

Every 2000 Metro under warranty is backed with the following services:

> Courtesy Transportation

Bumper-to-Bumper 3-years/36,000 miles (60 000 km) Limited Warranty 24-hour Roadside Assistance

> **1-800-CHEV-USA** (For vehicles purchased in Canada, call 1-800-268-6800) that provides in an emergency:

- **Free** lockout assistance
- **Free** dead-battery assistance
- **Free** out-of-fuel assistance
- **Free** flat-tire change



# 2000 Chevrolet Metro Owner's Manual

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Please keep this manual in your vehicle, so it will be there if you ever need it when you're on the road. If you sell the vehicle, please leave this manual in it so the new owner can use it.



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# For Canadian Owners Who Prefer a French Language Manual:

We support voluntary technician certification.

**Aux propriétaires canadiens:** Vous pouvez vous procurer un exemplaire de ce guide en français chez votre concessionaire ou au:

DGN Marketing Services Ltd. 1577 Meyerside Dr. Mississauga, Ontario L5T 1B9

### How to Use this Manual

Many people read their owner's manual from beginning to end when they first receive their new vehicle. If you do this, it will help you learn about the features and controls for your vehicle. In this manual, you'll find that pictures and words work together to explain things quickly.

### Safety Warnings and Symbols

You will find a number of safety cautions in this book. We use a box and the word CAUTION to tell you about things that could hurt you if you were to ignore the warning.

## **A** CAUTION:

These mean there is something that could hurt you or other people.

In the caution area, we tell you what the hazard is. Then we tell you what to do to help avoid or reduce the hazard. Please read these cautions. If you don't, you or others could be hurt.



You will also find a circle with a slash through it in this book. This safety symbol means "Don't," "Don't do this" or "Don't let this happen."

### Vehicle Damage Warnings

Also, in this book you will find these notices:

#### **NOTICE:**

These mean there is something that could damage your vehicle.

In the notice area, we tell you about something that can damage your vehicle. Many times, this damage would not be covered by your warranty, and it could be costly. But the notice will tell you what to do to help avoid the damage.

When you read other manuals, you might see CAUTION and NOTICE warnings in different colors or in different words.

You'll also see warning labels on your vehicle. They use the same words, CAUTION or NOTICE.

#### **Vehicle Symbols**

These are some of the symbols you may find on your vehicle.





#### **Service Station Guide**



## Section 1 Seats and Restraint Systems

Here you'll find information about the seats in your vehicle and how to use your safety belts properly. You can also learn about some things you should *not* do with air bags and safety belts.

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#### **Seats and Seat Controls**

This part tells you about the seats -- how to adjust them, and also about reclining front seatbacks, seatback latches, easy entry seats and the folding rear seatback.

#### **Manual Front Seat**

## **A** CAUTION:

You can lose control of the vehicle if you try to adjust a manual driver's seat while the vehicle is moving. The sudden movement could startle and confuse you, or make you push a pedal when you don't want to. Adjust the driver's seat only when the vehicle is not moving.



Pull up on the lever under the front seat to unlock it. The lever is to your right under the driver's front seat and to your left under the passenger's front seat. Slide the seat to where you want it. Then release the lever and try to move the seat with your body, to make sure the seat is locked into place.

#### **Reclining Front Seatbacks**



To adjust the seatback, lift the lever on the outer side of the seat. Release the lever to lock the seatback where you want it. Pull up on the lever, and the seat will go to its original upright position.



But don't have a seatback reclined if your vehicle is moving.

## <mark>▲ CAUTION:</mark>

Sitting in a reclined position when your vehicle is in motion can be dangerous. Even if you buckle up, your safety belts can't do their job when you're reclined like this.

**CAUTION:** (Continued)

#### **CAUTION: (Continued)**

The shoulder belt can't do its job because it won't be against your body. Instead, it will be in front of you. In a crash you could go into it, receiving neck or other injuries.

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

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

#### **Driver's Seatback Latch (2-Door)**



The driver's seatback folds forward to let people get into the back seat. To fold a seatback forward, lift this latch and the seatback will fold forward. To return the seatback to the upright position, just push the seatback rearward.

When you return the seatback to its original position, make sure the seatback is locked.



If the seatback isn't locked, it could move forward in a sudden stop or crash. That could cause injury to the person sitting there. Always press rearward on the seatback to be sure it is locked.

#### **Easy Entry Seat (If Equipped)**

The passenger's seat of your vehicle makes it easy to get in and out of the rear seat.



When you pull up on the recliner release lever, the seatback will tilt forward and the whole seat will slide forward.

After someone gets into the rear seat area, pull up on the front seat lever to move the bottom of the seat rearward. Then move the seatback to its original position. The seat and seatback should lock into position.



If an easy entry right front seat isn't locked, it can move. In a sudden stop or crash, the person sitting there could be injured. After you've used it, be sure to push rearward on an easy entry seat to be sure it is locked.



To get out, push the release lever forward. The seatback will fold and the seat will move forward.

#### **Rear Seatback**

#### **Folding the Rear Seat**

The rear seatback in your vehicle folds down to provide more cargo space.

To fold the seatback down:



If you have a two-door model, make sure the rear safety belts are hooked to the safety belt hangers.



If you have a four-door model, make sure the loops on the seatback are fastened and the rear safety belts pass through the loops. This prevents the safety belt from falling behind the seatback.



- 1. Pull up on the knobs on both sides of the seatback. If you have a split rear seatback, you can fold half of the seatback down by pulling only the knob on the side you want to fold down.
- 2. Fold the seatback down.

To raise the seatback:

If you have a two-door model, make sure the rear safety belts are hooked to the safety belt hangers. If you have a four-door model, make sure the loops on the seatback are fastened and the rear safety belts pass through the loops.

- 1. Lift the seatback up and push it back to lock it into place.
- 2. Be sure both sides of the seatback are latched. Push and pull the top of the seatback to be sure it is locked into position.
- 3. If you have a two-door model, unhook the safety belts from the belt hangers.

### Safety Belts: They're for Everyone

This part of the manual tells you how to use safety belts properly. It also tells you some things you should not do with safety belts.

And it explains the air bag system.

## **A** CAUTION:

Don't let anyone ride where he or she can't wear a safety belt properly. If you are in a crash and you're not wearing a safety belt, your injuries can be much worse. You can hit things inside the vehicle or be ejected from it. You can be seriously injured or killed. In the same crash, you might not be if you are buckled up. Always fasten your safety belt, and check that your passengers' belts are fastened properly too.

## **A** CAUTION:

It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a collision, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and safety belts. Be sure everyone in your vehicle is in a seat and using a safety belt properly.



Your vehicle has a light that comes on as a reminder to buckle up. (See "Safety Belt Reminder Light" in the Index.) In most states and Canadian provinces, the law says to wear safety belts. Here's why: *They work*.

You never know if you'll be in a crash. If you do have a crash, you don't know if it will be a bad one.

A few crashes are mild, and some crashes can be so serious that even buckled up a person wouldn't survive. But most crashes are in between. In many of them, people who buckle up can survive and sometimes walk away. Without belts they could have been badly hurt or killed.

After more than 30 years of safety belts in vehicles, the facts are clear. In most crashes buckling up does matter ... a lot!

#### Why Safety Belts Work

When you ride in or on anything, you go as fast as it goes.



Take the simplest vehicle. Suppose it's just a seat on wheels.



Put someone on it.

Get it up to speed. Then stop the vehicle. The rider doesn't stop.



The person keeps going until stopped by something. In a real vehicle, it could be the windshield ...



or the instrument panel ...



or the safety belts!

With safety belts, you slow down as the vehicle does. You get more time to stop. You stop over more distance, and your strongest bones take the forces. That's why safety belts make such good sense.

### Here Are Questions Many People Ask About Safety Belts -- and the Answers

- **Q:** Won't I be trapped in the vehicle after an accident if I'm wearing a safety belt?
- A: You *could* be -- whether you're wearing a safety belt or not. But you can unbuckle a safety belt, even if you're upside down. And your chance of being conscious during and after an accident, so you *can* unbuckle and get out, is *much* greater if you are belted.

# Q: If my vehicle has air bags, why should I have to wear safety belts?

A: Air bags are in many vehicles today and will be in most of them in the future. But they are supplemental systems only; so they work *with* safety belts -- not instead of them. Every air bag system ever offered for sale has required the use of safety belts. Even if you're in a vehicle that has air bags, you still have to buckle up to get the most protection. That's true not only in frontal collisions, but especially in side and other collisions.

- Q: If I'm a good driver, and I never drive far from home, why should I wear safety belts?
- A: You may be an excellent driver, but if you're in an accident -- even one that isn't your fault -- you and your passengers can be hurt. Being a good driver doesn't protect you from things beyond your control, such as bad drivers.

Most accidents occur within 25 miles (40 km) of home. And the greatest number of serious injuries and deaths occur at speeds of less than 40 mph (65 km/h).

Safety belts are for everyone.

## How to Wear Safety Belts Properly Adults

This part is only for people of adult size.

Be aware that there are special things to know about safety belts and children. And there are different rules for smaller children and babies. If a child will be riding in your vehicle, see the part of this manual called "Children." Follow those rules for everyone's protection.

First, you'll want to know which restraint systems your vehicle has.

We'll start with the driver position.

### **Driver Position**

This part describes the driver's restraint system.

#### Lap-Shoulder Belt

The driver has a lap-shoulder belt. Here's how to wear it properly.

- 1. Close and lock the door.
- 2. Adjust the seat (to see how, see "Seats" in the Index) so you can sit up straight.



3. Pick up the latch plate and pull the belt across you. Don't let it get twisted.

The shoulder belt may lock if you pull the belt across you very quickly. If this happens, let the belt go back slightly to unlock it. Then pull the belt across you more slowly.

4. Push the latch plate into the buckle until it clicks.

Pull up on the latch plate to make sure it is secure. If the belt isn't long enough, see "Safety Belt Extender" at the end of this section.

Make sure the release button on the buckle is positioned so you would be able to unbuckle the safety belt quickly if you ever had to.



5. To make the lap part tight, pull down on the buckle end of the belt as you pull up on the shoulder belt.



The lap part of the belt should be worn low and snug on the hips, just touching the thighs. In a crash, this applies force to the strong pelvic bones. And you'd be less likely to slide under the lap belt. If you slid under it, the belt would apply force at your abdomen. This could cause serious or even fatal injuries. The shoulder belt should go over the shoulder and across the chest. These parts of the body are best able to take belt restraining forces.

The safety belt locks if there's a sudden stop or crash, or if you pull the belt very quickly out of the retractor.

#### ${\it Q}$ : What's wrong with this?



A: The shoulder belt is too loose. It won't give nearly as much protection this way.

## **▲ CAUTION:**

You can be seriously hurt if your shoulder belt is too loose. In a crash, you would move forward too much, which could increase injury. The shoulder belt should fit against your body.

#### Q: What's wrong with this?



**A:** The belt is buckled in the wrong place.

## <mark>▲ CAUTION:</mark>

You can be seriously injured if your belt is buckled in the wrong place like this. In a crash, the belt would go up over your abdomen. The belt forces would be there, not at the pelvic bones. This could cause serious internal injuries. Always buckle your belt into the buckle nearest you.

#### ${\it Q}$ : What's wrong with this?



## A: The shoulder belt is worn under the arm. It should be worn over the shoulder at all times.

## <mark>▲ CAUTION:</mark>

You can be seriously injured if you wear the shoulder belt under your arm. In a crash, your body would move too far forward, which would increase the chance of head and neck injury. Also, the belt would apply too much force to the ribs, which aren't as strong as shoulder bones. You could also severely injure internal organs like your liver or spleen.

#### Q: What's wrong with this?



**A:** The belt is twisted across the body.

## <mark>▲ CAUTION:</mark>

You can be seriously injured by a twisted belt. In a crash, you wouldn't have the full width of the belt to spread impact forces. If a belt is twisted, make it straight so it can work properly, or ask your dealer to fix it.



To unlatch the belt, just push the button on the buckle. The belt should go back out of the way.

Before you close the door, be sure the belt is out of the way. If you slam the door on it, you can damage both the belt and your vehicle.

### Safety Belt Use During Pregnancy

Safety belts work for everyone, including pregnant women. Like all occupants, they are more likely to be seriously injured if they don't wear safety belts.



A pregnant woman should wear a lap-shoulder belt, and the lap portion should be worn as low as possible, below the rounding, throughout the pregnancy. The best way to protect the fetus is to protect the mother. When a safety belt is worn properly, it's more likely that the fetus won't be hurt in a crash. For pregnant women, as for anyone, the key to making safety belts effective is wearing them properly.

### **Right Front Passenger Position**

To learn how to wear the right front passenger's safety belt properly, see "Driver Position" earlier in this section.

The right front passenger's safety belt works the same way as the driver's safety belt -- except for one thing. If you ever pull the shoulder portion of the belt out all the way, you will engage the child restraint locking feature. If this happens, just let the belt go back all the way and start again.

## Air Bag System

This part explains the air bag system.

Your vehicle has air bags -- one air bag for the driver and another air bag for the right front passenger.

Frontal air bags are designed to help reduce the risk of injury from the force of an inflating air bag. But these air bags must inflate very quickly to do their job and comply with federal regulations. Here are the most important things to know about the air bag system:

## **A** CAUTION:

You can be severely injured or killed in a crash if you aren't wearing your safety belt -- even if you have air bags. Wearing your safety belt during a crash helps reduce your chance of hitting things inside the vehicle or being ejected from it. Air bags are "supplemental restraints" to the safety belts. All air bags are designed to work with safety belts, but don't replace them. Air bags are designed to work only in moderate to severe crashes where the front of your vehicle hits something. They aren't designed to inflate at all in rollover, rear, side or low-speed frontal crashes. And, for unrestrained occupants, air bags may provide less protection in frontal crashes than more forceful air bags have provided in the past. Everyone in your vehicle should wear a safety belt properly -- whether or not there's an air bag for that person.

## **A** CAUTION:

Air bags inflate with great force, faster than the blink of an eye. If you're too close to an inflating air bag, as you would be if you were leaning forward, it could seriously injure you. Safety belts help keep you in position before and during a crash. Always wear your safety belt, even with air bags. The driver should sit as far back as possible while still maintaining control of the vehicle.

## <u> CAUTION:</u>

Anyone who is up against, or very close to, any air bag when it inflates can be seriously injured or killed. Air bags plus lap-shoulder belts offer the best protection for adults, but not for young children and infants.

**CAUTION: (Continued)** 

#### **CAUTION: (Continued)**

Neither the vehicle's safety belt system nor its air bag system is designed for them. Young children and infants need the protection that a child restraint system can provide. Always secure children properly in your vehicle. To read how, see the part of this manual called "Children."



There is an air bag readiness light on the instrument panel, which shows AIR BAG.

The system checks the air bag electrical system for malfunctions. The light tells you if there is an electrical problem. See "Air Bag Readiness Light" in the Index for more information.

#### How the Air Bag System Works





The driver's air bag is in the middle of the steering wheel.



The right front passenger's air bag is in the instrument panel on the passenger's side.
# **A** CAUTION:

If something is between an occupant and an air bag, the bag might not inflate properly or it might force the object into that person. The path of an inflating air bag must be kept clear. Don't put anything between an occupant and an air bag, and don't attach or put anything on the steering wheel hub or on or near any other air bag covering.

#### When should an air bag inflate?

An air bag is designed to inflate in a moderate to severe frontal or near-frontal crash. The air bag will inflate only if the impact speed is above the system's designed "threshold level." If your vehicle goes straight into a wall that doesn't move or deform, the threshold level is about 9 to 13 mph (14 to 21 km/h). The threshold level can vary, however, with specific vehicle design, so that it can be somewhat above or below this range. If your vehicle strikes something that will move or deform, such as a parked car, the threshold level will be higher. The air bag is not designed to inflate in rollovers, side impacts or rear impacts, because inflation would not help the occupant.

In any particular crash, no one can say whether an air bag should have inflated simply because of the damage to a vehicle or because of what the repair costs were. Inflation is determined by the angle of the impact and how quickly the vehicle slows down in frontal or near-frontal impacts.

#### What makes an air bag inflate?

In an impact of sufficient severity, the air bag sensing system detects that the vehicle is in a crash. The sensing system triggers a release of gas from the inflator, which inflates the air bag. The inflator, air bag and related hardware are all part of the air bag modules inside the steering wheel and in the instrument panel in front of the right front passenger.

#### How does an air bag restrain?

In moderate to severe frontal or near-frontal collisions, even belted occupants can contact the steering wheel or the instrument panel. Air bags supplement the protection provided by safety belts. Air bags distribute the force of the impact more evenly over the occupant's upper body, stopping the occupant more gradually. But air bags would not help you in many types of collisions, including rollovers, rear impacts and side impacts, primarily because an occupant's motion is not toward those air bags. Air bags should never be regarded as anything more than a supplement to safety belts, and then only in moderate to severe frontal or near-frontal collisions.

#### What will you see after an air bag inflates?

After an air bag inflates, it quickly deflates, so quickly that some people may not even realize the air bag inflated. Some components of the air bag module -- the steering wheel hub for the driver's air bag, or the instrument panel for the right front passenger's bag -- will be hot for a short time. The parts of the bag that come into contact with you may be warm, but not too hot to touch. There will be some smoke and dust coming from vents in the deflated air bags. Air bag inflation doesn't prevent the driver from seeing or from being able to steer the vehicle, nor does it stop people from leaving the vehicle.

## **CAUTION:**

When an air bag inflates, there is dust in the air. This dust could cause breathing problems for people with a history of asthma or other breathing trouble. To avoid this, everyone in the vehicle should get out as soon as it is safe to do so. If you have breathing problems but can't get out of the vehicle after an air bag inflates, then get fresh air by opening a window or door. In many crashes severe enough to inflate an air bag, windshields are broken by vehicle deformation. Additional windshield breakage may also occur from the right front passenger air bag.

- Air bags are designed to inflate only once. After they inflate, you'll need some new parts for your air bag system. If you don't get them, the air bag system won't be there to help protect you in another crash. A new system will include air bag modules and possibly other parts. The service manual for your vehicle covers the need to replace other parts.
- Your vehicle is equipped with a crash sensing and diagnostic module, which records information about the air bag system. The module records information about the readiness of the system, when the system commands air bag inflation and driver's safety belt usage at deployment.
- Let only qualified technicians work on your air bag system. Improper service can mean that your air bag system won't work properly. See your dealer for service.

### **NOTICE:**

If you damage the covering for the driver's or the right front passenger's air bag, the bag may not work properly. You may have to replace the air bag module in the steering wheel or both the air bag module and the instrument panel for the right front passenger's air bag. Do not open or break the air bag coverings.

If your vehicle ever gets into a lot of water -- such as water up to the carpeting or higher -- or if water enters your vehicle and soaks the carpet, the air bag controller can be soaked and ruined. If this ever happens, and then you start your vehicle, the damage could make the air bags inflate, even if there's no crash. You would have to replace the air bags as well as the sensors and related parts. If your vehicle is ever in a flood, or if it's exposed to water that soaks the carpet, you can avoid needless repair costs by turning off the vehicle immediately and disconnecting the battery cables. Don't let anyone start the vehicle under any circumstances. See your dealer for service.

#### Servicing Your Air Bag-Equipped Vehicle

Air bags affect how your vehicle should be serviced. There are parts of the air bag system in several places around your vehicle. You don't want the system to inflate while someone is working on your vehicle. Your dealer and the service manual have information about servicing your vehicle and the air bag system. To purchase a service manual, see "Service and Owner Publications" in the Index.



For up to 15 seconds after the ignition key is turned off and the battery is disconnected, an air bag can still inflate during improper service. You can be injured if you are close to an air bag when it inflates. Avoid wires wrapped with yellow tape or yellow connectors. They are probably part of the air bag system. Be sure to follow proper service procedures, and make sure the person performing work for you is qualified to do so.

The air bag system does not need regular maintenance.

### **Rear Seat Passengers**

It's very important for rear seat passengers to buckle up! Accident statistics show that unbelted people in the rear seat are hurt more often in crashes than those who are wearing safety belts.

Rear passengers who aren't safety belted can be thrown out of the vehicle in a crash. And they can strike others in the vehicle who are wearing safety belts.



#### Lap-Shoulder Belt



## <mark>▲ CAUTION:</mark>

On two-door models, you can be seriously injured if you wear a safety belt that's hooked into a safety belt hanger. In a crash, the safety belt won't be able to do its job if it's hooked into a belt hanger like this. Always make sure the safety belt is unhooked from the belt hanger before anyone wears it.

The safety belt hangers should only be used to store the belts when the seatback is folded down. (See "Folding Rear Seat" in the Index.)

The rear seats have lap-shoulder belts. Here's how to wear one properly.



1. Pick up the latch plate and pull the belt across you. Don't let it get twisted.

The shoulder belt may lock if you pull the belt across you very quickly. If this happens, let the belt go back slightly to unlock it. Then pull the belt across you more slowly.

2. Push the latch plate into the buckle until it clicks. Pull up on the latch plate to make sure it is secure. When the shoulder belt is pulled out all the way, it will lock. If it does, let it go back all the way and start again. If the belt is not long enough, see "Safety Belt Extender" at the end of this section. Make sure the release button on the buckle is positioned so you would be able to unbuckle the safety belt quickly if you ever had to.



3. To make the lap part tight, pull down on the buckle end of the belt as you pull up on the shoulder part.

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The lap part of the belt should be worn low and snug on the hips, just touching the thighs. In a crash, this applies force to the strong pelvic bones. And you'd be less likely to slide under the lap belt. If you slid under it, the belt would apply force at your abdomen. This could cause serious or even fatal injuries. The shoulder belt should go over the shoulder and across the chest. These parts of the body are best able to take belt restraining forces.

The safety belt locks if there's a sudden stop or a crash, or if you pull the belt very quickly out of the retractor.

## **A** CAUTION:

You can be seriously hurt if your shoulder belt is too loose. In a crash, you would move forward too much, which could increase injury. The shoulder belt should fit against your body.



To unlatch the belt, just push the button on the buckle.

### Children

Everyone in a vehicle needs protection! That includes infants and all children smaller than adult size. Neither the distance traveled nor the age and size of the traveler changes the need, for everyone, to use safety restraints. In fact, the law in every state in the United States and in every Canadian province says children up to some age must be restrained while in a vehicle.

### **Smaller Children and Babies**



Children who are up against, or very close to, any air bag when it inflates can be seriously injured or killed. Air bags plus lap-shoulder belts offer the best protection for adults, but not for young children and infants. Neither the vehicle's safety belt system nor its air bag system is designed for them. Young children and infants need the protection that a child restraint system can provide. Always secure children properly in your vehicle.

# **A** CAUTION:

Smaller children and babies should always be restrained in a child or infant restraint. The instructions for the restraint will say whether it is the right type and size for your child. A very young child's hip bones are so small that a regular belt might not stay low on the hips, as it should. Instead, the belt will likely be over the child's abdomen. In a crash, the belt would apply force right on the child's abdomen, which could cause serious or fatal injuries. So, be sure that any child small enough for one is always properly restrained in a child or infant restraint. Infants need complete support, including support for the head and neck. This is necessary because an infant's neck is weak and its head weighs so much compared with the rest of its body. In a frontal crash, an infant in a rear-facing restraint settles into the restraint, so the crash forces can be distributed across the strongest part of the infant's body, the back and shoulders. A baby should be secured in an appropriate infant restraint. This is so important that many hospitals today won't release a newborn infant to its parents unless there is an infant restraint available for the baby's first trip in a motor vehicle.



# **A** CAUTION:

Never hold a baby in your arms while riding in a vehicle. A baby doesn't weigh much -- until a crash. During a crash a baby will become so heavy you can't hold it. For example, in a crash CAUTION: (Continued)

#### **CAUTION: (Continued)**

at only 25 mph (40 km/h), a 12-lb. (5.5 kg) baby will suddenly become a 240-lb. (110 kg) force on your arms. The baby would be almost impossible to hold.

Secure the baby in an infant restraint.



### **Child Restraints**

Every time infants and young children ride in vehicles, they should have protection provided by appropriate restraints.

# **Q:** What are the different types of add-on child restraints?

A: Add-on child restraints are available in four basic types. When selecting a child restraint, take into consideration not only the child's weight and size, but also whether or not the restraint will be compatible with the motor vehicle in which it will be used.



An infant car bed (A) is a special bed made for use in a motor vehicle. It's an infant restraint system designed to restrain or position a child on a continuous flat surface. With an infant car bed, make sure that the infant's head rests toward the center of the vehicle.





A rear-facing infant restraint (B) positions an infant to face the rear of the vehicle. Rear-facing infant restraints are designed for infants of up to about 20 lbs. (9 kg) and about one year of age. This type of restraint faces the rear so that the infant's head, neck and body can have the support they need in a frontal crash. Some infant seats come in two parts -- the base stays secured in the vehicle and the seat part is removable.





A forward-facing child restraint (C-E) positions a child upright to face forward in the vehicle. These forward-facing restraints are designed to help protect children who are from 20 to 40 lbs. (9 to 18 kg) and about 26 to 40 inches (66 to 102 cm) in height, or up to around four years of age. One type, a convertible restraint, is designed to be used either as a rear-facing infant seat or a forward-facing child seat.



A booster seat (F) is designed for children who are about 40 to 60 lbs., or even up to 80 lbs. (18 to 27 kg, or even up to 36 kg), and about four to eight years of age. A booster seat is designed to improve the fit of the vehicle's safety belt system. Booster seats with shields use lap-only belts; however, booster seats without shields use lap-shoulder belts. Booster seats can also help a child to see out the window. When choosing a child restraint, be sure the child restraint is designed to be used in a vehicle. If it is, it will have a label saying that it meets federal motor vehicle safety standards.

Then follow the instructions for the restraint. You may find these instructions on the restraint itself or in a booklet, or both. These restraints use the belt system in your vehicle, but the child also has to be secured within the restraint to help reduce the chance of personal injury. The instructions that come with the infant or child restraint will show you how to do that. Both the owner's manual and the child restraint instructions are important, so if either one of these is not available, obtain a replacement copy from the manufacturer.

#### Where to Put the Restraint

Accident statistics show that children are safer if they are restrained in the rear rather than the front seat. We at General Motors therefore recommend that you put your child restraint in the rear seat. *Never* put a rear-facing child restraint in the front passenger seat. Here's why:

# **A** CAUTION:

A child in a rear-facing child restraint can be seriously injured or killed if the right front passenger's air bag inflates. This is because the back of the rear-facing child restraint would be very close to the inflating air bag. Always secure a rear-facing child restraint in a rear seat.

You may secure a forward-facing child restraint in the right front seat, but before you do, always move the front passenger seat as far back as it will go. It's better to secure the child restraint in a rear seat.

Wherever you install it, be sure to secure the child restraint properly.

Keep in mind that an unsecured child restraint can move around in a collision or sudden stop and injure people in the vehicle. Be sure to properly secure any child restraint in your vehicle -- even when no child is in it.

### **Top Strap**



In Canada, the law requires that forward-facing child restraints have a top strap, and that the strap be anchored. In the United States, some child restraints also have a top strap. If your child restraint has a top strap, it should be anchored. *Two-door Models:* Top strap anchor brackets are located in the cargo area of your vehicle.



*Four-door Models:* Top strap anchor brackets are located behind the rear seat on the filler panel.



Anchor the top strap to this bracket. Once you have the top strap anchored, you'll be ready to secure the child restraint itself.

Anchor the top strap to this bracket. Once you have the top strap anchored, you'll be ready to secure the child restraint itself.

# Securing a Child Restraint in a Rear Seat Position



You'll be using the lap-shoulder belt. See the earlier part about the top strap if the child restraint has one. Be sure to follow the instructions that came with the child restraint. Secure the child in the child restraint when and as the instructions say.

## <mark>▲ CAUTION:</mark>

On two-door models, a child can be seriously injured if you secure a child restraint with a safety belt that's hooked into a safety belt hanger. In a crash, the safety belt won't be able to do its job if it's hooked into a belt hanger. Always make sure the safety belt is unhooked from the belt hanger before it's used to secure a child restraint.

The safety belt hangers should only be used to store the belts when the seatback is folded down. (See "Folding Rear Seat" in the Index.)

- 1. Put the restraint on the seat.
- 2. Pick up the latch plate, and run the lap and shoulder portions of the vehicle's safety belt through or around the restraint. The child restraint instructions will show you how.

If the shoulder belt goes in front of the child's face or neck, put it behind the child restraint.



3. Buckle the belt. Make sure the release button is positioned so you would be able to unbuckle the safety belt quickly if you ever had to.



4. Pull the rest of the shoulder belt all the way out of the retractor to set the lock.



- 5. To tighten the belt, feed the shoulder belt back into the retractor while you push down on the child restraint. If you're using a forward-facing child restraint, you may find it helpful to use your knee to push down on the child restraint as you tighten the belt.
- 6. Push and pull the child restraint in different directions to be sure it is secure.

To remove the child restraint, just unbuckle the vehicle's safety belt and let it go back all the way. The safety belt will move freely again and be ready to work for an adult or larger child passenger.

#### Securing a Child Restraint in the Right Front Seat Position



Your vehicle has a right front passenger air bag. *Never* put a rear-facing child restraint in this seat. Here's why:

## **▲ CAUTION:**

A child in a rear-facing child restraint can be seriously injured or killed if the right front passenger's air bag inflates. This is because the back of the rear-facing child restraint would be very close to the inflating air bag. Always secure a rear-facing child restraint in the rear seat. Although a rear seat is a safer place, you can secure a forward-facing child restraint in the right front seat.

You'll be using the lap-shoulder belt. See the earlier part about the top strap if the child restraint has one. Be sure to follow the instructions that came with the child restraint. Secure the child in the child restraint when and as the instructions say.

- 1. Because your vehicle has a right front passenger air bag, always move the seat as far back as it will go before securing a forward-facing child restraint. (See "Seats" in the Index.)
- 2. Put the restraint on the seat.
- 3. Pick up the latch plate, and run the lap and shoulder portions of the vehicle's safety belt through or around the restraint. The child restraint instructions will show you how.

If the shoulder belt goes in front of the child's face or neck, put it behind the child restraint.



4. Buckle the belt. Make sure the release button is positioned so you would be able to unbuckle the safety belt quickly if you ever had to.



5. Pull the rest of the shoulder belt all the way out of the retractor to set the lock.



- To tighten the belt, feed the shoulder belt back into the retractor while you push down on the child restraint. You may find it helpful to use your knee to push down on the child restraint as you tighten the belt.
- 7. Push and pull the child restraint in different directions to be sure it is secure.

To remove the child restraint, just unbuckle the vehicle's safety belt and let it go back all the way. The safety belt will move freely again and be ready to work for an adult or larger child passenger.

### Larger Children



Children who have outgrown child restraints should wear the vehicle's safety belts.

1-46

Accident statistics show that children are safer if they are restrained in the rear seat. But they need to use the safety belts properly.

- Children who aren't buckled up can be thrown out in a crash.
- Children who aren't buckled up can strike other people who are.



# **A** CAUTION:

#### Never do this.

Here two children are wearing the same belt. The belt can't properly spread the impact forces. In a crash, the two children can be crushed together and seriously injured. A belt must be used by only one person at a time.

- Q: What if a child is wearing a lap-shoulder belt, but the child is so small that the shoulder belt is very close to the child's face or neck?
- A: Move the child toward the center of the vehicle, but be sure that the shoulder belt still is on the child's shoulder, so that in a crash the child's upper body would have the restraint that belts provide.



# <mark>▲ CAUTION:</mark>

Never do this.

Here a child is sitting in a seat that has a lap-shoulder belt, but the shoulder part is behind the child. If the child wears the belt in this way, in a crash the child might slide under the belt. The belt's force would then be applied right on the child's abdomen. That could cause serious or fatal injuries.

Wherever the child sits, the lap portion of the belt should be worn low and snug on the hips, just touching the child's thighs. This applies belt force to the child's pelvic bones in a crash.

### **Safety Belt Extender**

If the vehicle's safety belt will fasten around you, you should use it.

But if a safety belt isn't long enough to fasten, your dealer will order you an extender. It's free. When you go in to order it, take the heaviest coat you will wear, so the extender will be long enough for you. The extender will be just for you, and just for the seat in your vehicle that you choose. Don't let someone else use it, and use it only for the seat it is made to fit. To wear it, just attach it to the regular safety belt.

### **Checking Your Restraint Systems**

Now and then, make sure the safety belt reminder light and all your belts, buckles, latch plates, retractors and anchorages are working properly. Look for any other loose or damaged safety belt system parts. If you see anything that might keep a safety belt system from doing its job, have it repaired.

Torn or frayed safety belts may not protect you in a crash. They can rip apart under impact forces. If a belt is torn or frayed, get a new one right away.

Also look for any opened or broken air bag covers, and have them repaired or replaced. (The air bag system does not need regular maintenance.)

### **Replacing Restraint System Parts** After a Crash

If you've had a crash, do you need new belts?

After a very minor collision, nothing may be necessary. But if the belts were stretched, as they would be if worn during a more severe crash, then you need new belts.



If you ever see a label on the driver's or the right front passenger's safety belt that says to replace the belt, be sure to do so. Then the new belt will be there to help protect you in a collision. You would see this label on the belt near the door opening.

If belts are cut or damaged, replace them. Collision damage also may mean you will need to have safety belt or seat parts repaired or replaced. New parts and repairs may be necessary even if the belt wasn't being used at the time of the collision.

If an air bag inflates, you'll need to replace air bag system parts. See the part on the air bag system earlier in this section. Here you can learn about the many standard and optional features on your vehicle, and information on starting, shifting and braking. Also explained are the instrument panel and the warning systems that tell you if everything is working properly -- and what to do if you have a problem.

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## Keys

# <mark>▲ CAUTION:</mark>

Leaving children in a vehicle with the ignition key is dangerous for many reasons. A child or others could be badly injured or even killed.

They could operate controls or even make the vehicle move. Don't leave the keys in a vehicle with children.





One key is used for the ignition, the doors and all other locks.

When a new vehicle is delivered, the dealer removes the metal plate from the key ring and gives it to the first owner.

The metal plate has a code on it that tells your dealer or a qualified locksmith how to make extra keys. Keep the code in a safe place. If you lose your keys, you'll be able to have new ones made easily using this code. If you need a new key, contact your Chevrolet dealer who can obtain the correct key code. In an emergency, call the Chevrolet Roadside Assistance Program at 1-800-CHEV-USA<sup>®</sup> (1-800-243-8872). In Canada call 1-800-268-6800.

## **NOTICE:**

Your vehicle has a number of features that can help prevent theft. However, you can have a lot of trouble getting into your vehicle if you ever lock your keys inside. You may even have to damage your vehicle to get in. So be sure you have an extra key.

### **Door Locks**

# 

Unlocked doors can be dangerous.

Passengers -- especially children -- can easily open the doors and fall out. When a door is locked, the inside handle won't open it.

Outsiders can easily enter through an unlocked door when you slow down or stop your vehicle.

This may not be so obvious: You increase the chance of being thrown out of the vehicle in a crash if the doors aren't locked. Wear safety belts properly, lock your doors, and you will be far better off whenever you drive your vehicle.

There are several ways to lock and unlock your vehicle.

From the outside, use your key. To lock the door, turn the key toward the front of the vehicle. To unlock the door, turn the key toward the rear.



To lock the door from the inside, push in the lever. To unlock it, pull out the lever.

#### **Power Door Locks (If Equipped)**



This feature allows you to lock or unlock all of the side doors at the same time. To lock the doors, push LOCK and to unlock the doors, push UNLOCK.

If you open the driver's side door manually with the key from the outside, only the driver's door will open. Then, you must push UNLOCK to unlock the rest of the doors.

#### **Rear Door Security Locks (4-Door Models)**

Your vehicle is equipped with rear door security locks that help prevent passengers from opening the rear doors of your car from the inside.

#### **To Use One of These Locks**



The switch is located on the inside of the rear door. To use the security locks:

- 1. Move the lever all the way down.
- 2. Close the door.
- 3. Do the same thing to the other rear door lock.

The rear doors of your vehicle cannot be opened from inside when this feature is in use.

#### To Open a Rear Door With the Security Lock

If you want to open a rear door when the security lock is on:

- 1. Unlock the door from the inside.
- 2. Then open the door from the outside.

If you don't cancel the security lock feature, adults or older children who ride in the rear won't be able to open the rear door from the inside. You should let adults and older children know how these security locks work, and how to cancel the locks.

#### **To Cancel the Rear Door Lock**



- 1. Unlock the door from the inside and open the door from the outside.
- 2. Move the lever all the way up.
- 3. Do the same for the other rear door.

The rear door locks will now work normally.

#### **Leaving Your Vehicle**

If you are leaving the vehicle, take your key, open your door and set the locks from the inside. Then get out and close the door.

## Hatchback/Trunk Lid

# <u> CAUTION:</u>

It can be dangerous to drive with the hatchback or trunk lid open because carbon monoxide (CO) gas can come into your vehicle. You can't see or smell CO. It can cause unconsciousness and even death.

If you must drive with the hatchback or trunk lid open or if electrical wiring or other cable connections must pass through the seal between the body and the hatchback or trunk lid:

- Make sure all other windows are shut.
- Turn the fan on your heating or cooling system to its highest speed with the setting on CIRCULATE. That will force outside air into your vehicle. See "Comfort Controls" in the Index.
- If you have air outlets on or under the instrument panel, open them all the way.

See "Engine Exhaust" in the Index.

#### Hatchback/Trunk Lid Release

Your key opens the hatchback or trunk lid. Turn the key clockwise to unlock the hatchback or trunk lid.

### **NOTICE:**

If you put things in the hatchback area, be sure they won't break the glass when you close it. Never slam the hatchback lid down. You could break the glass or damage the defogger grid (if equipped).

#### **Remote Trunk Release (If Equipped)**

On a sedan model, you may have a remote trunk release lever.



Pull upward on the remote release handle located on the floor near the left of the driver's seat, to release the trunk lid.

### Theft

Vehicle theft is big business, especially in some cities. Although your vehicle has a number of theft-deterrent features, we know that nothing we put on it can make it impossible to steal. However, there are ways you can help.

### **Key in the Ignition**

If you leave your vehicle with the keys inside, it's an easy target for joy riders or professional thieves -- so don't do it.

When you park your vehicle and open the driver's door, you'll hear a tone reminding you to remove your key from the ignition and take it with you. Always do this. Your steering wheel will be locked, and so will your ignition. If you take the key with you, and you have an automatic transaxle, it will be locked. And remember to lock the doors.

### **Parking at Night**

Park in a lighted spot, close all windows and lock your vehicle. Remember to keep your valuables out of sight. Put them in a storage area, or take them with you.

### **Parking Lots**

If you park in a lot where someone will be watching your vehicle, it's best to lock it up and take your keys. But what if you have to leave your key?

- If possible, park in a busy, well lit area.
- Put your valuables in a storage area, like your trunk or glove box. Be sure to close and lock the storage area.
- Close all windows.
- Lock all the doors except the driver's.

### New Vehicle "Break-In"

## NOTICE:

Your vehicle doesn't need an elaborate "break-in." But it will perform better in the long run if you follow these guidelines:

- Don't drive at any one speed -- fast or slow -- for the first 500 miles (805 km). Don't make full-throttle starts.
- Avoid making hard stops for the first 200 miles (322 km) or so. During this time your new brake linings aren't yet broken in. Hard stops with new linings can mean premature wear and earlier replacement. Follow this breaking-in guideline every time you get new brake linings.

## **Ignition Positions**



With the key in the ignition switch, you can turn the switch to four positions.

**LOCK** (A): This is the only position in which you can remove the key. This locks your steering wheel, ignition and automatic transaxle. Press in on the key as you turn it toward you to LOCK.

If you have an automatic transaxle, the ignition switch can't be turned to LOCK unless the shift lever is in the PARK (P) position.

ACC (ACCESSORY) (B): In this position, you can operate some of your electrical power accessories. It unlocks the steering wheel and ignition. Use this position if your vehicle must be pushed or towed. **ON** (C): This is the position to which the switch returns after you start your engine and release the switch. The switch stays in the ON position when the engine is running. But even when the engine is not running, you can use ON to operate your electrical power accessories (including the heater) and to display some instrument panel warning lights.

**START (D):** This position starts the engine. When the engine starts, release the key. The ignition switch will return to ON for normal driving.

Even if the engine is not running, ACC and ON will allow you to operate your electrical accessories, such as the radio.

A warning tone will sound if you open the driver's door when the ignition is in ACC or LOCK and the key is in the ignition.

## **A** CAUTION:

On manual transaxle vehicles, turning the key to LOCK will lock the steering column and result in a loss of ability to steer the vehicle. This could cause a collision. If you need to turn the engine off while the vehicle is moving, turn the key only to ACC. Don't push the key in while the vehicle is moving.

### **NOTICE:**

If your key seems stuck in LOCK and you can't turn it, be sure you are using the correct key; if so, is it all the way in? If it is, then turn the steering wheel left and right while you turn the key hard. But turn the key only with your hand. Using a tool to force it could break the key or the ignition switch. If none of this works, then your vehicle needs service.
## **Starting Your Engine**

#### **Automatic Transaxle**

Move your shift lever to PARK (P) or NEUTRAL (N). Your engine won't start in any other position -- that's a safety feature. To restart when you're already moving, use NEUTRAL (N) only.

### **NOTICE:**

Don't try to shift to PARK (P) if your vehicle is moving. If you do, you could damage the transaxle. Shift to PARK (P) only when your vehicle is stopped.

#### **Manual Transaxle**

The gear selector should be in NEUTRAL and the parking brake engaged. Hold the clutch pedal to the floor and start the engine. Your vehicle won't start if the clutch pedal is not all the way down -- that's a safety feature.

### **Starting Your Engine**

For cold and warm engines --

1. Without pushing the accelerator pedal, turn your ignition key to START. When the engine starts, let go of the key. The idle speed will go down as your engine gets warm.

## **NOTICE:**

Holding your key in START for longer than 15 seconds at a time will cause your battery to be drained much sooner. And the excessive heat can damage your starter motor. Wait about 15 seconds between each try to help avoid draining your battery or damaging your starter.

2. If it doesn't start, push the accelerator pedal one-third of the way down. Hold it there, for not more than 15 seconds at a time, while you turn your key to START. When the engine starts, let go of the key and release the pedal. Wait about 15 seconds between each try to help avoid draining your battery or damaging your starter. 3. If your engine still won't start (or starts but then stops), it could be flooded with too much gasoline. Try pushing your accelerator pedal all the way to the floor and holding it there as you hold the key in START for about three seconds. If the vehicle starts briefly but then stops again, do the same thing, but this time keep the pedal down for five or six seconds. This clears the extra gasoline from the engine.

### **NOTICE:**

Your engine is designed to work with the electronics in your vehicle. If you add electrical parts or accessories, you could change the way the engine operates. Before adding electrical equipment, check with your dealer. If you don't, your engine might not perform properly.

If you ever have to have your vehicle towed, see the part of this manual that tells how to do it without damaging your vehicle. See "Towing Your Vehicle" in the Index.

## **Automatic Transaxle Operation**

There are several different positions for your shift lever.



**PARK** (**P**): This locks your front wheels. It's the best position to use when you start your engine because your vehicle can't move easily.

# **A** CAUTION:

It is dangerous to get out of your vehicle if the shift lever is not fully in PARK (P) with the parking brake firmly set. Your vehicle can roll. Don't leave your vehicle when the engine is running unless you have to. If you have left the engine running, the vehicle can move suddenly. You or others could be injured. To be sure your vehicle won't move, even when you're on fairly level ground, always set your parking brake and move the shift lever to PARK (P).

See "Shifting Into PARK (P)" in the Index.

Ensure the shift lever is fully in PARK (P) before starting the engine. Your vehicle has a automatic transaxle shift lock control system. You have to fully apply your regular brakes before you can shift from PARK (P) when the ignition key is in ON. If you cannot shift out of PARK (P), ease pressure on the shift lever -- push the shift lever all the way into PARK (P) and release the shift lever button as you maintain brake application. Then press the shift lever button and move the shift lever into the gear you wish. See "Shifting Out of PARK (P)" in the Index.

**REVERSE** (**R**): Use this gear to back up.

### **NOTICE:**

Shifting to REVERSE (R) while your vehicle is moving forward could damage your transaxle. Shift to REVERSE (R) only after your vehicle is stopped.

To rock your vehicle back and forth to get out of snow, ice or sand without damaging your transaxle, see "Stuck: In Sand, Mud, Ice or Snow" in the Index. **NEUTRAL (N):** In this position, your engine doesn't connect with the wheels. To restart when you're already moving, use NEUTRAL (N) only. Also, use NEUTRAL (N) when your vehicle is being towed.

# <u> CAUTION:</u>

Shifting out of PARK (P) or NEUTRAL (N) while your engine is "racing" (running at high speed) is dangerous. Unless your foot is firmly on the brake pedal, your vehicle could move very rapidly. You could lose control and hit people or objects. Don't shift out of PARK (P) or NEUTRAL (N) while your engine is racing.

## **NOTICE:**

Damage to your transaxle caused by shifting out of PARK (P) or NEUTRAL (N) with the engine racing isn't covered by your warranty. **DRIVE** (**D**): This position is for normal driving.

If you need more power for passing, and you're:

- Going less than about 27 mph (43 km/h), push your accelerator pedal about halfway down.
- Going about 27 mph (43 km/h) or more, push your accelerator pedal all the way down.

You'll shift down to the next gear and have more power.

**SECOND (2):** This position gives you more power but lower fuel economy. You can use SECOND (2) on hills. It can help control your speed as you go down steep mountain roads, but then you would also want to use your brakes off and on.

### **NOTICE:**

Don't shift into SECOND (2) unless you are going slower than 70 mph (112 km/h); or you can damage your engine. **LOW** (L): This position gives you even more power but lower fuel economy than SECOND (2). You can use it on very steep hills, or in deep snow or mud. If the selector lever is put in LOW (L), the transaxle won't shift into low gear until the vehicle is going slowly enough.

## **NOTICE:**

If your front wheels can't rotate, don't try to drive. This might happen if you were stuck in very deep sand or mud or were up against a solid object. You could damage your transaxle. Also, if you stop when going uphill, don't hold your vehicle there with only the accelerator pedal. This could overheat and damage the transaxle. Use your brakes to hold your vehicle in position on a hill.

## Manual Transaxle Operation 5-Speed



The top of your manual transaxle shift lever shows you your shift pattern. Here's how to operate your transaxle:

**FIRST (1):** Press the clutch pedal and shift into FIRST (1). Then, slowly let up on the clutch pedal as you press the accelerator pedal.

You can shift into FIRST (1) when you're going less than 20 mph (32 km/h). If you've come to a complete stop and it's hard to shift into FIRST (1), put the shift lever in NEUTRAL (N) and let up on the clutch. Press the clutch pedal back down. Then shift into FIRST (1).

**SECOND (2):** Press the clutch pedal as you let up on the accelerator pedal and shift into SECOND (2). Then, slowly let up on the clutch pedal as you press the accelerator pedal.

**THIRD (3), FOURTH (4), FIFTH (5):** Shift into THIRD (3), FOURTH (4) and FIFTH (5) the same way you do for SECOND (2). Slowly let up on the clutch pedal as you press the accelerator pedal.

To stop, let up on the accelerator pedal and press the brake pedal. Just before the vehicle stops, press the clutch pedal and the brake pedal, and shift to NEUTRAL (N).

**NEUTRAL (N):** Use this position when you start or idle your engine.

**REVERSE** (**R**): To back up, press down the clutch pedal and shift into REVERSE (R). Let up on the clutch pedal slowly while pressing the accelerator pedal.

You cannot go directly from FIFTH (5) into REVERSE (R). If you try, you will be locked out. You must first shift into NEUTRAL (N), move the lever to the left, back to the right, and then shift into REVERSE (R). This is a safety feature.

## **NOTICE:**

Shift to REVERSE (R) only after your vehicle is stopped. Shifting to REVERSE (R) while your vehicle is moving could damage your transaxle.

Also, use REVERSE (R) along with the parking brake for parking your vehicle.

#### **Shift Speeds**

# <mark> CAUTION:</mark>

If you skip a gear when you downshift, you could lose control of your vehicle. You could injure yourself or others. Don't shift down more than one gear at a time when you downshift.

#### **Shift Light (United States Only)**



If you have a manual transaxle, you have a shift light. This light will show you when to shift to the next higher gear for best fuel economy.

When this light comes on, you should shift to the next higher gear if weather, road and traffic conditions let you. For best fuel economy, accelerate slowly and shift when the light comes on. While you accelerate, it is normal for the light to go on and off if you quickly change the position of the accelerator. Ignore the shift light when you downshift.

## **Parking Brake**



The parking brake is located between the seats. To set the parking brake, hold the brake pedal down and pull up on the parking brake lever. If the ignition is on, the brake system warning light will come on.



To release the parking brake, hold the brake pedal down. Pull the parking brake lever up until you can press the release button. Hold the release button in as you move the lever all the way down.

## **NOTICE:**

Driving with the parking brake on can cause your rear brakes to overheat. You may have to replace them, and you could also damage other parts of your vehicle.

## Shifting Into PARK (P) (Automatic Transaxle Only)

# ▲ CAUTION:

It can be dangerous to get out of your vehicle if the shift lever is not fully in PARK (P) with the parking brake firmly set. Your vehicle can roll. If you have left the engine running, the vehicle can move suddenly. You or others could be injured. To be sure your vehicle won't move, even when you're on fairly level ground, use the steps that follow.



- 1. Hold the brake pedal down with your right foot and set the parking brake.
- 2. Move the shift lever into PARK (P) by holding in the button on the lever and pushing the lever all the way toward the front of your vehicle.
- 3. Turn the ignition key to LOCK.
- 4. Remove the key and take it with you. If you can leave your vehicle with the ignition key in your hand, your vehicle is in PARK (P).

#### Leaving Your Vehicle With the Engine Running (Automatic Transaxle Only)

## **<u>A</u>** CAUTION:

It can be dangerous to leave your vehicle with the engine running. Your vehicle could move suddenly if the shift lever is not fully in PARK (P) with the parking brake firmly set. And, if you leave the vehicle with the engine running, it could overheat and even catch fire. You or others could be injured. Don't leave your vehicle with the engine running unless you have to.

#### **Torque Lock (Automatic Transaxle)**

If you are parking on a hill and you don't shift your transaxle into PARK (P) properly, the weight of the vehicle may put too much force on the parking pawl in the transaxle. You may find it difficult to pull the shift lever out of PARK (P). This is called "torque lock." To prevent torque lock, set the parking brake and then shift into PARK (P) properly before you leave the driver's seat. To find out how, see "Shifting Into PARK (P)" in the Index.

When you are ready to drive, move the shift lever out of PARK (P) *before* you release the parking brake.

If torque lock does occur, you may need to have another vehicle push yours a little uphill to take some of the pressure from the parking pawl in the transaxle, so you can pull the shift lever out of PARK (P).

## Shifting Out of PARK (P) (Automatic Transaxle Only)

Your vehicle has a automatic transaxle shift lock control system. You have to fully apply your regular brakes before you can shift from PARK (P) when the ignition key is ON. See "Automatic Transaxle Operation" in the Index.

If you cannot shift out of PARK (P), ease pressure on the shift lever -- push the shift lever all the way into PARK (P) and release the shift lever button as you maintain brake application. Then press the shift lever button and move the shift lever into the gear you wish.

If you ever hold the brake pedal down but still can't shift out of PARK (P), try this:

- 1. Turn off the engine (if started).
- 2. Set the parking brake.

- 3. Turn the ignition key to ON.
- 4. Find the access hole cover on the driver's side of the console, near the shift lever.
- 5. Remove the screw and cover with a screwdriver. Inside you'll see the lock cam.
- 6. Using the screwdriver, move the lock cam forward until the pin is free and hold the cam there. Move the shift lever into NEUTRAL (N) while holding the cam forward.
- 7. Firmly apply and hold the brake pedal.
- 8. Start the engine.
- 9. Move the shift lever into the gear you want.
- 10. Release the parking brake.
- 11. Have the vehicle fixed as soon as you can.

### Parking Your Vehicle (Manual Transaxle Models Only)

Before you get out of your vehicle, put your manual transaxle in REVERSE (R) and firmly apply the parking brake.

## **Parking Over Things That Burn**



# <u> CAUTION:</u>

Things that can burn could touch hot exhaust parts under your vehicle and ignite. Don't park over papers, leaves, dry grass or other things that can burn.

## **Engine Exhaust**

## **<u>A</u>** CAUTION:

Engine exhaust can kill. It contains the gas carbon monoxide (CO), which you can't see or smell. It can cause unconsciousness and death.

You might have exhaust coming in if:

- Your exhaust system sounds strange or different.
- Your vehicle gets rusty underneath.
- Your vehicle was damaged in a collision.
- Your vehicle was damaged when driving over high points on the road or over road debris.
- Repairs weren't done correctly.
- Your vehicle or exhaust system had been modified improperly.

If you ever suspect exhaust is coming into your vehicle:

- Drive it only with all the windows down to blow out any CO; and
- Have your vehicle fixed immediately.

### Running Your Engine While You're Parked (Automatic Transaxle)

It's better not to park with the engine running. But if you ever have to, here are some things to know.

# **A** CAUTION:

Idling the engine with the climate control system off could allow dangerous exhaust into your vehicle (see the earlier Caution under "Engine Exhaust").

Also, idling in a closed-in place can let deadly carbon monoxide (CO) into your vehicle even if the fan switch is at the highest setting. One place this can happen is a garage. Exhaust -- with CO -- can come in easily. NEVER park in a garage with the engine running.

Another closed-in place can be a blizzard. (See "Blizzard" in the Index.)

## **▲ CAUTION:**

It can be dangerous to get out of your vehicle if the shift lever is not fully in PARK (P) with the parking brake firmly set. Your vehicle can roll. Don't leave your vehicle when the engine is running unless you have to. If you've left the engine running, the vehicle can move suddenly. You or others could be injured. To be sure your vehicle won't move, even when you're on fairly level ground, always set your parking brake and move the shift lever to PARK (P).

Follow the proper steps to be sure your vehicle won't move. See "Shifting Into PARK (P)" in the Index.

## Windows

#### **Manual Windows**

Use the window crank to open and close each door window.

## Horn

Your can sound the horn by pressing one of the horn symbols on your steering wheel.

## **Turn Signal/Multifunction Lever**



The lever on the left side of the steering column includes your:

- Turn Signal and Lane Change Indicator
- Headlamp High/Low Beam Changer
- Flash-to-Pass

#### **Turn Signal and Lane Change Indicator**

The turn signal has two upward (for right) and two downward (for left) positions. These positions allow you to signal a turn or a lane change.

To signal a turn, move the lever all the way up or down. When the turn is finished, the lever will return automatically.



An arrow on the instrument panel cluster will flash in the direction of the turn or lane change.

To signal a lane change, just raise or lower the lever until the arrow starts to flash. Hold it there until you complete your lane change. The lever will return by itself when you release it.

As you signal a turn or a lane change, if the arrows don't flash but just stay on, a signal bulb may be burned out and other drivers won't see your turn signal.

If a bulb is burned out, replace it to help avoid an accident. If the arrows don't go on at all when you signal a turn, check for burned-out bulbs and check the fuse (see "Fuses and Circuit Breakers" in the Index).

#### Headlamp High/Low Beam Changer

To change the headlamps from low beam to high or high beam to low, push the turn signal away from you. To switch back to low beams, pull the lever toward you.



When the high beams are on, this light on the instrument panel cluster also will be on. It will go off when you switch to the low beams.

### Windshield Wipers



#### **Flash-to-Pass**

This feature lets you use your high-beam headlamps to signal a driver in front of you that you want to pass.

To use it, pull the turn signal/multifunction lever toward you until the high-beam headlamps come on, then release the lever to turn them off. You control the windshield wipers by moving the stalk with the windshield wiper symbol on it up or down.

For steady wiping at low speed, move the stalk down to LO. For high-speed wiping, move the stalk down to HI. To stop the wipers, move the stalk to OFF.

If your vehicle is equipped with intermittent wipers, you can use this function by moving the stalk to INT. In light rain or snow, you might want to use this position rather than continuous wiping. Remember that damaged wiper blades may prevent you from seeing well enough to drive safely. To avoid damage, be sure to clear ice and snow from the wiper blades before using them. If they're frozen to the windshield, carefully loosen or thaw them. If your blades do become damaged, get new blades or blade inserts.

Heavy snow or ice can overload your wipers. A circuit breaker will stop them until the motor cools. Clear away snow or ice to prevent an overload.

#### Windshield Washer

To wash your windshield, pull the stalk with the washer symbol on it toward you to spray washer fluid on the windshield. The spray will continue until you release the lever. If your vehicle is equipped with intermittent wipers, your windshield wipers will cycle a few times. See "Windshield Washer Fluid" in the Index.

# <mark> CAUTION:</mark>

In freezing weather, don't use your washer until the windshield is warmed. Otherwise the washer fluid can form ice on the windshield, blocking your vision.

#### **Rear Window Wiper/Washer (If Equipped)**



If you have this option on your two-door model, push the upper button to turn on your rear wiper. Push the same button again to turn it off.

To wash and wipe at the same time, push the lower washer button all the way in.

The washer and wiper will run as long as you hold it. To add washer fluid, see "Windshield Washer Fluid" in the Index.

## **Exterior Lamps**

#### Headlamps



Turn the outside part of the turn signal/multifunction lever to control the lamps.

**OFF:** All lamps are off. **CODE:** This position will turn on the following lamps:

- Parking Lamps
- Sidemarker Lamps
- Taillamps
- Instrument Panel Lamps

 $\overset{-}{\bigtriangledown}$ : This position will turn on the lamps listed above, as well as the headlamps.

### Lamps On Reminder

If you turn the ignition off and leave the lamps on, you'll hear a tone when you open the driver's door.

#### **Daytime Running Lamps**

Daytime Running Lamps (DRL) can make it easier for others to see the front of your vehicle during the day. DRL can be helpful in many different driving conditions, but they can be especially helpful in the short periods after dawn and before sunset. The DRL system will make your low-beam headlamps come on at a reduced brightness when:

- The ignition is on,
- the headlamp switch is off, and
- the parking brake is released.

When you turn on the headlamp switch, your DRL will go out and your headlamps will come on.

The other lamps that come on with your headlamps will also come on.

When you turn off the headlamp switch, the regular lamps will go off and your low-beam headlamps will come on at the reduced brightness of DRL.

To idle your vehicle with the DRL off, set the parking brake. The DRL will stay off until you release the parking brake.

As with any vehicle, you should turn on the regular headlamp system when you need it.

## Interior Lamps Instrument Panel Brightness Control



This knob controls the brightness of your instrument panel lights. Turn the knob clockwise to brighten the lights or counterclockwise to dim them.

#### **Dome Lamp**

The dome lamp is located between the sun visors on the two-door model, and in the center of the roof on the four-door model. The dome lamp has a three-position switch.

**OFF:** The lamp stays off even when the driver's door is open.

**CENTER:** The lamp comes on when the driver's door is opened.

**ON:** The lamp comes on and stays on whether or not a door is open.

#### **Mirrors**

#### **Inside Day/Night Rearview Mirror**

An inside rearview mirror is attached above your windshield. The mirror has a pivot so that you can adjust it up and down or side to side.

You can adjust the mirror for day or night driving. Pull the tab toward you for night driving to reduce glare. Push the tab away from you for daytime driving.

#### **Outside Manual Adjust Mirror**

Adjust the outside mirrors by hand so that you can just see the side of your vehicle when you are sitting in a comfortable driving position.

#### **Manual Remote Control Mirror**



The outside rearview mirror should be adjusted so you can just see the side of your vehicle when you are sitting in a comfortable driving position.

Adjust the driver's side outside mirror with the control lever on the driver's door. To adjust your passenger's side mirror, sit in the driver's seat and have a passenger adjust the mirror for you.

#### **Convex Outside Mirror**

Your passenger's side mirror is convex. A convex mirror's surface is curved so you can see more from the driver's seat.



A convex mirror can make things (like other vehicles) look farther away than they really are. If you cut too sharply into the right lane, you could hit a vehicle on your right. Check your inside mirror or glance over your shoulder before changing lanes.

## Storage Compartments Glove Box

To open the glove box, pull the latch toward you. Always keep the glove box door closed while driving.

#### **Door Storage Pocket**

Your driver and passenger doors have a storage compartment.

### **Cupholder and Compartment**



To use the cupholder, pull it out until it stops. With cups removed, push it back in to store. An open storage tray is below the cupholder.

#### **Cargo Cover (If Equipped)**

If your two-door model has this option, the cargo cover allows for hidden storage in the rear area of your vehicle. The cover opens with the hatchback lid so you can easily get things in and out. To carry larger items, the cover can be removed and the rear seat can be folded down.

To remove the cargo cover:

1. Unhook the lifter lines from the hatchback lid.



2. Pull the cover gently toward you and then lift the cover out of its retainers.

To store the cargo cover:

- 1. Fold the rear seatback down.
- 2. Place the cover horizontally between the front seatbacks and the rear seat cushion.

# **A** CAUTION:

An improperly stored cargo cover could be thrown about the vehicle during a collision or sudden maneuver. You or others could be injured. If you remove the cover, always store it horizontally between the front seatbacks and rear seat cushion. When you put it back, always be sure that it is securely reattached.

To install the cargo cover:

- 1. Raise the rear seatback.
- 2. Place the cover into its retainers and slide it gently away from you until it is secure.
- 3. Attach the lifter lines to the hatchback lid.

## Ashtray and Cigarette Lighter

Pull the door to open the ashtray. To remove it, press down on the silver tab and pull the ashtray out.

## **NOTICE:**

Don't put papers and other things that burn into your ashtray. If you do, cigarettes or other smoking materials could set them on fire, causing damage.

To use the lighter, push the lighter in all the way and let go. When it's ready, it will pop back out by itself.

## **NOTICE:**

Don't hold a cigarette lighter in with your hand while it is heating. If you do, it won't be able to back away from the heating element when it's ready. That can make it overheat, damaging the lighter and the heating element.

### **Sun Visors**

To block out glare, you can swing down the visors.

You can also swing them to the side. If the visors swing too easily, tighten the screw on the roof rail.

Your sun visors may have pockets. You can put light items, such as a map, in the pockets.

### **The Instrument Panel -- Your Information System**



2-32

- A. Rear Window Wiper Switch (If Equipped)
- B. Turn Signal/Multifunction Lever
- C. Air Vent
- D. Brightness Control
- E. Horn
- F. Hazard Warning Flasher
- G. Instrument Panel Cluster
- H. Ignition Switch
- I. Windshield Wiper/Washer Lever
- J. Coinholder
- K. Comfort Controls
- L. Side Defroster Vent

- M. Rear Window Washer Switch (If Equipped)
- N. Rear Window Defogger Switch
- O. Hood Release
- P. Fuse Block
- Q. Ashtray
- R. Transaxle Shift Lever
- S. Parking Brake Lever
- T. Storage Compartment
- U. Cupholder
- V. Cigarette Lighter
- W. Audio System
- X. Glove Box

## **Instrument Panel Cluster**

Your instrument panel cluster is designed to let you know at a glance how your vehicle is running. You'll know how fast you're going, about how much fuel you've used, and many other things you'll need to know to drive safely and economically.



**Standard Cluster** 



**Optional Cluster** 

#### **Speedometer and Odometer**

Your speedometer lets you see your speed in both miles per hour (mph) and kilometers per hour (km/h). Your odometer shows how far your vehicle has been driven, in either miles (used in the United States) or kilometers (used in Canada).

You may wonder what happens if your vehicle needs a new odometer installed.

If the new one can be set to the mileage total of the old odometer, then it must be. But if it can't, then it's set to zero and a label must be put on the driver's door to show the old mileage reading when the new odometer was installed.

#### **Trip Odometer (If Equipped)**

Your vehicle may be equipped with a trip odometer. The trip odometer can tell you how far your vehicle has been driven since you last set the trip odometer to zero.

To reset the trip odometer to zero, press the knob located to the right of the speedometer.

### **Tachometer (If Equipped)**



The tachometer displays the engine speed in revolutions per minute (rpm).

## NOTICE:

Do not operate the engine with the tachometer in the red area, or engine damage may occur.

## Warning Lights, Gages and Indicators

This part describes the warning lights and gages that may be on your vehicle. The pictures will help you locate them.

Warning lights and gages can signal that something is wrong before it becomes serious enough to cause an expensive repair or replacement. Paying attention to your warning lights and gages could also save you or others from injury.

Warning lights come on when there may be or is a problem with one of your vehicle's functions. As you will see in the details on the next few pages, some warning lights come on briefly when you start the engine just to let you know they're working. If you are familiar with this section, you should not be alarmed when this happens.

Gages can indicate when there may be or is a problem with one of your vehicle's functions. Often gages and warning lights work together to let you know when there's a problem with your vehicle. When one of the warning lights comes on and stays on when you are driving, or when one of the gages shows there may be a problem, check the section that tells you what to do about it. Please follow this manual's advice. Waiting to do repairs can be costly -- and even dangerous. So please get to know your warning lights and gages. They're a big help.

#### Safety Belt Reminder Light

When the key is turned to ON or START, a tone will come on for about eight seconds to remind people to fasten their safety belts, unless the driver's safety belt is already buckled.



The safety belt light will also come on and stay on until the driver's belt is buckled.

#### Air Bag Readiness Light

There is an air bag readiness light on the instrument panel, which shows AIR BAG. The system checks the air bag's electrical system for malfunctions. The light tells you if there is an electrical problem. The system check includes the air bag sensor, the air bag modules, and the crash sensing and diagnostic module. For more information on the air bag system, see "Air Bag" in the Index.



This light will come on when you start your vehicle, and it will flash for a few seconds. Then the light should go out. This means the system is ready.

If the air bag readiness light stays on after you start the vehicle or comes on when you are driving, your air bag system may not work properly. Have your vehicle serviced right away.

# **A** CAUTION:

If the air bag readiness light stays on after you start your vehicle, it means the air bag system may not be working properly. The air bags in your vehicle may not inflate in a crash, or they could even inflate without a crash. To help avoid injury to yourself or others, have your vehicle serviced right away if the air bag readiness light stays on after you start your vehicle.

The air bag readiness light should flash for a few seconds when you turn the ignition key to ON. If the light doesn't come on then, have it fixed so it will be ready to warn you if there is a problem.

### **Charging System Light**



This light will come on briefly when you turn the ignition to ON or START, but when the engine is not running, as a check to show you it is working.

Then it should go out when the engine starts.

If it stays on, or comes on when you are driving, you may have a problem with the electrical charging system. It could indicate that you have a loose generator drive belt or another electrical problem. Have it checked right away. Driving while this light is on could drain your battery.

If you must drive a short distance with the charging system light on, be certain to turn off all your accessories, such as the radio and air conditioner.

### Shift Light (Manual Transaxle)



This light comes on when you need to shift to the next higher gear. See "Manual Transaxle" in the Index.

#### **United States Only**

#### **Brake System Warning Light**

Your vehicle's hydraulic brake system is divided into two parts. If one part isn't working, the other part can still work and stop you. For good braking, though, you need both parts working well.

If the warning light comes on, there is a brake problem. Have your brake system inspected right away.



**United States** 

Canada

This light should come on when you turn the key to START. If it doesn't come on then, have it fixed so it will be ready to warn you if there's a problem.

If the light comes on while you are driving, pull off the road and stop carefully. You may notice that the pedal is harder to push. Or, the pedal may go closer to the floor. It may take longer to stop. If the light is still on, have the vehicle towed for service. (See "Anti-Lock Brake System Warning Light" and "Towing Your Vehicle" in the Index.)

## **A** CAUTION:

Your brake system may not be working properly if the brake system warning light is on. Driving with the brake system warning light on can lead to an accident. If the light is still on after you've pulled off the road and stopped carefully, have the vehicle towed for service.

When the ignition is on, the brake system warning light will also come on when you set your parking brake. The light will stay on if your parking brake doesn't release fully. If it stays on after your parking brake is fully released, it means you have a brake problem.

#### Anti-Lock Brake System Warning Light (Option)

ABS

With the anti-lock brake system, this light will come on when you start your engine and it will stay on for three seconds. That's normal.

If the light comes on when you're driving, you don't have anti-lock brakes and there could be a problem with your regular brakes. Pull off the road and stop carefully. You may notice that the pedal is harder to push. Or, the pedal may go closer to the floor. It may take longer to stop. Have the vehicle towed for service. (See "Towing Your Vehicle" in the Index.)

## <mark>⚠ CAUTION:</mark>

Your regular brake system may not be working properly if the anti-lock brake system warning light is on. Driving with the anti-lock brake system warning light on can lead to an accident. After you've pulled off the road and stopped carefully, have the vehicle towed for service.

If the anti-lock brake system warning light stays on longer than normal after you've started your engine, turn the ignition off. Or, if the light comes on and stays on when you're driving, stop as soon as possible and turn the ignition off. Then start the engine again to reset the system. If the light still stays on, or comes on again while you're driving, your vehicle needs service. If the light is on and the regular brake system warning light isn't on, you still have brakes, but you don't have anti-lock brakes.

The anti-lock brake system warning light should come on briefly when you turn the ignition key to ON. If the light doesn't come on then, have it fixed so it will be ready to warn you if there is a problem.

#### Anti-Lock Brake System Active Light (Option)



When your anti-lock system is adjusting brake pressure to help avoid a braking skid, the anti-lock brake system active light will come on.

Slippery road conditions may exist if this light comes on, so adjust your driving accordingly. The light will stay on for a few seconds after the system stops adjusting brake pressure.

The anti-lock brake system active light also comes on briefly when you turn the ignition key to ON. If the light doesn't come on then, have it fixed so it will be there to tell you when the system is active.

#### **Engine Coolant Temperature Gage**



Standard Cluster

#### **Optional Cluster**

This gage shows the engine coolant temperature. If the gage pointer moves to the HOT (H) side of the band, your engine is too hot! It means that your engine coolant has overheated and you should stop your vehicle and turn off the engine as soon as possible.

In "Problems on the Road," this manual show what to do. See "Engine Overheating" in the Index.

#### Malfunction Indicator Lamp (Service Engine Soon Light)



Your vehicle is equipped with a computer which monitors operation of the fuel, ignition and emission control systems.

This system is called OBD II (On-Board Diagnostics-Second Generation) and is intended to assure that emissions are at acceptable levels for the life of the vehicle, helping to produce a cleaner environment. The SERVICE ENGINE SOON light comes on to indicate that there is a problem and service is required. Malfunctions often will be indicated by the system before any problem is apparent. This may prevent more serious damage to your vehicle. This system is also designed to assist your service technician in correctly diagnosing any malfunction.

## **NOTICE:**

If you keep driving your vehicle with this light on, after a while, your emission controls may not work as well, your fuel economy may not be as good and your engine may not run as smoothly. This could lead to costly repairs that may not be covered by your warranty.

## **NOTICE:**

Modifications made to the engine, transaxle, exhaust or fuel system of your vehicle or the replacement of the original tires with other than those of the same Tire Performance Criteria (TPC) can affect your vehicle's emission controls and may cause the SERVICE ENGINE SOON light to come on. Modifications to these systems could lead to costly repairs not covered by your warranty. This may also result in a failure to pass a required Emission Inspection/Maintenance test. This light should come on, as a check to show you it is working, when the ignition is on and the engine is not running. If the light doesn't come on, have it repaired. This light will also come on during a malfunction in one of two ways:

- Light Flashing -- A misfire condition has been detected. A misfire increases vehicle emissions and may damage the emission control system on your vehicle. Dealer or qualified service center diagnosis and service may be required.
- Light On Steady -- An emission control system malfunction has been detected on your vehicle. Dealer or qualified service center diagnosis and service may be required.

#### If the Light Is Flashing

The following may prevent more serious damage to your vehicle:

- Reducing vehicle speed.
- Avoiding hard accelerations.
- Avoiding steep uphill grades.

If the light stops flashing and remains on steady, see "If the Light Is On Steady" following.

If the light continues to flash, when it is safe to do so, *stop the vehicle*. Find a safe place to park your vehicle. Turn the key off, wait at least 10 seconds and restart the engine. If the light remains on steady, see "If the Light Is On Steady" following. If the light is still flashing, follow the previous steps, and drive the vehicle to your dealer or qualified service center for service.

#### If the Light Is On Steady

You may be able to correct the emission system malfunction by considering the following:

Did you recently put fuel into your vehicle?

If so, reinstall the fuel cap, making sure to fully install the cap. See "Filling Your Tank" in the Index. The diagnostic system can determine if the fuel cap has been left off or improperly installed. A loose or missing fuel cap will allow fuel to evaporate into the atmosphere. A few driving trips with the cap properly installed should turn the light off.

Did you just drive through a deep puddle of water?

If so, your electrical system may be wet. The condition will usually be corrected when the electrical system dries out. A few driving trips should turn the light off. Are you low on fuel?

As your engine starts to run out of fuel, your engine may not run as efficiently as designed since small amounts of air are sucked into the fuel line causing a misfire. The system can detect this. Adding fuel should correct this condition. Make sure to install the fuel cap properly. See "Filling Your Tank" in the Index. It will take a few driving trips to turn the light off.

Have you recently changed brands of fuel?

If so, be sure to fuel your vehicle with quality fuel (see "Fuel" in the Index). Poor fuel quality will cause your engine not to run as efficiently as designed. You may notice this as stalling after start-up, stalling when you put the vehicle into gear, misfiring, hesitation on acceleration or stumbling on acceleration. (These conditions may go away once the engine is warmed up.) This will be detected by the system and cause the light to turn on.

If you experience one or more of these conditions, change the fuel brand you use. It will require at least one full tank of the proper fuel to turn the light off.

If none of the above steps have made the light turn off, have your dealer or qualified service center check the vehicle. Your dealer has the proper test equipment and diagnostic tools to fix any mechanical or electrical problems that may have developed.

#### **Emissions Inspection and Maintenance Programs**

Some state/provincial and local governments have or may begin programs to inspect the emission control equipment on your vehicle. Failure to pass this inspection could prevent you from getting a vehicle registration.

Here are some things you need to know in order to help your vehicle pass an inspection:

Your vehicle will not pass this inspection if the SERVICE ENGINE SOON light is on or not working properly.

Your vehicle will not pass this inspection if the OBD (on-board diagnostic) system determines that critical emission control systems have not been completely diagnosed by the system. The vehicle would be considered not ready for inspection. This can happen if you have recently replaced your battery or if your battery has run down. The diagnostic system is designed to evaluate critical emission control systems during normal driving. This may take several days of routine driving. If you have done this and your vehicle still does not pass the inspection for lack of OBD system readiness, see your dealer or qualified service center to prepare the vehicle for inspection.

### **Oil Pressure Light**



If you have a problem with your oil pressure this light may stay on after you start your engine, or come on when you are driving.

This indicates that there is not enough pressure to keep your engine properly lubricated and cool. The engine could be low on oil or have some other oil problem. Have it fixed right away.

The oil light could also come on in three other situations:

- When the ignition is on but the engine is not running, the light will come on as a test to show you it is working. If it doesn't come on with the ignition on, you may have a problem with the fuse or bulb. Have it fixed right away.
- Sometimes when the engine is idling at a stop, the light may blink on and off. This is normal.
- If you make a hard stop, the light may come on for a moment. This is normal.

## **A** CAUTION:

Don't keep driving if the oil pressure is low. If you do, your engine can become so hot that it catches fire. You or others could be burned. Check your oil as soon as possible and have your vehicle serviced.

## **NOTICE:**

Damage to your engine from neglected oil problems can be costly and is not covered by your warranty.
## Daytime Running Lamps (DRL) Indicator Light



You will have this light on the instrument panel cluster. It goes on whenever the daytime running lights are on.

## **Fuel Gage**



**Standard Cluster** 

**Optional Cluster** 

Your fuel gage show about how much fuel is in your tank. When the age first indicates "E" (empty), you still have a little fuel left about 1 or 2 gallons (3.8 or 7.6L), but you need to get more right away.

Here are four concerns some owners have had about the fuel gage. All of these situations are normal and do not indicate that anything is wrong with the fuel gage.

- At the gas station, the gas pump shuts off before the gage reads "F" (full).
- It takes more (or less) gas to fill up than the gage reads. For example the gage reads half full, but it took more (or less) than half of the tank's capacity to fill it.
- The gage moves a little when you turn, stop or speed up.
- When you turn the engine off, the gage doesn't go back to E (empty).

# Section 3 Comfort Controls and Audio Systems

In this section, you'll find out how to operate the comfort control and audio systems offered with your vehicle. Be sure to read about the particular systems supplied with your vehicle.

- 3-2 Comfort Controls
- 3-2 Climate Control System
- 3-3 Air Conditioner Controls (If Equipped)
- 3-3 Heating
- 3-3 Defogging and Defrosting
- 3-4 Rear Window Defogger (If Equipped)
- 3-4 Ventilation System
- 3-6 Audio Systems
- 3-6 Setting the Clock
- 3-6 AM-FM Stereo (If Equipped)

- 3-9 AM-FM Stereo with Cassette Tape Player (If Equipped)
- 3-14 AM-FM Stereo with Compact Disc Player (If Equipped)
- 3-18 Understanding Radio Reception
- 3-18 Tips About Your Audio System
- 3-19 Care of Your Cassette Tape Player
- 3-21 Care of Your Compact Discs
- 3-21 Care of Your Compact Disc Player
- 3-21 Antenna (If Equipped)

# **Comfort Controls**

With this system, you can control the heating and ventilation in your vehicle. If you have the air conditioning option, you can also control cooling.

Your vehicle also has the flow-through ventilation system described later in this section.

## **Climate Control System**



#### **Airflow Lever**

**VENT:** This position directs the airflow through the instrument panel vents.

**BI-LEVEL:** This position directs air through the instrument panel vents and toward the floor.

**FLOOR:** This position directs air toward the floor. **DEFOG:** This position directs air toward the floor, the windshield and side windows.

**DEFROST:** This position directs air to the windshield and side windows.

# **\$** Fan Control Lever

Slide the lever away from OFF to turn the system on. Move the lever toward the fan symbol to increase the fan's speed.

#### **Temperature Control Lever**

Slide the lever to change the temperature of the air flowing from the system. Move it to the right for warmer air and to the left for cooler air. Without optional air conditioning, the air temperature can't be less than the outside air temperature.

#### Air Intake Lever

CIRCULATE: Choose this position to circulate outside air through the comfort control system.

**RECIRCULATE:** Choose this position to recirculate the inside air through the comfort control system.

## Air Conditioner Controls (If Equipped)



The air conditioning system uses the same controls as described previously. The function of each lever is explained under "Climate Control System" in this part. The incoming air is cooled and dehumidified instead of being heated.

Push the A/C button to change your comfort control system from heating to air conditioning. A light will come on when the air conditioning is on. The A/C button can also control the humidity in your vehicle.

The air conditioner works best if you keep your windows closed. On very hot days, open the windows just long enough for the hot air to escape.

For normal cooling, push the A/C button and move the air intake lever to CIRCULATE. For faster cooling, move the lever to RECIRCULATE. Then move the airflow lever to VENT, the temperature control lever toward the left and the fan control lever toward the fan symbol.

On days when it is raining or the humidity is high, follow these dehumidifying steps to help clean windows that are cloudy with moisture. Push the A/C button. Move the air intake lever to CIRCULATE. Move the airflow lever to DEFROST and the fan control lever toward the fan symbol. Adjust the temperature control lever to a comfortable setting.

## Heating

For the quickest results, move the air intake lever to RECIRCULATE. Move the airflow lever to FLOOR, the temperature control lever toward the right for warmer air and the fan control lever toward the fan symbol. You should switch to CIRCULATE once in a while to avoid stale air and cloudy windows.

## **Defogging and Defrosting**

Slide the air intake lever to CIRCULATE and the airflow lever to DEFROST to direct air to the windshield vents. Then slide the temperature control lever toward the right and the fan control lever toward the fan symbol. When the windshield is clear, turn down the fan speed.

## **Rear Window Defogger (If Equipped)**



The rear window defogger uses a warming grid to remove fog from the rear window.

Press the switch to turn on the defogger. Press the switch again to turn the defogger off. The rear window defogger will also turn off if you turn the ignition switch to ACC or LOCK, but will turn back on when the ignition is turned back to ON.

Do not attach anything like a temporary vehicle license or a decal across the defogger grid on the rear window.

# NOTICE:

Don't use a razor blade or something else sharp on the inside of the rear window. If you do, you could cut or damage the warming grid, and the repairs wouldn't be covered by your warranty.

## **Ventilation System**

For mild outside temperatures, when little heating or cooling is needed, you can still direct outside air through your vehicle.

Move the air intake lever to CIRCULATE and the airflow lever to BI-LEVEL. Adjust the temperature lever to a comfortable setting and move the fan control lever toward the fan symbol.

Your vehicle's flow-through ventilation system supplies outside air into the vehicle when it is moving. Outside air will also enter the car when the fan is running and the air intake lever is at CIRCULATE.



Your vehicle has air outlets that allow you to adjust the direction and amount of airflow inside the vehicle. Move the outlet from side to side or up and down to direct airflow to your preference. Increase or reduce the amount of airflow by opening and closing the louvers.

#### **Ventilation Tips**

- Keep the hood and front air inlet free of ice, snow or any other obstruction (such as leaves). The heater and defroster will work far better, reducing the chance of fogging the inside of your windows.
- When you enter a car in cold weather, move the fan control lever toward the fan symbol for a few moments before driving off. This helps clear the intake ducts of snow and moisture, and reduces the chance of fogging the inside of your windows.
- Keep the air path under the front seats clear of objects. This helps air to circulate throughout your vehicle.

## **Audio Systems**

Your audio system has been designed to operate easily and give years of listening pleasure. You will get the most enjoyment out of it if you acquaint yourself with it first. Find out what your audio system can do and how to operate all its controls, to be sure you're getting the most out of the advanced engineering that went into it.

## **Setting the Clock**

Press and hold the HR or MIN arrow for two seconds. Then press the HR arrow until the correct hour appears. Press and hold the MIN arrow until the correct minute appears. The clock may be set with the ignition on or off.

## **AM-FM Stereo (If Equipped)**



#### **Playing the Radio**

**PWR VOL:** Press this knob to turn the system on and off. To increase volume, turn the knob clockwise. Turn it counterclockwise to decrease volume.

**RCL:** Press this knob to recall the station being played or to display the clock. Clock display is available with the vehicle off.

#### **Finding a Station**

**AM FM:** Press this button to switch between AM, FM1 and FM2. The display shows your selection.

TUNE: Turn this knob to choose radio stations.

**SEEK:** Press the right arrow to tune to the next higher station and the left arrow to tune to the next lower station and stay there. The radio will seek to stations with a strong signal only.

**SCAN:** Press and hold one of the SEEK arrows for two seconds until you hear a beep. Use SCAN to listen to stations for a few seconds. The radio will go to a station, stop for a few seconds and flash the station frequency, then go on to the next station. Press one of the SEEK arrows again to stop scanning. The radio will scan to stations with a strong signal only.

**PRESET SCAN:** Use PRESET SCAN to listen to each of your preset stations for a few seconds. Press and hold one of the SEEK arrows for more than four seconds until you hear two beeps. The radio will go to the first preset station stored on your pushbuttons, except those stations with weak reception, stop for a few seconds and flash the station frequency, then go on to the next preset station. PRESET SCAN will only scan the six presets that are in the band selected. Press one of the SEEK

arrows again to stop scanning presets. The channel number (P1-P6) will appear momentarily just before the frequency is displayed.

**PUSHBUTTONS:** The six numbered pushbuttons let you return to your favorite stations. You can set up to 18 stations (six AM, six FM1 and six FM2). Just:

- 1. Turn the radio on.
- 2. Press AM FM to select the band.
- 3. Tune in the desired station.
- 4. Press and hold one of the six numbered buttons until you hear a beep. Whenever you press that numbered button, the station you set will return.
- 5. Repeat the steps for each pushbutton.

#### **Setting the Tone**

**BASS:** Press and release AUDIO repeatedly until BAS appears on the display. Then press and hold the up arrow to increase bass. "B" and a positive number will appear on the display. Press and hold the down arrow to decrease bass. B and a negative number will appear on the display. B and a zero will appear on the display when the bass level is set to the middle position. Release the up or down arrow when you find the bass level you want or when the maximum or minimum level is reached.

**TREBLE:** Press and release AUDIO until TRE appears on the display. Then press and hold the up arrow to increase treble. "T" and a positive number will appear on the display. Press and hold the down arrow to decrease treble. T and a negative number will appear on the display. T and a zero will appear on the display when the treble level is set to the middle position. Release the up or down arrow when you find the treble level you want or when the maximum or minimum level is reached. If a station is weak or noisy, you may want to decrease the treble.

To set BASS or TREBLE to the middle position, select the desired tone control. Then press and hold AUDIO for more than two seconds until you hear a beep. B and a zero or T and a zero will appear on the display. To set all of the tone controls and speaker controls to the middle position, end out of audio mode. Then press and hold AUDIO for more than two seconds until you hear a beep. CEN will appear on the display.

#### **Adjusting the Speakers**

**BALANCE:** Press and release AUDIO until BAL appears on the display. Then press and hold the up arrow to move the sound to the right speakers or the down arrow to move the sound to the left speakers. "R" and a number will appear on the display when the sound is balanced toward the right speakers. "L" and a number will appear on the display when the sound is balanced toward the left speakers. L and a zero will appear on the display when the the sound is balanced between the speakers. Release the up or down arrow when you find the speaker balance you want or when the maximum or minimum level is reached.

**FADE:** Press and release AUDIO until FAD appears on the display. Then press and hold the up arrow to move the sound to the front speakers or the down arrow to move the sound to the rear speakers. "F" and a number will appear on the display when the sound is balanced toward the front speakers. "R" and a number will appear on the display when the sound is balanced toward the rear speakers. F and a zero will appear on the display when the the sound is balanced between the speakers. Release the up or down arrow when you find the speaker balance you want or when the maximum or minimum level is reached. To set BALANCE or FADE to the middle position, select the desired speaker control. Then press and hold AUDIO for more than two seconds until you hear a beep. L and a zero or F and a zero will appear on the display. To set all of the tone controls and speaker controls to the middle position, end out of audio mode. Then press and hold AUDIO for more than two seconds until you hear a beep. CEN will appear on the display.

#### **Radio Calibration**

Your audio system has been calibrated for your vehicle from the factory. If CAL appears on the display it means that your radio has not been configured properly for your vehicle and must be returned to the dealership for service.

# **AM-FM Stereo with Cassette Tape Player** (If Equipped)



#### **Playing the Radio**

**PWR VOL:** Press this knob to turn the system on and off. To increase volume, turn the knob clockwise. Turn it counterclockwise to decrease volume.

**RCL:** Press this knob to recall the station being played, if the tape player is active, or to display the clock.

#### **Finding a Station**

**AM FM:** Press this button to switch between AM, FM1 and FM2. The display shows your selection.

TUNE: Turn this knob to choose radio stations.

**SEEK:** Press the right arrow to tune to the next higher station and the left arrow to tune to the next lower station and stay there. The radio will seek to stations with a strong signal only.

**SCAN:** Press and hold one of the SEEK arrows for two seconds until you hear a beep. Use SCAN to listen to stations for a few seconds. The radio will go to a station, stop for a few seconds and flash the station frequency, then go on to the next station. Press one of the SEEK arrows again to stop scanning. The radio will scan to stations with a strong signal only.

**PRESET SCAN:** Use PRESET SCAN to listen to each of your preset stations for a few seconds. Press and hold one of the SEEK arrows for more than four seconds until you hear two beeps. The radio will go to the first preset station stored on your pushbuttons, except stations with weak reception, stop for a few seconds and flash the station frequency, then go on to the next preset station. PRESET SCAN will only scan the six presets that are in the band selected. Press one of the SEEK

arrows again to stop scanning presets. The channel number (P1-P6) will appear momentarily just before the frequency is displayed.

**PUSHBUTTONS:** The six numbered pushbuttons let you return to your favorite stations. You can set up to 18 stations (six AM, six FM1 and six FM2). Just:

- 1. Turn the radio on.
- 2. Press AM-FM to select the band.
- 3. Tune in the desired station.
- 4. Press and hold one of the six numbered buttons until you hear a beep. Whenever you press that numbered button, the station you set will return.
- 5. Repeat the steps for each pushbutton.

#### Setting the Tone

**BASS:** Press and release AUDIO until BAS appears on the display. Then press and hold the up arrow to increase bass. "B" and a positive number will appear on the display. Press and hold the down arrow to decrease bass. B and a negative number will appear on the display. B and a zero will appear on the display when the bass level is set to the middle position. Release the up or down arrow when you find the bass level you want or when the maximum or minimum level is reached. **TREBLE:** Press and release AUDIO until TRE appears on the display. Then press and hold the up arrow to increase treble. "T" and a positive number will appear on the display. Press and hold the down arrow to decrease treble. T and a negative number will appear on the display. T and a zero will appear on the display when the treble level is set to the middle position. Release the up or down arrow when you find the treble level you want or when the maximum or minimum level is reached. If a station is weak or noisy, you may want to decrease the treble.

To set BASS or TREBLE to the middle position, select the desired tone control. Then press and hold AUDIO for more than two seconds until you hear a beep. B and a zero or T and a zero will appear on the display. To set all of the tone controls and speaker controls to the middle position, end out of audio mode. Then press and hold AUDIO for more than two seconds until you hear a beep. CEN will appear on the display.

#### **Adjusting the Speakers**

**BALANCE:** Press and release AUDIO until BAL appears on the display. Then press and hold the up arrow to move the sound to the right speakers or the down arrow to move the sound to the left speakers. "R" and a number will appear on the display when the sound is balanced toward the right speakers. "L" and a number will appear on the display when the sound is balanced toward the left speakers. L and a zero will appear on the display when the the sound is balanced between the speakers. Release the up or down arrow when you find the speaker balance you want or when the maximum or minimum level is reached.

**FADE:** Press and release AUDIO until FAD appears on the display. Then press and hold the up arrow to move the sound to the front speakers or the down arrow to move the sound to the rear speakers. "F" and a number will appear on the display when the sound is balanced toward the front speakers. "R" and a number will appear on the display when the sound is balanced toward the rear speakers. F and a zero will appear on the display when the the sound is balanced between the speakers. Release the up or down arrow when you find the speaker balance you want or when the maximum or minimum level is reached. To set BALANCE or FADE to the middle position, select the desired speaker control. Then press and hold AUDIO for more than two seconds until you hear a beep. L and a zero or F and a zero will appear on the display. To set all of the tone controls and speaker controls to the middle position, end out of audio mode. Then press and hold AUDIO for more than two seconds until you hear a beep. CEN will appear on the display.

#### **Playing a Cassette Tape**

Your tape player is built to work best with tapes that are up to 30 to 45 minutes long on each side. Tapes longer than that are so thin they may not work well in this player. The longer side with the tape visible should face to the right. If the ignition is on, but the radio is off, the tape can be inserted and will begin playing. If you hear nothing but a garbled sound, the tape may not be in squarely. Press the eject button to remove the tape and start over.

While the tape is playing, use the VOL, FAD, BAL, TRE, BAS and SEEK controls just as you do for the radio. The radio will display UP or the  $\blacktriangle$  symbol if the top side of the tape is playing. DN or the  $\blacktriangledown$  symbol will appear if the bottom side is playing.

If the player detects a tight or broken tape, ERR (error) will appear on the display and the player will eject the tape. The radio will go back to playing the last station selected.

If you want to insert a tape when the ignition is off, first press the eject button or the RCL knob.

**PREV (1):** Press this button or the left SEEK arrow to go to the previous selection on the tape if the selection has been playing for less than 3 seconds. If the PREV button or the left SEEK arrow is pressed and the current selection has been playing for more than 13 seconds, it will go to the beginning of the current selection. If the PREV button or the left SEEK arrow is pressed and the current selection has been playing from 3 to 13 seconds, it will go to the beginning of the previous selection or the beginning of the current selection or the beginning of the current selection, depending on the position on the tape. PRE will appear on the display while the cassette player is in PREV mode. Your tape must have at least three seconds of silence between each selection for PREV to work. The sound will mute while seeking.

**NEXT (2):** Press this button or the right SEEK arrow to go to the next selection on the tape. NXT will appear on the display while the cassette player is in NEXT mode. Your tape must have at least three seconds of silence between each selection for NEXT to work. The sound will mute while seeking.

**REV (3):** Press this button to reverse the tape rapidly. REV will appear on the display. Press it again to return to playing speed. The radio will play the last selected station while the tape reverses. You may select stations during REV operation by using TUNE, SEEK, SCAN or PRESET SCAN.

**FWD (4):** Press this button to advance quickly to another part of the tape. FWD will appear on the display. Press the button again to return to playing speed. The radio will play the last selected station while the tape advances. You may select stations during FWD operation by using TUNE, SEEK, SCAN or PRESET SCAN.

**SIDE (5):** Press this button to play the other side of the tape.

**RPT (6):** Press this button once to hear a selection over again. RPT will appear on the display. The current selection will continue to repeat. RPT will flash on the display while the cassette player is searching for the start of the selection. Your tape must have at least three seconds of silence between each selection for RPT to work. Press this button again to turn off repeated play. OFF will appear on the display.

**AM FM:** Press this button to play the radio when a tape is in the player. The tape will stop but remain in the player.

**TAPE:** With a cassette tape in the player and the radio playing, press this button to play a cassette tape. CAS will appear on the display. Press AM FM to return to the radio when a cassette tape is playing. The inactive tape will remain safely inside the radio for future listening.

In order to use a portable CD player adapter or a cassette tape head cleaner you must disable the TIGHT/LOOSE TAPE sensor. Press and hold the TAPE button for two seconds with the radio off and the vehicle on. CAS will flash on the display showing the TIGHT/LOOSE TAPE sensor has been disabled. The feature will remain disabled until the tape is ejected.  $\bigtriangleup$  EJECT: Press the upward triangle button to remove a tape. The radio will play. Eject may be activated with the radio off. Cassette tapes may be loaded with the radio and vehicle off if this button is pressed first.

**CLN:** If this message appears on the display, the cassette tape player needs to be cleaned. It will still play tapes, but you should clean it as soon as possible to prevent damage to the tapes and player. See "Care of Your Cassette Tape Player" in the Index. After you clean the player, press and hold the eject button for five seconds to reset the CLN indicator. The radio display will flash --- to show the indicator was reset.

#### **Radio Calibration**

Your audio system has been calibrated for your vehicle from the factory. If CAL appears on the display it means that your radio has not been configured properly for your vehicle and must be returned to the dealership for service.

## AM-FM Stereo with Compact Disc Player (If Equipped)



#### **Playing the Radio**

**PWR VOL:** Press this knob to turn the system on and off. To increase volume, turn the knob clockwise. Turn it counterclockwise to decrease volume.

**RCL:** Press this knob to recall the station being played or to display the clock. Pressing RCL while playing a CD will also display the CD track number or elapsed time of CD track.

#### **Finding a Station**

**AM FM:** Press this button to switch between AM, FM1 and FM2. The display shows your selection.

TUNE: Turn this knob to choose radio stations.

**SEEK:** Press the right arrow to tune to the next higher station and the left arrow to tune to the next lower station and stay there.

**SCAN:** Press and hold one of the SEEK arrows for two seconds until you hear a beep. Use SCAN to listen to stations for a few seconds. The radio will go to a station, stop for a few seconds, then go on to the next station. Press one of the SEEK arrows again to stop scanning.

**PRESET SCAN:** Press and hold one of the SEEK arrows for more than four seconds until you will hear a double beep. Use PRESET SCAN to listen to each of your preset stations for a few seconds. The radio will go to the first preset station stored on your pushbuttons, stop for a few seconds, then go on to the next preset station. Press one of the SEEK arrows again to stop scanning presets. The channel number (P1-P6) will appear momentarily just before the frequency is displayed. **PUSHBUTTONS:** The six numbered pushbuttons let you return to your favorite stations. You can set up to 18 stations (six AM, six FM1 and six FM2). Just:

- 1. Turn the radio on.
- 2. Press AM-FM to select the band.
- 3. Tune in the desired station.
- 4. Press and hold one of the six numbered buttons until you hear a beep. Whenever you press that numbered button, the station you set will return.
- 5. Repeat the steps for each pushbutton.

#### **Setting the Tone**

**BAS:** Press and release AUDIO until BAS appears on the display. Then press and hold the up arrow to increase bass. "B" and a positive number will appear on the display. Press and hold the down arrow to decrease bass. B and a negative number will appear on the display. B and a zero will appear on the display when the bass level is set to the middle position. Release the up or down arrow when you find the bass level you want or when the maximum or minimum level is reached. **TRE:** Press and release AUDIO until TRE appears on the display. Then press and hold the up arrow to increase treble. "T" and a positive number will appear on the display. Press and hold the down arrow to decrease treble. T and a negative number will appear on the display. T and a zero will appear on the display when the treble level is set to the middle position. Release the up or down arrow when you find the treble level you want or when the maximum or minimum level is reached. If a station is weak or noisy, you may want to decrease the treble.

To set BAS or TRE to the middle position, select the desired tone control. Then press and hold AUDIO for more than two seconds until you hear a beep. B and a zero or T and a zero will appear on the display. To set all of the tone controls and speaker controls to the middle position, end out of audio mode. Then press and hold AUDIO for more than two seconds until you hear a beep. CEN will appear on the display.

#### **Adjusting the Speakers**

**BAL:** Press and release AUDIO until BAL appears on the display. Then press and hold the up arrow to move the sound to the right speakers or the down arrow to move the sound to the left speakers. "R" and a number will appear on the display when the sound is balanced toward the right speakers. "L" and a number will appear on the display when the sound is balanced toward the left speakers. L and a zero will appear on the display when the the sound is balanced between the speakers. Release the up or down arrow when you find the speaker balance you want or when the maximum or minimum level is reached.

**FAD:** Press and release AUDIO until FAD appears on the display. Then press and hold the up arrow to move the sound to the front speakers or the down arrow to move the sound to the rear speakers. "F" and a number will appear on the display when the sound is balanced toward the front speakers. "R" and a number will appear on the display when the sound is balanced toward the rear speakers. F and a zero will appear on the display when the the sound is balanced between the speakers. Release the up or down arrow when you find the speaker balance you want or when the maximum or minimum level is reached. To set BAL or FAD to the middle position, select the desired speaker control. Then press and hold AUDIO for more than two seconds until you hear a beep. L and a zero or F and a zero will appear on the display. To set all of the tone controls and speaker controls to the middle position, end out of audio mode. Then press and hold AUDIO for more than two seconds until you hear a beep. CEN will appear on the display.

#### **Playing a Compact Disc**

Insert a disc partway into the slot, label side up. The player will pull it in. The disc should begin playing. The display will show CD. If you want to insert a compact disc with the ignition off, first press RCL or the eject button.

If you're driving on a very rough road or if it's very hot, the disc may not play and Err (error) may appear on the display. When the road becomes smooth or the temperature returns to normal, the disc should play. If the disc comes out, it could be that:

- The disc is upside down.
- It is dirty, scratched or wet.
- It is very humid. (If so, wait about an hour and try again.)

If any error occurs repeatedly or if an error can't be corrected, please contact your dealer.

**PREV** (1): Press this button or the left SEEK arrow to go to the previous track if the current selection has been playing for less than eight seconds. If the PREV button or the left SEEK arrow is pressed and the current selection has been playing for more than eight seconds, it will go to the beginning of the current selection. The track number will appear on the display. If you hold the button or press it more than once, the player will continue moving back through the disc. The sound will mute while seeking.

**NEXT (2):** Press this button or the right SEEK arrow to go to the next track. The track number will appear on the display. If you hold the button or press it more than once, the player will continue moving forward through the disc. The sound will mute while seeking.

**REV (3):** Press and hold this button to reverse quickly within a track. Release it to play the passage. The display will show elapsed time.

**FWD (4):** Press and hold this button to advance quickly within a track. Release it to play the passage. The display will show elapsed time.

**RDM (5):** Press this button to hear the tracks in random, rather than sequential, order. RND will show on the display. Press RDM again to turn off random play. OFF will appear on the display.

**RPT (6):** Press this button once to hear a selection over again. RPT will appear on the display. The current track will continue to repeat. Press RPT button again to turn off repeated play. OFF will appear on the display.

**RCL:** Press this button to see the current track number or how long the current track has been playing.

**AM FM:** Press this button to play the radio when a disc is in the player. The disc will stop but remain in the player.

**CD:** With a compact disc in the player and the radio playing, press this button to play a compact disc. CD will appear on the display. Press AM-FM to return to the radio when a compact disc is playing. The inactive CD will remain safely inside the radio for future listening.

△ EJECT: Press the upward triangle button to remove the disc. The radio will play. Eject may be activated with either the ignition or radio off. CDs may be loaded with the radio and ignition off this button is pressed first.

## **Understanding Radio Reception**

#### AM

The range for most AM stations is greater than for FM, especially at night. The longer range, however, can cause stations to interfere with each other. AM can pick up noise from things like storms and power lines. Try reducing the treble to reduce this noise if you ever get it.

#### **FM Stereo**

FM stereo will give you the best sound, but FM signals will reach only about 10 to 40 miles (16 to 65 km). Tall buildings or hills can interfere with FM signals, causing the sound to come and go.

## **Tips About Your Audio System**

Hearing damage from loud noise is almost undetectable until it is too late. Your hearing can adapt to higher volumes of sound. Sound that seems normal can be loud and harmful to your hearing. Take precautions by adjusting the volume control on your radio to a safe sound level before your hearing adapts to it. To help avoid hearing loss or damage:

- Adjust the volume control to the lowest setting.
- Increase volume slowly until you hear comfortably and clearly.

# NOTICE:

Before you add any sound equipment to your vehicle -- like a tape player, CB radio, mobile telephone or two-way radio -- be sure you can add what you want. If you can, it's very important to do it properly. Added sound equipment may interfere with the operation of your vehicle's engine, Delphi Delco Electronics radio or other systems, and even damage them. Your vehicle's systems may interfere with the operation of sound equipment that has been added improperly.

So, before adding sound equipment, check with your dealer and be sure to check Federal rules covering mobile radio and telephone units.

## **Care of Your Cassette Tape Player**

A tape player that is not cleaned regularly can cause reduced sound quality, ruined cassettes or a damaged mechanism. Cassette tapes should be stored in their cases away from contaminants, direct sunlight and extreme heat. If they aren't, they may not operate properly or may cause failure of the tape player.

Your tape player should be cleaned regularly after every 50 hours of use. Your radio may display CLN or CLEAN to indicate that you have used your tape player for 50 hours without resetting the tape clean timer. If this message appears on the display, your cassette tape player needs to be cleaned. It will still play tapes, but you should clean it as soon as possible to prevent damage to your tapes and player. If you notice a reduction in sound quality, try a known good cassette to see if it is the tape or the tape player at fault. If this other cassette has no improvement in sound quality, clean the tape player. The recommended cleaning method for your cassette tape player is the use of a scrubbing action, non-abrasive cleaning cassette with pads which scrub the tape head as the hubs of the cleaner cassette turn. The recommended cleaning cassette is available through your dealership (GM Part No. 12344789).

When using a scrubbing action, non-abrasive cleaning cassette, it is normal for the cassette to eject because your unit is equipped with a cut tape detection feature and a cleaning cassette may appear as a broken tape. To prevent the cleaning cassette from being ejected, use the following steps.

- 1. Turn the ignition to ON or ACC.
- 1. Turn the radio off.
- 2. Press and hold the TAPE button for five seconds. CAS will flash on the display for five seconds.
- 3. Insert the scrubbing action cleaning cassette.
- 4. Eject the cleaning cassette after the manufacturer's recommended cleaning time.

When the cleaning cassette has been ejected, the cut tape detection feature is active again.

You may also choose a non-scrubbing action, wet-type cleaner which uses a cassette with a fabric belt to clean the tape head. This type of cleaning cassette will not eject on its own. A non-scrubbing action cleaner may not clean as thoroughly as the scrubbing type cleaner. The use of a non-scrubbing action, dry-type cleaning cassette is not recommended.

After you clean the player, press and hold the cassette eject symbol or EJT button for five seconds to reset the CLEAN or CLN indicator. The radio will display CLEANED or --- to show the indicator was reset.

Cassettes are subject to wear and the sound quality may degrade over time. Always make sure the cassette tape is in good condition before you have your tape player serviced.

### **Care of Your Compact Discs**

Handle discs carefully. Store them in their original cases or other protective cases and away from direct sunlight and dust. If the surface of a disc is soiled, dampen a clean, soft cloth in a mild, neutral detergent solution and clean it, wiping from the center to the edge.

Be sure never to touch the signal surface when handling discs. Pick up discs by grasping the outer edges or the edge of the hole and the outer edge.

#### **Care of Your Compact Disc Player**

The use of CD lens cleaner discs is not advised, due to the risk of contaminating the lens of the CD optics with lubricants internal to the CD mechanism.

## Antenna (If Equipped)

Use the knob on the end of the antenna to raise the antenna. To lower it, hold the antenna mast near the roof and feed it into the holder. Do not try to lower the antenna using the knob. Keep the antenna mast clean for good performance.

Always lower the antenna before entering a car wash.

# **Section 4** Your Driving and the Road

Here you'll find information about driving on different kinds of roads and in varying weather conditions. We've also included many other useful tips on driving.

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## **Defensive Driving**

The best advice anyone can give about driving is: Drive defensively.

Please start with a very important safety device in your vehicle: Buckle up. (See "Safety Belts" in the Index.)

Defensive driving really means "be ready for anything." On city streets, rural roads or freeways, it means "always expect the unexpected."

Assume that pedestrians or other drivers are going to be careless and make mistakes. Anticipate what they might do. Be ready for their mistakes.

Rear-end collisions are about the most preventable of accidents. Yet they are common. Allow enough following distance. It's the best defensive driving maneuver, in both city and rural driving. You never know when the vehicle in front of you is going to brake or turn suddenly.

Defensive driving requires that a driver concentrate on the driving task. Anything that distracts from the driving task -- such as concentrating on a cellular telephone call, reading, or reaching for something on the floor -- makes proper defensive driving more difficult and can even cause a collision, with resulting injury. Ask a passenger to help do things like this, or pull off the road in a safe place to do them yourself. These simple defensive driving techniques could save your life.

# **Drunken Driving**

Death and injury associated with drinking and driving is a national tragedy. It's the number one contributor to the highway death toll, claiming thousands of victims every year.

Alcohol affects four things that anyone needs to drive a vehicle:

- Judgment
- Muscular Coordination
- Vision
- Attentiveness.

Police records show that almost half of all motor vehicle-related deaths involve alcohol. In most cases, these deaths are the result of someone who was drinking and driving. In recent years, over 17,000 annual motor vehicle-related deaths have been associated with the use of alcohol, with more than 300,000 people injured.

Many adults -- by some estimates, nearly half the adult population -- choose never to drink alcohol, so they never drive after drinking. For persons under 21, it's against the law in every U.S. state to drink alcohol. There are good medical, psychological and developmental reasons for these laws. The obvious way to solve the leading highway safety problem is for people never to drink alcohol and then drive. But what if people do? How much is "too much" if the driver plans to drive? It's a lot less than many might think. Although it depends on each person and situation, here is some general information on the problem.

The Blood Alcohol Concentration (BAC) of someone who is drinking depends upon four things:

- The amount of alcohol consumed
- The drinker's body weight
- The amount of food that is consumed before and during drinking
- The length of time it has taken the drinker to consume the alcohol.

According to the American Medical Association, a 180-lb. (82 kg) person who drinks three 12-ounce (355 ml) bottles of beer in an hour will end up with a BAC of about 0.06 percent. The person would reach the same BAC by drinking three 4-ounce (120 ml) glasses of wine or three mixed drinks if each had 1-1/2 ounces (45 ml) of a liquor like whiskey, gin or vodka.



It's the amount of alcohol that counts. For example, if the same person drank three double martinis (3 ounces or 90 ml of liquor each) within an hour, the person's BAC would be close to 0.12 percent. A person who consumes food just before or during drinking will have a somewhat lower BAC level.

There is a gender difference, too. Women generally have a lower relative percentage of body water than men. Since alcohol is carried in body water, this means that a woman generally will reach a higher BAC level than a man of her same body weight when each has the same number of drinks.

The law in many U.S. states sets the legal limit at a BAC of 0.10 percent. In a growing number of U.S. states, and throughout Canada, the limit is 0.08 percent. In some other countries, it's even lower. The BAC limit for all commercial drivers in the United States is 0.04 percent.

The BAC will be over 0.10 percent after three to six drinks (in one hour). Of course, as we've seen, it depends on how much alcohol is in the drinks, and how quickly the person drinks them. But the ability to drive is affected well below a BAC of 0.10 percent. Research shows that the driving skills of many people are impaired at a BAC approaching 0.05 percent, and that the effects are worse at night. All drivers are impaired at BAC levels above 0.05 percent. Statistics show that the chance of being in a collision increases sharply for drivers who have a BAC of 0.05 percent or above. A driver with a BAC level of 0.06 percent has doubled his or her chance of having a collision. At a BAC level of 0.10 percent, the chance of this driver having a collision is 12 times greater; at a level of 0.15 percent, the chance is 25 times greater!

The body takes about an hour to rid itself of the alcohol in one drink. No amount of coffee or number of cold showers will speed that up. "I'll be careful" isn't the right answer. What if there's an emergency, a need to take sudden action, as when a child darts into the street? A person with even a moderate BAC might not be able to react quickly enough to avoid the collision. There's something else about drinking and driving that many people don't know. Medical research shows that alcohol in a person's system can make crash injuries worse, especially injuries to the brain, spinal cord or heart. This means that when anyone who has been drinking -- driver or passenger -- is in a crash, that person's chance of being killed or permanently disabled is higher than if the person had not been drinking.

# **<u>A</u>** CAUTION:

Drinking and then driving is very dangerous. Your reflexes, perceptions, attentiveness and judgment can be affected by even a small amount of alcohol. You can have a serious -- or even fatal -- collision if you drive after drinking. Please don't drink and drive or ride with a driver who has been drinking. Ride home in a cab; or if you're with a group, designate a driver who will not drink.

# **Control of a Vehicle**

You have three systems that make your vehicle go where you want it to go. They are the brakes, the steering and the accelerator. All three systems have to do their work at the places where the tires meet the road.



Sometimes, as when you're driving on snow or ice, it's easy to ask more of those control systems than the tires and road can provide. That means you can lose control of your vehicle.

# **Braking**

Braking action involves *perception time* and *reaction time*.

First, you have to decide to push on the brake pedal. That's *perception time*. Then you have to bring up your foot and do it. That's *reaction time*.

Average *reaction time* is about 3/4 of a second. But that's only an average. It might be less with one driver and as long as two or three seconds or more with another. Age, physical condition, alertness, coordination and eyesight all play a part. So do alcohol, drugs and frustration. But even in 3/4 of a second, a vehicle moving at 60 mph (100 km/h) travels 66 feet (20 m). That could be a lot of distance in an emergency, so keeping enough space between your vehicle and others is important.

And, of course, actual stopping distances vary greatly with the surface of the road (whether it's pavement or gravel); the condition of the road (wet, dry, icy); tire tread; the condition of your brakes; the weight of the vehicle and the amount of brake force applied. Avoid needless heavy braking. Some people drive in spurts -- heavy acceleration followed by heavy braking -- rather than keeping pace with traffic. This is a mistake. Your brakes may not have time to cool between hard stops. Your brakes will wear out much faster if you do a lot of heavy braking. If you keep pace with the traffic and allow realistic following distances, you will eliminate a lot of unnecessary braking. That means better braking and longer brake life.

If your engine ever stops while you're driving, brake normally but don't pump your brakes. If you do, the pedal may get harder to push down. If your engine stops, you will still have some power brake assist. But you will use it when you brake. Once the power assist is used up, it may take longer to stop and the brake pedal will be harder to push.

## **Anti-Lock Brakes (Option)**

Your vehicle may have anti-lock brakes (ABS). ABS is an advanced electronic braking system that will help prevent a braking skid.



If your vehicle has anti-lock brakes, this warning light on the instrument panel will come on briefly when you start your vehicle.

When you start your engine, or when you begin to drive away, your anti-lock brake system will check itself. You may hear a momentary motor or clicking noise while this test is going on, and you may even notice that your brake pedal moves or pulses a little. This is normal.

If there's a problem with the anti-lock brake system, the anti-lock brake system warning light will stay on. See "Anti-Lock Brake System Warning Light" in the Index.



Here's how anti-lock works. Let's say the road is wet. You're driving safely. Suddenly an animal jumps out in front of you.

You slam on the brakes. Here's what happens with ABS.

A computer senses that wheels are slowing down. If one of the wheels is about to stop rolling, the computer will separately work the brakes at each front wheel and at both rear wheels. The anti-lock system can change the brake pressure faster than any driver could. The computer is programmed to make the most of available tire and road conditions.



You can steer around the obstacle while braking hard.

As you brake, your computer keeps receiving updates on wheel speed and controls braking pressure accordingly.

Remember: Anti-lock doesn't change the time you need to get your foot up to the brake pedal or always decrease stopping distance. If you get too close to the vehicle in front of you, you won't have time to apply your brakes if that vehicle suddenly slows or stops. Always leave enough room up ahead to stop, even though you have anti-lock brakes.

#### Using Anti-Lock

Don't pump the brakes. Just hold the brake pedal down firmly and let anti-lock work for you. You may feel a slight brake pedal pulsation or notice some noise, but this is normal.



When your anti-lock system is adjusting brake pressure to help avoid a braking skid, this light will come on. See "Anti-Lock Brake System Active Light" in the Index.

## **Braking in Emergencies**

At some time, nearly every driver gets into a situation that requires hard braking.

If you have anti-lock, you can steer and brake at the same time. However, if you don't have anti-lock, your first reaction -- to hit the brake pedal hard and hold it down -- may be the wrong thing to do. Your wheels can stop rolling. Once they do, the vehicle can't respond to your steering. Momentum will carry it in whatever direction it was headed when the wheels stopped rolling. That could be off the road, into the very thing you were trying to avoid, or into traffic.

If you don't have anti-lock, use a "squeeze" braking technique. This will give you maximum braking while maintaining steering control. You do this by pushing on the brake pedal with steadily increasing pressure.

In an emergency, you will probably want to squeeze the brakes hard without locking the wheels. If you hear or feel the wheels sliding, ease off the brake pedal. This will help you retain steering control. (If you *do* have anti-lock, it's different: see "Anti-Lock Brakes" in the Index.)

In many emergencies, steering can help you more than even the very best braking.

## Steering

## **Power Steering**

If you lose power steering assist because the engine stops or the system is not functioning, you can steer but it will take much more effort.

## **Steering Tips**

### **Driving on Curves**

It's important to take curves at a reasonable speed.

A lot of the "driver lost control" accidents mentioned on the news happen on curves. Here's why:

Experienced driver or beginner, each of us is subject to the same laws of physics when driving on curves. The traction of the tires against the road surface makes it possible for the vehicle to change its path when you turn the front wheels. If there's no traction, inertia will keep the vehicle going in the same direction. If you've ever tried to steer a vehicle on wet ice, you'll understand this.

The traction you can get in a curve depends on the condition of your tires and the road surface, the angle at which the curve is banked, and your speed. While you're in a curve, speed is the one factor you can control.

Suppose you're steering through a sharp curve. Then you suddenly apply the brakes. Both control systems -- steering and braking -- have to do their work where the tires meet the road. Unless you have four-wheel anti-lock brakes, adding the hard braking can demand too much of those places. You can lose control.

The same thing can happen if you're steering through a sharp curve and you suddenly accelerate. Those two control systems -- steering and acceleration -- can overwhelm those places where the tires meet the road and make you lose control.

What should you do if this ever happens? Ease up on the brake or accelerator pedal, steer the vehicle the way you want it to go, and slow down.

Speed limit signs near curves warn that you should adjust your speed. Of course, the posted speeds are based on good weather and road conditions. Under less favorable conditions you'll want to go slower.

If you need to reduce your speed as you approach a curve, do it before you enter the curve, while your front wheels are straight ahead.

Try to adjust your speed so you can "drive" through the curve. Maintain a reasonable, steady speed. Wait to accelerate until you are out of the curve, and then accelerate gently into the straightaway.

## **Steering in Emergencies**

There are times when steering can be more effective than braking. For example, you come over a hill and find a truck stopped in your lane, or a car suddenly pulls out from nowhere, or a child darts out from between parked cars and stops right in front of you. You can avoid these problems by braking -- if you can stop in time. But sometimes you can't; there isn't room. That's the time for evasive action -- steering around the problem.

Your vehicle can perform very well in emergencies like these. First apply your brakes -- but, unless you have anti-lock, not enough to lock your wheels. (See "Braking in Emergencies" earlier in this section.) It is better to remove as much speed as you can from a possible collision. Then steer around the problem, to the left or right depending on the space available.



An emergency like this requires close attention and a quick decision. If you are holding the steering wheel at the recommended 9 and 3 o'clock positions, you can turn it a full 180 degrees very quickly without removing either hand. But you have to act fast, steer quickly, and just as quickly straighten the wheel once you have avoided the object.

The fact that such emergency situations are always possible is a good reason to practice defensive driving at all times and wear safety belts properly.

# **Off-Road Recovery**

You may find that your right wheels have dropped off the edge of a road onto the shoulder while you're driving.



If the level of the shoulder is only slightly below the pavement, recovery should be fairly easy. Ease off the accelerator and then, if there is nothing in the way, steer so that your vehicle straddles the edge of the pavement. You can turn the steering wheel up to one-quarter turn until the right front tire contacts the pavement edge. Then turn your steering wheel to go straight down the roadway.

# Passing

The driver of a vehicle about to pass another on a two-lane highway waits for just the right moment, accelerates, moves around the vehicle ahead, then goes back into the right lane again. A simple maneuver?

Not necessarily! Passing another vehicle on a two-lane highway is a potentially dangerous move, since the passing vehicle occupies the same lane as oncoming traffic for several seconds. A miscalculation, an error in judgment, or a brief surrender to frustration or anger can suddenly put the passing driver face to face with the worst of all traffic accidents -- the head-on collision.

So here are some tips for passing:

- "Drive ahead." Look down the road, to the sides and to crossroads for situations that might affect your passing patterns. If you have any doubt whatsoever about making a successful pass, wait for a better time.
- Watch for traffic signs, pavement markings and lines. If you can see a sign up ahead that might indicate a turn or an intersection, delay your pass. A broken center line usually indicates it's all right to pass (providing the road ahead is clear). Never cross a solid line on your side of the lane or a double solid line, even if the road seems empty of approaching traffic.

- Do not get too close to the vehicle you want to pass while you're awaiting an opportunity. For one thing, following too closely reduces your area of vision, especially if you're following a larger vehicle. Also, you won't have adequate space if the vehicle ahead suddenly slows or stops. Keep back a reasonable distance.
- When it looks like a chance to pass is coming up, start to accelerate but stay in the right lane and don't get too close. Time your move so you will be increasing speed as the time comes to move into the other lane. If the way is clear to pass, you will have a "running start" that more than makes up for the distance you would lose by dropping back. And if something happens to cause you to cancel your pass, you need only slow down and drop back again and wait for another opportunity.
- If other cars are lined up to pass a slow vehicle, wait your turn. But take care that someone isn't trying to pass you as you pull out to pass the slow vehicle. Remember to glance over your shoulder and check the blind spot.

- Check your mirrors, glance over your shoulder, and start your left lane change signal before moving out of the right lane to pass. When you are far enough ahead of the passed vehicle to see its front in your inside mirror, activate your right lane change signal and move back into the right lane. (Remember that your right outside mirror is convex. The vehicle you just passed may seem to be farther away from you than it really is.)
- Try not to pass more than one vehicle at a time on two-lane roads. Reconsider before passing the next vehicle.
- Don't overtake a slowly moving vehicle too rapidly. Even though the brake lamps are not flashing, it may be slowing down or starting to turn.
- If you're being passed, make it easy for the following driver to get ahead of you. Perhaps you can ease a little to the right.

# **Loss of Control**

Let's review what driving experts say about what happens when the three control systems (brakes, steering and acceleration) don't have enough friction where the tires meet the road to do what the driver has asked.

In any emergency, don't give up. Keep trying to steer and constantly seek an escape route or area of less danger.

## Skidding

In a skid, a driver can lose control of the vehicle. Defensive drivers avoid most skids by taking reasonable care suited to existing conditions, and by not "overdriving" those conditions. But skids are always possible.

The three types of skids correspond to your vehicle's three control systems. In the braking skid, your wheels aren't rolling. In the steering or cornering skid, too much speed or steering in a curve causes tires to slip and lose cornering force. And in the acceleration skid, too much throttle causes the driving wheels to spin.

A cornering skid and an acceleration skid are best handled by easing your foot off the accelerator pedal.

If your vehicle starts to slide, ease your foot off the accelerator pedal and quickly steer the way you want the vehicle to go. If you start steering quickly enough, your vehicle may straighten out. Always be ready for a second skid if it occurs.

Of course, traction is reduced when water, snow, ice, gravel or other material is on the road. For safety, you'll want to slow down and adjust your driving to these conditions. It is important to slow down on slippery surfaces because stopping distance will be longer and vehicle control more limited.

While driving on a surface with reduced traction, try your best to avoid sudden steering, acceleration or braking (including engine braking by shifting to a lower gear). Any sudden changes could cause the tires to slide. You may not realize the surface is slippery until your vehicle is skidding. Learn to recognize warning clues -- such as enough water, ice or packed snow on the road to make a "mirrored surface" -- and slow down when you have any doubt.

If you have the anti-lock braking system, remember: It helps avoid only the braking skid. If you do not have anti-lock, then in a braking skid (where the wheels are no longer rolling), release enough pressure on the brakes to get the wheels rolling again. This restores steering control. Push the brake pedal down steadily when you have to stop suddenly. As long as the wheels are rolling, you will have steering control.
### **Driving at Night**



Night driving is more dangerous than day driving. One reason is that some drivers are likely to be impaired -- by alcohol or drugs, with night vision problems, or by fatigue. Here are some tips on night driving.

- Drive defensively.
- Don't drink and drive.
- Adjust your inside rearview mirror to reduce the glare from headlamps behind you.
- Since you can't see as well, you may need to slow down and keep more space between you and other vehicles.
- Slow down, especially on higher speed roads. Your headlamps can light up only so much road ahead.
- In remote areas, watch for animals.
- If you're tired, pull off the road in a safe place and rest.

No one can see as well at night as in the daytime. But as we get older these differences increase. A 50-year-old driver may require at least twice as much light to see the same thing at night as a 20-year-old.

What you do in the daytime can also affect your night vision. For example, if you spend the day in bright sunshine you are wise to wear sunglasses. Your eyes will have less trouble adjusting to night. But if you're driving, don't wear sunglasses at night. They may cut down on glare from headlamps, but they also make a lot of things invisible. You can be temporarily blinded by approaching headlamps. It can take a second or two, or even several seconds, for your eyes to readjust to the dark. When you are faced with severe glare (as from a driver who doesn't lower the high beams, or a vehicle with misaimed headlamps), slow down a little. Avoid staring directly into the approaching headlamps.

Keep your windshield and all the glass on your vehicle clean -- inside and out. Glare at night is made much worse by dirt on the glass. Even the inside of the glass can build up a film caused by dust. Dirty glass makes lights dazzle and flash more than clean glass would, making the pupils of your eyes contract repeatedly.

Remember that your headlamps light up far less of a roadway when you are in a turn or curve. Keep your eyes moving; that way, it's easier to pick out dimly lighted objects. Just as your headlamps should be checked regularly for proper aim, so should your eyes be examined regularly. Some drivers suffer from night blindness -- the inability to see in dim light -- and aren't even aware of it.

### **Driving in Rain and on Wet Roads**



Rain and wet roads can mean driving trouble. On a wet road, you can't stop, accelerate or turn as well because your tire-to-road traction isn't as good as on dry roads. And, if your tires don't have much tread left, you'll get even less traction. It's always wise to go slower and be cautious if rain starts to fall while you are driving. The surface may get wet suddenly when your reflexes are tuned for driving on dry pavement. The heavier the rain, the harder it is to see. Even if your windshield wiper blades are in good shape, a heavy rain can make it harder to see road signs and traffic signals, pavement markings, the edge of the road and even people walking.

It's wise to keep your windshield wiping equipment in good shape and keep your windshield washer tank filled with washer fluid. Replace your windshield wiper inserts when they show signs of streaking or missing areas on the windshield, or when strips of rubber start to separate from the inserts.



Driving too fast through large water puddles or even going through some car washes can cause problems, too. The water may affect your brakes. Try to avoid puddles. But if you can't, try to slow down before you hit them.

# **▲** CAUTION:

Wet brakes can cause accidents. They won't work as well in a quick stop and may cause pulling to one side. You could lose control of the vehicle.

After driving through a large puddle of water or a car wash, apply your brake pedal lightly until your brakes work normally.

#### Hydroplaning

Hydroplaning is dangerous. So much water can build up under your tires that they can actually ride on the water. This can happen if the road is wet enough and you're going fast enough. When your vehicle is hydroplaning, it has little or no contact with the road. Hydroplaning doesn't happen often. But it can if your tires do not have much tread or if the pressure in one or more is low. It can happen if a lot of water is standing on the road. If you can see reflections from trees, telephone poles or other vehicles, and raindrops "dimple" the water's surface, there could be hydroplaning.

Hydroplaning usually happens at higher speeds. There just isn't a hard and fast rule about hydroplaning. The best advice is to slow down when it is raining.

#### **Driving Through Deep Standing Water**

#### **NOTICE:**

If you drive too quickly through deep puddles or standing water, water can come in through your engine's air intake and badly damage your engine. Never drive through water that is slightly lower than the underbody of your vehicle. If you can't avoid deep puddles or standing water, drive through them very slowly.

#### **Driving Through Flowing Water**

## **A** CAUTION:

Flowing or rushing water creates strong forces. If you try to drive through flowing water, as you might at a low water crossing, your vehicle can be carried away. As little as six inches of flowing water can carry away a smaller vehicle. If this happens, you and other vehicle occupants could drown. Don't ignore police warning signs, and otherwise be very cautious about trying to drive through flowing water.

#### **Some Other Rainy Weather Tips**

- Besides slowing down, allow some extra following distance. And be especially careful when you pass another vehicle. Allow yourself more clear room ahead, and be prepared to have your view restricted by road spray.
- Have good tires with proper tread depth. (See "Tires" in the Index.)

### **City Driving**



One of the biggest problems with city streets is the amount of traffic on them. You'll want to watch out for what the other drivers are doing and pay attention to traffic signals.

Here are ways to increase your safety in city driving:

- Know the best way to get to where you are going. Get a city map and plan your trip into an unknown part of the city just as you would for a cross-country trip.
- Try to use the freeways that rim and crisscross most large cities. You'll save time and energy. (See the next part, "Freeway Driving.")
- Treat a green light as a warning signal. A traffic light is there because the corner is busy enough to need it. When a light turns green, and just before you start to move, check both ways for vehicles that have not cleared the intersection or may be running the red light.

#### **Freeway Driving**



Mile for mile, freeways (also called thruways, parkways, expressways, turnpikes or superhighways) are the safest of all roads. But they have their own special rules.

The most important advice on freeway driving is: Keep up with traffic and keep to the right. Drive at the same speed most of the other drivers are driving. Too-fast or too-slow driving breaks a smooth traffic flow. Treat the left lane on a freeway as a passing lane.

At the entrance, there is usually a ramp that leads to the freeway. If you have a clear view of the freeway as you drive along the entrance ramp, you should begin to check traffic. Try to determine where you expect to blend with the flow. Try to merge into the gap at close to the prevailing speed. Switch on your turn signal, check your mirrors and glance over your shoulder as often as necessary. Try to blend smoothly with the traffic flow.

Once you are on the freeway, adjust your speed to the posted limit or to the prevailing rate if it's slower. Stay in the right lane unless you want to pass.

Before changing lanes, check your mirrors. Then use your turn signal.

Just before you leave the lane, glance quickly over your shoulder to make sure there isn't another vehicle in your "blind" spot.

Once you are moving on the freeway, make certain you allow a reasonable following distance. Expect to move slightly slower at night.

When you want to leave the freeway, move to the proper lane well in advance. If you miss your exit, do not, under any circumstances, stop and back up. Drive on to the next exit.

The exit ramp can be curved, sometimes quite sharply.

The exit speed is usually posted.

Reduce your speed according to your speedometer, not to your sense of motion. After driving for any distance at higher speeds, you may tend to think you are going slower than you actually are.

### **Before Leaving on a Long Trip**

Make sure you're ready. Try to be well rested. If you must start when you're not fresh -- such as after a day's work -- don't plan to make too many miles that first part of the journey. Wear comfortable clothing and shoes you can easily drive in. Is your vehicle ready for a long trip? If you keep it serviced and maintained, it's ready to go. If it needs service, have it done before starting out. Of course, you'll find experienced and able service experts in Chevrolet dealerships all across North America. They'll be ready and willing to help if you need it.

Here are some things you can check before a trip:

- *Windshield Washer Fluid:* Is the reservoir full? Are all windows clean inside and outside?
- *Wiper Blades:* Are they in good shape?
- *Fuel, Engine Oil, Other Fluids:* Have you checked all levels?
- *Lamps:* Are they all working? Are the lenses clean?
- *Tires:* They are vitally important to a safe, trouble-free trip. Is the tread good enough for long-distance driving? Are the tires all inflated to the recommended pressure?
- *Weather Forecasts:* What's the weather outlook along your route? Should you delay your trip a short time to avoid a major storm system?
- *Maps:* Do you have up-to-date maps?

### **Highway Hypnosis**

Is there actually such a condition as "highway hypnosis"? Or is it just plain falling asleep at the wheel? Call it highway hypnosis, lack of awareness, or whatever.

There is something about an easy stretch of road with the same scenery, along with the hum of the tires on the road, the drone of the engine, and the rush of the wind against the vehicle that can make you sleepy. Don't let it happen to you! If it does, your vehicle can leave the road in *less than a second*, and you could crash and be injured.

What can you do about highway hypnosis? First, be aware that it can happen.

Then here are some tips:

- Make sure your vehicle is well ventilated, with a comfortably cool interior.
- Keep your eyes moving. Scan the road ahead and to the sides. Check your rearview mirrors and your instruments frequently.
- If you get sleepy, pull off the road into a rest, service or parking area and take a nap, get some exercise, or both. For safety, treat drowsiness on the highway as an emergency.

### **Hill and Mountain Roads**



Driving on steep hills or mountains is different from driving in flat or rolling terrain.

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If you drive regularly in steep country, or if you're planning to visit there, here are some tips that can make your trips safer and more enjoyable.

- Keep your vehicle in good shape. Check all fluid levels and also the brakes, tires, cooling system and transaxle. These parts can work hard on mountain roads.
- Know how to go down hills. The most important thing to know is this: let your engine do some of the slowing down. Shift to a lower gear when you go down a steep or long hill.

# <mark>▲ CAUTION:</mark>

If you don't shift down, your brakes could get so hot that they wouldn't work well. You would then have poor braking or even none going down a hill. You could crash. Shift down to let your engine assist your brakes on a steep downhill slope.

## **<u>A</u>** CAUTION:

Coasting downhill in NEUTRAL (N) or with the ignition off is dangerous. Your brakes will have to do all the work of slowing down. They could get so hot that they wouldn't work well. You would then have poor braking or even none going down a hill. You could crash. Always have your engine running and your vehicle in gear when you go downhill.

- Know how to go uphill. You may want to shift down to a lower gear. The lower gears help cool your engine and transaxle, and you can climb the hill better.
- Stay in your own lane when driving on two-lane roads in hills or mountains. Don't swing wide or cut across the center of the road. Drive at speeds that let you stay in your own lane.
- As you go over the top of a hill, be alert. There could be something in your lane, like a stalled car or an accident.
- You may see highway signs on mountains that warn of special problems. Examples are long grades, passing or no-passing zones, a falling rocks area or winding roads. Be alert to these and take appropriate action.

### Winter Driving



Here are some tips for winter driving:

- Have your vehicle in good shape for winter.
- You may want to put winter emergency supplies in your vehicle.



Include an ice scraper, a small brush or broom, a supply of windshield washer fluid, a rag, some winter outer clothing, a small shovel, a flashlight, a red cloth and a couple of reflective warning triangles. And, if you will be driving under severe conditions, include a small bag of sand, a piece of old carpet or a couple of burlap bags to help provide traction. Be sure you properly secure these items in your vehicle.

#### **Driving on Snow or Ice**

Most of the time, those places where your tires meet the road probably have good traction.

However, if there is snow or ice between your tires and the road, you can have a very slippery situation. You'll have a lot less traction or "grip" and will need to be very careful.



What's the worst time for this? "Wet ice." Very cold snow or ice can be slick and hard to drive on. But wet ice can be even more trouble because it may offer the least traction of all. You can get wet ice when it's about freezing  $(32^{\circ}F; 0^{\circ}C)$  and freezing rain begins to fall. Try to avoid driving on wet ice until salt and sand crews can get there.

Whatever the condition -- smooth ice, packed, blowing or loose snow -- drive with caution. Accelerate gently. Try not to break the fragile traction. If you accelerate too fast, the drive wheels will spin and polish the surface under the tires even more.

Unless you have the anti-lock braking system, you'll want to brake very gently, too. (If you do have anti-lock, see "Anti-Lock" in the Index. This system improves your vehicle's stability when you make a hard stop on a slippery road.) Whether you have the anti-lock braking system or not, you'll want to begin stopping sooner than you would on dry pavement. Without anti-lock brakes, if you feel your vehicle begin to slide, let up on the brakes a little. Push the brake pedal down steadily to get the most traction you can. Remember, unless you have anti-lock, if you brake so hard that your wheels stop rolling, you'll just slide. Brake so your wheels always keep rolling and you can still steer.

- Whatever your braking system, allow greater following distance on any slippery road.
- Watch for slippery spots. The road might be fine until you hit a spot that's covered with ice. On an otherwise clear road, ice patches may appear in shaded areas where the sun can't reach: around clumps of trees, behind buildings or under bridges. Sometimes the surface of a curve or an overpass may remain icy when the surrounding roads are clear. If you see a patch of ice ahead of you, brake before you are on it. Try not to brake while you're actually on the ice, and avoid sudden steering maneuvers.

#### If You're Caught in a Blizzard



If you are stopped by heavy snow, you could be in a serious situation. You should probably stay with your vehicle unless you know for sure that you are near help and you can hike through the snow. Here are some things to do to summon help and keep yourself and your passengers safe:

• Turn on your hazard flashers.

- Tie a red cloth to your vehicle to alert police that you've been stopped by the snow.
- Put on extra clothing or wrap a blanket around you. If you have no blankets or extra clothing, make body insulators from newspapers, burlap bags, rags, floor mats -- anything you can wrap around yourself or tuck under your clothing to keep warm.



You can run the engine to keep warm, but be careful.

## **<u>A</u>** CAUTION:

Snow can trap exhaust gases under your vehicle. This can cause deadly CO (carbon monoxide) gas to get inside. CO could overcome you and kill you. You can't see it or smell it, so you might not know it is in your vehicle. Clear away snow from around the base of your vehicle, especially any that is blocking your exhaust pipe. And check around again from time to time to be sure snow doesn't collect there.

Open a window just a little on the side of the vehicle that's away from the wind. This will help keep CO out. Run your engine only as long as you must. This saves fuel. When you run the engine, make it go a little faster than just idle. That is, push the accelerator slightly. This uses less fuel for the heat that you get and it keeps the battery charged. You will need a well-charged battery to restart the vehicle, and possibly for signaling later on with your headlamps. Let the heater run for a while.

Then, shut the engine off and close the window almost all the way to preserve the heat. Start the engine again and repeat this only when you feel really uncomfortable from the cold. But do it as little as possible. Preserve the fuel as long as you can. To help keep warm, you can get out of the vehicle and do some fairly vigorous exercises every half hour or so until help comes.

#### **Recreational Vehicle Towing**

There may be times when you want to tow your vehicle behind another vehicle for use at your destination. Be sure to use the proper towing equipment designed for recreational vehicle towing. Follow the instructions for the towing equipment.

#### Towing Your Vehicle from the Front (Automatic Transaxle)



Follow these steps:

1. Put the front wheels on a dolly.

#### **NOTICE:**

Do not tow your vehicle with the front wheels in contact with the ground, or the automatic transaxle could be damaged.

- 2. Set the parking brake.
- 3. Turn the ignition key to ACC to unlock the steering wheel.
- 4. Release the parking brake.

### **NOTICE:**

The front wheels transmit shocks during towing. The steering column may not be strong enough to withstand the shocks. Always unlock the steering wheel before towing.

### NOTICE:

Make sure that the towing speed does not exceed 55 mph (90 km/h), or your vehicle could be badly damaged.

#### Towing Your Vehicle from the Front (Manual Transaxle)



With a manual transaxle, you can tow your vehicle with all four wheels on the ground. Follow these steps:

- 1. Set the parking brake.
- 2. Turn the ignition key to ACC to unlock the steering wheel.
- 3. Shift your manual transaxle to NEUTRAL (N).
- 4. Release the parking brake.

#### **NOTICE:**

The front wheels transmit shocks during towing. The steering column may not be strong enough to withstand the shocks. Always unlock the steering wheel before towing.

#### **NOTICE:**

Make sure that the towing speed does not exceed 55 mph (90 km/h), or your vehicle could be badly damaged.

#### **Towing Your Vehicle from the Rear**



#### **NOTICE:**

Do not tow your vehicle from the rear, or your vehicle could be badly damaged and the costly repairs would not be covered by your warranty.

### **Loading Your Vehicle**



Two labels on your vehicle show how much weight it may properly carry. The Tire-Loading Information label found on the driver's door lock pillar tells you the proper size, speed rating and recommended inflation pressures for the tires on your vehicle. It also gives you important information about the number of people that can be in your vehicle and the total weight that you can carry. This weight is called the Vehicle Capacity Weight and includes the weight of all occupants, cargo, and all nonfactory-installed options.



The other label is the Certification label, also found on the driver's door lock pillar. It tells you the gross weight capacity of your vehicle, called the Gross Vehicle Weight Rating (GVWR). The GVWR includes the weight of the vehicle, all occupants, fuel and cargo. Never exceed the GVWR for your vehicle, or the Gross Axle Weight Rating (GAWR) for either the front or rear axle.

# **▲ CAUTION:**

Do not load your vehicle any heavier than the GVWR, or either the maximum front or rear GAWR. If you do, parts on your vehicle can break, and it can change the way your vehicle handles. These could cause you to lose control and crash. Also, overloading can shorten the life of your vehicle.

#### **NOTICE:**

Your warranty does not cover parts or components that fail because of overloading.

## **A** CAUTION:

Things you put inside your vehicle can strike and injure people in a sudden stop or turn, or in a crash.

- Put things in the trunk or rear area of your vehicle. In a trunk, put them as far forward as you can. Try to spread the weight evenly.
- Never stack heavier things, like suitcases, inside the vehicle so that some of them are above the tops of the seats.
- Don't leave an unsecured child restraint in your vehicle.
- When you carry something inside the vehicle, secure it whenever you can.
- Don't leave a seat folded down unless you need to.

### **Towing a Trailer**

Your vehicle is neither designed nor intended to tow a trailer.

## **Section 5 Problems on the Road**

Here you'll find what to do about some problems that can occur on the road.

- 5-2 Hazard Warning Flashers
- 5-3 Other Warning Devices
- 5-3 Jump Starting
- 5-8 Towing Your Vehicle
- 5-8 Engine Overheating

- 5-10 Cooling System
- 5-16 If a Tire Goes Flat
- 5-17 Changing a Flat Tire
- 5-28 Compact Spare Tire
- 5-29 If You're Stuck: In Sand, Mud, Ice or Snow

### **Hazard Warning Flashers**



Your hazard warning flashers let you warn others. They also let police know you have a problem. Your front and rear turn signal lamps will flash on and off.



Press the button located on top of the steering column to make your front and rear turn signal lamps flash on and off.

Your hazard warning flashers work no matter what position your key is in, and even if the key isn't in.

To turn off the flashers, push the button again.

When the hazard warning flashers are on, your turn signals won't work.

### **Other Warning Devices**

If you carry reflective triangles, you can set one up at the side of the road about 300 feet (100 m) behind your vehicle.

### **Jump Starting**

If your battery has run down, you may want to use another vehicle and some jumper cables to start your vehicle. But please use the following steps to do it safely.

# **A** CAUTION:

Batteries can hurt you. They can be dangerous because:

- They contain acid that can burn you.
- They contain gas that can explode or ignite.
- They contain enough electricity to burn you.

If you don't follow these steps exactly, some or all of these things can hurt you.

## **NOTICE:**

Ignoring these steps could result in costly damage to your vehicle that wouldn't be covered by your warranty.

The ACDelco<sup>®</sup> battery in your vehicle has a built-in hydrometer. Do not charge, test or jump start the battery if the hydrometer looks clear or light yellow. Replace the battery when there is a clear or light yellow hydrometer and a cranking complaint.

Trying to start your vehicle by pushing or pulling it won't work, and it could damage your vehicle.

1. Check the other vehicle. It must have a 12-volt battery with a negative ground system.

### **NOTICE:**

If the other system isn't a 12-volt system with a negative ground, both vehicles can be damaged.

2. Get the vehicles close enough so the jumper cables can reach, but be sure the vehicles aren't touching each other. If they are, it could cause a ground connection you don't want. You wouldn't be able to start your vehicle, and the bad grounding could damage the electrical systems.

To avoid the possibility of the vehicles rolling, set the parking brake firmly on both vehicles involved in the procedure. Put an automatic transaxle vehicle in PARK (P) and a manual transaxle vehicle in NEUTRAL (N).

3. Turn off the ignition on both vehicles. Unplug unnecessary accessories plugged into the cigarette lighter. Turn off all lamps that aren't needed as well as radios. This will avoid sparks and help save both batteries. In addition, it could save your radio!

### **NOTICE:**

If you leave your radio on, it could be badly damaged. The repairs wouldn't be covered by your warranty.

4. Open the hoods and locate the batteries.

## **A** CAUTION:

An electric fan can start up even when the engine is not running and can injure you. Keep hands, clothing and tools away from any underhood electric fan.

5. Find the positive (+) and negative (-) terminals on each battery.

# **A** CAUTION:

Using a match near a battery can cause battery gas to explode. People have been hurt doing this, and some have been blinded. Use a flashlight if you need more light.

Be sure the battery has enough water. You don't need to add water to the ACDelco<sup>®</sup> battery installed in every new GM vehicle. But if a battery has filler caps, be sure the right amount of fluid is there. If it is low, add water to take care of that first. If you don't, explosive gas could be present.

Battery fluid contains acid that can burn you. Don't get it on you. If you accidentally get it in your eyes or on your skin, flush the place with water and get medical help immediately.  Check that the jumper cables don't have loose or missing insulation. If they do, you could get a shock. The vehicles could be damaged, too.

Before you connect the cables, here are some basic things you should know. Positive (+) goes to positive (+) and negative (-) will go to a heavy, unpainted metal engine part. Don't connect positive (+) to negative (-) or you'll get a short that would damage the battery and maybe other parts too.

# **▲** CAUTION:

Fans or other moving engine parts can injure you badly. Keep your hands away from moving parts once the engine is running.



- Circles State
- 8. Don't let the other end touch metal. Connect it to the positive (+) terminal of the good battery. Use a remote positive (+) terminal if the vehicle has one.

- 9. Now connect the black negative (-) cable to the good battery's negative (-) terminal. Don't let the other end touch anything until the next step.

 Connect the red positive (+) cable to the positive (+) terminal of the vehicle with the dead battery. Use a remote positive (+) terminal if the vehicle has one.



- 10. The other end of the negative (-) cable doesn't go to the dead battery. It goes to a heavy, unpainted metal part on the engine of the vehicle with the dead battery. Attach the cable at least 18 inches (45 cm) away from the dead battery, but not near engine parts that move. The electrical connection is just as good there, but the chance of sparks getting back to the battery is much less.
- 11. Now start the vehicle with the good battery and run the engine for a while.

- 12. Try to start the vehicle with the dead battery. If it won't start after a few tries, it probably needs service.
- 13. Remove the cables in reverse order to prevent electrical shorting. Take care that they don't touch each other or any other metal.



- A. Heavy, Unpainted Metal Engine Part
- B. Good Battery
- C. Dead Battery

## **Towing Your Vehicle**

# <u> CAUTION:</u>

To help avoid serious personal injury to you or others:

- Never let passengers ride in a vehicle that is being towed.
- Never tow faster than safe or posted speeds.
- Never tow with damaged parts not fully secured.
- Never get under your vehicle after it has been lifted by the tow truck.
- Always secure the vehicle on each side with separate safety chains when towing it.
- Use only the correct hooks.

### **NOTICE:**

Use the proper towing equipment to avoid damage to the bumper, fascia or fog lamp areas of the vehicle. With current trends in automotive styles and design, it is essential that the correct towing equipment is used to tow a vehicle. Your vehicle can be towed with wheel-lift or car carrier equipment.

Consult your dealer or a professional towing service if you need to have your vehicle towed. See "Roadside Assistance" in the Index.

## **Engine Overheating**

You will find a coolant temperature gage on your vehicle's instrument panel. See "Engine Coolant Temperature Gage" in the Index.

#### If Steam Is Coming From Your Engine



# **A** CAUTION:

Steam from an overheated engine can burn you badly, even if you just open the hood. Stay away from the engine if you see or hear steam coming from it. Just turn it off and get everyone away from the vehicle until it cools down. Wait until there is no sign of steam or coolant before you open the hood.

If you keep driving when your engine is overheated, the liquids in it can catch fire. You or others could be badly burned. Stop your engine if it overheats, and get out of the vehicle until the engine is cool.

### **NOTICE:**

If your engine catches fire because you keep driving with no coolant, your vehicle can be badly damaged. The costly repairs would not be covered by your warranty.

#### If No Steam Is Coming From Your Engine

If you get an engine overheat warning but see or hear no steam, the problem may not be too serious. Sometimes the engine can get a little too hot when you:

- Climb a long hill on a hot day.
- Stop after high-speed driving.
- Idle for long periods in traffic.

If you get the overheat warning with no sign of steam, try this for a minute or so:

- 1. If you have an air conditioner and it's on, turn it off.
- 2. Turn on your heater to full hot at the highest fan speed and open the window as necessary.
- 3. If you're in a traffic jam, shift to NEUTRAL (N); otherwise, shift to the highest gear while driving -- DRIVE (D) for automatic transaxles.

If you no longer have the overheat warning, you can drive. Just to be safe, drive slower for about 10 minutes. If the warning doesn't come back on, you can drive normally.

If the warning continues, pull over, stop, and park your vehicle right away.

If there's still no sign of steam, idle the engine for three minutes while you're parked. If you still have the warning, *turn off the engine and get everyone out of the vehicle* until it cools down.

You may decide not to lift the hood but to get service help right away.

### **Cooling System**

When you decide it's safe to lift the hood, here's what you'll see:



- 1. Coolant Recovery Tank
- 2. Radiator Pressure Cap
- 3. Electric Engine Cooling Fan

# **A** CAUTION:

An electric engine cooling fan under the hood can start up even when the engine is not running and can injure you. Keep hands, clothing and tools away from any underhood electric fan.

If the coolant inside the coolant recovery tank is boiling, don't do anything else until it cools down.



When the engine is cold, the coolant level should be at the FULL mark. If it isn't, you may have a leak in the radiator hoses, heater hoses, radiator, water pump or somewhere else in the cooling system.

## **<u>A</u>** CAUTION:

Heater and radiator hoses, and other engine parts, can be very hot. Don't touch them. If you do, you can be burned.

Don't run the engine if there is a leak. If you run the engine, it could lose all coolant. That could cause an engine fire, and you could be burned. Get any leak fixed before you drive the vehicle.

### **NOTICE:**

Engine damage from running your engine without coolant isn't covered by your warranty.

If there seems to be no leak, with the engine on, check to see if the electric engine cooling fan is running. If the engine is overheating, the fan should be running. If it isn't, your vehicle needs service.

#### How to Add Coolant to the Coolant Recovery Tank

If you haven't found a problem yet, but the coolant level isn't at the FULL mark, add a 50/50 mixture of *clean*, *drinkable water* and a proper coolant at the coolant recovery tank. (See "Engine Coolant" in the Index for more information about the proper coolant mixture.)

## **A** CAUTION:

Adding only plain water to your cooling system can be dangerous. Plain water, or some other liquid like alcohol, can boil before the proper coolant mixture will. Your vehicle's coolant warning system is set for the proper coolant mixture. With plain water or the wrong mixture, your engine could get too hot but you wouldn't get the overheat warning. Your engine could catch fire and you or others could be burned. Use a 50/50 mixture of clean, drinkable water and a proper coolant.

## **NOTICE:**

In cold weather, water can freeze and crack the engine, radiator, heater core and other parts. Use the recommended coolant and the proper coolant mixture.



# **A** CAUTION:

You can be burned if you spill coolant on hot engine parts. Coolant contains ethylene glycol and it will burn if the engine parts are hot enough. Don't spill coolant on a hot engine.

When the coolant in the coolant recovery tank is at the FULL mark, start your vehicle.

If the overheat warning continues, there's one more thing you can try. You can add the proper coolant mixture directly to the radiator, but be sure the cooling system is cool before you do it.

# <u> CAUTION:</u>

Steam and scalding liquids from a hot cooling system can blow out and burn you badly. They are under pressure, and if you turn the radiator CAUTION: (Continued)

#### **CAUTION: (Continued)**

pressure cap -- even a little -- they can come out at high speed. Never turn the cap when the cooling system, including the radiator pressure cap, is hot. Wait for the cooling system and radiator pressure cap to cool if you ever have to turn the pressure cap.



#### How to Add Coolant to the Radiator



1. You can remove the radiator pressure cap when the cooling system, including the radiator pressure cap and upper radiator hose, is no longer hot. Turn the pressure cap slowly counterclockwise until it first stops. (Don't press down while turning the pressure cap.)

If you hear a hiss, wait for that to stop. A hiss means there is still some pressure left.



2. Then keep turning the pressure cap, but now push down as you turn it. Remove the pressure cap.



- 3. Fill the radiator with the proper coolant mixture, up to the base of the filler neck. (See "Engine Coolant" in the Index for more information about the proper coolant mixture.)
- 4. Then fill the coolant recovery tank to the FULL mark.
- 5. Put the cap back on the coolant recovery tank, but leave the radiator pressure cap off.



- 6. Start the engine and let it run until you can feel the upper radiator hose getting hot. Watch out for the engine cooling fan.
- 7. By this time, the coolant level inside the radiator filler neck may be lower. If the level is lower, add more of the proper coolant mixture through the filler neck until the level reaches the base of the filler neck.



8. Then replace the pressure cap. At any time during this procedure if coolant begins to flow out of the filler neck, reinstall the pressure cap. Be sure the ears on the pressure cap are in line with the vent tube.

### If a Tire Goes Flat

It's unusual for a tire to "blow out" while you're driving, especially if you maintain your tires properly. If air goes out of a tire, it's much more likely to leak out slowly. But if you should ever have a "blowout," here are a few tips about what to expect and what to do:

If a front tire fails, the flat tire will create a drag that pulls the vehicle toward that side. Take your foot off the accelerator pedal and grip the steering wheel firmly. Steer to maintain lane position, and then gently brake to a stop well out of the traffic lane.

A rear blowout, particularly on a curve, acts much like a skid and may require the same correction you'd use in a skid. In any rear blowout, remove your foot from the accelerator pedal. Get the vehicle under control by steering the way you want the vehicle to go. It may be very bumpy and noisy, but you can still steer. Gently brake to a stop -- well off the road if possible.

If a tire goes flat, the next part shows how to use your jacking equipment to change a flat tire safely.

### **Changing a Flat Tire**

If a tire goes flat, avoid further tire and wheel damage by driving slowly to a level place. Turn on your hazard warning flashers.

# **▲ CAUTION:**

Changing a tire can cause an injury. The vehicle can slip off the jack and roll over you or other people. You and they could be badly injured. Find a level place to change your tire. To help prevent the vehicle from moving:

- 1. Set the parking brake firmly.
- 2. Put an automatic transaxle shift lever in PARK (P), or shift a manual transaxle to FIRST (1) or REVERSE (R).
- 3. Turn off the engine.

To be even more certain the vehicle won't move, you can put blocks at the front and rear of the tire farthest away from the one being changed. That would be the tire on the other side of the vehicle, at the opposite end.



The following steps will tell you how to use the jack and change a tire.

#### **Removing the Spare Tire and Tools**





Unbutton the carpet at the two outside corners. Pull back the carpet and remove the cover over the spare tire.



Remove the compact spare tire by turning the wing nut on the top of the spare counterclockwise and removing it. See "Compact Spare Tire" later in this section for more information about the compact spare. Now you have access to the compact spare tire. Pull it up to remove it.

The jack is located behind the compact spare. Turn the jack screw to remove the jack from the clamps. The wheel wrench is located underneath the wing nut and the jack handle is attached to the cardboard cover that is on top of the spare tire. Remove all of these items.


The tools you'll be using include the jack (A), wheel wrench (B) and jack handle (C).



Attach the jack handle to the jack. Turn the jack handle clockwise to raise the lift head.



If you have a wheel cover, remove it using the flat end of the jack handle. Pry along the edge of the wheel cover (as shown) and pull toward you until it comes off.

# Removing the Flat Tire and Installing the Spare Tire



 Using the wheel wrench, loosen all the wheel nuts. Don't remove them yet.



2. Under the vehicle near each wheel, there are jack head seating plates in the vehicle's frame. Position the jack and raise the jack lift head until it fits firmly onto the plates closest to the flat tire. The jack should be positioned as shown above if a rear tire is being changed.



3. If the flat tire is a front tire, follow the instructions noted before and position the jack as shown.

Regardless of whether it is a front or rear tire that is flat, the jack head groove will fit in the plates.

# <mark>▲ CAUTION:</mark>

Getting under a vehicle when it is jacked up is dangerous. If the vehicle slips off the jack, you could be badly injured or killed. Never get under a vehicle when it is supported only by a jack.

# \land CAUTION:

Raising your vehicle with the jack improperly positioned can damage the vehicle and even make the vehicle fall. To help avoid personal injury and vehicle damage, be sure to fit the jack lift head into the proper location before raising the vehicle.



- 4. Raise the vehicle by turning the jack handle clockwise. Raise the vehicle far enough off the ground so there is enough room for the spare tire to fit.
- 5. Remove all the wheel nuts and take off the flat tire.



6. Remove any rust or dirt from the wheel bolts, mounting surfaces and spare wheel.

## **A** CAUTION:

Rust or dirt on the wheel, or on the parts to which it is fastened, can make the wheel nuts become loose after a time. The wheel could come off and cause an accident. When you change a wheel, remove any rust or dirt from the places where the wheel attaches to the vehicle. In an emergency, you can use a cloth or a paper towel to do this; but be sure to use a scraper or wire brush later, if you need to, to get all the rust or dirt off.

## **<u>A</u>** CAUTION:

Never use oil or grease on studs or nuts. If you do, the nuts might come loose. Your wheel could fall off, causing a serious accident. 7. Install the compact spare tire.



8. Reinstall the wheel nuts with the rounded end of the nuts toward the wheel. Tighten each nut by hand until the wheel is held against the hub.



9. Lower the vehicle by turning the jack handle counterclockwise. Lower the jack completely.



10. Tighten the wheel nuts firmly in a criss-cross sequence as shown.

# **A** CAUTION:

Incorrect wheel nuts or improperly tightened wheel nuts can cause the wheel to become loose and even come off. This could lead to an accident. Be sure to use the correct wheel nuts. If you have to replace them, be sure to get new GM original equipment wheel nuts.

Stop somewhere as soon as you can and have the nuts tightened with a torque wrench to 45 lb-ft (60 N·m).

## **NOTICE:**

Improperly tightened wheel nuts can lead to brake pulsation and rotor damage. To avoid expensive brake repairs, evenly tighten the wheel nuts in the proper sequence and to the proper torque specification.

11. Don't try to put a wheel cover on your compact spare tire. It won't fit. Store the wheel cover in the rear area until you have the flat tire repaired or replaced.

## NOTICE:

Wheel covers won't fit on your compact spare. If you try to put a wheel cover on your compact spare, you could damage the cover or the spare.

#### **Storing the Flat Tire and Tools**

# **▲ CAUTION:**

Storing a jack, a tire or other equipment in the passenger compartment of the vehicle could cause injury. In a sudden stop or collision, loose equipment could strike someone. Store all these in the proper place.

After you've put the compact spare tire on your vehicle, you'll need to store the flat tire in your trunk.



Reinstall the jacking equipment, cover and carpet. Place the flat tire in the trunk so the side that faces out when it is on the vehicle is facing down. The full-size tire will not fit down into the well.

#### **Storing the Spare Tire and Tools**

# <u> CAUTION:</u>

Storing a jack, a tire or other equipment in the passenger compartment of the vehicle could cause injury. In a sudden stop or collision, loose equipment could strike someone. Store all these in the proper place.

The compact spare tire is for temporary use only. Replace the compact spare tire with a full-size tire as soon as you can. See "Compact Spare Tire" in the Index.



- 1. Cover
- 2. Clamp
- 3. Jack Handle
- 4. Jack
- 5. Wheel Wrench
- 6. Bolt

Put the jack, jack handle, flat tire and wheel wrench back into the storage area.

## **Compact Spare Tire**

Although the compact spare tire was fully inflated when your vehicle was new, it can lose air after a time. Check the inflation pressure regularly. It should be 60 psi (420 kPa).

After installing the compact spare on your vehicle, you should stop as soon as possible and make sure your spare tire is correctly inflated. The compact spare is made to perform well at speeds up to 65 mph (105 km/h) for distances up to 3,000 miles (5 000 km), so you can finish your trip and have your full-size tire repaired or replaced where you want. Of course, it's best to replace your spare with a full-size tire as soon as you can. Your spare will last longer and be in good shape in case you need it again.

## **NOTICE:**

When the compact spare is installed, don't take your vehicle through an automatic vehicle wash with guide rails. The compact spare can get caught on the rails. That can damage the tire and wheel, and maybe other parts of your vehicle.

Don't use your compact spare on other vehicles.

And don't mix your compact spare tire or wheel with other wheels or tires. They won't fit. Keep your spare tire and its wheel together.

### **NOTICE:**

Tire chains won't fit your compact spare. Using them can damage your vehicle and can damage the chains too. Don't use tire chains on your compact spare.

### If You're Stuck: In Sand, Mud, Ice or Snow

In order to free your vehicle when it is stuck, you will need to spin the wheels, but you don't want to spin your wheels too fast. The method known as "rocking" can help you get out when you're stuck, but you must use caution.

# <u> CAUTION:</u>

If you let your tires spin at high speed, they can explode, and you or others could be injured. And, the transaxle or other parts of the vehicle can overheat. That could cause an engine compartment fire or other damage. When you're stuck, spin the wheels as little as possible. Don't spin the wheels above 35 mph (55 km/h) as shown on the speedometer.

## NOTICE:

Spinning your wheels can destroy parts of your vehicle as well as the tires. If you spin the wheels too fast while shifting your transaxle back and forth, you can destroy your transaxle.

For information about using tire chains on your vehicle, see "Tire Chains" in the Index.

#### **Rocking Your Vehicle To Get It Out**

First, turn your steering wheel left and right. That will clear the area around your front wheels. Then shift back and forth between REVERSE (R) and a forward gear (or with a manual transaxle, between FIRST (1) or SECOND (2) and REVERSE (R)), spinning the wheels as little as possible. Release the accelerator pedal while you shift, and press lightly on the accelerator pedal when the transaxle is in gear. By slowly spinning your wheels in the forward and reverse directions, you will cause a rocking motion that may free your vehicle. If that doesn't get you out after a few tries, you may need to be towed out. If you do need to be towed out, see "Towing Your Vehicle" in the Index.

## Section 6 Service and Appearance Care

Here you will find information about the care of your vehicle. This section begins with service and fuel information, and then it shows how to check important fluid and lubricant levels. There is also technical information about your vehicle, and a part devoted to its appearance care.

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### Service

Your dealer knows your vehicle best and wants you to be happy with it. We hope you'll go to your dealer for all your service needs. You'll get genuine GM parts and GM-trained and supported service people.

We hope you'll want to keep your GM vehicle all GM. Genuine GM parts have one of these marks:



#### **Doing Your Own Service Work**

If you want to do some of your own service work, you'll want to use the proper service manual. It tells you much more about how to service your vehicle than this manual can. To order the proper service manual, see "Service and Owner Publications" in the Index.

Your vehicle has an air bag system. Before attempting to do your own service work, see "Servicing Your Air Bag-Equipped Vehicle" in the Index.

You should keep a record with all parts receipts and list the mileage and the date of any service work you perform. See "Maintenance Record" in the Index.

# **A** CAUTION:

You can be injured and your vehicle could be damaged if you try to do service work on a vehicle without knowing enough about it.

- Be sure you have sufficient knowledge, experience, the proper replacement parts and tools before you attempt any vehicle maintenance task.
- Be sure to use the proper nuts, bolts and other fasteners. "English" and "metric" fasteners can be easily confused. If you use the wrong fasteners, parts can later break or fall off. You could be hurt.

#### Adding Equipment to the Outside of Your Vehicle

Things you might add to the outside of your vehicle can affect the airflow around it. This may cause wind noise and affect windshield washer performance. Check with your dealer before adding equipment to the outside of your vehicle.

### Fuel

Use regular unleaded gasoline rated at 87 octane or higher. It is recommended that the gasoline meet specifications which have been developed by the American Automobile Manufacturers Association (AAMA) and endorsed by the Canadian Motor Vehicle Manufacturers Association for better vehicle performance and engine protection. Gasolines meeting the AAMA specification could provide improved driveability and emission control system performance compared to other gasolines.

Be sure the posted octane is at least 87. If the octane is less than 87, you may get a heavy knocking noise when you drive. If it's bad enough, it can damage your engine.

If you're using fuel rated at 87 octane or higher and you hear heavy knocking, your engine needs service. But don't worry if you hear a little pinging noise when you're accelerating or driving up a hill. That's normal, and you don't have to buy a higher octane fuel to get rid of pinging. It's the heavy, constant knock that means you have a problem. If your vehicle is certified to meet California Emission Standards (indicated on the underhood emission control label), it is designed to operate on fuels that meet California specifications. If such fuels are not available in states adopting California emissions standards, your vehicle will operate satisfactorily on fuels meeting federal specifications, but emission control system performance may be affected. The malfunction indicator lamp on your instrument panel may turn on and/or your vehicle may fail a smog-check test. (See "Malfunction Indicator Lamp" in the Index.) If this occurs, return to your authorized Chevrolet dealer for diagnosis to determine the cause of failure. In the event it is determined that the cause of the condition is the type of fuels used, repairs may not be covered by your warranty.

Some gasolines that are not reformulated for low emissions may contain an octane-enhancing additive called methylcyclopentadienyl manganese tricarbonyl (MMT); ask your service station operator whether or not the fuel contains MMT. General Motors does not recommend the use of such gasolines. If fuels containing MMT are used, spark plug life may be reduced and your emission control system performance may be affected. The malfunction indicator lamp on your instrument panel may turn on. If this occurs, return to your authorized Chevrolet dealer for service. To provide cleaner air, all gasolines in the United States are now required to contain additives that will help prevent deposits from forming in your engine and fuel system, allowing your emission control system to function properly. Therefore, you should not have to add anything to the fuel. In addition, gasolines containing oxygenates, such as ethers and ethanol, and reformulated gasolines may be available in your area to contribute to clean air. General Motors recommends that you use these gasolines, particularly if they comply with the specifications described earlier.

### **NOTICE:**

Your vehicle was not designed for fuel that contains methanol. Don't use it. It can corrode metal parts in your fuel system and also damage plastic and rubber parts. That damage wouldn't be covered under your warranty.

## **Fuels in Foreign Countries**

If you plan on driving in another country outside the United States or Canada, the proper fuel may be hard to find. Never use leaded gasoline or any other fuel not recommended in the previous text on fuel. Costly repairs caused by use of improper fuel wouldn't be covered by your warranty.

To check on fuel availability, ask an auto club, or contact a major oil company that does business in the country where you'll be driving.

You can also write us at the following address for advice. Just tell us where you're going and give your Vehicle Identification Number (VIN).

General Motors Overseas Distribution Corporation 1908 Colonel Sam Drive Oshawa, Ontario L1H 8P7

## **Filling Your Tank**

# **<u>A</u>** CAUTION:

Gasoline vapor is highly flammable. It burns violently, and that can cause very bad injuries. Don't smoke if you're near gasoline or refueling your vehicle. Keep sparks, flames and smoking materials away from gasoline.



The fuel cap is behind a hinged door on the driver's side of your vehicle.



While refueling, hang the cap inside the fuel door.

To remove the cap, turn it slowly to the left (counterclockwise).

## **A** CAUTION:

If you get gasoline on yourself and then something ignites it, you could be badly burned. Gasoline can spray out on you if you open the fuel filler cap too quickly. This spray can happen if your tank is nearly full, and is more likely in hot weather. Open the fuel filler cap slowly and wait for any "hiss" noise to stop. Then unscrew the cap all the way.

Be careful not to spill gasoline. Clean gasoline from painted surfaces as soon as possible. See "Cleaning the Outside of Your Vehicle" in the Index.

When you put the cap back on, turn it to the right (clockwise) until you hear a clicking sound. Make sure you fully install the cap. The diagnostic system can determine if the fuel cap has been left off or improperly installed. This would allow fuel to evaporate into the atmosphere. See "Malfunction Indicator Lamp" in the Index.

## **NOTICE:**

If you need a new cap, be sure to get the right type. Your dealer can get one for you. If you get the wrong type, it may not fit properly. This may cause your malfunction indicator lamp to light and your fuel tank and emissions system may be damaged. See "Malfunction Indicator Lamp" in the Index.

## Filling a Portable Fuel Container

# <mark>▲ CAUTION:</mark>

Never fill a portable fuel container while it is in your vehicle. Static electricity discharge from the container can ignite the gasoline vapor. You can be badly burned and your vehicle damaged if this occurs. To help avoid injury to you and others:

• Dispense gasoline only into approved containers.

**CAUTION: (Continued)** 

#### **CAUTION: (Continued)**

- Dispense gasoline only into approved containers.
- Do not fill a container while it is inside a vehicle, in a vehicle's trunk, pickup bed or on any surface other than the ground.
- Bring the fill nozzle in contact with the inside of the fill opening before operating the nozzle. Contact should be maintained until the filling is complete.
- Don't smoke while pumping gasoline.

## **Checking Things Under the Hood**

# **CAUTION:**

An electric fan under the hood can start up and injure you even when the engine is not running. Keep hands, clothing and tools away from any underhood electric fan.

# <mark>▲ CAUTION:</mark>

Things that burn can get on hot engine parts and start a fire. These include liquids like gasoline, oil, coolant, brake fluid, windshield washer and other fluids, and plastic or rubber. You or others could be burned. Be careful not to drop or spill things that will burn onto a hot engine.

#### **Hood Release**



To open the hood, first pull the handle inside the vehicle.



Then go to the front of the vehicle to release the secondary hood release. Reach under the hood toward the center. Pull the lever all the way up with one hand and lift the hood up with your other hand.



Release the hood prop from its retainer and put the hood prop into the slot in the hood.



Before closing the hood, be sure all the filler caps are on properly. Then lift the hood to relieve pressure on the hood prop. Remove the hood prop from the slot in the hood and return the prop to is retainer. Lower the hood 8 to 10 inches (20 to 25 cm) above the vehicle and release so that it will latch fully. Check to make sure the hood is closed and repeat if necessary.

#### 1.0L L3 Engine

When you lift the hood, you'll see these items:



A. Hood Prop

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- B. Engine Oil Dipstick
- C. Engine Air Cleaner/Filter
- D. Engine Oil Fill Cap

- E. Radiator Pressure Cap
- F. Brake Fluid Reservoir
- G. Engine Coolant Reservoir

- H. Battery
- I. Engine Compartment Fuse Block
- J. Windshield Washer Reservoir

#### 1.3L L4 Engine

When you lift the hood, you'll see these items:



- A. Hood Prop
- B. Power Steering Reservoir
- C. Engine Air Cleaner/Filter
- D. Engine Oil Dipstick

- E. Engine Oil Fill Cap
- F. Electric Engine Cooling Fan
- G. Radiator Pressure Cap
- H. Brake Fluid Reservoir

- I. Engine Coolant Reservoir
- J. Battery
- K. Engine Compartment Fuse Block
- L. Windshield Washer Reservoir

## **Engine Oil**



If the engine oil pressure light appears on the instrument panel, it means you need to check your engine oil level right away.

For more information, see "Engine Oil Pressure Light" in the Index.

You should check your engine oil level regularly; this is an added reminder.

#### **Checking Engine Oil**

It's a good idea to check your engine oil every time you get fuel. In order to get an accurate reading, the oil must be warm and the vehicle must be on level ground.



The engine oil dipstick is located next to the air cleaner. The dipstick handle is a yellow loop.

Turn off the engine and give the oil several minutes to drain back into the oil pan. If you don't, the oil dipstick might not show the actual level. Pull out the dipstick and clean it with a paper towel or cloth, then push it back in all the way. Remove it again, keeping the tip down, and check the level.



#### When to Add Engine Oil

If the oil is at or below the upper mark, then you'll need to add at least one quart of oil. But you must use the right kind. This part explains what kind of oil to use. For crankcase capacity, see "Capacities and Specifications" in the Index.

## **NOTICE:**

Don't add too much oil. If your engine has so much oil that the oil level gets above the upper mark that shows the proper operating range, your engine could be damaged.



The engine oil fill cap is located at the center of the engine compartment.

Be sure to fill it enough to put the level somewhere in the proper operating range. Push the dipstick all the way back in when you're through.

#### What Kind of Engine Oil to Use

Oils recommended for your vehicle can be identified by looking for the starburst symbol.

This symbol indicates that the oil has been certified by the American Petroleum Institute (API). Do not use any oil which does not carry this starburst symbol.



If you change your own oil, be sure you use oil that has the starburst symbol on the front of the oil container. If you have your oil changed for you, be sure the oil put into your engine is American Petroleum Institute certified for gasoline engines.

You should also use the proper viscosity oil for your vehicle, as shown in the following chart:



As shown in the chart, SAE 5W-30 is best for your vehicle. However, you can use SAE 10W-30 if it's going to be  $0^{\circ}F$  (-18°C) or above. These numbers on an oil container show its viscosity, or thickness. Do not use other viscosity oils, such as SAE 20W-50.

## NOTICE:

Use only engine oil with the American Petroleum Institute Certified For Gasoline Engines starburst symbol. Failure to use the recommended oil can result in engine damage not covered by your warranty.

GM Goodwrench<sup>®</sup> oil meets all the requirements for your vehicle.

If you are in an area where the temperature falls below -20°F (-29°C), consider using either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil. Both will provide easier cold starting and better protection for your engine at extremely low temperatures.

#### **Engine Oil Additives**

Don't add anything to your oil. The recommended oils with the starburst symbol are all you will need for good performance and engine protection.

#### When to Change Engine Oil

If any one of these is true for you, use the short trip/city maintenance schedule:

- Most trips are less than 5 to 10 miles (8 to 16 km). This is particularly important when outside temperatures are below freezing.
- Most trips include extensive idling (such as frequent driving in stop-and-go traffic).
- Most trips are through dusty areas.
- The vehicle is used for delivery service, police, taxi or other commercial application.

Driving under these conditions causes engine oil to break down sooner. If any one of these is true for your vehicle, then you need to change your oil and filter every 3,000 miles (5 000 km) or 3 months -- whichever occurs first. If none of them is true, use the long trip/highway maintenance schedule. Change oil and filter every 7,500 miles (12 500 km) or 7.5 months -- whichever occurs first. Driving a vehicle with a fully warmed engine under highway conditions causes engine oil to break down slower.

#### What to Do with Used Oil

Did you know that used engine oil contains certain elements that may be unhealthy for your skin and could even cause cancer? Don't let used oil stay on your skin for very long. Clean your skin and nails with soap and water, or a good hand cleaner. Wash or properly throw away clothing or rags containing used engine oil. (See the manufacturer's warnings about the use and disposal of oil products.)

Used oil can be a real threat to the environment. If you change your own oil, be sure to drain all free-flowing oil from the filter before disposal. Don't ever dispose of oil by putting it in the trash, pouring it on the ground, into sewers, or into streams or bodies of water. Instead, recycle it by taking it to a place that collects used oil. If you have a problem properly disposing of your used oil, ask your dealer, a service station or a local recycling center for help.

## **Engine Air Cleaner/Filter**



1.0L L3 Engine



1.3L L4 Engine

Refer to the Maintenance Schedule to determine when to replace the air filter.

See "Scheduled Maintenance Services" in the Index.

## <mark>▲ CAUTION:</mark>

Operating the engine with the air cleaner/filter off can cause you or others to be burned. The air cleaner not only cleans the air, it stops flame if the engine backfires. If it isn't there, and the engine backfires, you could be burned. Don't drive with it off, and be careful working on the engine with the air cleaner/filter off.

### **NOTICE:**

If the air cleaner/filter is off, a backfire can cause a damaging engine fire. And, dirt can easily get into your engine, which will damage it. Always have the air cleaner/filter in place when you're driving.

#### **Engine Air Cleaner/Filter Replacement**



#### 1.0L L3 Engine

To check or replace the filter on vehicles with a 1.0L L3 engine:

- 1. Remove the center wing nut.
- 2. Lift and release the four clips.
- 3. Lift up the cover.
- 4. Pull out the filter and replace the filter.
- 5. Be sure to align the tab on the filter.
- 6. Reverse the above steps to reinstall the cover.



#### 1.3L L4 Engine

To check or replace the filter on vehicles with a 1.3L L4 engine:

- 1. Remove the screws at the front and back of the air cleaner.
- 2. Open the two retaining clips.
- 3. Lift and separate the two parts of the air cleaner housing.
- 4. Remove and replace the air filter.
- 5. Reverse the above steps to reinstall the air cleaner housing. Make sure that the hinge in the bottom of the air cleaner housing is engaged.

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### Automatic Transaxle Fluid

#### When to Check and Change

A good time to check your automatic transaxle fluid level is when the engine oil is changed.

Change both the fluid and filter every 50,000 miles (83 000 km) if the vehicle is mainly driven under one or more of these conditions:

- In heavy city traffic where the outside temperature regularly reaches 90°F (32°C) or higher.
- In hilly or mountainous terrain.
- Uses such as found in taxi, police or delivery service.

If you do not use your vehicle under any of these conditions, the fluid and filter do not require changing.

See "Scheduled Maintenance Services" in the Index.

#### How to Check

Because this operation can be a little difficult, you may choose to have this done at the dealership service department.

If you do it yourself, be sure to follow all the instructions here, or you could get a false reading on the dipstick.

## **NOTICE:**

Too much or too little fluid can damage your transaxle. Too much can mean that some of the fluid could come out and fall on hot engine parts or exhaust system parts, starting a fire. Be sure to get an accurate reading if you check your transaxle fluid.

Wait at least 30 minutes before checking the transaxle fluid level if you have been driving:

- When outside temperatures are above  $90^{\circ}F(32^{\circ}C)$ .
- At high speed for quite a while.
- In heavy traffic -- especially in hot weather.

To get the right reading, the fluid should be at normal operating temperature, which is  $180^{\circ}$ F to  $200^{\circ}$ F ( $82^{\circ}$ C to  $93^{\circ}$ C).

Get the vehicle warmed up by driving about 15 miles (24 km) when outside temperatures are above  $50^{\circ}$ F ( $10^{\circ}$ C). If it's colder than  $50^{\circ}$ F ( $10^{\circ}$ C), you may have to drive longer.

#### **Checking the Fluid Level**

Prepare your vehicle as follows:

- Park your vehicle on a level place. Keep the engine running.
- With the parking brake applied, place the shift lever in PARK (P).
- With your foot on the brake pedal, move the shift lever through each gear range, pausing for about three seconds in each range. Then, position the shift lever in PARK (P).
- Let the engine run at idle for three to five minutes.

Then, without shutting off the engine, follow these steps:



1. Locate the dipstick with the red loop just in front of your battery. Pull out the dipstick and wipe it with a clean rag or paper towel.

2. Push it back in all the way, wait three seconds and then pull it back out again.



- 3. Check both sides of the dipstick, and read the lower level. The fluid level must be between the two notches in the hot range.
- 4. If the fluid level is in the acceptable range, push the dipstick back in all the way.

#### How to Add Fluid

Refer to the Maintenance Schedule to determine what kind of transaxle fluid to use. See "Recommended Fluids and Lubricants" in the Index. If the fluid level is low, add only enough of the proper fluid to bring the level into the area between notches on the dipstick.

- 1. Pull out the dipstick.
- 2. Using a long-neck funnel, add enough fluid at the dipstick hole to bring it to the proper level.

It doesn't take much fluid, generally less than one pint (0.5 L). *Don't overfill*.

## NOTICE:

We recommend you use only fluid labeled DEXRON<sup>®</sup>-III, because fluid with that label is made especially for your automatic transaxle. Damage caused by fluid other than DEXRON<sup>®</sup>-III is not covered by your new vehicle warranty.

- 3. After adding fluid, recheck the fluid level as described under "How to Check."
- 4. When the correct fluid level is obtained, push the dipstick back in all the way.

## **Manual Transaxle Fluid**

#### When to Check and Change

A good time to have it checked is when the engine oil is changed. Refer to the Maintenance Schedule to determine when to change your transaxle fluid. See "Scheduled Maintenance Services" in the Index.

#### **How to Check**

Because this operation can be a little difficult, you may choose to have this done at your Chevrolet dealership service department.

If you do it yourself, be sure to follow all the instructions here, or you could get a false reading.

## **NOTICE:**

Too much or too little fluid can damage your transaxle. Too much can mean that some of the fluid could come out and fall on hot engine parts or exhaust system parts, starting a fire. Be sure to get an accurate reading if you check your transaxle fluid. Check the fluid level only when your engine is off, the vehicle is parked on a level place and the transaxle is cool enough for you to rest your fingers on the transaxle case.

Then, follow these steps:



- 1. Remove the filler plug.
- 2. Check that the lubricant level is up to the bottom of the filler plug hole.
- 3. If the fluid level is good, install the plug and be sure it is fully seated. If the fluid level is low, add more fluid as described in the next steps.

#### How to Add Fluid

Here's how to add fluid. Refer to the Maintenance Schedule to determine what kind of fluid to use. See "Recommended Fluids and Lubricants" in the Index.

- 1. Remove the filler plug.
- 2. Add fluid at the filler plug hole. Add only enough fluid to bring the fluid level up to the bottom of the filler plug hole.
- 3. Install the filler plug. Be sure the plug is fully seated.

## **Clutch Adjustment**

The clutch linkage in your vehicle should be checked as recommended in your Maintenance Schedule. To check, push the clutch pedal down with your hand until you feel some resistance to the movement of the pedal. If the pedal moves freely up to 5/8 to 3/4 of an inch (1.5 to 2.0 cm) or so before you feel resistance to the travel, adjustment isn't needed.

If there is no free travel or very little (less than 5/8 of an inch (1.5 cm)), see your dealer for adjustment.

## **Engine Coolant**

The following explains your cooling system and how to add coolant when it is low. If you have a problem with engine overheating, see "Engine Overheating" in the Index.

A 50/50 mixture of clean, drinkable water and the proper coolant will:

- Give freezing protection down to  $-33^{\circ}F(-36^{\circ}C)$ .
- Give boiling protection up to  $258^{\circ}F(125^{\circ}C)$ .
- Protect against rust and corrosion.
- Help keep the proper engine temperature.
- Let the warning lights and gages work as they should.

#### What to Use

Use a mixture of one-half *clean, drinkable water* and one-half coolant that meets GM Specification 1825-M, which won't damage aluminum parts. You can also use a recycled coolant conforming to GM Specification 1825-M with a complete coolant flush and refill. If you use this coolant mixture, you don't need to add anything else.

## **A** CAUTION:

Adding only plain water to your cooling system can be dangerous. Plain water, or some other liquid like alcohol, can boil before the proper coolant mixture will. Your vehicle's coolant warning system is set for the proper coolant mixture. With plain water or the wrong mixture, your engine could get too hot but you wouldn't get the overheat warning. Your engine could catch fire and you or others could be burned. Use a 50/50 mixture of clean, drinkable water and the proper coolant.

## **NOTICE:**

If you use an improper coolant mixture, your engine could overheat and be badly damaged. The repair cost wouldn't be covered by your warranty. Too much water in the mixture can freeze and crack the engine, radiator, heater core and other parts.

If you have to add coolant more than four times a year, have your dealer check your cooling system.

### NOTICE:

If you use the proper coolant, you don't have to add extra inhibitors or additives which claim to improve the system. These can be harmful.

#### **Checking Coolant**



The vehicle must be on a level surface. When your engine is cold, the coolant level should be at LOW, or a little higher. When your engine is warm, the level should be up to FULL, or a little higher.

#### **Adding Coolant**

If you need more coolant, add the proper coolant mixture *at the coolant recovery tank*, but be careful not to spill it.

## <mark>▲ CAUTION:</mark>

Turning the radiator pressure cap when the engine and radiator are hot can allow steam and scalding liquids to blow out and burn you badly. With the coolant recovery tank, you will almost never have to add coolant at the radiator. Never turn the radiator pressure cap -- even a little -- when the engine and radiator are hot.

## **A** CAUTION:

You can be burned if you spill coolant on hot engine parts. Coolant contains ethylene glycol, and it will burn if the engine parts are hot enough. Don't spill coolant on a hot engine.

Occasionally check the coolant level in the radiator. For information on how to add coolant to the radiator, see "Cooling System" in the Index.
## **Radiator Pressure Cap**

## **NOTICE:**

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Your radiator cap is a 13 psi (90 kPa) pressure-type cap and must be tightly installed to prevent coolant loss and possible engine damage from overheating. Be sure the arrows on the cap line up with the overflow tube on the radiator filler neck.



**Power Steering Fluid** 

#### When to Check Power Steering Fluid

It is not necessary to regularly check power steering fluid unless you suspect there is a leak in the system or you hear an unusual noise. A fluid loss in this system could indicate a problem. Have the system inspected and repaired.



When you replace your radiator pressure cap, an  $ACDelco^{\$}$  cap is recommended.

#### How To Check Power Steering Fluid

You can check your fluid without taking the cap off. The level should fall between the MIN and MAX marks on the reservoir.

#### What to Use

To determine what kind of fluid to use, see "Recommended Fluids and Lubricants" in the Index.

## **NOTICE:**

When adding power steering fluid or making a complete fluid change, always use the proper fluid. Failure to use the proper fluid can cause leaks and damage hoses and seals.

## Windshield Washer Fluid

#### What to Use

When you need windshield washer fluid, be sure to read the manufacturer's instructions before use. If you will be operating your vehicle in an area where the temperature may fall below freezing, use a fluid that has sufficient protection against freezing.

#### **Adding Washer Fluid**



Open the cap with the washer symbol on it. Add washer fluid until the tank is full.

## **NOTICE:**

- When using concentrated washer fluid, follow the manufacturer's instructions for adding water.
- Don't mix water with ready-to-use washer fluid. Water can cause the solution to freeze and damage your washer fluid tank and other parts of the washer system. Also, water doesn't clean as well as washer fluid.
- Fill your washer fluid tank only three-quarters full when it's very cold. This allows for expansion if freezing occurs, which could damage the tank if it is completely full.
- Don't use engine coolant (antifreeze) in your windshield washer. It can damage your washer system and paint.

## Brakes Brake Fluid



Your brake master cylinder reservoir is on the driver's side of the engine compartment. It is filled with DOT-3 brake fluid.

There are only two reasons why the brake fluid level in the reservoir might go down. The first is that the brake fluid goes down to an acceptable level during normal brake lining wear. When new linings are put in, the fluid level goes back up. The other reason is that fluid is leaking out of the brake system. If it is, you should have your brake system fixed, since a leak means that sooner or later your brakes won't work well, or won't work at all.

So, it isn't a good idea to "top off" your brake fluid. Adding brake fluid won't correct a leak. If you add fluid when your linings are worn, then you'll have too much fluid when you get new brake linings. You should add (or remove) brake fluid, as necessary, only when work is done on the brake hydraulic system.

# **<u>A</u>** CAUTION:

If you have too much brake fluid, it can spill on the engine. The fluid will burn if the engine is hot enough. You or others could be burned, and your vehicle could be damaged. Add brake fluid only when work is done on the brake hydraulic system. When your brake fluid falls to a low level, your brake warning light will come on. See "Brake System Warning Light" in the Index.

#### What to Add

When you do need brake fluid, use only DOT-3 brake fluid. Use new brake fluid from a sealed container only. Refer to "Recommended Fluids and Lubricants" in the Maintenance Schedule.

Always clean the brake fluid reservoir cap and the area around the cap before removing it. This will help keep dirt from entering the reservoir.

# **CAUTION:**

With the wrong kind of fluid in your brake system, your brakes may not work well, or they may not even work at all. This could cause a crash. Always use the proper brake fluid.

## **NOTICE:**

- Using the wrong fluid can badly damage brake system parts. For example, just a few drops of mineral-based oil, such as engine oil, in your brake system can damage brake system parts so badly that they'll have to be replaced. Don't let someone put in the wrong kind of fluid.
- If you spill brake fluid on your vehicle's painted surfaces, the paint finish can be damaged. Be careful not to spill brake fluid on your vehicle. If you do, wash it off immediately. See "Appearance Care" in the Index.

#### **Brake Wear**

Your vehicle has front disc brakes and rear drum brakes.

Disc brake pads have built-in wear indicators that make a high-pitched warning sound when the brake pads are worn and new pads are needed. The sound may come and go or be heard all the time your vehicle is moving (except when you are pushing on the brake pedal firmly).

# **A** CAUTION:

The brake wear warning sound means that soon your brakes won't work well. That could lead to an accident. When you hear the brake wear warning sound, have your vehicle serviced.

## **NOTICE:**

Continuing to drive with worn-out brake pads could result in costly brake repair.

Some driving conditions or climates may cause a brake squeal when the brakes are first applied or lightly applied. This does not mean something is wrong with your brakes.

Properly torqued wheel nuts are necessary to help prevent brake pulsation. When tires are rotated, inspect brake pads for wear and evenly torque wheel nuts in the proper sequence to GM specifications. Your rear drum brakes don't have wear indicators, but if you ever hear a rear brake rubbing noise, have the rear brake linings inspected immediately. Also, the rear brake drums should be removed and inspected each time the tires are removed for rotation or changing. When you have the front brake pads replaced, have the rear brakes inspected, too.

Brake linings should always be replaced as complete axle sets.

See "Brake System Inspection" in Section 7 of this manual under Part C "Periodic Maintenance Inspections."

#### **Brake Pedal Travel**

See your dealer if the brake pedal does not return to normal height, or if there is a rapid increase in pedal travel. This could be a sign of brake trouble.

#### **Brake Adjustment**

Every time you make a moderate brake stop, your disc brakes adjust for wear. If you rarely make a moderate or heavier stop, then your brakes might not adjust correctly. If you drive in that way, then -- very carefully -- make a few moderate brake stops about every 1,000 miles (1 600 km), so your brakes will adjust properly.

#### **Replacing Brake System Parts**

The braking system on a vehicle is complex. Its many parts have to be of top quality and work well together if the vehicle is to have really good braking. Your vehicle was designed and tested with top-quality GM brake parts. When you replace parts of your braking system -- for example, when your brake linings wear down and you have to have new ones put in -- be sure you get new approved GM replacement parts. If you don't, your brakes may no longer work properly. For example, if someone puts in brake linings that are wrong for your vehicle, the balance between your front and rear brakes can change -- for the worse. The braking performance you've come to expect can change in many other ways if someone puts in the wrong replacement brake parts.

## **Low Maintenance Battery**

The battery in your vehicle needs only periodic service. You never have to add water. But check the battery, cables and battery bracket for corrosion. Clean off any corrosion using a brush and a solution of ammonia and water or baking soda and water. Rinse with clear water.

#### **Vehicle Storage**

If you're not going to drive your vehicle for 25 days or more, remove the black, negative (-) cable from the battery. This will help keep your battery from running down.



Batteries have acid that can burn you and gas that can explode. You can be badly hurt if you aren't careful. See "Jump Starting" in the Index for tips on working around a battery without getting hurt.

Contact your dealer to learn how to prepare your vehicle for longer storage periods.

## **Bulb Replacement**

The following procedures tell you how to replace the bulbs for your vehicle. See "Replacement Bulbs" in the Index to check the size and type of bulb you need to use.

For any bulb changing procedure not listed in this section, contact your Chevrolet dealer's service department.

#### **Halogen Bulbs**

# **A** CAUTION:

Halogen bulbs have pressurized gas inside and can burst if you drop or scratch the bulb. You or others could be injured. Be sure to read and follow the instructions on the bulb package.

#### Headlamps

#### **Halogen Capsule Lamps**

1. Open the hood.



- 2. Using a Phillips screwdriver, remove the headlamp assembly mounting screws.
- 3. Pull the headlamp assembly straight out from the vehicle.
- 4. Turn the plastic lock ring about one-quarter of a turn counterclockwise to remove it. Save the lock ring to use with the new bulb assembly.

- 5. Pull up on the plastic clip. Gently pull the bulb out for replacement.
- 6. Reverse the steps to replace the new bulb assembly. Make sure the locator tab is properly aligned when installing the headlamp assembly to the vehicle.

#### **Headlamp Aiming**

Your vehicle may have the halogen capsule headlamp system. These headlamps have horizontal and vertical adjustments. These have been pre-set at the factory and should need no further adjustment.

If your vehicle is damaged in an accident and the headlamp aim seems affected, see your dealer. Headlamps on damaged vehicles may require:

- vehicle body repair for correct installation of the headlamp housing or
- replacement with new headlamp housing (s).

## NOTICE:

To make sure your headlamps are aimed properly, read all the instructions before beginning. Failure to follow these instructions could cause damage to headlamp parts. To check the aim, the vehicle should be properly prepared as follows:

- The vehicle must have all four tires on a perfectly level surface.
- If necessary, pads may be used on an uneven surface.
- The vehicle should not have any snow, ice or mud attached to it.
- The vehicle should be fully assembled and all other work stopped while headlamp aiming is being done.
- There should not be any cargo or loading of the vehicle, except it should have a full tank of fuel and one person or 160 lbs. (75 kg) on the driver's seat.
- Close all doors.
- Tires should be properly inflated.
- Rock the vehicle to stabilize the suspension.

Start with the horizontal aim. The adjustment gear can be turned with a flat-head screwdriver.



- A. "0" Mark
- B. Center Line
- C. Horizontal Aiming Gear
- 1. Verify that the black line is not at the "0" mark.
- 2. Using a flat-tipped screwdriver, adjust the horizontal aiming gear until the "0" mark lines up with the centerline.

Once the horizontal aim is adjusted, then adjust the vertical aim.



- A. Vertical Aiming Gear
- B. Vertical Indicator

For vertical adjustment:

- 1. Verify that the bubble is not in the center.
- 2. Place a flat-tipped screwdriver into the vertical adjusting gear.
- 3. Turn the adjusting gear until the bubble comes to the center.

See your dealer if you need further assistance with headlamp aiming.

#### Front Turn Signal/Parking/ Sidemarker Lamps



- A. Turn Signal
- B. Headlamp
- C. Sidemarker

To remove the front turn signal, parking or sidemarker lamps:

- 1. Open the hood.
- 2. Using a Phillips screwdriver, remove the headlamp assembly mounting screws.
- 3. Pull the headlamp straight out from the vehicle.
- 4. Turn the appropriate socket counterclockwise and pull the socket out.
- 5. Pull the old bulb straight up to remove it.
- 6. Reverse the steps with the new bulb.

#### Center High-Mounted Stoplamp (2-Door Model)

- 1. Remove the two mounting screws located inside the hatchback door and then the lamp assembly from the hatchback door.
- 2. Remove the bulb from the socket.
- 3. Replace the bulb with a new one and then use the two mounting screws to secure the lamp assembly into place.

# Center High-Mounted Stoplamp (4-Door Model)

- 1. Open the rear compartment lid.
- 2. Remove the bulb socket from the underside of the rear seat to rear window panel.
- 3. Twist the bulb to the right and pull it straight out.
- 4. Replace the bulb then snap and turn the bulb socket into the lamp housing.

#### **Rear Combination Lamps**

To remove the rear combination bulbs:

- 1. Remove the two screws from the combination lamps on the outside of the vehicle.
- 2. On 4-door models, pull back the cover on the inside of the trunk and use a 10 mm wrench to remove the nut.
- 3. Pull the assembly out far enough to reach the bulb socket.



2-Door Models



#### **4-Door Models**

- 4. Turn the socket counterclockwise and pull the socket out.
- 5. Disconnect the bulb from its socket by twisting and then pulling the bulb out.
- 6. Reverse the steps to install a new bulb.

#### Rear Parking/Sidemarker Lamps (2-Door Model)

- 1. Remove the rear combination lamp assembly as described under "Rear Combination Lamps" listed previously.
- 2. Turn the socket counterclockwise and gently pull the socket out of the assembly.



- 3. Pull the old bulb straight up to remove it.
- 4. Reverse the steps to install a new bulb.

## **Dome Lamp**

- 1. Gently pry the dome lamp lens from the dome lamp assembly with a flat-head screwdriver.
- 2. Pull the old bulb out.
- 3. Replace the bulb and snap the cover back into place.

## Tires

Your new vehicle comes with high-quality tires made by a leading tire manufacturer. If you ever have questions about your tire warranty and where to obtain service, see your Chevrolet Warranty booklet for details.

# **A** CAUTION:

Poorly maintained and improperly used tires are dangerous.

• Overloading your tires can cause overheating as a result of too much friction. You could have an air-out and a serious accident. See "Loading Your Vehicle" in the Index.

**CAUTION: (Continued)** 

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#### **CAUTION: (Continued)**

- Underinflated tires pose the same danger as overloaded tires. The resulting accident could cause serious injury. Check all tires frequently to maintain the recommended pressure. Tire pressure should be checked when your tires are cold.
- Overinflated tires are more likely to be cut, punctured or broken by a sudden impact -- such as when you hit a pothole. Keep tires at the recommended pressure.
- Worn, old tires can cause accidents. If your tread is badly worn, or if your tires have been damaged, replace them.

#### **Inflation -- Tire Pressure**

The Tire-Loading Information label, which is on the driver's door lock pillar, shows the correct inflation pressures for your tires when they're cold. "Cold" means your vehicle has been sitting for at least three hours or driven no more than 1 mile (1.6 km).

## **NOTICE:**

Don't let anyone tell you that underinflation or overinflation is all right. It's not. If your tires don't have enough air (underinflation), you can get the following:

- Too much flexing
- Too much heat
- Tire overloading
- Bad wear
- Bad handling
- Bad fuel economy.

If your tires have too much air (overinflation), you can get the following:

- Unusual wear
- Bad handling
- Rough ride
- Needless damage from road hazards.

#### When to Check

Check your tires once a month or more.

Don't forget your compact spare tire. It should be at 60 psi (420 kPa).

#### How to Check

Use a good quality pocket-type gage to check tire pressure. You can't tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated even when they're underinflated.

Be sure to put the valve caps back on the valve stems. They help prevent leaks by keeping out dirt and moisture.

#### **Tire Inspection and Rotation**

Tires should be rotated every 6,000 to 8,000 miles (10 000 to 13 000 km). Any time you notice unusual wear, rotate your tires as soon as possible and check wheel alignment. Also check for damaged tires or wheels. See "When It's Time for New Tires" and "Wheel Replacement" later in this section for more information.

The purpose of regular rotation is to achieve more uniform wear for all tires on the vehicle. The first rotation is the most important. See "Scheduled Maintenance Services" in the Index for scheduled rotation intervals.



When rotating your tires, always use the correct rotation pattern shown here.

Don't include the compact spare tire in your tire rotation.

After the tires have been rotated, adjust the front and rear inflation pressures as shown on the Tire-Loading Information label. Make certain that all wheel nuts are properly tightened. See "Wheel Nut Torque" in the Index.

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# **A** CAUTION:

Rust or dirt on a wheel, or on the parts to which it is fastened, can make wheel nuts become loose after a time. The wheel could come off and cause an accident. When you change a wheel, remove any rust or dirt from places where the wheel attaches to the vehicle. In an emergency, you can use a cloth or a paper towel to do this; but be sure to use a scraper or wire brush later, if you need to, to get all the rust or dirt off. (See "Changing a Flat Tire" in the Index.)

#### When It's Time for New Tires



One way to tell when it's time for new tires is to check the treadwear indicators, which will appear when your tires have only 1/16 inch (1.6 mm) or less of tread remaining.

You need a new tire if any of the following statements are true:

- You can see the indicators at three or more places around the tire.
- You can see cord or fabric showing through the tire's rubber.
- The tread or sidewall is cracked, cut or snagged deep enough to show cord or fabric.
- The tire has a bump, bulge or split.
- The tire has a puncture, cut or other damage that can't be repaired well because of the size or location of the damage.

#### **Buying New Tires**

To find out what kind and size of tires you need, look at the Tire-Loading Information label.

The tires installed on your vehicle when it was new had a Tire Performance Criteria Specification (TPC Spec) number on each tire's sidewall. When you get new tires, get ones with that same TPC Spec number. That way your vehicle will continue to have tires that are designed to give proper endurance, handling, speed rating, traction, ride and other things during normal service on your vehicle. If your tires have an all-season tread design, the TPC number will be followed by an "MS" (for mud and snow).

If you ever replace your tires with those not having a TPC Spec number, make sure they are the same size, load range, speed rating and construction type (bias, bias-belted or radial) as your original tires.

# **A** CAUTION:

Mixing tires could cause you to lose control while driving. If you mix tires of different sizes or types (radial and bias-belted tires), the vehicle may not handle properly, and you could have a crash. Using tires of different sizes may also cause damage to your vehicle. Be sure to use the same size and type tires on all wheels.

It's all right to drive with your compact spare, though. It was developed for use on your vehicle.

## **CAUTION:**

If you use bias-ply tires on your vehicle, the wheel rim flanges could develop cracks after many miles of driving. A tire and/or wheel could fail suddenly, causing a crash. Use only radial-ply tires with the wheels on your vehicle.

#### **Uniform Tire Quality Grading**

The following information relates to the system developed by the United States National Highway Traffic Safety Administration, which grades tires by treadwear, traction and temperature performance. (This applies only to vehicles sold in the United States.) The grades are molded on the sidewalls of most passenger car tires. The Uniform Tire Quality Grading system does not apply to deep tread, winter-type snow tires, space-saver or temporary use spare tires, tires with nominal rim diameters of 10 to 12 inches (25 to 30 cm), or to some limited-production tires.

While the tires available on General Motors passenger cars and light trucks may vary with respect to these grades, they must also conform to Federal safety requirements and additional General Motors Tire Performance Criteria (TPC) standards.

#### 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 -- AA, A, B, C

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. 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 -- A, B, C

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, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

#### Wheel Alignment and Tire Balance

The wheels on your vehicle were aligned and balanced carefully at the factory to give you the longest tire life and best overall performance.

Scheduled wheel alignment and wheel balancing are not needed. However, if you notice unusual tire wear or your vehicle pulling one way or the other, the alignment may need to be reset. If you notice your vehicle vibrating when driving on a smooth road, your wheels may need to be rebalanced.

#### **Wheel Replacement**

Replace any wheel that is bent, cracked, or badly rusted or corroded. If wheel nuts keep coming loose, the wheel, wheel bolts and wheel nuts should be replaced. If the wheel leaks air, replace it (except some aluminum wheels, which can sometimes be repaired). See your dealer if any of these conditions exist.

Your dealer will know the kind of wheel you need.

Each new wheel should have the same load-carrying capacity, diameter, width, offset and be mounted the same way as the one it replaces.

If you need to replace any of your wheels, wheel bolts or wheel nuts, replace them only with new GM original equipment parts. This way, you will be sure to have the right wheel, wheel bolts and wheel nuts for your vehicle.

# <u> CAUTION:</u>

Using the wrong replacement wheels, wheel bolts or wheel nuts on your vehicle can be dangerous. It could affect the braking and handling of your vehicle, make your tires lose air and make you lose control. You could have a collision in which you or others could be injured. Always use the correct wheel, wheel bolts and wheel nuts for replacement.

## **NOTICE:**

The wrong wheel can also cause problems with bearing life, brake cooling, speedometer or odometer calibration, headlamp aim, bumper height, vehicle ground clearance and tire or tire chain clearance to the body and chassis.

See "Changing a Flat Tire" in the Index for more information.

#### **Used Replacement Wheels**

# **CAUTION:**

Putting a used wheel on your vehicle is dangerous. You can't know how it's been used or how far it's been driven. It could fail suddenly and cause an accident. If you have to replace a wheel, use a new GM original equipment wheel.

#### **Tire Chains**

## NOTICE:

Use tire chains only where legal and only when you must. Use only SAE Class "S" type chains that are the proper size for your tires. Install them on the front tires and tighten them as tightly as possible with the ends securely fastened. Drive slowly and follow the chain manufacturer's instructions. If you can hear the chains contacting your vehicle, stop and retighten them. If the contact continues, slow down until it stops. Driving too fast or spinning the wheels with chains on will damage your vehicle.

## **Appearance Care**

Remember, cleaning products can be hazardous. Some are toxic. Others can burst into flame if you strike a match or get them on a hot part of the vehicle. Some are dangerous if you breathe their fumes in a closed space. When you use anything from a container to clean your vehicle, be sure to follow the manufacturer's warnings and instructions. And always open your doors or windows when you're cleaning the inside. Never use these to clean your vehicle:

- Gasoline
- Benzene
- Naphtha
- Carbon Tetrachloride
- Acetone
- Paint Thinner
- Turpentine
- Lacquer Thinner
- Nail Polish Remover

They can all be hazardous -- some more than others -- and they can all damage your vehicle, too.

Don't use any of these unless this manual says you can. In many uses, these will damage your vehicle:

- Alcohol
- Laundry Soap
- Bleach
- Reducing Agents

## **Cleaning the Inside of Your Vehicle**

Use a vacuum cleaner often to get rid of dust and loose dirt. Wipe vinyl, leather, plastic and painted surfaces with a clean, damp cloth.

#### **Cleaning of Fabric/Carpet**

Your dealer has two cleaners, Multi-Purpose Interior Cleaner and Capture Non-Solvent Dry Spot and Soil Remover for cleaning fabric and carpet. They will clean normal spots and stains very well. You can get GM-approved cleaning products from your dealer. (See "Appearance Care and Materials" in the Index.)

Here are some cleaning tips:

- Always read the instructions on the cleaner label.
- Clean up stains as soon as you can -- before they set.
- Carefully scrape off any excess stain.
- Use a clean cloth or sponge, and change to a clean area often. A soft brush may be used if stains are stubborn.
- If a ring forms on fabric after spot cleaning, clean the entire area immediately or it will set.

#### Using Multi-Purpose Interior Cleaner on Fabric

- 1. Vacuum and brush the area to remove any loose dirt.
- 2. Always clean a whole trim panel or section. Mask surrounding trim along stitch or welt lines.
- 3. Mix powdered cleaner following the directions on the container label to form thick suds.
- 4. Use suds only and apply with a clean sponge. Don't saturate the material and don't rub it roughly.
- 5. As soon as you've cleaned the section, use a sponge to remove the suds.
- 6. Wipe cleaned area with a clean, damp towel or cloth.
- 7. Wipe with a clean cloth and let dry.

## **Special Fabric Cleaning Problems**

Stains caused by such things as catsup, coffee (black), egg, fruit, fruit juice, milk, soft drinks, vomit, urine and blood can be removed as follows:

- 1. Carefully scrape off excess stain, then sponge the soiled area with cool water.
- 2. If a stain remains, follow the multi-purpose interior cleaner instructions described earlier.

 If an odor lingers after cleaning vomit or urine, treat the area with a water/baking soda solution: 1 teaspoon (5 ml) of baking soda to 1 cup (250 ml) of lukewarm water.

#### 4. Let dry.

Stains caused by candy, ice cream, mayonnaise, chili sauce and unknown stains can be removed as follows:

- 1. Carefully scrape off excess stain.
- 2. First, clean with cool water and allow to dry completely.
- 3. If a stain remains, follow instructions for Multi-Purpose Interior Cleaner.

## **Cleaning Vinyl**

Use warm water and a clean cloth.

- Rub with a clean, damp cloth to remove dirt. You may have to do it more than once.
- Things like tar, asphalt and shoe polish will stain if you don't get them off quickly. Use a clean cloth and a vinyl/leather cleaner. See your dealer for this product.

#### **Cleaning the Top of the Instrument Panel**

Use only mild soap and water to clean the top surfaces of the instrument panel. Sprays containing silicones or waxes may cause annoying reflections in the windshield and even make it difficult to see through the windshield under certain conditions.

#### **Cleaning Interior Plastic Components**

Use only a mild soap and water solution on a soft cloth or sponge. Commercial cleaners may affect the surface finish.

## **Care of Safety Belts**

Keep belts clean and dry.

# **A** CAUTION:

Do not bleach or dye safety belts. If you do, it may severely weaken them. In a crash, they might not be able to provide adequate protection. Clean safety belts only with mild soap and lukewarm water.

## **Cleaning Glass Surfaces**

Glass should be cleaned often. GM Glass Cleaner or a liquid household glass cleaner will remove normal tobacco smoke and dust films on interior glass. (See "Appearance Care and Materials" in the Index.)

Don't use abrasive cleaners on glass, because they may cause scratches. Avoid placing decals on the inside rear window, since they may have to be scraped off later. If abrasive cleaners are used on the inside of the rear window, an electric defogger element may be damaged. Any temporary license should not be attached across the defogger grid.

## Cleaning the Outside of the Windshield, Backglass and Wiper Blades

If the windshield is not clear after using the windshield washer, or if the wiper blade chatters when running, wax, sap or other material may be on the blade or windshield. Clean the outside of the windshield with GM Windshield Cleaner, Bon Ami<sup>®</sup> Powder (non-scratching glass cleaning powder), GM Part No. 1050011. The windshield is clean if beads do not form when you rinse it with water.

Grime from the windshield will stick to the wiper blades and affect their performance. Clean the blade by wiping vigorously with a cloth soaked in full-strength windshield washer solvent. Then rinse the blade with water.

Check the wiper blades and clean them as necessary; replace blades that look worn.

## Weatherstrips

Silicone grease on weatherstrips will make them last longer, seal better, and not stick or squeak. Apply silicone grease with a clean cloth at least every six months. During very cold, damp weather more frequent application may be required. (See "Recommended Fluids and Lubricants" in the Index.)

## **Cleaning the Outside of Your Vehicle**

The paint finish on your vehicle provides beauty, depth of color, gloss retention and durability.

#### Washing Your Vehicle

The best way to preserve your vehicle's finish is to keep it clean by washing it often with lukewarm or cold water.

Don't wash your vehicle in the direct rays of the sun. Use a car washing soap. Don't use strong soaps or chemical detergents. Be sure to rinse the vehicle well, removing all soap residue completely. You can get GM-approved cleaning products from your dealer. (See "Appearance Care and Materials" in the Index.) Don't use cleaning agents that are petroleum based, or that contain acid or abrasives. All cleaning agents should be flushed promptly and not allowed to dry on the surface, or they could stain. Dry the finish with a soft, clean chamois or an all-cotton towel to avoid surface scratches and water spotting.

High pressure car washes may cause water to enter your vehicle.

#### **Cleaning Exterior Lamps/Lenses**

Use lukewarm or cold water, a soft cloth and a car washing soap to clean exterior lamps and lenses. Follow instructions under "Washing Your Vehicle."

#### **Finish Care**

Occasional waxing or mild polishing of your vehicle by hand may be necessary to remove residue from the paint finish. You can get GM-approved cleaning products from your dealer. (See "Appearance Care and Materials" in the Index.)

Your vehicle may have a "basecoat/clearcoat" paint finish. The clearcoat gives more depth and gloss to the colored basecoat. Always use waxes and polishes that are non-abrasive and made for a basecoat/clearcoat paint finish.

## **NOTICE:**

Machine compounding or aggressive polishing on a basecoat/clearcoat paint finish may dull the finish or leave swirl marks. Foreign materials such as calcium chloride and other salts, ice melting agents, road oil and tar, tree sap, bird droppings, chemicals from industrial chimneys, etc., can damage your vehicle's finish if they remain on painted surfaces. Wash the vehicle as soon as possible. If necessary, use non-abrasive cleaners that are marked safe for painted surfaces to remove foreign matter.

Exterior painted surfaces are subject to aging, weather and chemical fallout that can take their toll over a period of years. You can help to keep the paint finish looking new by keeping your vehicle garaged or covered whenever possible.

## **Cleaning Tires**

To clean your tires, use a stiff brush with a tire cleaner.

## **NOTICE:**

When applying a tire dressing always take care to wipe off any overspray or splash from all painted surfaces on the body or wheels of the vehicle. Petroleum-based products may damage the paint finish and tires.

## **Sheet Metal Damage**

If your vehicle is damaged and requires sheet metal repair or replacement, make sure the body repair shop applies anti-corrosion material to the parts repaired or replaced to restore corrosion protection.

Original manufacturer replacement parts will provide the corrosion protection while maintaining the warranty.

## **Finish Damage**

Any stone chips, fractures or deep scratches in the finish should be repaired right away. Bare metal will corrode quickly and may develop into a major repair expense.

Minor chips and scratches can be repaired with touch-up materials available from your dealer or other service outlets. Larger areas of finish damage can be corrected in your dealer's body and paint shop.

## **Underbody Maintenance**

Chemicals used for ice and snow removal and dust control can collect on the underbody. If these are not removed, accelerated corrosion (rust) can occur on the underbody parts such as fuel lines, frame, floor pan and exhaust system even though they have corrosion protection.

At least every spring, flush these materials from the underbody with plain water. Clean any areas where mud and other debris can collect. Dirt packed in closed areas of the frame should be loosened before being flushed. Your dealer or an underbody car washing system can do this for you.

## **Chemical Paint Spotting**

Some weather and atmospheric conditions can create a chemical fallout. Airborne pollutants can fall upon and attack painted surfaces on your vehicle. This damage can take two forms: blotchy, ringlet-shaped discolorations, and small irregular dark spots etched into the paint surface.

Although no defect in the paint job causes this, Chevrolet will repair, at no charge to the owner, the surfaces of new vehicles damaged by this fallout condition within 12 months or 12,000 miles (20 000 km) of purchase, whichever occurs first.

## **GM Vehicle Care/Appearance Materials**

PART NUMBER	SIZE	DESCRIPTION	USAGE
994954	23 in. x 25 in.	Polishing Cloth – Wax Treated	Exterior polishing cloth
1050172	16 oz. (0.473 L)	Tar and Road Oil Remover	Removes tar, road oil and asphalt
1050173	16 oz. (0.473 L)	Chrome Cleaner and Polish	Use on chrome, stainless steel, nickel, copper and brass
1050174	16 oz. (0.473 L)	White Sidewall Tire Cleaner	Removes soil and black marks from whitewalls
1050214	32 oz. (0.946 L)	Vinyl Cleaner	Cleans vinyl tops, upholstery and convertible tops
1050427	23 oz. (0.680 L)	Glass Cleaner	Removes dirt, grime, smoke and fingerprints
1052918**	8 oz. (0.237 L)	Armor All <sup>™</sup> Protectant	Protects leather, wood, acrylics, Plexiglas <sup>™</sup> , plastic, rubber and vinyl
1052925	16 oz. (0.473 L)	Multi-Purpose Interior Cleaner	Cleans carpets, seats, interior trim, door panels and floor mats
1052929	16 oz. (0.473 L)	Wheel Cleaner	Spray on and rinse with water
1052930	8 oz. (0.237 L)	Capture Dry Spot Remover	Attracts, absorbs and removes soils on fabric
12345721	2.5 sq. ft.	Synthetic Chamois	Shines vehicle without scratching
12345725	12 oz. (0.354 L)	Silicone Tire Shine	Spray on tire shine
12377964*	16 oz. (0.473 L)	Finish Enhancer	Removes dust, fingerprints and surface contaminants
12377966*	16 oz. (0.473 L)	Cleaner Wax	Removes light scratches and oxidation and protects finish
12377984*	16 oz. (0.473 L)	Surface Cleaner	Removes contaminants, blemishes and swirl marks
		1	* For exterior use only. **Not recommended for use on instrument panels.

## Vehicle Identification Number (VIN)



This is the legal identifier for your vehicle. It appears on a plate in the front corner of the instrument panel, on the driver's side. You can see it if you look through the windshield from outside your vehicle. The VIN also appears on the Vehicle Certification and Service Parts labels and the certificates of title and registration.

#### **Engine Identification**

The 8th character in your VIN is the engine code. This code will help you identify your engine, specifications and replacement parts.

## **Service Parts Identification Label**

You'll find this label inside on the load floor at the rear of the vehicle, on the spare tire cover. It's very helpful if you ever need to order parts. On this label is:

- your VIN,
- the model designation,
- paint information and
- a list of all production options and special equipment. Be sure that this label is not removed from the vehicle.

## Electrical System Add-On Electrical Equipment

## **NOTICE:**

Don't add anything electrical to your vehicle unless you check with your dealer first. Some electrical equipment can damage your vehicle and the damage wouldn't be covered by your warranty. Some add-on electrical equipment can keep other components from working as they should. Your vehicle has an air bag system. Before attempting to add anything electrical to your vehicle, see "Servicing Your Air Bag-Equipped Vehicle" in the Index.

#### Windshield Wiper Fuses

The windshield wiper motor is protected by a circuit breaker and a fuse. If the motor overheats due to heavy snow, etc., the wiper will stop until the motor cools. If the overload is caused by some electrical problem and not snow, etc., be sure to get it fixed.

#### **Fuses and Circuit Breakers**

The wiring circuits in your vehicle are protected from short circuits by fuses, circuit breakers and thermal links in the wiring itself. This greatly reduces the chance of fires caused by electrical problems.

Look at the silver-colored band inside the fuse. If the band is broken or melted, replace the fuse. Be sure you replace a bad fuse with a new fuse of the correct amperage. If you ever have a problem on the road and don't have a spare fuse, you can borrow one. Just pick some feature of your vehicle that you can get along without -- like the radio or cigarette lighter -- and use its fuse, if it is the size you need. Replace it as soon as you can. Before replacing a fuse, turn every vehicle electrical switch off.

There are two fuse blocks in your vehicle: the engine compartment fuse block and the instrument panel fuse block.

#### **Instrument Panel Fuse Block**

This fuse box is under the left side of the instrument panel. To open it, squeeze the short sides and pull off the cover. The fuses protect each separate circuit including the headlamps. If you have an electrical failure, check here first.



#### Fuse Usage

- 1 Left Headlamp, High-Beam Indicator
- 2 Right Headlamp
- 3 Parking Lamps, Sidemarker Lamps, License Plate Lamps, Instrument Cluster Lights

Fuse	Usage
4	Door Lock System (If Equipped)
5	Hazard Lamps, Horn
6	Ignition System, Gages, Warning and Indicator Lights, Automatic Transaxle Speed Sensor
7	Heater, Air Conditioning (If Equipped)
8	Stoplamps
9	Lighter, Radio
10	Back-Up Lamps, Turn Signal Lamps
11	Rear Defogger (If Equipped)
12	Front and Rear Wiper/Washer
13	Not Used
14	Not Used
15	Not Used

#### **Engine Compartment Fuse Block**



The main fuse box is in your engine compartment on the driver's side.

For access to the main fuses, squeeze the tabs on the sides and pull off the cover.



Fuse	Usage
BATT	All Electrical Load
ABS	ABS System
IG	Accessory, Ignition, Windshield Wipers, Defrost/Defog, Heater, Back-Up Lamps
LAMP	Taillamps, Stoplamps, Hazard, Headlamps
PTC	PTC Heater
FI	Fuel Injection
RDTR	Radiator Fan Motor
A/C	Air Conditioner

## **Replacement Bulbs**

Lamps	Bulb Number
Back-Up	921
_	GM Part No. 96059983
	or equivalent
Center High-Mounted Stoplan	np 921
	GM Part No. 96059983
	or equivalent
*Dome	GM Part No. 94153335
Front Parking and Sidemarker	168
	GM Part No. 96053293
	or equivalent
Headlamp (Halogen) G	GM Part No. 9441731 or
	GM Part No. 91171148
	or equivalent
*License Plate	168
Rear Sidemarker	194
Rear Stop/Tail	1157
Turn Signal and Hazard (Front	

\*For information on these bulbs, contact your Chevrolet dealer's service department.

## **Capacities and Specifications**

The following approximate capacities are given in U.S. and metric conversions. Please refer to "Recommended Fluids and Lubricants" in the Index for more information.

Automatic Transaxle
Drain and Refill 1.6 quarts (1.5 L)**
Manual Transaxle 2.5 quarts (2.4 L)**
Cooling System
Automatic Transaxle
VIN Engine Code 2 5.0 quarts (4.7 L)
Manual Transaxle
VIN Engine Code 6 4.1 quarts (3.9 L)
VIN Engine Code 2 4.9 quarts (4.6 L)
Crankcase
(With Filter Change) 3.5 quarts (3.3 L)*
<b>Fuel Tank</b> 10.3 U.S. gallons (39.0 L)
<b>Wheel Nut Torque</b> 45 lb-ft (60 N·m)
Air Conditioning <sup>†</sup> See the refrigerant
information label under the hood.

\*When changing the oil filter, additional oil may be needed. Recheck the oil level after filling. See "Engine Oil" in the Index.

\*\*Recheck the fluid level after filling. See "Automatic Transaxle Fluid" or "Manual Transaxle Fluid" in the Index.

## **Engine Specifications**

#### Туре

VIN Engine Code 6 L3
VIN Engine Code 2 L4
Firing Order
VIN Engine Code 6 1-3-2
VIN Engine Code 2 1-3-4-2
Horsepower
VIN Engine Code 6 55 hp @ 5700 rpm
VIN Engine Code 2 79 hp @ 6000 rpm
Fuel Delivery Fuel Injection
Piston Displacement
VIN Engine Code 6 61 CID (1.0L)
VIN Engine Code 2 79 CID (1.3L)
Valve Arrangement In-Head

## **Normal Maintenance Replacement Parts**

· · · · · · · · · · · · · · · · · · ·
Air Cleaner Filter AC Type A1203C
Battery 26R-50S
Engine Oil Filter AC Type PF53
Fuel Filter GM Part No. 96068664
or equivalent
PCV Valve GM Part No. 96051849
Radiator Pressure Cap 13 psi (90 kPa)
Spark Plugs
1.0L L3 Engine AC Type R42XLS
0.039 to 0.045 inch gap (1.0 to 1.1 mm)
1.3L L4 Engine NGK Type BKR6E11
0.039 to 0.045 inch gap (1.0 to 1.1 mm)
1.3L L4 Engine Denso Type K20PR-U11
0.039 to 0.045 inch gap (1.0 to 1.1 mm)

#### **Vehicle Dimensions**

#### Length

Coupe 149.4 inches (379.0 cm)	
Sedan 164.0 inches (417.0 cm)	
Width	
Coupe	
Sedan	
Height	
Coupe 54.7 inches (139.0 cm)	
Sedan 55.4 inches (140.0 cm)	

# Wheelbase Coupe 93.1 inches (237.0 cm) Sedan 93.1 inches (237.0 cm) Front Tread Coupe 54.5 inches (138.0 cm) Sedan 54.5 inches (138.0 cm) Sedan 54.5 inches (138.0 cm) Rear Tread 53.5 inches (136.0 cm) Sedan 53.5 inches (136.0 cm)

# Section 7 Maintenance Schedule

This section covers the maintenance required for your vehicle. Your vehicle needs these services to retain its safety, dependability and emission control performance.

- 7-2 Introduction
- 7-4 Part A: Scheduled Maintenance Services
- 7-8 Short Trip/City Scheduled Maintenance
- 7-26 Long Trip/Highway Scheduled Maintenance
- 7-38 Part B: Owner Checks and Services
- 7-42 Part C: Periodic Maintenance Inspections
- 7-44 Part D: Recommended Fluids and Lubricants
- 7-46 Part E: Maintenance Record




Have you purchased the GM Protection Plan? The Plan supplements your new vehicle warranties. See your Warranty and Owner Assistance booklet, or your dealer for details.

### Introduction

#### Your Vehicle and the Environment

Proper vehicle maintenance not only helps to keep your vehicle in good working condition, but also helps the environment. All recommended maintenance procedures are important. Improper vehicle maintenance can even affect the quality of the air we breathe. Improper fluid levels or the wrong tire inflation can increase the level of emissions from your vehicle. To help protect our environment, and to keep your vehicle in good condition, please maintain your vehicle properly.

#### **Maintenance Requirements**

Maintenance intervals, checks, inspections and recommended fluids and lubricants as prescribed in this manual are necessary to keep your vehicle in good working condition. Any damage caused by failure to follow recommended maintenance may not be covered by warranty.

#### How This Section is Organized

This maintenance schedule is divided into five parts:

**"Part A: Scheduled Maintenance Services"** shows what to have done and how often. Some of these services can be complex, so unless you are technically qualified and have the necessary equipment, you should let your dealer's service department or another qualified service center do these jobs.

# <u> CAUTION:</u>

Performing maintenance work on a vehicle can be dangerous. In trying to do some jobs, you can be seriously injured. Do your own maintenance work only if you have the required know-how and the proper tools and equipment for the job. If you have any doubt, have a qualified technician do the work.

If you want to get the service information, see "Service and Owner Publications" in the Index.

**"Part B: Owner Checks and Services"** tells you what should be checked and when. It also explains what you can easily do to help keep your vehicle in good condition.

**"Part C: Periodic Maintenance Inspections"** explains important inspections that your dealer's service department or another qualified service center should perform.

**"Part D: Recommended Fluids and Lubricants"** lists some recommended products necessary to help keep your vehicle properly maintained. These products, or their equivalents, should be used whether you do the work yourself or have it done.

**"Part E: Maintenance Record"** is a place for you to record and keep track of the maintenance performed on your vehicle. Keep your maintenance receipts. They may be needed to qualify your vehicle for warranty repairs.

### Part A: Scheduled Maintenance Services

#### **Using Your Maintenance Schedule**

We at General Motors want to help you keep your vehicle in good working condition. But we don't know exactly how you'll drive it. You may drive very short distances only a few times a week. Or you may drive long distances all the time in very hot, dusty weather. You may use your vehicle in making deliveries.

Or you may drive it to work, to do errands or in many other ways.

Because of all the different ways people use their vehicles, maintenance needs vary. You may need more frequent checks and replacements. So please read the following and note how you drive. If you have any questions on how to keep your vehicle in good condition, see your dealer.

This part tells you the maintenance services you should have done and when you should schedule them. If you go to your dealer for your service needs, you'll know that GM-trained and supported service people will perform the work using genuine GM parts. The proper fluids and lubricants to use are listed in Part D. Make sure whoever services your vehicle uses these. All parts should be replaced and all necessary repairs done before you or anyone else drives the vehicle.

These schedules are for vehicles that:

- carry passengers and cargo within recommended limits. You will find these limits on your vehicle's Tire-Loading Information label. See "Loading Your Vehicle" in the Index.
- are driven on reasonable road surfaces within legal driving limits.
- use the recommended fuel. See "Fuel" in the Index.

#### **Selecting the Right Schedule**

First you'll need to decide which of the two schedules is right for your vehicle. Here's how to decide which schedule to follow:

## **Scheduled Maintenance**

#### **Short Trip/City Definition**

Follow the Short Trip/City Scheduled Maintenance if any one of these conditions is true for your vehicle:

- Most trips are less than 5 to 10 miles (8 to 16 km). This is particularly important when outside temperatures are below freezing.
- Most trips include extensive idling (such as frequent driving in stop-and-go traffic).
- Most trips are through dusty areas.
- If the vehicle is used for delivery service, police, taxi or other commercial application.

One of the reasons you should follow this schedule if you operate your vehicle under any of these conditions is that these conditions cause engine oil to break down sooner.

#### **Short Trip/City Intervals**

- **Every 3,000 Miles (5 000 km):** Engine Oil and Filter Change (or 3 months, whichever occurs first).
- Every 6,000 Miles (10 000 km): Chassis Lubrication (or 6 months, whichever occurs first). Tire Rotation.
- Every 12,000 Miles (20 000 km): Manual Transaxle Fluid Change (or 12 months, whichever occurs first).
- **Every 15,000 Miles (25 000 km):** Engine Air Cleaner Filter Inspection, if driving in dusty conditions. Valve Lash (Clearance) Adjustment (1.3L Code 2 engine only). Fuel Tank, Cap and Lines Inspection (or every 15 months, whichever occurs first).
- **Every 30,000 Miles (50 000 km):** Engine Air Cleaner Filter Replacement. Spark Plug Replacement. Ignition Coil Plug Cap Inspection (1.3L Code 2 L4 engine only) (or every 30 months, whichever occurs first). Engine Accessory Drive Belt Inspection (or every 24 months, whichever occurs first). Cooling System Service (or every 30 months, whichever occurs first). Fuel Tank, Cap and Lines Inspection.

#### (Continued)

## **Scheduled Maintenance**

#### **Short Trip/City Intervals**

Every 50,000 Miles (83 000 km): Automatic Transaxle Service (severe conditions only).

Every 60,000 Miles (100 000 km): Camshaft Timing Belt Inspection. Brake Fluid Service. Spark Plug Wire Replacement (or every 60 months, whichever occurs first). Wiring Harness and Connectors Inspection (or every 60 months, whichever occurs first).

Every 100,000 Miles (166 000 km): Fuel Filter Replacement. Camshaft Timing Belt Replacement.

**Every 120,000 Miles (200 000 km):** Evaporative Emissions Canister Air Suction Filter Replacement (or every 120 months, whichever occurs first).

These intervals only summarize maintenance services. Be sure to follow the complete scheduled maintenance on the following pages.

#### Long Trip/Highway Definition

Follow this scheduled maintenance *only* if none of the conditions from the Short Trip/City Scheduled Maintenance are true. Do not use this schedule if the vehicle is used for trailer towing, driven in a dusty area or used off paved roads. Use the Short Trip/City schedule for these conditions.

Driving a vehicle with a fully warmed engine under highway conditions causes engine oil to break down slower.

## **Scheduled Maintenance**

#### **Long Trip/Highway Intervals**

- Every 7,500 Miles (12 500 km): Engine Oil and Filter Change (or every 7.5 months, whichever occurs first). Chassis Lubrication (or every 12 months, whichever occurs first). Tire Rotation.
- **Every 15,000 Miles (25 000 km):** Valve Lash (Clearance) Adjustment (1.3L Code 2 engine only). Fuel Tank, Cap and Lines Inspection (or every 15 months, whichever occurs first).
- Every 30,000 Miles (50 000 km): Engine Accessory Drive Belt Inspection (or every 24 months, whichever occurs first). Cooling System Service (or every 30 months, whichever occurs first). Fuel Tank, Cap and Lines Inspection. Spark Plug Replacement. Ignition Coil Plug Cap Inspection (1.3L Code 2 L4 engine only) (or every 30 months, whichever occurs first). Engine Air Cleaner Filter Replacement. Manual Transaxle Fluid Change (or 30 months, whichever occurs first).

#### **Long Trip/Highway Intervals**

- **Every 50,000 Miles (83 000 km):** Automatic Transaxle Service (severe conditions only).
- Every 60,000 Miles (100 000 km): Camshaft Timing Belt Inspection. Spark Plug Wire Replacement (or every 60 months, whichever occurs first). Wiring Harness and Connectors Inspection (or every 60 months, whichever occurs first). Brake Fluid Service.
- **Every 100,000 Miles (166 000 km):** Fuel Filter Replacement. Camshaft Timing Belt Replacement.
- **Every 120,000 Miles (200 000 km):** Evaporative Emissions Canister Air Suction Filter Replacement (or every 120 months, whichever occurs first).

These intervals only summarize maintenance services. Be sure to follow the complete scheduled maintenance on the following pages.

The services shown in this schedule up to 100,000 miles (166 000 km) should be performed after 100,000 miles (166 000 km) at the same intervals. The service shown at 120,000 miles (200 000 km) should be performed at the same interval after 120,000 miles (200 000 km).

See "Owner Checks and Services" and "Periodic Maintenance Inspections" following.

#### **Footnotes**

<sup>†</sup> The U.S. Environmental Protection Agency or the California Air Resources Board has determined that the failure to perform this maintenance item will not nullify the emission warranty or limit recall liability prior to the completion of the vehicle's useful life. We, however, urge that all recommended maintenance services be performed at the indicated intervals and the maintenance be recorded.

# Lubricate the parking brake cable guides, underbody contact points and linkage.

+ A good time to check your brakes is during tire rotation. See "Brake System Inspection" under "Periodic Maintenance Inspections" in Part C of this schedule.

## 3,000 Miles (5 000 km)

☐ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.

### 6,000 Miles (10 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.*
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 9,000 Miles (15 000 km)

□ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.* 

DATE	
ACTUAL MILEAGE	SERVICED BY:

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## 12,000 Miles (20 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)
- ☐ Change manual transaxle fluid (or every 12 months, whichever occurs first).

### 15,000 Miles (25 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.*
- □ Inspect engine air cleaner filter if you are driving in dusty conditions. Replace filter if necessary. An Emission Control Service. (See footnote †.)
- □ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). *An Emission Control Service*.
- ☐ Inspect fuel tank, cap and lines and any hoses for damage (or every 15 months, whichever occurs first). An Emission Control Service. (See footnote †.)

DATE	
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### 18,000 Miles (30 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.*
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

## 21,000 Miles (35 000 km)

□ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.* 

## 24,000 Miles (40 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)
- Change manual transaxle fluid (or every 12 months, whichever occurs first).

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## 27,000 Miles (45 000 km)

☐ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.* 

### 30,000 Miles (50 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- ☐ Inspect engine accessory drive belts (or every 24 months, whichever occurs first). *An Emission Control Service*.
- □ Drain, flush and refill cooling system (or every 30 months, whichever occurs first). See "Engine Coolant" in the Index for what to use. Inspect hoses. Clean radiator, condenser, pressure cap and neck. Pressure test the cooling system and pressure cap.

```
An Emission Control Service. (See footnote †.)
```

☐ Replace spark plugs. An Emission Control Service.

DATE	
ACTUAL MILEAGE	SERVICED BY:

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- □ Inspect ignition coil plug cap (1.3L Code 2 L4 engine only) (or every 30 months, whichever occurs first). *An Emission Control Service. (See footnote* †.)
- □ Replace engine air cleaner filter. *An Emission Control Service.*
- □ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). *An Emission Control Service*.
- ☐ Inspect fuel tank, cap and lines and any hoses for damage, (or every 15 months, whichever occurs first). *An Emission Control Service. (See footnote* †.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 33,000 Miles (55 000 km)

□ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.

DATE	
ACTUAL MILEAGE	SERVICED BY:

## 36,000 Miles (60 000 km)

- ☐ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)
- Change manual transaxle fluid (or every 12 months, whichever occurs first).

### 39,000 Miles (65 000 km)

□ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.

### 42,000 Miles (70 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

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### 45,000 Miles (75 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.
- ☐ Inspect engine air cleaner filter if you are driving in dusty conditions. Replace filter if necessary. An Emission Control Service. (See footnote †.)
- □ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). *An Emission Control Service*.
- ☐ Inspect fuel tank, cap and lines and any hoses for damage, (or every 15 months, whichever occurs first). *An Emission Control Service. (See footnote* †.)

### 48,000 Miles (80 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)
- □ Change manual transaxle fluid (or every 12 months, whichever occurs first).

DATE	
ACTUAL MILEAGE	SERVICED BY:

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## 50,000 Miles (83 000 km)

- ☐ Change automatic transaxle fluid and filter if the vehicle is mainly driven under one or more of these conditions:
  - In heavy city traffic where the outside temperature regularly reaches 90°F (32°C) or higher.
  - In hilly or mountainous terrain.
  - Uses such as found in taxi, police or delivery service.

If you do not use your vehicle under any of these conditions, the fluid and filter do not require changing.

### 51,000 Miles (85 000 km)

☐ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.

### 54,000 Miles (90 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

DATE	
ACTUAL MILEAGE	SERVICED BY:

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### 57,000 Miles (95 000 km)

☐ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.

### 60,000 Miles (100 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- ☐ Inspect engine accessory drive belts (or every 24 months, whichever occurs first). An Emission Control Service.

□ Inspect camshaft timing belt. An Emission Control Service. (See footnote †.)

□ Drain, flush and refill cooling system (or every 30 months, whichever occurs first). See "Engine Coolant" in the Index for what to use. Inspect hoses. Clean radiator, condenser, pressure cap and neck. Pressure test the cooling system and pressure cap.

An Emission Control Service. (See footnote †.)

□ Replace spark plugs. An Emission Control Service. DATE
ACTUAL
MILEAGE
SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

(Continued)

#### 60,000 Miles (100 000 km) (Continued)

- ☐ Inspect ignition coil plug cap (1.3L Code 2 L4 engine only) (or every 30 months, whichever occurs first). *An Emission Control Service*.
- □ Replace spark plug wires (or every 60 months, whichever occurs first). *An Emission Control Service*.
- □ Inspect the underhood wiring harness for loose connections, chafed wires and damage (or every 60 months, whichever occurs first). *An Emission Control Service. (See footnote* †.)
- □ Drain, refill and bleed the brake system.
- □ Replace engine air cleaner filter. An Emission Control Service.
- ☐ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). *An Emission Control Service.*
- □ Inspect fuel tank, cap and lines and any hoses for damage (or every 15 months, whichever occurs first).
   An Emission Control Service. (See footnote <sup>†</sup>.)
- □ Change manual transaxle fluid (or every 12 months, whichever occurs first).
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 63,000 Miles (105 000 km)

☐ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.

### 66,000 Miles (110 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.*
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 69,000 Miles (115 000 km)

□ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.* 

DATE	
ACTUAL MILEAGE	SERVICED BY:

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## 72,000 Miles (120 000 km)

- ☐ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.*
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)
- Change manual transaxle fluid (or every 12 months, whichever occurs first).

### 75,000 Miles (125 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.*
- □ Inspect engine air cleaner filter if you are driving in dusty conditions. Replace filter if necessary. An Emission Control Service. (See footnote †.)
- □ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). *An Emission Control Service*.
- □ Inspect fuel tank, cap and lines and any hoses for damage (or every 15 months, whichever occurs first). An Emission Control Service. (See footnote †.)

DATE	
ACTUAL MILEAGE	SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

### 78,000 Miles (130 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.*
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 81,000 Miles (135 000 km)

□ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.* 

### 84,000 Miles (140 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)
- Change manual transaxle fluid (or every 12 months, whichever occurs first).

DATE	
ACTUAL MILEAGE	SERVICED BY:

DATE	
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## 87,000 Miles (145 000 km)

☐ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.* 

## 90,000 Miles (150 000 km)

- □ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- ☐ Inspect engine accessory drive belts (or every 24 months, whichever occurs first). An Emission Control Service.
- □ Drain, flush and refill cooling system (or every 30 months, whichever occurs first). See "Engine Coolant" in the Index for what to use. Inspect hoses. Clean radiator, condenser, pressure cap and neck. Pressure test the cooling system and pressure cap.

```
An Emission Control Service. (See footnote †.)
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☐ Replace spark plugs. An Emission Control Service.

DATE	
ACTUAL MILEAGE	SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

- ☐ Inspect ignition coil plug cap (1.3L Code 2 L4 engine only) (or every 30 months, whichever occurs first). *An Emission Control Service.*
- □ Replace engine air cleaner filter. An Emission Control Service.
- □ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). *An Emission Control Service*.
- □ Inspect fuel tank, cap and lines and any hoses for damage (or every 15 months, whichever occurs first). An Emission Control Service. (See footnote †.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 93,000 Miles (155 000 km)

□ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.

DATE	
ACTUAL MILEAGE	SERVICED BY:

## 96,000 Miles (160 000 km)

- ☐ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service.*
- Lubricate chassis components (or every 6 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)
- Change manual transaxle fluid (or every 12 months, whichever occurs first).

### 99,000 Miles (165 000 km)

□ Change engine oil and filter (or every 3 months, whichever occurs first). *An Emission Control Service*.

## 100,000 Miles (166 000 km)

- □ Change automatic transaxle fluid and filter if the vehicle is mainly driven under one or more of these conditions:
  - In heavy city traffic where the outside temperature regularly reaches  $90^{\circ}F(32^{\circ}C)$  or higher.
  - In hilly or mountainous terrain.
  - Uses such as found in taxi, police or delivery service.

If you do not use your vehicle under any of these conditions, the fluid and filter do not require changing.

DAT	E	
	TUAL ÆAGE	SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

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- □ Replace fuel filter. An Emission Control Service.
- □ Replace the camshaft timing belt. An Emission Control Service.

### 120,000 Miles (200 000 km)

□ Replace evaporative emission canister air suction filter (1.3L Code 2 engine only) (or every 120 months, whichever occurs first).

DATE	
ACTUAL MILEAGE	SERVICED BY:

The services shown in this schedule up to 100,000 miles (166 000 km) should be performed after 100,000 miles (166 000 km) at the same intervals. The service shown at 120,000 miles (200 000 km) should be performed at the same interval after 120,000 miles (200 000 km).

See "Owner Checks and Services" and "Periodic Maintenance Inspections" following.

#### **Footnotes**

*† The U.S. Environmental Protection Agency or the California Air Resources Board has determined that the failure to perform this maintenance item will not nullify the emission warranty or limit recall liability prior to the completion of the vehicle's useful life. We, however, urge that all recommended maintenance services be performed at the indicated intervals and the maintenance be recorded.* 

# Lubricate the parking brake cable guides, underbody contact points and linkage.

+ A good time to check your brakes is during tire rotation. See "Brake System Inspection" under "Periodic Maintenance Inspections" in Part C of this schedule.

### 7,500 Miles (12 500 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service.*
- □ Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 15,000 Miles (25 000 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). *An Emission Control Service*.
- □ Inspect fuel tank, cap and lines and any hoses for damage (or every 15 months, whichever occurs first).
   An Emission Control Service. (See footnote <sup>†</sup>.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

DATE	
ACTUAL MILEAGE	SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

## 22,500 Miles (37 500 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service.*
- Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 30,000 Miles (50 000 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service.*
- Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)
- Inspect engine accessory drive belts (or every 24 months, whichever occurs first).
   An Emission Control Service.

□ Drain, flush and refill cooling system (or every 30 months, whichever occurs first). See "Engine Coolant" in the Index for what to use. Inspect hoses. Clean radiator, condenser, pressure cap and neck. Pressure test the cooling system and pressure cap.

An Emission Control Service. (See footnote †.)

DATE	
ACTUAL MILEAGE	SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

- □ Replace spark plugs. An Emission Control Service.
- □ Inspect ignition coil plug cap (1.3L Code 2 L4 engine only) (or every 30 months, whichever occurs first). *An Emission Control Service. (See footnote* †.)
- □ Replace engine air cleaner filter. An Emission Control Service.
- □ Change manual transaxle fluid (or every 30 months, whichever occurs first).
- □ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). *An Emission Control Service.*
- □ Inspect fuel tank, cap and lines and any hoses for damage (or every 15 months, whichever occurs first).
   An Emission Control Service. (See footnote <sup>†</sup>.)

### 37,500 Miles (62 500 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service.*
- □ Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

DATE	
ACTUAL MILEAGE	SERVICED BY:

## 45,000 Miles (75 000 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service.*
- Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). *An Emission Control Service.*
- ☐ Inspect fuel tank, cap and lines and any hoses for damage (or every 15 months, whichever occurs first). An Emission Control Service. (See footnote †.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 50,000 Miles (83 000 km)

- ☐ Change automatic transaxle fluid and filter if the vehicle is mainly driven under one or more of these conditions:
  - In heavy city traffic where the outside temperature regularly reaches  $90^{\circ}F(32^{\circ}C)$  or higher.
  - In hilly or mountainous terrain.
  - Uses such as found in taxi, police or delivery service.

If you do not use your vehicle under any of these conditions, the fluid and filter do not require changing.

DATE	
ACTUAL MILEAGE	SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

### 52,500 Miles (87 500 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service.*
- □ Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 60,000 Miles (100 000 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)
- Inspect engine accessory drive belts (or every 24 months, whichever occurs first).
   An Emission Control Service.
- □ Inspect camshaft timing belt. An Emission Control Service. (See footnote †.)

DATE	
ACTUAL MILEAGE	SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

(Continued)

#### 60,000 Miles (100 000 km) (Continued)

- □ Drain, flush and refill cooling system (or every 30 months, whichever occurs first). See "Engine Coolant" in the Index for what to use. Inspect hoses. Clean radiator, condenser, pressure cap and neck. Pressure test the cooling system and pressure cap. *An Emission Control Service. (See footnote* †.)
- □ Replace spark plugs. An Emission Control Service.
- ☐ Inspect ignition coil plug cap (1.3L Code 2 L4 engine only) (or every 30 months, whichever occurs first). *An Emission Control Service*.
- □ Replace engine air cleaner filter. *An Emission Control Service.*
- □ Change manual transaxle fluid (or every 30 months, whichever occurs first).
- □ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). *An Emission Control Service*.
- □ Inspect fuel tank, cap and lines and any hoses for damage (or every 15 months, whichever occurs first). An Emission Control Service. (See footnote †.)

- ☐ Inspect the underhood wiring harness for loose connections, chafed wires and damage (or every 60 months, whichever occurs first). *An Emission Control Service.*
- □ Replace spark plug wires (or every 60 months, whichever occurs first). *An Emission Control Service*.
- □ Drain, refill and bleed the brake system.

### 67,500 Miles (112 500 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service*.
- Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 75,000 Miles (125 000 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service*.
- □ Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). *An Emission Control Service*.

DATE	
ACTUAL MILEAGE	SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

(Continued)

#### 75,000 Miles (125 000 km) (Continued)

☐ Inspect fuel tank, cap and lines and any hoses for damage (or every 15 months, whichever occurs first). An Emission Control Service. (See footnote †.)

□ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 82,500 Miles (137 500 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service.*
- Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 90,000 Miles (150 000 km)

- □ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service.*
- □ Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- Inspect engine accessory drive belts (or every 24 months, whichever occurs first).
   An Emission Control Service.

DATE	
ACTUAL MILEAGE	SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

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Drain, flush and refill cooling system (or every 30 months, whichever occurs first). See "Engine Coolant" in the Index for what to use. Inspect hoses. Clean radiator, condenser, pressure cap and neck. Pressure test the cooling system and pressure cap. An Emission Control Service. (See footnote †.) □ Replace spark plugs. An Emission Control Service. □ Inspect ignition coil plug cap (1.3L Code 2 L4 engine only) (or every 30 months, whichever occurs first). An Emission Control Service. □ Replace engine air cleaner filter. An Emission Control Service. Change manual transaxle fluid (or every 30 months, whichever occurs first). □ Inspect the valve lash and adjust if necessary (1.3L Code 2 engine only). An Emission Control Service. □ Inspect fuel tank, cap and lines and any hoses for damage (or every 15 months, whichever occurs first). An Emission Control Service. (See footnote <sup>†</sup>.) Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (See footnote +.)

## 97,500 Miles (162 500 km)

- ☐ Change engine oil and filter (or every 7.5 months, whichever occurs first). *An Emission Control Service.*
- Lubricate chassis components (or every 12 months, whichever occurs first). (See footnote #.)
- □ Rotate tires. See "Tire Inspection and Rotation" in the Index for proper rotation pattern and additional information. (*See footnote* +.)

### 100,000 Miles (166 000 km)

- □ Change automatic transaxle fluid and filter if the vehicle is mainly driven under one or more of these conditions:
  - In heavy city traffic where the outside temperature regularly reaches  $90^{\circ}F(32^{\circ}C)$  or higher.
  - In hilly or mountainous terrain.
  - Uses such as found in taxi, police or delivery service.

If you do not use your vehicle under any of these conditions, the fluid and filter do not require changing.

- □ Replace fuel filter. An Emission Control Service.
- □ Replace the camshaft timing belt. An Emission Control Service.

DATE	
ACTUAL MILEAGE	SERVICED BY:

DATE	
ACTUAL MILEAGE	SERVICED BY:

### 120,000 Miles (200 000 km)

□ Replace evaporative emissions canister air suction filter (1.3L Code 2 engine only) (or every 120 months, whichever occurs first).

DATE	
ACTUAL MILEAGE	SERVICED BY:
# Part B: Owner Checks and Services

Listed in this part are owner checks and services which should be performed at the intervals specified to help ensure the safety, dependability and emission control performance of your vehicle.

Be sure any necessary repairs are completed at once. Whenever any fluids or lubricants are added to your vehicle, make sure they are the proper ones, as shown in Part D.

### **At Each Fuel Fill**

It is important for you or a service station attendant to perform these underhood checks at each fuel fill.

### **Engine Oil Level Check**

Check the engine oil level and add the proper oil if necessary. See "Engine Oil" in the Index for further details.

### **Engine Coolant Level Check**

Check the engine coolant level and add the proper coolant mixture if necessary. See "Engine Coolant" in the Index for further details.

#### Windshield Washer Fluid Level Check

Check the windshield washer fluid level in the windshield washer tank and add the proper fluid if necessary. See "Windshield Washer Fluid" in the Index for further details.

#### **Hood Latch Operation Check**

Pull the primary hood latch release handle inside the vehicle. The secondary latch should keep the hood from opening all the way when the primary latch is released. Make sure the hood closes firmly. See "Hood Release" in the Index for further details.

### At Least Once a Month

### **Tire Inflation Check**

Make sure tires are inflated to the correct pressures. Don't forget to check your spare tire. See "Tires" in the Index for further details.

#### **Cassette Deck Service**

Clean cassette deck. Cleaning should be done every 50 hours of tape play. See "Audio Systems" in the Index for further details.

### At Least Twice a Year

#### **Restraint System Check**

Make sure the safety belt reminder light and all your belts, buckles, latch plates, retractors and anchorages are working properly. Look for any other loose or damaged safety belt system parts. If you see anything that might keep a safety belt system from doing its job, have it repaired. Have any torn or frayed safety belts replaced.

Also look for any opened or broken air bag coverings, and have them repaired or replaced. (The air bag system does not need regular maintenance.)

#### Wiper Blade Check

Inspect wiper blades for wear or cracking. Replace blade inserts that appear worn or damaged or that streak or miss areas of the windshield. Also see "Wiper Blades, Cleaning" in the Index.

#### Weatherstrip Lubrication

Silicone grease on weatherstrips will make them last longer, seal better, and not stick or squeak. Apply silicone grease with a clean cloth. During very cold, damp weather more frequent application may be required. (See "Recommended Fluids and Lubricants" in the Index.)

### **Fluid Level Check**

Check the automatic or manual transaxle fluid level and add as needed. See "Automatic Transaxle" or "Manual Transaxle" in the Index. Check for leaks. A fluid loss in these systems could indicate a problem. Have the system inspected and repaired at once.

### At Least Once a Year

### Key Lock Cylinders Service

Lubricate the key lock cylinders with the lubricant specified in Part D.

#### **Body Lubrication Service**

Lubricate all body door hinges. Also lubricate all hinges and latches, including those for the hood, rear compartment and any folding seat hardware. Part D tells you what to use. More frequent lubrication may be required when exposed to a corrosive environment.

#### **Starter Switch Check**

# **A** CAUTION:

When you are doing this check, the vehicle could move suddenly. If it does, you or others could be injured. Follow the steps below.

- 1. Before you start, be sure you have enough room around the vehicle.
- Firmly apply both the parking brake (see "Parking Brake" in the Index if necessary) and the regular brake.
  NOTE: Do not use the accelerator pedal, and be ready to turn off the engine immediately if it starts.
- 3. On automatic transaxle vehicles, try to start the engine in each gear. The starter should work only in PARK (P) or NEUTRAL (N). If the starter works in any other position, your vehicle needs service.

On manual transaxle vehicles, put the shift lever in NEUTRAL (N), push the clutch down halfway and try to start the engine. The starter should work only when the clutch is pushed down all the way to the floor. If the starter works when the clutch isn't pushed all the way down, your vehicle needs service.

#### Automatic Transaxle Shift Lock Control System Check

# **▲ CAUTION:**

When you are doing this check, the vehicle could move suddenly. If it does, you or others could be injured. Follow the steps below.

- 1. Before you start, be sure you have enough room around the vehicle. It should be parked on a level surface.
- 2. Firmly apply the parking brake (see "Parking Brake" in the Index if necessary).

NOTE: Be ready to apply the regular brake immediately if the vehicle begins to move.

3. With the engine off, turn the key to the ON position, but don't start the engine. Without applying the regular brake, try to move the shift lever out of PARK (P) with normal effort. If the shift lever moves out of PARK (P), your vehicle needs service.

#### Ignition Automatic Transaxle Lock Check

While parked, and with the parking brake set, try to turn the ignition key to LOCK in each shift lever position.

- The key should turn to LOCK only when the shift lever is in PARK (P).
- The key should come out only in LOCK.

#### Parking Brake and Automatic Transaxle PARK (P) Mechanism Check

# **A** CAUTION:

When you are doing this check, your vehicle could begin to move. You or others could be injured and property could be damaged. Make sure there is room in front of your vehicle in case it begins to roll. Be ready to apply the regular brake at once should the vehicle begin to move. Park on a fairly steep hill, with the vehicle facing downhill. Keeping your foot on the regular brake, set the parking brake.

- To check the parking brake's holding ability: With the engine running and transaxle in NEUTRAL (N), slowly remove foot pressure from the regular brake pedal. Do this until the vehicle is held by the parking brake only.
- To check the PARK (P) mechanism's holding ability: With the engine running, shift to PARK (P). Then release the parking brake followed by the regular brake.

#### **Underbody Flushing Service**

At least every spring, use plain water to flush any corrosive materials from the underbody. Take care to clean thoroughly any areas where mud and other debris can collect.

## Part C: Periodic Maintenance Inspections

Listed in this part are inspections and services which should be performed at least twice a year (for instance, each spring and fall). You should let your dealer's service department or other qualified service center do these jobs. Make sure any necessary repairs are completed at once.

Proper procedures to perform these services may be found in a service manual. See "Service and Owner Publications" in the Index.

### Steering, Suspension and Front-Wheel-Drive Axle Boot and Seal Inspection

Inspect the front and rear suspension and steering system for damaged, loose or missing parts, signs of wear, or lack of lubrication. Inspect power steering lines and hoses for proper hook-up, binding, leaks, cracks, chafing, etc. Check for seal leakage. Clean and then inspect the drive axle boot seals for damage, tears or leakage. Replace seals if necessary. Check final drive axle output shaft seals for leakage.

## **Exhaust System Inspection**

Inspect the complete exhaust system. Inspect the body near the exhaust system. Look for broken, damaged, missing or out-of-position parts as well as open seams, holes, loose connections or other conditions which could cause a heat build-up in the floor pan or could let exhaust fumes into the vehicle. See "Engine Exhaust" in the Index.

### **Engine Cooling System Inspection**

Inspect the hoses and have them replaced if they are cracked, swollen or deteriorated. Inspect all pipes, fittings and clamps; replace as needed. Clean the outside of the radiator and air conditioning condenser. To help ensure proper operation, a pressure test of the cooling system and pressure cap is recommended at least once a year.

### **Throttle System Inspection**

Inspect the throttle system for interference or binding, and for damaged or missing parts. Replace parts as needed. Replace any components that have high effort or excessive wear. Do not lubricate accelerator and cruise control cables.

### **Brake System Inspection**

Inspect the complete system. Inspect brake lines and hoses for proper hook-up, binding, leaks, cracks, chafing, etc. Inspect disc brake pads for wear and rotors for surface condition. Also inspect drum brake linings for wear and cracks. Inspect other brake parts, including drums, wheel cylinders, calipers, parking brake, etc. Check parking brake adjustment. You may need to have your brakes inspected more often if your driving habits or conditions result in frequent braking.

### **Clutch Release Arm Play Service**

Adjust the linkage whenever there is little or no play. Check the linkage every 7,500 miles (12 500 km) or less. The clutch play should be checked at the clutch release arm on the transaxle, not at the clutch pedal.

# Part D: Recommended Fluids and Lubricants

NOTE: Fluids and lubricants identified below by name, part number or specification may be obtained from your dealer.

USAGE	FLUID/LUBRICANT			
Engine Oil	Engine Oil with the American Petroleum Institute Certified For Gasoline Engines starburst symbol of the proper viscosity. To determine the preferred viscosity for your vehicle's engine, see "Engine Oil" in the Index.			
Engine Coolant	50/50 mixture of clean, drinkable water (preferable distilled) and good quality Ethylene Glycol Base Coolant (GM Part No. 1052753 or equivalent) conforming to GM Specification 1825M or approved recycled coolant conforming to GM Specification 1825M. See "Engine Coolant" in the Index.			

USAGE	FLUID/LUBRICANT				
Hydraulic Brake System	Delco Supreme 11 <sup>®</sup> Brake Fluid (GM Part No. 12377967 or equivalent DOT-3 Brake Fluid).				
Windshield Washer Solvent	GM Optikleen <sup>®</sup> Washer Solvent (GM Part No. 1051515) or equivalent.				
Parking Brake Cable Guides	Chassis Lubricant (GM Part No. 12377985 or equivalent) or lubricant meeting requirements of NLGI # 2, Category LB or GC-LB.				
Power Steering System	DEXRON <sup>®</sup> -III Automatic Transmission Fluid.				
Manual Transaxle	GM Goodwrench Synthetic Manual Transmission Fluid (GM Part No. 12346190 - 1 quart) or equivalent SAE 75W-85 GL-4 Gear Oil.				
Automatic Transaxle	DEXRON <sup>®</sup> -III Automatic Transmission Fluid.				

USAGE	FLUID/LUBRICANT			
Key Lock Cylinders	Multi-Purpose Lubricant, Superlube <sup>®</sup> (GM Part No. 12346241 or equivalent).			
Manual Transaxle Shift Linkage	Chassis Lubricant (GM Part No. 12377985 or equivalent) or lubricant meeting requirements of NLGI # 2, Category LB or GC-LB.			
Clutch Linkage Pivot Points	Chassis Lubricant (GM Part No. 12377985 or equivalent) or lubricant meeting requirements of NLGI # 2, Category LB or GC-LB.			
Chassis Lubrication	Chassis Lubricant (GM Part No. 12377985 or equivalent) or lubricant meeting requirements of NLGI # 2, Category LB or GC-LB.			

USAGE	FLUID/LUBRICANT			
Hood Latch Assembly and Secondary Latch	Lubriplate <sup>®</sup> Lubricant Aerosol (GM Part No. 12346293 or equivalent) or lubricant meeting requirements of NLGI # 2, Category LB or GC-LB.			
Hood and Door Hinges	Multi-Purpose Lubricant, Superlube <sup>®</sup> (GM Part No. 12346241 or equivalent).			
Weatherstrip Conditioning	Dielectric Silicone Grease (GM Part No. 12345579 or equivalent).			

# Part E: Maintenance Record

After the scheduled services are performed, record the date, odometer reading and who performed the service in the boxes provided after the maintenance interval. Any additional information from "Owner Checks and

Services" or "Periodic Maintenance" can be added on the following record pages. Also, you should retain all maintenance receipts. Your owner information portfolio is a convenient place to store them.

Maintenance Record						
TE ODOMETER READING SERVICED BY MAINTENANCE PERFORMED						
		ODOMETER				

Maintenance Record						
DATE	ODOMETER READING	SERVICED BY	MAINTENANCE PERFORMED			

Maintenance Record						
ODOMETER READING	SERVICED BY	MAINTENANCE PERFORMED				
		ODOMETER				

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# **Section 8** Customer Assistance Information

Here you will find out how to contact Chevrolet if you need assistance. This section also tells you how to obtain service publications and how to report any safety defects.

- 8-2 Customer Satisfaction Procedure
- 8-4 Customer Assistance for Text Telephone (TTY) Users
- 8-4 Customer Assistance Offices
- 8-5 GM Mobility Program for Persons with Disabilities
- 8-6 Chevrolet Roadside Assistance Program
- 8-7 Canadian Roadside Assistance
- 8-8 Courtesy Transportation

- 8-9 Warranty Information
- 8-10 Reporting Safety Defects to the United States Government
- 8-10 Reporting Safety Defects to the Canadian Government
- 8-11 Reporting Safety Defects to General Motors
- 8-11 Ordering Owner Publications in Canada

## **Customer Satisfaction Procedure**



Your satisfaction and goodwill are important to your dealer and to Chevrolet. Normally, any concerns with the sales transaction or the operation of your vehicle will be resolved by your dealer's sales or service departments. Sometimes, however, despite the best intentions of all concerned, misunderstandings can occur. If your concern has not been resolved to your satisfaction, the following steps should be taken:

**STEP ONE** -- Discuss your concern with a member of dealership management. Normally, concerns can be quickly resolved at that level. If the matter has already been reviewed with the sales, service or parts manager, contact the owner of the dealership or the general manager. **STEP TWO** -- If after contacting a member of dealership management, it appears your concern cannot be resolved by the dealership without further help, contact the Chevrolet Customer Assistance Center by calling 1-800-222-1020. In Canada, contact GM of Canada Customer Communication Centre in Oshawa by calling 1-800-263-3777 (English) or 1-800-263-7854 (French).

We encourage you to call the toll-free number in order to give your inquiry prompt attention. Please have the following information available to give the Customer Assistance Representative:

- Vehicle Identification Number (This is available from the vehicle registration or title, or the plate at the top left of the instrument panel and visible through the windshield.)
- Dealership name and location
- Vehicle delivery date and present mileage

When contacting Chevrolet, please remember that your concern will likely be resolved at a dealer's facility. That is why we suggest you follow Step One first if you have a concern.

**STEP THREE** -- Both General Motors and your dealer are committed to making sure you are completely satisfied with your new vehicle. However, if you continue to remain unsatisfied after following the procedure outlined in Steps One and Two, file with the GM/BBB Auto Line Program to enforce any additional rights you may have. Canadian owners refer to your Warranty and Owner Assistance Information booklet for information on the Canadian Motor Vehicle Arbitration Plan (CAMVAP). The BBB Auto Line Program is an out of court program administered by the Council of Better Business Bureaus to settle automotive disputes regarding vehicle repairs or the interpretation of the New Vehicle Limited Warranty. Although you are required to resort to this informal dispute resolution program prior to filing any court action, use of the program is free of charge and your case will generally be heard within 40 days. If you do not agree with the decision given in your case, you may reject it and proceed with any other venue for relief available to you.

You may contact the BBB using the toll-free telephone number or write them at the following address:

BBB Auto Line Council of Better Business Bureaus, Inc. 4200 Wilson Boulevard Suite 800 Arlington, VA 22203-1804

Telephone: 1-800-955-5100

This program is available in all 50 states and the District of Columbia. Eligibility is limited by vehicle age, mileage and other factors. General Motors reserves the right to change eligibility limitations and/or discontinue its participation in this program.

# **Customer Assistance for Text Telephone (TTY) Users**

To assist customers who are deaf, hard of hearing, or speech-impaired and who use Text Telephones (TTYs), Chevrolet has TTY equipment available at its Customer Assistance Center. Any TTY user can communicate with Chevrolet by dialing: 1-800-833-CHEV (2438). (TTY users in Canada can dial 1-800-263-3830.)

# **Customer Assistance Offices**

Chevrolet encourages customers to call the toll-free number for assistance. If a U.S. customer wishes to write to Chevrolet, the letter should be addressed to Chevrolet's Customer Assistance Center.

## **United States**

Chevrolet Motor Division Chevrolet Customer Assistance Center P.O. Box 7047 Troy, MI 48007-7047

1-800-222-1020 1-800-833-2438 (For Text Telephone devices (TTYs)) Roadside Assistance: 1-800-CHEV-USA<sup>®</sup> (243-8872)

### Canada

General Motors of Canada Limited Customer Communication Centre, 163-005 1908 Colonel Sam Drive Oshawa, Ontario L1H 8P7

1-800-263-3777 (English) 1-800-263-7854 (French) 1-800-263-3830 (For Text Telephone devices (TTYs)) Roadside Assistance: 1-800-268-6800

### **All Overseas Locations**

GMODC - Customer Communication Centre 169-007 1908 Colonel Sam Drive Oshawa, Ontario L1H 8P7

Telephone:905-644-4112Fax:905-644-4866

### **Caribbean Numbers**

1-800-496-9992 (English) Puerto Rico 1-800-496-9993 (Spanish) Puerto Rico 1-800-751-4135 (English) Dominican Republic 1-800-751-4136 (Spanish) Dominican Republic 1-800-496-9994 U.S. Virgin Islands 1-800-389-0009 Bahamas 1-800-534-0122 Bermuda, Barbados, Antigua & B.V.I. If toll free service is not available in the Caribbean, call Puerto Rico 1-787-763-1315.

# **GM Mobility Program for Persons** with Disabilities



This program, available to qualified applicants, can reimburse you up to \$1,000 toward aftermarket driver or passenger adaptive equipment you may require for your vehicle (hand controls, wheelchair/scooter lifts, etc.).

This program can also provide you with free resource information, such as area driver assessment centers and mobility equipment installers. The program is available for a limited period of time from the date of vehicle purchase/lease. See your dealer for more details or call the GM Mobility Assistance Center at 1-800-323-9935. Text telephone (TTY) users, call 1-800-833-9935.

GM of Canada also has a Mobility Program. Call 1-800-GM-DRIVE (463-7483) for details. When calling from outside Canada, please dial 1-905-644-3063. All TTY users call 1-800-263-3830.

## **Chevrolet Roadside Assistance Program**



To enhance Chevrolet's strong commitment to customer satisfaction, Chevrolet is excited to announce the establishment of the Chevrolet Roadside Assistance Center. As the owner of a 2000 Chevrolet, membership in Roadside Assistance is free.

Roadside Assistance is available 24 hours a day, 365 days a year, by calling 1-800-CHEV-USA (243-8872). This toll-free number will provide you over-the-phone roadside assistance with minor mechanical problems. If your problem cannot be resolved over the phone, our advisors have access to a nationwide network of dealer recommended service providers. Roadside membership is free; however some services may incur costs.

Roadside offers two levels of service to the customer, *Basic Care* and *Courtesy Care*:

- Toll-free number, 1-800-CHEV-USA (243-8872)
- Free towing for warranty repairs
- Basic over-the-phone technical advice
- Available dealer services at reasonable costs (i.e., wrecker services, locksmith/key service, glass repair, etc.)

### ROADSIDE Courtesy Care PROVIDES:

- Roadside *Basic Care* services (as outlined previously) Plus:
- FREE Non-Warranty Towing (to the closest dealer from a legal roadway)
- FREE Locksmith/Key Service (when keys are lost on the road or locked inside)
- FREE Flat Tire Service (spare installed on the road)
- FREE Jump Start (at home or on the road)
- FREE Fuel Delivery (\$5 of fuel delivered on the road)

Chevrolet offers Courtesy Transportation for customers needing warranty service. Courtesy Transportation will be offered in conjunction with the coverage provided by the Bumper-to-Bumper New Vehicle Limited Warranty to eligible purchasers of 2000 Chevrolet passenger cars and light duty trucks. (Please see your selling dealer for details.)

Note: *Courtesy Care* is available to retail and retail lease customers operating 2000 and newer Chevrolet vehicles for a period of 3 years/36,000 miles (60 000 km), whichever occurs first. All *Courtesy Care* services must be pre-arranged by Chevrolet Roadside or dealer service management.

*Basic Care* and *Courtesy Care* are not part of or included in the coverage provided by the New Vehicle Limited Warranty. Chevrolet reserves the right to modify or discontinue *Basic Care* and *Courtesy Care* at any time.

For complete program details, see your Chevrolet dealer to obtain a Roadside Assistance Center brochure.

The Roadside Assistance Center uses companies that will provide you with quality and priority service. When roadside services are required, our advisors will explain any payment obligations that may be incurred for utilizing outside services. For prompt assistance when calling, please have the following available to give to the advisor:

- Vehicle Identification Number (VIN)
- License plate number
- Vehicle color
- Vehicle location
- Telephone number where you can be reached
- Vehicle mileage
- Description of problem

Please refer to the Roadside Assistance brochure inside your owner information portfolio for full program details.

### **Canadian Roadside Assistance**

Vehicles purchased in Canada have an extensive Roadside Assistance program accessible from anywhere in Canada or the United States. Please refer to the separate brochure provided by the dealer or call 1-800-268-6800 for emergency services.

# **Courtesy Transportation**

Chevrolet has always exemplified quality and value in its offering of motor vehicles. To enhance your ownership experience, we and our participating dealers are proud to offer Courtesy Transportation, a customer support program for new vehicles.

The Courtesy Transportation program is offered to retail purchase/lease customers in conjunction with the Bumper-to-Bumper coverage provided by the New Vehicle Limited Warranty. Several transportation options are available when warranty repairs are required. This will reduce your inconvenience during warranty repairs.

### **Plan Ahead When Possible**

When your vehicle requires warranty service, you should contact your dealer and request an appointment. By scheduling a service appointment and advising your service consultant of your transportation needs, your dealer can help minimize your inconvenience. If your vehicle cannot be scheduled into the service department immediately, keep driving it until it can be scheduled for service, unless, of course, the problem is safety-related. If it is, please call your dealership, let them know this, and ask for instructions. If the dealer requests that you simply drop the vehicle off for service, you are urged to do so as early in the work day as possible to allow for same day repair.

### **Transportation Options**

Warranty service can generally be completed while you wait. However, if you are unable to wait Chevrolet helps minimize your inconvenience by providing several transportation options. Depending on the circumstances, your dealer can offer you one of the following:

#### **Shuttle Service**

Participating dealers can provide you with shuttle service to get you to your destination with minimal interruption of your daily schedule. This includes a one way shuttle ride to a destination up to 10 miles from the dealership.

### **Public Transportation or Fuel Reimbursement**

If your vehicle requires overnight warranty repairs, reimbursement up to \$30 per day (five days maximum) may be available for the use of public transportation such as taxi or bus. In addition, should you arrange transportation through a friend or relative, reimbursement for reasonable fuel expenses up to \$10 per day (five day maximum) may be available. Claim amounts should reflect actual costs and be supported by original receipts.

#### **Courtesy Rental Vehicle**

When your vehicle is unavailable due to overnight warranty repairs, your dealer may arrange to provide you with a courtesy rental vehicle or reimburse you for a rental vehicle you obtained, at actual cost, up to a maximum of \$30.00 per day supported by receipts. This requires that you sign and complete a rental agreement and meet state, local and rental vehicle provider requirements. Requirements vary and may include minimum age requirements, insurance coverage, credit card, etc. You are responsible for fuel usage charges and may also be responsible for taxes, levies, usage fees, excessive mileage or rental usage beyond the completion of the repair.

Generally it is not possible to provide a like-vehicle as a courtesy rental.

### **Additional Program Information**

Courtesy Transportation is available during the Bumper-to-Bumper warranty coverage period, but it *is not* part of the New Vehicle Limited Warranty. A separate booklet entitled "Warranty and Owner Assistance Information" furnished with each new vehicle provides detailed warranty coverage information. Courtesy Transportation is available only at participating dealers and all program options, such as shuttle service, may not be available at every dealer. Please contact your dealer for specific information about availability. All Courtesy Transportation arrangements will be administered by appropriate dealer personnel.

**Canadian Vehicles:** For warranty repairs during the Complete Vehicle Coverage period of the General Motors of Canada New Vehicle Limited Warranty, alternative transportation may be available under the Courtesy Transportation Program. Please consult your dealer for details.

General Motors reserves the right to unilaterally modify, change or discontinue Courtesy Transportation at any time and to resolve all questions of claim eligibility pursuant to the terms and conditions described herein at its sole discretion.

# **Warranty Information**

Your vehicle comes with a separate warranty booklet that contains detailed warranty information.

## **REPORTING SAFETY DEFECTS TO THE UNITED STATES GOVERNMENT**

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA), in addition to notifying General Motors.

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 or General Motors.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in the Washington, D.C. area) or write to:

NHTSA, U.S. Department of Transportation Washington, D.C. 20590

You can also obtain other information about motor vehicle safety from the hotline.

# **REPORTING SAFETY DEFECTS TO THE CANADIAN GOVERNMENT**

If you live in Canada, and you believe that your vehicle has a safety defect, you should immediately notify Transport Canada, in addition to notifying General Motors of Canada Limited. You may write to:

Transport Canada 330 Sparks Street Tower C Ottawa, Ontario K1A 0N5

# **REPORTING SAFETY DEFECTS TO GENERAL MOTORS**

In addition to notifying NHTSA (or Transport Canada) in a situation like this, we certainly hope you'll notify us. Please call us at 1-800-222-1020, or write:

Chevrolet Motor Division Chevrolet Customer Assistance Center P.O. Box 7047 Troy, MI 48007-7047

In Canada, please call us at 1-800-263-3777 (English) or 1-800-263-7854 (French). Or, write:

General Motors of Canada Limited Customer Communication Centre, 163-005 1908 Colonel Sam Drive Oshawa, Ontario L1H 8P7

# **Ordering Owner Publications** in Canada

Owner's manuals are available for purchase for all current and *most* past model General Motors vehicles.

The toll-free telephone number for ordering information in Canada is 1-800-668-5539.

# 2000 CHEVROLET SERVICE PUBLICATIONS ORDERING INFORMATION

The following publications covering the operation and servicing of your vehicle can be purchased by filling out the Service Publication Order Form in this book and mailing it in with your check, money order, or credit card information to Helm, Incorporated (address below.)

### **CURRENT PUBLICATIONS FOR 2000 CHEVROLET**

#### SERVICE MANUALS

Service Manuals have the diagnosis and repair information on engines, transmission, axle, suspension, brakes, electrical, steering, body, etc. RETAIL SELL PRICE: \$120.00

# TRANSMISSION, TRANSAXLE, TRANSFER CASE UNIT REPAIR MANUAL

This manual provides information on unit repair service procedures, adjustments and specifications for the 2000 GM transmissions, transaxles and transfer cases. RETAIL SELL PRICE: \$50.00

#### SERVICE BULLETINS

Service Bulletins give technical service information needed to knowledgeably service General Motors cars and trucks. Each bulletin contains instructions to assist in the diagnosis and service of your vehicle.

# PLEASE COMPLETE THE ORDER FORM SHOWN ON THE FOLLOWING PAGE AND MAIL TO:

Helm, Incorporated • P.O. Box 07130 • Detroit, MI 48207

#### **OWNER'S INFORMATION**

Owner publications are written directly for Owners and intended to provide basic operational information about the vehicle. The owner's manual will include the Maintenance Schedule for all models.

In-Portfolio: Includes a Portfolio, Owner's Manual and Warranty Booklet. RETAIL SELL PRICE: \$20.00

Without Portfolio: Owner's Manual only. RETAIL SELL PRICE: \$15.00

#### **CURRENT & PAST MODEL ORDER FORMS**

Service Publications are available for current and past model GM vehicles. To request an order form, please specify year and model name of the vehicle.

OR ORDER TOLL FREE: 1-800-551-4123

Monday-Friday 8:00 AM - 6:00 PM Eastern Time

For Credit Card Orders Only (VISA-MasterCard-Discover)

ORDER TOLL FREE (NOTE: For Credit Card Holders Only) 1-800-551-4123 (Monday-Friday 8:00 AM – 6:00 PM EST) FAX Orders Only 1-313-865-5927 Orders will be mailed within 10 days of receipt. Please allow adequate time for postal service. If further information is needed, write to the address shown below or call 1-800-551-4123. Material cannot be returned for credit without packing slip with return information within 30 days of delivery. On returns, a re-stocking fee may be applied against the original order.

PUBLICATION FORM		ITEM DESCRIPTION		VEHICLE MODEL			PRICE	TOTAL
2	NUMBER		NAME		YEAF	QTY.	EACH*	PRICE
0		Service Manual			2000		\$120.00	
0		Car & Light Truck Transmission Unit Repair			2000		\$50.00	
0		Owner's Manual In Portfolio			2000		\$20.00	
U		Owner's Manual Without Portfolio			2000		\$15.00	
G								
Μ								
	NOTE: Dealers and Companies please pro	Check or Money			TOTAL MATERIAL			
S	name of the person to whose attention the Mail completed order form to:		P Grder payable to Helm, Inc. (USA funds			Michigan Purchasers add 6% sales tax		
H				A only - do not send ca MasterCard		J.S. Order P	rocessing	\$6.00
						Canadian Po See Note Bo		
I	(CUSTOMER'S NAME) (ATTENTION)				GRAND TOTAL			
Ρ				Discover				
т	(STREET ADDRESS-NO P.O. BOX NUMBERS)		E Account Number:					
0	IN Expiration Crieck refer in your bining address is different from your shipping						g address	
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	AREA	UDE .						

GM-CHE-ORD99 \*(Prices are subject to change without notice and without incurring obligation. Allow ample time for delivery.)

Note to Canadian Customers: All listed prices are quoted in U.S. funds. Canadian residents are to make checks payable in U.S. funds. To cover Canadian postage, add \$11.50 plus the U.S. order processing.