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#### INTRODUCTION

This manual has been prepared with the assistance of service and engineering specialists to acquaint you with the operation and maintenance of your new vehicle. It is supplemented by a Warranty Information Booklet and various customer oriented documents. You are urged to read these publications carefully. Following the instructions and recommendations in this manual will help assure safe and enjoyable operation of your vehicle.

**NOTE:** After you read the manual, it should be stored in the vehicle for convenient reference and remain with the vehicle when sold, so that the new owner will be aware of all safety warnings.

When it comes to service, remember that your dealer knows your vehicle best, has the factory-trained technicians and genuine Mopar<sup>®</sup> parts, and is interested in your satisfaction.

## WARNING!

Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

#### HOW TO USE THIS MANUAL

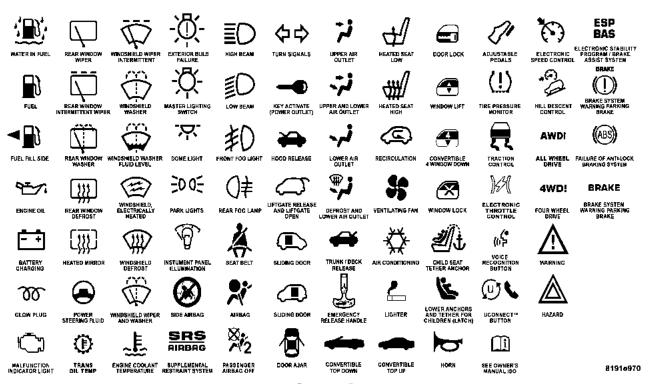
Consult the table of contents to determine which section contains the information you desire.

The detailed index, at the rear of this manual, contains a complete listing of all subjects.

Consult the following table for a description of the symbols that may be used on your vehicle or throughout this owner manual:



1



Common Icons

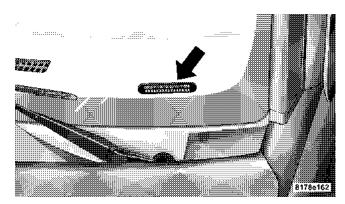


#### WARNINGS AND CAUTIONS

This manual contains **WARNINGS** against operating procedures, which could result in an accident or bodily injury. It also contains **CAUTIONS** against procedures, which could result in damage to your vehicle. If you do not read this entire manual you may miss important information. Observe all Warnings and Cautions.

#### **VEHICLE IDENTIFICATION NUMBER**

Vehicle Identification Number (VIN) is found on the driver's front corner of the instrument panel, visible through the windshield. This number also appears on the vehicle registration or title.



## Vehicle Identification Number VEHICLE MODIFICATIONS / ALTERATIONS

## WARNING!

Any modifications or alterations to this vehicle could seriously affect its roadworthiness and safety and may lead to an accident resulting in serious injury or death.



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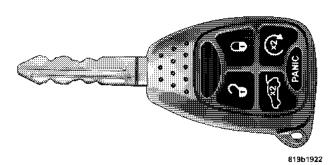
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#### A WORD ABOUT YOUR KEYS

The dealer that sold you your new vehicle has the key code numbers for your vehicle locks. These numbers can be used to order duplicate keys from your dealer. Ask your dealer for these numbers and keep them in a safe place.

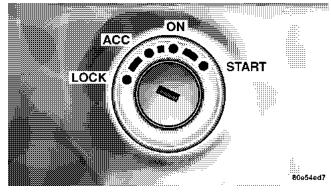


Vehicle Key

## **Ignition Key Removal**

#### Automatic Transaxle

Place the shift lever in PARK. Turn the ignition switch to the ACC position, push the key and cylinder inward, rotate the key to the LOCK position, and remove the key.



**Ignition Key Position** 

**NOTE:** If you try to remove the key before you place the lever in PARK, the key may become trapped temporarily in the ignition cylinder. If this occurs, rotate the key to the right slightly, then remove the key as described. If a malfunction occurs, the system will trap the key in the



ignition cylinder to warn you that this safety feature is inoperable. The engine can be started and stopped but the key cannot be removed until you obtain service.

**NOTE:** The power window switches, radio, and power outlets, will remain active for up to 45 seconds after the ignition switch has been turned off. Opening a vehicle front door will cancel this feature.

## WARNING!

NEVER leave children alone in a vehicle. Leaving children in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Don't leave the keys in the ignition. A child could operate power windows, other controls, or move the vehicle

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 11

## CAUTION!

An unlocked car is an invitation to thieves. Always remove key from the ignition and lock all doors when leaving the vehicle unattended.

#### Automatic Transaxle Ignition Interlock System

This system prevents the key from being removed unless the shift lever is in PARK. It also prevents shifting out of PARK unless the key is in the ACC, or ON positions, and the brake pedal is depressed.

#### **Key-In-Ignition Reminder**

Opening the driver's door when the key is in the ignition, sounds a signal to remind you to remove the key.

**NOTE:** With either front door open, and the key in the ignition, both the power door locks and Remote Keyless Entry (RKE) will not function.



#### Locking Doors With The Key

There is only one external door lock cylinder which is located in the driver's door only.

You can insert the key with either side up. To lock the door, turn the key rearward, to unlock the door, turn the key forward. See Section 7 of this manual for door lock lubrication.

#### SENTRY KEY

The Sentry Key Immobilizer System prevents unauthorized operation of the vehicle by disabling the engine. The system will shut the engine off after 2 seconds of running if an invalid key is used to start the vehicle. This system utilizes ignition keys which have an electronic chip (transponder) embedded into them. Only keys that have been programmed to the vehicle can be used to start and operate the vehicle.

The Sentry Key Immobilizer System does not need to be armed or activated. Operation of the system is automatic regardless of whether or not the vehicle is locked or unlocked. During normal operation, the Theft Alarm/ Immobilizer Light will come on for three (3) seconds immediately after the ignition switch is turned on for a bulb check. Afterwards, if the bulb remains on, this indicates a problem with the electronics.

If the bulb begins to flash after the bulb check, this indicates that an invalid key has been used to start the vehicle. Both of these conditions will result in the engine being shut off after two (2) seconds of running.

Keep in mind that a key, which has not been programmed is also considered an invalid key even if it is cut to fit the ignition lock cylinder for that vehicle.

If the Theft Alarm/Immobilizer Light comes on during normal vehicle operation, (the vehicle has been running for longer than 10 seconds), a fault has been detected in the electronics and the vehicle should be serviced as soon as possible.

#### NOTE:

• The Sentry Key Immobilizer System is not compatible with remote starting systems. Use of these systems may result in vehicle starting problems and loss of security protection.



● Exxon/Mobil Speed Pass,™ additional Sentry Keys, or any other transponder equipped components on the same keychain will not cause a key-related (transponder) fault unless the additional part is physically held against the ignition key being used when starting the vehicle. Cell phones, pagers, or other RF electronics will not cause interference with this system.

All of the keys provided with your new vehicle have been programmed to the vehicle electronics.

#### **Replacement Keys**

**NOTE:** Only keys that have been programmed to the vehicle electronics can be used to start the vehicle. Once a Sentry Key has been programmed to a vehicle, it cannot be programmed to any other vehicle.

At the time of purchase, the original owner is provided with a four-digit PIN number. This number is required for dealer replacement of keys. Duplication of keys may be performed at an authorized dealer or by using the Customer Key Programming procedure. This procedure

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 13

consists of programming a blank key to the vehicle electronics. A blank key is one, which has never been programmed.

When having the Sentry Key Immobilizer 2 NOTE: System serviced, bring all vehicle keys with you to the dealer.

#### Sentry Key Programming

You can program new keys to the system if you have two valid sentry keys by performing the following procedure:

1. Cut the additional Sentry Key Transponder blank(s) to match the ignition switch lock cylinder key code.

2. Insert the first valid key into the ignition switch and turn the ignition switch ON for at least 3 seconds but no longer than 15 seconds. Turn the ignition switch OFF and remove the first key.

3. Insert the second valid key and turn the ignition switch ON within 15 seconds. After ten seconds, a chime will sound and the Theft Alarm Light will begin to flash. Turn the ignition switch OFF and remove the second key.



4. Insert a blank Sentry Key into the ignition switch and turn the ignition switch ON within 60 seconds. After 10 seconds a single chime will sound. The Theft Alarm Light will stop flashing, turn on for 3 seconds; then turn off.

The new Sentry Key has been programmed.

Repeat this procedure to program up to 8 keys. If you do not have a programmed sentry key, contact your dealer for details.

#### **General Information**

The Sentry Key system complies with FCC rules part 15 and with RSS-210 of Industry Canada. Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference that may be received, including interference that may cause undesired operation.

#### SECURITY ALARM SYSTEM — IF EQUIPPED

The Vehicle Theft Security Alarm (VTSA) system monitors the doors, trunk, and ignition switch for unauthorized operation.

If something triggers the alarm, the system will signal for about 18 minutes. For the first 3 minutes, the horn will sound intermittently and the headlights, park lights, taillights and the indicator light in the cluster will flash. Then the exterior lights will flash for another 15 minutes.

#### Rearming of the System:

If something triggers the alarm, and no action is taken to disarm it, the system will turn off the horn after 3 minutes, turn off all of the visual signals after 15 minutes, and then the system will rearm itself.

#### To Arm the System:

1. Remove the keys from the ignition switch and get out of the vehicle.

2. Lock the door using either the power door lock switch or the Keyless Entry Transmitter, and close all doors.



3. The indicator light in the instrument cluster will flash rapidly for 16 seconds. This shows that the system is arming. During this period, if a door is opened, the ignition switch is turned ON, or the power door locks are unlocked in any manner, the system will automatically disarm. After 16 seconds, the indicator light will flash slowly. This shows that the system is fully armed.

**NOTE:** For added security, whenever the Security Alarm is armed, the Homelink/Garage Door Opener (if equipped) is disabled as well.

#### To Disarm the System:

Either press the UNLOCK button on the remote keyless entry transmitter or insert a valid sentry key into the ignition lock cylinder and turn the key to the ON/START position.

#### NOTE:

• The driver's door key cylinder and the trunk button on the keyless entry transmitter cannot arm or disarm the system.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 15

- The system remains armed during trunk entry. Pressing the trunk button will not disarm the system. If someone enters the vehicle through the trunk and opens any door, the alarm will sound.
- When the system is armed, the interior power door lock switches will not unlock the doors.

The Vehicle Security Alarm system is designed to protect your vehicle; however, you can create conditions where the system will give you a false alarm. If one of the previously described arming sequences has occurred, the system will arm regardless of whether you are in the vehicle or not. If you remain in the vehicle and open a door, the alarm will sound. If this occurs, disarm the system.

If the alarm system is armed and the battery becomes disconnected the system will remain armed when the battery is reconnected. The exterior lights will flash, the horn will sound, and the ignition will not start the vehicle. If this occurs, disarm the system.

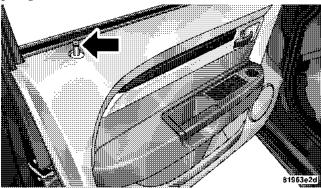


#### **Tamper Alert**

If the alarm was triggered, but the warning signals have timed out, the park and taillights flash three times (instead of the normal twice) when unlocking the vehicle with a valid Remote Keyless Entry (RKE) transmitter to alert the driver.

#### Security System Manual Override

The Vehicle Theft Security Alarm (VTSA) system will not arm if you lock the doors using the manual door lock plunger.



Manual Lock Plunger

## ILLUMINATED ENTRY SYSTEM — IF EQUIPPED

The courtesy lights will turn on when you use the keyless entry transmitter or open the doors. This feature is only available if you have Remote Keyless Entry.

The lights will fade to off after about 30 seconds or they will immediately fade to off once the ignition switch is turned on.

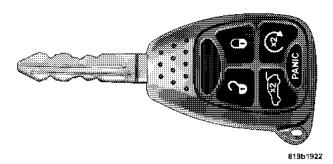
#### NOTE:

- The front courtesy overhead console and door courtesy lights do not turn on if the dimmer control is in the interior lights ON position (extreme top position).
- The illuminated entry system will not operate if the dimmer control is in the "defeat" position (extreme downward position).



## **REMOTE KEYLESS ENTRY**

This system allows you to lock or unlock the doors and trunk or activate the panic alarm from distances a maximum of 66 feet (20 meters) using a hand held radio transmitter. The transmitter need not be pointed at the vehicle to activate the system.



Five Button Vehicle Key

NOTE: The line of transmission must not be blocked with metal objects.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 17

#### To unlock the doors:

Press and release the UNLOCK button on the key fob once to unlock only the driver's door or twice to unlock all the doors. When the UNLOCK button is pressed, the  $\mathbf{2}$ illuminated entry will initiate, the parking lights will flash on twice, and the headlights will remain on. The time for headlamp delay is programmable on vehicles equipped with the Electronic Vehicle Information Center (EVIC). Refer to "Headlamps Off Delay" under "Personal Settings" in the Electronic Vehicle Information Center (EVIC) section of this manual for details.

**NOTE:** The system can also be programmed to unlock all doors on the first press of the UNLOCK button. On electronic vehicle information center (EVIC) equipped vehicles refer to "Remote Unlock Driver's Door 1st" under "Personal Settings" in the EVIC section of this manual. On non EVIC - equipped vehicles perform the following steps:

The system can be programmed to unlock all the doors upon the first UNLOCK button press by using the following procedure:



1. Press and hold the LOCK button on a programmed key fob.

2. Continue to hold the LOCK button at least 4 seconds, but not longer than 10 seconds, then press and hold the UNLOCK button. A single chime will sound to indicate that this feature has changed.

3. Release both buttons at the same time.

4. Test the feature while outside of the vehicle, by pressing the LOCK/UNLOCK button on the keyfob.

**NOTE:** Pressing the LOCK button on the keyfob while you are inside the vehicle will activate the Security Alarm. Opening a door with the Security Alarm activated will cause the alarm to sound. Press the UNLOCK button to deactivate the Security Alarm.

5. If the desired programming was not achieved or to reactivate this feature, repeat the above steps.

#### To lock the doors:

Press and release the LOCK button on the transmitter to lock all doors. The turn signal lights will flash and the horn will chip once to acknowledge the lock signal. If desired, the "Sound Horn On Lock" feature can be turned on or off. On electronic vehicle information center (EVIC) equipped vehicles refer to "Personal Settings" in the "Electronic Vehicle Information Center (EVIC)" section of this manual. On non EVIC – equipped vehicles perform the following steps:

1. Press the LOCK button for 4 to 10 seconds.

2. While the LOCK button is pressed (after 4 seconds), press the PANIC button. Release both buttons.

The "Sound Horn On Lock" feature can be reactivated by repeating this procedure.

#### To Unlatch the Trunk:

Press the trunk button on the transmitter two times to unlatch the trunk.



## Using The Express Down Window Feature — If Equipped

The key fob remotely lowers both driver and passenger front windows simultaneously. Lowering the front windows using the key fob is a two step operation:

1. Press the **unlock** button once.

2. Press the **unlock** button a second time and hold the button until the glass lowers completely or the windows drop to the desired level

#### Using The Panic Alarm:

To turn the panic alarm feature ON or OFF, press and hold the PANIC button on the transmitter for at least one second and release. When the panic alarm is on, the headlights and park lights will flash, the horn will pulse on and off and the interior lights will turn on.

The panic alarm will stay on for 3 minutes unless you turn it off by pressing the PANIC button a second time or if the vehicle speed is 5 mph (8 km/h) or greater.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 19

**NOTE:** When you turn off the panic alarm by pressing the PANIC button a second time, you may have to be closer to the vehicle due to the radio frequency noises of the system.

#### To Turn Off "Flash Lights With Lock"

**NOTE:** The "Flash Lights With Lock" feature can be turned on or off. On electronic vehicle information center (EVIC) equipped vehicles refer to "Personal Settings" in the EVIC section of this manual. On non EVIC - equipped vehicles perform the following steps:

1. Press the UNLOCK button for 4 to 10 seconds.

2. While the UNLOCK button is pressed, (after 4 seconds) press the LOCK button. Release both buttons.

3. Test the flash lamps with LOCK feature while outside of the vehicle, by pressing the LOCK button on the key fob with the ignition in the LOCK position, and the key removed.

The "Flash Lights On Lock/Unlock" feature can be reactivated by repeating this procedure.



**NOTE:** Pressing the LOCK button on the key fob, while you are in the vehicle, will activate the Security Alarm. Opening a door with the Security Alarm activated will cause the alarm to sound. Press the UNLOCK button to deactivate the Security Alarm.

#### **To Program Transmitters:** Refer to SENTRY KEY "Sentry Key Programming."

If you do not have a programmed transmitter, contact your dealer for details.

#### **General Information**

This device complies with part 15 of FCC rules and with RS-210 of Industry Canada. Operation is subject to the following conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference that may be received including interference that may cause undesired operation.

**NOTE:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

If your Remote Lock Control fails to operate from a normal distance, check for these two conditions.

1. Weak batteries in transmitter. The expected life of batteries is five years.

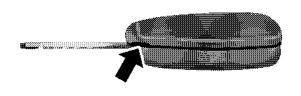
2. Closeness to a radio transmitter such as a radio station tower, airport transmitter, military base, and some mobile or CB radios.

#### **Battery Replacement**

The recommended replacement battery is CR2032.

1. With the transmitter buttons facing down, use a flat blade to pry the two halves of the transmitter apart. Make sure not to damage the seal during removal.





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#### Separating Transmitter Halves

2. Remove and replace the batteries. Avoid touching the new batteries with your fingers. Skin oils may cause battery deterioration. If you touch a battery, clean it with rubbing alcohol.

3. To assemble the transmitter case, snap the two halves together.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 21

#### Remote Start System — If Equipped

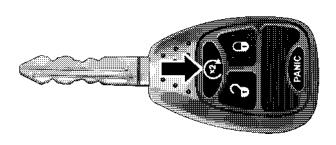
Remote start conveniently starts the engine from outside the vehicle by using the Remote Keyless Entry (RKE) key fob while maintaining security. The system has a targeted range of 328 ft. (100 m). The vehicle must be locked, the deck lid and hood closed and the transmission in Park in order to start the engine using the Remote Start button on the key fob.

**NOTE:** Remote start requires automatic transaxle equipped vehicles.

#### How To Use Remote Start

To **enter the Remote Start mode**, depress the Remote Start button twice on the key fob. The engine will start and the vehicle will remain in the remote start mode for a 15 minute cycle.





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#### **REMOTE START BUTTON**

(×2)

To exit the Remote Start mode, allow the engine to run the cycle or depress the unlock button to disarm the Vehicle Theft Security Alarm and within one minute insert the key into the ignition and turn the ignition to the RUN

position. The ignition must be in the RUN position in order to drive the vehicle.

NOTE: The engine can be started two consecutive times (two 15 minute cycles) by using the key fob. For a third cycle, the key must be cycled to the ignition RUN position and then repeat the start sequence.

To shut off the vehicle when it is in Remote Start mode, press the remote start button once. In order to avoid inadvertent shut downs, the one-time press to shut down the vehicle will be disabled for two seconds after receipt of a valid remote start request.

**NOTE:** When the vehicle is in the Remote Start mode, power window and sunroof operation are disabled for security.

The following conditions must be met before the engine will remote start:

- Automatic Transaxle in Park
- All doors are closed
- Hood is closed
- Hazard Switch is off
- Brake Switch is inactive
- Key is not in the ignition

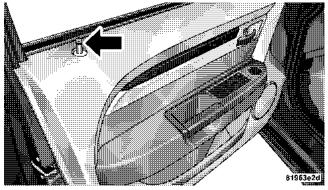


- Battery is at an acceptable charge level
- Panic button on key fob is not depressed

## DOOR LOCKS

#### **Manual Door Locks**

Use the manual door lock plunger to lock the doors from inside the vehicle. If the plunger is down when the door is closed, the door will lock. Therefore, make sure the keys are not inside the vehicle before closing the door.



Manual Lock Plunger

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 23

## WARNING!

For personal security, and safety in the event of an accident, lock the vehicle doors as you drive as well as when you park and leave the vehicle.

2

## WARNING!

When leaving the vehicle always remove the key from the ignition lock, and lock your vehicle. Do not leave children unattended in the vehicle, or with access to an unlocked vehicle. Unsupervised use of vehicle equipment may cause severe personal injuries and death.

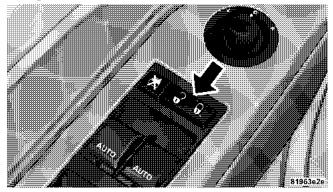


## CAUTION!

An unlocked vehicle is an invitation to thieves. Always remove the key from the ignition and lock all of the doors when leaving the vehicle unattended.

#### **Power Door Locks**

A door lock switch is located on the driver and passenger door panel. Press this switch to lock or unlock the doors.



Power Door Lock Switch

#### Automatic Door Locks—If Equipped

The doors will lock automatically on vehicles with power door locks if all of the following conditions are met:

- 1. The Auto Lock feature is enabled.
- 2. The transmission is in gear.
- 3. All doors are closed.
- 4. The throttle is pressed.
- 5. The vehicle speed is above 15 mph (24 km/h).

6. The doors were not previously locked using the power door lock switch or remote keyless entry transmitter.

The Automatic Door Lock feature can be enabled or disabled. Refer to "Personal Settings" (Customer Programmable Features) in the Electronic Vehicle Information Center (EVIC) — if equipped section of this manual for details.

For vehicles not equipped with the EVIC, the Automatic Door Locks can be enabled or disabled by performing the following procedure:

1. Close all doors and place the key in the ignition.



2. Cycle the ignition switch between LOCK, and ON, and back to LOCK 4 times ending up in the LOCK position.

3. Depress the power door lock switch to lock the doors.

4. A single chime will indicate the completion of the programming.

#### Auto Unlock

The doors will unlock automatically on vehicles with power door locks if:

1. The Auto Unlock feature is enabled.

2. The transmission was in gear and the vehicle speed returned to 0 mph (0 km/h).

- 3. The transmission is in NEUTRAL or PARK.
- 4. The driver door is opened.
- 5. The doors were not previously unlocked.
- 6. The vehicle speed is 0 mph (0 km/h).

The Auto Unlock feature can be enabled or disabled. Refer to "Personal Settings" (Customer Programmable

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 25

Features) in the Electronic Vehicle Information Center (EVIC) — if equipped section of this manual.

For vehicles not equipped with the EVIC, the Auto Unlock Feature can be enabled or disabled by performing the following procedure:

1. Close all doors and place the key in the ignition.

2. Cycle the ignition switch between LOCK, and ON and back to LOCK 4 times ending up in the LOCK position.

3. Depress the power door unlock switch to unlock the doors.

4. A single chime will indicate the completion of the programming.

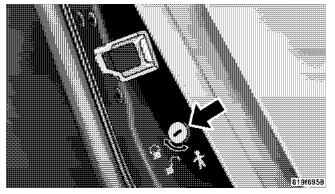
**NOTE:** Use the Auto Door Locks and Auto Unlock features in accordance with local laws.

# "Child-Protection" Door Lock System (Rear Doors)

The Rear Door Child-Protection Locks are located inside the rear edge of the door. Insert the tip of the ignition key



or similar flat-bladed object into the lock and rotate approximately <sup>1</sup>/<sub>4</sub> turn to the lock or unlock position (as indicated by the stamped icons).



Child Lock Control

WARNING!

Avoid trapping anyone in a vehicle in a collision. Remember that the rear doors can only be opened from the outside when the child protection locks are engaged. **NOTE:** For emergency exit with the system engaged, move the lock plunger up (unlocked position), roll down the window, and open the door with the outside door handle.

### **POWER WINDOWS**

#### **Power Window Switches**

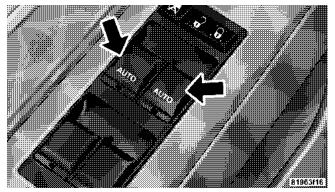
The control on the left front door has up-down switches that give you fingertip control of all four power windows. There is a single opening and closing switch on the front passenger door and one each on rear doors for window control. The windows will operate only when the ignition switch is turned to the ON position and for 45 seconds after the ignition is turned OFF or the driver's door is opened. This feature can be turned off by your authorized dealer.

# Auto Window Down (Express Down) — If Equipped

The driver's window switch has an Auto Down feature for both the driver and passenger front windows. The tab is labeled "AUTO" to indicate this capability. Push the window switch past the first detent, release, and the



window will go down automatically. To cancel the Auto Down movement, operate the switch either in the up or down direction and release the switch.



Power Window Auto Up / Auto Down Switches NOTE: The convenience of one-touch down front windows, can also be controlled by using the remote key fob — if equipped.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 27

To open the window part way, press the window switch to the first detent and release it when you want the window to stop.

The power window switches will remain active for up to 2 45 seconds after the ignition switch is turned off. Opening either front door will cancel this feature. The time for this feature is programmable. For details, refer to "Delay Power Off to Accessories Until Exit," under "Personal Settings (Customer Programmable Features)," under "Electronic Vehicle Information Center (EVIC)" in Section 4 of this manual.

## Auto Window Up (Express Up) with Anti–Pinch Protection — If Equipped

Lift the window switch to the second detent, release, and the window will go up automatically.

To stop the window from going all the way up, during the auto-up operation, push down on the switch briefly.





To close the window part way, lift the window switch to the first detent and release it when you want the window to stop.

#### NOTE:

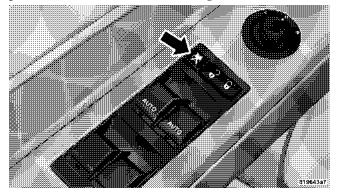
- If the window runs into any obstacle during autoclosure, it will reverse direction and then stop. Remove the obstacle and use the window switch again to close the window.
- Any impact due to rough road conditions may trigger the auto reverse function unexpectedly during autoclosure. If this happens, pull the switch lightly to the first detent and hold to close window manually.

## WARNING!

There is no anti-pinch protection when the window is almost closed. To avoid personal injury, be sure to clear your arms, hands, fingers and all objects from the window path before closing.

#### Window Lockout Switch

The window lockout switch on the driver's door allows you to disable the window control on the other doors. To disable the window controls on the other doors, press the window lock button. To enable the window controls, press the window control button again.



Window Lockout Switch



#### **Reset Express Up**

Any time the vehicle battery is disconnected, or goes dead, the auto-up function will be disabled. To reactivate the auto-up feature, pull the window switch up to close the window completely and continue to hold the switch up for an additional two seconds after the window is closed.

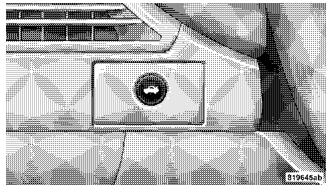
#### Wind Buffeting

Wind buffeting can be described as the perception of pressure on the ears or a helicopter type sound in the ears. Your vehicle may exhibit wind buffeting with the windows down, or the sunroof (if equipped) in certain open or partially open positions. This is a normal occurrence and can be minimized. If the buffeting occurs with the rear windows open, then open the front and rear windows together to minimize the buffeting. If the buffeting occurs with the sunroof open, then adjust the sunroof opening to minimize the buffeting.

#### I THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 29

### TRUNK RELEASE

Use the Remote Keyless Entry Transmitter to open the trunk from outside the vehicle. From inside the car the trunk lid can be released by depressing the Trunk Release Button located on the instrument panel to the left of the steering wheel. The transmission must be in Park before the switch will operate.



**Trunk Release Button** 



With the ignition ON, the word "deck" will display in place of the odometer display indicating that the trunk is open. The odometer display will reappear once the trunk is closed or if the trip button is depressed.

With the key in the lock position or with the key out, the word "deck" will display until the trunk is closed.

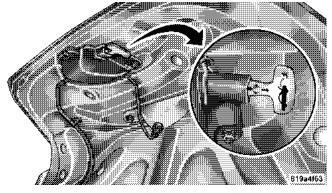
On EVIC equipped vehicles, the words "Trunk Ajar" will display.

#### TRUNK SAFETY WARNING

#### WARNING!

Do not allow children to have access to the trunk, either by climbing into the trunk from outside, or through the inside of the vehicle. Always close the trunk lid when your vehicle is unattended. Once in the trunk, young children may not be able to escape, even if they entered through the rear seat. If trapped in the trunk, children can die from suffocation or heat stroke.

#### **Trunk Internal Emergency Release**



Interior Trunk Emergency Release

**NOTE:** As a security measure, a Trunk Internal Emergency Release lever is built into the trunk latching mechanism. In the event of an individual being locked inside the trunk, the trunk can be simply opened by pulling on the glow-in-the-dark handle attached to the trunk latching mechanism. See picture.



#### **OCCUPANT RESTRAINTS**

Some of the most important safety features in your vehicle are the restraint systems. The following safety features are standard on all vehicles:

- Three point lap and shoulder belts for all seating positions
- Pretensioning and load-limiting retractors for the front seat belts
- Advanced multistage driver and new active-vent front passenger airbags
- Knee Bolsters/Blockers for front seat occupants
- An energy absorbing steering column and steering wheel
- Supplemental Side Airbag Inflatable Curtains (SABIC) that span the front and second rows for sedans.
- Supplemental seat side (Thorax) airbags for sedans.
- Supplemental seat side and head airbags for convertibles.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 31

- Front seat belt retractors incorporate pretensioners to enhance occupant protection by managing occupant energy during an impact event.
- All seat belt systems (except the driver's) include 2 Automatic Locking Retractors (ALR's) which lock the seat belt webbing into position by extending the belt all the way out and then adjusting the belt to the desired length to restrain a child seat or secure a large item in a seat.

If you will be carrying children too small for adult-size seat belts, your seat belts or the LATCH feature also can be used to hold infant and child restraint systems.

**NOTE:** The front airbags have a multi stage inflator design. This allows the airbag to have different rates of inflation that are based on collision severity.

Please pay close attention to the information in this section. It tells you how to use your restraint system properly to keep you and your passengers as safe as possible.



## WARNING!

In a collision, you and your passengers can suffer much greater injuries if you are not properly buckled up. You can strike the interior of your vehicle or other passengers, or you can be thrown out of the vehicle. Always be sure you and others in your vehicle are buckled up properly.

Buckle up even though you are an excellent driver, even on short trips. Someone on the road may be a poor driver and cause a collision that includes you. This can happen far away from home or on your own street.

Research has shown that seat belts save lives, and they can reduce the seriousness of injuries in a collision. Some of the worst injuries happen when people are thrown from the vehicle. Seat belts reduce the possibility of ejection and the risk of injury caused by striking the inside of the vehicle. **Everyone in a motor vehicle should be belted at all times.** 

#### Lap/Shoulder Belts

All the seats in your vehicle are equipped with Lap/ Shoulder Belts.

The belt webbing retractor is designed to lock during very sudden stops or collisions. This feature allows the shoulder part of the belt to move freely with you under normal conditions. However, in a collision, the belt will lock and reduce the risk of your striking the inside of the vehicle or being thrown out.



## WARNING!

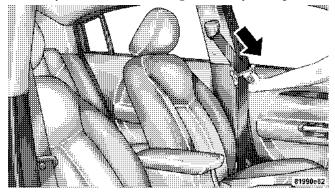
- Be sure everyone in your vehicle is in a seat and using a seat belt properly.
- Wearing a seat belt incorrectly is dangerous. Seat belts are designed to go around the large bones of your body. These are the strongest parts of your body and can take the forces of a collision the best.
- Wearing your belt in the wrong place could make your injuries in a collision much worse. You might suffer internal injuries, or you could even slide out of part of the belt. Follow these instructions to wear your seat belt safely and to keep your passengers safe, too.
- Two people should never be belted into a single seat belt. People belted together can crash into one another in an accident, hurting one another badly. Never use a lap/shoulder belt or lap belt for more than one person, no matter what their size.

## THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 33

#### Lap/Shoulder Belt Operating Instructions

1. Enter the vehicle and close the door. Sit back and adjust the seat.

2. The seat belt latch plate is above the back of the front seat, next to your arm. Grasp the latch plate and pull out the belt. Slide the latch plate up the webbing as far as necessary to allow the belt to go around your lap.



Pulling Out the Latch Plate

3. When the belt is long enough to fit, insert the latch plate into the buckle until you hear a "click."

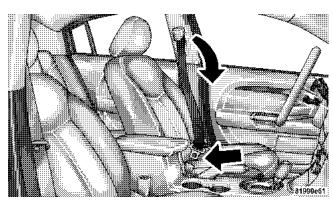


## 2

## WARNING!

• A belt that is buckled into the wrong buckle will not protect you properly. The lap portion could ride too high on your body, possibly causing internal injuries. Always buckle your belt into the buckle nearest you.

• A belt that is too loose will not protect you as well. In a sudden stop, you could move too far forward, increasing the possibility of injury. Wear your seat belt snugly.



Inserting Latch Plate Into Buckle



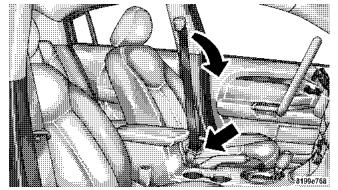
## WARNING!

• A belt that is worn under your arm is very dangerous. Your body could strike the inside surfaces of the vehicle in a collision, increasing head and neck injury. A belt worn under the arm can cause internal injuries. Ribs aren't as strong as shoulder bones. Wear the belt over your shoulder so that your strongest bones will take the force in a collision.

• A shoulder belt placed behind you will not protect you from injury during a collision. You are more likely to hit your head in a collision if you do not wear your shoulder belt. The lap and shoulder belt are meant to be used together.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 35

4. Position the lap belt across your thighs, below your abdomen. To remove slack in the lap belt portion, pull up on the shoulder belt. To loosen the lap belt if it is too tight, tilt the latch plate and pull on the lap belt. A snug belt reduces the risk of sliding under the belt in a collision.



Positioning the Lap Belt



### WARNING!

• A lap belt worn too high can increase the risk of internal injury in a collision. The belt forces won't be at the strong hip and pelvic bones, but across your abdomen. Always wear the lap belt as low as possible and keep it snug.

• A twisted belt can't do its job as well. In a collision, it could even cut into you. Be sure the belt is straight. If you can't straighten a belt in your vehicle, take it to your dealer and have it fixed.

5. Position the shoulder belt on your chest so that it is comfortable and not resting on your neck. The retractor will withdraw any slack in the belt. 6. To release the belt, push the red button on the buckle. The belt will automatically retract to its stowed position. If necessary, slide the latch plate down the webbing to allow the belt to retract fully.

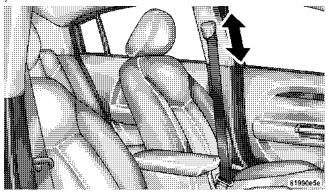
### WARNING!

A frayed or torn belt could rip apart in a collision and leave you with no protection. Inspect the belt system periodically, checking for cuts, frays, or loose parts. Damaged parts must be replaced immediately. Do not disassemble or modify the system. Seat belt assemblies must be replaced after a collision if they have been damaged (bent retractor, torn webbing, etc.).



# Adjustable Upper Shoulder Belt Anchorage

In the front seat, the shoulder belt can be adjusted upward or downward to position the belt away from your neck. Push anchorage button to release the anchorage, and move it up or down to the position that serves you best.



## Adjustable Anchorage

As a guide, if you are shorter than average, you will prefer a lower position, and if you are taller than average,

## THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 37

you'll prefer a higher position. When you release the anchorage, try to move it up or down to make sure that it is locked in position.

# Automatic Locking Retractors (ALR) Mode – If Equipped

In this mode, the shoulder belt is automatically prelocked. The belt will still retract to remove any slack in the shoulder belt. The automatic locking mode is available on all passenger seating positions with a combination lap/shoulder belt.

#### When To Use The Automatic Locking Mode

Anytime a child safety seat is installed in a passenger seating position. Children 12 years old and under should be properly restrained in the rear seat whenever possible.

## How To Use The Automatic Locking Mode

1. Buckle the combination lap/shoulder belt.

2. Grasp the shoulder portion and pull downward until the entire belt is extracted.



3. Allow the belt to retract. As the belt retracts, you will hear a clicking sound. This indicates the safety belt is now in the automatic locking mode.

#### How To Disengage The Automatic Locking Mode

Disconnect the combination lap/shoulder belt and allow it to retract completely to disengage the automatic locking mode and activate the vehicle sensitive (emergency) locking mode.

#### **Rear Seat Belts**

Three point belts are nonadjustable for outboard and center rear passengers on sedans. The center belt is mounted to the rear shelf panel and exits through a bezel in the panel.

#### Seat Belt Pretensioners

The seat belts for both front seating positions are equipped with pretensioning devices that are designed to remove slack from the seat belt in the event of a collision. These devices improve the performance of the seat belt by assuring that the belt is tight about the occupant early in a collision. Pretensioners work for all size occupants, including those in child restraints. In addition, the front passenger seat belt includes a two-stage load-limiting feature to enhance occupant protection for the same reason.

**NOTE:** These devices are not a substitute for proper seat belt placement by the occupant. The seat belt still must be worn snugly and positioned properly.

The pretensioners are triggered by the Occupant Restraint Controller (ORC) (see Airbag Section). Like the front airbags, the pretensioners are single use items. After a collision that is severe enough to deploy the airbags and pretensioners, both must be replaced.

#### **BeltAlert® Enhanced Warning System**

If the occupied driver's seat belt has not been buckled within 60 seconds of starting the vehicle and if the vehicle speed is greater than 5 mph (8 km/h), the Enhanced Warning System (BeltAlert) will alert the driver to buckle their seat belt. The driver should also instruct all other occupants to buckle their seat belts. Once the warning is triggered, the Enhanced Warning System (BeltAlert) will continue to chime and flash the Seat Belt Warning Light for 96 seconds or until the driver's seat belt is buckled.



The Enhanced Warning System (BeltAlert) will be reactivated if the driver's seat belt is unbuckled for more than 10 seconds and the vehicle speed is greater than 5 mph (8 km/h).

#### **Belt Alert Programming**

BeltAlert<sup>®</sup> can be enabled or disabled by your authorized dealer or by following these steps:

**NOTE:** The following steps must occur within the first 60 seconds of the ignition switch being turned to the ON or START position. DaimlerChrysler does not recommend deactivating the Enhanced Warning System (BeltAlert).

1. Turn the ignition switch to the LOCK position and buckle the driver's seat belt.

2. Turn the ignition switch to the ON position and wait for the Seat Belt Warning Light to turn off.

3. Within 60 seconds of turning the ignition switch to the ON position, unbuckle and then re-buckle the driver's seat belt at least three times within 10 seconds, ending with the seat belt buckled.

#### I THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 39

**NOTE:** Watch for the Seat Belt Warning Light to turn on while unbuckling and off while re-buckling the seat belt. It may be necessary to retract the seat belt partially each time when unbuckling.

4. Turn the ignition switch to the LOCK position. A single chime will sound to signify that you have successfully completed the programming.

The Enhanced Warning System (BeltAlert) can be reactivated by repeating this procedure.

**NOTE:** Although the Enhanced Warning System (BeltAlert) has been deactivated, the Seat Belt Warning Light will continue to illuminate while the driver's seat belt remains unbuckled.

#### Seat Belts And Pregnant Women

We recommend that pregnant women use the seat belts throughout their pregnancy. Keeping the mother safe is the best way to keep the baby safe.

Pregnant women should wear the lap part of the belt across the thighs and as snug across the hips as possible. Keep the belt low so that it does not come across the abdomen. That way the strong bones of the hips will take the force if there is a collision.



#### Seat Belt Extender

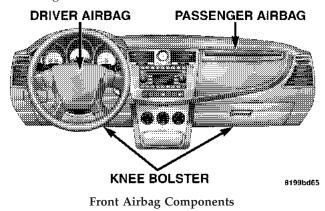
If a seat belt is too short, even when fully extended and when the adjustable upper shoulder belt anchorage (if equipped) is in its lowest position, your dealer can provide you with a seat belt extender. This extender should be used only if the existing belt is not long enough. When it is not required, remove the extender, and stow it.

# WARNING!

Using a seat belt extender when not needed can increase the risk of injury in a collision. Only use when the lap belt is not long enough when it is worn low and snug, and in the recommended seating positions. Remove and store the extender when not needed.

# Supplemental Restraint System (SRS) - Airbag

This vehicle has airbags for both the driver and front passenger as a supplement to the seat belt restraint systems. The driver's front airbag is mounted in the center of the steering wheel. The passenger's front airbag is mounted in the instrument panel, above the glove compartment. The words SRS AIRBAG are embossed on the airbag covers.





**NOTE:** The front airbags are certified to the Federal regulations that allow less forceful deployment.

The front airbags have a multistage inflator design. This may allow the airbag to have different rates of inflation that are based on collision severity and occupant size.

This vehicle may also be equipped with window bags to protect the driver, front, and rear passengers sitting next to a window. If the vehicle is equipped with window bags, they are located above the side windows. Their covers are also labeled SRS AIRBAG.

**NOTE:** Airbag covers may not be obvious in the interior trim; but they will open to allow airbag deployment.

#### **Airbag System Components**

The airbag system consists of the following:

- Occupant Restraint Controller (ORC)
- AIRBAG Light
- Driver Airbag
- Front Passenger Airbag

# THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 41

- Supplemental Side Airbag Inflatable Curtains (SABIC)
   If Equipped
- Front Seat— side mounted (Thorax) Airbags If 2 Equipped
- Front Impact Sensors
- Side Impact Sensors (If Equipped)
- Steering Wheel and Column
- Instrument Panel
- Interconnecting Wiring
- Seat Belt Reminder Light
- Knee Impact Bolster
- Front Seat Belt Buckle Pretensioners



#### **Front Seat Airbag Features**

The front airbag system has dual-stage driver and front passenger airbags. This system provides output appropriate to the level of crash severity as determined by the Occupant Restraint Controller (ORC) and the impact sensors at the front of the car.

The first stage inflator is triggered immediately during an impact that requires airbag deployment. The timing of the second stage determines whether the output force is low, medium, or high. If a low output is sufficient to meet the need, the second stage is expended later in the crash event.

#### **Driver Airbag Special Features**

Driver airbag deployment and force level is controlled by the driver's seat position as well as impact severity. Use of special inflators, result in a very compact driver's side airbag. In addition to the small size, the inflating gasses exit through strategically placed vents, which direct the gas away from the occupant.

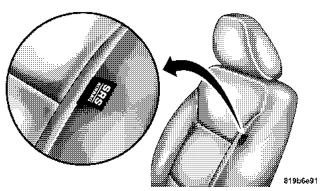
#### Front Passenger Airbag Special Features

A new active venting front-passenger airbag is designed to reduce the risk of occupants who may be out of position by the use of active vents positioned on each side of the airbag.

# Supplemental Front Seat-Mounted Thorax Side Airbags

Front seat mounted side (Thorax) airbags provide enhanced protection and work together with supplemental Side Airbag Inflatable Curtains (SABIC) to help protect an occupant during a side impact. The seat-mounted side airbag is marked with an airbag label sewn into the outboard side of the seat.





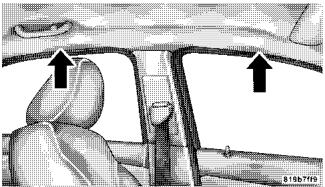
Seat-mounted Side Airbag Label

When the bag deploys, it opens the seam between the front and side of the seat's trim cover. Each bag deploys independently, that is a left side impact deploys the left bag only and a right-side impact deploys only the right bag.

## THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 43

# Supplemental Side Airbag Inflatable Curtain (SABIC)

Supplemental Side Airbag Inflatable Curtain (SABIC) Airbags offer side-impact protection to front and rear seat outboard occupants in addition to that provided by the body structure. Each airbag features inflated chambers place adjacent to the head of each outboard occupant that reduce the potential for side-impact head injuries. The curtains deploy downward, covering both windows on the impact side.



Side Airbag Inflatable Curtains (SABIC) Location



**NOTE:** Airbag covers may not be obvious in the interior trim; but they will open to allow airbag deployment.

The system includes sensors adjacent to both front and rear seat occupants that are calibrated to deploy during an impact severe enough to require airbag occupant protection.

# WARNING!

- Do not put anything on or around the airbag covers or attempt to open them manually. You may damage the airbags and you could be injured because the airbags are not there to protect you. These protective covers for the airbag cushions are designed to open only when the airbags are inflating.
- Do not use accessory seat covers or place objects between you and the side airbags; the performance could be adversely affected and/or objects could be pushed into you, causing serious injury.
- If your vehicle is equipped with left and right window bags, do not stack luggage or other cargo up high enough to block the location of the Side Airbag Inflatable Curtains (SABIC). The area where the side curtain airbag is located should remain free from any obstructions.
- Do not attach cup holders or any other objects on or around the door. The inflating side airbag could drive the object into occupants, causing serious injury.



Airbags inflate in moderate to high speed impacts. Along with seat belts and pretensioners, front airbags work with the knee bolsters to provide improved protection for the driver and front passenger. Side airbags also work with seat belts to improve occupant protection.

The seat belts are designed to protect you in many types of collisions. The front airbags deploy in moderate to severe frontal collisions. If your vehicle is equipped, the side airbag on the crash side of the vehicle is triggered in moderate to severe side collisions. In certain types of collisions, both the front and side airbags may be triggered. However, even in collisions where the airbags work, you need the seat belts to keep you in the right position for the airbags to protect you properly.

Here are some simple steps you can take to minimize the risk of harm from a deploying airbag.

1. Children 12 years old and under should always ride buckled up in a rear seat.

## THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 45

Infants in rear facing child restraints should **NEVER** ride in the front seat of a vehicle with a passenger front airbag. An airbag deployment can cause severe injury or death to infants in that position.

Children that are not big enough to wear the vehicle seat belt properly (see Section on Child Restraints) should be secured in the rear seat in child restraints or beltpositioning booster seats. Older children who do not use child restraints or belt-positioning booster seats should ride properly buckled up in the rear seat. Never allow children to slide the shoulder belt behind them or under their arm.

If a child from 1 to 12 years old must ride in the front passenger seat because the vehicle is crowded, move the seat as far back as possible, and use the proper child restraint. Refer to the section on Child Restraint.

You should read the instructions provided with your child restraint to make sure that you are using it properly.



2. All occupants should wear their lap and shoulder belts properly.

3. The driver and front passenger seats should be moved back as far as practical to allow the front airbags room to inflate.

4. If your vehicle has side airbags, do not lean against the door, airbags will inflate forcefully into the space between you and the door.

5. If the airbag system in this vehicle needs to be modified to accommodate a disabled person, contact the Customer Center. Phone numbers are provided under "If You Need Assistance" in Section 9 of this manual.

# WARNING!

- Relying on the airbags alone could lead to more severe injuries in a collision. The airbags work with your seat belt to restrain you properly. In some collisions, the airbags won't deploy at all. Always wear your seat belts even though you have airbags.
- Being too close to the steering wheel or instrument panel during front airbag deployment could cause serious injury. Airbags need room to inflate. Sit back, comfortably extending your arms to reach the steering wheel or instrument panel.
- Side airbags also need room to inflate. Do not lean against the door. Sit upright in the center of the seat.



## **Airbag Deployment Sensors and Controls**

#### **Occupant Restraint Controller (ORC)**

The Occupant Restraint Controller System (ORC) is part of a Federally regulated safety system required for this vehicle.

The ORC determines if a frontal collision is severe enough to require the airbags to inflate. Based on the sensor signals, a central electronic Occupant Restraint Controller (ORC) deploys the front airbags, side inflatable airbag curtains, seat-mounted side (Thorax) airbags, and front seat belt pretensioners as required for each type of impact.

The ORC monitors the readiness of the electronic parts of the system whenever the ignition switch is in the START or RUN positions. These include all of the items listed above except the steering wheel and column, instrument panel, and passenger knee bolsters. If the key is in the OFF position, in the ACC position, or not in the ignition, the airbags are not on and will not inflate.

## THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 47

The ORC contains a backup power supply system that will deploy the airbags even if the battery loses power or becomes disconnected prior to deployment.



Also, the ORC turns on the AIRBAG warning 2 light in the instrument panel for 6 to 8 seconds for a self-check when the ignition is first turned on. After the self-check, the AIRBAG warning

light will turn off. If the ORC detects a malfunction in any part of the system, it turns on the AIRBAG warning light either momentarily or continuously. A single chime will sound if the light comes on again after initial start up.

It also includes diagnostics that will illuminate the instrument cluster airbag warning lamp if a malfunction is noted. The diagnostics also record the nature of the malfunction.



# WARNING!

Ignoring the AIRBAG light in your instrument panel could mean you won't have the airbags to protect you in a collision. If the light does not come on, stays on after you start the vehicle, or if it comes on as you drive, have the airbag system checked right away.

#### **Impact Sensors**

Two sensors, located on the front body structure, trigger airbag deployment in direct frontal impacts and aid the Occupant Restraint Controller (ORC) in determining appropriate response to frontal impact events. Additional sensors in the ORC determine the level of airbag deployment and provide verification.

# Side Inflatable Curtain and Front Seat Mounted Airbags

The Occupant Restraint Controller System (ORC) deploys the side inflatable curtain and seat mounted thorax side airbags during collision with other vehicles and during collisions where the impact is confined to a particular area of the vehicle — such as collisions with poles, trees or similar objects.

It will deploy the side inflatable curtains and front seat thorax mounted airbags only on the impact side of the vehicle.

The front driver and passenger seat contain inflatable side airbags to protect the occupant from impact injuries. Correctly functioning front passenger seat components are critical for the Occupant Restraint Controller System (ORC) to properly classify the front passenger and calculate the proper airbag deployment. Do not make any modifications to the front passenger seat components, assembly, or to the seat cover.



The following requirements must be strictly adhered to:

- Do not make any modifications to the front passenger seat components, assembly, or to the seat cover in any way.
- Do not use prior or future model year seat covers not designated for the specific model being repaired. Always use the correct seat cover specified for the vehicle.
- Do not replace the seat cover with an aftermarket seat cover.
- Do not add a secondary seat cover other than those approved by DaimlerChrysler/Mopar.
- At no time should any supplemental restraint system (SRS) component or SRS related component or fastener be modified or replaced with any part except those which are approved by DaimlerChrysler/ Mopar.

# WARNING!

Unapproved modifications or service procedures to the front passenger seat assembly, its related components, or seat cover may inadvertently change the airbag deployment in case of a frontal crash. This could result in death or serious injury to the front seat passenger if the vehicle is involved in an accident. A modified vehicle may not comply with required Federal Motor Vehicle Safety Standards (FMVSS).

#### **Enhanced Accident Response System**

In the event of an impact that causes airbag deployment, with the vehicle stopped, and the vehicle communication network intact, and the power intact, the Enhanced Accident Response System performs the following functions:

- Cuts off fuel to the engine.
- Flashes hazard lights.



- Turns on the interior lamps which remain on as long as the battery has power or until the ignition key is removed.
- Unlocks the doors automatically

#### If A Deployment Occurs

The airbag systems are designed to deploy when the Occupant Restraint Controller (ORC) detect a moderateto-severe collision, to help restrain the driver and front passenger, and then immediately deflate.

**NOTE:** A frontal collision that is not severe enough to need airbag protection will not activate the system. This does not mean something is wrong with the airbag system.

If you do have a collision, which deploys the airbags, any or all of the following may occur:

- The nylon airbag material may sometimes cause abrasions and/or skin reddening to the driver and front passenger as the airbags deploy and unfold. The abrasions are similar to friction rope burns or those you might get sliding along a carpet or gymnasium floor. They are not caused by contact with chemicals. They are not permanent and normally heal quickly. However, if you haven't healed significantly within a few days, or if you have any blistering, see your doctor immediately.
- As the airbags deflate, you may see some smoke-like particles. The particles are a normal by-product of the process that generates the nontoxic gas used for airbag inflation. These airborne particles may irritate the skin, eyes, nose, or throat. If you have skin or eye irritation, rinse the area with cool water. For nose or throat irritation, move to fresh air. If the irritation continues, see your doctor. If these particles settle on your clothing, follow the garment manufacturer's instructions for cleaning.



• It is not advisable to drive your vehicle after the airbags have deployed. If you are involved in another collision, the airbags will not be in place to protect you.

## WARNING!

Deployed airbags and seat belt pretensioners cannot protect you in another collision. Have the airbags, seat belt pretensioners, and the front passenger seat belt retractor assembly, replaced by an authorized dealer as soon as possible. Also, have the Occupant Restraint Controller System serviced as well.

## THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 51

Maintaining Your Airbag System

# WARNING!

- Modifications to any part of the airbag system could cause it to fail when you need it. You could be injured if the airbag system is not there to protect you. Do not modify the components or wiring, including adding any kind of badges or stickers to the steering wheel hub trim cover or the upper right side of the instrument panel. Do not modify the front bumper, vehicle body structure, or add aftermarket side steps or running boards.
- It is dangerous to try to repair any part of the airbag system yourself. Be sure to tell anyone who works on your vehicle that it has an airbag system.



# WARNING!

Do not attempt to modify any part of your advanced airbag system. The airbag may inflate accidentally or may not function properly if modifications are made. Take your vehicle to an authorized dealer for any advanced airbag system service. If your seat including your trim cover and cushion needs to be serviced in any way (including removal or loosening/tightening of seat attachment bolts), take the vehicle to your authorized dealer. Only manufacturer approved seat accessories may be used. If it is necessary to modify an advanced airbag system for persons with disabilities, contact your authorized dealer.

### Airbag Light



You will want to have the airbags ready to inflate for your protection in a collision. While the airbag system is designed to be maintenance free, if any of the following occurs, have

an authorized dealer service the system immediately.

- The AIRBAG light does not come on during the 6 to 8 seconds when the ignition switch is first turned on.
- The light remains on after the 6 to 8 second interval.
- The light comes on and remains on while driving.

**NOTE:** If the speedometer, tachometer, or any engine related gauges are not working, the Occupant Restraint Controller (ORC) may also be disabled. The airbags may not be ready to inflate for your protection. Promptly check fuse block for blown fuses. Refer to the label located on the inside of the fuse block cover for the proper airbag fuses. See your dealer if the fuse is good.

# Event Data Recorder (EDR)

In the event of an accident, your vehicle is designed to record up to 5 seconds of specific vehicle data parameters (see the following list) in an event data recorder prior to the moment of airbag deployment, or near deployment, and up to a quarter second of high-speed deceleration data during and/or after airbag deployment. EDR data are ONLY recorded if an airbag deploys, or nearly deploys, and are otherwise unavailable.



#### NOTE:

1. A near-deployment event occurs when the airbag sensor detects severe vehicle deceleration usually indicative of a crash, but not severe enough to warrant airbag deployment.

2. Under certain circumstances, EDR data may not be recorded (e.g., loss of battery power).

In conjunction with other data gathered during a complete accident investigation, the electronic data may be used by DaimlerChrysler Corporation and others to learn more about the possible causes of crashes and associated injuries in order to assess and improve vehicle performance. In addition to crash investigations initiated by DaimlerChrysler Corporation, such investigations may be requested by customers, insurance carriers, government officials, and professional crash researchers, such as those associated with universities, and with hospital and insurance organizations.

In the event that an investigation is undertaken by DaimlerChrysler Corporation (regardless of initiative), the company or its designated representative will first obtain permission of the appropriate custodial entity for

## THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 53

the vehicle (usually the vehicle owner or lessee) before accessing the electronic data stored, unless ordered to download data by a court with legal jurisdiction (i.e., pursuant to a warrant). A copy of the data will be **2** provided to the custodial entity upon request. General data that does not identify particular vehicles or crashes may be released for incorporation in aggregate crash databases, such as those maintained by the US government and various states. Data of a potentially sensitive nature, such as would identify a particular driver, vehicle, or crash, will be treated confidentially. Confidential data will not be disclosed by DaimlerChrysler Corporation to any third party except when:

1. Used for research purposes, such as to match data with a particular crash record in an aggregate database, provided confidentiality of personal data is thereafter preserved

2. Used in defense of litigation involving а DaimlerChrysler Corporation product

- 3. Requested by police under a legal warrant
- 4. Otherwise required by law



## Data Parameters that May Be Recorded:

- Diagnostic trouble code(s) and warning lamp status for electronically-controlled safety systems, including the airbag system
- Airbag disable lamp status (if equipped)
- "Time" of airbag deployment (in terms of ignition cycles and vehicle mileage)
- Airbag deployment level (if applicable)
- Impact acceleration and angle
- Seatbelt status
- Brake status (service and parking brakes)
- Accelerator status (including vehicle speed)
- Engine control status (including engine speed)
- Transmission gear selection
- Cruise control status
- Traction/stability control status
- Tire pressure monitoring system status If Equipped

#### **Child Restraint**

Everyone in your vehicle needs to be buckled up at all times — babies and children, too. Every state in the United States and all Canadian provinces require that small children ride in proper restraint systems. This is the law, and you can be prosecuted for ignoring it.

Children 12 years and under should ride properly buckled up in a rear seat, if available. According to crash statistics, children are safer when properly restrained in the rear seats, rather than in the front.

#### WARNING!

In a collision, an unrestrained child, even a tiny baby, can become a missile inside the vehicle. The force required to hold even an infant on your lap could become so great that you could not hold the child, no matter how strong you are. The child and others could be badly injured. Any child riding in your vehicle should be in a proper restraint for the child's size.



# Infants And Small Children

There are different sizes and types of restraints for children from newborn size to the child almost large enough for an adult safety belt. Always check the child seat owner's manual to ensure you have the correct seat for your child. Use the restraint that is correct for your child.

- Safety experts recommend that children ride rearwardfacing in the vehicle until they are at least one year old and weigh at least 20 lbs (9 kg). Two types of child restraints can be used rearward-facing: infant carriers and "convertible" child seats. Both types of child restraints are held in the vehicle by the lap/shoulder belt or the LATCH child restraint anchorage system.
- The infant carrier is only used rearward-facing in the vehicle. It is recommended for children who weigh up to about 20 lbs (9 kg). "Convertible" child seats can be used either rearward-facing or forward-facing in the vehicle. Convertible child seats often have a higher weight limit in the rearward-facing direction than infant carriers do, so they can be used rearward-facing by children who weigh more than 20 lbs (9 kg) but are less than one year old.

## THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 55

• Rearward-facing child seats must **NEVER** be used in the front seat of a vehicle with a front passenger airbag. An airbag deployment could cause severe injury or death to infants in this position.

#### Older Children and Child Restraints

Children who weigh more than 20 lbs (9 kg) and who are older than one year can ride forward-facing in the vehicle. Forward-facing child seats and convertible child seats used in the forward-facing direction are for children who weigh 20 to 40 lbs (9 to 18 kg) and who are older than one year. These child seats are also held in the vehicle by the lap/shoulder belt or the LATCH child restraint anchorage system.

The belt-positioning booster seat is for children weighing more than 40 lbs (18 kg), but who are still too small to fit the vehicle's seat belts properly. If the child cannot sit with knees bent over the vehicle's cushion while the child's back is against the seatback, then the child should use a Belt Positioning Booster Seat. The child and booster seat are held in the vehicle by the lap/shoulder belt. (Some booster seats are equipped with a front shield and are held in the vehicle by the lap portion.)



# WARNING!

- Improper installation can lead to failure of an infant or child restraint. It could come loose in a collision. The child could be badly injured or killed. Follow the manufacturer's directions exactly when installing an infant or child restraint.
- A rearward facing child restraint should only be used in a rear seat. A rearward facing child restraint in the front seat may be struck by a deploying passenger airbag which may cause severe or fatal injury to the infant.

# Here are some tips on getting the most out of your child restraint:

Children who are large enough to wear the shoulder belt comfortably, and whose legs are long enough to bend over the front of the seat when their back is against the seatback, should use the lap/shoulder belt in a rear seat.

• Before buying any restraint system, make sure that it has a label certifying that it meets all applicable Safety Standards. We also recommend that you make sure

that you can install the child restraint in the vehicle where you will use it, before you buy it.

- The restraint must be appropriate for your child's weight and height. Check the label on the restraint for weight and height limits.
- Carefully follow the instructions that come with the restraint. If you install the restraint improperly, it may not work when you need it.
- The passenger seat belts are equipped with either cinching latch plates or seat belt retractors that can be switched to an automatic locking mode, which are designed to keep the lap portion tight around the child restraint so that it is not necessary to use a locking clip. If the seat belt has a cinching latch plate, pulling up on the shoulder portion of the lap/shoulder belt will tighten the belt. The cinching latch plate will keep the belt tight, however, any seat belt system will loosen with time, so check the belt occasionally and pull it tight if necessary.



- If the seat belt has a switchable retractor, it will have a distinctive label. To operate the switchable retractor, please refer to Automatic-Locking Retractor (ALR) in this section.
- In the rear seat, you may have trouble tightening the lap/shoulder belt on the child restraint because the buckle or latch plate is too close to the belt path opening on the restraint. Disconnect the latch plate from the buckle and twist the short buckle end of the belt several times to shorten it. Insert the latch plate into the buckle with the release button facing out.
- If the belt still can't be tightened, or if by pulling and pushing on the restraint loosens the belt, disconnect the latch plate from the buckle, turn the latch plate around, and insert the latch plate into the buckle again. If you still can't make the child restraint secure, try a different seating position.
- Buckle the child into the seat according to the child restraint manufacturer's directions.
- When your child restraint is not in use, secure it in the vehicle with the seat belt or remove it from the vehicle.

Don't leave it loose in the vehicle. In a sudden stop or collision, it could strike the occupants or seat backs and cause serious personal injury.

NOTE: For additional information, refer online to 2 www.seatcheck.org.

## Lower Anchors and Tether for CHildren (LATCH)

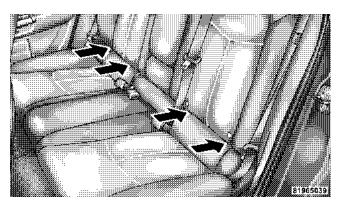
Your vehicle is equipped with the child restraint anchorage system called LATCH, which stands for Lower Anchors and Tether for CHildren. The LATCH system provides for the installation of the child restraint without using the vehicle seat belt. The outboard rear seating positions have lower anchorages that are capable of accommodating LATCH-compatible child seats having flexible, webbing-mounted lower attachments. Child seats with fixed lower attachments must be installed in the outboard positions only. Regardless of the specific type of lower attachment, NEVER install LATCHcompatible child seats such that two seats share a common lower anchorage. If you are installing LATCHcompatible child restraints in adjacent rear seating positions, you can use the LATCH anchors or the vehicle's seat belt for the outboard position, but you must use



the vehicle's seat belt at the center position. If your child restraints are not LATCH-compatible, you can only install the child restraints using the vehicle's seat belts. Please refer to "Installing the Child Restraint System" for typical installation instructions.

#### **Rear Seat LATCH Anchors**

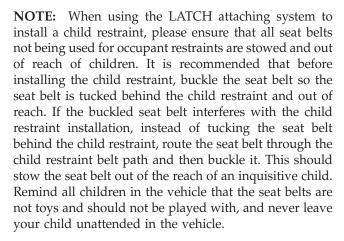
Child restraints systems having attachments designed to connect to the lower anchorages are now available. Child restraints having tether straps and hooks for connection to the top tether anchorage have been available for some time. In fact, many child restraint manufacturers will provide add-on tether strap kits for some of their older products. Tether anchorage kits are also available for most older vehicles.



**Rear Seat LATCH Anchors** 

Because the lower anchorages are to be introduced to passenger carrying vehicles over a period of years, child restraint systems having attachments for those anchorages will continue to have features for installation in vehicles using the lap or lap/shoulder belt. They will also have tether straps, and you are urged to take advantage of all of the available attachments provided with your child restraint in any vehicle.





## Installing the LATCH-Compatible Child Restraint System

We urge that you carefully follow the directions of the manufacturer when installing your child restraint. Not all child restraint systems will be installed as described here. Again, carefully follow the installation instructions that were provided with the child restraint system.



The rear seat lower anchorages are round bars, located at the rear of the seat cushion where it meets the seat back, and are just visible when you lean into the rear seat to install the child **2** 

restraint. You will easily feel them if you run your finger along the intersection of the seatback and seat cushion surfaces.



In addition, there are tether strap anchorages behind each rear seating position located in the panel between the rear seat back and the rear window. These tether strap anchorages are under a plastic cover with this symbol on it.

Many, but not all restraint systems will be equipped with separate straps on each side, with each having a hook or connector for attachment to the lower anchorage and a means of adjusting the tension in the strap. Forwardfacing toddler restraints and some rear-facing infant restraints will also be equipped with a tether strap, a hook for attachment to the tether strap anchorage and a means of adjusting the tension of the strap.





You will first loosen the adjusters on the lower straps and on the tether strap so that you can more easily attach the hooks or connectors to the vehicle anchorages. Next, attach the lower hooks or connectors over the top of the seat cover material. Then rotate the tether anchorage cover directly behind the seat where you are placing the child restraint and attach the tether strap to the anchorage, being careful to route the tether strap to provide the most direct path between the anchor and the child restraint. Finally, tighten all three straps as you push the child restraint rearward and downward into the seat, removing slack in the straps according to the child restraint manufacturer's instructions.

#### NOTE:

- Ensure that the tether strap does not slip into the opening between the seat backs as you remove slack in the strap.
- When using the LATCH attaching system to install a child restraint, please ensure that all seat belts not being used for occupant restraints are stowed and out of reach of children. It is recommended that before installing the child restraint, buckle the seat belt so the

seat belt is tucked behind the child restraint and out of reach. If the buckled seat belt interferes with the child restraint installation, instead of tucking the seat belt behind the child restraint, route the seat belt through the child restraint belt path and then buckle it. This should stow the seat belt out of the reach of an inquisitive child. Remind all children in the vehicle that the seat belts are not toys and should not be played with, and never leave your child unattended in the vehicle.

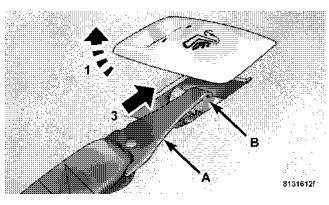
# WARNING!

Improper installation of a child restraint to the LATCH anchorages can lead to failure of an infant or child restraint. The child could be badly injured or killed. Follow the manufacturer's directions exactly when installing an infant or child restraint.

### Installing Child Restrain Tether Strap

1. Rotate the cover over the anchor directly behind the seat where you are placing the child restraint.





1 — Cover 3 — Attaching Strap A — Tether Strap and Hook B — Tether Anchor

2. Route the tether strap to provide the most direct path for the strap between the anchor and the child seat. If your vehicle is equipped with adjustable rear head restraints, raise the head restraint, and where possible, route the tether strap under the head restraint and

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 61

between the two posts. If not possible, lower the head restraint and pass the tether strap around the outboard side of the head restraint.

3. Attach the tether strap hook (A) of the child restraint 2 to the anchor (P) and to the anchor (B) and remove slack in the tether strap according to the child restraint manufacturer's instructions.

# WARNING!

An incorrectly anchored tether strap could lead to increased head motion and possible injury to the child. Use only the anchor positions directly behind the child seat to secure a child restraint top tether strap.

# Installing Child Restraints Using the Vehicle Seat belt

The passenger seat belts are equipped with either cinching latch plates or automatic locking retractors, which are designed to keep the lap portion tight around the child restraint so that it is not necessary to use a locking clip.



Pulling up on the shoulder portion of the lap/shoulder belt will tighten the belt. The cinching latch plate will keep the belt tight; however, any seat belt system will loosen with time, so check the belt occasionally, and pull it tight if necessary.

Seat belts with an automatic locking retractor have a distinctive label on the seat belt webbing. The seat belt must be in the automatic locking mode in order to enable a child restraint to be tightly installed. Refer to "Automatic Locking Mode" in this section for details. A locking clip should not be necessary once the automatic locking feature is enabled. Position the shoulder and lap belt on the child restraint. The automatic locking retractor is activated by first attaching the child seat, then pulling all of the webbing out of the retractor, then allowing back in. Tighten webbing. To release, simply unbuckle the seat belt by depressing the button, allowing the webbing to retract into the retractor.

In the rear seat, you may have trouble tightening the lap/shoulder belt on the child restraint because the buckle or latch plate is too close to the belt path opening on the restraint. Disconnect the latch plate from the buckle and twist the short buckle-end belt several times to shorten it. Insert the latch plate into the buckle with the release button facing out.

If the belt still can't be tightened, or if by pulling and pushing on the restraint loosens the belt, you may need to do something more. Disconnect the latch plate from the buckle, turn the buckle around, and insert the latch plate into the buckle again. If you still can't make the child restraint secure, try a different seating position.

#### Children Too Large For Booster Seats

Children who are large enough to wear the shoulder belt comfortably, and whose legs are long enough to bend over the front of the seat when their back is against the seat back, should use the lap/shoulder belt in a rear seat.



- Make sure that the child is upright in the seat.
- The lap portion should be low on the hips and as snug as possible.
- Check belt fit periodically. A child's squirming or slouching can move the belt out of position.
- If the shoulder belt contacts the face or neck, move the child closer to the center of the vehicle. Never allow a child to put the shoulder belt under an arm or behind their back.

#### **Transporting Pets**

Airbags deploying in the front seat could harm your pet. An unrestrained pet will be thrown about and possibly injured, or injure a passenger during panic braking or in a collision.

Pets should be restrained in the rear seat in pet harnesses or pet carriers that are secured by seat belts.

#### THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 63

#### ENGINE BREAK-IN RECOMMENDATIONS

A long break-in period is not required for the engine in your new vehicle.

Drive moderately during the first 300 miles (500 km). After the initial 60 miles (100 km), speeds up to 50 or 55 mph (80 or 90 km/h) are desirable.

While cruising, brief full-throttle acceleration, within the limits of local traffic laws, contributes to a good break-in. Wide open throttle acceleration in low gear can be detrimental and should be avoided.

The engine oil installed in the engine at the factory is a high quality energy conserving type lubricant. Oil changes should be consistent with anticipated climate conditions under which vehicle operations will occur. The recommended viscosity and quality grades are shown in Section 7 of this manual. NON-DETERGENT OR STRAIGHT MINERAL OILS MUST NEVER BE USED.



A new engine may consume some oil during its first few thousand miles (kilometers) of operation. This should be considered as a normal part of the break-in and not interpreted as an indication of difficulty.

# SAFETY TIPS

## **Exhaust Gas**

# WARNING!

Exhaust gases can injure or kill. They contain carbon monoxide (CO) which is colorless and odorless. Breathing it can make you unconscious and can eventually poison you. To avoid breathing (CO) follow the safety tips below.

Do not run the engine in a closed garage or in confined areas any longer than needed to move your vehicle in or out of the area.

If it is necessary to sit in a parked vehicle with the engine running, adjust your heating or cooling controls to force outside air into the vehicle. Set the blower at high speed.

# WARNING!

If you are required to drive with the deck lid open, make sure that all windows are closed, and the climate control blower switch is set at high speed. DO NOT use the recirculation mode.

# Safety Checks You Should Make Inside The Vehicle

#### Seat Belts

Inspect the belt system periodically, checking for cuts, frays and loose parts. Damaged parts must be replaced immediately. Do not disassemble or modify the system.

Front seat belt assemblies must be replaced after a collision. Rear seat belt assemblies must be replaced after a collision if they have been damaged (bent retractor, torn webbing, etc. If there is any question regarding belt or retractor condition, replace the belt.

#### Airbag Light

The light should come on and remain on for 6 to 8 seconds as a bulb check when the ignition switch is first



turned ON. If the LED is not lit during starting, have it checked. If the light stays on or comes on while driving, have the system checked by an authorized dealer.

#### Defroster

Check operation by selecting the defrost mode and place the blower control on high speed. You should be able to feel the air directed against the windshield.

**NOTE:** If the defrost feature is not functioning, the cause should be located and corrected immediately. The windshield could fog up while driving and obscure your visibility.

# Periodic Safety Checks You Should Make Outside The Vehicle

#### Tires

Examine tires for excessive tread wear or uneven wear patterns. Check for stones, nails, glass, or other objects lodged in the tread. Inspect tread and sidewall for cuts or cracks. Check wheel nuts for tightness, and tires (including spare) for proper pressure.

## THINGS TO KNOW BEFORE STARTING YOUR VEHICLE 65

#### Lights

Have someone observe the operation of exterior lights while you work the controls. Check turn signal and high beam indicator lights on the instrument panel.

#### Fluid Leaks

Check area under vehicle after overnight parking for fuel, engine coolant, oil, or other fluid leaks. In addition, if gasoline fumes are detected or fuel, power steering fluid, transmission fluid, or brake fluid leaks are suspected, the cause should be located and corrected immediately.

2





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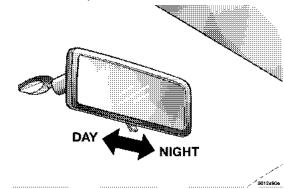
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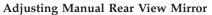


## **MIRRORS**

# Inside Day/Night Mirror— If Equipped

Adjust the mirror to center on the view through the rear window. A two-point pivot system allows for horizontal and vertical mirror adjustment.

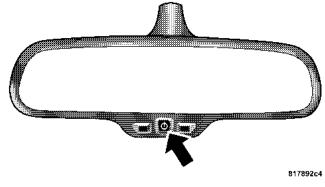




Annoying headlight glare can be reduced by moving the small control under the mirror to the night position (toward rear of vehicle). The mirror should be adjusted while set in the day position (toward windshield).

## Automatic Dimming Mirror— If Equipped

This mirror will automatically adjust for annoying headlight glare from vehicles behind you. Push in the button on the face of the mirror to activate the dimming feature.



Automatic Dimming Mirror



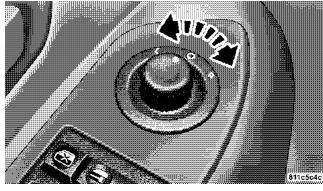
# CAUTION!

To avoid damage to the mirror during cleaning, never spray any cleaning solution directly onto the mirror. Apply the solution onto a clean cloth and wipe the mirror clean.

### **Electric Remote-Control Mirrors**

Both of the outside mirrors can be adjusted by using the remote controls mounted on the driver's door panel.

A rotary knob selects the left mirror, right mirror, or off position.

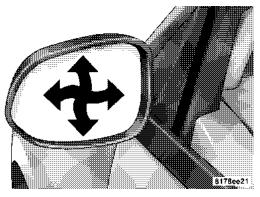


3

**Power Mirror Switch** 

After selecting a mirror, move the knob in the same direction you want the mirror to move. When finished, return the knob to the center "O" (Off) position to guard against accidentally moving a mirror position.





Mirror Directions
Adjusting Side View Mirrors

# Outside Mirror — Driver's Side

Adjust the outside mirror to center on the adjacent lane of traffic, with a slight overlap of the view obtained on the inside mirror.

# Outside Mirror — Passenger's Side

Adjust the convex outside mirror so you can just see the side of your vehicle in the part of the mirror closest to the vehicle.

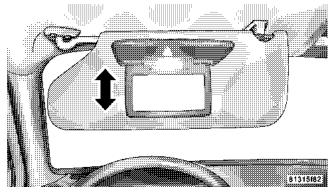
# WARNING!

Vehicles and other objects seen in the right side convex mirror will look smaller and farther away than they really are. Relying too much on your right side mirror could cause you to collide with another vehicle or other object. Use your inside mirror when judging the size or distance of a vehicle seen in this convex mirror.



## Illuminated Vanity Mirrors — If Equipped

An illuminated vanity mirror is on each sun visor. To use the mirror, rotate the sun visor down and swing the mirror cover upward. The lights will turn on automatically. Closing the mirror cover turns off the lights.



**Illuminated Vanity Mirror** 

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 73

## HANDS-FREE COMMUNICATION (UConnect<sup>™</sup>) — IF EQUIPPED

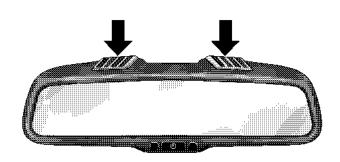
UConnect<sup>TM</sup> is a voice-activated, hands-free, in- vehicle communications system. UConnect<sup>™</sup> allows you to dial a phone number with your cellular phone using simple voice commands (e.g., "Call" ... "Mike" ..."Work" or "Dial" 3 ... "248-555-1212"). Your cellular phone's audio is transmitted through your vehicle's audio system; the system will automatically mute your radio when using the UConnect<sup>™</sup> system.

**NOTE:** The UConnect<sup>TM</sup> system use requires a cellular phone equipped with the Bluetooth "Hands-Free Profile," version 0.96 or higher. See www.chrysler.com/uconnect for supported phones.

UConnect<sup>™</sup> allows you to transfer calls between the system and your cellular phone as you enter or exit your vehicle, and enables you to mute the system's microphone for private conversation.



The UConnect<sup>™</sup> phone book enables you to store up to 32 names and four numbers per name. Each language has a separate 32-name phone book accessible only in that language. This system is driven through your Bluetooth<sup>™</sup> Hands-Free profile cellular phone. UConnect<sup>™</sup> features Bluetooth<sup>™</sup> technology - the global standard that enables different electronic devices to connect to each other without wires or a docking station, so UConnect works no matter where you stow your cellular phone (be it your purse, pocket, or briefcase), as long as your phone is turned on and has been paired to the vehicle's UConnect<sup>TM</sup> system. The UConnect<sup>TM</sup> system allows up to seven cellular phones to be linked to system. Only one linked (or paired) cellular phone can be used with the system at a time. The system is available in English, Spanish, or French languages (as equipped).

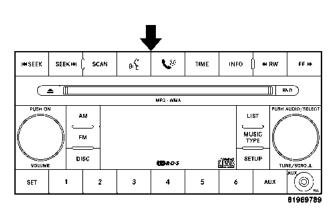




#### **Microphone Location**

The rearview mirror contains the microphone for the system and the radio has the two control buttons that will enable you to access the system. Actual button location may vary with radio. The individual buttons are described in the "Operations" section.





#### **UConnect Buttons**

The UConnect<sup>™</sup> system can be used with any Hands-Free Profile certified Bluetooth<sup>TM</sup> cellular phone. See www.chrysler.com/uconnect for supported phones. If your cellular phone supports a different profile (e.g., Headset Profile) you may not be able to use any UConnect<sup>™</sup> features. Refer to your cellular service provider or the phone manufacturer for details.

The UConnect<sup>™</sup> system is fully integrated with the vehicle's audio system. The volume of the UConnect<sup>TM</sup>

### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 75

system can be adjusted either from the radio volume control knob or from the steering wheel radio control (right switch), if so equipped.

The radio display will be used for visual prompts from the UConnect<sup>™</sup> system such as "CELL" or caller ID on **3** certain radios.

#### Operations

Voice commands can be used to operate the UConnect<sup>™</sup> system and to navigate through the UConnect<sup>TM</sup> menu structure. Voice commands are required after most UConnect<sup>™</sup> system prompts. You will be prompted for a specific command and then guided through the available options.

- Prior to giving a voice command, one must wait for the beep, which follows the "Ready" prompt or another prompt.
- For certain operations, compound commands can be used. For example, instead of saying "Setup" and then "Phone Pairing," the following compound command can be said: "Setup Phone Pairing."



For each feature explanation in this section, only the combined form of the voice command is given. You can also break the commands into parts and say each part of the command, when you are asked for it. For example, you can use the combined form voice command "Phonebook New Entry," or you can break the combined form command into two voice commands: "Phonebook" and "New Entry." Please remember, the UConnect<sup>™</sup> system works best when you talk in a normal conversational tone, as if speaking to some one sitting eight feet away from you.

#### Voice Command Tree

Refer to "Voice Tree" at the end of this section.

#### Help Command

If you need assistance at any prompt, or if you want to know your options at any prompt, say "Help" following the beep. The UConnect<sup>TM</sup> system will play all the options at any prompt if you ask for help.

To activate the UConnect<sup>TM</sup> system from idle, simply press the 'Phone' button and follow audible prompts for directions. All UConnect<sup>TM</sup> system sessions begin with a press of the 'Phone' button on the radio control head.

#### **Cancel Command**

At any prompt, after the beep, you can say "Cancel" and you will be returned to the main menu. However, in a few instances the system will take you back to the previous menu.

**Pair (Link) UConnect<sup>TM</sup> System to a Cellular Phone** To begin using your UConnect<sup>TM</sup> system, you must pair your compatible Bluetooth<sup>TM</sup> enabled cellular phone.

To complete the pairing process, you will need to reference your cellular phone owner's manual. One of the following vehicle specific websites may also provide detailed instructions for pairing with the brand of phone that you have:

#### NOTE:

- www.chrysler.com/uconnect
- www.dodge.com/uconnect
- www.jeep.com/uconnect

The following are general phone to UConnect<sup>™</sup> System pairing instructions:

• Press the 'Phone' button to begin.



- After the "Ready" prompt and the following beep, say "Setup Phone Pairing."
- When prompted, after the beep, say "Pair a Phone" and follow the audible prompts.
- You will be asked to say a four-digit pin number, which you will later need to enter into your cellular. You can enter any four-digit pin number. You will not need to remember this pin number after the initial pairing process.
- For identification purposes, you will be prompted to give the UConnect<sup>™</sup> system a name for your cellular phone. Each cellular phone that is paired should be given a unique phone name.
- You will then be asked to give your cellular phone a priority level between 1 and 7, 1 being the highest priority. You can pair up to seven cellular phones to your UConnect<sup>™</sup> system. However, at any given time, only one cellular phone can be in use, connected to your UConnect<sup>™</sup> System. The priority allows the UConnect<sup>™</sup> system to know which cellular phone to use if multiple cellular phones are in the vehicle at the

same time. For example, if priority 3 and priority 5 phones are present in the vehicle, the UConnect<sup>TM</sup> system will use the priority 3 cellular phone when you make a call. You can select to use a lower priority cellular phone at any time (refer to "Advanced Phone Connectivity").

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#### Dial by Saying a Number

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Dial."
- System will prompt you to say the number you want call.
- For example, you can say "234-567-8901." The phone number that you enter must be of valid length and combination. Based on the country in which the vehicle was purchased, the UConnect<sup>™</sup> limits the user from dialing invalid combination of numbers. For example, in USA, 234-567-890 is nine digits long, which is not a valid USA phone number - the closest valid phone number has ten digits.



• The UConnect<sup>™</sup> system will confirm the phone number and then dial. The number will appear in the display of certain radios.

## Call by Saying a Name

- Press the "Phone" button to begin.
- After the "Ready" prompt and the following beep, say "Call."
- System will prompt you to say the name of the person you want call.
- After the "Ready" prompt and the following beep, say the name of the person you want to call. For example, you can say "John Doe," where John Doe is a previously stored name entry in the UConnect<sup>TM</sup> phone book. Refer to "Add Names to Your UConnect<sup>TM</sup> Phonebook," to learn how to store a name in the phone book.
- The UConnect<sup>™</sup> system will confirm the name and then dial the corresponding phone number, which may appear in the display of certain radios.

## Add Names to Your UConnect<sup>TM</sup> Phonebook

**NOTE:** Adding names to phone book is recommended when vehicle is not in motion.

- Press the "Phone" button to begin.
- After the "Ready" prompt and the following beep, say "Phonebook New Entry."
- When prompted, say the name of the new entry. Use of long names helps the voice recognition and it is recommended. For example, say "Robert Smith" or "Robert" instead of "Bob."
- When prompted, enter the number designation (e.g., "Home," "Work," "Mobile," or "Pager"). This will allow you to store multiple numbers for each phone book entry, if desired.
- When prompted, recite the phone number for the phone book entry that you are adding.

After you are finished adding an entry into the phone book, you will be given the opportunity to add more phone numbers to the current entry or to return to the main menu.



The UConnect<sup>™</sup> system will allow you to enter up to 32 names in the phone book with each name having up to four associated phone numbers and designations. Each language has a separate 32-name phone book accessible only in that language.

#### Edit Entries in the UConnect<sup>™</sup> Phonebook

NOTE: Editing names in the phone book is recommended when vehicle is not in motion.

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Phonebook Edit."
- You will then be asked for the name of the phone book entry that you wish to edit.
- Next, choose the number designation (home, work, mobile, or pager) that you wish to edit.
- When prompted, recite the new phone number for the phone book entry that you are editing.

## UNDERSTANDING THE FEATURES OF YOUR VEHICLE 79

After you are finished editing an entry in the phone book, you will be given the opportunities to edit another entry in the phonebook, call the number you just edited, or return to the main menu.

"Phonebook Edit" can be used to add another phone 3 number to a name entry that already exists in the phonebook. For example, the entry John Doe may have a mobile and a home number, but you can add John Doe's work number later using the "Phonebook Edit" feature.

#### Delete Entries in the UConnect<sup>TM</sup> Phonebook

NOTE: Editing phone book entries is recommended when vehicle is not in motion.

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Phonebook Delete."
- After you enter the Phonebook Delete menu, you will then be asked for the name of the entry that you wish to delete. You can either say the name of a phone book entry that you wish to delete or you can say "List Names" to hear a list of the entries in the phone book



from which you choose. To select one of the entries from the list, press the "Voice Recognition" button while the UConnect<sup>TM</sup> system is playing the desired entry and say "Delete."

- After you enter the name, the UConnect<sup>™</sup> system will ask you which designation you wish to delete, home, work, mobile, pager, or all. Say the designation you wish to delete.
- Note that only the phone book entry in the current language is deleted.

## Delete All Entries in the UConnect<sup>™</sup> Phonebook

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Phonebook Erase All."
- The UConnect<sup>™</sup> system will ask you to verify that you wish to delete all the entries from the phonebook.
- After confirmation, the phone book entries will be deleted.

• Note that only the phone book in the current language is deleted.

## List All Names in the UConnect<sup>TM</sup> Phonebook

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Phonebook List Names."
- The UConnect<sup>™</sup> system will play the names of all the phone book entries.
- To call one of the names in the list, press the "Voice Recognition' button during the playing of the desired name, and say "Call."

**NOTE:** The user can also exercise "Edit" or "Delete" operations at this point.

- The UConnect<sup>™</sup> system will then prompt you as to the number designation you wish to call.
- The selected number will be dialed.



#### **Phone Call Features**

The following features can be accessed through the UConnect<sup>™</sup> system if the feature(s) are available on your cellular service plan. For example, if your cellular service plan provides three-way calling, this feature can be accessed through the UConnect<sup>™</sup> system. Check with your cellular service provider for the features that you have.

## Answer or Reject an Incoming Call - No Call Currently in Progress

When you receive a call on your cellular phone, the UConnect<sup>TM</sup> system will interrupt the vehicle audio system, if on, and will ask if you would like to answer the call. Press 'Phone' button to accept the call. To reject the call, press and hold the 'Phone' button until you hear a single beep indicating that the incoming call was rejected.

## Answer or Reject an Incoming Call - Call Currently in Progress

If a call is currently in progress and you have another incoming call, you will hear the same network tones for

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 81

call waiting that you normally hear when using your cell phone. Press the 'Phone' button to place the current call on hold and answer the incoming call.

**NOTE:** The UConnect<sup>™</sup> system compatible phones in market today do not support rejecting an incoming call when another call is in progress. Therefore, the user can only either answer an incoming call or ignore it.

# Making a Second Call while Current Call in Progress

To make a second call while you are currently in a call, press the 'Voice Recognition' button and say "Dial" or "Call" followed by the phone number or phone book entry you wish to call. The first call will be on hold while the second call is in progress. To go back to the first call, refer to "Toggling Between Calls." To combine two calls, refer to "Conference Call."

#### Place/Retrieve a Call from Hold

To put a call on hold, press the 'Phone' button until you hear a single beep. This indicates that the call is on hold. To bring the call back from hold, press and hold the 'Phone' button until you hear a single beep.



#### **Toggling Between Calls**

If two calls are in progress (one active and one on hold), press the 'Phone' button until you hear a single beep indicating that the active and hold status of the two calls have switched. Only one call can be placed on hold at one time.

## **Conference Call**

When two calls are in progress (one active and one on hold), press and hold the 'Phone' button until you hear a double beep indicating that the two calls have been joined into one conference call.

#### **Three-Way Calling**

To initiate three-way calling, press the 'Voice Recognition' button while a call is in progress and make a second phone call as described under "Making a Second Call while Current Call in Progress." After the second call has established, press and hold the 'Phone' button until you hear a double beep indicating that the two calls have been joined into one conference call.

#### **Call Termination**

To end a call in progress, momentarily press the 'Phone' button. Only the active call(s) will be terminated and if

there is a call on hold, it will become the new active call. If the active call is terminated by the far end, a call on hold may not become active automatically. This is cell phone dependent. To bring the call back from hold, press and hold the 'Phone' button until you hear a single beep.

#### Redial

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Redial."
- The UConnect<sup>TM</sup> system will call the last number that was dialed on your cellular phone.

**NOTE:** This may not be the last number dialed from the UConnect<sup>TM</sup> system.

#### Call Continuation

Call continuation is progression of a phone call on UConnect<sup>TM</sup> system after the vehicle ignition key has been switched to off. Call continuation functionality available on the vehicle can be any one of three types:

• After ignition key is switched off, a call can continue on the UConnect<sup>TM</sup> system either until the call ends or



until the vehicle battery condition dictates cessation of the call on the UConnect  ${\ensuremath{^{\text{TM}}}}$  system and transfer of the call to the mobile phone.

- After ignition key is switched to off, a call can continue on the UConnect<sup>TM</sup> system for certain duration, after which the call is automatically transferred from the UConnect<sup>TM</sup> system to the mobile phone.
- An active call is automatically transferred to the mobile phone after ignition key is switched to off.

## UConnect<sup>™</sup> System Features

#### Language Selection

To change the language that the UConnect<sup>TM</sup> system is using,

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say the name of the language you wish to switch to (English, Espanol, or Francais, if so equipped).
- Continue to follow the system prompts to complete language selection.

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After selecting one of the languages, all prompts and voice commands will be in that language.

NOTE: After every UConnect<sup>™</sup> language change operation, only the language specific 32-name phone book is usable. The paired phone name is not language specific 3 and usable across all languages.

#### **Emergency Assistance**

If you are in an emergency and the mobile phone is reachable:

 Pick up the phone and manually dial the emergency number for your area.

If the phone is not reachable and the UConnect<sup>TM</sup> system is operational, you may reach the emergency number as follows:

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Emergency" and the UConnect<sup>TM</sup> system will instruct the paired cellular phone to call the emergency number. This feature is only supported in the USA.



**NOTE:** The emergency number dialed is based on the Country where the vehicle is purchased (911 for USA and Canada and 060 for Mexico). The number dialed may not be applicable with the available cellular service and area.

The UConnect<sup>™</sup> system does slightly lower your chances of successfully making a phone call as to that for the cell phone directly.

Your phone must be turned on and paired to the UConnect<sup>TM</sup> system to allow use of this vehicle feature in emergency situations when the cell phone has network coverage and stays paired to the UConnect<sup>TM</sup> system.

#### **Towing Assistance**

If you need towing assistance,

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Towing Assistance."

**NOTE:** The Towing Assistance number dialed is based on the Country where the vehicle is purchased (1-800-528-2069 for USA, 1-877-213-4525 for Canada, 55-14-3454 for Mexico City and 1-800-712-3040 for outside Mexico City in Mexico).

Please refer to the 24-Hour "Towing Assistance" coverage details in the Warranty information booklet and on the 24–Hour Towing Assistance Card.

#### Paging

To learn how to page refer to "Working with Automated Systems." Paging works properly except for pagers of certain companies which time-out a little too soon to work properly with the UConnect<sup>TM</sup> system.

#### Voice Mail Calling

To learn how to access your voice mail, refer to "Working with Automated Systems."

#### Working with Automated Systems

This method is designed to be used in instances where one generally has to press numbers on the cellular phone keypad while navigating through an automated telephone system.



You can use your UConnect<sup>™</sup> system to access a voicemail system or an automated service, such as, paging service or automated customer service. Some services require immediate response selection, in some instances, that may be too quick for use of UConnect<sup>™</sup> system.

When calling a number with your UConnect<sup>TM</sup> system that normally requires you to enter in a touch-tone sequence on your cellular phone keypad, you can push the 'Voice Recognition' button and say the sequence you wish to enter followed by the word "Send." For example, if required to enter your pin number followed with a pound 3 7 4 6 #, you can press the 'Voice Recognition' button and say "3 7 4 6 # Send." Saying a number, or sequence of numbers, followed by "Send" is also to be used to navigate through an automated customer service center menu structure and to leave a number on a pager.

#### **Barge In - Overriding Prompts**

The 'Voice Recognition' button can be used when you wish to skip part of a prompt and issue your voice recognition command immediately. For example, if a prompt is playing "Would you like to pair a phone, clear

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 85

a...," you could press the 'Voice Recognition' button and say "Pair a Phone" to select that option without having to listen to the rest of the voice prompt.

#### Turning Confirmation Prompts On/Off

Turning confirmation prompts off will stop the system from confirming your choices (e.g., the UConnect<sup>TM</sup> system will not repeat a phone number before you dial it).

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Setup Confirmations." The UConnect<sup>™</sup> system will play the current confirmation prompt status and you will be given the choice to change it.

#### Phone and Network Status Indicators

If available on the radio and/or on a premium display such as the instrument panel cluster, and supported by your cell phone, the UConnect<sup>™</sup> system will provide notification to inform you of your phone and network status when you are attempting to make a phone call using UConnect<sup>™</sup>. The status is given for roaming, network signal strength, phone battery strength, etc.



### Dialing Using the Cellular Phone Keypad

You can dial a phone number with your cellular phone keypad and still use the UConnect<sup>TM</sup> system (while dialing via the cell phone keypad, the user must exercise caution and take precautionary safety measures). By dialing a number with your paired Bluetooth<sup>TM</sup> cellular phone, the audio will be played through your vehicle's audio system. The UConnect<sup>TM</sup> system will work the same as if you dial the number using voice recognition.

**NOTE:** Certain brands of mobile phones do not send the dial ring to the UConnect<sup>TM</sup> system to play it on the vehicle audio system, so you will not hear it. Under this situation, after successfully dialing a number, the user may feel that the call did not go through even though the call is in progress. Once your call is answered, you will hear the audio.

#### Mute/Un-mute (Mute off)

When you mute the UConnect<sup>TM</sup> system, you will still be able to hear the conversation coming from the other party, but the other party will not be able to hear you. In order to mute the UConnect<sup>TM</sup> system:

• Press the 'Voice Recognition' button.

• Following the beep, say "Mute."

In order to un-mute the UConnect<sup>™</sup> system:

- Press the 'Voice Recognition' button.
- Following the beep, say "Mute-off."

#### **Information Service**

When using AT&T Wireless Service, dialing to phone number "#121," you can access voice activated automated system to receive news, weather, stocks, traffic, etc. related information. This is an AT&T provided service.

## **Advanced Phone Connectivity**

#### Transfer Call to and from Cellular Phone

The UConnect<sup>TM</sup> system allows on going calls to be transferred from your cellular phone to the UConnect<sup>TM</sup> system without terminating the call. To transfer an ongoing call from your UConnect<sup>TM</sup> paired cellular phone to the UConnect<sup>TM</sup> system or vice-versa, press the 'Voice Recognition' button and say "Transfer Call."



# Connect or Disconnect Link Between the UConnect<sup>™</sup> System and Cellular Phone

Your cellular phone can be paired with many different electronic devices, but can only be actively "connected" with one electronic device at a time.

If you would like to connect or disconnect the Bluetooth<sup>TM</sup> connection between a UConnect<sup>TM</sup> paired cellular phone and the UConnect<sup>TM</sup> system, then follow the instruction described in your cellular phone user's manual.

#### List Paired Cellular Phone Names

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Setup Phone Pairing".
- When prompted, say "List Phones."
- The UConnect<sup>™</sup> system will play the phone names of all paired cellular phones in order from the highest to the lowest priority. To "select" or "delete" a paired phone being announced, press the 'Voice Recognition'

### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 87

button and say "Select" or "Delete." Also, see the next two sections for an alternate way to "select" or "delete" a paired phone.

## Select another Cellular Phone

This feature allows you to select and start using another phone with the UConnect<sup>TM</sup> system. The phone must have been previously paired to the UConnect<sup>TM</sup> system that you want to use it with.

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Setup Select Phone" and follow the prompts.
- You can also press the 'Voice Recognition' button anytime while the list is being played, and then choose the phone that you wish to select.
- The selected phone will be used for the next phone call. If the selected phone is not available, the UConnect<sup>™</sup> system will return to using the highest priority phone present in or near (approximately within 30 feet) the vehicle.



#### Delete UConnect<sup>™</sup> Paired Cellular Phones

- Press the 'Phone' button to begin.
- After the "Ready" prompt and the following beep, say "Setup Phone Pairing."
- At the next prompt, say "Delete" and follow the prompts.
- You can also press the 'Voice Recognition' button anytime while the list is being played, and then choose the phone you wish to delete.

# Things You Should Know About Your UConnect<sup>™</sup> System

#### **Voice Training**

For users experiencing difficulty with the system recognizing their voice commands or numbers, the UConnect<sup>TM</sup> system Voice Training feature may be used. To enter this training mode, follow one of the two procedures:

From outside the UConnect  ${}^{\rm TM}$  mode (e.g. from radio mode)

- Press and hold the 'Voice Recognition' button for 5 seconds until the session begins, or,
- Press the 'Voice Recognition' button and say "Setup, Voice Training" command.

Repeat the words and phrases when prompted by the UConnect<sup>™</sup> system. For best results, the Voice Training session should be completed when the vehicle is parked, engine running, all windows closed, and the blower fan switched off.

This procedure may be repeated with a new user. The system will adapt to the last trained voice only.

To restore the Voice Recognition system to factory default settings, enter the Voice Training session via the above procedure and follow the prompts.

#### Voice Recognition (VR)

- Always wait for the beep before speaking.
- Speak normally, without pausing, just as you would speak to a person sitting approximately eight (8) feet away from you.



- Make sure that no one other than you is speaking during a voice recognition period.
- Performance is maximized under:
  - low-to-medium blower setting,
  - low-to-medium vehicle speed,
  - low road noise,
  - smooth road surface,
  - fully closed windows,
  - dry weather condition.
- Even though the system is designed for users speaking in North American English, French, and Spanish accents, the system may not always work for some.
- When navigating through an automated system, such as voice mail, or when sending a page, at the end of speaking the digit string, make sure to say "Send."

- Storing names in phone book when vehicle is not in motion is recommended.
- It is not recommended to store similar sounding names in the UConnect<sup>™</sup> phone book.
- UConnect<sup>™</sup> phone book nametag recognition rate is **3** optimized for the person who stored the name in the phone book.
- You can say "O" (letter "O") for "0" (zero). "800" must be spoken "eight-zero-zero."
- Even though international dialing for most number combinations is supported, some shortcut dialing number combinations may not be supported.

#### Far End Audio Performance

- Audio quality is maximized under:
  - low-to-medium blower setting,



- low-to-medium vehicle speed,
- low road noise,
- smooth road surface,
- fully closed windows, and
- dry weather condition.
- operation from driver seat.
- Performance, such as audio clarity, echo, and loudness to a large degree rely on the phone and network, and not the UConnect<sup>™</sup> system.
- Echo at far end can sometime be reduced by lowering the in-vehicle audio volume.

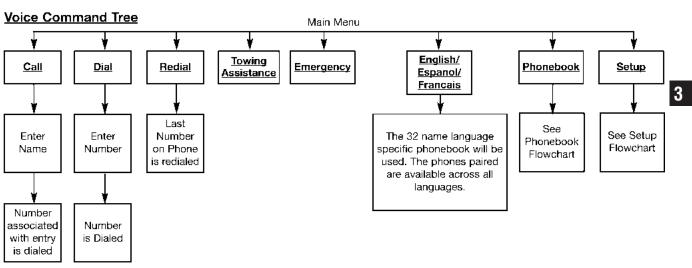
## **Bluetooth Communication Link**

Cellular phones have been found to lose connection to the UConnect<sup>TM</sup> system. When this happens, the connection can generally be re-established by switching the phone off/on. Your cell phone is recommended to remain in Bluetooth "on" mode.

## Power-Up

After switching the ignition key from OFF to either ON or ACC position, or after a language change, you must wait at least five (5) seconds prior to using the system.

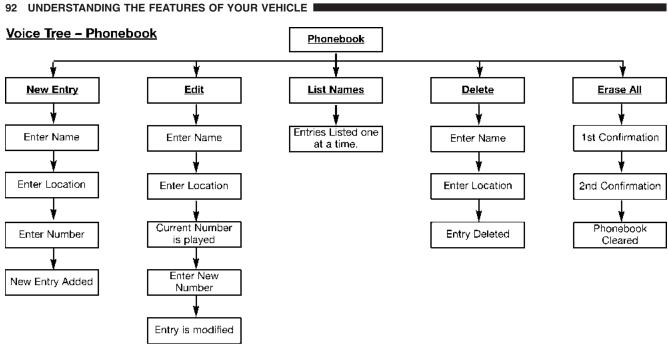




Note: Available Voice commands are shown in bold face and are underlined.

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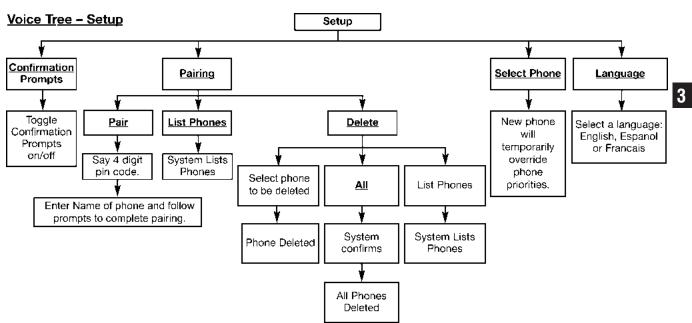




Note: Available Voice commands are shown in **bold** face and are underlined.

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Note: Available Voice commands are shown in bold face and are underlined. 819402e4



Voice Commands	
Primary	Alternate(s)
zero	
one	
two	
three	
four	
five	
six	
seven	
eight	
nine	
star (*)	
plus (+)	
pound (#)	
add location	
all	
call	
cancel	
confirmation prompts	

continue	
delete	
dial	
edit	
emergency	
English	
erase all	
Espanol	
Fancais	
help	
home	
language	
list names	
list phones	
mobile	
mute	
mute off	
new entry	
no	
pager	



pair a phone	
phone pairing	pairing
phonebook	phone book
previous	
record again	
redial	
return to main menu	return or main menu
select phone	select
send	
set up	phone settings or phone set up
towing assistance	
transfer call	
try again	
voice training	
work	
yes	

#### **General Information**

This device complies with part 15 of the FCC rules and RSS 210 of Industry Canada. Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

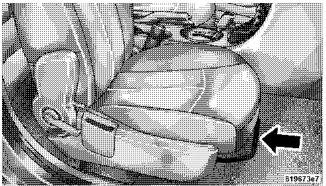


## SEATS

## **Manual Front Seat Adjustments**

#### Forward/Rearward

The adjusting bar is at the front of the seats, near the floor. Pull the bar up to move the seat to the desired position.

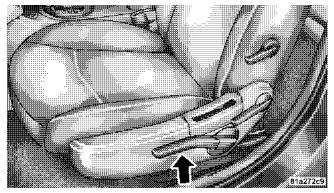


#### Manual Seat Adjuster

After releasing the adjusting bar, apply forward and rearward body pressure to be sure the seat is latched.

# Driver Seat Manual Height Adjuster — If Equipped

A lever style height adjustment feature enhances comfort for petite as well as tall drivers. A lever with a ratcheting mechanism, located on the outboard side of the seat, raises and lowers it. Total travel is 2.2 in. (56 mm).

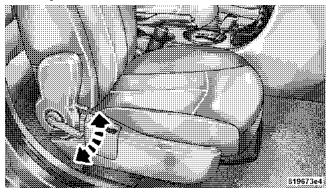


Manual Seat Height Adjuster



## **Reclining Bucket Seats**

The recliner control is on the side of the seat. To recline, lean forward slightly before lifting the lever, then lean back to the desired position and release the lever. Lean forward and lift the lever to return the seatback to its normal position.



Seat Back Fold Forward

## UNDERSTANDING THE FEATURES OF YOUR VEHICLE 97

## WARNING!

- Adjusting a seat while the vehicle is moving is dangerous. The sudden movement of the seat could cause you to lose control. The seat belt might not be properly adjusted and you could be injured. Adjust the seat only while the vehicle is parked.
- Do not ride with the seatback reclined so that the shoulder belt is no longer resting against your chest. In a collision you could slide under the seat belt and be seriously or even fatally injured. Use the recliner only when the vehicle is parked.



## Lumbar Support — If Equipped

This feature allows you to increase or decrease the amount of lumbar support. The control lever is located on the outboard side of the driver's seatback. Turn the control lever downward to increase and upward to decrease the desired amount of lumbar support.



Lumbar Support

## Power Seats — If Equipped

The power seat switches are on the outboard side of the seat near the floor. Use the front switch to move the seat up, down, forward, rearward, or to tilt the seat. The rear switch controls the seatback recliner.



**Power Seat Switches** 



# CAUTION!

Do not place any article under a power seat as it may cause damage to the seat controls.

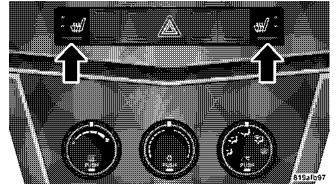
## Heated Seats — If Equipped

## WARNING!

Persons who are unable to feel pain to the skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion or other physical condition must exercise care when using the seat heater. It may cause burns even at low temperatures, especially if used for long periods of time. Do not place anything on the seat that insulates against heat, such as a blanket or cushion. This may cause the seat heater to overheat.

## UNDERSTANDING THE FEATURES OF YOUR VEHICLE 99

This feature heats leather or cloth front driver and passenger seats. The controls for the heated seats are located in the center console above the climate controls. There are indicator lights in the switches, which indicate a low heat setting (one lamp lit) or high heat setting (2 lamps lit).

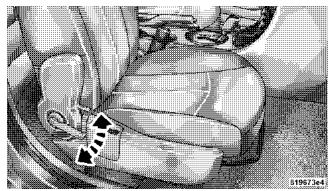


Heated Seat Switches



## Fold Flat Front Passenger Seat

The recline handle on the front passenger seat also releases the seatback to fold forward.



Seat Back Fold Forward

The hard seatback features a work surface and a molded rim for retaining items stored on the seat back panel.

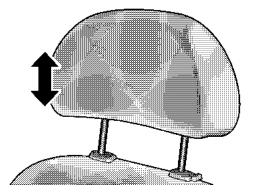


Fold Flat Front Passenger Seat



## **Adjustable Head Restraints**

Head restraints can reduce the risk of whiplash injury in the event of impact from the rear. Adjust the restraints so that the upper edge is as high as practical. To raise, pull up on the head restraint. To lower, depress the button on the post guide and push down on the head restraint.



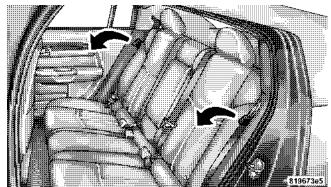
Adjustable Head Restraint

## UNDERSTANDING THE FEATURES OF YOUR VEHICLE 101

## **Folding Rear Seat**

To provide additional storage area, the rear seatback can be folded forward. Pull on the loops shown in the picture to fold down either or both seatbacks.

When returning the rear seat back to the upright position, **3** be sure the seat back is latched.



**Folding Rear Seats** 



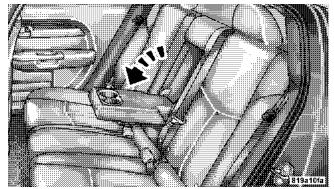
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## WARNING!

The rear cargo area of the vehicle (with the rear seatbacks in the locked-up or folded down position) should not be used as a play area by children. They could be seriously injured in an accident. Children should be seated and using the proper restraint system.

## Folding Rear Seat Center Armrest

The rear seat is equipped with a folding armrest with cup holders.

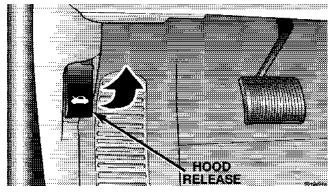


Folding Rear Seat Armrest



# TO OPEN AND CLOSE THE HOOD

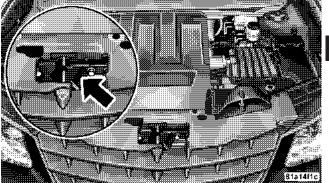
To open the hood, two latches must be released. First pull the hood release lever located under the left side of the instrument panel.



Hood Release Lever

## UNDERSTANDING THE FEATURES OF YOUR VEHICLE 103

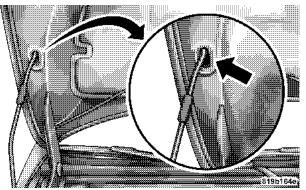
Then lift the secondary latch located under the front edge of the hood, near the center and raise the hood.



Hood Safety Catch



Use the hood prop rod to secure the hood in the open position. Place the upper end of the prop rod in the hole on the left underside of the hood.



#### Hood Prop Rod Hole Location

Before closing the hood, make sure to stow the prop rod in its proper location. To prevent possible damage, do not slam the hood to close it. Use a firm downward push at the center of the hood to ensure that both latches engage.

## WARNING!

If the hood is not fully latched it could fly up when the vehicle is moving and block your forward vision. You could have a collision. Be sure all hood latches are fully latched before driving.

## LIGHTS

## Map/Reading/Interior Lights

These lights are mounted between the sun visors above the rear view mirror. Each light is turned ON by pressing the button. Press the button a second time to turn the light OFF. The lights will remain on until the switch is pressed a second time, so be sure they have been turned off before leaving the vehicle. They will not turn off automatically. Interior lighting also comes on when a door is opened or the dimmer control is turned fully upward, past the second detent.

There is a second light located midway back in the headliner.



To protect the battery, the interior lights will turn off automatically 10 minutes after the ignition switch is moved to the LOCK position. This will occur if the interior lights were switched on manually or are on because a door is open. This includes the glove box light, but not the trunk light. To restore interior light operation, either turn the ignition switch ON or cycle the light switch.

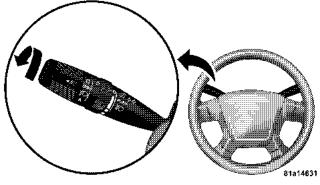
## **Multi-Function Control Lever**

The Multi-Function Control Lever controls the operation of the headlights, parking lights, turn signals, headlight beam selection, instrument panel light dimming, interior lights, the passing lights, and fog lights. The lever is located on the left side of the steering column.

## UNDERSTANDING THE FEATURES OF YOUR VEHICLE 105

# Headlights, Parking Lights, Instrument Panel Lights

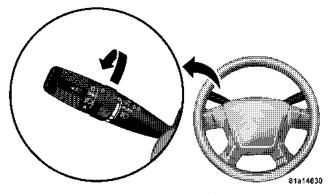
Turn the end of the Multi-Function Control Lever to the first detent for parking light operation. Turn to the second detent for headlight operation. Turn to the third detent "A" for "Auto" headlight operation (if equipped).



Headlight Switch



To change the brightness of the instrument panel lights, rotate the center portion of the Multi-Function Control Lever up or down.



## **Dimmer Control Automatic Headlight System — If Equipped** Turning the end of the multi-function control lever to the third detent, "A" (Auto), will activate the automatic

headlight system.

With the engine running and the multi-function control lever in the "A" (Auto) position, the headlights will turn on and off based on the surrounding light levels.

#### **Headlight Time Delay**

There is also a feature that delays turning off the vehicle lights for 30, 60, or 90 seconds after the ignition switch is turned OFF. To activate the headlight delay, the multifunction control lever must be rotated to the "Off" position after the ignition switch is turned OFF. Only the headlights will illuminate during this time. Refer to "EVIC- Customer Programmable Features" in Section 4 to turn this feature "On/Off" or set the time interval.

## Passing Light / Flash to Pass

You can signal another vehicle with your headlights by lightly pulling the Multi-Function Control Lever toward you. This will cause the headlights to turn on at high beam and remain on until the lever is released.

**NOTE:** If the Multi-Function Control Lever is held in the flash to pass position for more than 15 seconds, the high beams will shut off. If this occurs, wait 30 seconds for the next flash to pass operation.



## Daytime Running Lights (DRL) — If Equipped

The high beam lights will come on as Daytime Running Lights (DRL) at DRL intensity (lower), whenever the ignition is on, the engine is running, the headlight switch is off, the parking brake is off, the turn signal is off, and the gearshift lever is in any position except park.

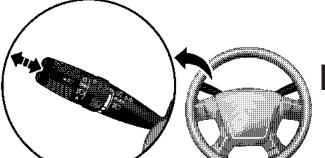
**NOTE:** On this vehicle, the daytime running light will automatically turn off when the turn signal is in operation and automatically turn back on when the turn signal is not operating.

## **Lights On Reminder**

If the headlights or parking lights are on after the ignition is turned OFF, a chime will sound to alert the driver when the driver's door is opened.

#### Fog Lights — If Equipped

★D The front fog light switch is on the Multi-Function Control Lever. To activate the front fog lights, turn on the parking lights or the low beam headlights and pull out the end of the control lever.



UNDERSTANDING THE FEATURES OF YOUR VEHICLE 107

#### Front Fog Light Control

**NOTE:** The front fog lights will only operate with the headlights on low beam. Selecting high beam headlights will turn off the front fog lights.

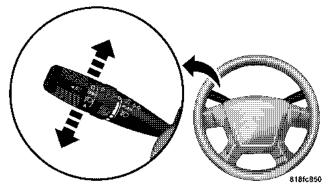


# 3

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## **Turn Signals**

Move the Multi-Function Control Lever up or down and the arrows on each side of the instrument cluster flash to show proper operation of the front and rear turn signal lights. You can signal a lane change by moving the lever partially up or down without moving beyond the detent.

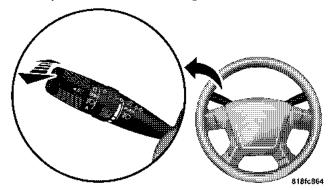


**Turn Signal Control** 

If either light remains on and does not flash, or there is a very fast flash rate, check for a defective outside light bulb. If an indicator fails to light when the lever is moved, it would suggest that the fuse or indicator bulb is defective.

#### Highbeam/Lowbeam Select Switch

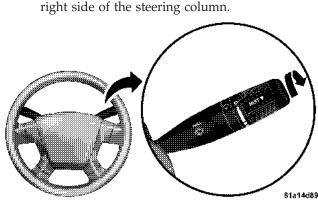
Push the Multi-Function Control Lever away from you to switch the headlights to HIGH beam. Pull the Lever toward you, to switch the headlights back to Low beam.



**Highbeam Functions** 



# WINDSHIELD WIPERS AND WASHERS The wipers and washers are operated by a switch



on the control lever. The lever is located on the

Windshield Wiper / Washer Lever

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 109

# Windshield Washers

To use the washer, pull the multi-function control lever toward you and hold while spray is desired. If the lever is pulled while in the delay range, the wiper will operate in low speed for two wipe cycles after the lever is released, and then resume the intermittent interval previously selected.

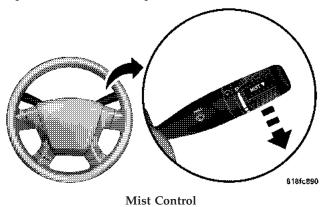
If the lever is pulled while in the OFF position, the wipers will operate for two wipe cycles, then turn OFF.

NOTE: Always remove any buildup of snow that prevents the windshield wiper blades from returning to the OFF position. If the windshield wiper switch is turned OFF and the blades cannot return to the OFF position, damage to the wiper motor may occur.



# **Mist Feature**

Push down on the wiper control lever to activate a single wipe to clear the windshield of road mist or spray from a passing vehicle. As long as the lever is held down, the wipers will continue to operate.



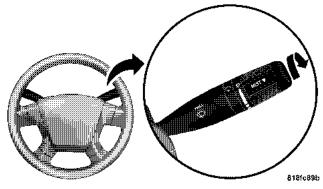
# WARNING!

Sudden loss of visibility through the windshield could lead to an accident. You might not see other vehicles or other obstacles. To avoid sudden icing of the windshield during freezing weather, warm the windshield with defroster before and during windshield washer use.



# Windshield Wiper Operation

Turn to the second detent for low wiper speed and the third detent for high wiper speed.



Wiper Control

# Speed Sensitive Intermittent Wiper System

Use the intermittent wiper when weather conditions make a single wiping cycle, with a variable pause between cycles, desirable. Select the delay interval by turning the end of the lever. Rotate the knob upward to decrease the delay time and downward to increase the

### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 111

delay time. The delay can be regulated from a maximum of approximately 18 seconds between cycles, to a cycle every second.

**NOTE:** The wiper delay times depend on vehicle speed. If the vehicle is moving less than 10 mph (16 km/h), 3 delay times will be doubled.

**NOTE:** If the front wiper is operating when the ignition is turned off, the wiper will automatically return to the "Park" position. When the vehicle is restarted, the wipers will resume operation.

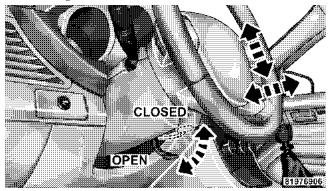
# **Adding Washer Fluid**

The fluid reservoir for the windshield washers is located in the engine compartment and should be checked for fluid level at regular intervals. Fill the reservoir with windshield washer solvent (not radiator antifreeze) and operate the system for a few seconds to flush out the residual water. Refer to the appropriate engine diagram (Section 7 "Maintaining Your Vehicle") for the location of the reservoir.



# **TILT/TELESCOPING STEERING COLUMN**

This feature allows you to tilt the steering column upward or downward. It also allows you to lengthen or shorten the steering column. The tilt/telescoping control handle is located below the steering wheel at the end of the steering column.



# Tilt / Telescoping Steering Wheel Lock

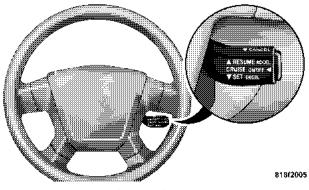
To unlock the steering column, pull the control handle outward. To tilt the steering column, move the steering wheel upward or downward as desired. To lengthen or shorten the steering column, pull the steering wheel outward or push it inward as desired. To lock the steering column in position, push the control handle inward until fully engaged.

#### WARNING!

Do not adjust the steering wheel while driving. The telescoping adjustment must be locked while driving. Adjusting the steering wheel while driving or driving without the telescoping adjustment locked could cause the driver to lose control of the vehicle.



# **ELECTRONIC SPEED CONTROL — IF EQUIPPED** When engaged, this device takes over the accelerator operation at speeds greater than 25 mph (40 km/h). The speed control lever is located on the right side of the steering wheel.



**Speed Control Location** 

# To Activate:

Push the ON/OFF button located in the end of the Electronic Speed Control Lever. The CRUISE indicator in the instrument cluster will illuminate. To turn the system

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 113

OFF, push the ON/OFF button a second time. The CRUISE indicator will turn off. The system should be turned OFF when not in use.

NOTE: The Electronic Speed Control System will automatically turn itself off when the ignition key is turned to 3 the "OFF" position.

# WARNING!

Leaving the Electronic Speed Control system on when not in use is dangerous. You could accidentally set the system or cause it to go faster than you want. You could lose control and have an accident. Always leave the system OFF when you are not using it.

# To Set At A Desired Speed:

When the vehicle has reached the desired speed, press down on the lever and release. Release the accelerator and the vehicle will operate at the selected speed.

# NOTE:

• The vehicle must be traveling at least 25 mph (40 km/h) for the speed control to set.



• The vehicle should be traveling at a steady speed and on level ground before pressing the SET lever.

# To Deactivate:

A soft tap on the brake pedal, pulling the speed control lever towards you "CANCEL", or normal brake pressure while slowing the vehicle will deactivate speed control without erasing the set speed memory. Pressing the ON/OFF button or turning off the ignition switch erases the set speed memory.

#### To Resume Speed:

To resume a previously set speed, push the "RESUME ACCEL" lever up and release. Resume can be used at any speed above 20 mph (32 km/h).

# To Vary The Speed Setting:

When the speed control is ON, speed can be increased by pushing up and holding "RESUME ACCEL". Release the lever when the desired speed is reached, and the new speed will be set. Tapping "RESUME ACCEL" once will result in a 1 mph (2 km/h) speed increase. Each time the lever is tapped, speed increases so that tapping the lever three times will increase speed by 3 mph (5 km/h), etc.

To decrease speed while speed control is ON, push down and hold "SET DECEL". Release the lever when the desired speed is reached, and the new speed will be set.

Tapping the "SET DECEL" button once will result in a 1 mph (2 km/h) speed decrease. Each time the button is tapped, speed decreases.

# WARNING!

Speed Control can be dangerous where the system can't maintain a constant speed. Your vehicle could go too fast for the conditions, and you could lose control. An accident could be the result. Don't use Speed Control in heavy traffic or on roads that are winding, icy, snow-covered, or slippery.



# To Accelerate For Passing:

Depress the accelerator as you would normally. When the pedal is released, the vehicle will return to the set speed.

# Using Speed Control On Hills

**NOTE:** The speed control system maintains speed up and down hills. A slight speed change on moderate hills is normal.

On steep hills, a greater speed loss or gain may occur so it may be preferable to drive without speed control.

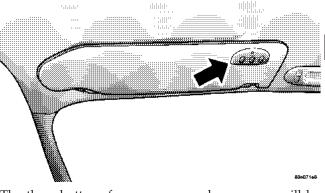
# GARAGE DOOR OPENER (HomeLink®) — IF EQUIPPED

The HomeLink<sup>®</sup> Universal Transceiver replaces up to three remote controls (hand held transmitters) that operate devices such as garage door openers, motorized gates, or home lighting. It triggers these devices at the push of a button. The Universal Transceiver operates off your vehicle's battery and charging system; no batteries are needed.

**NOTE:** The HomeLink<sup>®</sup> Universal Transceiver is disabled when the Vehicle Security Alarm is active.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE 115

For additional information on HomeLink<sup>®</sup>, call 1–800–355–3515, or on the internet at www.homelink.com.



The three buttons for your garage door opener will be located in the driver's sunvisor. The training procedure is the same regardless of the 3-button location.

# Programming The Universal Transceiver (HomeLink<sup>®</sup>)

**NOTE:** When programming a garage door opener, it is advised to park outside the garage and with the engine off. It is also recommended that you install a new battery



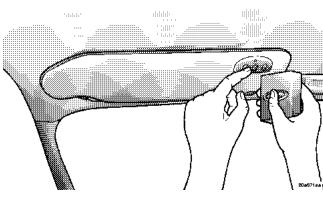
in the hand-held transmitter of the device being programmed. This will allow for quicker training and accurate transmission of the radio-frequency signal.

If your garage door opener (located in the garage) is equipped with an antenna, make sure that the antenna is hanging straight down.

1. Erase the factory test codes by pressing the two outside buttons. Release the buttons when the light in the Universal Transceiver begins to flash (about 20 seconds).

**NOTE:** Step 1 above does not have to be followed to program additional hand held transmitters.

2. Choose one of the three Universal Transceiver buttons to program. Position the end of your hand-held transmitter 1-3 inches (3-8 cm) away from the HomeLink buttons while keeping its indicator light in view.



Proper Transceiver Training Distance

3. Simultaneously press and hold the HomeLink button (that you want to train) and the hand-held transmitter button. Do not release the buttons until Step 4 is complete.

**NOTE:** Some gate operators and garage door openers may require you to replace this Programming Step 3 with procedures noted under "Gate Operator/Canadian Programming."



4. The indicator light in the Universal Transceiver will begin to flash, first slowly and then rapidly. The rapid flashing indicates successful programming. If after 90 seconds the indicator light does not flash rapidly or goes out, return to step 1 and repeat the procedure. To train the other buttons, repeat steps 3 and 4. Be sure to keep your hand held transmitters in case you need to retrain the Universal Transceiver.

**NOTE:** To program the remaining two HomeLink buttons, begin with "Programming" Step Two. Do not repeat Step One.

NOTE: If your garage door opener fails to respond to the programmed HomeLink® Universal Transceiver, and your garage door opener is manufactured after 1995, it may have a multiple security code system (rolling code system). If your garage door opener is the "rolling code" type, please proceed to the heading "Programming A Rolling Code System."

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 117

#### Programming A "Rolling Code" System

On garage door openers with the "Rolling Code" feature, the transmitter code changes after each use to prevent the copying of your code.

**NOTE:** The assistance of a second person may make the **3** following programming procedure quicker and easier.

1. Locate the training button on the garage door motor head unit. The exact location and color of the button may vary by garage door opener manufacturer. If you have difficulty in locating the training button, check your garage door opener manual, or call 1-800-355-3515 or, on the Internet, at www.homelink.com.

2. Press and hold the training button on the garage door opener head unit. This will activate the "training" light.

**NOTE:** After completing step 2, you have 30 seconds to start step 3.

3. Return to the Universal Transceiver in the vehicle and firmly press and release the garage door button. Press and release the button a second time to complete the



training process. Some garage door openers may require you to do this procedure a third time to complete the training.

# **Canadian Programming/Gate Programming**

Canadian radio-frequency laws require transmitter signals to "time-out" (or quit) after several seconds of transmission, which may not be long enough for HomeLink to pick up the signal during programming. Similar to this Canadian law, some U.S. gate operators are designed to "time-out" in the same manner.

If you live in Canada or you are having difficulties programming a gate operator by using the "Programming" procedures (regardless of where you live), **replace** "**Programming HomeLink**" **Step 3** with the following: 3. Continue to press and hold the HomeLink button while you **press and release** your hand-held transmitter **every two seconds** until the frequency signal is accepted successfully by HomeLink. The Universal Transceiver light will flash slowly and then rapidly when the programming is successful. Proceed with "**Programming HomeLink**" **Step 4** to complete the procedure. **NOTE:** When programming such a garage door opener or gate, unplug the device to prevent possible damage to the garage door or gate motor.

#### Using HomeLink

To operate, simply press and release the programmed HomeLink button. Activation will now occur for the trained device (i.e. garage door opener, gate operator, security system, entry door lock, home/office lighting, etc.). The light in the display shows that the signal is being transmitted. For convenience, the hand-held transmitter of the device may also be used at any time.

#### Erasing HomeLink Buttons

To erase programming from the three buttons (individual buttons cannot be erased but can be "reprogrammed" - note below), follow the step noted:

Press and hold the two outer HomeLink buttons (for approximately 20 seconds). Release the buttons when the indicator begins to flash rapidly. All three channels will be cleared.



# Reprogramming a Single HomeLink Button

To program a device with a previously trained HomeLink button, follow these steps:

1. Press and hold the Universal Transceiver button to be reprogrammed. Do not release until step 4 has been completed.

2. When the indicator light begins to flash slowly (after 20 seconds), position the hand held transmitter one to three inches away from the button to be trained.

3. Press and hold the hand held transmitter button.

4. The Universal Transceiver indicator light will begin to flash, first slowly, then rapidly. When the indicator lights

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 119

begin to flash rapidly, release both buttons.

# Security

If you sell your vehicle, be sure to erase the frequencies by following the "Erasing HomeLink Buttons" instructions in this section.

This device complies with part 15 of FCC rules and with RSS-210 of Industry Canada. Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference that may be received including interference that may cause undesired operation.



# WARNING!

- A moving garage door can cause injury to people and pets in the path of the door. People or pets could be seriously or fatally injured. Only use this transceiver with a garage door opener that has a "stop and reverse" feature as required by federal safety standards. This includes most garage door opener models manufactured after 1982. Do not use a garage door opener without these safety features, it could cause injury or death. Call tollfree 1–800–355–3515 or, on the Internet at www.homelink.com for safety information or assistance.
- Vehicle exhaust contains carbon monoxide, a dangerous gas. Do not run the vehicle's exhaust while training the transceiver. Exhaust gas can cause serious injury or death.

**NOTE:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

HomeLink<sup>®</sup> is a trademark owned by Johnson Controls, Inc.

In the event that you are still having programming difficulties, questions, or comments, call toll free 1–800–355–3515 or if you have access on the Internet, at www.homelink.com for information or assistance.

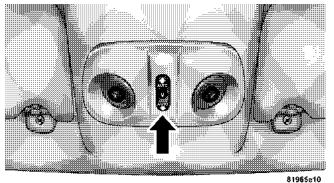
# WARNING!

Your motorized door or gate will open and close while you are training the Universal Transceiver. Do not train the transceiver if people or pets are in the path of the door or gate. A moving door or gate can cause serious injury or death to people and pets or damage to objects.



# POWER SUNROOF — IF EQUIPPED

The sunroof controls are mounted between the sun visors in the Dome / Reading Lamp.



**Power Sunroof Switch** 

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 121

# WARNING!

- Never leave children in a vehicle, with the keys in the ignition switch. Occupants, particularly unattended children, can become entrapped by the power sunroof while operating the power sunroof switch. Such entrapment may result in serious injury or death.
- In an accident, there is greater risk of being thrown from a vehicle with an open sunroof. You could also be seriously injured or killed. Always fasten your seat belt properly and make sure all passengers are properly secured too.
- Do not allow small children to operate the sunroof. Never allow fingers or other body parts, or any object to project through the sunroof opening. Injury may result.



#### **Opening Sunroof - Manual**

Press the switch rearward and hold, and the sunroof will open automatically from any position. The sunroof will open fully, then stop automatically. During this operation, any release of the sunroof switch will stop the sunroof.

# **Opening Sunroof - Express**

Press the switch rearward and release, and the sunroof will open automatically from any position. The sunroof will open fully, then stop automatically. This is called Express Open. During Express Open operation, any movement of the sunroof switch will stop the sunroof.

#### **Closing Sunroof - Manual**

To Close the sunroof from an open or vent position, press and **hold** the switch forward. The sunroof will close fully and stop automatically. Release the switch to stop sunroof travel at any point.

# Venting Sunroof - Express

Press and release the "V" button, and the sunroof will open to the vent position. This is called Express Vent.

# **Closing Sunroof - Express**

Press the switch forward and release, and the sunroof will close automatically from any position. The sunroof will close fully, then stop automatically. This is called Express Close. During Express Close operation, any movement of the sunroof switch will stop the sunroof.

# Auto Sunroof (Express) with Anti–Pinch Protection — If Equipped

During express closing, anytime an obstacle that restricts glass movement is detected, the motor will stop and reverse travel to avoid pinching the object.

# WARNING!

There is no anti-pinch protection when the sunroof is almost closed. To avoid personal injury, be sure to clear your arms, hands, fingers and all objects from the sunroof path before closing.



# **Sunshade Operation**

The sunshade can be opened manually. However, the sunshade will open automatically as the sunroof opens.

**NOTE:** The sunshade cannot be closed if the sunroof is open.

# Wind Buffeting

Wind buffeting can be described as the perception of pressure on the ears or a helicopter type sound in the ears. Your vehicle may exhibit wind buffeting with the windows down, or the sunroof (if so equipped) in certain open or partially open positions. This is a normal occurrence and can be minimized. If the buffeting occurs with the rear windows open, then open the front and rear windows together to minimize the buffeting. If the buffeting occurs with the sunroof open, adjust the sunroof opening to minimize the buffeting.

# **Sunroof Maintenance**

Use only a non abrasive cleaner and a soft cloth to clean the glass panel.

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 123

### Ignition Off Operation

For vehicles not equipped with the Electronic Vehicle Information Center (EVIC), the power sunroof switch will remain active for 10 minutes after the ignition switch is turned off. Opening either front door will cancel this feature.

3

For vehicles equipped with the EVIC, the power sunroof switch will remain active for up to 60 minutes after the ignition switch is turned off. Opening either front door will cancel this feature. The time is programmable. For details, refer to "Delay Power Off to Accessories Until Exit," under "Personal Settings (Customer Programmable Features)," under "Electronic Vehicle Information Center (EVIC)" in Section 4 of this manual.

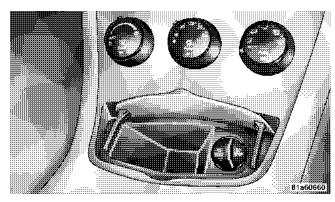


# **ELECTRICAL POWER OUTLETS**

There are two 12-volt electrical outlets on this vehicle. Both of the outlets are protected by a fuse.

The 12-volt power outlet next to the ash receiver tray (if equipped with an optional Smoker's Package) has power available only when the ignition is on. This outlet will also operate a conventional cigar lighter unit.

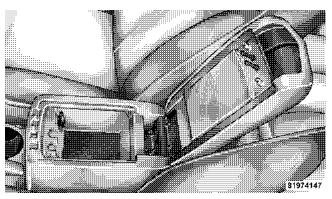
**NOTE:** If desired, the power outlet next to the ash receiver tray (if equipped) can be converted by your authorized dealer to provide power with the ignition switch in the LOCK position.



**Instrument Panel Power Outlet** 

The center console outlet is powered directly from the battery (power available at all times). Items plugged into this outlet may discharge the battery and/or prevent engine starting.





# Console Interior ELECTRICAL POWER INVERTER — IF EQUIPPED



There is a 115 VAC (150-Watts Maximum) outlet in the center console for added convenience. This outlet can power cell phones, electronics, and other low power devices.

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 125

**NOTE:** Due to built-in overload protection, the inverter will shut down if the power rating is exceeded.

# WARNING!

To Avoid Serious Injury or Death:

- Do not use a 3-Prong Adaptor.
- Do not insert any objects into the receptacles.
- Do not touch with wet hands.
- Close the lid when not in use.
- If this outlet is mishandled, it may cause an electric shock and failure.



# **Electrical Outlet Use With Engine Off**

# **CAUTION!**

- Many accessories that can be plugged in draw power from the vehicle's battery, even when not in use (i.e. cellular phones, etc.). Eventually, if plugged in long enough, the vehicle's battery will discharge sufficiently to degrade battery life and/or prevent engine starting.
- Accessories that draw higher power (i.e. coolers, vacuum cleaners, lights, etc.) will degrade the battery even more quickly. Only use these intermittently and with greater caution.
- After the use of high power draw accessories, or long periods of the vehicle not being started (with accessories still plugged in), the vehicle must be driven a sufficient length of time to allow the generator to recharge the vehicle's battery.

# CIGAR LIGHTER AND ASH RECEIVER

The covered ash receiver is located in the instrument panel below the climate control knobs.

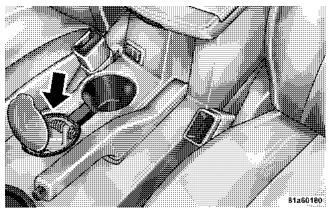
The cigar lighter is located to the right of the ash receiver.

As a child safety precaution, the lighter only operates with the ignition switch ON. It heats when pushed in and pops out automatically when ready for use. **To preserve the heating element**, **do not hold the lighter in the heating position**.

# Cup Holder Ash Receiver — If Equipped

Should your vehicle not come equipped with the instrument panel cigar lighter and ash receiver, an optional ash receiver is available from your authorized dealer and will fit in either one of the center console cup holders.





**Optional Cup Holder Ash Receiver** 

# CAUTION!

If your vehicle is equipped with the heated and cooled cup holder, locate the cup holder ash receiver in the forward cup holder.

The optional ash receiver also comes with a cigar lighter. You may use the power outlet, located in the instrument panel below the climate control knob, or in the bottom of the console compartment, for this cigar lighter.

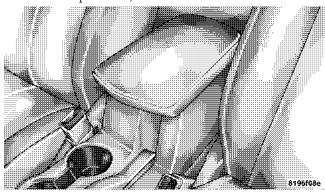
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# **CONSOLE FEATURES**

# **Console Features**

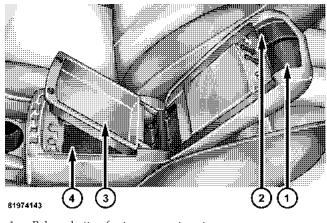
The center console armrest slides forward from design position to provide added user comfort. Two cup holders, each of which can accommodate large sized fast food beverage containers. A one piece cup holder insert for both cavities can easily be removed for cleaning. The cup holders will also accommodate large size cups and 20 oz. bottles. (An optional removable ashtray may be located in the one cup holder.)



**Console Features** 

# **Dual Storage Bins**

Lifting a latch at the front of the hinged armrest provides access to these storage areas.



- 1 Release button for top compartment
- 2 Release button for bottom compartment
- 3 Top Compartment
- 4 Bottom Compartment
- The Left Latch opens to the top storage area.



- The lower bin can be accessed directly, without first exposing the upper bin, by operating the right latch with the armrest down.
- The first storage bin can be used to hold smaller items.
- The lower storage bin includes a molded-in coin holder, room for CD's, DVD's, and a power outlet that allows a cell phone to recharge while concealed.

**NOTE:** A notch in the side of the console base under the armrest will also allow use of cell phone while still plugged into the power outlet and with the armrest latched down.

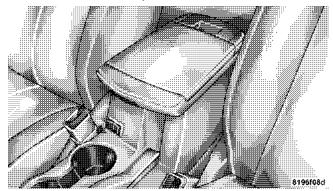
**NOTE:** The power outlet located inside the console can also energize the cigar lighter in the available Smoker's Package.

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 129

# Video Console — If Equipped

The optional VES<sup>TM</sup>(Video Entertainment System) includes the following components:

- The screen for a rear seat DVD player is stored under the armrest.
- Remote Control
- Audio / Video RCA Jacks



Video Console



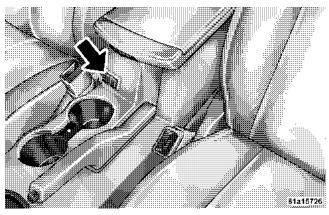
# **CUP HOLDERS**

# Heated or Cooled Cup Holder — If Equipped

With this feature the rear cavity of the cup holder can heat or cool the beverage container it is holding. The rear cup holder can heat from room temperature ( $70^{\circ}F/21^{\circ}C$ ), to 140°F ( $60^{\circ}C$ ) or cool it to near freezing, 0°F ( $-20^{\circ}C$ ).

The switch is located on the front of the center console and has three positions: HEAT, OFF, COOL.

When the unit is on and the LED is Red, the cup holder is being heated. When the LED is Blue, the cup holder is being cooled.



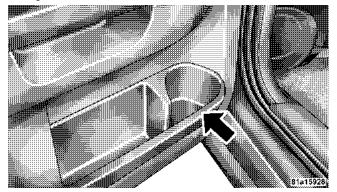
Cooled or Heated Cup Holder

A special mug is included with this feature and is specially designed to work best with this system.



# **Rear Bottle Holders**

There are built-in bottle holders located in both rear door trim panels.



**Rear Bottle Holder** 

# UNDERSTANDING THE FEATURES OF YOUR VEHICLE 131

# WARNING!

If containers of hot liquid are placed in the bottle holder, they can spill when the door is closed, burning the occupants. Be careful when closing the doors to avoid injury.





# UNDERSTANDING YOUR INSTRUMENT PANEL

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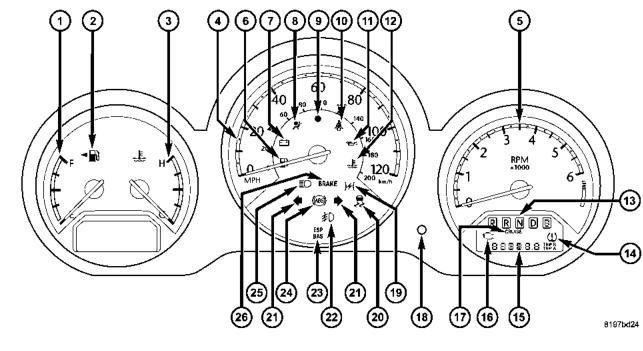
**Instrument Panel** 

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# INSTRUMENT PANEL FEATURES



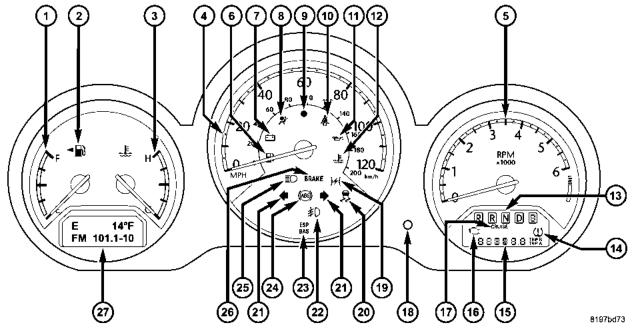


INSTRUMENT CLUSTER—BASE

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138 UNDERSTANDING YOUR INSTRUMENT PANEL **INSTRUMENT CLUSTER—PREMIUM** 

# INSTRUMENT CLUSTER DESCRIPTIONS

# 1. Fuel Gauge

When the ignition switch is in the ON position, the pointer will show the level of fuel remaining in the fuel tank.

# 2. Fuel Door Reminder

This is a reminder that the Fuel Filler Door is located on the left side of the vehicle.

#### 3. Temperature Gauge

The temperature gauge shows engine coolant temperature. Any reading below the red area of the gauge shows that the engine cooling system is operating properly. The gauge pointer may show a higher than normal temperature when driving in hot weather, up mountain grades, in heavy stop and go traffic, or when towing a trailer.

If the pointer rises to the **H** (red) mark, the instrument cluster will sound a chime. Pull over and stop the vehicle. Idle the vehicle with the air conditioner turned off until

#### UNDERSTANDING YOUR INSTRUMENT PANEL 139

the pointer drops back into the normal range. If the pointer remains on the **H** (red) mark, turn the engine off immediately and call for service.

There are steps that you can take to slow down an impending overheat condition. If your air conditioning is on, turn it off. The air conditioning system adds heat to the engine cooling system and turning off the A/C removes this heat. You can also turn the Temperature control to maximum heat, the Mode control to Floor and the Fan control to High. This allows the heater core to act as a supplement to the radiator and aids in removing heat from the engine cooling system.

#### 4. Speedometer

Indicates vehicle speed.

#### 5. Tachometer

The white area of the scale shows the permissible engine revolutions-per-minute (rpm x 1000) for each gear range. Before reaching the red area, ease up on the accelerator to prevent engine damage.



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#### 6. Low Fuel Light

When the fuel level drops to 2 gallons, the fuel symbol will light and a single chime will sound.

# 7. Charging System Light

This light shows the status of the electrical charging system. The light should come on briefly when the ignition is first turned on and remain on briefly as a bulb check. If the light stays on or comes on while driving, turn off some of the vehicle's electrical devices, such as the Fog Lights or Rear Defroster. If the Charging System Light remains on, it means that the vehicle is experiencing a problem with the charging system. Obtain SERVICE IMMEDI-ATELY. See your local authorized dealer.

#### 8. Airbag Light



The light comes on and remains on for 6 to 8 seconds as a bulb check when the ignition switch is first turned ON. If the light does not come on during starting, stays on, or

comes on while driving, have the system checked by an authorized dealer.

# 9. Theft Alarm Light — If Equipped

This light will flash rapidly for several seconds when the alarm system is arming. The light will begin to flash slowly indicating that the system is armed.

#### 10. Seat Belt Reminder Light

When the ignition switch is first turned ON, this light will come on for about six seconds. A chime will sound if you have not pulled the shoulder belt out of the retractor. This is a reminder to "buckle up". If you do not buckle up, the light will remain on.

# 11. Oil Pressure Light

Shows low engine oil pressure. The light will come on and remain on when the ignition switch is turned from the OFF to the ON position, and the light will turn off after the engine is started. If the bulb does not come on during starting, have the system checked by an authorized dealer.

If the light comes on and remains on while driving, stop the vehicle and shut off the engine. DO NOT OPERATE THE VEHICLE UNTIL THE CAUSE IS CORRECTED.

The light does not show the quantity of oil in the engine. This can be determined using the procedure shown in Section 7.

# 12. Engine Temperature Warning Light

This light warns of an overheated engine condition. If the engine is critically hot, a warning chime will sound 10 times. After the chime turns off, the engine will still be critically hot until the light goes out.

#### 13. Transmission Range Indicator

This display indicator shows the automatic transaxle gear selection.

# 14. Tire Pressure Monitor Light

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

# UNDERSTANDING YOUR INSTRUMENT PANEL 141

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

**NOTE:** The Tire Pressure Monitoring System (TPMS) is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the Tire Pressure Monitoring System low tire pressure telltale.

The Tire Pressure Monitoring Telltale Lamp will illuminate in the instrument cluster, and an audible chime will be activated when one or more tire pressures is low. The Tire Pressure Monitoring Telltale Lamp will flash on and



#### 142 UNDERSTANDING YOUR INSTRUMENT PANEL

off for 60 seconds when a system fault is detected. The flash cycle will repeat every ten minutes or until the fault condition is removed and reset.

If this indicator comes on, the entire, PRNDL/ odometer, display will brighten to FULL DAYTIME INTENSITY and will not be dimmable.

# CAUTION!

The TPMS has been optimized for the original equipment tires and wheels. TPMS pressures and warning have been established for the tire size equipped on your vehicle. Undesirable system operation or sensor damage may result when using replacement equipment that is not of the same size, type, and/or style. Aftermarket wheels can cause sensor damage. Do not use tire sealant from a can, or balance beads if your vehicle is equipped with a TPMS, as damage to the sensors may result.

# 15. Odometer/Trip Odometer

A vacuum fluorescent display indicates the total distance the vehicle has been driven. Also, the cluster odometer will display the following vehicle warning messages: door/trunk ajar and loose gas cap.

# Loose Fuel Filler Cap

If the vehicle diagnostic system determines that the fuel filler cap is loose, improperly installed, or damaged, "FUEL CAP OFF" will be displayed in the instrument cluster odometer. Tighten the fuel filler cap properly and press the odometer reset button to turn the "FUEL CAP OFF" message off.

**NOTE:** If vehicle is equipped with the optional Electronic Vehicle Information Center (EVIC) in the instrument cluster, all warnings including "DOOR AJAR", and "TRUNK AJAR" will only be displayed in the EVIC display. For additional information, refer to "Electronic Vehicle Information Center — If Equipped" in Section 3.

The two (if equipped) trip odometers show individual trip mileage. To switch from odometer to trip odometers, press and release the Trip Odometer button. To reset a



trip odometer, display the desired trip odometer to be reset then push and hold the button until the display resets (approximately 2 seconds).

U.S. federal regulations require that upon transfer of vehicle ownership, the seller certify to the purchaser the correct mileage that the vehicle has been driven. Therefore, if the odometer reading is changed during repair or replacement, be sure to keep a record of the reading before and after the service so that the correct mileage can be determined.

# 16. Malfunction Indicator Light

This light is part of an onboard diagnostic system called OBD that monitors emissions, engine, and automatic transaxle control systems. The light will illuminate when the key is in the ON/RUN position before engine start. If the bulb does not come on when turning the key from OFF to ON/RUN, have the condition checked promptly.

Certain conditions such as a loose or missing gas cap, poor fuel quality, etc. may illuminate the light after engine start. The vehicle should be serviced if the light stays on through several of your typical driving cycles. In most situations the vehicle will drive normally and will

UNDERSTANDING YOUR INSTRUMENT PANEL 143

If the Malfunction Indicator Light flashes when the engine is running, serious conditions may exist that could lead to immediate loss of power or severe catalytic converter damage. The vehicle should be serviced as **1** soon as possible if this occurs.

If this indicator comes on, the entire, PRNDL/ odometer, display will brighten to FULL DAYTIME INTENSITY and will not be dimmable.

#### 17. Cruise Indicator — If Equipped

not require towing.

**CRUISE** This indicator shows that the Speed Control System is ON.

#### 18. Odometer/Trip Odometer Reset Knob

Press this button to change the display from odometer to either of the two trip odometer settings. Trip A or Trip B (if equipped) will appear when in the trip odometer mode. Push in and hold the button for two seconds to reset the trip odometer to 0 miles or kilometers. The odometer must be in trip mode to reset.



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#### 19. Electronic Throttle Control Indicator Light

This red illuminated light informs you of a ¥4 problem with the Electronic Throttle Control system. If a problem is detected, the light will come on while the engine is running. If the light remains lit with the engine running your vehicle will usually be drivable and not need towing, however see your dealer for service as soon as possible.

If the light is flashing when the engine is running you may experience power loss, an elevated/rough idle, and increased brake pedal effort, and your vehicle may require towing. Immediate service is required.

The light will come on when the ignition switch is first turned on and remain on briefly as a bulb check. This is normal. If the light does not come on during starting, have the system checked by an authorized dealer.

# 20. Electronic Stability Program (ESP) Indicator Light/Traction Control System (TCS) Indicator Light — If Equipped

If this indicator light flashes during acceleration, apply as little throttle as possible. While driving, ease up on the accelerator. Adapt

your speed and driving to the prevailing road conditions, and do not switch off the ESP, or TCS — if equipped.

#### 21. Turn Signal Indicators

ESP

BAS

The arrows will flash in unison with the exterior turn signal, when using the turn signal lever.

#### 22. Front Fog Light Indicator — If Equipped

**‡D** This light shows when the front fog lights are ON.

# 23. Electronic Stability Program (ESP) Indicator Light

The malfunction lamp for the ESP is combined with BAS. The yellow "ESP/BAS Warning Lamp" comes on when the ignition switch is turned to the "ON" position. They

should go out with the engine running. If the "ESP/



BAS Warning Lamp" comes on continuously with the engine running, a malfunction has been detected in either the ESP or the BAS system. If this light remains on after several ignition cycles, and the vehicle has been driven several miles at speeds greater than 30 mph (48 km/h), see your authorized dealer as soon as possible.

# 24. Anti-Lock Warning Light (ABS) — If Equipped



This light monitors the Anti-Lock Brake System (ABS) described elsewhere in this manual. This light will come on when the ignition key is turned to the ON position and may stay on for as long as four seconds.

If the ABS light remains on or comes on during driving, it indicates that the Anti-Lock portion of the brake system is not functioning and that service is required, however, the conventional brake system will continue to operate normally provided that the BRAKE warning light is not on.

If the ABS light is on, the brake system should be serviced as soon as possible to restore the benefit of Anti-Lock Brakes. The warning light should be checked frequently to assure that it is operating properly. Turn the ignition key to the on position, but do not start the vehicle. The light should come on. If the light does not come on, have the system checked by an authorized dealer.

#### 25. High Beam Indicator

This light shows that the headlights are on high beam. Push the turn signal lever away from the steering wheel to switch the headlights from high or low beam.

#### 26. Brake System Warning Light

This light monitors various brake functions,

**BRAKE** including brake fluid level and parking brake application. If the brake light turns on,

it may indicate that the parking brake is applied, that the brake fluid level is low, or that there is a problem with the anti-lock brake system (if equipped).

The dual brake system provides a reserve braking capacity in the event of a failure to a portion of the hydraulic system. Failure of either half of the dual brake system is



indicated by the Brake Warning Light which will turn on when the brake fluid level in the master cylinder has dropped below a specified level.

The light will remain on until the cause is corrected.

**NOTE:** The light may flash momentarily during sharp cornering maneuvers which change fluid level conditions. The vehicle should have service performed, and the brake fluid level checked.

If brake failure is indicated, immediate repair is necessary.

# WARNING!

Driving a vehicle with the brake light on is dangerous. Part of the brake system may have failed. It will take longer to stop the vehicle. You could have an accident. Have the vehicle checked immediately.

Vehicles equipped with Anti-Lock brakes (ABS), are also equipped with Electronic Brake Force Distribution (EBD).

In the event of an EBD failure, the Brake Warning Light will turn on along with the ABS Light. Immediate repair to the ABS system is required.

The operation of the Brake Warning Light can be checked by turning the ignition switch from the OFF position to the ON position. The light should illuminate for approximately two seconds. The light should then turn off unless the parking brake is applied or a brake fault is detected. If the light does not illuminate, have the light inspected by an authorized dealer.

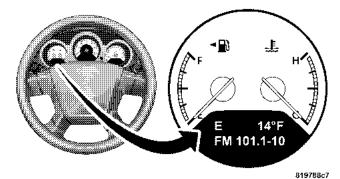
The light also will turn on when the parking brake is applied with the ignition switch in the ON position.

**NOTE:** This light shows only that the parking brake is applied. It does not show the degree of brake application.

27. Electronic Vehicle Information Center (EVIC) Display—Premium Cluster Only This window will display EVIC information.



# ELECTRONIC VEHICLE INFORMATION CENTER (EVIC) – IF EQUIPPED



# **EVIC Display Location**

The Electronic Vehicle Information Center (EVIC) features a driver-interactive display. It is located in the lower left part of the cluster below the fuel and engine temperature gauge. The EVIC consists of the following:

- System Status
- Vehicle information warning message displays
- Personal Settings (customer programmable features)

# UNDERSTANDING YOUR INSTRUMENT PANEL 147

- Compass heading (N, S, E, W, NE, NW, SE, SW)
- Outside temperature display (°F or °C)
- Trip computer functions
- UConnect<sup>™</sup> hands-free communication system displays (if equipped)
- Audio mode display 12 preset Radio Stations or CD 4
   Title and Track number when playing
- Tire Pressure Monitor System (TPMS) (if equipped)
- Navigation system screens (if equipped)

# Electronic Vehicle Information Center (EVIC) Displays

When the appropriate conditions exist, the Electronic Vehicle Information Center (EVIC) displays the following messages.

- Turn Signal On (with a continuous warning chime)
- Left Front Turn Signal Light Out (with a single chime)
- Left Rear Turn Signal Light Out (with a single chime)



- Right Front Turn Signal Light Out (with a single chime)
- Right Rear Turn Signal Light Out (with a single chime)
- RKE (Remote Keyless Entry) Battery Low (with a single chime)
- Memory #1/#2 Profile Set
- Memory #1/#2 Profile Recall
- Memory System Disabled Vehicle Not In Park (with a single chime)
- Memory System Disabled Seat Belt Buckled (with a single chime)
- Personal Settings Not Available Vehicle Not in Park.

- Left/Right Front Door Ajar (one or more, with a single chime if speed is above 1 mph)
- Left/Right Rear Door Ajar (one or more, with a single chime if speed is above 1 mph)
- Door(s) Ajar (with a single chime if vehicle is in motion)
- Trunk Ajar (with a single chime)
- Low Washer Fluid (with a single chime)
- Headlights On
- Key In Ignition

# **EVIC Functions**

The 2nd (MENU / STEP) and 3rd (RESET) buttons of the center instrument panel switch bank are used for EVIC Functions.





# **Trip Functions**

# **MENU / STEP Button**



Press and release the MENU / STEP button (located near the radio) until one of the following Trip Functions displays in the EVIC:



• Average Fuel Economy

# UNDERSTANDING YOUR INSTRUMENT PANEL 149

- Distance To Empty
- Elapsed Time
- Display Units of Measure in

Press the STEP button to cycle through all the Trip Computer functions.

The Trip Functions mode displays the following information: **4** 

# • Average Fuel Economy

Shows the average fuel economy since the last reset. When the fuel economy is reset, the display will read, "RESET" or show dashes for two seconds. Then, the history information will be erased, and the averaging will continue from the last fuel average reading before the reset.

# • Distance To Empty (DTE)

Shows the estimated distance that can be traveled with the fuel remaining in the tank. This estimated distance is determined by a weighted average of the instantaneous and average fuel economy, according to the current fuel tank level. DTE cannot be reset through the RESET button.



**NOTE:** Significant changes in driving style or vehicle loading will greatly affect the actual drivable distance of the vehicle, regardless of the DTE displayed value.

• When the DTE value is less than 30 miles (48 km) estimated driving distance, the DTE display will change to a text display of "LOW FUEL." This display will continue until the vehicle runs out of fuel. Adding a significant amount of fuel to the vehicle will turn off the "LOW FUEL" text and a new DTE value will display.

# • Elapsed Time

Shows the total elapsed time of travel since the last reset when the ignition switch is in the ACC position. Elapsed time will increment when the ignition switch is in the ON or START position.

# • Display Units of Measure in:

To make your selection, press and release the RESET button until "US" or "METRIC" appears.

#### To Reset The Display



Pressing and holding the RESET button once will clear the function currently being displayed. Reset will only occur if a resettable function is currently being displayed. To reset all resettable functions, press and release the RESET button a second time within 3 seconds

of resetting the currently displayed function (Reset ALL will be displayed during this 3-second window).

# **Compass Display**

# **COMPASS Button**



The compass readings indicate the direction the vehicle is facing. Press and release the compass button to display one of eight com-

pass readings and the outside temperature. The RESET button is used in conjunction with the MENU / STEP buttons to navigate and select Menu Preferences.

# **Automatic Compass Calibration**

This compass is self-calibrating, eliminating the need to calibrate the compass manually. When the vehicle is new, the compass may appear erratic and the EVIC will display "FLASH THE CAL" indicator until the compass



is calibrated. Calibrate the compass by completing one or more 360° turns (in an area free from large metal or metallic objects) until the "FLASH THE CAL" message displayed in the EVIC turns off. The compass will now function normally.

#### Manual Compass Calibration

If the compass appears erratic, inaccurate, or abnormal, you may wish to calibrate the compass manually. Prior to calibrating the compass, make sure the proper zone is selected. Continue to calibrate the compass manually using the following steps:

1. Start the engine and leave the transmission selector in PARK, in order to enter the EVIC Programming Menus.

2. Press the Step Button Several Times until "Personal Settings" is displayed in the EVIC window.

3. Once in "Personal Settings," Press the STEP button until "Calibrate Compass Yes" displays in the EVIC window. Press and release the RESET Button and the "CAL" indicator will come on solid.

# UNDERSTANDING YOUR INSTRUMENT PANEL 151

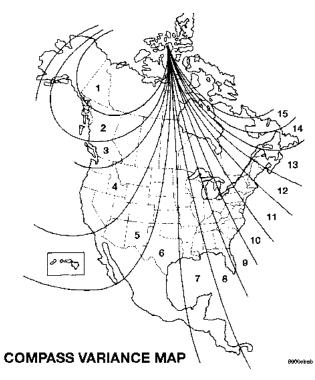
4. Drive the vehicle slowly, completing one or more circles (in an area free from large metal or metallic objects) until the "CAL" message turns off. The compass will now function normally.

#### **Compass Variance**

Compass Variance is the difference between magnetic North and Geographic North. In some areas of the country, the difference between magnetic and geographic North is great enough to cause the compass to give false readings. If this occurs, the compass variance must be set using the following procedure:

**NOTE:** Magnetic materials and cell phones should be kept away from the top of the Instrument Panel. This is where the compass sensor is located.





# Procedure to Update the Variance:

1. Turn the ignition switch to the ON position while leaving the transmission selector in PARK.

2. Press the Step Button Several Times until "Personal Settings" is displayed in the EVIC window.

3. Once in "Personal Settings," Press the STEP button until "Compass Variance" and the current value displays in the EVIC window.

4. Press and release the RESET Button to increment the Variance Value by one, (one button press per update), until the proper variance zone is selected according to the map.

**NOTE:** The Variance values will wrap around from 15 back to 1. The Default Variance is Zone 8.

5. Press and release the RESET button to exit. Press the STEP button if you wish to calibrate the compass manually (see: "Manual Compass Calibration" listed above).



# Telephone — If Equipped

Press and release the MENU button until "Telephone" displays in the EVIC.

When the appropriate conditions exist, the EVIC provides the following telephone information:

- Phone status: idle; voice mail; roaming; battery strength; and signal strength in increments of 20 percent.
- Call status: Incoming call; connecting; connected; air time in minutes and seconds; call ended; call failed; roaming; and no phone connection.
- UConnect Active.
- Caller ID phone number display.

When the appropriate conditions exist, and if supported by the cell phone, the EVIC will display the following telephone symbols:

#### UNDERSTANDING YOUR INSTRUMENT PANEL 153



The EVIC displays this symbol to indicate the signal strength of the UConnect<sup>TM</sup> phone. The number of horizontal bars increases as the strength of the UConnect<sup>TM</sup> phone signal increases.



Signal

Strength

The EVIC displays this symbol to indicate an incoming call.

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#### Incoming Call



The EVIC displays this symbol to indicate that the UConnect<sup>TM</sup> phone is currently in analog mode.

# Analog



The EVIC displays this symbol to indicate that the UConnect<sup>TM</sup> phone is currently roaming.

Roaming





The EVIC displays this symbol to indicate that you have voice mail.

#### Voice Mail

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The EVIC displays this symbol to indicate a text message.

#### Text Message



The EVIC displays this symbol to indicate the battery strength of the UConnect<sup>™</sup> phone.

#### Battery Strength



The EVIC displays this symbol to indicate that a phone connection has been made.

# Call in Progress



The EVIC displays this symbol to indicate that the UConnect<sup>™</sup> phone is currently not available.

Phone Not Available

# Navigation — If Equipped

# Navigation Display Control

Press and release the MENU button until Navigation displays in the EVIC. When the Navigation System is On, the buttons can be used to select the Map or Menu display on the Navigation Unit. When the Menu display is active, the STEP button can be used to scroll through the list, the RESET button can be used to select an item, and the AUDIO MODE button can be used to return to the previous menu. When the Map display is active, pressing the RESET button will change the Navigation Unit Display to the Menu.



# **Turn-By-Turn Directions**

The EVIC displays turn-by-turn directions to a programmed destination when Turn-By-Turn Navigation is enabled through Personal Settings. When enabled, the EVIC displays the name of the approaching road at the top of the screen, followed by an arrow to indicate the direction to turn the vehicle, and a count down to indicate the distance to the turn.

NOTE: Refer to your "Navigation User's Manual" for detailed operating instructions.

# **Personal Settings (Customer Programmable** Features)

This allows the driver to set and recall features when the automatic transaxle is in PARK.

Press and release the MENU button until Personal Settings displays in the EVIC.

Use the STEP button to display one of the following choices:

# Language

When in this display you may select different languages for all display nomenclature, including the trip functions.

# UNDERSTANDING YOUR INSTRUMENT PANEL 155

Pressing the RESET button while in this display selects English, Spanish, French, German, Italian, or Dutch depending on availability. As you continue, the displayed information will be shown in the selected language.

**NOTE:** UConnect<sup>TM</sup> language will not change using the EVIC. Please refer to "Language Selection" in the HANDS-FREE COMMUNICATION (UConnect<sup>™</sup>) sec- ⊿ tion of this manual for details.

#### Auto Door Locks

When ON is selected, all doors will lock automatically when the vehicle reaches a speed of 15 mph (24 km/h). To make your selection, press and hold the RESET button until "ON" or "OFF" appears.

#### Auto Unlock on Exit

When ON is selected, all doors will unlock when the vehicle is stopped and the transmission is in the P (Park) or N (Neutral) position and the driver's door is opened. To make your selection, press and hold the RESET button until "ON" or "OFF" appears.



# Remote Key Unlock Driver Door 1st

When **Driver Door 1st Press** is selected, only the driver's door will unlock on the first press of the remote keyless entry unlock button. When Driver Door 1st Press is selected, you must press of the remote keyless entry unlock button twice to unlock the passenger's doors. When **All Doors 1st Press** is selected, all of the doors will unlock on the first press of the remote keyless entry unlock button. To make your selection, press and release the RESET button until "Driver Door 1st Press" or "All Doors 1st Press" appears.

# Sound Horn with Lock

When ON is selected, a short horn sound will occur when the remote keyless entry "Lock" button is pressed. This feature may be selected with or without the flash lights on lock/unlock feature. To make your selection, press and release the RESET button until "ON" or "OFF" appears.

# **Flash Lights Lock**

When ON is selected, the front and rear turn signals will flash when the doors are locked or unlocked with the remote keyless entry transmitter. This feature may be selected with or without the sound horn on lock feature selected. To make your selection, press and release the RESET button until "ON" or "OFF" appears.

#### Headlights Off Delay

When this feature is selected, the driver can choose to have the headlights remain on for 0, 30, 60, or 90 seconds when exiting the vehicle. To make your selection, press and hold the RESET button until "0," "30," "60," or "90" appears.

# Headlights With Wipers (Available with Auto Headlights Only)

When ON is selected, and the headlight switch is in the AUTO position, the headlights will turn on approximately 10 seconds after the wipers are turned on. The headlights will also turn off when the wipers are turned off if they were turned on by this feature. To make your selection, press and hold the RESET button until "ON" or "OFF" appears.

**NOTE:** Turning the headlights on during the daytime causes the instrument panel lights to dim. To increase the brightness, refer to "Lights" in Section 3 of this manual.



# **Key-Off Power Display**

When this feature is selected, the power window switches, radio, hands-free system (if equipped), power sunroof (if equipped), and power outlets will remain active for up to 10 minutes after the ignition switch is turned off. Opening a vehicle door will cancel this feature. To make your selection, press and hold the RESET button until "Off," "45 sec.," "5 min.," or "10 min." appears.

# **Illumination Approach**

When this feature is selected, the headlights will activate and remain on for up to 90 seconds when the doors are unlocked with the remote keyless entry transmitter. To make your selection, press and hold the RESET button until "OFF," "30 sec.," "60 sec.," or "90 sec." appears.

# Confirmation of Voice Commands — If Equipped

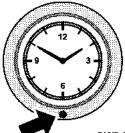
When ON is selected, all voice commands from the UConnect<sup>TM</sup> system are confirmed. To make your selection, press and hold the RESET button until "ON" or "OFF" appears.

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## Display Units of Measure in English or Metric

The EVIC, odometer, and navigation system (if equipped) can be changed between English and Metric units of measure. To make your selection, press and release the RESET button until "US" or "METRIC" appears.

# SETTING THE ANALOG CLOCK



To set the analog clock at the top center of the instrument panel, press and hold the button until the setting is correct. The clock will adjust slowly at first and then quicker the longer the button is held. Δ

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# **ELECTRONIC DIGITAL CLOCK**

The clock and radio each use the display panel built into the radio. A digital readout shows the frequency and/or time in hours and minutes (depending on your radio model) whenever the ignition switch is in the "ON" or "ACC" position.

When the ignition switch is in the "OFF" position, or when the radio frequency is being displayed, time keeping is accurately maintained.

On the AM/FM/CD (6-disc) radio the time button alternates the location of the time and frequency on the display. On the AM/FM/CD (single-disc) radio only one of the two, time or frequency is displayed.

### **Clock Setting Procedure**

1. Press and hold the time button until the hours blink.

2. Adjust the hours by turning the right side Tune / Audio control.

3. After the hours are adjusted, press the right side Tune / Audio control to set the minutes.

4. Adjust the minutes using the right side Tune / Audio control.

5. To exit, press any button/knob or wait approximately 5 seconds.

# **RADIO GENERAL INFORMATION**

#### **Radio Broadcast Signals**

Your new radio will provide excellent reception under most operating conditions. Like any system, however, car radios have performance limitations, due to mobile operation and natural phenomena, which might lead you to believe your sound system is malfunctioning. To help you understand and save you concern about these "apparent" malfunctions, you must understand a point or two about the transmission and reception of radio signals.

# **Two Types of Signals**

There are two basic types of radio signals... AM or Amplitude Modulation, in which the transmitted sound causes the amplitude, or height, of the radio waves to vary... and FM or Frequency Modulation, in which the frequency of the wave is varied to carry the sound.



# **Electrical Disturbances**

Radio waves may pick up electrical disturbances during transmission. They mainly affect the wave amplitude, and thus remain a part of the AM reception. They interfere very little with the frequency variations that carry the FM signal.

# **AM Reception**

AM sound is based on wave amplitude, so AM reception can be disrupted by such things as lightning, power lines and neon signs.

# **FM Reception**

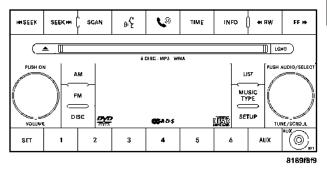
Because FM transmission is based on frequency variations, interference that consists of amplitude variations can be filtered out, leaving the reception relatively clear, which is the major feature of FM radio.

**NOTE:** The radio, steering wheel radio controls (if equipped), and 6 disc CD/DVD changer (if equipped) will remain active for up to 10 minutes after the ignition switch has been turned off. Opening a vehicle front door will cancel this feature.

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# SALES CODE REQ — AM/FM STEREO RADIO AND 6–DISC CD/DVD CHANGER (MP3/WMA AUX JACK)

**NOTE:** The radio sales code is located on the lower right side of your radio faceplate.



**REQ Radio** 

4



# **Operating Instructions - Radio Mode**

**NOTE:** The ignition switch must be in the ON or ACC position to operate the radio.

#### Power Switch/Volume Control (Rotary)

Press the ON/VOL control to turn the radio ON. Press the ON/VOL a second time to turn OFF the radio.

# **Electronic Volume Control**

The electronic volume control turns continuously (360 degrees) in either direction without stopping. Turning the volume control to the right increases the volume and to the left decreases it.

When the audio system is turned on, the sound will be set at the same volume level as last played.

# **SEEK Buttons (Radio Mode)**

Press and release the SEEK buttons to search for the next listenable station in AM/FM mode. Press the right switch to seek up and the left switch to seek down. The radio will remain tuned to the new station until you make another selection. Holding either button will bypass stations without stopping until you release it.

# SCAN Button (Radio Mode)

Pressing the SCAN button causes the tuner to search for the next listenable station, in either AM, FM or Satellite (if equipped) frequencies, pausing for 5 seconds at each listenable station before continuing to the next. To stop the search, press SCAN a second time.

#### **INFO Button (Radio Mode)**

Press the INFO button for an RDS station (one with call letters displayed). The radio will return a Radio Text message broadcast from an FM station (FM mode only).

#### **TIME Button**

Press the TIME button and the time of day will be displayed. In AM or FM mode, pressing the TIME button will switch between the time and frequency displays.

#### **Clock Setting Procedure**

1. Press and hold the TIME button, until the hours blink.

2. Adjust the hours by turning the right side TUNE control knob.



3. After the hours are adjusted, press the right side TUNE control knob to set the minutes. The minutes will begin to blink.

4. Adjust the minutes using the right side TUNE control knob. Press the TUNE control knob to save time change.

5. To exit, press any button/knob or wait 5 seconds.

The clock can also be set by pressing the SETUP button and selecting the "SET HOME CLOCK" entry. Once in this display follow the above procedure, starting at step 2.

# **RW/FF (Radio Mode)**

Pressing the rewind or fast forward button causes the tuner to search for the next frequency in the direction of the arrows. This feature operates in either AM, FM or Satellite (if equipped) frequencies.

#### **TUNE Control (Radio Mode)**

Turn the right side rotary control clockwise to increase or counter-clockwise to decrease the frequency.

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### Setting the Tone, Balance, and Fade

Press the rotary TUNE control knob and BASS will display. Turn the TUNE control knob to the right or left to increase or decrease the Bass tones.

Press the rotary TUNE control knob a second time and MID will display. Turn the TUNE control knob to the right or left to increase or decrease the Mid Range tones.

Press the rotary TUNE control knob a third time and TREBLE will display. Turn the TUNE control knob to the right or left to increase or decrease the Treble tones.

Press the rotary TUNE control knob a fourth time and BALANCE will display. Turn the TUNE control knob to the right or left to adjust the sound level from the right or left side speakers.

Press the rotary TUNE control knob a fifth time and FADE will display. Turn the TUNE control knob to the left or right to adjust the sound level between the front and rear speakers.

Press the rotary TUNE control knob again to exit setting tone, balance and fade.



#### **MUSIC TYPE Button (Radio Mode)**

Pressing this button once will turn on the Music Type mode for 5 seconds. Pressing the Music Type button or turning the TUNE control knob within 5 seconds will allow the program format type to be selected. Many radio stations do not currently broadcast Music Type information.

Toggle the Music Type button to select the following format types:

Program Type	16 Digit-Character Dis- play
No program type or un- defined	None
Adult Hits	Adlt Hit
Classical	Classicl
Classic Rock	Cls Rock
College	College
Country	Country
Foreign Language	Language
Information	Inform
Jazz	Jazz

News	News
Nostalgia	Nostalga
Oldies	Oldies
Personality	Persnlty
Public	Public
Rhythm and Blues	R & B
Religious Music	Rel Musc
Religious Talk	Rel Talk
Rock	Rock
Soft	Soft
Soft Rock	Soft Rck
Soft Rhythm and Blues	Soft R&B
Sports	Sports
Talk	Talk
Тор 40	Тор 40
Weather	Weather

By pressing the SEEK button when the Music Type icon is displayed, the radio will be tuned to the next frequency station with the same selected Music Type name. The Music Type function only operates when in the FM mode.



If a preset button is activated while in the Music Type (Program Type) mode, the Music Type mode will be exited and the radio will tune to the preset station.

# **SETUP Button**

Pressing the SETUP button allows you to select between the following items:

**NOTE:** Use Tune Control Knob to scroll through the entries, and push Audio/Select button to select an entry and make changes.

• **DVD Enter** - When the disc is in DVD Menu mode, selecting DVD Enter will allow you to play the current highlighted selection. Use the remote control to scroll up and down the menu (If Equipped).



 DISC Play/Pause - You can toggle between playing the DVD or pausing the DVD, by pushing the SELECT button (If Equipped).

• **DVD Play Options** - Selecting the DVD Play Options will display the following:

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- Subtitle Repeatedly Pressing SELECT will switch subtitles to different subtitle languages that are available on the disc (If Equipped).
- Audio Stream Repeatedly Pressing SELECT will switch to different audio languages (if supported on the disc) (If Equipped).
- Angle Repeatedly Pressing SELECT will change 4 the viewing angle if it is supported by the DVD disc (If Equipped).

**NOTE:** The available selections for each of the above entries varies depending upon the disc.

**NOTE:** These selections can only be made while playing a DVD.

- **VES Power** Allows you to turn VES ON and OFF (If Equipped).
- **VES Lock** Locks out rear VES remote controls (If Equipped).
- VES CH1/CH2 Allows the user to change mode of either the IR1 or IR2, wireless headphones, by pressing the Audio/Select button (If Equipped).



- Set Home Clock Pressing the SELECT button will allow user to set the clock. Turn TUNE control knob to adjust the hours then press and turn the TUNE control knob to adjust the minutes. Press the TUNE control knob again to save changes.
- **Player Defaults** Selecting this item will allow the user to scroll through the following items, and set defaults according to customer preference.

# Menu Language — If Equipped

Selecting this item will allow the user to choose the default startup DVD menu language (effective only if language supported by disc). If customer wishes to select a language not listed, then scroll down and select "other." Enter the 4 digit country code using the TUNE control knob to scroll up and down to select the # and then push to select.

# Audio Language — If Equipped

Selecting this item will allow the user to choose a default audio language (effective only if language supported by disc). If customer wishes to select a language not listed, then scroll down and select "other." Enter the country code using the TUNE control knob to scroll up and down to select the # and then push to select.

# Subtitle Language — If Equipped

Selecting this item will allow the user to choose a default subtitle language (effective only if language supported by disc). If customer wishes to select a language not listed, then scroll down and select "other." Enter the country code using the TUNE control knob to scroll up and down to select the # and then push to select.

# Subtitles — If Equipped

Selecting this item will allow the user to choose between subtitle OFF or ON.

# Audio DRC — If Equipped

Selecting this item will allow the user to limit maximum audio dynamic range - The default is set to "High" and under this setting, dialogues are played at 11 db higher than if the setting is "Normal."



# Aspect Ratio — If Equipped

Selecting this item will allow the user to choose between wide screen, pan scan, and letter box.

# AutoPlay — If Equipped

When this is set to ON and a DVD video is inserted, it will bypass the DVD menu screen and automatically play the movie. In some rare cases, the DVD player may not auto play the main title. In such cases, use the menu button on the remote control to select desired title to play.

**NOTE:** The user will have to set these defaults before loading a disc. If changes are made to these settings after a disc is loaded, changes will not be effective. Also, the defaults are effective only if the disc supports the customer preferred settings.

**AM and FM Buttons (Radio Mode)** Press buttons to select AM or FM Modes.

# SET Button (Radio Mode) — To Set the Push-Button Memory

When you are receiving a station that you wish to commit to push-button memory, press the SET button.

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The symbol SET 1 will now show in the display window. Select the button (1-6) you wish to lock onto this station and press and release that button. If a button is not selected within 5 seconds after pressing the SET button, the station will continue to play but will not be stored into push-button memory.

You may add a second station to each push-button by repeating the above procedure with this exception: Press the SET button twice and SET 2 will show in the display window. Each button can be set for SET 1 and SET 2 in both AM and FM. This allows a total of 12 AM,12 FM and 12 Satellite (if equipped) stations to be stored into push-button memory. The stations stored in SET 2 memory can be selected by pressing the push-button twice.

Every time a preset button is used a corresponding button number will be displayed.

# Buttons 1 - 6 (Radio Mode)

These buttons tune the Radio to the stations that you commit to push-button memory {12 AM, 12 FM, and 12 Satellite (if equipped) stations}.



# **DISC Button**

Pressing the DISC button will allow you to switch from AM/FM modes to Disc modes.

# Operation Instructions - (DISC MODE for CD and MP3/WMA Audio Play, DVD-VIDEO)

The radio DVD player and many DVD discs are coded by geographic region. These region codes must match in order for the disc to play. If the region code for the DVD disc does not match the region code for the radio DVD player, it will not play the disc. Customers may take their vehicle to a authorized dealer to change the region code of the player a maximum total of 5 times.

# CAUTION!

The radio may shut down during extremely hot conditions. When this occurs, the radio will indicate "Disc Hot" and shut off until a safe temperature is reached. This shutdown is necessary to protect the optics of the DVD player and other radio internal components. **NOTE:** The ignition switch must be in the ON or ACC position to operate the radio.

# LOAD Button — Loading Compact Disc(s)

Press the LOAD button and the push-button with the corresponding number (1-6) where the CD is being loaded. The radio will display PLEASE WAIT and prompt when to INSERT DISC. After the radio displays "INSERT DISC," insert the CD into the player.

Radio display will show "LOADING DISC" when the disc is loading and "READING DISC" when the radio is reading the disc.

# **CAUTION!**

• This CD player will accept 4 3/4 inch (12 cm) discs only. The use of other sized discs may damage the CD player mechanism.



# Eject Button — Ejecting Compact Disc(s)



Press the eject button and the push-button with the corresponding number (1-6) where the CD was loaded and the disc will unload and move to the entrance for easy removal. Radio display

will show "EJECTING DISC" when the disc is being ejected and prompt the user to remove the disc.

Press and hold the eject button for 5 seconds and all CDs will be ejected from the radio.

The disc can be ejected with the radio and ignition OFF.

# **SEEK Button (CD MODE)**

Press the right SEEK button for the next selection on the CD. Press the left SEEK button to return to the beginning of the current selection, or return to the beginning of the previous selection if the CD is within the first second of the current selection. Pressing and holding the SEEK button will allow to scroll through tracks faster in CD, MP3/MWA modes.

#### SCAN Button (CD MODE)

Press the Scan button to scan through each track on the CD currently playing.

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### TIME Button (CD MODE)

Press this button to change the display from a large CD playing time display to a small CD playing time display.

#### **RW/FF (CD MODE)**

Press and hold FF (Fast Forward) and the CD player will begin to fast forward until FF is released or RW or another CD button is pressed. The RW (Reverse) button **4** works in a similar manner.

# AM or FM Button (CD MODE)

Switches the Radio to the Radio mode.

# RND Button (Random Play Button) (CD MODE)

Press this button while the CD is playing to activate Random Play. This feature plays the selections on the compact disc in random order to provide an interesting change of pace.

Press the right SEEK button to move to the next randomly selected track.

Press the RND button a second time to stop Random Play.



# Notes On Playing MP3/WMA Files

The radio can play MP3/WMA files, however, acceptable MP3/WMA file recording media and formats are limited. When writing MP3/WMA files, pay attention to the following restrictions.

# Supported Media (Disc Types)

The MP3/WMA file recording media supported by the radio are CDDA, CD-R, CD-RW, MP3,WMA, DVD Video, DVD-R, DVD-RW, DVD+R, DVD+RW, and CDDA+MP3.

# Supported Medium Formats (File Systems)

The medium formats supported by the radio are ISO 9660 Level 1 and Level 2 and includes the Joliet extension. When reading discs recorded using formats other than ISO 9660 Level 1 and Level 2, the radio may fail to read files properly and may be unable to play the file normally. UDF and Apple HFS formats are not supported.

The radio uses the following limits for file systems:

- Maximum number of directory levels: 8
- Maximum number of files: 255
- Maximum number of folders: 100

- Maximum number of characters in file/folder names:
  - Level 1: 12 (including a separator "." and a 3-character extension)
  - Level 2: 31 (including a separator "." and a 3-character extension)

Multisession disc formats are supported by the radio. Multisession discs may contain combinations of normal CD audio tracks and computer files (including MP3/ WMA files). Discs created with an option such as "keep disc open after writing" are most likely multisession discs. The use of multisession for CD audio or MP3/ WMA playback may result in longer disc loading times.

If a disc contain multi formats, such as CD audio and mp3/wma tracks, the radio will only play the mp3/wma tracks on that disc.

# Supported MP3/WMA File Formats

The radio will recognize only files with the \*.MP3/WMA extension as MP3/WMA files. Non-MP3/WMA files named with the \*.MP3/WMA extension may cause playback problems. The radio is designed to recognize the file as an invalid MP3/WMA and will not play the file.



When using the MP3/WMA encoder to compress audio data to an MP3/WMA file, the bit rate and sampling frequencies in the following table are supported. In addition, variable bit rates (VBR) are also supported. The majority of MP3/WMA files use a 44.1 kHz sampling rate and a 192, 160, 128, 96 or VBR bit rates.

MPEG Specification	Sampling Fre- quency (kHz)	Bit rate (kbps)
MPEG-1 Audio Layer 3	48, 44.1, 32	320, 256, 224, 192, 160, 128, 112, 96, 80, 64, 56, 48
MPEG-2 Audio Layer 3	24, 22.05, 16	160, 128, 144, 112, 96, 80, 64, 56, 48

WMA Specification	Sampling Fre- quency (kHz)	Bit Rate (kbps)
WMA	44.1 and 48	48, 64, 96, 128, 160, 192 VBR

ID3 Tag information for artist, song title and album title are supported for version 1 ID3 tags. ID3 version 2 is not supported by the radios.

# UNDERSTANDING YOUR INSTRUMENT PANEL 169

Playlist files are not supported. MP3 Pro files are not supported.

#### Playback of MP3/WMA Files

When a medium containing MP3/WMA data is loaded, the radio checks all files on the medium. If the medium contains a lot of folders or files, the radio will take more time to start playing the MP3/WMA files.

Loading times for playback of MP3/WMA files may be affected by the following:

- Media CD-RW media may take longer to load than CD-R media
- Medium formats Multisession discs may take longer to load than non-multisession discs
- Number of files and folders Loading times will increase with more files and folders

To increase the speed of disc loading, it is recommended to use CD-R media and single-session discs. To create a single-session disc, enable the Disc at Once option before writing to the disc.



# LIST Button (DISC Mode for MP3/WMA Play)

Pressing the LIST button will bring up a list of all folders on the disc. Scrolling up or down the list is done by turning the TUNE control knob. Selecting a folder by pressing the TUNE control knob will begin playing the files contained in that folder (or the next folder in sequence if the selection does not contain playable files).

The folder list will time out after 5 seconds.

# INFO Button (DISC Mode for MP3/WMA Play)

Pressing the INFO button repeatedly will scroll through the following TAG information: Song Title, Artist, File Name, and Folder Name (if available).

Press the INFO button once more to return to "elapsed time" priority mode.

Press and hold the INFO button for 3 seconds or more and radio will display song titles for each file.

Press and hold the INFO button again for 3 seconds to return to "elapsed time" display.

# **Operation Instructions - Auxiliary Mode**

The auxiliary (AUX) jack is an audio input jack, which allows the user to plug in a portable device such as an MP3/WMA player, cassette player or microphone and utilize the vehicle's audio system to amplify the source and play through the vehicle speakers.

Pushing the AUX button will change the mode to auxiliary device if the AUX jack is connected.

**NOTE:** The AUX device must be turned on and the device's volume set to proper level. If the AUX audio is not loud enough, turn the device's volume up. If the AUX audio sounds distorted, turn the device's volume down.

**SEEK Button (Auxiliary Mode)** No function.

**SCAN Button (Auxiliary Mode)** No function.

EJECT Button (Auxiliary Mode) No function.





# **PSCAN Button (Auxiliary Mode)** No function.

# TIME Button (Auxiliary Mode)

Press this button to change the display from elapsed playing time to time of day. The time of day will be displayed for 5 seconds.

# **RW/FF** (Auxiliary Mode)

No function.

SET Button (Auxiliary Mode) No function.

# **Operating Instructions - Hands Free Phone (If** Equipped)

Refer to Hands Free Phone in Section 3 of the Owner's Manual.

# **Operating Instructions - Satellite Radio Mode (If** Equipped)

Refer to the Satellite Radio section of the Owner's Manual.

#### UNDERSTANDING YOUR INSTRUMENT PANEL 171

# **Operating Instructions - Video Entertainment** System (VES<sup>®</sup>) (If Equipped)

Refer to separate Video Entertainment System (VES®) Guide.

# Dolby

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# Macrovision

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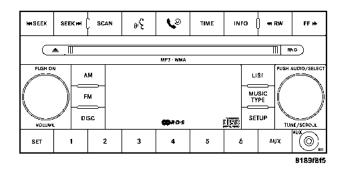
# DTS

"DTS" and "DTS 2.0" are trademarks of Digital Theater Systems, Inc.



# SALES CODE RES — AM/FM STEREO RADIO WITH CD PLAYER (MP3 AUX JACK)

**NOTE:** The radio sales code is located on the lower right side of your radio faceplate.





**NOTE:** The ignition switch must be in the ON or ACC position to operate the radio.

# Power Switch/Volume Control (Rotary)

Press the ON/VOLUME control knob to turn the radio on. Press the ON/VOLUME control knob a second time to turn the radio off.

# **Electronic Volume Control**

The electronic volume control turns continuously (360 degrees) in either direction without stopping. Turning the ON/VOLUME control knob to the right increases the volume and to the left decreases it.

When the audio system is turned on, the sound will be set at the same volume level as last played.

# **SEEK Buttons**

Press and release the SEEK buttons to search for the next listenable station in AM/FM mode. Press the right switch to seek up and the left switch to seek down. The radio will remain tuned to the new station until you make another selection. Holding either button will bypass stations without stopping until you release it.



# **SCAN Button**

Pressing the SCAN button causes the tuner to search for the next listenable station, in either AM or FM frequencies, pausing for 5 seconds at each listenable station before continuing to the next. To stop the search, press SCAN a second time.

# **INFO Button**

Press the INFO button for an RDS station (one with call letters displayed). The radio will return a Radio Text message broadcast from an FM station (FM mode only).

#### **TIME Button**

Press the TIME button and the time of day will be displayed. In AM or FM mode, pressing the TIME button will switch between the time and frequency displays.

### **Clock Setting Procedure**

1. Press and hold the TIME button, until the hours blink.

2. Adjust the hours by turning the right side TUNE control knob.

# UNDERSTANDING YOUR INSTRUMENT PANEL 173

3. After the hours are adjusted, press the right side TUNE control knob to set the minutes. The minutes will begin to blink.

4. Adjust the minutes using the right side TUNE control knob. Press the TUNE control knob to save time change.

5. To exit, press any button/knob or wait 5 seconds.

The clock can also be set by pressing the SETUP button, and selecting SET CLOCK. Once in this display follow the above procedure, starting at step 2.

#### RW/FF

Pressing the RW (Rewind) or FF (Fast Forward) buttons causes the tuner to search for the next frequency in the direction of the arrows. This feature operates in either AM or FM frequencies.

#### **TUNE Control**

Turn the right side rotary control clockwise to increase or counter-clockwise to decrease the frequency.



# Setting the Tone, Balance, and Fade

Press the rotary TUNE control knob and BASS will display. Turn the TUNE control knob to the right or left to increase or decrease the Bass tones.

Press the rotary TUNE control knob a second time and MID will display. Turn the TUNE control knob to the right or left to increase or decrease the Mid Range tones.

Press the rotary TUNE control knob a third time and TREBLE will display. Turn the TUNE control knob to the right or left to increase or decrease the Treble tones.

Press the rotary TUNE control knob a fourth time and BALANCE will display. Turn the TUNE control knob to the right or left to adjust the sound level from the right or left side speakers.

Press the rotary TUNE control knob a fifth time and FADE will display. Turn the TUNE control knob to the left or right to adjust the sound level between the front and rear speakers.

Press the rotary TUNE control knob again to exit setting tone, balance and fade.

### **MUSIC TYPE Button**

Pressing this button once will turn on the Music Type mode for 5 seconds. Pressing the Music Type button or turning the TUNE control knob within 5 seconds will allow the program format type to be selected. Many radio stations do not currently broadcast Music Type information.

Toggle the Music Type button to select the following format types:

Program Type	16 Digit-Character Dis- play
No program type or un- defined	None
Adult Hits	Adlt Hit
Classical	Classicl
Classic Rock	Cls Rock
College	College
Country	Country
Foreign Language	Language
Information	Inform
Jazz	Jazz



News	News
Nostalgia	Nostalga
Oldies	Oldies
Personality	Persnlty
Public	Public
Rhythm and Blues	R & B
Religious Music	Rel Musc
Religious Talk	Rel Talk
Rock	Rock
Soft	Soft
Soft Rock	Soft Rck
Soft Rhythm and Blues	Soft R&B
Sports	Sports
Talk	Talk
Тор 40	Тор 40
Weather	Weather

By pressing the SEEK button when the Music Type icon is displayed, the radio will be tuned to the next frequency station with the same selected Music Type name. The Music Type function only operates when in the FM mode.

### UNDERSTANDING YOUR INSTRUMENT PANEL 175

If a preset button is activated while in the Music Type (Program Type) mode, the Music Type mode will be exited and the radio will tune to the preset station.

## **SETUP Button**

Pressing the SETUP button allows you to select between the following items:

• Set Clock — Pressing the SELECT button will allow user to set the clock. Turn TUNE control knob to adjust the hours then press and turn the TUNE control knob to adjust the minutes. Press the TUNE control knob again to save changes.

# AM and FM Buttons

Press buttons to select AM or FM Modes.

#### SET Button — To Set the Push-Button Memory

When you are receiving a station that you wish to commit to push-button memory, press the SET button. The symbol SET 1 will now show in the display window. Select the button (1-6) you wish to lock onto this station and press and release that button. If a button is not selected within 5 seconds after pressing the SET button, the station will continue to play but will not be stored into push-button memory.



You may add a second station to each push-button by repeating the above procedure with this exception: Press the SET button twice and SET 2 will show in the display window. Each button can be set for SET 1 and SET 2 in both AM and FM. This allows a total of 12 AM and 12 FM stations to be stored into push-button memory. The stations stored in SET 2 memory can be selected by pressing the push-button twice.

Every time a preset button is used a corresponding button number will be displayed.

#### Buttons 1 - 6

These buttons tune the radio to the stations that you commit to push-button memory {12 AM and 12 FM stations}.

# **DISC Button**

Pressing the DISC button will allow you to switch from AM/FM modes to Disc modes.

# Operation Instructions - CD MODE for CD and MP3 Audio Play

**NOTE:** The ignition switch must be in the ON or ACC position to operate the radio.

**NOTE:** This Radio is capable of playing compact discs (CD), recordable compact discs (CD-R), rewritable compact discs (CD-RW) compact discs with MP3 tracks and multisession compact discs with CD and MP3 tracks.

# Inserting Compact Disc(s)

Gently insert one CD into the CD player with the CD label facing up. The CD will automatically be pulled into the CD Player and the CD icon will illuminate on the radio display. If a CD does not go into the slot more than an inch, a disc may already be loaded and must be ejected before a new disc can be loaded.

If you insert a disc with the ignition ON and the radio ON, the unit will switch from radio to CD mode and begin to play when you insert the disc. The display will show the disc number, the track number, and index time in minutes and seconds. Play will begin at the start of track 1.



# **CAUTION!**

- This CD player will accept 4 3/4 inch (12 cm) discs only. The use of other sized discs may damage the CD player mechanism.
- Do not use adhesive labels. These labels can peel away and jam the player mechanism.
- RES is a single CD player. Do not attempt to insert a second CD if one is already loaded.
- Dual-media disc types (one side is a DVD, the other side is a CD) should not be used, and can cause damage to the player.

# EJECT Button - Ejecting a CD



Press the EJECT button to eject the CD.

If you have ejected a disc and have not removed it within 10 seconds, it will be reloaded. If the CD is not removed, the radio will reinsert the CD but will not play it.

# UNDERSTANDING YOUR INSTRUMENT PANEL 177

A disc can be ejected with the radio and ignition OFF.

NOTE: Ejecting with ignition OFF is not allowed on convertible or soft-top models (if equipped).

# **SEEK Button**

Press the right SEEK button for the next selection on the CD. Press the left SEEK button to return to the beginning of the current selection, or return to the beginning of the previous selection if the CD is within the first second of the current selection. Pressing and holding the SEEK button will allow to scroll through tracks faster in CD, MP3 modes.

# SCAN Button

Press the Scan button to scan through each track on the CD currently playing.

# **TIME Button**

Press this button to change the display from a large CD playing time display to a small CD playing time display.

# RW/FF

Press the RW button to stop the CD at the beginning of the current CD track/title.



Press and hold FF (Fast Forward) and the CD player will begin to fast forward until FF is released or RW or another CD button is pressed. The RW (Reverse) button works in a similar manner.

#### AM or FM Button

Switches the Radio to the Radio mode.

#### **RND Button (Random Play Button)**

Press this button while the CD is playing to activate Random Play. This feature plays the selections on the compact disc in random order to provide an interesting change of pace.

Press the right SEEK button to move to the next randomly selected track.

Press the RND button a second time to stop Random Play.

# **Notes On Playing MP3 Files**

The radio can play MP3 files, however, acceptable MP3 file recording media and formats are limited. When writing MP3 files, pay attention to the following restrictions.

# Supported Media (Disc Types)

The MP3 file recording media supported by the radio are CDDA, CD-R, CD-RW, MP3, and CDDA+MP3.

#### Supported Medium Formats (File Systems)

The medium formats supported by the radio are ISO 9660 Level 1 and Level 2 and includes the Joliet extension. When reading discs recorded using formats other than ISO 9660 Level 1 and Level 2, the radio may fail to read files properly and may be unable to play the file normally. UDF and Apple HFS formats are not supported.

The radio uses the following limits for file systems:

- Maximum number of folder levels: 8
- Maximum number of files: 255
- Maximum number of folders (The radio display of file names and folder names is limited. For large numbers of files and/or folders, the radio may be unable to display the file name and folder name and will assign a number instead. With a maximum number of files, exceeding 20 folders will result in this display. With 200 files, exceeding 50 folders will result in this display.



- Maximum number of characters in file/folder names:
  - Level 1: 12 (including a separator "." and a 3-character extension)
  - Level 2: 31 (including a separator "." and a 3-character extension)

Multisession disc formats are supported by the radio. Multisession discs may contain combinations of normal CD audio tracks and computer files (including MP3 files). Discs created with an option such as "keep disc open after writing" are most likely multisession discs. The use of multisession for CD audio or MP3 playback may result in longer disc loading times.

#### Supported MP3 File Formats

The radio will recognize only files with the \*.MP3 extension as MP3 files. Non-MP3 files named with the \*.MP3 extension may cause playback problems. The radio is designed to recognize the file as an invalid MP3 and will not play the file.

When using the MP3 encoder to compress audio data to an MP3 file, the bit rate and sampling frequencies in the following table are supported. In addition, variable bit rates (VBR) are also supported. The majority of MP3 files use a 44.1 kHz sampling rate and a 192, 160, 128, 96 or VBR bit rates.

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MPEG Specifi- cation	Sampling Fre- quency (kHz)	Bit Rate (kbps)
MPEG-1 Audio Layer 3	48, 44.1, 32	320, 256, 224, 192, 160, 128, 112, 96, 80, 64, 56, 48, 40, 32
MPEG-2 Audio Layer 3	24, 22.05, 16	160, 128, 144, 112, 96, 80, 64, 56, 48, 40, 32, 24, 16, 8

ID3 Tag information for artist, song title and album title are supported for version 1 ID3 tags. ID3 version 2 is not supported by the radios.

Playlist files are not supported. MP3 Pro files are not supported.



# Playback of MP3 Files

When a medium containing MP3 data is loaded, the radio checks all files on the medium. If the medium contains a lot of folders or files, the radio will take more time to start playing the MP3 files.

Loading times for playback of MP3 files may be affected by the following:

- Media CD-RW media may take longer to load than CD-R media
- Medium formats Multisession discs may take longer to load than non-multisession discs
- Number of files and folders Loading times will increase with more files and folders

To increase the speed of disc loading, it is recommended to use CD-R media and single-session discs. To create a single-session disc, enable the Disc at Once option before writing to the disc.

# LIST Button (CD Mode for MP3 Play)

Pressing the LIST button will bring up a list of all folders on the disc. Scrolling up or down the list is done by turning the TUNE control knob. Selecting a folder by pressing the TUNE control knob will begin playing the files contained in that folder (or the next folder in sequence if the selection does not contain playable files).

The folder list will time out after 5 seconds.

#### INFO Button (CD Mode for MP3 Play)

Pressing the INFO button repeatedly will scroll through the following TAG information: Song Title, Artist, File Name, and Folder Name (if available).

Press the INFO button once more to return to "elapsed time" priority mode.

Press and hold the INFO button for 3 seconds or more and radio will display song titles for each file.

Press and hold the INFO button again for 3 seconds to return to "elapsed time" display.



# **Operation Instructions - Auxiliary Mode**

The auxiliary (AUX) jack is an audio input jack, which allows the user to plug in a portable device such as an MP3 player, or cassette player, and utilize the vehicle's audio system to amplify the source and play through the vehicle speakers.

Pushing the AUX button will change the mode to auxiliary device if the AUX jack is connected.

**NOTE:** The AUX device must be turned on and the device's volume set to proper level. If the AUX audio is not loud enough, turn the device's volume up. If the AUX audio sounds distorted, turn the device's volume down.

#### **TIME Button (Auxiliary Mode)**

Press this button to change the display to time of day. The time of day will be displayed for 5 seconds (when ignition is off).

# **Operating Instructions - Hands Free Phone (If Equipped)**

Refer to Hands Free Phone in Section 3 of the Owner's Manual.

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# Operating Instructions - Satellite Radio Mode (If Equipped)

Refer to the Satellite Radio section of the Owner's Manual.

# Operating Instructions - Video Entertainment System (VES<sup>®</sup>) (If Equipped)

Refer to separate Video Entertainment System (VES<sup>®</sup>) **4** Guide.

# SALES CODE RER — AM/FM/CD/DVD RADIO WITH NAVIGATION SYSTEM — IF EQUIPPED

**NOTE:** The radio sales code is located on the lower right side of your radio faceplate.

Satellite Navigation Radio with CD Player with MP3 Capability (RER) - combines a Global-Positioning System-based navigation system with an integrated color screen to provide maps, turn identification, selection menus and instructions for selecting a variety of destinations and routes.



This radio has a hard drive. CD's can be ripped to the hard drive, and the map data comes loaded on the hard drive. Refer to your "Navigation User's Manual" for detailed operating instructions.

#### **Operating Instructions — Satellite Radio**

Refer to your "Navigation User's Manual" for detailed operating instructions.

# **Clock Setting Procedure**

The GPS receiver used in this system is synchronized to the time data being transmitted by the GPS satellite. The satellites' clock is Greenwich Mean Time (GMT). This is the worldwide standard for time. This makes the system's clock very accurate once the appropriate time zone and daylight savings information is set.

To manually set the clock, change the time zone, or change daylight savings information, use a ball point pen or similar object to press the hour (H) or minute (M) buttons on the radio. The **Setup** screen appears.

# Setting the Clock

1. Turn the ignition switch to the ON or ACC position. Using the tip of a ballpoint pen or similar object, press

either the H button on the faceplate to change the hour or the M button on the faceplate to change the minute.

2. The time setting will increase each time you press the button. Holding either button in will fast forward the setting.

3. If no changes are made within 5 seconds of accessing the **Setup** screen, the screen will time out and you will be taken to the last mode.

**NOTE:** To reset the clock, select the appropriate time zone and press ENTER. The clock will revert to the accurate time based on the time zone you selected.

# Changing the Time Zone

1. Highlight "Clock Setup" and press ENTER.

2. At the **Clock Setup** screen highlight the box next to "Time Zone" and press ENTER.

3. Highlight the appropriate time zone for you location and press ENTER to store your selection. Select "Done" when finished.



NOTE: When you are traveling and enter a new time zone, the cluck must be reset manually for the new zone.

# **Changing Daylight Savings Time**

1. Highlight the box next to "Time" and press ENTER.

2. Select Daylight Savings when Daylight Savings Time is in effect or Select Standard if Daylight Savings Time is not being observed. press ENTER.

3. Select "Done" when finished.

Select "Done" to exit from the clock setting mode.

# SATELLITE RADIO — IF EQUIPPED

Satellite radio uses direct satellite to receiver broadcasting technology to provide clear digital sound, coast to coast. The subscription service provider is Sirius<sup>™</sup> Satellite Radio. This service offers up to 100 channels of music, sports, news, entertainment, and programming for children, directly from its satellites and broadcasting studios.

# System Activation

Sirius Satellite Radio service is pre-activated, and you may begin listening immediately to the one year of SIRIUS audio service that is included with the factoryinstalled satellite radio system in your vehicle. Sirius will contact you to supply a welcome kit and to confirm subscription information, including the set up of your on-line listening account at no additional charge. For 4 further information, call the toll-free number 888-539-7474, or visit the Sirius web site at www.sirius.com. Please have the following information available when calling:

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1. The Electronic Serial Number/Sirius Identification Number (ESN/SID).

2. Your Vehicle Identification Number.

# **Electronic Serial Number/Sirius Identification** Number (ENS/SID)

The Electronic Serial Number/Sirius Identification Number is needed to activate your Sirius Satellite Radio system. To access the ESN/SID, refer to the following steps:



#### ESN/SID Access With RSC Radios

With the ignition switch in the ON/RUN or ACCESSORY position and the radio ON, press the SETUP button and scroll using the TUNE control knob until Sirius ID is selected. Press the TUNE control knob and the Sirius ID number will be displayed. The Sirius ID number display will time out in 2 minutes. Press any button on the radio to exit this screen.

# Selecting Satellite Mode (RSC Radios)

Press the SAT button until "SAT" appears in the display. A CD may remain in the radio while in the Satellite radio mode.

#### Satellite Antenna

To ensure optimum reception, do not place items on the roof around the rooftop antenna location or strap items to the trunk lid around the trunk lid antenna (if equipped). Metal objects placed within the line of sight of the antenna will cause decreased performance. Larger luggage items such as bikes should be placed as far rearward as possible, within the loading design of the rack. Do not place items directly on or above the antenna.

# **Reception Quality**

Satellite reception may be interrupted due to one of the following reasons.

- The vehicle is parked in an underground parking structure or under a physical obstacle.
- Dense tree coverage may interrupt reception in the form of short audio mutes.
- Driving under wide bridges or along tall buildings can cause intermittent reception.
- Placing objects over or too close to the antenna can cause signal blockage.

#### **Operating Instructions - Satellite Mode**

**NOTE:** The ignition switch must be in the ON or ACC position to operate the radio.

# **SEEK Buttons**

Press and release the SEEK buttons to search for the next channel in Satellite mode. Press the right switch to seek up and the left switch to seek down. The radio will



remain tuned to the new channel until you make another selection. Holding either button will bypass channels without stopping until you release it.

#### **SCAN Button**

Pressing the SCAN button causes the tuner to search for the next channel, pausing for 8 seconds before continuing to the next. To stop the search, press SCAN a second time.

# **INFO Button**

Pressing the INFO button will cycle between Artist, Song Title, and Composer (if available) information. Also, pressing and holding the INFO button for an additional 3 seconds will make the radio display the Song Title all of the time (press and hold again to return to normal display).

#### RW/FF

Pressing the RW (Rewind) or FF (Fast Forward) buttons causes the tuner to search for the next channel in the direction of the arrows.

#### **TUNE Control (Rotary)**

Turn the right side rotary control clockwise to increase or counter-clockwise to decrease the channel.

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# **MUSIC TYPE Button**

Pressing this button once will turn on the Music Type mode for 5 seconds. Pressing the MUSIC TYPE button or turning the TUNE control knob within 5 seconds will allow the program format type to be selected.

Toggle the MUSIC TYPE button again to select the music type.

By pressing the SEEK button when the Music Type function is active, the radio will be tuned to the next channel with the same selected Music Type name.

If a preset button is activated while in the Music Type (Program Type) mode, the Music Type mode will be exited and the radio will tune to the preset channel.

# **SETUP Button**

Pressing the SETUP button allows you to select the following items:

 Display Sirius ID number — Press the SELECT button to display the Sirius ID number. This number is used to activate, deactivate, or change the Sirius subscription.



# SET Button — To Set the Push-Button Memory

When you are receiving a channel that you wish to commit to push-button memory, press the SET button. The symbol SET 1 will now show in the display window. Select the button (1-6) you wish to lock onto this channel and press and release that button. If a button is not selected within 5 seconds after pressing the SET button, the channel will continue to play but will not be stored into push-button memory.

You may add a second channel to each push-button by repeating the above procedure with this exception: Press the SET button twice and SET 2 will show in the display window. Each button can be set for SET 1 and SET 2. This allows a total of 12 Satellite channels to be stored into push-button memory. The channels stored in SET 2 memory can be selected by pressing the push-button twice.

Every time a preset button is used a corresponding button number will be displayed.

#### Buttons 1 - 6

These buttons tune the radio to the channels that you commit to push-button memory {12 Satellite stations}.

# Operating Instructions - Hands Free Phone (If Equipped)

Refer to Hands Free Phone in Section 3 of the Owner's Manual.

# Operating Instructions - Video Entertainment System (VES<sup>®</sup>) (If Equipped)

Refer to separate Video Entertainment System (VES®) Guide.



# VIDEO ENTERTAINMENT SYSTEM — IF EQUIPPED

The optional VES<sup>TM</sup> (Video Entertainment System) includes the following components for rear seat entertainment:

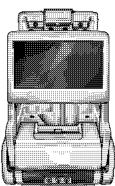
• A diagonal seven-inch liquid crystal display (LCD) screen integrated into the center console armrest. The screen features brightness control for optimum day-time and nighttime viewing.



Opening the Rear Seat Video Entertainment System

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• The LCD Screen swings up from the rear of the armrest to allow the rear seat passenger(s) to view the display.



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**VES<sup>TM</sup> Video Screen** 

- The touch screen radio and DVD player controls allow front seat operation for easy setup in the case of younger rear seat passengers.
- A battery-powered infrared remote control that snaps into a molded compartment in the center console armrest upper storage bin.



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- Two wireless infrared headsets allow rear seat passengers to listen to the same or individual audio sources.
- Audio/Video RCA Jacks (AUX Jacks) on the rear of the center console enable the monitor to display video directly from a video camera, connect video games for display on the screen or play music directly from an MP3 player.

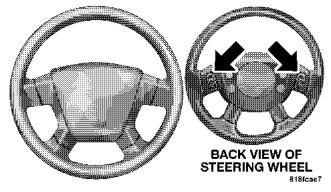
**NOTE:** Refer to your "Vehicle Entertainment System (VES<sup>TM</sup>) User Manual" for detailed operating instructions.

# **RADIO OPERATION AND CELLULAR PHONES**

Under certain conditions, the cellular phone being ON in your vehicle can cause erratic or noisy performance from your radio. This condition may be lessened or eliminated by relocating the cellular phone antenna. This condition is not harmful to the radio. If your radio performance does not satisfactorily "clear" by the repositioning of the antenna, it is recommended that the radio volume be turned down or off during cellular phone operation.

# REMOTE SOUND SYSTEM CONTROLS — IF EQUIPPED

The remote sound system controls are located on the rear surface of the steering wheel. Reach behind the wheel to access the switches.



# **Remote Sound Controls**

The right hand control is a rocker type switch with a push button in the center. Pressing the top of the switch will increase the volume and pressing the bottom of the switch will decrease the volume.



The button located in the center of the right hand control will switch modes to Radio or CD.

The left hand control is a rocker type switch with a push button in the center. The function of the left hand control is different depending on which mode you are in.

The following describes the left hand control operation in each mode.

# **Radio Operation**

Pressing the top of the switch will SEEK up for the next listenable station and pressing the bottom of the switch will SEEK down for the next listenable station.

The button located in the center of the left hand control will tune to the next pre-set station that you have programmed in the radio pre-set push-buttons.

### **CD** Player

Pressing the top of the switch once will go to the next track on the CD. Pressing the bottom of the switch once will go to the beginning of the current track or to the beginning of the previous track if it is within one second after the current track begins to play.

If you press the switch up or down twice it plays the second track, three times, it will play the third, etc.

The button in the center of the left hand switch changes CD's on the 6-Disc in-dash CD changer radio. This button does not function for all other radios.

# **CD/DVD DISC MAINTENANCE**

To keep the CD/DVD discs in good condition, take the following precautions:

1. Handle the disc by its edge; avoid touching the surface.

2. If the disc is stained, clean the surface with a soft cloth, wiping from center to edge.

3. Do not apply paper, paper CD labels, or tape to the disc; avoid scratching the disc.

4. Do not use solvents such as benzine, thinner, cleaners, or antistatic sprays.

5. Store the disc in its case after playing.

6. Do not expose the disc to direct sunlight.



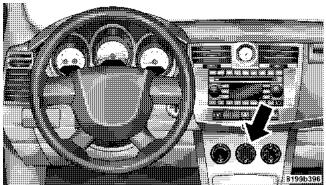
7. Do not store the disc where temperatures may become too high.

# **CLIMATE CONTROLS**

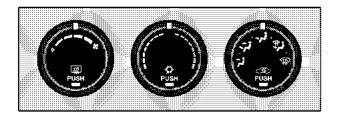
The Climate Control System allows you to balance the temperature, amount, and direction of air circulating throughout the vehicle. The controls are located on the instrument panel, below the radio.



The controls for the heating/air conditioning and ventilation system in this vehicle consist of a series of outer rotary dials inner push knobs. These comfort controls can be set to obtain desired interior conditions.



The air conditioning system of your vehicle contains R-134a, a refrigerant that does not deplete the ozone layer in the upper atmosphere.



81a10d01 Manual Air Conditioning and Heating Controls



The instrument panel features four airflow registers. Two registers are located on the outer ends of the instrument panel and two are located in the center of the instrument panel. These registers can be fully closed to partially block airflow, and they can be adjusted to direct airflow where the occupant desires.

There are four blower speeds.

Use this control to regulate

the amount of air forced through the system in any

mode you select. The blower

speed increases as you move

the control to the right from

the OFF position.

# **Blower Control**



8199cd22

UNDERSTANDING YOUR INSTRUMENT PANEL 191

**Temperature Control** 



Use this control to regulate the temperature of the air inside the passenger compartment. The blue area of the scale indicates cooler temperatures while the red area indicates warmer temperatures.

#### 8199cd20

**NOTE:** If your air conditioning performance seems lower than expected, check the front of the A/C condenser: located in front of the radiator, for an accumulation of dirt or insects. Clean with a gentle water spray from behind the radiator and through the condenser. Fabric front fascia protectors may reduce air flow to the condenser, reducing air conditioning performance.



## Mode Control (Air Direction)



Mode control allows you to choose from several patterns of air distribution. You can select either a primary mode, as identified by the symbols, or a blend of two of these modes. The closer the control is to a particular mode, the more air distribution you receive from that mode.

8199cd21

#### Panel Mode

Air is directed through the outlets in the instrument panel. These outlets can be adjusted to direct air flow.

#### **Bi-Level Mode**

Air is directed through the panel and floor outlets.

**NOTE:** There is a difference in temperature (in any conditions other than full cold or full hot), between the upper and lower outlets for added comfort. The warmer

air goes to the floor outlets. This feature gives improved comfort during sunny but cool conditions.

#### Floor Mode

Air is directed through the floor outlets with a small amount through the defrost and side window demist outlets.

# Mix Mode



 $\mathbf{W}_{\mathbf{P}}$  Air is directed through the floor, defrost and side window demist outlets. This setting works best in cold or snowy conditions that require extra heat at the windshield. This setting is good for maintaining comfort while reducing moisture on the windshield.

#### **Defrost Mode**

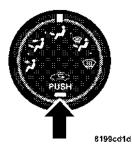
Air is directed through the windshield and side window demist outlets. Use this mode with maximum blower and temperature settings for best windshield and side window defrosting.

NOTE: The air conditioning compressor operates in Floor, Mix and Defrost, or a blend of these modes even if the Air Conditioning Snowflake button is not pressed.



This dehumidifies the air to help dry the windshield. To improve fuel economy, use these modes only when necessary.

# **Recirculation Control**



Use this button to choose between outside air intake or recirculation of the air inside the vehicle. A lamp will illuminate when you are in recirculate mode. Only use the recirculate mode to temporarily block out any outside odors, smoke, or dust and to cool the interior rapidly upon initial start up in very hot or humid weather.

# NOTE:

- Continuous use of the recirculation mode may make the inside air stuffy and window fogging may occur. Extended use of this mode is not recommended.
- In cold or damp weather, the use of the recirculation mode will cause windows to fog on the inside because

# UNDERSTANDING YOUR INSTRUMENT PANEL 193

of moisture build up inside the vehicle. For maximum defogging, select the Outside Air position.

- In order to prevent fogging, when the recirculation button is press and the mode control is set to panel or panel / floor, the A/C will engage automatically.
- The A/C can be deselected manually without disturbing the mode control selection.

#### Air Outlets

The airflow from each of the instrument panel outlets can be adjusted for direction and turned on or off to control air flow.

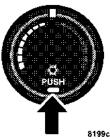
**NOTE:** For maximum airflow to the rear, the center instrument panel outlets can be aimed, so that they are directed toward the rear seat passengers.

#### **Economy Mode**

If economy mode is desired, press the A/C button to turn off the indicator light, and the A/C compressor. Move the temperature control lever to the desired temperature.



# Air Conditioning Operation



Use this button to engage the Air Conditioning. A lamp will illuminate when the Air Conditioning System is engaged

8199cd1e

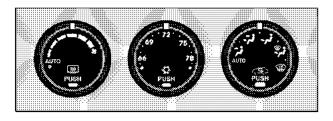
NOTE: The air conditioning compressor will not engage until the engine has been running for about 10 seconds.

#### MAX A/C

For maximum cooling use the A/C and recirculate buttons at the same time.

# Automatic Temperature Control (ATC)- If Equipped

The Infrared Climate Control System automatically maintains the climate in the cabin of the vehicle at the comfort levels desired by the driver and passenger. To accomplish this, the system gathers information from the cabin infrared sensor mounted between the sun-visors and from various sensors located throughout the vehicle.



819bfad4

#### Automatic Temperature Control

The controls on the climate control provide the system with operator input. Other sensors take account of vehicle speed, A/C pressure, outside temperature, and engine cooling temperature. Using all of these inputs, the system automatically adjusts airflow temperature, airflow distribution, airflow volume, and the amount of outside air recirculation. This maintains a comfortable temperature even under changing conditions.



Operation of the system is quite simple.

1. Turn the Mode Control knob (on the right) and the Blower Control knob (on the left) to AUTO.

**NOTE:** The AUTO position performs best for front seat occupants only.

2. Dial in the temperature you would like the system to maintain by rotating the Temperature Control knob.

Once the comfort level is selected, the system will maintain that level automatically using the heating system. Should the desired comfort level require air conditioning, the system will automatically make the adjustment.

You will experience the greatest efficiency by simply allowing the system to function automatically. Selecting the OFF position on the blower control stops the system completely and closes the outside air intake.

72°F (22°C) is the recommended setting for maximum comfort for the average person; however, this may vary.

**NOTE:** The temperature setting can be adjusted at any time without affecting automatic operation.

#### UNDERSTANDING YOUR INSTRUMENT PANEL 195

**Automatic Blower Control** 



To engage the Automatic Temperature Control, turn the Blower Control Knob Indicator to AUTO.

B1a300e5

#### Automatic Temperature Control



Use this control to regulate the temperature of the air inside the passenger compartment. Rotate the outer ring to the desired numerical temperature.

B1a13c28



Air conditioning in this system is automatic. Pressing the Air Conditioning Control button while in AUTO mode will cause the LED in the control button to flash three times and then turn off. This indicates that the system is in AUTO mode and requesting the air conditioning is not necessary.

NOTE: If your air conditioning performance seems lower than expected, check the front of the A/C condenser: located in front of the radiator, for an accumulation of dirt or insects. Clean with a gentle water spray from behind the radiator and through the condenser. Fabric front fascia protectors may reduce air flow to the condenser, reducing air conditioning performance.

# Automatic Mode Control (Air Direction)



To engage Automatic Temperature Control, turn the selector fully left to AUTO.

#### 81a13c27



The system will automatically control recirculation. However, pressing the Recirculation Control button will temporarily put the system in recirculation mode (ten minutes). This can be used when outside conditions such as smoke, odors, dust, or high humidity are present. Activating recirculation will cause the LED in the control button to illuminate. After ten minutes, the system will return to normal

#### NOTE:

• When the ignition switch is turned OFF, the recirculation feature will be cancelled.

AUTO mode function and the LED will turn off.



- In cold weather, use of the Recirculation mode may lead to excessive window fogging. The Recirculation mode is not allowed in the Mix and Defrost modes to improve window clearing operation. Recirculation will be disabled automatically if these modes are selected.
- Extended use of recirculation may cause the windows to fog. If the interior of the windows begins to fog, press the Recirculation button to return to outside air. Some temp/humidity conditions will cause captured interior air to condense on windows and hamper visibility. For this reason, the system will not allow Recirculation to be selected while in floor, defrost, or defrost/floor mode. Attempting to use the recirculation while in these modes will cause the LED in the control button to blink and then turn off.
- Most of the time, when in Automatic Operation, you can temporarily put the system into Recirculation Mode by pressing the Recirculation Button. However, under certain conditions, while in Automatic Mode, the system is blowing air out the defrost vents. When

these conditions are present and the Recirculation Button is pressed the indicator will flash and remain off. This tells you that you are unable to go into recirculation mode at this time. If you would like to go into Recirculation Mode, you must first move your Mode Knob to Panel, Panel/Floor and then press the Recirculation Button. This feature will reduce the possibility of window fogging.

#### Manual Operation

This system offers a full complement of manual override features, which consist of Blower Preferred Automatic, Mode Preferred Automatic, or Blower and Mode Preferred Automatic. This means the operator can override the blower, the mode, or both. There is a manual blower range for times when the AUTO setting is not desired. The blower can be set to any fixed blower speed by rotating the Blower Control knob (on the left).

**NOTE:** Please read the Automatic Temperature Control Operation Chart that follows for details.



Automatic Temperature Control Operation Operation	_	The system will				
	How	Blower Control	Mode Control	Air Temperature Control	Air Recirculation Control	A/C Operation
Full Automatic Operation	Set blower knob to Auto. Set mode knob to Auto. Set temperature knobs for comfort.	Automatic	Automatic	Automatic	Automatic but can be overridden for 10 minutes at a time.	Automatic
Blower Preferred Automatie	Set blower knob to any desired airflow level other than Auto. Set mode knob to Auto. Set temperature knobs for comfort.	User selectable to any speed.	Automatie	Automatie	Automatic but can be overridden for 10 minutes at a time.	Automatic
Mode Preferred Automatic	Set mode knob to any desired air delivery point other than Auto. Set blower knob to Auto. Set temperature knobs for comfort.	Automatic	User selectable to any air delivery point.	Automatic	User selectable outside or recirculated.	User selectable A/C on or off.
Blower and Mode Preferred Automatic	Set blower knob to any desired airflow level other than Auto. Set mode knob to any desired air delivery point other than Auto. Set temperature knobs for comfort.	User selectable to any speed.	User selectable to any air delivery point.	Automatic	User selectable outside or recirculated.	User selectable A/C on or off.

Auto Climate Controls Chart

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The operator can override the AUTO mode setting to change airflow distribution by rotating the Mode Control knob (on the right) to one of the following positions.

#### Panel Mode

3 Air is directed through the outlets in the instrument panel. These outlets can be adjusted to direct air flow.

# **Bi-Level Mode**

Air is directed through the panel and floor outlets.

**NOTE:** There is a difference in temperature (in any conditions other than full cold or full hot), between the upper and lower outlets for added comfort. The warmer air goes to the floor outlets. This feature gives improved comfort during sunny but cool conditions.

# Floor Mode

Air is directed through the floor outlets with a small amount through the defrost and side window demist outlets.

# Mix Mode

 $\mathbf{W}_{\mathbf{P}}$  Air is directed through the floor, defrost and side window demist outlets. This setting works best in cold or snowy conditions that require extra heat at

the windshield. This setting is good for maintaining comfort while reducing moisture on the windshield.

# **Defrost Mode**

Air is directed through the windshield and side window demist outlets. Use this mode with maximum blower and temperature settings for best windshield and side window defrosting.

# **Operating Tips**

NOTE: Refer to the chart at the end of this section for suggested control settings for various weather conditions.

#### **Summer Operation**

The engine cooling system in air-conditioned vehicles must be protected with a high-quality antifreeze coolant to provide proper corrosion protection and to protect against engine overheating. A 50% solution of ethylene glycol antifreeze coolant in water is recommended. Refer to "Maintenance Procedures" in Section 7 of this manual for proper coolant selection.

#### Winter Operation

Use of the air Recirculation mode during winter months is not recommended because it may cause window fogging.



#### Vacation Storage

Anytime you store your vehicle, or keep it out of service (i.e. vacation) for two weeks or more, run the air conditioning system at idle for about five minutes in the fresh air and high blower setting. This will insure adequate system lubrication to minimize the possibility of compressor damage when the system is started again.

#### Window Fogging

Interior fogging on the windshield can be quickly removed by turning the mode selector to Defrost. The Defrost/Floor mode can be used to maintain a clear windshield and provide sufficient heating. If side window fogging becomes a problem increase blower speed. Vehicle windows tend to fog on the inside in mild but rainy or humid weather.

**NOTE:** Recirculate without A/C should not be used for long periods as fogging may occur.

# Side Window Demisters

A side window demister outlet is at each end of the instrument panel. These nonadjustable outlets direct air toward the side windows when the system is in either the FLOOR, MIX, or DEFROST mode. The air is directed at the area of the windows through which you view the outside mirrors.

#### **Outside Air Intake**

Make sure the air intake, located directly in front of the windshield, is free of obstructions such as leaves. Leaves collected in the air intake may reduce airflow, and if they enter the plenum, they could plug the water drains. In winter months, make sure the air intake is clear of ice, slush, and snow.

# A/C Air Filter — If Equipped

An air filter is included in the optional Security Group. The filter will reduce, but not eliminate, diesel and agricultural smells. The filter acts on air coming from outside the vehicle and recirculated air within the passenger compartment. The filter's normal service life is 12,000 miles (20,000 km) or one year. The air filter change schedule coincides with that for engine oil and filter. As with oil changes, the interval is shorter for heavy duty service or dusty conditions. See your authorized dealer for service.



# Control Setting Suggestions for Various Weather Conditions

WEATHER	CONTROL SETTINGS
HOT WEATHER AND VEHICLE INTERIOR IS VERY HOT	Open the windows, start the vehicle, press the $$ button to turn recirculate off. Set the Fan control to the high position (full clockwise) position. Press the $  \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $
WARM WEATHER	Press the $\underline{\langle \underline{\Box} \rangle}$ button to turn recirculate off. If it's sunny, set the Mode control at or near $\vec{J}$ and turn the air conditioning on. If it's cloudy or dark, set the Mode control at or near $\vec{J}$ .
COOL OR COLD HUMID CONDITIONS	Press the $\sub{s}$ button to turn recirculate off. If it's sunny, set the Mode control at or between $\cancel{s}$ and $\cancel{s}$ then turn the air conditioning on. If it's cloudy or dark, set the Mode control at or near $\cancel{s}$ and turn the air conditioning on. If the windows begin to fog, set Mode control at or between $\cancel{s}$ and $\cancel{s}$ .
COLD DRY CONDITIONS	Set the Mode control at ot near [عَبَرُهُ]. If it is sunny, you may want more upper air. In this case, set the Mode control at or between مُعَبَّ and عَبُرُ. In very cold weather, if you need extra heat at the windshield, set the Mode control at or near the عَبَدُ.

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# **Electric Rear Window Defroster**

Press this button, located on the Blower Control knob, to turn on the rear window defroster and the heated side mirrors — if equipped. A light in the button will illuminate to indicate the rear window defroster is ON. The defroster automatically turns off after about 10 minutes of operation.

# **CAUTION!**

To avoid damaging the electrical conductors of the rear window defroster, do not use scrapers, sharp instruments, chemically harsh or abrasive window cleaners on the interior surface of the window.

Labels can be gently peeled off after soaking with warm water.



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# STARTING PROCEDURES

Before starting your vehicle, adjust your seat, adjust both inside and outside mirrors, and fasten your seat belt. Make sure all occupants have securely fastened their seat belts.

# WARNING!

Never leave children alone in a vehicle. Leaving children in a vehicle unattended is dangerous for a number of reasons. A child or others could be seriously or fatally injured. Don't leave the keys in the ignition. A child could operate power windows, other controls, or move the vehicle.

#### STARTING AND OPERATING 207

# WARNING!

Be sure to turn off the engine if you want to rest or sleep in your car. Accidents can be caused by inadvertently moving the gear selection lever or by pressing the accelerator pedal. This may cause excessive heat in the exhaust system, resulting in overheating and vehicle fire which may cause serious or fatal injuries.

# Automatic Transaxle

The gear selector must be in the PARK or NEUTRAL position before you can start the engine. Apply the brakes before shifting to any driving gear.

**NOTE:** You must press the brake pedal before shifting out of Park.

# **Normal Starting**

Normal Starting of either a cold or a warm engine does not require pumping or depressing the accelerator pedal. Simply turn the ignition switch to the "START" position and release when the engine starts. If the engine fails to



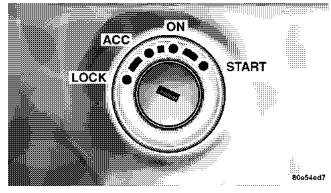
start within 15 seconds, turn the ignition switch to the "OFF" position, wait 10 to 15 seconds, then repeat the normal starting procedure.

# WARNING!

Do not attempt to push or tow your vehicle to get it started. Vehicles equipped with an automatic transaxle cannot be started this way. Unburned fuel could enter the catalytic converter and once the engine has started, ignite and damage the converter and vehicle. If the vehicle has a discharged battery, booster cables may be used to obtain a start from another vehicle. This type of start can be dangerous if done improperly, so follow the procedure carefully. See section 6 of this manual for jump starting instructions.

### Tip Start Feature — Automatic Transaxle Only

**Do not** press the accelerator. Turn the ignition key briefly to START position, and release it. The starter motor will continue to run, but will automatically disengage itself when the engine is running.



# Ignition Key Position

**Extremely Cold Weather (below**  $-20^{\circ}$ **F** or  $-29^{\circ}$ **C)** To insure reliable starting at these temperatures, use of an externally powered electric engine block heater (available from your dealer) is recommended.

### If Engine Fails to Start

If the engine fails to start after you have followed the "NORMAL STARTING" procedure, it may be flooded. Push the accelerator pedal all the way to the floor and hold it there. Crank the engine for no more than 15 seconds. This should clear any excess fuel in case the



engine is flooded. Leave the ignition key in the ON position, release the accelerator pedal and repeat the "NORMAL STARTING" procedure.

# WARNING!

Never pour fuel or other flammable liquid into the throttle body air inlet opening in an attempt to start the vehicle. This could result in flash fire causing serious personal injury.

# **CAUTION!**

To prevent damage to the starter, do not crank the engine for more than 15 seconds at a time. Wait 10 to 15 seconds before trying again.

# After Starting

The idle speed will automatically decrease as the engine warms up.

# Remote Start System — If Equipped

Remote start conveniently starts the engine from outside the vehicle by using the Remote Keyless Entry (RKE) key fob while maintaining security. The system has a targeted range of 328 ft. (100 m). The vehicle must be locked, the deck lid and hood closed and the transmission in Park in 5 order to start the engine using the Remote Start button on the key fob.

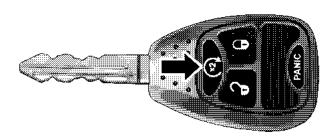
NOTE: Remote start requires Automatic Transaxle equipped vehicles.

# How To Use Remote Start

To enter the Remote Start mode , depress the Remote Start button twice on the key fob. The engine will start and the vehicle will remain in the remote start mode for a 15 minute cycle.



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# **REMOTE START BUTTON**

To exit the Remote Start mode, allow the engine to run the cycle or depress the unlock button to disarm the Vehicle Theft Security Alarm and within one minute insert the key into the ignition and turn the ignition to the RUN

position. The ignition must be in the RUN position in order to drive the vehicle.

NOTE: The engine can be started two consecutive times (two 15 minute cycles) by using the key fob. For a third cycle, the key must be cycled to the ignition RUN position and then repeat the start sequence.

To shut off the vehicle when it is in Remote Start mode, press the remote start button once. In order to avoid inadvertent shut downs, the one-time press to shut down the vehicle will be disabled for two seconds after receipt of a valid remote start request.

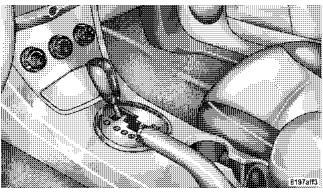
**NOTE:** When the vehicle is in the Remote Start mode, power window and sunroof operation are disabled for security.

The following conditions must be met before the engine will remote start:

- Automatic Transaxle in Park
- All doors are closed
- Hood is closed
- Hazard Switch is off
- Brake Switch is inactive
- Key is not in the ignition
- Battery is at an acceptable charge level
- Panic button on key fob is not depressed



# AUTOMATIC TRANSAXLE



Automatic Transaxle Shifter

# CAUTION!

Damage to the transaxle may occur if the following precautions are not observed:

• Shift into PARK only after the vehicle has come to a complete stop.

# STARTING AND OPERATING 211

- Shift into or out of REVERSE only after the vehicle has come to a complete stop and the engine is at idle speed.
- Do not shift from REVERSE, PARK, or NEUTRAL into any forward gear when the engine is above idle speed.
- Before shifting into any gear, make sure your foot is firmly on the brake pedal.

**NOTE:** You MUST press and hold the brake pedal **5** down while shifting out of Park.

# WARNING!

It is dangerous to shift the selector lever out of "P" or "N" if the engine speed is higher than idle speed. If your foot is not firmly on the brake pedal, the vehicle could accelerate quickly forward or in reverse. You could lose control of the vehicle and hit someone or something. Only shift into gear when the engine is idling normally and when your right foot is firmly on the brake pedal.



## **Brake/Transaxle Interlock System**

This system prevents you from moving the gear shift out of Park and into any gear unless the brake pedal is pressed. This system is active only while the ignition switch is in the ON or ACC positions. Always depress the **brake pedal first**, before moving the gear selector out of PARK.

**NOTE:** If a malfunction occurs, the transaxle will not shift out of park. Battery power is required to release the brake/transaxle interlock system. There is an override system that allows you to shift out of Park in case of loss of power. To activate the override system, remove the cup holder liner, insert a key, screwdriver or finger into the front hole and push the lever forward. If this occurs obtain service as soon as possible.

#### Automatic Transaxle Ignition Interlock System

This system prevents the key from being removed unless the shift lever is in PARK. It also prevents shifting out of PARK unless the key is in the OFF or ON positions.

**NOTE:** If a malfunction occurs, the system will trap the key in the ignition cylinder to warn you that this safety

feature is inoperable. The engine can be started and stopped but the key cannot be removed until you obtain service.

# Four Speed or Six Speed (AutoStick) Automatic Transaxle

The electronically controlled transaxle provides a precise shift schedule. The transaxle electronics are selfcalibrating; therefore, the first few shifts on a new vehicle, may be somewhat abrupt. This is a normal condition, and precision shifts will develop within a few hundred miles.

#### Reset Mode - Electronic Transaxle

The transaxle is monitored electronically for abnormal conditions. If a condition is detected that could cause damage, the transaxle automatically shifts into second gear. The transaxle remains in second gear (3rd gear with six speed automatic) despite the forward gear selected. Park (P), Reverse (R), and Neutral (N) will continue to operate. This Reset feature allows the vehicle to be driven to a dealer for service without damaging the transaxle.

In the event that the problem has been momentary, the transaxle can be reset to regain all forward gears.



- Stop the vehicle and shift into Park (P).
- Turn the key to OFF then restart the engine.
- Shift into the desired range and resume driving.

**NOTE:** Even if the transaxle can be reset, it is recommended that you visit a dealer at your earliest possible convenience. Your dealer has diagnostic equipment to determine if the problem could recur.

If the transaxle cannot be reset, dealer service is required.

# Gear Ranges for Automatic Transaxle

# "P" Park

Supplements the parking brake by locking the transaxle. The engine can be started in this range. Never attempt to use PARK while vehicle is in motion.

Apply parking brake when leaving vehicle in this range.

DO NOT race the engine when shifting from PARK or NEUTRAL positions into another gear range.

# WARNING!

Never use Park position on an Automatic Transaxle as a substitute for the parking brake. Always apply parking brake fully when parked to guard against vehicle movement and possible injury or damage.

# "R" Reverse

Shift into this range only after the vehicle has come to a **5** complete stop.

*"N" Neutral* Engine may be started in this range.

# "D" Overdrive

For most city and highway driving, it provides smoothest upshifts and downshifts and best fuel economy. When frequent transaxle shifting occurs while using the "D" Overdrive position, such as when operating the vehicle under heavy loading conditions, (i.e. in hilly terrain, traveling into strong head winds or while towing heavy trailers), using the "3" position will improve performance and extend transaxle life by reducing excessive shifting and heat build-up.



# "3" Drive

This range eliminates shifts into Overdrive. The transaxle will operate normally in First, Second and Third while in this range. The "3" position should also be used when descending steep grades to prevent brake system distress.

**NOTE:** Using the "3" range while operating the vehicle under heavy operating conditions will improve performance and extend transaxle life by reducing excessive shifting and heat build up.

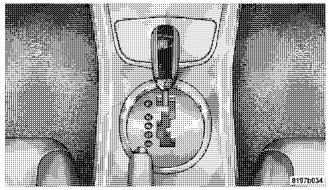
# "L" Low

This range should be used for engine braking when descending very steep grades. In this range, upshifts will occur only to prevent engine overspeed while downshifts occur earlier than other gear range selections.

**NOTE:** The vehicle computer will over ride Overdrive and "3" Drive ranges by changing shift points if the transaxle operating temperature exceeds acceptable limits. This is done to prevent transaxle damage due to overheating.

# AUTOSTICK<sup>®</sup> — IF EQUIPPED

AutoStick<sup>®</sup> is a driver-interactive transaxle that offers six manual ratio changes to provide you with more control. AutoStick<sup>®</sup> allows you to maximize engine braking, eliminate undesirable upshifts and downshifts, and improve overall vehicle performance. This system can also provide you with more control during passing, city driving, cold slippery conditions, mountain driving, trailer towing, and many other situations.



AutoStick<sup>®</sup> Shift Lever



# AutoStick<sup>®</sup> Operation

By placing the selector lever one shift level below the "D" position, it can be moved from side to side. This allows the driver to select a higher or lower range of gears. Moving the selector lever to the Left (-) triggers a downshift and to the Right (+) an upshift. The gear position will display in the instrument cluster on the transaxle range indicator.

NOTE: In Autostick<sup>®</sup> mode, the transaxle will only shift up or down when the driver moves the selector lever to the Right (+) or Left (-).

Holding the lever to (+) for at least one second, will deactivate AutoStick®. AutoStick® is also deactivated when the lever is shifted out of the (+) or (-) and into "D."

# AutoStick<sup>®</sup> General Information

- You can start out in first or second gear. The system will ignore attempts to upshift at too low of a vehicle speed.
- If a ratio other than 1st is selected and the vehicle is brought to a stop, the transaxle control logic will automatically select the 1st gear ratio.

- STARTING AND OPERATING 215
- Starting out in second gear is helpful in snowy or icy conditions.
- Avoid using speed control when Autostick® is engaged.
- The transaxle will automatically shift up when maximum engine speed is reached while Autostick® is engaged.
- transaxle shifting will be more noticeable when Autostick<sup>®</sup> is engaged.
- If a low range is selected and the engine accelerates to the rev limit, the transaxle will automatically select the next higher ratio.
- If a downshift would cause the engine to over-speed, that shift will not occur until it is safe for the engine. Mostly the transaxle will stay in the manually selected ratio, however.
- If the system detects powertrain overheating, the transaxle will revert to the automatic shift mode and remain in that mode until the powertrain cools off.



• If the system detects a problem it will disable the AutoStick<sup>®</sup> mode and the transaxle will return to the automatic mode until the problem is corrected.

# PARKING BRAKE

**BRAKE** When the parking brake is applied with the ignition on, the Brake Light in the instrument cluster will come on.

**NOTE:** This light, when illuminated with parking brake application, shows only that the parking brake is on. It does not show the degree of brake application.

**NOTE:** If the light remains on with the parking brake released, a brake system malfunction is indicated. Have the brake system serviced by an authorized dealer immediately.

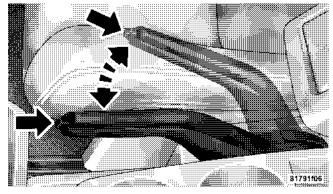
**NOTE:** If the parking brake is applied while the vehicle is moving, a chime will sound to alert the driver. The chime will sound up to 10 times or until the vehicle has returned to a stop.

Before leaving the vehicle, make sure that the parking brake is fully applied. For manual transaxle vehicles,

place the gear selector in REVERSE. For vehicles equipped with automatic transaxles, place the gear selector in the PARK position.

To release the parking brake, slightly pull up the handle while pushing the lock button, and guide the lever downward to its stop. The brake warning light in the instrument cluster should go out.

**NOTE:** The parking brake lever will not release unless the lever is pulled up slightly past its applied position.



Parking Brake Lever



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**NOTE:** When parking on a hill, it is important to set the parking brake **before** placing the gear selector in Park, otherwise the load on the automatic transaxle locking mechanism may make it difficult to move the selector out of Park. As an added precaution, turn the front wheels toward the curb on a downhill grade and away from the curb on a uphill grade.

**NOTE:** You should always apply the parking brake before leaving the vehicle.

# WARNING!

- Never leave children alone in a vehicle. Leaving children in a vehicle unattended is dangerous for a number of reasons. A child or others could be injured. Don't leave the keys in the ignition. A child could operate power windows, other controls, or move the vehicle.
- Be sure the parking brake is fully disengaged before driving. Failure to do so can lead to brake failure and an accident.

### **BRAKE SYSTEM**

Your vehicle is equipped with power assisted brakes as standard equipment. In the event power assist is lost for any reason (for example, repeated brake applications with the engine off), the brakes will still function. However, the effort required to brake the vehicle will be much greater than that required with the power system operating.

# WARNING!

Riding the brakes can lead to brake failure and possibly an accident. Driving with your foot resting or riding on the brake pedal can result in abnormally high brake temperatures, excessive lining wear, and possible brake damage. You wouldn't have your full braking capacity in an emergency.



If either of the two hydraulic systems lose normal capability, the remaining system will still function with some loss of overall braking effectiveness. This will be evident by increased pedal travel during application and greater pedal force required to slow or stop. In addition, if the malfunction is caused by an internal leak, as the brake fluid in the master cylinder drops, the brake warning indicator will light.

# WARNING!

Driving a vehicle with the brake light on is dangerous. A significant decrease in braking performance or vehicle stability during braking may occur. It will take you longer to stop the vehicle or will make your vehicle harder to control. You could have an accident. Have the vehicle checked immediately.

# Anti-Lock Brake System (ABS) — If Equipped

The Anti-Lock Brake System provides increased vehicle stability and brake performance under most braking conditions. The system automatically "pumps" the brakes during severe braking conditions to prevent wheel lock-up.

### WARNING!

Pumping of the Anti-Lock Brakes will diminish their effectiveness and may lead to an accident. Pumping makes the stopping distance longer. Just press firmly on your brake pedal when you need to slow down or stop.



# WARNING!

- Anti-lock system (ABS) cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase braking or steering efficiency beyond that afforded by the condition of the vehicle brakes and tires or the traction afforded.
- The ABS cannot prevent accidents, including those resulting from excessive speed in turns, following another vehicle too closely, or hydroplaning. Only a safe, attentive, and skillful driver can prevent accidents.
- The capabilities of an ABS equipped vehicle must never be exploited in a reckless or dangerous manner which could jeopardize the user's safety or the safety of others.



The ABS light monitors the Anti-Lock Brake System. The light will come on when the ignition switch is turned to the ON position and may stay on for as long as four seconds. If the ABS light remains on or comes on while driving, it indicates that the Anti-Lock portion of the brake system is not functioning and that service is required. However, the conventional brake system will continue to operate normally if the BRAKE warning light is not on.

If the ABS light is on, the brake system should be serviced as soon as possible to restore the benefits of Anti-Lock brakes. If the ABS light does not come on when the Ignition switch is turned to the ON position, have the bulb repaired as soon as possible.

If both the Brake Warning Light and the ABS Light remain on, the Anti-Lock brakes (ABS) and Electronic Brake Force Distribution (EBD) systems are not functioning. Immediate repair to the ABS system is required.

When the vehicle is driven over 7 mph (11 km/h), you may also hear a slight clicking sound as well as some related motor noises. These noises are the system performing its self check cycle to ensure that the ABS system is working properly. This self check occurs each time the vehicle is started and accelerated past 7 mph (11 km/h).



ABS is activated during braking under certain road or stopping conditions. ABS-inducing conditions can include ice, snow, gravel, bumps, railroad tracks, loose debris, or panic stops.

You also may experience the following when the brake system goes into Anti-lock:

- The ABS motor running (it may continue to run for a short time after the stop),
- the clicking sound of solenoid valves,
- brake pedal pulsations,
- and a slight drop or fall away of the brake pedal at the end of the stop.

These are all normal characteristics of ABS.

# WARNING!

The Anti-Lock Brake System contains sophisticated electronic equipment that may be susceptible to interference caused by improperly installed or high output radio transmitting equipment. This interference can cause possible loss of anti-lock braking capability. Installation of such equipment should be performed by qualified professionals.

All vehicle wheels and tires must be the same size and type and tires must be properly inflated to produce accurate signals for the computer.



# ELECTRONIC BRAKE CONTROL SYSTEM – ABS/TCS/BAS/ESP

Your vehicle may be equipped with an optional advanced electronic brake control system that includes Anti-Lock Brake System (ABS), Traction Control System (TCS), Brake Assist System (BAS) and Electronic Stability Program (ESP). All systems work together to enhance vehicle stability and control in various driving conditions and are commonly referred to as ESP.

### Anti-Lock Brake System (ABS) — If Equipped

This system aids the driver in maintaining vehicle control under adverse braking conditions. The system controls hydraulic brake pressure to prevent wheel lock-up and help avoid skidding on slippery surfaces during braking. Refer to "Anti-Lock Brake System" in this Section of the manual for more information about ABS.

### Traction Control System (TCS) — If Equipped

This system monitors the amount of wheel spin of each of the driven wheels. If wheel spin is detected, brake pressure is applied to the slipping wheel(s) and engine power is reduced to provide enhanced acceleration and stability. A feature of the TCS system functions similar to

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a limited slip differential and controls the wheel spin across a driven axle. If one wheel on a driven axle is spinning faster than the other, the system will apply the brake of the spinning wheel. This will allow more engine torque to be applied to the wheel that is not spinning. This feature remains active even if TCS and ESP are in the "Partial Off" mode. Refer to "Electronic Stability Program (ESP)" in this Section of this manual.

#### Brake Assist System (BAS) — If Equipped

The BAS is designed to optimize the vehicle's braking capability during emergency braking maneuvers. The system detects an emergency braking situation by sensing the rate and amount of brake application and then applies optimum pressure to the brakes. This can help reduce braking distances. The BAS complements the Anti-Lock Brake System (ABS). Applying the brakes very quickly results in the best BAS assistance. To receive the benefit of the system, you must apply continuous braking pressure during the stopping sequence. Do not reduce brake pedal pressure unless braking is no longer desired. Once the brake pedal is released, the BAS is deactivated.



# WARNING!

- BAS cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase braking efficiency beyond that afforded by the condition of the vehicle brakes and tires or the traction afforded.
- The BAS cannot prevent accidents, including those resulting from excessive speed in turns, following another vehicle too closely, or hydroplaning. Only a safe, attentive, and skillful driver can prevent accidents.
- The capabilities of a BAS-equipped vehicle must never be exploited in a reckless or dangerous manner which could jeopardize the user's safety or the safety of others.

# Electronic Stability Program (ESP) — If Equipped

This system enhances directional control and stability of the vehicle under various driving conditions. ESP corrects for over/under steering of the vehicle by applying the brake of the appropriate wheel to assist in counteracting the over/under steer condition. Engine power may also be reduced to help the vehicle maintain the desired path. ESP uses sensors in the vehicle to determine the vehicle path intended by the driver and compares it to the actual path of the vehicle. When the actual path does not match the intended path, ESP applies the brake of the appropriate wheel to assist in counteracting the oversteer or understeer condition

- Oversteer when the vehicle is turning more than appropriate for the steering wheel position.
- Understeer when the vehicle is turning less than appropriate for the steering wheel position.

### **ESP/TCS** Indicator Light

The "ESP/TCS Indicator Light" located in the instrument cluster, starts to flash as soon as the tires lose traction and the ESP system becomes active. The "ESP/TCS Indicator Light" also flashes when TCS is active. If the "ESP/TCS Indicator Light" begins to flash during acceleration, ease up on the accelerator and apply as little throttle as possible. Be sure to adapt your speed and driving to the prevailing road conditions.



### WARNING!

- Electronic Stability Program (ESP) cannot prevent the natural laws of physics from acting on the vehicle, nor can it increase the traction afforded by prevailing road conditions.
- ESP cannot prevent accidents, including those resulting from excessive speed in turns, driving on very slippery surfaces, or hydroplaning. Only a safe, attentive, and skillful driver can prevent accidents.
- The capabilities of an ESP-equipped vehicle must never be exploited in a reckless or dangerous manner which could jeopardize the user's safety or the safety of others.

### **ESP** Operating Modes

All ESP equipped vehicles can choose the following ESP operating modes:

### ESP ON

This is the normal operating mode for ESP. Whenever the vehicle is started the ESP system will be in this mode. This mode should be used for almost all driving situations. ESP should only be turned to "Partial Off" for specific reasons as noted below.

#### PARTIAL ESP Mode

This mode is entered by momentarily depressing the "ESP Control Switch." When in "Partial Off" mode, the TCS portion of ESP, except for the "limited slip" feature described in the TCS section, has been disabled and the "ESP/TCS Indicator Light" will be illuminated. All other stability features of ESP function normally, with the exception of engine power reduction. This mode is intended to be used if the vehicle is in deep snow, sand or gravel conditions and more wheel spin than ESP would normally allow is required to gain traction.

To turn ESP on again, momentarily depress the "ESP Control Switch". This will restore the normal "ESP On" mode of operation.



# WARNING!

In the Partial ESP mode, the engine torque reduction and stability features are desensitized. Therefore, the enhanced vehicle stability offered by ESP is unavailable.

**NOTE:** To improve the vehicle's traction when driving with snow chains, or starting off in deep snow, sand or gravel, it may be desirable to switch to the "Partial Off" mode by pressing the ESP switch. Once the situation requiring ESP to be switched to the "Partial Off" mode is overcome, turn ESP back on by momentarily depressing the "ESP Control Switch". This may be done while the vehicle is in motion.

# ESP/BAS Warning Light and ESP/TCS Indicator Light

The malfunction indicator for the ESP is combined with the BAS indicator. The yellow "ESP/BAS Warning Lamp" and the yellow "ESP/TCS Indicator Light" in the instrument cluster both come on when the ignition switch is turned to the "ON" position. They should both go out with the engine running. If the "ESP/BAS Warning Lamp" comes on continuously with the engine running, a malfunction has been detected in either the ESP or BAS system, or both. If this light remains on after several ignition cycles, and the vehicle has been driven several miles at speeds greater than 30 mph (48 km/h), see your authorized dealer as soon as possible to have the problem diagnosed and corrected.

### NOTE:

- The "ESP Indicator Light" and the "ESP/BAS Warning Light" come on momentarily each time the ignition switch is turned ON.
- Each time the ignition is turned ON, the ESP System will be ON even if it was turned off previously.
- The ESP Control System will make buzzing or clicking sounds when it is active. This is normal; the sounds will stop when ESP becomes inactive following the maneuver that caused the ESP activation.



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#### **POWER STEERING**

The standard power steering system will give you good vehicle response and increased ease of maneuverability in tight spaces. The system will provide mechanical steering capability if power assist is lost.

If for some reason the power assist is interrupted, it will still be possible to steer your vehicle. Under these conditions, you will observe a substantial increase in steering effort, especially at very low vehicle speeds and during parking maneuvers.

**NOTE:** Increased noise levels at the end of the steering wheel travel are considered normal and do not indicate that there is a problem with the power steering system.

Upon initial start-up in cold weather, the power steering pump may make noise for a short amount of time. This is due to the cold, thick fluid in the steering system. This noise should be considered normal, and does not in any way damage the steering system.

# WARNING!

Continued operation with reduced power steering assist could pose a safety risk to yourself and others. Service should be obtained as soon as possible.

# CAUTION!

Prolonged operation of the steering system at the end of the steering wheel travel will increase the steering fluid temperature and it should be avoided when possible. Damage to the power steering pump may occur.



## DRIVING ON SLIPPERY SURFACES

#### Acceleration

Rapid acceleration on snow covered, wet, or other slippery surfaces may cause the front wheels to pull erratically to the right or left. This phenomenon occurs when there is a difference in the surface traction under the front (driving) wheels.

# WARNING!

Rapid acceleration on slippery surfaces is dangerous. Unequal traction can cause sudden pulling of the front wheels. You could lose control of the vehicle and possibly have an accident. Accelerate slowly and carefully whenever there is likely to be poor traction (ice, snow, wet, mud, loose sand, etc.).

### Traction

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tire and road surface. This is hydroplaning and may cause partial or complete loss of vehicle control and stopping ability. To reduce this possibility, the following precautions should be observed:

1. Slow down during rainstorms or when roads are slushy.

2. Slow down if road has standing water or puddles.

3. Replace tires when tread wear indicators first become visible.

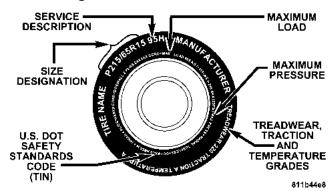
4. Keep tires properly inflated.

5. Maintain enough distance between your vehicle and the vehicle in front of you to avoid a collision in a sudden stop.



### TIRE SAFETY INFORMATION

**Tire Markings** 



# NOTE:

• P (Passenger)-Metric tire sizing is based on U.S. design standards. P-Metric tires have the letter "P" molded into the sidewall preceding the size designation. Example: P215/65R15 95H.

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- European Metric tire sizing is based on European design standards. Tires designed to this standard have the tire size molded into the sidewall beginning with the section width. The letter "P" is absent from this tire size designation. Example: 215/65R15 96H
- LT (Light Truck)-Metric tire sizing is based on U.S. design standards. The size designation for LT-Metric tires is the same as for P-Metric tires except for the letters "LT" that are molded into the sidewall preceding the size designation. Example: LT235/85R16.
- Temporary Spare tires are high-pressure compact spares designed for temporary emergency use only. Tires designed to this standard have the letter "T" molded into the sidewall preceding the size designation. Example: T145/80D18 103M.
- High Flotation tire sizing is based on U.S. design standards and it begins with the tire diameter molded into the sidewall. Example: 31x10.5 R15 LT.



# Tire Sizing Chart

EXAMPLE:								
Size Designation:								
$\mathbf{P}$ = Passenger car tire size based on U.S. design standards								
"blank" = Passenger car tire based on European design standards								
LT = Light Truck tire based on U.S. design standards								
T = Temporary Spare tire								
31 = Overall Diameter in Inches (in)								
<b>215</b> = Section Width in Millimeters (mm)								
65 = Aspect Ratio in Percent (%)								
-Ratio of section height to section width of tire.								
10.5 = Section Width in Inches (in)								
$\mathbf{R}$ = Construction Code								
—"R" means Radial Construction.								
—"D" means Diagonal or Bias Construction.								
15 = Rim Diameter in Inches (in)								



EXAMPLE:
Service Description:
95 = Load Index
—A numerical code associated with the maximum load a tire can carry.
H = Speed Symbol
—A symbol indicating the range of speeds at which a tire can carry a load corresponding to its load index under certain operating conditions.
—The maximum speed corresponding to the Speed Symbol should only be achieved un- der specified operating conditions (i.e. tire pressure, vehicle loading, road conditions, and posted speed limits).
Load Identification:
"blank" = Absence of any text on sidewall of the tire indicates a Standard Load (SL) Tire
Extra Load (XL) = Extra Load (or Reinforced) Tire
Light Load = Light Load Tire
C,D,E = Load range associated with the maximum load a tire can carry at a specified pressure
Maximum Load — Maximum Load indicates the maximum load this tire is designed to carry.
Maximum Pressure — Maximum Pressure indicates the maximum permissible cold tire inflation pressure for this tire.



# **Tire Identification Number (TIN)**

The TIN may be found on one or both sides of the tire; however, the date code may only be on one side. Tires with white sidewalls will have the full TIN including date code located on the white sidewall side of the tire. Look for the TIN on the outboard side of black sidewall tires as mounted on the vehicle. If the TIN is not found on the outboard side then you will find it on the inboard side of the tire.

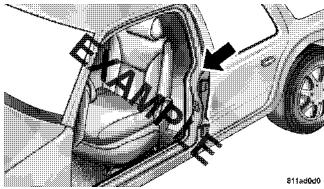
EXAMPLE:
DOT MA L9 ABCD 0301
<b>DOT</b> = Department of Transportation
—This symbol certifies that the tire is in compliance with the U.S. Department of Transportation tire safety standards, and is approved for highway use.
MA = Code representing the tire manufacturing location. (2 digits)
L9 = Code representing the tire size. (2 digits)
<b>ABCD</b> = Code used by tire manufacturer. (1 to 4 digits)
03 = Number representing the week in which the tire was manufactured. (2 digits)
—03 means the 3rd week.
01 = Number representing the year in which the tire was manufactured. (2 digits)
—01 means the year 2001.
—Prior to July 2000, tire manufacturers were only required to have 1 number to represent the year in which the tire was manufactured. Example: 031 could represent the 3rd week of 1981 or 1991.



# **Tire Loading and Tire Pressure**

# **Tire Placard Location**

**NOTE:** The proper cold tire inflation pressure is listed on either the face of the driver's door or the driver's side "B" pillar.



**Tire Placard Location** 

# Tire and Loading Information Placard

SEATING THE COMB	AND LOAD CAPACITY - TOTA NED WEIGHT OF CO HED XXX KG C	L 5 FRONT	2 REAR 3 RGO SHOULD	
TIRE	FRONT	REAR	SPARE	)
ORIGINAL TIRE SIZE	P196/70814	P195/70R14	T125/70D15	₩3
COLD TIRE	200kPa. 29PSI	200kPa. 29PSI	420kPa, 60PSI	)≁4 5
SEE OWNER'S MANUAL FOR	ADDITIONAL INFORM		4N109268	) –

811b5a9a

## Tire and Loading Information

This placard tells you important information about the:

1) number of people that can be carried in the vehicle

2) the total weight your vehicle can carry

3) the tire size designed for your vehicle

4) the cold tire inflation pressures for the front, rear, and spare tires.



#### Loading

The vehicle maximum load on the tire must not exceed the load carrying capacity of the tire on your vehicle. You will not exceed the tire's load carrying capacity if you adhere to the loading conditions, tire size, and cold tire inflation pressures specified on the "Tire and Loading Information" placard and in the "Vehicle Loading" section of this manual.

**NOTE:** Under a maximum loaded vehicle condition, gross axle weight ratings (GAWR's) for the front and rear axles must not be exceeded. For further information on GAWR's, vehicle loading, and trailer towing, refer to the "Vehicle Loading" section of this manual.

To determine the maximum loading conditions of your vehicle, locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on the Tire and Loading Information placard. The combined weight of occupants, cargo/luggage and trailer tongue weight (if applicable) should never exceed the weight referenced here.

# Steps for Determining Correct Load Limit

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX pounds" on your vehicle's placard.

2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.

3. Subtract the combined weight of the driver and passengers from XXX kilograms or XXX pounds.

4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if "XXX" amount equals 1400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (since  $5 \ge 150 = 750$ , and 1400 - 750 = 650 lbs.)

5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.



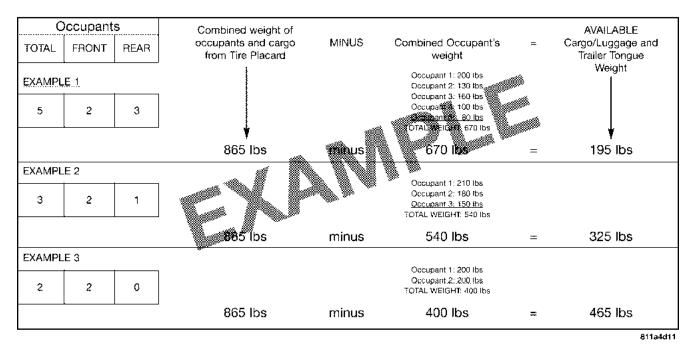
6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

**NOTE:** The following table shows examples on how to calculate total load, cargo/luggage, and towing capacities of your vehicle with varying seating configurations

and number and size of occupants. This table is for illustration purposes only and may not be accurate for the seating and load carry capacity of your vehicle.

**NOTE:** For the following example, the combined weight of occupants and cargo should never exceed 865 lbs. (392 Kg).







# WARNING!

Overloading of your tires is dangerous. Overloading can cause tire failure, affect vehicle handling, and increase your stopping distance. Use tires of the recommended load capacity for your vehicle. Never overload them.

# TIRES — GENERAL INFORMATION

### **Tire Pressure**

Proper tire inflation pressure is essential to the safe and satisfactory operation of your vehicle. Three primary areas are affected by improper tire pressure:

# 1. Safety—

# WARNING!

- Improperly inflated tires are dangerous and can cause accidents.
- Under inflation increases tire flexing and can result in tire failure.
- Over inflation reduces a tire's ability to cushion shock. Objects on the road and chuckholes can cause damage that result in tire failure.
- Unequal tire pressures can cause steering problems. You could lose control of your vehicle.
- Over inflated or under inflated tires can affect vehicle handling and can fail suddenly, resulting in loss of vehicle control.
- Unequal tire pressures from one side of the vehicle to the other can cause the vehicle to drift to the right or left.
- Always drive with each tire inflated to the recommended cold tire inflation pressure.



#### 2. Economy—

Improper inflation pressures can cause uneven wear patterns to develop across the tire tread. These abnormal wear patterns will reduce tread life resulting in a need for earlier tire replacement. Under inflation, also increases tire rolling resistance and results in higher fuel consumption.

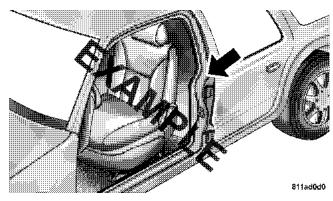
#### 3. Ride Comfort and Vehicle Stability—

Proper tire inflation contributes to a comfortable ride. Over inflation produces a jarring and uncomfortable ride.

### **Tire Inflation Pressures**

The proper cold tire inflation pressure is listed either on the face of the driver's door or on the driver's side "B" pillar.

Some vehicles may have Supplemental Tire Pressure Information for vehicle loads that are less than the maximum loaded vehicle condition. These pressure conditions will be found in the "Supplemental Tire Pressure Information" section of this manual.



**Tire Placard Location** 

The pressure should be checked and adjusted as well as inspecting for signs of tire wear or visible damage at least once a month. Use a good quality pocket-type gauge to check tire pressure. Do not make a visual judgement when determining proper inflation. Radial tires may look properly inflated even when they are under inflated.



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# CAUTION!

After inspecting or adjusting the tire pressure, always reinstall the valve stem cap (if equipped). This will prevent moisture and dirt from entering the valve stem, which could damage the valve stem.

Inflation pressures specified on the placard are always "cold tire inflation pressure." Cold tire inflation pressure is defined as the tire pressure after the vehicle has not been driven for at least 3 hours, or driven less than 1 mile (1 km) after a 3 hour period. The cold tire inflation pressure must not exceed the maximum inflation pressure molded into the tire sidewall.

Check tire pressures more often if subject to a wide range of outdoor temperatures, as tire pressures vary with temperature changes.

Tire pressures change by approximately 1 psi (7 kPa) per  $12^{\circ}$  F (7° C) of air temperature change. Keep this in mind when checking tire pressure inside a garage, especially in the winter.

Example: If garage temperature =  $68^{\circ}$  F ( $20^{\circ}$  C) and the outside temperature =  $32^{\circ}$  F ( $0^{\circ}$  C) then the cold tire inflation pressure should be increased by 3 psi (21 kPa), which equals 1 psi (7 kPa) for every 12° F (7° C) for this outside temperature condition.

Tire pressure may increase from 2 to 6 psi (13 to 40 kPa) during operation. DO NOT reduce this normal pressure build up or your tire pressure will be too low.

# Tire Pressures for High Speed Operation

The manufacturer advocates driving at safe speeds within posted speed limits. Where speed limits or conditions are such that the vehicle can be driven at high speeds, maintaining correct tire inflation pressure is very important. Increased tire pressure and reduced vehicle loading may be required for high-speed vehicle operation. Refer to original equipment or an authorized tire dealer for recommended safe operating speeds, loading and cold tire inflation pressures.

# WARNING!

High speed driving with your vehicle under maximum load is dangerous. The added strain on your tires could cause them to fail. You could have a serious accident. Don't drive a vehicle loaded to the maximum capacity at continuous speeds above 75 mph (120 km/h).

### **Radial-Ply Tires**

# WARNING!

Combining radial ply tires with other types of tires on your vehicle will cause your vehicle to handle poorly. The instability could cause an accident. Always use radial ply tires in sets of four (or 6, in case of trucks with dual rear wheels). Never combine them with other types of tires. Cuts and punctures in radial tires are repairable only in the tread area because of sidewall flexing. Consult your authorized tire dealer for radial tire repairs.

### Compact Spare Tire — If Equipped

The compact spare is for temporary emergency use with radial tires. It is engineered to be used on your style vehicle only. Since this tire has limited tread life, the original tire should be repaired (or replaced) and reinstalled at the first opportunity.

### WARNING!

Temporary use spare tires are for emergency use only. With these tires, do not drive more than 50 mph (80 km/h). Temporary-use spare tires have limited tread life. When the tread is worn to the tread wear indicators, the temporary use spare tire needs to be replaced. Be sure to follow the warnings, which apply to your spare. Failure to do so could result in spare tire failure and loss of vehicle control.



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# CAUTION!

Prolonged use of limited use spare, or an incorrect tire size on either front wheel, may damage transaxle differential and result in loss of vehicle mobility.

Do not install a wheel cover or attempt to mount a conventional tire on the compact spare wheel, since the wheel is designed specifically for the compact spare.

Do not install more than one compact spare tire/wheel on the vehicle at any given time.

# **CAUTION!**

Because of the reduced ground clearance, do not take your vehicle through an automatic car wash with the compact spare installed. Damage to the vehicle may result.

#### Limited Use Spare — If Equipped

The limited use spare tire is for temporary emergency use on your vehicle. This tire is identified by a limited use spare tire warning label located on the limited use spare tire and wheel assembly. This tire may look like the original equipped tire on the front or rear axle of your vehicle, but it is not. Installation of this limited use spare tire affects vehicle handling. Since it is not the same tire, replace (or repair) the original tire and reinstall on the vehicle at the first opportunity.

# WARNING!

The limited use spare tires are for emergency use only. Installation of this limited use spare tire affects vehicle handling. With this tire, do not drive more than 60 mph (100 km/h). Keep inflated to the cold tire inflation pressure listed on either your tire placard or limited use spare tire and wheel assembly. Replace (or repair) the original tire at the first opportunity and reinstall it on your vehicle. Failure to do so could result in loss of vehicle control.



# WARNING!

Prolonged use of limited use spare, or incorrect tire size of front wheel, may damage the transaxle differential and result in loss of vehicle mobility and could result in loss of vehicle control.

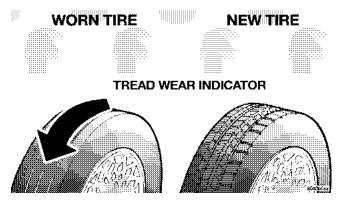
# **Tire Spinning**

When stuck in mud, sand, snow, or ice conditions, do not spin your vehicle's wheels above 30 mph (48 km/h) for more than 30 seconds continuously.

Refer to: "Freeing A Stuck Vehicle" in Section 6 of this manual for additional information.

### **Tread Wear Indicators**

Tread wear indicators are in the original equipment tires to help you in determining when your tires should be replaced.



These indicators are molded into the bottom of the tread grooves. They will appear as bands when the tread depth becomes 1/16 inch (2 mm). When the tread is worn to the tread wear indicators, the tire should be replaced.

Many states have laws requiring tire replacement at this point.



## Life of Tire

The service life of a tire is dependent upon varying factors including but not limited to:

- Driving style
- Tire pressure
- Distance driven

# WARNING!

Tires and spare tire should be replaced after six years, regardless of the remaining tread. Failure to follow this warning can result in sudden tire failure. You could lose control and have an accident resulting in serious injury or death.

Keep dismounted tires in a cool, dry place with as little exposure to light as possible. Protect tires from contact with oil, grease, and gasoline.

#### STARTING AND OPERATING 241

### **Replacement Tires**

The tires on your new vehicle provide a balance of many characteristics. They should be inspected regularly for wear and correct cold tire inflation pressure. The manufacturer strongly recommends that you use tires equivalent to the originals in size, quality and performance when replacement is needed (refer to the paragraph on "Tread Wear Indicators"). Refer to the "Tire and Loading Information" placard for the size designation of your tire. The service description and load identification will be 5 found on the original equipment tire. Failure to use equivalent replacement tires may adversely affect the safety, handling, and ride of your vehicle. We recommend that you contact your original equipment or an authorized tire dealer with any questions you may have on tire specifications or capability.





# WARNING!

- Do not use a tire, wheel size or rating other than that specified for your vehicle. Some combinations of unapproved tires and wheels may change suspension dimensions and performance characteristics, resulting in changes to steering, handling, and braking of your vehicle. This can cause unpredictable handling and stress to steering and suspension components. You could lose control and have an accident resulting in serious injury or death. Use only the tire and wheel sizes with load ratings approved for your vehicle.
- Never use a tire with a smaller load index or capacity, other than what was originally equipped on your vehicle. Using a tire with a smaller load index could result in tire overloading and failure. You could lose control and have an accident.
- Failure to equip your vehicle with tires having adequate speed capability can result in sudden tire failure and loss of vehicle control.

# CAUTION!

Replacing original tires with tires of a different size may result in false speedometer and odometer readings.

# Alignment And Balance

Poor suspension alignment may result in:

- Fast tire wear.
- Uneven tire wear, such as feathering and one-sided wear.
- Vehicle pull to right or left.

Tires may also cause the vehicle to pull to the left or right. Alignment will not correct this condition. See your dealer for proper diagnosis.

Improper alignment will not cause vehicle vibration. Vibration may be a result of tire and wheel out-ofbalance. Proper balancing will reduce vibration and avoid tire cupping and spotty wear.



# TIRE PRESSURE MONITORING SYSTEM (TPMS) — IF EQUIPPED

# Base Tire Pressure Monitoring System (TPMS) Operation – If Equipped

This is the Tire Pressure Monitoring System warning indicator located in the instrument cluster.

- The Tire Pressure Monitoring System (TPMS) will warn the driver of a low tire pressure based on the vehicle recommended cold placard pressure.
- The tire pressure will vary with temperature by about 1 psi (6.9 kPa) for every 12 °F (6.5 °C). This means that when the outside temperature decreases, the tire pressure will decrease. Tire pressure should always be set based on cold inflation tire pressure. This is defined as the tire pressure after a vehicle has not been driven for more than 3 hours and in outside ambient temperature. Refer to the "Tires General Information" in this section for information on how to properly inflate the vehicle's tires. The tire pressure will also increase as the vehicle is driven this is normal and there should be no adjustment for this increased pressure.

# STARTING AND OPERATING 243

- The TPM System will warn the driver of a low tire pressure if the tire pressure falls below the low pressure warning threshold for any reason, including low temperature effects.
- The TPM System will continue to warn the driver of low tire pressure as long as the condition exists, and will not turn off until the tire pressure is at or above recommended cold placard pressure. Once the low tire pressure warning has been illuminated, the tire pressure must be increased to the recommended cold placard pressure in order for the TPM warning lamp to be turned off. The system will automatically update and the TPM warning lamp will extinguish once the updated tire pressures have been received. The vehicle may need to be driven for up to 10 minutes above 15 mph (25 km/h) to receive this information.

For example, your vehicle may have a recommended cold (parked for more than 3 hours) placard of 35 °F (241 kPa). If the ambient temperature is 68 °F (20 °C) and the measured tire pressure is 30 psi (207 kPa), a temperature drop to 20 °F (-7 °C) will decrease the tire pressure to approximately 26 psi (179 kPa). This tire pressure is



sufficiently low enough to turn ON the "Tire Pressure Monitoring Light". Driving the vehicle may cause the tire pressure to rise to approximately 30 psi (207 kPa), but the "Tire Pressure Monitoring Light" will still be ON. In this situation, the "Tire Pressure Monitoring Light" will turn OFF only after the tires have been inflated to the vehicle's recommended cold placard pressure value.

### Premium System – If Equipped

The Tire Pressure Monitor System (TPMS) uses wireless technology with wheel rim mounted electronic sensors to monitor tire pressure levels. Sensors, mounted to each wheel as part of the valve stem, transmit tire pressure readings to the Receiver Module.

**NOTE:** It is particularly important, for you to check the tire pressure in all of your tires regularly and to maintain the proper pressure.

The TPMS consists of the following components:

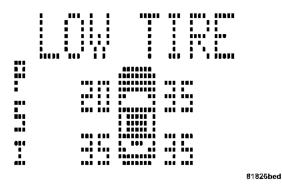
- Receiver Module
- 4 Tire Pressure Monitoring Sensors

- 3 Trigger Modules (mounted in three of the four wheel wells)
- Various Tire Pressure Monitoring System Messages, which display in the Electronic Vehicle Information Center (EVIC)
- Yellow Tire Pressure Monitoring Telltale Light

### Tire Pressure Monitoring Low Pressure Warnings

The Tire Pressure Monitoring Telltale Lamp will illuminate in the instrument cluster, and an audible chime will be activated when one or more of the four active road tire pressures are low. The audible chime will sound once every ignition cycle for each condition that it detects. In addition, the Electronic Vehicle Information Center (EVIC) will display a graphic of the pressure value(s) with the low tire(s) flashing.





Low Tire Pressure Display

**NOTE:** A low spare tire will not cause the Tire Pressure Monitoring Telltale Lamp to illuminate or the chime to sound.

Should a low tire condition occur on any of the four active road tire(s), you should stop as soon as possible, and inflate the low tire(s) that is flashing on the graphic display to the vehicle's recommended cold placard pressure value. The system will automatically update, the

#### STARTING AND OPERATING 245

graphic display of the pressure value(s) will stop flashing, and the Tire Pressure Monitoring Lamp will extinguish once the updated tire pressure(s) have been received. The vehicle may need to be driven for up to 10 minutes above 15 mph (25 km/h) to receive this information.

# Check TPM System Message

The Tire Pressure Monitoring Telltale Light will flash on and off for 60 seconds, and an audible chime will sound when a system fault is detected. The flash cycle will repeat every ten minutes, without an audible chime, until the fault condition no longer exists.

The EVIC will display the "CHECK TPM SYSTEM" message for 3 seconds. This text message is then followed by a graphic, with "--" displayed for the pressure value indicating which of the Tire Pressure Monitoring Sensor(s) is not being received.





#### Check TPM System Display

If the ignition key is cycled, this sequence will repeat, providing the system fault still exists. If the system fault no longer exists, the Tire Pressure Monitoring Telltale Light will no longer flash, and the "CHECK TPM SYS-TEM" text message will no longer display.

**NOTE:** If your vehicle is equipped with a compact spare wheel and tire assembly it does not have a tire pressure monitoring sensor. Therefore, it will not be monitored by the Tire Pressure Monitor System (TPMS). In the event that the compact spare tire is swapped with

a low pressure road tire, the next ignition key cycle will still show the "Tire Pressure Monitoring Lamp" to be ON, a chime to sound, and the Electronic Vehicle Information Center (EVIC) will still show the low tire pressure value flashing on the graphic display. However, driving the vehicle for up to 10 minutes above 15 mph (25 km/h) will display a "CHECK TPM SYSTEM" text message on the EVIC. This text message will then be followed by a graphic, with "--" in place of the flashing low pressure value. For every subsequent key cycle, the "Tire Pressure" Monitoring Lamp" will be ON, a chime will sound, a "CHECK TPM SYSTEM" text message will be display in the EVIC, and the graphic display will have "--" in place of the pressure value of the spare tire location. Once the original road tire has been properly repaired, and put back onto the vehicle in place of the compact spare tire. The TPMS will update the graphic display on the EVIC with a new tire pressure value instead of "--", and the "Tire Pressure Monitoring Lamp" will be OFF as long as none of the road tire(s) are below the low pressure warning threshold. The vehicle may need to be driven for up to 10 minutes above 15 mph (25 km/h) for this update to happen.



# **CAUTION!**

The TPMS has been optimized for the original equipment tires and wheels. TPMS pressures have been established for the tire size equipped on your vehicle. Undesirable system operation or sensor damage may result when using replacement equipment that is not of the same size, type, and/or style. Aftermarket wheels can cause sensor damage. Do not use tire sealant from a can, or balance beads if your vehicle is equipped with a TPMS, as damage to the sensors may result.

# CAUTION!

After inspecting or adjusting the tire pressure, always reinstall the valve stem cap. This will prevent moisture and dirt from entering the valve stem, which could damage the wheel rim sensor.

#### NOTE:

- The TPMS is not intended to replace normal tire care and maintenance, or to provide warning of a tire failure or condition.
- The TPMS should not be used as a tire pressure gauge while adjusting your tire pressure.
- Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.
- The TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the Tire Pressure Monitoring Telltale lamp.



#### **General Information**

This device complies with part 15 of the FCC rules and RSS 210 of Industry Canada. Operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

The tire pressure sensors are covered under one of the following licenses:

United States											. KR5S120123
Canada											2671-S120123

# **TIRE CHAINS**

Due to limited clearance, tire chains are not recommended.

# CAUTION!

Damage to the vehicle may result if tire chains are used.

# **SNOW TIRES**

Some areas of the country require the use of snow tires during winter. Standard tires are of the all season type and satisfy this requirement as indicated by the M+S designation on the tire side wall.

If you need snow tires, select tires equivalent in size and type to the original equipment tires. Use snow tires only in sets of 4, failure to do so may adversely affect the safety and handling of your vehicle.

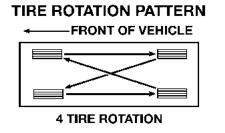


Snow tires generally have lower speed ratings than what was originally equipped with your vehicle and should not be operated at sustained speeds over 75 mph (120 km/h).

#### **Tire Rotation Recommendations**

Tires on the front and rear axles of vehicles operate at different loads and perform different steering, driving and braking functions. For these reasons, they wear at unequal rates, and tend to develop irregular wear patterns.

These effects can be reduced by timely rotation of tires. The benefits of rotation are especially worthwhile with aggressive tread designs such as those on all season type tires. Rotation will increase tread life, help to maintain mud, snow and wet traction levels, and contribute to a smooth, quiet ride. Follow the recommended tire rotation frequency for your type of driving found in the "Maintenance Schedules" Section of this manual. More frequent rotation is permissible if desired. The reasons for any rapid or unusual wear should be corrected before rotating. The suggested rotation method is the "forward-cross" shown in the diagram.



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#### FUEL REQUIREMENTS

#### 2.4L and 2.7L ENGINES



Your vehicle is designed to meet all emission regulations and provide excellent fuel economy when using high quality regular unleaded gasoline with an octane rating of 87. The use of premium gasoline is not recommended. The use of premium gaso-

line will provide no benefit over high quality regular gasoline, can impair engine performance and may damage the engine.

### 3.5L ENGINE



The 3.5L engine is designed to meet all emissions regulations and provide satisfactory fuel economy and performance when using high-quality unleaded gasoline with an octane rating of 87 to 89. The manufacturer recommends the use of 89-octane for optimum performance. The routine use of premium gasoline is not recommended. The use of premium gasoline will provide no benefit over high quality regular gasoline or midgrade gasoline and in some circumstances may result in poorer performance.

Light spark knock at low engine speeds is not harmful to your engine. However, continued heavy spark knock at high speeds can cause damage and immediate service is required.

Poor quality gasoline can cause problems such as hard starting, stalling and hesitations. If you experience these symptoms, try another brand of gasoline (with the appropriate octane rating for your engine) before considering service for the vehicle.

Over 40 automobile manufacturers around the world have issued and endorsed consistent gasoline specifications (the World Wide Fuel Charter, WWFC) which define fuel properties necessary to deliver enhanced emissions, engine performance, and durability for your vehicle. The manufacturer recommends the use of gasolines that meet the WWFC specifications if they are available.



### **Reformulated Gasoline**

Many areas of the country require the use of cleaner burning gasoline referred to as "Reformulated Gasoline".

Reformulated gasolines contain oxygenates, and are specifically blended to reduce vehicle emissions and improve air quality.

The manufacturer supports the use of reformulated gasolines. Properly blended reformulated gasolines will provide excellent performance and durability of engine and fuel system components.

### **Gasoline/Oxygenate Blends**

Some fuel suppliers blend unleaded gasoline with oxygenates such as 10% ethanol, MTBE, and ETBE. Oxygenates are required in some areas of the country during the winter months to reduce carbon monoxide emissions. Fuels blended with these oxygenates may be used in your vehicle.

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# **CAUTION!**

2.4L and 3.5L Engines — If Equipped

DO NOT use gasoline containing Methanol or E85 Ethanol. Use of these blends may result in starting and driveability problems and may damage critical fuel system components.

**NOTE:** 2.7L Engine — If Equipped , is now rated for E85 Ethanol use (EXCEPT CALIFORNIA EMISSION STATES). Only vehicles with the E-85 fuel filler door label can operate on E-85. For more information, see "Flexible Fuel" in this section.

Problems that result from using methanol/gasoline blends are not the responsibility of the manufacturer. While MTBE is an oxygenate made from Methanol, it does not have the negative effects of Methanol.



#### **MMT In Gasoline**

MMT is a manganese containing metallic additive that is blended into some gasoline to increase the octane number. Gasolines blended with MMT offer no performance advantage beyond gasolines of the same octane number without MMT. Gasolines blended with MMT have shown to reduce spark plug life and reduce emission system performance in some vehicles. The manufacturer recommends using gasolines without MMT. Since the MMT content of gasoline may not be indicated on the pump, you should ask your gasoline retailer whether or not his/her gasoline contains MMT.

It is even more important to look for gasolines without MMT in Canada, because MMT can be used at levels higher than those allowed in the United States.

MMT is prohibited in Federal and California reformulated gasolines.

#### Materials Added to Fuel

All gasoline sold in the United States is required to contain effective detergent additives. Use of additional detergents or other additives is not needed under normal conditions and would result in additional cost. Therefore you should not have to add anything to the fuel.

#### **Fuel System Cautions**

### CAUTION!

Follow these guidelines to maintain your vehicle's performance:

- The use of leaded gas is prohibited by Federal law. Using leaded gasoline can impair engine performance, damage the emission control system.
- An out-of-tune engine, or certain fuel or ignition malfunctions, can cause the catalytic converter to overheat. If you notice a pungent burning odor or some light smoke, your engine may be out of tune or malfunctioning and may require immediate service. Contact your dealer for service assistance.
- The use of fuel additives which are now being sold as octane enhancers is not recommended. Most of these products contain high concentrations of methanol.



Fuel system damage or vehicle performance problems resulting from the use of such fuels or additives is not the responsibility of the manufacturer.

NOTE: Intentional tampering with emissions control systems can result in civil penalties being assessed against you.

#### **Carbon Monoxide Warnings**

#### WARNING!

Carbon monoxide (CO) in exhaust gases is deadly. Follow the precautions below to prevent carbon monoxide poisoning:

• Do not inhale exhaust gases. They contain carbon monoxide, a colorless and odorless gas which can kill. Never run the engine in a closed area, such as a garage, and never sit in a parked vehicle with the engine running for an extended period. If the vehicle is stopped in an open area with the engine running for more than a short period, adjust the ventilation system to force fresh, outside air into the vehicle.

• Guard against carbon monoxide with proper maintenance. Have the exhaust system inspected every time the vehicle is raised. Have any abnormal conditions repaired promptly. Until repaired, drive with all side windows fully open.

### FLEXIBLE FUEL— 2.7L ENGINES ONLY (EXCEPT **CALIFORNIA)**

### E-85 General Information

The information in this section is for Flexible Fuel vehicles only. These vehicles can be identified by the unique fuel filler door label that states Ethanol (E-85) or Unleaded Gasoline Only. This section only covers those subjects that are unique to these vehicles. Please refer to the other sections of this manual for information on features that are common between Flexible Fuel and gasoline only powered vehicles.



# CAUTION!

Only vehicles with the E-85 fuel filler door label can operate on E-85.

#### **ETHANOL FUEL (E-85)**

E-85 is a mixture of approximately 85% fuel ethanol and 15% unleaded gasoline.

### WARNING!

Ethanol vapors are extremely flammable and could cause serious personal injury. Never have any smoking materials lit in or near the vehicle when removing the fuel filler tube cap (gas cap) or filling the tank. Do not use E-85 as a cleaning agent and never use it near an open flame.

#### **Fuel Requirements**

Your vehicle will operate on both unleaded gasoline with an octane rating of 87, or E-85 fuel, or any mixture of these two.

For best results, a refueling pattern that alternates between E-85 and unleaded gasoline should be avoided. When you do switch fuels, it is recommended that

- you do not switch when the fuel gauge indicates less than 1/4 full
- you do not add less than 5 gallons when refueling
- you operate the vehicle immediately after refueling for a period of at least 5 minutes

Observing these precautions will avoid possible hard starting and/or significant deterioration in drivability during warm up.

**NOTE:** When the ambient temperature is above 90°F, you may experience hard starting and rough idle following start up even if the above recommendations are followed.



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# Selection Of Engine Oil For Flexible Fuel Vehicles (E-85) and Gasoline Vehicles

Whether operating the vehicle on an E-85 ethanol fuel or unleaded gasoline the engine oil requirements are the same. Refer to "Engine Oil Selection in the "Maintenance Procedures" section of this manual for the proper quality and viscosity engine oil.

**NOTE:** Your engine oil filler cap also describes the correct engine oil to use.

#### Starting

The characteristics of E-85 fuel make it unsuitable for use when ambient temperatures fall below  $0^{\circ}$  F. In the range of  $0^{\circ}$  F to  $32^{\circ}$  F, you may experience an increase in the time it takes for your engine to start, and a deterioration in drivability (sags and/or hesitations) until the engine is fully warmed up.

#### **Cruising Range**

Because E-85 fuel contains less energy per gallon than gasoline, you will experience an increase in fuel consumption. You can expect your mpg and your driving range to decrease by about 30% compared to gasoline operation.

#### **Replacement Parts**

Many components in your Flexible Fuel Vehicle (FFV) are designed to be compatible with ethanol. Always be sure that your vehicle is serviced with correct ethanol compatible parts.

#### CAUTION!

Replacing fuel system components with non-ethanol compatible components can damage your vehicle.

#### Maintenance

If you operate the vehicle using E-85 fuel, follow Schedule B in the maintenance schedule section of this manual.

#### CAUTION!

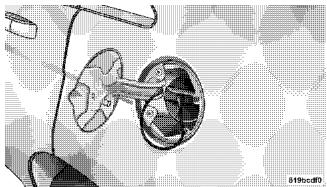
Do not use ethanol mixture greater than 85% in your vehicle. It will cause difficulty in cold starting and may affect drivability.



#### **ADDING FUEL**

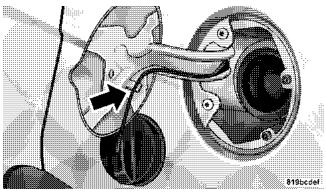
# Fuel Filler Cap (Gas Cap)

The gas cap is behind the fuel filler door, on the left rear quarter panel of the vehicle. If the gas cap is lost or damaged, be sure the replacement cap is for use with this vehicle.



Fuel Filler Door

After removing the gas cap, place the gas cap tether cable over a hook on the inside of the fuel door. This keeps the gas cap suspended away from and protects the vehicle's surface.



**Fuel Filler Door Features** 



# CAUTION!

Damage to the fuel system or emission control system could result from using an improper fuel tank filler tube cap (gas cap). A poorly fitting cap could let impurities into the fuel system.

# CAUTION!

A poorly fitting gas cap may cause the Malfunction Indicator Light to turn on.

#### Loose Fuel Filler Cap Message

If the vehicles diagnostic system determines that the fuel filler cap in loose, improperly installed, or damaged, a "GASCAP" or "FUEL CAP OFF" message will be displayed in the instrument cluster. Tighten the gas cap until a "clicking" sound is heard. This is an indication that the gas cap is properly tightened. Press the odometer reset button to turn the message off. If the problem persists, the message will appear the next time the vehicle is started. This might indicate a damaged cap. If the problem is detected twice in a row, the system will turn on the Malfunction Indicator Light (MIL). Resolving the problem will turn the MIL light off.

# CAUTION!

To avoid fuel spillage and overfilling, do not "top off" the fuel tank after filling.

**NOTE:** When the fuel nozzle "clicks" or shuts off, the fuel tank is full.

# WARNING!

- Never have any smoking materials lit in or near the vehicle when the gas cap is removed or the tank filled.
- Never add fuel when the engine is running. This is in violation of most state and federal fire regulations and will cause the malfunction indicator light to turn on.



**NOTE:** Tighten the gas cap about 1/4 turn until you hear one click. This is an indication that cap is properly tightened.

If the gas cap is not tighten properly, the Malfunction Indicator Light will come on. Be sure the gas cap is tightened every time the vehicle is refueled.

#### WARNING!

A fire may result if gasoline is pumped into a portable container that is inside of a vehicle. You could be burned. Always place gas containers on the ground while filling.

### **VEHICLE LOADING**

The load carrying capacity of your vehicle is shown on the "Vehicle Certification Label." This information should be used for passenger and luggage loading as indicated.

#### Vehicle Curb Weight

2.4 L	 3287 lbs (1491 kg)
2.7 L	 3356 lbs (1522 kg)
3.5 L	 3484 lbs (1580 kg)

If the seatbacks are folded for carrying cargo, do not exceed the specified GVWR and GAWR.

#### Vehicle Certification Label

Your vehicle has a certification label attached to the rear of the driver's door.

The label contains the following information:

- Name of manufacturer
- Month and year of manufacture
- Gross Vehicle Weight Rating (GVWR)
- Gross Axle Weight Rating (GAWR) front



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- Gross Axle Weight Rating (GAWR) rear
- Vehicle Identification Number (VIN)
- Type of Vehicle
- Month Day and Hour of Manufacture (MDH)

The bar code allows a computer scanner to read the Vehicle Identification Number (VIN).

### Gross Vehicle Weight Rating (GVWR)

The GVWR is the total allowable weight of your vehicle. This includes driver, passengers, and cargo. The total load must be limited so that you do not exceed the GVWR.

#### Gross Axle Weight Rating (GAWR)

The GAWR is the maximum capacity of the front and rear axles. Distribute the load over the front and rear axles evenly. Make sure that you do not exceed either front or rear GAWR.

# WARNING!

Because the front wheels steer the vehicle, it is important that you do not exceed the maximum front or rear GAWR. A dangerous driving condition can result if either rating is exceeded. You could lose control of the vehicle and have an accident.

#### Overloading

The load carrying components (axle, springs, tires, wheels, etc.) of your vehicle will provide satisfactory service as long as you do not exceed the GVWR and front and rear GAWR.

The best way to figure out the total weight of your vehicle is to weigh it when it is fully loaded and ready for operation. Weigh it on a commercial scale to insure that it is not over the GVWR.

Figure out the weight on the front and rear of the vehicle separately. It is important that you distribute the load evenly over the front and rear axles.



Overloading can cause potential safety hazards and shorten useful service life. Heavier axles or suspension components do not necessarily increase the vehicle's GVWR.

#### Loading

To load your vehicle properly, first figure out its empty weight, axle by axle and side by side. Store heavier items down low and be sure you distribute their weight as evenly as possible. Stow all loose items securely before driving. If weighing the loaded vehicle shows that you have exceeded either GAWR, but the total load is within the specified GVWR, you must redistribute the weight. Improper weight distribution can have an adverse effect on the way your vehicle steers and handles and the way the brakes operate.

A loaded vehicle is shown in the illustration. Note that neither the GVWR nor the GAWR capacities have been exceeded.

Vehicle with a GVWR of 4480		
EXAMPLE ONLY	Front Axle	Rear Axle
Empty Weight	1853 lbs (841 kg)	1631 lbs (740 kg )
Load (Including driver, passengers, and cargo)	271 lbs (123 kg)	579 lbs (263 kg)
Total	2124 lbs (963 kg)	2210 lbs (1002 kg)
GAWR	2195 lbs (997 kg)	2285 lbs (1036 kg)

**NOTE:** Refer to the "Vehicle Certification Label" attached to the rear of the driver's door for your vehicle's GVWR and GAWR's. This table is only an example.



#### **TRAILER TOWING**

In this section you will find safety tips and information on limits to the type of towing you can reasonably do with your vehicle. Before towing a trailer carefully review this information to tow your load as efficiently and safely as possible.

To maintain warranty coverage, follow the requirements and recommendations in this manual concerning vehicles used for trailer towing.

If you have any questions or concerns after reviewing this section, please consult your dealer to for full details on the towing capabilities of the vehicle.

#### **Common Towing Definitions**

The following trailer towing related definitions will assist you in understanding the following information:

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#### Gross Vehicle Weight Rating (GVWR)

The GVWR is the total allowable weight of your vehicle. This includes driver, passengers, cargo and tongue weight. The total load must be limited so that you do not exceed the GVWR.

#### Gross Trailer Weight (GTW)

The gross trailer weight (GTW) is the weight of the trailer plus the weight of all cargo, consumables and equipment (permanent or temporary) loaded in or on the trailer in its "loaded and ready for operation" condition. The recommended way to measure GTW is to put your fully loaded trailer on a vehicle scale. The entire weight of the trailer must be supported by the scale.



#### Gross Combination Weight Rating (GCWR)

The gross combination weight rating (GCWR) is the total permissible weight of your vehicle and trailer when weighed in combination. (Note that GCWR ratings include a 150 lbs (68 kg) allowance for the presence of a driver).

#### Gross Axle Weight Rating (GAWR)

The GAWR is the maximum capacity of the front and rear axles. Distribute the load over the front and rear axles evenly. Make sure that you do not exceed either front or rear GAWR.

#### WARNING!

It is important that you do not exceed the maximum front or rear GAWR. A dangerous driving condition can result if either rating is exceeded. You could lose control of the vehicle and have an accident.

#### **Tongue Weight (TW)**

The downward force exerted on the hitch ball by the trailer. In most cases it should not be less than or more than 10% of the trailer load. You must consider this as part of the load on your vehicle.

#### **Frontal Area**

The maximum height and maximum width of the front of a trailer and its cargo.

#### Weight-Carrying Hitch

A weight-carrying hitch supports the trailer tongue weight, just as if it were luggage located at a hitch ball or some other connecting point of the truck. These kind of hitches are the most popular on the market today and they're commonly used to tow small- and medium-sized trailers.



#### **Trailer Hitch Classification**

The following chart provides the industry standard for the maximum trailer weight a given trailer hitch class can tow and should be used to assist you in selecting the correct trailer hitch for your intended towing condition. Refer to the Trailer Towing Weights (Maximum Trailer Weight Ratings) chart for the Max. GTW towable for your given drivetrain.

Trailer Hitch Classification	
Class	Max. GTW (Gross Trailer Wt.)
Class I - Light Duty	2,000 lbs (907 kg)
Class II - Medium Duty	3,500 lbs (1587 kg)

All trailer hitches should be professionally installed on your vehicle.

# Trailer Towing Weights (Maximum Trailer Weight Ratings)

The following chart provides the maximum trailer weight ratings towable for your given drivetrain.

Engine/Transmission	Max. Frontal Area	Max. GTW (Gross Trailer Wt.)	Max. Tongue Wt. <sup>1</sup>
2.4L / Auto	15 Sq. Ft. (1.4 Sq. M) <sup>2</sup>	1000 lbs (450 kg)	100 lbs (45 kg)
2.7L / Auto	15 Sq. Ft. (1.4 Sq. M) <sup>2</sup>	1500 lbs (680 kg)	150 lbs (68 kg)
3.5L / Auto	22 Sq., Ft. (3.7 Sq. M) <sup>2</sup>	2000 lbs (907 kg)	200 lbs (91 kg)
Refer to local laws for maximum trailer towing speeds.			

<sup>1</sup> The trailer tongue weight must be considered as part of the combined weight of occupants and cargo, and should never exceed the weight referenced on the Tire and Loading Information placard. Refer to the Tire–Safety Information Section in this manual.

<sup>2</sup> Enclosed trailers or open utility trailers with front shields/guards are not recommended for use with 2.4L or 2.7L engine with automatic transmission. Please see the website, http://www-5.chrysler.com/searchapp/ui.jsp or your dealer for additional information.



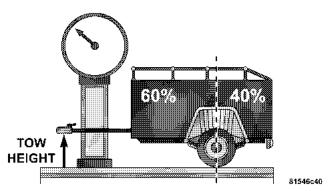
### CAUTION!

Towing a trailer with a larger than recommended frontal area could cause the engine to overheat or cause severe engine damage under extreme conditions.

#### **Trailer and Tongue Weight**

Always load a trailer with 60% to 65% of the weight in the front of the trailer. This places 10% of the Gross Trailer Weight (GTW) on the tow hitch of your vehicle. Loads balanced over the wheels or heavier in the rear can cause the trailer to sway **severely** side to side which will cause loss of control of vehicle and trailer. Failure to load trailers heavier in front is the cause of many trailer accidents.

Never exceed the maximum tongue weight stamped on your bumper or trailer hitch.



Consider the following items when computing the weight on the rear axle of the vehicle:

- The tongue weight of the trailer.
- The weight of any other type of cargo or equipment put in or on your vehicle.
- The weight of the driver and all passengers.

**NOTE:** Remember that everything put into or on the trailer adds to the load on your vehicle. Also, additional factory-installed options, or dealer-installed options,



must be considered as part of the total load on your vehicle. Refer to the Tire and Loading Information placard in the Tire Safety Information Section of this manual for the maximum combined weight of occupants and cargo for your vehicle.

# **CAUTION!**

Incorrect tongue weight could result in increased yaw or vehicle instability. A negative tongue weight could unload the rear suspension of the tow vehicle decreasing vehicle stability. Negative tongue weight could cause the trailer to squat and potentially become disengaged from the tow vehicle resulting in a runaway trailer condition.

#### **Towing Requirements**

To promote proper break-in of your new vehicle drivetrain components the following guidelines are recommended:

# **CAUTION!**

- Avoid towing a trailer for the first 500 miles (805 km) of vehicle operation. Doing so may damage your vehicle.
- During the first 500 miles (805 km) of trailer towing, limit your speed to 50 mph (80 km/h).

Perform the maintenance listed in Section 8 of this manual. When towing a trailer, never exceed the GAWR, or GCWR, ratings.



#### WARNING!

Improper towing can lead to an injury accident. Follow these guidelines to make your trailer towing as safe as possible:

Make certain that the load is secured in the trailer and will not shift during travel. When trailering cargo that is not fully secured, dynamic load shifts can occur that may be difficult for the driver to control. You could lose control of your vehicle and have an accident.

- When hauling cargo or towing a trailer, do not overload your vehicle or trailer. Overloading can cause a loss of control, poor performance or damage to brakes, axle, engine, transmission, steering, suspension, chassis structure or tires.
- Safety chains must always be used between your vehicle and trailer. Always connect the chains to the frame or hook retainers of the vehicle hitch. Cross the chains under the trailer tongue and allow enough slack for turning corners.

- Vehicles with trailers should not be parked on a grade. When parking, apply the parking brake on the tow vehicle. Put the tow vehicle automatic transmission in P for Park. Always, block or "chock" the trailer wheels.
- GCWR must not be exceeded.
- Total weight must be distributed between the tow vehicle and the trailer such that the following four ratings are not exceeded:
  - 1. GVWR
  - 2. GTW
  - 3. GAWR

4. Tongue weight rating for the trailer hitch utilized (This requirement may limit the ability to always achieve 10% of tongue weight as a percentage of total trailer weight).

#### **Towing Requirements** — Tires

- Do not attempt to tow a trailer while using a compact spare tire.



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- Proper tire inflation pressures are essential to the safe and satisfactory operation of your vehicle. Refer to the Tires–General Information section of this manual on Tire Pressures for proper tire inflation procedures.
- Also, check the trailer tires for proper tire inflation pressures before trailer usage.
- Check for signs of tire wear or visible tire damage before towing a trailer. Refer to the Tires–General Information section of this manual on Tread Wear Indicators for the proper inspection procedure.
- When replacing tires refer to the Tires–General Information section of this manual on Replacement Tires for proper tire replacement procedures. Replacing tires with a higher load carrying capacity will not increase the vehicle's GVWR and GAWR limits.

#### Towing Requirements — Trailer Brakes

 Do not interconnect the hydraulic brake system or vacuum system of your vehicle with that of the trailer. This could cause inadequate braking and possible personal injury.

- An electronically actuated trailer brake controller is required when towing a trailer with electronically actuated brakes. When towing a trailer equipped with a hydraulic surge actuated brake system, an electronic brake controller is not required.
- Trailer brakes are recommended for trailers over 1,000 lbs (450 kg) and required for trailers in excess of 2,000 lbs (907 kg).

# **CAUTION!**

If the trailer weighs more than 1,000 lbs (450 kg) loaded, it should have its own brakes and they should be of adequate capacity. Failure to do this could lead to accelerated brake lining wear, higher brake pedal effort, and longer stopping distances.



### WARNING!

Do not connect trailer brakes to your vehicle's hydraulic brake lines. It can overload your brake system and cause it to fail. You might not have brakes when you need them and could have an accident.

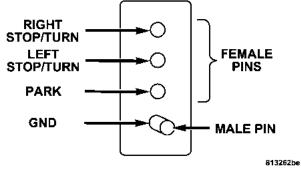
Towing any trailer will increase your stopping distance. When towing you should allow for additional space between your vehicle and the vehicle in front of you. Failure to do so could result in an accident.

#### **Towing Requirements** — **Trailer Lights & Wiring** Whenever you pull a trailer, regardless of the trailer size, stop lights and turn signals on the trailer are required for motoring safety.

Use a factory approved trailer harness and connector.

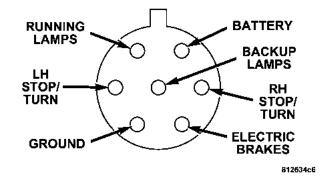
**NOTE:** Do not cut or splice wiring into the vehicles wiring harness.

The electrical connections are all complete to the vehicle but you must mate the harness to a trailer connector.









# Towing Tips

Before setting out on a trip, practice turning, stopping and backing the trailer in an area away from heavy traffic.

7- Pin Connector

Make sure all trailer and vehicle lights are working properly — including hazard flashers.

#### STARTING AND OPERATING 269

#### Towing Tips — Automatic Transmission

The "D" range can be selected when towing. However, if frequent shifting occurs while in this range, the "3" range should be selected.

**NOTE:** Using the "3" range while operating the vehicle under heavy operating conditions will improve performance and extend transmission life by reducing excessive shifting and heat build up. This action will also provide better engine braking.

The automatic transmission fluid and filter should be changed if you REGULARLY tow a trailer for more than 45 minutes of continuous operation. See Schedule "B" in section 8 of this manual for transmission fluid change intervals.

**NOTE:** Check the automatic transmission fluid level before towing.

# Towing Tips — Electronic Speed Control (If Equipped)

- Don't use in hilly terrain or with heavy loads.



- When using the speed control, if you experience speed drops greater than 10 mph (16 km/h), disengage until you can get back to cruising speed.
- Use speed control in flat terrain and with light loads to maximize fuel efficiency.

#### Towing Tips — Cooling System

To reduce potential for engine and transmission overheating, take the following actions:

#### - City Driving

When stopped for short periods of time, put transmission in neutral and increase engine idle speed.

# - *Highway Driving* Reduce speed.

- *Air Conditioning* Turn off temporarily.

 Refer to Cooling System Operating information in the Maintenance section of this manual for more information. If you have any questions or concerns after reviewing this section, please consult your dealer to for full details on the towing capabilities of the vehicle.

# RECREATIONAL TOWING (BEHIND MOTORHOME, ETC.)

Towing This Vehicle Behind Another Vehicle (Flat towing with all four wheels on the ground)

# CAUTION!

DO NOT flat tow this vehicle. Damage to the drivetrain will result.

**NOTE:** If the vehicle requires towing make sure all four wheels are off the ground.



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■ If Your Engine Overheats
Engine Oil Overheating — 2.4L Engine Only (If Equipped)
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#### HAZARD WARNING FLASHER

The flasher switch is located on the instrument panel, below the radio. Depress the switch and both cluster indicators and all front and rear directional signals will flash. Depress the switch again to turn Hazard Warning Flashers off.



#### Hazard Warning Flasher

Do not use this emergency warning system when the vehicle is in motion. Use it when your vehicle is disabled and is creating a safety hazard for other motorists. If it is necessary to leave the vehicle to go for service, the flasher system will continue to operate with the ignition key removed and the vehicle locked.

**NOTE:** With extended use, the flasher may wear down your battery.

#### **IF YOUR ENGINE OVERHEATS**

In any of the following situations, you can reduce the potential for overheating by taking the appropriate action.

- On the highways Slow down.
- In city traffic While stopped, put transaxle in neutral, but do not increase engine idle speed.

If the pointer rises to the **H** (red) mark, the instrument cluster will sound a chime. Pull over and stop the vehicle with the engine at idle, when safe. Turn off the air conditioning and wait until the pointer drops back into the normal range. If the pointer remains on the H (red) mark for more than a minute, turn the engine off immediately and call for service.



**NOTE:** There are steps that you can take to slow down an impending overheat condition. If your air conditioner is on, turn it off. The air conditioning system adds heat to the engine cooling system and turning off the A/C removes this heat. You can also turn the Temperature control to maximum heat, the Mode control to floor, and the fan control to High. This allows the heater core to act as a supplement to the radiator and aids in removing heat from the engine cooling system.

# Engine Oil Overheating — 2.4L Engine Only (If Equipped)

During sustained high speed driving or trailer tow up long grades on hot day, the engine oil temperature may become too hot. If this happens, the "HOTOIL" message flashes, the vehicle speed will be reduced to 53 mph (85 km/h) until the engine oil temperature is reduced.

**NOTE:** Engine speed is reduced to 53 mph (85 km/h) at the maximum. You may, of course, reduce your speed further if needed.

### CAUTION!

Driving with a hot cooling system could damage your vehicle. If temperature gauge reads "H", pull over and stop the vehicle with the engine at idle, when safe. Turn the air conditioner off and wait until the pointer drops back into the normal range. After appropriate action has been taken, if the pointer remains on the "H", turn the engine off immediately, and call for service.

# WARNING!

A hot engine cooling system is dangerous. You or others could be badly burned by steam or boiling coolant. You may want to call a service center if your vehicle overheats. If you decide to look under the hood yourself, refer to Section 7, Maintenance, of this manual. Follow the warnings under the Cooling System Pressure Cap paragraph.



# JACKING AND TIRE CHANGING

# WARNING!

- Being under a jacked-up vehicle is dangerous. The vehicle could slip off the jack and fall on you. You could be crushed. Never put any part of your body under a vehicle that is on a jack. Never start or run the engine while the vehicle is on a jack. If you need to get under a raised vehicle, take it to a service center where it can be raised on a lift.
- The jack is designed to use as a tool for changing tires only. The jack should not be used to lift the vehicle for service purposes. The vehicle should be jacked on a firm level surface only. Avoid ice or slippery areas.

#### **Jack Location**

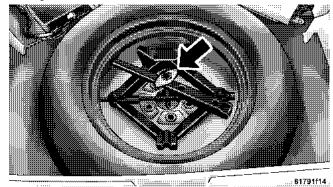
The jack and jack-handle are stowed under the load floor in the trunk.

#### Spare Tire Stowage

The compact spare tire is stowed under the rear load floor in the trunk.

#### Spare Tire Removal

Lift up the load floor cover and remove the hold down.



Spare Tire and Jack Stowage



# **Preparations For Jacking**

Park the vehicle on a firm level surface, avoid ice or slippery areas, **set the parking brake** and place the gear selector in PARK (automatic transaxle) or REVERSE (manual transaxle). Turn OFF the ignition.

# WARNING!

Do not attempt to change a tire on the side of the vehicle close to moving traffic. Pull far enough off the road to avoid the danger of being hit when operating the jack or changing the wheel.

#### WHAT TO DO IN EMERGENCIES 275

• Turn on the Hazard Warning Flasher.



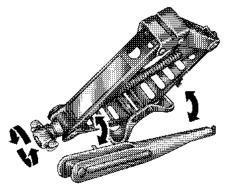
- Block both the front and rear of the wheel diagonally opposite the jacking position. For example, if changing the right front tire, block the left rear wheel.
- Passengers should not remain in the vehicle while the vehicle is being jacked.



# **Jacking Instructions**

1. Remove the scissors jack and lug wrench from the spare wheel as an assembly. Turn the jack screw to the left to loosen the lug wrench, and remove the wrench from the jack assembly.

**NOTE:** The Jack Handle attaches to the side of the jack with two attachment points. When the jack is partially expanded, the tension between the two attachment points holds the jack handle in place.

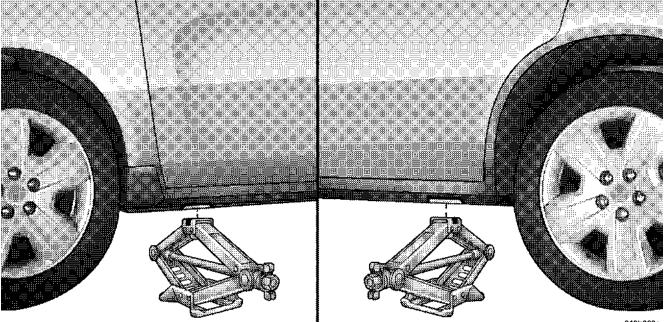


Removing Jack Handle From Jack

8195068d

2. Loosen, but do not remove, the wheel nuts by turning them to the left one turn while the wheel is still on the ground.





Jacking Locations

8196068c

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# CAUTION!

Do not attempt to raise the vehicle by jacking on locations other than those indicated in step 3.

3. There are two front jacking locations and two rear jacking locations on each side of the body. The front locations are outlined by two triangular cutouts, the rear ones by two rectangular cutouts. For vehicles equipped with plastic trim, the plastic has been cut away to expose the jacking locations in the body.

Do not raise the vehicle until you are sure the jack is securely engaged.

4. Turn the jack screw to the left until the jack can be placed under the jacking location. Once the jack is positioned, turn the jack screw to the right until the jack head is properly engaged with the lift area closest to the wheel to be changed. Do not raise the vehicle until you are sure the jack is securely engaged.

# WARNING!

Raising the vehicle higher than necessary can make the vehicle less stable. It could slip off the jack and hurt someone near it. Raise the vehicle only enough to remove the tire.

5. Raise the vehicle by turning the jack screw to the right, using the swivel wrench. Raise the vehicle only until the tire just clears the surface and enough clearance is obtained to install the spare tire. Minimum tire lift provides maximum stability.

6. Remove the wheel nuts and pull the wheel and wheel covers where applicable off the hub. Install the spare wheel and wheel nuts with the cone shaped end of the nuts toward the wheel. Lightly tighten the nuts. To avoid the risk of forcing the vehicle off the jack, do not tighten the nuts fully until the vehicle has been lowered.



# WARNING!

To avoid possible personal injury, handle the wheel covers with care to avoid contact with any sharp edges.

**NOTE:** The wheel cover is held on the wheel by the wheel nuts. When reinstalling original wheel, properly align the wheel cover to the valve stem, place the wheel cover onto the wheel, then install the wheel nuts.

7. Lower the vehicle by turning the jack screw to the left.

8. Finish tightening the nuts. Push down on the wrench while tightening the wheel nuts. Alternate nuts until each nut has been tightened twice. Correct wheel nut torque is 100 ft. lbs (135 N·m). If you doubt that you have tightened the nuts correctly, have them checked with a torque wrench by your dealer or at a service station.

9. Remove the wheel blocks and lower the jack until it is free. Reassemble the lug wrench to the jack assembly and stow it in the spare tire area. Secure the assembly using the means provided.

#### WHAT TO DO IN EMERGENCIES 279

### WARNING!

A loose tire or jack thrown forward in a collision or hard stop could endanger the occupants of the vehicle. Always stow the jack parts and the spare tire in the places provided.

10. Place the deflated (flat) tire in the cargo area, have the tire repaired or replaced as soon as possible.

# WARNING!

A loose tire thrown forward in a collision or hard stop could injure the occupants in the vehicle. Have the deflated (flat) tire repaired or replaced immediately.

11. Check the tire pressure as soon as possible. Correct pressure as required.



6

# JUMP-STARTING PROCEDURES DUE TO A LOW BATTERY

Jump-starting remote battery terminals are located under the hood.

The battery is stored between the left front head lamp assembly and the left front wheel splash shield. Access is through the splash shield.

#### WARNING!

- Take care to avoid the radiator cooling fan whenever the hood is raised. It can start anytime the ignition switch is on. You can be hurt by the fan.
- Do not attempt to push or tow your vehicle to get it started. Vehicles equipped with an automatic transaxle cannot be started this way. Unburned fuel could enter the catalytic converter and once the engine has started, ignite and damage the converter and vehicle. If the vehicle has a discharged battery, booster cables may be used to obtain a start from another vehicle. This type of start can be dangerous if done improperly, so follow this procedure carefully.
- Do not use a booster battery or any other booster source with an output that exceeds 12 volts.



1. Wear eye protection and remove any metal jewelry such as watch bands or bracelets that might make an inadvertent electrical contact.

2. When boosting from a battery in another vehicle, park that vehicle within booster cable reach but without letting the vehicles touch. Set parking brake, place automatic transaxle in PARK and turn ignition to OFF for both vehicles.

# WARNING!

Do not permit vehicles to touch each other as this could establish a ground connection and personal injury could result.

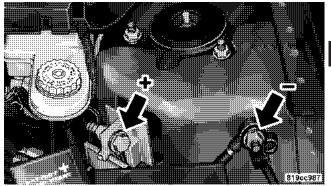
3. Turn off the heater, radio and all unnecessary electrical loads.

4. Remove the protective cover over the remote jumpstart positive battery post (+) in the engine compartment. Connect one end of the jumper cable to the positive battery post. Connect the other end of the same cable to

#### WHAT TO DO IN EMERGENCIES 281

the positive terminal of the booster battery. Refer to the following illustration for jump-starting connections.

5. Connect the other cable, first to the negative terminal of the booster battery and **then to the engine ground (-) of the vehicle with the discharged battery.** Make sure you have a good contact on the engine ground. Refer to the following illustration for jump-starting connections.



**Jump-Starting Location** 

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6. If the vehicle is equipped with Sentry Key Immobilizer, turn the ignition switch to the ON position for 3 seconds before moving the ignition switch to the START position.

7. Start the engine in the vehicle that has the booster battery, let the engine idle a few minutes, then start the engine in the vehicle with the discharged battery.

8. When removing the jumper cables, reverse the sequence exactly. Be careful of the moving belts and fan.

9. Reinstall the protective cover over the remote jumpstart positive battery post.

#### WARNING!

• During cold weather when temperatures are below freezing point, electrolyte in a discharged battery may freeze. Do not attempt jump-starting because the battery could rupture or explode. The battery temperature must be brought up above freezing point before attempting jump-start. **NOTE:** To access the battery for service or replacement refer to "Maintenance Procedures" in the **MAINTAIN-ING YOUR VEHICLE** section of this manual.

#### FREEING A STUCK VEHICLE

**NOTE:** If your vehicle is equipped with Traction Control, turn the system OFF before attempting to "rock" the vehicle.

If your vehicle becomes stuck in mud, sand or snow, it can often be moved by a rocking motion. Turn your steering wheel right and left to clear the area around the front wheels. Then shift back and forth between Reverse and First gear. Usually the least accelerator pedal pressure to maintain the rocking motion without spinning the wheels is most effective.



# WARNING!

Fast spinning tires can be dangerous. Forces generated by excessive wheel speeds may cause axle, tire damage or failure. A tire could explode and injure someone. Do not spin your vehicle's wheels faster than 30 mph (48 km/h) or for longer than 30 seconds continuously without stopping when you are stuck. And don't let anyone near a spinning wheel, no matter what the speed.

# CAUTION!

Racing the engine or spinning the wheels too fast may lead to transaxle overheating and failure. It can also damage the tires. Do not spin the wheels above 30 mph (48 km/h). Do not spin the wheels continuously for more than 30 seconds.

#### WHAT TO DO IN EMERGENCIES 283

#### TOWING A DISABLED VEHICLE

#### With Ignition Key

#### Automatic And Manual Transaxle

Front-wheel-drive vehicles must have the front wheels elevated; all-wheel-drive vehicles must be hauled on a flatbed truck.

All Transaxles

# **CAUTION!**

If the vehicle being towed requires steering, the ignition switch must be in the ACCESSORY position, not in the LOCK position.

Do not attempt to use sling type equipment when towing. When securing vehicle to flat bed truck, do not attach to front or rear suspension components. Damage to your vehicle may result from improper towing.



If it is necessary to use the accessories while being towed (wipers, defrosters, etc.), the key must be in the ON position, not the ACCESSORY position. Make certain the transaxle remains in NEUTRAL.

#### Without The Ignition Key

Special care must be taken when the vehicle is towed with the ignition in the LOCK position. A dolly should be used under the front wheels if the rear wheels are raised. Proper towing equipment is necessary to prevent damage to the vehicle.

Battery power is required to release the brake/ transmission interlock system. There is an override system that allows you to shift out of Park in case of loss of power. To activate the override system, remove the cup holder liner, insert a key, screwdriver or finger into the front hole and push the lever forward. Towing This Vehicle Behind Another Vehicle (Flat Towing With All Four Wheels On The Ground)

#### CAUTION!

DO NOT flat tow this vehicle. Damage to the drivetrain will result.



# MAINTAINING YOUR VEHICLE

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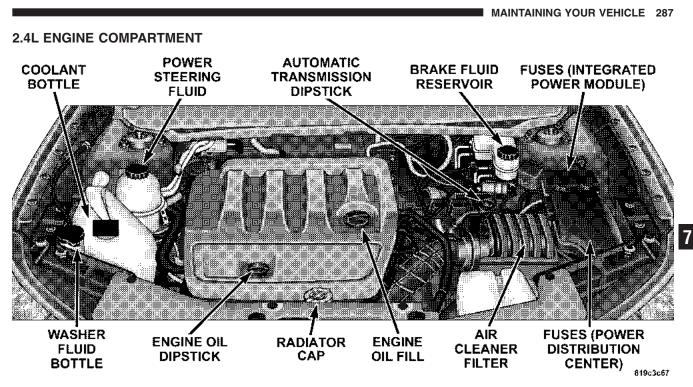


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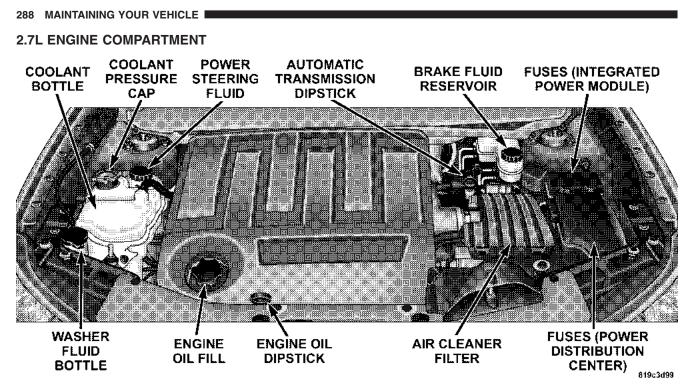
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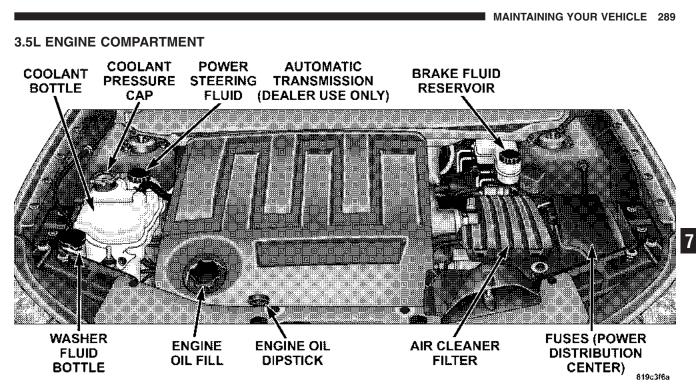
2.4L Engine





2.7L Engine





3.5L Engine



## **ONBOARD DIAGNOSTIC SYSTEM — OBD II**

Your vehicle is equipped with a sophisticated onboard diagnostic system called OBD II. This system monitors the performance of the emissions, engine, and automatic transmission control systems. When these systems are operating properly, your vehicle will provide excellent performance and fuel economy, as well as engine emissions well within current government regulations.

If any of these systems require service, the OBD II system will turn on the "Malfunction Indicator Light." It will also store diagnostic codes and other information to assist your service technician in making repairs. Although your vehicle will usually be drivable and not need towing, see your dealer for service as soon as possible.

# CAUTION!

- Prolonged driving with the "Malfunction Indicator Light" on could cause further damage to the emission control system. It could also affect fuel economy and driveability. The vehicle must be serviced before any emissions tests can be performed.
- If the "Malfunction Indicator Light" is flashing while the engine is running, severe catalytic converter damage and power loss will soon occur. Immediate service is required.

## Loose Fuel Filler Cap Message

After fuel is added, the vehicle diagnostic system can determine if the fuel filler cap is loose or improperly installed. A GASCAP message will be displayed in the instrument cluster. Tighten the gas cap until a "clicking" sound is heard. This is an indication that the gas cap is properly tightened. Press the odometer reset button to turn the message off. If the problem persists, the message will appear the next time the vehicle is started. This



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might indicate a damaged cap. If the problem is detected twice in a row, the system will turn on the Malfunction Indicator Light (MIL). Resolving the problem will turn the MIL light off.

# EMISSIONS INSPECTION AND MAINTENANCE PROGRAMS

In some localities, it may be a legal requirement to pass an inspection of your vehicle's emissions control system. Failure to pass could prevent vehicle registration.

For states, which have an I/M (Inspection and Maintenance) requirement, this check verifies the following: the MIL (Malfunction Indicator Lamp) is functioning and is not on when the engine is running, and that the OBD (On Board Diagnostic) system is ready for testing.

Normally, the OBD system will be ready. The OBD system may **not** be ready if your vehicle was recently serviced, if you recently had a dead battery, or a battery replacement. If the OBD system should be determined not ready for the I/M test, your vehicle may fail the test.

Your vehicle has a simple ignition key actuated test, which you can use prior to going to the test station. To check if your vehicle's OBD system is ready, you must do the following:

1. Insert your ignition key into the ignition switch.

2. Turn the ignition to the ON position, but do not crank or start the engine.

3. If you crank or start the engine, you will have to start this test over.

4. As soon as you turn your key to the ON position, you will see your MIL symbol come on as part of a normal bulb check.

5. Approximately 15 seconds later, one of two things will happen:

a. The MIL will flash for about 10 seconds and then return to being fully illuminated until you turn off the ignition key or start the engine. This means that your vehicle's OBD system is **not ready** and you should **not** proceed to the I/M station.



b. The MIL will not flash at all and will remain fully illuminated until you turn off the ignition key or start the engine. This means that your vehicle's OBD system is **ready** and you can proceed to the I/M station.

If your OBD system is **not ready**, you should see your authorized dealer or repair facility. If your vehicle was recently serviced or had a battery failure or replacement, you may need to do nothing more than drive your vehicle as you normally would in order for your OBD system to update. A recheck with the above test routine may then indicate that the system is now ready.

Regardless of whether your vehicle's OBD system is ready or not ready, if the MIL symbol is illuminated during normal vehicle operation, you should have your vehicle serviced before going to the I/M station. The I/M station can fail your vehicle because the MIL symbol is on with the engine running.

## **REPLACEMENT PARTS**

Use of genuine Mopar<sup>®</sup> parts for normal/scheduled maintenance and repairs is highly recommended to insure the designed performance. Damage or failures caused by the use of non-Mopar<sup>®</sup> parts for maintenance and repairs will not be covered by the manufacturer's warranty.

## **DEALER SERVICE**

Your dealer has the qualified service personnel, special tools, and equipment to perform all service operations in an expert manner. Service Manuals are available which include detailed service information for your vehicle. Refer to these manuals before attempting any procedure yourself.

**NOTE:** Intentional tampering with emissions control systems can result in civil penalties being assessed against you.



## WARNING!

You can be badly injured working on or around a motor vehicle. Only do service work for which you have the knowledge and the proper equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.

## MAINTENANCE PROCEDURES

The pages that follow contain the **required** maintenance services determined by the engineers who designed your vehicle.

Besides the maintenance items for which there are fixed maintenance intervals, there are other items that should operate satisfactorily without periodic maintenance. However, if a malfunction of these items does occur, it could adversely affect the engine or vehicle performance. These items should be inspected if a malfunction is observed or suspected.

## **Engine Oil**

#### Checking Oil Level

To assure proper engine lubrication, the engine oil must be maintained at the correct level. Check the oil level at regular intervals, such as every fuel stop.

The best time to check the engine oil level is about 5 minutes after a fully warmed engine is shut off. Do not check oil level before starting the engine after it has sat overnight. Checking engine oil level when the engine is cold will give you an incorrect reading.





#### 818168a4

#### Engine Oil Dipstick — Gasoline Engines

Checking the oil while the vehicle is on level ground and only when the engine is hot, will improve the accuracy of the oil level readings. Maintain the oil level between the range markings on the dipstick. The range markings will consist of a crosshatch zone that says SAFE or a crosshatch zone that says "MIN" at the low end of the range and MAX at the high end of the range. Adding one quart of oil when the reading is at the low end of the indicated range will result in the oil level at the full end of the indicator range.

# **CAUTION!**

Do not overfill the engine. Overfilling the engine as indicated by the range markings, as described above, on the engine oil dipstick will cause oil aeration, which can lead to loss of oil pressure and an increase in oil temperature. This could damage your engine.

## **Change Engine Oil**

Road conditions and your kind of driving affects the interval at which your oil should be changed. Check the following list to decide if any apply to you.

- Day and night temperatures are below 32°F (0°C).
- Stop and Go driving.
- Extensive engine idling.
- Driving in dusty conditions.
- Short trips of less than 10 miles (16 km).
- More than 50% of your driving is at sustained high speeds during hot weather, above 90°F (32°C).



- Trailer towing.
- Taxi, Police or delivery service (commercial service).
- Off-Road or desert operation.
- If equipped for and operating with E-85 (ethanol) fuel.

**NOTE:** If **ANY** of these apply to you then change your engine oil every 3,000 miles (5 000 km) or 3 months, whichever comes first, and follow schedule "B—All Engines" of the "Maintenance Schedules" section of this manual.

If none of these apply to you, then change your engine oil at every interval shown on schedule "A" in the maintenance schedule section of this manual.

NOTE: Under no circumstances should oil change intervals exceed 6,000 miles (10 000 km) or 6 months whichever occurs first.

# Engine Oil Selection (Gasoline Engines)

For best performance and maximum protection for all engines under all types of operating conditions, the manufacturer recommends engine oils that are API Certified and meet the requirements of DaimlerChrysler Material Standard MS-6395.

American Petroleum Institute (API) Engine Oil Identification Symbol

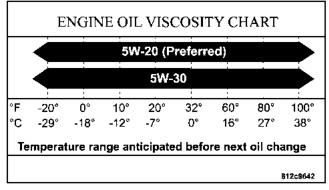


This symbol means that the oil has been certified by the American Petroleum Institute (API). The manufacturer only recommends API Certified engine oils.



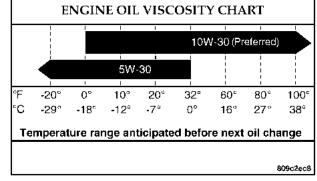
Engine Oil Viscosity (SAE Grade) SAE 5W-20 engine oil for 2.4L and 2.7L engines, is

recommended for all operating temperatures.



5W-20 Oil Viscosity Chart

SAE 10W-30 engine oil for 3.5L engines, is recommended for all operating temperatures.



## 10W-30 Oil Viscosity Chart

These engine oils are designed to improve low temperature starting and vehicle fuel economy. Refer to the engine oil filler cap for the preferred engine oil viscosity grade for each vehicle.

Lubricants which do not have both, the engine oil certification mark and the correct SAE viscosity grade number should not be used.



## Synthetic Engine Oils

There are a number of engine oils being promoted as either synthetic or semi-synthetic. If you chose to use such a product, use **only** those oils that are American Petroleum Institute (API) Certified and have the recommended SAE viscosity grade. Follow the maintenance schedule that describes your driving type.

## Materials Added To Engine Oils

The manufacture strongly recommends against the addition of any additives (other than leak detection dyes) to the engine oil. Engine oil is an engineered product and it's performance may be impaired by supplemental additives.

#### **Disposing of Used Engine Oil**

Care should be taken in disposing of used engine oil from your vehicle. Used oil, indiscriminately discarded, can present a problem to the environment. Contact your dealer, service station, or governmental agency for advice on how and where used oil can be safely discarded in your area.

#### **Engine Oil Filter**

The engine oil filter should be replaced at every engine oil change.

#### **Engine Oil Filter Selection**

All of this manufacturers engines have a full-flow type disposable oil filter. Use a filter of this type for replacement. The quality of replacement filters varies considerably. Only high quality filters should be used to assure most efficient service. Mopar Engine Oil Filters are high quality oil filters and are recommended.

## **Spark Plugs**

Spark plugs must fire properly to assure engine performance and emission control. New plugs should be installed at the specified mileage. The entire set should be replaced if there is any malfunction due to a faulty spark plug. Refer to the Engine data Label located under the hood for the proper type of spark plug for use in your vehicle.

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## **Catalytic Converter**

The catalytic converter requires the use of unleaded fuel only. Leaded gasoline will destroy the effectiveness of the catalyst as an emission control device.

Under normal operating conditions, the catalytic converter will not require maintenance. However, it is important to keep the engine properly tuned to assure proper catalyst operation and prevent possible catalyst damage.

# CAUTION!

Damage to the catalytic converter can result if your vehicle is not kept in proper operating condition. In the event of engine malfunction, particularly involving engine misfire or other apparent loss of performance, have your vehicle serviced promptly. Continued operation of your vehicle with a severe malfunction could cause the converter to overheat, resulting in possible damage to the converter and the vehicle.

# WARNING!

A hot exhaust system can start a fire if you park over materials that can burn. Such materials might be grass or leaves coming into contact with your exhaust system. Do not park or operate your vehicle in areas where your exhaust system can contact anything that can burn.

In unusual situations involving grossly malfunctioning engine operation, a scorching odor may suggest severe and abnormal catalyst overheating. If this occurs, stop the vehicle, turn off the engine and allow it to cool. Service, including a tune up to manufacturers specifications, should be obtained immediately.

To minimize the possibility of catalyst damage:

- Do not shut off the engine or interrupt the ignition when the transaxle is in gear and the vehicle is in motion.
- Do not try to start the engine by pushing or towing the vehicle.



• Do not idle the engine with any ignition coil connectors disconnected for prolonged periods.

## **Crankcase Emission Control System**

Proper operation of this system depends on freedom from sticking or plugging due to deposits. As vehicle mileage builds up, the PCV valve and passages may accumulate deposits. If a valve is not working properly, replace it with a new valve. DO NOT ATTEMPT TO CLEAN THE OLD PCV VALVE!

Check ventilation hose for indication of damage or plugging deposits. Replace if necessary.

## **Fuel Filter**

A plugged fuel filter can cause hard starting or limit the speed at which a vehicle can be driven. Should an excessive amount of dirt accumulate in the fuel tank, frequent filter replacement may be necessary. The fuel filters are located inside the fuel tank. See your dealer for service.

## Air Cleaner Element (Filter)

Under normal driving conditions, replace the filter at the intervals shown on Schedule "A". If, however, you drive the vehicle frequently under dusty or severe conditions, the filter element should be inspected periodically and replaced if necessary at the intervals shown on Schedule "B".

# WARNING!

The air cleaner can provide a measure of protection in the case of engine backfire. Do not remove the air cleaner unless such removal is necessary for repair or maintenance. Make sure that no one is near the engine compartment before starting the vehicle with the air cleaner removed. Failure to do so can result in serious personal injury.

#### **Maintenance-Free Battery**

You will never have to add water, nor is periodic maintenance required.

**NOTE:** The battery is stored in a compartment behind the left front fender and is accessible without removing the tire and wheel. Remote battery terminals are located in the engine compartment for jump starting.

To access the battery, turn the steering wheel fully to the right and remove the inner fender shield.

## WARNING!

Battery fluid is a corrosive acid solution and can burn or even blind you. Don't allow battery fluid to contact your eyes, skin or clothing. Don't lean over a battery when attaching clamps. If acid splashes in eyes or on skin, flush the area immediately with large amounts of water.

Battery gas is flammable and explosive. Keep flame or sparks away from the battery. Don't use a booster battery or any other booster source with an output greater than 12 volts. Don't allow cable clamps to touch each other.

Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.



# CAUTION!

It is essential when replacing the cables on the battery that the positive cable is attached to the positive post and the negative cable is attached to the negative post. Battery posts are marked positive (+) and negative (-) and identified on the battery case. Cable clamps should be tight on the terminal posts and free of corrosion. Apply grease to posts and clamps after tightening.

If a "fast charger" is used while the battery is in the vehicle, disconnect both vehicle battery cables before connecting the charger to battery. Do not use a "fast charger" to provide starting voltage as battery damage can result.

## Air Conditioner Maintenance

For best possible performance, your air conditioner should be checked and serviced by an Authorized Dealer at the start of each warm season. This service should include cleaning of the condenser fins and a performance test. Drive belt tension should also be checked at this time.

#### WARNING!

- Use only refrigerants and compressor lubricants approved by the manufacturer for your air conditioning system. Some unapproved refrigerants are flammable and can explode, injuring you. Other unapproved refrigerants or lubricants can cause the system to fail, requiring costly repairs. Refer to Section 3 of the Warranty Information book for further warranty information.
- The air conditioning system contains refrigerant under high pressure. To avoid risk of personal injury or damage to the system, adding refrigerant or any repair requiring lines to be disconnected should be done by an experienced repairman.

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#### **Refrigerant Recovery and Recycling**

R-134a Air Conditioning Refrigerant is a hydrofluorocarbon (HFC) that is endorsed by the Environmental Protection Agency and is an ozone-saving product. However, the manufacturer recommends that air conditioning service be performed by dealers or other service facilities using recovery and recycling equipment.

**NOTE:** Use only manufacturer approved A/C System Sealers, Stop Leak Products, Seal Conditioners, Compressor Oil, or Refrigerants.

## Power Steering — Fluid Check

Checking the power steering fluid level at a defined service interval is not required. The fluid should only be checked if a leak is suspected, abnormal noises are apparent, and/or the system is not functioning as anticipated. Coordinate inspection efforts through a certified DaimlerChrysler Dealership.

# WARNING!

Fluid level should be checked on a level surface and with the engine off to prevent injury from moving parts and to insure accurate fluid level reading. Do not overfill. Use only manufacturers recommended power steering fluid.

If necessary, add fluid to restore to the proper indicated level. With a clean cloth, wipe any spilled fluid from all surfaces. Refer to Fluids, Lubricants, and Genuine Parts for correct fluid types.

#### Front Suspension Ball Joints

There are two front suspension lower ball joints that are permanently lubricated. Inspect these ball joints whenever under vehicle service is done. Damaged seals and their corresponding potentially damaged ball joints must be replaced.



## **Body Lubrication**

Locks and all body pivot points, including such items as seat tracks, doors, liftgate and hood hinges, should be lubricated periodically to assure quiet, easy operation and to protect against rust and wear. Prior to the application of any lubricant, the parts concerned should be wiped clean to remove dust and grit; after lubricating excess oil and grease should be removed. Particular attention should also be given to hood latching components to insure proper function. When performing other underhood services, the hood latch, release mechanism and safety catch should be cleaned and lubricated.

The external lock cylinders should be lubricated twice a year, preferably in the fall and spring. Apply a small amount of a high quality lubricant such as Mopar<sup>®</sup> Lock Cylinder Lubricant directly into the lock cylinder.

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#### Windshield Wiper Blades

Clean the rubber edges of the wiper blades and the windshield periodically with a sponge or soft cloth and a mild non abrasive cleaner or use the washer solvent. This will remove accumulations of salt, waxes or road film and help reduce streaking and smearing.

Operation of the wipers on dry glass for long periods may cause deterioration of the wiper blades. Always use washer fluid when using the wipers to remove salt or dirt from a dry windshield. Avoid using the wiper blades to remove frost or ice from the windshield. Make sure that they are not frozen to the glass before turning them on to avoid damaging the blade. Keep the blade rubber out of  $m{7}$ contact with petroleum products such as engine oil, gasoline, etc.

#### Windshield Wiper Blade Replacement

1. Lift the wiper arm away from the glass.

2. Push the release tab shown in the illustration and slide the wiper blade assembly down along the arm. Gently place the wiper arm on the windshield.



3. Install the new blade assembly onto the wiper arm tip until it locks in place.

**NOTE:** Always refer to the wiper blade packaging for specific installation instructions. Many wiper blade replacements fit multiple vehicles.

## Windshield Washer Reservoir

The washer fluid reservoir is located engine compartment and should be checked for fluid level at regular intervals. Fill the reservoir with windshield washer solvent (not radiator antifreeze) and operate the system for a few seconds to flush out the residual water. Refer to the appropriate engine diagram (at the beginning of this section) for the location of the reservoir.

#### **Exhaust System**

The best protection against carbon monoxide entry into the vehicle body is a properly maintained engine exhaust system. If you notice a change in the sound of the exhaust system, or if exhaust fumes can be detected inside the vehicle, or when the underside or rear of the vehicle is damaged; have a competent technician inspect the complete exhaust system and adjacent body areas for broken, damaged, deteriorated, or mispositioned parts. Open seams or loose connections could permit exhaust fumes to seep into the passenger compartment. In addition, inspect the exhaust system each time the vehicle is raised for an oil change or lubrication. Replace as required.

# WARNING!

Exhaust gases can injure or kill. They contain carbon monoxide (CO) which is colorless and odorless. Breathing it can make you unconscious and can eventually poison you. To avoid breathing CO, refer to Exhaust Gas in the Safety Tips section of this manual.



## **Cooling System**

# WARNING!

- When working near the radiator cooling fan, disconnect the fan motor lead or turn the ignition switch to the OFF position. The fan is temperature controlled and can start at any time the ignition switch is in the ON position.
- You or others can be badly burned by hot coolant or steam from your radiator. If you see or hear steam coming from under the hood, don't open the hood until the radiator has had time to cool. Never try to open a cooling system pressure cap when the radiator is hot.

## **Coolant Checks**

Check engine coolant (antifreeze) protection every 12 months (before the onset of freezing weather, where applicable). If coolant is dirty or rusty in appearance, the system should be drained, flushed and refilled with fresh coolant. Check the front of the A/C condenser for any

accumulation of bugs, leaves, etc. If dirty, clean by gently spraying water from a garden hose vertically down the face of the condenser.

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Check the coolant recovery bottle tubing for brittle rubber, cracking, tears, cuts and tightness of the connection at the bottle and radiator. Inspect the entire system for leaks.

## Cooling System — Drain, Flush and Refill

At the intervals shown on the Maintenance Schedules, the system should be drained, flushed and refilled.

If the solution is dirty or contains a considerable amount of sediment, clean and flush with a reliable cooling system cleaner. Follow with a thorough rinsing to remove all deposits and chemicals. Properly dispose of old antifreeze solution.

# Selection Of Coolant

Use only the manufacturers recommended coolant, refer to Fluids, Lubricants and Genuine Parts for correct coolant type.



# CAUTION!

Mixing of coolants other than specified HOAT engine coolants, may result in engine damage and may decrease corrosion protection. If a non-HOAT coolant is introduced into the cooling system in an emergency, it should be replaced with the specified coolant as soon as possible.

Do not use plain water alone or alcohol base engine coolant (antifreeze) products. Do not use additional rust inhibitors or antirust products, as they may not be compatible with the radiator engine coolant and may plug the radiator.

This vehicle has not been designed for use with Propylene Glycol based coolants. Use of Propylene Glycol based coolants is not recommended.

#### **Adding Coolant**

Your vehicle has been built with an improved engine coolant that allows extended maintenance intervals. This coolant can be used up to 5 Years or 100,000 miles before replacement. To prevent reducing this extended maintenance period, it is important that you use the same coolant throughout the life of your vehicle. Please review these recommendations for using Hybrid Organic Additive Technology (HOAT) coolant.

When adding coolant, a minimum solution of 50% recommended Mopar Antifreeze/ Coolant 5 Year/100,000 Mile Formula HOAT (Hybrid Organic Additive Technology), or equivalent, in water should be used. Use higher concentrations (not to exceed 70%) if temperatures below  $-34^{\circ}F(-37^{\circ}C)$  are anticipated.

Use only high purity water such as distilled or deionized water when mixing the water/engine coolant solution. The use of lower quality water will reduce the amount of corrosion protection in the engine cooling system.



## Please note that it is the owner's responsibility to maintain the proper level of protection against freezing according to the temperatures occurring in the area where the vehicle is operated.

**NOTE:** Mixing coolant types will decrease the life of the engine coolant and will require more frequent coolant changes.

## **Cooling System Pressure Cap**

The cap must be fully tightened to prevent loss of coolant, and to insure that coolant will return to the radiator from the coolant recovery bottle.

The cap should be inspected and cleaned if there is any accumulation of foreign material on the sealing surfaces.

## WARNING!

- The warning words "DO NOT OPEN HOT" on the cooling system pressure cap are a safety precaution. Never add coolant when the engine is overheated. Do not loosen or remove the cap to cool an overheated engine. Heat causes pressure to build up in the cooling system. To prevent scalding or injury, do not remove the pressure cap while the system is hot or under pressure.
- Do not use a pressure cap other than the one specified for your vehicle. Personal injury or engine damage may result.

# **Disposal of Used Engine Coolant**

Used ethylene glycol based engine coolant is a regulated substance requiring proper disposal. Check with your local authorities to determine the disposal rules for your community. To prevent ingestion by animals or children do not store ethylene glycol based engine coolant in open containers or allow it to remain in puddles on the



ground. If ingested by a child, contact a physician immediately. Clean up any ground spills immediately.

## **Coolant Level**

**4 Cylinder Engines** — the coolant bottle provides a quick visual method for determining that the coolant level is adequate. With the engine idling and warm to normal operating temperature, the level of the coolant in the bottle should be between the "ADD" and "Full" lines, shown on the bottle.

**6** Cylinder Engines — the level of the coolant in the pressurized coolant bottle should be between the cold and full range on the bottle when the engine is cold.

The radiator normally remains completely full, so there is no need to remove the radiator cap unless checking for coolant freeze point or replacing coolant. Advise your service attendant of this. As long as the engine operating temperature is satisfactory, the coolant bottle need only be checked once a month. When additional coolant is needed to maintain the proper level, it should be added to the coolant bottle. Do not overfill.

## **Points To Remember**

**NOTE:** When the vehicle is stopped after a few miles (a few kilometers) of operation, you may observe vapor coming from the front of the engine compartment. This is normally a result of moisture from rain, snow, or high humidity accumulating on the radiator and being vaporized when the thermostat opens, allowing hot coolant to enter the radiator.

If an examination of your engine compartment shows no evidence of radiator or hose leaks, the vehicle may be safely driven. The vapor will soon dissipate.

- Do not overfill the coolant recovery bottle.
- Check coolant freeze point in the radiator and in the coolant recovery bottle. If antifreeze needs to be added, contents of coolant recovery bottle must also be protected against freezing.
- If frequent coolant additions are required, or if the level in the coolant recovery bottle does not drop when the engine cools, the cooling system should be pressure tested for leaks.



- Maintain coolant concentration at 50% HOAT engine coolant (minimum) and distilled water for proper corrosion protection of your engine which contains aluminum components.
- Make sure that the radiator and coolant recovery bottle overflow hoses are not kinked or obstructed.
- Keep the front of the radiator clean. If your vehicle is equipped with air conditioning, keep the front of the condenser clean, also.
- Do not change the thermostat for summer or winter operation. If replacement is ever necessary, install ONLY the correct type thermostat. Other designs may result in unsatisfactory coolant performance, poor gas mileage, and increased emissions.

#### Hoses And Vacuum/Vapor Harnesses

Inspect surfaces of hoses and nylon tubing for evidence of heat and mechanical damage. Hard or soft spots, brittle rubber, cracking, tears, cuts, abrasions, and excessive swelling indicate deterioration of the rubber Pay particular attention to the hoses nearest to high heat sources such as the exhaust manifold. Inspect hose routing to be sure hoses do not touch any heat source or moving component that may cause heat damage or mechanical wear.

Insure nylon tubing in these areas has not melted or collapsed

Inspect all hose connections such as clamps and couplings to make sure the are secure and no leaks are present.

Components should be replaced immediately if there is any evidence of degradation that could cause failure.

#### **Fuel System Connections**

Electronic Fuel Injection high pressure fuel systems are designed with tubes and special connects, connections and clamps which have unique material characteristics to provide adequate sealing and resist attack by deteriorated gasoline.

You are urged to use only the manufactures-specified tubes, connections and clamps, or their equivalent in material and specification, in any fuel system servicing.



#### **Brake System**

In order to assure brake system performance, all brake system components should be inspected periodically. Suggested service intervals can be found in the Maintenance Section.

# WARNING!

Riding the brakes can lead to brake failure and possibly an accident. Driving with your foot resting or riding on the brake pedal can result in abnormally high brake temperatures, excessive lining wear, and possible brake damage. You wouldn't have your full braking capacity in an emergency.

#### Brake And Power Steering System Hoses

When servicing the vehicle for scheduled maintenance, inspect the surface of the hoses and nylon tubing for evidence of heat and mechanical damage. Hard and brittle rubber, cracking, tears, cuts, abrasions, and excessive swelling suggest deterioration of the rubber. Particular attention should be made to examining those hose surfaces nearest to high heat sources, such as the exhaust manifold.

Inspect all hose clamps and couplings to make sure they are secure and no leaks are present.

Insure nylon tubing in these areas has not melted or collapsed.

**NOTE:** Often, fluids such as oil, power steering fluid, and brake fluid are used during assembly plant operations to ease the assembly of hoses to couplings. Therefore, oil wetness at the hose-coupling area is not necessarily an indication of leakage. Actual dripping of hot fluid when systems are under pressure (during vehicle operation) should be noted before a hose is replaced based on leakage.

**NOTE:** Inspection of brake hoses should be done whenever the brake system is serviced and at every engine oil change.



## WARNING!

Worn brake hoses can burst and cause brake failure. You could have an accident. If you see any signs of cracking, scuffing, or worn spots, have the brake hoses replaced immediately.

## Brake Master Cylinder

The fluid level in the master cylinder should be checked when performing under hood services, or immediately if the brake system warning lamp is on.

Be sure to clean the top of the master cylinder area before removing the cap. If necessary, add fluid to bring the fluid level up to the requirements described on the brake fluid reservoir. Fluid level can be expected to fall as the brake pads wear. Brake fluid level should be checked when pads are replaced. However, low fluid level may be caused by a leak and a checkup may be needed.

Use only manufacturers recommended brake fluid, refer to Fluids, Lubricants and Genuine Parts for correct fluid type.

# WARNING!

Use of a brake fluid that may have a lower initial boiling point or unidentified as to specification, may result in sudden brake failure during hard prolonged braking. You could have an accident.

# WARNING!

Overfilling the brake fluid reservoir can result in spilling brake fluid on hot engine parts and the brake fluid catching fire.

Use only brake fluid that has been in a tightly closed container to avoid contamination from foreign matter.

Do not allow petroleum based fluid to contaminate the brake fluid as seal damage will result!



#### **Automatic Transaxle**

The automatic transaxle and differential assembly are contained within a single housing.

All automatic transaxles (with the exception of the transaxle with the 3.5L engine, which has no dipstick and is dealer service only) are equipped with a conventional filler tube and dipstick. If fluid is added, it should be added through the dipstick hole in the case.

#### **Procedure For Checking Fluid Level**

The fluid level in the automatic transaxle should be checked whenever the vehicle is serviced. Operation with an improper fluid level will greatly reduce the life of the transaxle and of the fluid.

The fluid level in the automatic transaxle with 3.5L engine, should be checked only by a trained technician.

To properly check the automatic transaxle fluid level, the following procedure must be used:

1. The vehicle must be on level ground.

2. The engine should be running at curb idle speed for a minimum of 60 seconds.

3. Fully apply parking brake.

4. Place the gear selector momentarily in each gear position ending with the lever in P (PARK). Wipe the area around the dipstick clean to eliminate the possibility of dirt entering the transaxle.

5. Remove the dipstick and determine if the fluid is hot or warm. Hot fluid is approximately 180°F (82°C), which is the normal operating temperature after the vehicle has been driven at least 15 miles (24 km). The fluid cannot be comfortably held between the finger tips. Cold is when the fluid is below 80°F (27°C).

6. Wipe the dipstick clean and reinsert until seated. Remove dipstick and note reading.

a. If the fluid is hot, the reading should be in the crosshatched area marked "HOT" (between the upper two holes in the dipstick).

b. If the fluid is cold, the fluid level should be between the lower two holes in the area marked "COLD".



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If the fluid level indicates low, add sufficient fluid to bring to the proper level.

## CAUTION!

Do not overfill. Dirt and water in the transaxle can cause serious damage. To prevent dirt and water from entering the transaxle after checking or replenishing fluid, make certain that the dipstick cap is re-seated properly.

#### **Special Additives**

Do not add any materials (other than leak detection dyes) to Automatic transaxle Fluid (ATF). ATF is an engineered product and its performance may be impaired by supplemental additives.

#### Appearance Care And Protection From Corrosion

## Protection Of Body And Paint from Corrosion

Vehicle body care requirements vary according to geographic locations and usage. Chemicals that make roads passable in snow and ice, and those that are sprayed on trees and road surfaces during other seasons, are highly corrosive to the metal in your vehicle. Outside parking, which exposes your vehicle to airborne contaminants, road surfaces on which the vehicle is operated, extreme hot or cold weather and other extreme conditions will have an adverse effect on paint, metal trim, and underbody protection.

The following maintenance recommendations will enable you to obtain maximum benefit from the corrosion resistance built into your vehicle.

## What Causes Corrosion?

Corrosion is the result of deterioration or removal of paint and protective coatings from your vehicle.

The most common causes are:

- Road salt, dirt and moisture accumulation.
- Stone and gravel impact.
- Insects, tree sap and tar.
- Salt in the air near sea coast localities.
- Atmospheric fallout/industrial pollutants.



## Washing

- Wash your vehicle regularly. Always wash your vehicle in the shade using Mopar Car Wash or a mild car wash soap, and rinse the panels completely with clear water.
- If insects, tar or other similar deposits have accumulated on your vehicle, use Mopar Super Kleen Bug and Tar Remover to remove.
- Use Mopar Cleaner Wax to remove road film, stains and to protect your paint finish. Take care never to scratch the paint.
- Avoid using abrasive compounds and power buffing that may diminish the gloss or thin out the paint finish.

# **CAUTION!**

Do not use abrasive or strong cleaning materials such as steel wool or scouring powder, which will scratch metal and painted surfaces.

#### **Special Care**

- If you drive on salted or dusty roads or if you drive near the ocean, hose off the undercarriage at least once a month.
- It is important that the drain holes in the lower edges of the doors, rocker panels and trunk be kept clear and open.
- If you detect any stone chips or scratches in the paint, touch them up immediately. The cost of such repairs is considered the responsibility of the owner.
- If your vehicle is damaged due to an accident or similar cause which destroys the paint and protective coating, have your vehicle repaired as soon as possible. The cost of such repairs is considered the responsibility of the owner.
- If you carry special cargo such as chemicals, fertilizers, de-icer salt, etc., be sure that such materials are well packaged and sealed.
- If a lot of driving is done on gravel roads, consider mud or stone shields behind each wheel.



• Use Mopar touch up paint on scratches as soon as possible. Your dealer has touch up paint to match the color of your vehicle.

#### Wheel and Wheel Trim Care

All wheels and wheel trim, especially aluminum and chrome plated wheels should be cleaned regularly with a mild soap and water to prevent corrosion. To remove heavy soil, use Mopar Wheel Cleaner or select a nonabrasive, non-acidic cleaner. Do not use scouring pads, steel wool, a bristle brush or metal polishes. Only Mopar cleaners are recommended. Do not use oven cleaner. Avoid automatic car washes that use acidic solutions or harsh brushes that may damage the wheels' protective finish.

## **Interior Care**

#### **Cleaning Interior Trim**

Interior Trim should be cleaned starting with a damp cloth, a damp cloth with Mopar Total Clean, then Mopar Spot & Stain Remover if absolutely necessary. Do not use harsh cleaners or Armorall. Use Mopar Total Clean to clean vinyl upholstery

#### Cleaning Leather Upholstery

Mopar Total Clean is specifically recommended for leather upholstery.

Your leather upholstery can be best preserved by regular cleaning with a damp soft cloth. Small particles of dirt can act as an abrasive and damage the leather upholstery and should be removed promptly with a damp cloth. Stubborn soils can be removed easily with a soft cloth and Mopar Total Clean. Care should be taken to avoid soaking your leather upholstery with any liquid. Please do not use polishes, oils, cleaning fluids, solvents, detergents, or ammonia based cleaners to clean your leather upholstery. Application of a leather conditioner is not required to maintain the original condition.

#### WARNING!

Do not use volatile solvents for cleaning purposes. Many are potentially flammable, and if used in closed areas they may cause respiratory harm.



# YES Essentials<sup>®</sup> Fabric Cleaning Procedure – If Equipped

YES Essentials<sup>®</sup> seats may be cleaned in the following manner:

- Remove as much of the stain as possible by blotting with a clean, dry towel.
- Blot any remaining stain with a clean, damp towel.
- For tough stains, apply Mopar<sup>®</sup> Total Clean or a mild soap solution to a clean, damp cloth and remove stain. Use a fresh, damp towel to remove soap residue.
- For grease stains, apply Mopar<sup>®</sup> Multi-Purpose Cleaner to a clean, damp cloth and remove stain. Use a fresh, damp towel to remove soap residue.
- Do not use any solvents or protectants on Yes Essentials<sup>®</sup> products.

#### **Glass Surfaces**

All glass surfaces should be cleaned on a regular basis with Mopar Glass Cleaner or any commercial householdtype glass cleaner. Never use an abrasive type cleaner. Use caution when cleaning the inside rear window equipped with electric defrosters or the right rear quarter window equipped with the radio antenna. Do not use scrapers or other sharp instruments which may scratch the elements.

When cleaning the rear view mirror, spray cleaner on the towel or rag that you are using. Do not spray cleaner directly on the mirror.

#### **Cleaning Plastic Instrument Cluster Lenses**

The lenses in front of the instruments in this vehicle are molded in clear plastic. When cleaning the lenses, care must be taken to avoid scratching the plastic.

1. Clean with a wet soft rag. A mild soap solution may be used, but do not use high alcohol content or abrasive cleaners. If soap is used, wipe clean with a clean damp rag.

2. Dry with a soft tissue.

## **Cleaning Headlights**

Your vehicle has plastic headlights that are lighter and less susceptible to stone breakage than glass headlights.



Plastic is not as scratch resistant as glass and therefore different lens cleaning procedures must be followed.

To minimize the possibility of scratching the lenses and reducing light output, avoid wiping with a dry cloth. To remove road dirt, wash with a mild soap solution followed by rinsing.

Do not use abrasive cleaning components, solvents, steel wool or other aggressive material to clean the lenses.

#### **Instrument Panel Cover**

The instrument panel cover has a low glare surface which minimizes reflections in the windshield. Do not use protectants or other products which may cause undesirable reflections. Use soap and warm water to restore the low glare surface.

#### Seat Belt Maintenance

Do not bleach, dye or clean the belts with chemical solvents or abrasive cleaners. This will weaken the fabric. Sun damage can also weaken the fabric.

If the belts need cleaning, use a mild soap solution or lukewarm water. Do not remove the belts from the car to wash them. Replace the belts if they appear frayed or worn or if the buckles do not work properly.

Dry with a soft tissue.

#### Cleaning The Center Console Cup Holders

#### Removal

Grab the rubber portion of the cupholder and lift upward.

#### Cleaning

Soak the rubber cupholder liner in a mixture of medium hot tap water and one teaspoon of mild liquid dish soap. Let soak for approximately one hour. After one hour pull the liner from the water and dip it back into the water about six times. This will loosen any remaining debris. Rinse the liner thoroughly under warm running water. Shake the excess water from the liner and dry the outer surfaces with a clean soft cloth.

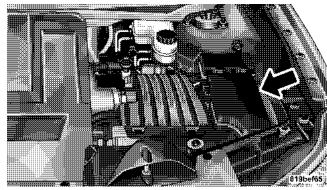
## Installation

Align the liner in the cupholder and press down firmly.



# FUSES/TOTALLY INTEGRATED POWER MODULE (TIPM)

A Totally Integrated Power Module is located in the engine compartment near the air cleaner assembly. This center contains cartridge fuses and mini fuses. A label that identifies each component may be printed on the inside of the cover. Refer to the graphic below for FUSES/TIPM location.



Fuse and Relay Center (TIPM)

Cavity	Cartridge Fuse	Mini Fuse	Description
1	40 Amp Green		Power Top Feed
2		20 Amp Yellow	AWD — If Appli- cable, ECU Feed
3		10 Amp Red	CHMSL Brake Switch Feed
4		10 Amp Red	Ignition Switch Feed
5		20 Amp Yellow	Trailer Tow
6		10 Amp Red	IOD Sw/Pwr Mir/ Ocm Steering Cntrl Sdar/Hfm
7		30 Amp Green	IOD Sense1
8		30 Amp Green	IOD Sense2
9	40 Amp Green		Power Seats



0.1	G ( ) ]		
Cavity	Cartridge Fuse	Mini Fuse	Description
10		20 Amp Yellow	CCN Power Locks
11		15 Amp Lt Blue	Power Outlet
12		20 Amp Yellow	Ign Run/Acc Inverter
13		20 Amp Yellow	Pwr run/Acc Outlet RR
14		10 Amp Red	IOD CCN/ Interior Lighting
15	40 Amp Green		RAD Fan Relay Bat- tery Feed
16		15 Amp Lt. Blue	IGN Run/Acc Cigar Ltr/Sunroof
17		10 Amp Red	IOD Feed Mod-Wcm
18	40 Amp Green		ASD Relay Contact PWR Feed
19		20 Amp Yellow	PWR Amp 1 & Amp 2 Feed

Cavity	Cartridge Fuse	Mini Fuse	Description
20		15 Amp Lt. Blue	IOD Feed Radio
21		10 Amp Red	IOD Feed Intrus Mod/Siren
22		10 Amp Red	IGN RUN HVAC/ Compass Sensor
23		15 Amp Lt. Blue	ENG ASD Relay Feed 3
24		25 Amp Natural	PWR Sunroof Feed
25		10 Amp Red	Heated Mirror
26		15 Amp Lt. Blue	ENG ASD Relay Feed 2
27		10 Amp Red	IGN RUN Only ORC Feed
28		10 Amp Red	IGN RUN ORC/OCM Feed
29			Hot Car (No Fuse Required)



Cavity	Cartridge Fuse	Mini Fuse	Description
30		20 Amp Yellow	Heated Seats
31		10 Amp Red	Headlamp Washer Relay Control
32	30 Amp Pink		ENG ASD Control Feed 1
33		10 Amp Red	ABS MOD/J1962 Conn/PCM
34	30 Amp Pink		ABS Valve Feed
35	40 Amp Green		ABS Pump Feed
36	30 Amp Pink		Headlamp Washer Control
37		15 Amp Lt. Blue	110 Inverter

# **CAUTION!**

- When installing the Totally Integrated Power Module cover, it is important to ensure the cover is properly positioned and fully latched. Failure to do so may allow water to get into the Totally Integrated Power Module, and possibly result in an electrical system failure.
- When replacing a blown fuse, it is important to use only a fuse having the correct amperage rating. The use of a fuse with a rating other than indicated may result in a dangerous electrical system overload. If a properly rated fuse continues to blow, it indicates a problem in the circuit that must be corrected.



## **VEHICLE STORAGE**

If you will not be using your vehicle for more than 21 days you may want to take steps to preserve your battery. You may:

- Disengage the mini fuse in the Power Distribution Center labeled IOD (Ignition Off-Draw).
- Or, disconnect the negative cable from the battery.

## **REPLACEMENT BULBS**

All the inside bulbs are brass or glass wedge base. Aluminum base bulbs are not approved and should not be used for replacement.

LIGHT BULBS — Interior	Bulb Number
Front Courtesy/Reading Lights	578/W5W
Center Courtesy/Reading Lights	578/W5W
Visor Vanity Lights	A6220
Glove Box Light	194
Shift Indicator Light	JKLE14140
Rear Compartment (Trunk) Light	579

**NOTE:** For lighted switches, see your dealer for replacement instructions.

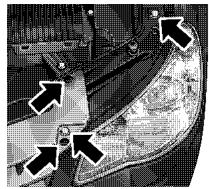
LIGHTS BULBS — Outside	Bulb No.
Low Beam Headlight	9006
High Beam Headlight.	9005
Front Park/Turn Signal/Side Marker Light	
Front Fog Light 9145//H10 (Serviced	at Dealer)
Center High Mounted	
Stop Light (CHMSL) LED	Assembly
Rear Tail/Stop	3057
Rear Turn Signal	
Backup Light W	16W (921)
License Light	



## **BULB REPLACEMENT**

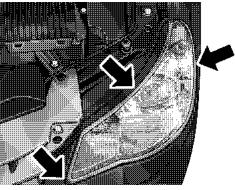
## Head Lamp Bulb Replacement

1. Open the hood and remove the two head lamp mounting screws.



**Removing Head Lamp For Bulb Replacement** 2. Remove the push-in fasteners by prying under the head of the fasteners with a flat bladed tool.

3. Gently pry the head lamp assembly away from the fender as shown in the picture. This will free the ball stud from its retainer in the fender. Pull the head lamp assembly away from the vehicle.



Gently Pry Out Head Lamp

819ba51a

- 4. Rotate bulb and connector<sup>1</sup>/<sub>4</sub> turn counterclockwise.
- 5. Pull the bulb out of the socket and replace the bulb.



819ba51b

# CAUTION!

Do not touch the new bulb with your fingers. Oil contamination will severely shorten bulb life.

6. If the bulb comes in contact with any oily surface, clean the bulb with rubbing alcohol.

7. Reinsert the bulb and socket assembly and rotate clockwise<sup>1</sup>/<sub>4</sub>turn to secure.

8. Reinstall the head lamp assembly.

## **Fog Lamps**

1. Access to the lamps through the lower fascia cutout is limited.

2. We recommend you access the lamps by turning the steering wheel to allow access and remove the inner fender shield.

- MAINTAINING YOUR VEHICLE 323
- 3. Rotate bulb and connector<sup>1</sup>/<sub>4</sub>turn counterclockwise.
- 4. Pull bulb off of connector and replace with a new one.

# CAUTION!

Do not touch the new bulb with your fingers. Oil contamination will severely shorten bulb life. If the bulb comes in contact with an oily surface, clean the bulb with rubbing alcohol.





# Tail Lamps, Rear Turn Signals And Backup Lamps — Replacement

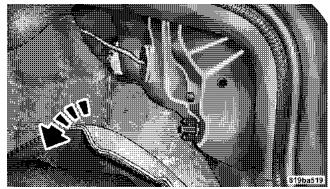
The tail lamps are a two piece design. The turn signal, brake and tail lamps are located in the rear corner body panel housing. The back up and tail lamps are located in the trunk lid housing.



Split Tail Lamp Assembly

# Changing the Rear Corner Tail Lamp Bulbs

1. Open the trunk and gently pull back the trunk liner behind the tail lamp



Pull Back Trunk Liner



2. Remove the two plastic wing nuts from the tail lamp housing.

# 

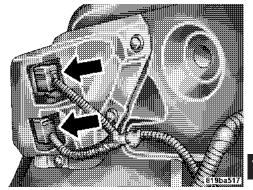
Location Plastic Wing Nuts

3. Grasp the tail lamp and pull firmly outward pushing gently on the studs from inside to disengage the lamp housing.

- 4. Twist and remove socket from lamp.
- 5. Remove bulb from socket and replace.

# Changing the Trunk Lid Tail Lamps

1. With the trunk lid open, unplug the lamp assembly.



MAINTAINING YOUR VEHICLE 325

Trunk Lid Tail Lamp

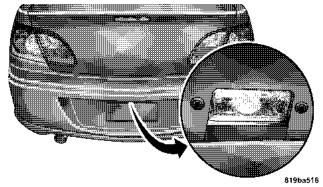
- 2. Remove and replace the bulb.
- 3. Reinstall the lamp assembly locking in place.



#### 326 MAINTAINING YOUR VEHICLE I

## License Plate Lamp — Rear

1. Remove two retaining screws holding the lamp lens in place.

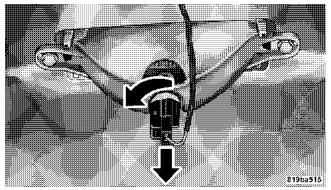


**Location and Removal of Rear License Lamp Lens** 2. Gently pry the lens loose.

3. Pull bulb from socket, replace and reattach the lamp lens with the two retaining screws.

# Center High-Mounted Stop Lamp

1. Open the trunk lid to find the centrally located highmounted stop lamp.



- **High-mounted Stop Lamp Bulb Replacement** 2. Twist and remove socket from lamp.

3. Replace the bulb and reinstall the lamp assembly locking in place with a twist.



MAINTAININ	G YOUR VEHICLE
U.S.	Metric
16.9 gallons	64 liters
4.5 quarts	4.26 liters
5.5 quarts	5.2 liters
5.5 quarts	5.2 liters
7.7 quarts.	7.3 liters
9.8 quarts.	9.3 liters
11.6 quarts.	11.0 liters
	U.S. 16.9 gallons 4.5 quarts 5.5 quarts 5.5 quarts 7.7 quarts. 9.8 quarts.



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## 328 MAINTAINING YOUR VEHICLE

# FLUIDS, LUBRICANTS, AND GENUINE PARTS Engine

Component	Fluids, Lubricants, and Genuine Parts
Engine Coolant	Mopar <sup>®</sup> Antifreeze/Coolant 5 Year/100,000 Mile Formula HOAT (Hybrid Organic Additive Technology) or equivalent
Engine Oil (2.4 & 2.7 Liter)	Use API Certified engine oil. SAE 5W-20 is recommended. Refer to the en- gine oil fill cap for the correct SAE grade meeting DaimlerChrysler Mate- rial Standard MS-6395.
Engine Oil (3.5 Liter)	Use API Certified engine oil. SAE 10W-30 is recommended. Refer to the engine oil viscosity chart for the correct SAE grade meeting DaimlerChrysler Material Standard MS-6395.
Oil Filter (2.4 Liter)	Mopar <sup>®</sup> 04884900AB or equivalent.
Oil Filter (2.7 & 3.5 Liter)	Mopar <sup>®</sup> 05281090 or equivalent.
Spark Plugs	Refer to the Vehicle Emission Control Information label in the engine com- partment.
Fuel Selection (2.4 & 2.7 Liter)	87 Octane
Fuel Selection (3.5 Liter)	87 to 89 Octane



#### MAINTAINING YOUR VEHICLE 329

7

Chassis	
Component	Fluids, Lubricants and Genuine Parts
Automatic Transmission	Mopar® ATF+4 Automatic Transmission Fluid.
Brake Master Cylinder	Mopar <sup>®</sup> DOT 3 and SAE J1703 should be used. If DOT 3 brake fluid is not available, then DOT 4 is acceptable. Use only recommended brake fluids.
Power Steering Reservoir	Mopar® ATF+4 Automatic Transmission Fluid.





# **MAINTENANCE SCHEDULES**

# CONTENTS

Emission Control System Maintenance	
Maintenance Schedules	

□ Schedule "B"														.335
□ Schedule "A"					•		•			•	•			.344



## 332 MAINTENANCE SCHEDULES

#### **EMISSION CONTROL SYSTEM MAINTENANCE**

The "Scheduled" maintenance services, listed in **bold type** must be done at the times or mileages specified to assure the continued proper functioning of the emission control system. These, and all other maintenance services included in this manual, should be done to provide best vehicle performance and reliability. More frequent maintenance may be needed for vehicles in severe operating conditions such as dusty areas and very short trip driving.

Inspection and service also should be done any time a malfunction is suspected.

**NOTE:** Maintenance, replacement, or repair of the emission control devices and systems on your vehicle may be performed by any automotive repair establishment or individual using any automotive part, which has been certified pursuant to U.S. EPA or, in the State of California, California Air Resources Board regulations.

#### MAINTENANCE SCHEDULES

There are two maintenance schedules that show the **required** service for your vehicle.

First is Schedule **"B"**. It is for vehicles that are operated under the conditions that are listed below and at the beginning of the schedule.

- Day or night temperatures are below 32° F (0° C).
- Stop and go driving.
- Extensive engine idling.
- Driving in dusty conditions.
- Short trips of less than 10 miles (16 km).
- More than 50% of your driving is at sustained high speeds during hot weather, above 90° F (32° C).
- Trailer towing.
- Taxi, police, or delivery service (commercial service).
- Off-road or desert operation.
- Heavy Loading



**NOTE:** If **ANY** of these apply to you then change your engine oil every 3,000 miles (5 000 km) or 3 months, whichever comes first and follow schedule "B" of the "Maintenance Schedules" section of this manual.

**NOTE:** If **ANY** of these apply to you then change your coolant every 102,000 miles (170 000 km) or 60 months, whichever comes first and follow schedule "B" of the "Maintenance Schedules" section of this manual.

Second is Schedule "A". It is for vehicles that are not operated under any of the conditions listed under Schedule "B."

Use the schedule that best describes your driving conditions. Where time and mileage are listed, follow the interval that occurs first.

**NOTE:** Under no circumstances should oil change intervals exceed 6000 miles (10 000 km) or 6 months whichever comes first.

#### MAINTENANCE SCHEDULES 333

## CAUTION!

Failure to perform the required maintenance items may result in damage to the vehicle.

#### At Each Stop for Fuel

- Check the engine oil level about 5 minutes after a fully warmed engine is shut off. Checking the oil level while the vehicle is on level ground will improve the accuracy of the oil level reading. Add oil only when the level is at or below the ADD or MIN mark.
- Check the windshield washer solvent and add, if required.

#### Once a Month

- Check tire pressure and look for unusual wear or damage.
- Inspect the battery and clean and tighten the terminals as required.



# 334 MAINTENANCE SCHEDULES

- Check the fluid levels of coolant reservoir, brake/ clutch master cylinder, and manual transaxle and add as needed.
- Check all lights and all other electrical items for correct operation.

# At Each Oil Change

- Change the engine oil filter.
- Inspect the exhaust system.
- Inspect the brake hoses.
- Inspect the CV joints (if equipped) and front suspension components.

- Check the manual transmission fluid level (if equipped).
- Check the coolant level, hoses, and clamps.

## **CAUTION!**

Do not check the automatic transaxle fluid. It must be check by a trained service technician every 15,000 miles and if required only the recommended fluid be added. Refer to the section "Fluids, Lubricants And Genuine Parts" for the proper fluid.



SCHEDULE "B" 335

# Schedule "B"

Follow schedule "B" if you usually operate your vehicle under one or more of the following conditions.

- Day or night temperatures are below 32° F (0° C).
- Stop and go driving.
- Extensive engine idling.
- Driving in dusty conditions.
- Short trips of less than 10 miles (16 km).
- More than 50% of your driving is at sustained high speeds during hot weather, above 90° F (32° C).
- Trailer towing.

- Taxi, police, or delivery service (commercial service).
- Off-road or desert operation.
- Heavy Loading

**NOTE:** If **ANY** of these apply to you then change your engine oil every 3,000 miles (5 000 km) or 3 months, whichever comes first and follow schedule "B" of the "Maintenance Schedules" section of this manual.

**NOTE:** If **ANY** of these apply to you then change your coolant every 102,000 miles (170 000 km) or 60 months, whichever comes first and follow schedule "B" of the "Maintenance Schedules" section of this manual.



336	SCHEDULE "B"	

Miles (Kilometers)	3,000 (5 000)	6,000 (10 000)	9,000 (15 000)	12,000 (20 000)	15,000 (25 000)
<b>Change engine oil and oil filter,</b> or at 3 months, whichever comes first.	X	Х	X	Х	Х
Inspect engine air cleaner filter, <b>replace if neces</b> - sary.					Х
Rotate tires.		Х		Х	
Check spare tire for proper pressure and correct stowage.		Х		Х	



				SCHED	ULE "B" 337
Miles (Kilometers)	18,000 (30 000)	21,000 (35 000)	24,000 (40 000)	27,000 (45 000)	30,000 (50 000)
<b>Change engine oil and oil filter,</b> or at 3 months, whichever comes first.	X	Х	X	Х	Х
Replace the air cleaner filter.					X
Rotate tires.	X		X		X
Check spare tire for proper pressure and correct stowage.	x		X		Х
Inspect brake linings.	Х				
Replace Spark Plugs: 2.4L Engine					Х



338	SCHEDULE "I	B" 🛛

	22.000	0.000	20,000	42.000	45.000
Miles (Kilometers)	33,000 (55 000)	36,000 (60 000)	39, 000 (65 000)	42,000 (70 000)	45,000 (75 000)
<b>Change engine oil and oil filter,</b> or at 3 months, whichever comes first.	Х	Х	Х	Х	Х
Inspect engine air cleaner filter, <b>replace if neces-</b> <b>sary</b> .					Х
Rotate tires.		Х		Х	
Check spare tire for proper pressure and correct stowage.		Х		Х	
Inspect brake linings.		Х			



				SCHED	ULE "B" 339
Miles	48,000	51,000	54,000	57,000	60,000
(Kilometers)	(80 000)	(85 000)	(90 000)	(95 000)	(100 000)
<b>Change engine oil and oil filter,</b> or at 3 months, whichever comes first.	Х	Х	X	X	x
Replace engine air cleaner filter.					Х
Rotate tires.	Х		X		Х
Check spare tire for proper pressure and correct stowage.	Х		X		Х
Inspect brake linings.			Х		
Change Automatic Transaxle Fluid and Filter.					X
Replace Spark Plugs: 2.4L Engine					Х
Flush and replace engine coolant at 60 months, or 102,000 miles (170 000 km) whichever comes first.					Х

MAINTENANCE SCHEDDLES



# 340 SCHEDULE "B"

Miles	63,000	66,000	69,000	72,000	75,000
(Kilometers)	(105 000)	(110 000)	(115 000)	(120 000)	(125 000)
<b>Change engine oil and oil filter,</b> or at 3 months, whichever comes first.	Х	Х	Х	Х	Х
Inspect engine air cleaner filter, replace if neces-					Х
sary.					Л
Rotate tires.		Х		Х	
Check spare tire for proper pressure and correct stowage.		Х		Х	
Inspect brake linings.				Х	



Miles	78,000	81,000	84,000	87,000	90,000
(Kilometers )	(130 000)	(135 000)	(140 000)	(145 000)	(150 000)
<b>Change engine oil and oil filter</b> , or at 3 months, whichever comes first.	X	Х	x	Х	X
Replace engine air cleaner filter.					Х
Rotate tires.	X		Х		Х
Check spare tire for proper pressure and correct stowage.	Х		Х		Х
Inspect brake linings.					Х
Replace Spark Plugs: 2.4L Engine					Х



# 342 SCHEDULE "B"

Miles	93,000	96,000	99,000	102,000	105,000
(Kilometers)	(155 000)	(160 000)	(165 000)	(170 000)	(175 000)
<b>Change engine oil and oil filter,</b> or at 3 months, whichever comes first.	Х	Х	Х	Х	Х
Replace engine air cleaner filter.					Х
Rotate tires.		Х		Х	
Check spare tire for proper pressure and correct stowage.		Х		Х	
Replace Spark Plugs: 2.7L and 3.5L Engines				Х	
<b>Flush and replace engine coolant</b> if not done at 60 months. (Flush and replace engine coolant at 60 months, or 102,000 miles (170 000 km) whichever comes first.				Х	



				SCHED	ULE "B" 343
Miles	108,000	111,000	114,000	117,000	120,000
(Kilometers)	(180 000)	(185 000)	(190 000)	(195 000)	(200 000)
<b>Change engine oil and oil filter,</b> or at 3 months, whichever comes first.	x	X	Х	Х	х
Replace engine air cleaner filter.					Х
Rotate tires.	X		Х		Х
Check spare tire for proper pressure and correct stowage.	x		Х		Х
Inspect brake linings.	X				
Change Automatic Transaxle Fluid and Filter.					Х
Replace Spark Plugs: 2.4L Engine					Х
Replace the accessory drive belt every 120,000 miles (200 000 km).					Х

MAINTENANCE SCHEDDLES 8



# 344 SCHEDULE "A"

# Schedule "A"

6,000	12,000	18,000	24,000	30,000
(10 000)	(20 000)	(30 000)	(40 000)	(50 000)
[6]	[12]	[18]	[24]	[30]
X	Х	Х	Х	Х
				Х
X	Х	Х	Х	Х
x	Х	Х	Х	Х
		Х		
				Х
	(10 000) [6] X X	(10 000)         (20 000)           [6]         [12]           X         X           X         X	(10 000)         (20 000)         (30 000)           [6]         [12]         [18]           X         X         X           X         X         X           X         X         X           X         X         X           X         X         X           X         X         X	(10 000)     (20 000)     (30 000)     (40 000)       [6]     [12]     [18]     [24]       X     X     X     X       X     X     X     X       X     X     X     X       X     X     X     X       X     X     X     X       X     X     X     X



				SCHED	OULE "A" 345
Miles	36,000	42,000	48,000	54000	60,000
(Kilometers)	(60 000)	(70 000)	(80 000)	(90 000)	(100 000)
[Months]	[36]	[42]	[48]	[54]	[60]
Change engine oil and oil filter.	Х	Х	Х	Х	X
Replace engine air cleaner filter.					X
Rotate tires.	Х	X	Х	Х	X
Check spare tire for proper pressure and correct stowage.	х	x	X	X	Х
Inspect brake linings.	Х			Х	
Flush and replace engine coolant at 60 months, if not replaced at 102,000 miles (170 000 km).					X
Replace Spark Plugs: 2.4L Engine					X



346 SCHEDULE "A"					
Miles	66,000	72,000	78,000	84,000	90,000
(Kilometers)	(110 000)	(120 000)	(130 000)	(140 000)	(150 000)
[Months]	[66]	[72]	[78]	[84]	[90]
Change engine oil and oil filter.	X	Х	Х	Х	Х
Replace engine air cleaner filter.					Х
Rotate tires.	Х	Х	Х	Х	Х
Check spare tire for proper pressure and correct stowage.	x	Х	Х	X	Х
Inspect brake linings.		Х			Х
Replace Spark Plugs: 2.4L Engine					Х



				SCHED	ULE "A" 347
Miles	96,000	102,000	108,000	114,000	120,000
(Kilometers)	(160 000)	(170 000)	(180 000)	(190 000)	(200 000)
[Months]	[96]	[102]	[108]	[114]	[120]
Change engine oil and oil filter.	Х	Х	Х	Х	Х
Replace engine air cleaner filter.					Х
Rotate tires.	Х	Х	Х	Х	Х
Check spare tire for proper pressure and correct stowage.	X	Х	Х	X	Х
Inspect brake linings.			Х		
Change Automatic Transaxle Fluid and Filter.					Х
<b>Flush and replace engine coolant,</b> 102,000 miles (170 000 km) if not done at 60,000 miles		Х			
Replace Spark Plugs: 2.4L Engine					Х
Replace Spark Plugs: 2.7L and 3.5L Engines		Х			
Replace the accessory drive belt every 120,000 miles (200 000 km).					Х



## 348 SCHEDULE "A"

Inspection and service should also be performed anytime a malfunction is observed or suspected. Retain all receipts.

# WARNING!

You can be badly injured working on or around a motor vehicle. Do only that service work for which you have the knowledge and the right equipment. If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.



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# SUGGESTIONS FOR OBTAINING SERVICE FOR YOUR VEHICLE

#### **Prepare For The Appointment**

If you're having warranty work done, be sure to have the right papers with you. Take your warranty folder. All work to be performed may not be covered by the warranty, discuss additional charges with the service manager. Keep a maintenance log of your vehicle's service history. This can often provide a clue to the current problem.

#### **Prepare A List**

Make a written list of your vehicle's problems or the specific work you want done. If you've had an accident, or work done that is not on your maintenance log, let the service advisor know.

#### **Be Reasonable With Requests**

If you list a number of items, and you must have your vehicle by the end of the day, discuss the situation with the service advisor and list the items in order of priority. At many dealers, you may obtain a rental vehicle at a minimal daily charge. If you need a rental, it is advisable to make these arrangements when you call for an appointment.

#### IF YOU NEED ASSISTANCE

The manufacturer and its dealers are vitally interested in your satisfaction. We want you to be happy with our products and services.

Warranty service must be done by an authorized Chrysler, Dodge, or Jeep dealer. We strongly recommend that you take your vehicle to your selling dealer. They know you and your vehicle best, and are most concerned that you get prompt and high quality service. The manufacturer's dealers have the facilities, factory-trained technicians, special tools, and the latest information to assure your vehicle is fixed correctly and in a timely manner.

This is why you should always talk to your dealer's service manager first. Most matters can be resolved with this process.



- If for some reason you are still not satisfied, talk to the general manager or owner of the dealership. They want to know if you need assistance.
- If your dealership is unable to resolve the concern, you may contact the Manufacturer's Customer Center.

Any communication to the Manufacturer's Customer Center should include the following information:

- Owner's name and address
- Owner's telephone number (home and office)
- Dealership name
- Vehicle identification number
- Vehicle delivery date and mileage

## DaimlerChrysler Motors Corporation Customer Center

P.O. Box 21–8004 Auburn Hills, MI 48321–8004 Phone: (800) 992-1997 DaimlerChrysler Canada Inc. Customer Center P.O. Box 1621 Windsor, Ontario N9A 4H6 Phone —(800) 465–2001

#### In Mexico contact:

Av. Prolongacion Paseo de la Reforma, 1240 Sante Fe C.P. 05109 Mexico, D. F. In Mexico (915) 729–1248 or 729–1240 Outside Mexico (525) 729–1248 or 729–1240

#### *Customer Assistance For The Hearing Or Speech Impaired (TDD/TTY)*

To assist customers who have hearing difficulties, the manufacturer has installed special TDD (Telecommunication Devices for the Deaf) equipment at its Customer Center. Any hearing or speech impaired customer who has access to a TDD or a conventional teletypewriter (TTY) in the United States can communicate with the manufacturer by dialing 1–800–380–CHRY.



#### Service Contract

You may have purchased a service contract for your vehicle to help protect you from the high cost of unexpected repairs after your manufacturer's new vehicle limited warranty expires. The manufacturer stands behind only the manufacturer's Service Contracts. If you purchased a manufacturer's Service Contract, you will receive Plan Provisions and an Owner Identification Card in the mail within three weeks of your vehicle delivery date. If you have any questions about your service contract, call the manufacturer's Service Contract National Customer Hotline at 1-800-521-9922.

The manufacturer will not stand behind any service contract that is not the manufacturer's Service Contract. It is not responsible for any service contract other than the manufacturer's Service Contract. If you purchased a service contract that is not a manufacturer's Service Contract, and you require service after your manufacturer's new vehicle limited warranty expires, please refer to your contract documents, and contact the person listed in those documents. We appreciate that you have made a major investment when you purchased your new vehicle. Your dealer has also made a major investment in facilities, tools, and training to assure that you are absolutely delighted with your ownership experience. You'll be pleased with their sincere efforts to resolve any warranty issues or related concerns.

#### WARRANTY INFORMATION (U.S. Vehicles Only)

See the Warranty Information Booklet for the terms and provisions of DaimlerChrysler's warranties applicable to this vehicle.

#### **MOPAR® PARTS**

Mopar<sup>®</sup> fluids, lubricants, parts, and accessories are available from your dealer. They will help you keep your vehicle operating at its best.



#### **REPORTING SAFETY DEFECTS**

In the 50 United States and Washington D.C.: If you believe that your vehicle has a defect, which could cause a crash or cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying the manufacturer.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, and the manufacturer.

To contact NHTSA, you may either call the Auto Safety Hotline toll free at 1–888–327–4236 (TTY: 1–800–424– 9153), or go to http://www.safercar.gov; or write to: Administrator, NHTSA, 400 Seventh Street, SW., Washington, DC 20590. You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

http://www.NHTSA.gov.

#### In Canada:

If you believe that your vehicle has a safety defect, you should contact the Customer Service Department immediately. Canadian customers who wish to report a safety defect to the Canadian government should write to Transport Canada, Motor Vehicle Defect Investigations and Recalls, 2780 Sheffield Road, Ottawa, Ontario K1B 3V9.

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## PUBLICATION ORDER FORMS

To order the following manuals, you may use either the website or the phone numbers listed below. Visa, Mastercard, American Express, and Discover orders are accepted. If you prefer mailing your payment, please call for an order form.

**NOTE:** A street address is required when ordering manuals. (No P.O. Boxes).

• Service Manuals.

These comprehensive service manuals provide the information that students and professional technicians need in diagnosing/troubleshooting, problem solving, maintaining, servicing, and repairing DaimlerChrysler

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Corporation vehicles. A complete working knowledge of the vehicle, system, and/or components is written in straightforward language with illustrations, diagrams, and charts.

• Diagnostic Procedure Manuals.

Filled with diagrams, charts and detailed illustrations, these practical manuals make it easy for students and technicians to find and fix problems on computercontrolled vehicle systems and features. They show exactly how to find and correct problems the first time, using step-by-step troubleshooting and driveability procedures, proven diagnostic tests and a complete list of all tools and equipment.

• Owner's Manuals.

These manuals have been prepared with the assistance of service and engineering specialists to acquaint you with specific Chrysler group vehicles. Included are starting, operating, emergency and maintenance procedures as well as specifications, capabilities and safety tips.

#### Call Toll Free at:

- 1-800-890-4038 (U.S.)
- 1-800-387-1143 (Canada)

#### Or

Visit us on the World Wide Web at:

- www.techauthority.daimlerchrysler.com
- www.daimlerchrysler.ca/manuals

## DEPARTMENT OF TRANSPORTATION UNIFORM TIRE QUALITY GRADES

The following describes the tire grading categories established by the National highway Traffic Safety Administration. The specific grade rating assigned by the tire's manufacturer in each category is shown on the sidewall of the tires on your car.

All Passenger Car Tires Must Conform to Federal Safety Requirements in Addition to These Grades.



#### Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and a half (1 1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

#### **Traction Grades**

The traction grades, from highest to lowest, are AA, A, B, and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

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#### WARNING!

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

#### **Temperature Grades**

The temperature grades are A (the highest), B, and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor 🔮 Vehicle Safety Standard No. 109. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.



# WARNING!

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under inflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.





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