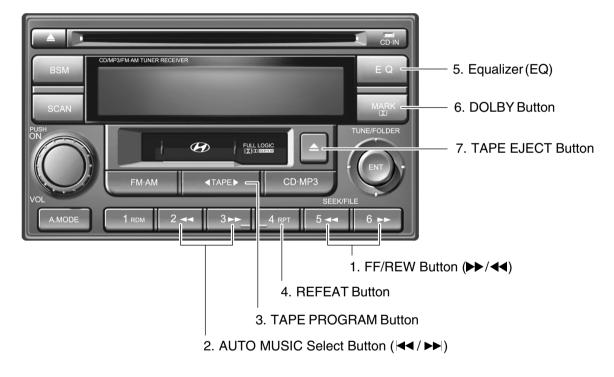






124

## **CASSETTE TAPE PLAYER OPERATION (M280) (If installed)**



M280C01JM

124 4/12/04, 4:57 PM Jmgene-1b.p65





H290D01O-GAT

### 1. FF/REW

- Fast forward tape winding starts when the FF (►►) button is pressed during PLAY or REW mode.
- Tape PLAY starts when the FF (>>) button is pressed again during FF mode.
- Tape rewinding starts when the REW
   (◄◄) button is pressed during PLAY
   or FF mode.
- Tape PLAY starts when the REW
   (◄◄) button pressed again during
   REW mode.

### 2. AUTO MUSIC Select

Press the button to find the starting point of each song in a prerecorded music tape. The quiet space between songs (must have at least 4 sec. gap) can be accepted by the AUTO MUSIC Select button.

- Pressing the ▶►|button will play the beginning of the next music segment.
- o Pressing the ◄ button will start replay at the beginning of the music iust listened to.

#### 3. TAPE PROGRAM Button

- This allows you to play the reverse side of the tape by merely depressing the program button. An arrow will appear in the display to show tape direction.
- Push the TAPE button to turn on that function without pushing power ON OFF control knob.

### 4. REPEAT

- o To repeat the track you are currently listening to, press the RPT button. To cancel, press again.
- o If you do not release RPT operation when the track ends, it will automatically be replayed.
  - This process will be continued until you push the button again.

### 5. Equalizer (EQ)

Press the EQ button to select the CLAS-SIC, JAZZ, ROCK and DEFEAT MODE for the desired tone quality. Each press of the button changes the display as follows;

### 6. DOLBY

If you get background noise during tape PLAY, you can reduce this considerably by merely pressing the DOLBY button. If you want to cancel the DOLBY feature, press the button again.

### 7. TAPE EJECT

- o When the ≜ button is pressed with a cassette loaded, the cassette will eject.
- When the button is pressed during FF/REW mode, the cassette will eject.

### NOTE:

- To assure proper operation of the unit, keep the vehicle interior temperature within a normal range by using the vehicle's air conditioning or heating system.
- When replacing the fuse, replace it with a fuse having the correct capacity.
- The preset station frequencies are all erased when the car battery is disconnected. Therefore, all data will have to be set again if this should occur.





Jmgene-1b.p65 125





### 126

- o Do not add any oil to the rotating parts. Keep magnets, screwdrivers and other metallic objects away from the tape mechanism and head.
- o This equipment is designed to be used only in a 12 volt DC battery system with negative ground.
- o This unit is made of precision parts. Do not attempt to disassemble or adjust any parts.
- When driving your vehicle, be sure to keep the volume of the unit set low enough to allow you to hear sounds coming from the outside.
- o Do not expose this equipment (including the speakers and tape) to water or excessive moisture.

# $\triangle$

### **CAUTION:**

- Do not insert anything like coins into the player slot as damage to the unit may occur.
- Do not place beverages close to the audio system. The playback mechanism may be damaged if you spill them.
- o Do not impact on the audio system, or the playback mechanism could be damaged.





HMP280F01TB-GAT

## COMPACT DISC PLAYER OPERATION (COMPATIBLE WITH MP3/WMA/AAC) (M280) (If installed)



Jmgene-1b.p65 127 4/12/04, 4:57 PM

H290F01O-GAT

### 1. AUDIO/MP3 CD Select Button

- o Insert the CD with the label facing upward.
- Insert the CD to start CD playback, during radio operation or cassette tape playing.
- o When a disc is in the CD deck, if you press the CD button the CD player will begin playing even if the radio or cassette player is being used.
- The CD player can be used when the ignition switch is in either the "ON" or "ACC" position.
- Push the CD-MP3 button to turn on that function without pushing Power ON-OFF control knob.

### NOTE:

- Do not stick paper or tape etc., auto the label side or the recording side of any discs, as it may cause a malfunction.
- o The unit cannot play a CD-R(Recordable CD) and CD-RW(Rewritable CD) that is not finalized. Please refer to the manual of CD-R/CD-RW recoder or CD-R/CD-RW software for more information on finalization process.

 Depending on the recording status, some CD-Rs/CD-RWs may not be played on this unit.

### 2. FF/REW (▶▶/◀◀)

If you want to fast forward or reverse through the compact disc track, push and hold the FF (▶▶) or REW (◄◄) button.

When you release the button, the compact disc player will resume playing.

### 3. TRACK UP/DOWN

- o The desired track on the disc currently being played can be selected using the track number.
- o Press ◄◄ button once to skip forward to the beginning of the next track. Press ▶▶ button once to skip back to the beginning of the track.

### 4. REPEAT (RPT)

- o To repeat the track you are currently listening to, press the RPT button. To cancel, press it again.
- o To repeat the music within selected folder, press the RPT button for more than 2 seconds. To cancel, press it again. (MP3 CD only)

o If you do not release RPT operation when the track ends, it will automatically be replayed.

This process will be continued until you push the button again.

### 5. RANDOM (RDM)

- Press the RDM button to listen the tracks in random, rather than sequential, order. Press it again to cancel random play.
- o To listen the music within the selected folder in random order, press the RDM button for more than 2 seconds. To cancel press it again. (MP3 CD only)

### 6. EQUALIZER (EQ)

Press the EQ button to select the CLAS-SIC, JAZZ, ROCK and DEFEAT MODE for the desired tone quality. Each press of the button changes the display as follows;





### 7. CD EJECT

When the button is pressed with a CD loaded, the CD will eject.

### 8. SCAN

- Press the SCAN button to playback the first 10 seconds of each track.
- To playback the first 10 seconds of each track in the selected folder, press the SCAN button for 2 seconds or longer. (MP3 CD only)
- Press the SCAN button again within 10 sec. When you have reached the desired track.

## 9. BOOKMARK (MARK)

When the CD player unit is operating, the desired track on the disc can be bookmarked by using the MARK button.

 Press the MARK button to bookmark the desired track for more than 2 seconds.

This will display the " $\sqrt{\phantom{a}}$ " symbol on the LCD with beep sound.

To play the bookmarked tracks, press the MARK button within a second.

 Press the MARK button to erase the bookmarked tracks for more than 2 seconds.

This will erase the bookmark and " $\sqrt{}$ " symbol on the LCD with beep sound.

### 10. JOY STICK (ENT)

- You can skip the track by pushing the JOY STICK to the left or right.
   After selecting the desired track, press the JOY STICK to playback the track.
  - If you do not press the JOY STICK within 5 seconds, the previous track will playback again.
- You can move through the folder by pushing the JOYSTICK to up and down.

After moving the desired folder, press the JOYSTICK to playback the selected track.

If you do not press the JOYSTICK within 5 seconds, the previous track will playback again. (MP3 CD only)

### NOTE:

- To assure proper operation of the unit, keep the vehicle interior temperature within a normal range by using the vehicle's air conditioning or heating system.
- When replacing the fuse, replace it with a fuse having the correct capacity.
- The bookmarks are all erased when the car battery is disconnected or power off. Therefore, all data will have to be set again if this should occur.
- o This equipment is designed to be used only in a 12 volt DC battery system with negative ground.
- o This unit is made of precision parts. Do not attempt to disassemble or adjust any parts.
- When driving your vehicle, be sure to keep the volume of the unit set low enough to allow you to hear sounds coming from the outside.
- o Do not expose this equipment (including the speakers and tape) to water or excessive moisture.









### **1** FEATURES OF YOUR HYUNDA

130



### **CAUTION:**

- o Do not insert warped or poor quality discs into the CD player as damage to the unit may occur.
- o Do not insert anything like coins into the player slot as damage to the unit may occur.
- Do not place beverages close to the audio system. The playback mechanism may be damaged if you spill them.
- o Do not impact on the audio system, or the playback mechanism could be damaged.
- Driving on the off-roads or other vibrations may skip your compact disc.
  - Do not use the audio system on off-roads as the discs could be scratched and damaged.
- o Do not grip or pull out the disc with your hand while the disc is being pulled into the unit by the self loading mechanism. These can cause poor disc scratching to occur or trouble in the compact disc player.

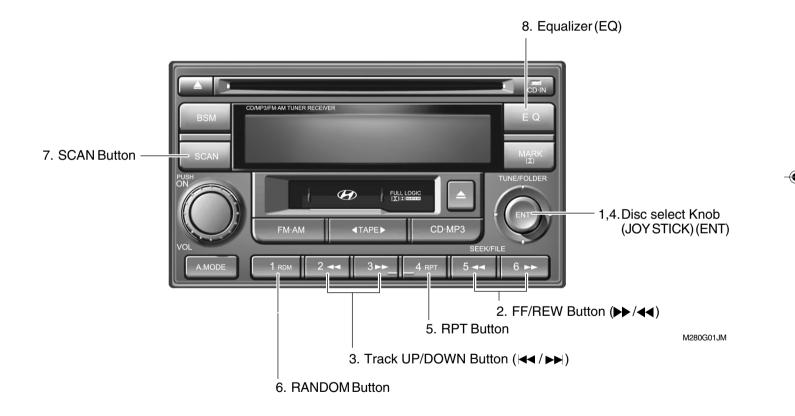
 Avoid using CD-Recordable or CD-Rewritable as the player could not be operated in recording way of the CD maker. When using the compact disc player, genuine CDs are recommended.





HMP280G01JM-GAT

## CD CHANGER OPERATION (M280) (If Installed)



Jmgene-1b.p65 131 4/12/04, 4:57 PM

B290H01JM-GAT

## 1. DISC Select Knob (JOY STICK)

To select the CD you want push the DISC select knob (JOY STICK) to up and down. After selecting the desired CD, push the change the disc number.

## 2. FF/REW (▶▶/◀◀)

If you want to fast forward or reverse through the compact disc track, push and hold in the FF (▶▶) or REW (◄◄) button.

When you release the button, the compact disc player will resume playing.

#### 3. TRACK UP/DOWN

- o The desired track on the disc currently being played can be selected using the track number.
- o Press ▶▶once to skip forward to the I◄◆beginning of the next track. Press once to skip back to the beginning of the track.

#### 4. JOYSTICK

You can skip the track by pushing the JOY STICK to the left or right.

After selecting the desired track, press the JOY STICK to playback the track. If you do not press the JOY STICK within 5 seconds, the previous track will playback again.

#### 5. REPEAT

- To repeat the track you are listening to, press the RPT button. To cancel, press again.
- o If you do not release RPT operation when the track ends, it will automatically be replayed.

This process will be continued until you push the button again.

## 6. RANDOM (RDM)

Press the RDM button to listen the tracks in random, rather than sequential, order. Press it again to cancel random play.

#### 7. SCAN

- Press the SCAN button to playback the first 10 seconds of each track.
- o Press the SCAN button again within 10 sec. for the desired track.

## 8. EQUALIZER (EQ)

Press the EQ button to select the CLAS-SIC, JAZZ, ROCK and DEFEAT MODE for the desired tone quality. Each press of the button changes the display as follows:

$$\begin{array}{c} \mathsf{CLASSIC} \to \mathsf{JAZZ} \to \mathsf{ROCK} \to \mathsf{DEFEAT} \\ \uparrow & | \end{array}$$

### NOTE:

- When replacing the fuse, replace it with a fuse having the correct capacity.
- o This equipment is designed to be used only in a 12 volt DC battery system with negative ground.
- o This unit is made of precision parts. Do not attempt to disassemble or adjust any parts.







o When driving your vehicle, be sure to keep the volume of the unit set low enough to allow you to hear sounds coming from the outside.



#### CAUTION:

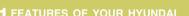
- o Do not insert warped or poor quality discs into the CD changer as damage to the unit may occur.
- o Do not insert anything like coins into the changer slot as damage to the unit may occur.
- o Do not place beverages close to the audio system. The playback mechanism may be damaged if you spill them.
- o Do not impact on the audio system, or the playback mechanism could be damaged.
- o Driving on the off-roads or other vibrations may skip your compact disc.
  - Do not use the audio system on off-roads as the discs could be scratched and damaged.

- o Do not grip or pull out the disc with your hand while the disc is being pulled into the unit by the self loading mechanism. These can cause poor disc scratching to occur or trouble in the compact disc changer.
- o Avoid using CD-Recordable or CD-Rewritable as the changer could not be operated in recording way of the CD maker. When using the compact disc changer, genuine CDs are recommended.









#### B890A01TB-GAT

## **AUDIO FAULT CODE (M280 only)**

If you see any error indication in the display while using the CD or Tape mode, find the cause in the chart below. If you cannot clear the error indication, take the car to your Hyundai dealer.

INDICATION	CAUSE	SOLUTION
Er2	CDP DECK MECHANICAL ERROR	After resetting the audio, push the eject button.
	(EJECT ERROR, LOADING ERROR)	If disc is not ejected, consult your hyundai dealer.
Er3	FOCUS ERROR DATA READ ERROR	Make sure the disc is not scratched or damaged.
		Press the eject button and pull out the disc.
		Then insert a normal cd disc.
Er6	DISCERROR	Check if the disc is inserted correctly in the cd player.
Er7	LOADING ERROR	Check if the disc is inserted correctly in the cd player.
Er8	TAPE DECK ERROR	After resetting the audio, push the eject button.
	TAPE EJECT ERROR	If tape is not ejected, consult your hyundai dealer.
HHH	TEMPERATURE IS TOO HIGH	Fault code will reset automatically when the temperature returns to
		normal.





J290A01JM-GAT

## STEREO RADIO OPERATION (J290) (If installed)

1. POWER ON/OFF/VOLUME Control Knob



J290A01JM

**-**

J290B01JM-GAT

## 1. POWER ON-OFF/VOLUME Control Knob

The radio unit may be operated when the ignition key is in the "ACC" or "ON" position. Press the button to switch the power on. The display shows the radio frequency in the radio mode, the tape direction indicator in the tape mode, or CD track in the CD AUTO CHANGER mode. To switch the power off, press the button again.

#### **VOLUME Control**

Rotate the knob clockwise to increase the volume and turn the knob counterclockwise to reduce the volume.

#### 2. BAND Selector

Pressing the button changes the AM, FM1 and FM2 bands. The mode selected is shown on the display.

## 3. SEEK Select Button (Automatic Channel Selection)

Press the SEEK select button 1 sec. or more. When the (A) side is pressed, the unit will automatically tune to the next higher frequency and when the (▼) side is pressed, it will automatically tune to the next lower frequency.

## 4. PRESET STATION Select **Buttons**

Six (6) stations for AM, FM and FM2 respectively can be preset in the electronic memory circuit.

#### **HOW TO PRESET STATIONS**

Six AM and twelve FM stations may be programmed into the memory of the radio. Then, by simply pressing the AM /FM select button and/or one of the six station select buttons, you may recall any of these stations instantly. To program the stations, follow these steps:

- o Press AM/FM selector to set the band for AM. FM1 and FM2.
- Select the desired station to be stored by seek, scan or manual tuning.
- o Determine the preset station select button you wish to use to access that station.
- o Press the station select button for more than two seconds. A select button indicator will show in the display indicating which select button you have depressed. The frequency display will flash after it has been stored into the memory. You should then release the button, and proceed to program the next desired station. A total of 18 stations can be programmed by selecting one AM and two FM station per button.
- o When completed, any preset station may be recalled by selecting AM, FM1 or FM2 band and the appropriate station button.







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## 5. Best Station Memory Button (BSM)

When the BSM button is pressed for two seconds or longer, the six channels from the highest field intensity are selected next and stored in memory. The stations selected are stored in the sequence frequency from the first preset key.

#### 6. EQ Button

Press the EQ button to select the CLAS-SIC, JAZZ, ROCK and DEFEAT MODE for the desired tone quality. Each press of the button changes the display as follows:

$$\begin{array}{c} \mathsf{CLASSIC} \to \mathsf{JAZZ} \to \mathsf{ROCK} \to \mathsf{DEFEAT} \\ \uparrow \\ \end{array}$$

## 7. TUNE (Manual) Select Knob

Rotate the knob clockwise to increase the frequency and turn the knob counterclockwise to reduce the frequency.

#### Mode Select Knob

Pressing the MODE button changes the BASS, MIDDLE, TREBLE, FADER and BALANCE mode.

The mode selected is shown on the display.

After selecting the each mode, rotate the mode select knob clockwise or counterclockwise.

#### **BASS Control**

To increase the BASS, rotate the knob clockwise, while to decrease the BASS, rotate the knob counterclockwise.

#### MID Control

To increase the MID, rotate the knob clockwise, while to decrease the MID, rotate the knob counterclockwise.

#### **TREBLE Control**

To increase the TREBLE, rotate the knob clockwise, while to decrease the TREBLE, rotate the knob counterclockwise.

## **FAD (Fader Control)**

Rotate the control knob clockwise to emphasize rear speaker sound (front speaker sound will be attenuated). When the control knob is turned counterclockwise, front speaker sound will be emphasized (rear speaker sound will be attenuated).

#### **BALANCE Control**

Rotate the knob clockwise to emphasize right speaker sound (left speaker sound will be attenuated). When the control knob is turned counterclockwise, left speaker sound will be emphasized (right speaker sound will be attenuated).



### **CAUTION:**

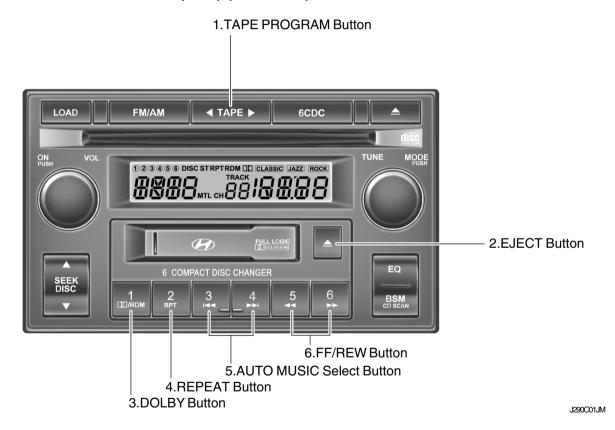
- Do not place beverages close to the audio system. The audio system mechanism may be damaged if you spill them.
- Do not impact on the audio system, or the audio system mechanism could be damaged.





.1290C01.IM-GAT

## CASSETTE TAPE PLAYER OPERATION (J290) (If installed)



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J290D01JM-GAT

#### 1. TAPE PROGRAM Button

This allows you to play the reverse side of the tape by merely pressing the program button. The PLAY and an arrow will appear in the display to show tape direction.

#### 2. EJECT Button

- When the EJECT button is pressed with a cassette loaded, the cassette will eject.
- When the EJECT button is pressed during FF/REW mode, the cassette will eject.

#### 3. DOLBY Button

If you get background noise during tape PLAY, you can reduce this considerably by merely pressing the DOLBY button. If you want to cancel the DOLBY feature, press the button again.

#### 4. REPEAT Button

- o To repeat the track you are currently listening to, press the RPT button. To cancel, press again.
- If you do not release RPT operation when the track ends, it will automatically be replayed.
   This process will be continued until

#### 5. AUTO MUSIC Select Button

you push the button again.

Press the button to find the starting point of each song in a prerecorded music tape. The quiet space between songs (must have at least a 4 sec. gap) can be identified by the AUTO MUSIC Select button.

- o Pressing the ▶▶ will play the beginning of the next music segment.
- Pressing the ◄◄ will start replay at the beginning of the music just listened to.
- o To stop FF or REW action, press the button again.

#### 6. FF/REW Button

- Fast forward tape winding starts when the FF button is pressed during PLAY or REW mode.
- o PLAY starts when the FF button is pressed again during FF mode.
- Tape rewinding starts when the REW button is pressed during PLAY or FF mode.
- o PLAY starts when the REW button pressed again during REW mode.



## **CAUTION:**

- Do not insert anything like coins into the player slot as damage to the unit may occur.
- Do not place beverages close to the audio system. The playback mechanism may be damaged if you spill them.
- Do not impact on the audio system, or the playback mechanism could be damaged.



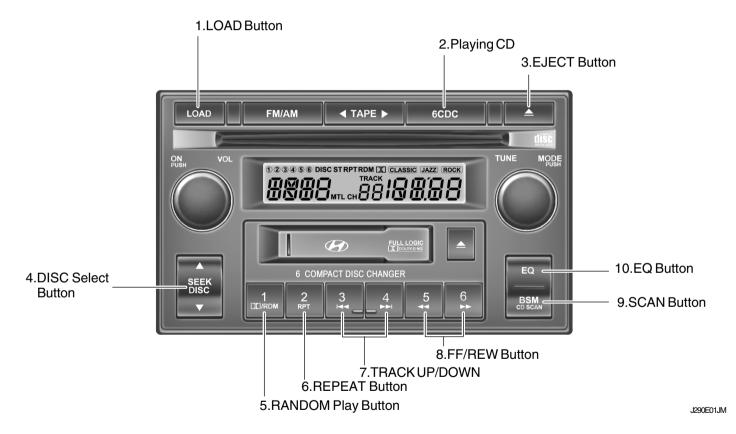






J290E01JM-GAT

## COMPACT DISC PLAYER / CD AUTO CHANGER OPERATION (J290) (If installed)





J290F01JM-GAT

#### 1. LOAD Button

This compact disc playing will accommodate up to six discs.

To insert one disc do the following:

- 1. Press and release the LOAD Button.
- 2. Green light on the both side of the slot will be illuminated and the will blink ten times on the display.
- 3. Load a disc while the **1** is blinking. Insert a disc partway into the slot, label side up. The player will pull the disc in.

#### NOTE:

- o The disc can be only inserted while the **1** is blinking.
- This CD player is suitable only for 12 cm discs, do not use irregular shaped CDs.

When the disc is inserted, the disc will begin to play automatically.

To insert multiple discs do the followings:

- 1. Press and hold the LOAD button for two seconds or more.
  - You will then hear two beeps and the green light on the both side of the slot will be illuminated.
- Load a disc while the 2 is blinking. Insert a disc partway into the slot, label side up. The player will pull the disc in.
  - Once the disc is loaded, the numbers of the vacant disc will blink on the display continuously. If the next "DISC NO." is appeared on the display with the both side of the slot illuminated, you can then load another disc.
- 3. Load the remaining disc by following the same procedures 1 and 2. When you finished loading 6 discs, the CD player will begin to play the last CD loaded.
- 4. To load more than one disc but less than six, complete Steps 1 and 2. When you have finished loading discs, press LOAD button to cancel the loading function or wait for 10 seconds. The CD player will begin to play the last CD loaded.

As each CD starts to play, the DISC number will appear on the display.

#### NOTE:

The disc player takes up to six discs. Do not try to load more than six.

## 2. Playing CD

- Press the 6CDC to start CD playback, during radio operation or cassette tape playing.
- When discs are in the CD deck, if you press the 6CDC button the CD player will begin playing even if the radio or cassette player is being used.
- The CD player can be used when the ignition switch is in either the "ON" or "ACC" position.

#### 3. EJECT Button

- o When the EJECT button is pressed with a CD loaded, the CD will eject.
- o To eject all of the discs, press this button for 2 seconds or more.





#### 4.DISC Select Button

To select the CD you want, push "DISC ▲" or "DISC ▼" to change the disc number.

#### 5. RANDOM Button

With random, you can listen to the tracks in random, rather than sequential order, on all of the discs or on one disc.

To use random, do the following:

 Press and release the RDM button to play the tracks on all of the discs or on one disc that are loaded, in random order. RDM will appear in the display. Press RDM to turn if off.

#### 6. REPEAT Button

- o To repeat the track you are currently listening to, press the RPT button. To cancel, press again.
- If you do not release RPT operation after all the tracks are played back, the unit will play back again from the first track.

#### 7. TRACK UP/DOWN

- The desired track on the disc currently being played can be selected using the track number.
- o Press ▶ once to skip forward to the beginning of the next track.
- o Press ◄ once to skip back to the beginning of the track.

#### 8. FF/REW Button

While the disc is playing, if you hold down the FF button continuously, the selected track is advanced. Holding down the REW button continuously moves the selected track back.

#### 9. SCAN Button

- o Press the SCAN button to playback the first 10 seconds of each track.
- Press the SCAN button again within 10 sec. when you have reached the desired track.

#### 10. EQ Button

Press the EQ button to select the CLAS-SIC, JAZZ, ROCK and DEFEAT MODE for the desired tone quality. Each press of the button changes the display as follows:

$$\begin{array}{c} \mathsf{CLASSIC} \to \mathsf{JAZZ} \to \mathsf{ROCK} \to \mathsf{DEFEAT} \\ \uparrow \\ \end{array}$$

#### NOTE:

- To assure proper operation of the unit, keep the vehicle interior temperature within a normal range by using the vehicle's air conditioning or heating system.
- When replacing the fuse, replace it with a fuse having the correct capacity.
- o The preset station frequencies are all erased when the car battery is disconnected. Therefore, all data will have to be set again if this should occur.
- Do not add any oil to the rotating parts. Keep magnets, screwdrivers and other metallic objects away from the tape mechanism and head.







- o This equipment is designed to be used only in a 12 volt DC battery system with negative ground.
- o This unit is made of precision parts. Do not attempt to disassemble or adjust any parts.
- When driving your vehicle, be sure to keep the volume of the unit set low enough to allow you to hear sounds coming from the outside.
- o Do not expose this equipment (including the speakers and tape) to water or excessive moisture.



#### CAUTION:

- Do not insert warped or poor quality discs into the CD player as damage to the unit may occur.
- Do not insert anything like coins into the player slot as damage to the unit may occur.
- Do not place beverages close to the audio system. The playback mechanism may be damaged if you spill them.
- o Do not impact on the audio system, or the playback mechanism could be damaged.
- o Driving on the off-roads or other vibrations may skip your compact disc
  - Do not use the audio system on off-roads as the discs could be scratched and damaged.
- o Do not grip or pull out the disc with your hand while the disc is being pulled into the unit by the self loading mechanism. These can cause poor disc scratching to occur or trouble in the compact disc player.

 Avoid using CD-Recordable or CD-Rewritable as the player could not be operated in recording way of the CD maker. When using the compact disc player, genuine CDs are recommended.









## B890A01Y-AAT AUDIO FAULT CODE

If you see any error indication in the display while using the system in the CD or Tape mode, find the cause in the chart below. If you cannot clear the error indication, take the car to your Hyundai dealer.

INDICATION	CAUSE	SOLUTION
Er2	CD DECK MECHANICAL ERROR	After resetting the audio system, push the eject button.
	(EJECT ERROR, LOADING ERROR)	If disc is not ejected, consult your Hyundai dealer.
Er3	FOCUS ERROR DATA READ ERROR	Make sure the disc is not scratched or damaged.
		Press the eject button and pull out the disc.
		Then insert a normal CD disc.
Er6	DISC ERROR	Check if the disc is inserted correctly in the CD player.
		Make sure the disc is not scratched or damaged.
Er8	TAPE DECK ERROR	After resetting the audio system, push the eject button.
	TAPE EJECT ERROR	If tape does not eject, consult your Hyundai dealer.
ННН	TEMPERATURE IS TOO HIGH	Fault code will reset automatically when the temperature returns
		to normal.
no CD	NO DISC IN MAGAZINE	
	NO CD MAGAZINE IN THE AUTO	Insert disc in magazine or insert CD magazine in the auto changer.
	CHANGER	



144

4/12/04, 4:57 PM



## **CARE OF DISCS**

B850A02F-AAT

## **Proper Handling**



B850A01L

Handle your disc as shown. Do not drop the disc. Hold the disc so you will not leave fingerprints on the surface. If the surface is scratched, it may cause the pickup to skip signal tracks. Do not affix tape, paper, or gummed labels on the disc. Do not write on the disc.

## **Damaged Disc**

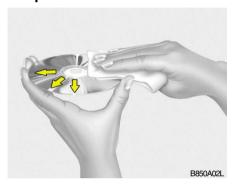
Do not attempt to play damaged, warped or cracked discs. These could severely damage the playback mechanism.

## **Storage**

When not in use, place your discs in their individual cases and store them in a cool place away from the sun, heat, and dust.

Do not grip or pull out the disc with your hand while the disc is being pulled into the unit by the self loading mechanism.

## **Keep Your Discs Clean**



Fingerprints, dust, or soil on the surface of a disc could cause the pickup to skip signal tracks. Wipe the surface clean with a clean soft cloth.

If the surface is heavily soiled, dampen a clean soft cloth in a solution of mild neutral detergent to wipe it clean.



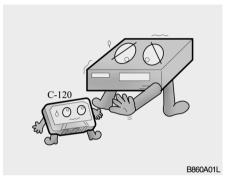






## **CARE OF CASSETTE TAPES**

#### B860A01A-AAT



Proper care of your cassette tapes will extend the tape life and increase your listening enjoyment. Always protect your tapes and cassette cases from direct sunlight, severely cold and dusty conditions. When not in use, cassettes should always be stored in the original protective cassette case. When the vehicle is very hot or cold, allow the interior temperature to become more comfortable before listening to your cassettes.

- Never leave a cassette inserted in the player when not being played.
   This could damage the tape player unit and the cassette tape.
- We strongly recommend against the use of tapes longer than C-60 (60 minutes total). Tapes such as C-120 or C-180 are very thin and do not perform as well in the automotive environment.



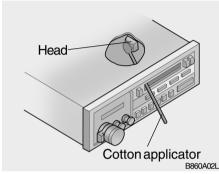
- Be sure that the cassette label is not loose or peeling off or tape ejection may be difficult.
- Never touch or soil the actual audio tape surfaces.
- Keep all magnetized objects, such as electric motors, speakers or transformers away from your cassette tapes and tape player unit.
- Store cassettes in a cool, dry place with the open side facing down to prevent dust from setting in the cassette body.
- o Avoid repeated fast reverse usage to replay one given tune or tape section. This can cause poor tape winding to occur, and eventually cause excessive internal drag and poor audio quality in the cassette. If this occurs, it can sometimes be corrected by fast winding the tape from end to end several times. If this does not correct the problem, do not continue to use the tape in your vehicle.



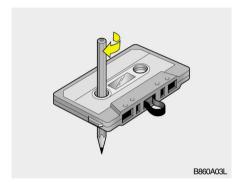


### **ANTENNA**

147



- o The playback head, capstan and pinch rollers will develop a coating of tape residue that can result in deterioration of sound quality, such as a wavering sound. They should be cleaned monthly using a commercially available head cleaning tape or special solution available from audio specialty shops. Follow the supplier's directions carefully and never oil any part of the tape player unit.
- o Always be sure that the tape is tightly wound on its reel before inserting in the player. Rotate a pencil in the drive sprockets to wind up any slack.



#### NOTE:

Look at a tape before you insert it. If the tape is loose, tighten it by turning one of the hubs with a pencil or your finger.

If the label is peeling off, do not put it in the drive mechanism.

Do not leave tapes sitting where they are exposed to hot, warm, or high humidity, such as on top of the dashboard or in the player.

If a tape is exposed to excessively hot or cold, let it reach a moderate temperature before putting it in the player.

## B870D01FC-GAT





Your car uses a roof antenna to receive both AM and FM broadcast signals. This antenna is a removable type. To remove the antenna, turn the antenna counterclockwise. To install the antenna, turn the antenna clockwise.









#### **1** FEATURES OF YOUR HYUNDA

148



## **CAUTION:**

- o Be sure to remove the antenna before washing the car in an automatic car wash or it may be damaged.
- o Before entering a place with a low height clearance, be sure to adjust the roof antenna low.
- o When reinstalling your antenna, it is important that it is fully tightened to ensure proper reception.







## **DRIVING YOUR HYUNDAI**

Engine Exhaust Can Be Dangerous!	2-2
Before Starting the Engine	2-3
Key Positions	2-4
Starting	2-5
Operating the Manual Transaxle	2-7
Operating the Automatic Transaxle	
Anti-Lock Brake System (ABS)	
Brake Traction Control System (BTCS)	
Electronic Stability Program (ESP)	
Full-Time 4WD Operation	
Good Braking Practices	
Driving for Economy	
Smooth Cornering	
Winter Driving	
Trailer or Vehicle Towing	

2

2

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C010A01JM-AAT



## **WARNING: ENGINE EXHAUST CAN BE DANGEROUS!**

Engine exhaust fumes can be extremely dangerous. If, at any time, you smell exhaust fumes inside the vehicle, open the windows immediately.

#### o Do not inhale exhaust fumes.

Exhaust fumes contain carbon monoxide, a colorless, odorless gas that can cause unconsciousness and death by asphyxiation.

### o Be sure the exhaust system does not leak.

The exhaust system should be checked whenever the vehicle is raised to change the oil or for any other purpose. If you hear a change in the sound of the exhaust or if you drive over something that strikes the underneath side of the car, have the exhaust system checked as soon as possible by your Hyundai dealer.

#### o Do not run the engine in an enclosed area.

Letting the engine idle in your garage, even with the garage door open, is a hazardous practice. Never run the engine in your garage any longer than it takes to start the engine and back the car out.

## o Avoid idling the engine for prolonged periods with people inside the car.

If it is necessary to idle the engine for a prolonged period with people inside the car, be sure to do so only in an open area with the air intake set at "Fresh" and fan operating at one of the higher speeds so fresh air is drawn into the interior.

If you must drive with the tailgate open because you are carrying objects that make this necessary:

- 1. Close all windows.
- 2. Open side vents.
- 3. Set the air intake control at "Fresh", the air flow control at "Floor" or "Face" and the fan at one of the higher speeds.

To assure proper operation of the ventilation system, be sure the ventilation air intakes located just in front of the windshield are kept clear of snow, ice, leaves or other obstructions.





C020A01O-AAT

Before you start the engine, you should always:

- Look around the vehicle to be sure there are no flat tires, puddles of oil, water or other indications of possible trouble.
- 2. After entering the car, check to be sure the parking brake is engaged.
- 3. Check that all windows, and lights are clean.
- 4. Check that the interior and exterior mirrors are clean and in position.
- 5. Check your seat, seatback and headrest to be sure they are in their proper positions.
- 6. Lock all the doors.
- Fasten your seat belt and be sure that all other occupants have fastened theirs.
- 8. Turn off all lights and accessories that are not needed.
- 9. When you turn the ignition switch to 'ON', check that all appropriate warning lights are operating and that you have sufficient fuel.



### **WARNING:**

- o The 2WD Tucson is not designed for off-road use. The 4WD Tucson is designed primarily for use on paved roads. However, occasional use in off-highway conditions such as established unpaved roads and non-challenging off-road trails is allowed. The 4WD Tucson is not designed for blazing new trails, challenging off-road conditions, or unpaved hill climbing. Exceeding the conditions that were intended for the vehicle's primary design may result in injury or death.
- Utility vehicle has a significantly higher collision rate than other type of vehicles.
- o Utility vehicle have higher ground clearance and a narrower track to make them capable of performing in a wide variety of offroad applications. Specific design characteristics give them a higher center of gravitiv than ordinary cars. An advantage of the higher ground clearance is a better view of the road allowing you to anticipate problem. They are not designed for cornering at the same speeds as conventional 2wheel drive vehicles any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions. If at all possible, avoid sharp turns or abrupt maneuvers. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or vehicle rollover.
- o In a collision crash, an unbelted person is significantly more likely to die than a person wearing a seatbelt.



2







### **9** DRIVING YOUR HYUNDAI

10.Check the operation of warning lights and all bulbs when key is in the 'ON' position.



### WARNING

(Diesel Engine):

To ensure that sufficient vacuum exists within the brake system during cold weather start-up conditions, it is necessary to run the engine at idle for several seconds after starting the engine.

## TO START THE ENGINE

C030A01A-GAT

## COMBINATION IGNITION SWITCH

- o If your Hyundai is equipped with a manual transaxle, place the shift lever in neutral and depress the clutch pedal fully.
- o If your Hyundai has an automatic transaxle, place the shift lever in 'P' (park).
- o To start the engine, insert the ignition key and turn it to the "START" position. Release it as soon as the engine starts. Do not hold the key in the "START" position for more than 15 seconds.

## NOTE:

For safety, the engine will not start if the shift lever is not in "P" or "N" Position (Automatic Transaxle).

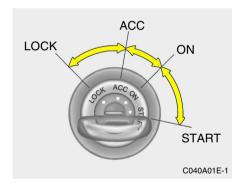
## **KEY POSITIONS**

C040A01A-AAT



## **WARNING:**

The engine should not be turned off or the key removed from the ignition key cylinder while the vehicle is in motion. The steering wheel is locked by removing the key.



#### o "START"

The engine is started in this position. It will crank until you release the key.



## **STARTING**

5

#### NOTE:

Do not hold the key in the "START" position for more than 15 seconds.

#### o "ON"

When the key is in the "ON position, the ignition is on and all accessories may be turned on. If the engine is not running, the key should not be left in the "ON" position. This will discharge the battery and may also damage the ignition system.

#### o "ACC"

With the key in the "ACC" position, the some electrical accessories (radio, etc.) may be operated.

#### o "LOCK"

The key can be removed or inserted in this position.

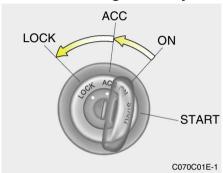
To protect against theft, the steering wheel locks by removing the key.

#### NOTE:

To unlock the steering wheel, insert the key, and then turn the steering wheel and key simultaneously.

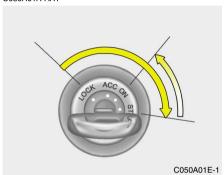
#### C070C01A-AAT

## To remove the ignition key



- Turn the ignition key to the "ACC" position.
- 2. Simultaneously push and turn the ignition key counterclockwise from the "ACC" position to the "LOCK" position.
- 3. The key can be removed in the "LOCK" position.





# A

#### **WARNING:**

Never run the engine in a closed or poorly ventilated area any longer than is needed to move your car in or out of the area. The carbon monoxide gas emitted is odorless and can cause serious injury or death.











C051A01O-GAT

## STARTING FOR THE DIESEL ENGINE

#### **ENGINE COLD**

- Turn the ignition key to position "ON" and wait for the pre-heat indicator light to go out.
- o Operate the starter until the engine runs.

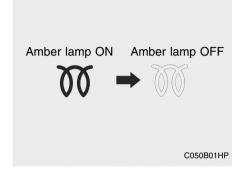
#### **ENGINE WARM**

Operate the starter. If the engine does not respond on the first attempt, wait several seconds and try again using the pre-heat. C050B02S-GAT

## **Normal Conditions**

The Starting Procedure:

- 1. Insert key, and fasten the seat belt.
- 2. Depress the clutch pedal fully and place the gearshift lever in neutral (manual transaxle) or the selector lever in "P"(park) position (automatic transaxle).
- 3. After turning the ignition key to the "ON" position, make certain all warning lights and gauges are functioning properly before starting the engine.
- 4. On vehicles equipped with the diesel preheat indication light, turn the ignition key to the "ON" position. The diesel-preheat indicator light will first illuminate in amber, and then after a short time, the amber illumination will go off, indicating that preheating is completed.



#### NOTE:

If the engine were not started within 10 seconds after the preheating is completed, turn the ignition key once more to the "LOCK" position, and then to the "ON" position, in order to preheat again.







## **WARNING:**

Be sure that the clutch is fully depressed when starting a manual transaxle vehicle. Otherwise there is the potential to cause damage to the vehicle or injury to someone inside or outside the vehicle as a result of the forward or backward movement of the vehicle that will occur if the clutch is not depressed when the vehicle is started.

5. Turn the ignition key to the "START" position and release it when the engine starts.

C055B01B-GAT

## STARTING AND STOPPING THE **ENGINE FOR TURBO CHARGER INTERCOOLER (Diesel Engine)**

- (1) Do not race the engine or sudden accelerate the engine immediately after start it. If the engine is cold, allow the engine to idle for several seconds before it is driven to ensure sufficient lubrication of the turbo charger unit.
- (2) After high speed or extended driving, requiring a heavy engine load, the engine should be allowed to idle about 1 minute before turning it off. This idle time will allow the turbo charger to cool prior to shutting the engine off.



C070A02A-AAT

a conventional shift pattern. This shift pattern is imprinted on the shift knob. The transaxle is fully synchronized in all forward gears so shifting to either a higher or a lower gear is easily accomplished.

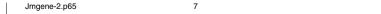








Do not turn the engine off immediately after it has been subjected to a heavy load. Doing so may cause severe damage to the engine or turbo charger unit.







#### NOTE:

- o To shift into reverse, rest the lever in neutral for at least 3 seconds after your car is completely stopped. Then move the lever into the reverse position.
- o During cold weather, shifting may be difficult until the transaxle lubricant has warmed up. This is normal and not harmful to the transaxle.
- o If you've come to a complete stop and it's hard to shift into 1st or R(Reverse), put the shift lever in N(Neutral) position and release the clutch. Press the clutch pedal back down, and then shift into 1st or R(Reverse) gear position.
- o Do not use the shift lever as a handrest during driving, as this can result in premature wear of the transaxle shift forks.



### **CAUTION:**

When downshifting from fifth gear to fourth gear, caution should be taken not to inadvertently press the gear shift lever sideways in such a manner that second gear is engaged. Such a drastic downshift may cause the engine speed to increase to the point that the tachometer will enter the red-zone. Such over-revving of the engine may possibly cause engine damage.

C070B01A-AAT

## **Using the Clutch**

The clutch should be pressed all the way to the floor before shifting, then released slowly. The clutch pedal should always be used after fully returning to the original position. Do not rest your foot on the clutch pedal while driving. This can cause unnecessary wear. Do not partially engage the clutch to hold the car on an incline. This causes unnecessary wear. Use the parking brake to hold the car on an incline. Do not operate the clutch pedal rapidly and repeatedly.







#### C070E02A-GAT

#### RECOMMENDED SHIFT POINTS

Shift	Recommended
from-to	
1-2	20 km/h (15 mph)
2-3	40 km/h (25 mph)
3-4	55 km/h (35 mph)
4-5	75 km/h (45 mph)

The shift points as shown chart are recommended for optimum fuel economy and performance.

C070D03O-AAT

## **Good Driving Practices**

- Never take the car out of gear and coast down a hill. This is extremely hazardous. Always leave the car in gear.
- o Don't "ride" the brakes. This can cause them to overheat and malfunction. Instead, when you are driving down a long hill, slow down and shift to a lower gear. When you do this, engine braking will help slow the car.
- Slow down before shifting to a lower gear. This will help avoid over-revving the engine, which can cause damage.
- Slow down when you encounter cross winds. This gives you much better control of your car.

- o Be sure the car is completely stopped before you attempt to shift into reverse. The transaxle can be damaged if you do not. To shift into reverse, depress the clutch, move the shift lever to neutral, wait three seconds, then shift to the reverse position.
- o Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, accelerating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and the vehicle to go out of control.



#### WARNING:

- o Avoid high cornering speeds.
- o Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- o Always wear your seat belts. In a collision crash, an unbelted person is significantly more likely to die than a person wearing a seatbelt.





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- o The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- o Loss of control often occurs if two or more wheels drop off the roadway and the driver oversteers to reenter the roadway.
- o In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.
- Never exceed posted speed limits.
- o Excessive depressing of the accelerater pedal under the tire slip condition such as moving out of the mud or fresh snow etc, may cause severe damage to the transaxle. At this time, take other way such as towing.

## OPERATING THE AUTOMATIC TRANSAXLE

C090A01O-GAT



The highly efficient Hyundai automatic transaxle has four forward speeds and one reverse speed. The individual speeds are selected automatically, depending on the position of the speed selector lever. The selector lever has 2 gates; the main gate and the manual gate.

#### NOTE:

For information on manual gate operation, refer to "Sports Mode".

In the main gate, the selector lever has 4 positions, and is equipped with a button to avoid inadvertent wrong selection.

#### NOTE:

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Depress the brake pedal and push the button when shifting.



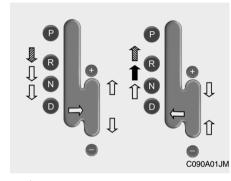
The selector lever can be shifted freely.

The first few shifts on a new vehicle, or if the battery has been disconnected, may be somewhat abrupt. This is a normal condition, and the shifting sequence will adjust after shifts are cycled a few times by the T.C.M (Transaxle Control Module).











## **CAUTION:**

Never shift into "R" or "P" position while the vehicle is moving.

The indicator lights in the instrument cluster are indicate the selector lever position when the ignition is switched "ON". During "D" range operation, green lights indicate the gear currently in use.

C090B02A-AA7

## The function of each position is as follows:

## o P (Park):

Use to hold the vehicle in place when parked or while starting the engine; Whenever parking the car, apply the parking brake and shift the selector lever to the "P" (Park) position.



#### CAUTION:

Never place the selector lever in the "P" (Park) position unless the vehicle is fully stopped. Failure to observe this caution will cause severe damage to the transaxle.

C090C01A-AAT

## o R (Reverse):

Use for backing up the vehicle. Bring the car to a complete stop before shifting the selector lever to "R" position.

C090D02A-AAT

## o N (Neutral):

In the "N" position, the transaxle is in neutral, which means that no gears are engaged. The engine can be started with the shift lever in "N" position, although this is not recommended except if the engine stalls while the car is moving.



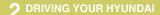
C090E01O-AAT

## o D (Drive):

Use for normal driving. The transaxle will automatically shift through a four gear sequence.







#### C090F01O-GAT

### Sports mode



Whether the vehicle is stationary or in motion, sports mode is selected by pushing the selector lever from the "D" position into the manual gate. To return to "D" range operation, push the selector lever back into the main gate. In sports mode, moving the selector lever backwards and forwards can make rapid gearshifts simple. In contrast to a manual transaxle, the sports mode allows gearshifts with the accelerator pedal depressed.

**UP (+)**: Push the lever forward once to shift up one gear.

**DOWN** (-): Pull the lever backwards once to shift down one gear.

**SKIP**: By rapidly moving the selector forward or backward twice, it is possible to skip one gear, i.e. 1st to 3rd or 3rd to 1st.

# $\triangle$

### **CAUTION:**

- In sports mode, the driver must execute shifts in accordance with prevailing road conditions, taking care to keep the engine speed below the red zone.
- o By rapidly moving the selector lever backwards (-) twice it is possible to skip one gear, i.e., 3rd to 1st, 4th to 2nd. Since sudden engine braking and/or rapid acceleration can cause a loss of traction, however, downshifts must be made carefully in accordance with the vehicle's speed.

#### NOTE:

- o In sports mode, only the four forward gears can be selected. To reverse or park the vehicle, move the selector lever to the "R" or "P" position as required.
- In sports mode, downward shifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.
- o To maintain the required levels of vehicle performance and safety, the system may not execute certain gearshifts when the selector lever is operated.
- o Before driving away from a stop on a slippery road, push the selector lever toward into the +(UP) position. This causes the transaxle to shift into the 2nd gear which is better for smooth driving away on a slippery road. Push the selector lever to the -(DOWN) side to shift back to 1st gear.





C090H01L-GAT

#### NOTE:

- For smooth and safe operation, depress the brake pedal when shifting from "Neutral" position or "Park" position to a forward or reverse gear.
- o The ignition key must be in the "ON" position and the brake pedal fully depressed in order to move the shift lever from the "P" (Park) position to any of the other positions.
- It is always possible to shift from "R", "N", "D" position to "P" position. The vehicle must be fully stopped to avoid transaxle damage.





## **CAUTION:**

- Shift into "R" and "P" position only when the vehicle has completely stopped.
- o Do not accelerate the engine in reverse or any of the forward positions with the brakes applied.
- o Always apply the footbrake when shifting from "P" or "N", to "R" or "D" position.
- o Do not use the "P" (Park) position in place of the parking brake. Always set the parking brake, shift the transaxle into "P" (Park) position and turn off the ignition when you leave the vehicle, even momentarily. Never leave the vehicle unattended while the engine is running.
- Check the automatic transaxle fluid level regularly, and add fluid as necessary.
- o See the maintenance for the proper fluid recommendation.

C090N02O-AAT

## **Good Driving Practices**

- Never move the gear selector lever from 'P' or 'N' to any other position with the accelerator pedal depressed.
- Never move the gear selector lever into 'P' when the vehicle is in motion.
- Be sure the car is completely stopped before you attempt to shift into 'R'.
- Never take the car out of gear and coast down a hill. This may be extremely hazardous. Always leave the car in gear when moving.
- o Do not 'ride' the brakes. This can cause them to overheat and malfunction. Instead, when you are driving down a long hill, slow down and shift to a lower gear. When you do this, engine braking will help slow the car.
- Slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged.
- Always use the parking brake. Do not depend on placing the transaxle in 'P' to keep the car from moving.
- Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, acceler-







ating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and the vehicle to go out of control.



#### **WARNING:**

- o Avoid high cornering speeds.
- o Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- o Always wear your seat belts. In a collision crash, an unbelted person is significantly more likely to die than a person wearing a seatbelt.
- o The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- o Loss of control often occurs if two or more wheels drop off the roadway and the driver oversteers to reenter the roadway.
- In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.
- Never exceed posted speed limits.

C120A02A-AAT

## (If installed)

The Anti-Lock Brake System (ABS) is designed to prevent wheel lock-up during sudden braking or on hazard-ous road surfaces. The ABS control module monitors the wheel speed and controls the pressure applied to each brake. Thus, in emergency situations or on slick roads, ABS will increase vehicle control during braking.

#### NOTE:

During ABS operation, a slight pulsation may be felt in the brake pedal when the brakes are applied. Also, a noise may be heard in the engine compartment while braking. These conditions are normal and indicate that the anti-lock brake system is functioning properly.



### WARNING:

ABS will not prevent accidents due to improper or dangerous driving maneuvers. Even though vehicle control is improved during emergency braking, always maintain a safe distance between you and objects ahead. Vehicle speeds should always be reduced during extreme road conditions.

The braking distance for cars equipped with an anti-lock braking system may be longer than for those without it in the following road conditions.





During these conditions the vehicle should be driven at reduced speeds.

- o Rough, gravel or snow-covered roads.
- o With tire chains installed.
- On roads where the road surface is pitted or has different surface height.

The safety features of an ABS equipped vehicle should not be tested by high speed driving or cornering. This could endanger the safety of yourself or others.

## TRACTION CONTROL SYSTEM (TCS)

C300A02Y-GAT

(If installed)



On slippery road surfaces, the traction control system (TCS) limits the drive wheels from spinning excessively, thus helping the car to accelerate. It also provides sufficient driving force and steering performance as the car turns at accelerated speeds.

#### **SLIP Control**

Limits the drive wheels from spinning excessively during starting or while making accelerated turns on slippery roads to avoid losing the driving force of the front wheels.

## **Driving Hints**

TCS does not actively apply brakes. Be sure to decelerate the car sufficiently before entering curves.



## **CAUTION:**

When the TCS indicator blinks, SLIP control function has been activated. It also means that the road is slippery or your car is accelerating excessively. In this situation, gently release foot pressure from the accelerator pedal and maintain moderate speed.





## **WARNING:**

Traction control is a driving aid; all normal precautions for driving in inclement weather and on slippery driving surfaces should be observed.



C310B01O-AAT

#### TCS ON/OFF Mode

When the TCS is running, the TCS indicator in the instrument cluster will blink.

If you turn the system off by pressing the TCS switch, the TCS-OFF indicator will come on and stay on. In the TCS-OFF mode, the SLIP control will be deactivated. Adjust you driving accordingly. To turn the system back on, press the switch again. The TCS-OFF indicator should go off.

#### NOTE:

- 1) The TCS mode will automatically be turned ON after the engine is turned off and restarted.
- When the traction control is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.
- When the engine starts, a click is heard from the engine compartment; however, this is only the sound of traction control being checked.
- 4) When moving out of the mud or fresh snow, pressing the accelerator pedal may not cause the engine speed to increase due to TCS operation.

C310D01O-AAT

## **Indicators and Warning**

The indicators should illuminate when the ignition key is turned to ON or START but should go out after three seconds.

If the indicators do not illuminate, or the TCS or TCS-OFF indicator does not go out after 3 seconds, have it checked by an authorized dealer.

Should there be any unusual conditions in the device while driving, TCS-OFF indicator illuminates as a warning.

If TCS-OFF indicator illuminates, pull your car to a safe place and stop the engine.

Then, start the engine again to check if the TCS-OFF indicator goes out.





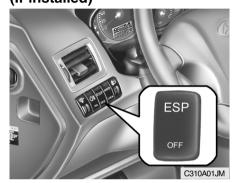
If the indicator remains lit even after the engine has been started, have your car checked by an authorized Hyundai dealer.

#### NOTE:

- 1) When the TCS-OFF indicator illuminates, traction control is automatically deactivated for safety.
- 2) This warning function is not provided when the driver selects the TCS-OFF mode.

## ELECTRONIC STABILITY PROGRAM (ESP)

C310A01LZ-AAT
(If installed)



On slippery road surfaces, the electronic stability program (ESP) limits the drive wheels from spinning excessively, thus helping the car to accelerate. It also provides sufficient driving force and steering performance as the car turns at accelerated speeds.

#### **SLIP Control**

Limits the drive wheels from spinning excessively during starting or while making accelerated turns on slippery roads to avoid losing the driving force of the front wheels.

## **Driving Hints**

ESP does not actively apply brakes. Be sure to decelerate the car sufficiently before entering curves.



#### **CAUTION:**

When the ESP indicator blinks, SLIP control has been activated. It also means that the road is slippery or your car is accelerating excessively. In this situation, release foot pressure from the accelerator pedal and maintain moderate speed.

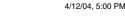


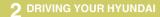


## **WARNING:**

Electronic stability program is only a driving aid; all normal precautions for driving in inclement weather and on slippery road surfaces should be observed.







C310B01LZ-AAT

#### **ESP ON/OFF Mode**

When the ESP is running, the ESP indicator in the instrument cluster will blink.

If you turn the system off by pressing the ESP switch, the ESP-OFF indicator will come on and stay on. In the ESP-OFF mode, the SLIP control will be deactivated. Adjust you driving accordingly. To turn the system back on, press the switch again. The ESP-OFF indicator should go off.

#### NOTE:

- 1) The ESP mode will automatically be turned ON after the engine is turned off and restarted.
- When the electronic stability program is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.
- When the engine starts, a click is heard from the engine compartment; however, this is only the sound of traction control being checked.

4) When moving out of the mud or fresh snow, pressing the accelerator pedal may not cause the engine speed to increase due to ESP operation.

C310D01L7-AAT

## **Indicators and Warning**

The indicators should illuminate when the ignition key is turned to ON or START but should go out after three seconds.

If the indicators do not illuminate, or the ESP or ESP-OFF indicator does not go out after 3 seconds, have it checked by an authorized dealer.

Should there be any unusual conditions in the device while driving, ESP-OFF indicator illuminates as a warning.

If ESP-OFF indicator illuminates, pull your car to a safe place and stop the engine.

Then, start the engine again to check if the ESP-OFF indicator goes out.

If the indicator remains lit even after the engine has been started, have your car checked by an authorized Hyundai dealer.

#### NOTE:

4/12/04, 5:00 PM

- When the ESP-OFF indicator illuminates, electronic stability program is automatically deactivated for safety.
- 2) This warning function is not provided when the driver selects the ESP-OFF mode.







#### **FULL-TIME 4WD OPERATION**

C350A01JM-GAT

## (If installed)

Engine power can be delivered to all front and rear wheels for maximum power. Full-time 4WD is useful when good traction is required, such as, when driving on slippery, wet or snowcovered roads and when moving out of mud. These vehicles, however, are not designed for challenging off-road use. Full-time 4WD vehicles are designed primarily to improve traction and performance on paved roads and highways in wet and/or slippery conditions. Occasional off-road use such as established unpaved roads and trails is OK. It is always important when traveling off-highway that the driver carefully reduce their speed to a level that does not exceed the safe operating speed for those conditions. In general, off-road conditions provide less traction and braking effectiveness than on road conditions. These factors must be carefully considered when driving off-road. Keeping the vehicle in contact with the driving surface and under control in these conditions is always the driver's responsibility for the safety of him/herself and his or her passengers.



## **WARNING:**

This vehicle is designed primarily for on road use. Driving the vehicle in challenging off-road conditions for which it was not designed may result in damage to the vehicle. Driving in conditions that exceed the vehicle's intended design or the driver's experience level may result in severe injury or death.

## **Driving 4WD Safely**

- (1) Be sure to wear the seat belt.
- (2) Do not drive in challenging off-road conditions or areas that exceed the vehicle's basic design intent or the driver's experience level.
- (3) Drive at lower speeds in strong crosswinds. Because of your vehicle's high center of gravity, its stability will be affected in crosswinds. Slower speeds ensure better vehicle control.

- (4) Check the brake condition after driving in wet or muddy conditions. Press the brake several times as you move slowly until you feel normal braking forces return.
- (5) Do not drive the vehicle through water. (i.e. streams, rivers, lakes, etc.)
- (6) The stopping distance of the fulltime 4WD vehicle differs very little from that of the 2WD vehicle. When driving on a snow-covered road or a slippery, muddy surface, make sure that you keep a sufficient distance between your vehicle and the one ahead of you.
- (7) Since the driving torque is always applied to the 4 wheels, the performance of the full-time 4WD vehicle is greatly affected by the condition of the tires. Be sure to equip it with all four tires of the same size and type.
  - When replacement of any of the tires or disc wheels is necessary, replace all of them.
  - o Rotate the tires and check the tire pressure at regular intervals.







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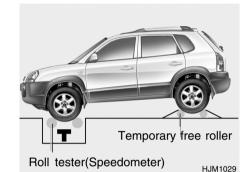


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- (8) The full-time 4WD vehicle cannot be towed by an ordinary tow truck. Make sure that the vehicle is towed with its four wheels raised off the ground.
  - o If the vehicle is towed with its only two wheels raised off the ground, the 4WD system could be damaged.
  - In unavoidable case, if the vehicle is being towed with all four wheels on the ground, it should be towed only forward direction with rope.
  - o While towing, check the following items.
    - 1. The ignition switch is in "ACC" or "ON".
    - Place the shift lever in neutral (For Automatic Transaxle, "N" position).
    - 3. Release the parking brake.

### NOTE:

To avoid serious damage to your 4WD vehicle, limit towing to 15 km/h (10 mph) and not for more than 1.5 km (1 mile) at ANY TIME.



(9) For speedometer test or inspection/maintenance (I/M) program of Tucson 4WD, use a four wheel chassis dynamometer.



### CAUTION:

Never engage the parking brake while performing these tests.

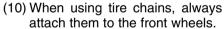
o In rare cases when it's unavoidable that a 4WD vehicle is to be inspected for speedometer test on 2WD roll tester, strictly follow the procedures next.

- 1. Check the tire pressures recommended for your vehicle.
- 2. Place the front wheels on the roll tester for speedometer test as shown in the illustration.
- 3. Release the parking brake.
- 4. Place the rear wheels on the temporary free roller as shown in the illustration.



## **WARNING:**

Keep away from the front of the vehicle while inspecting. This is very dangerous as the vehicle can jump forward and cause serious injury or death.



(11) If the front or rear wheels get stuck in the mud, do not spin them recklessly. The 4WD system could be damaged.











#### CAUTION:

- o While the full-time 4WD vehicle is being raised on a lack, never start the engine or cause the tires to rotate.
  - There is the danger that rotating tires touching the ground could cause the vehicle to go off the iack and to jump forward.
- o If one of the front or rear wheels begins to spin in mud, snow, etc., the vehicle can sometimes be driven out by depressing the accelerator pedal further; however, avoid running the engine continuously at high rpm because doing so could damage the 4WD system.



## **WARNING:**

- o Avoid high cornering speeds.
- o Do not make quick steering wheel movements, such as sharp lane charges or fast, sharp turns.
- o The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- o In a collision crash, an unbelted person is significantly more likely to die a person weara seatbelt.
- o Loss of control often occurs if two or more wheels drop off the roadway and the driver oversteers to reenter the roadway.
- o In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.





### **WARNING:**

Nothing should be carried on top of the cargo area cover behind the rear seat. If there were an accident or a sudden stop, such objects could move forward and cause damage to the vehicle or injure the occupants.

- o After being parked, check to be sure the parking brake is not engaged and that the parking brake indicator light is out before driving away.
- o Driving through water may get the brakes wet. They can also get wet when the car is washed. Wet brakes can be dangerous! Your car will not stop as quickly if the brakes are wet. Wet brakes may cause the car to pull to one side. To dry the brakes, apply the brakes lightly until the braking action returns to normal, taking care to keep the car under control at all times. If the braking action does not return to normal. stop as soon as it is safe to do so and call your Hyundai dealer for assistance.







- o Don't "ride" the brake pedal. Resting your foot on the brake pedal while driving can be dangerous because it can result in the brakes overheating and losing their effectiveness. It also increases the wear of the brake components.
- o If a tire goes flat while you are driving, apply the brakes gently and keep the car pointed straight ahead while you slow down. When you are moving slowly enough for it to be safe to do so, pull off the road and stop in a safe place.
- If your car is equipped with an automatic transaxle, don't let your car creep forward. To avoid creeping forward, keep your foot firmly on the brake pedal when the car is stopped.
- o Use caution when parking on a hill. Engage the parking brake and place the gear selector lever in "P" (automatic transaxle) or in first or reverse

gear (manual transaxle). If your car is facing downhill, turn the front wheels into the curb to help keep the car from rolling. If your car is facing uphill, turn the front wheels away from the curb to help keep the car from rolling. If there is no curb or if it is required by other conditions to keep the car from rolling, block the wheels.

- o Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk that the parking brake may freeze, apply it only temporarily while you put the gear selector lever in "P" (automatic) or in first or reverse gear (manual transaxle) and block the rear wheels so the car cannot roll. Then release the parking brake.
- o Do not hold the vehicle on the upgrade with the accelerator pedal. This can cause the transaxle to overheat. Always use the brake pedal or parking brake.

#### DRIVING FOR ECONOMY

C140A01A-GAT

You can save fuel and get more kilometers from your car if you follow these suggestions:

- o Drive smoothly. Accelerate at a moderate rate. Don't make "jack-rabbit" starts or full-throttle shifts and maintain a steady cruising speed. Don't race between stoplights. Try to adjust your speed to that of the other traffic so you don't have to change speeds unnecessarily. Avoid heavy traffic whenever possible. Always maintain a safe distance from other vehicles so you can avoid unnecessary braking. This also reduces brake wear.
- o Drive at a moderate speed. The faster you drive, the more fuel your car uses. Driving at a moderate speed, especially on the highway, is one of the most effective ways to reduce fuel consumption.
- o Don't "ride" the brake or clutch pedal. This can increase fuel consumption and also increase wear on these components. In addition, driving with your foot resting on the brake pedal may cause the brakes to overheat,





- which reduces their effectiveness and may lead to more serious consequences.
- o Take care of your tires. Keep them inflated to the recommended pressure. Incorrect inflation, either too much or too little, results in unnecessary tire wear. Check the tire pressures at least once a month.
- o Be sure that the wheels are aligned correctly. Improper alignment can result from hitting curbs or driving too fast over irregular surfaces. Poor alignment causes faster tire wear and may also result in other problems as well as greater fuel consumption.
- o Keep your car in good condition. For better fuel economy and reduced maintenance costs, maintain your car in accordance with the maintenance schedule in Section 5. If you drive your car in severe conditions, more frequent maintenance is required (see Section 5 for details).
- Keep your car clean. For maximum service, your Hyundai should be kept clean and free of corrosive materials. It is especially important that mud, dirt, ice, etc. not be al-

- lowed to accumulate on the underside of the car. This extra weight can result in increased fuel consumption and also contribute to corrosion.
- Travel lightly. Don't carry unnecessary weight in your car. Weight reduces fuel economy.
- o Don't let the engine idle longer than necessary. If you are waiting (and not in traffic), turn off your engine and restart only when you're ready to go.
- o Remember, your Hyundai does not require extended warm-up. As soon as the engine is running smoothly, you can drive away. In very cold weather, however, give your engine a slightly longer warm-up period.
- o Don't "lug" or "over-rev" the engine. Lugging is driving too slowly in too high a gear resulting in the engine bucking. If this happens, shift to a lower gear. Over-revving is racing the engine beyond its safe limit. This can be avoided by shifting at the recommended speeds.
- Use your air conditioning sparingly.
   The air conditioning system is operated by engine power so your fuel economy is reduced when you use it.

C150A01A-AAT

Avoid braking or gear changing in corners, especially when roads are wet. Ideally, corners should always be taken under gentle acceleration. If you follow these suggestions, tire wear will be held to a minimum.







#### DRIVING YOUR HYUNDAL

### 24 WINTER DRIVING

C160A01A-AAT

The more severe weather conditions of winter result in greater wear and other problems. To minimize the problems of winter driving, you should follow these suggestions:

C160B01A-GAT

## **Snowy or Icy Conditions**

To drive your vehicle in deep snow, it may be necessary to use snow tires or to install tire chains on your tires. If snow tires are needed, it is necessary to select tires equivalent in size and type of the original equipment tires. Failure to do so may adversely affect the safety and handling of your car. Furthermore, speeding, rapid acceleration, sudden brake applications, and sharp turns are potentially very hazardous practices.

During deceleration, use engine braking to the fullest extent. Sudden brake applications on snowy or icy roads may cause skids to occur. You need to keep sufficient distance between the vehicle in operation in front and your

vehicle. Also, apply the brake gently. It should be noted that installing tire chains on the tire will provide a greater driving force, but will not prevent side skids.

#### NOTE:

Tire chains are not legal in all provinces. Check province laws before fitting tire chains.

C160C01A-AAT

# Use High Quality Ethylene Glycol Coolant

Your Hyundai is delivered with high quality ethylene glycol coolant in the cooling system. It is the only type of coolant that should be used because it helps prevent corrosion in the cooling system, lubricates the water pump and prevents freezing. Be sure to replace or replenish your coolant in accordance with the maintenance schedule in Section 5. Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

C160D01A-AAT

# **Check Battery and Cables**

Winter puts additional burdens on the battery system. Visually inspect the battery and cables as described in Section 6. The level of charge in your battery can be checked by your Hyundai dealer or a service station.

C160E01A-AAT

# Change to "Winter Weight" Oil if Necessary

In some climates it is recommended that a lower viscosity "winter weight" oil be used during cold weather. See Section 9 for recommendations. If you aren't sure what weight oil you should use, consult your Hyundai dealer.

C160F01A-AA7

# **Check Spark Plugs and Ignition System**

Inspect your spark plugs as described in Section 6 and replace them if necessary. Also check all ignition wiring and components to be sure they are not cracked, worn or damaged in any way.





24

C160G01A-GAT

## To Keep Locks from Freezing

To keep the locks from freezing, squirt an approved de-icer fluid or glycerine into the key opening. If a lock is covered with ice, squirt it with an approved de-icing fluid to remove the ice. If the lock is frozen internally, you may be able to thaw it out by using a heated key. Handle the heated key with care to avoid injury.

#### NOTE:

The proper temperature for using the immobilizer key is from -40°C (-40°F) to 80°C(176°F). If you heat the immobilizer key over 80°C to open the frozen lock, it may cause damage to the transponder in its head.

C160H01A-AAT

# Use Approved Anti-Freeze in Window Washer System

To keep the water in the window washer system from freezing, add an approved anti-freeze solution in accordance with instructions on the container. Window washer anti-freeze is available from Hyundai dealers and most auto parts outlets. Do not use engine coolant or other types of anti-freeze as these may damage the finish.

C160I01A-AAT

# Don't Let Your Parking Brake Freeze

Under some conditions your parking brake can freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or if the brakes are wet. If there is a risk the parking brake may freeze, apply it only temporarily while you put the gear selector lever in "P" (automatic) or in first or reverse gear (manual transaxle) and block the rear wheels so the car cannot roll. Then release the parking brake.









26

#### C160J01A-AAT

# Don't Let Ice and Snow Accumulate Underneath

Under some conditions, snow and ice can build up under the fenders and interfere with the steering. When driving in severe winter conditions where this may happen, you should periodically check underneath the car to be sure the movement of the front wheels and the steering components is not obstructed.

#### C160K01A-AAT

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# **Carry Emergency Equipment**

Depending on the severity of the weather where you drive your car, you should carry appropriate emergency equipment. Some of the items you may want to carry include tire chains, tow straps or chains, flashlight, emergency flares, sand, a shovel, jumper cables, a window scraper, gloves, ground cloth, coveralls, a blanket, etc.

### **HIGHER SPEED MOTORING**

#### C170A01A-AAT

# **Pre-Trip Inspections**

#### 1. Tires:

Adjust the tire inflation pressures to specification. Low tire inflation pressures will result in overheating and possible failure of the tires.

Avoid using worn or damaged tires which may result in reduced traction or tire failure.

#### NOTE:

Never exceed the maximum tire inflation pressure shown on the tires.

# 2. Fuel, engine coolant and engine oil:

High speed travel consumes more fuel than urban motoring. Do not forget to check both engine coolant and engine oil.

#### 3. Drive belt:

A loose or damaged drive belt may result in overheating of the engine.

### **USE OF LIGHTS**

#### C180A01A-AAT

Check your lights regularly for correct operation and always keep them clean. When driving during the day in conditions of poor visibility, it is helpful to drive with headlights on low beam. This enables you to be seen as well as to see.







#### TRAILER OR VEHICLE TOWING

C190A02A-GAT

If you are considering towing with your car, you should first check with your Province Department of Motor Vehicles to determine their legal requirements. Since laws vary from province to province the requirements for towing trailers, cars, or other types of vehicles or apparatus may differ. Ask your Hyundai dealer for further details before towing.



### **CAUTION:**

Do not do any towing with your car during its first 2,000 km (1,200 miles) in order to allow the engine to properly break in. Failure to heed this caution may result in serious engine or transaxle damage.

C190B01S-AAT

#### Trailer Hitches

Select the proper hitch and ball combination, making sure that it's location is compatible with that of the trailer or vehicle being towed.

Use a quality non-equalizing hitch which distributes the tongue load uniformly throughout the chassis.

The hitch should be bolted securely to the car and installed by a qualified technician. DO NOT USE A HITCH DESIGNED FOR TEMPORARY INSTALLATION AND NEVER USE ONE THAT ATTACHES ONLY TO THE BUMPER.

C190C03S-GAT

#### **Trailer Brakes**

If your trailer is equipped with a braking system, make sure it conforms to federal and/or local regulations and that it is properly installed and operating correctly.

#### NOTE:

If you tow a trailer or vehicle, your car will require more frequent maintenance due to the additional load. See "Maintenance Under Severe Usage Conditions" on page 5-7.



### **CAUTION:**

- Never connect a trailer brake system directly to the vehicle brake system.
- o When towing a trailer on steep grades (in excess of 12%) pay close attention to the engine coolant temperature gauge to ensure the engine does not overheat. If the needle of the coolant temperature gauge moves across the dial towards "H" (HOT), pull over and stop as soon as it is safe to do so, and allow the engine to idle until it cools down. You may proceed once the engine has cooled sufficiently.







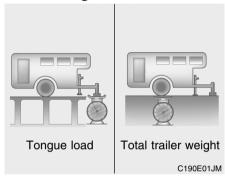
#### C190D01A-GAT

## **Safety Chains**

Should the hitch connection between your car and the trailer or vehicle you are towing fail, the trailer or vehicle could wander dangerously across other lanes of traffic and ultimately collide with another vehicle. To eliminate this potentially dangerous situation, safety chains, attached between your car and the trailer or towed vehicle, are required in most provinces.

C190E01JM-GAT

# **Trailer Weight Limit**

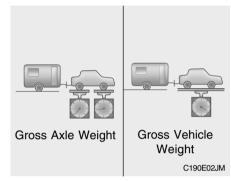


Tongue loads can be increased or decreased by redistributing the load in the trailer.

This can be verified by checking the total weight of the loaded trailer and then checking the load on the tongue.

#### NOTE:

 Never load the trailer with more weight in the back than in the front. About 60% of the trailer load should be in the front half on the trailer and the remaining 40% in the rear.



- 2. The total gross vehicle weight with trailer must not exceed the Gross Vehicle Weight Rating (GVWR) shown on the vehicle identification plate (see page 8-2). The total gross vehicle weight is the combined weight of the vehicle, driver, all passengers and their luggage, cargo, hitch, trailer tongue load and other optional equipment.
- 3. The front or rear axle weight must not exceed the Gross Axle Weight Rating (GAWR) shown on the vehicle identification plate (see page 8-2). It is possible that your towing package does not exceed the GVWR but exceeds the

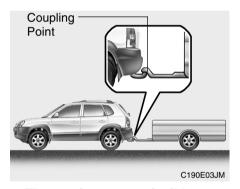






GAWR. Improper trailer loading and/or too much luggage in the cargo area can overload the rear axle. Redistribute the load and check the axle weight again.

4. The maximum permissible static vertical load on the coupling device is; 75kg (165 lb)



5. The maximum permissible overhang of the coupling point is 910 mm.



### CAUTION:

The following specifications are recommended when towing a trailer. The loaded trailer weight cannot safely exceed the values in the chart below.

kg. (Lbs)

Engine         Trailer         Tongue           With Brake         2.0(2WD)         1400           2.0(4WD)         (3088)         75(165)           2.7(4WD)         1600         (3529)           2.0(2WD)         500(1100)         Without           2.0(4WD)         -         -		Maximum Towable Weight				
With Brake Diesel (2WD) (3088) 2.0(4WD) 1600 (3529) 75(165) 2.7(4WD) 2.0(2WD) 500(1100) Without 2.0(4WD) -		Engine	Trailer	Tongue		
With Brake 2.0(4WD) 1600 (3529) 75(165)  2.7(4WD) (3529) 2.0(2WD) 500(1100) Without 2.0(4WD) -		2.0(2WD)	1400			
Brake 2.0(4WD) 1600 75(165)  2.7(4WD) (3529) 75(165)  2.0(2WD) 500(1100)  Without 2.0(4WD) -	\\/ith	Diesel (2WD)	(3088)	75(165)		
2.7(4WD) (3529)  Diesel (2WD) (3529)  2.0(2WD) (500(1100)  Diesel (2WD) (2.0(4WD) -	1	2.0(4WD)	1600			
2.0(2WD)   500(1100)   Without   2.0(4WD)   -	Diake	2.7(4WD)				
Diesel (2WD) 500(1100) Without 2.0(4WD) -		Diesel (2WD)	(3529)			
Without 2.0(4WD)		2.0(2WD)	500(1100)			
2.0(1112)		Diesel (2WD)	300(1100)			
		2.0(4WD)		-		
Brake 2.7(4WD) 750(1654)	Brake	2.7(4WD)	750(1654)			
Diesel (4WD)		Diesel (4WD)				



# **WARNING:**

Improperly loading your car and trailer can seriously affect its steering and braking performance causing a crash which could cause injury or death.

C190F01A-GAT

# **Trailer or Vehicle Towing Tips**

- 1. Before towing, check hitch and safety chain connections as well as proper operation of the trailer running lights, brake lights, and turn signals.
- 2. Always drive your vehicle at a moderate speed (Less than 100 km/h).
- 3. Trailer towing requires more fuel than normal conditions.
- 4. To maintain engine braking efficiency and electrical charging performance, do not use fifth gear (manual transaxle) or overdrive (automatic transaxle).
- 5. Always secure items in the trailer to prevent load shift while driving.
- Check the condition and air pressure of all tires on the trailer and your car. Low tire pressure can seriously affect the handling. Also check the spare tire.





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- 7. The vehicle/trailer combination is more affected by crosswind and buffeting. When being passed by a large vehicle, keep a constant speed and steer straight ahead. If there is too much wind buffeting, slow down to get out of the other vehicle's air turbulence.
- 8. When parking your car and trailer, especially on a hill, be sure to follow all the normal precautions. Turn your front wheel into the curb, set the parking brake firmly, and put the transaxle in 1st or Reverse (manual) or Park (automatic). In addition, place wheel chocks at each of the trailer's tires.
- If the trailer has electric brakes, start your vehicle and trailer moving, and then apply the trailer brake controller by hand to be sure the brakes are working. This lets you check your electrical connection at the same time.
- 10. During your trip, check occasionally to be sure that the load is secure, and that the lights and any trailer brakes are still working.

- 11. Avoid jerky starts, sudden acceleration or sudden stops.
- 12. Avoid sharp turns and rapid lane changes.
- 13. Avoid holding the brake pedal down too long or too frequently. This could cause the brakes to overheat, resulting in reduced braking efficiency.
- 14. When going down a hill, shift into a lower gear and use the engine braking effect. When ascending a long grade, downshift the transaxle to a lower gear and reduce speed to reduce chances of engine overloading and/or overheating.
- 15.If you have to stop while going uphill, do not hold the vehicle in place by pressing on the accelerator. This can cause the automatic transaxle to overheat. Use the parking brake or footbrake.

#### NOTE:

When towing, check transaxle fluid more frequently.



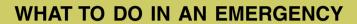
### CAUTION:

If overheating should occur when towing, (temperature gauge reads near red zone), taking the following action may reduce or eliminate the problem.

- 1. Turn off the air conditioner.
- 2. Reduce car speed.
- 3. Select a lower gear when going uphill.
- 4. While in stop and go traffic, place the gear selector in park or neutral and idle the engine at a higher speed.







If the Engine Will not Start	3-2
Jump Starting	3-3
If the Engine Overheats	3-4
Spare Tire	3-5
If You Have a Flat Tire	3-7
Changing a Flat Tire	3-7
If Your Car Must Be Towed 3	3-12
Emergency Towing3	3-14
If You Lose Your Keys 3	3-14

-6

3

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# **WARNING:**

If the engine will not start, do not push or pull the car to start it. This could result in a collision or cause other damage. In addition, push or pull starting may cause the catalytic converter to be overloaded and create a fire hazard.

D010B01A-AAT

# If Engine Doesn't Turn Over or **Turns Over Slowly**



- 1. If your car has an automatic transaxle, be sure the gear selector lever is in "N" or "P" and the emergency brake is set.
- 2. Check the battery connections to be sure they are clean and tight.
- 3. Turn on the interior light. If the light dims or goes out when you operate the starter, the battery is discharged.
- 4. Check the starter connections to be sure they are securely tightened.
- 5. Do not push or pull the vehicle to start it. See instructions for "Jump Starting" on the following pages.

D010C02A-AAT

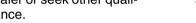
## If Engine Turns Over Normally **but Does Not Start**

- 1. Check fuel level.
- 2. With the key in the "OFF" position, check all connectors at ignition coils and spark plugs(For Gasoline Engine) or check all connectors at glow plug and glow plug relay(For Diesel Engine). Reconnect any that may be disconnected or loose.
- 3. Check fuel line in the engine room.
- 4. If engine still refuses to start, call a Hyundai dealer or seek other qualified assistance.

D010D01A-AAT

# If Engine Stalls While Driving

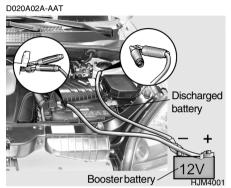
- 1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
- 2. Turn on your emergency flashers.
- 3. Try to start the engine again. If your vehicle will not start, contact a Hvundai dealer or seek other qualified assistance.







#### JUMP STARTING





### WARNING:

The gas produced by the battery during the jump-start operation is highly explosive. If these instructions are not followed exactly, serious personal injury and damage to the vehicle may occur! If you are not sure how to follow this procedure, seek qualified assistance. Automobile batteries contain sulfuric acid. This is poisonous and highly corrosive. When jump starting, wear protective glasses and be careful not to get acid on yourself, your clothing or on the car.

- o If you should accidentally get acid on your skin or in your eyes, immediately remove any contaminated clothing and flush the area with clear water for at least 15 minutes. Then promptly obtain medical attention. If vou must be transported to an emergency facility, continue to apply water to the affected area with a sponge or cloth.
- o The gas produced by the battery during the jump-start operation is highly explosive. Do not smoke or allow a spark or an open flame in the vicinity.
- o The battery being used to provide the jump start must be 12-volts. If you cannot determine that it is a 12volt battery, do not attempt to use it for the jump start.
- o To jump start a car with a discharged battery, follow this procedure exactly:

- 1. If the booster battery is installed in another vehicle, be sure the two vehicles are not touching.
- 2. Turn off all unnecessary lights and accessories in both vehicles.
- 3. Attach the clamps of the jumper cable in the exact location shown in the illustration. First, attach one clamp of the jumper cable to the positive (+) post or cable of the discharged battery. Then attach the other end of the same cable to the positive (+) post or cable of the booster battery. Next, using the other cable, attach one clamp to the negative (-) post or cable of the booster battery. Then attach the other end of that cable to a solid metal part of the engine away from the battery. Do not connect the cable to any moving part.
- 4. Start the engine in the car with the booster battery and let it run for a few minutes. This will help to assure that the booster battery is fully charged. During the jumping operation, run the engine in this vehicle at about 2000 rpm.







- Start the engine in the car with the discharged battery using the normal starting procedure. After the engine starts, leave the jumper cables connected and let the engine run at fast idle or about 2000 rpm for several minutes.
- Carefully remove the jumper cables in the reverse order of attachment.

If you do not know why your battery became discharged (because the lights were left on, etc.), have the charging system checked by your Hyundai dealer.

### IF THE ENGINE OVERHEATS

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If your temperature gauge indicates overheating, you experience a loss of power, or hear loud pinging or knocking, the engine is probably too hot. If this happens to you, you should:

- 1. Pull off the road and stop as soon as it is safe to do so.
- 2. Place the gear selector lever in "P" (automatic), or neutral (manual transaxle) and set the parking brake. If the air conditioning is on, turn it off.
- 3. If engine coolant is running out under the car or steam is coming out from the hood, stop the engine. Do not open the hood until the engine coolant has stopped running or the steaming has stopped. If there is no visible loss of coolant and no steam, leave the engine running and check to be sure the engine cooling fan is operating. If the fan is not running, turn the engine off.
- 4. Check to see if the water pump drive belt is missing. If it is not missing, check to see that it is tight. If the drive belt seems to be satisfactory,

check for engine coolant leaking from the radiator, hoses or under the car. (If the air conditioning had been in use, it is normal for cold water to be draining from it when you stop).



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## **WARNING:**

While the engine is running, keep hands and clothing away from moving parts such as the fan and drive belts to prevent injury.

WARNING (Diesel only):
Never work on injection system with
engine running or within 30 seconds after shutting off engine. High
pressure pump, rail, injectors and
high pressure pipes are subject to
high pressure even after the engine
stopped. The fuel jet produced by
fuel leaks may cause serious injury, if it touch the body. People
using pacemakers should not move
than 30cm closer to the ECU or

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wiring harness within the engine room while engine is running, since the high currents in the Common Rail system produce considerable magnetic fields.

5. If the water pump drive belt is broken or coolant is leaking out, stop the engine immediately and call the nearest Hyundai dealer for assistance.

7. Proceed with caution, keeping alert for further signs of overheating. If overheating happens again, call a Hvundai dealer for assistance.



### **CAUTION:**

Serious loss of coolant indicates there is a leak in the cooling system and this should be checked as soon as possible by a Hyundai dealer.



#### **WARNING:**

Do not remove the radiator cap when the engine is hot. This can allow coolant to be blown out of the opening and cause serious burns.

6. If you cannot find the cause of the overheating, wait until the engine temperature has returned to normal. Then, if coolant has been lost. carefully add coolant to the reservoir (page 6-12) to bring the fluid level in the reservoir up to the halfway mark.

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### **TEMPORARY SPARE TIRE**

The following instructions for the temporary spare tire should be observed:

1. Check inflation pressure as soon as practical after installing the spare tire, and adjust to the specified pressure. The tire pressure should be periodically checked and maintained at the specified pressure while the tire is stored.

# **Spare Tire Pressure**

Tire Size	T155/90R16
Inflation Pressure	420 kPa (60 psi)

- 2. The spare tire should only be used temporarily and should be returned to the luggage compartment as soon as the original tire can be repaired or replaced.
- 3. Continuous use at speeds of over 80 km/h (50 mph) is not recommended.
- 4. As the temporary spare tire is specifically designed for your car, it should not be used on any other vehicle.





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6

- 5. The temporary spare tire should not be used on any other wheels, nor should standard tires, snow tires, wheel covers or trim rings be used with the temporary spare wheel. If such use is attempted, damage to these items or other car components may occur.
- 6. The temporary spare tire pressure should be checked once a month while the tire is stored.



## **CAUTION:**

- o Do not use snow chains with your temporary spare tire.
- o Do not use more than one temporary spare tire at a time.

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#### **FULL SIZE SPARE TIRE**

The following instructions for the FULL SIZE spare tire should be observed:

Check inflation pressure as soon as practical after installing the spare tire, and adjust to the specified pressure. The tire pressure should be periodically checked and maintained at the specified pressure while the tire is stored.

# **Spare Tire Pressure**

Tire Size	Full Size
Inflation Pressure	207 kPa (30 psi)

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# **Handling the Spare Tire**



## To remove the spare tire

- 1. Open the tail gate.
- 2. Remove the luggage mat.
- 3. Remove the luggage under tray cover to turn the lever toward "UNLOCK".
- 4. Remove the luggage under tray.



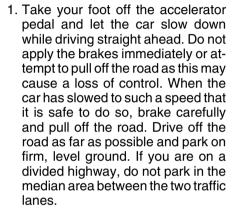


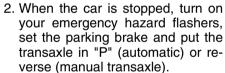
### **CHANGING A FLAT TIRE**



If a tire goes flat while you are driving:

IF YOU HAVE A FLAT TIRE





- 3. Have all passengers get out of the car. Be sure they all get out on the side of the car that is away from traffic.
- 4. Change the tire according to the instructions provided as following.



The procedure described on the following pages can be used to rotate tires as well as to change a flat tire. When preparing to change a flat tire, check to be sure the gear selector lever is in "P" (automatic transaxle) or reverse gear (manual transaxle) and that the parking brake is set, then:



5. Turn the installation bolt counter-

clockwise to remove the spare tire.

After replace the spare tire, install

and tighten the bolt firmly with your

fingers until there is no more play in

the spare tire.



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8

#### D060B01JM-AAT

# 1. Obtain Spare Tire and Tool



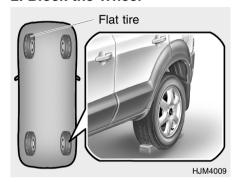
Remove the spare tire and remove the jack and tool bag from the luggage compartment.

### NOTE:

The spare tire is located under the luggage compartment floor.

#### D060C01A-AAT

### 2. Block the Wheel



Block the wheel that is diagonally opposite from the flat to keep the vehicle from rolling when the car is raised on the jack.

#### D060D01A-AAT

## 3. Loosen Wheel Nuts



The wheel nuts should be loosened slightly before raising the car. To loosen the nuts, turn the wrench handle counterclockwise. When doing this, be sure that the socket is seated completely over the nut so it cannot slip off. For maximum leverage, position the wrench so the handle is to the left as shown in the drawing. Then, while holding the wrench near the end of the handle, push down on it with steady pressure. Do not remove the nuts at this time. Just loosen them about one-half turn.

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#### D060E01A-AAT

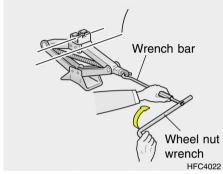
### 4. Put the Jack in Place



The base of the jack should be placed on firm, level ground. The jack should be positioned as shown in the drawing.

#### D060F02E-AAT

# 5. Raising the Car



After inserting a wrench bar into the wheel nut wrench, install the wrench bar into the jack as shown in the drawing. To raise the vehicle, turn the wheel nut wrench clockwise. As the jack begins to raise the vehicle, double check that it is properly positioned and will not slip. If the jack is on soft ground or sand, place a board, brick, flat stone or other object under the base of the jack to keep it from sinking.

Raise the car high enough so that the fully inflated spare tire can be installed. To do this, you will need more ground clearance than is required to remove the flat tire.



# **WARNING:**

Do not get under the car when it is supported by the jack! This is very dangerous as the vehicle could fall and cause serious injury or death. No one should stay in the car while the jack is being used.









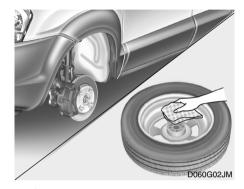
10

#### D060G02Y-AAT

## 6. Changing Wheels



Loosen the wheel nuts and remove them with your fingers. Slide the wheel off the studs and lay it flat so it cannot roll away. To put the wheel on the hub, pick up the spare tire, line up the holes with the studs and slide the wheel onto them. If this is difficult, tip the wheel slightly and get the top hole in the wheel lined up with the top stud. Then jiggle the wheel back and forth until the wheel can be slid over the other studs.





### **WARNING:**

Wheel and wheel covers may have sharp edges. Handle them carefully to avoid possible severe injury. Before putting the wheel into place, be sure that there is nothing on the hub or wheel (such as mud, tar, gravel, etc.) that interferes with the wheel from fitting solidly against the hub. If there is, remove it. If there is not good contact on the mounting surface between the wheel and hub, the wheel nuts could loosen and cause the loss of a

wheel. Loss of a wheel may result in loss of control of the vehicle. This may cause serious injury or death.

#### D060H02O-AAT

#### 7. Reinstall Wheel Nuts



To reinstall the wheel, hold it on the studs, put the wheel nuts on the studs and tighten them finger tight. The nuts should be installed with their small diameter ends directed inward. Jiggle the tire to be sure it is completely seated, then tighten the nuts as much as possible with your fingers again.



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# 8. Lower Vehicle and Tighten Nuts



Lower the car to the ground by turning the wheel nut wrench counterclockwise. Then position the wrench as shown in the drawing and tighten the wheel nuts. Be sure the socket is seated completely over the nut. Do not stand on the wrench handle or use an extension pipe over the wrench handle. Go around the wheel tightening every other nut until they are all tight. Then double-check each nut for tightness. After changing wheels, have a technician tighten the wheel nuts to their proper torque as soon as possible.

# Wheel nut tightening torque:

Steel wheel & aluminium alloy wheel: 900-1,100 kg.cm (65-80 lb.ft)

# D060J01O-AAT **AFTER CHANGING WHEELS**



If you have a tire gauge, remove the valve cap and check the air pressure. If the pressure is lower than recommended, drive slowly to the nearest service station and inflate to the correct pressure. If it is too high, adjust it until it is correct. Always reinstall the valve cap after checking or adjusting tire pressure. If the cap is not replaced,

air may leak from the tire. If you lose a valve cap, buy another and install it as soon as possible.

After you have changed wheels, always secure the flat tire in its place and return the jack and tools to their proper storage locations.









# 3 WHAT TO DO IN AN EMERGENCY

# 12 IF YOUR CAR MUST BE TOWED

D080A02A-GAT



 OK FOR AUTOMATIC OR MANUAL TRANSAXLE EQUIPPED VEHICLE

D080A01JM



# **CAUTION:**

# Your car can be damaged if towed incorrectly!

If your car has to be towed, it should be done by your Hyundai dealer or a commercial tow truck service. This will help assure that your car is not damaged in towing. Also, professionals are generally aware of local laws governing towing. In any case, rather than risk damage to your car, it is suggested that you show this information to the tow truck operator. Be sure that a safety chain system is used and that all local laws are observed.

D080B02O-AAT

# Towing a Car with Manual Transaxle



- o DO NOT TOW 4WD
- OK FOR AUTOMATIC OR MANUAL TRANSAXLE EQUIPPED VEHICLE WITH NO DAMAGE (except 4WD)

D080B01JM

- If the car is being towed with the rear wheels on the ground, be sure the parking brake is released.
- o If the car is being towed with the front wheels on the ground, be sure that the transaxle is in neutral. Also, be sure that the ignition key is in the "ACC" position. This is necessary to prevent damage to the steering lock mechanism, which is not designed to hold the front wheels straight while the car is being towed.
- o If any of the loaded wheels or suspension components are damaged, a towing dolly must be used.



#### CAUTION:

- o When towing the 2WD vehicle with the rear wheels on the ground, the vehicle should be towed with wheel lift type truck. Otherwise, the CV joint boot can interfere with the towing hook caused by insufficient clearance resulting in CV joint boot damage.
- o 4 Wheel Drive cannot be towed with a tow truck.
  It must be towed by lifting all 4 wheels.



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D080C01O-GAT

# Towing a Car with Automatic Transaxle



- o DO NOT TOW 4WD
- o NOT OK FOR AUTOMATIC TRANSAXLE EQUIPPED VEHICLE
- O OK FOR MANUAL TRANSAXLE (except 4WD) D080C01JM

### CAUTION:

o A car with an automatic transaxle should never be towed from the rear with the front wheels on the ground. This can cause serious damage to the transaxle. If the car must be towed from the rear, a towing dolly must be used under the front wheels. o If the car is being towed with all four wheels on the ground, it can be towed only from the front. Be sure that the transaxle is in neutral. Do not tow at speeds greater than 50 km/h (30 mph) and for more than 25 km (15 miles). Be sure the steering is unlocked by placing the key in the "ACC" position. A driver must be in the towed vehicle to operate the steering and brakes.

If the car is being towed with the rear wheels on the ground, be sure the parking brake is released.



o OK FOR AUTOMATIC OR MANUAL TRANSAXLE EQUIPPED VEHICLE

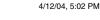
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### NOTE:

Before towing, check the level of the transaxle fluid. If it is below the "HOT" range on the dipstick, add fluid. If you cannot add fluid, a towing dolly must be used.



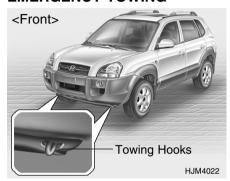






# 14

#### D080D01O-GAT **EMERGENCY TOWING**





mercial tow vehicle is available, attach a tow cable, chain or strap to one of the towing hooks under the front/rear of

14

your car. Be very careful when attempting this procedure when the vehicle is on any unpaved surface to avoid damage to your vehicle.

Nor should towing be attempted if the wheels, drive train, axles, steering or brakes are damaged. Before towing, be sure the transaxle is in neutral and the key is in "ACC" (with the engine off) or in the "ON" position (with the engine running). A driver must be in the towed car to steer it and operate the brakes.

### NOTE:

To avoid serious damage to your 4WD vehicle, limit the towing to 15 km/h (10 mph) and not for more than 1.5 km (1 mile) at ANY TIME.

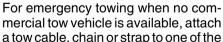
## IF YOU LOSE YOUR KEYS

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If you lose your keys, many Hyundai dealers can make you a new key if you have your key number. If you lock the keys inside your car and you cannot obtain a new key, many Hyundai dealers can use special tools to open the door for you.

Information about the key of immobilizer system (if installed) will be found on page 1-5.









Corrosion Protection	4-2
To Help Prevent Corrosion	4-3
Washing and Waxing	4-4
Cleaning the Interior	4-6

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## CORROSION PROTECTION

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# Protecting Your Hyundai from Corrosion

By using the most advanced design and construction practices to combat corrosion, Hyundai produces cars of the highest quality, However, this is only part of the job. To achieve the long-term corrosion resistance your Hyundai can deliver, the owner's cooperation and assistance is also required.



#### **Common Causes of Corrosion**

The most common causes of corrosion on your car are:

- Road salt, dirt and moisture that is allowed to accumulate underneath the car.
- Removal of paint or protective coatings by stones, gravel, abrasion or minor scrapes and dents which leave unprotected metal exposed to corrosion.

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## **High-Corrosion Areas**

If you live in an area where your car is regularly exposed to corrosive materials, corrosion protection is particularly important. Some of the common causes of accelerated corrosion are road salts, dust control chemicals, ocean air and industrial pollution.

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#### **Moisture Breeds Corrosion**

Moisture creates the conditions in which corrosion is most likely to occur. For example, corrosion is accelerated by high humidity, particularly when temperatures are just above freezing. In such conditions, the corrosive material is kept in contact with the car surfaces by moisture that is slow to evaporate.

Mud is particularly corrosive because it is slow to dry and holds moisture in contact with the vehicle. Although the mud appears to be dry, it can still retain the moisture and promote corrosion. High temperatures can also accelerate corrosion of parts that are not properly ventilated so the moisture can be dispersed. For all these reasons, it is particularly important to keep your car clean and free of mud or accumulations of other materials. This applies not only to the visible surfaces but particularly to the underside of the car.







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# TO HELP PREVENT CORROSION

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You can help prevent corrosion from getting started by observing the following:

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### **Keep Your Car Clean**

The best way to prevent corrosion is to keep your car clean and free of corrosive materials. Attention to the underside of the car is particularly important.

- o If you live in a high-corrosion area where road salts are used, near the ocean, areas with industrial pollution, acid rain, etc.—, you should take extra care to prevent corrosion. In winter, hose off the underside of your car at least once a month and be sure to clean the underside thoroughly when winter is over.
- When cleaning underneath the car, give particular attention to the components under the fenders and other areas that are hidden from view. Do a thorough job; just dampening the accumulated mud rather than wash-

ing it away will accelerate corrosion rather than prevent it. Water under high pressure and steam are particularly effective in removing accumulated mud and corrosive materials.

 When cleaning lower door panels, rocker panels and frame members, be sure that drain holes are kept open so that moisture can escape and not be trapped inside to accelerate corrosion.

# **Keep Your Garage Dry**

Don't park your car in a damp, poorly ventilated garage. This creates a favorable environment for corrosion. This is particularly true if you wash your car in the garage or drive it into the garage when it is still wet or covered with snow, ice or mud. Even a heated garage can contribute to corrosion unless it is well ventilated so moisture is dispersed.

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# Keep Paint and Trim in Good Condition

Scratches or chips in the finish should be covered with "touch-up" paint as soon as possible to reduce the possibility of corrosion. If bare metal is showing through, the attention of a qualified body and paint shop is recommended.

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# **Don't Neglect the Interior**

Moisture can collect under the floor mats and carpeting to cause corrosion. Check under the mats periodically to be sure the carpeting is dry. Use particular care if you carry fertilizers, cleaning materials or chemicals in the car.

These should be carried only in proper containers and any spills or leaks should be cleaned up, flushed with clear water and thoroughly dried.

where road salts are used, near the ED20C01A-AAT Moisture can colle



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### **WASHING AND WAXING**

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# Washing Your Hyundai

Never wash your car when the surface is hot from being in the sun. Always wash your car in the shade.

Wash your car frequently. Dirt is abrasive and can scratch the paint if it is not removed. Air pollution or acid rain may damage the paint and trim through chemical action if pollutants are allowed to remain in contact with the surface. If you live near the ocean or in an area where road salts or dust control chemicals are used, you should pay particular attention to the underside of the car. Start by rinsing the car to remove dust and loose dirt. In winter, or if you have driven through mud or muddy water, be sure to thoroughly clean the underside as well. Use a hard direct stream of water to remove accumulations of mud or corrosive materials. Use a good quality car-washing solution and follow the manufacturer's directions on the package. These are available at your Hyundai dealer or auto parts outlet. Don't use strong household detergents, gasoline, strong solvents or abrasive cleaning powders as these may damage the finish.

Use a clean sponge or cloth, rinse it frequently and don't damage the finish by rubbing too hard. For stubborn spots, dampen them frequently and remove them a little at a time.

To clean whitewall tires, use a stiff brush or soapy steel-wool scouring pad.

To clean plastic wheel covers, use a clean sponge or soft cloth and water.

To clean cast aluminum alloy wheels, use a mild soap or neutral detergent. Do not use abrasive cleaners. Protect the bare-metal surfaces by cleaning. polishing and waxing. Because aluminum is subject to corrosion, be sure to give aluminum alloy wheels special attention in winter. If you drive on salted roads, clean the wheels thoroughly afterwards.

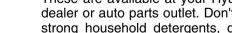
After washing, be sure to rinse thoroughly. If soapy water dries on the finish, streaking will result.

When the weather is warm and the humidity low, you may find it necessary to rinse each section immediately after washing to avoid streaking.

After rinsing, dry the car using a damp chamois or soft, absorbent cloth. The reason for drying the car is to remove water from the car so it will dry without water spots. Don't rub, this can damage the finish.

If you find any nicks or scratches in the paint, use touch-up paint to cover them to prevent corrosion. To protect the paintwork of the car against corrosion, vou must clean your Hyundai (at least once a month). Give special attention to the removal of salt, mud and other substances on the underside of the splashboards of the car. Make sure that the outlets and the underside of the doors are open. Paint damage can be caused by small accumulation of tar, industrial precipitation, tree resin, insects and bird droppings, when not removed immediately. If water alone is not strong enough to remove the accumulated dirt, use a mild car washing

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solution. Be sure to rinse the surface after washing to remove the solution. Never allow the solution to dry on the painted surfaces.

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# **Spot Cleaning**

Don't use gasoline, strong solvents or corrosive cleaning agents. These can damage the finish of the car. To remove road tar, use turpentine on a clean, soft cloth or commercially available bug and tar remover. Be gentle. To remove dead insects or tree sap, use warm water and mild soap or carwashing solution. Soak the spot and rub gently. If the paint has lost its luster, use a commercial car-cleaning polish.

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# **Polishing and Waxing**

Always wash and dry the car before polishing or waxing or using a combination cleaner and wax. Use a good quality commercial product and follow the manufacturer's directions on the container. Polish and wax the bright trim pieces as well as the paint.

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### When to Wax Again

You should polish and wax the car again when water no longer beads on a clean surface but spreads out over a larger area.

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## **Maintaining Bumpers**

Special precautions must be observed to preserve the appearance of the bumpers on your Hyundai. They are:

- Be careful not to spill battery electrolyte or hydraulic brake fluid on the bumpers. If you do, wash it off immediately with clean water.
- Be gentle when cleaning the bumper surfaces. They are made of soft plastic and the surface can be damaged if mistreated. Do not use abrasive cleaners. Use warm water and mild soap or car-washing solution.
- o Do not expose the bumpers to high temperatures. For example, if you have your car repainted, do not leave the bumpers on the car if the car is going to be placed in a hightemperature paint booth.





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# **CLEANING THE INTERIOR**

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# To Clean the Vinyl Upholstery

To clean the vinvl upholstery, first remove loose dirt and dust with a vacuum cleaner. Then apply a solution of mild soap or detergent and water using a clean sponge or soft cloth. Allow this to stay on the surface to loosen the dirt, then wipe with a clean damp sponge or cloth. If all the dirt stains are not removed, repeat this procedure until the upholstery is clean. Do not use gasoline, solvent, paint thinner or other strong cleaners.

# To Clean the Leather Upholstery (If installed)

In the normal course of use, leather upholstered surfaces will. like any material, pick-up dust and dirt. This dust and dirt must be cleaned off or it may work into the surface of the leather. causing damage.

Fine leather needs care, and should be cleaned when necessary. Washing leather thoroughly with soap and water will keep your leather lustrous, beautiful and ensure you have many years of wear.

Take a piece of cheese cloth and using any mild soap and lukewarm water, work up a good lather. Thoroughly wash the leather. Wipe clean with a slightly damp cloth and dry with soft cloth. Do this as often as the leather becomes soiled.

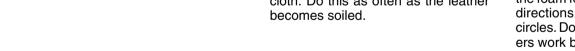
During tanning operations, sufficient oils are incorporated through processing that none need be applied during the life of the leather. Oil applied to the finished surface will in no way help the leather and may do more harm than good. Varnishes and furniture polishes should never be used under any conditions.

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### Cleaning the Carpets

Use a foam-type carpet cleaner. Cleaners of this type are available in aerosol cans in liquid form or powder. Read the instructions and follow them exactly. Using a vacuum cleaner with the appropriate attachment, remove as much dirt from the carpets as possible. Apply the foam following the manufacturer's directions, then rub in overlapping circles. Do not add water. These cleaners work best when the carpet is kept as dry as possible.





## CORROSION PREVENTION AND APPEARANCE CARE 1

# **ANY QUESTIONS?**

7

#### E040D01A-AAT

# **Cleaning the Seat Belts**

To clean the seat belts, use a cloth or sponge with mild soap or detergent and warm water. Do not use strong detergents, dye, bleach or abrasive materials on the seat belts as this may weaken the fabric.

While cleaning the belts, inspect them for excessive wear, cuts, fraying or other signs of damage and replace them if necessary.

#### E040E01A-AAT

# **Cleaning the Windows**

You may use any household window cleaner on the windows. However, when cleaning the inside of the rear window be careful not to damage the rear window defroster wiring.

#### E050A01A-AAT

If you have any questions about the care of your car, consult your Hyundai dealer.









# **VEHICLE MAINTENANCE REQUIREMENTS**

Maintenance Intervals	5-2
Scheduled Maintenance	5-4
Maintenance Under Severe Usage Conditions	5-7
Explanation of Scheduled Maintenance Items	5-8

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## MAINTENANCE INTERVALS

F010A01A-GAT

### **Service Requirements**

To assure that you receive the greatest number of kilometers of satisfying operation from your Hyundai, certain maintenance procedures must be performed. Although careful design and engineering have reduced these to a minimum, those that are required are of the utmost importance.

It is your responsibility to have these maintenance procedures performed to comply with the terms of the warranties covering your new Hyundai. The Service Passport supplied with your new vehicle provides further information about these warranties.

F010R014-44T

### **Maintenance Requirements**

The maintenance required for your Hyundai can be divided into three main areas:

- o Specified scheduled procedures
- o General checks
- o Do-it-yourself maintenance

F010C01A-GAT

## **Specified Scheduled Procedures**

These are the procedures such as inspections, adjustments and replacements that are listed in the maintenance charts starting on page 5-4. These procedures must be performed at the intervals shown in the maintenance schedule to assure that your warranty remains in effect. Although it is strongly recommended that they be performed by the factory-trained or distributor-trained technicians at your Hyundai dealer, these procedures may be performed at any qualified service facility.

It is suggested that genuine Hyundai service parts be used for any required repairs or replacements. Other parts of equivalent quality such as engine oil, engine coolant, manual or auto transaxle oil, brake fluid and so on which are not supplied by Hyundai Motor Company or its distributor may be used without affecting your warranty coverage but you should always be sure these are equivalent to the quality of the original Hyundai parts. Your Service Passport provides further information about your warranty coverage.

F010D01A-AAT

## **General Checks**

These are the regular checks you should perform when you drive your Hyundai or you fill the fuel tank. A list of these items will be found on page 6-5.





#### F010E01A-AAT

## **Do-It-Yourself Maintenance**

If you are mechanically inclined, own a few tools that are required and want to take the time to do so, you can inspect and service a number of items. For more information about doing it yourself, see Section 6.

#### F010F01A-GAT

## **A Few Tips**

Whenever you have your Hyundai serviced, keep copies of the service records in your glovebox. This will help ensure that you can document that the required procedures have been performed to keep your warranties in effect. This is especially important when service is not performed by an authorized Hyundai dealer.

## SCHEDULED MAINTENANCE **REQUIREMENTS**

F020A01Y-GAT

Inspection should be performed any time a malfunction is experienced or suspected. Receipts for all emission control system services should be retained to demonstrate compliance with conditions of the emissions system warranty.

For severe usage maintenance requirements, see page 5-7 of this section.







# 4 SCHEDULED MAINTENANCE

#### F030A01A-GAT

The following maintenance services must be performed to assure good vehicle control and performance. Keep receipts for all vehicle services to protect your warranty. Where both kilometrage and time are shown, the frequency of service is determined by whichever occurs first.

#### F030B01JM-GAT

R:Replace I: Inspect and, after Inspection, clean, adjust, repair or replace of necessary.

	•	•	•		•			•				
NO	O. DESCRIPTION		KILOMETERS X 1000	15	30	45	60	75	90	105	120	
NO.			MONTHS	12	24	36	48	60	72	84	96	
	ENGINE C	CONTROL SYST	EM MAINTENANCE (	GASOLINE)								
1	ENGINE OIL & FILTER 2.0 DOHC (API SH, ILSAC GF-1 or ABOVE)			В	R	R	R	R	R	B	R	
			2.7 V6	See Note (1)	l n	l n	n	n	n	"	"	n
2	DRIVE	2.0 DOHC (AL	TERNATOR, WATER	PUMP, P/STR'G) See Note (2)	ı	ı	ı	ı	ı	ı	ı	I
	BELT	BELT 2.7 V6 (AUTO-TENSIONER, ALTERNATOR, P/STR'G, A/CON)				ı		ı		1		I
3	FUEL FILTER (MPI TYPE)							R				R
4	FUEL LINES, FUEL HOSES & CONNECTIONS				ı	ı	ı	ı	ı	ı	ı	I
5	TIMING BELT (WHEN REPLACE TIMING BELT AND INSPECT WATER PUMP: 2.7 GSL)						ı		R			
6	VAPOR HOSE & FUEL FILLER CAP				ı		ı		1		- 1	
7	VACUUM & CRANKCASE VENTILATION HOSES						ı			1		
8	8 AIR CLEANER FILTER I I I I I R				ı	I						
9	AIR FILTER-CANISTER			See Note (3)								
10	SPARK PLUGS			R: 40,000km								
	SPARK PLUGS (PLATINUM COATED)			R: 100,000km								
	SPARK PLUGS (IRIDIUM COATED) R: 160,000km/120months											
11	VALVE CLEARANCE (2.0 GASOLINE ENGINE)				See Note (4)							

NOTE: (1) SF OR LOWER: EVERY 10,000 KM OR 6 MONTHS: "R"

- (2) When replace drive belt and inspect water pump
- (3) For every 10,000km : "I", For every 40,000km : "R"
- (4) For every 90,000km or 48 months: "I"

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F030D01JM-GAT R :Replace I: Inspect and, after Inspection, clean, adjust, repair or replace if necessary.

NO	NO. DESCRIPTION		KILOMETERS X 1000	15	30	45	60	75	90	105	120
NO.			MONTHS	12	24	36	48	60	72	84	96
	ENGINE CONTROL SYSTEM MA										
1	ENGINE OIL & FILTER [API Class: CF-4 or		r ABOVE]	R	R	R	R	R	R	R	R
	See Note (1) [ACE/	r ABOVE]	"								
2	AIR CLEANER FILTER	ANER FILTER			ı	R	I	- 1	R	ı	ı
3	FUEL FILTER CARTRIDGE	European Community Only			R		R		R		R
	Except European Community			See Note (2)							
4	TIMING BELT										R
5	DRIVE BELT (FOR P/STR'G PUM	FOR & A/CON)		ı		I		R		I	
6	ALTERNATOR VACUUM PUMP		I	I	I	I	I	I	I	I	
7	ALTERNATOR OIL HOSE & VACU		1	ı	I	I	I	I	ı	I	
8	FUEL LINES, FUEL HOSE & CONNECTIONS			ı	I	1	I	ı	ı	ı	ı
9	VACUUM HOSE (FOR EGR & THROTTLE BODY)			I	I	I	I	I	I	I	I

NOTE: (1) EVERY 500 KM OR BEFORE STARTING A LONG TRIP: "I"

(2) INSPECT EVERY 7,500KM OR 6 MONTHS AND REPLACE EVERY 15,000KM OR 12 MONTHS. WHEN REPLACING THE FUEL FILTER CARTRIDGE, USE HYUNDAI GENUINE PARTS.



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R: Replace I: Inspect and, after inspection, clean, adjust, repair or replace if necessary

NO.	DECCRIPTION		KILOMETERS X 1000	15	30	45	60	75	90	105	120
INO.	DESCRIPTION		MONTHS	12	24	36	48	60	72	84	96
	GENERAL MAINTENANCE										
1	COOLING SYSTEM	COOLING SYSTEM			I	I	I	I	I	I	I
2	COOLANT	Gasoline Engine			See Note (1)						
-		Diesel Engine			R		R		R		R
3	MANUAL TRANSAXLE OIL			1	I	I	I	I	I	I	I
	AUTOMATIC TRANSAXLE European Comr		munity Only	1	I	I	I	I	R	I	I
4	FLUID AND FILTER Except Europea		an Community	1	I	I	I	I	I	I	I
5	BRAKE HOSES AND LINES			I	I	I	I	I	I	ı	ı
6	BRAKE FLUID				I		I		I		I
7	REAR BRAKE DRUMS/LININGS, PARKING BRAKE				I		I		I		I
8	BRAKE PADS, CALIPERS AND ROTORS			1	I	- 1	I	I	ı	I	I
9	EXHAUST PIPE AND MUFFLER			I	I	I	I	I	I	I	I
10	SUSPENSION MOUNTING BOLTS			1	I	I	I	I	I	I	I
11	STEERING GEAR BOX, LINKAGE & BOOTS / LOWER ARM BALL JOINT			I	I	I	I	I	I	I	I
12	POWER STEERING PUMP AND HO	OSES		1	1	I	I	I	I	I	I
13	DRIVE SHAFTS AND BOOTS				I		I		I		I
14	AIR CONDITIONING REFRIGERANT			1	I	I	I	I	ı	I	I
15	AIR CONDITIONER FILTER				See Note (2)						
16	TRANSFER CASE OIL (4WD) See Note (5)				See Note (3)						
17	REAR AXLE OIL (4WD) See Note (5)				See Note (4)						
18	PROPELLAR SHAFT CLEAN, BOLT RETIGHTEN (4WD)				I		I		I		I

NOTE: (1) FOR EVERY 24 MONTHS OR 45,000 KM, WHICHEVER OCCURS FIRST: "R"

- (2) FOR EVERY 12 MONTHS OR 20,000 KM, WHICHEVER OCCURS FIRST: "R"
- (3) INSPECT EVERY 40,000 KM AND REPLACE EVERY 100,000 KM
- (4) INSPECT EVERY 40,000 KM
- (5) Transfer Case Oil and Rear Axle Oil should be changed anytime they have been submerged in water.

6





#### MAINTENANCE UNDER SEVERE USAGE CONDITIONS

F040A01JM-GAT

The following items must be serviced more frequently on cars normally used under severe driving conditions. Refer to the chart below for the appropriate maintenance intervals.

#### R: Replace I: Inspect and, after inspection, clean, adjust, repair or replace if necessary

MAINTE	NANCE ITEM	MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION	
ENGINE OIL AND FILTER		R	EVERY 7,500 KM OR 6 MONTHS	A, B, C, F, H, I, J	
AIR CLEANER FILTER		R	MORE FREQUENTLY	C, E	
SPARK PLUGS		R	MORE FREQUENTLY	B, H	
TIMING BELT (WHEN REPLACE T (2.7 GSL)	IMING BELT AND INPECT WATER PUMP	R	EVERY 60,000 KM OR 48 MONTHS	D, E, F, G	
BRAKE PADS, CALIPERS AND R	OTORS	_	MORE FREQUENTLY	C, D, G, H	
REAR BRAKE DRUMS/LININGS/F	PADS, PARKING BRAKE	_	MORE FREQUENTLY	C, D, G, H	
STEERING GEAR BOX, LINKAGI	& BOOTS/LOWER ARM BALL JOINT	I	MORE FREQUENTLY	C, D, E, F	
DRIVE SHAFTS AND BOOTS		I	EVERY 15,000 KM OR 12 MONTHS	C, D, E, F	
MANUAL TRANSAXLE OIL		R	EVERY 100,000 KM	A, C, D, E, F, G, H, I, J	
AUTOMATIC TRANSAXLE European Community Only		B	EVERY 45,000 KM	A C F F C II I	
FLUID AND FILTER Except European Community		n n	EVERY 40,000 KM	A, C, E, F, G, H, I	
AIR CONDITIONER FILTER		R	MORE FREQUENTLY	C, E	
TRANSFER CASE OIL (4WD) *1		R	EVERY 40,000 KM	C, E, G, I	
REAR AXLE OIL (4WD) *1		R	EVERY 80,000 KM	C, E, G, I	

<sup>\*1.</sup> Transfer Case Oil and Rear Axle Oil should be changed anytime they have been submerged in water.

#### **SEVERE DRIVING CONDITIONS**

- A Repeated short distance driving
- B Extensive idling
- C Driving in dusty, rough roads
- D Driving in areas using salt or other corrosive materials or in very cold weather
- E Driving in sandy areas

- F More than 50% driving in heavy city traffic during hot weather above 32°C(90°F)
- G Driving in mountainous areas
- H Towing a trailer
- I Driving as a patrol car, taxi, other commercial use or vehicle towing
- J Driving over 170 Km/h(100 MPH)





### EXPLANATION OF SCHED-ULED MAINTENANCE ITEMS

F060M01A-AAT

### o Engine Oil and Filter

The engine oil and filter should be changed at the intervals specified in the maintenance schedule. If the car is being driven in severe conditions, more frequent oil and filter changes are required.

F060B01A-AAT

#### o Drive Belts

Inspect all drive belts for evidence of cuts, cracks, excessive wear or oil saturation and replace if necessary. Drive belts should be checked periodically for proper tension and adjusted as necessary.

F060C01A-AAT

#### o Fuel Filter

A clogged filter can limit the speed at which the vehicle may be driven, damage the emission system and cause hard starting. If an excessive amount of foreign matter accumulates in the fuel tank, the filter may require replacement more frequently.

After installing a new filter, run the engine for several minutes, and check for leaks at the connections. Fuel filters should be installed by trained technicians.

F060D01TB-AAT

# o Fuel Lines, Fuel Hoses and Connections

Check the fuel lines, fuel hoses and connections for leakage and damage. Have a trained technician replace any damaged or leaking parts immediately.

**WARNING (Diesel only):** Never work on injection system with engine running or within 30 seconds after shutting off engine. High pressure pump, rail, injectors and high pressure pipes are subject to high pressure even after the engine stopped. The fuel jet produced by fuel leaks may cause serious injury, if it touch the body. People using pacemakers should not move than 30cm closer to the ECU or wiring harness within the engine room while engine is running, since the high currents in the Common Rail system produce considerable magnetic fields.







F060E01A-AAT

### o Timing Belt

Inspect all parts related to the timing belt for damage and deformation. Replace any damaged parts immediately.

F060G01A-AAT

### o Vapor Hose and Fuel Filler Cap

The vapor hose and fuel filler cap should be inspected at those intervals specified in the maintenance schedule. Make sure that a new vapor hose or fuel filler cap is correctly replaced. F060F01 4-4 AT

## o Vacuum, Crankcase Ventilation Hoses

Inspect the surface of hoses for evidence of heat and/or mechanical damage. Hard and brittle rubber, cracking, tears, cuts, abrasions, and excessive swelling indicate deterioration. Particular attention should be paid to examine those hose surfaces nearest to high heat sources, such as the exhaust manifold.

Inspect the hose routing to assure that the hoses do not come in contact with any heat source, sharp edges or moving component which might cause heat damage or mechanical wear. Inspect all hose connections, such as clamps and couplings, to make sure they are secure, and that no leaks are present. Hoses should be replaced immediately if there is any evidence of deterioration or damage.

F060H01A-AAT

#### o Air Cleaner Filter

A Genuine Hyundai air cleaner filter is recommended when the filter is replaced.

F060J01A-AA

## o Spark Plugs (For Gasoline Engine)

Make sure to install new spark plugs of the correct heat range.

70B01A-GAT

## o Cooling System

Check the cooling system part, such as radiator, coolant reservoir, hoses and connections for leakage and damage. Replace any damaged parts.

F070C01A-AAT

#### o Coolant

The coolant should be changed at the intervals specified in the maintenance schedule.







F070D01A-AAT

#### o Manual Transaxle Oil

Inspect the manual transaxle oil according to the maintenance schedule.

#### NOTE:

If the oil level is low, check for possible leaks before adding oil. Do not overfill.

F070F03A-AAT

#### o Automatic Transaxle Fluid and Filter

The fluid level should be in the "HOT" range of the dipstick, after the engine and transaxle are at normal operating temperature. Check the automatic transaxle fluid level with the engine running and the transaxle in neutral, with the parking brake properly applied. Use DIAMOND ATF SP-III or SK ATF SP-III when adding or changing fluid.

F070F01A-AAT

#### o Brake Hoses and Lines

Visually check for proper installation, chafing, cracks, deterioration and any leakage. Replace any deteriorated or damaged parts immediately.

F070G02A-AAT

#### o Brake Fluid

Check brake fluid level in the brake fluid reservoir. The level should be between 'MIN' and 'MAX' marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4.

## o Rear Brake Drums / Linings, Parking Brake

Check the rear brake drums and linings for scoring, burning, leaking fluid, broken parts, and excessive wear. Inspect the parking brake system including the parking brake lever and cables. For detailed service procedures, refer to the Shop Manual.

F070J01A-AAT

#### o Brake Pads, Calipers and Rotors

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

F070K01A-AAT

## o Exhaust Pipe and Muffler

Visually inspect the exhaust pipes, muffler and hangers for cracks, deterioration, or damage. Start the engine and listen carefully for any exhaust gas leakage. Tighten connections or replace parts as necessary.



## o Suspension Mounting Bolts

Check the suspension connections for looseness or damage. Retighten to the specified torque.





F070M01A-AAT

## o Steering Gear Box, Linkage & Boots/Lower Arm Ball Joint

With the vehicle stopped and engine off, check for excessive free-play in the steering wheel.

Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage. Replace any damaged parts.

F070N01A-AAT

## o Power Steering Pump, Belt and Hoses

Check the power steering pump and hoses for leakage and damage. Replace any damaged or leaking parts immediately. Inspect the power steering belt for evidence of cuts, cracks, excessive wear, oiliness and proper tension. Replace or adjust it if necessary.

F070P01A-AAT

#### o Drive Shafts and Boots

Check the drive shafts, boots and clamps for cracks, deterioration, or damage. Replace any damaged parts and, if necessary, repack the grease.

F070Q01A-AAT

## o Air Conditioning Refrigerant

Check the air conditioning lines and connections for leakage and damage. Check air conditioning performance according to the relevant shop manual if necessary.









Engine Compartment	6-2
General Checks	6-
Checking the Engine Oil	6-6
Changing the Oil and Filter	6-9
Checking and Changing the Engine Coolant	. 6-12
Spark Plugs	. 6-15
Changing the Air Cleaner Filter	6-17
Checking the Transaxle Oil (Manual)	. 6-19
Checking the Transaxle Fluid (Automatic)	6-20
Checking the Brakes	6-22
Checking the Clutch Fluid	6-23
Air Conditioning Care	. 6-24
Changing the Air Conditioner Filter	6-26
Checking Drive Belts	6-28
Checking and Replacing Fuses	6-29
Checking the Battery	. 6-3 <sup>-</sup>
Power Steering Fluid Level	6-32
Removal of Water from the Fuel Filter	. 6-30
Headlight Aiming Adjustment	. 6-34
Replacement of Light Bulbs	6-36
Bulb Wattage	6-43
Fuse Panel Description	6-44

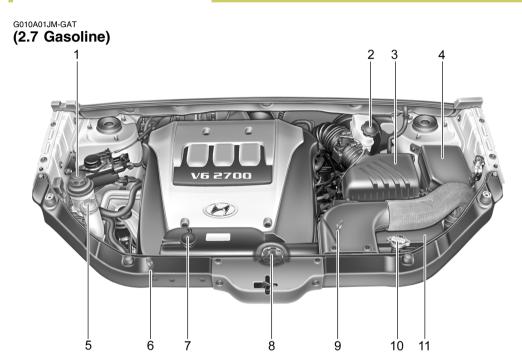
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## 6 DO-IT-YOURSELF MAINTENANCE

## **ENGINE COMPARTMENT**





When inspecting or servicing the engine, you should handle tools and other heavy objects carefully so that the plastic cover of the engine is not damaged.



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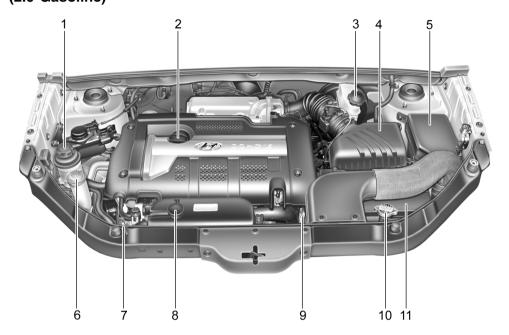
- 1. Power steering fluid reservoir
- 2. Brake & Clutch fluid reservoir
- 3. Air cleaner
- 4. Fuse and Relay box

- 5. Windshield washer fluid reservoir
- 6. Engine oil level dipstick
- 7. Coolant reservoir cap
- 8. Engine oil filler cap

- 9. Automatic transaxle fluid level dipstick (Vehicle with Automatic Transaxle)
- 10.Radiator cap
- 11.Battery



#### G010B01JM-AAT (2.0 Gasoline)





## **CAUTION:**

When inspecting or servicing the engine, you should handle tools and other heavy objects carefully so that the plastic cover of the engine is not damaged.



G010B01JM

- 1. Power steering fluid reservoir
- Engine oil filler cap
   Brake & Clutch fluid reservoir
- 4. Air cleaner

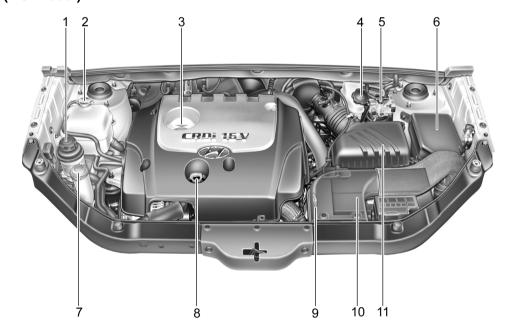
- 5. Fuse and Relay box
- 6. Windshield washer fluid reservoir
- 7. Engine oil level dipstick
- 8. Coolant reservoir cap

- 9. Automatic transaxle fluid level dipstick (Vehicle with Automatic Transaxle)
- 10.Radiator cap
- 11.Battery



## 6 DO-IT-YOURSELF MAINTENANCE

#### G010C01JM-GAT (2.0 Diesel)





## **CAUTION:**

When inspecting or servicing the engine, you should handle tools and other heavy objects carefully so that the plastic cover of the engine is not damaged.



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- 1. Power steering fluid reservoir
- 2. Coolant reservoir & Radiator cap
- 3. Engine oil filler cap
- 4. Brake & Clutch fluid reservoir
- 5. Fuel filter
- 6. Fuse and Relay box
- 7. Windshield washer fluid reservoir
- 8. Engine oil level dipstick
- 9. Automatic transaxle fluid level dipstick (Vehicle with Automatic Transaxle)
- 10.Battery
- 11.Air cleaner

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#### **GENERAL CHECKS**

G020A01A-AAT

### **Engine Compartment**

The following should be checked regularly:

- o Engine oil level and condition
- o Transaxle fluid level and condition
- o Brake fluid level
- o Clutch fluid level
- o Engine coolant level
- o Windshield washer fluid level
- o Accessory drive belt condition
- o Engine coolant hose condition
- o Fluid leaks (on or below components)
- o Power steering fluid level
- o Battery condition
- o Air filter condition

G020B01A-AAT

#### Vehicle Exterior

The following should be checked monthly:

- o Overall appearance and condition
- o Wheel condition and wheel nut torque
- o Exhaust system condition
- o Light condition and operation
- o Windshield glass condition
- o Wiper blade condition
- o Paint condition and body corrosion
- o Fluid leaks
- o Door and hood lock condition
- o Tire pressure and condition (including spare tire)

 Defroster, heating system operation (and air conditioning, if installed)

- o Steering operation and condition
- o Mirror condition and operation
- o Turn signal operation
- o Accelerator pedal operation
- o Brake operation, including parking brake
- Manual transaxle operation, including clutch operation
- Automatic transaxle operation, including "Park" mechanism operation
- o Seat control condition and opera-
- o Seat belt condition and operation
- o Sun visor operation

If you notice anything that does not operate correctly or appears to be functioning incorrectly, inspect it carefully and seek assistance from your Hyundai dealer if service is needed.

G020C01A-AAT

#### Vehicle Interior

The following should be checked each time when the vehicle is driven:

- o Lights operation
- o Windshield wiper operation
- o Horn operation

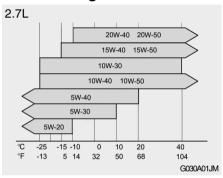




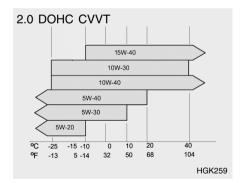
## **CHECKING THE ENGINE OIL**

#### G030A01E-GAT

## Recommended Oil **Gasoline Engine**



SH, SG or SG/CD (API) multi-grade and fuel efficient oil is recommended.



SH(API) or GF-1 (ILSAC) and ABOVE multi-grade and fuel efficient oil is recommended.

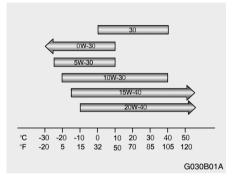
Engine oil is essential to the performance and service of the engine. It is suggested that you check the oil level at least once a week in normal use and more often if you are on a trip or driving in severe conditions.

#### NOTE:

- o SAE 5W-20 is not recommended for sustained high speed vehicle operation.
- o When replacing or adding the oil, below SAE 10W-30 is recommended. Using a high viscosity oil of SAE 15W-40 and over makes malfunction of DOHC CVVT engine when the engine is cool.

G030B02FC-GAT

## Recommended Oil **Diesel Engine**



Engine oil is essential to the performance and service of the engine. It is suggested that you check the oil level every 500km or before starting a long trip and more often if you are driving in severe conditions.

The engine oil quality should meet the following classification:

API class: CF-4 or ABOVE ACEA class: B4 or ABOVE

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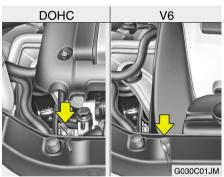


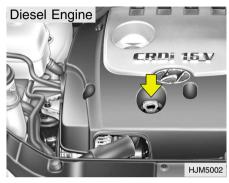
### NOTE:

SAE 0W-30 oil is for extra cold zone and to be restricted by driving condition and dealing area. (Especially, not recommended for sustained high loaded and high speed operation.)

G030C01JM-GAT

#### To Check the Oil Level





Before checking the oil, warm up the engine to the normal operating temperature and be sure your car is parked on level ground. Turn the engine off.

Wait about five minutes (gasoline engine) /Wait about two minutes (diesel engine), then remove the dipstick, wipe it off, fully reinsert the dipstick and withdraw it again. Then note the highest level the oil has reached on the dipstick. It should be between the upper ("FULL") and lower ("LOW") range.

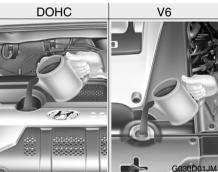


### WARNING:

Be very careful not to touch the radiator hose when checking the engine oil as it may be hot enough to burn you.

## G030D01JM-GAT

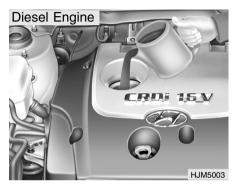
## **Adding Oil**

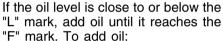




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- 1. Remove the oil filler cap by turning it counterclockwise.
- 2. Add oil, then check the level again. Do not overfill.
- 3. Replace the cap by turning it clockwise.

The distance between the "F" and "L" marks is equal to about 1 liter (Gasoline Engine)/ 1.6 liter (Diesel Engine) of oil.



## WARNING:

Be very careful not to touch the radiator hose when adding the engine oil as it may be hot enough to burn vou.

G350A01A-GAT

## **ENGINE OIL CONSUMPTION Function of Engine Oil**

Engine oil has the primary function of lubricating and cooling the inside of the engine.

## **Engine oil consumption**

It is normal that an engine should consume some engine oil while normal driving. The cause of oil consumption in a normal engine are as follows:

- o Engine oil is used to lubricate pistons, piston rings and cylinders.
- A thin film of oil is left on the cylinder wall when a piston moves downwards in the cylinder. High negative pressure generated during engine operation sucks some of the oil into the combustion chamber.

This oil with some oil of the cylinder wall is burned by the high temperature combustion gases during the combustion process.

o The engine oil consumption is strongly effected by the viscosity and quality of oil, engine rpm and driving condition etc. The engine oil is more consumed under severe driving conditions such as high speeds and frequent acceleration and deceleration than normal driving condition.





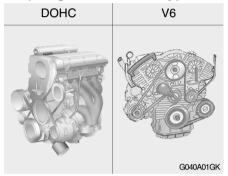


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### CHANGING THE OIL AND **FILTER**

G040A01JM-GAT

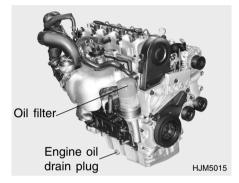
## **Gasoline Engine/ Diesel Engine** : Left hand drive type(Except E.C), Right hand drive type



The engine oil and filter should be changed at those intervals specified in the maintenance schedule in Section 5. If the car is being driven in severe conditions, more frequent oil and filter changes are required.

The procedure for changing the oil and filter is as follows:

Diesel Engine (LHD (Except E.C), RHD)



- 1. Park the car on level ground and set the parking brake. Start the engine and let it warm up until the needle on the coolant temperature gauge moves above the lowest mark. Turn the engine off and place the gear selector lever in "P" (automatic) or reverse gear (manual transaxle).
- 2. Open the hood and remove the engine oil filler cap.
- 3. Slide underneath the car and loosen the drain plug by turning it counterclockwise with a wrench of the proper size. Be sure that a drain

pan is in position to catch the oil as it drains out, then remove the drain plug.



#### WARNING:

Be very careful when draining the engine oil as it may be hot enough to burn you!

4. When the oil has stopped draining. replace the drain plug using a new washer and retighten by turning it clockwise.

Oil pan drain plug tightening torque : 3.5 ~ 4.5 kgf.m (2.7L/Diesel)  $4.0 \sim 4.5 \text{ kgf.m}$  (2.0L)

5. Remove the oil filter by turning it counterclockwise with a oil filter wrench of the proper size. A certain amount of oil will come out when you remove the filter. So be sure to have your drain pan in place underneath it.









 Install a new oil filter in accordance with the instructions on the carton or on the filter itself. Do not over-tighten.

Tightening torque:
Gasoline - 1.2 ~ 1.6 kgf.m
Diesel(LHD(Except E.C), RHD) 2.3 ~ 2.5 kgf.m

Be sure that the mounting surface on the engine is clean and that the old gasket is removed completely. Lubricate the new gasket on the filter with clean engine oil before installation.

- 7. Remove the engine oil level dipstick.
- 8. Refill the crankcase with the recommended engine oil. Refer to the specification in chapter 9 for engine oil capacity.



## **CAUTION:**

Slowly pour the recommended oil using by a funnel. Do not overfill not to damage engine.

- 9. Start the engine and check to be sure no oil is leaking from the drain plug or oil filter.
- 10.Shut off the engine and recheck the oil level.

#### NOTE:

Always dispose of used engine oil in an environmentally acceptable manner. It is suggested that it be placed in a sealed container and taken to a service station for reclamation. Do not pour the oil on the ground or put it in with the household trash.

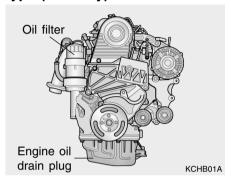


## **WARNING:**

Used motor oil may cause irritation or cancer of the skin if left in contact with the skin for prolonged periods of time. Wash your hands thoroughly with soap and warm water as soon as possible after handling used oil.

G040B02O-GAT

# Diesel Engine: Left hand drive type (E.C only)



The engine oil and filter should be changed at those intervals specified in the maintenance schedule in Section 5. If the car is being driven in severe conditions, more frequent oil and filter changes are required.

The procedure for changing the oil and filter is as follows:

Jmgene-6.p65 10





- 1. Park the car on level ground and set the parking brake. Start the engine and let it warm up until the needle on the coolant temperature gauge moves above the lowest mark. Turn the engine off and place the gear selector lever in "P" (automatic) or reverse gear (manual transaxle).
- 2. Open the hood and remove the engine oil filler cap.
- 3. Slide underneath the car and loosen the oil pan drain plug by turning it counterclockwise oil pan with a wrench of the proper size. Be sure that a drain pan is in position to catch the oil as it drains out, then remove the drain plug.

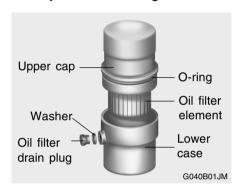


## **WARNING:**

Be very careful when draining the engine oil as it may be hot enough to burn you!

4. When the oil has stopped draining, replace the drain plug using a new washer and retighten by turning it clockwise.

## Oil pan drain plug tightening torque: 3.5 ~ 4.5 kgf.m



- Loosen the oil filter drain plug by turning it counterclockwise with a wrench of the proper size and drain out some oil in the oil filter. Be sure that a drain pan is in position to catch the oil.
- 6. Loosen the oil filter upper cap with a proper tool from the lower case until an O-ring is seen. Then, drain the oil completely.
- Pull out the oil filter upper cap with element from the lower case.
   Using a clean cloth, remove any dirt or oil accumulated around the lower case.

 Install a new copper washer of the oil filter drain plug by the side of lower case and retighten by turning it clockwise.

#### Tightening torque: 0.8~1.0 kgf.m

 After mounting a new oil filter element and new O-ring to upper cap, install the upper cap to lower case and retighten by turning it clockwise. Do not over-tighten.

Tightening torque: 2.3~2.5 kgf.m

#### NOTE:

Be careful not to be the element upside down when mounting the element.

- 10.Remove the engine oil level dipstick.
- 11.Refill the crankcase with the recommended engine oil. Refer to the specification in chapter 9 for engine oil capacity.













#### CAUTION:

Slowly pour the recommended oil using by a funnel. Do not overfill not to damage engine.

- 12.Start the engine and check to be sure no oil is leaking from the drain plug or oil filter.
- 13. Shut off the engine and recheck the oil level.



- o It is recommended that the engine oil and filter should be changed by an authorized Hyundai dealer.
- o Always dispose of used engine oil in an environmentally acceptable manner. It is suggested that it be placed in a sealed container and taken to a service station for maybe reclaimation. Do not pour the oil on the ground or put it into the household trash.



## **WARNING:**

Used motor oil may cause irritation or cancer of the skin if left in contact with the skin for prolonged periods of time. Wash your hands thoroughly with soap and warm water as soon as possible after handling used oil.

# CHECKING AND CHANGING THE ENGINE COOLANT

G050A01A-AAT



#### WARNING:

Do not remove the radiator cap when the engine is hot. When the engine is hot, the engine coolant is under pressure and may erupt through the opening if the cap is removed. You could be seriously burned if you do not observe this precaution. Do not remove the radiator cap until the radiator is cool to the touch.







G050B01A-AAT

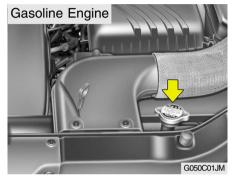
## **Recommended Engine Coolant**

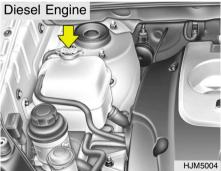
Use a high quality ethylene-glycol coolant in a 50/50 mix with water. The engine coolant should be compatible with aluminum engine parts. Additional corrosion inhibitors or additives should not be used. The cooling system must be maintained with the correct concentration and type of engine coolant to prevent freezing and corrosion. Never allow the concentration of antifreeze to exceed the 60% level or go below the 35% level, or damage to the cooling system may result. For proper concentration when adding or replacing the engine coolant, refer to the following table.

Ambient	Engine coolant concentration				
temperature °C ( °F)	Antifreeze solution	Water			
-15 (5)	35%	65%			
-25 (-13)	40%	60%			
-35 (-31)	50%	50%			
-45 (-49)	60%	40%			

G050C01A-AAT

#### To Check the Coolant Level





The coolant level can be seen on the side of the plastic coolant reservoir. The level of the coolant should be between the "L" and "F" lines on the reservoir when the engine is cool. If the level is below the "L" mark, add engine coolant to bring it up between "L" and "F". If the level is low, inspect for coolant leaks and recheck the fluid level frequently. If the level drops again, visit your Hyundai dealer for an inspection and diagnosis of the reason.











G050D02A-AAT

## To Change the Coolant

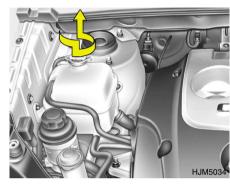
The engine coolant should be changed at those intervals specified in the vehicle maintenance schedule in Section 5.



## CAUTION:

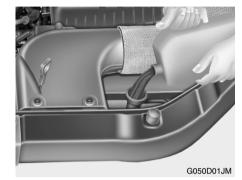
Engine coolant can damage the finish of your car. If you spill engine coolant on the car, wash it off thoroughly with clean water.

- 1. Park the car on level ground, set the parking brake and remove the radiator cap when cool.
- Be sure your drain receptacle is in place. Open the drain cock on the radiator. Allow all the engine coolant to drain from the cooling system, then securely close the drain cock.
- Check Section 9 for the capacity of the cooling system in your car. Then, following the manufacturer's directions on the engine coolant container, add the appropriate quantity of coolant to the radiator.



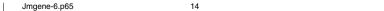
4. Turn the radiator cap counterclockwise without pressing down on it, until it stops. This relieves any pressure remaining in the cooling system. And remove the radiator cap by pushing down and turning counterclockwise.

Now fill the radiator with clean demineralized or distilled water. Continue to add clean demineralized or distilled water in small quantities until the fluid level stays up in the radiator neck.



- 5. Start the engine, top off the radiator with water and then add coolant to the reservoir until the level is between "LOW" and "FULL".
- Replace the radiator and reservoir caps and check to be sure the drain cocks are fully closed and not leaking.







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## **SPARK PLUGS**



#### WARNING:

The cooling fan is controlled by engine coolant temperature and may sometimes operate even when the engine is not running. Use extreme caution when working near the blades of the cooling fan so that you are not injured by a rotating fan blade. As the engine coolant temperature decreases, the fan will automatically shut off. This is a normal condition.

15

G060B01JM-GAT

# Replacing the Spark Plugs (Gasoline Engine only)

The spark plugs should be changed at the intervals specified in the vehicle maintenance schedule in Section 5 or whenever engine performance indicates they should be changed. Symptoms that suggest poor spark plug performance include engine misfiring under load, loss of fuel economy, poor acceleration, etc.

When spark plugs are replaced, always use spark plugs recommended by Hyundai. The use of other spark plugs can result in loss of performance, radio interference or engine damage.

#### NOTE:

- o When replacing the spark plugs, genuine Hyundai replacement parts are recommended.
- o it is recommended that spark plugs for Engine 2.7L should be changed by an authorized Hvundai dealer.
- Do not clean or regap platinumtipped spark (Iridium tipped) plugs.

## **Recommended Spark Plugs:**

RE	EMARK	TYPE				
	Unleaded	E.C *1	IFR5G-11			
		Except	PFR5N-11 (NGK)			
2.7		E.C *2	RC10PYPB4 (CHAMPION)			
	Leaded	BKR5ES (NGK)				
		RC10Y	C (CHAMPION)			
	Unleaded	BKR5E	S-11(NGK)			
		RC10YC (CHAMPION)				
2.0L	Leaded	BKR5ES (NGK)				
		RC10Y	C (CHAMPION)			

\*1: Iridium Coated

\*2: Platinum Coated







## 6 DO-IT-YOURSELF MAINTENANCE

16

## G060C01JM-GAT



You will find it easier to change spark plugs if the engine is cold. Always change one spark plug at a time. This helps avoid getting the wires mixed up.

- 1. Remove the center cover (2.0L) on the engine rocker cover.
- 2. Using a clean cloth, remove any dirt that has accumulated around the base of the spark plug so it cannot fall into the cylinder when the spark plug is removed.

3. To remove the spark plug cable, pull straight up on the insulated connector, not the cable. Pulling on the cable may damage the carbon core conductor.





It is recommended that the engine be cool or cold when changing the spark plugs. If the engine is hot, you could burn yourself on the insulated connector, the spark plug or the engine itself.

- When preparing to remove the old spark plug, guide the socket down over the spark plug, being careful not to damage the ceramic insulator.
- To remove the old spark plug, turn the wrench handle in a counterclockwise direction.
- 6. To install the new spark plug, guide the socket down over the spark plug, being careful not to damage the ceramic insulator.





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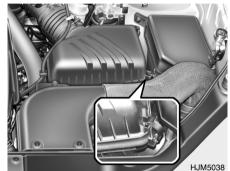
## NOTE:

Spark plugs should be tightened firmly. Over-tightening can damage the threads in the aluminum cylinder head. Also, leaving them too loose can cause the spark plug to get very hot and possibly result in damage to the engine.

7. Replace the cable by pushing the insulated connector directly down onto the electrode. Check to be sure it has snapped into place and can't fall off.

# CHANGING THE AIR CLEANER FILTER

G070A03Y-AAT



The replacement of air filter is performed in the following manner.

- 1. Unsnap the clips around the cover.
- 2. When this is done, the cover can be lifted off, the old filter removed and the new filter put in its place.

Genuine Hyundai replacement parts are recommended.



- Operating your vehicle without a proper air cleaner filter in place can result in excessive engine wear.
- When removing the air cleaner filter, be careful that dust or dirt does not enter the air intake. These may result in damage to the air cleaner filter.





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## 6 DO-IT-YOURSELF MAINTENANCE

# WINDSHIELD WIPER BLADES

G080A02A-AAT



The wiper blades should be carefully inspected from time to time and cleaned to remove accumulations of road film or other debris. To clean the wiper blades and arms, use a clean sponge or cloth with a mild soap or detergent and water. If the wipers continue to streak or smear the glass, replace them with genuine Hyundai replacement parts or their equivalent.

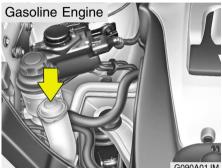


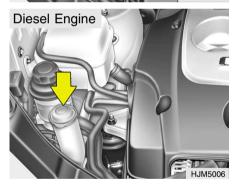
## CAUTION:

- o Do not operate the wipers on dry glass. This can result in more rapid wear of the wiper blades and may scratch the glass.
- o Keep the blade rubber out of contact with petroleum products such as engine oil, gasoline, etc.

# FILLING THE WASHER RESERVOIR

G090A01O-GAT











The washer fluid reservoir supplies fluid to the windshield washer system.

A good quality washer fluid should be used to fill the washer reservoir. The fluid level should be checked more frequently during inclement weather or whenever the washer system is in more frequent use.

The capacity of the washer reservoir is 3.4 liters (3.59 U.S. quarts).

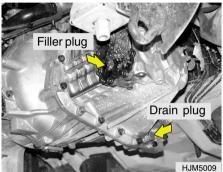


#### **CAUTION:**

- o Radiator antifreeze (engine coolant) should not be used in the washer system because it will damage the car's finish.
- o The washer should not be operated if the washer reservoir is empty. This can damage the washer fluid pump.

# CHECKING THE TRANSAXLE OIL (MANUAL)

G100A01JM-GAT



Transaxle lubricant in the manual transaxle should be checked at those intervals specified in the vehicle maintenance schedule in Section 5.

#### Recommended Oil

Use only HYUNDAI GENUINE PARTS MTF 75W/90 (API GL-4) in the manual transaxle.

## **Manual Transaxle Oil Capacity**

The oil capacity of the manual transaxle is 2.1 liters (2.2).

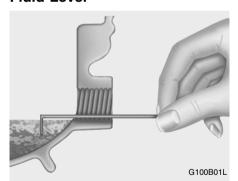


#### WARNING:

It is always better to check the transaxle oil level when the engine is cool or cold. If the engine is hot, you should exercise great caution to avoid burning yourself on hot engine or exhaust parts.

G100B02A-AAT

# To Check the Manual Transaxle Fluid Level



Park the car on level ground with the engine off.







- Using a wrench of the correct size, loosen the oil filler plug by turning it counterclockwise and remove it with your fingers.
- Use your finger or suitable tool to feel inside the hole. The oil level should be at its bottom edge. If it is not, check for leaks before adding oil. To refill the transaxle or bring the oil level up, add oil slowly until it reaches the proper level. Do not overfill.
- 3. Replace the plug and washer, screw it in with your fingers and then tighten securely with the wrench.

# CHECKING THE TRANSAXLE FLUID (AUTOMATIC)

G110A01E-AAT

Transaxle fluid in the automatic transaxle should be checked at those intervals specified in the vehicle maintenance schedule in Section 5.

#### NOTE:

Automatic transaxle fluid is basically red color. As driving distance increases, the fluid color turns darkish red gradually. It is a normal condition and you should not judge the need to replace based upon the changing color.

You must replace the automatic transaxle fluid in accordance with intervals specified in the vehicle maintenance schedule in section 5.

G110B03A-AAT

#### Recommended Fluid

Your Hyundai automatic transaxle is specially designed to operate with DIAMOND ATF SP-III or SK ATF SP-III. Damage caused by a nonspecified fluid is not covered by your new vehicle limited warranty.

G110C01JM-GAT

## **Transaxle Fluid Capacity**

The fluid capacity of the automatic transaxle is 7.8 liters (8.2 U.S. guarts).



#### **WARNING:**

The transaxle fluid level should be checked when the engine is at normal operating temperature. This means that the engine, radiator, exhaust system etc., are very hot. Exercise great care not to burn yourself during this procedure.







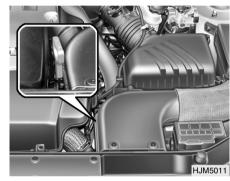
# To Check the Transaxle Fluid Level

Park the car on level ground with the parking brake engaged. When the transaxle fluid level is checked, the transaxle fluid should be at normal operating temperature and the engine idling.

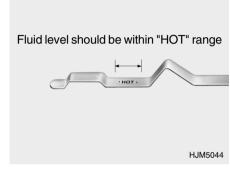


While the engine is idling, apply the brakes and move the gear selector lever from "P" to each of its other positions — "R", "N", "D" — and then return to "N" or "P". With the engine still idling:

1. Open the hood, being careful to keep hands, long hair and clothing clear of any moving parts.



 Remove the transaxle dipstick, wipe it clean, reinsert the dipstick as far as it will go, then remove it again. Now check the fluid level on the dipstick. It should be in the 'HOT' range on the dipstick.



3. If the transaxle fluid level is low, use a funnel to add transaxle fluid through the dipstick tube until the level reaches the 'HOT' range. Do not overfill.









## **CHECKING THE BRAKES**



#### WARNING:

The cooling fan is controlled by engine coolant temperature and may sometimes operate even when the engine is not running. Use extreme caution when working near the blades of the cooling fan, so that you are not injured by a rotating fan blade. As the engine coolant temperature decreases, the fan will automatically shut off. This is a normal condition.

**WARNING (Diesel only):** Never work on injection system with engine running or within 30 seconds after shutting off engine. High pressure pump, rail, injectors and high pressure pipes are subject to high pressure even after the engine stopped. The fuel jet produced by fuel leaks may cause serious injury, if it touch the body. People using pacemakers should not move than 30cm closer to the ECU or wiring harness within the engine room while engine is running, since the high currents in the Common Rail system produce considerable magnetic fields.



## **CAUTION:**

Because brakes are essential to the safe operation of the car, it is suggested that they be checked and inspected by your Hyundai dealer. The brakes should be checked and inspected for wear at those intervals specified in the vehicle maintenance schedule in Section 5.



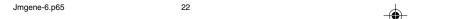
Checking the Brake Fluid Level



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#### WARNING:

Use caution when handling brake fluid. It can damage your vision if it gets into your eyes. It will also damage your vehicle's paint if spilled on it and not removed immediately.





## CHECKING THE CLUTCH FLUID

G130A01A-AAT

#### To Check the Clutch Fluid



The clutch fluid level in the master cylinder should be checked when performing other under hood services. The system should be checked for leakage at the same time. Check to make certain that the clutch fluid level is always between the "MAX" and "MIN" level markings on the fluid reservoir. Fill as required. Fluid loss indicates a leak in the clutch system which should be inspected and repaired immediately. Consult your Hyundai dealer.

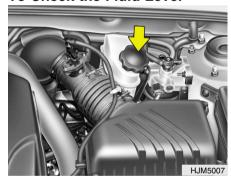
G120C02A-AAT

#### Recommended Brake Fluid

Use only hydraulic brake fluid conforming to DOT 3 or DOT 4 specifications in your braking system. Follow the instructions printed on the container.

G120D01A-AAT

#### To Check the Fluid Level



The fluid level in the brake fluid reservoir should be checked periodically. The level should be between the "MIN" and "MAX" marks on the side of the reservoir. If the level is at or below the "MIN" mark, carefully add fluid to bring it up to "MAX". Do not overfill.

G120E02A-AAT

#### Adding Brake Fluid



## WARNING:

Handle brake fluid carefully. It can damage your vision if it gets into your eyes. Use only DOT 3 or DOT 4 specification fluid from a sealed container. Do not allow the fluid can or reservoir to remain open any longer than required. This will prevent entry of dirt and moisture which can damage the brake system and cause improper operation.

To add brake fluid, first wipe away any dirt then unscrew the fluid reservoir cap. Slowly pour the recommended fluid into the reservoir. Do not overfill. Carefully replace the cap on the reservoir and tighten.

Jmgene-6.p65 23









#### G130B02A-AAT

## To Replace the Fluid

Recommended brake fluid conforming to DOT 3 or DOT 4 specification should be used. The reservoir cap must be fully tightened to avoid contamination from foreign matter or moisture.

#### NOTE:

Do not allow any other liquids to contaminate the brake fluid. Seal damage will result.



#### WARNING:

Use caution when handling brake fluid. It can damage your vision if you get it in your eyes. It will also damage your vehicle's paint if spilled on it and not removed immediately.

#### **AIR CONDITIONING CARE**

#### G140A01A-AAT

## **Keeping the Condenser Clean**

The air conditioning condenser (and engine radiator) should be checked periodically for accumulation of dirt, dead insects, leaves, etc. These can interfere with maximum cooling efficiency. When removing such accumulations, brush or hose them away carefully to avoid bending the cooling fans.

#### G140B01A-AAT

# Checking the Air Conditioning Operation

- 1. Start the engine and let it run at fast idle for several minutes with the air conditioning set at the maximum cold setting.
- 2. If the air coming out of the in-dash vents is not cold, have the air conditioning system inspected by your Hyundai dealer.



## **CAUTION:**

Running the air conditioning system for extended periods of time with a low refrigerant level may damage the compressor.







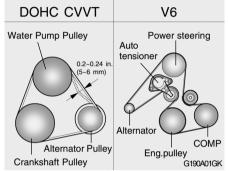
#### G140C01A-AAT

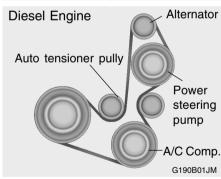
#### Lubrication

To lubricate the compressor and the seals in the system, the air conditioning should be run for at least 10 minutes each week. This is particularly important during cool weather when the air conditioning system is not otherwise in use.

#### G140D01S-GAT

# **Checking the Compressor Drive Belt**





When the air conditioning is being used regularly, the compressor drive belt tension should be checked at least once a month.

To check the drive belt tension, press down on the belt halfway between the engine crankshaft and compressor pulleys. Pressing with your finger, you should not be able to deflect this belt anymore than 8.0 mm. If you have the instruments to check it with a force of 98N (22 lb.), the deflection should be approx. 8.0 mm (0.315 inches). If the belt is too loose, have it adjusted by your Hyundai dealer.







## 6 DO-IT-YOURSELF MAINTENANCE

# 26 CHANGING THE AIR CONDITIONER FILTER

B145A01JM-GAT

# (For Evaporator and Blower Unit) (If Installed)

The air conditioner filter is located in front of the evaporator unit behind the glove box.

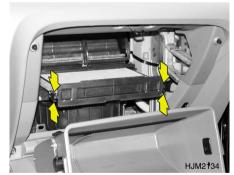
It helps to decrease the amount of pollutants entering the car.



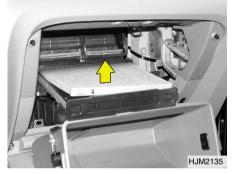
1. Open the glove box and take out the damper strap through the hole.



2. Lower the glove box down completely by pushing the both sides of the glove box inward.



3. Remove the air conditioner filter cover with pressing the both side's clips.



- 4. Replace the air conditioner filter by lifting it.
- 5. Installation is the reverse order of disassembly.









## **CHECKING THE FREEPLAY**





## CAUTION:

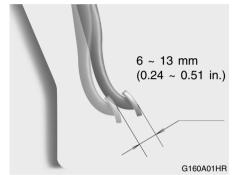
Be sure to install the air conditioner filter in the direction of the arrow sign. Otherwise, it may cause noise or deterioration.





To check the steering wheel freeplay, stop the car with the wheels pointed straight ahead and gently move the steering wheel back and forth. Use very light finger pressure and be sensitive to changes in resistance that mark the limits of the freeplay. If the freeplay is greater than specified, have it inspected by your Hyundai dealer and adjusted or repaired if necessary.

#### G160A01A-GAT **CLUTCH PEDAL**



With the engine off, press lightly on the clutch pedal until you feel a change in resistance. This is the clutch pedal freeplay. The freeplay should be within the limits specified in the illustration. If it is not, have it inspected by your Hyundai dealer and adjusted or repaired if necessary.

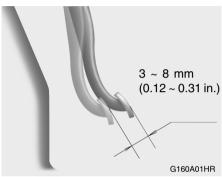








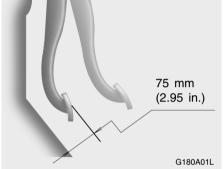
## G170A01A-GAT BRAKE PEDAL



With the engine off, press down on the brake pedal several times to reduce the vacuum in the brake booster. Then, using your hand, press down slowly on the brake pedal until you feel a change in resistance. This is the brake pedal freeplay. The freeplay should be within the limits specified in the illustration. If it is not, have it inspected by your Hyundai dealer and adjusted or repaired if necessary.

## CHECKING BRAKE PEDAL CLEARANCE

G180A01A-GAT

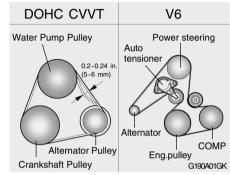


You need a helper to check the brake pedal clearance. With the engine running, have your helper press down on the brake pedal several times and then hold it down with a force of about 490N (50 kg, 110 lbs). The brake pedal clearance is the distance from the top surface of the brake pedal to the asphalt sheeting under the floor mat. If the brake pedal clearance is not within the limits specified in the illustration, have it inspected by your Hyundai dealer and adjusted or repaired if necessary.

### **CHECKING DRIVE BELTS**

G190A01A-GAT

#### **GASOLINE ENGINE**



Drive belts should be checked periodically for proper tension and adjusted if necessary. At the same time, belts should be examined for cracks, wear, fraying or other evidence of deterioration and replaced if necessary.

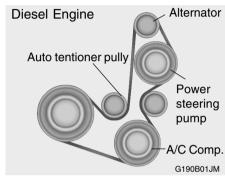
Belt routing should also be checked to be sure there is no interference between the belts and other parts of the engine. After a belt is replaced, the new belt should be adjusted again after two or three weeks to eliminate slack resulting from initial stretching after use.





## G190B01TB-GAT

## **DIESEL ENGINE**



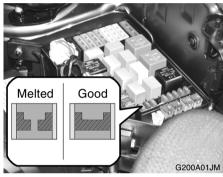
At the scheduled maintenance inspection, belts should be examined for cracks, wear, fraying or other evidence of deterioration and replaced if necessary.

Belt routing should also be checked to be sure there is no interference between the belts and other parts of the engine.

## **CHECKING AND REPLACING FUSES**

G200A01A-AAT

## Replacing a Fusible Link



A fusible link will melt if the electrical circuits from the battery are ever overloaded, thus preventing damage to the entire wiring harness. (This could be caused by a short in the system drawing too much current.) If this ever happens, have a Hyundai dealer determine the cause, repair the system and replace the fusible link. The fusible links are located in a relay box for easy inspection.

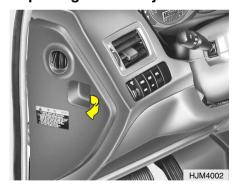


## **CAUTION:**

When replacing a fusible link, never use anything but a new fusible link with the same or lower amperage rating. Never use a piece of wire or a higher-rated fusible link. This could result in serious damage and create a fire hazard.

G200B01JM-AAT

## **Replacing Accessory Fuses**









## 6 DO-IT-YOURSELF MAINTENANCE

30

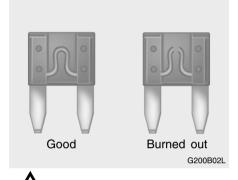
The fuse box for the lights and other electrical accessories will be found on the left side of crash pad. Inside the box you will find a list showing the circuits protected by each fuse.

If any of your car's lights or other electrical accessories stop working, a blown(open) fuse could be the reason. If the fuse has burned out, you will see that the metal strip inside the fuse has melted through. If you suspect a blown fuse, follow this procedure:

- 1. Turn off the ignition and all other switches.
- 2. Open the fuse box and examine each fuse. Remove each fuse by pulling it toward you (a small "fuse puller" tool is contained in the fuse box to simplify this operation).
- Be sure to check all other fuses even if you find one that appears to have burned out.



4. Replace the blown fuse by pressing a new fuse of the same rating into place. The fuse should be a snug fit. If it is not, have the fuse clip repaired or replaced by a Hyundai dealer. If you do not have a spare fuse, you may be able to borrow a fuse of the same or lower rating from an accessory you can temporarily get along without (the radio or cigarette lighter, for example). Always remember to replace the borrowed fuse.



## CAUTION:

A burned-out fuse indicates that there is a problem in the electrical circuit. If you replace a fuse and it blows as soon as the accessory is turned on, the problem is serious and should be referred to a Hyundai dealer for diagnosis and repair. Never replace a fuse with anything except a fuse with the same or a lower amperage rating. A higher capacity fuse could cause damage and create a fire hazard.

#### NOTE:

See page 6-44 for the fuse panel descriptions.





#### **CHECKING THE BATTERY**

G210A01A-AAT





#### WARNING:

Batteries can be dangerous! When working with batteries, carefully observe the following precautions to avoid serious injuries.

The fluid in the battery contains a strong solution of sulfuric acid, which is poisonous and highly corrosive. Be careful not to spill it on yourself or the car. If you do spill battery fluid on yourself, immediately do the following:

- If battery fluid is on your skin, flush the affected areas with water for at least 15 minutes and then seek medical assistance.
- o If battery fluid is in your eyes, rinse out your eyes with water and get medical assistance as soon as possible. While you are being driven to get medical assistance, continue to rinse your eyes by using a sponge or soft cloth saturated with water.
- o If you swallow battery fluid, drink a large quantity of water or milk followed by milk of magnesia, eat a raw egg or drink vegetable oil. Get medical assistance as soon as possible.

While batteries are being charged (either by a battery charger or by the vehicle's alternator), they produce explosive gases. Always observe these warnings to prevent injuries from occurring:

- Charge batteries only in a well ventilated area.
- o Do not permit flames, sparks or smoking in the area.
- o Keep children away from the area.

G210B01A-AAT

## **Checking the Battery**

Keep the battery clean. Any evidence of corrosion around the battery posts or terminals should be removed using a solution of household baking soda and warm water. After the battery terminals are dry, cover them with a light coating of grease.





Jmgene-6.p65 31 4/13/04, 1:46 PM



CHECKING ELECTRIC COOLING FANS

G220A01A-AAT



### WARNING:

The cooling fan is controlled by engine coolant temperature and may sometimes operate even when the engine is not running. Use extreme caution when working near the blades of the cooling fan, so that you are not injured by a rotating fan blade. As the engine coolant temperature decreases the fan will automatically shut off. This is a normal condition.

G220B01A-AAT

## **Checking Engine Cooling Fan**

The engine cooling fan should come on automatically if the engine coolant temperature is high.

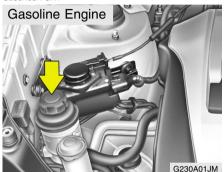
G220C01A-AAT

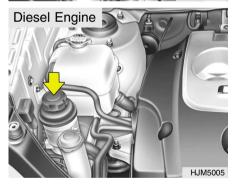
## **Checking Condenser Cooling Fan**

The condenser cooling fan should come on automatically whenever the air conditioning is in operation.

## POWER STEERING FLUID LEVEL

G230A03A-GAT







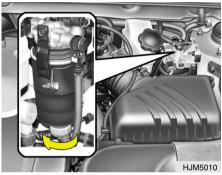




### REMOVAL OF WATER FROM 733 THE FUEL FILTER

G300A02O-GAT

### **DIESEL ENGINE**



If the fuel filter warning lamp illuminates during driving, it indicates that water has accumulated in the fuel filter. If this occurs, remove the water as described below.

1. Unscrew the mounting bolt on the fuel filter and raise the fuel filter up.

The power steering fluid level should be checked regularly.

To check the power steering fluid level, be sure the ignition is "OFF", then check to make certain that the power steering fluid level is between the "MAX" and "MIN" level markings on the fluid reservoir.

#### NOTE:

Grinding noise from the power steering pump may be heard immediately after the engine is started in extremely cold conditions (below -20°C). In this case, if the noise stops during warm up, there is no abnormal function in the system. This is due to a power steering fluid characteristic in extremely cold conditions.

#### Recommended Fluid

Use PSF-3 type fluid.

#### NOTE:

Do not start the engine when the power steering oil reservoir is empty.

G240A01A-AAT

#### **POWER STEERING HOSES**

It is suggested that you check the power steering hose connections for fluid leakage at regular intervals. The power steering hoses should be replaced if there is severe surface cracking, pulling, scuffing or worn spots. Deterioration of the hose could cause premature failure.



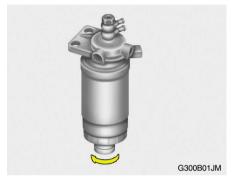






## 6 DO-IT-YOURSELF MAINTENANCE

34



- 2. Loosen the drain plug at the bottom of the fuel filter.
- 3. Tighten the drain plug when water no longer comes out.
- 4. Installation is the reverse order of the disassembly.
- 5. Check to be sure that the warning lamp illuminates when the ignition key is turned to 'ON', and that it goes off when the engine is started. If in doubt, consult your nearest authorized HYUNDAI dealer.

#### NOTE:

It is recommended that water accumulated in the fuel filter should be removed by an authorized Hyundai dealer.



#### **WARNING:**

Be sure to carefully wipe away any water drained out in this manner, because the fuel mixed in the water might be ignited and result in a fire.

## HEADLIGHT AIMING ADJUSTMENT

G290A02O-GAT

Before performing aiming adjustment, make sure of the following.

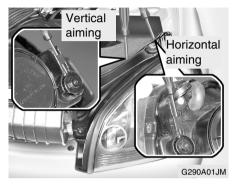
- 1. Keep all tires inflated to the correct pressure.
- 2. Place the vehicle on level ground and press the front bumper & rear bumper down several times. Place vehicle at a distance of 3,000 mm (118 in.) from the test wall.
- See that the vehicle is unloaded (except for full levels of coolant, engine oil and fuel, and spare tire, jack, and tools). Have the driver or equivalent weight placed in driver's seat.
- 4. Clean the head light lenses and turn on the headlights (low beam).





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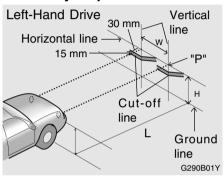
- 5. Open the hood.
- 6. Draw the vertical line (through the center of each headlight) and the horizontal line (through the center of each headlight) on the aiming screen.

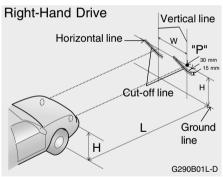
And then, draw a parallel line at 30 mm (1.18 in.) under the horizontal line.

- 7. Adjust each cut-off line of the low beam to the parallel line with a phillips screwdriver - VERTICAL AIMING.
- 8. Adjust each cut-off line of the low beam to each vertical line with a phillips screwdriver - HORIZON-TAL AIMING.

G290B01JM-GAT

## **Adjustment After Headlight Assembly Replacement**





If the vehicle has had front body repair and the headlight assembly has been replaced, the headlight aiming should be checked using an aiming screen as shown in the illustration. Turn on the headlight switch. (Low Beam Position)

- 1. Adjust headlights so that main axis of light is parallel to center line of the body and is aligned with point "P" shown in the illustration.
- 2. Dotted lines in the illustration show the center of headlights.











#### **SPECIFICATION:**

"H"

Horizontal center line of headlights from ground: 904 mm (35.6 in.)

"W"

Distance between each headlight center: 1,356 mm (53.4 in.)

"| "

Distance between the headlights and the wall that the lights are tested against:

3,000 mm (118.1 in.)

## REPLACEMENT OF LIGHT BULBS

G260A02A-GAT

Before attempting to replace a light bulb, be sure the switch is turned to the "OFF" position.

The next paragraph shows how to reach the light bulbs so they may be changed. Be sure to replace the burned-out bulb with one of the same number and wattage rating.

See page 6-43 for the wattage descriptions.



### **CAUTION:**

Keep the lamps out of contact with petroleum products, such as oil, gasoline, etc.

G270A01O-GAT

# Headlight and Front Turn Signal Light

- 1. Allow the bulb to cool. Wear eye protection.
- 2. Open the engine hood.
- 3. Always grasp the bulb by its plastic base, avoid touching the glass.



4. Using a spanner, remove the headlight assembly mounting bolts.



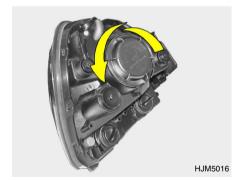








5. Disconnect the power cord from the bulb base in the back of the headlight.

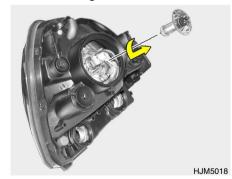


6. Turn the plastic cover counterclockwise and remove it.

7. Disconnect the connector from the bulb base in the back of the headlight.



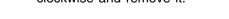
8. Push the bulb spring to remove the headlight bulb.



- 9. Remove the protective cap from the replacement bulb and install the new bulb by matching the plastic base with the headlight hole. Reattach the bulb spring and reconnect the connector.
- 10.Use the protective cap and carton to promptly dispose of the old bulb.
- 11. Check for proper headlight aim.
- 12.To replace the front turn signal light bulb, take out it from the bulb holder and install the new bulb.













#### **WARNING:**

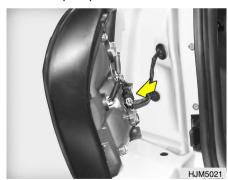
This halogen bulb contains gas under pressure and if impacted could shatter, resulting in flying fragments. Always wear eye protection when servicing the bulb. Protect the bulb against abrasions or scratches and against liquids when lighted. Turn the bulb on only when installing in a headlight. Replace the headlight if damaged or cracked. Keep the bulb out of the reach of children and dispose of the used bulb with care.



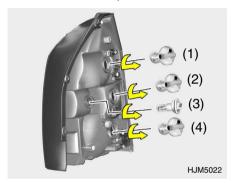
## **Rear Combination Light**



- 1. Open the tail gate.
- 2. Remove the mounting screws of the rear combination light as shown with a phillips screwdriver.



3. Disconnect the power code.



- To replace the rear combination light (stop/tail light, turn signal light and back-up light), take it out from the bulb holder by turning it counterclockwise.
  - (1) Stop/Tail light
  - (2) Turn signal light
  - (3) Back-up light
  - (4) Rear fog light (E.C)/ Tail Light (Except E.C)
- 5. Install the new bulb.

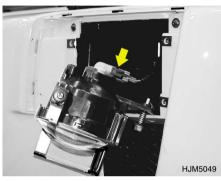




#### G270I01JM-GAT Front fog Light (If installed)



- 1. Remove the cover with a (+) driver. 2. Remove the bolts with a spanner.
- HJM5048



3. Disconnect the power cord.

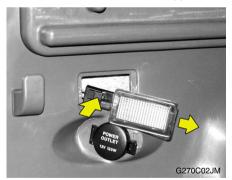


4. Replace to the new bulb.

## **Luggage Compartment Light** (If Installed)



1. Remove the cover with a (-) driver.



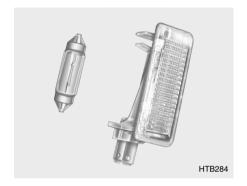
2. Disconnect the power cord.











3. Replace to the new bulb.

# G270C01JM-GAT Cargo Light

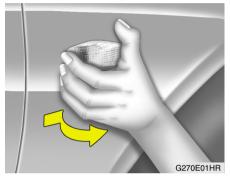


- 1. Open the tail gate.
- 2. Remove the cover with a flat-head screwdriver.

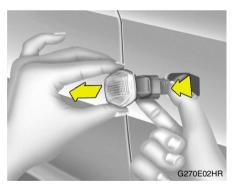


3. Replace with a new bulb.

# G270E01A-GAT Side Repeater Light (If installed)



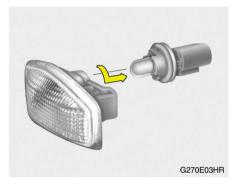
1. Push the cover toward the front of vehicle and remove it.



2. Disconnect the power code.







3. Replace with a new bulb.

# G270G01O-GAT Room Light



1. Remove the cover with a flat-head screwdriver.



2. Replace with a new bulb.

## G270H01O-GAT Glove Box Illuminated Light



- 1. Open the glove box.
- 2. Remove the cover with a flat-head screwdriver.

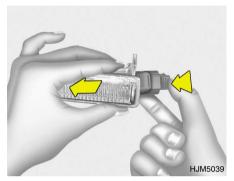






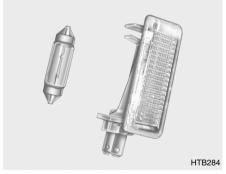
#### 6 DO-IT-YOURSELF MAINTENANCE

42



3. Disconnect the connector.





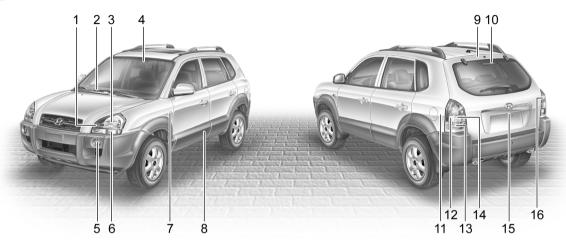
4. Replace with a new bulb.



## **BULB WATTAGE**

43

G280A01JM-GAT



G280A01JM

No.	Part Name		Wattage	No.	Part Name	Wattag	je
1	Front Postion Ligh	5	9	Cargo Light	10		
2	Glove Box Illuminated Light		10	10	High Mounted Rear Stop Light (LED Type)	A TYPE	2.4
3	Head Light (Low/F	ligh)	55/60	В ТҮРЕ		5	
4	Interior Light Map Light		10	11	Luggage Compartment Light	10	
	Room Light		10	12	Turn Signal Light	21	
5	Front Fog Light (If	27	13	Rear Fog Light (If installed)	21		
6	Turn Signal Light	21	14	Back-up Light	21		
7	Side Repeater Lig	5	15	License Plate Light	5		
8	Front Door Edge	5	16	Stop/Tail Light	21/5		





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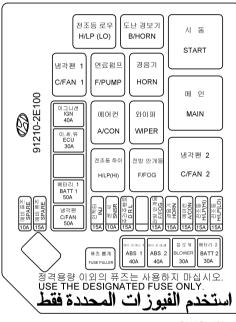




## 44 FUSE PANEL DESCRIPTION

#### G200C01JM-GAT

## **Engine Compartment**



DESCRIPTION		FUSE RATING	PROTECTED COMPONENTS
	IGN	30A	Start relay, Igition switch
	ECU	30A	Engine control, Fuel pump , A/C, Generator, ATM
	BATT #1	50A	Ignition switch, Power connector
FUSIBLE	C/FAN	50A	Cooling fan
LINK	ABS #1	30A	ABS, ESP
İ	ABS #2	40A	ABS, ESP
İ	BLOWER	30A	Blower
	BATT #2	30A	Igition switch, Power connector
	INJ	15A	Injector
	SNSR	10A	Cooling fan, Stop lamp switch, Oxygen sensor, ECM/PCM
İ	DRL	15A	DRL
FUSE	F/FOG	15A	Front fog lamp
FUSE	HORN	15A	Horn, Siren
İ	A/CON	15A	A/C
İ	H/LP (HI)	15A	Head lamp (HIGH)
İ	H/LP (LOW)	15A	Head lamp (LOW)

#### G200C01JM

### NOTE:

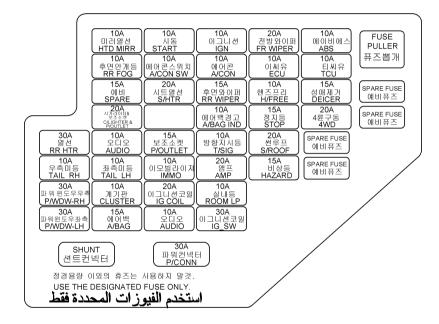
Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse box on your vehicle, refer to the fuse box label.

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G200E01JM-AAT

## Inner Panel (Left hand drive)

45



G200E01JM

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### 6 DO-IT-YOURSELF MAINTENANCI

46

FUSE	FUSE RATING	PROTECTED COMPONENTS
P/WDW-LH	30A	Left power window
P/WDW-RH	30A	Right power window
TAIL RH	10A	Right rear combination lamp, Glove box Illuminations
RR HTR	30A	Rear defogger
A/BAG	15A	SRS control
CLUSTER	10A	Instrument cluster, ETACM/TACM
TAIL LH	10A	Left head lamp, left rear combination lamp, License lamp
AUDIO	10A	Digital clock, Audio, Power outside mirror folding module, Power outside mirror & mirror folding switch
C/LIGHTER	20A	Cigaratta lightar
& P/OUTLET	20A	Cigarette lighter
SPARE	15A	(SPARE)
RR FOG	10A	Rear fog lamp
HTD MIRR	10A	Left/Right power outsider mirror& mirror folding motor, Rear defogger switch
AUDIO	10A	Audio
IG COIL	20A	Ignition coil (2.7 GSL)
IMMO	10A	Immobilizer control module (2.7 GSL)
P/OUTLET	15A	Rear power outlet
	10A	(Not used)
S/HTR	20A	Seat warmer
A/CON SW	10A	A/C control module (Manual A/C)
START	10A	Burglar alarm relay, Transaxle range switch, Ignition lock switch







FUSE	FUSE	PROTECTED COMPONENTS			
RATING					
IG-SW	30A	Ignition switch			
ROOM LP	10A	Room lamp, A/C control module, Digital clock, ETACM/TACM Key remind switch			
AMP	20A	Audio			
T/SIG	10A	Hazard switch, Auto light & Photo sensor, Transaxle range switch			
A/BAG IND	10A	Instrument cluster			
RR WIPER	15A	Safety relay			
A/CON	10A	Sunroof controller, A/C control module, Blower relay, ETACM/TACM			
IGN	10A	PTC heater relay, Fuel filter heater relay, DRL CONTROL MODULE, head LAMP RELAY			
HAZARD	10A	Hazard switch, Hazard relay, Immobilizer control module (2.7 GSL)			
S/ROOF	20A	Sunroof, Door lock/unlock relay			
STOP	15A	Stop lamp switch, Power outside mirror folding module			
H/FREE	10A	(Not used)			
ECU	10A	Cruise control, Stop lamp, TCS, ESP, 4WD ECM, ECM, PCM, TCM, Vehicle speed sensor			
FF WIPER	20A	Front wiper, Multifunction switch			
4WD	20A	4WD/ECM			
DEICER	15A	Winshield defogger			
TCU	10A	TCM (2.7 GSL/DSL)			
ABS	10A	G-Sensor, ESP, ABS			



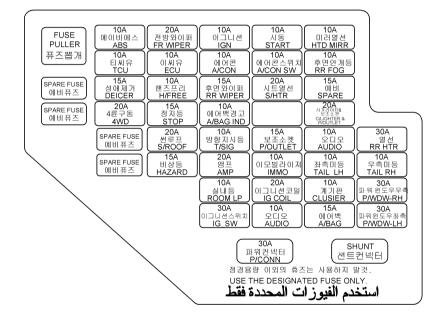






G200E01JM-GAT

## Inner Panel (Right hand drive)



G200E01JM-D







FUSE	FUSE RATING	PROTECTED COMPONENTS	
P/WDW-LH	30A	Left power window	
P/WDW-RH	30A	Right power window	
TAIL RH	10A	Right rear combination lamp, Glove box Illuminations	
RR HTR	30A	Rear defogger	
A/BAG	15A	SRS control	
CLUSTER	10A	Instrument cluster, ETACM/TACM	
TAIL LH	10A	Left head lamp, left rear combination lamp, License lamp	
AUDIO	10A	Digital clock, Audio, Power outside mirror folding module, Power outside mirror & mirror folding switch	
C/LIGHTER	20A	Cigarette lighter	
& P/OUTLET	20A	Ogarette lighter	
SPARE	15A	(SPARE)	
RR FOG	10A	Rear fog lamp	
HTD MIRR	10A	Left/Right power outsider mirror& mirror folding motor, Rear defogger switch	
AUDIO	10A	Audio	
IG COIL	20A	Ignition coil (2.7 GSL)	
IMMO	10A	Immobilizer control module (2.7 GSL)	
P/OUTLET	15A	Rear power outlet	
	10A	(Not used)	
S/HTR	20A	Seat warmer	
A/CON SW	10A	A/C control module (Manual A/C)	
START	10A	Burglar alarm relay, Transaxle range switch, Ignition lock switch	









### 6 DO-IT-YOURSELF MAINTENANCE

50

FUSE	FUSE	PROTECTED COMPONENTS			
RATING					
IG-SW	30A	Ignition switch			
ROOM LP	10A	Room lamp, A/C control module, Digital clock, ETACM/TACM Key remind switch			
AMP	20A	Audio			
T/SIG	10A	Hazard switch, Auto light & Photo sensor, Transaxle range switch			
A/BAG IND	10A	Instrument cluster			
RR WIPER	15A	Safety relay			
A/CON	10A	Sunroof controller, A/C control module, Blower relay, ETACM/TACM			
IGN	10A	PTC heater relay, Fuel filter heater relay, DRL CONTROL MODULE, head LAMP RELAY			
HAZARD	10A	Hazard switch, Hazard relay, Immobilizer control module (2.7 GSL)			
S/ROOF	20A	Sunroof, Door lock/unlock relay			
STOP	15A	Stop lamp switch, Power outside mirror folding module			
H/FREE	10A	(Not used)			
ECU	10A	Cruise control, Stop lamp, TCS, ESP, 4WD ECM, ECM, PCM, TCM, Vehicle speed sensor			
FF WIPER	20A	Front wiper, Multifunction switch			
4WD	20A	4WD/ECM			
DEICER	15A	Winshield defogger			
TCU	10A	TCM (2.7 GSL/DSL)			
ABS	10A	G-Sensor, ESP, ABS			







## **EMISSION CONTROL SYSTEM**

Emission Control System	7-2
EGR System	
Catalytic Converter	7-3

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## EMISSION CONTROL SYSTEMS

H010A01A-GAT

#### (If installed)

Your Hyundai is equipped with an emission control system to meet all requirements of the Emission prohibition rules of your province.

There are three emission control systems which are as follows.

- (1) Crankcase emission control system
- (2) Evaporative emission control system
- (3) Exhaust emission control system

In order to assure the proper function of the emission control systems, it is recommended that you have your car inspected and maintained by an authorized Hyundai dealer in accordance with the maintenance schedule in this manual.

H010B01A-AAT

## 1. Crankcase Emission Control System

The positive crankcase ventilation system is employed to prevent air pollution caused by blow-by gases being emitted from the crankcase. This system supplies fresh filtered air to the crankcase through the air intake hose. Inside the crankcase, which the fresh air mixes with blow-by gases, which then pass through the PCV valve into the induction system.

H010C02Y-GAT

## 2. Evaporative Emission Control System

The Evaporative Emission Control System is designed to prevent fuel vapors from escaping into the atmosphere.

#### Canister

4/12/04, 5:06 PM

While the engine is inoperative, fuel vapors generated inside the fuel tank are absorbed and stored in the canister. When the engine is running, the fuel vapors absorbed in the canister are drawn into the induction system through the purge control solenoid valve.

### **Purge Control Solenoid Valve**

The purge control solenoid valve is controlled by the ECM; when the engine coolant temperature is low, and during idling, it closes, so that evaporated fuel is not taken into the surge tank. After engine warm-up, during ordinary driving, it opens so as to introduce evaporated fuel to the surge tank.



Jmgene-7.p65 2



## **CATALYTIC CONVERTER**

H010D01A-AAT

### 3. Exhaust Emission Control **System**

The Exhaust Emission Control System is a highly effective system which controls exhaust emissions while maintaining good vehicle performace.

H010E01Y-GAT

**EGR SYSTEM** 

This system helps control nitrogen oxides by recirculating a part of the exhaust gas into the engine, thereby reducing cylinder combustion temperature.

H020A01A-AAT

## ; For a Gasoline Engine



All Hyundai vehicles are equipped with a monolith type three-way catalytic converter to reduce the carbon monoxide, hydrocarbons and nitrogen oxides contained in the exhaust gas. Exhaust gases passing through the catalytic converter may cause it to operate at a very high temperature. The introduction of large amounts of unburned gasoline into the exhaust may cause the catalytic converter to overheat and create a fire hazard. This risk may be reduced by observing the following:

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#### WARNING:

- o Use unleaded fuel only.
- o Maintain the engine in good operating condition. Extremely high catalytic converter temperatures can result from improper operation of the electrical, ignition or multiport electronic fuel injection.
- o If your engine stalls, pings, knocks, or is hard to start, have your Hyundai dealer inspect and repair the problem as soon as possible.
- o Avoid driving with a very low fuel level. Running out of gasoline may cause the engine to misfire and result in damage to the catalytic converter.
- o Avoid idling the engine for periods longer than 10 minutes.
- o The vehicle should not be pushed or pulled to get started. This may cause the catalytic converter to overheat and create a fire hazard.

- o Do not touch the catalytic converter or any other part of the exhaust system while the catalytic converter is hot. Shut off the engine, wait for at least one hour before touching the catalytic converter or any other part of the exhaust system.
- o Remember that your Hyundai dealer is your best source of assistance.
- Do not stop your Hyundai over any combustible material such as grass, paper, leaves or rags. These materials might contact the hot catalytic converter and a fire might result.

H020D01S-GAT

## ; For a Diesel Engine

All Hyundai vehicles are equipped with oxidation type catalytic converter to reduce the carbon monoxide, hydrocarbons and particulate contained in the exhaust gas.







## **CONSUMER INFORMATION**

Vehicle Identification Number (VIN)	8-2
Engine Number	
Recommended Inflation Pressures	8-2
Snow Tires	8-3
Tire Chains	8-4
Tire Rotation	8-4
Tire Balancing	8-5
Tire Traction	8-5
When to Replace Tires	8-5
Spare Tire and Tools	8-6

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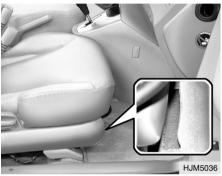




### **8** CONSUMER INFORMATION

# VEHICLE IDENTIFICATION NUMBER (VIN)

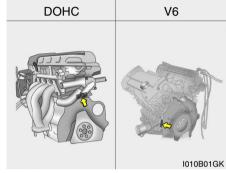
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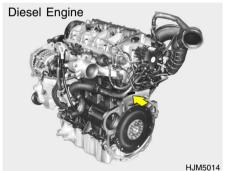


The vehicle identification number (VIN) is the number used in registering your car and in all legal matters pertaining to its ownership, etc. It can be found on the center piller of the driver side and the lower side of the front passenger seat.

### **ENGINE NUMBER**

I010B01S-GAT





The engine number is stamped on the engine block as shown in the drawing.

### **TIRE**

I020A01A-AAT

#### TIRE INFORMATION

The tires supplied on your new Hyundai are chosen to provide the best performance for normal driving.

I030A01JM-AAT

## RECOMMENDED INFLATION PRESSURES



The tire label located on the driver's side of the center pillar outer panel gives the tire pressures recommended for your vehicle.

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·	TIRE SIZE	PRESSURE, kPa (PSI)				
RIM SIZE		NORMA	L LOAD	MAXIMUM LOAD		
l oize		FRONT	REAR	FRONT	REAR	
6.5Jx16	215/65R16	210(30)	210(30)	210(30)	210(30)	
6.5Jx16	235/60R16	210(30)	210(30)	210(30)	210(30)	
4.0Tx16	T155/90R16	420(60)	420(60)	420(60)	420(60)	

These pressures were chosen to provide the most satisfactory combination of ride comfort, tire wear and stability under normal conditions. Tire pressures should be checked at least monthly. Proper tire inflation pressures should be maintained for these reasons:

- Lower-than-recommended tire pressures cause uneven tread wear and poor handling.
- Higher-than-recommended tire pressures increase the chance of damage from impacts and cause uneven tread wear.



#### **CAUTION:**

Always observe the following:

- o Check pressures when the tires are cold. That is, after the car has been parked for at least three hours and hasn't been driven more than 1.6 km or one mile since starting up.
- o Check the pressure of your spare tire each time you check the pressure of other tires.
- Never overload your car. Be especially careful about overloading if you equip your car with a luggage rack or car top carrier.

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#### **SNOW TIRES**

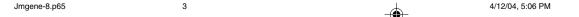
If you equip your car with snow tires, they should be the same size and have the same load capacity as the original tires. Snow tires should be installed on all four wheels; otherwise, poor handling may result.

Snow tires should carry 28 kPa (4 psi) more air pressure than the pressure recommended for the standard tires on the tire label on the driver's door edge, or up to the maximum pressure shown on the tire sidewall whichever is less.

Do not drive faster than 120 km/h (75 mph) when your car is equipped with snow tires.







### 8 CONSUMER INFORMATION

4

#### 1050A01O-GAT

#### **TIRE CHAINS**

Tire chains should be installed on the front wheels. Be sure that the chains installed in accordance with the manufacturer's instructions.

To minimize tire and chain wear, do not continue to use tire chains when they are no longer needed.

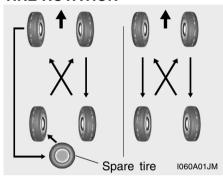


#### **WARNING:**

- o When driving on roads covered with snow or ice, drive at less than 30 km/h (20 mph).
- o Use the SAE "S" class or wire & plastic chains.
- o If you have noise caused by chains contacting the body, retighten the chain to avoid contact with the vehicle body.
- To prevent body damage, retighten the chains after driving
   0.5 ~ 1 km.

#### I060A01Y-GAT

#### TIRE ROTATION



Tires should be rotated every 10,000 km (6,000 miles). If you notice that tires are wearing unevenly between rotations, have the car checked by a Hyundai dealer so the cause may be corrected.

After rotating, adjust the tire pressures and be sure to check wheel nut torque.



#### WARNING:

Do not mix bias-ply and radial-ply tires under any circumstances. This may cause dangerous handling characteristics that may cause death, serious injury, or property damage.





I070A01A-AAT

#### TIRE BALANCING

A tire that is out of balance may affect handling and tire wear. The tires on your Hyundai were balanced before the car was delivered but may need balancing again during the years you own the car.

Whenever a tire is dismounted for repair, it should be rebalanced before being reinstalled on the car.



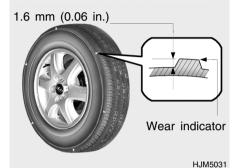
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#### TIRE TRACTION

Tire traction can be reduced if you drive on worn tires, tires that are improperly inflated or on slippery road surfaces. Tires should be replaced when tread wear indicators appear. To reduce the possibility of losing control, slow down whenever there is rain, snow or ice on the road.

1090A01S-GAT

#### WHEN TO REPLACE TIRES



The original tires on your car have tread wear indicators. The tread wear indicators appear when the tread depth is 1.6 mm (0.06 in.). The tire should be replaced when these appear as a solid bar across two or more grooves of the tread. Always replace your tires with those of the recommended size. If you change wheels, the new wheel's rim width and offset must meet Hyundai specifications.



#### **WARNING:**

- o Driving on worn-out tires is dangerous! Worn-out tires can cause loss of braking effectiveness, steering control and traction. When replacing tires, never mix radial and bias-ply tires on the same car. If you replace radial tires with bias-ply tires, they must be installed in sets of four.
- o Using tires and wheels of other than the recommended sizes may cause unusual handling characteristics that may cause death, serious injury, or property damage.







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## 8 CONSUMER INFORMATION

## 6 SPARE TIRE AND TOOLS

#### I100A01FC-AAT



Your Hyundai is delivered with the following:

Spare tire and wheel Wheel nut wrench, Wrench bar, Spanner, Screwdriver Jack



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## **VEHICLE SPECIFICATIONS**

Measurement	9-2
Engine	9-3
Lubrication Chart	9-4

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#### J010A01JM-GAT

### **MEASUREMENT**

mm (in.)

Overall Length		4,325 (170)
Overall Width		1,795 (70)
Overall Height(U	nladen)	1,680 (66)
Wheelbase		2,630 (103)
Wheeltread Front		1,540 (60)
Rear		1,540 (60)

## J020A01JM-GAT **STEERING**

Туре	Rack and pinion	
Wheel free play	0~30mm(0~1.18 in.)	
Rack stroke	140mm(5.5 in.)	
Oil pump type	Vane type	

J060A01JM-GAT

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### **FUEL SYSTEM**

Engine	Fuel tank capacity	
2.7L	65L	
2.0L	58L	

J030A01JM-GAT

Standard	215/65R16
Option	235/60R16

J035A01JM-GAT

### **SPARE TIRE**

Standard	T155/90R16 (Temporary)
Option	Full size

J040A01JM-GAT

### **ELECTRICAL**

ITEM	GASOLINE		DIESEL	
Battery	MF 60	AH, MF 68 AH	CMF 90 AH	
Alternator	2.0L	90A (13.5V)	120A (12V)	
	2.7L	120A (13.5V)	120A(12V)	

J050A01JM-AAT

### **BRAKE**

Туре	Dual hydraulic with brake booster		
Front brake type	Ventilated disc		
Rear brake type	2WD CBS (With ABS)		Drum type
		ABS	Disc type
	4WD	CBA, ABS	Disc type
Parking brake	Cable operated on rear wheel		











## ENGINE

3

#### J070A01JM-GAT

ITEMS		GASOLINE		DIESEL	
HEMO			2.0 DOHC	2.7 V6	2.0 TCI
Engine Type	Engine Type			6-Cyl., V-type DOHC	4-Cyl., In-line SOHC
Bore x Stroke	Bore x Stroke			86.7 × 75.0	83 x 92
Displacement (cc)	Displacement (cc)			2656	1991
Firing order	Firing order			1-2-3-4-5-6	1 - 3 - 4 - 2
	For adjusting	Intake	0.17 ~ 0.23 mm	Auto lash	-
Valve Clearance	For adjusting	Exhaust	0.25 ~ 0.31 mm	Auto lash	-
(Cold engine : 20±5°C)	For checking	Intake	0.12 ~ 0.28 mm	Auto lash	-
		Exhaust	0.20 ~ 0.38 mm	Auto lash	-
Spark plug gap	Spark plug gap Unleaded		1.0 - 1.1 mm		-
Leaded		0.7 - 0.8 mm		-	
Idle speed (rpm)	Idle speed (rpm)			650 ± 100	800 ± 100
Ignition timing			BTDC 8° ± 5°	BTDC 12° ± 5°	-









## 4 LUBRICATION CHART

#### J080A01JM-GAT

Item			Oil & Grease Standard	Q'ty (liter)
Engine Oil	Engine Oil 2.7 GSL API SH, SG or		SAE 20W-40, 20W-50 (ABOVE -10°C)	Drain and refill (With oil filter)
		ABOVE	SAE 15W-40, 15W-50 (ABOVE -15°C)	2.0 L : 4.0
			SAE 10W-30 (-25°C ~ 40°C)	2.7 L : 4.5
			SAE 10W-40, 10W-50 (ABOVE -25°C)	
			SAE 5W-20 (BELOW -10°C)*1, *2	
			SAE 5W-30 (BELOW 10°C)*1	
			SAE 5W-40 (BELOW 20°C) *1	
	2.0 GSL	API SH ABOVE	SAE 15W-40 (ABOVE -10°C)	
		ILSAC GF1, ABOVE	SAE 10W-30 (-25°C ~ 40°C)	
			SAE 10W-40 (ABOVE -25°C)	
			SAE 5W-20 (BELOW -10°C)*1, *2	
			SAE 5W-30 (BELOW 10°C)*1	
			SAE 5W-40 (BELOW 20°C) *1	
	Diesel	API CF-4 or ABOVE	SAE 30 (0°C ~ 40°C)	Drain and refill (With oil filter): 5.9
		ACEA B4 or ABOVE	SAE 20W-40 (ABOVE -10°C)	at Oil Pan : 5.4 (MAX)
			SAE 15W-40 (ABOVE -15°C)	3.8 (MIN)
			SAE 10W-30 (-20°C ~ 40°C)	
			SAE 5W-30 (-25°C ~ 10°C)	
			SAE 0W-30 (BELOW 10°C) *1, *2	
		*1. Restricted by driving	g condition and area	
		*2. Not recommended	for sustained high speed vehicle operation	

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Item		Oil & Grease Standard	Q'ty (liter)
Engine oil consumption		Normal driving condition	MAX. 1L /1500 Km
		Severe driving condition	MAX. 1L /1000 Km
Transaxle	Manual	HYUNDAI GENUINE PARTS SAE MTF SAE 75W/90 (API GL-4)	2.1
Automatic		DIAMOND ATF SP-III, SK ATF SP-III	7.8
Transfer cas	е	API GL-5, SAE 80W/90 (SHELL SPIRAX AX Equivalent)	0.8
Rear Axle		API GL-5, SAE 80W/90 (SHELL SPIRAX AX Equivalent)	0.75
Coolant		Ethylene glycol base for aluminum radiator	7 (Gasoline ), 8.7(Diesel)
Power steering gear		PSF-3 TYPE FLUID	0.9
Brakes and clutch fluid		DOT 3, DOT 4 or Equivalent	As required





Jmgene-9.p65 5 4/12/04, 5:07 PM





10



4/12/04, 5:07 PM



2

A _	
Air Bag	1-38
Air Cleaner Filter	
Air Conditioner Filter	1-107, 6-26
Air Conditioning	
Care	6-24
Operation	1-99, 6-24
Switch	1-98
Antenna	1-147
Ashtray	
Audio Fault Code	
Audio System	,
Cassette tape player operation (J290)	1-138
Cassette tape player operation (K240)	
Cassette tape player operation (M280)	
CD changer operation (M280)	
Compact disc player operation (K260)	
Compact disc player operation (M280)	
Compact disc player/	
CD auto changer operation (J290)	1-140
Stereo radio operation (J290)	
Stereo radio operation (K240)	
Stereo radio operation (K260)	
Stereo radio operation (M280)	
Stored radio operation (M200)	1 121

<b>B</b> Battery Brake	2-24, 6-3 <sup>-1</sup>
Anti-lock brake system (ABS)	2-14
Brake traction control system (BTCS)	2-15
Checking the brakes	6-22
Electronic stability program (ESP)	2-17
Fluid	6-23
Pedal clearance	
Pedal free-play	6-28
Practices	
Breaking-In your New Hyundai	1-0
С	
Care of Cassette Tapes	
Care of Discs	1-14
Catalytic Converter	
CD Auto Changer	
Child Restraint System	
Child-Protector Rear Door Lock	
Cigarette Lighter	
Clock	1-6
Clutch	0.00
Checking fluid	6-20
Combination Light	4.0
Auto light	
Daytime running lights	
Headlight flasher	
Headlight switch	1-00





3

High-beam switch	1-59 1-60 1-59 1-76
Cleaning the interior	4-6
Protecting your Hyundai from corrosion	
Washing and waxing	
Cruise Control	
Door Central door locks Door locks Front door edge warning light Locking, unlocking front door with a key Drink Holder Drive Belts Driving Driving Driving for economy Smooth cornering Winter driving	1-8 1-86 1-9 1-67 6-28 2-22 2-23

E	
Emission Control System7-2	2
Engine	
Before starting the engine2-3	3
Compartment (2.0) 6-3	3
Compartment (2.7 V6) 6-2	2
Compartment (Diesel)6-4	
Coolant 6-12	
Coolant temperature gauge 1-55	
If the engine overheats 3-4	
Number 8-2	
Oil	
Starting	
Engine Exhaust Can Be Dangerous!2-2	_
F	
Fog Light	
Front 1-63	3
Rear	3
Front Seats	_
Adjustable headrests1-16	3
Adjusting seat forward and rearward 1-15	
Adjusting seatback angle 1-16	
Fuel	
Capacity 9-2	2
Gauge 1-55	
Recommendations 1-2	2









Fuel Filler Lid Remote release Full-time 4WD Operation Fuses Fuses Panel Description	2-19 6-29
General Checks	
H Hazard Warning System Headlight Aiming Adjustment Headlight Leveling Device System Heating and Cooling Control Heating and Ventilation Air flow control Air intake control switch Bi-level heating Defrosting/Defogging Fan speed control (Blower Control) Temperature control High-Mounted Rear Stop Light Hood Release Horn How to Use Luggage Room	6-34 1-87 1-91 1-93 1-92 1-96 1-92 1-95 1-83 1-84 1-86

I Ignition Switch
J Jump Starting 3-3
K         Keys       1-5         If you lose your keys       3-14         Positions       2-4
L Light Bulbs Replacement 6-36 Light Bulbs Wattage 6-43 Lubrication Chart 9-4 Luggage Compartment Light 1-79 Luggage Net 1-81
M Maintenance Intervals Explanation of scheduled maintenance items 5-8 Maintenance under severe usage conditions 5-7 Scheduled maintenance

4/12/04, 5:07 PM

Jmgene-10.p65



5

Mirrors Compass mirror	75
O Odometer/Trip Odometer 1-	57
Parking Brake 1-Power Outlet 1-Power Steering Fluid Level 6-	66
R Rear Seat Adjusting seatback angle	19 64

S	
Seat	
Front seat	1-15
Rear seat	1-19
Seat warmer	1-18
Seat Belts	
3-Point system	1-24
2-Point static type	
Pre-tensioner seat belt	
Adjusting your seat belt1	-25, 1-26
Care of seat belts	
Precautions	1-21
Shopping bag holder	1-79
Spark Plugs	
Spectacle Case	
Speedometer	
Starting Procedure	
Steering Wheel	
Free play	6-27
Steering Wheel Tilt Lever	
Stereo Sound System	
Sunroof	
Sun Visor	





T	
Tachometer	1-56
Tail Gate	1-78
Tail gate window	1-78
Theft-Alarm system	1-11
Ticket Holder	
Tire	
Balancing	8-5
Chains	
Changing a flat tire	
If you have a flat tire	
Information	
Pressure	
Replacement	
Rotation	
Snow tires	8-3
Spare tire	3-5
Traction	
Towing	
A trailer (or vehicle)	2-27
Emergency	
If your car must be towed	
Transaxle	
Automatic	2-10
Automatic transaxle fluid checking	
Manual	
Manual transaxle oil checking	
<u> </u>	

V Vehicle Identification Number	
W Warning and Indicator Lights	1-14 1-64 1-61 1-62







A000A01A-EAT
This Owner's Manual should be considered a part of the car and remain with it when it is sold for the use of the next owner.

ORIGINAL:	NAME:	
ADDRESS:	STREET:	
	TOWN:	
	COUNTRY:	
	P.CODE:	
SUBSEQUENT:	NAME:	
ADDRESS:	STREET:	
	TOWN:	
	COUNTRY:	
	P.CODE:	









**OWNER'S MANUAL** 

Operation Maintenance **Specifications** 

A030A01JM-D

The information in this Owner's Manual is current at the time of publication. However, the right to amend specifications without notice or obligation to incorporate such amendments into vehicles already produced is reserved.

This manual applies to all markets and includes descriptions and explanations of optional as well as standard equipment. As a result, some of the equipment operating descriptions referred to may not apply to the particular vehicle with which this manual is supplied.

Please refer to the nearest Hyundai authorised repairer for information regarding current standard and optional equipment levels.

SA020A2-E

# **Responsibilty For Maintenance**

It is the responsibility of the vehicle owner/driver to ensure that all routine maintenance services are undertaken in line with the recommendations specified in Section 5 of this manual. In addition, in order to ensure continued validity of the new vehicle warranty and safe operation of the vehicle, non scheduled maintenance/running repairs should be undertaken at the earliest available opportunity. Under severe operating conditions, more frequent maintenance is required. Details

of the maintenance schedule for such conditions are also given in section 5. It is recommended that all maintenance operations and repairs are entrusted to a Hyundai authorised repairer to ensure that the latest repair methods, specialized tooling and genuine Hyundai parts are used to ensure the continued reliability and safety of the vehicle.





SA030A2-E

### **FOREWORD**

Hyundai Motor Company wish to take this opportunity to thank you for purchasing a Hyundai product and to welcome you to the ever increasing number of discriminating motorists who drive Hyundai vehicles. The advanced engineering and construction methods employed during both design and production of the Hyundai marque are something of which we are proud, and this commitment to providing a high quality product is supported by a comprehensive after sales and warranty service of which we are equally proud.

This owner's manual will introduce the operating and maintenance requirements for the vehicle and it is recommended that it is carefully read to ensure that the maximum performance and durability along with safe and satisfactory operation are obtained. The recommended routine maintenance servicing along with any running repairs that may be required should be entrusted to a franchised Hyundai dealer to ensure that only the latest methods and genuine Hyundai replacement parts are used for the continued reliability, safety and performance of the vehicle.

Should any question or query exist regarding any aspect of your Hyundai please contact the nearest Hyundai authorised repairer who will be only too pleased to assist wherever possible.

**Note:** This owners manual should be considered as part of the vehicle and should be kept in the vehicle at all times for ease of reference.

In the event of the vehicle being sold please ensure that this manual is left in the vehicle for the reference of the new owner.



#### CAUTION:

Severe engine and transaxle damage may result from the use of poor quality fuels and lubricants that do not meet Hyundai specifications. You must always use high quality fuels and lubricants that meet the specifications listed on Page 9-4 in the Vehicle Specifications section of the Owner's Manual.

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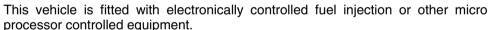


# CAUTION: MODIFICATIONS TO ORIGINAL VEHICLE -SPECIFICATION

Modification to the original vehicle specification may invalidate the manufacturers warranty and may adversely affect the safety and durability of the vehicle. Components which are subject to modification or are added to the original vehicle specification without the express approval of the manufacturer and result in consequential loss or damage are not covered by the vehicle manufacturers warranty.

#### SA050A2-E





It is possible for incorrectly installed two way radio equipment including mobile telephones to adversely affect these systems.

Before radio equipment of this kind is installed, please contact your Hyundai authorised repairer for recommendation regarding the suitability of the particular radio equipment concerned and the recommended method of installation and equipment location. Incorrectly installed or unsuitable equipment which gives rise to incorrect functioning of or damage to electronic vehicle components will not fall within the scope of the vehicle manufacturers warranty.







A090A01A-AAT

# SAFETY AND VEHICLE DAMAGE WARNING

This manual includes information titled as WARNING, CAUTION and NOTE. These titles indicate the following:



# WARNING:

This indicates that a condition may result in harm, serious injury or death to you or other persons if the warning is not heeded. Follow the advice provided with the warning.



# **CAUTION:**

This indicates that a condition may result in damage to your vehicle or its equipment if the caution is not heeded. Follow the advice provided with the caution.

# NOTE:

This indicates that interesting or helpful information is being provided.







A100A01L-EAT

# GUIDE TO HYUNDAI GENUINE PARTS

# 1. What are Hyundai Genuine Parts?

Hyundai Genuine Parts are the same parts used by Hyundai Motor Company to manufacture vehicles. They are designed and tested for the optimum safety, performance, and reliability to our customers.

# 2. Why should you use genuine parts?

Hyundai Genuine Parts are engineered and built to meet rigid manufacturing

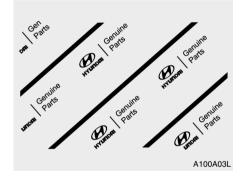
requirements. Using imitation, counterfeit or used salvage parts is not covered under the Hyundai New Vehicle Limited Warranty or any other Hyundai warranty. In addition, any damage to or failure of Genuine Hyundai Parts caused by the installation or failure of an imitation, counterfeit or used salvage part is not covered by Hyundai Motor Company.

# 3. How can you tell if you are purchasing Hyundai Genuine Parts?

Look for the Hyundai Genuine Parts Logo on the package (see below).

The export specifications are written in English only.

Hyundai Génuine Parts are only sold through Hyundai authorised repairers.



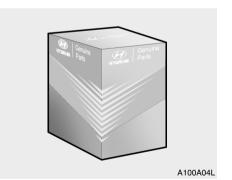


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CONTROLS AND EQUIPMENT

DRIVING YOUR HYUNDAI

IN CASE OF EMERGENCY

APPEARANCE CARE

VEHICLE MAINTENANCE REQUIREMENTS

OWNER MAINTENANCE

EMISSION CONTROL SYSTEMS

1

2

3

4

VEHICLE MAINTENANCE

6

EMISSION CONTROL SYSTEMS

**INDEX** 

8

9

10

SECTION

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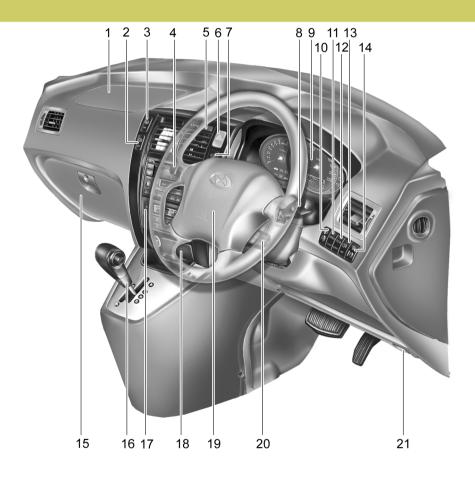
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**CONSUMER INFORMATION** 

**VEHICLE SPECIFICATIONS** 

# **INSTRUMENTS AND CONTROLS**

B250A01JM-EAT



B250B01JM

jmuk-0.P65 10





- 1. Passenger's Airbag
- 2. Front Fog Light Switch (Not all models)
- 3. Rear Defroster and Outside Rearview Mirror Heater Switch (Not all models)
- 4. Windscreen Wiper/Washer Switch
- 5. Digital Clock
- 6. Hazard Warning Light Switch
- 7. Front Window Defroster (Not all models)
- 8. Multi-Function Light Switch
- 9. Instrument Cluster
- 10. Panel Brightness Control Knob

- 11. 4WD Lock Switch
- 12. Traction Control System (Not all models)
- 13. Rear Fog Light Switch
- 14. Headlight Leveling Device System
- 15. Glove Box
- 16. Shift Lever (Not all models)
- 17. Heating/Air Conditioning Control Panel (Not all models)
- 18. Ashtray
- 19. Horn and Driver's Airbag (Not all models)
- 20. Cruise Control Switch (Not all models)
- 21. Hood Release Lever







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# **CAUTION:**

- o Please note that certain switch locations will vary depending on the model specification.
- o When installing a container of liquid air freshener inside the vehicle, do not place it near the instrument cluster nor on the instrument panel pad surface. If there is any leakage from the air freshener onto these areas (Instrument cluster, instrument panel pad or air ventilator), it may damage these parts. If the liquid from air freshener does leak onto these areas, wash them with water immediately.





#### B255A01JM-EAT

### INDICATOR SYMBOLS ON THE INSTRUMENT PANEL



Turn Signal Indicator Lights



ABS Service Reminder Indicator



TCS OFF

Traction Control Indicator Light (Not all models)





Electronic Stability Program Indicator Lights (Not all models)



High Beam Indicator Light



Low Oil Pressure Warning Light



Parking Brake/Brake Fluid Level Warning Light



Charging System Warning Light



Door Ajar Warning Light and Chime (Not all models)



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Low Fuel Level Warning Light



Tail Gate Open Warning Light



SRS (Airbag) Service Reminder Indicator (SRI)



Malfunction Indicator Light



4WD System Warning Light (Not all models)



4WD Lock Indicator Light



Seat Belt Reminder Light



Immobiliser Warning Light



Cruise Indicator (Not all models)



Diesel Preheat Indicator Light-Amber (Diesel Engine)



Fuel Filter Warning Light-Red (Diesel Engine)



<sup>\*</sup> More detailed explanations of these items will be found beginning on page 1-42.

# **CONTROLS AND EQUIPMENT**

-uer Recommendations	1-∠
Running In Your New Hyundai	1-4
mmobiliser System	
Door Locks (Theft-Alarm System)	1-6, 1-8
Power Windows	1-11
Seats	1-12
Seat Belts	1-18
Child Restraint System	
Supplemental Restraint (AIRBAG) System	
nstrument Cluster and Indicator Lights	1-40
Warning and Indicator Lights	
Multi-function Switch	1-54
Windscreen Wiper/Washer Switch	1-56
Sunroof	1-62
Mirror	1-68
Bonnet Release	1-77
Cruise Control	1-81
Heating and Cooling Control	1-85
Stereo Sound System	
Antenna	1-106

1

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# FUEL RECOMMENDATIONS

B010A03O-EAT

#### PETROL ENGINES

THIS VEHICLE MUST ONLY BE OPERATED WITH UNLEADED FUEL.

SERIOUS DAMAGE WILL RESULT FROM THE USE OF LEADED FUEL.



Unleaded fuel with a Research Octane Number (RON) of 91 or higher must be used in this vehicle.

To prevent accidental filling of the fuel tank with leaded fuel, a small diameter filler neck along with a restrictor flap are fitted to ensure that only unleaded fuel pump nozzles may enter the filler neck. However, care must be exercised when refuelling the vehicle tank from jerry cans or by means of a funnel that the fuel being used is unleaded. The use of leaded fuel in this vehicle will result in irreversible pollution of the catalyst element. Such pollution will prevent correct operation of the catalyst and give rise to increased operating temperatures leading to the catalyst element melting and restricting the exhaust flow along with an increase in exhaust emission levels.



# CAUTION:

The vehicle warranty will not extend to damage arising from the use of incorrect fuels.

#### **DIESEL ENGINES**

Diesel fuel of 52 to 54 cetane is used in diesel engined Hyundai vehicle. If two types of diesel fuel are available, use summer or winter fuel properly according to the following temperature conditions.

- o Above 23°F (-5°C) ... Summer type diesel fuel.
- o Below 23°F (-5°C) ... Winter type diesel fuel.

Watch the fuel level in the tank very carefully: If the engine stops due to fuel failure, the circuits must be completely purged to permit restarting.



# **CAUTION:**

Do not let any petrol or water enter the tank. If this happens, the tank should be completely drained and the fuel lines should all be cleaned out. This will stop the fuel pump from becoming contaminated.

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#### **CONTROLS AND EQUIPMENT 1**

#### ZB010C1-E

#### "Alternative fuels"

Fuels which contain methanol or ethanol must not be used.

#### ZB010D1-E

# **Operation in Foreign Countries**

Drivers of vehicles which are to be operated in foreign countries must satisfy themselves that:

- o The vehicle meets all local regulations with respect to insurance, specifications etc..
- o The correct types and grades of fuel are available for satisfactory operation of the vehicle.

#### ZB010F2-A

#### **Fuels for Cleaner Air**

To help contribute to cleaner air, Hyundai recommends that you use fuels treated with detergent additives, which help to prevent deposit formation in the engine. These fuels will help the engines run cleaner and the Emission Control System performance.

# BEFORE ENTERING THE VEHICLE

#### YB020A1-E

- o Ensure that all windows, mirrors and lamps are clean.
- o Check condition of all tyres.
- o Ensure that no fluid leaks are evident.
- o Ensure that the area around the vehicle is clear before driving off.

# AFTER ENTERING THE VEHICLE

YB020B1-E

- o Ensure that all occupants fasten and correctly adjust seat belts.
- o Ensure that seat and headrestraint positions are adjusted for optimum safety, control and comfort.
- Adjust interior and exterior rear view mirrors.
- o Verify correct operation of lamps, horn and other electrical equipment.
- o Ensure that warning lamps illuminate when ignition is turned on.

#### NOTE:

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Fluid levels such as engine oil, engine coolant, brake and windscreen washer fluid should be checked daily or at each refuelling, whichever occurs sooner.



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# RUNNING IN YOUR NEW HYUNDAI

B020A01FC-EAT

# (PETROL ENGINE)

The longevity and performance of the vehicle are greatly affected by the care exercised during the first 1000 miles of motoring. Because of modern manufacturing techniques, rigid guidelines regarding maximum road speeds have become unnecessary. However, certain precautions should be observed in order to obtain the best possible performance and useful life from the vehicle.

- 1) Do not race the engine without a load (i.e revving the engine in neutral).
- 2) During the first 500 miles the maximum engine speed should be restricted to 3000 rpm and gradually increased thereafter.
- Avoid prolonged constant speed operation. The internal components of the engine will become more quickly run in if the operation speed is varied during the running in period.

- 4) Never allow the engine to labour. Use the gearbox freely and avoid large throttle openings when the engine speed is below 1500 rpm.
- 5) Avoid rapid acceleration and maximum throttle openings.
- 6) Avoid harsh braking during the first 100 miles of urban motoring or 1000 miles of motorway driving to allow the friction facings of the brake pads and shoes to bed against the discs and drums properly.
- 7) No trailer towing should be undertaken during the running-in period.

B020B01FC-EAT

# (DIESEL ENGINE)

The longevity and performance of the vehicle are greatly affected by the care exercised during the first 1000 miles of motoring. Because of modern manufacturing techniques, rigid guidelines regarding maximum road speeds have become unnecessary. However, certain precautions should be observed in order to obtain the best possible performance and useful life from the vehicle.

- Do not race the engine without a load (i.e revving the engine in neutral).
- During the first 600 miles the maximum engine speed should be restricted to 3000 rpm and gradually increased thereafter. And whilst driving, keep under three quarters of maximum vehicle speed.
- Avoid prolonged constant speed operation. The internal components of the engine will become more quickly run in if the operation speed is varied during the running in period.
- 4) Never allow the engine to labour. Use the gearbox freely and avoid large throttle openings when the engine speed is below 1500 rpm.
- 5) Avoid rapid acceleration and maximum throttle openings.
- 6) Avoid harsh braking during the first 100 miles of urban motoring or 1000 miles of motorway driving to allow the friction facings of the brake pads and shoes to bed against the discs and drums properly.
- 7) No trailer towing should be undertaken during the running-in period.

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# **IMMOBILISER SYSTEM**

B880A01A-EAT

The immobiliser system is an anti-theft device, designed to deter vehicle theft.

#### B885B01O-EAT

# **Keys**



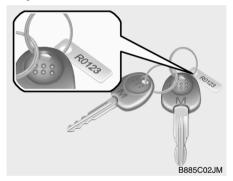
All of the locks fitted to the vehicle are operated by the same key. However, since it is possible to lock the doors without the use of the key, care should be exercised to ensure that the key does not become locked inside the vehicle by mistake.

#### NOTE:

If you make your own duplicate key, you will not be able to cancel the system or start the engine.

B880C02A-GAT

# **Key Numbers**



The vehicle key number is recorded upon a metal tag attached to the keys when the vehicle is first delivered to you.

The key number should be recorded and kept in a safe place in case the need to order further keys arises. New keys are available from any Hyundai authorised repairer by quoting the relevant key number.

In the interest of security, the metal tag attached to the keys which bears the key number should be removed from the key ring after you receive your new vehicle.

In addition, key numbers cannot be provided by Hyundai for security reasons.

If you need additional keys or if you should lose your keys, your Hyundai authorised repairer can make new keys.





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# **DOOR LOCKS**

YB030C2-E

# ILLUMINATED IGNITION SWITCH (Not all models)



Whenever a door is opened, the ignition switch will be illuminated for your convenience provided the ignition switch is not in the "ON" position. The light will go off approximately 10 seconds after closing the door or when the ignition switch is turned on.

B040A01A-AAT

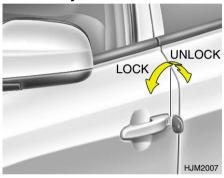


# **WARNING:**

- o Before you drive away, be sure that all the doors are securely closed. It is also recommended that the child-protector rear door locks are in the 'lock' position so that children cannot open the rear doors from inside the vehicle accidentally.
- Before opening the door, always look for and avoid oncoming traffic.

B040B01A-AAT

# Locking, Unlocking Front Doors With a Key



- o The door can be locked or unlocked with a key.
- Lock the door by turning the key toward the front of the vehicle and unlock it by turning the key toward the rear.

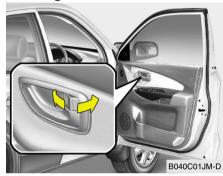






### B040C01O-EAT

# **Locking From the Outside**



The doors can be locked without a key. To lock the doors, first push the inside lock switch to the "LOCK" position so that the red mark on the switch is not visible, then close the door.

#### NOTE:

- o If your vehicle is equipped with central door locking system, the door will not lock if the key is left in the ignition switch when the front doors are closed.
- o When locking the door this way, be careful not to lock the door with the ignition key left in the vehicle.

o To reduce the possibility of prevent theft, always remove the ignition key, close all windows, and lock all doors and hatchback door when leaving your vehicle unattended.

#### B040D01S-AAT

# **Locking from the Inside**



To lock the doors from the inside. simply close the door and push the lock switch to the "LOCK" position. When this is done, neither the outside nor the inside door handles can be used.

# NOTE:

When the door is locked, the red mark on the switch is not visible.

#### SB040F1-E

# CHILD-PROOF REAR DOOR LOCK



The rear doors are fitted with child proof locks to prevent accidental opening of the doors using the inside door handle, whilst allowing access by means of the outside handle (such as is required in the event of an acccident for example) provided that the door lock button is at the unlocked position.







R

Use of the child proof lock mechanism is recommended when children are carried in the vehicle.

#### B040G01HP-AAT

#### **Central Door Locks**



The central door locking switch is located on the driver's arm rest. It is operated by depressing the door lock switch.

# NOTE:

- o When pushing the front portion of the driver's door lock switch, all vehicle doors will lock. If any door is open when the switch is depressed, the door will remain locked when closed.
- When pushing the rear portion of the switch, all vehicle doors will unlock.
- The central door locking is operated by turning the key toward the front or rear of the vehicle.

# THEFT-ALARM SYSTEM

B070A01A-EAT

# (Not all models)

This system is designed to provide protection from unauthorized entry into the car. This system is operated in three stages: the first is the "Armed" stage, the second is the "Alarm" stage, and the third is the "Disarmed" stage. If triggered, the system provides an audible alarm with blinking of turn signal lights.







#### B070B01O-EAT

# **Armed Stage**



Park the car and stop the engine. Arm the system as described below.

- 1) Remove the ignition key from the ignition switch.
- 2) Make sure that the bonnet and hatchback door are closed and latched.
- 3) Lock the doors using the transmitter of the keyless entry system.

After completion of the steps above, the turn signal lights will blink once to indicate that the system is armed

#### NOTE:

- 1) If any door, hatchback door or engine bonnet remains open, the system will not be armed.
- 2) If this happens, rearm the system as described above.

# $\triangle$

# **CAUTION:**

Do not arm the system until all passengers have left the car. If the system is armed whilst a passenger(s) remains in the car, the alarm may be activated when the remaining passenger(s) leaves the car.

B070C02O-EAT

# Alarm Stage

The alarm will be activated if any of the following occurs whilst the car is parked and the system is armed.

- 1) A front or rear door is opened without using the transmitter.
- 2) The hatchback door is opened without using the transmitter.
- 3) The engine bonnet is opened.

The siren will sound and the turn signal lights will blink continuouly for 27 seconds. To turn off the system, unlock the door or hatchback door with the transmitter.



# CAUTION:

Avoid trying to start the engine whilst the system is armed.

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10

B070D01HP-EAT

# **Disarmed Stage**



The system will be disarmed when the driver's or passenger's door is unlocked by depressing the "UNLOCK" button on the transmitter.

After completion of the step above, the turn signal lights will blink twice to indicate that the system is disarmed.

If any door, hatchback door or engine bonnet is not opened within 30 seconds, the system will be rearmed.



# **CAUTION:**

Only the transmitter can disarm the armed stage. If the transmitter does not disarm the system, it is necessary to take the following steps;

- Unlock the door with the key, which will cause, the alarm to be activated.
- 2. Insert the key in the ignition key cylinder and turn the ignition key to "ON" position.
- 3. Wait for 30 seconds.

After completion of the steps above, the system will be disarmed.

B070F01A-EAT

# Keyless Entry System (Not all models) Locking doors

- 1. Close all doors.
- 2. Push the "LOCK" button on the transmitter.
- At the same time all doors lock, the turn signal lights will blink once to indicate that the system is armed.

# **Unlocking doors**

- 1. Push the "UNLOCK" button on the transmitter.
- 2. At the same time all doors unlock, the turn signal lights will blink twice to indicate that the system is disarmed.



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# **POWER WINDOWS**

B070E02HP-GAT

# Replacing the battery

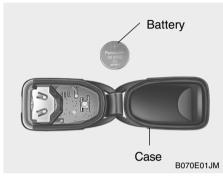
When the transmitter's battery begins to get weak, it may take several pushes on the button to lock or unlock the doors, and the LED will not light. Replace the battery as soon as possible.

# Battery type: CR2032



Replacement instructions:

 Carefully separate the case with a blade screwdriver as shown in the illustration.



2. Remove the old battery from the case and note the polarity. Make sure the polarity of the new battery is the same(+side facing down), then insert it in the transmitter.





The power windows operate when the ignition key is in the "ON" position. The main switches are located on the driver's armrest and control the front and rear windows on both sides of the vehicle. The windows may be opened by depressing the appropriate window switch and closed by pulling up the switch. To open the window on the driver's side, press the switch(1) halfway down. The window moves as long as the switch is operated. To fully open the driver's window automatically, press the switch fully down. In automatic operation, the window will fully open even if you let go of the switch. To stop at the desired opening, pull up and release the switch.



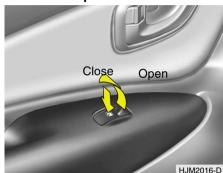






12







**SEATS** 

# WARNING:

FRONT SEAT ADJUSTMENT

Front seat adjustments must not be undertaken whilst the vehicle is in motion. Loss of control of the vehicle may result if seat adjustments are made whilst the vehicle is in motion.



In order to prevent operation of the passenger front and rear windows, a window lock switch(2) is provided on the armrest of the driver's door. To disable the power windows, press the window lock switch. To revert to normal operation, press the window lock switch a second time.

# NOTE:

jmuk-1a.p65

The power windows can be operated for 30 seconds after the ignition key is turned to the "ACC" or "LOCK" positions, or removed from the ignition switch.

If the front doors are opened during this 30 second period, the power windows can no longer be oper-



# WARNING:

- 1) Be careful that someone's head. hands and body are not trapped by a closing window.
- 2) Never try to operate the main switch on the driver's door and the individual door window switch in opposing directions at the same time. If this is done, the window will stop and cannot be opened or closed.
- 3) Do not leave children alone in the car. Always remove the ignition key for their safety.









# Front Seat Fore/Aft Adjustment



Front seat fore/aft adjustment is facilitated by turning the lever located on the front centre of the seat base and sliding the seat forwards or backwards as required.

When the seat is at the desired position, release the lever and ensure that the locking mechanism is engaged by rocking the seat to and fro.



# **WARNING:**

- Seat adjustment should not be made whilst the vehicle is in motion since loss of control of the vehicle may occur.
- o To ensure the seat is locked securely, attempt to move the seat forward or rearward without using the lock release lever.

To recline the seatback, lean forward to take your weight off it, then pull up on the recliner control lever at the outside edge of the seat. Now lean back until the desired seatback angle is achieved. To lock the seatback into position, release the recliner control lever.



# **WARNING:**

To minimize risk of personal injury in event of a collision or sudden stop, both the driver and passenger seatbacks should always be in a nearly upright position whilst the vehicle is in motion. The protection provided by the seat belts and airbags may be reduced significantly when the seatbacks are reclined. There is greater risk that the passenger will slide under the belt resulting in serious injury when the seatbacks are reclined.



# **Adjusting Seatback Angle**







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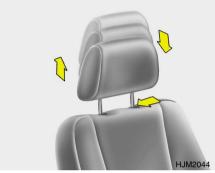


# **1** CONTROLS AND EQUIPMENT

14

#### B080D01JM-EAT

# **Adjustable Head restraints**



Head restraints are designed to help reduce the risk of neck injuries.

To raise the head restraint, pull it up. To lower it, push it down whilst pressing the lock knob. To remove the headrest, raise it as far as it can go then press the lock knob while pulling upward.



# **WARNING:**

o For maximum effectiveness in case of an accident, the head restraint should be adjusted so the top of the head restraint is at the same height as the top of the occupant's ears. The use of a cushion that holds the body away from the seatback is not recommended.



- o Do not operate the vehicle with the head restraints removed as severe injury to an occupant may occur in the event of an accident. Head restraints may provide protection against severe neck injuries when properly adjusted.
- o Do not adjust the headrest height while the vehicle is in motion.

#### YB060F4-F

# Seat Cushion Height Adjustment (Driver's Seat Only)



To adjust the height of the seat cushion, turn the seat cushion control knob in the appropriate direction.







### B080H01JM-GAT

# Seatback table



Seatback table is made by folding the front passenger seat.

It is useful to operate a notebook on the seatback table, etc.

# To operate seatback table

- 1. Lower the headrest.
- 2. With the recliner control lever pulled up, fold the seatback forward to the flat position.
- 3. When returning the seatback to the upright position, ensure the seatback is completely locked into place.

15

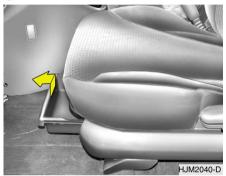


# **WARNING:**

- o Do not sit on the seatback table.
  o Do not use the seatback table
- when the vehicle is in motion.
- o Do not leave items on the seatback table when the vehicle is in motion.

### B080G01FC-EAT

# UNDER TRAY



The tray is located under the front passenger's seat. It is opened by up and pulling forward.



# WARNING:

To avoid the possibility of injury in case of an accident or a sudden stop, the tray should be kept closed when the car is in motion.







16

#### B100A01JM-EAT

# **SEAT WARMER (Not all models)**



The seat warmer is provided to warm the front seats during cold weather. With the ignition key in the "ON" position, push either of the switches to warm the driver's seat or the passenger's seat.

During mild weather or under conditions where the operation of the seat warmer is not needed, keep the switches in the "OFF" position.

# NOTE:

- o The seat warmer will not operate if ambient temperature is higher than 82.4°F(28°C) ± 3.5°F (3.5°C).
- o If the seat warmer doesn't work when ambient temperature is lower than 75.2°F(24°C), it must be checked at authorised Hyundai dealer.

B085A01JM-GAT

# REAR SEAT Adjusting Seatback Angle



To recline the seatback, pull the seatback folding lever and release it after the desired seatback angle is achieved.

When you recline the seatback to desired position, always be sure it has locked into position.



# CAUTION:

When reclining the seatback, you should adjust the seatback folding lever while standing.

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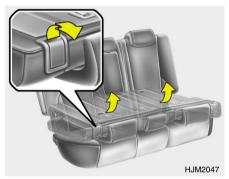




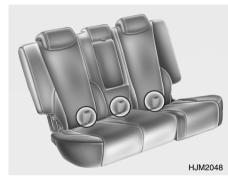
B085B01JM-AAT

# Folding Rear Seatback and Seat Cushion

For greater convenience, the entire seatback and seat cushion may be folded down and up.



- 1. Pull the seatback folding lever (1) then push down the seatback.
- 2. Be sure it has locked into position to listen an audible "Click".



#### NOTE:

- o Before folding the seatback, place the rear seat belt buckles in the buckle pouch on the seatback. This will prevent the seat belt buckles from becoming covered by the seat cushion when it is returned to the seating position.
- o The rear seat belt buckles must be removed from the buckle clips by pressing release button when in use.
- To return the seatback to its normal position, pull the seatback folding lever and reverse the above procedure.

 When you return the seatback to its upright position, always be sure it is locked into position by pulling and pushing on the top of the seatback.



# **WARNING:**

o The purpose of the fold-down rear seat back is to allow you to carry more objects than could otherwise be accommodated. Never allow passengers to sit on the cargo area while the car is moving. This is not a proper seating position and no seat belts are available for use when the seat back is folded down.

This could result in serious injury or death in case of an accident or a sudden stop. Objects should not extend higher than the top of the front seatbacks. This could allow cargo to slide forward and cause injury or damage during sudden stops.





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18

o When you return the rear seatback to its upright position after being folded down, be careful not to damage the seatbelt webbing or buckle. In addition, do not allow the seatbelt webbing or buckle to get caught or pinched in the rear seat.

#### B140A01B-GAT

### **REAR SEAT WARNING**



For the safety of all passengers, luggage or other cargo should not be piled higher than the top of the seatback.

# **SEAT BELTS**

SB090A1-E

### **SEAT BELT PRECAUTIONS**

Seat belts should be worn at all times by all occupants front and rear. The possibility of injury or the severity of injuries suffered in the event of an accident will be greatly reduced by the wearing of seat belts.

In addition the following recommendations should be observed.

#### SB090B1-E

### Babies/Small Children

Babies and small children must be restrained using a restraint system specifically designed for this purpose. Under no circumstances should a child be carried in the vehicle without the use of a suitable restraint which meets the regulations in force in the country where the vehicle is in operation.

SB090C1-E

# Larger Children

Larger children should occupy the rear seat and be restrained at all times. The restraint may take the form of a special safety belt or the original factory fitted seat belt used in conjunction with an approved booster cushion depending upon the size and weight of the child. Under no circumstances should children be allowed to travel standing, kneeling or lying on the seat.

Never allow childen to ride in the front passenger seat.

#### SB090O1-E

# **Pregnant Women**

The use of a seat belt is recommended for pregnant women. The seat belt should be worn as low and snugly as possible across the hips, not across the abdomen. A qualified Medical Practitioner should be consulted for further information.







SB090E1-E

# **Injured Persons**

A seat belt should be used when an injured person is being transported. For specific recommendations, the advice of a qualified Medical Practioner should be sought.

SB090F1-E

# **Seat Belt Occupancy**

The seat belts are designed to be used by one seat occupant only. The use of a seat belt by more than one person increases the levels of injury which may be sustained in the event of an accident.

SE090G1-E

#### Do Not Lie Down

To ensure that the maximum level of protection may be afforded by the seat belt system, all passengers should be sitting in an upright position throughout the journey. The seat belt will be unable to afford maximum protection if the front seats are at or near the fully reclined position.

SB090H1-E

# **CARE OF SEAT BELTS**

Seat belt assemblies must never be disassembled or modified in any way. In addition, care should be exercised to ensure that the belt assemblies do not become damaged by being trapped in seat mechanisms, door shuts etc.

SB090I-E

# **Periodic Inspection**

It is recommended that all seat belts be inspected periodically for wear or damage of any kind. Parts of the system that are damaged should be replaced as soon as possible. Under no circumstances must any part of the seat belt assemblies be dismantled or repaired.

SB090J1-E

# **Keep Belts Clean and Dry**

Seat belts should be kept clean and dry. If belts become dirty, they can be cleaned using a mild soap solution and warm water. Bleach, dye, strong detergents or abrasives should not be used since the fabric may become damaged and weakened.

SB090K1-F

# **Replacement of Seat Belts**

The entire seat belt assembly or assemblies should be replaced if the vehicle has been involved in an accident even if no damage is evident. Additional questions concerning seat belt operation should be directed to Hyundai authorised repairer.

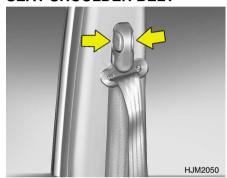




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#### B170A04A-EAT

## HEIGHT ADJUSTABLE FRONT SEAT SHOULDER BELT



You can adjust the height of the shoulder belt anchor to one of the 4 positions.

If the height of the adjusting seat belt is too near your neck, you will not be getting the most effective protection. The shoulder portion should be adjusted so that it lies across your chest and midway over your shoulder nearest the door and not your neck.

To adjust the height of the seat belt anchor, lower or raise the height adjuster into an appropriate position. To raise the height adjuster, pull it up. To lower it, push it down whilst pressing the height adjuster button.

Release the button to lock the anchor into position. Try sliding the release button to make sure that it has locked into the position.

## A

#### **WARNING:**

- The height adjuster must be in the locked position when the vehicle is moving.
- o The misadjustment of height of the shoulder belt could reduce the effectiveness of the seat belt in a crash.

SB090P1-E

## SEAT BELTS (3-Point Type) To Fasten The Seat Belt



The seat belts are fastened by pulling the belt buckle towards the seat belt stalk and inserting the metal tongue of the buckle into the stalk. The buckle should be firmly pressed into the stalk until locked which will be indicated by an audible "click".

The length of the seat belt webbing will be automatically adjusted by the seat belt mechanism to allow the wearer maximum freedom of movement whilst the belt is being worn. However, in the event of rapid deceleration or impact, the belt mechanism will automatically lock.

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The mechanism will also lock if the seat belt webbing is withdrawn too quickly when the belt is being fastened or if attempts are made to withdraw the webbing whilst the vehicle is not on level ground. Should the seat belt lock under these conditions, it will be possible to release the mechanism by allowing a small amount of webbing to be retracted and the belt withdrawn again.



#### **WARNING:**

You should place the lap belt portion as low as possible and snugly across your hips, not on your waist. If the lap belt is located too high on your waist, it may increase the chance of injury in the event of a collision. Both arms should not be under or over the belt. Rather, one should be over and the other under. as shown in the illustration.

The seat belt is released by pressing the release button in the locking buckle. When it is released, the belt should automatically draw back into the retractor.

If this does not happen, check the belt to be sure it is not twisted, then try again.



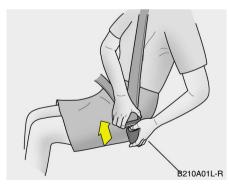
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## **Adjusting Your Seat Belt**



B210A01A-AAT

### To Release the Seat Belt



21









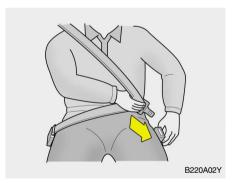
B220A01JM-DAT

### SEAT BELTS - Rear Seat Centre's 3-Point System With Emergency Locking Retractor



- 1. Before fastening the rear seat centre belt, confirm the metal tab (a) and buckle (b) are latched together.
- 2. After confirming that (a) and (b) are latched, pull the seat belt out of the retractor and insert the metal tab (c) into the buckle (d).

There will be an audible "click" when the tab locks in the buckle. The seat belt automatically adjusts to the proper length only after the lap belt is adjusted manually so that it fits snugly around your hips. If you lean forward in a slow, easy motion, the belt will extend and let you move around. If there is a sudden stop or impact, the belt will lock into position. It will also lock if you try to lean forward too quickly.





#### WARNING:

- o When using the rear seat centre belt, you must lock all metal tabs and buckles. If any metal tab or buckle is not locked, it will increase the chance of injury in the event of collision.
- o Never unlock the metal tab (a) and the buckle (b) with the following exceptions.
  - (1)In case of folding rear seatbacks down.
  - (2)If transporting an object on the rear seat may cause damage to the rear seat centre belt.





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## CHILD RESTRAINT SYSTEM 723

o When the metal tab (a) is unlocked from the buckle (b), place the metal tab (a) in the seat belt clip as this will prevent undue noise occuring when driving.



o Lock the metal tab (a) and the buckle (b) immediately after folding rear seatbacks up.

B220C01Y-DAT To Release the Seat Belt



When you want to release the seat belt, press the button in the locking buckle.



## WARNING:

The centre belt latching mechanism is different from those for the rear seat shoulder belts. When fastening the rear seat shoulder belts or the rear seat center belt, make sure they are inserted into the correct buckles to obtain maximum protection from the seat belt system and assure proper operation.

B230A04P-EAT Children riding in the car should sit in the rear seat and must always be restrained to minimize the risk of injury in an accident, sudden stop or sudden manoeuvre. According to accident statistics, children are safer when properly restrained in the rear seats than in the front seat. Larger children should use one of the seat belts provided. You are required by law to use safety restraints for children. If small children ride in your vehicle you must put them in a child restraint system (safety seat). Children could be injured or killed in a crash if their restraints are not properly secured. For small children and babies, a child seat or infant seat must be used. Before buying a particular child restraint system, make sure it fits your car seat and seat belts, and fits your child. Follow all the instructions provided by the manufacturer when in-

stalling the child restraint system.

23 jmuk-1a.p65













#### WARNING:

- o A child restraint system must be placed in the rear seat. Never install a child or infant seat on the front passenger's seat.

  Should an accident occur and cause the passenger side airbag to deploy, it could severely injure or kill an infant or child seated in an infant or child seat. Thus, only use a child restraint in the rear seat of your vehicle.
- o Since a safety belt or child restraint system can become very hot if it is left in a closed vehicle, be sure to check the seat cover and buckles before placing a child there.
- o When the child restraint system is not in use, store it in the luggage compartment or fasten it with a safety belt so that it will not be thrown forward in the case of a sudden stop or an accident.

- o Children who are too large to be in a child restraint should sit in the rear seat and be restrained with the available lap/shoulder belts. Never allow children to ride in the front passanger seat.
- o Always make sure that the shoulder belt portion of the outboard lap/shoulder belt is positioned midway over the shoulder, never across the neck. Moving the child closer to the centre of the each seat may help provide a good shoulder belt fit. The lap belt portion of the lap/shoulder belt or the centre seat lap belt must always be positioned as low as possible on the child's hips and as snug as possible.
- o If the seat belt will not properly fit the child, we recommend the use of an approved booster seat in the rear seat in order to raise the child's seating height so that the seat belt will properly fit the child.
- o Never allow a child to stand up or kneel on the seat.

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- Never use an infant carrier or child safety seat that "hooks" over a seatback; it may not provide adequate security in an accident.
- o Never allow a child to be held in a person's arms whilst they are in a moving vehicle, as this could result in serious injury to the child in the event of an accident or a sudden stop. Holding a child in a moving vehicle does not provide the child with any means of protection during an accident, even if the person holding the child is wearing a seat belt.
- o If the child restraint seat is not anchored properly, the risk of a child being seriously injured or killed in a collision greatly increases.







## Installation on Rear Seat Centre Position



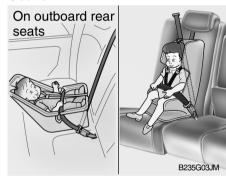
Use the centre seat belt for the rear to secure the child restraint system as illustrated. After installation of the child restraint system, rock the child seat back and forth, and side to side to ensure that it is properly secured by the seat belt.

If the child seat moves, readjust the length of the seat belt. Then, if equipped, insert the child restraint tether strap hook into the child restraint hook holder and tighten to secure the seat. Always refer to the child restraint system manufacturer's rec-

ommendation before installing the child restraint system in your vehicle.

#### B230G02A-GAT

## Installation on Outboard Rear Seats



To install a child restraint system in the outboard rear seats, extend the shoulder/lap belt from its retractor. Install the child restraint system, buckle the seat belt and allow the seat belt to take up any slack. Make sure that the lap portion of the belt is tight around the child restraint system and the shoulder portion of the belt is positioned so that it cannot interfere with the child's head or neck. After installation of the child

restraint system, try to move it in all directions to be sure the child restraint system is securely installed.

If you need to tighten the belt, pull more webbing toward the retractor.

#### NOTE:

- o Before installing the child restraint system, read the instructions supplied by the child restraint system manufacturer.
- o If the seat belt does not operate as described, have the system checked immediately by your Hyundai authorised repairer.

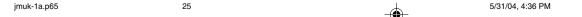


#### **WARNING:**

Do not install any child restraint system in the front passenger seat. Should an accident occur and cause the passenger side airbag to deploy, it could severely injure or kill an infant or child seated in an infant or child seat. Therefore, only use a child restraint system in the rear seat of your vehicle.









B230B02A-GAT

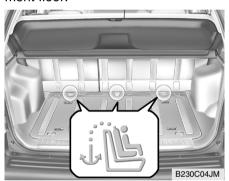
# Using a Child Restraint System with "Tether Anchorage" System

For small children and babies, the use of a child seat or infant seat is required. This child seat or infant seat should be of appropriate size for the child and should be installed in accordance with the manufacturer's instructions. It is further required that the seat be placed in the vehicle's rear seat since this can make an important contribution to safety. Your vehicle is provided with three child restraint hook holders for installing the child seat or infant seat.

B230C04O-GAT

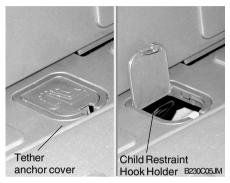
# Securing a Child Restraint System with the "Tether Anchorage" System

Three child restraint hook holders are located on the rear luggage compartment floor.



This symbol indicates the location of each user ready tether anchorage.

#### To install the child restraint seat



1. Open the tether anchor cover on the rear luggage compartment floor.

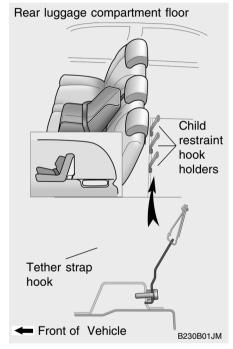












2. Route the child restraint seat strap over the seatback.

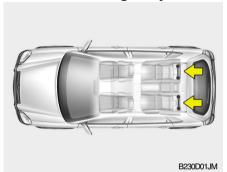
For vehicles with adjustable headrests, route the tether strap under the headrest and between the headrest posts, otherwise route the tether strap over the top of the seatback.

3. Connect the tether strap hook to the child restraint hook holder and tighten to secure the seat.

#### WARNING:

To install the Child Restraint Seat, for safety reasons the Seat should be positioned rearmost with the seatback in a vertical position, not reclined.

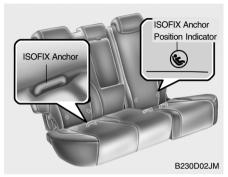
### **Using a Child Restraint System** with "ISOFIX" System and "Tether Anchorage" System



ISOFIX is a standardised method of fitting child seats that eliminates the positive location with the added benefit of easier and quicker installation.

need to use the standard adult seat belt to secure the seat in the vehicle. This enables a much more secure and



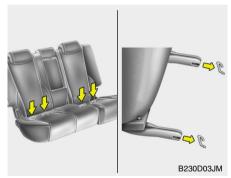


On each side of the rear seat, between the cushion and backrest, are located a pair of ISOFIX anchorage points together with a top tether mounting located in the luggage compartment. During the installation, the seat has to be engaged at the anchorage-points in such a way whereby you can hear it click (check by pulling!) and has to be fixed with the Top Tether-belt to the top tether mounting located in the luggage compartment. The installing and the use of a child-seat has to be done according to the installing-manual, which is added to the ISOFIX-seat.

#### NOTE:

An ISOFIX-child-seat can only be installed if the seat has a vehicle-specific approval according to ECE-R44. Before using the ISOFIX-child-seat, which was bought for another car, ask your Hyundai-dealer whether this seat-type is approved and recommended for your Hyundai.

#### To secure the child restraint seat



 To engage the child restraint seat to the ISOFIX anchor, insert the child restraint seat latch into the ISOFIX anchor. Listen for the audible "click" sound.  Connect the tether strap hook to the child restraint hook holder and tighten to secure the seat. Refer to "Securing a Child Restraint System with the Tether Anchorage System" on page 1-26.



## **WARNING:**

o Do not install a child restraint seat at the centre of the rear seat using the vehicle's ISOFIX anchors. The ISOFIX anchors are only provided for the left and right outboard rear seating positions. Do not misuse the ISOFIX anchors by attempting to attach a child restraint seat in the middle of the rear seat to the ISOFIX anchors. In a crash, the child restraint seat ISOFIX attachments may not be strong enough to secure the child restraint seat properly in the centre of the rear seat and may break, causing serious injury or death.





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- o Do not mount more than one child restraint to a child restraint lower anchorage point. Overloading may cause the anchorage points or tether anchor to break, causing serious injury or death.
- o Attach the ISOFIX or ISOFIX-compatible child restraint seat only to the appropriate locations shown in the illustration.
- o Always follow the installation and use instructions provided by the manufacturer of the child restraint.

B230H01JM-EAT

## Child Seat Restraint Suitability For Seat Position

Use child safety seats that have been officially approved and are appropriate for your children.

When using the child safety seats, refer to the following table.

	Seating Position		
Age Group	Front	Rear	Rear
	Passenger	Outboard	Centre
0 : Up to 10 kg	.,	L1, L2,	.,
(0 ~ 9 months)	Х	L3, L4	Х
0+ : Up to 13 kg		L1, L2,	
(0 ~ 2 years)	X	L3, L4	Х
I: 9kg to 18kg		L3, L5,	
(9 months ~	Х	· ' '	х
4 years)		L6, L7, L8	
II & III: 15kg to			
36kg	Х	L6, L9	х
(4 ~ 12 years)			

- L1 : Suitable for Bebe confort ELIOS (E2 037014) approved for the use in this group
- L2: Suitable for PegPerego primo Viaggio (E13 030010) approved for the use in this group

L3 : Suitable for Bebe confort iSEOS (E2 039014) approved for the use in this group

#### NOTE:

Use it after adjusting headrest to lowest level.

- L4 : Suitable for GRACO Autobaby (E11 03. 44.160/E11 03.44.161) approved for the use in this group
- L5 : Suitable for Romer Lord Plus (E1 03301136) approved for the use in this group
- L6 : Suitable for Euro Kids Star (E1 03301128/E1 03301129) approved for the use in this group
- L7: Suitable for BeSafe iZi COMFORT (E4 03443206) approved for this use in this group

#### NOTE:

Use it after removing headrest or adjusting headrest to lowest level.







- L8: Suitable for MAXI-COSI Priori XP (E1 03301153) approved for the use in this group
- L9: Suitable for Bebe confort HiPSOS (E2 031011) approved for this use in this group

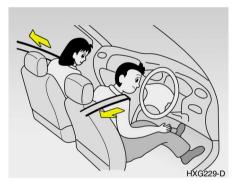
## NOTE: Use it after removing headrest.

X : Seat position not suitable for children in this mass group

B180B01JM-EAT

#### **Pre-tensioner Seat Belt**

Your Hyundai vehicle is equipped with driver's and front passenger's pretensioner seat belts. The purpose of the pre-tensioner is to make sure that the seat belts fit tightly against the occupant's body in certain frontal collisions. The pre-tensioner seat belts can be activated with the airbags.



The pre-tensioner seat belt operates in a similar way as an Emergency Locking Retractor (ELR) type of seat belt. When the vehicle stops suddenly, or if the occupant tries to lean forward too quickly, the seat belt retractor will

lock into position. In certain frontal collisions, the pre-tensioner will activate and pull the seat belt into tighter contact against the occupant's body.



The seat belt pre-tensioner system consists mainly of the following components.

Their locations are shown in the illustration.

- 1. SRS airbag warning light
- 2. Retractor pre-tensioner assembly
- 3. Buckle pre-tensioner assembly
- 4. SRS control module







#### WARNING:

To obtain maximum benefit from a pre-tensioner seat belt:

- 1. The seat belt must be worn correctly.
- 2. The seat belt must be adjusted to the correct position.

#### NOTE:

o Both the driver's and front passenger's pre-tensioner seat belts will be activated in certain frontal collisions. The pre-tensioner seat belts can be activated with the airbags. The pre-tensioners will be activated under these conditions even if the seat belts are not being worn at the time of the collision.

- o When the pre-tensioner seat belts are activated, a loud noise may be heard and fine dust, which may appear to be smoke, may be visible in the passenger compartment. These are normal operating conditions and are not hazardous.
- o Although it is harmless, the fine dust may cause skin irritation and should not be breathed for prolonged periods. Wash your hands and face thoroughly after an accident in which the pretensioner seat belts were activated.



#### CAUTION:

- o Because the sensor that activates the SRS airbag is connected with pre-tensioner seat belt, the SRS airbag warning light on the instrument panel will come on for approximately 6 seconds after the ignition key has been turned to the "ON" position, and then it should turn off.
- o If pre-tensioner seat belt is not working properly, this warning light will illuminate even if there is no malfunction of the SRS airbag. If the SRS airbag warning light does not illuminate when the ignition key is turned to "ON", or if it remains illuminated after coming on for approximately 6 seconds, or if it illuminates whilst the vehicle is being driven, please have Hyundai authorised repairer inspect the pre-tensioner seat belts and SRS airbag system as soon as possible.





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#### **1** CONTROLS AND EQUIPMENT

32



#### WARNING:

- o Pre-tensioners are designed to operate only one time. After activation, pre-tensioner seat belts must be replaced. All seat belts, of any type, should always be replaced after they have been worn during a collision.
- o The pre-tensioner seat belt assembly mechanisms become hot during activation. Do not touch the pre-tensioner seat belt assemblies for several minutes after they have been activated.
- Do not attempt to inspect or replace the pre-tensioner seat belts yourself. This must be done by an Hyundai authorised repairer.
- o Do not strike the pre-tensioner seat belt assemblies.
- Do not attempt to service or repair the pre-tensioner seat belt system in any manner.

- o Improper handling of the pretensioner seat belt assemblies, and failure to heed the warnings to not strike, modify, inspect, replace, service or repair the pretensioner seat belt assemblies may lead to improper operation or inadvertent activation and serious injury.
- o Always wear seat belts when driving or traveling in a motor vehicle.

## SUPPLEMENTAL RESTRAINT (AIRBAG) SYSTEM

B240A03F-EAT



Your Hyundai is equipped with a Supplemental Restraint (Airbag) System. The indications of the system's presence are the letters "SRS AIR BAG" embossed on the airbag pad cover in the steering wheel and the passenger's side front panel pad above the glove box.

The Hyundai SRS consists of airbags installed under the pad covers in the centre of the steering wheel and the passenger's side front panel above the glove box. The purpose of the SRS is to provide the vehicle's driver and/or





the front passenger with additional protection than that offered by the seat belt system alone, in case of a frontal impact of sufficient severity.

#### NOTE:

Be sure to read information about the SRS on the labels provided on the reverse side of the sun visor and in the glove box.



#### **WARNING:**

o As its name implies, the SRS is designed to work with, and be supplemental to, the driver's and the passenger's three point seat belt systems and is not a substitute for them. Therefore your seat belts must be worn at all times whilst the vehicle is in motion. The airbags deploy only in certain frontal impact conditions severe enough to likely cause significant injury to the vehicle occupants.

o The SRS is designed to deploy the airbags only when an impact is sufficiently severe and when the impact angle is less than 30° from the forward longitudinal axis of the vehicle and will not deploy in side, rear or rollover impacts. Additionally, the airbags will only deploy once. Thus, seat belts must be worn at all times.



o Front airbags are not intended to deploy in side-impact, rear-impact or rollover crashes. In addition, airbags will not normally deploy in frontal crashes below the deployment threshold speed.

- o For maximum safety protection in all types of crashes, all occupants including the driver should always wear their seat belts whether or not an airbag is also provided at their seating position to minimize the risk of severe injury or death in the event of a crash. Do not sit or lean unnecessarily close to the airbag whilst the vehicle is in motion.
- o The SRS airbag system must deploy very rapidly to provide protection in a crash. If an occupant is out of position because of not wearing a seat belt, the airbag may forcefully contact the occupant causing serious or fatal injuries.







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#### **1** CONTROLS AND EQUIPMENT

34

#### B240B01JM-DAT

### **SRS Components and Functions**



The SRS consists of the following components:

- Driver's Airbag Module
- Passenger's Airbag Module
- SRS Service Reminder Indicator (SRI)
- SRS Control Module (SRSCM)

The SRSCM continually monitors all elements whilst the ignition is "ON" to determine if a frontal or near-frontal impact is severe enough to require airbag deployment.

The SRS service reminder indicator (SRI) on the instrument panel will come on for about 6 seconds after the ignition key is turned to the "ON" position or after the engine is started, after which the SRI should go out.



The airbag modules are located both in the centre of the steering wheel and in the front passenger's panel above the glove box. When the SRSCM detects a considerable impact to the front of the vehicle, it will automatically deploy the airbags.



Upon deployment, tear seams molded directly into the pad covers will separate under pressure from the expansion of the airbags. Further opening of the covers then allows full inflation of the airbags.

A fully inflated airbag in combination with a properly worn seat belt slows the driver's or the passenger's forward motion, thus reducing the risk of head or chest injury.

After complete inflation, the airbag immediately starts deflating, enabling the driver to maintain forward visibility.















### **CAUTION:**

When installing a container of liquid air freshener inside a vehicle, do not place it near the instrument cluster nor on the instrument panel pad surface. If there is any leakage from the air freshener onto these areas (instrument cluster, instrument panel pad or air ventilator), it may damage these parts. If the liquid from the air freshener does leak onto these areas, wash them with water immediately.



## **WARNING:**

o When the SRS is activated, there may be a loud noise and fine dust will be released throughout the vehicle. These conditions are normal and are not hazardous. However, the fine dust generated during airbag deployment may cause skin irritation. Be sure to wash your hands and face thoroughly with lukewarm water and a mild soap after an accident in which the airbags were deployed.

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- o The SRS can function only when the ignition key is in the "ON" position. If the SRS SRI does not come on, or continuously remains on, after coming on for about 6 seconds when the ignition key is turned to the "ON" position, or after the engine is started, or comes on whilst driving, the SRS is not working properly. If this occurs, have your vehicle immediately inspected by your Hyundai dealer.
- o Before you replace a fuse or disconnect a battery terminal, turn the ignition key to the "LOCK" position or remove the ignition key. Never remove or replace the air bag related fuse(s) when the ignition key is in the "ON" position. Failure to heed this warning will cause the SRS SRI to illuminate.





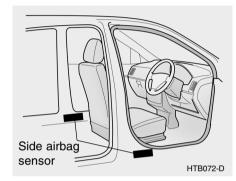


#### B990B04Y-EAT

## Side Impact Airbag (Not all models)



Your Hyundai is equipped with a side impact airbag in each front seat. The purpose of the airbag is to provide the vehicle's driver and/or the front passenger with additional protection than that offered by the seat belt alone. The side impact airbags are designed to deploy only during certain side impact collisions, depending on the crash severity, angle, speed and point of impact. The side impact airbags are not designed to deploy in all side impact situations.





### **WARNING:**

o The side impact airbag is supplemental to the driver's and the passenger's three point seat belt systems and is not a substitute for them. Therefore your seat belts must be worn at all times whilst the vehicle is in motion. The airbags deploy only in certain side impact conditions severe enough to cause significant injury to the vehicle occupants.

- o For best protection from the side impact airbag system and to avoid being injured by the deploying side impact airbag, both front seat occupants should sit in an upright position with the seat belt properly fastened. The driver's hands should be placed on the steering wheel at the 9:00 and 3:00 o'clock positions. The passenger's arms and hands should be placed on their laps.
- o Do not use any accessory seat
- Use of seat covers could reduce or prevent the effectiveness of the system.
- o Do not install any accessories on the side or near the side impact airbag.
- o Do not use excessive force on the side of the seat.
- Do not place any objects over the airbag or between the airbag and yourself.

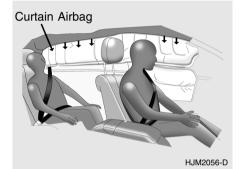
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- o Do not place any objects (an umbrella, bag, etc.) between the front door and the front seat. Such objects may become dangerous projectiles and cause injury if the supplemental side impact airbag inflates.
- o To prevent unexpected deployment of the side impact air bag that may result in personal injury, avoid impact to the side impact airbag sensor when the ignition key is on.

#### B990C01LZ-GAT

### **Curtain Airbag (Not all models)**



Curtain airbags are located along both sides of the roof rails above the front and rear doors.

It is designed to help protect the heads of the front seat occupants and the rear outboard seat occupants in certain side impact collisions.

The curtain airbags are designed to deploy only during certain side impact collisions, depending on the crash severity, angle, speed and impact. The curtain airbags are not designed to deploy in all side impact situations, collisions from the front or rear of the vehicle or in most rollover situations.

#### B240C01JM-GAT SRS Care

The SRS is virtually maintenance-free and so there are no parts you can safely service by yourself. If the SRS SRI (Service Reminder Indicator) does not come on, or continuously remains on, have your vehicle immediately inspected by your Hyundai dealer.

Any work on the SRS system, such as removing, installing, repairing, or any work on the steering wheel must be performed by a qualified Hyundai technician. Improper handling of the SRS system may result in serious personal injury.









#### **1** CONTROLS AND EQUIPMENT

38



B240C02L

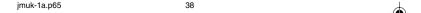


#### **WARNING:**

- o Extreme Hazard! Do not use a rearward facing restraint on a seat protected by an airbag in front of it!
- o Modification to SRS components or wiring, including the addition of any kind of badges to the pad covers or modifications to the body structure, can adversely affect SRS performance and lead to possible injury.

- o For cleaning the airbag pad covers, use only a soft, dry cloth or one which has been moistened with plain water. Solvents or cleaners could adversely affect the airbag covers and proper deployment of the system.
- o No objects should be placed over or near the airbag modules on the steering wheel, instrument panel, and the front passenger's panel above the glove box, because any such object could cause harm if the vehicle is in a crash severe enough to cause the airbags to inflate.
- o If the airbags inflate, they must be replaced by an Hyundai authorised repairer.
- o Do not tamper with or disconnect SRS wiring, or other components of the SRS system. Doing so could result in injury, due to accidental firing of the airbags or by rendering the SRS inoperative.

- o Do not install a child restraint system in the front passenger seat position. A child restraint system must never be placed in the front seat. The infant or child could be severely injured by an airbag deployment in case of an accident.
- o If components of the airbag system must be discarded, or if the vehicle must be scrapped, certain safety precautions must be observed. Your Hyundai authorised repairer knows these precautions and can give you the necessary information. Failure to follow these precautions and procedures could increase the risk of personal injury.
- If you sell your vehicle, be sure to inform the new owner of these important points and make certain that this manual is transferred to the new owner.











- o If your car was flooded and has soaked carpeting or water on flooring, you shouldn't try to start engine; have the car towed to Hyundai authorised repairer.
- Do not replace the bumper or the bumper guard with the one other than the Hyundai genuine parts.
   Otherwise, it can adversely affect SRS performance and lead to unexpected injury.





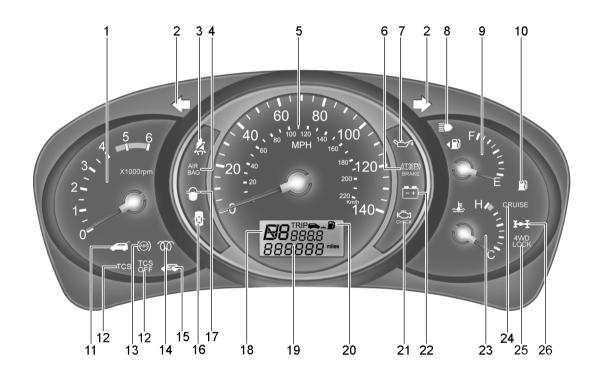
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### **1** CONTROLS AND EQUIPMENT

## 40 INSTRUMENT CLUSTER AND INDICATOR LIGHTS

B260A01JM-EAT



B260A01JM-E

**-**

- 1. Tachometer
- 2. Turn Signal Indicator Light
- 3. Seat Belt Warning Light
- 4. Supplemental Restraint (AirBag) System Service Reminder Indicator (SRI)
- 5. Speedometer
- 6. Parking Brake/Low Brake Fluid Level Warning Light
- 7. Low Oil Pressure Warning Light
- 8. High Beam Indicator Light
- 9. Fuel Gauge
- 10. Low Fuel Warning Light
- 11. Hatchack door Open Warning Light
- 12. Traction Control Indicator Light (Not all models)/ Electronic Stability Program (ESP) Indicator Light (Not all models)
- 13. ABS Service Reminder Indicator

- 14. Diesel Preheat Indicator Light (Diesel Engine)
- 15. Immobiliser Warning Light (Diesel Engine)
- 16. Door Ajar Warning Light
- 17. Fuel Filter Warning Light (Diesel Engine)
- 18. Automatic Transaxle Position Indicator Light (Not all models)
- 19. Odometer / Trip odometer
- 20. Trip Computer (Not all models)
- 21. Malfunction Indicator Light (MIL)
- 22. Charging System Warning Light
- 23. Coolant Temperature Gauge
- 24. Cruise Indicator (Not all models)
- 25. 4WD Lock Indicator Light
- 26. 4WD System Warning Light (Not all models)







#### WARNING AND INDICATOR LIGHTS

B260D01A-AAT



## Turn Signal Indicator Lights

The blinking green arrows on the instrument panel show the direction indicated by the turn signals. If the arrow comes on but does not blink, blinks more rapidly than normal, or does not illuminate at all, a malfunction in the turn signal system is indicated. Your Hyundai authorised repairer should be consulted for repairs.

<del>-</del>

B260P02Y-EAT



## ABS Service Reminder Indicator (SRI)

When the key is turned to the "ON" position, the Anti-Lock Brake System SRI will come on and then go off in a few seconds. If the ABS SRI remains on, comes on whilst driving, or does not come on when the key is turned to the "ON" position, this indicates that there may be a problem with the ABS.

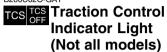
If this occurs, have your vehicle checked by your Hyundai authorised repairer as soon as possible. The normal braking system will still be operational, but without the assistance of the anti-lock brake system.



### **WARNING:**

If the both ABS SRI and Parking Brake/Brake fluid level warning lights remain "ON" or come on whilst driving, there may be a problem with E.B.D (Electronic Brake Force Distribution).

If this occurs, avoid sudden stops and have your vehicle checked by your Hyundai authorised repairer as soon as possible. B260C02O-GAT



The traction control indicator change operation according to the ignition switch position and whether or not the system is in operation.

They will also illuminate when the ignition key is turned to the "ON" position, but should go out after the engine starts. If the TCS indicator stays on, take your car to your Hyundai authorised repairer and have the system checked. See section 2 for more information about the TCS.



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B265C01LZ-AAT

# ESP OFF Electronic Stability Program Indicator Lights (If installed)

The electronic stability program indicators change operation according to the ignition switch position and whether the system is in operation or not.

They will illuminate when the ignition key is turned to the "ON" position, but should go out after three seconds. If the ESP or ESP-OFF indicator stays on, take your car to your authorized Hyundai dealer and have the system checked. See section 2 for more information about the ESP.

B260F01A-AAT



## High Beam Indicator Light

The high beam indicator light comes on whenever the headlights are switched to the high beam or flash position.

B260G01A-AAT



Low Oil Pressure Warning Light



#### **CAUTION:**

If the oil pressure warning light stays on whilst the engine is running, serious engine damage may result. The oil pressure warning light comes on whenever there is insufficient oil pressure. In normal operation, it should come on when the ignition switch is turned on, then go out when the engine is started.

If the oil pressure warning light stays on whilst the engine is running, there is a serious malfunction. If this happens, stop the car as soon as it is safe to do so, turn off the engine and check the oil level. If the oil level is low, fill engine oil to the proper level and start the engine again. If the light stays on with the engine running, turn the engine off immediately. In any instance where the oil light stays on when the engine is running, the engine should be checked by an Hyundai authorised repairers before the car is driven again.





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Parking Brake/ Low Brake Fluid Level **Warning Light** 



#### **WARNING:**

In the event of problems being suspected with the braking system, the advice of the nearest Hyundai authorised repairer must be sought before the vehicle is driven. Driving the vehicle with either an electrical or hydraulic braking system defect may be dangerous, resulting in accident or personal injury.

### **Warning Light Operation**

The parking brake/brake fluid level warning light will be illuminated whenever the ignition switch is turned to the "ON" position irrespective of whether or not the parking brake is applied and must be extinguished when the engine starts and the parking brake released. If the warning light fails to extinguish or illuminates at any other time, the vehicle must be brought to rest in a safe location and the level of brake fluid in

the reservoir checked. If the fluid level is incorrect, fluid conforming to DOT 3 or DOT 4 specifications should be added. If, after correcting the brake fluid level, the warning light continues to be illuminated, the advice of the nearest Hyundai authorised repairer must be sought before the vehicle is driven again.

Your Hyundai is equipped with a diagonally split dual braking system which will ensure that in the event of one of the brake circuits becoming defective, approximately fifty per cent of the normal braking performance will be available.

If failure of one of the circuits occurs, the required amount of pedal effort, pedal travel and stopping distance will be increased. Use of the gearbox is recommended to assist in bringing the vehicle to rest. The vehicle must not be driven once brake failure has occurred until the system has been repaired and is functioning normally.

The braking system employs a vacuum servo in order that the pedal efforts are reduced. Power for the servo is derived from the engine and therefore, in the event of the engine stopping or the vehicle being towed, pedal efforts will be substantially increased.



5/31/04, 4:36 PM

### CAUTION (Diesel Engine):

The parking brake / low brake fluid warning light should come on when the vacuum level in brake booster descends to about 275 mmHg or below. The brake system is designed to stop the vehicle with reserve assist if brake pedal is held down. This reserve is greatly reduced each time you release the brake. Without vacuum assist your vehicle can still be stopped by pushing much harder on brake pedal. however the stopping distance may be much longer. If the light comes on at any other time, you should slow the vehicle and bring it to a complete stop in a safe location off the roadway.







After starting the engine, do not drive the vehicle until the vacuum level is above 275 mmHg below atmosphere and warning light has turned off. If further trouble is experienced, the vehicle should not be driven at all but taken to Hvundai authorised repairer by a professional towing service.

B260J01S-EAT



## **Charging System Warn**ing Light

The charging system warning light should come on when the ignition is turned on, then go out when the engine is running. If the light stays on whilst the engine is running, there is a malfunction in the electrical charging system. If the light comes on whilst you are driving, stop, turn off the engine and check under the bonnet. First, make certain the generator drive belt is in place. If it is, check the tension of the belt.

And then, have the system checked by vour Hvundai authorised repairer.



#### **CAUTION:**

If the drive belt (generator belt) is loose, broken, or missing whilst the vehicle is driving, there may be a serious malfunction, engine could overheat because this belt also drives the water pump.

SB2100I-E



### **Door Ajar Warning** Liaht

The door aiar warning light indicates that a door is not correctly closed. Ensure that the light is extinguished prior to driving the vehicle.

5/31/04, 4:36 PM



## Low Fuel Level **Warning Light**

The low fuel warning light serves to warn the driver that the remaining fuel quantity is approximately 9 litres and that the vehicle should be refuelled. If the vehicle is driven for an extended period with the low fuel warning light illuminated there exists a possibility that misfiring due to fuel shortage may occur. This situation must be avoided to prevent damage to the catalyst occurring.



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B260B01B-EAT



## Hatchback Door Open Warning Light

This light remains on unless the hatchback door is completely closed and latched.

B260B01JM-EAT



### SRS (Airbag) Service Reminder Indicator (SRI)

The SRS service reminder indicator (SRI) comes on for about 6 seconds after the ignition key is turned to the "ON" position or after the engine is started, after which it will go out.

This light also comes on when the SRS is not working properly. If the SRI does not come on, or continuously remains on after operating for about 6 seconds when you turned the ignition key to the "ON" position or started the engine, or if it comes on whilst driving, have the SRS inspected by Hyundai authorised repairer.

B260N01A-EAT



## Malfunction Indicator Light

This light illuminates when there is a malfunction of an exhaust gas related component, and the system is not functioning properly so that the exhaust gas regulation values are not satisfied. This light will also illuminate when the ignition key is turned to the "ON" position, and will go out in a few seconds. If it illuminates whilst driving, or does not illuminate when the ignition key is turned to the "ON" position, take your car to your nearest Hyundai authorised repairer and have the system checked.

B260T01O-EAT



## 4WD System Warning Light (Not all models)

When the key is turned to the "ON" position, the 4WD(Four Wheel Drive) system warning light will come on and then go off in a few seconds.



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#### CAUTION:

If the 4WD system warning light ( ) blinks whilst driving, this indicates that there is a malfunction in the 4WD system. If this occurs, have your vehicle checked by Hyundai authorised repairer as soon as possible.







B260V01JM-GAT



### **4WD Lock Indicator Light** (If installed)

4WD (Four Wheel Drive) lock indicator light in the instrument cluster is illuminated when the 4WD lock switch is pushed.

The purpose of this switch is to increase the drive power when driving on dry road surface, wet pavement snow-covered roads and/or off-road. 4WD lock indicator light is turned off by pushing the switch once again



#### **CAUTION:**

Do not use 4WD lock switch on dry paved roads or highway, it can cause noise, vibration or damage of 4WD related parts.

B260E01HP-GAT



## **Seat Belt Reminder Light**

The seat belt reminder light blinks for about 6 seconds when the ignition key is turned from the "OFF" position to "ON" or "START".

B260Q01E-GAT



### **Cruise Indicator Light** (If installed)

The cruise indicator light in the instrument cluster is illuminated when the cruise control main switch on the end of the barrel is pushed.

The indicator light does not illuminate when the cruise control main switch is pushed a second time.

Information about the use of cruise control is beginning on page 1-81.

B260U01TB-EAT



### **Immobiliser Warning** Light

This warning light comes on for some seconds after the ignition key is turned to the "ON" position. At this time, you can start the engine. The light goes out after the engine is running. In case this light goes out before you start the engine, you must turn to the "LOCK" position and restart the engine. In case this light blinks for five seconds when the ignition key is turned to "ON" position, this indicates that the immobiliser system is out of order. At this time. consult to the Hyundai authorised repairer.





47 jmuk-1a.p65 5/31/04, 4:36 PM





B260S01B-GAT



#### Diesel Preheat Indicator Light

The indicator light illuminates amber when the ignition switch is placed at the "ON" position. The engine can be started after the preheat indicator light goes off. The illuminating time varies with the water temperature, air temperature and battery condition.

#### NOTE:

If the engine were not started within 10 seconds after the preheating is completed, turn the ignition key once more to the "LOCK" position, and then to the "ON" position, in order to preheat again.

B265A01B-GAT



## Fuel Filter Warning Light (Diesel Engine)

This light illuminates when the ignition switch is set to the "ON" position and goes off after the engine has started. If it lights up whilst the engine is running, it indicates that water has accumulated inside the fuel filter. If this happens, remove the water from the fuel filter. (Refer to 6-30 page)

B260K01O-GAT



## Engine Oil Level Warning Light (Diesel Engine)

This light is illuminated when the engine oil level should be checked. If the light comes on whilst the engine is running, take your vehicle to a level ground and keep the engine turned on for several minutes.

If it remains on, check the oil level. (See page. 6-6)

In case that the engine oil level is below the "L" mark, add engine oil. (See page. 6-7)



#### **CAUTION:**

If the light comes on after adding the engine oil, take your vehicle to your nearest Hyundai authorised repairer and have the system checked. The warning light can come on due to road and driving conditions and not necessarily indicates an insufficient amount of engine oil.

Even if this light doesn't come on, the engine oil should be checked and replaced at the intervals specified in the vehicle maintenance schedule in section 5.









#### **INSTRNMENT CLUSTER**

B270A01A-EAT

## BRAKE PAD WEAR WARNING SOUND

The front disc brake pads have wear indicators that should make a high-pitched squealing or scraping noise when new pads are needed. The sound may come and go or be heard all the time when the vehicle is moving. It may also be heard when the brake pedal is pushed down firmly. Excessive rotor damage will result if the worn pads are not replaced. See your Hyundai authorised repairer immediately.

B280A01A-AAT

#### **FUEL GAUGE**



The needle on the gauge indicates the approximate fuel level in the fuel tank. The fuel capacity is given in Section 9.

B290A02A-EAT

## COOLANT TEMPERATURE GAUGE





#### WARNING:

Never remove the radiator cap when the engine is hot. The engine coolant is under pressure and could erupt and cause severe burns. Wait until the engine is cool before removing the radiator cap.





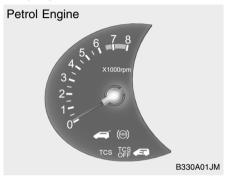


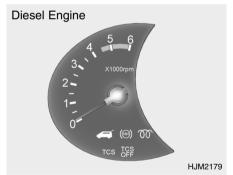
#### **1** CONTROLS AND EQUIPMENT

50

The needle on the engine coolant temperature gauge should stay in the normal range. If it moves across the dial to "H" (HOT), pull over and stop as soon as possible and turn off the engine. Then open the bonnet and check the coolant level and the water pump drive belt. If you suspect cooling system trouble, have your cooling system checked by Hyundai dealer as soon as possible.

## B330A03A-AAT TACHOMETER





The tachometer registers the speed of your engine in revolutions per minute (rpm).

## CAUTION:

The engine should not be raced to such a speed that the needle enters the red zone on the tachometer face. This can cause severe engine damage and may void your warranty.





#### B300A01Y-EAT

#### **SPEEDOMETER**



Your Hyundai's speedometer is calibrated in miles per hour and kilometers per hour.

51

B310B01JM-EAT

### **ODOMETER/TRIP ODOMETER**



B310B04JM

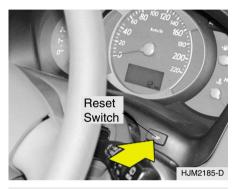
### 1. Odometer

The odometer records the total driving distance in miles and is useful for keeping a record for maintenance intervals.

It is normal for a new vehicle to have the odometer indicating less than 31miles.

### NOTE:

Any alteration of the odometer may void your warranty coverage.





## 2. Trip odometer

This mode indicates the drive distance travelled since the last drive time reset.







#### **1** CONTROLS AND EQUIPMENT

### 52 TRIP COMPUTER

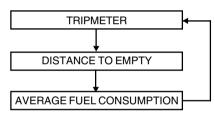
## B400B01JM-EAT (Not all models)



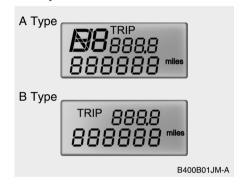
The trip computer is a microcomputercontrolled driver information gauge that displays information related to driving, such as a tripmeter, average fuel consumption and distance to empty on the LCD.

### **Trip Computer Switch**

- o The trip computer switch is used to zero the multi-functional display mode.
- Pushing in the trip computer switch behind the right side of the steering wheel changes the display as follows;



### 1. Tripmeter



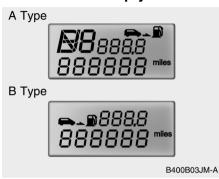
- o This mode indicates the total distance travelled since the last tripmeter reset. Total distance is also reset to zero if the battery is disconnected.
- Pressing the trip computer switch for more than 1 second, when the tripmeter is being displayed, clears the tripmeter to zero.
- o The meter's working range is from 0 to 621 miles.





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#### 2. Distance to Empty

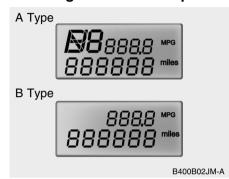


- This mode indicates the estimated distance to empty from the current fuel in the fuel tank and distance to empty symbol.
- When refueling with more than 8 liters, the trip computer will recognize refueling.
- o For an accurate distance to empty, drive more than 62miles.
- o When the distance to empty is less than 31miles, the symbol will always come on and the distance to empty digits will indicate with a flashing "----" symbol until more fuel is added.

#### NOTE:

- o The distance to empty can differ from the actual tripmeter according to driving conditions.
- The distance to empty can vary according to the driving conditions, driving pattern or vehicle speed.

#### 3. Average Fuel Consumption



- This mode calculates the average fuel consumption from the total fuel used and the distance since the last average consumption reset.
- o The total fuel used is calculated from the fuel consumption input.
- o For an accurate calculation, drive more than 0.31 miles.
- o The meter's working range is from 0.0 to 99.9 L/62 miles.







#### **MULTI FUNCTION SWITCH**

ZB120A1-E

## **Turn Signal Operation**

To signal an intention to turn right, the switch lever should be pressed down. To signal an intention to turn left, the switch lever should be pushed upwards. In both instances, the turn signal lamps on one side of the car will flash and the warning lamp located in the instrument cluster will flash in sympathy. Upon completion of the manoeuvre, the lever will, under normal circumstances, return to the "OFF" position. However, if the manoeuvre involved only a small movement of the steering wheel, the signal may need to be cancelled manually. If either turn signal indicator flashes more rapidly than normal or refuses to flash at all, a malfunction of the turn signal system may exist.

#### HPB220B1-E **Lane Change Signal**



To indicate an intention to change lanes, moving the lever slightly towards the direction of the relevant turn signal will cause the turn signal lights to flash. The lever will either return automatically or will need to be manually moved to the centre position when the lane change indication has been completed.

#### B340C03L-AAT **Headlight Switch**



To operate the headlights, turn the barrel on the end of the multi-function switch. The first position turns on the parking lights, sidelights, tail lights and instrument panel lights. The second position turns on the headlights.

#### NOTE:

The ignition must be in the "ON" position to turn on the headlights.



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### **Parking Light Auto Cut**

If you do not turn the parking lights "OFF" after driving, the parking light will automatically shut "OFF" when the driver's door is opened.

To turn them "ON" again you must simply turn the ignition key to the "ON" position.

ZB120D1-E

### High and low beam

To turn on the headlight high beams, push the lever forward (away from you). For low beams, pull the lever back (toward you). The appropriate headlight beam indicator light will come on at the same time.

#### ZB120E1-A **Headlight Flasher**



To flash the headlights, pull the switch lever toward you, then release it. The headlights can be flashed even though the headlight switch is in the "OFF" position.

#### B340G01L-GAT

## Auto Light (Not all models)



HJM2085-D

To operate the automatic light feature, turn the barrel on the end of the multifunction switch. If you set the multifunction switch to "AUTO", the tail lights and headlights will be turned automatically on or off according to external illumination.

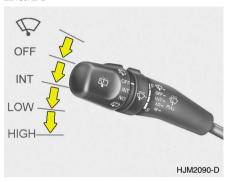






## WINDSCREEN WIPER AND WASHER SWITCH

ZB130A2-E



The windscreen wiper switch has three positions.

- 1. Intermittent operation
- 2. Low speed operation
- 3. High speed operation

### NOTE:

To prevent damage to the wiper system, do not attempt to wipe away heavy accumulations of snow or ice. Accumulated snow and ice should be removed manually. If there is only a light layer of snow or ice, operate the heater in the defrost mode to melt the snow or ice before using the wiper.

B350B01O-EAT

## **Windscreen Washer Operation**



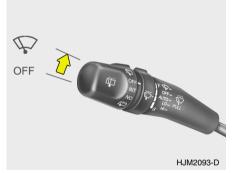
To use the windscreen washer, pull the wiper/washer lever toward the steering wheel. When the washer lever is operated, the wipers automatically make two passes across the windscreen. The washer continues to operate until the lever is released.

## NOTE:

In winter conditions where screen washericing occurs, a winter screen wash additive containing an antifreeze component may be used. Only fluids specifically intended for this purpose should be used. En-

sure that undiluted additive is not spilt upon the vehicle paintwork and that engine coolant anti-freeze is not used for this purpose or damage to the paintwork may occur.

## **Mist Wiper Operation**



If a single wipe is desired in mist, push the windscreen wiper and washer control lever upwards.





### OB140A1-E **Variable Intermittent Wipe**

**Facility** 



The variable intermittent wipe facility is operated by moving the windscreen wiper switch to the first position. The time period between wipes is adjusted by moving the rotary control on the windscreen wiper switch barrel. This is also varied automatically depending on your road speed.

B390A01E-EAT

## Hatchback door Wiper and Washer (Not all models)



1. : The hatchback door wiper starts to operate three times after the washer fluid sprays onto the rear window.

2.OFF

3.INT: The interval between wipes operates every 5 seconds intermittently.

4.ON: The hatchback door wiper starts to operate continuously.

5. (1) : The washer fluid will be sprayed onto the hatchback door and the wiper operates while the hatchback door wiper barrel is placed in this position.

Do not operate the washer continuously for more than 15 seconds or when the fluid reservoir is empty; this could damage the system. Do not operate the wiper when the window is dry; this can result in scratching as well as premature wiper blade wear.

For the reason stated above do not operate the washer when the washer fluid reservoir is empty.











## 58 FOG LIGHT SWITCH

#### B360B01A-EAT

## Front Fog Light Switch (Not all models)



To turn on the front fog lights, push the switch. They will light when the headlight switch is in the second position and the ignition key is in the "ON" position.

#### B360A01Y-DAT

## **Rear Fog Light Switch**



To turn on the rear fog lights, push the switch. They will light when the headlight switch is in the second position and the key is in the "ON" position.

## **HAZARD WARNING SYSTEM**

#### YB160A1-A



The hazard warning system should be used whenever you find it necessary to stop the car in a hazardous location. When you must make such an emergency stop, always pull off the road as far as possible.

The hazard warning lights are turned on by pushing in on the hazard switch. This causes all turn signal lights to blink. The hazard warning lights will operate even though the key is not in the ignition.

To turn the hazard warning lights off, push in on the switch a second time.







## **HEATED REAR WINDOW**

YB170A2-E



The rear window defogger is turned on by pushing in on the switch. At the same time, the rear window defogger indicator light on the switch is turned on. To turn the defogger off, push in on the switch a second time. The rear window defogger automatically turns itself off after about 15 minutes. To restart the defogger cycle, push in on the switch again after it has turned itself off.



## CAUTION:

The inside of the rear windscreen should never be cleaned with a hard or sharp implement since damage to the heating element may occur. The glass should only be cleaned with a soft cloth or chamois leather with the use only of a mild detergent or proprietary glass cleaner where necessary. Only horizontal movement of the cloth should be made when cleaning the glass and care should be exercised to ensure that the heating elements are not damaged by rings or jewellery whilst the glass is being cleaned.

### NOTE:

The ignition must be in the "ON" position for the heated rear window to operate.



## Windscreen wiper Blade De-icer (Not all models)



The windscreen wiper blade de-icer is turned on by pushing in the switch. To turn the de-icer off, push the switch a second time. The windscreen wiper blade de-icer automatically turns itself off after about 20 minutes.









## 60 DIGITAL CLOCK

#### ZB190A1-E



There are three control buttons for the digital clock. Their functions are:

- **HOUR** Push "H" to advance the hour indicated.
- **MIN** Push "M" to advance the minute indicated.
- **RESET** Push "R" to reset minutes to "00" to facilitate resetting the clock to the correct time.

When this is done: Pressing "R" between 10:30 and 11:29 changes the readout to 11:00 Pressing "R" between 11:30 and 12:29 changes the readout to 12:00

## **RHEOSTAT SWITCH**

### ZB200A1-E

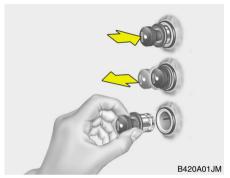
## (Not all models)



The panel lamps may be dimmed by use of the rheostat, turning the knob to decrease or increase the illumination intensity as required.

## **CIGAR LIGHTER**

#### B420A02A-EAT



For the cigar lighter to work, the key must be in the "ACC" position or the "ON" position.

To use the cigar lighter, push it all the way into its socket. When the element has heated, the lighter will pop out to the "ready" position.

Do not hold the cigar lighter pressed in. This can damage the heating element and create a fire hazard.

If it is necessary to replace the cigar lighter, use only a genuine Hyundai replacement or its approved equivalent.









## **POWER OUTLET**

## **ASHTRAY**

61



## CAUTION:

Do not use electric accessories or equipment other than the Hyundai genuine parts in the socket.





These are located in the quarter trim and on the rear main console.

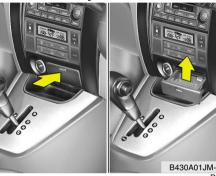
These supply 12V electric power to operate electric accessories or equipment only when the key is in the "ON" or "ACC" position.



## **CAUTION:**

Do not use the power outlet to connect electric accessories or equipment other than those designed to operate on 12 volts. B430A01E-AAT

## **Front Ashtray**



The front ashtray may be opened by pushing and releasing the ashtray lid. To remove the ashtray to empty or clean it, lift the ashtray upward and pull it out. The ashtray light will only illuminate when the external lights are on (If installed).







## 62 DRINK HOLDER

## B450A02O-GAT



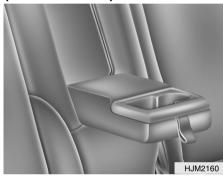
The drink holder is located on the main console for holding cups or cans.



## WARNING:

- Use caution when using the drink holders. A spilled beverage that is very hot can injure you or your passengers. Spilled liquids can damage interior trim and electrical components.
- o Do not place objects other than cups or drinks in the drink holder. Such objects can be thrown out in the event of a sudden stop or an accident, possibly injuring the passengers in the vehicle.

# B450B01JM-AAT Rear drink holder (Not all models)



The rear drink holders is located in the rear seat arm rest for holding cups or cans.

The rear drink holder can be used by pulling the rear seat armrest.



## **WARNING:**

Do not place objects other than cups or cans in the drink holder. This objects can be thrown out in the event of a sudden stop or an accident, possibly injuring the passengers in the vehicle.

## **SUNROOF**

#### YB240B2-E

## (Not all models) Sun Shade



Your HYUNDAI is equipped with a sliding sunshade which you can manually adjust to let in light with the sunroof closed, or to block sunlight.



## WARNING:

Never install or remove the sunshade whilst driving.





## **Opening the Sunroof System**



If your vehicle is equipped with this feature, you can slide or tilt your sunroof with the sunroof control buttons located on the overhead console.

The sunroof can only be opened, closed, ortilted when the ignition switch is in the "ON" position.

## Sliding the sunroof Auto slide open

To use the autoslide feature, momentarily (more than 1 second) press the SLIDE OPEN button on the overhead console. The sunroof will slide all the way open. To stop the sunroof sliding at any point, press any sunroof control button.

## Manual slide open

Press the SLIDE OPEN button on the overhead console for less than 0.5 second.

### Close

To close the sunroof, press the CLOSE button on the overhead console and hold it until the sunroof is closed.



## **WARNING:**

- Do not close a sunroof if anyone's hands, arms or body are between the sliding glass and the sunroof sash, as this could result in injury.
- o Do not place your head or arms out of the sunroof opening at any time.



## CAUTION:

- Do not open the sunroof in severely cold temperature or when it is covered with ice or snow.
- o Periodically remove any dirt that may have accumulated on the guide rails.
- o Do not press any sunroof control button longer than necessary.

  Damage to the motor or system components could occur.









64

#### B460C01JM-AAT

## **Tilting the Sunroof System**



## Auto tilt open

To use the auto tilt feature, momentarily (more than 1 second) press the TILT UP button on the overhead console. The sunroof will tilt all the way open. To stop the sunroof tilting at any point, press any sunroof control button.

## Manual tilt open

Press the TILT UP button on the overhead console for less than 0.5 second.

## Close

To close the sunroof, press the CLOSE button on the overhead console and hold it until the sunroof is closed.

## NOTE:

After washing the car or after there is rain, be sure to wipe off any water that is on the sunroof before operating it.

#### B460D03B-EAT

## **Manual Operation of Sunroof**

If the sunroof does not electrically operate:



1. Remove the rectangular plastic interior light lenses in the front overhead console by using a flat blade screwdriver as shown.









2. Turn the cross bolt counterclockwise to remove the front overhead console with a philips screwdriver.



- 3. Insert the hexagonal head wrench into the socket. This wrench can be found in the glove box.
- 4. Turn the wrench clockwise to open or counterclockwise to close.



## Resetting the sunroof

Whenever the vehicle battery is disconnected or discharged, or you use the emergency handle to operate the sunroof, you have to reset your sunroof system as follows:

- 1. Turn the ignition key to the ON position.
- 2. According to the position of the sunroof, do as follows.
  - 1) in case that the sunroof has closed completely or been tilted: Press the TILT UP button for 1 second.
  - 2) in case that the sunroof has slideopened: Press and hold the CLOSE button for more than 5 seconds until the sunroof has closed completely. And then press the TILT UP button for 1 second
- 3. Then, release it.





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66

4. Press and hold the TILT UP button once again until the sunroof has returned to the original position of TILT UP after it is raised a little higher than the maximum TILT UP position.

When this is complete, the sunroof system is reset.



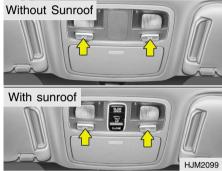
## CAUTION:

If the sunroof is not reset, it may not be operated properly.

## **INTERIOR LIGHT**

B480B01Y-AAT

## **Map Light**



Push in the map light switch to turn the light on or off. This light produces a spot beam for convenient use as a map light at night or as a personal light for the driver and the passenger.

## B490A01JM-AAT

## Interior light



The interior courtesy light has two buttons. The two buttons are:

### o DOOR

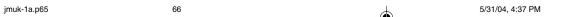
In the "DOOR" position, the interior courtesy light comes on when any door is opened regardless of the ignition key position. The light goes out gradually 6 seconds after the door is closed.

## o ON

In the "ON" position, the light stays on at all times. Do not leave this button pressed for an extended period of time when the vehicle is not running.







## **SPECTACLE CASE**

## **GLOVE BOX**

#### ONTHOLS AND EGOIF WENT

67

B491A02O-EAT



The spectacle case is located on the front overhead console.

Push the end of the cover to open the spectacle case.



## WARNING:

Do not keep objects such as sharp or unsuitable things inside the spectacle case. Such objects can be thrown out in the event of a sudden stop or an accident, possibly injuring the passengers in the vehicle.





## A W

## WARNING:

To avoid the possibility of injury in case of an accident or a sudden stop, the glove box door should be kept closed when the car is in motion.

- o To open the glove box, pull on the glove box release lever.
- o The glove box door can be locked (and unlocked) with the key.

B500B01O-AAT

## **Illuminated Glove Box**

Opening the glove box will automatically turn on the light when the multifunction switch is turned to the first/second position.





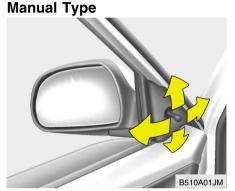
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## OUTSIDE REARVIEW MIRROR

## B510A01A-AAT



The outside rearview mirrors are equipped with a remote control for your convenience. It is operated by the control lever in the bottom front corner of the window.

Before driving away, always check that your mirrors are positioned so you can see directly behind you. When using the mirror, always exercise caution when attempting to judge the distance of vehicles behind or along side of you.

## CAUTION:

If the mirror control is jammed with ice, do not attempt to break it free using the control handle or by manipulating the face of the mirror. Use an approved spray de-icer (not radiator antifreeze) to release the frozen mechanism or move the vehicle to a warm place and allow the ice to melt.

## B510B01Y-EAT **Electric Type (Not all models)**



The outside rearview mirrors can be adjusted to your preferred rear vision, both directly behind the vehicle, and to the rear of the left and right sides.

The remote control outside rearview mirror switch controls the adjustments for both right and left outside mirrors.

## To adjust the position of either mirror:

 Move the selecting switch to the right or left to activate the adjustable mechanism for the corresponding door mirror.







Adjust mirror angle by depressing the appropriate perimeter switch as illustrated.



## CAUTION:

- o Do not operate the switch continuously for an unnecessary length of time.
- o Scraping ice from the mirror face could cause permanent damage. To remove any ice, use a sponge, soft cloth or approved de-icer.



## WARNING:

Be careful when judging the size or distance of any object seen in the passenger side rearview mirror. It is a convex mirror with a curved surface. Any objects seen in this mirror are closer than they appear.

YB270C1-E

## OUTSIDE REARVIEW MIRROR HEATER (Not all models)



The outside rearview mirror heater is actuated in connection with heated rear window. So, to heat the outside rearview mirror glass, push in the switch for heated rear window.

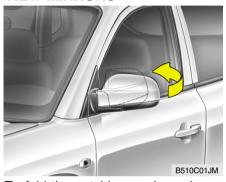
The rearview mirror glass will be heated for defrosting or defogging and will give you improved rear vision in all weather conditions.

Push the switch again to turn the heater off.

The outside rearview mirror heater automatically turns itself off after 15 minutes.

YB270D2-E

## FOLDING THE OUTSIDE REAR-VIEW MIRRORS



To fold the outside rearview mirrors, push them towards the rear.

The outside rearview mirrors can be folded rearward for parking in restricted areas.



## WARNING:

Do not adjust or fold the outside rearview mirrors whilst the vehicle is moving. This could result in loss of control, and an accident causing death, serious injury or property damage.





## 70 DAY/NIGHT INSIDE REARVIEW MIRROR

SB370A1-E



The interior mirror is of the day/night type to enable the glare of headlights from following vehicles to be eliminated during night time driving.

The tab located at the bottom of the mirror should be set to the position nearest the windscreen for normal day time driving, and flipped towards the rear of the vehicle to eliminate glare during night time driving. To adjust the field of vision, the mirror may be moved by hand upon the mounting.

### NOTE:

The mirror should always be adjusted prior to setting the vehicle in motion.

B520C01JM-GAT

# AUTOMATIC DIMMING REAR VIEW MIRROR WITH COMPASS (Not all midels)



Automatic dimming rear view mirror controls automatically the glare of headlights of the car behind you when it turned on by pushing the "MIRROR" button.

It is turned off by pushing the button once more.



## CAUTION:

When cleaning the mirror, use a paper towel or similar material dampened with glass cleaner. Do not spray glass cleaner directly on the mirror as that may cause the liquid cleaner to enter the mirror housing.

## 1.To operate Compass feature

Compass is a convenient feature which displays compass heading of vehicle.



### 2."COMP" switch

Push the "COMP" lower part of mirror, then the vehicle's directional heading will be displayed. Pushing the "COMP" again will turn off the display.

Heading display

- E : East - W : West - S : South - N : North

ex) NE: North East

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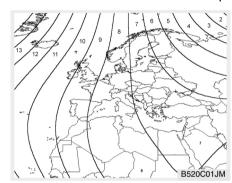
## 3. Calibration procedure

If the display reads "C", calibrate the compass.

- Driving the vehicle in a circle at less than 8km/h 3 times or until the compass heading appears.
- Driving in a circle in right-handed direction and opposite direction are possible, and if the calibration is completed, the compass heading will appear.
- Keep driving in a circle until a compass heading appears.

## 4. Setting the compass zone

1. Find your current location and variance zone number on the zone map.



- 2. Press the "COMP" button for more than 3 seconds. The current zone number will appear in the display.
- Press the "COMP" button until the new zone number appears in the display. After you stop pressing the button in, the display will show a compass direction within a few seconds.



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## **CAUTION:**

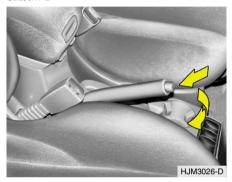
- Do not install the ski rack, antenna, etc. which are attached to the vehicle by means of a magnet. They affect the operation of the compass.
- 2. If the compass deviates from the correct indication soon after repeated adjustment, have the compass checked at Hyundai authorised repairer.
- 3. The compass may not indicate the correct compass point in tunnels or while driving up or down a steep hill.
  - (The compass returns to the correct compass point when the vehicle moves to an area where the geomagnetism is stabilized.)





## 72

#### OB290A1-E



Always engage the parking brake before leaving the car. This also turns on the parking brake indicator light when the key is in the "ON" or "START" position. Before driving away, be sure that the parking brake is fully released and the warning light is off.

- o To engage the parking brake, apply the foot brake and pull up the lever as far as possible.
- o To release the parking brake, apply the foot brake and pull up the lever slightly. Then, whilst holding the thumb button in, lower the brake lever.

## **HATCHBACK DOOR**

#### B540A01JM-EAT



- o Pull and raise the "DOOR" release lever to open the hatchback door.
- To close, lower the door, then press down on it until it locks. To be sure the door is securely fastened, always try to pull it up again.

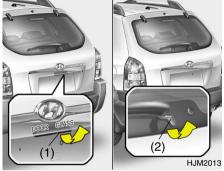
## WARNING:

The hatchback door should always be kept completely closed while the vehicle is in motion. If it is left open or ajar, poisonous exhaust gases may enter the car resulting in serious illness or death to the occupants. See additional warnings concerning exhaust gases on page 2-2.

## **PARKING BRAKE**

#### B540B01JM-EAT

## **Hatchback door Window**



- o Pull the "GLASS" release lever (1) to open the hatchback door window glass, and raise the window open lever (2).
- To close the hatchback door window, lower the hatchback door window, and it will close by itself.
   To be sure the hatchback door window is securely fastened, always try to pull it up again.

### NOTE:

The hatchback door window lock is operated in connection with the hatchback door lock. To open the hatchback door window make sure the hatchback door is unlocked with a key or the central door locking switch.







## **LUGGAGE COMPARTMENT**

B540C01JM-EAT

## LUGGAGE COMPARTMENT LIGHT



Luggage compartment light has a 3-position switch. The three positions are:

- o In the "DOOR" position, the luggage compartment light comes on when the hatchback door is opened, then goes out when it is closed.
- o In the "ON" position, the light stays on at all times.
- o In the "OFF" position, the light stays off at all times.

B545A01JM-GAT

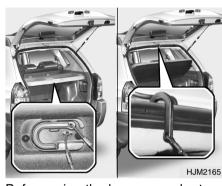
## **HOW TO USE LUGGAGE ROOM**

B650A01JM-GAT

## Cargo Area Cover (Not all models)



Nothing should be carried on top of the luggage cover. Loose materials could result in injury to vehicle occupants during sudden braking.



Before using the luggage under tray, hang the cargo area cover hook to the weather strip. Place the cargo area cover hook back into its normal stowed position while not in use.







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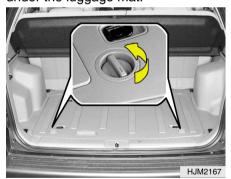
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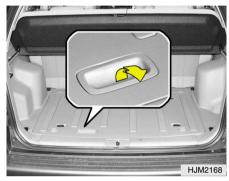
### B545B01JM-GAT

## **Luggage Under Tray**



There is a multipurpose storage area under the luggage mat.





Before using the luggage under tray, remove the luggage mat. And turn the lever toward "UNLOCK".

Raise the luggage under tray cover while holding the grip. After using it lock the luggage under tray cover to turn the lever toward "LOCK".

## **Luggage Side Trim**



There is a storage area to accept small commodities in the luggage side trim.



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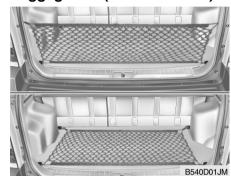


## **ROOF RACK**

75

#### B540D02HP-DAT

## Luggage Net (Not all models)



Some objects can be kept in the net at the luggage compartment.

Use the luggage net on the floor or at the back of the luggage compartment to prevent objects from sliding.



## **CAUTION:**

To prevent damage to the goods or the vehicle, care should be taken when carrying fragile or bulky objects in the luggage compartment.



## **WARNING:**

Avoid eye injury. DO NOT overstretch. ALWAYS keep face and body out of recoil path. DO NOT use when strap has visible signs of wear or damage.



## (Not all models)



If your Hyundai has a roof rack, you can load things on top of your vehicle. Crossrails and fixing components to adapt the roof rack on your vehicle may be obtained from Hyundai authorised repairer.









76



## CAUTION:

o The following specifications are recommended when loading cargo or luggage.

	165 lb (75 kg)
RACK	EVENLY DISTRIBUTED

- o Loading cargo or luggage above 34 kg (75 lb) on the roof rack may damage your vehicle.
  When you carry large objects, never let them hang over the rear or the sides of your vehicle.
- o To prevent damage or loss of cargo as you are driving, check frequently to make sure the luggage carrier and cargo are still securely fastened.
- o Always drive your vehicle at a moderate speed.

- o To use the roof rails as a roof rack, you must fit the roof rails with two or more crossrails or equivalent before carrying cargo or lugguage on the roof.
- o When crossrail is adapted, you can load items on the roof rack.
- Loading cargo or luggage over specification on the roof rack may damage stability of your vehicle.

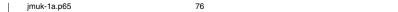
## HIGH-MOUNTED REAR STOP LIGHT

B550A01A-EAT



In addition to the lower-mounted rear stoplights on either side of the car, the high mounted rear stoplight in the centre of the rear window also lights when the brakes are applied.







5/31/04, 4:38 PM

## REMOTE FUEL-FILLER FLAP RELEASE

JB360A1-E



The fuel-filler flap may be opened from inside the vehicle by pulling up on the fuel-filler flap opener located on the front floor area on the right side of the car.

### NOTE:

If the fuel-filler flap will not open because ice has formed around it, tap lightly or push on the lid to break the ice and release the lid. Do not lever the flap. If necessary, spray around the flap with an approved de-icer fluid (do not use radiator anti-freeze) or move the vehicle to a warm place and allow the ice to melt.



## W

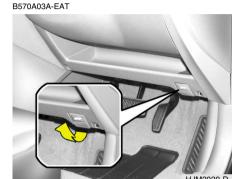
## **WARNING:**

Fuel vapors are dangerous. Before refueling, always stop the engine and never allow sparks or open flames near the filler area. If you need to replace the filler cap, use a genuine Hyundai replacement part. If you open the fuel filler cap during high ambient temperatures, a slight "pressure sound" may be heard. This is normal and not a cause for concern.

Whenever you open the fuel filler cap, turn it slowly.

## **BONNET RELEASE**

77



1. Pull the release knob to unlatch the bonnet.









78

2. Push the safety catch lever to the left and lift the bonnet.



3. Hold the bonnet open with the support rod.

Before closing the bonnet, return the support rod to its clip to prevent it from rattling. Lower the bonnet until it is about 1 ft. (30 cm) above the closed position and let it drop. Make sure that it locks into place.



## CAUTION:

Make sure that the support rod has been released prior to closing the bonnet.



## **WARNING:**

- o Always double check to be sure that the bonnet is firmly latched before driving away. If it is not latched, the bonnet could fly open whilst the vehicle is being driven, causing a total loss of visibility, which might result in an accident.
- o The support rod must be inserted completely into the hole provided in the bonnet whenever you inspect the engine compartment. This will prevent the bonnet from falling and possibly injuring you.
- Do not move the vehicle with the bonnet in the raised position, as vision is obstructed and the bonnet could fall or be damaged.

## **SUN VISOR**

B580A01E-EAT



Sun visors are fitted to both the driver and passenger side of the vehicle. Certain derivatives are equipped with a vanity mirror which is located on the back of the driver and passenger visor. The visor may be lowered to reduce the amount of glare from directly ahead, or may be moved towards the side window to reduce glare from the side of the vehicle, once the inner pivot has been unclipped from the bracket.



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## FRONT DOOR EDGE **WARNING LIGHT**

79

B620A01S-EAT

(Not all models)



A red light comes on when the front door is opened. The purpose of this light is to assist when you get in or out and also to warn passing vehicles.

## NOTE:

The Supplemental Restraint System (SRS) label containing useful information can be found on the back of each sun visor.



## WARNING:

Do not place the sun visor in such a manner that it obscures visibility of the roadway, traffic or other objects.





The ticket holder is provided on the front of the sun visor for holding a tollgate ticket.





79 jmuk-1a.p65



5/31/04, 4:38 PM



## 80 HORN

## B610A01A-DAT



Press the centre hub of the steering wheel to sound the horn.

## **PACKAGE ARM REST**

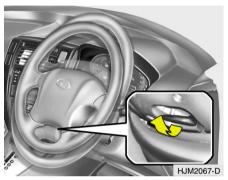
## YB830A1-E (Not all models)



The package arm rest is located in the centre of rear seat back.

## **STEERING WHEELTILT LEVER**

#### SB520A1-F



To adjust the steering wheel:

- 1. Push the lever downward to unlock.
- 2. Raise or lower the steering wheel to the desired position.
- 3. After adjustment, securely tighten the lever by pulling it upward



## WARNING:

Do not attempt to adjust the steering wheel while driving as this may result in loss of control of the vehicle and result in death or serious injury.









## **CRUISE CONTROL**

81

## HEADLIGHT LEVELING DEVICE SYSTEM

B340G01O-EAT



To adjust the headlight beam level according to the number of the passengers and the loading weight in the luggage area, turn the beam leveling switch.

The higher the number of the switch position, the lower the headlight beam level. Always keep the headlight beam at the proper leveling position, or headlights may dazzle other road users.

Listed below are the examples of recommeneded switch settings. For loading conditions other than those listed below, adjust the switch position so that the beam level may be the nearest as the condition obtained according to the list.

LOADING CONDITION	Switch position	
LOADING CONDITION	(2WD/4WD)	
Driver Only	0	
Driver + Front Passenger	0	
Driver + Front Passenger +	1	
Farthest Rear Seat Full		
Full Passengers	1	
Full Passengers +	2	
Maximum Permissible		
Loading		
Driver + Maximum	3	
Permissible Loading		





The cruise control system provides automatic speed control for your comfort when driving on freeways, tollroads, or other noncongested highways. This is designed to function above approximately 25 mph (40 km/h).





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5/31/04, 4:38 PM



82

#### B660B01E-AAT

## To Set the Cruise Speed



- 1. Push in the cruise control main switch on the end of the barrel. The "CRUISE" indicator light in the instrument cluster will be illuminated. This turns the system on.
- 2. Accelerate to the desired cruising speed above 25 mph (40 km/h).
- 3. Push the control switch downward to "SET (COAST)" and release it.
- 4. Remove your foot from the accelerator pedal and the desired speed will automatically be maintained.

5. To increase speed, depress the accelerator pedal enough for the vehicle to exceed the preset speed. When you remove your foot from the accelerator pedal, the vehicle will return to the speed you have set.

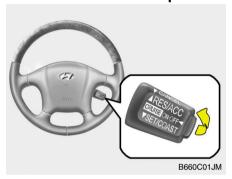


## WARNING:

To avoid accidental cruise control engagement, keep the cruise control main switch off when not using the cruise control

B660C04E-AAT

## To Cancel the Cruise Speed



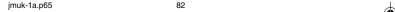
To disengage the cruise control system, pull the control switch toward the steering wheel to the "CANCEL" position. Additionally, the following actions will disengage the system:

- o Depress the brake pedal.
- o Depress the clutch pedal (Manual transaxle).
- o Shift the selector lever to "P" or "N" position (Automatic transaxle).
- o Decrease the vehicle speed to less than 25 mph (40 km/h).
- o Release the main switch.

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#### B660D01E-AAT

## To Resume the Preset Speed



The vehicle will automatically resume the speed set prior to cancellation when you push the control switch upward to the "RESUME (ACCEL)" position and release it, providing the vehicle speed is above 25 mph (40 km/h).

B660E01E-AAT

## To Reset at a Faster Speed

- Push the control switch upward to the "RESUME (ACCEL)" position and hold it.
- 2. Accelerate to desired speed and release the control switch. While the control switch is held, the vehicle will gradually gain speed.

B660F02E-AAT

## To Reset at a Slower Speed



- 1. Push the control switch downward to "SET (COAST)" position and hold it. The vehicle will decelerate.
- When the desired speed is obtained, release the control switch. While the control switch is pushed, the vehicle speed will gradually decrease.



### **WARNING:**

- o Keep the main switch off when not using the cruise control.
- o Use the cruise control system only when traveling on open highways in good weather.
- o Do not use the cruise control when it may not be safe to keep the car at a constant speed, for instance, driving in heavy or varying traffic, or on slippery (rainy, icy or snow-covered) or winding roads or over 6% up-hill or downhill roads.





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84

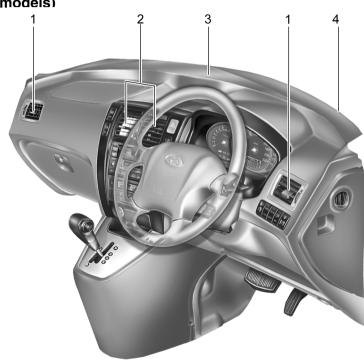
- o Pay particular attention to the driving conditions whenever using the cruise control system.
- o During cruise-control driving with a manual transaxle vehicle, do not shift into neutral without depressing the clutch pedal, or the engine will be overrevved. If this happens, depress the clutch pedal or release the main switch.
- o With the cruise control engaged, when the brake pedal is applied, it is normal to hear the cruise control system deactivate. This is an indication of normal system operation.
- o During normal cruise control operation, when the "SET(COAST)" is activated or reactivated after applying the brakes, the cruise control will energize after approximately 3 seconds. This delay is normal.

•



## **HEATING AND COOLING CONTROL**

B710A01JM-EAT
(Not all models)



- 1. Side Ventilator
- 2. Centre Ventilator
- 3. Windscreen Defroster Nozzle
- 4. Side Defroster Nozzle

B710B02O-EAT

### Centre Ventilator

The centre ventilators are located in the middle of the dashboard. To change the direction of the air flow, move the knob in the centre of the vent up-and-down and side-to-side. The vents are opened when the vent knob is moved to "\$\subseteq " position. The vents are closed when the vent knob is moved to "\$\subseteq " position. The vents are closed when the vent knob is moved to "\$\subseteq ". Keep these vents clear of any obstructions.

B710C02HP-EAT

## **Side Ventilator**

The side ventilators are located on each side of the dashboard. To change the direction of the air flow, move the knob in the centre of the vent up-and-down and side-to-side. The vents are opened when the vent knob is moved to "\$\equiv " position. The vents are closed when the vent knob is moved to "\$\times " \text{ Keep these vents clear of any obstructions.}

B710A02JM-D

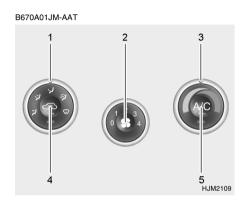
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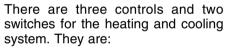






## 86 HEATING AND VENTILATION





- 1. Air flow control
- 2. Fan speed control
- 3. Temperature control
- 4. Air intake control switch
- 5. Air conditioning switch

B670B01A-AAT

## Fan Speed Control (Blower Control)



This is used to turn the blower fan on and off and to select the fan speed. The blower fan speed, and therefore the volume of air delivered from the system, may be controlled manually by setting the blower control between the "1" and "4" position.

B670C02E-EAT

## **Air Intake Control**



HJM211

This is used to select fresh outside air or recirculating inside air.

To change the air intake control mode, (Fresh mode, Recirculation mode) push the control button.

FRESH MODE ( ): The indicator light on the button goes off when the air intake control is fresh mode.

RECIRCULATION MODE (): The indicator light on the button is illuminated when the air intake control is recirculation mode.









With the "Fresh" mode selected, air enters the vehicle from the outside and is heated or cooled according to the function selected.

With the "Recirculation" mode selected, air from within the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

### NOTE:

- o It should be noted that prolonged operation of the heating in "Recirculation" mode ( ) will give rise to fogging of the windscreen and side windows and the air within the passenger compartment will become stale. In addition, prolonged use of the air conditioning with the "Recirculation" mode ( ) selected may result in the air within the passenger compartment becoming excessively dry.
- o When the ignition switch is turned "ON" the air intake control will change to "Fresh" mode ( ) in floor, floor-defrost and defrost position. This is normal operation.

## B670D01L-EAT Air Flow Control



HJM2110

This is used to direct the flow of air. Air can be directed to the floor, dashboard outlets, or windscreen. Five symbols are used to represent Face, Bi-Level, Floor, Floor-Defrost and Defrost air position.

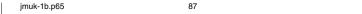


Face-Level

Selecting the "Face" mode will cause air to be discharged through the face level vents.











88





Air is discharged through the face vents and the floor vents. This makes it possible to have cooler air from the dashboard vents and warmer air from the floor outlets at the same time.



Floor-Level

Air is discharged through the floor vents, windscreen defroster nozzle, side defroster nozzle and side ventilator.



## Floor-Defrost Level

Air is discharged through the windscreen defroster nozzle, the floor vents, side defroster nozzle and side ventilator.

If the "Floor-Defrost" mode is selected, the A/C will be turned on automatically and "Fresh" mode will be activated.





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## **HEATING CONTROLS**

89







## **Defrost-Level**

Air is discharged through the windscreen defroster nozzle, side defroster nozzle and side ventilator. If the "Defrost" mode is selected, the A/C will be turned turn on automatically and "Fresh" mode will be activated to improve windscreen defrosting.



## **Temperature Control**



This control is used to adjust the degree of heating or cooling desired.

B690A01E-AAT



B690A01JM

For normal heating operation, set the air intake control to the fresh air ( ) position and the air flow control to the floor ( ) position.

For faster heating, the air intake control should be set in the recirculate (=) position.

If the windows fog up, set the air flow control to the defrost ( ) position. (The A/C will be on automatically and "Fresh" mode will be activated.)

For maximum heat, move the temperature control to "Warm".







## **BI-LEVEL HEATING**

**VENTILATION** 

## **DEFROSTING/DEFOGGING**





B700A01JM

Your Hyundai is equipped with bi-level heating controls. To use this feature:

- o Set the air intake control to the fresh air ( ) position.
- o Set the air flow control at the bi-level (نترا) position.
- o Adjust the fan speed control to the desired speed.
- o Set the temperature control between "Cool" and "Warm".





B710A01JM

To operate the ventilation system:

- o Set the air intake control to "Fresh" mode ( ).
  o To direct all intake air to the dash-
- board vents, set the airflow control to "Face" ( 7).
- o Adjust the fan speed control to the desired speed.
- o Set the temperature control between "Cool" and "Warm".

B720A04S-EAT



Use the heating/ventilation system to defrost or defog the windscreen:

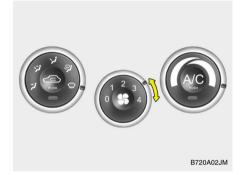
## To remove interior fog on the windscreen:

- o Set the air flow control to the defrost ( ) position. (The A/C will be turned on automatically and "Fresh" mode will be activated.)
- o Set the temperature control to the desired position.
- o Set the fan speed control between "1" and "4" position.









## To remove frost or exterior fog on the windscreen:

- o Set the air flow control to the defrost (viii) position. (The A/C will be turned on automatically and "Fresh" mode will be activated.)
- o Set the temperature control to the warm.
- o Set the fan speed control to position "3" or "4".

## NOTE:

When the A/C is operated continuously on the floor-defrost level (\*\*) or defrost level ( , it may cause fog to form on the exterior windscreen by the temperature difference. At this time set the air flow control to the face level position (す) and fan speed control to the low position.

#### B730A01L-EAT

## **Operation Tips**

- o To keep dust or unpleasant fumes from entering the car through the ventilation system, temporarily set the air intake control to ( ). Be sure to return the control to ( ) when the irritation has passed to keep fresh air in the vehicle. This will help keep the driver alert and comfortable.
- o Air for the heating/cooling system is drawn in through the grilles just ahead of the windscreen. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- o To prevent interior fog on the windscreen, set the air intake control to the fresh air ( ) position, fan speed to the desired position, turn on the air conditioning system, and adjust temperature control to desired temperature.









## AIR CONDITIONING SYSTEM

B740A01S-AAT

#### **Air Conditioning Switch** (Not all models)



The air conditioning is turned on or off by pushing the A/C button on the heating/air conditioning control panel.

B740B01S-AAT

#### **Air Conditioning Operation for** Cooling



To use the air conditioning to cool the interior:

- o Set the side vent control to "OFF", to shut off outside air entry.
- o Turn on the fan control switch.
- o Turn on the air conditioning switch by pushing on the switch. The air conditioning indicator light should come on at the same time.
- o Set the air intake control to "Fresh" mode (🕮).

- o Set the temperature control to "Cool". ("Cool" provides maximum cooling. The temperature may be moderated by moving the control toward "Warm".)
- o Adjust the fan control to the desired speed. For greater cooling, turn the fan control to one of the higher speeds or temporarily select the "Recirculation ( )" position on the air intake control.





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B740C01S-AAT

#### **Dehumidified Heating**

For dehumidified heating:

- o Turn on the fan control switch.
- o Turn on the air conditioning switch. The air conditioning indicator light should come on at the same time.
- o Set the air intake control to the "Fresh" mode ( ).
- o Set the air flow control to the "Face" (デ).
- o Adjust the fan control to the desired speed.
- o For more rapid action, set the fan at one of the higher speeds.
- Adjust the temperature control to provide the desired amount of warmth.

B740D01A-AAT

## **Operation Tips**

- o If the interior of the car is hot when you first get in, open the windows for a few minutes to expel the hot air.
- o When you are using the air conditioning system, keep all windows closed to keep hot air out.
- o When moving slowly, as in heavy traffic, shift to a lower gear. This increases engine speed, which in turn increases the speed of the air conditioning compressor.
- On steep grades, turn the air conditioning off to avoid the possibility of the engine over-heating.
- o During winter months or in periods when the air conditioning is not used regularly, run the air conditioning once every month for a few minutes. This will help circulate the lubricants and keep your system in peak operating condition.







## AUTOMATIC HEATING AND COOLING CONTROL SYSTEM

B970A01Y-AAT

## (Nor all models)

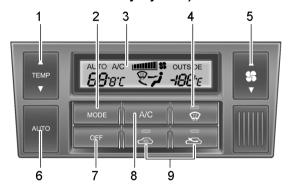
Your Hyundai is equipped with an automatic heating and cooling control system controlled by simply setting the desired temperature.

B970B01JM-GAT

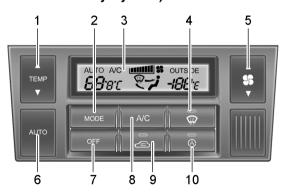
## **Heating and Cooling Controls**

- 1. Temperature Control Switch
- 2. Air Flow Control Switch
- 3. Display Window
- 4. Defroster Switch
- 5. Blower Fan Control Switch
- 6. AUTO (Automatic Control)Switch
- 7. OFF Switch
- 8. Air Conditioning Switch
- 9. Air Intake Control Switch
- 10.Air Quality System Switch (Not all models)

#### TYPE A (Without A.Q.S: Air Quality System)



#### TYPE B (With A.Q.S: Air Quality System)



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B970B01JM

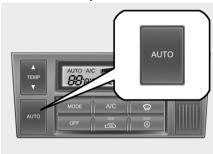
B970B02JM

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B970C001JM-EAT

## **Automatic Operation**



HJM2124

The FATC (Full Automatic Temperature Control) system automatically controls heating and cooling by doing as follows:

 Push the "AUTO" button. The indicator light will illuminate confirming that the Face, Floor and/or Bi-Level modes as well as the blower speed and air conditioner will be controlled automatically.



HJM2126

2. Push the "TEMP" button to set the desired temperature.

The temperature will increase to the maximum 90°F(32°C) by pushing the "▲" button. Each push of the button will cause the temperature to increase by 1°F(0.5°C).

The temperature will decrease to the minimum 62°F(17°C) by pushing the "▼" button. Each push of the button will cause the temperature to decrease by 1°F(0.5°C).

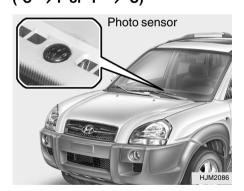
#### NOTE:

If the battery has been discharged or disconnected, the temperature mode will reset to Centigrade degrees.

This is a normal condition and you can change the temperature mode from Centigrade to Farenheit as follows;

Press the "TEMP" down button and "AUTO" button simultaneously for 3 secs. The display shows that the unit of temperature is adjusted to Centigrade or Fahrenheit. (°C  $\rightarrow$ °F or °F  $\rightarrow$  °C)









#### NOTE:

Never place anything covering the photo sensor which is located on the instrument panel to ensure better control of the heating and cooling system.

#### B980A01Y-AAT

#### **MANUAL OPERATION**

The heating and cooling system can be controlled manually as well by pushing buttons other than the "AUTO" button. In this state, the system sequentially works according to the order of buttons selected.

The function of the buttons which are not selected will be controlled automatically.

Press the "AUTO" button in order to convert to automatic control of the system.

#### B980B01Y-AAT

## **Fan Speed Control Switch**



HJM21

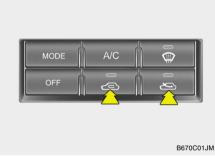
The fan speed can be set to the desired speed by pressing the appropriate fan speed control button. The higher the fan speed is, the more air is delivered. Pressing the "OFF" button turns off the fan.





B670C02Y-EAT

# Air Intake Control Switch (Without A.Q.S)



This is used to select fresh outside air or recirculation inside air.

To change the air intake control mode, (Fresh mode, Recirculation mode) push the control button.

FRESH MODE ( ): The indicator light on the button goes on when the air intake control is fresh mode.

**RECIRCULATION MODE** ( ): The indicator light on the button is illuminated when the air intake control is recirculation mode.

With the "Fresh" mode selected, air enters the vehicle from the outside and is heated or cooled according to the function selected.

With the "Recirculation" mode selected, and air from within the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

#### NOTE:

o It should be noted that prolonged operation of the heating system in "recirculation" mode will give rise to fogging of the windscreen and side windows and the air within the passenger compartment will become stale. In addition, prolonged use of the air conditioning with the "Recirculation" mode selected may result in the air within the passenger compartment becoming excessively dry.

o When the ignition switch is turned "ON" the air intake control will change to " " mode (regardless of switch position). This is normal operation. The air intake control operates in "AUTO" mode when turning the ignition to the ON position if the "AUTO" mode was used before shutting off the engine.



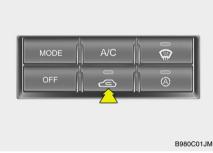






B980C01JM-EAT

# Air Intake Control Switch (With A.Q.S) (Not all models)



This is used to select fresh outside air or recirculate inside air automatically.

\_\_ : OFF \_\_ : ON

Fresh Mode :

Air enters the vehicle from the outside and is heated or cooled according to the function selected.

Recirculation Mode :

Air from within the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.



Air enters the vehicle from the outside. But if exhaust gas enters the vehicle from the outside, the exhaust gas cutoff mode ( ) is automatically converted to the ( ) mode, to prevent exhaust gas from entering the vehicle.

#### NOTE:

- o It should be noted that prolonged operation of the heating system in recirculation mode ( ) will give rise to misting of the windscreen and side windows and the air within the passenger compartment will become stale. In addition, prolonged use of the air conditioning with the recirculation mode ( ) selected may result in the air within the passenger compartment becoming excessively dry.
- o When the ignition switch is turned "ON" the air intake control will change to (♣ ♠) mode except for the case you turned "OFF" the ignition switch in A.Q.S mode (♣ ♠) beforehand. This operation

is normal. The air intake control is operated in "AUTO" mode when turning the ignition to the "ON" position if the "AUTO" mode was used before shutting off the engine.



If the windows fog up with the Recirculation or A.Q.S mode selected, set the air intake control to the Fresh air position or A.Q.S control to "OFF".

B980D01Y-AAT

#### **Heating and Cooling System Off**

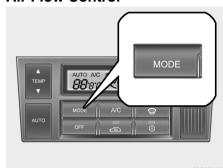
Press the "OFF" button to stop the operation of the heating and cooling system.







# B980E01E-EAT Air Flow Control



This is used to direct the flow of air. Air can be directed to the floor, dashboard outlets, or windscreen. Four symbols are used to represent Face, Bi-Level, Floor and Floor-Defrost air position.



#### Face-Level When selecting the "Face" mode, the indicator light will come on, causing air to be discharged through the face level

vents.



**Bi-Level** When selecting the "Bi-Level" mode, the indicator light will come on and the air will be discharged through the face vents and the floor vents.



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#### **1** CONTROLS AND EQUIPMENT

100



## Floor-Level

When selecting the "Floor-Level" mode, the indicator light will come on and the air will be discharged through the floor vents, windscreen defroster nozzle, side defroster nozzle and side ventilator.



## Floor-Defrost Level

When selecting the "Floor-Defrost" mode, the indicator light will come on and the air will be discharged through the windscreen defrost vents, the floor vents and side defroster nozzle and side ventilator.

B980F01JM-EAT

#### **Defrost Switch**



B980F01JM

When the "Defrost" button is pressed, the ( ) mode will be automatically selected and the air will be discharged through the windscreen defrost nozzle, side defroster nozzle and side ventilator. To assist in defrosting, the air conditioning will operate if ambient temperature is higher than 2°C, and automatically turns off if the ambient temperature drops below 2°C.



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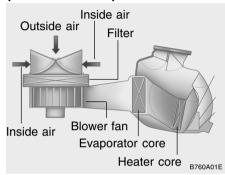
#### CONTROLS AND EQUIPMENT 1

101

# AIR CONDITIONER FILTER (IN FRONT OF BLOWER UNIT)

B760A03E-GAT

## (Not all models)



The air conditioner filter is located in front of the blower unit behind the glove box.

It operates to decrease the amount of pollutants entering the car.

To replace the air conditioner filter, refer to the page 6-23.



#### **CAUTION:**

- o Replace the filter every 10,000 mile or 12 months. If the car is being driven in severe conditions such as dusty, rough roads, more frequent air conditioner filter inspections and changes are required.
- o When the air flow rate is decreased, it must be checked by Hyundai authorised repairer.





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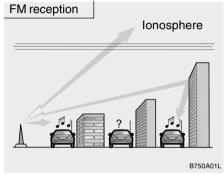
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#### 102 STEREO SOUND SYSTEM

#### B750A02A-AAT

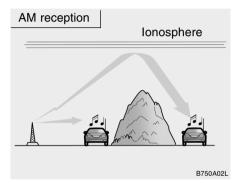
#### **How Car Audio Works**



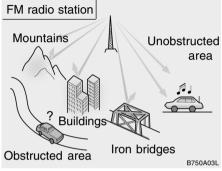
AM and FM radio signals are broadcast from transmitter towers located around your city. They are intercepted by the radio antenna on your car. This signal is then received by the radio and sent to your car speakers.

When a strong radio signal has reached your vehicle, the precise engineering of your audio system ensures the best possible high quality reproduction. However, in some cases the signal coming to your vehicle is not strong and clear. This can be due to factors such as the distance from the radio station, closeness of other strong ra-

dio stations or the presence of buildings, bridges or other large obstructions in the area.



AM broadcasts can be received at greater distances than FM broadcasts. This is because AM radio waves are transmitted at low frequency. These long, low frequency radio waves can follow the curvature of the earth rather than travelling straight out into the ionosphere. In addition, they curve around obstructions so that they can provide better signal coverage.



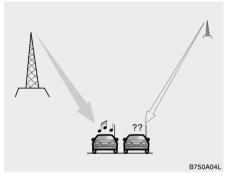
FM broadcasts are transmitted at high frequency and do not bend to follow the earth's surface. Because of this, FM broadcasts generally begin to fade at short distances from the station. Also, FM signals are easily affected by buildings, mountains, or other obstructions. These can result in certain listening conditions which might lead you to believe a problem exists with your radio. The following conditions are normal and do not indicate radio trouble:

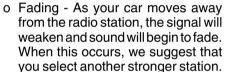


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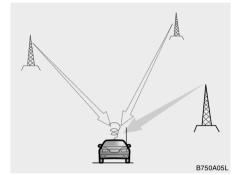
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o Flutter/Static - Weak FM signals or large obstructions between the transmitter and your radio can disturb the signal causing static or fluttering noises to occur. Reducing the treble level may lessen this effect until the disturbance clears.

103



- o Station Swapping As a FM signal weakens, another more powerful signal near the same frequency may begin to play. This is because your radio is designed to lock onto the clearest signal. If this occurs, select another station with a stronger signal.
- o Multi-Path Cancellation Radio signals being received from several directions can cause distortion or fluttering. This can be caused by a direct and a reflected signal from the same station, or by signals from two stations with close frequencies. If this occurs, select another station until the condition has passed.

B750B02Y-AAT

### Using a cellular phone or a twoway radio

When a cellular phone is used inside the vehicle, noise may be produced from the audio equipment. This does not mean that something is wrong with the audio equipment. In such a case, use the cellular phone at a place as far as possible from the audio equipment.



#### CAUTION:

When using a communication system such a mobile phone or a radio set inside the vehicle, a separate external antenna must be fitted. When a mobile phone or a radio set is used with an internal antenna alone, it may interfere with the vehicle's electrical system and adversely affect safe operation of the vehicle.



#### **WARNING:**

Don't use a mobile phone when you are driving, you must stop at a safe place to use a mobile phone.







#### 104 CARE OF DISCS

B850A01F-DAT

## **Proper Handling**



B850A01L

Handle your disc as shown. Do not drop the disc. Hold the disc so you will not leave fingerprints on the surface. If the surface is scratched, it may cause the pickup to skip signal tracks. Do not affix tape, paper, or gummed labels on the disc. Do not write on the disc.

## **Damaged Disc**

Do not attempt to play damaged, warped or cracked discs. These could severely damage the playback mechanism.

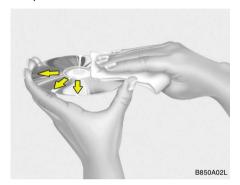
## Storage

When not in use, place your discs in their individual cases and store them in a cool place away from the sun, heat, and dust.

Do not grip or pull out the disc with your hand while the disc is being pulled into the unit by the self loading mechanism. Do not pull the unit from the dash immediately after a disc is inserted or the eject switch has been pressed. If the unit is pulled out before an operation is completed, the disc will be unstable in the unit and may be damaged.

Do not attempt to insert a disc into the unit when the unit is out of the dash or

the power is off.



## **Keep Your Discs Clean**

Fingerprints, dust, or foreign material on the surface of a disc could cause the pickup to skip signal tracks. Wipe the surface clean with a clean soft cloth.

If the surface is heavily soiled, dampen a clean soft cloth in a solution of mild neutral detergent to wipe it clean.

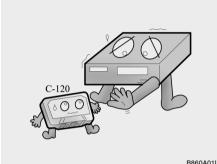






#### **CARE OF CASSETTE TAPES**

B860A01A-AAT



Proper care of your cassette tapes will extend the tape life and increase your listening enjoyment. Always protect your tapes and cassette cases from direct sunlight, severely cold and dusty conditions. When not in use, cassettes should always be stored in the original protective cassette case. When the vehicle is very hot or cold, allow the interior temperature to become more moderate before listening to your cassettes.

- o Never leave a cassette inserted in the player when not being played. This could damage the tape player unit and the cassette tape.
- o We strongly recommend against the use of tapes longer than C-60 (60 minutes total). Tapes such as C-120 or C-180 are very thin and do not perform as well in the automotive environment.



- o Be sure that the cassette label is not loose or peeling off or tape ejection may be difficult.
- o Never touch or soil the actual audio tape surfaces.
- o Keep all magnetized objects, such as electric motors, speakers or transformers away from your cassette tapes and tape player unit.
- o Store cassettes in a cool, dry place with the open side facing down to prevent dust from setting in the cassette body.
- o Avoid repeated fast reverse usage to replay one given tune or tape section. This can cause poor tape winding to occur, and eventually cause excessive internal drag and poor audio quality in the cassette. If this occurs, it can sometimes be corrected by fast winding the tape from end to end several times. If this does not correct the problem, do not continue to use the tape in your vehicle.

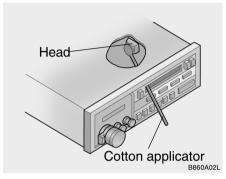




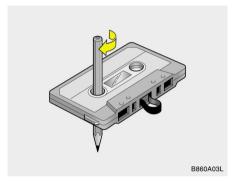
105 jmuk-1b.p65 5/31/04, 4:41 PM



## 6



- o The playback head, capstan and pinch rollers will develop a coating of tape residue that can result in deterioration of sound quality, such as a wavering sound. They should be cleaned monthly using a commercially available head cleaning tape or special solution available from audio specialty shops. Follow the supplier's directions carefully and never oil any part of the tape player unit.
- o Always be sure that the tape is tightly wound on its reel before inserting in the player. Rotate a pencil in the drive sprockets to wind up any slack.



#### NOTE:

Look at a tape before you insert it. If the tape is loose, tighten it by turning one of the hubs with a pencil or your finger.

If the label is peeling off, do not put it in the drive mechanism.

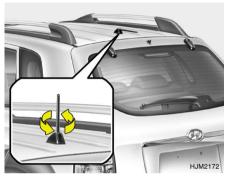
Do not leave tapes sitting where they are exposed to hot, warm, or high humidity, such as on top of the dashboard or in the player. If a tape is exposed to excessively hot or cold, let it reach a moderate

temperature before putting it in the player.

#### **ANTENNA**

#### B870D01FC-GAT

#### **Roof Antenna**



Your car uses a roof antenna to receive both AM and FM broadcast signals.

This antenna is a removable type. To remove the antenna, turn the antenna counterclockwise. To install the antenna, turn the antenna clockwise.









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## **CAUTION:**

- Be sure to remove the antenna before washing the car in an automatic car wash or it may be damaged.
- o Before entering a place with a low height clearance, be sure to adjust the roof antenna low.
- o When reinstalling your antenna, it is important that it is fully tightened to ensure proper reception.





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## **DRIVING YOUR HYUNDAI**

Engine Exhaust Can Be Dangerous!	2-2
Before Starting the Engine	
Key Positions	2-4
Starting	2-6
Manual Transaxle	
Automatic Transaxle	2-10
Anti-Lock Brake System (ABS)	
Brake Traction Control System (BTCS)	2-15
Electronic Stability Program (ESP)	2-17
Full-Time 4WD Operation	2-18
Effective Braking	
Driving for Economy	
Smooth Cornering	
Winter Motoring	
Trailer or Vehicle Towing	

9

2

jmuk-2.p65



C010A01JM-EAT



#### **WARNING: ENGINE EXHAUST CAN BE DANGEROUS!**

Engine exhaust gases are potentially lethal. If at any time engine exhaust gas is detected within the passenger compartment, move the vehicle to an open area and open all windows.

#### o Never inhale exhaust gas.

Exhaust gases contain Carbon Monoxide which is colourless and odourless. Carbon Monoxide is poisonous and can cause unconsciousness and death by asphyxiation.

#### o Exhaust System Maintenance.

Ensure that the exhaust system is maintained in good condition and is free from excessive corrosion and damage which may result in leakage. If the vehicle is driven over an object which strikes the exhaust system, ensure that the exhaust system is inspected at the first available opportunity to ensure that no leakage exists.

#### o Confined Areas.

Do not run the engine in confined spaces, allowing the engine to idle in a garage, even when the doors are open is dangerous practice. Only start the engine immediately prior to moving the vehicle out of the garage.

#### o Prolonged Idling.

If it is necessary to allow the vehicle to idle for prolonged periods, ensure that the heating system air intake control is set to the "Fresh" position, the blower is set to high speed operation and that the vehicle is standing in an open area.

#### o Load Carrying.

If it is necessary to carry long objects which do not permit the hatchback door to be fully closed, the side windows must remain closed and the heating air intake control set to the "Fresh" position with the blower running at the highest speed setting.

To ensure correct operation of the heater system, the air intake grilles at the base of the windscreen must not be obstructed by snow leaves etc..







# BEFORE STARTING THE ENGINE

C020A01O-EAT

Before you start the engine, you should always:

- Look around the vehicle to be sure there are no flat tyres, puddles of oil or water or other indications of possible trouble.
- 2. After entering the car, check to be sure the parking brake is engaged.
- 3. Check that all windows, and lights are clean.
- 4. Check that the interior and exterior mirrors are clean and in position.
- 5. Check your seat, seatback and head restraint to be sure they are in their proper positions.
- 6. Close all the doors.
- Fasten your seat belt and be sure that all other occupants have fastened theirs.
- 8. Turn off all lights and accessories that are not needed.
- 9. When you turn the ignition switch to "ON" check that all appropriate warning lights are operating and that you have sufficient fuel.

A

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#### **WARNING:**

o The 2WD Tucson is not designed for off-road use. The 4WD Tucson is designed primarily for use on paved roads. However, occasional use in off-highway conditions such as established unpaved roads and non-challenging off-road trails is allowed. The 4WD Tucson is not designed for blazing new trails, challenging off-road conditions, or unpaved hill climbing. Exceeding the conditions that were intended for the vehicle's primary design may result in injury or death.

- o Utility vehicles have higher ground clearance and a narrower track to make them capable of performing in a wide variety of off-road applications. Specific design characteristics give them a higher centre of gravitiv than ordinary cars. An advantage of the higher ground clearance is a better view of the road allowing you to anticipate a problem. They are not designed for cornering at the same speeds as conventional 2-wheel drive vehicles any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions, If at all possible, avoid sharp turns or abrupt manoeuvres. As with other vehicles of this type, failure to operate this vehicle correctly may result in loss of control or vehicle rollover.
- o In a collision crash, an unbelted person is significantly more likely to die than a person wearing a seatbelt.









#### **DRIVING YOUR HYUNDAI**

10. Check the operation of warning lights and all bulbs when key is in the "ON" position.

WARNING:(Diesel only) To ensure that sufficient vacuum exists within the brake system during cold weather start-up conditions, it is necessary to run the engine at idle for several seconds after starting the engine.

#### TO START THE ENGINE

SC040A1-F

#### **COMBINATION** IGNITION **SWITCH AND STEERING LOCK**

- o If your Hyundai is equipped with a manual transaxle, place the shift lever in neutral and depress the clutch pedal fully.
- o If your Hyundai has an automatic transaxle, place the shift lever in "P" (park).
- o To start the engine, insert the ignition key and turn it to the "START" position. Release it as soon as the engine starts. Do not hold the key in the "START" position for more that 15 seconds.

#### NOTE:

For safety, the engine will not start if the shift lever is not in "P" or "N" position (Automatic Transaxle).

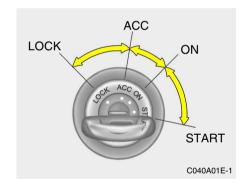
#### **KEY POSITIONS**

SC050A1-E



## **WARNING:**

The engine must never be turned off and the key removed from the ignition key cylinder whilst the vehicle is in motion since the steering lock will operate and control of the vehicle will be lost.



#### o "START"

The engine is started in this position. It will crank until you release the key.

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#### NOTE:

Do not hold the key in the "START" position for more than 15 seconds.

#### o "ON"

When the key is at the "ON" position, the ignition and all accessories are available for use. If the engine is not running, the key should not be left at this position since the battery will become discharged and damage to the ignition system may also result. For information regarding engine starting, refer to "STARTING THE ENGINE".

#### o "ACC"

When the ignition key is at the "ACC" position, the radio and other accessories may be used.

#### o "LOCK"

The ignition key may only be inserted or removed at this position.

#### NOTE:

The ignition key can only be removed if the transmission selector is at the "P" position (automatic transaxle only).

#### YC030A1-E

#### STEERING WHEEL LOCK

When the ignition key is removed, the steering wheel lock will be activated. The lock only engages at one position of the steering wheel and therefore it will be necessary to turn the wheel until this position is reached. It is not, however, necessary for the lock to be engaged before leaving the vehicle since in the event of attempted unauthorized removal, the lock will engage when attempts are made to steer the vehicle.

Should it be difficult to turn the key from the "LOCK" position, it may be found that rocking the steering wheel from side to side whilst turning the key will assist.

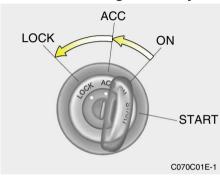
# $\triangle$

## **CAUTION:**

Never remove the key from the ignition lock whilst the vehicle is in motion since the steering mechanism lock will be activated.

#### C070C01A-AAT

#### To Remove the Ignition Key



- Turn the ignition key to the "ACC" position.
- 2. Simultaneously push and turn the ignition key counterclockwise from the "ACC" position to the "LOCK" position.
- 3. The key can be removed in the "LOCK" position.

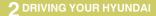




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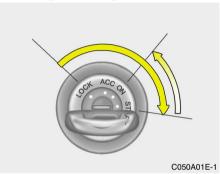
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## 6 STARTING

#### SC060A1-E

## **Starting The Engine**



- 1. Ensure that the transaxle is in neutral and that the clutch pedal is held depressed (manual transaxle) or the transaxle selector is at the "P" position (automatic transaxle vehicle).
- 2. Turn the ignition key to and hold at the "START" position until the engine starts. When the engine has started, release the key.

#### NOTE:

Do not operate the starter for more than 15 seconds continuously or continue to operate the starter after the engine has started to avoid damaging the starter motor. If the engine makes a false start, allow it and the starter motor to come to rest before attempting to start the engine again. Never attempt to start the engine with the transaxle in gear. Do not depress the accelerator pedal whilst starting the engine. Allow the engine to idle for 20 seconds or so before driving the vehicle.

# $\triangle$

#### CAUTION:

Do not leave the vehicle unattended whilst idling. Never allow the vehicle to idle or warm up in a confined space (ie garage) longer than is necessary to move the vehicle into an open area.

C050A01O-AAT

# Starting For Diesel Engine ENGINE COLD

- o Turn the ignition key to position "ON" and wait for the pre-heat indicator light to go out.
- o Operate the starter until the engine runs.

#### **ENGINE WARM**

Operate the starter. If the engine does not respond on the first attempt, wait several seconds and try again using the pre-heat.



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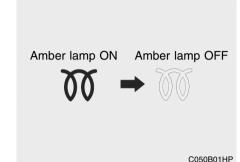


C050B02S-GAT

#### NORMAL CONDITIONS

The Starting Procedure:

- 1. Insert key, and fasten the seat belt.
- 2. Depress the clutch pedal fully and place the gearshift lever in neutral (manual transaxle) or the selector lever in "P"(park) position (automatic transaxle).
- After turning the ignition key to the "ON" position, make certain all warning lights and gauges are functioning properly before starting the engine.
- 4. On vehicles equipped with the diesel preheat indication light, turn the ignition key to the "ON" position. The diesel-preheat indication light will first illuminate in amber, and then after a short time, the amber illumination will goes off, indicating that preheating is completed.



#### NOTE:

If the engine does not started within 10 seconds after the preheating is completed, turn the ignition key once more to the "LOCK" position, and then to the "ON" position, in order to preheat again.



#### **WARNING:**

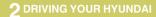
Be sure that the clutch is fully depressed when starting a manual transaxle vehicle. Otherwise there is the potential to cause damage to the vehicle or injury to someone inside or outside the vehicle as a result of the forward or backward movement of the vehicle that will occur if the clutch is not depressed when the vehicle is started.

5. Turn the ignition key to the "START" position and release it when the engine starts.









C055B01B-GAT

## STARTING AND STOPPING THE ENGINE FOR TURBO CHARGER INTERCOOLER (DIESEL ENGINE)

- (1) Do not race the engine or suddenly accelerate the engine immediately after starting it. If the engine is cold, allow the engine to idle for several seconds before it is driven to ensure sufficient lubrication of the turbo charger unit.
- (2) After high speed or extended driving, requiring a heavy engine load, the engine should be allowed to idle about 1 minute before turning it off. This idle time will allow the turbo charger to cool prior to shutting the engine off.



#### WARNING:

Do not turn the engine off immediately after it has been subjected to a heavy load. Doing so may cause severe damage to the engine or turbo charger unit.

DC090C1-E

## **FUEL ECONOMY**

The following suggestions are made to assist in achieving the greatest degree of fuel economy.

- Maintaining a constant check on fuel consumption will enable the most economical use pattern and driving style to be adopted.
- o Avoid using the vehicle for very short journeys if possible, particularly when a cold start is involved.
- o Ensure that tyre pressures are maintained at the correct level.
- o Use only the recommended grade of fuel.
- Avoid carrying unnecessary weight, and if a roof rack is in use, remove it as soon as possible after use.

- Anticipate the road and conditions ahead to enable adjustments in speed to be made smoothly. Avoid heavy acceleration and sharp braking.
- Avoid cruising at unnecessary high speeds.
- Always ensure that the periodic maintenance services are performed by a Hyundai authorised repairer at the time and/or mileage intervals specified.
- o Use the air conditioner only when necessary.

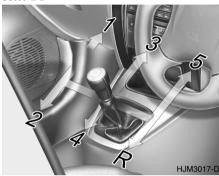






## OPERATING THE MANUAL TRANSAXLE

SC090A2-E



The five speed fully synchronized transaxle is controlled by a floor mounted shift lever upon which the shift pattern is indicated. It is important that when changing gear, the clutch pedal is fully depressed to avoid transaxle damage.

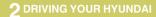


#### **CAUTION:**

- o Do not attempt to engage reverse gear when the car is in motion.
- o To avoid damaging the selector mechanism, do not use the gear shift lever as a hand rest. Release the lever immediately the shift is completed.
- To avoid premature clutch wear, do not use the clutch pedal as a foot rest, and do not hold the vehicle on a gradient using the clutch,
- Ensure that the engine is not over-revved by upshifting before the tachometer needle enters the red zone.
- o Do not coast with the shift lever at the neutral position.
- o When descending long gradients, make use of the engine braking to assist the footbrake to avoid brake fade or overheating.
- When slippery conditions are encountered, increased caution should be exercised when gear changing, braking or accelerating. Abrupt changes in speed

- may cause a loss of traction or
- During cold weather, shifting may be difficult until the transaxle lubricant has warmed up. This is normal and not harmful to the transaxle.
- o If you've come to a complete stop and it's hard to shift into 1st or R(Reverse), put the shift lever in N(Neutral) position and release the clutch. Press the clutch pedal back down, and then shift into 1st or R(Reverse) gear position.
- Do not use the shift lever as a handrest during driving, as this can result in premature wear of the transaxle shift forks.
- o Excessive depressing of the accelerater pedal under the tyres slip condition such as moving out of the mud or fresh snow etc, may cause severe damage to the transaxle. If this condition exists, it may be adviseable to have the vehicle towed.





C070B01A-EAT

## **Using the Clutch**

The clutch should be pressed all the way to the floor before shifting, then released slowly. The clutch pedal should aways be used after fully returning to the original position. Do not rest your foot on the clutch pedal whilst driving. This can cause unnecessary wear.

Do not partially engage the clutch to hold the car on an incline. This causes unnecessary wear. Use the parking brake to hold the car on an incline. Do not operate the clutch pedal rapidly and repeatedly.

C070E03A-EAT

#### **RECOMMENDED SHIFT POINTS**

Shift from-to	Recommended mph (km/h)
1-2	15 (20)
2-3	25 (40)
3-4	35 (55)
4-5	45 (75)

The shift points as shown above are recommended for optimum fuel economy and performance.

# OPERATING THE AUTOMATIC TRANSAXLE

C090A01O-GAT



The highly efficient Hyundai automatic transaxle has four forward speeds and one reverse speed. The individual speeds are selected automatically, depending on the position of the speed selector lever. The selector lever has 2 gates; the main gate and the manual gate.

#### NOTE:

For information on manual gate operation, refer to "Sports Mode".



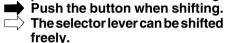




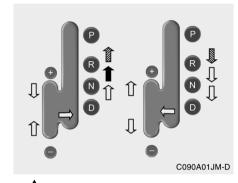
In the main gate, the selector lever has 4 positions, and is equipped with a button to avoid inadvertent wrong selection.

#### NOTE:

Depress the brake pedal and push the button when shifting.



The first few shifts on a new vehicle, or if the battery has been disconnected. may be somewhat abrupt. This is a normal condition, and the shifting sequence will adjust after shifts are cycled a few times by the T.C.M (Transaxle Control Module).





Never shift into "R" or "P" position whilst the vehicle is moving.

The indicator lights in the instrument cluster indicate the selector lever position when the ignition is switched "ON". During "D" range operation, green lights indicate the gear currently in use.

#### **SELECTOR POSITIONS** o P (Park):

With the selector in this position, no drive is transmitted from the engine and the transaxle output and therefore the front wheels locked. The engine may be started with the selector in this position.

## **CAUTION:**

The selector must NEVER be shifted to the "P" position whilst the vehicle is in motion, otherwise serious transaxle damage will result.

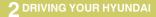








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DC110C1-E

## o R (Reverse):

With the selector in this position, reverse gear will be engaged. The engine may not be started with the selector in this position.



#### **CAUTION:**

The selector must NEVER be shifted to the "R" position whilst the vehicle is in motion.

DC110D1-E

## o N (Neutral):

With the selector in this position, no gear is selected and no drive is transmitted from the engine. The engine may be started with the selector in this position.



#### CAUTION:

Do not coast with the selector at the "N" position.



C090E01O-AAT

### o D(Drive):

Use for normal driving. The transaxle will automatically shift through a four gear sequence.

C090F01O-GAT

#### Sports mode



Whether the vehicle is stationary or in motion, sports mode is selected by pushing the selector lever from the "D" position into the manual gate. To return to "D" range operation, push the selector lever back into the main gate. In sports mode, moving the selector lever backward and forward can make rapid gearshifts simple. In contrast to a manual transaxle, the sports mode allows gearshifts with the acceleator pedal depressed.





**UP (+)**: Push the lever forward once to shift up one gear.

**DOWN** (-): Pull the lever backward once to shift down one gear.

**SKIP**: By rapidly moving the selector forward or backward twice, it is possible to skip one gear, i.e. 1st to 3rd or 3rd to 1st.



#### **CAUTION:**

- o Upward shifts do not take place automatically in sports mode. The driver must execute shifts in accordance with prevailing road conditions, taking care to keep the engine speed below the red zone.
- o By rapidly moving the selector lever backwards (-) twice or it is possible to skip one gear, i.e., 3rd to 1st, 4th to 2nd. Since sudden engine braking and/or rapid acceleration can cause a loss of traction, however, downshifts must be made carefully in accordance with the vehicle's speed.

#### NOTE:

- o In sports mode, only the four forward gears can be selected. To reverse or park the vehicle, move the selector lever to the "R" or "P" position as required.
- In sports mode, downward shifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.
- o To maintain the required levels of vehicle performance and safety, the system may not execute certain gearshifts when the selector lever is operated.
- o When driving away on a slippery road, push the selector lever toward into the +(UP) position. This causes the transaxle to shift into the 2nd gear which is better for smooth driving away on a slippery road. Push the selector lever to the -(DOWN) side to shift back to 1st gear.

C090H01L-GAT

#### NOTE:

- For smooth and safe operation, depress the brake pedal when shifting from "Neutral" position or "Park" position to a forward or reverse gear.
- o The ignition key must be in the "ON" position and the brake pedal fully depressed in order to move the shift lever from the "P" (Park) position to any of the other positions.
- It is always possible to shift from "R", "N", "D" position to "P" position. The vehicle must be fully stopped to avoid transaxle damage.







C090I02L-EAT



#### CAUTION:

- o Shift into "R" and "P" position only when the vehicle has completely stopped.
- o Do not accelerate the engine in reverse or any of the forward positions with the brakes applied.
- o Always apply the footbrake when shifting from "P" or "N", to "R" or "D" position.
- o Do not use the "P" (Park) position in place of the parking brake. Always set the parking brake, shift the transaxle into "P" (Park) position and turn off the ignition when you leave the vehicle, even momentarily. Never leave the vehicle unattended whilst the enaine is runnina.
- o Check the automatic transaxle fluid level regularly, and add fluid as necessary.
- o See the maintenance for the proper fluid recommendation.

OC120D1-E

## **General Operating Instructions**

- o The button in the selector handle must be depressed before the selector can be moved.
- o The engine may only be started when the selector is at position "P".
- o Ensure that the footbrake is firmly applied when shifting from "P" or "N", to "R" or "D" and vice versa.
- o Always engage the parking brake when the vehicle is unattended, never use the "P" position in place of the parking brake.
- o Under normal circumstances, the selector should be placed in the "D" position and the transaxle allowed to select the most ideal ratio for the circumstances. In this position maximum fuel economy will be achieved.
- o When descending steep gradients where engine braking is required, the selector should be placed at the "L" position depending upon the vehicle speed.

- o When ascending steep gradients and using large throttle openings, the transaxle may repeatedly change between two adjacent ratios. This is a normal characteristic and may be prevented by selecting "L" depending upon the vehicle speed.
- o Never move the selector to or from the "P" or "N" position with the accelerator depressed.
- o Only with the brake pedal fully depressed, the shift lever is shifted from "P" (parking) position to other position. (Not all models)
- o If rapid acceleration is required, fully depress the accelerator pedal. In this condition, the kickdown mechanism will be operated and the transaxle will automatically downshift according to the vehicle speed.





(ABS)

The Anti-Lock Brake System (ABS) is designed to prevent wheel lock-up during sudden braking or on hazardous road surfaces. The ABS control module monitors the wheel speed and controls the pressure applied to each brake. Thus, in emergency situations or on slick roads, ABS will increase vehicle control during braking.

ANTI-LOCK BRAKE SYSTEM

#### NOTE:

During ABS operation, a slight pulsation may be felt in the brake pedal when the brakes are applied. Also, a noise may be heard in the engine compartment while braking. These conditions are normal and indicate that the anti-lock brake system is functioning properly.



#### **WARNING:**

ABS will not prevent accidents due to improper or dangerous driving manoeuvres. Even though vehicle control is improved during emergency braking, always maintain a safe distance between you and objects ahead. Vehicle speeds should always be reduced during extreme road conditions.

The braking distance for cars equipped with an anti-lock braking system may be longer than for those without it in the following road conditions. These roads should be driven at reduced speeds.

- o Rough, gravel or snow-covered roads.
- o With tyre chains installed.
- On roads where the road surface is pitted or has different surface height.

The safety features of an ABS equipped vehicle should not be tested by high speed driving or cornering. This could endanger the safety of yourself or others.

# BRAKE TRACTION CONTROL SYSTEM (BTCS)

C300A01O-EAT

(Not all models)



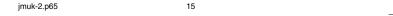
On slippery road surfaces, the traction control system (TCS) limits the drive wheels from spinning excessively, thus helping the car to accelerate. It also provides sufficient driving force and steering performance as the car turns at accelerated speeds.

#### **SLIP Control**

Limits the drive wheels from spinning excessively during starting or whilst making accelerated turns on slippery roads to avoid losing the driving force of the driven wheels.









#### **Driving hints**

TCS does not actively apply brakes. Be sure to decelerate the car sufficiently before entering curves.



#### CAUTION:

When the TCS indicator blinks, SLIP control function has been activated. It also means that the road is slippery or your car is accelerating excessively. In this situation, gently release foot pressure from the accelerator pedal and maintain moderate speed.



#### **WARNING:**

Traction control is a driving aid; all normal precautions for driving in inclement weather and on slippery road surfaces should be observed.

C300B01O-GAT

#### **TCS ON Mode**

When the TCS is running, the TCS indicator in the instrument cluster will blink.

#### NOTE:

- 1) The TCS mode will automatically be turned ON after the engine is turned off and restarted.
- When the traction control is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.
- When the engine starts, a click is heard from the engine compartment; however, this is only the sound of traction control being checked.
- 4) When moving out of the mud or fresh snow, pressing the accelerator pedal may not cause the engine speed to increase due to TCS operation.

C300D02O-EAT

#### **Indicator and Warning**

The TCS indicator should illuminate when the ignition key is turned ON or START but should go out after three seconds.

If the indicator does not illuminate or TCS indicator does not go out after 3 seconds, have it checked by an Hyundai authorised repairer.

Should there be any unusual conditions in the device whilst driving, TCS illuminates as a warning.

If TCS illuminates, pull your car to a safe place and stop the engine.

Then, start the engine again to check if the TCS indicator goes out.

If the indicator remains lit even after the engine has been started, have your car checked by Hyundai authorised repairer.

#### NOTE:

When the TCS illuminates, traction control is automatically deactivated for safety.







## **ELECTRONIC STABILITY** PROGRAM (ESP)

C310A01LZ-AAT

#### (Not all models)



On slippery road surfaces, the electronic stability program (ESP) limits the drive wheels from spinning excessively, thus helping the car to accelerate. It also provides sufficient driving force and steering performance as the car turns at accelerated speeds.

#### SLIP Control

Limits the drive wheels from spinning excessively during starting or while making accelerated turns on slippery roads to avoid losing the driving force of the front wheels.

#### **Driving Hints**

ESP does not actively apply brakes. Be sure to decelerate the car sufficiently before entering curves.



#### **CAUTION:**

When the ESP indicator blinks, SLIP control has been activated. It also means that the road is slippery or your car is accelerating excessively. In this situation, release foot pressure from the accelerator pedal and maintain moderate speed.



#### **WARNING:**

Electronic stability program is only a driving aid; all normal precautions for driving in inclement weather and on slippery road surfaces should be observed.

C310B01LZ-AAT

#### **ESP ON/OFF Mode**

When the ESP is running, the ESP indicator in the instrument cluster will blink.

If you turn the system off by pressing the ESP switch, the ESP-OFF indicator will come on and stay on. In the ESP-OFF mode, the SLIP control will be deactivated. Adjust you driving accordingly. To turn the system back on, press the switch again. The ESP-OFF indicator should go off.

#### NOTE:

- 1) The ESP mode will automatically be turned ON after the engine is turned off and restarted.
- 2) When the electronic stability program is operating properly, you can feel a slight pulsation in the vehicle. This is only the effect of brake control and indicates nothing unusual.
- 3) When the engine starts, a click is heard from the engine compartment: however, this is only the sound of traction control being checked.

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4) When moving out of the mud or fresh snow, pressing the accelerator pedal may not cause the engine speed to increase due to ESP operation.

C310D01L 7-AAT

#### **Indicators and Warning**

The indicators should illuminate when the ignition key is turned to ON or START but should go out after three seconds.

If the indicators do not illuminate, or the ESP or ESP-OFF indicator does not go out after 3 seconds, have it checked by Hyundai authorised repairer.

Should there be any unusual conditions in the device while driving, ESP-OFF indicator illuminates as a warning.

If ESP-OFF indicator illuminates, pull your car to a safe place and stop the engine.

Then, start the engine again to check if the ESP-OFF indicator goes out.

If the indicator remains lit even after the engine has been started, have your car checked by an Hyundai authorised repairer.

#### NOTE:

- 1) When the ESP-OFF indicator illuminates, electronic stability program is automatically deactivated for safety.
- 2) This warning function is not provided when the driver selects the ESP-OFF mode.

#### **FULL-TIME 4WD OPERATION**

C350A01JM-EAT

#### (Not all models)

Engine power can be delivered to all front and rear wheels for maximum power. Full-time 4WD is useful when good traction is required, such as, when driving on slippery, wet or snowcovered roads and when moving out of mud. These vehicles, however, are not designed for challenging off-road use. Full-time 4WD vehicles are designed primarily to improve traction and performance on paved roads and highways in wet and/or slippery conditions. Occasional off-road use such as established unpaved roads and trails is OK. It is always important when traveling off-highway that the driver carefully reduce their speed to a level that does not exceed the safe operating speed for those conditions. In general, off-road conditions provide less traction and braking effectiveness than on road conditions. These factors must be carefully considered when driving off-road. Keeping the vehicle in contact with the driving surface and under control in these conditions is always







the driver's responsibility for the safety of him/herself and his or her passengers.



#### **WARNING:**

This vehicle is designed primarily for on road use. Driving the vehicle in challenging off-road conditions for which it was not designed may result in damage to the vehicle. Driving in conditions that exceed the vehicle's intended design or the driver's experience level may result in severe injury or death.

#### **Driving 4WD Safely**

- (1) Be sure to wear the seat belt.
- (2) Do not drive in challenging off-road conditions or areas that exceed the vehicle's basic design intent or the driver's experience level.
- (3) Drive at lower speeds in strong crosswinds. Because of your vehicle's high centre of gravity, its stability will be affected in crosswinds. Slower speeds ensure better vehicle control.
- (4) Check the brake condition after driving in wet or muddy conditions. Press the brake several times as you move slowly until you feel normal braking forces return.
- (5) Do not drive the vehicle through water. (i.e. streams, rivers, lakes, etc.)
- (6) The stopping distance of the full-time 4WD vehicle differs very little from that of the 2WD vehicle. When driving on a snow-covered road or a slippery, muddy surface, make sure that you keep a sufficient distance between your vehicle and the one ahead of you.

- (7) Since the driving torque is always applied to the 4 wheels, the performance of the full-time 4WD vehicle is greatly affected by the condition of the tyres. Be sure to equip it with all four tyres of the same size and type.
  - When replacement of any of the tyres or disc wheels is necessary, replace all of them.
  - o Rotate the tyres and check the tyre pressure at regular intervals.
- (8) The full-time 4WD vehicle cannot be towed by an ordinary tow truck. Make sure that the vehicle is towed with its four wheels raised off the ground.
  - o If the vehicle is towed with its only two wheels raised off the ground, the 4WD system could be damaged.
  - o Where the situation is unavoidable, if the vehicle is being towed with all four wheels on the ground, it should be towed in a forward direction only using a towing rope.



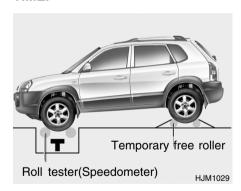




- o Whilst towing, check the following items.
  - 1. The ignition switch is in "ACC" or "ON".
  - 2. Place the shift lever in neutral (For Automatic Transaxle, "N" position).
  - 3. Release the parking brake.

#### NOTE:

To avoid serious damage to your 4WD vehicle, limit towing to 10 mph and not for more than 1 mile at ANY TIME.



(9) For speedometer test or inspection/maintenance (I/M) program of Tucsan 4WD, use a four wheel chassis dynamometer.

#### **CAUTION:**

Never engage the parking brake while performing these tests.

- o In rare cases when it's unavoidable that a 4WD vehicle is to be inspected for speedometer test on 2WD roll tester, strictly follow the procedures next.
  - 1. Check the tyre pressures recommended for your vehicle.
  - Place the front wheels on the roll tester for speedometer test as shown in the illustration.
- 3. Release the parking brake.
- 4. Place the rear wheels on the temporary free roller as shown in the illustration.



#### WARNING:

Keep away from the front of the vehicle while inspecting. This is very dangerous as the vehicle can jump forward and cause serious injury or death.

- (10) When using tyre chains, always attach them to the front wheels.
- (11) If the front or rear wheels get stuck in the mud, do not spin them recklessly. The 4WD system could be damaged.









## CAUTION:

- Whilst the full-time 4WD vehicle is being raised on a jack, never start the engine or cause the tyres to rotate.
  - There is the danger that rotating tyres touching the ground could cause the vehicle to move off the jack and to jump forward.
- o If one of the front or rear wheels begins to spin in mud, snow, etc., the vehicle can sometimes be driven out by depressing the accelerator pedal further; however, avoid running the engine continuously at high rpm because doing so could damage the 4WD system.



## WARNING:

- o Avoid high cornering speeds.
- o Do not make quick steering wheel movements, such as sharp lane charges or fast, sharp turns.
- The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- o In a collision crash, an unbelted person is significantly more likely to die than a person wearing a seatbelt.
- Loss of control often occurs if two or more wheels drop off the roadway and the driver oversteers to reenter the roadway.
- In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.

SC140A1-E

Braking system performance and friction material life are greatly affected by the driving style adopted. The following suggestions are made to assist in achieving the best results from the braking system.

- Anticipate the road and conditions ahead in order that heavy braking may be avoided.
- When descending long gradients, use the engine to assist in retarding the vehicle to minimize the possibility of brake fade occurring.
- When trailer towing, ensure that the trailer brakes function correctly and use engine braking to assist the vehicle braking system.
- Use only genuine Hyundai replacement brake pads and shoes to ensure consistent friction characteristics and wear rates.





- o After driving through deep water (e.g. fording), the brakes may become wet and performance reduced. Always check brake efficiency after emerging from the water and dry the brakes by lightly depressing the brake pedal several times whilst driving slowly.
- o Apply the parking brake only when the vehicle is at rest.
- o Since the power assistance provided by the brake servo is derived from the engine, coasting with the engine turned off or towing of the vehicle with the engine turned off will result in greatly increased pedal pressures being required to stop the vehicle.
- Do not hold the vehicle on the upgrade with the accelerator pedal.
   This can cause the transmission to overheat. Always use the brake pedal or parking brake.

C140A01A-EAT

You can save fuel and get more miles from your car if you follow these suggestions:

DRIVING FOR ECONOMY

- o Drive smoothly. Accelerate at a moderate rate. Don't make "jackrabbit" starts or full-throttle shifts and maintain a steady cruising speed. Don't race between stoplights. Try to adjust your speed to that of the other traffic so you don't have to change speeds unnecessarily. Avoid heavy traffic whenever possible. Always maintain a safe distance from other vehicles so you can avoid unnecessary braking. This also reduces brake wear.
- o Drive at a moderate speed. The faster you drive, the more fuel your car uses. Driving at a moderate speed, especially on the highway, is one of the most effective ways to reduce fuel consumption.
- o Don't "ride" the brake or clutch pedal. This can increase fuel consumption and also increase wear on these components. In addition, driving with your foot resting on the brake pedal may cause the brakes to overheat,

- which reduces their effectiveness and may lead to more serious consequences.
- o Take care of your tyres. Keep them inflated to the recommended pressure. Incorrect inflation, either too much or too little, results in unnecessary tyre wear. Check the tyre pressures at least once a month.
- o Be sure that the wheels are aligned correctly. Improper alignment can result from hitting curbs or driving too fast over irregular surfaces. Poor alignment causes faster tyre wear and may also result in other problems as well as greater fuel consumption.
- o Keep your car in good condition. For better fuel economy and reduced maintenance costs, maintain your car in accordance with the maintenance schedule in Section 5. If you drive your car in severe conditions, more frequent maintenance is required (see Section 5 for details).







## **SMOOTH CORNERING**

23

- o Keep your car clean. For maximum service, your Hyundai should be kept clean and free of corrosive materials. It is especially important that mud, dirt, ice, etc. not be allowed to accumulate on the underside of the car. This extra weight can result in increased fuel consumption and also contribute to corrosion.
- o Travel lightly. Don't carry unnecessary weight in your car. Weight reduces fuel economy.
- o Don't let the engine idle longer than necessary. If you are waiting (and not in traffic), turn off your engine and restart only when you're ready to go.
- o Remember, your Hyundai does not require extended warm-up. As soon as the engine is running smoothly. you can drive away. In very cold weather, however, give your engine a slightly longer warm-up period.

- o Don't "labour" or "over-rev" the engine. Labouring is driving too slowly in too high a gear resulting in the vehicle kangarooing. If this happens, shift to a lower gear. Over-revving is racing the engine beyond its safe limit. This can be avoided by shifting at the recommended speeds.
- o Use your air conditioning sparingly. The air conditioning system is operated by engine power so your fuel economy is reduced when you use it.

C150A01A-EAT

Avoid braking or gear changing in corners, especially when roads are wet. Ideally, corners should always be taken under gentle acceleration. If you follow these suggestions, tyre wear will be held to a minimum.









## 2 DRIVING YOUR HYUNDAI

## 24 WINTER MOTORING

DC170A1-E

The onset of winter conditions subject motor vehicles to greater operating demands. Therefore, the following suggestions will assist in maintaining peak performance and reliability during these periods:

#### ZC170B1-E

## **Electrical System**

Winter conditions impose severe demands upon vehicle electrical systems, particularly the charging circuit. The battery condition and performance along with the alternator performance and drive belt condition should be checked prior to the onset of winter.

#### ZC170C1-E

## Anti-freeze/Corrosion inhibitor

The cooling system must always contain an Ethylene-Glycol based antifreeze solution. The system is filled during manufacture with solution of the correct strength which should be checked before the onset of winter and adjusted or changed as required.

### NOTE:

The anti-freeze solution contains a corrosion inhibitor to prevent degradation of the aluminium castings contained within the engine. Therefore, never, drain the system and refill with water only.

In addition, anti-freeze solution must ALWAYS be used in vehicles fitted with air conditioning, to prevent the heater matrix from freezing and subsequently bursting with the refrigeration system in use.

#### ZC170D1-E

## Door Locks

Should the door lock mechanism become frozen, a proprietary lock de-icer should be used.

Never attempt to thaw a frozen door lock using hot water, since the water will eventually freeze and compound the problem.

#### ZC170E1-E

## **Windscreen Washers & Wipers**

The windscreen washer bottle should be filled with a solution of water and a proprietary winter screen wash additive. The windscreen wipers should not be used if the blades are frozen to the windscreen or if they are covered with snow, before this is removed.

## NOTE:

Never allow undiluted screen washer fluid additive to spill upon the paintwork or use engine coolant anti-freeze since damage to the paintwork may result.







- o When driving in extreme conditions, the windscreen wiper blades may fail to clear the screen properly due to the formation of ice upon the blade edge. It will therefore be necessary to periodically remove such ice to restore their efficiency.
- o If the power operated door mirrors become frozen, attempts to adjust these may damage the mechanism.
- o The formation of snow or ice build up inside the wheel arches may interfere with the roadwheels or steering mechanism. In such instances, unusual noises or an increase in steering effort may result. Therefore, ensure that the wheelarches are checked periodically and any accumulated snow or ice removed.
- It is advisable to carry emergency equipment including, torch, shovel, tow rope, blankets etc., if a journey is to be undertaken into areas of severe road conditions.

## TRAILER OR VEHICLE TOWING

YC200A1-E

If you are considering towing with your car, you should first check with your Local Laws to determine their legal requirements.

Since laws vary from country to country, the requirements for towing trailers, cars, or other types of vehicles or apparatus may differ. Ask your Hyundai authorised repairer for further details before towing.



## **CAUTION:**

Do not do any towing with your car during its first 10,000 miles (1,600 km) in order to allow the engine to have properly run-in. Failure to heed this caution may result in serious engine or transaxle damage.

YC200B2-E

### **Trailer Hitches**

Select the proper towbar and ball combination, making sure that its location is compatible with that of the trailer or vehicle being towed.

Use a quality non-equalizing towbar which distributes the nose weight uniformly throughout the chassis.

The towbar should be bolted securely to the car and installed by a qualified technician.

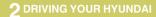








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YC200C3-A

### **Trailer Brakes**

If your trailer is equipped with a braking system, make sure it conforms to local regulations and that it is properly installed and operating correctly.

## NOTE:

If you tow a trailer or vehicle, your car will require more frequent maintenance due to the additional load. See Maintenance Under Severe Usage Conditions" on page 5-7.



## **CAUTION:**

- Never connect a trailer brake system directly to the vehicle brake system.
- o When towing a trailer on steep grades (in excess of 12%) pay close attention to the engine coolant temperature gauge to ensure the engine does not overheat. If the needle of the coolant temperature gauge moves across the dial towards "H" (HOT), pull over and stop as soon as it is safe to do so, and allow the engine to idle until it cools down. You may proceed once the engine has cooled sufficiently.

YC200D2-E

## **Safety Cables**

Should the towbar connection between your car and the trailer or vehicle you are towing fail, the trailer or vehicle could wander dangerously across other lanes of traffic and ultimately leave the roadway. To eliminate this potentially dangerous situation, safety cable, attached between your car and the trailer or towed vehicle, are required.

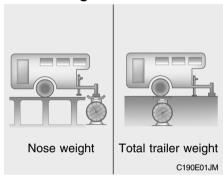








## **Trailer Weight Limit**

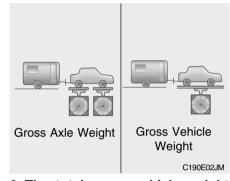


Nose weights can be increased or decreased by re-distributing the load in the trailer.

This can be verified by checking the total weight of the loaded trailer and then checking the nose weight.

### NOTE:

 Never load the trailer with more weight in the back than in the front. About 60% of the trailer load should be in the front half on the trailer and the remaining 40% in the rear.



2. The total gross vehicle weight with trailer must not exceed the Gross Vehicle Weight Rating (GVWR) shown on the vehicle identification plate (see page 8-2). The total gross vehicle weight is the combined weight of the vehicle, driver, all passengers and their luggage, cargo, towbar hitch, trailer nose weight and other optional equipment.

3. The front or rear axle weight must not exceed the Gross Axle Weight Rating (GAWR) shown on the vehicle identification plate (see page 8-2). It is possible that your towing package does not exceed the GVWR but exceeds the GAWR.

Improper trailer loading and/or too much luggage in the luggage compartment can overload the rear axle. Redistribute the load and check the axle weight again.

4. The maximum permissible static vertical load(nose weight) on the coupling device is; 75 kg

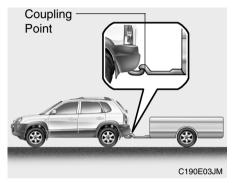












5. The maximum permissible overhang of the coupling point is 36 inches.



## CAUTION:

The following specifications are recommended when towing a trailer. The loaded trailer weight cannot safely exceed the values in the chart.

## Lbs(kg.)

	Maximu	Maximum Towable Weight						
	Engine Trailer		Tongue					
	2.0(2WD)	3088						
With	Diesel (2WD)	(1400)						
Brake	2.0(4WD)	3529	165(75)					
Diake	2.7(4WD)	(1600)						
	Diesel (2WD)	(1600)						
	2.0(2WD)	1100(500)						
	Diesel (2WD)	1100(300)						
Without	2.0(4WD)		-					
Brake	2.7(4WD)	1654(750)						
	Diesel (4WD)							

## WARNING:

Improperly loading your car and trailer can seriously affect its steering and braking performance causing a crash which could cause serious injury or death.

C190G01O-EAT

# Important Trailer Weight Information

The Maximum Towable Weight of your Hyundai Santa Fe will be reduced if the vehicle is load.

The Maximum Towable Weight for a fully load is vehicle is calculated as follows:

- 1. Find the Vehicle Identification Number (VIN) plate (see section 8).
- 2. Note the top 2 weights (in kg) of the 4 lines of weight information on the VIN plate.
- 3. Subtract the weight on line 1 from line 2. This result (in kg) is the maximum towable weight of a fully loaded vehicle.

For more information, contact your local Hyundai Dealer.





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YC200E3-E

## **Trailer or Vehicle Towing Tips**

- Before towing, check towbar ball and safety cable connections as well as proper operation of the trailer running lights, brake lights, and turn signals.
- 2. Always drive your vehicle at a moderate speed (Less than 60 mph).
- 3. Trailer towing requires more fuel than normal conditions.
- 4. To maintain engine braking efficiency, do not tow a trailer with the transaxle in fifth gear (manual transaxle) or overdrive (automatic transaxle).
- 5. Always secure items in the trailer to prevent load shift whilst driving.
- Check the condition and air pressure of all tyres on the trailer and your car. Low tyre pressure can seriously affect the handling. Also check the spare tyre.
- 7. The vehicle/trailer combination is more affected by crosswind and buffeting. When being passed by a large vehicle, keep a constant speed and steer straight ahead. If there is too much wind buffeting, slow down

- to get out of the other vehicle's air turbulence.
- 8. When parking your car and trailer, especially on a hill, be sure to follow all the normal precautions. Turn your front wheels into the curb, set the parking brake firmly, and put the transaxle in 1st or Reverse (manual) or Park (automatic). In addition, place wheel chocks at each of the trailer's tyres.
- If the trailer has electric brakes, start your vehicle and trailer moving, and then apply the trailer brake controller by hand to be sure the brakes are working. This lets you check your electrical connection at the same time.
- 10. During your trip, check occasionally to be sure that the load is secure, and that the lights and any trailer brakes are still working.
- 11. Avoid jerky starts, sudden acceleration or sudden stops.
- 12. Avoid sharp turns and rapid lane changes.

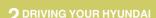
- 13. Avoid holding the brake pedal down too long or too frequently. This could cause the brakes to overheat, resulting in reduced braking efficiency.
- 14. When going down a hill, shift into a lower gear and use the engine braking effect.
  - When ascending a long grade, downshift the transaxle to a lower gear and reduce speed to reduce chances of engine overloading and/ or overheating.
- 15.If you have to stop whilst going uphill, do not hold the vehicle in place by pressing on the accelerator. This can cause the automatic transaxle to overheat. Use the parking brake or footbrake.

## NOTE:

When towing, check transaxle fluid more frequently.









## **CAUTION:**

If overheating should occur when towing, (temperature gauge reads near red zone), taking the following action may reduce or eliminate the problem.

- 1. Turn off the air conditioner.
- 2. Reduce highway speed.
- 3. Select a lower gear when going uphill.
- 4. Whilst in stop and go traffic, place the gear selector in park or neutral and idle the engine at a higher speed.







If the Engine will not Start	3-2
Jump Starting	3-3
If the Engine Overheats	3-4
Spare Tyre	3-6
In the Event of a Puncture	3-7
Changing a Flat Tyre	3-8
If Your Car Must be Towed	3-12
Emergency Towing3	3-14
If You Lose Your Kevs 3	3-15

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## IF THE ENGINE WILL NOT START

SD020A1-E

Seek assistance from the nearest Hyundai authorised repairer with regard to the method of ignition and fuel system diagnosis.



## **WARNING:**

If the engine refuses to start, no attempt should be made to push or tow start the vehicle. Vehicles with automatic transaxle or fuel injection will not be able to be started in this manner since no drive is transmitted through the automatic transaxle whilst the engine is not running, and in the case of fuel injected derivatives, the fuel pump will not operate under tow start conditions. In addition, if the vehicle is equipped with an exhaust catalyst, damage to the catalyst may result if the vehicle is tow started.

SD020B1-E

## If The Engine Cannot Be Cranked



- 1. If the vehicle is fitted with manual transaxle, ensure that the clutch pedal is depressed whilst cranking the engine. If the vehicle is fitted with automatic transaxle, ensure that the transaxle selector is at the "P" or "N" position.
- Check the battery terminals and connections to ensure that these are clean and also tight.

- If the ignition warning lights dim when the engine is cranked and the battery terminals have been checked, a discharged battery is indicated.
- 4. Do not attempt to push or tow start the vehicle, refer to "Jump Starting" for information regarding engine starting when the battery is discharged.





## **JUMP STARTING**

D010C02A-EAT

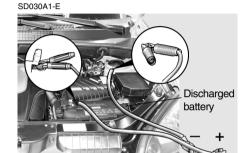
# If Engine Turns Over Normally but Does Not Start

- 1. Check fuel level.
- 2. With the key in the "OFF" position, check all connectors at ignition coils and spark plugs(For Petrol Engine) or check all connectors at glow plug and glow plug relay(For Diesel Engine). Reconnect any that may be disconnected or loose.
- 3. Check fuel line in the engine compartment.
- 4. If engine still refuses to start, call a Hyundai authorised repairer or seek other qualified assistance.

D010A01A-EAT

## If Engine Stalls Whilst Driving

- Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
- 2. Turn on your emergency flashers.
- Try starting the engine again. If your vehicle will not start, contact Hyundai authorised repairer or seek other qualified assistance.





## **CAUTION:**

Personal injury and damage to the vehicle may occur if jump starting is not performed correctly. If any doubt exists as to how this operation should be performed, seek assistance from qualified personnel.

Booster battery /



## WARNING:

Motor vehicle batteries contain sulphuric acid and emit hydrogen gas. Protective clothing should be worn and care exercised to prevent the acid from coming into contact with skin or clothing and the vehicle. Naked lights should not be permitted in the vicinity of the battery. Care should be exercised to prevent sparks occurring during connection. If acid accidentally comes into contact with skin or eyes, the affected area should immediately be flushed with copious amounts of water and medical assistance sought.











- Ensure that the booster battery is 12 volt type. If the booster battery is installed in another vehicle, ensure that the two vehicles are not touching.
- 2. Turn off all unnecessary electrical equipment in both vehicles.
- 3. Ensure that the engine of the vehicle providing the jump start is running prior to connection of the jump cables.
- Connect the red jump cable to the positive (+) terminal of the booster battery and the other end to the positive (+) terminal of the discharged battery.
- 5. Attach the black jump cable to the negative (-) terminal of the booster battery, and the other end to a ground point within the engine compartment of the vehicle with the flat battery. Do not connect to the negative battery terminal of the flat battery since sparks may be generated with the subsequent risk of explosion.

- 6. Raise the booster vehicle engine speed to 2,000 r.p.m. and start the engine of the vehicle with the flat battery.
- 7. Switch "ON" the main beam headlamps before carefully removing the jumper cables in the reverse order of attachment. Once the jumper cables have been removed, switch "OFF" the main beam headlamps.



## **CAUTION:**

If the jump cables is incorrectly installed, damage to the vehicle electrical system may occur, in particular the electronic components such as the Fuel Injection system computer and the Automatic transaxle computer. The battery must never be disconnected whilst the engine is running.

## IF THE ENGINE OVERHEATS

SD040A2-E

If the temperature gauge indicates overheating:

- 1. Pull off the road and stop as soon as it is safe to do so.
- 2. Place the gear selector lever in "P" (automatic), or neutral (manual transaxle) and set the parking brake. If the air conditioning is on, turn it off.
- 3. If coolant is running out under the car or steam is coming out from under the bonnet stop the engine. Do not open the bonnet until the coolant has stopped running or the steaming has stopped. If there is no visible loss of coolant and no steam, leave the engine running and check to be sure the engine cooling fan is operating.
  - If the fan is not running, turn the engine off.
- 4. Check to see if the water pump drive belt is broken. If it is not broken, check to see that it is tight. If the drive belt seems to be satisfactory, check for coolant leaking from the radiator, hoses or under the car. (If the air conditioning had been in use,

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it is normal for cold water to be draining from it.)



## WARNING:

Whilst the engine is running, keep hands and clothing away from moving parts such as the fan and drive belts to prevent injury.

WARNING (Diesel only): Never work on injection system with engine running or within 30 seconds after shutting off engine. High pressure pump, rail, injectors and high pressure pipes are subject to high pressure even after the engine stopped. The fuel jet produced by fuel leaks may cause serious injury, if it contacts the body. People using pacemakers should ensure that they keep a distance of 30cm from the ECU or wiring harness within the engine room whilst engine is running, since the high currents in the Common Rail system produce considerable magnetic fields.

5. If the water pump drive belt is broken or coolant is leaking out, stop the engine immediately and call the nearest Hyundai authorised repairer for assistance.



## **WARNING:**

Do not remove the radiator cap when the engine is hot since steam and boiling water may be ejected from the radiator resulting in burns or scalding.

6. If the cause of the overheating cannot be found, wait until the engine temperature has returned to normal. Then, if coolant has been lost, carefully add coolant to the reservoir (page 6-11) to bring the fluid level in the reservoir up to the base of the radiator fill opening. Fill the coolant expansion tank to the halfway mark.

7. Proceed with caution until it is established that the engine is operating normally. If the engine overheats repeatedly, the advice of Hyundai authorised repairer should be sought.



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## **CAUTION:**

Serious loss of coolant indicates there is a leak in the cooling system and this should be checked as soon as possible by Hyundai authorised repairer.









## 6 SPARE TYRE

OD050A1-E

### For Full Size

The following instructions for the FULL SIZE spare tyre should be observed:

Check inflation pressure as soon as possible after installing the spare tyre, and adjust to the specified pressure. The tyre pressure should be periodically checked and maintained at the specified pressure whilst the tyre is stored.

## **Spare Tyre Pressure**

Tyre Size	FULL SIZE					
Inflation Pressure	30 psi (207 kPa)					

D040A01JM-EAT

# TEMPORARY SPARE TYRE (Not all models)

The following instructions for the temporary spare tyre should be observed:

 Check inflation pressure as soon as practical after installing the spare tyre, and adjust to the specified pressure. The tyre pressure should be periodically checked and maintained at the specified pressure while the tyre is stored.

## **Spare Tyre Pressure**

Tyre Size	T155/90R16
Inflation Pressure	420 kPa (60 psi)

- 2. The spare tyre should only be used temporarily and should be returned to the luggage compartment as soon as the original tyre can be repaired or replaced.
- Continuous use at speeds of over 50 mph(80 km/h) is not recommended.
- As the temporary spare tyre is specifically designed for your car, it should not be used on any other vehicle.

- 5. The temporary spare tyre should not be used on any other wheels, nor should standard tyre, snow tyre, wheel covers or trim rings be used with the temporary spare wheel. If such use is attempted, damage to these items or other car components may occur.
- The temporary spare tyre pressure should be checked once a month while the tyre is stored.



## **CAUTION:**

- o Do not use snow chains with your temporary spare tyre.
- o Do not use more than one temporary spare tyre at a time.



# IN THE EVENT OF A PUNCTURE

SD060A1-E

If a puncture occurs whilst driving the vehicle:

- Bring the car to rest as soon as it is safe to do so and with the minimum amount of braking required which will assist in maintaining the maximum amount of control. The vehicle should be parked wherever possible upon firm level ground to facilitate wheel changing.
- 2. If the vehicle is creating a hazard and the road conditions do not permit the wheel to be changed safely, assistance should be sought.
- 3. Passengers must not be allowed to remain inside the vehicle during wheel changing. If a puncture occurs whilst the vehicle is on a motorway, the passengers should take refuge on the motorway embankment to avoid the possibility of injury occurring should the vehicle be struck by other motorway traffic.
- 4. Wheel changing should be performed according to the following instructions.

D040B01JM-EAT Handling the Spare Tyre





- 1. Open the hatchback door.
- 2. Remove the luggage mat.
- 3. Remove the luggage under tray cover to turn the lever toward "UNLOCK" and luggage under tray.



4. Remove the installation bolt to remove the spare tyre. To replace the spare tyre in its storage compartment, tighten the bolt firmly with your fingers until there is no more play in the spare tyre.





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5/31/04, 4:42 PM

## 3 IN CASE OF EMERGENCY

## CHANGING A FLAT TYRE

#### SD070A1-E



It is of the utmost importance that care is exercised when changing road wheels. Ensure that the parking brake is set and that the gear shift lever is in reverse (P, if the vehicle has automatic transaxle).

#### D060B01JM-EAT

## 1. Obtain Spare Tyre and Tool



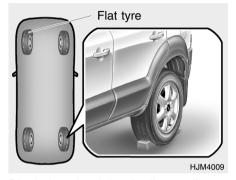
Remove the spare tyre and remove the jack, tool bag from the luggage compartment.

## NOTE:

The spare tyre is located under the luggage compartment floor.

#### ZD070D1-E

## 2. Block the Wheel



Block the wheel that is diagonally opposite from the flat tyre to prevent the vehicle from rolling when the car is raised on the jack.



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ZD070F1-E

## 3. Loosen Wheel Nuts



The wheel nuts should be loosened slightly before raising the car. To loosen the nuts, turn the wrench handle counterclockwise. When doing this, be sure that the socket is seated completely over the nut so it cannot slip off. For maximum leverage, position the wrench so the handle is to the right as shown in the drawing. Then, whilst holding the wrench near the end of the handle, pull up on it with steady pressure. Do not remove the nuts at this time. Just loosen them about one-half turn.

#### D060E01A-AAT

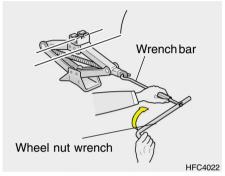
## 4. Put the Jack in Place



The base of the jack should be placed on firm, level ground. The jack should be positioned as shown in the illustration.

#### SD070G1-E

## 5. Raising the Car



After inserting a wrench bar into the wheel nut wrench, install the wrench bar into the jack as shown in the drawing, turning the wrench clockwise in order to raise the vehicle. As the jack begins to raise the vehicle, double check that it is properly positioned and will not slip. If the jack is on soft ground or sand, it may be necessary to place a stout piece of timber under the base of the jack to prevent it from sinking. Raise the car high enough so that the fully inflated spare tyre can be installed.







## 3 IN CASE OF EMERGENCY

10



## **WARNING:**

Do not get under the car when it is supported by the jack! The jack is solely designed for wheel changing and is not intended to support the vehicle for other purposes. The use of purpose designed supports is necessary whilst the vehicle is raised and the operator is required to get underneath.



## 6. Changing Wheels



Using the wheel nut wrench, remove the nuts and slide the wheel off the hub and wheel studs. Lie the wheel flat to prevent it from rolling. Ensure that the faces of the wheel and hub are clean. Position the spare wheel over the studs and slide it up to the hub.





## **WARNING:**

It is important that the faces of the wheel and hub are clean prior to installing the wheel. The prescence of dirt or other matter in the wheel or hub faces could result in the wheel nuts becoming loose whilst the vehicle is being driven.









#### SD070I1-E

## 7. Re-install Wheel Nuts



Fit the wheel nuts onto the studs and tighten with the wheel nut wrench.

D060I01E-EAT

# 8. Lower Vehicle and Tighten Nuts



Lower the car to the ground by turning the wheel nut wrench counterclockwise. Then position the wrench as shown in the drawing and tighten the wheel nuts. Be sure the socket is seated completely over the nut. Do not stand on the wrench or use an extension pipe over the wrench handle.

Go around the wheel tightening every other nut until they are all tight. Then double-check each nut for tightness. After changing wheels, have a technician tighten the wheel nuts to their proper torque as soon as possible.

## Wheel nut tightening torque:

Steel wheel & aluminium alloy wheel: 90-110 N.m (65-80 lb.ft)









## D060J02O-EAT **AFTER CHANGING WHEELS**



If you have a tyre gauge, remove the valve cap and check the air pressure. If the pressure is lower than recommended, drive slowly to the nearest service station and inflate to the correct pressure. If it is too high, adjust it until it is correct. Always reinstall the valve cap after checking or adjusting tyre pressure. If the cap is not replaced, air may leak from the tyre. If you lose a valve cap, buy another and install it as soon as possible.

After you have changed wheels, always secure the flat tyre in its place and return the jack and tools to their proper storage locations.

# IF YOUR CAR MUST BE TOWED

D080A02A-EAT



 OK FOR AUTOMATIC OR MANUAL TRANSAXLE EQUIPPED VEHICLE

D080A01JM



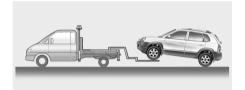
Your car can be damaged if towed incorrectly!

If your car has to be towed, it should be done by your Hyundai authorised repairer or a commercial tow truck service. This will help assure that your car is not damaged in towing. Also, professionals are generally aware of local laws governing towing. In any case, rather than risk damage to your car, it is suggested that you show this information to the tow truck operator. Be

sure that a safety cable system is used and that all current laws associated with vehicle towing are observed.

D080B01O-AAT

# Towing a Car With Manual Transaxle



- o DO NOT TOW 4WD
- o OK FOR AUTOMATIC OR MANUAL TRANSAXLE EQUIPPED VEHICLE WITH NO DAMAGE (except 4WD)

D080B02JM

- o If the car is being towed with the rear wheels on the ground, be sure the parking brake is released.
- o If the car is being towed with the front wheels on the ground, be sure that the Transaxle is in neutral. Also, be sure that the ignition key is in the "ACC" position. This is necessary to

jmuk-3.p65 12







prevent damage to the steering lock mechanism, which is not designed to hold the front wheels straight whilst the car is being towed.

o If any of the loaded wheels or suspension components are damaged. a towing dolly must be used.



## CAUTION:

- o When towing the 2WD vehicle with the rear wheels on the ground, the vehicle should be towed with wheel lift type truck. Otherwise, the CV joint boot can interfere with the towing hook caused by insufficient clearance resulting in CV joint boot damage.
- o 4 Wheel Drive cannot be towed with a tow truck. It must be towed by lifting all 4 wheels.

D080C01O-EAT

## **Towing A Car With Automatic** Transaxle



- o DO NOT TOW 4WD
- o NOT OK FOR AUTOMATIC TRANSAXLE EQUIPPED VEHICLE
- o OK FOR MANUAL TRANSAXLE (except 4WD) D080C01JM

5/31/04, 4:43 PM



## CAUTION:

o A car with an automatic transaxle should never be towed from the rear with the front wheels on the ground. This can cause serious damage to the transaxle. If the car must be towed from the rear. a towing dolly must be used under the front wheels.

o If the car is being towed with all four wheels on the ground, it can be towed only from the front. Be sure that the transaxle is in neutral. Do not tow at speeds greater than 30 mph (50 km/h) and for more than 15 miles (25 km). Be sure the steering is unlocked by placing the key in the "ACC" position. A driver must be in the towed vehicle to operate the steering and brakes.

If the car is being towed with the rear wheels on the ground, be sure the parking brake is released.











## 3 IN CASE OF EMERGENCY

14



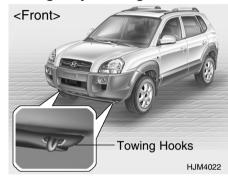
- o OK FOR 4WD
- OK FOR AUTOMATIC OR MANUAL TRANSAXLE EQUIPPED VEHICLE

D080C02JM

## NOTE:

Before towing, check the level of the transaxle fluid. If it is below the "HOT" range on the dipstick, add fluid. If you cannot add fluid, a towing dolly must be used.

## D080D01O-EAT Emergency Towing





For emergency towing when no commercial tow vehicle is available, attach a tow cable, chain or strap to one of the towing hooks under the front/rear of your car. Be very careful when attempting this procedure when the vehicle is on any unpaved surface to avoid damage to your vehicle.

Nor should towing be attempted if the wheels, drive train, axles, steering or brakes are damaged. Before towing, be sure the transaxle is in neutral and the key is in "ACC" (with the engine off) or in the "ON" position (with the engine running). A driver must be in the towed car to steer it and operate the brakes.

## NOTE:

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To avoid serious damage to your 4WD vehicle, limit the towing to 10 mph (15 km/h) and not for more than 1 mile (1.5 km) at ANY TIME.



jmuk-3.p65 14





## IN CASE OF EMERGENCY

15

## IF YOU LOSE YOUR KEYS

D120A01A-EAT

Information about the key of immobiliser system will be found on page 1-5.



jmuk-3.p65 15 5/31/04, 4:43 PM



## **APPEARANCE CARE**

Protecting Your Hyundai from Corrosion	4-2
Underbody Coatings	4-2
Valeting	4-3
Interior Valeting	4-5



4

jmuk-4.p65 1 5/31/04, 4:43 PM

## 4 APPEARANCE CARE

## PROTECTING YOUR HYUNDAIFROM CORROSION

ZE020A1-E

In using the most advanced design and construction practices, every Hyundai is built to retain its original factory finish for many years. However, long term durability is also greatly dependant upon maintaining the various protection systems and coatings used in manufacture since constant exposure to the elements will eventually result in their breakdown and loss of effectiveness. The following suggestions are made to assist in the maintenance of the vehicle bodywork.

ZE020B1-E

## UNDERBODY COATINGS

Every Hyundai passenger car receives a full underbody and cavity injection treatment during production. In order that this treatment may retain maximum effectiveness, it is recommended that the underbody receives a power wash and a thorough inspection after each winter season. In doing so any accumulations of mud, which act as moisture traps and combine with road salts to accelerate corrosion, will be removed. Should any damage to or deterioration of the underbody coating be apparent, the advice of a Hyundai dealer regarding the use of a compatible repair material should be sought.

### NOTE:

The underbody should never be steam cleaned since the underbody coating may be removed by this process.

During the interim period between power washing the underbody, the more vulnerable areas such as wheelarches should be hosed off, particularly during the winter season to prevent prolonged contact of road salt with the body.

Ensure that the various drain points located at bottom of the door panels are kept clear, to prevent water becoming trapped within the cavities. Wherever possible, the parking of the vehicle in a confined, poorly ventilated location (e.g.) garage should be avoided when the vehicle is wet or covered with snow or ice. Under these conditions, the internal cavities of the vehicle will remain damp for long periods of time which encourage corrosion. Parking the vehicle where good ventilation exists is preferable.





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ZE020C1-E

### **INTERIOR**

During the winter period, it is possible that the carpet within the passenger compartment may become wet. The carpet should not be allowed to remain in this condition for prolonged periods since the carpet may begin to create musty smells and promote internal corrosion of the floorpan.

JE050A1-E

**VALETING** 

Regular cleaning of the exterior paintwork serves two important functions. Firstly, the removal of abrasive dirt and contaminants will maintain the lustre of the paintwork and will prevent discolouration and dulling due to prolonged contact.

Secondly, the presence of damage through impact or abrasion will be apparent allowing early rectification to be made thus preventing corrosion from becoming established and spreading beneath the paint film. To avoid "water spotting" the vehicle should not be washed in direct sunlight particularly in the case of vehicles having dark body colours. The heat from the sun rays is absorbed by the paint film increasing the surface temperature. This action causes water used for washing to evaporate quickly leaving behind the deposits from the water and the shampoo used.

Use only a shampoo intended for the purpose and ensure that the body work is thoroughly wetted to soften the dirt film prior to attempting to remove this. After removing the dirt film with a soft sponge, the body work should be thoroughly rinsed and then dried with a good quality chamois leather to prevent streaking or spotting of the paint

Household detergents, solvents and abrasive cleaning materials should not be used in order to avoid damaging the paint film.

Plastic wheel covers should be cleaned using a sponge and water. Cast alloy wheels should be cleaned using a mild soap or neutral detergent. Abrasive compounds must not be used since in the event of these damaging the lacquer coating, oxidisation of the aluminium wheel will occur, spoiling the appearance.

The use of a toothbrush will facilitate cleaning between the wheel "spokes".

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#### IEOGO A 1 - E

## Stain/Spot Removal

Should tree sap, dead insects or tar prove to be difficult to remove from the paint film, turpentine or a proprietary paint cutting compound may be used. Ensure that the area to be cleaned is not rubbed intensively to prevent breaking through the colour coat and exposing the under coat.



## Polishing

The exterior paint work should be polished with a proprietary wax polish when water no longer collects in bead form on the paint work. The instructions of the product manufacturer should be adhered to.

#### JE080A1-E

## **Bumper Maintenance**

The special material from which the bumpers are manufactured warrants special attention to preserve the appearance of the bumpers. Avoid contact with battery electrolyte or brake fluid and ensure that accidental spillages are immediately flushed with water.

Do not use abrasive cleaning materials which may damage the bumpers. Avoid subjecting the bumpers to high temperatures such as may be encountered in high bake paint ovens.

#### JE090A2-E

## **Accident Repairs**

In the event of the body work sustaining damage, the following points should be noted prior to repairs being undertaken.

If body panels are replaced or repaired, anti corrosion treatment must be applied to the repair area. The product used must be compatible with those used in manufacture. It is recommended that repairs are entrusted to Hyundai authorised repairer to ensure that replacement parts used are of the same high quality as those used in manufacture of the vehicle and that the correct repair methods and materials will ensure adequate levels of corrosion protection and the continued validity of the Anti Perforation Warranty.



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## INTERIOR VALETING

JE110A1-E

The soft trim and carpets should be maintained with the regular use of a vacuum cleaner. Heavy soiling should be removed with a dry cleaning agent recommended for this purpose following the instructions of the product manufacturer. Paint thinner, solvents or other such cleaning materials should not be used since damage to the upholstery may result.

JE100A1-E

### Seat Belts

Seat belts should be cleaned only with a mild soap solution. Strong detergents, solvents or bleaches may damage the belt webbing and therefore reduce the effectiveness of the belt. Belts which display signs of fraying, wear or cuts should be replaced.

JE120A1-E

### Windows

A proprietary glass cleaner should be used to clean the inside of the windows. However, the rear heated windscreen must only be cleaned using a light horizontal cleaning action. Care should be exercised to avoid the use of abrasive cleaners or contact with items of jewellery which may damage the heating elements.

YE010A1-E

## To Clean Leather Upholstery (Not all models)

In the normal course of use, leather upholstered surfaces will, like any material, pick-up dust and dirt. This dust and dirt MUST be cleaned off or it may work into the surface of the leather. causing damage.

Fine leather needs care. This care, as with all fine things, need not be elaborate, but should include cleaning when necessary. Washing leather thoroughly with soap and water will keep your leather lustrous, beautiful and ensure you have many years of wear.

Take a piece of cheese cloth and using any mild soap and lukewarm water. work up a good lather. Thoroughly wash the leather. Wipe clean with a slightly damp cloth and dry with soft cloth. Do this as often as the leather becomes soiled.

During tanning operations, sufficient oils are incorporated through processing that none need be applied during the life of the leather. Oil applied to the finished surface will in no way help the leather and may do more harm than good. Varnished and furniture polishes should NEVER be used under any conditions.

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## **VEHICLE MAINTENANCE REQUIREMENTS**

Maintenance and Servicing Requirements	5-2
Scheduled Maintenance	5-4
Maintenance under Severe Usage Conditions	5-7
Explanation of Scheduled Maintenance Items	5-8



5

jmuk-5.p65 1 5/31/04, 4:43 PM



## MAINTENANCE AND SER-VICING REQUIREMENTS

DF020A1-F

To ensure the continued reliability and safety of the vehicle, certain routine maintenance operations are required at specific mileage or time intervals. It is the responsibility of the vehicle owner to ensure that the maintenance schedules shown in both this Owner's Manual and the Warranty and Service Passport are adhered to.

The new vehicle warranty may be invalidated if the routine maintenance operations are not performed in line with the recommendations outlined and the safety and durability of the vehicle adversely affected.

It is recommended that all maintenance operations with the exception of the daily operating checks are entrusted to a Hyundai authorised repairer to ensure that the latest repair and maintenance procedures and specialized servicing tools are employed. In addition, the use of genuine Hyundai replacement parts will ensure that the vehicle safety and performance will not be compromised.

### NOTE:

The inspection and testing of certain electronic fuel injection/engine management and automatic transmission control systems require specialised electronic equipment specifically designed for Hyundai vehicles. The use of general purpose electrical test equipment may result in damage to the control unit microprocessors.

DF020C2-

## **Specified Scheduled Procedures**

The specified scheduled procedures are listed in the maintenance charts beginning at page 5-4. The operations specified must be performed at the time or mileage intervals shown irrespective of whether the mileage interval has been reached before the specified time interval.

Certain lubricants and components degrade with both time and mileage (eg, engine oil and brake fluid) and therefore it is not permissable to base the maintenance schedule upon mileage alone. It is strongly recommended that the maintenance operations are performed by Hyundai authorised repairer because of the need for specialized knowledge and tooling and to ensure that no possibility of invalidating the manufacturers warranty exists. The maintenance schedules relate to vehicles operated under normal conditions, vehicles which are operated under adverse conditions will require more frequent maintenance which is described at page 5-7.

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## NOTE:

Service schedules may change depending on individual country needs. Please ask your local Hyundai dealer for a copy of the service schedule that relates to that country.

#### DF020F1-F

## SERVICE HISTORY

It is important that all scheduled maintenance services are recorded in the warranty and service passport to ensure that proof of maintenance is available when warranty service is required.





## 5 VEHICLE MAINTENANCE REQUIREMENTS

## 4 SCHEDULED MAINTENANCE

YF010A2-E

In order to ensure continued reliability, safety and longevity, regular maintenance performed at the intervals specified is essential. The maintenance intervals specified are based both on time elapsed and mileage covered since the previous maintenance service was performed. However, under severe operating conditions, certain scheduled operations should be performed at shorter intervals. Regular maintenance should be entrusted to Hyundai authorised repairer who is best able to provide the expertise required to ensure optimum operational performance.

In addition the use of Hyundai replacement parts and service consumables will ensure that the original build quality, operational performance and safety are maintained.

F030B01JM-EAT

R: Replace I: Inspect and, after Inspection, clean, adjust, repair or replace if necessary

NO.	DESCRIPTION	MILES X 1000		10	20	30	40	50	60	
INO.	DESCRIPTION		MONTHS		12	24	36	48	60	72
	ENGINE CONTROL SYST	EM MAINTENANCE	(PETROL)							
1	ENGINE OIL & FILTER (SO	G OR ABOVE)		See Note (1)	R	R	R	R	R	R
2	DRIVE BELT	2.0 DOHC (ALT, V	V/PUMP,P/STR'G)	See Note (2)	I	I	I	I	I	I
-	DUINE PELI	2.7 V6 (AUTO-TEI	NSIONER,ALT,P/STR'G,	A/CON)		I		ı	ı	- 1
3	FUEL FILTER (MPI TYPE)						R			
4	FLUID LEAKS			ı	ı	I	I	ı	I	
5	TIMING BELT (WHEN REPLACE TIMING BELT and INSPECT WATER PUMP : 2.7 GSL)					I		R		
6	VENTILATION HOSES							ı		
7	AIR CLEANER FILTER		I	R	I	R	I	R		
8	AIR FILTER-CANISTER			I: 62,000 miles/R: 25,000 miles					s	
9	SPARK PLUG (2.0L)			R		R		R		
_ 9	SPARK PLUGS (2.7L - Iridium coated)		R: 100,000 miles/120months							
10	VALVE CLEARANCE: (2.0 GSL)				l: 60,0	000 mile	es/48 m	nonths		

Note: (1) SF OR LOWER: EVERY 6,000 MILES OR 6 MONTHS: "R"

(2) WHEN REPLACING TIMING BELT ALSO INSPECT WATER PUMP

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F030D01JM-EAT R :Replace I: Inspect and, after Inspection, clean, adjust, repair or replace if necessary.

NO.	DESCRIPTION	MILES X 1000	10	20	30	40	50	60	70
INO.	DESCRIPTION	MONTHS	12	24	36	48	60	72	84
	ENGINE CONTROL SYSTEM MAINTENANCE (	(DIESEL)							
	ENGINE OIL & FILTER [API Class: CF-4 or	r ABOVE]		R	R	R	R	R	_
'	See Note(1) [ACEA Class: B4 o	r ABOVE]	R						R
2	AIR CLEANER FILTER		I	ı	R	ı	ı	R	I
3	FUEL FILTER CARTRIDGE			R		R		R	
4	TIMING BELT								R
5	DRIVE BELT (FOR P/STR'G PUMP, ALTERNATOR AND A/CON)			I		I		R	
6	ALTERNATOR VACUUM PUMP		I	I	ı	ı	I	- 1	- 1
7	ALTERNATOR OIL HOSE & VACUUM HOSE		ı	ı	ı	ı	ı	I	ı
8	FUEL LINES, FUEL HOSE & CONNECTIONS		I	I	I	I	I	I	I
9	VACUUM HOSE (FOR EGR & THROTTLE BODY)		I	I	ı	ı	I	I	I

Note: (1) ON A DAILY BASIS, WHENEVER THE VEHICLE IS REFUELLED OR BEFORE STARTING A LONG TRIP: "I"







R: Replace I: Inspect and, after inspection, clean, adjust, repair or replace if necessary

NO.	DESCRIPTION	MILES X 1000	10	20	30	40	50	60
INO.	DESCRIPTION	MONTHS	12	24	36	48	60	72
	GENERAL MAINTENANCE							
1	COOLING SYSTEM		I	I	I	I	I	I
2	COOLANT	PETROL ENGINE			R			R
Ľ	COOLANT	DIESEL ENGINE		R		R		R
3	ENGINE COOLANT SPECIFIC GRAVITY		I	- 1	- 1	- 1	I	- 1
4	MANUAL TRANSAXLE OIL		I	I	I	I	I	ı
5	AUTOMATIC TRANSAXLE FLUID AND FILTER		I	I	I	I	ı	R
6	BRAKE PIPES, HOSES, AND CONNECTIONS		I	I	I	I	I	I
7	BRAKE FLUID		I	R	I	R	ı	R
8	CLUTCH FLUID		I	R	I	R	I	R
9	REAR BRAKE LININGS AND CYLINDERS			I		I		I
10	BRAKE PADS		I	I	I	I	I	I
11	1 SUSPENSION AND STEERING SYSTEM		I	I	- 1	I	I	I
12	FRONT SUSPENSION BALL JOINTS		I	I	- 1	I	I	I
13	POLLEN FILTER		R	R	R	R	R	R
14	TRANSFER CASE OIL		I	I	I	I	R	I
15	REAR AXLE OIL		I	I	I	I	R	I
16	CLEAN PROPELLAR SHAFT/RETIGHTEN BOLT	TS .	I	ı	I	I	ı	I
17	REAR WHEEL BEARINGS		I	- 1	- 1	I	- 1	- 1
18	TYRE CONDITION AND PRESSURE (incl. Spar	e)	I	I	I	I	I	I
19			I	I	I	I	I	I
20	CHECK ALL ELECTRICAL SYSTEMS		I	I	I	I	I	I
21	ROAD TEST		I	I	I	I	I	I
22	CHECK ALL SYSTEMS WITH HI-SCAN		I	I	I	I	I	I
23	CHECK EMISSIONS			I	I	I	I	I
24	CHECK 4 WHEEL ALIGNMENT		I	I	I	I	I	I

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F040A01JM-EAT

The following items must be serviced more frequently on cars normally used under severe driving conditions. Refer to the chart below for the appropriate maintenance intervals.

### R: Replace I: Inspect and, after inspection, clean, adjust, repair or replace if necessary

MAINTENANCE ITEM	MAINTENANCE OPERATION	MAINTENANCE INTERVALS	DRIVING CONDITION
ENGINE OIL AND FILTER	R	EVERY 4,500 MILES OR 6 MONTHS	A, B, C, F, H, I, J
AIR CLEANER FILTER	R	MORE FREQUENTLY	C, E
SPARK PLUGS	R	MORE FREQUENTLY	B, H
TIMING BELT (WHEN REPLACE TIMING BELT	R	EVERY 37,000 MILES OR 48 MONTHS	D, E, F, G
and INSPECT WATER PUMP : 2.7 GSL)			
BRAKE PADS, CALIPERS AND ROTORS	I	MORE FREQUENTLY	C, D, G, H
REAR BRAKE DISCS/LININGS, PARKING BRAKE		MORE FREQUENTLY	C, D, G, H
STEERING GEAR BOX, LINKAGE & BOOTS/	l I	MORE FREQUENTLY	C, D, E, F
LOWER ARM BALL JOINT			
DRIVESHAFTS & BOOTS	R	EVERY 9,000 MILES OR 12 MONTHS	C, D, E, F
MANUAL TRANSAXLE OIL	R	EVERY 60,000 MILES	A, C, D, E, F, G, H, I, J
AUTOMATIC TRANSAXLE FLUID AND FILTER	R	EVERY 27,000 MILES	A, C, E, F, G, H, I
POLLEN FILTER	R	MORE FREQUENTLY	C, E
TRANSFER CASE OIL (4WD)*1	R	EVERY 25,000 MILES	C, E, G, H, I
REAR AXLE OIL (4WD)*1		EVERY 50,000 MILES	C, E, G, H, I

<sup>\*1.</sup> Transfer Case Oil and Axle Gear Oil should be checked (and replaced it necessary) anytime they have been submerged in water over 15.7 in. (40 cm) deep.

### **SEVERE DRIVING CONDITIONS**

- A Repeated short distance driving
- B Extensive idling
- C Driving in dusty, rough roads
- D Driving in areas using salt or other corrosive materials or in very cold weather
- E Driving in sandy areas

- F More than 50% driving in heavy city traffic during hot weather above 90°F(32°C)
- G Driving in mountainous areas
- H Towing a trailer
- I Driving for patrol car,taxi,commercial car or vehicle towing
- J Driving over 100 MPH







### EXPLANATION OF SCHED-ULED MAINTENANCE ITEMS

F060M01A-AAT

### o Engine oil and filter

The engine oil and filter should be changed at the intervals specified in the maintenance schedule. If the car is being driven in severe conditions, more frequent oil and filter changes are required.

#### EOGORO1A-AAT

#### o Drive belts

Inspect all drive belts for evidence of cuts, cracks, excessive wear or oil contamination and replace if necessary. Drive belts should be checked periodically for proper tension and adjusted as necessary.

F060C01A-AAT

#### o Fuel filter

A clogged filter can limit the speed at which the vehicle may be driven, damage the emission system and cause hard starting. If an excessive amount of foreign matter accumulates in the fuel tank, the filter may require replacement more frequently.

After installing a new filter, run the engine for several minutes, and check for leaks at the connections. Fuel filters should be installed by trained technicians.

#### F060D01TB-AAT

# Fuel lines, fuel hoses and connections

Check the fuel lines, fuel hoses and connections for leakage and damage. Have a trained technician replace any damaged or leaking parts immediately.

**WARNING (Diesel only):** Never work on injection system with engine running or within 30 seconds after shutting off engine. High pressure pump, rail, injectors and high pressure pipes are subject to high pressure even after the engine stopped. The fuel jet produced by fuel leaks may cause serious injury. if it contacts the body. People using pacemakers should ensure that they keep a distance of 30cm from the ECU or wiring harness within the engine room while engine is running, since the high currents in the Common Rail system produce considerable magnetic fields.



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q

F060E01A-AAT

### o Timing belt

Inspect all parts related to the timing belt for damage and deformation. Replace any damaged parts immediately.

F060G01A-EAT

# o Vapour hose and fuel filler cap

The vapour hose and fuel filler cap should be inspected at those intervals specified in the maintenance schedule. Make sure that a new vapour hose or fuel filler cap is correctly replaced. E060E014-44T

# o Vacuum, crankcase ventilation hoses

Inspect the surface of hoses for evidence of heat and/or mechanical damage. Hard and brittle rubber, cracking, tears, cuts, abrasions, and excessive swelling indicate deterioration. Particular attention should be paid to examine those hose surfaces nearest to high heat sources, such as the exhaust manifold.

Inspect the hose routing to assure that the hoses do not come in contact with any heat source, sharp edges or moving component which might cause heat damage or mechanical wear. Inspect all hose connections, such as clamps and couplings, to make sure they are secure, and that no leaks are present. Hoses should be replaced immediately if there is any evidence of deterioration or damage.

F060H01A-AAT

### o Air cleaner filter

A Genuine Hyundai air cleaner filter is recommended when filter is replaced.

F060J01A-AAT

# o Spark plugs (For Petrol Engine)

Make sure to install new spark plugs of the correct heat range.

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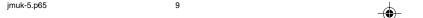
F070B01A-AAT

# o Cooling system

Check the cooling system part, such as radiator, coolant reservoir, hoses and connections for leakage and damage. Replace any damaged parts.









10

F070C01A-AAT

#### o Coolant

The coolant should be changed at the intervals specified in the maintenance schedule.

#### o Manual transaxle oil

Inspect the manual transaxle oil according to the maintenance schedule.



If the oil level is low, check for possible leaks before adding oil. Do not overfill.

F070F03A-GAT

### o Automatic transaxle fluid and filter

The fluid level should be in the "HOT" range of the dipstick, after engine and transaxle and filter are at normal operating temperature. Check the Automatic and filter Transaxle and filter Fluid level with the engine running and the transaxle and filter in neutral, with the parking brake properly applied. Use HYUNDAÏ GENUINĖ ATF SP III, DIA-MOND ATF SP III, SK ATF SP III or other brands approved by Hyundai Motor Co., when adding or changing fluid.

F070F01A-AAT

#### o Brake hoses and lines

Visually check for proper installation, chafing, cracks, deterioration and any leakage. Replace any deteriorated or damaged parts immediately.

F070G02A-AAT

#### o Brake fluid

Check brake fluid level in the brake fluid reservoir. The level should be between "MIN" and "MAX" marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4.

# o Rear brake discs, linings and pads parking brake

Check the rear brake discs, linings and pads for scoring, burning, leaking fluid, broken parts, and excessive wear. Inspect the parking brake system including the parking brake lever and cables. For detailed service procedures, refer to the Shop Manual.



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F070J01A-AAT

# o Brake pads, calipers and rotors

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

F070K01A-AAT

### o Exhaust pipe and silencer

Visually inspect the exhaust pipes, silencer and hangers for cracks, deterioration, or damage. Start the engine and listen carefully for any exhaust gas leakage. Tighten connections or replace parts as necessary.

F070L01A-AAT

# o Suspension mounting bolts

Check the suspension connections for looseness or damage. Retighten to the specified torque.

F070M01O-AAT

# o Steering gear box, linkage & boots/lower arm ball joint

With the vehicle stopped and engine off, check for excessive free-play in the steering wheel.

Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage. Replace any damaged parts.

F070N01A-AAT

# Power steering pump, belt and hoses

Check the power steering pump and hoses for leakage and damage. Replace any damaged or leaking parts immediately. Inspect the power steering belt for evidence of cuts, cracks, excessive wear, oil contamination and proper tension. Replace or adjust it if necessary.

F070P01HP-AAT

#### o Driveshafts and boots

Check the drive shafts, boots and clamps for cracks, deterioration, or damage. Replace any damaged parts and, if necessary, repack the grease.

F070Q01A-AA

# o Air conditioning refrigerant

Check the air conditioning lines and connections for leakage and damage. Check air conditioning performance according to the relevant shop manual if necessary.









# **OWNER MAINTENANCE**

Engine Compartment	6-2
Daily Operating Checks	6-5
Engine Oil	
Engine Oil and Filter Replacement	6-9
Engine Coolant Checking and Replacing	
Spark Plugs	6-13
Changing the Air Cleaner Filter	
Manual Transaxle Lubricant	
Automatic Transaxle Lubricant	6-18
Brake System Checking	
Checking the Clutch Fluid	
Air Conditioning System Maintenance	6-22
Changing the Pollen Filter	
Checking Engine Drive Belts	
Fusible Links	6-27
Battery Maintenance	6-29
Power Steering Hoses	6-30
Removal of Water from the Fuel Filter	6-3 <sup>-</sup>
Replacing Light Bulbs	
Bulb Wattage	
Fuse Panel Description	

6

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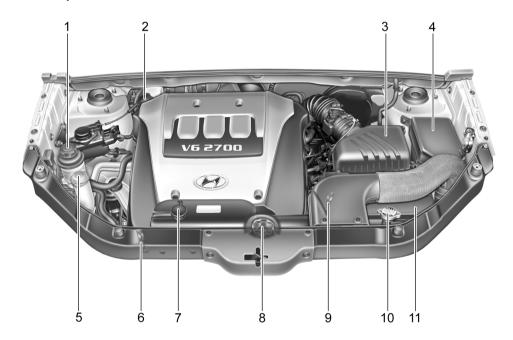
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# 2 ENGINE COMPARTMENT

G010A01JM-EAT **(2.7 Petrol)** 



# CAUTION:

When inspecting or servicing the engine, you should handle tools and other heavy objects carefully so that the plastic cover of the engine is not damaged.

G010A01JM-D

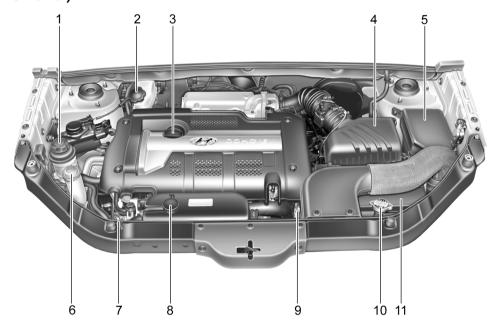
- 1. Power steering fluid reservoir
- 2. Brake & Clutch fluid reservoir
- 3. Air cleaner
- 4. Fuse and Relay box

- 5. Windscreen washer fluid reservoir
- 6. Engine oil level dipstick
- 7. Coolant reservoir cap
- 8. Engine oil filler cap

- Automatic transaxle fluid level dipstick (Vehicle with Automatic Transaxle)
- 10.Radiator cap
- 11.Battery



### G010B01JM-EAT (2.0 Petrol)





When inspecting or servicing the engine, you should handle tools and other heavy objects carefully so that the plastic cover of the engine is not damaged.



G010B01JM-D

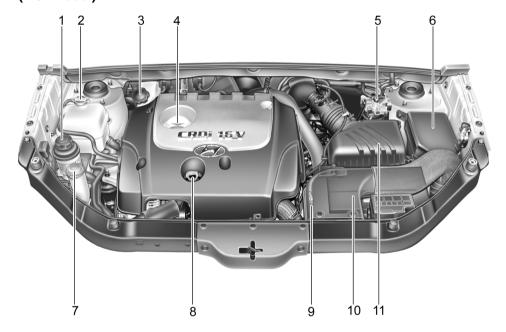
- 1. Power steering fluid reservoir
- Engine oil filler cap
   Brake & Clutch fluid reservoir
- 4. Air cleaner

- 5. Fuse and Relay box
- 6. Windscreen washer fluid reservoir
- 7. Engine oil level dipstick
- 8. Coolant reservoir cap

- 9. Automatic transaxle fluid level dipstick (Vehicle with Automatic Transaxle)
- 10.Radiator cap
- 11.Battery



### G010C01JM-EAT (2.0 Diesel)





When inspecting or servicing the engine, you should handle tools and other heavy objects carefully so that the plastic cover of the engine is not damaged.



HJM5001-D

- 1. Power steering fluid reservoir
- 2. Coolant reservoir & Radiator cap
- 3. Engine oil filler cap
- 4. Brake & Clutch fluid reservoir
- 5. Fuel fiter
- 6. Fuse and Relay box
- 7. Windscreen washer fluid reservoir
- 8. Engine oil level dipstick
- 9. Automatic transaxle fluid level dipstick (Vehicle with Automatic Transaxle)
- 10.Battery
- 11.Air cleaner

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### **DAILY OPERATING CHECKS**

# **ENGINE OIL**

#### SG020B1-E

The following items should be checked on a daily basis or whenever the vehicle is refuelled, whichever occurs sooner.

- o Engine oil level.
- o Coolant level.
- o Power steering fluid level.
- o Brake fluid level.
- o Windscreen washer fluid level.
- o Battery condition.
- o Tyre condition and pressures.
- o Operation and cleanliness of all lighting equipment.
- o Windscreen wiper and washer operation.
- o Horn operation.
- o Warning light operation.
- o Adjustment and cleanliness of mirrors.
- o Seat and seat belt adjustment and operation.
- o Fluid leakage.

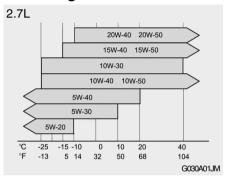
The vehicle must not be driven if the daily operating checks indicate that any item of equipment related to the G030A01FC-EAT

The correct engine oil level is of paramount importance. An excessively high or low oil level may result in irreparable damage being sustained by the engine. The engine oil level must be checked on a daily basis. whenever the vehicle is refuelled or before starting a long trip, whichever occurs sooner.

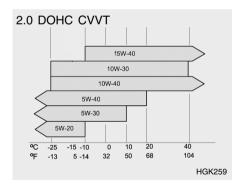
In addition, it is imperative that only an approved grade and specification of oil is used to avoid the possibility of serious engine damage and premature wear. The use of "budget price" oil is a false economy that must be avoided if the maximum reliability and useful life is to be obtained from the vehicle.

#### G030A01E-EAT

# **Recommended Oil** Petrol engine



SH, SG or SG/CD (API) multi-grade and fuel efficient oil is recommended.



safety or roadworthiness of the vehicle is not functioning correctly.



SH(API) or GF-1 (ILSAC) and ABOVE multi-grade and fuel efficient oil is recommended.

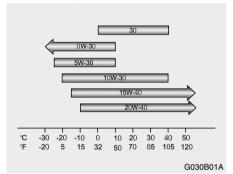
Engine oil is essential to the performance and service of the engine. It is suggested that you check the oil level at least once a week in normal use and more often if you are on a trip or driving in severe conditions.

#### NOTE:

- o SAE 5W-20 is not recommended for sustained high speed vehicle operation.
- o When replacing or adding the oil, below SAE 10W-30 is recommended. Using a high viscosity oil of SAE 15W-40 and over will lead to a malfunction of the DOHC CVVT engine when the engine is cool.

G030B02FC-GAT

# **Diesel Engine**



Engine oil is essential to the performance and service of the engine. It is suggested that you check the oil level every 500km or before starting a long trip and more often if you are driving in severe conditions.

The engine oil quality should meet the following classification:

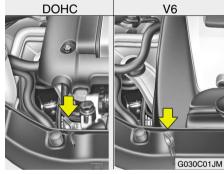
API class: CF-4 or ABOVE ACEA class: B4 or ABOVE

#### NOTE:

SAE 0W-30 oil is for use in very cold zones. Its use should therefore be restricted only to driving in these type of sub-zero conditions. (Especially, not recommended for sustained high engine load and high speed operation.)

JMG030C1-E

# **Engine Oil Level**



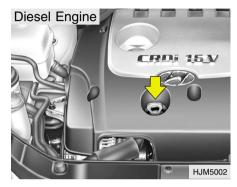












The engine oil level should be checked with the engine at normal operating temperature and the vehicle parked upon level ground.

Prior to checking the level, the vehicle should be allowed to stand for several minutes after the engine has been switched off to allow the oil to drain back to the sump.

Withdraw the dipstick and wipe it with a clean rag. Replace the dipstick fully and withdraw again when the oil level may be read from the stick. Normal oil level is indicated when the oil is present between the two marks on the stick. It is not necessary to add oil if the level is above the lower mark and in any case, oil must not be added to the degree that the level exceeds the upper mark. Replace the dipstick fully after checking the level.

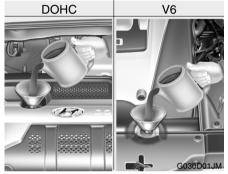
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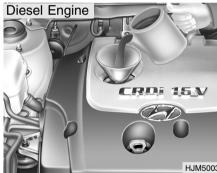
## **WARNING:**

Be very careful not to touch the radiator hose when checking the engine oil as it may be hot enough to burn you.

#### G030D01JM-EAT

### **ENGINE OIL REPLENISHMENT**





If the indicated oil level is at or below the lower mark of the dipstick, oil should be added until the level is at or below the upper mark.









8

To add oil to the engine, remove the filler cap by rotating in an counter-clockwise direction and pour engine oil into the engine. Before checking the level again, allow several minutes for the oil to drain into the sump. Replace the oil filler cap rotating it in a clockwise direction until tight.

The quantity of oil required to raise the level from the minimum to maximum level is approximately 1 litre (Petrol Engine)/1.6 litres (Diesel Engine).



# **WARNING:**

Be very careful not to touch the radiator hose when adding the engine oil as it may be hot enough to burn you.

G350A01A-EAT

# **ENGINE OIL CONSUMPTION**

# Function of engine oil

Engine oil has the primary function of lubricating and cooling the inside of the engine.

# **Engine oil consumption**

It is normal that an engine should consume some engine oil in the course of normal driving.

The causes of oil consumption in a normal engine are as follows;

Engine oil is used to lubricate pistons, piston rings and cylinders.
 A thin film of oil is left on the cylinder wall when a piston moves downwards in the cylinder.
 High negative pressure generated during engine operation sucks some of this oil into the combustion chamber.

This oil with some oil of the cylinder wall is burned by the high temperature combustion gases during the combustion process.

 The engine oil consumption is strongly effected by the viscosity and quality of oil, engine rpm and driving condition etc.

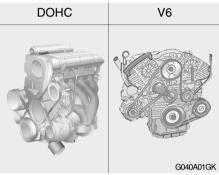
More engine oil may be consumed under severe driving conditions such as high speeds, frequent acceleration and deceleration, compared to normal driving.

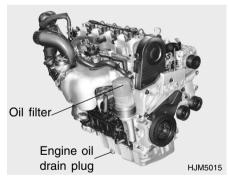




# ENGINE OIL AND FILTER REPLACEMENT

G040A01JM-EAT





The engine oil and filter must be changed at the time or mileage interval specified in the maintenance schedule. If the vehicle is operated under severe or adverse conditions, the oil and filter must be replaced more frequently.

To replace the oil and filter, proceed as follows:

- Ensure that the engine is at normal operating temperature and park the vehicle on level ground with the parking brake securely applied and the engine turned off.
- 2. Open the bonnet and remove the oil filler cap.
- 3. Prepare a suitable receptacle to collect the displaced oil and remove the drain plug from the sump.



# CAUTION:

The oil being drained from the engine will be hot. Care should be exercised to prevent scalding.

4. When the oil has drained from the sump, replace the drain plug using a new washer ensuring that the plug is not over tightened.

Tightening torque is:

3.5 ~ 4.5 kgf.m(2.7L/Diesel)

 $4.0 \sim 4.5 \text{ kgf.m} (2.0L)$ 

- 5. Remove the oil filter by rotating counterclockwise, using a proprietary oil filter removal tool if necessary. Note that the oil filter will contain approximately 0.5 litres of oil and this should be collected in a suitable receptacle.
- Install a new oil filter having smeared the sealing ring with clean oil and rotating clockwise until the filter contacts the mounting and then a further one half turn. Do not over-tighten.

Tightening torque: Petrol - 1.2 ~ 1.6 kgf.m Diesel - 2.3 ~ 2.5 kgf.m





10

- 7. Remove the engine oil level dipstick.
- 8. Pour the specified quantity of the recommended oil into the engine and replace the filler cap. Start the engine and ensure that no oil leaks exist. Turn off the engine and after a couple minutes, recheck the oil level.



### CAUTION:

Slowly pour the recommended oil using by a funnel. Do not overfill not to damage engine.



# WARNING:

Prolonged and repeated contact with used engine oils may result in serious skin disorders including dermatitis and cancer. Avoid contact with skin as far as possible and always wash thoroughly after any contact. Keep used oils out of reach of children. It is illegal to pollute drains, water courses and soil. Use only authorized waste collection facilities including civic amenity sites and garages for the disposal of used oil and oil filters. If in doubt, contact the local authority for disposal instructions.

# ENGINE COOLANT CHECK-ING AND REPLACING

SG050A1-E



# **WARNING:**

Do not remove the radiator cap when the engine is hot, since the system is pressurized and coolant may be ejected from the radiator resulting in scalding.







SG050B1-E

#### Coolant recommendations

Only ethylene glycol based coolant with a corrosion inhibitor suited to aluminium alloy engine components should be used in the cooling system. No further additives or inhibitors should be used. The coolant specific gravity should be checked as prescribed in the maintenance schedule to ensure adequate frost and corrosion protection. In addition, the engine coolant must be replaced at the specified interval since the corrosion inhibitor properties deteriorate with time.

It is important to note that whilst an increase in the concentration of anti freeze gives an increase in the level of frost protection, a solution which is in excess of 65% anti freeze will result in reduced frost protection and engine overheating. Therefore the recommended concentration of 50% should not be exceeded for general use.

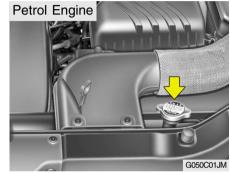
The use of methanol based anti freeze compounds may result in engine overheating and will invalidate the vehicle warranty.

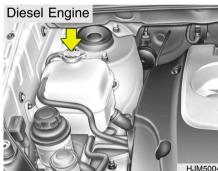
### NOTE:

It is imperative that vehicles fitted with an air conditioning system have a coolant concentration of the recommended strength at all times. The use of the air conditioning system when the cooling system is filled with water only will result in the heater matrix freezing and subsequently bursting.

SG050C1-E

### **Coolant Level**















12

The engine coolant level may be observed through the side of the plastic coolant reservoir (expansion tank) when the engine is cold. If the level is below the "LOW" mark, add coolant of the correct concentration until the level is between the "LOW" and "FULL" marks. If the level falls below the "LOW" mark on a regular basis despite being topped up, consult Hyundai authorised repairer.

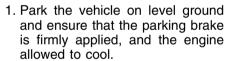
SG050D1-E

# To Change the Coolant

The coolant should be changed at those intervals specified in the vehicle maintenance schedule in Section 5.

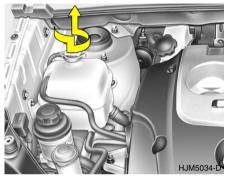
### NOTE:

Care should be taken to ensure that coolant is not allowed to spill onto the paintwork since the finish may become damaged. If coolant spillage occurs, the affected area should be rinsed thoroughly with water.



Do not attempt this operation whilst the engine is hot since burning or scalding may result.

- 2. Prepare a suitable receptacle to collect the displaced coolant and position this under the radiator drain tap.
- 3. With the heater temperature control set to the "HOT" position, remove the radiator cap and open the radiator drain tap.



4. When the engine coolant has drained completely, close the drain tap ensuring that this is not over tightened.





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- 5. Prepare a suitable quantity of new engine coolant (refer to section 9) and pour this into the radiator.
- 6. Start the engine with the radiator cap still removed and continue to add coolant as the level decreases as air is expelled from the system. When the level remains constant, replace the radiator cap and replenish the coolant reservoir.
- When the engine is hot, check to ensure that no coolant leaks are present.



### **WARNING:**

The cooling fan is controlled by engine coolant temperature and may sometimes operate even when the engine is not running. Use extreme caution when working near the blades of the cooling fan so that you are not injured by a rotating fan blade. As the engine coolant temperature decreases, the fan will automatically shut off. This is a normal condition.

13

G060B01JM-EAT

# **Replacing the Spark Plugs**

The spark plugs should be changed at the intervals specified in the vehicle maintenance schedule in Section 5 or whenever engine performance indicates they should be changed. Symptoms that suggest poor spark plug performance include engine misfiring under load, loss of fuel economy, poor acceleration, etc.

When spark plugs are replaced, always use spark plugs recommended by Hyundai. The use of other spark plugs can result in loss of performance, radio interference or engine damage.

#### NOTE:

- o When replacing the spark plugs, genuine Hyundai replacement parts are recommended.
- It is recommended that the spark plugs for Engine 2.7L should be changed by Hyundai authorised repairer.

# **Recommended Spark Plugs:**

REMARK	TYPE
2.7L*	IFR5G-11 (NGK)
2.0L	RC10YC4 (CHAMPION)
	BKR5ES-11 (NGK)

\*: Iridium Coated







# **6** OWNER MAINTENANCE

14

G060C01JM-EAT

# **Sparking Plug Replacement**

This operation should only be performed when the engine is cold.

- 1. Remove the centre cover (2.0) from the engine rocker cover.
- 2. Remove plug lead from the sparking plug to be replaced, pulling the lead by the rubber cap. (Pulling the lead may damage the carbon conductor.)



 Clean around the base of the plug to be removed, and install the plug socket ensuring that the ceramic insulator does not become damaged. Turn the socket counterclockwise to remove the plug.



### CAUTION:

Sparking plugs must only be cleaned using purpose designed equipment. Wire brushing may damage the centre electrode insulator causing misfiring to occur. Only the correct grade of sparking plug should be used. Use of an incorrect grade may result in serious engine damage.



Prior to installing a sparking plug, the gap between the centre and outer electrodes must be checked and adjusted as necessary.

Adjustment is facilitated by bending the outer electrode towards or away from the centre electrode. Under no circumstances should attempts be made to adjust the position of the centre electrode.



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15

# WINDSCREEN WIPER BLADES

ZG080A2-E



The wiper blades should be carefully inspected from time to time and cleaned to remove accumulations of road film or other debris.

To clean the wiper blades and arms, use a clean sponge or cloth with a mild soap or detergent and water.

If the wipers continue to streak or

If the wipers continue to streak or smear the glass, replace them with genuine Hyundai replacement parts or their equivalent.

CHANGING THE AIR CLEANER FILTER

G070A01E-AAT



To change the filter, unsnap the clips around the cover. When this is done, the cover can be lifted off, the old filter removed and the new filter put in its place. Genuine Hyundai Replacement Parts are recommended.



# **\( \)** CAUTION:

- Operating your vehicle without a proper air filter in place can result in excessive engine wear.
- o When removing the air cleaner filter, be careful that dust or dirt does not enter the air intake. These may result in damage to the air cleaner filter.





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5. Replace the plug lead ensuring that the cap is pushed firmly into place.

seated by lightly pulling upon it.

Confirm that the cap is correctly

4. Insert the sparking plug into the cylinder head and using a suitable plug socket, slowly rotate the sparking plug, (being careful not to crossthread) until the plug contacts the seating area. Tighten the plug with the socket by a further 1/2 to 3/4 of

a turn only.





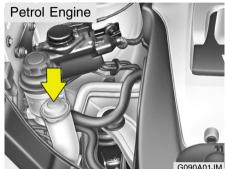
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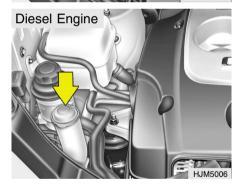
#### NOTE:

- o Do not operate the wipers on dry glass. This can result in more rapid wear of the wiper blades and may scratch the glass.
- o Keep the blade rubber out of contact with petroleum products such as engine oil, gasoline, etc.

# WINDSCREEN WASHER RES-ERVOIR REPLENISHMENT

OG090A2-E





The level of windscreen washer fluid available should be checked on a daily basis.

The level of fluid will be visible through the side of the reservoir. When the fluid is to be replenished, only a proprietary screen wash additive should be used and in the concentration recommended by the manufacturer. The windscreen washer reservoir has a total capacity of 3.4 litres.



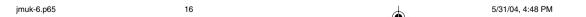
### **CAUTION:**

Engine coolant anti freeze must not be used in the windscreen washer system since damage to the paintwork may result.

Undiluted windscreen washer additive must not be allowed to come into contact with the paintwork. If spillage occurs, flush the affected area immediately with water. Do not operate the windscreen washer for more than 15 seconds continuously or when the reservoir is empty since damage to the washer pump will result.

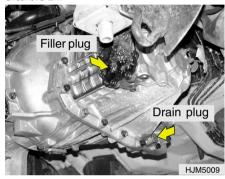






# MANUAL TRANSAXLE LUBRICANT

G100A01O-EAT



The transaxle lubricant should be checked and/or changed at intervals specified in the maintenance schedule.

### **Recommended Lubricant**

Use only HYUNDAI GENUINE PARTS MTF 75W/90 (API GL-4).



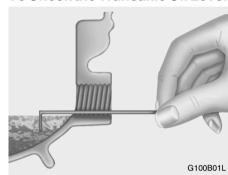
### CAUTION:

The transaxle lubricant level should only be checked when the engine is cold to prelude the possibility of personal injury by contact with hot components.

- To check the transaxle lubricant level, the vehicle should be placed on level ground and the level plug removed with a suitable spanner.
- 2. If the level is correct, lubricant should begin to drip from the plug orifice. In this case the plug should be replaced.

If the level is incorrect, lubricant should be added until it begins to drip from the plug orifice at which time the plug should be replaced.

### To Check the Transaxle Oil Level



Park the car on level ground with the engine off.

- Using a wrench of the correct size, loosen the oil filler bolt turning it counterclockwise and remove it with your fingers.
- 2. Use your finger to feel inside the hole. The oil level should be at its bottom edge. If it is not, check for leaks before adding oil. To refill the transaxle or bring the oil level up, add oil slowly until it reaches the proper level. Do not overfill.
- 3. Replace the bolt and washer, screw it in with your fingers and then tighten securely with the wrench.







# AUTOMATIC TRANSAXLE LUBRICANT

G110A01JM-EAT

Transaxle lubricant should be changed at those intervals specified in the vehicle maintenance schedule in Section 5.

#### NOTE:

Automatic transaxle fluid is red color. As driving distance increases, the fluid color turns darkish red gradually. It is a normal condition and you should not judge the need to replace based upon the changing color.

You must replace the automatic transaxle fluid in accordance with intervals specified in the vehicle maintenances schedule in section 5.

#### **Recommended Lubricant**

Use only HYUNDAI GENUINE ATF SP III, DIAMOND ATF SP III, SK ATF SP III or other brands approved by Hyundai Motor Co., Damage caused by a nonspecified fluid is not covered by your new vehicle limited warranty.

## **Transaxle Fluid Capacity**

The fluid capacity of the automatic transaxle is 7.8 litres.



## **CAUTION:**

The transaxle fluid level should be checked when the engine is at normal operating temperature. This means that the engine, radiator, exhaust system etc., are very hot so you should exercise great care not to burn yourself during this procedure.

#### To Check the Transaxle Fluid Level

Park the car on level ground with the parking brake engaged. When the transaxle fluid level is checked, the transaxle fluid should be at normal operating temperature and the engine idling.



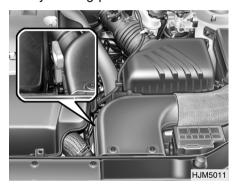
Whilst the engine is idling, apply the brakes and move the gear selector level from "P" to each of its other positions — "R", "N", "D" — and then return to "N" or "P". With the engine still idling:

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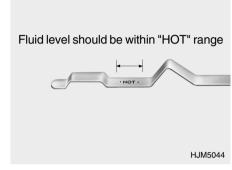


1. Open the bonnet, being careful to keep hands and clothing clear of any moving parts.



 Remove the transaxle dipstick, wipe it clean, reinsert the dipstick as far as it will go, then remove it again. Now check the fluid level on the dipstick. It should be in the "HOT" range on the dipstick.

19



 If the transaxle fluid level is low, use a funnel to add transaxle fluid through the dipstick tube until the level reaches the "HOT" range. Do not overfill.



# **WARNING:**

The electric engine cooling fan automatically switches on and off according to engine temperature. Be careful to keep away from the fan during this check as it may switch on at any time.

**WARNING (Diesel only):** Never work on injection system with engine running or within 30 seconds after shutting off engine. High pressure pump, rail, injectors and high pressure pipes are subject to high pressure even after the engine stopped. The fuel jet produced by fuel leaks may cause serious injury, if it contacts the body. People using pacemakers should ensure that they keep a distance of 30cm from the ECU or wiring harness within the engine room while engine is running, since the high currents in the Common Rail system produce considerable magnetic fields.

### NOTE:

Only lint free cloth should be used for wiping the dipstick. The presence of lint within the transaxle may cause problems with the normal function of the transaxle.





### **BRAKE SYSTEM CHECKING**

SG120A1-E



#### **CAUTION:**

Correct operation of the braking system is essential to the safe operation of the vehicle and therefore, any maintenance operations other than those listed below should be entrusted to Hyundai authorised repairer.

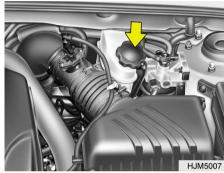


#### **Brake Fluid Recommendations**

Only brake fluid conforming to DOT 3 or DOT 4 specifications or higher may be used in the braking system. Care should be taken to observe the instructions and precautions printed upon the container.

SG120D1-E

### **Brake Fluid Level**



The fluid level in the brake fluid reservoir should be checked periodically. The level should be between the "MIN" and "MAX" marks on the side of the reservoir. If the level is at or below the "MIN" mark, fluid should be added having carefully cleaned the area surrounding the reservoir cap to ensure that dirt is not allowed to enter the system. It should be borne in mind that the brake fluid level will decrease slightly as the friction linings of the pads and shoes become worn and that this is a normal condition.



### WARNING:

Brake fluid is hydroscopic and should never be stored in an unsealed container. The presence of water in the braking system will cause vapour locks and increase the possibility of brake fade along with promoting corrosion within the braking system. The brake fluid must be changed at the specified time or mileage interval to ensure continued safe operation of the system. Brake fluid will cause rapid and serious damage to paintwork. If accidental spillage occurs, the affected area must be rinsed with water immediately. Do not allow brake fluid to come into contact with the eyes or to be ingested and ensure that fluid is safely stored away form the reach of children.



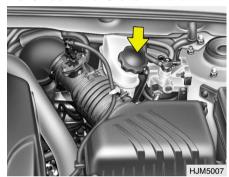




# CHECKING THE CLUTCH **FLUID**

YG160A1-E

### To Check the Clutch Fluid



The clutch fluid level in the master cylinder should be checked when performing other under bonnet checks. The system should be checked for leakage at the same time.

Check to make certain that the clutch fluid level is always between the "MAX" and "MIN" level markings on the fluid reservoir. Fill as required. Fluid loss indicates a leak in the clutch system which should be inspected and repaired immediately.

SG130B2-E

# **Adding Fluid**

Recommended brake fluid conforming to DOT 3 or DOT 4 should be used. The reservoir cap must be fully tightened to avoid contamination from foreign matter or moisture.



## CAUTION:

Brake fluid is hygroscopic and should never be stored in an unsealed container. Do not allow petroleum base fluid to contaminate the brake fluid since damage to the rubber seals of the system may result.



### WARNING:

Brake fluid will cause rapid and serious damage to paintwork. If accidental spillage occurs, the affected area must be rinsed with water immediately. Do not allow brake fluid to come into contact with the eves or to be ingested and ensure that fluid is safely stored away form the reach of children.





21 5/31/04, 4:48 PM jmuk-6.p65





# 22 AIR CONDITIONING SYSTEM MAINTENANCE

SG140A1-E

#### Condenser

Ensure that the condenser is periodically inspected and that accumulations of dirt, dead insects and leaves etc, are removed to ensure that the efficiency of the system is not impaired. Care must be exercised to ensure that the condenser fins are not damaged during cleaning.

SG140C2-E

# **Checking the Refrigerant**

- 1. Start the engine and run at idle for several minutes with the refrigeration system running at the coldest setting.
- 2. If the air coming out of the in-dash vents is not cold, have the air conditioning system inspected by your Hyundai authorised repairer.



### CAUTION:

Running the air conditioning system for extended periods of time with a low refrigerant level may damage the compressor.

SG140D1-E

### **Off Season Maintenance**

The air conditioning must be run for ten minutes or so weekly during periods when the system would not normally be used to ensure that the compressor and seals are lubricated. If this precaution is not observed the compressor seals may become stuck to the compressor shaft and damaged when the system is next used resulting in a loss of refrigerant and damage to the compressor.







## **CHANGING THE POLLEN FILTER**

B145A01JM-EAT

# (For Evaporator and Blower Unit) (Not all models)

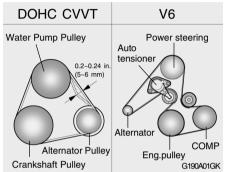
The pollen filter is located in front of the evaporator unit behind the glove box.

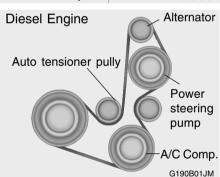
It helps to decrease the amount of pollutants entering the car.



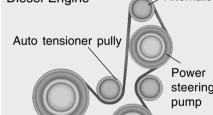
1. Open the glove box and take out the damper strap through the hole.

SG140B1-E **Compressor Drive Belt** 





23





The air conditioning compressor drive

belt should be checked to ensure

freedom from damage or excessive

wear and correct tension. The belt

tension is correct when the belt de-

flects by about 0.3 inches (8 mm)

when a force of 98 N is applied to the

belt halfway between the compressor

and crankshaft pulleys. Adjustment of the belt should be entrusted to

Hyundai authorised repairer.

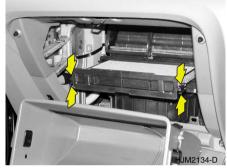


# 6 OWNER MAINTENANCE

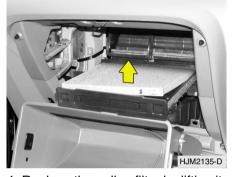
## 24



2. Lower the glove box down completely by pushing the both sides of the glove box inward.



3. Remove the air conditioner filter cover by pressing both side clips.



4. Replace the pollen filter by lifting it.5. Installation is the reverse order of removal.

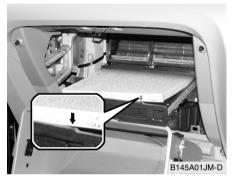
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## **CHECKING THE FREE-PLAY**



# **CAUTION:**

Be sure to install the pollen filter in the direction of the arrow sign. Otherwise, it may cause noise or deterioration.

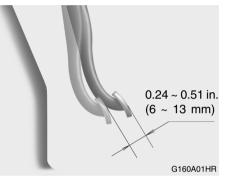




To check the steering wheel freeplay, stop the car with the wheels pointed straight ahead and gently move the steering wheel back and forth. Use very light finger pressure and be sensitive to changes in resistance that mark the limits of the freeplay.

If the free-play is greater than specified, have it inspected by your Hyundai authorised repairer and adjusted or repaired if necessary.

#### YG170A1-E **CLUTCH PEDAL**



The clutch pedal free-play must lay within the limits shown. Incorrect freeplay can result in premature wear of the clutch linings and release bearing. Excessive free-play can result in gear selection difficulties.

If the free-play is incorrect, the clutch cable should be adjusted by Hyundai authorised repairer.





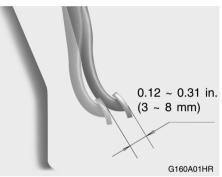






26

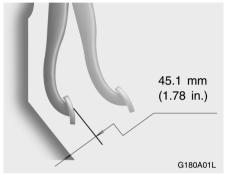
# G170A01A-GAT BRAKE PEDAL



With the engine off, press down on the brake pedal several times to reduce the vacuum in the brake booster. Then, using your hand, press down slowly on the brake pedal until you feel a change in resistance. This is the brake pedal freeplay. The freeplay should be within the limits specified in the illustration. If it is not, have it inspected by your Hyundai authorised repairer and adjusted or repaired if necessary.

# CHECKING BRAKE PEDAL CLEARANCE

G180A01A-GAT



You need a helper to check the brake pedal clearance. With the engine running, have your helper press down on the brake pedal several times and then hold it down with a force of about 490 N (50 Kg, 110 lbs). The brake pedal clearance is the distance from the top surface of the brake pedal to the asphalt sheeting under the floor mat.

If the brake pedal clearance is not within the limits specified in the illustration, have it inspected by your Hyundai authorised repairer and adjusted or repaired if necessary.

# CHECKING ENGINE DRIVE BELTS

YG200A1-E

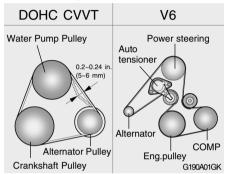
- 1. With the engine turned off, check the belts for cracks, fraying, or excessive wear. Replace the belt if it is in poor condition.
- 2. With your thumb (with a force approx. 10 kg) press on each belt midway between the pulleys. Each belt should deflect no more than the amount shown in figure.







# YG190A1-E (Petrol Engine)

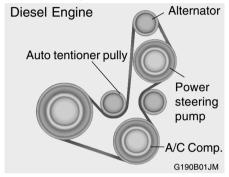


If a belt is loose, adjust it by:

- 1. Loosen the adusting bolts just enough so that the components can be moved.
- 2. Whilst pulling outward on the pry bar or screw driver, test the belt deflection with your thumb.
- After tightening the adjusting bolts, be sure to recheck the belt tension. Overtightening drive belts can cause excessive wear and failure in driven components and belts.

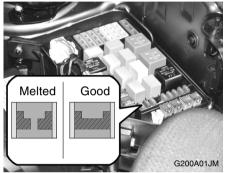
G190B01TB-GAT

# (Diesel Engine)



At the scheduled maintenance inspection, belts should be examined for cracks, wear, fraying or other evidence of deterioration and replaced if necessary.

Belt routing should also be checked to be sure there is no interference between the belts and other parts of the engine. DG200A1-E



The fusible link prevents damage to the wiring harness in the event of an electrical system malfunction. Failure of a fusible link is indicative of a serious overload condition having occurred and therefore the electrical system should be checked by Hyundai authorised repairer before a replacement link is fitted.





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5/31/04, 4:49 PM



### 6 OWNER MAINTENANCI

28



### **WARNING:**

Under no circumstances should a fusible link be replaced with anything other than a new link of the same rating. The use of higher rated links or other means of connecting the circuit will create a potential fire hazard.



### **Individual Circuit Fuses**



The fuse box containing the individual circuit fuses is located on the right side of the crash pad. The fuse box cover is removed by pushing lightly and then releasing the lid. A fuse rating grid will be found on the reverse side of the cover. In the event of fuse failure, the fuse should be replaced with one of equivalent rating. A fuse removal tool is provided within the fuse box to facilitate replacement.



In the event of a replacement fuse failing shortly after installation a malfunction within the circuit protected by that fuse is indicated. The circuit should be checked by Hyundai authorised repairer at the first available opportunity.

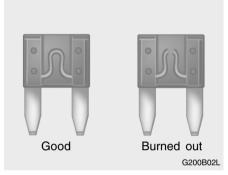


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5/31/04, 4:49 PM

# **BATTERY MAINTENANCE**





# **WARNING:**

The use of replacement fuses having a higher rating than specified or other means of connecting the circuit will create a potential fire hazard.

#### NOTE:

See page 6-41 for the fuse panel descriptions.

29



# A

# **WARNING:**

Motor vehicle batteries contain sulphuric acid which is corrosive and poisonous. Hydrogen gas is emitted from the battery which is explosive when combined with oxygen. The following precautions must be strictly observed to avoid personal injury or damage to the vehicle.

- o If battery electrolyte is spilled onto skin or into eyes, the effected area must be flushed with copious amounts of water and medical assistance sought.
- o If battery electrolyte is ingested, copious amounts of water or milk followed by an ant-acid (raw egg or milk of magnesia) must be drunk. Vomiting should not be induced and medical assistance must be sought.
- Batteries must only be charged in well ventilated areas from which naked lights or sources of sparks are excluded.
- Ensure that children, pets or other unauthorized persons are kept away from batteries.
- Do not allow anything to bridge the positive (+) and negative (-) terminals of the battery.
- o Never invert the battery.

The battery fitted during production is of the "Maintenance Free" type.







30 ELECTRIC COOLING FANS

# **POWER STEERING HOSES**

YG210A1-E



## **WARNING:**

The cooling fan is controlled by engine coolant temperature and may sometimes operate even when the engine is not running. Do not touch the radiator fan until it is completely stopped.

As the coolant temperature decreases the fan will automatically shut off. This is a normal condition.

# **Checking Engine Cooling Fan**

The engine cooling fan should automatically come on if the engine coolant temperature is high.

# **Checking Condenser Cooling Fan**

The condenser cooling fan (in front of the condenser) should come on automatically whenever the air conditioner is in operation. YG220A1-E

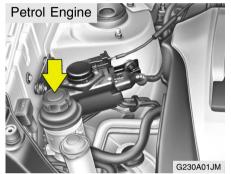
It is suggested that you check the power steering hose connections for fluid leakage at those intervals specified in the vehicle maintenance schedule in Section 5. The power steering hoses should be replaced if there are severe surface cracking, pulling, scuffing or worn spots. Deterioration of the hoses could cause premature failure.

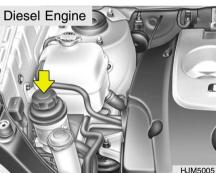
#### NOTE:

The power steering pump may be noisy when the engine is first started in the extreme cold (-4°F). This noise is not abnormal and will stop as the engine warms up. If the power steering pump continues to be noisy after the engine has warmed up, have it inspected by your Hyundai authorised repairer.

G230A03A-EAT

# **Power Steering Fluid Level**





jmuk-6.p65 30







The power steering fluid level should be checked regularly.

To check the power steering fluid level, be sure the ignition is "OFF", then check to make certain that the power steering fluid level is between the "MAX" and "MIN" level markings on the fluid reservoir.

#### NOTE:

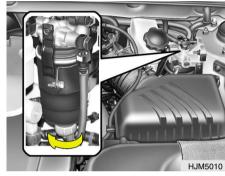
Do not check whilst the engine is running. Do not start when power steering fluid reservoir is empty.

#### Fluid Recommendation

Only automatic transaxle fluid meeting the specification of PSF-3 or ATF DEXRON 2 should be used in the power steering system.

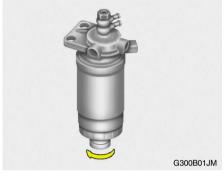
# REMOVAL OF WATER FROM THE FUEL FILTER

G300A02O-GAT (Diesel Engine)



If the fuel filter warning lamp illuminates during driving, it indicates that water has accumulated in the fuel filter. If this occurs, remove the water as described below.

1. Unscrew the mounting bolt on the fuel filter and raise the fuel filter up.



- 2. Loosen the drain plug at the bottom of the fuel filter.
- 3. Tighten the drain plug when water no longer comes out.
- 4. Installation is the reverse order of removal.
- 5. Check to be sure that the warning lamp illuminates when the ignition key is turned to "ON", and that it goes off when the engine is started. If in doubt, consult your nearest Hyundai authorised repairer.





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32

### NOTE:

It is recommended that water accumulated in the fuel filter should be removed by Hyundai authorised repairer.



### **WARNING:**

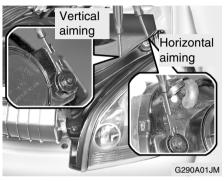
Be sure to carefully wipe away any water drained out in this manner, because the fuel mixed in the water might be ignited and result in a fire.

# HEADLIGHT AIMING ADJUSTMENT

G290A02O-EAT

Before performing aiming adjustment, make sure of the following.

- 1. Keep all tyres inflated to the correct pressure.
- 2. Place the vehicle on level ground and press the front bumper & rear bumper down several times. Place the vehicle at a distance of 118.1in. (3,000 mm) from the test wall.
- See that the vehicle is unloaded (except for full levels of coolant, engine oil and fuel, and spare tyre, jack, and tools). Have the driver or equivalent weight placed in driver's seat.
- 4. Clean the headlights lenses and turn on the headlights (Low beam).
- 5. Open the bonnet.



- Draw the vertical line (through the centre of each headlight) and the horizontal line (through the centre of each headlight) on the aiming screen.
  - And then, draw a parallel line at 1.18 in.(30 mm) under the horizontal line.
- Adjust each cut-off line of the low beam to the parallel line with a phillips screwdriver - VERTICAL AIMING
- Adjust each cut-off line of the low beam to the each vertical line with a phillips screwdriver - HORIZON-TAL AIMING.



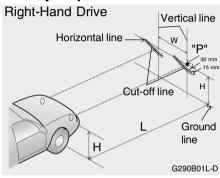


### **REPLACING LIGHT BULBS**

33

G290B01JM-EAT

# Adjustment After Headlight Assembly Replacement



If the vehicle has had front body repair and the headlight assembly has been replaced, the headlight aiming should be checked using the aiming screen as shown in the illustration. Turn on the headlight switch (Low Beam Position).

- Adjust headlights so that main axis of light is parallel to center line of the body and is aligned with point "P" shown in the illustration.
- 2. Dotted lines in the illustration show the centre of headlights.

### **SPECIFICATIONS:**

"H";

Horizontal centre line of headlights from ground: 35.6 in. (904 mm)

"W"

Distance between each headlight centre: 53.4 in. (1,356 mm)

"L":

Distance between the headlights and the wall that the lights are tested against:

118 in. (3,000 mm).

G260A03A-EAT

In the event of bulb failure being experienced, ensure that the relative lighting circuit is turned off prior to attempting to replace the bulb. The illustrations on the following page will assist in locating and removing the various bulbs. Ensure that the replacement bulb has the same cap configuration and wattage as the original.

See page 6-40 for the wattage descriptions.



### **CAUTION:**

Keep the lamps out of contact with petroleum products, such as oil, gasoline, etc.











### 6 OWNER MAINTENANCE

34

#### G270A01O-EAT

# Headlight and Front Turn Signal Light

- 1. Allow the bulb to cool. Wear eye protection.
- 2. Open the engine bonnet.
- 3. Always grasp the bulb by its plastic base, avoid touching the glass.



4. Using a spanner, remove the headlight assembly mounting bolts.



5. Disconnect the power cord from the bulb base in the back of the headlight.

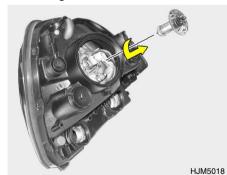


6. Turn the plastic cover counterclockwise and remove it.

Disconnect the connector from the bulb base in the back of the headlight.



8. Push the bulb spring to remove the headlight bulb.









- Remove the protective cap from the replacement bulb and install the new bulb by matching the plastic base with the headlight hole. Retighten the bulb spring and reconnect the connector.
- 10.Use the protective cap and carton to promptly dispose of the old bulb.
- 11. Check for proper headlight aim.
- 12.To replace the front turn signal light bulb, remove from the bulb holder and install the new bulb.





### WARNING:

Halogen bulbs contain gas under pressure and if impacted could shatter, resulting in flying fragments. Always wear eye protection when servicing the bulb. Protect the bulb against abrasions or scratches and against liquids when lighted. Turn the bulb on only when installing in a headlight. Replace the headlight if damaged or cracked. Keep the bulb out of the reach of children and dispose of the used bulb with care.



### **Rear Combination Light**



- 1. Open the hatchback door.
- 2. Remove the mounting screws as shown with a phillips screwdriver.





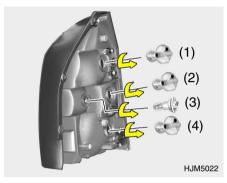
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36



- 3. To replace the rear combination light (stop/tail light, turn signal light or back-up light), take it out from the bulb holder by turning it counterclockwise.

  - (1) Stop/Tail light(2) Turn signal light
  - (3) Back-up light
  - (4) Rear fog light
- 4. Install the new bulb.



### Front fog Light (Not all models)



- 1. Remove the cover with a phillips screwdriver.
- 2. Remove the bolts with a spanner.





3. Disconnect the power cord.



4. Replace to the new bulb.









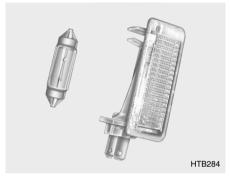
## G270C01TB-GAT Luggage Compartment Light (Not all models)



1. Remove the cover with a flat-blade screwdriver.



2. Disconnect the power cord.



3. Replace with a new bulb.

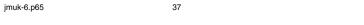
# G270C01JM-EAT Cargo Light



- 1. Open the hatchbook door.
- 2. Remove the cover with a flat-blade screwdriver.



3. Replace with a new bulb.









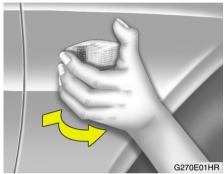


### 6 OWNER MAINTENANCE

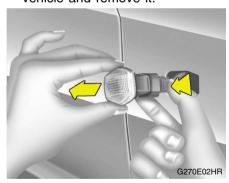
38

### G270E01A-GAT

### **Side Repeater Light** (Not all models)



1. Push the cover toward the front of vehicle and remove it.



2. Disconnect the power code.



3. Replace with a new bulb.

# G270G01O-GAT Room Light



1. Remove the cover with a flat-head screwdriver.



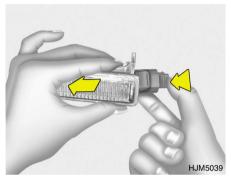
2. Replace with a new bulb.



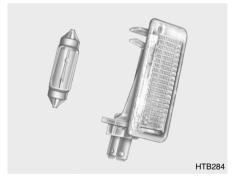
# G270H01O-GAT Glove Box Illuminated Light



- Open the glove box.
   Remove the cover with a flat-blade screwdriver.



3. Disconnect the connector.



4. Replace with a new bulb.

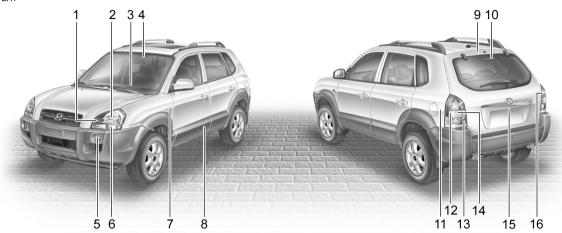






## **BULB WATTAGE**

G280A01JM-EAT



G280A01JM-D

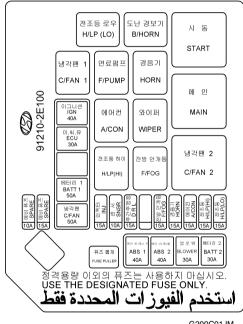
No.	Part Name		Wattage	No.	Part Name	Wattag	е
1	Front Postion Light		5	9	Cargo Light	10	
2	Head Light (Low/High)		55/60	10	High Mounted Door Cton Light (LED Type)	A TYPE	2.4
3	Glove Box Illuminated Light		10	High Mounted Rear Stop Light (LED Type)	В ТҮРЕ	5	
4	Interior Light Map Light		10	11	Luggage Compartment Light	10	
		Room Light	10	12	Turn Signal Light	21	
5	Front Fog Light (Not all models)		27	13	Rear Fog Light	21	
6	Turn Signal Light		21	14	Back-up Light	21	
7	Side Repeater Light		5	15	License Plate Light	5	
8	Front Door Edge Warning Light (Not all models)		5	16	Stop/Tail Light	21/5	

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### **FUSE PANEL DESCRIPTION**

G200C01JM-GAT

### **Engine Compartment**



DESCRIPTION		FUSE RATING	PROTECTED COMPONENTS	
IGN 30A		30A	Start relay, Igition switch	
	ECU	30A	Engine control, Fuel pump , A/C, Generator, ATM	
	C/FAN	40A	Cooling fan	
	BATT #1	50A	Ignition switch, Power connector	
FUSIBLE	C/FAN	50A	Cooling fan	
LINK	ABS #1	30A	ABS, ESP	
	ABS #2	40A	ABS, ESP	
	BLOWER	30A	Blower	
	BATT #2	30A	Ignition switch, Power connector	
	INJ	15A	Injector	
	SNSR	10A	Cooling fan, Stop lamp switch, Oxygen sensor, ECM/PCM	
	DRL	15A	DRL	
FUSE	F/FOG	15A	Front fog lamp	
	HORN	15A	Horn, Siren	
	A/CON	15A	A/C	
	H/LP (HI)	15A	Head lamp (HIGH)	
	H/LP (LOW)	15A	Head lamp (LOW)	

G200C01JM

### NOTE:

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse box on your vehicle, refer to the fuse box label.

41 jmuk-6.p65 5/31/04, 4:50 PM







42

# G200E01JM-EAT Inner Panel

10A 에이비에스 ABS 20A 전방와이퍼 FR WIPER 10A 이그니션 IGN 10A 미러열선 HTD MIRR FUSE PULLER 10A 티씨유 TCU 10A 에어콘스위치 A/CON SW 10A 후면안개등 RR FOG 퓨즈뽑개 10A 이씨유 ECU 10A 에어콘 A/CON 15A 성애제거 DEICER 10A 핸즈프리 H/FREE 15A 예비 SPARE 15A 후면와이퍼 RR WIPER SPARE FUSE 예비퓨즈 20A 4륜구동 4WD 15A 정지등 STOP 10A 에어백경고 A/BAG IND SPARE FUSE 예비퓨즈 10A 오디오 AUDIO 20A 썬루프 S/ROOF 10A 방향지시등 T/SIG 15A 보조소켓 P/OUTLET 30A 열선 RR HTR SPARE FUSE 예비퓨즈 15A 비상등 HAZARD 20A 앰프 AMP 10A 이모빌라이기 IMMO 10A 좌측미등 TAIL LH 10A 우측미등 SPARE FUSE 예비퓨즈 10A 실내등 ROOM LP 20A 기그니션코일 IG COIL 10A 계기판 CLUSIER 30A 파워윈도우우측 P/WDW-RH 10A 오디오 AUDIO 30A 이그니션스위치 IG SW 15A 에어백 A/BAG 30A 파워윈도우좌측 P/WDW-LH 

 30A
 SHUNT

 파워컨넥터
 선트컨넥

 정경용량 이외의 휴즈는 사용하지 말것.

 SHUNT 션트컨넥터 USE THE DESIGNATED FUSE ONLY.

G200E01JM-D



42



### OWNER MAINTENANCE 6

FUSE	FUSE RATING	PROTECTED COMPONENTS
P/WDW-LH	30A	Left power window
P/WDW-RH	30A	Right power window
TAIL RH	10A	Right rear combination lamp, Glove box Illuminations
RR HTR	30A	Rear defogger
A/BAG	15A	SRS control
CLUSTER	10A	Instrument cluster, ETACM/TACM
TAIL LH	10A	Left head lamp, left rear combination lamp, License lamp
AUDIO	10A	Digital clock, Audio, Power outside mirror folding module, Power outside mirror & mirror folding switch
C/LIGHTER & P/OUTLET	20A	Cigarette lighter
SPARE	15A	(SPARE)
RR FOG	10A	Rear fog lamp
HTD MIRR	10A	Left/Right power outsider mirror & mirror folding motor, Rear defogger switch
AUDIO	10A	Audio
IG COIL	20A	Ignition coil (2.7 GSL)
IMMO	10A	Immobilizer control module (2.7 GSL)
P/OUTLET	15A	Rear power outlet
	10A	(Not used)
S/HTR	20A	Seat warmer
A/CON SW	10A	A/C control module (Manual A/C)
START	10A	Burglar alarm relay, Transaxle range switch, Ignition lock switch









### 6 OWNER MAINTENANCE

#### 44

FUSE	FUSE	PROTECTED COMPONENTS
	RATING	
IG-SW	30A	Ignition switch
ROOM LP	10A	Room lamp, A/C control module, Digital clock, ETACM/TACM Key remind switch
AMP	20A	Audio
T/SIG	10A	Hazard switch, Auto light & Photo sensor, Transaxle range switch
A/BAG IND	10A	Instrument cluster
RR WIPER	15A	Safety relay
A/CON	10A	Sunroof controller, A/C control module, Blower relay, ETACM/TACM
IGN	10A	PTC heater relay, Fuel filter heater relay, DRL control module, head lamp relay
HAZARD	10A	Hazard switch, Hazard relay, Immobilizer control module (2.7 GSL)
S/ROOF	20A	Sunroof, Door lock/unlock relay
STOP	15A	Stop lamp switch, Power outside mirror folding module
H/FREE	10A	(Not used)
ECU	10A	Cruise control, Stop lamp, TCS, ESP, 4WD ECM, ECM, PCM, TCM, Vehicle speed sensor
FF WIPER	20A	Front wiper, Multifunction switch
4WD	20A	4WD/ECM
DEICER	15A	Winshield defogger
TCU	10A	TCM (2.7 GSL/DSL)
ABS	10A	G-Sensor, ESP, ABS







# **EMISSION CONTROL SYSTEMS**

Exhaust Gas Warning	7-2
Emission Control Systems	
Catalytic Converter	7-4
EGR System	7-5

7

jmuk-7.p65 1 5/31/04, 4:44 PM



### EXHAUST GAS WARNING

YH020A1-E

Exhaust gases contain carbon monoxide, a potentially toxic gas that is colorless and odorless. Avoid breathing exhaust gases.

- Do not run the engine in confined areas, such as garages, any longer than necessary to move the car in or out.
- o Do not drive with the tailgate open. An open tailgate may draw exhaust gases into the passenger compartment. If you must drive with the tailgate open, drive only with all the windows wide open and the blower motor on high speed.
- o If it is necessary to sit in a parked car with the engine running for more than a short period, adjust your heating system to force outside air into the car by placing the air selector button of the heater in the FRESH AIR position and mode control in the VENT position. Set the fan at high speed and the controls in any position desired.

### Inspect the exhaust system

Whenever a change is noticed in the sound of the exhaust system, the underside or rear of the vehicle may be damaged. You should inspect the exhaust system each time the car is raised for lubrication or oil change.

### To check condition

- Holes and gas leaks due to corrosion, damage, etc., should be rectified.
- The joints should be checked for loose connections and gas leakage.
- 3. The hanger rubber and brackets should be checked for damage.

# EMISSION CONTROL SYSTEMS

ZH010A1-E

### (Not all models)

Your Hyundai is equipped with an emission control systems.

There are three emission control systems which are as follows.

- (1) Crankcase emission control system
- (2) Evaporative emission control system
- (3) Exhaust emission control system

In order to assure the proper function of the emission control system, it is recommended that you have your car inspected and maintained by Hyundai authorised repairer in accordance with the schedule in this manual.







5/31/04, 4:44 PM

DH010B1-A

# 1. Crankcase Emission Control System

The positive crankcase ventilation system is employed to prevent air pollution caused by blow-by gases being emitted from the crankcase. This system supplies fresh air to the crankcase through the air cleaner. Inside the crankcase, the fresh air mixes with blow-by gases, then passes through the PCV valve into the intake system.

ZH010C1-E

# 2. Evaporative Emission Control System

The Evaporative Emission Control System is designed to prevent fuel vapors from escaping into the atmosphere.

### Canister

While the engine is inoperative, fuel vapors generated inside the fuel tank are absorbed and stored in the canister. When the engine is running, the fuel vapors absorbed in the canister are drawn into the induction system through the purge control solenoid valve.

### **Purge Control Solenoid Valve**

The purge control solenoid valve is controlled by the ECU; when the engine coolant temperature is low, and during idling, it closes, so that evaporated fuel is not taken into the surge tank. After engine warm-up, during ordinary driving, it opens to introduce evaporated fuel to the surge tank.

JH010D1-E

# 3. Exhaust Emission Control System

This system helps control oxides of nitrogen by recirculating a portion of the exhaust gases into the intake manifold, thereby reducing cylinder combustion temperatures.







4

#### YH040A2-E

# CATALYTIC CONVERTER - For a Petrol Engine

The catalytic converter is part of the exhaust emission control system. Its purpose is to remove certain engine emission products from the engine's exhaust. It looks something like a muffler and is located underneath the car in the exhaust system.

#### YH040B1-E

### **About the Catalytic Converter**



Exhaust gases passing through the catalytic converter cause it to operate at very high temperatures. As a result, the introduction of large amounts of unburned gasoline may cause it to overheat and create a fire hazard. This can be avoided by observing the following:

- o Use only unleaded fuel.
- Maintain your engine in good condition. Extremely high converter temperatures can re-sult from improper operation of the electrical, ignition or M.P.I. system.

- If your engine stalls, pings, knocks, or is hard to start, take your car to your Hyundai authorised repairer as soon as possible and have the difficulty corrected.
- o Avoid driving with a very low fuel level. If you run out of gasoline, it could cause the engine to misfire and result in excessive loading of the catalytic converter.
- o Avoid idling the engine for periods longer than 10 minutes.
- Your Hyundai should not be either pushed or pulled to get it started.
   This can cause the catalytic converter to overload.
- Take care not to stop your Hyundai over any combustible material such as grass, paper, leaves or rags.
- Do not touch the catalytic converter or any other part of the exhaust system while the engine is running.
- Remember that your Hyundai authorised repairer is your best source of assistance.



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5/31/04, 4:44 PM



### **EGR SYSTEM**

5

H020D01S-GAT

# CATALYTIC CONVERTER - For a Diesel Engine

All Hyundai vehicles are equipped with oxidation type catalytic converter to reduce the carbon monoxide, hydrocarbons and particulate contained in the exhaust gas.

H020C01S-GAT

### **EGR SYSTEM**

### - For a Diesel Engine

This system helps control oxides of nitrogen by recirculating a part of the exhaust gas into the engine, there by reducing cylinder combustion temperature.

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# **CONSUMER INFORMATION**

Vehicle Identification Number (VIN)	8-2
Engine Number	8-2
Tyre Information	8-2
Tyre Pressures	8-2
Snow Tyres	8-3
Tyre Chains	8-3
Tyre Rotation	8-4
Tyre Balancing	8-4
Tyre Replacement	8-4
Wheel Replacement	8-5
Spare Tyre and Tools	8-5

8

8

jmuk-8.p65 1

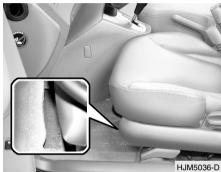




### 8 CONSUMER INFORMATION

# VEHICLE IDENTIFICATION NUMBER (VIN)

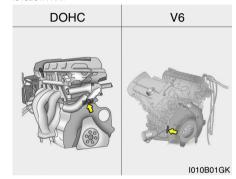
I010A01TB-DAT



The vehicle identification number (VIN) is the number used in registering your car and in all legal matters pertaining to its ownership, etc. It can be found on the centre piller of the driver side and the lower side of the front passenger seat.

### **ENGINE NUMBER**

I010B01A-AAT





The engine number is stamped on the engine block as shown in the drawing.

### **TYRE INFORMATION**

ZI010C1-E

The tyres supplied on your new Hyundai are chosen to provide the best performance for normal driving.

### 1030A01JM-EAT





In modern high-speed motoring, correct tyre pressures are vitally important.





Incorrect pressures can reduce adhesion, affect the steering, and cause excessive tyre wear. Check the pressures before you start a trip, when tyres are cold. If the pressures are measured when the tyres are warm, a higher reading will be obtained. The correct tyre pressures are indicated on the label affixed in the driver's door edge and below.

	RIM SIZE	TIRE SIZE	PRESSURE, kPa (PSI)			
			NORMAL LOAD MAXIMUM LOA			IM LOAD
			FRONT	REAR	FRONT	REAR
	6.5Jx16	215/65R16	210(30)	210(30)	210(30)	210(30)
	6.5Jx16	235/60R16	210(30)	210(30)	210(30)	210(30)
	4.0Tx16	T155/90R16	420(60)	420(60)	420(60)	420(60)

ZI030A1-E

### **SNOW TYRES**

If you equip your car with snow tyres, they should be the same size and have the same load capacity as the original tyres. Do not drive faster than 70 mph (112 Km/h) when your car is equipped with snow tyres.



### **TYRE CHAINS**

Tyre chains when included should be installed on the front wheels. Be sure that the chains are the proper size and that they are installed in accordance with the manufacturer's instructions.

To minimize tyre and chain wear, do not continue to use tyre chains when they are no longer needed.



### WARNING:

- o When driving on roads covered with snow or ice, drive at less than 20 mph (30 km/h).
- Use the SAE "S" class or wire & plastic chains.
- o if you have noise caused by chains contacting the body, retighten the chain to avoid contact with the vehicle body.
- o To prevent body damage, retighten the chains after driving 0.3~0.6 miles (0.5~1 km).





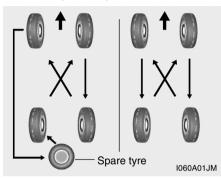


5/31/04, 4:44 PM

### 8 CONSUMER INFORMATION

1

## YI010A1-E TYRE ROTATION



Tyre wear will vary for each wheel. In order to increase the life of each tyre and keep wear uniform, tyre rotation should be performed every 10,000 miles as shown in figure.



### **WARNING:**

Do not mix cross-ply and radialply under any circumstances. This may cause dangerous handling characteristics. SI060A1-E

### **TYRE BALANCING**

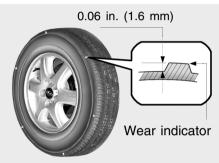
Incorrect tyre balance will cause steering vibration and uneven tyre wear. The vehicle tyres are balanced during production but may need further balancing throughout the life of the tyres. It is recommended that the tyres be balanced on the car for best results and that the tyres are balanced whenever they have been removed from the wheel for repair.

### NOTE:

Should abnormal wear be noted on a tyre, then it is recommended that the wheel alignment be checked by your Hyundai authorised repairer at the earliest opportunity.

SI060B1-E

### TYRE REPLACEMENT



HJM503

Tyres must be replaced when the wear indicators appear as a solid bar across the tyre tread. At this point, the remaining tread depth will be approximately 0.06 in.(1.6 mm). In addition to this, the tyre must be replaced if any portion of the tread has become bald or if there are any lumps, bulges or deep cuts in the sidewalls or tread.

Replacement tyres must be of the recommended size and rating and should be of the same manufacture and tread pattern on each axle.

jmuk-8.p65 4







#### SI060D02-E

### WHEEL REPLACEMENT

The original wheels may only be replaced with Hyundai Approved wheels.



### WARNING:

Driving on worn or defective tyres is dangerous. Worn tyres may cause loss of steering control and a serious deterioration of braking efficiency. Defective tyres may cause vibration and loss of control through blow outs.

Tyres of different size, construction or tread pattern should not be intermixed on the same axle. Radial and cross ply tyres should not be used on the same vehicle.

The use of tyres and wheels of non approved sizes can be dangerous.

#### I100A01FC-EAT

### **SPARE TYRE AND TOOLS**



Your Hyundai is delivered with the following:

Spare tyre and wheel Wheel nut wrench, Wrench bar, Spanner, Screw driver and Jack









# **VEHICLE SPECIFICATIONS**

Measurement	9-2
Engine	9-3
Lubrication Chart	9-4



0

jmuk-9.p65 1



5/31/04, 4:44 PM

### QVEHICLE SPECIFICATIONS

### J010A01JM-EAT

in.(mm)

<u>MEASUREMEN</u>	IT	. ,
Overall Length		170(4,325)
Overall Width		70(1,795)
Overall Height(U	Inladen)	66(1,680)
Wheelbase		103(2,630)
Wheeltread	Front	60(1,540)
	Rear	60(1,540)

J020A01JM-EAT

### POWER STEERING

Туре	Rack and pinion	
Wheel free play	0~30mm(0~1.18in.)	
Rack stroke	140mm(5.5 in.)	
Oil pump type	Vane type	

J060A01JM-GAT

### **FUEL SYSTEM**

Engine	Fuel tank capacity	
2.7L	65L	
2.0L	58L	

J030A01JM-EAT

Standard	215/65R16
Option	235/60R16

J030A01JM-EAT

### **SPARE TYRE**

Standard	T155/90R16
Option	Full size

J040A01JM-EAT

### **ELECTRICAL**

ITEM	PETROL		DIESEL
Battery	MF 60 AH, MF 68 AH		CMF 90 AH
Alternator	2.0L	90A (13.5V)	1004 (101/)
	2.7L	120A (13.5V)	120A (12V)

J050A01JM-AAT

### BRAKE

Type	Dual hydraulic with brake booster			
Front brake type	Ventilated disc			
Rear brake type	2WD CBS (With ABS) Drum type			
		ABS	Disc type	
	4WD	CBS, ABS	Disc type	
Parking brake	Cable operated on rear wheel			







### ENGINE

3

### J070A01JM-EAT

ITEMS		PETROL		DIESEL	
		2.0 DOHC	2.7 V6	2.0 TCI	
Engine Type			4-Cyl., In-line DOHC	6-Cyl., V-type DOHC	4-Cyl., In-line SOHC
Bore x Stroke	Bore x Stroke			86.7 × 75.0	83 x 92
Displacement (cc)	Displacement (cc)			2656	1991
Firing order		1-3-4-2	1-2-3-4-5-6	1 - 3 - 4 - 2	
	For adjusting	Intake	0.17 ~ 0.23 mm	Auto lash	-
Valve Clearance		Exhaust	0.25 ~ 0.31 mm	Auto lash	-
(Cold engine : 20±5°C)	For checking	Intake	0.12 ~ 0.28 mm	Auto lash	-
		Exhaust	0.20 ~ 0.38 mm	Auto lash	-
Spark plug gap			1.0 - 1.1 mm		-
Idle speed (rpm)		700 ± 100	650 ± 100	800 ± 100	
Ignition timing			BTDC 8° ± 5°	BTDC 12° ± 5°	-







### 9VEHICLE SPECIFICATIONS

## 4 LUBRICATION CHART

### J080A01JM-EAT

Item		Oil & Grease Standard		Q'ty (Imp. qts) (litre)
Engine Oil	2.7 GSL	API SH, SG or	SAE 20W-40, 20W-50 (ABOVE -10°C)	Drain and refill (With oil filter)
		ABOVE	SAE 15W-40, 15W-50 (ABOVE -15°C)	2.0 L : 3.5 (4.0)
			SAE 10W-30 (-25°C ~ 40°C)	2.7 L : 4.0 (4.5)
			SAE 10W-40, 10W-50 (ABOVE -25°C)	
			SAE 5W-20 (BELOW -10°C)*1, *2	
			SAE 5W-30 (BELOW 10°C)*1	
			SAE 5W-40 (BELOW 20°C) *1	
	2.0 GSL	API SH ABOVE	SAE 15W-40 (ABOVE -10°C)	
		ILSAC GF1, ABOVE	SAE 10W-30 (-25°C ~ 40°C)	
			SAE 10W-40 (ABOVE -25°C)	
			SAE 5W-20 (BELOW -10°C)*1, *2	
			SAE 5W-30 (BELOW 10°C)*1	
			SAE 5W-40 (BELOW 20°C) *1	
	Diesel	API CF-4 or ABOVE	SAE 30 (0°C ~ 40°C)	Drain and refill :5.2 (5.9)
		ACEA B4 or ABOVE	SAE 20W-40 (ABOVE -10°C)	(With oil filter)
			SAE 15W-40 (ABOVE -15°C)	at Oil Pan : 4.8 (5.4) (MAX)
			SAE 10W-30 (-20°C ~ 40°C)	3.3 (3.8) (MIN)
			SAE 5W-30 (-25°C ~ 10°C)	
			SAE 0W-30 (BELOW 10°C) *1, *2	
		*1. Restricted by driving condition and area		
		*2. Not recommended for sustained high speed vehicle operation		

jmuk-9.p65 5/31/04, 4:44 PM









5

Item		Oil & Grease Standard	Q'ty (Imp. qts) (litre)
Engine oil consumption		Normal driving condition	MAX. 1L /1,000 miles
		Severe driving condition	MAX. 1L /620 miles
Transaxle	Manual	HYUNDAI GENUINE PARTS SAE MTF SAE 75W/90 (API GL-4)	1.8 (2.1)
	Automatic	HYUNDAI GENUINE ATF SP III, DIAMOND ATF SP III, SK ATF SP III or	6.9 (7.8)
		other brands approved by Hundai Motor Co.,	0.9 (7.8)
Transfer cas	e	API GL-5, SAE 80W/90 (SHELL SPIRAX AX Equivalent)	0.7 (0.8)
Rear Axle		API GL-5, SAE 80W/90 (SHELL SPIRAX AX Equivalent)	0.7 (0.75)
Coolant		Ethylene glycol base for aluminum radiator	6.2 (7.0) (Petrol), 7.7 (8.7)(Diesel)
Power steering gear		PSF-3/Dexron 2 TYPE FLUID	0.8 (0.9)
Brakes and clutch fluid		DOT 3, DOT 4 or Equivalent	As required





jmuk-9.p65 5 5/31/04, 4:44 PM





jmuk-10.p65 1



5/31/04, 4:44 PM

2

A	
Airbag	1-32
Air Cleaner Filter	6-15
Air Conditioning	
Maintenance	
Operation	1-92
Switch	1-92
Antenna	1-106
Ashtray	1-61
B	0.00
Battery	
Bonnet Release	1-//
Brake	0.45
Anti-lock brake system	2-15
Brake traction control system	
Checking the brake	
Electronic Stability Program (ESP)	
Effective braking	
Fluid	
Pedal clearance	
Pedal freeplay	
Bulbs Replacement	
Bulbs Wattage	6-40

C
Care of Cassette Tapes 1-105
Care of Discs 1-104
Catalytic Converter
Child-Proof Rear Door Lock 1-7
Child Restraint System 1-23
Cigar Lighter 1-60
Clock 1-60
Clutch
Checking the cluch fluid 6-21
Pedal freeplay 6-25
Cooling Fans 6-29
Corrosion Protection
Interior valeting 4-5
Polishing
Protecting your Hyundai from corrosion 4-2
Underbody coatings
Cruise Control
<b>D</b>
Delika Orangatina Olanaka
Daily Operating Checks
Door Control door looks
Central door locks
Door locks
Drink Holder 1-62
Drive Belts
DIIVE DEIG0-20



3

Driving Driving for economySmooth cornering	2-23
E Electric Cooling Fans Emission Control Systems Engine	
Before starting the engine Compartment	6-2
Coolant temperature gauge	1-49 3-4 8-2
Starting Engine Exhaust Can Be Dangerous	2-6
Fog LightFront Seats Head restraints adjustmentSeat cushion height adjustment	1-14 1-14
Seat fore/aft adjustment Seatback angle adjustment Seatback table	1-13

Fuel Capacity Gauge Recommendations Fuel Filler Flap Remote release Full-Time 4WD Operation Fuses Fuse panel description	. 1-49 1-2 . 1-77 . 2-18 . 6-27
G Glove Box	. 1-67
H Hatchback Door	. 1-58 . 6-32 . 1-81 . 1-59 . 1-85 . 1-86 . 1-90 . 1-90 . 1-86 . 1-89 . 1-76
How to use Luggage Room	

jmuk-10.p65 3



jmuk-10.p65

4

Mirror	
Automatic dimming rear view mirror w	vith
compass	
Interior rearview mirror	1-70
Outside rearview mirror	1-68
Outside rearview mirror heater	
Multi Function Switch	1-54
Headlight Flasher	1-55
Headlight Switch	
High and low beam	
Lane change signal	1-54
Turn signal operation	
Odometer / Trip Odometer	1-51
Р	
Parking Brake	1-72
Pollen Filter	
Power Outlet	
Power Steering Hoses & Fluid Level	
R Rear Seat	
Folding rear seatback and seat cushic	on 1-17
Seatback angle adjustment	
Rheostat Switch	
Roof Rack	

5/31/04, 4:44 PM

4

5

S	
Seats	
Front seat	1-12
Rear seat	1-16
Seat Belts	
3-Point type	1-20
Adjustable height	1-20
Adjusting your seat belt	1-21
Care of seat belts	1-19
Precautions	1-18
Pre-tensioner seat belt	1-30
Seat warmer	
Spark Plugs	
Spectacle Case	
Speedometer	
Starting	
Steering Wheel Freeplay	
Steering Wheel Tilt Lever	
Stereo Sound System 1	
Sunroof	
Sun Visor	1-78
_	
<u>T</u>	
Tachometer	
Theft-Alarm System	
Ticket Holder	1-79
Towing	
Emergency towing	
If your car must be towed	
Trailer or vehicle towing	2-25

Transaxle
Automatic 2-10
Automatic transaxle lubricant 6-18
Manual
Manual transaxle lubricant
Trip Computer
Tyre
Balancing 8-4
Chains 8-3
In the event of a puncture 3-7
Information 8-2
Pressures 8-2
Replacement
Rotation 8-4
Snow tyres 8-3
Spare tyre
oparo tyro
V
Vehicle Identification Number (VIN) 8-2
venicle identification Number (VIIV) 6-2
•
W
Warning and Indicator Lights1-42
Windows (Power) 1-11
Windscreen Wiper and Washer Switch 1-56
Hatchback door wiper and washer switch 1-57
Windscreen Wiper Blades 6-15
Windscreen Wiper Blade De-icer 1-59
Winter Motoring2-24
Ville Metering

5 jmuk-10.p65 5/31/04, 4:44 PM

