



**2006 General Motors
Light Service Support Vehicle (LSSV),
Enhanced Mobility Package (EMP)
Owner Manual Supplement**

2006 General Motors Light Service Support Vehicle (LSSV) Military Truck Owner's Manual Supplement

Seats and Restraints Systems	1-1	Service and Appearance Care	5-1
Troop Seats.....	1-2	Fuel.....	5-3
Safety Belts.....	1-3	Checking Things Under the Hood.....	5-4
Features and Controls	2-1	Electrical System.....	5-13
Windows.....	2-2	Tires.....	5-16
Starting and Operating the Vehicle.....	2-3	Bulb Replacement	5-48
Vehicle Load Disconnect Switch.....	2-3	Vehicle Identification.....	5-50
Accessory Power 24-Volt.....	2-4	Capacities and Specifications.....	5-51
Storage Areas.....	2-5	Appearance Care.....	5-53
Gun Rack.....	2-7	Maintenance Schedule	6-1
Pioneer Tool Kit.....	2-9	Maintenance Schedule.....	6-2
Instrument Panel	3-1	Customer Assistance Information	7-1
Exterior Lamps.....	3-3	Customer Assistance Information.....	7-2
Operating Service and Blackout Lighting.....	3-6	Index	8-1
Interior Lamps.....	3-8		
Warning Lights, Gages and Indicators.....	3-9		
Driving Your Vehicle	4-1		
Your Driving, the Road and the Vehicle.....	4-2		
Towing.....	4-9		



GENERAL MOTORS, GM, the GM Emblem, CHEVROLET, the CHEVROLET Emblem, GMC, the GMC Emblem, and the names SILVERADO and SIERRA are registered trademarks of General Motors Corporation.

The information in this manual supplements the owner manual. This manual includes the latest information available at the time it was printed. We reserve the right to make changes in the product after that time without notice.

Please keep this manual with the owner manual in the vehicle, so it will be there if you ever need it while you are on the road. If you sell your vehicle, leave this manual and the owner manual with the vehicle.

Litho in USA
Part No. LSSVOM06

ii

How to Use This Manual

This supplement contains information specific to the military upfit on your vehicle. It does not explain everything you need to know about your vehicle. You must use this supplement along with your GM owner manual. Only then will you be able to properly operate and maintain your vehicle. Many people read their owner manual supplement 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 supplement, you will find that pictures and words work together to explain things quickly.

Index

A good place to look for what you need is the Index in back of the manual. It is an alphabetical list of what is in the manual, and the page number where you will find it.

©2006 General Motors Corporation. All Rights Reserved.

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 cause personal injury if you were to ignore the warning.



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 "Do not," "Do Not do this" or "Do Not let this happen."

Vehicle Damage Warnings

Also, in this supplement manual you will find notices.

Notice: These mean there is something that could damage the vehicle.

In the notice area, we tell you about something that can damage the vehicle. Many times, this damage would not be covered by the 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 the vehicle. They use the same words, CAUTION or NOTICE.

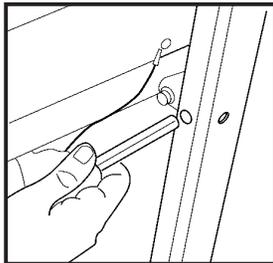
Section 1 Seats and Restraints

Troop Seats	1-2	Safety Belts	1-3
Troop Seat Operation.....	1-2	Safety Belts: They Are for Everyone.....	1-3

Troop Seats

If the vehicle is a cargo/troop carrier, it may be equipped with troop seats. They provide seating for up to eight passengers in the cargo area. The seat bottoms can be lowered individually for use or folded up to provide more cargo space. (The short box version has a one piece seat bottom) The seat bottoms lock in both the up and down positions.

Troop Seat Operation



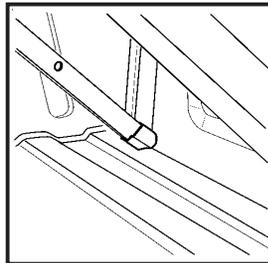
A quick-release pin is located on the left or right side of the troop seat leg immediately under the hinge pin.

When the seat is in the up position, the quick release pin will go through the left-hand leg and the right-hand leg of the seats. It will then go through the seat channel, to secure the seat bottom in the cargo or up position.

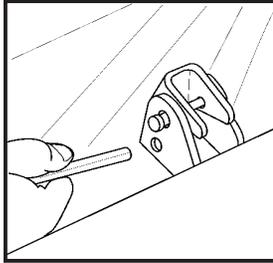


CAUTION:

A seat that is not locked into place properly can move around in a collision or sudden stop. That could cause injury to the person sitting there. Be sure to lock the seat into place properly when installing it.



1. Remove the pin and place the legs into the joint of the cargo area side and the floor.



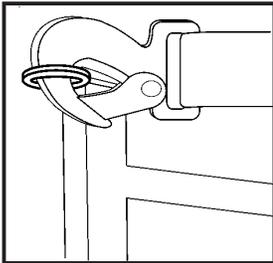
2. Place the pin in the hole provided under the hinge pin. The seat is now locked in the down position.

To return to the cargo or up position, reverse steps 1 and 2.

Safety Belts

Safety Belts: They Are for Everyone

This part of the manual tells you how to use the safety belt properly.



It is very important for rear passengers to have the safety belt attached properly. The belt may help rear passengers from being thrown out of the cargo area in a crash.

Whenever the troop seats are occupied, the safety belt must be installed.

Secure the belt across the cargo storage area by attaching the two clips on the belt to the tie-down locations on the seat backs at the rear of storage area. Be sure that the latches are in the locked position. The latches are in the locked position when they are parallel to the front and back edge of the belt clips.

Section 2 Features and Controls

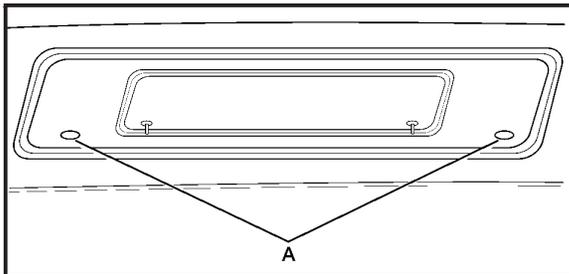
Windows	2-2	Storage Areas	2-5
Manual Windows.....	2-2	Cargo Cover.....	2-5
Side Windows.....	2-2	Rolling Up the Side Panels.....	2-5
Rear Doors.....	2-2	Storing the Cargo Cover.....	2-6
Starting and Operating Your Vehicle	2-3	Gun Rack	2-7
Starting Your Vehicle.....	2-3	Floor Mount.....	2-7
		Cab Mount.....	2-8
Vehicle Load Disconnect Switch	2-3	Pioneer Tool Kit	2-9
Accessory Power 24-Volt	2-4		

Windows

Manual Windows

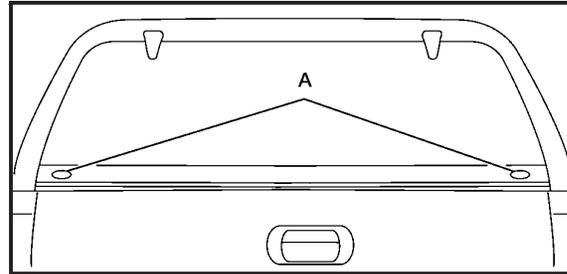
The vehicle may have this feature, a fiberglass cap. The cap has dark tinted glass, swing open side windows and a swing open rear access door. The side window handles and door handles have lock cylinders to secure them closed.

Side Windows



You will be able to open the side window by turning the window handles (A) in a clockwise direction, which will allow you to lift the window with the assistance of the struts.

Rear Doors



You will be able to open the access door by turning the door handles (A) in a counterclockwise direction, which will allow you to lift the door with the assistance of the struts.

Starting and Operating Your Vehicle

Starting Your Vehicle

The diesel engine starts differently than a gasoline engine.



CAUTION:

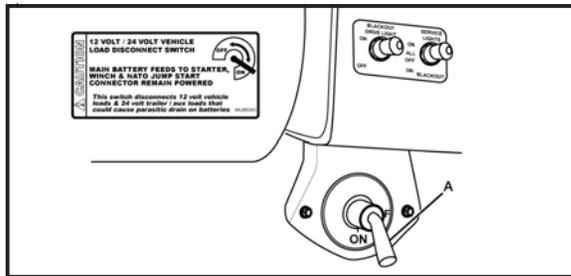
Do not use gasoline or starting "aids," such as ether, in the air intake. They could damage the engine. There could also be a fire, which could cause serious personal injury.

Refer to the 2006 Duramax Diesel Engine Owner's Manual Supplement, located in the glove compartment.

Vehicle Load Disconnect Switch

The vehicle is equipped with a load disconnect switch, the switch disconnects 12-volt vehicle loads and 24-volt trailer/aux loads that could cause a parasitic drain on the batteries.

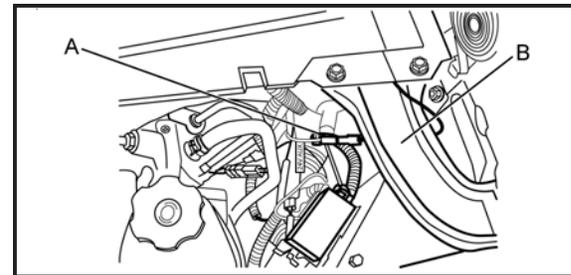
Notice: If you will not be using your vehicle for a period of 48 hours or more, you will need to place the switch in the OFF position to prevent the batteries from discharging. Continued discharging could damage the batteries. When this switch is in the OFF position the main battery feeds to the starter and NATO jump start connector remain powered.



The load disconnect switch (A) is located under the accessory panel.

The switch should be placed in the OFF position any time the expected vehicle storage time is to exceed 48 hours.

Accessory Power 24-Volt



Your vehicle may be equipped with a 24-volt Accessory Power circuit. The connector (A) is located in the engine compartment on the driver's side rear corner of the vehicle, under the fender support brace (B). The circuit is identified with a label stating 24V AUX. The circuit is protected by a 25 amp fuse. The accessory side of the connector is supplied, the terminal for that connector will be needed. Contact your GM Goodwrench® dealer for this part.

Storage Areas

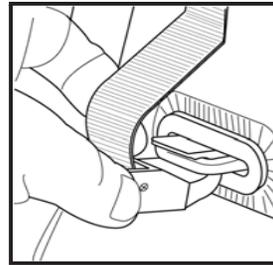
Cargo Cover

The vehicle may have this feature, a soft top cargo cover. The cargo cover is made of a waterproof, welded, plastic coated polyester. For care and cleaning of the cargo cover, see *Cargo Cover on page 5-53* under *Service and Appearance Care*. The cover must be fully installed and properly anchored before traveling on the highway.

Notice: If you raise or lower the cargo cover while the vehicle is in motion, you could damage the cover or the cover components. The repair would not be covered under your vehicle's warranty. Always put the automatic transmission in **PARK (P)** and the transfer case in a drive gear and not in **NEUTRAL** before raising or lowering the cargo cover.

The side panels and rear panel of the cargo cover can be rolled up. The cargo cover allows ventilation within the closed portion through opening vents located on the front and rear of the top.

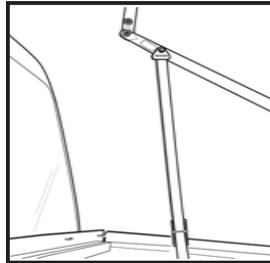
Rolling Up the Side Panels:



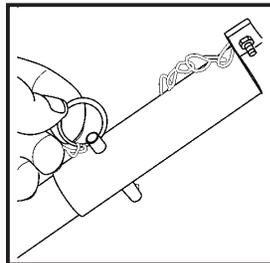
1. Release tension on the hooks by pushing the release on the front of the hook.
2. Remove the plastic hook from the bed fastener.
3. Pull apart the velcro flaps on both side panels near the vehicle cab.
4. Pull apart the velcro flaps on both side panels near the back of the vehicle.
5. Roll the side evenly upward, repeat for the other side.
6. When the sides reach the top, they can be held in place by inserting the cargo cover straps in the clips at the top of the cargo cover.

Storing the Cargo Cover:

1. Release tension on the hooks by pushing the release on the front of the hook.
2. Remove the plastic hook from the bed fastener.
3. Pull apart the velcro flaps on both side panels near the vehicle cab.
4. Pull apart the velcro flaps on both panels near the back of the vehicle.
5. Release the six cover straps, located inside the cargo box, that attach the cover to the cargo cover bows.
6. Remove the cover from the cargo cover bows.
7. Fold the cover neatly and store it behind the seat in the truck cab.

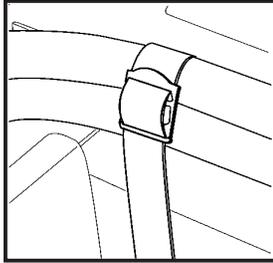


8. Release the four corner support straps.



9. Remove the six quick release pins from the sides of the cargo cover bows.

10. Stack the bows on top of each other without striking the cab or the troop seats (if equipped). Push down equally on both sides of the upper part of the front and rear bows.
11. Pull upward equally on both sides of the upper part of the center bow.
12. Standing at the rear of the vehicle, push the bows forward.



13. Secure the bows in place with the front support straps.

14. To reinstall the cargo cover, reverse Steps 1 through 13.

Note: The cargo cover is marked with the word FRONT on the inside top to aid in proper positioning of the cover onto the vehicle.

Gun Rack Floor Mount

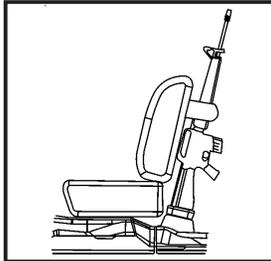


CAUTION:

If a gun is not properly stored, it could be thrown about the vehicle in a crash or sudden maneuver. You and others in the vehicle could be injured. When ever you store a gun in the vehicle, always be sure that it is stored securely in the proper location.

The gun rack is designed for secure storage and easy mounting and dismounting of the gun. The floor mount gun rack is located behind the front seats and will secure two guns.

Mounting the Gun



1. Insert the stock of the gun into the center of the lower mount. The lip of the lower mount must be fully around the stock.
2. Place the barrel into the upper mount and push until fully seated in the clamp.
3. Grasp and tug the gun up and down and side-to-side to ensure the gun is securely installed.

Cab Mount

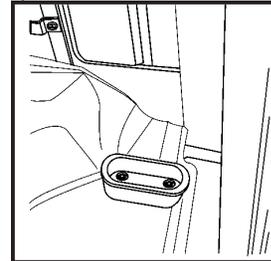


CAUTION:

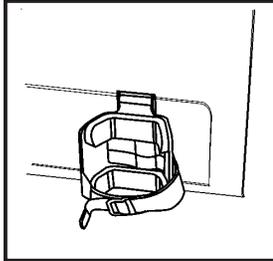
If a gun is not properly stored, it could be thrown about the vehicle in a crash or sudden maneuver. You and others in the vehicle could be injured. When ever you store a gun in the vehicle, always be sure that it is stored securely in the proper location.

The cab mounted gun racks are located at the rear of the cab and will secure one gun each.

Mounting the Gun



1. Place the stock of the gun into the center of the lower mount. The lip of the lower mount must be fully around the stock.



2. Place the barrel into the upper mount until fully seated and secure using the buckle and strap.

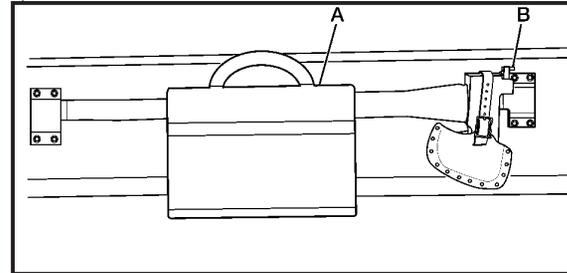
3. Grasp and tug the gun up and down and side-to-side to ensure the gun is securely installed.

Pioneer Tool Kit



CAUTION:

Improperly stored Pioneer Tool Kit could be thrown about the vehicle during a collision or sudden maneuver. You or others could be injured. If you remove the tool kit, always store it in the proper storage location. When you put it back, always be sure that is securely reattached in the mounting brackets.



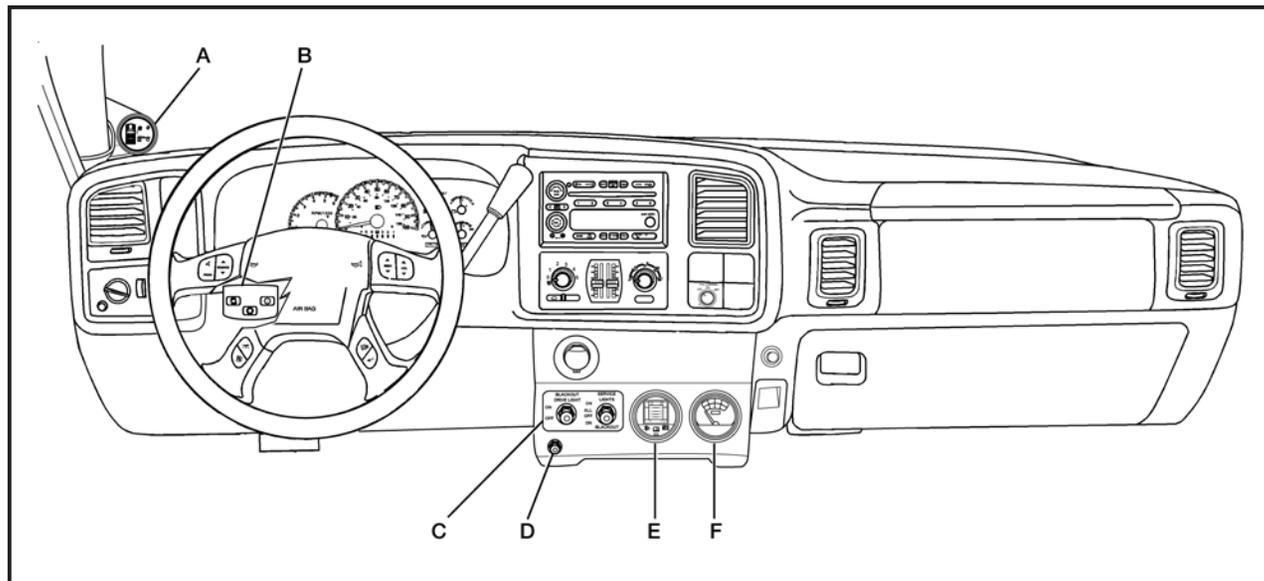
The Pioneer Tool Kit is a multi-purpose tool. It incorporates seven basic hand tools into one compact unit based on a Hudson Bay-style axe with a 36 inch handle. All of the attachments are stored in the carrying case (A) that slides onto the handle for storage. The entire unit is mounted in brackets located on the interior rear cab wall. Remove by pulling out the hitch pin (B) from the axe and lifting and sliding it off the brackets. When you are finished using the tool kit, install all tools into the storage bag. Slide the bag onto the handle, install the axe into the storage brackets, and install the hitch pin. For additional information on the usage of this tool refer to the manufacturer's instructions.

Section 3 Instrument Panel

Instrument Panel	3-2	Interior Lamps	3-8
Accessory Panel Overview.....	3-2	Topper Dome Lamp.....	3-8
Exterior Lamps	3-3	Warning Lights, Gages and Indicators	3-9
Service and Blackout Lighting.....	3-3	24-Voltmeter Gage.....	3-9
Service Lights/Blackout Control.....	3-4	Voltmeter Gage Operation.....	3-10
Blackout Drive Light Control.....	3-5	Air Filter Restriction Indicator.....	3-11
Operating Service and Blackout Lighting.....	3-6	Tire Pressure Monitor Display.....	3-11

Instrument Panel

Accessory Panel Overview



The main components of your instrument panel are the following:

- A. Tire Pressure Monitoring System Gage.
See *Tire Pressure Monitor Display* on page 5-34.
- B. Tire Pressure Monitoring System Switch Panel.
See *Tire Pressure Monitor System Switch Panel* on page 5-35.
- C. Blackout Lighting Switches. See *Exterior Lamps* on page 3-3.
- D. Topper Cap Dome Lamp Switch. See *Interior Lamps* on page 3-8.
- E. Air Filter Restriction Indicator. See *Air Filter Restriction Indicator* on page 3-11.
- F. 24-Voltmeter Gage. See *24-Voltmeter Gage* on page 3-9.

Exterior Lamps

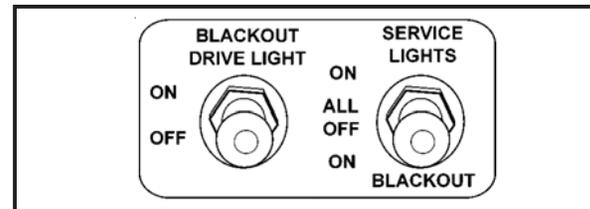
Service and Blackout Lighting

Note: Before operating the vehicle, visually inspect the exterior lighting to ensure that all lights are

operating correctly in blackout and non-blackout modes. Ensure that lights and reflectors are not obscured by dirt or have broken lenses.

The blackout driving light is mounted on the front bumper grille guard on the left side of the vehicle. The blackout marker lamps are located on the front left and right sides of the vehicle. The blackout stoplights are on the rear left and right sides of the vehicle. The military blackout lighting provides a stealthy low illumination to standard lighting systems.

Within the rear marker lamps are separate color markers. Yellow will illuminate for the brakes and red will illuminate for the drive mode. The front markers illuminate yellow.



Service Lights/Blackout Control

Notice: If the vehicle is not going to be driven for 24 hours or more, the service lights switch must be placed in the “ALL OFF” position. This will help prevent the batteries from discharging. Continued discharging could damage the batteries. Before normal driving operations, turn on service lights to ensure headlights, brake lights and turn signals are operational.

The switch located on the left side of the accessory panel is the service lights/blackout control.

With the ignition switch in the ON Position:

- Pull the switch outward then push upward to the service ON position. All normal service lamps will be operational with normal controls.
- Move the service lights/blackout switch to the center ALL OFF position. All lamps and accessory power to the vehicle will turn off.

- Move the switch to the blackout position, the following will occur:
 - The blackout lighting system will be operative.
 - The front and rear blackout marker lamps will illuminate.
 - The blackout stoplamps will illuminate when the brakes are applied.
 - The instrument panel warning lights will remain functional.
 - The hazard lights will remain functional.
 - The horn will not be functional.

The vehicle’s military 12-pin trailer wiring connector and trailer lamps are also controlled by this switch.

Blackout Drive Light Control

The switch located on the blackout switch panel next to the service light switch is the blackout drive light control.

The service lights/blackout control switch must be in blackout position or in the down position for the blackout drive lights to function.

With the ignition switch in the ON position:

- Pull the switch outward then up to the ON position, the front blackout drive lamp will activate.
- Pull the switch outward then down to the OFF position, the blackout drive lamp will deactivate.
- The switch will return to the center position automatically after you release it from either the ON or OFF position.

Operating Service and Blackout Lighting

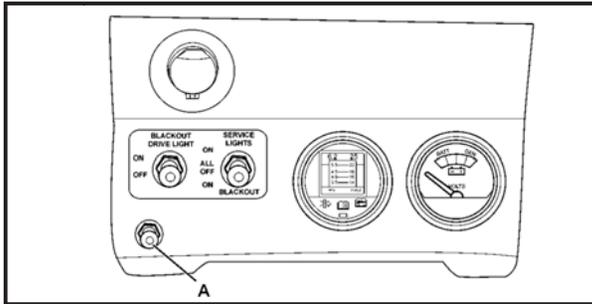
The following are function charts for the service light/blackout control switch and the conditions that cause various exterior and interior lighting functions to activate.

Exterior Lamp or Device	Service Lights/ Blackout Switch	Blackout Drive Light Switch
Headlamps and Taillamps	SERVICE ON	OFF
Parking Lamps	SERVICE ON	OFF
Front/Rear Side Marker Lamps	SERVICE ON	OFF
Marker Lamps; Roof, Fender and End Gate	SERVICE ON	OFF
Stoplamps	SERVICE ON	OFF
Back-Up Lamps	SERVICE ON	OFF
License Plate Lamps	SERVICE ON	OFF
Front/Rear Turn Signals	SERVICE ON	OFF
Hazard Warning Lamps	ALL POSITIONS	ON/OFF
Cargo Lamp (If Equipped)	SERVICE ON	OFF
Horn	SERVICE ON	OFF
Front/Rear Blackout Marker Lamps	BLACKOUT	ON/OFF
Blackout Stoplamps	BLACKOUT	ON/OFF
Blackout Drive Lamp (Headlamp)	BLACKOUT	ON

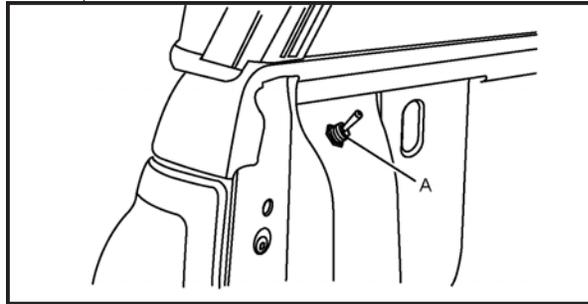
Interior Lamp or Device	Service Lights/ Blackout Switch	Blackout Drive Light Switch
Instrument Panel/Switch Illumination	SERVICE ON	OFF
Radio/Clock Illumination	SERVICE ON	OFF
Headlamp High-Beam Indicator	ALL POSITIONS	OFF
Turn Signal	SERVICE ON	OFF
Four-Wheel-Drive Indicator	ALL POSITIONS	ON/OFF
Dome/Courtesy Lamps	SERVICE ON	OFF
Glove Compartment Lamp (if equipped)	SERVICE ON	OFF
Warning Chime: Headlamps On, Instrument Cluster Warning Lights	SERVICE ON	ON/OFF
Hazard Warning Indicators	ALL POSITIONS	OFF
Tire Pressure Monitoring Gage Illumination	SERVICE ON	OFF
Topper Dome Lamp (if equipped)	SERVICE ON	ON/OFF

Interior Lamps Topper Dome Lamp

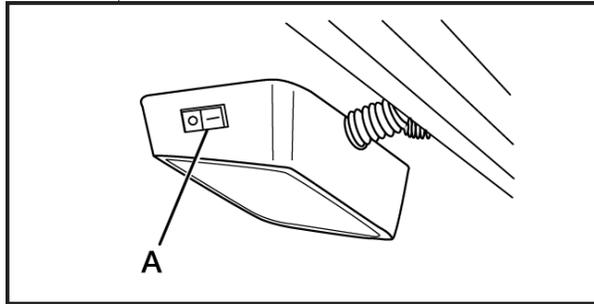
If the vehicle has this feature, a fiberglass cap, it will include a white interior illumination lamp. The lamp is located in the top center of the rear panel, above the cap rear door. Switches located in the cab and cargo area of the vehicle control the lamp. The lamp will not function when the vehicle is in blackout mode.



The interior 3-way switch (A) is located on the accessory panel.



The bed mounted 3-way switch (A) is located in the left rear of the cargo bed.



The lamp mounted override switch (A) is located on the rear center of the topper roof. If the override switch is turned OFF the following will occur:

- The interior mounted 3-way switch will not function.
- The bed mounted 3-way switch will not function.

The dome lamp will not function in the blackout mode.

Warning Lights, Gages and Indicators

This part describes the 24-voltmeter gage on your vehicle.

This gage can signal that something is wrong before it becomes serious enough to cause an expensive repair or replacement.

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 is a problem with your vehicle.

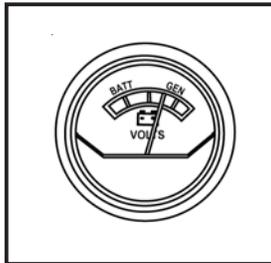
24-Voltmeter Gage

Readings in either red warning zone indicate a possible problem in the electrical system. When the engine is not running, but the ignition is in RUN, this gage shows the 24-volt battery's state of charge. When the engine is running, the gage shows the condition of the 24-volt charging system. Readings in the low warning zone may occur when a large number of electrical accessories are operating in the vehicle and the engine is left at an idle for an extended period. This condition is normal since the

charging system may not be able to provide full power at engine idle. As engine speeds are increased, this condition should correct itself because higher engine speeds allow the charging system to create maximum power. The 24-voltmeter gage is located in the lower right side of the accessory panel. The voltmeter is located in the instrument panel next to the service and blackout lighting switch.

Voltmeter Gage Operation

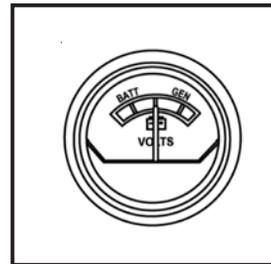
Engine Running



The gage needle should be in the green band when engine speed is above an idle. If the needle is not in the green band, the fuse element may have melted. If the fuse is not blown and the system still does not

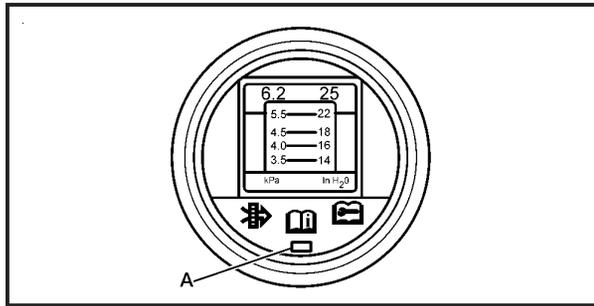
operate properly, consult your local GM Goodwrench® dealer.

Engine Off



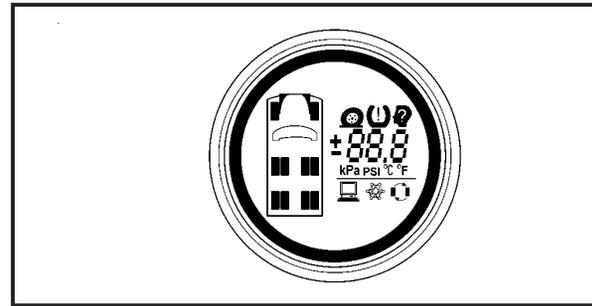
In a no load situation, with the engine off, the gage needle should be mid-way between the red band and green band, in the yellow band. If the gage needle is in the lower end of the yellow band, this is unacceptable, and the 24-volt battery may have run down.

Air Filter Restriction Indicator



If the vehicle has this feature, a gage will be located on the accessory panel. It monitors the engine air filter. As the filter gets dirty, the yellow indicator will begin to rise. When it reaches the top of the scale, the filter should be replaced. After replacing the filter, reset the gage by pressing in the yellow reset button (A) at the bottom of the gage.

Tire Pressure Monitor Display



The Tire Pressure Monitor (TPM) system uses radio and sensor technology to check tire pressure levels and temperature. If the vehicle has this feature, sensors are mounted on each tire and wheel assembly, except the spare tire. The TPM sensors transmit tire pressure and temperature readings to a receiver located in the vehicle. The TPM display is located on the lower driver side of the windshield molding. For additional information and details about the TPM operation and displays see *Tire Pressure Monitor System* on page 5-34.

Section 4 Driving Your Vehicle

Your Driving, the Road and the Vehicle	4-2	Towing	4-9
Loading the Vehicle.....	4-2	Towing Your Vehicle.....	4-9
Front Mounted Receiver.....	4-3	Trailer Connections.....	4-9
Rear Mounted Receiver.....	4-5	Pintle Hitch.....	4-9
Recovery Loops.....	4-7	Towing A Trailer.....	4-11
Enhanced Suspension System.....	4-8		
Underbody Protection.....	4-8		

Your Driving, the Road and the Vehicle

Loading the Vehicle

CAUTION:

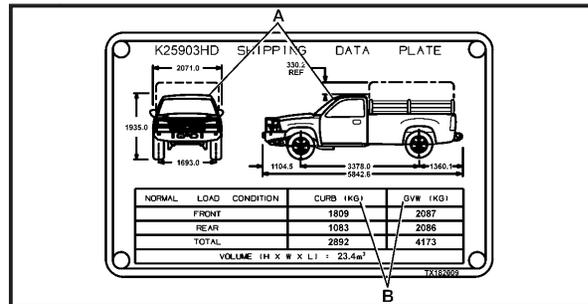
Do not load the vehicle any heavier than the GVWR, or either the maximum front or rear GAWR. If you do, parts on the vehicle can break, or it can change the way the vehicle handles. These could cause you to lose control. Also, overloading can shorten the life of the vehicle.

It is very important to know how much weight your vehicle can carry. This weight is called the vehicle capacity weight and includes the weight of all occupants, cargo and all military-installed options. The GVWR includes the weight of the vehicle, all occupants, fuel and cargo. Three labels on your vehicle show how much weight it was designed to carry and other information important to the vehicle, the Vehicle Identification label, Shipping Data Plate label and the Certification/Tire label. These labels are located on the driver's door.

Notice: Overloading your vehicle may cause damage. Repairs would not be covered by your warranty. Do not overload your vehicle.

Be sure to spread out your load equally on both sides of the center line. Refer to Loading Your Vehicle and Off-Road Driving in the 2006 Vehicle Owner Manual for more information on vehicle loading.

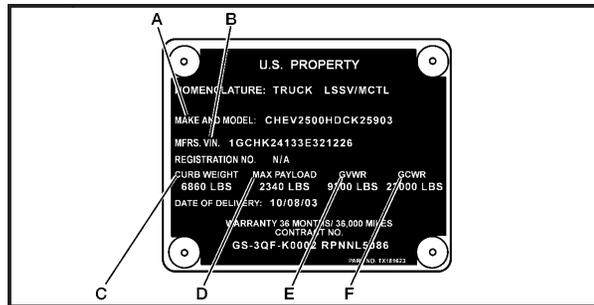
Shipping Data Label



A vehicle specific shipping data label is found on the driver's inner door panel above the vehicle identification plate. This label includes the vehicle loading curb and gross vehicle weight (GVW) (B) and

vehicle dimensions (A). For actual vehicle specifications refer to label on vehicle. The curb weight is the vehicle weight without cargo or occupants. The GVW is the total weight of the loaded vehicle. Never exceed the weights for your vehicle.

Vehicle Identification Label

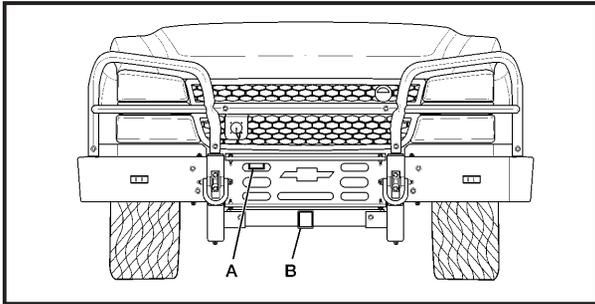


A vehicle specific vehicle identification label is found on the driver's inner door panel under the shipping data plate. This plate includes the make and model (A), manufacturer's VIN number (B), curb weight (C), maximum payload (D), Gross Vehicle Weight Rating (GVWR) (E), and Gross Combined Weight Rating (GCWR) (F). For actual vehicle specifications refer to label on vehicle.

The curb weight is the vehicle weight without cargo or occupants. The maximum payload is the maximum allowable weight of cargo and occupants the vehicle is designed to carry. The GVWR includes the weight of the vehicle, all occupants, fuel and cargo. The GCWR is the total weight of the vehicle, all occupants, fuel, cargo and trailer. Never exceed the weights for your vehicle.

Front Mounted Receiver

The vehicle may feature a front mounted receiver. You can use the receiver with a power winch platform or with other accessories. Never use the front mounted receiver to tow a trailer. Never use the front mounted receiver without the receiver extension.



The front receiver (B) is located under the front bumper. There is a winch power disconnect (A) located on the bumper near the receiver.

Connect the winch to the platform. Connect the wiring to the winch disconnect following the manufacturer's guidelines.

If you are using a winch to pull out another vehicle, follow the winch manufacturer's guidelines and observe the following to prevent damage to your vehicle:

- If possible, have your vehicle anchored from the opposite side of the winch to a solid, immovable object. When winching from the front, use both of the rear recovery loops.

- Put your transmission in NEUTRAL (N).
- Use your regular brakes to hold your vehicle in place and block the wheels to keep the vehicle from moving.

Notice: Using a power winch with the transmission in gear to pull out another vehicle may damage the transmission. When operating a power winch, always leave the transmission in NEUTRAL (N).

If you are using a winch to pull out your own vehicle, follow the winch manufacturer's guidelines for self recovery and observe the following to prevent damage to your vehicle:

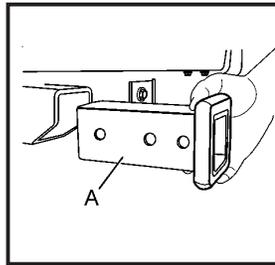
- Do not self recover your vehicle by wrapping the winch cable around an object (such as pulley block or tree) and attaching it back to your vehicle's recovery loops.
- Always attach the winch cable directly to a solid anchor directly in front of your vehicle to achieve a straight line pull.

Receiver Extension

The receiver extension must be used any time you use the front receiver.

To install the front receiver extension, do the following:

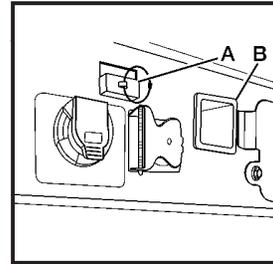
1. Remove any debris from the front receiver opening.



2. Install the extension (A) and line up the hole in the receiver with the rear hole of the extension.
3. Install the retaining pin and spring clip exactly as the pintle hitch does. Refer to *Pintle Hitch* on page 4-9.

Rear Mounted Receiver

The vehicle may feature a rear mounted receiver. You can use the receiver with a power winch platform or with other accessories. Never use the rear mounted receiver without the receiver extension.



The rear receiver (B) is located in the rear bumper. There is a winch power disconnect (A) located on the bumper near the receiver.

Connect the winch to the platform. Connect the wiring to the winch disconnect by following the manufacturer's guidelines.

If you are using a winch to pull out another vehicle, follow the winch manufacturer's guidelines and observe the following to prevent damage to your vehicle:

- If possible, have your vehicle anchored from the opposite side of the winch to a solid, immovable object. When winching from the rear, use both of the front recovery loops.

- Put your transmission in NEUTRAL (N).
- Use your regular brakes to hold your vehicle in place and block the wheels to keep the vehicle from moving.

Notice: Using a power winch with the transmission in gear to pull out another vehicle may damage the transmission. When operating a power winch, always leave the transmission in NEUTRAL (N).

If you are using a winch to pull out your own vehicle, follow the winch manufacturer's guidelines for self recovery and observe the following to prevent damage to your vehicle:

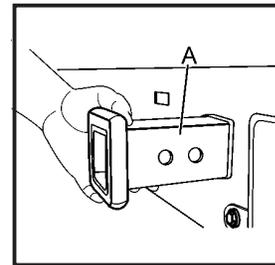
- Do not self recover your vehicle by wrapping the winch cable around an object (such as pulley block or tree) and attaching it back to your vehicle's recovery loops.
- Always attach the winch cable directly to a solid anchor directly in the rear of your vehicle to achieve a straight line pull.

Receiver Extension

The receiver extension must be used any time you use the rear receiver.

To install the rear receiver extension, do the following:

1. Remove any debris from the rear receiver opening.

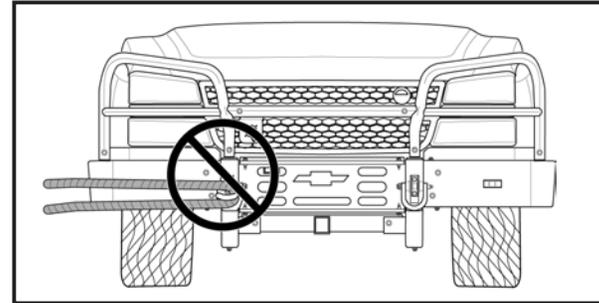
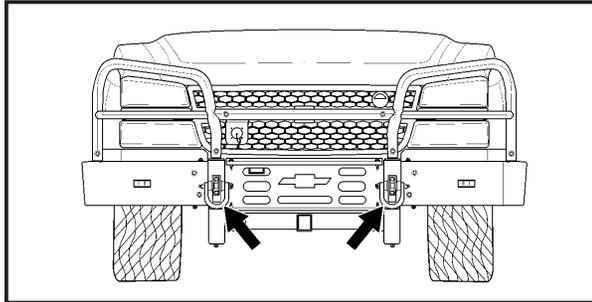


2. Install the extension (A) and line up the hole on the back side of the rear bumper with hole of the extension.

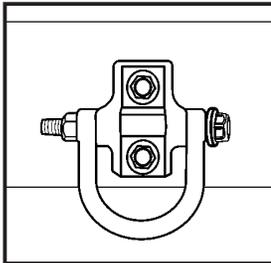
3. Install the retaining pin and spring clip exactly as the pintle hitch does. Refer to *Pintle Hitch* on page 4-9.

Recovery Loops

Front of the Vehicle



Rear of the Vehicle



The vehicle is equipped with two loops on the front and back ends of the vehicle. You may need to use them if you are stuck off-road and need to be pulled out to some place where you can continue driving. The loops meet MIL-STD-209J for the tie-down specifications and not for vehicle lifting.

CAUTION:

These loops, when used, are under a lot of force. Keep people away from the vicinity of the loops and any chains or cables during use. Always pull the vehicle straight out. Never pull on the loops at a sideways angle. The loops could break off and you or others could be injured from the chain or cable snapping back.

Notice: Never use the recovery loops to tow the vehicle. Your vehicle could be damaged and it would not be covered by warranty.

When recovering the vehicle, you should determine the direction of the recovery by the distance required to free the vehicle from the surrounding terrain. Secure the towing cable to both front or rear loops with a V-device to gain an even pull on both anchor points and avoid damage to the vehicle.

Enhanced Suspension System

The vehicle may have this feature. The enhanced suspension system is found on vehicles with option package (EMP). The enhanced suspension provides supplemental suspension modifications specially engineered for severe service on and off road. The system is comprised of a series of four specially designed and critically damped hydro/pneumatic jounce shocks in parallel with the vehicle's primary suspension for increased energy dissipation and greatly enhanced all terrain capability. The front and rear suspension is equipped with this feature. The front factory jounce bumper has been modified to work with this system. This system requires no maintenance or adjustments.

Underbody Protection

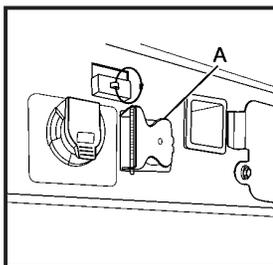
The vehicle may have this feature. To protect the underside of the vehicle, multiple skid plates have been installed. The skid plates ensure that an optimal amount of the vehicle's underside is protected from damage, but a smooth underside also assists your vehicle in sliding over obstacles it might otherwise hang up on. When in place, the multiple skid plates allow full access to maintenance items.

Towing

Towing Your Vehicle

When towing the vehicle, you should always use a properly equipped wrecker/recovery vehicle. Refer to *Towing Your Vehicle* and *Recreational Towing* in the index of the 2006 Vehicle Owners Manual for further information on towing the vehicle.

Trailer Connections



The NATO standard 12-pin trailer connector (A) is located on the rear bumper between the driver's side recovery loop and the pintle hitch. When connecting a trailer wiring harness connector to the connector, make sure the dog ears of the trailer connector are properly aligned when inserting it into the connector.

Pintle Hitch

The pintle hitch is a dual purpose hitch. It can tow trailers with either a lunnette eye or a standard coupler. The pintle upper jaw closes onto the top of the ball to allow for towing trailers with lunnette eye. The upper jaw locks into up or open position for standard coupler towing.

The pintle hitch is located at the rear of the vehicle, and is removable.

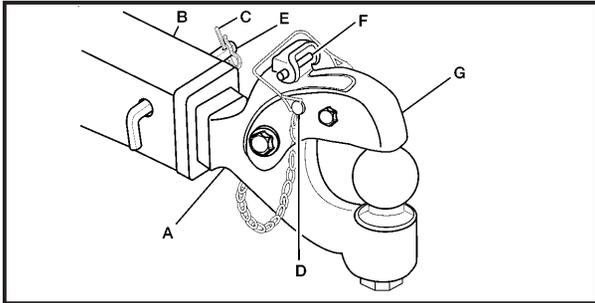


CAUTION:

Do not use the pintle hitch if it is worn, damaged or missing parts. An improperly working hitch would cause the trailer to disengage from the vehicle and cause you can lose control of the trailer. You and others could be seriously injured. Inspect the hitch before using to ensure it is in proper working condition.

Operating the Pintle Hitch:

To Open:



1. Open the latch by removing latch pin (D).
2. Pull up on the lock latch (F) while lifting the latch (G).

To Close:

1. Push the latch (G) until the lock latch (F) locks in place.
2. Install the latch pin (D).

Installing the Pintle Hitch:

1. Install the receiver extension (B).
2. Push the pintle hitch (A) into the receiver extension.
3. Install the retaining pin (E) into the receiver extension and the pintle hitch (A).
4. Install the spring clip (C) into the retaining pin (E).

Towing a Trailer

The vehicle is equipped with a class IV hitch for towing a trailer.



CAUTION:

If you do not use the correct equipment and drive properly, you can lose control when you pull a trailer. For example, if the trailer is too heavy, the brakes may not work well — or even at all. You and your passengers could be seriously injured. You may also damage your vehicle; the resulting repairs would not be covered by your warranty. Pull a trailer only if you have followed all the steps in this section. Ask your dealer for advice and information about towing a trailer with your vehicle.

You must not exceed the maximum trailer weight towing capacity for that vehicle. Refer to Towing a Trailer in the 2006 Vehicle Owner Manual for additional information.

Section 5 Service and Appearance Care

Fuel	5-3	Tire Pressure Monitor System Gage	
Using JP8 as a Fuel.....	5-3	Warning and Displays.....	5-34
Checking Things Under the Hood	5-4	Tire Pressure Monitor System	
Engine Compartment Overview.....	5-4	Switch Panel.....	5-35
Battery.....	5-5	Gage Function.....	5-35
Vehicle Storage.....	5-5	Alerts and Warnings.....	5-37
Jump Starting (12V System).....	5-5	Tire Pressure Monitor System	
Slave Starting (24V NATO Connector).....	5-10	Programming.....	5-39
Electrical System	5-13	Bulb Replacement Headlamp	5-48
Fuses and Circuit Breakers.....	5-13	Marker Lamps (Blackout).....	5-48
Blackout Lighting Relay Center.....	5-14	Vent Filters	5-49
Engine Control Module (ECM).....	5-15	Transfer Case.....	5-49
Tires	5-16	Front Axle.....	5-49
Inflation-Tire Pressure.....	5-16	Rear Axle.....	5-49
Tire Pressure Monitoring System.....	5-16		
Beadlock Wheels.....	5-16		
Removing the Spare Tire and Tools.....	5-17		
Removing the Flat Tire and			
Intalling the Spare Tire.....	5-24		
Storing a Flat or Spare Tire and Tools.....	5-33		

Section 5 Service and Appearance Care

Vehicle Identification	5-50
Shipping Data Plate.....	5-50
Government Vehicle Data Plate.....	5-50
Capacities and Specifications	5-51
Wheel Nut Torque.....	5-51
Tire Pressure - EMP Only.....	5-52
Tire Pressure Monitoring System Settings - EMP Only.....	5-57
Tire Pressure Alerts and Warnings.....	5-52
Appearance Care	5-53
Washing Your Vehicle.....	5-53
Cargo Cover.....	5-53
Seat Covers.....	5-53

Fuel

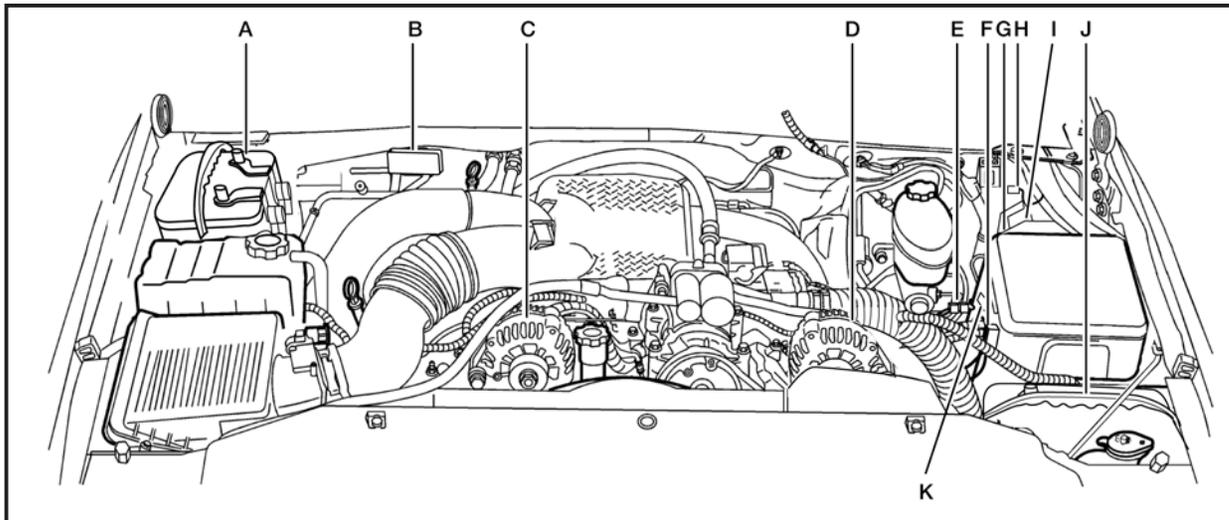
Using JP8 as a Fuel

JP8 fuel is a form of military jet fuel. Use of JP8 fuel is acceptable in DURAMAX® 6.6L diesel vehicles and will not impact warranty coverage.

For additional information on other compatible fuels, refer to the 2006 DURAMAX® Diesel Engine Owner Manual Supplement.

Checking Things Under the Hood

Engine Compartment Overview



The following items are options that may be found on the 6.6L vehicle:

- | | | |
|--------------------------------|---|--------------------------------------|
| A. 12-volt Battery | D. 12-volt Generator | H. 24-volt Accessory Power Connector |
| B. Rear Winch Feed (12V Power) | E. 24-volt Fuses | I. 24-volt 50 amp Fuse |
| C. 24-volt Generator | F. 24-volt Relay | J. 24-volt Battery |
| | G. Blackout (B/O) Lighting Relay Center | K. 12-volt 175 amp Fuse |

Battery

The vehicle may be equipped with deep cycle maintenance free batteries. When it is time for a new battery, get one that has the replacement number shown on the original battery's label. We recommend an Optima® replacement battery. See *Engine Compartment Overview on page 5-4* for battery location.

Warning: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

Note: There is also a 12-volt battery located on the frame under the vehicle on the passenger side.



CAUTION:

Batteries have acid that can burn you and gas that can explode. You can be badly hurt if you are not careful. See *Jump Starting (12V System) on page 5-5* for tips on working around a battery without getting hurt.

Vehicle Storage

If you are not going to drive your vehicle for 48 hours or more, place the vehicle load disconnect switch in the OFF position. See *Vehicle Load Disconnect Switch on page 2-3*. This will help keep your batteries from running down.

Jump Starting (12V System)

If the battery (or batteries) on the vehicle have run down and the vehicle will not start, you may want to use another vehicle to provide power to start the vehicle.

Heavy duty jumper cables can be used to jump start the 12-volt system.



CAUTION:

Getting between vehicles that are being jump started is dangerous. If the vehicles were to move you could be seriously injured or killed. Do not stand in front of the vehicle being jump started. Never jump start frozen batteries they can explode. You or others can be seriously injured. Allow the battery to thaw at room temperature before jump starting.



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 do not follow these steps exactly, some or all of these things can hurt you.

Notice: Ignoring these steps could result in costly damage to the vehicle that would not be covered by the vehicle warranty. Trying to start the vehicle by pushing or pulling it will not work, and it could damage the vehicle.

1. Check the other vehicle. It must have a 12-volt battery with a negative ground.
2. Get the vehicles close enough so that jumper cables can reach, but be sure the vehicles are not touching each other. If they are, it could cause a ground causing the vehicle not to start. 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 jump start procedure. Put the automatic transmission in PARK (P). Be sure the transfer case is in a drive gear and is NOT in NEUTRAL (N).

Notice: If you leave the communications/navigation equipment or other accessories on during jump starting procedure, they could be damaged. The repairs wouldn't be covered by the warranty. Always turn off your communications/navigation equipment or other accessories when jump starting your vehicle.

3. Turn off the ignition on both vehicles. Unplug unnecessary accessories plugged into the cigarette lighter or accessory power outlets. Turn off all lamps that are not required as well as radios. This will avoid sparks and help save both batteries. In addition, it could save the radio!
4. Ensure the jumper cables do not have loose or missing insulation. If they do, you could get shocked and the vehicle could be damaged.

Before you connect the cables, here are some basic things you should know. Positive (+) will go to positive (+). Negative (-) will go to a heavy, unpainted metal engine part or a remote negative (-) terminal. The remote negative terminal is located on the engine drive bracket and is marked GND (ground).

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



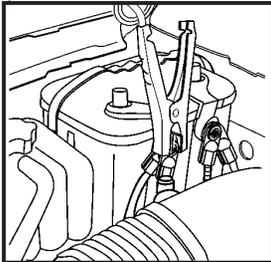
CAUTION:

Using an open flame 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 batteries have enough water. You don't need to add water to the Optima battery (or batteries) installed in every new Military 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 do not, explosive gas could be present. Battery fluid contains acid that can burn you. Do not get it on you. If you accidentally get it in the eyes or on the skin, flush the place with water and get medical help immediately.

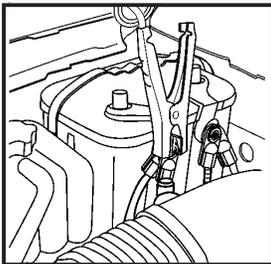


CAUTION:

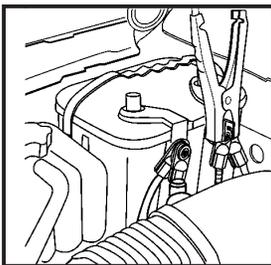
Fans or other moving engine parts can injure you badly. Keep your hands away from moving part once the engine is running.



6. Connect the positive (+) cable to the positive (+) terminal of the 12-volt battery (12-volt side) of the vehicle with the dead battery.

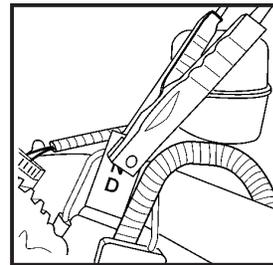


7. Connect the positive (+) cable to the positive (+) terminal 12-volt system of the vehicle with the good battery.



8. Connect the negative (-) cable to the negative (-) terminal of the 12-volt system of the vehicle with the good battery.

Do not let the other end touch anything until the next step. The other end of the negative (-) cable does not go to the dead battery. It goes to a heavy unpainted metal part of the engine in the vehicle with the dead battery.



9. Connect the other end of the negative (-) cable to the remote negative (-) terminal, marked GND, on the vehicle with the dead battery.

The electrical connection is just as good there, but the chance of sparks getting back to the battery is much less.

10. Start the vehicle with the good battery. Allow the vehicle's battery to charge for 10 minutes before attempting to start the vehicle.

Note: It may take up to 30 minutes to charge the battery enough to start the vehicle, depending on the battery's state of charge.

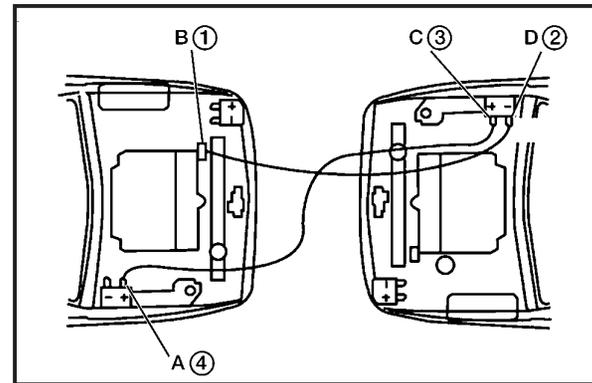
11. Start the vehicle with the dead battery.

Notice: If the jumper cables are connected or removed in the wrong order, electrical shorting may occur and damage the vehicle. The repairs would not be covered by your warranty. Always connect and remove the jumper cables in the correct order, making sure that the cables do not touch each other or other metal.

12. Remove the cables in reverse order to prevent electrical shorting. Take care that they do not touch each other or any other metal.

If this procedure does not work, you will need to disconnect the 24-volt side battery and charge it alone for 10 minutes. Replace the battery and repeat the jump starting procedures as outlined.

Note: This procedure should only be performed by authorized personnel.



Jumper Cable Removal

- A. Dead Battery Positive (+) Terminal
- B. Remote Negative (-) Terminal, marked GND
- C. Good Battery Positive (+) Terminal
- D. Good Battery Negative (-) Terminal

To disconnect the jumper cables from both vehicles do the following:

1. Disconnect the black negative (-) cable from the vehicle that had the bad battery, or remove the negative terminal.
2. Disconnect the black negative (-) cable from the vehicle with the good battery.

3. Disconnect the red positive (+) cable from the vehicle with the good battery.
4. Disconnect the red positive (+) cable from the other vehicle.
5. Return the remote positive (+) terminal cover, if equipped, to its original position.

Slave Starting (24V NATO Connector)

If the battery (or batteries) on the vehicle have run down and the vehicle will not start, you may want to use another vehicle to provide power to start the vehicle.

NATO slave cables are the only recommended method for 24-volt jump starting of the vehicle. You should only use NATO slave cables to jump start similar vehicles.

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

Trying to start the vehicle by pushing or pulling it will not work, and it could damage the vehicle.



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 do not follow these steps exactly, some or all of these things can hurt you.

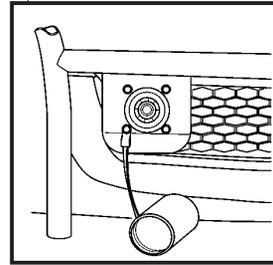
You should only use the NATO slave receptacle and slave cable when performing this operation.

1. Check the other vehicle. It must have a 24-volt battery with a negative ground.
2. Get the vehicles close enough so that the slave cable can reach, but be sure the vehicles are not touching each other. If they are, it could cause a ground connection causing the vehicle not to start, 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 jump start procedure. Put the automatic transmission in PARK (P). Be sure the transfer case is in a drive gear and is NOT in NEUTRAL (N).

Notice: If you leave the communications/navigation equipment or other accessories on during jump starting procedure, they could be damaged. The repairs wouldn't be covered by the warranty. Always turn off your communications/navigation equipment or other accessories when jump starting your vehicle.

3. Turn off the ignition on both vehicles. Unplug unnecessary accessories plugged into the cigarette lighter or accessory power outlets. 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 the radio!



4. Locate the slave receptacles on both vehicles and unscrew the cover.

 **CAUTION:**

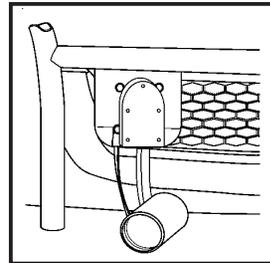
Using a open flame near a battery can cause battery gas to explode. People have been hurt doing this, and some have been blinded. Use a flashlight if you need more light.

Be sure the batteries have enough water. You don't need to add water to the new military battery (or batteries) 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 do not, explosive gas could be present.

Battery fluid contains acid that can burn you. Do not get it on you. If you accidentally get it in the eyes or on the skin, flush the place with water and get medical help immediately.

 **CAUTION:**

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



5. Connect the slave cable to the vehicle with the dead battery.

Note: Use twisting motion when installing the slave cable to the receptacle. Forcefully pushing the cable onto the receptacle may cause damage to the receptacle mount.

6. Connect the slave cable to the vehicle with the good battery.

Note: Use twisting motion when installing the slave cable to the receptacle. Forcefully pushing the cable onto the receptacle may cause damage to the receptacle mount.

7. Start the vehicle with the dead battery.
8. Allow the vehicle with the dead battery to charge for 10 minutes.

Note: It may take up to 30 minutes to charge the battery enough to start the vehicle, depending on the battery's state of charge.

9. Start the vehicle with the dead battery.

Note: Use twisting motion when disconnecting the slave cable from the receptacle. Forcefully pulling the cable from the receptacle may cause damage to the receptacle mount.

10. Remove the slave cable in the reverse order that it was installed. Take care not to let the cable ends touch each other or any other metal.
11. Install the covers on both vehicles and fully tighten to ensure a proper seal.
12. Clean and stow the slave cable.

Electrical System

Fuses and Circuit Breakers

The wiring circuits in your vehicle are protected from short circuits by a combination of fuses, circuit breakers and fusible thermal links. This greatly reduces the chance of fires caused by electrical problems.

Be sure you replace a bad fuse with a new one of the identical size and rating.

If you ever have a problem on the road and do not have a spare fuse, you can borrow one that has the same amperage. 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 correct amperage. Replace it as soon as you can.

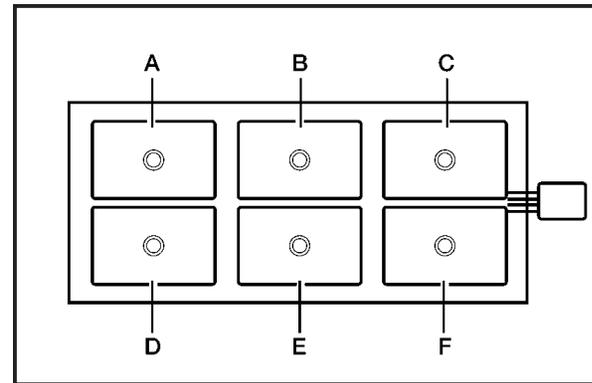
The 24-volt fuses are located in the engine compartment taped to the 24-volt generator wiring harness. These fuses are for the 24-voltmeter gage fuse (5 amp), 24-volt trailer fuse (25 amp) and 24-volt accessory power circuit (25 amp). Your vehicle also has a special relay center for the blackout lighting. The relay center is located on the

underhood fuse block in the engine compartment on the driver's side of the vehicle near the 24-volt battery.

See *Engine Compartment Overview on page 5-4* for more information on their locations. To remove fuses, hold the end of the fuse between your thumb and index finger and pull straight out.

Blackout Lighting Relay Center

The Blackout Light Relay block is located in the engine compartment on the driver's side of the vehicle on the underhood fuse block. See *Engine Compartment Overview on page 5-4* for location of your vehicle's Blackout Lighting Relay Center. Lift the cover for access to the relay block.



Relay Block	Usage
A	Turn Signal Interrupt
B	Park Lamp Interrupt
C	Headlamp Hi-Beam Interrupt
D	Horn Interrupt
E	DRL Interrupt
F	Headlamp Low-Beam Interrupt

Engine Control Module (ECM)

When tires are changed from the original equipment size to those adapted to off-road usage, the Engine Control Module (ECM) must be reprogrammed to correct the speedometer reading.

This reprogramming will also limit maximum vehicle speed to 93 mph (150 km/h).

Truck models K 2500: LLY, LB7 or LBZ 6.6L V8 Diesel Engine and M74 or MW7 Automatic Transmission.

Reprogramming the ECM is done with a TECH II electronic diagnostic system. Your GM dealer has this equipment. Your dealer has the correct calibration identified by the calibration part numbers on the following chart and any later updates after this publication.

Model Year	Engine	Transmission	New Tire Sizes	*Calibration P/N
2003/2004	LB7	M74	LT285/75R16 (628 Rev Mile) (392 Rev per Kilometer)	15130245
2004	LLY	M74	LT285/75R16 (628 Rev Mile) (392 Rev per Kilometer)	15130246
2005	LLY	M74	LT285/75R16 (628 Rev Mile) (392 Rev per Kilometer)	15130247
2006	LBZ	MW7	LT285/75R16 (628 Rev Mile) (392 Rev per Kilometer)	15130247
Please refer to the light duty series GM BODY BUILDER BOOK for further general information regarding vehicle modification.				

* New calibrations include maximum vehicle speed of 93 mph (150 km/h)

Tires Inflation - Tire Pressure

For vehicles without Option Package EMP (Enhanced Mobility Package).

Tire pressure should be within the manufacturer's recommended range as indicated on the certification/tire label which is on the driver's door edge. When hauling heavy loads the pressure should be at the maximum allowable pressure.

Refer to Inflation - Tire Pressure in the Index of the 2006 Vehicle Owner Manual for additional information on tire inflation pressure.

If the vehicle features Option Package EMP (Enhanced Mobility Package), see Tire Pressure Chart in *Capacities and Specifications on page 5-51*.

Tire Pressure Monitoring System

Notice: Do not use a tire sealant if your vehicle has Tire Pressure Monitors. The liquid sealant can damage the tire pressure monitor sensors.

If the vehicle has this feature, a Tire Pressure Monitoring (TPM) system, this system is a sensing device designed to identify and display tire operating data and activate an alert or warning when tire pressure or temperature irregularities are detected.

Beadlock Wheels

CAUTION:

Traction systems used on a vehicle without the proper amount of clearance can cause damage to the brakes, suspension or other vehicle parts. The area damaged by the traction device could cause you to lose control of your vehicle and you or others may be injured in a crash. Beadlock wheels or vehicles with military option code EMP should not be used with tire chains or other similar belt or strap traction system. There is not enough clearance.

If the vehicle features Option Package EMP (Enhanced Mobility Package), it will feature special rubber beadlocks, made exclusively for use on multi-piece wheels. This device fits securely between the

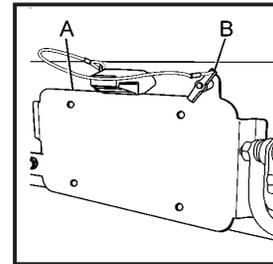
tire beads and positively locks the tire to the wheel rim flange. Beadlocks allow vehicle operation at the low tire air pressure conditions required for better mobility in mud, sand and snow.

By reducing the air pressure, the tire footprint is increased significantly, thus allowing a greater area of traction or contact. The beadlock also performs as a safety device to ensure that the tire does not “unseat” from the rim or rotate on the wheel at these low air pressure settings, while also preventing the entry of foreign objects, debris or water into the tire’s air chamber. Replace with the same type, style or size as originally equipped or the beadlock wheels may not function properly. For tire pressures see the Tire Pressure Chart in *Capacities and Specifications* on page 5-51.

Removing the Spare Tire and Tools

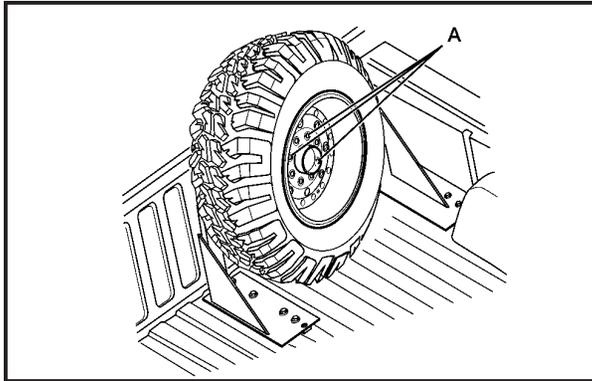
Pickup Vehicles

Under Body Carrier



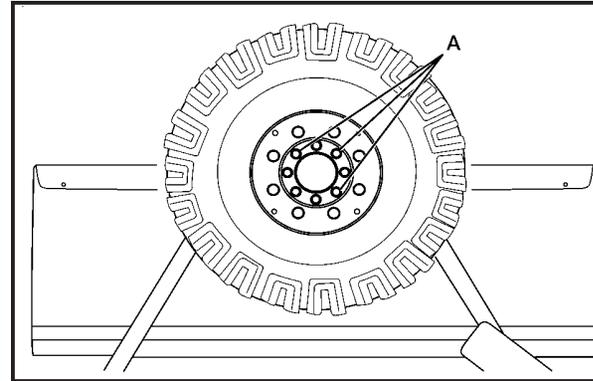
The heavy duty bumper of the vehicle has an opening in the bumper to gain access to the spare tire hoist. This opening is located behind the license plate mount. In order to gain access to this opening you must lower the license plate. To lower the plate you must remove the pin (B). Rotate the plate (A) down enough to access the opening. For more information, refer to Changing a Flat Tire and Removing the Spare Tire and Tools in the 2006 Vehicle Owner Manual.

Cargo Bed Carrier



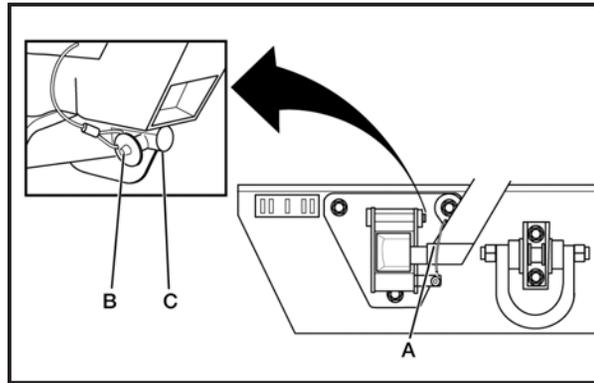
The cargo bed tire carrier is located in the passenger front of the cargo bed. To remove the tire, use and turn the wheel wrench counterclockwise and remove the wheel nuts (A).

Swing Away Carrier



The swing away tire carrier is located at the rear of the vehicle attached to the bumper. To remove the tire, use and turn the wheel wrench counterclockwise and remove the wheel nuts (A).

To open the swing away spare tire carrier, do the following:



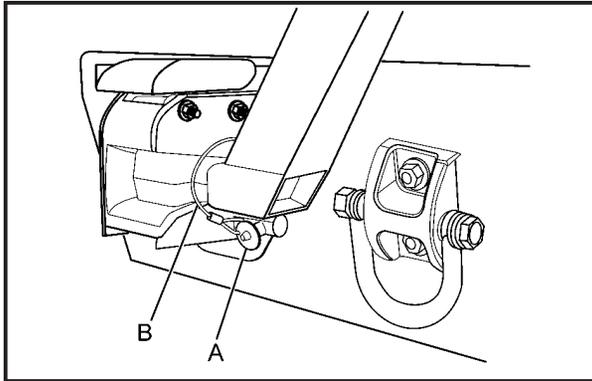
1. Press the button on the pin (B), which is attached to the cable (A), to remove the pin from the latch bolt nut (C).
2. Lift up on the latch on the left side of the vehicle to release the spare tire carrier from the vehicle. The handle will stay in the raised position until the spare tire carrier is closed and latched properly.
3. Swing the spare tire carrier to the side.



CAUTION:

If you drive with the spare tire carrier unlatched, you could injure pedestrians or damage the vehicle. Make sure the carrier is secure before driving.

To close the swing away tire carrier, do the following:

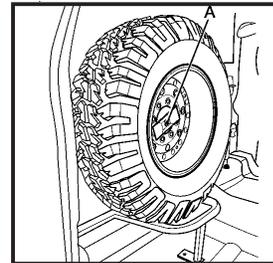


1. Move the spare tire carrier back into place until it latches, by closing it into the latch forcefully. The spare tire carrier is latched properly when the latch handle has lowered to the closed position.
2. Reinstall the cable (B) by pushing in the button on the pin (A) and inserting the pin into the latch bolt nut.
3. Pull on the spare tire carrier to make sure it is firmly latched.

In Vehicle Carrier

CAUTION:

The spare tire carrier must be secured so that it does not strike and injure someone. Always close it into the latch forcefully. Make sure that the release handle is fully closed (down) and that the cable is attached.

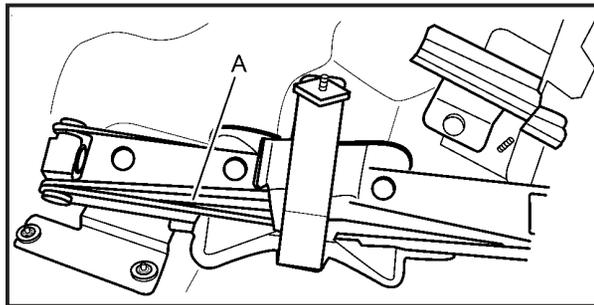


The in vehicle tire carrier is located behind the passenger seat. To remove the tire turn the nut (A) counterclockwise then remove the tire from the carrier.

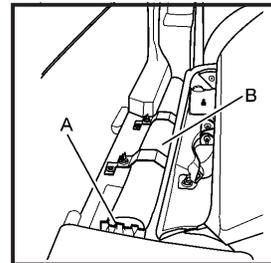
The following steps apply only to vehicles featuring Option Package EMP (Enhanced Mobility Package). For vehicles without EMP refer to the 2006 Vehicle Owner Manual.

Regular Cab Models

For regular cab models, the jack you will need is behind the passenger's seat.



A. Jack

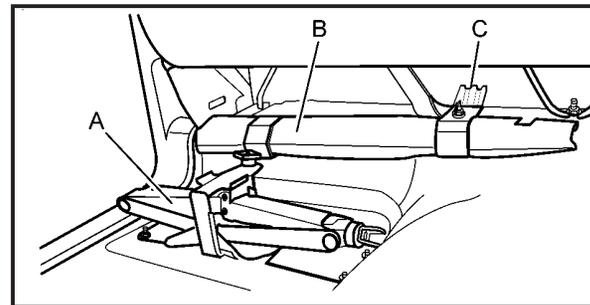


The equipment is behind the driver's seat mounted on the floor.

- A. Wheel Blocks
- B. Tire Tools

Extended Cab Models

For extended cab models, the equipment you will need is under the passenger's side second row seats.



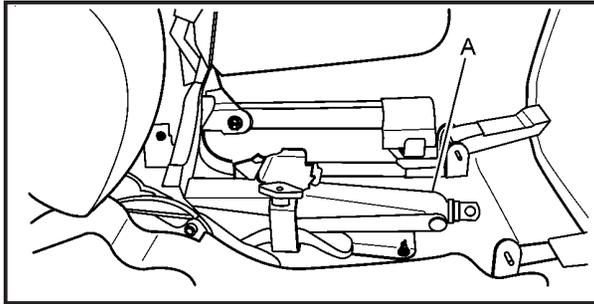
A. Jack

B. Tire Tools

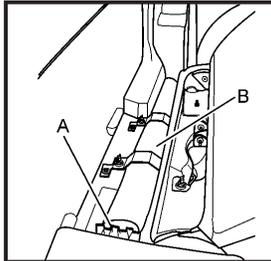
C. Wheel Blocks

Crew Cab Models

For crew cab models, the jack you will need is under the passenger's side second row seats.

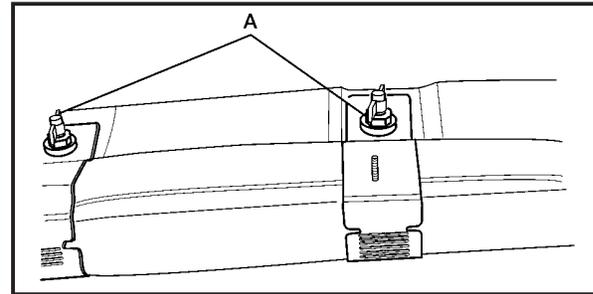


A. Jack

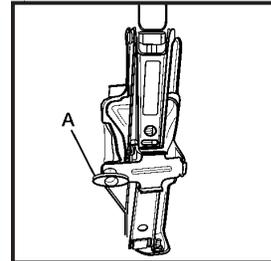


A. Wheel Blocks
B. Tire Tools

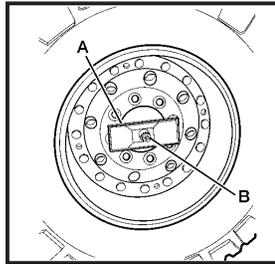
To Remove the Spare Tire Tools Except In-Cab Tire Carrier



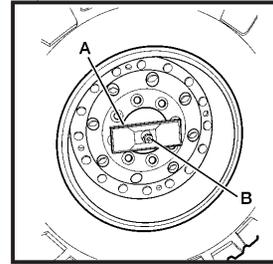
1. Wing nuts (A) are used to retain the storage bag and tools. To remove them, turn the wing nuts counterclockwise.



2. Remove the wheel blocks by turning the wing nut counterclockwise.
3. To release the jack from its holder, turn the knob (A) on the jack holder counterclockwise.



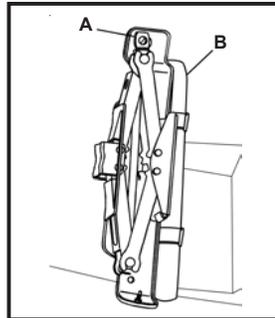
4. Using the wheel wrench and ratchet, remove the retainer nut (B) and the retainer (A) or wheel nuts.
5. Remove tire from the vehicle and put the spare tire near the flat tire.



4. Using the wheel wrench, remove the retaining nut (B) and the retainer (A) or the wheel nuts.
5. Remove tire from the vehicle and put the spare tire near the flat tire.

In-Cab Tire Carrier

The spare tire tools are located behind the jack mounting bracket.

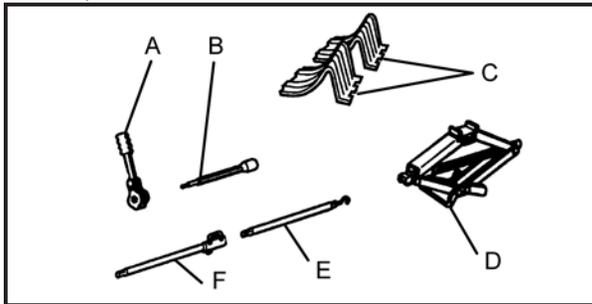


1. Release the Velcro straps retaining the storage bag and tools (B).
2. Turn the jack handle end counterclockwise (A) to release it.
3. Grasp and lift the jack out of the bracket.

Removing the Flat Tire and Installing the Spare Tire

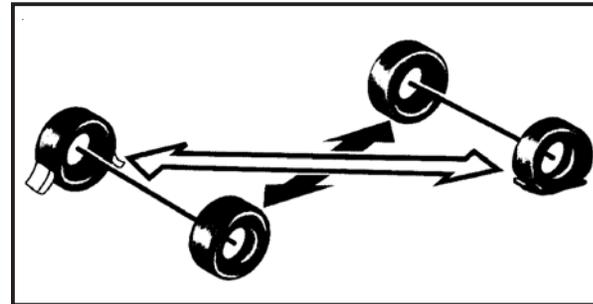
This applies to vehicles featuring Option Package EMP (Enhanced Mobility Package) only. For vehicles without EMP refer to the 2006 Vehicle Owner Manual. Use the following pictures and instructions to remove the flat tire and raise the vehicle.

Except In-Cab Tire Carrier

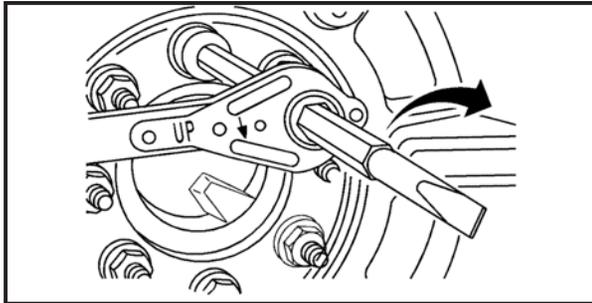


The tools you will be using include the ratchet (A), the wheel wrench (B), the wheel blocks (C), the jack (D), the jack handle (E), and the extension (F).

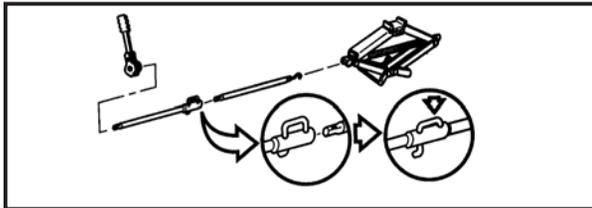
1. Ensure that the vehicle is parked on a level surface.
2. Ensure that the vehicle's transmission is in park and the transfer case is NOT in neutral.
3. Set the vehicle parking brake.



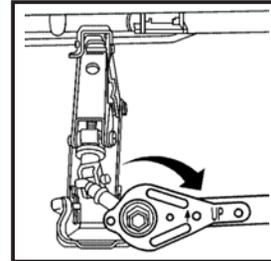
4. Using the wheel blocks, block the opposite tire that is being changed.



5. Slide the ratchet onto the wheel wrench with the DOWN mark facing you.
6. Turn the ratchet counterclockwise to loosen the wheel nuts. Do not remove them yet.
7. Assemble the jacking components.

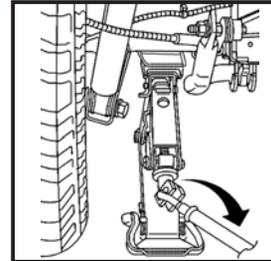


Place the jack only at the appropriate jack point.



Front Flat Tire

8. **Front Flat Tire:** Position the jack under the vehicle on the frame behind the flat tire where the frame sections overlap.



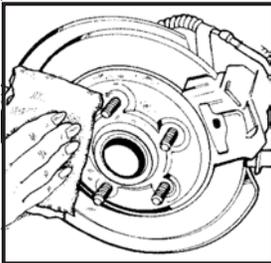
Rear Flat Tire

9. **Rear Flat Tire:** Place the jack under the curved rear axle pad. Make sure the jack head is positioned so that the rear axle pad is resting securely on the jack head.

10. Raise the tire off the ground.



11. Remove all of the wheel nuts and take off the flat tire.



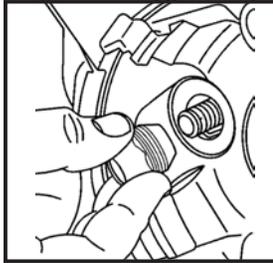
12. Remove any rust or dirt from the wheel bolts, mounting surfaces and spare wheel.

 **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 needed, to get all the rust or dirt off.

 **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.



13. After mounting the spare, put the wheel nuts back on with the rounded end of the nuts toward the wheel. Tighten each wheel nut by hand. Then use the wheel wrench to tighten the nuts until the wheel is held against the hub.

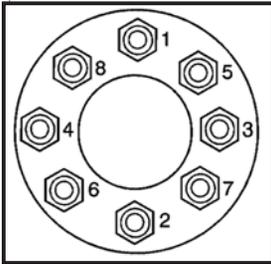
14. Turn the wheel wrench counterclockwise to lower the vehicle and remove the jack.



CAUTION:

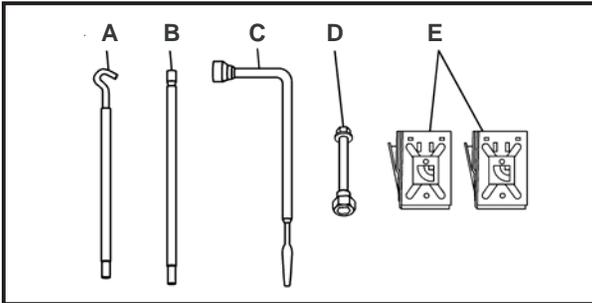
Incorrect wheel nuts or improperly tightened wheel nuts can cause the wheel to come loose and even come off. This could lead to an accident. Be sure to use the correct wheel nuts. If you have to replace them, be sure to get new GM original equipment wheel nuts. Stop somewhere as soon as you can and have the nuts tightened with a torque wrench to the proper torque specification. See *Capacities and Specifications on page 5-51* for wheel nut torque specification.

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. See *Capacities and Specifications on page 5-51* for the wheel nut torque specification.



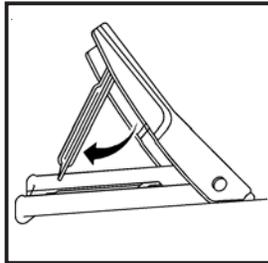
15. Tighten the nuts firmly in a crisscross sequence as shown by turning the wheel wrench clockwise.

In-Cab Tire Carrier



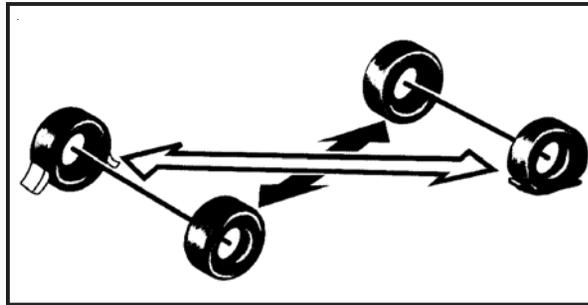
The tools you will be using include the jack handle (A), the jack handle extensions (B), the wheel wrench (C), the wheel wrench extension (D) and the wheel blocks (E).

5-28

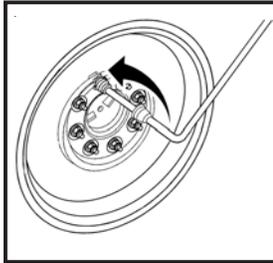


1. Remove the wheel blocks from the tool bag. Then, lift the wheel block as shown to lock it into place.
2. Ensure that the vehicle is parked on a level surface.

3. Ensure that the vehicle's transmission is in park and the transfer case in NOT in neutral.
4. Set the parking brake.

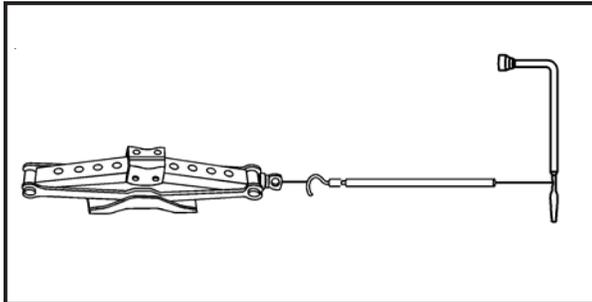


5. Using the wheel blocks, block the opposite tire that is being changed.

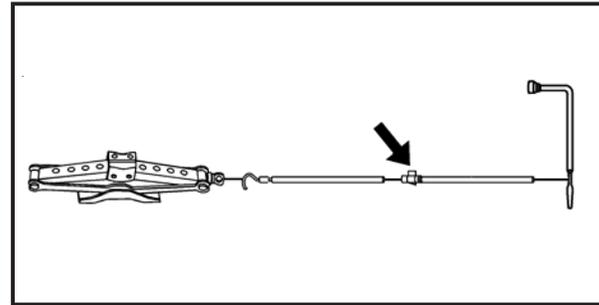


6. Turn the wheel wrench with the wheel wrench extender counterclockwise to loosen the wheel nuts. Do not remove them yet. You will now need to jack the vehicle up.

7. Assemble the jack and tools as follows:



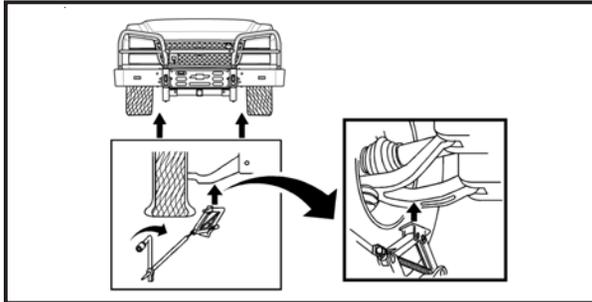
8. **Front Flat Tire:** Attach the jack handle with the hook end connected to the u-hook/clevis on the jack. Slide the wheel wrench onto the jack handle extension.



9. **Rear Flat Tire:** Assemble the jack together with the jack handle and the jack handle extensions. Press the retention clip on the jack handle extension (arrow) so it engages into the jack handle. Slide the wheel wrench onto the jack handle extension.

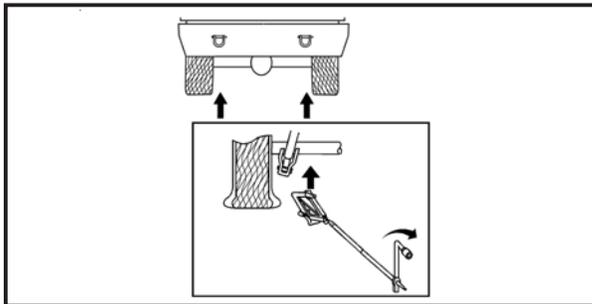
10. Turn the wheel wrench clockwise to raise the jack head to the lifting point.

Front Flat Tire



11. **Front Flat Tire:** Position the jack under the vehicle on the front lower control arm behind the flat tire.

Rear Flat Tire



12. **Rear Flat Tire:** Place the jack under the curved rear axle pad. Make sure the jack head is positioned so that the rear axle pad is resting securely on the jack head.

CAUTION:

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.

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.

13. Turn the wheel wrench clockwise to raise the vehicle. Raise the vehicle far enough off the ground so there is enough room for the spare tire to clear the ground.

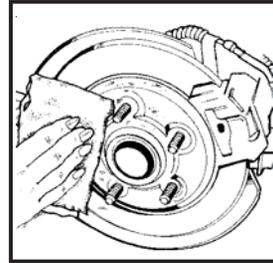


14. Remove all the wheel nuts and take off the flat tire.



CAUTION:

Rust or dirt on the wheel, or on the parts to which it is fastened, can make the wheel nuts become loose after 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 needed, to get all the rust or dirt off.

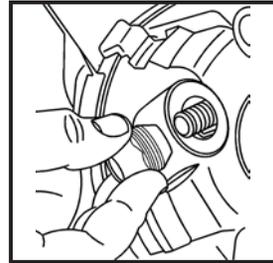


15. Remove any rust or dirt from the wheel bolts, mounting surfaces and spare wheel.



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.

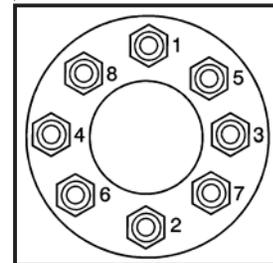


16. Install the spare tire.
17. Put the wheel nuts back on with the rounded end of the nuts toward the wheel.

18. Tighten each wheel nut by hand. Then use the wheel wrench to tighten the nuts by turning it clockwise until the wheel is held against the hub. You will not be tightening the nuts fully yet.
19. Lower the vehicle by turning the wheel wrench counterclockwise. Then lower the jack completely.

 CAUTION:
<p>Incorrect wheel nuts or improperly tightened wheel nuts can cause the wheel to come 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 the proper torque specification. See <i>Capacities and Specifications</i> on page 5-51 for wheel nut torque specification.</p>

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. See *Capacities and Specifications* on page 5-51 for the wheel nut torque specification.



20. Tighten the nuts firmly in a crisscross sequence as shown by turning the wheel wrench with the wheel wrench extender clockwise.

Storing a Flat or Spare Tire and Tools

This applies only to vehicle's featuring Option Package EMP (Enhanced Mobility Package) only. For vehicles without EMP refer to the 2006 Vehicle Owner Manual.

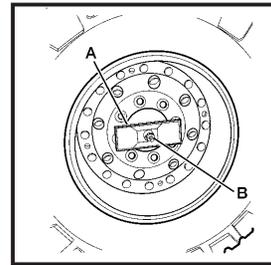


CAUTION:

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.

Return the jack, wheel blocks, wheel wrench and jack handle to their location on the floor at the rear of the cab.

To store the flat or spare tire on the tire carrier, do the following:



1. Return the tire back into the tire carrier and install retainer (A), washer and retainer nut (B).

In-Cab Tire Carrier

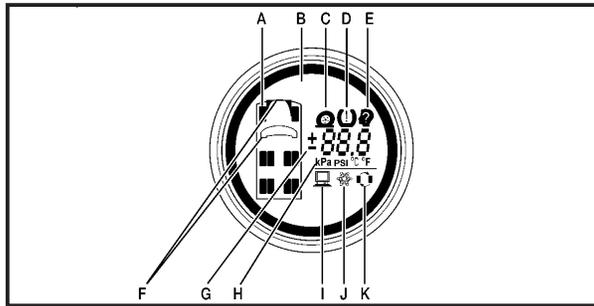
2. Turn the nut clockwise until a minimum of 5 visible threads are showing.

Except In-Cab Tire Carrier

2. Tighten the nuts firmly. Try to move the tire back and forth slightly to be sure it is secure.

Tire Pressure Monitor System Gage Warning and Displays

The Tire Pressure Monitor (TPM) system gage will be located on the lower left driver side of windshield molding. The TPM system gage can display information such as the tire pressure, tire temperature and warning/alert messages.



A (Programmed Wheel Position): This message will alert the user of which wheel is being programmed and if the system is receiving data from that location. This is also referred to as the Tire Icon.

B (Alarm Indicator Lamp): This will change color of the gage backlighting if a wheel problem is detected.

C (Low Pressure Indicator): This message will display to indicate a low wheel pressure condition.

D (Alert Indicator): This message will display to alert the user of a problem. When the alert occurs, stop and check your tire as soon as possible.

E (Learn Mode): This message will display to indicate the system is in a programming mode for removing or adding wheel sensors.

F (Towing Vehicle Indicator): This message will display to indicate that a towed vehicle data has been received.

G (Numerical Display): The display will indicate the pressure or temperature of the wheel indicated.

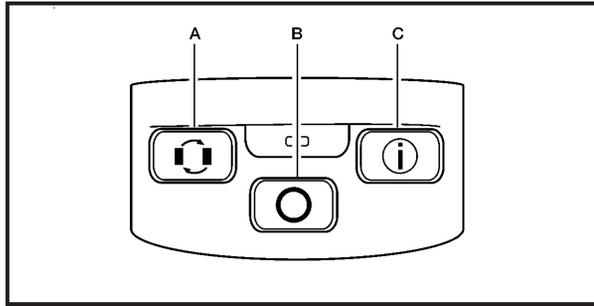
H (Units of Pressure or Temperature): This message will indicate which unit of measurement has been selected for the numerical display.

I (Programming Mode): This message will display that the system is in a programming mode.

J (Cold Pressure Indicator): This message will indicate that the numerical display is cold tire pressure.

K (Tire Rotation Program): Press this button after the tires have been rotated and the new position needs to be updated.

Tire Pressure Monitor System Switch Panel



The switch panel is located on the instrument panel next to the steering column. The switch panel's function is to program or select certain functions of the system.

A (Tire Button): Press this button to program the system.

B (Set Button): Press this button to save a setting and to exit and return to the normal display view.

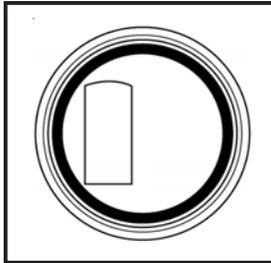
C (Mode Button): Press this button to enter different modes of the programming operation.

Notice: Driving when a TPM system alert or warning condition is detected, may cause tire damage. This damage would not be covered by the vehicle warranty. Reduce vehicle speed to an appropriate safe level and proceed to a safe stopping location or facility where the tire can be inspected and serviced.

Gage Function

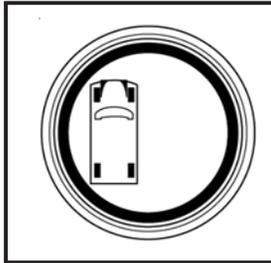
When power is applied to the receiver, the gage display momentarily turns on all icons, beeps, and the gage backlight blinks once. The unit then goes into standby mode waiting for data from the wheel transmitters.

Note: Until the vehicle is in motion no data will be received from any installed transmitter. The display will remain blank.

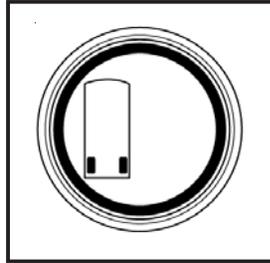


The gage display has an energy saving feature that turns lights on to full intensity or active stage only when required to display alert conditions or program the unit. The gage automatically switches to low power stage when no control activity is detected.

The respective tire icon is filled in as soon as data from its transmitter is received. The windshield/louver is shown for any towing vehicle transmitter. After data from all transmitters is received the display will be in the state shown or normal mode until an alert or warning condition is detected.

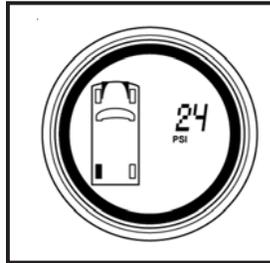


Data from a towed vehicle or trailer (if equipped with sensors) is indicated by tire icons with no windshield/louver icon.

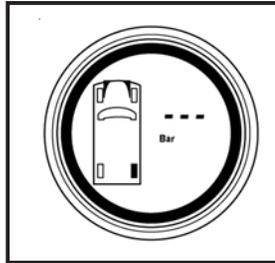


The system will alternate views between the towing and towed vehicle when operating with this configuration.

Checking Tire Conditions



1. Press the TIRE button to scroll through the tires.
2. Press the MODE button to scroll through the pressure, temperature, and pressure deviation readings for a selected tire.



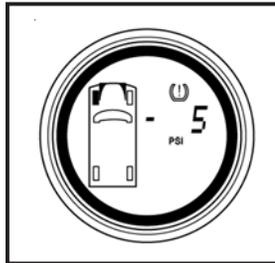
3. Press SET button to return to normal mode.

No data received from a selected tire is shown as dashes “- - -”.

Alerts and Warnings

Pressure Deviation Alert

The Pressure Deviation Alert is initiated when the measured tire pressure deviates from the required pressure by more than the preset level.



The gage light will change colors and the alert indicator flashes on and off. The audible alarm sounds once and the digital readout displays the amount of deviation from required pressure. Press any button to acknowledge the alert and stop the flashing. The gage light will remain on and the system returns to normal mode.

Example:

Pressure Deviation Alert Level = ± 5 PSI (0.34 Bar)

Required Pressure = 35 PSI (2.40 Bar)

Actual Pressure in a wheel drops to 30 PSI (2 Bar)

Pressure Deviation reading as shown will be -5 PSI

(0.34 Bar). You should stop and check your tires as

soon as possible. The Pressure Deviation Alert is

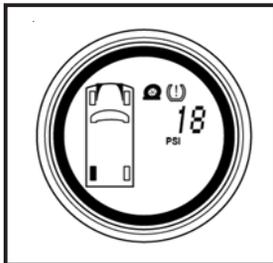
cancelled when the tires are properly re-inflated to

correct levels. See *Capacities and Specifications* on

page 5-51 for Tire Pressure Monitoring System

Setting Chart.

Low Pressure Warning



A Low Pressure Warning is initiated when the pressure drops below the programmed level.

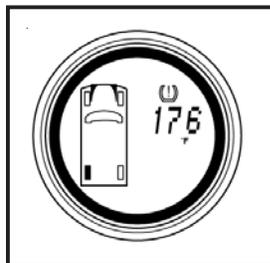
The gage light, low-pressure warning indicator and the audible alarm turn on and off continuously. Press any button to acknowledge and stop the flashing. The gage light remains on and the display reverts to a normal mode. The Low Pressure Alert is cancelled when the tires are properly re-inflated to correct levels. See *Capacities and Specifications on page 5-51* for Tire Pressure Monitoring System Setting Chart. The Pressure Low Alert is cancelled when the tires are properly re-inflated to correct levels.



CAUTION:

When the alert occurs, reduce speed and proceed to a safe location to check tires.

High Pressure Warning



The High Temperature Alert is initiated when the air temperature within a tire exceeds the programmed level. The temperature alert indicator and audible alarm turn on and off continuously.

Press any button to acknowledge the alert and stop the flashing. The gage light remains on and the display reverts to a normal mode. The High Pressure Alert is cancelled when the tires are properly re-inflated to correct levels. See *Capacities and Specifications on page 5-51* for Tire Pressure Monitoring System Setting Chart.

Error Code

An E1 error code may be displayed if the vehicle is not in motion for 15 minutes or longer with the key in the ON position. If after 5 minutes of driving 6 mph (10 kph) or greater the code is still present, contact your GM Goodwrench® dealer.

Tire Pressure Monitor System Programming

1. Ensure the key is in the ON position.
2. Press and hold the Set button in normal mode to enter programming mode:
 - 2 seconds for Level 1
 - 5 seconds for Level 2

The programming mode indicators will be displayed.

Indicators Displayed

These gage indicators will display during programming. The lit indicator will inform the user as to which section is being programmed.

Level 1	
 Cold Pressure	\pm Pressure Deviation
 Tire Rotation	 °C°F High Temperature Alert
 Low Pressure Warning	Bar PSI °C°F Units Selection

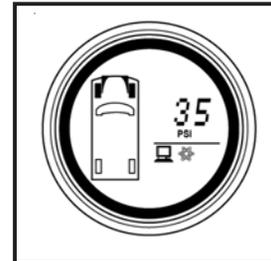
Level 2	
 Slope	 Learn Transmitter ID

Programming - Level 1 Cold Inflation Pressure

See *Capacities and Specifications on page 5-51* for Tire Pressure Monitoring System Setting Chart for setting value specifications.

This function changes the cold inflation pressure for each axle. Factory default setting is 35 PSI (2.41 Bar).

To Program



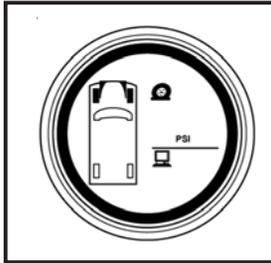
1. Enter Level 1 Programming Mode, see Entering Programming Mode.
2. Press the TIRE button to scroll to the desired axle. The tires of the selected axle are filled in.

3. Press the MODE button to view the current value.
4. Press the TIRE button to increase the value.
5. Press the MODE button to decrease the value.
6. Press the SET button to save when the desired value is reached.

Repeat programming steps 2-6 until Cold Inflation Pressure levels are set for all axles as desired.

7. Press the SET button to exit.
8. Press the SET button again to revert to normal view.

Low-Pressure Warning

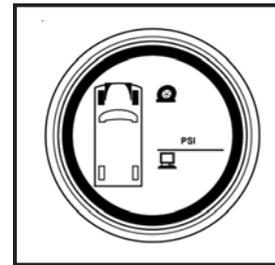


This function changes the low-pressure warning threshold for each axle. Factory default setting is 18 PSI (1.24 Bar).

See *Capacities and Specifications on page 5-51* for Tire Pressure Monitoring System Setting Chart for setting value specifications.

To Program

1. Enter Level 1 Programming Mode, see Entering Programming Mode.
2. To enter this function press the MODE button until the flat tire icon and pressure units are displayed.



3. Press the TIRE button to scroll to the desired axle. The tires of the selected axle are filled in.
4. Press the MODE button to view the current value.

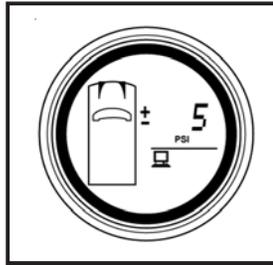
5. Press the TIRE button to increase the value.
6. Press the MODE button to decrease the value.
7. Press the SET button to save when the desired value is reached.

Repeat programming steps 2-7 until Low-Pressure warning levels are set for all axles as desired.

8. Press the SET button to exit.
9. Press the SET button again to revert to normal view.

Pressure Deviation Alert

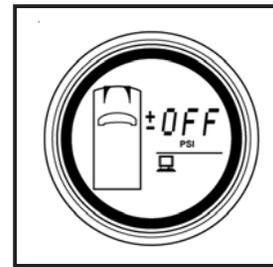
This function sets the pressure deviation alert threshold for all tires. Factory default setting is 5 PSI (0.34 Bar).



To Program

1. Enter Level 1 Programming Mode, see Entering Programming Mode.
2. To enter this function press the MODE button until the flat tire icon and pressure units are displayed.
3. Press the TIRE button to scroll to the desired axle. The tires of the selected axle are filled in.

4. Press the TIRE button to increase the value.
5. Press the MODE button to decrease the value.
6. To disable this feature press the MODE button until the display shows OFF.



7. Press the SET button to save when the desired value is reached.

8. Press the SET button twice to revert to normal view.

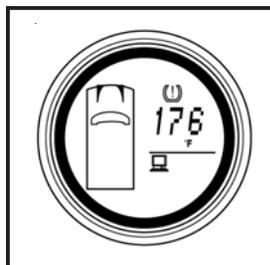
Temperature Compensated Pressure

When a tire heats up, the air pressure inside the tire can also be expected to increase. For example, a normal or “required” pressure at 64°F (18°C) may be 34 PSI or (2.34 Bar) and a normal pressure at 120°F (49°C) may be 39 PSI (2.70 Bar). Both pressure readings are correct at their respective temperatures.

The amount of deviation from the required pressure at any temperature can be read by using the Pressure Deviation mode of this system. If at any time you are uncertain that the Actual Pressure reading on the gage display indicates the correct tire pressure, switch to the Pressure Deviation (±) readout. A blank display indicates that the reading on the display is the correct one. Any (+) or (-) value indicates the tire pressure is incorrect by that value. This value can then be used to correctly inflate the tire.

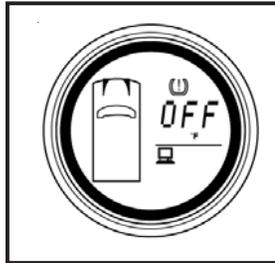
High Temperature Alert

This function changes the high-temperature alert threshold. Factory default setting is 176°F (80°C).



To Program

1. Enter Level 1 Programming Mode see Entering Programming Mode.
2. To enter this function press the MODE button until the alert icon and temperature units are displayed.
3. Press the TIRE button to enter and display the current value of High Temperature Alert.
4. Press the TIRE button to increase the value.
5. Press the MODE button to decrease the value.

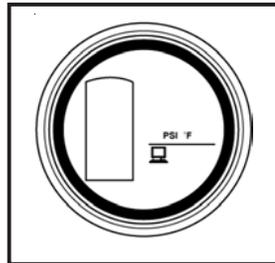


6. To disable this feature press the MODE button until the display reads OFF.
7. Press the SET button to save and exit this mode when the desired value is reached.

8. Press the SET again to revert to normal mode.

Measurement Selection-Metric or Imperial

Use this mode to select the combination of pressure and temperature units. Unit combinations are PSI -°F, Bar -°F, Bar -°C, PSI -°C.



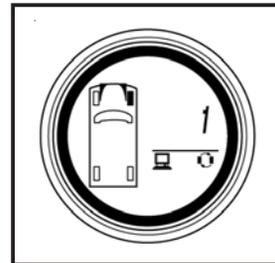
To Program

1. Enter Level 1 Programming Mode, see Entering Programming Mode.
2. To enter this function press the MODE button until the pressure and temperature units are displayed. (PSI/Bar, °C/°F).

3. Press the TIRE button to enter.
4. Use the TIRE or MODE button to scroll through the four combinations of unit settings.
5. When the desired combination is displayed press the SET button to save and exit this mode.
6. Press the SET button again to revert to normal mode.

Tire Rotation Mode

This function is used after tires are rotated and the new positions need to be updated. This procedure is valid for four tire locations only.



To Program

1. Enter Level 1 Programming Mode, see Entering Programming Mode.
2. To enter this function press the MODE button until the tire rotation icon is displayed.

3. Press the TIRE button to scroll to a tire position.

4. Press the MODE button to select it for editing.

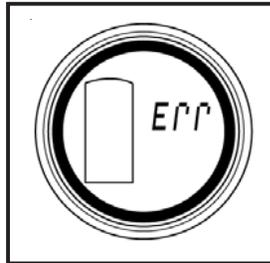
Note: The current tire position number will be displayed.

5. Use the TIRE or MODE button to adjust the value to the number determined in step 6.

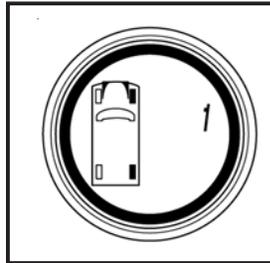
6. Press the SET button when the number representing the desired sensor is achieved. This returns the display to the tire selection menu. Scroll to a different tire location and edit the sensor numbers as above.

7. Press SET button to save and exit this mode.

If more than one tire location contains the same sensor number, the display will prompt an error with the conflicting tires filled in and the associated sensor number. Press any button to return the tire selection menu and make necessary corrections.



Note: This display indicates that ID 1 is programmed in two locations causing the error.

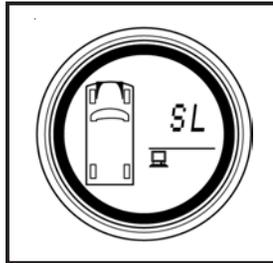


8. Press SET button again to revert to normal mode.

Advanced Programming-Level 2 Slope Mode SL

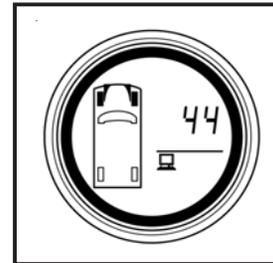
See the *Tire Pressure Monitoring System Setting Chart* on page 5-52 for setting value specifications.

The Slope is a value corresponding to the rate of pressure change due to temperature for a particular tire. This value affects the calculation to determine pressure deviation value. The factory default setting is 44.



To Program

1. Enter Level 2 Programming Mode, see Entering Programming Mode.



2. Press the TIRE button to scroll to the desired axle, the tires of the selected axle are filled in.

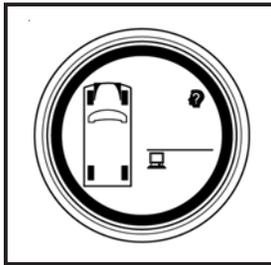
3. Press the MODE button to display the current value of slope for the selected axle.
4. Press the TIRE button to increase the value.
5. Press the MODE button to decrease the value. The minimum value is 10 and the maximum is 160.
6. Press the SET button to save the value.

Repeat steps 2-6 until the slope level is set for all axles as desired.

7. Press the SET button to exit.
8. Press the SET again to revert to normal mode.

Learn Mode

This mode is used to add or remove transmitters from the system.

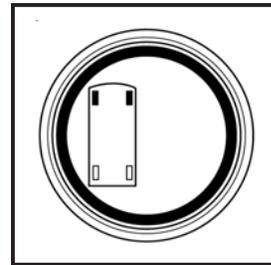


To Program

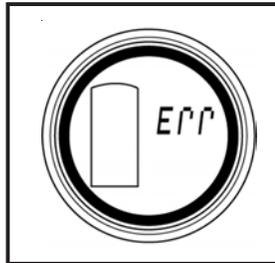
1. Enter Level 2 Programming Mode, see Entering Programming Mode.
2. Press the MODE button to select the learn mode icon.
3. Press the TIRE button to display the ten possible wheel positions for the towing vehicle. The currently installed transmitter positions are now indicated with a filled in tire indicator.
4. Use the TIRE button to scroll to the desired position. The outline of the wheel position to be programmed will flash.
5. A new transmitter identification can be learned by inflating or deflating the tire by more than 3 PSI (0.20 Bar).

This method must be carried out while the transmitters are in “gage fill” mode. This mode is entered for 15 minutes after the vehicle has been driven above 6 mph (10 kph). Each transmitter “learn operation” must be carried out at least 90 seconds apart. If it is not possible to complete the learn operation for all transmitters within 15 minutes, the vehicle must again be driven above 6 mph (10 kph) and then the process can be continued.

Note: To prevent the last identification from being erased, scroll to the next tire position before driving. A beep and rapid flashing of the gage light indicate a transmission was received. The new ID is stored.



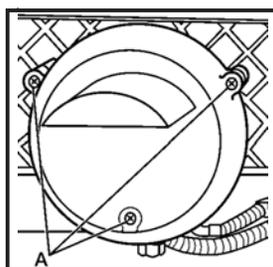
6. To *remove* the transmitter from the selected tire location, press the MODE button.
7. Press the TIRE button to scroll to another position and repeat step 4 or 5 as required.
8. Press the SET button to save and exit.
If no error is found, the system will reset and go to normal mode.



If more than one tire location contains the same sensor ID, the display will prompt an error and flash between this message and the display, with the conflicting tires filled in. If so indicated repeat the programming procedure above.

Bulb Replacement Headlamp

To replace the blackout headlamp, do the following:



1. Remove the three screws (A) from the front of the headlamp.

2. Remove the lens cover from the lamp.
3. Press in on the bulb and turn counterclockwise.
4. Pull the old bulb straight out of the socket.
5. Put the new bulb into the socket and press in and turn clockwise.
6. Install the rubber lens gasket into the lamp groove.
7. Reinstall the lens and tighten the screws.

5-48

Marker Lamps (Blackout)

Note: The bulbs in the blackout tail/stoplamp and front marker lamps are light emitting diodes (LED) instead of incandescent bulbs. They are not replaceable and are serviced as an assembly. For bulb replacement refer to the 2006 LSSV Military Trucks Service Manual Supplement.

Replacement Bulbs

Lamp	Bulb Number
Blackout Headlamp	1073

Note: Bulbs not listed here refer to the 2006 Vehicle Owner Manual.

Note: The following bulbs are not replaceable and are serviced as an assembly:

LSSV Vehicle

- Fiberglass Cap CHMSL Lamp
- License Plate Lamp

For lamp replacement refer to the 2006 Light Service Support Vehicle (LSSV) Trucks Service Manual.

Vent Filters

Transfer Case

The filter is attached to the transfer case vent tube. It is located on the driver's side of the transfer case housing.

When to Change the Filter

Refer to the *Scheduled Maintenance on page 6-2* to determine how often to change the filter.

Front Axle

The filter is attached to the front axle vent tube. It is located in the engine compartment next to the left inner wheel housing.

When to Change the Filter

Refer to the *Scheduled Maintenance on page 6-2* to determine how often to change the filter.

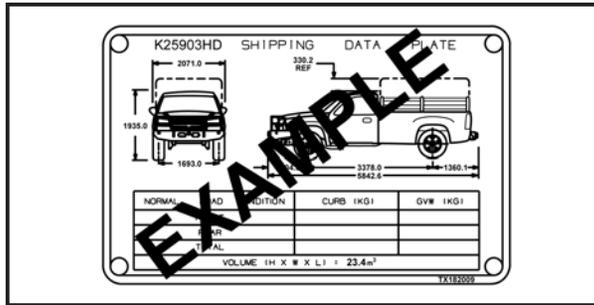
Rear Axle

The filter is attached to the rear axle vent tube. It is located near the top of the rear axle housing.

When to Change the Filter

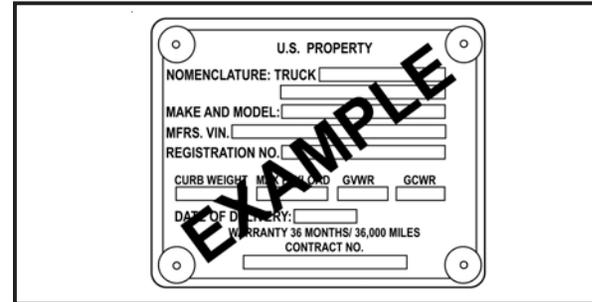
Refer to the *Scheduled Maintenance on page 6-2* to determine how often to change the filter.

Vehicle Identification Shipping Data Plate



This plate is located on the driver's side front corner of the inner door panel. The data plate is used to inform the operator of the vehicle as to the make, model, Gross Vehicle Weight (GVW), and vehicle dimensions.

Government Vehicle Data Plate



This plate is located on the driver's side front corner of the inner door panel. The data plate is used to inform the operator of the vehicle as to the upfitting information and other specifications.

Capacities and Specifications

Wheel Nut Torque

Model	Description	Torque
C/K 2500	8 bolts (14 mm)	140 LB FT (190 N•m)

Tire Pressure - EMP Only *

Terrain	Deflection	Max. Speed	Load	Min. Inflation
Highway ** Front Axle	—	93 mph (149 km/h)	2400 lbs (1089 kg)	45 PSI (3.10 Bar)
Highway ** Rear Axle	—	93 mph (149 km/h)	3042 lbs (1390 kg)	65 PSI (4.48 Bar)
Highway **	18%	93 mph (149 km/h)	2300 lbs (1043 kg)	40 PSI (2.76 Bar)
Cross Country ***	25%	30 mph (48 km/h)	2300 lbs (1043 kg)	23 PSI (1.59 Bar)
Mud, Sand, Snow ***	30%	10 mph (16 km/h)	2300 lbs (1043 kg)	18 PSI (1.24 Bar)

* Option Package EMP (Enhanced Mobility Package) vehicles only. Non-EMP vehicles refer to the Tire and Loading Information label attached to the vehicles center pillar (B-pillar), below the driver's door lock post (striker).

** Inflation pressure needed to obtain the Gross Vehicle Weight Rating (GVWR).

*** All Axles

**Tire Pressure Monitoring System Settings - EMP Only
Tire Pressure and Slope**

Terrain	Cold Inflation Pressure	Slope
Highway * Front Axle	45 PSI (3.10 Bar)	55
Highway * Rear Axle	65 PSI (4.48 Bar)	75
Highway **	40 PSI (2.76 Bar)	51
Cross Country **	23 PSI (1.60 Bar)	34
Mud, Sand, Snow **	18 PSI (1.24 Bar)	29

Tire Pressure Alerts and Warnings

Terrain	Deviation Pressure Alert ***	Low Pressure Warning
Highway * Front Axle	±5PSI (0.34 Bar)	33 PSI (2.28 Bar)
Highway * Rear Axle	±5PSI (0.34 Bar)	40 PSI (2.76 Bar)
Highway **	±5PSI (0.34 Bar)	30 PSI (2.07 Bar)
Cross Country **	±5PSI (0.34 Bar)	17 PSI (1.17 Bar)
Mud, Sand, Snow **	±5PSI (0.34 Bar)	13 PSI (0.90 Bar)

* Factory Tire Pressure Setting

** All Axles

*** From Cold Pressure Tire Setting

Appearance Care

Washing Your Vehicle

The exterior finish on the vehicle is a non-gloss or lusterless paint in accordance with MILHDBK-1223. Wash the vehicle using only mild soap and water. Do not 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. Do not towel dry or wax the paint surface. High pressure washes may cause water to enter the vehicle.

Cargo Cover

Wash the cover using only mild soap and water. Do not 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. Do not towel dry or wax the surface. The windows should be washed with a water soaked cloth. Do not rub dry. After washing the cover make sure it is completely dry before lowering it. High pressure water may cause water to enter the cargo area.

Seat Covers

The interior seats have been fitted with fabric seat covers. The seat covers protect the seat from damage and can be removed for cleaning. Refer to Cleaning the Inside of Your Vehicle in the Vehicle Owner Manual for fabric cleaning.

Section 6 Maintenance Schedule

Maintenance Schedule	6-2	Recommended Fluids and Lubricants.....	6-3
Maintenance Requirements.....	6-2	Normal Maintenance Replacement Parts.....	6-3
Scheduled Maintenance.....	6-2	Maintenance Records.....	6-4
Maintenance Footnotes.....	6-2		

Maintenance Schedule

Maintenance Requirements

Notice: Maintenance intervals, checks, inspections, replacement parts, 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 scheduled maintenance may not be covered by warranty.

Scheduled Maintenance

The following service should be performed at the following mileage intervals:

Service and Miles (Kilometers)	30,000 (48,000)	60,000 (96,500)	90,000 (145,000)	120,000 (193,000)	150,000 (242,000)	180,000 (290,000)
Change Front Axle Vent Filter.	•	•	•	•	•	•
Change Rear Axle Vent Filter.	•	•	•	•	•	•
Change Transfer Case Vent Filter.	•	•	•	•	•	•
Lubricate Swing Away Tire Carrier Hinge. <i>See footnote (a).</i>	—	—	—	—	—	—

Maintenance Footnotes

(a) Lubricate the swing away tire carrier hinge at vehicle engine oil change intervals. More frequent lubrication may be required when exposed to a corrosive environment.

Recommended Fluids and Lubricants

Fluids and lubricants identified below by name, part number or specification may be obtained from your dealer.

Usage	Fluid/Lubricant
Swing Away Spare Tire Carrier Hinge	Chassis lubricant (GM Part No. U.S. 12377985, in Canada 88901242) or lubricant meeting requirements of NLGI #2, Category LB or GC-LB.

Normal Maintenance Replacement Parts

Replacement parts identified below by name, part number, or specification can be obtained from your GM Goodwrench® dealer.

For other replacement parts refer to Scheduled Maintenance in the 2006 Vehicle Owner Manual or the maintenance schedule section in the 2006 DURAMAX® Diesel Engine Supplement.

Part	GM Part Number	ACDelco® Part Number
Vent Filter - Front Axle	5651682	GF-453
Vent Filter - Rear Axle	5651682	GF-453
Vent Filter - Transfer Case	5651682	GF-453

Section 7 Customer Assistance Information

Customer Assistance Information.....	7-2
Contact Information.....	7-2

Customer Assistance Information

For customer assistance phone numbers, refer to Contact Information.

To assist in our review of your concerns, provide the following information:

1. The Vehicle Identification Number (this will be on the VIN plate in the cab of the vehicle)
2. Current mileage on the vehicle
3. Nature of the problem

Contact Information

Telephone Users

Department	Phone Number
GM Customer Assistance Center (general information, dealer location, other concerns)	1-800-222-1020
Roadside Assistance Center (towing and all Roadside Assistance program services)	1-800-243-8872

Online LSSV/EMP Service/Parts Manuals:

www.gmfleet.com

Select "Fleet Tools"

Select "Service/Maintenance Tools"

PDF files can be viewed or downloaded.

A

Accessory Panel	
Blackout Lighting Controls.....	3-6
Exterior Lamps.....	3-3
Interior Lamps.....	3-8
Overview.....	3-2
Accessory Power 24-Volt.....	2-4
Air Filter Restriction Indicator.....	3-11
Appearance Care.....	5-53
Cargo Cover.....	5-53
Seat Covers.....	5-53
Washing Your Vehicle.....	5-53

B

Battery.....	5-5
Beadlock Wheels.....	5-16
Blackout Drive Light Control.....	3-5
Blackout Lighting Relay Center.....	5-14
Bulb Replacement Blackout Headlamp.....	5-48
Marker Lamps (Blackout).....	5-48

C

Capacities and Specifications.....	5-51
Tire Pressure Alerts and Warnings.....	5-52
Tire Pressure - EMP Only.....	5-51
Tire Pressure Monitoring System	
Settings - EMP Only.....	5-52
Wheel Nut Torque.....	5-51
Cargo Cover.....	2-5
Checking Things Under the Hood.....	5-4
Contact Information.....	7-2
Customer Assistance Information.....	7-2

D

Driving, the Road and the Vehicle.....	4-2
Loading the Vehicle.....	4-2
Shipping Data Label.....	4-2
Vehicle Identification Label.....	4-3
Driving Your Vehicle.....	4-1

E

Electrical System.....	5-13
Blackout Lighting Relay Center.....	5-14
Engine Control Module (ECM).....	5-15
Fuses and Circuit Breakers.....	5-13
Engine Compartment Overview.....	5-4
Engine Control Module (ECM).....	5-15
Enhanced Suspension System.....	4-8
Exterior Lamps.....	3-3
Blackout Drive Light Control.....	3-5
Service and Blackout Lighting.....	3-3
Service Lights/Blackout Control.....	3-4

F

Features and Controls.....	2-1
Front Axle Vent Filter.....	5-49
Front Mounted Receiver.....	4-3
Receiver Extension.....	4-5
Fuel	
Using JP8 as a Fuel.....	5-3
Fuses	
Blackout Lighting Relay Center.....	5-14
Fuses and Circuit Breakers.....	5-13

G

Government Vehicle Data Plate.....	5-50
Gun Rack.....	2-7
Cab Mount.....	2-8
Floor Mount.....	2-7

H

How to Use This Manual.....	ii
-----------------------------	----

I

Inflation - Tire Pressure.....	5-16
Instrument Panel.....	3-1
Interior Lamps.....	3-8
Topper Dome Lamp.....	3-8

J

Jump Starting	
Slave Starting (24V NATO Connector).....	5-10
12V System.....	5-5

L

Lamps	
Exterior.....	3-3
Interior.....	3-8
Lighting	
Blackout.....	3-5
Service.....	3-4
Loading the Vehicle.....	4-2

M

Maintenance Schedule	
Front Axle Vent Filter.....	5-49
Maintenance Footnotes.....	6-2
Maintenance Records.....	6-4
Maintenance Requirements.....	6-2
Normal Maintenance Replacement Parts.....	6-3
Rear Axle Vent Filter.....	5-49
Recommended Fluids and Lubricants.....	6-3
Scheduled Maintenance.....	6-2
Transfer Case Vent Filter.....	5-49
Manual Windows.....	2-2
Marker Lamps (Blackout).....	5-48

O

Operating the Pintle Hitch.....	4-10
Operating Service and Blackout Lighting.....	3-6

P

Pintle Hitch.....	4-9
Pioneer Tool Kit.....	2-9

R

Rear Axle Vent Filter.....	5-49
Rear Door Windows.....	2-2
Receiver	
Front.....	4-3
Rear.....	4-5
Receiver Extensions	
Front.....	4-5
Rear.....	4-6
Recommended Fluids and Lubricants.....	6-3
Recovery Loops.....	4-7
Front.....	4-7
Rear.....	4-7
Removing the Spare Tire and Tools.....	5-17
Replacement Bulbs.....	5-48

S

SafetyBelts	
Safety Belts: They Are For Everyone.....	1-3
Safety Warnings and Symbols.....	iii
Seat Covers.....	5-53
Seats and Restraints Systems.....	1-1
Scheduled Maintenance.....	6-2
Service and Appearance Care.....	5-1
Service and Blackout Lighting.....	3-3
Service Lights/Blackout Control.....	3-4
Spare Tire	
Installing the Spare Tire.....	5-24
Removing the Spare Tire and Tools.....	5-17
Storing a Spare Tire and Tools.....	5-33
Starting	
Jump Starting.....	5-5
Slave Starting (24V NATO Connector).....	5-10
Starting Your Vehicle.....	2-3
Starting and Operating Your Vehicle.....	2-3
Storing a Flat or Spare Tire and Tools.....	5-33
Storage Areas.....	2-5
Cargo Cover.....	2-5

T

Tires.....	5-16
Beadlock Wheels.....	5-16
Inflation - Tire Pressure.....	5-16
Removing the Flat Tire and Installing the Spare Tire.....	5-24
Tire Pressure Monitoring System.....	5-16
To Remove the Spare Tire and Tools.....	5-17
Tire Pressure Monitor Display.....	3-11
Tire Pressure Monitor System	
Alerts and Warnings.....	5-52
Gage Warning and Displays.....	5-34
Overview.....	5-16
Programming.....	5-39
Switch Panel.....	5-35
Tire Pressure Monitoring System Setting.....	5-52
Tire Pressure and Slope.....	5-52
Topper Dome Lamp.....	3-8
Towing.....	4-9
Pintle Hitch.....	4-9
Towing A Trailer.....	4-11
Trailer Connections.....	4-9
Your Vehicle.....	4-9
Trailer Connections.....	4-9
Transfer Case Vent Filter.....	5-49
Troop Seats	
Troop Seat Operation.....	1-2

U

Underbody Protection.....4-8

V

Vehicle Damage Warnings.....iii

Vehicle Identification

 Government Vehicle Data Plate.....5-50

 Shipping Data Plate.....5-50

Vehicle

 Load Disconnect Switch.....2-3

 Starting Your Vehicle.....2-3

Vehicle Storage.....5-5

Vent Filters.....5-49

 Front Axle.....5-49

 Rear Axle.....5-49

 Transfer Case.....5-49

Voltmeter Gage.....3-9

W

Warnings

 Tire Pressure Monitor System

 Alerts and Warnings.....5-37

 Tire Pressure Monitor System Gage

 Warnings and Displays.....5-34

 24-Voltmeter Gage.....3-9

Washing Your Vehicle.....5-53

Wheel Nut Torque.....5-51

Windows.....2-2

 Manual Windows.....2-2

 Rear Doors.....2-2

 Side Windows.....2-2



www.gmfleet.com