TECHlink
GM
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A Monthly Publication for GM Dealership Service Professionals

Removing Transseal Protective Film

Installation of Transseal at the factory

Protection continues during storage

Numerous GM vehicles, including the Cadillac XLR and Chevrolet Corvette, are delivered to the dealership with Transseal® protective film on most horizontal surfaces. Bulletin 03-08-51-001 has been released to provide instructions for removing this film.

Transseal film is installed early in the manufacturing process and protects the vehicle surfaces during assembly as well as during shipment and storage.

TIP: For continued protection, leave the film on the vehicle until it's prepped for delivery to the customer (up to 6 months).

For satisfactory removal, follow the

continued on page 3

Techline News

TechLink Distribution

Beginning with this issue, the quantity of *TechLink* newsletters being sent to dealers is being changed. You will receive either 3, 5 or 10 copies, depending on dealership size (US only).

Effective immediately, only dealers will receive *TechLink*. Internal distribution within GM has ceased. Back issues will no longer be stocked and cannot be ordered from the DealerWorld online store.

You are encouraged to begin using the *TechLink* website. This can be located at http://service.gm.com. In the Archives, you will find a PDF of each past issue of *TechLink*, from October 1999 to the present issue. These PDFs can be used to make additional b/w or color copies on your printer.

TIP: Each *TechLink* is posted to the website the second week of the month of issue.

- Mark Stesney, publisher

TECHlink GM

Contents

GM Service and Parts Operations

Including Codes with Warranty Claims

Various module-based systems in vehicles are capable of providing a great deal of diagnostic information in the form of diagnostic trouble codes (DTC). You are requested to pass along as much of this information as possible.

TIP: See the May 2005 issue of TechLink for an explanation of how to navigate the diagnostic information in SI.

Technicians – Record the following on the repair order:

– technician observations
– customer comments
– diagnostic codes (B = body, C = chassis, P = powertrain, U = communication).

See the GM Service Policies and Procedures Manual, article 1.6.2.

Warranty Claims Administrator – Enter the same information in the comment section on the warranty claim for submission.

See the GM Claims Processing Manual, Section 4.2.g.

This information is continually analyzed by GM Engineering. This process provides engineers with accurate, detailed information on a more timely basis. The idea is to identify and resolve potential product concerns as early as possible.

If you will provide applicable diagnostic codes, your observations, and customer comments on every vehicle you repair, Engineering can begin to better understand the root cause of the condition.

Top Tier Gasoline Availability

As mentioned in the August 2004 TechLink, GM participated in developing a Top Tier Detergent Gasoline standard, which exceeds the detergency standards imposed by the EPA (applies to the United States only).

TIP: A running list of comforming gasoline brands will appear in the Reference Guide section of the TechLink website at http://service.gm.com.

Here's a list of gasoline brands that meet Top Tier standards as of August 15, 2004.

Chevron

Chevron has markets in 29 states in the West, Southwest and South.

QuikTrip

QuikTrip (not to be confused with Kwik Trip) operates convenience stores and travel centers in:

Tulsa, OK
Springfield, MO
Kansas City, MO and Kansas City, KS
Wichita, KS
Des Moines, IA
Omaha, NE
St. Louis, MO and St. Louis, IL
Atlanta, GA
Dallas-Ft. Worth, TX
Phoenix, AZ
Bartlesville, OK
Miami, OK
Vinita, OK
Columbia, MO

- Thanks to Jay Dankovich

Programming Corner

BCM Setup

IMPORTANT: This information applies only to the 2004-05 Chevrolet Malibu and 2005 Pontiac G6.

When you are setting up a new BCM using the Tech 2, a screen will ask you:

Do you want to set up a new BCM?

If you answer YES, the screen will read:

Controller is locked.
Select ENTER to continue . . .

IMPORTANT: When you see the "Controller is locked" screen, do not assume that this means you are unable to change options, and press EXIT. If you do this, and then replace the BCM, this is an unnecessary replacement of an otherwise good BCM.

You must press ENTER to continue. The screen will read:

Would you like to Configure Options Only

Answer YES to proceed.

- Thanks to Steve Apking

GM TechLink

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

Removing Transseal Protective Film — from page 1

instructions in the bulletin completely and carefully. Here are some of the important highlights. See the bulletin for details.

The film releases easily from the paint at an ambient temperature between 60°F and 85°F (16°C and 29°C). If the vehicle has been parked in the sun, place it in the shade and allow the painted surfaces to cool to this temperature. The film may tear into small pieces if you attempt to remove it without allowing it to cool.

TIP: For extreme conditions (film has been on a long time, is dirty or is difficult to remove by hand), the bulletin suggests soaking the film with water, then applying Murphy Oil Soap or equivalent with a woolen mitt. Washing is particularly important when the film is contaminated by railroad dust or other grit. Gritty film can flop over and contact the painted surfaces, causing scratches.

Grit and grime

The film must be thoroughly wetted with cool water. **Never use hot water.** Use a standard tap water from a garden hose, or a pressure washer within a range of 1000-2200 psi (6900-15000 kPa).

Removing dirt with mild soap

When wetted, the film's appearance turns from clear to milky, indicating that the release agents have been activated and the film can be removed.

Perhaps the most effective method of removing the film is to peel a corner back to break the seal, allow water to penetrate under the film, then peel with one hand while directing the water with the other.

Breaking the seal

Small particles of film that remain on the surface can be removed by applyling GM OptiKleen concentrate (do not dilute).

Allow water to penetrate under the film.

Apply the concentrate with a clean, soft cloth to dissolve the Transseal particles.

After the film is removed, if a haze remains on the surface, simply wash the vehicle with soap and water to provide a polished luster.

TIP: The manufacturer offers assistance at 1.800.307.7218 (US) or 972.286.7890 (Canada).

- Thanks to Len Tillard and George Grogan

Idle Flare or Decel Stall

This condition may affect 2002-04 vehicles with 4 cylinder 2.2L engine (VIN F - RPO L61) (Chevrolet Malibu, Cavalier, and Classic, Oldsmobile Alero, Pontiac Grand Am and Sunfire).

Some owners may comment about an engine idle flare when the clutch is depressed. Also, some owners may comment about a low speed engine decel stall when coming to a stop.

The flare is caused by the vehicle entering stall-saver mode when the clutch is depressed. The low speed engine decel stall is produced by an interaction between the engine control software and the IAC motor.

Reprogram the PCM with the latest calibration available. The new calibration was released beginning with TIS satellite data update version 6.0 for 2004 available June 2004. As always make sure your Tech 2 is updated with the latest software version.

- Thanks to Steve Oakley

CTS Transmission Oil Cooler Line Fitting

The following information applies to the 2003 through present Cadillac CTS vehicles with automatic transmissions.

Radiators on these vehicles have two non-serviceable transmission oil cooler (TOC) fittings that mount the in-tank cooler to the plastic radiator end tank. These fittings are also are non-removable. A protective wall is placed around the fitting to prevent wrench access.

A threadlocking compound is used to retain the fittings to the in-tank cooler. Any attempt to remove these fittings will damage the threads on the in-tank cooler and damage the seal between the in-tank cooler and the plastic radiator end tank. This can result in a coolant or transmission oil leak and possible vehicle damage.

Proper removal of the TOC line requires the use of J-44827 to properly disengage the TOC line from the fitting. Refer to SI for the service procedure for correctly disconnecting and re-connecting the TOC lines from the fittings.

- Thanks to Chris Semanisin

Protective wall at TOC fitting

J-44827

Using J-44827

Carbon Canisters

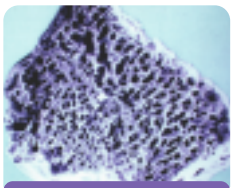
Carbon canisters, on automobiles since 1970, have changed in external appearance and size. But inside they all perform the same function – storing fuel vapors (hydrocarbons) that would otherwise pollute the atmosphere. Vapors come from the fuel tank (and the float bowl of a carburetor, if so equipped).

The outer plastic housing of the canister contains one or more chambers of activated carbon pellets. The special properties of this material allow the carbon canister to do its job.

Carbon Pellets

Carbon results when wood is heated to about 1,000° F without oxygen. Volatile organic compounds in the wood are driven off, leaving behind the carbon (charcoal) and the minerals (ash).

Activated carbon is treated with oxygen to open up millions of tiny pores between the carbon atoms. This material has a surface area so large that one gram may have the surface of two to five football fields!



Pores in activated charcoal

Activated carbon is widely used to adsorb odors or substances from liquids or gases. The adsorbed substance is attached by chemical attraction much like a sponge soaking up water. Fuel vapors migrate into all the little pores in the carbon, attach themselves, and are trapped.

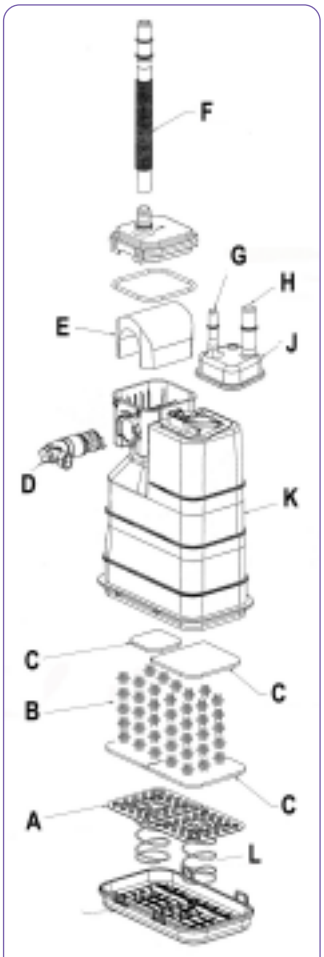
When the carbon adsorbs fuel vapor, an exothermic (creates heat) reaction occurs. During a re-fueling event, the canister may have an internal temperature of 212° F. The external temperature is closer to 150° F, due to airflow through the canister.

Components

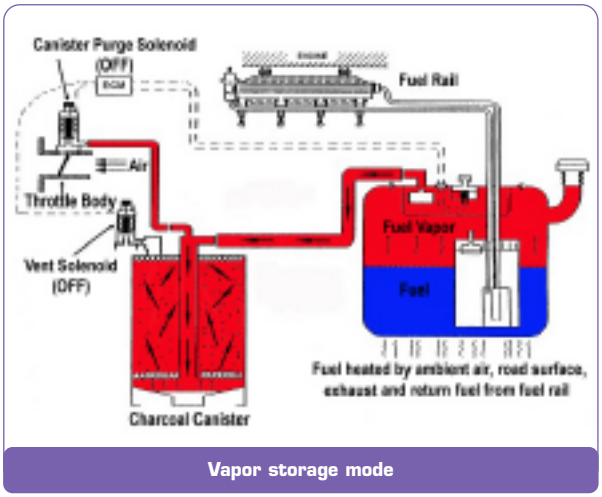
The accompanying diagram represents a typical carbon canister. The activated carbon (B) is packed tightly into the body (K) of the canister using screens (C). A spring-loaded (L) volume compensator plate (A) continually pushes up against the screens that hold the carbon in place.

Leaving the carbon loose would decrease effectiveness by allowing too much air space between the particles and would allow the carbon to move around and pulverize.

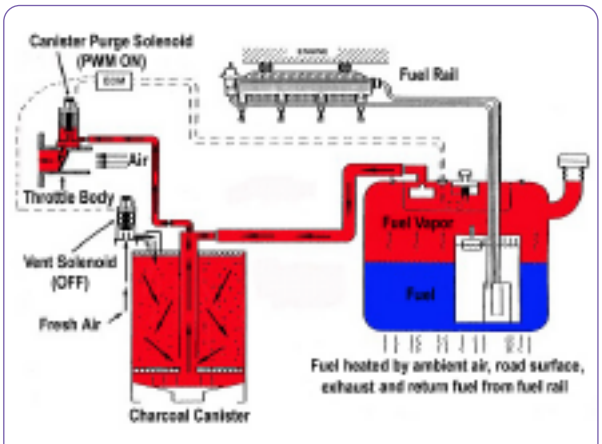
The vent to atmosphere (F) is controlled by a solenoid (D) that is normally open. In this diagram, the vent solenoid is integral with the canister. A replaceable filter (E) keeps dust from intruding into the canister and reducing its effectiveness. The liquid trap (J) consists of a cover and a series of molded ramps that prevent liquid fuel from entering the canister from the fuel tank vapor tube (H). Finally, vapor is drawn from the canister by engine vacuum through the vapor purge tube (G).



Components



Vapor storage mode



Purge mode

Evaporative Emission System

The carbon canister is part of the Evaporative Emissions System.

In the **vapor storage mode**, fuel vapors from the fuel tank travel through plumbing to the canister. The amount of vapor created depends on:

- ambient air temperature
- Reid Vapor Pressure of fuel
- heat from road surface and exhaust system
- heated return fuel

During this mode, the Canister Purge Solenoid is closed (unenergized) and the Vent Solenoid of the canister is open (unenergized) to the atmosphere. Fuel vapor is adsorbed by the activated carbon in the canister. Any air displaced from the canister by the vapor is pushed out the vent. Fuel vapors will not "leak" out of the vent to any great extent due to the attraction of the vapor to the carbon.

During operation of the vehicle, the control module (PCM, VCM, etc.) commands a **purge mode**, in which the Purge Solenoid is pulse-width-modulated, similar to a fuel injector. The vapors are pulled by engine vacuum out of the carbon and fuel tank into the intake manifold. This resembles squeezing water out of a sponge for re-use. The vapors are removed from the carbon's tiny pores, preparing it for more storage.

Things That Can Go Wrong With a Carbon Canister

Vapor system-related codes to know:

Carbon Canisters — from page 4

TIP: Some code numbers have changed recently. P0440 became P0455. And P1441 became P0496.

P0440	Evap Emission (EVAP) System
P0442	Small leak detected
P0446	System performance
P0455	Large leak detected
P0496	Flow during non-purge
P1441	Flow during non-purge

Carbon canister loose in brackets – The canister bouncing around breaks up the carbon and turns it into dust that can at times be found in the purge solenoid. This may not set a code unless enough carbon dust restricts the flow in the Evap system, or prevents the purge solenoid from operating properly.

Damage incurred by foreign objects striking the canister and breaking the canister body – This will cause major leakage during evap testing, possibly causing a P0442 or P0455 and of course venting vapors to the atmosphere.

Water in the canister – Water can be pulled in through the vent solenoid if the solenoid or its vent tube are exposed to water (such as the bed drain on a C/K pickup, Bulletin 00-06-04-024). Water inhibits the carbon's ability to adsorb vapor. Water tends to stay in the carbon for a period of time even with purging. This has a high potential of setting a P0446.

Fuel saturation – Overfilling of the fuel tank forces fuel into the canister. Liquid fuel inhibits the carbon's ability to adsorb and may cause a restriction in the system, causing a P0446.

Dust and dirt contamination – Almost always pulled in through the vent solenoid. Initially this causes a flow problem and eventually inhibits the carbon's ability to adsorb. A filter is usually used in the vent path of the carbon canister to trap contamination before it gets to the canister. The filter may be located in the canister under a cover or remotely mounted at the end of the vent (air) tube. It's always located before the vent solenoid. Check SI for the location of the filter. When a P0446 code is set, this filter and the entire vent path should be checked for restrictions.

Insect infestation – Due to the heat generated during adsorption, the canister becomes attractive to insects. Generally they nest in the vent tube of the vent solenoid and can cause a restriction resulting in a P0446. Always check the entire length of vent tubing for foreign material if a code P0446 is set, and clean as necessary.

- Thanks to Randy Pearl and Paul Reed

Cab Rattle Noise

Owners of some 2001-05 Chevrolet Silverados and GMC Sierras may comment of a rattle type noise coming from the rear of the cab during body twist maneuvers or over bumps. This noise may be coming from the dealer-installed GM Tubular Assist Bars (Nerf Bars). Several cases have been reported were the gasket between the Tubular Assist Bar and the body mounting bracket were distorted and the Assist Bar had cut through the gasket, making metal-to-metal contact with the body bracket. The gasket can be distorted or cut by overtightening the body bolts during installation of the Assist Bars.

To correct this concern, replace the Assist Bar gaskets, which are included in hardware kit 88961680 (brackets, bolts, and washers). Be careful when installing the body bolts. Apply blue Loctite and tighten the bolts to 91 Nm (65 lbs. ft.). DO NOT use an air impact wrench.

- Thanks to Tom Clapham

Instrument Panel Itch or Ticking Noise

Owners of some LeSabres may encounter a creak or tick noise in the instrument cluster area while driving over bumps. This noise is due to the mispositioned felt strip on the top pad between the I/P and the cluster. The felt strip is usually too far forward, toward the windshield.

To correct this condition, reposition the felt strip toward the driver.

- Thanks to Bill Metoyer

Good fore and aft location of felt strip on IP top pad

Cobalt Door Upper Front Trim Panel

On the 2005 Cobalt, the method for attaching the Side Door Upper Front Trim Panel ("shark fin") depends on the trim level.

On base models with manual outside rearview mirror, the extension is removable by pulling the trim piece straight back from the door; it is held in place by clips.

On uplevel models with power outside rearview mirror, the extension is heat-staked to the door trim panel. There is no provision for removal. Attempting to do so will result in damage to the door trim panel.

- Thanks to Ed Kay

Duramax Diesel Injector Tips

Attention to detail is important when working with Duramax diesel injectors. Perform a visual inspection of the fuel line connections and the area around the injector for corrosion and contamination before removal.

Follow the removal and installation procedures in SI, ensuring that all areas are clean and free of dirt and contaminants before installing.

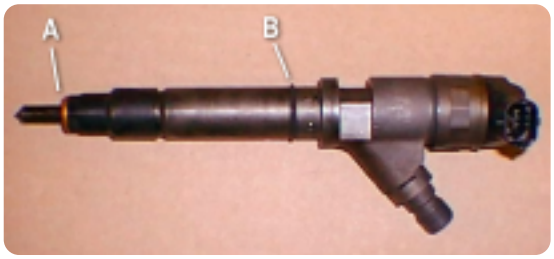
Before installing the injector, move aside any wires or other obstacles that may interfere with installation.

Be sure the high-pressure copper seal (A) is attached to the bottom of the injector. If the seal is damaged, it could cause a compression leak, leading to a running condition and high imbalance rates.

Be sure the rubber O-ring (B) is seated in the mid-barrel groove on the injector. The rubber O-ring prevents water and contaminants from getting between the injector and the engine.

Be sure the injector and hold-down bracket are seated and in the proper position, and the attaching bolt is torqued to the appropriate specification.

- Thanks to Art Seymour



Inline A/C Filter

Service Technicians Voice Concerns – GM Listens and Delivers

It's common A/C service knowledge that, when a compressor fails, contaminants are carried throughout the system. Thorough refrigerant flushing is time-consuming and does not assure complete 100% removal. Although some thermal expansion valves (TXVs) have their own screens, they don't have the surface area to contain compressor failure debris. So, for years, a service in-line filter has been recommended to prevent TXV plugging.

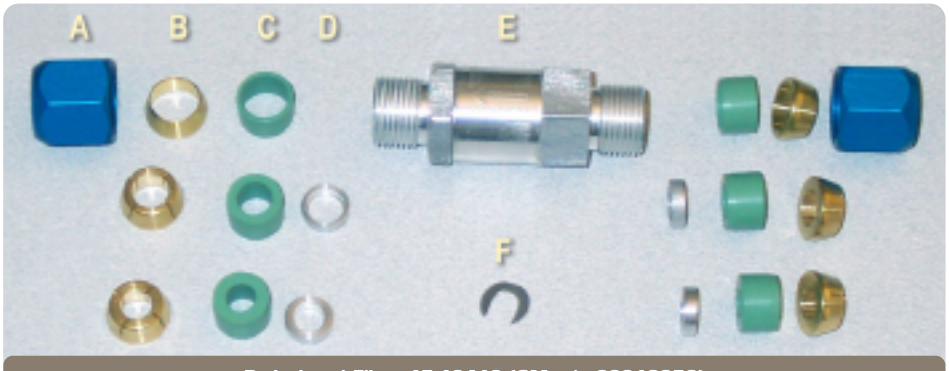
Original GM Filter

The original GM service filter effectively contained contaminant material. But, this part had several installation shortcomings that technicians readily pointed out. These included:

- Installation leak sensitivity – any deviation from approved procedure could result in leaks.
- Installation labor – required double installation to ensure no leaks.
- Capacity limitation – certain compressors and systems would benefit from additional contaminant capacity.
- Numerous models – the parts department never seemed to have the right unit in stock.

Realizing these shortcomings existed, GM worked with the original supplier to redesign the filter to address all of the technicians' concerns. The resulting filter provides a larger capacity, universal application, and enhanced reliability in the real-world field environment. In late 2003, ACDelco released the redesigned filter 15-10413 (GM p/n 89016656).

A Nut
B Ferrule
C Seal
D Tube Adaptor
E Filter Body
F Orifice Retainer Clip



Redesigned Filter 15-10413 (GM p/n 89016656)

What's different about this new service filter?

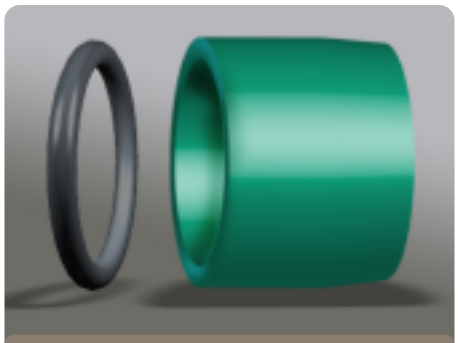
Provides a simplified, robust, leak-free installation.

The original filter design incorporated an O-ring to seal around the A/C tube OD. Successful installation required a smooth round surface. Technicians pointed out the obvious field reality:

- Tubes are not all perfectly round
- Tube finish has surface imperfections

Round and non-round tubes

Surface imperfections



O-ring (left) and new tapered seal (right)

- Installing the filter collar twice to assure proper seating is inefficient and time-consuming.

The redesigned filter replaces the single O-ring with a robust tapered sealing sleeve. The seal provides 10 times the sealing area and greatly increases the seal's ability to overcome tube irregularities. The addition of slots on the brass ferrule permits the ferrule to seat correctly on the first installation and increases compression on the seal.

Old ferrule (left) and new slotted brass ferrule (right)

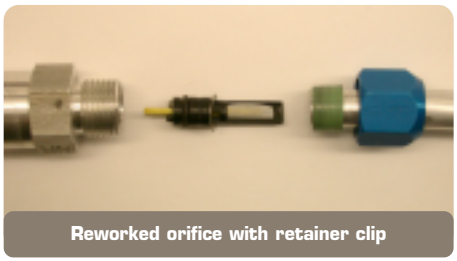
Increased debris containment.

The redesigned filter incorporates a new screen within a new body. This not only shortens the overall filter length but also increases the capacity three-fold, while reducing restrictions to pressure and flow.

Universal application and ability to cover new systems

The old filter had four part numbers to accommodate two tube sizes, with a variation of each to incorporate an 0.072-inch orifice. The new unit is universal and fits the 5/16-inch, 3/8-inch and 1/2-inch tube sizes common to TXV systems.

In addition, the universal unit permits reworking an existing orifice (regardless of size – 0.072-inch, 0.062-inch, 0.052-inch, etc.) and incorporating it into the filter. This greatly simplifies inventory and increases flexibility.



Reworked orifice with retainer clip

TIP: Because of the interchangeable fittings, the filter can be used to join different tubing sizes. It can also be used as a splice to repair a damaged tube or to replace a damaged thread.

Overall, the new filter provides the insurance technician have been requesting to reduce comebacks on compressor replacements – especially on vehicles with rear A/C systems.

- Thanks to Jim Resutek

TAC*Corner*

Technical Assistance Information

This information applies to US dealers only and is effective as of September 13, 2004.

GM Technical Assistance Center (GMTAC) would like to be able to resolve your concern during the first phone call. Bulletin 01-00-89-011B explains the procedures that are now in place to help this happen.

The bulletin contains a copy of the GM TAC form, which you are required to fill out before placing a TAC phone call. In filling out the form, you are required to obtain specified information. A few of them are emphasized here. See the bulletin and the form for complete details.

1. You are required to follow Strategy Based Diagnostics and include your findings on the form.
2. You are required to provide the SI document number of the technical issue you're working on.
3. You are required to have the dealer code, VIN, and RO number.

Having these steps completed before you call will allow the consultant to spend time researching the issue rather than giving out service information that's already available at your dealership.

TIP: When you call TAC, a recorded message will remind you of these requirements before you're connected to a consultant.

TIP: SI is now being updated every 24 hours, so the latest PI and bulletin information is available at your dealership. And remember, a VIN is no longer required to access PI information on SI.

The GM TAC form also contains space for you to close the TAC case when it has been resolved. This information is important in helping TAC update the database with the latest information, which will be useful to help future callers with the same condition.

And finally, there's a space for you to provide feedback on the survey portion of the form, regarding the assistance you received. TAC will use this information to make continuous quality improvements.

- Thanks to Sean Garrison

TAC*Tips*

M74 Allison LCT1000 PTO Gear Applications

Some 2004-05 Chevrolet and GMC pickup trucks equipped with Allison LCT1000 transmissions do not have PTO (power take-off) gears installed on the rotating housing. Instead, they have a tone ring for the turbine speed sensor that is not able to drive a PTO.

If a customer desires to use a PTO on a pickup truck equipped with a LLY 6.6 engine, it will be necessary to install a rotating housing that has a PTO gear installed on it, p/n 29540518.

2001-04	6.6 LB7 (VIN code 1)	PTO gear
2001-05	8.1 L18 (VIN code G)	PTO gear
2004-05	6.6 LLY (VIN code 2) pickup	no PTO gear
2004-05	6.6 LLY (VIN code 2) chassis cab	PTO gear

TIP: This procedure is not covered under warranty and is at the customer's expense.

- Thanks to Rusty A. Sampsel

Changes To Personalization And Memory Recall

Starting in 2005, the mid-size Chevrolet, GMC and Buick SUVs will have a change in personalization operation. The key fob will no longer recall seat position, mirror position, radio presets, HVAC settings and/or DIC personalization settings for each driver.

Vehicles equipped with memory seats RPO AAB will recall seat and mirror positions only for driver 1 and 2. To activate the memory recall feature, each driver will need to program the seat and mirror settings to one of the memory positions.

The driver must select driver 1 or 2 when entering the vehicle so the seats and mirrors can recall to the programmed position. No other personalization features will follow the driver 1 or 2 button.

Also, the DIC will no longer display driver 1 or 2. This is a engineering change and no repairs should be attempted.

- Thanks to Dino Poulos

Steering Will Not Lock

Owners of some 2004-05 Chevrolet Colorado and GMC Canyon vehicles may comment that the steering will not lock when the key is removed from the ignition.

This is a normal condition. The Colorado and Canyon never had this feature. The owner's manual and service information were published incorrectly. They are both currently in review and will be updated with the correct information.

Do not perform any repairs for this concern.

- Thanks to Dino Poulos

Seatbelt Retractor

Owners of some 2004 Chevrolet Corvettes may state that the driver or passenger seatbelt will not extend from the seatbelt retractor.

If a resolution can't be found through normal diagnosis, replace the affected seatbelt and install a new bolt (p/n 15017724) and new washer (p/n10257765) and discard the original bolt and washer. The larger diameter washer distributes the clamping load evenly on the lower seatbelt retractor.

- Thanks to Paul Radzwilowicz

Tire Scrub Noise On Low Speed Turns

Owners of some 1999-2005 Full Size Trucks and Utilities may experience tire scrub noise on low speed turns (parking lot maneuvers). The steering rod (centerlink) can be installed backwards on all trucks and utilities with recirculating ball type steering that do not use a steering dampener.

To determine the correct installation of the steering rod, compare to a like vehicle. In a correct installation, the steering rod should curve to the rear, outboard of idler/pitman attachment holes and inboard of the inner tie rods.

The idler and pitman attaching holes are tapered in only one direction. With the steering rod installed incorrectly, the curved portion of the rod between the idler/pitman holes and inner tie rods curves toward the front of the vehicle. Remove and correctly reinstall the steering rod (centerlink).

- Thanks to Jim Will

Windshield Upper Reveal Molding

Some 2003-05 HUMMER H2s may have a less than perfect fit of the windshield upper reveal molding which may contribute to wind noise in the windshield area.

To replace the molding, you no longer have to order and replace a complete windshield assembly. The molding, p/n 15060528, is now available through Service Parts Operations. The labor operation is B7540 and pays straight time. Refer to SI document number 800535 for replacement procedures.

- Thanks to Paul Radzwilowicz

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
1997-2005	**Buick Century, Regal – Broken Armrest Lid Latch**	**Replace lid latch only.**	**Don't replace console armrest lid (Regal) or front seat center storage armrest (Century)**	**03-08-49-018A**
2004-2005	**Grand Prix – Outside Rearview Mirrors**	**Replace mirror glass or motor.**	**Don't replace complete mirror assembly.**	**04-08-64-009**
2004	Grand Prix – Steering, Suspension or Cradle Click Noise	Re-torque right steering gear mount.	Don't replace steering gear or cradle.	03-02-32-048
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, Rendezvous (FWD), Venture/ Montana/Silhouette – 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
1998-2004	Seville – Heated Seat Inoperative	Replace only needed heating element.	Don't replace entire seat cover if heated seat element is inoperative.	01-08-50-002C
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
2003-2004	Cavalier/Sunfire – Air Conditioning Compressor Noisy	Inspect for ground out conditions that can cause A/C compressor noise complaints.	Don't replace A/C compressor for excessive noise complaint without inspecting for ground outs.	03-01-38-012
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
2001-2003	Fullsize Pickups – Injector Replacement for High Flow Rates	Use Bulletin 04-06-04-007A for injectors with high fuel return rates. Use Special Policy 04039 for 01-02 vehicles.	Don't replace 8 injectors except for high fuel return rates. Other injector failures are fix as failed.	Special Policy 04039
2004-2005	All Cars and Trucks – State-of-Charge Upon Delivery of New Vehicle	Check battery's state-of-charge per revised PDI procedure.	Don't remove and replace battery.	02-06-03-009A
2003-2005	Avalanche, Suburban, Tahoe, Silverado, Yukon/XL, Sierra, Escalade – Snap/ Popping Noise from Front of Vehicle	Slot left side mounting holes on front crossmember per bulletin.	Don't replace crossmember.	03-08-61-002B
2002-2004	Fullsize and Midsize Pickups and Utilities – Labor Operation Assignments for Control Module Reprogramming	When submitting claims for reprogramming an electronic module, use correct labor operation that reflects module being programmed.	Do not use K5364, which is for reprogramming transmission control module (TCM), when reprogramming 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, per bulletin. Reprogram TCCM with latest software released 3/11/04.	Don't replace encoder motor or transfer case. Replace module only if 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 the components with "Armor-dillo." To order call (888)393-4722 or online at www.armor-dillo.net.	Don't replace cargo covers for this condition.	04-08-111-001A (July 2004)
2002-2004	All Passenger Cars and Trucks – Air Conditioner Compressor Diagnosis	Follow SI and bulletin for diagnostic information before compressor replacement.	Don't replace the air conditioning compressor.	01-01-38-013A 03-01-38-019
2002-2004 (models with HomeLink™ option)	All TrailBlazers, All Envoys, Bravada, Rainier with HomeLink Universal Transmitter – Programming Diagnosis	Use J 41540 – GM Integrated HomeLink Tester. Follow SI and refer customers to Owner's Manual.	Don't replace HomeLink Transceiver without validating internal fault recognized by J 41540.	01-08-97-001B
2002-2004	All TrailBlazers, Envoy, Envoy XL, Bravada – Squeak/Rub/Scrub Type Noise in Steering Column	Lubricate and remove material, per bulletin.	Don't replace upper or lower intermediate shaft.	02-02-35-006A
2001-2004	Fullsize Pickups and Utilities – Servicing Wide Load Mirrors (RPO DPF)	Replace individual parts as needed.	Don't replace complete mirror assembly.	03-08-64-028

Know-How Broadcasts for November

November 11, 2004		November 18, 2004	
10280.11D Emerging Issues		10280.23D	Eastern Time
Time to be announced on www.gmtraining.com. Click on: Resources, Service Know-How		To Be Announced	9:00 AM 12:30 PM 3:00 PM

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– Thanks to Tracy Timmerman