

SPS Applications



IMPORTANT: The proper operating system must be installed on your Techline terminal. See the article to the right for details.

When programming a vehicle with Service Programming System (SPS), it is important that you select the correct method of connecting to the vehicle. Some applications in SPS require the TIS terminal to be connected in the Pass-Thru Programming Mode. Pass-Thru Programming allows the technician to make critical data selections on the TIS Terminal while the terminal is in direct communication with the vehicle. These applications (see tables) are available only in this mode. For instruction on how to use the Pass-Thru Programming Mode, refer to the TIS User Guide.

- Thanks to Devin Koski and
Lisa Cleaveland

SPS for Accessories (ACC):

2004	Chevrolet GMC Isuzu	6500 (C6/T6F), 7500 (B7/C7/D7/T7F/W7), 8500 (C8/T8F) Series -	Engine: Isuzu (3) 7.8L L6 DI Turbo Diesel, I/C LG4 w/ & w/o C7F
2005	Chevrolet GMC Isuzu	4500 (C4/V4), 5500 (C5/V5)	Engine: Isuzu (6) 5.2L L4 I/C Turbo Diesel (1C5)
2005	GMC Isuzu	6500 (C6/T6F), 7500 (B7/C7/D7/T7F/W7), 8500 (C8/T8F) Series	Engine: Isuzu (3) 7.8L L6 DI Turbo Diesel, I/C LG4

I/C = Inter cooler

SPS for Tire Pressure Monitor (TPM):

2004- 2005	Chevrolet GMC	Full size truck 4 X 2, 1500 (1/2 ton) Full size truck 4 X 2, 1500 (1/2 ton) Luxury Full size truck 4 X 4, 1500 (1/2 ton) Full size truck 4 X 4, 1500 (1/2 ton) Luxury
2004 2005	Cadillac	Escalade, 4 X 2 1500 (1/2 Ton) Luxury Escalade, Escalade ESV, Escalade Ext. 4 X 4 1500 (1/2 Ton) Luxury

SPS for Remote Start Enabling/ Disabling (RSE):

2005	Chevrolet	Malibu
2005	Pontiac	Grand Prix G6
2005	Buick	LaCrosse / Allure (Canada)

SPS for Body Control Module (BCM Setup):

2004	Chevrolet	Equinox	Engine: (E) 3.4L V6 LA1
------	-----------	---------	-------------------------

SPS for Powertrain Interface Module (PIM to PCM Linking):

2004	Pontiac	GTO	Engine: (U) 6.0L V8 LS2
------	---------	-----	-------------------------

SPS for Vehicle Identification Number (VIN Write):

2004	Pontiac	Vibe
------	---------	------

SPS For Saturn

2000- 2005	Saturn	All
---------------	--------	-----

Techline News

Proper Operating System Critical for Techline Terminal

An article in the January 2005 issue of TechLink reminded you that effective January 1, 2005, Service and Parts Operations has discontinued all support for Windows 98 (Second Edition), Millennium and NT 4.0.

You must have Windows XP Professional or Windows 2000 Professional installed in your Techline terminal. Refer to the administrative message VMG20030999 dated October 31, 2003 for more information.

When programming controllers for certain vehicles, only the Pass Thru method can be used.

IMPORTANT: It has been discovered that having Windows 98 installed will interfere with the programming event if you attempt to program a controller

continued on page 2

Contents

SPS Applications	1
Proper Operating System Critical	1
New TechLink Website Features	2
Rear Axle Fill Level	2
Dexron VI	2
Motorola BCMs	3
I/P Appearance	3
PDI and CSDS Forms	4
Avoiding Scratched Headlamps	4
Axle Vent Noise	4
Duramax Air Filter	4
CTS Ignition Key	4
Unlocking Liftgate Latch	5
ABS Code U2108	5
White Instrument Faces	5
Navigation DVD	5
Product Recalls	6
Brake Twang Noise	6
Navigation Radio Hum	6
Star Washers in Grounds	6
SIR Lamp On	6
SSR Electrical Conditions	7
Programmable Door Unlocking Mode	7
Sunroof Option	7
FLD Feature on Radio	7
Clock Setting Revision	7
Coolant Leak	7
Fix It Right the First Time	8
Know How Broadcasts for March	8

using Pass Thru programming. The controller may be damaged, may lock up, and may be rendered useless if the

Techline terminal does not have the proper operating system.
- Thanks to Mark Stesney

New TechLink Website Features

Effective January 3, 2005, several new features have been added to the TechLink website.

You will continue to have access to the TechLink website through the <http://service.gm.com> web address.

The first new feature we've added is a keyword search capability. You will find a link to keyword search on the TechLink home page. There is also a search link button in the masthead of every issue of TechLink on the website, just above the table of contents. Simply click on the link and follow instructions.

For the first few weeks the new site was up, keyword search was available from October 2002 to the present. By the time you read this, you will be able to do a keyword search of every issue of TechLink.

The second new feature is "Late Breaking News." This button has been on the TechLink site from the beginning, but is now active for the first time.

You are encouraged to click on this button each time you visit the TechLink website, because important new information will appear there as it becomes available. In many cases, new information will appear on the website first, before it appears in the paper magazine.

We hope you enjoy these new features. If you have any suggestions about them, or any other website improvements, contact:

mark.stesney@gm.com

or

jim.horner@sandycorp.com

- Mark Stesney, publisher and editor

Rear Axle Fill Level

On 2005 Chevrolet Silverado and GMC Sierra 2500/3500 Series Pickups equipped with the 11.5-inch ring gear rear axle assembly, the factory lubricant fill level may appear lower than the published specification. This axle can be identified by the location of the fill plug on the rear axle housing cover, instead of on the front of the axle housing.

During production, all axle assemblies are filled by volume of fluid. They are not filled to reach a certain level. On the 11.5-inch rear axle, the fill quantity is 3.0 liters +/- 0.1 liter (3.18 quarts +/- 0.1 quart). With the correct amount of fluid in the axle, the fluid level may be as much as 35 mm (1.4 in.) below the bottom of the fill plug. The published specification is 17–21 mm (0.6–0.8 in.) below the fill plug opening.

TIP: It is NOT necessary to add axle fluid when the fluid level is at or above 35 mm (1.4 in.) below the bottom of the fill plug.

On any rear axle, variations in the readings can be caused by factory fill differences between the minimum and maximum fluid volume. Also, if a vehicle has just been driven before checking the fluid level, it may appear lower than normal because fluid has traveled out along the axle tubes and has not drained back to the sump area. A reading taken five minutes after the vehicle has been driven will appear to have a lower fluid level than a vehicle that has been stationary for an hour or two.

TIP: The rear axle assembly must be supported to get a true reading.

A revised bulletin will include service fill levels and fill amounts.

- Thanks to Rich Burrell

Dexron VI

During the first six months of 2005, GM Powertrain will transition from Dexron III Automatic Transmission Fluid to Dexron VI.

Dexron VI offers these longer-life characteristics.

TIP: Dexron III and Dexron VI can be mixed with no problem.

- Thanks to Robert C. Martin

Extended factory fill for life	150K miles for cars 200K miles for trucks
Clutch friction stability	Improved 100%
Clutch durability due to fluid	Improved 120%
Oil film thickness	Increased 20%
Fluid oxidation	Improved 100%
Foam / aeration	Improved 150%
Shear stability	Improved 200%

GM TechLink is a monthly magazine for all GM retail technicians and service consultants providing timely information to help increase knowledge about GM products and improve the performance of the service department.

Manager, Product Readiness:

R. M. (Bob) Savo
GM Service and Parts Operations
bob.savo@GM.com

Publisher & Editor:

Mark Stesney
GM Service and Parts Operations
Mark.Stesney@GM.com

Technical Editor:

Jim Horner
Jim.Horner@SandyCorp.com
1-248-816-3641

Production Manager:

Marie Meredith

Desktop Publishing:

Greg Szpaichler, MediaWurks
greg@mediawurks.com

FAX number:

1-248-649-5465

Write to:

TechLink
PO Box 500
Troy, MI 48007-0500

GM TechLink on the Web:

<http://service.gm.com>

General Motors service tips are intended for use by professional technicians, not a "do-it-yourselfer." They are written to inform those technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions and know-how to do a job properly and safely. If a condition is described, do not assume that the bulletin applies to your vehicle or that your vehicle will have that condition. See a General Motors dealer servicing your brand of General Motors vehicle for information on whether your vehicle may benefit from the information.

Inclusion in this publication is not necessarily an endorsement of the individual or the company.

Copyright© 2004 General Motors Corporation
All rights reserved.

Motorola Body Control Modules

This information applies to the Motorola BCMs used in several GM vehicle lines:

- Chevrolet Impala/Monte Carlo
- Pontiac Aztek/Buick Rendezvous
- Chevrolet Equinox

TIP: A microprocessor condition that affected early BCMs was corrected during the 2003 model year, beginning with p/n GMAN169 (Impala/Monte Carlo) and GMAN410C (Aztek/Rendezvous). Any BCM with a higher part number contains the microprocessor improvement. The Equinox, a newer vehicle, never had the earlier microprocessor.

Based on the history of these earlier control modules, technicians consider BCM replacement as the appropriate remedy for a number of customer concerns and vehicle conditions. However, with the improved microprocessor, this is not often the case. Analysis shows that almost 75% of BCMs replaced under warranty have no trouble found (NTF).

In cases where there was no trouble found with the returned BCM, the most common reasons for replacement were determined to be:

- Wrong module replaced
- Service procedure not followed
- Wiring
- System issue

The information provided here is not intended to replace the need for following established SI diagnostic procedures. But it will help you more thoroughly understand the relationship of the BCM to other vehicle systems.

In the following tables, you will learn which systems the BCM directly controls, the systems with which the BCM has an interaction, and the systems with which the BCM has no interaction. As you can see, these lists vary considerably between vehicle lines.

- Thanks to Jeff Strong, Motorola

Abbreviations Used in Reference Tables

- ALC – Automatic Lamp Control
- BTSI – Brake Transmission Shift Interlock
- HUD – Head Up Display
- PPEI – Platform Powertrain Electrical Interface
- PWM – Pulse Width Modulation
- RAP – Retained Accessory Power
- RFA – Remote Function Actuation
- RPA – Rear Park Assist
- SDM – Sensing and Diagnostic Module
- VSES – Vehicle Stability Enhancement System
- VTD – Vehicle Theft Deterrent

Impala/Monte Carlo BCM

Directly Controls	Interaction	No Interaction
<ul style="list-style-type: none"> – Power Door Locks – Interior/Exterior Lights – Security/Alarm – Content Theft Deterrent – RAP Relay – Power Mode Master – Fog Lamps – Electrical Load Management – Battery Rundown Protection – Personalization Features – Reverse Lights – BTSI 	<ul style="list-style-type: none"> – Radio – Theftlock, RAP – A/C – Cooling Fan – Cluster – Telltales – RFA – SDM – Store p/n – Power Windows – RAP – Sunroof – RAP – VTD – Passlock Controller 	<ul style="list-style-type: none"> – Wipers – Clock – Mirrors – Engine Controls

Aztek/Rendezvous BCM

Directly Controls	Interaction	No Interaction
<ul style="list-style-type: none"> – Door Locks – Interior/Exterior Lights – Power Mode Master – Battery Rundown Protection – Electrical Power Management – Security/Alarm (Content Theft Deterrent only) – RAP Relay – Fog Lamps (Aztek only) – Personalization Features – BTSI (MY03+) – Reverse Lights (MY03+) 	<ul style="list-style-type: none"> – Radio – Theftlock, RAP – Cluster – Some Indicators – A/C – PPEI – Cooling Fan – PPEI – Rear Park Assist – Chime (Rendezvous only) – RFA – X Link – SDM – Store p/n – MemorySeats – Personalization – Power Windows – RAP – Sunroof – RAP 	<ul style="list-style-type: none"> – Wipers – Engine Cranking/Starting/Running – HUD head up display – Mirrors

Equinox BCM

Directly Controls	Interaction	No Interaction
<ul style="list-style-type: none"> – Power Mode Master – Interior/Exterior Lights (Dome, DRL, ALC, Park Lamps, Fog Lamps) – Battery Rundown Protection – BTSI – Door Locking/Unlocking – Security/Alarm, Security – LED – CTD – Horn Relay – RFA – PRNDL Display – Intermittent Wipers (Front, Rear) – Rear Defog 	<ul style="list-style-type: none"> – Radio – Theftlock, Chimes, RAP – VTD – Passlock Controller (Key Cylinder, BCM, ECM), Security LED – IP – Liftgate, Door Ajar, Low Brake Fluid, Park Brake, Odometer, PWM Dimming – ECM – A/C Control, Oil Life Reset/Control, Fuel Level, Coolant Temperature/Hot Telltale, Odometer, Volts Telltale, Traction Control Off Telltale – ABS – Low Traction, ABS Failure, VSES Failure, VSES Active, VSES Disable, Brake Control – Cluster – SVS Telltale – SDM – Store P/N – Power Windows – RAP 	<ul style="list-style-type: none"> – Mirrors – Turn Signals – Reverse Lights – Clock – Radio – Windshield Washer – Non-Intermittent Wipers

I/P Appearance

This information applies to 2000-05 Chevrolet Impala and Monte Carlo.

Anti-squeak tape is used as an isolator between the trim plate and the I/P top pad. This tape has been identified as a source of a gap appearance, when the tape begins to release from the trim plate and the adhesive side of the tape shows between the parts.

Bulletin 04-08-110-007 recommends trimming the tape at the upper edge.

TIP: DO NOT remove or cut the tape with the trim plate attached.

Allow enough of the tape to remain on the trim plate edge contacting the topper pad, but trim so it no longer shows between the parts. This will prevent the unnecessary replacement of the entire I/P trim plate for gap appearance.

- Thanks to Gary McAdam



PDI and CSDS Forms



TIP: This information is not applicable to GM of Canada dealers.

According to bulletin 04-00-89-052, the Pre-Delivery Inspection (PDI) and the Completely Satisfied Delivery System (CSDS) Forms are now available for you to download and print.

TIP: Paper copies of these forms will no longer be supplied.

These forms can be found in the Retail Operating System (ROS) on the web at <http://gmweb.siweb.com/gmros>, and on the DealerWorld DWD Store.

The forms have been updated to address areas critical to a quality delivery experience. The Service Introduction and Orientation section of the CSDS Form has been added, to provide a more formal introduction to the Service

Department, and to help bring business back to your dealership.

Please contact your Zone Team if there are any questions regarding these forms.

- Thanks to Chuck Burns

Avoiding Scratched Headlamps

Owners should be reminded not to use an ice scraper on the headlamps of the 2005 Corvette. The exposed headlamps are covered by clear plastic lenses that have a hardcoated material applied at the supplier to resist scratching. Trying to clear snow, ice, or frost with a sharp instrument (ice scraper) could damage the hardcoat material and make the lens susceptible to scratching.

The following are some suggested methods for clearing the lens surface of snow, ice, or frost.

- water to melt the deposit
- cloth
- credit card
- rubber squeegee

- Thanks to Luke Ananian



Duramax Air Filter

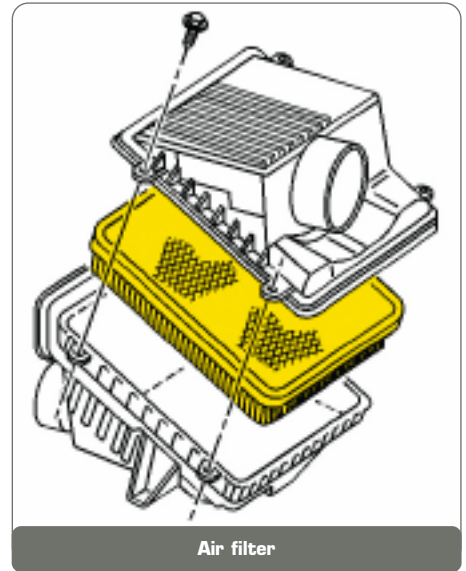
This information applies to 2001-05 Silverado and Sierra trucks with 6.6L Duramax® diesel engine.

Air filter p/n 25332443 is specific to the Duramax diesel engine. It is reinforced to eliminate damage from the increased airflow of the turbocharger. The reinforcement is visually identified by five ribs of epoxy across the pleats of the clean side of the filter.

TIP: The 8.1 liter gasoline engine air filter p/n 25313349 should never be used with a Duramax diesel. It will fit into the air box; however, it does not have the required reinforcement of the diesel air filter.

Due to the greater airflow possible with the turbo, an incorrect air filter may collapse or be torn, allowing dust and dirt to be ingested. This can cause serious damage to the turbo vanes and cylinder walls of the engine.

- Thanks to Andy Sutherland



Air filter

Axle Vent Noise

It's common for a drive axle to be vented to atmosphere to account for internal pressure changes as the axle heats up and cools down. The vent on the 2005 Corvette is unique.

A check valve relieves pressure as heat builds up. It's set to open at 0.7 psi (4.8 kPa).

However, this vent doesn't allow air back in during cooldown, to prevent water intrusion. As the air cools down, it can pull a vacuum of between 3 and 5 psi (20-34 kPa).

Consequently, it is possible to hear a hissing sound when removing the oil plug. This is normal, and results from air entering the axle.

TIP: The sound may be mistaken for pressurized air escaping.

- Thanks to Dave Howe

CTS Ignition Key

Owners of some 2004-05 Cadillac CTSs may comment that the ignition key will not come out of the ignition lock cylinder. The CTS is equipped with an electrically operated ignition lock cylinder control actuator that prevents the key being turned to the off position if the transmission is not in Park.

If electrical power is lost, as happens when the battery is dead, the key will not rotate to the off position and cannot be removed from the ignition lock cylinder. ECMs have been replaced unnecessarily for this reason. The ECM does not control the circuit for the ignition lock cylinder control actuator, and replacing the ECM will not correct this concern.

To diagnose and repair this concern, refer to SI document 821925 for 2004 CTS and SI document 1403801 for 2005 CTS. Ensure that the battery is fully charged before attempting repairs.

TIP: There is a release button for the ignition lock cylinder control actuator on the underside of the ignition key cylinder.

- Thanks to Dave Dickey

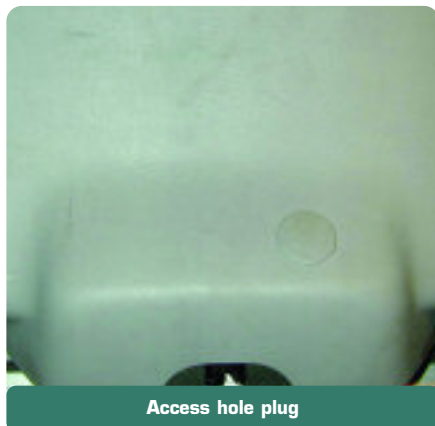
Unlocking Liftgate Latch

The 2002 and newer Chevrolet TrailBlazers, GMC Envoys, Oldsmobile Bravadas and Buick Rainiers are equipped with a service access hole in the event the liftgate latch will not unlock due to a loss of power. The access hole is located near the liftgate latch.

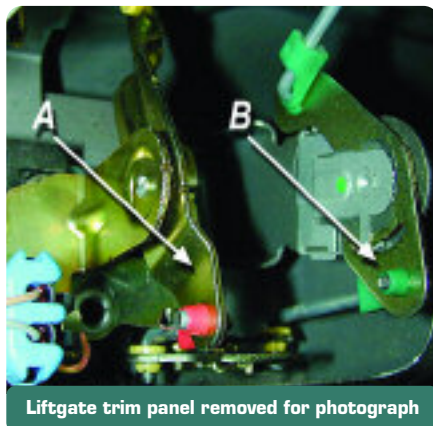
- A Liftgate release lever
- B Glass lock lever

To unlock the liftgate from inside the vehicle, expose the access hole by removing the round plug. Then, unlatch the glass lock lever (located toward driver's side). With the glass unlocked, the liftgate release lever (located toward passenger side) can be operated.

- Thanks to Andy Slawick and Lance Mossman of Applegate Chevrolet, Flint, MI



Access hole plug



Liftgate trim panel removed for photograph

ABS Code U2108

This information applies to the 2005 Chevrolet Cobalt (Pontiac Pursuit in Canada) vehicles without ABS brakes (J41), built before February 2005.

You may observe a history or current DTC code of U2108 stored in the ECM on the vehicles listed above. Document number 1530314 in SI provides the following diagnostic for DTC U2108:

- DTC U2108 Lost Communications With ABS/TCS Control System

This diagnostic may cause confusion, because the vehicle is not equipped with ABS. The ECM may falsely set a code of U2108 in cars not equipped with ABS brakes, due to a GMLAN configuration software condition.

A software update will be introduced in January of 2005 to correct this issue in production, so DTC U2108 will not potentially be set in non-ABS equipped vehicles.

TIP: A DTC U2108 will NOT illuminate a SES/MIL light. A code clear will clear this diagnostic code only momentarily. It will return to a current state almost immediately. No repairs to the vehicle are necessary as a result of a DTC U2108.

IMPORTANT: For conditions in which the SES/MIL light is illuminated, with a DTC U2108 present, check for additional DTCs causing the condition.

- Thanks to Steve Oakley

White Instrument Faces

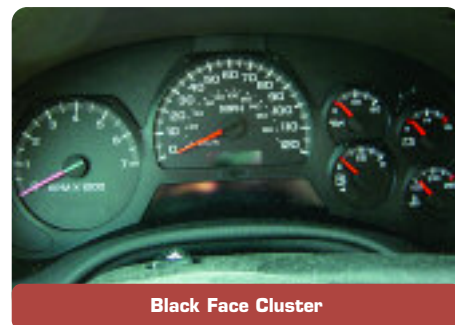
Some customers may comment that the instrument panel cluster is hard to read during sunlight hours on 2005 Chevrolet TrailBlazer and EXT Models built before October 12, 2004.

The white background of the instrument cluster is the cause. Refer to service bulletin 04-08-49-028 or SI document 1560970 for black face cluster exchange information to resolve this condition.

- Thanks to Doug Daugherty



White Face Cluster



Black Face Cluster

Navigation DVD



This information applies to the following 2004-05 vehicles with the UM8 Navigation Radio Sound System:

- Buick Rendezvous and Rainier
- Cadillac Escalade, ESV, and EST
- Chevrolet Avalanche, Tahoe, Suburban, TrailBlazer and EXT
- GMC Yukon, XL, Denali, Envoy, XL and XUV
- HUMMER H2 SUV and SUT

Customers may comment that their navigation radio system does not have complete coverage for their area. This may be due to recent construction, or changes to public access roads or highways.

2005 model vehicles should contain the latest navigation DVD disk release, version 3.0. If not, refer to service bulletin 04-08-126-001.

2004 model vehicles should contain an earlier navigation DVD disk release, such as version 2.0.

TIP: The New Vehicle Warranty does not cover cases in which the customer requests an updated navigation DVD. However, customers can purchase the DVD disk, release version 3.0, under part number 10390370.

- Thanks to Doug Daugherty

Product Recalls

"The media have information on recalls before the dealership does."

"Customers seem to know about a recall before the dealer does."

These quotes are from a recent Dealer Satisfaction Index Survey and are representative of how some dealer personnel feel about the way General Motors handles product recalls.

The purpose of this article is to explain what GM is doing to make sure that recall information is communicated to your dealership in a consistent and timely manner and how you can help.

GM's goal is always to notify dealers about a recall before notifying the media or vehicle owners, so dealers can respond to customer inquiries and concerns. The general policy is for dealers to be notified one week before customer letters are mailed. This notification is accomplished through the issuance of a GM Administrative Message, and corresponding voice mail to involved dealers on the day the recall is released.

The message typically contains:

- information about the customer letter mailing schedule;
- when the GM Vehicle Inquiry System (GMVIS) will be updated with the involved V. I. Numbers;
- the availability of the Campaign Initiation Detail Report (CIDR) in GM DealerWorld. This report identifies the vehicles and customers that are assigned to your dealership for completion of the recall.

Additionally, a copy of the recall bulletin is always electronically attached for immediate review, and the bulletin is normally in Service Information (SI) the next day. A file containing a list of the involved V. I. Numbers may also be attached to the message. The file is usually sorted by dealer Business Associate Code (BAC) for easy reference.

Depending upon the nature of the recall and the availability of replacement parts, exceptions to this process do occur. Sometimes other communications must be issued before the official release of a recall. This can be a GM Administrative Message telling dealers about the upcoming recall or a letter to involved customers advising of precautionary measures to take until parts are available to repair their vehicles. Involved dealers are always notified by GM Administrative Message and voice mail whenever any recall related communication is sent to customers. Also, a list of anticipated questions and answers may be provided to dealers to assist in responding to customer inquiries about a pending recall.

GM is required to notify the National Highway Traffic Safety Administration (NHTSA) within five business days of the decision to conduct a safety or noncompliance recall. Shortly thereafter, information about the recall is usually available to the media and customers through a NHTSA web site. If the recall is not ready to be launched, a GM Administrative

Message and voice mail is issued advising dealers about the information that will appear on the NHTSA web site. This ensures that dealers are aware of the recall before the media or vehicle owners. GM has been providing these messages to dealers since September 2002.

Government agencies may issue information or put information on their web sites about ongoing investigations, before either manufacturers or the agency have made any decisions or recommendations about a recall. These investigations may be reported by the media, and customers may ask about them as if there were already a recall decision. GM does not routinely notify dealers about investigations, but will do so if there is a high level of media and consumer interest.

Because the primary link to you is through the GM Administrative Message System, it is imperative that dealership management check GM DealerWorld daily for product recall information. More importantly, it is critical that a process is in place to guarantee that such information is immediately shared with appropriate dealership sales and service personnel, even if the Service Manager or someone else in the regular communications chain is not at work on that day. Otherwise, the chain is broken, which can put your dealership at a severe disadvantage when trying to help customers who are seeking recall information.

- Thanks to Loren Rusk

TAC Tips

Brake Twang Noise

This information applies to 2005 Chevrolet 1500 Silverado and GMC 1500 Sierra with RPO JF3 or JF7.

Some owners may comment on a creak or twang type noise when the brake pedal is applied or released. The noise is normally heard only with the engine off.

To correct this concern, replace the brake booster assembly with p/n 15250764.

- Thanks to Jim Will

Navigation Radio Hum

This information applies to 2003-05 Chevrolet/GMC/Cadillac/Hummer H2 Full Size Utilities with RPO UM8.

Customers may comment of a hum or fan running type noise from the navigation radio.

This sound is normal. The navigation radio has an internal cooling fan to cool the radio's internal components.

- Thanks to Jim Will

Star Washers in Grounds

This information applies to 1996-2005 passenger cars, trucks and utilities.

In the past, star washers have been used under most ground connections. It was believed using a star washer would improve continuity to ground and prevent the ground fastener from becoming loose.

GM Engineering has determined that installing a star washer increases the chance for corrosion and prevents the terminal from achieving proper torque. On vehicles being built today, star washers are not being used under any ground connection.

It is recommend NOT to use a star washer on any ground connection to the body or chassis of the vehicle.

- Thanks to Dino Poulos

SIR Lamp On

Owners of some 2005 Chevrolet Corvettes may experience an SIR lamp after depressing the horn for more than 5 seconds or using the horn two or three times in succession. A current or history code B0104 or B0101 may be set in the SDM.

Make sure the horn bracket is

properly attached and torqued to the skid bar assembly of the frame. If the concern still exists, advise the customer that Engineering is investigating the concern.

TIP: Replacing the SDM or the sensors will not resolve the concern.

- Thanks to Paul Radzwilowicz

continued on page 7

SSR Electrical Conditions

Owners of some 2003-04 Chevrolet SSRs may comment on one or more of the following conditions:

- Air bag light on
- Check Engine light on
- Service Air Bag message displayed
- Reduced Engine Power message displayed
- Park lamps stay on all the time

In addition to referring to Bulletin 04-08-45-003, there is one additional area of wire chafing to inspect – the main vehicle wire harness in front of the master cylinder. An open seam in the conduit can allow the exposed wires to contact the front of the master cylinder and chafe. If wire chafing is found, follow published wire repair procedures in SI. Make sure all the wires are installed into the conduit, then tape the conduit closed and reposition it so it does not contact the master cylinder.

- Thanks to Ron Erman

Programmable Door Unlocking Mode

This information applies to 2005 Chevrolet Trailblazer and EXT; GMC Envoy, XL and XUV; and Buick Rainier.

When attempting to program the Programmable Unlocking Feature on a vehicle without a DIC, the owner's manual is not correct. The type of unlock features match the owner's manual, but the order of the modes has changed.

A vehicle without a DIC will need to use the multifunction switch method to program door locks. The correct unlock modes are listed below.

TIP: Refer to SI document 1545348 to

obtain the manual programming procedure.

Programmable Unlocking Feature

The following is the list of available programming options:

Mode 1 – Driver's door unlocks when the transmission is shifted into PARK (P).

Mode 2 – All doors unlock when the transmission is shifted into PARK (P).

Mode 3 – All doors unlock when the key is removed from the ignition.

Mode 4 – No automatic door unlock.

- Thanks to Dino Poulos

Sunroof Option

The CF5 sunroof option is now available on the 2005 Chevrolet Colorado and GMC Canyon. This sunroof, manufactured by Webasto, is an electric sliding glass type unit. When opening, the glass moves rearward and slides above the roof.

A unique feature of this sunroof is that it is installed at the plant after the vehicle is fully assembled. This involves the cutting of the roof panel and headliner. Another unique item is that the sunroof assembly does not have water

management drains that run down the inside pillars. This roof is sealed to prevent water from traveling past the glass panel seal.

Every vehicle equipped with a CF5 option is water tested at the plant before shipment. If a water leak is noticed in the vehicle, begin water testing the vehicle from the bottom of the body, and work up to the roof area. To eliminate the sunroof as a source, use two inch (50 mm) wide masking tape over the entire perimeter of the sunroof.

- Thanks to Dino Poulos

FLD Feature on Radio

This information applies to 2005 Chevrolet Colorado, Trailblazer and EXT; and GMC Canyon, Envoy, XUV and XL; and Buick Rainier.

Some owners may comment that on the US8 radio, the FLD buttons seem to be inoperative and will not allow the user to change tracks on the CD being played.

This button will not change tracks on a CD.

FLD is the abbreviation for Folder and

is labeled under any two of the radio's preset buttons. This button will function only when playing an MP3 CD. MP3 format allows the user to create folders. Some examples of a folder may be Rock, Country, Kid's Songs, etc. If the MP3 that is being played has multiple folders created, this button will allow the user to change folders. If the user did not create a folder(s), this option will not be utilized and may be interpreted as the change track button.

- Thanks to Dino Poulos

Clock Setting Revision

An article on page 7 of the December 2004 issue explained how to use the 12 hour and 24 hour clock feature on 2005 Corvettes with RPO USB or US9 radios.

Step 2 should have read:

2. Depress the radio tuner knob to toggle between 12 hour and 24 hour (military) format. Release the knob for 30 seconds for the change to occur.

- Thanks to Paul Radzwilowicz

Coolant Leak

On some 2004 Chevrolet Express and GMC Savana with a 4.3L engine, there may be a coolant leak from the lower radiator hose.

The lower radiator hose on the 4.3L engine may be chafing against the left front brake hose retaining clip.

Replace the lower radiator hose as needed. Then, reposition the left front brake hose retaining clip. Rotate the clip 90°, so the flat part of the clip is at the top.

- Thanks to Ron Erman



Hose contacting clip



Original position of clip



Repositioned clip



Car Issues – Fix It Right the First Time (new issues in bold)

Model Year(s)	Vehicle Line(s) / Condition	Do This	Don't Do This	Reference Information / Bulletin
2003-2004	Cavalier, Sunfire – HVAC Control Head, Difficult to Adjust Mode Dial	Replace foam which, delaminated from the model door, can cause bind condition.	Don't replace HVAC control head, module or cables, unless they are damaged.	03-01-38-005B
2002-2005	Cars and Trucks – Multiple Driveability Symptoms/Clogged Fuel Injectors	Clean fuel injectors as described in Service Bulletin.	Don't replace fuel injectors.	03-06-04-030A
1999-2004	Park Avenue (99-03), LeSabre (00-04) – Ash Tray Does Not Remain Closed	Use I/P ash tray latch (Park Avenue) or ash tray springs (LeSabre) for service repair.	Don't replace complete ash tray assembly.	03-08-49-005 (Park Avenue) 03-08-49-016 (LeSabre)
2004-2005	Grand Prix – Outside Rearview Mirrors	Replace mirror glass or motor, whichever is defective.	Do not replace complete mirror assembly.	04-08-64-009
2004	Grand Prix – Steering, Suspension or Cradle Click Noise	Install new two-piece sleeve and spacer to steering gear mounts.	Don't replace steering gear or cradle.	03-02-32-048A
2000-2003	Century, Regal, Lumina, Impala, Monte Carlo, Grand Prix, Intrigue with 3.8L L36 Engine – Coolant Leak	Replace upper intake manifold gasket only.	Don't replace upper intake manifold assembly for coolant leak condition.	03-06-01-016
2001-2004	Aztek (01-04), Rendezvous (FWD, 02-04), Venture/Montana/Silhouette (01-04) – Pop and/or Rattle in Exhaust Down Pipe	Follow procedure in bulletin using clamp P/N on down pipe to correct rattle/buzz noise.	Don't replace converter assembly for rattle/buzz noise without completing instructions in bulletin.	03-06-05-003
2000-2004	All Cars with 4T40/4T45E and 4T65E – Light On/Various Transmission Codes Stores	Check transmission 20-way connector for secure connection (disconnect and reconnect).	Don't replace transmission, TCC PWM, VSS, PCS or valve body.	02-07-30-022B
2000-2004	Cavalier/Sunfire/Alero/Grand Am – Inoperative Sunroof Module	Retime module or replace only motor for inoperative complaints.	Don't replace entire sunroof module assembly.	03-08-67-009A
1999-2004	All Cars and Trucks – Brake Warranty, Service and Procedures	Issue One: Refinish brake rotor. Issue Two: Measure for LRO.	Issue One: Don't replace brake rotors. Issue Two: Don't measure for LRO.	00-05-22-002D



Truck Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s) / Condition	Do This	Don't Do This	Reference Information / Bulletin
2003-2005	Full Size Pickups and Utilities – Snap/Popping Noise from Front of Vehicle	Slot left side mounting holes on front crossmember.	Don't replace crossmember.	03-08-61-002B
2002-2004	Chevrolet Silverado, GMC Sierra – Accumulator/Accumulator Bracket	Replace accumulator and/or accumulator bracket.	Don't replace compressor.	02-01-38-007C
2004	Tahoe, Suburban, Silverado, Yukon, Yukon XL, Sierra, Escalade, Escalade EXT, Escalade ESV, H2 – Passenger Door Module and RKE Inoperative	Re-flash passenger door module.	Don't replace passenger door module.	04-08-52-005
2001-2003	Fullsize Pickups – Injector Replacement for High Flow Rates	Use Corporate Bulletin Number 04-06-04-007A for injectors with high fuel return rates. Use Special Policy 04039 for all 01-02 vehicles.	Don't replace 8 injectors for any complaint other than high fuel return rates. All other injector failures are fix as failed.	Special Policy 04039
2004-2005	All Cars and Trucks – State-of-Charge Upon Delivery of a New Vehicle	Check battery's state-of-charge per revised PDI procedure using Midtronics Conductance Tester.	Don't remove and replace battery.	02-06-03-009A
2002-2004	Fullsize and Midsize Pickups and Utilities – Labor Operation Assignments for Control Module Reprogramming	When submitting claims for reprogramming electronic module, use correct labor operation that reflects module being programmed.	Don't use K5364, which is for reprogramming a transmission control module (TCM), when reprogramming a TCCM.	02-04-21-006D 02-06-04-057D
2002-2004	Fullsize and Midsize Pickups and Utilities – Sleepy New Venture Gear Transfer Case Control Module	Verify sleepy module as primary cause. Reprogram TCCM with latest software.	Don't replace encoder motor or transfer case. Replace the module only if a C0550 DTC shows as current or in history.	02-04-21-006D
2002-2003	Chevrolet Avalanche and Cadillac Escalade EXT – Cargo Covers and Cladding Faded or Stained	Thoroughly clean, dry and treat components with "Armor-dillo."	Don't replace cargo covers for this condition.	04-08-111-001A
2002-2004	All TrailBlazers, Envoy, Envoy XL, Bravada – Squeak/Rub/Scrub Type Noise in Steering Column	Lubricate and remove material.	Don't replace upper or lower intermediate shaft.	02-02-35-006A
2001-2004	Fullsize Pickups and Utilities – Servicing Wide Load Mirrors (RPO DP6)	Replace individual parts as needed.	Don't replace complete mirror assembly.	03-08-64-028

**Know-How
Broadcasts
for
March**

10290.03D Emerging Issues

New Model Features and
Technology Close-Up seminars

March 10, 2005, 9:00 AM, 11:30 PM, and 3:30 PM Eastern Time

Stay tuned! These programs will return soon.
Check the Service Know-How section of the GM Training
website (www.gmtraining.com) for more details.



– Thanks to Tracy Timmerman