TECHlink
GM
June 2008
Volume 10, No.6
A Monthly Publication for GM Dealership Service Professionals

Laser Assisted Belt Alignment

The available EN-49228 Laser Belt Alignment Tool is simple to use and time-saving. Use it to assist in achieving precise alignment of the drive belt pulleys. Using it removes the guesswork from proper pulley alignment and may serve to reduce comebacks from:

- Drive belt noise
- Accelerated drive belt wear
- Drive belt slippage

Instructions

TIP: These instructions from bulletin 08-06-01-008 are specific to the truck Gen IV V-8 family of engines. Universal instructions are included in the kit.

CAUTION:

- Do not look directly into the beam projected from the laser.
- Use caution when shining the laser on highly polished or reflective surfaces. Laser safety glasses help reduce laser beam glare in many circumstances.
- Always use laser safety glasses when using the laser. Laser safety glasses are not designed to protect eyes from direct laser exposure.

1. Observe and mark the serpentine belt orientation.
2. Remove the serpentine belt from the accessory drive system
3. Install the tool onto the power steering pulley. Position the legs of the tool into the outer grooves of the pulley, farthest from the front of the engine.
4. Install the retaining cord around the pulley and to the legs of the tool.
5. Put on the laser safety glasses provided with the tool.
6. Depress the switch on the rear of the tool to activate the light beam.
7. Rotate the power steering pulley as required to project the laser

continued on page 2

Techline News

Calling Technical Assistance Center (TAC) – US Only

Effective May 1, 2008, changes have been implemented which will enable TAC to provide more timely and consistent service.

A most important requirement is that technicians MUST complete the key steps of Strategy Based Diagnosis (SBD) BEFORE placing the call to TAC. This information will be REQUIRED at the time of the call:

1. Complete work order, including VIN and details of customer concern.
2. Amount of days the vehicle has been down.
3. Attempt to duplicate customer concern.
4. All DTCs, values and measurements recorded and diagnosed.
5. Search all of SI for diagnostic information, bulletins, and PIs.

IMPORTANT: If you are not prepared at the time of the call, you will be requested to use SBD before calling back.

TIP: For more information, refer to these preparedness documents:

- Policy and Procedures, section 5.3.1
- SI Document 1957622, Strategy Based Diagnosis

continued on page 2

TECHlink GM

Contents

GM Service and Parts Operations

Technical Assistance Center

– continued from page 1

– Bulletin 01-00-89-010G, Use of Customer Concern Verification Sheets, Comeback Prevention, GM TAC Form, Strategy Based Diagnosis (SBD), Intermittent Concerns Diagnostics, Repeat Repair Log

– *Thanks to Ward Boyer and Ann Briedis*

Loss-of-Communication U-Codes

Sometimes, while diagnosing a specific customer concern or after a repair, you may notice a history U-code present. However, there is no associated "current" or "active" status. Loss-of-communication U-codes such as these can set for a variety of reasons. Many times, they're transparent to the vehicle operator and technician, and/or have no associated symptoms. Eventually, they will erase themselves automatically after a number of fault-free ignition cycles.

This condition would most likely be attributed to one of these scenarios:

– A control module on the data communication circuit was disconnected while the communication circuit is awake.
– Power to one or more modules was interrupted during diagnosis.
– A low battery condition was present, so some control modules stop communicating when battery voltage drops below a certain threshold.
– Battery power was restored to the vehicle and control modules on the communication circuit did not all re-initialize at the same time.

If a loss-of-communication U-code appears in history for no apparent reason, it is most likely associated with one of the scenarios above. These are all temporary conditions and should never be interpreted as an intermittent fault, causing you to replace a part.

TIP: A loss-of-communication U-code does not typically represent a failure of the module that set it.

It's important to remember that all "current" or "active" DTCs need to be diagnosed and repaired by following proper service procedures. Always remember to clear all DTCs after successfully diagnosing and repairing a customer concern.

– *Thanks to Paul Gallo*

Laser Assisted Belt Alignment –

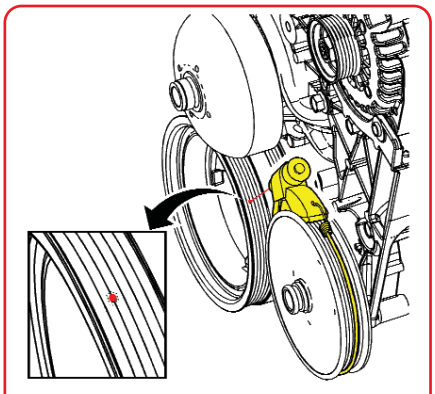
continued from page 1

beam onto the crankshaft balancer pulley grooves.

8. Inspect for proper power steering pulley alignment.

– If the laser beam projects onto the second rib or raised area, the pulleys are aligned properly.
– If the laser beam projects more than one-quarter rib 0.9 mm (0.035 in) misalignment, adjust the position of the power steering pulley as required.
– Refer to SI for Power Steering Pulley Removal and Installation procedures.

9. Install the serpentine belt to the accessory drive system in the original orientation.



Beam projected onto second rib of pulley

10. Operate the vehicle and verify that the belt noise concern is no longer present.

Parts Information

Contact 1-800-GM-TOOLS or http://gmspecialservicetools.spx.com for information or to order this tool.

– *Thanks to Ron Minoletti*

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.

Publisher:
R. M. (Bob) Savo
GM Service and Parts Operations
Bob.Savo@GM.com

Editor:
Lisa G. Scott
GM Service and Parts Operations
Lisa.G.Scott@GM.com

Technical Editor:
Jim Horner
jhorner@gpworldwide.com
1-248-729-4630

Production Manager:
Marie Meredith

Desktop Publishing:
Supreme Graphics, Inc.
supremeinc@supremeg.com

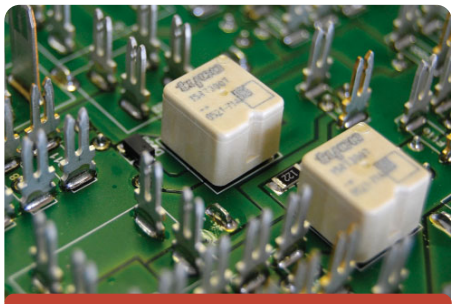
FAX number:
1-248-729-4704

Write to:
TechLink
PO Box 500
Troy, MI 48007-0500

GM TechLink on the Web:
GM DealerWorld

Printed Circuit Board Relays

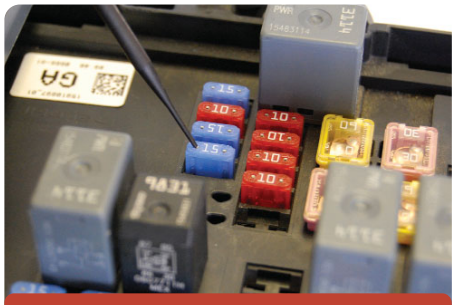
Many electrical centers (also called Bussed Electrical Centers or BECs) use Printed Circuit Board (PCB) relays. The PCB relay is integrally soldered to the printed circuit board; it is not plugged in.



PCB relay

Because the PCB relay is compact, it helps electrical engineers reduce the size and mass of the BEC.

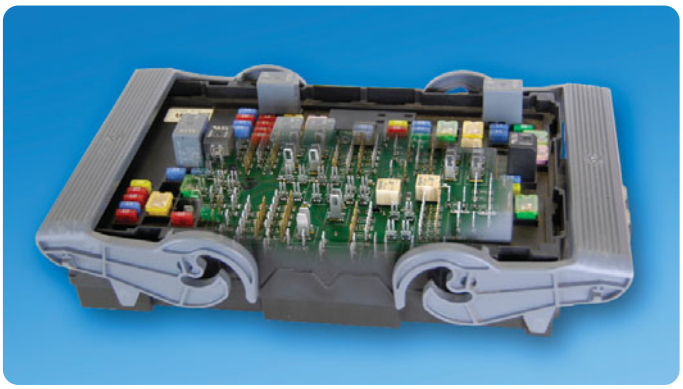
In the past, you could either feel or hear the "click" of an older style relay, as you operated the circuit it was controlling. You could often use a scan tool or operate the circuit to verify that the relay was operating.

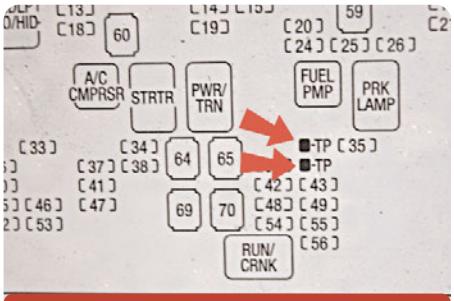


Fuse test point

Due to the location and size of the PCB relays, it may not be possible to hear or feel them operate, so another method has been developed to diagnose them.

The component technical specification (CTS) of the BEC requires that if a fuse is used with a relay, the fuse must be downstream of the switched contacts of the relay.

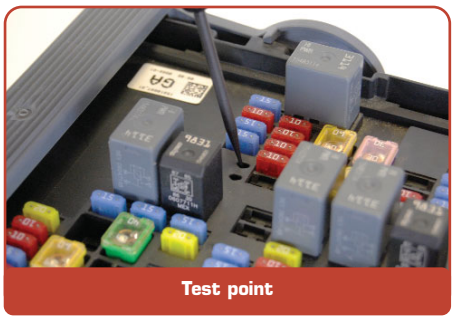




Test point callout on cover

Depending on the operation of the circuit, the relay contacts will open or close, and voltage will be either present or not present at the fuse. A test lamp can be used to verify this change by touching the small metal portion on top of the fuse.

If the circuit is protected in some way other than with a fuse, a test point is placed in the BEC for use with a test lamp. The test point is called out on the BEC cover and in SI. Test procedures are written to use either the fuse or test point as a diagnostic location.



Test point

TIP: If necessary, carefully move the test lamp probe around in the opening to get a good connection with the test point.

TIP: Using the prescribed fuse or test point as a diagnostic location, it is possible to diagnose the operation of PCB relays without removing the BEC from its mounting place.

– *Thanks to John Roberts*

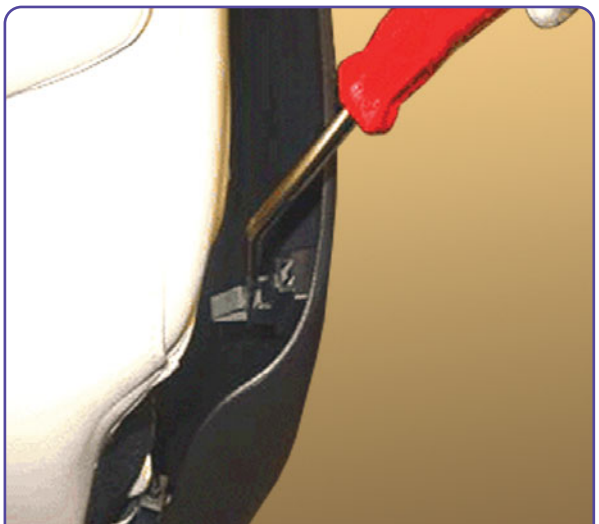
Replace Driver or Passenger Seat Back Finish Panel

Bulletin 08-08-50-007 is being published to explain how to properly remove the driver or passenger seat back cushion finish panel/cover from the front seat of the 2006–08 Hummer H3.

Release the two upper spring type clips, followed by the two side clips, then the lower bottom retaining hooks.

1. Push the trim cover forward at the upper right corner with your hand.
2. Insert a trim tool on top of the clip and push down on it to release the spring-type clip from the frame. Repeat for the other side.
3. Once the two upper corners are released, grab each side of the back panel and pull outward to release the side clips.
4. Place one hand at each bottom corner of the back panel (between the panel and trim), press in and pull upward to release the bottom retaining hooks.

– *Thanks to Terry Nicholas*



Releasing spring clip with trim tool

Parking Assist Changes for 2009

For the 2009 model year, the way in which parking assist notifies the driver of an object of interest has been modified. This change applies only to the Buick Enclave, Cadillac Escalade, Chevrolet Tahoe, Silverado, and Suburban, GMC Acadia, Sierra, Yukon, and Yukon XL, and Saturn OUTLOOK.

TIP: The new driver notification scheme will be available through a calibration update to previous model year Buick Enclave, Cadillac Escalade, Chevrolet Tahoe, Silverado, and Suburban, GMC Acadia, Sierra, Yukon, and Yukon XL, and Saturn OUTLOOK. The Buick Lucerne and Cadillac CTS, DTS, and SRX will receive a similar calibration update at a later time.

The previous driver notification scheme indicated an object of interest with a single beep at the time of first detection. The system would then continuously beep when the object was within 30 cm (1 ft.) of the vehicle. The new driver notification scheme still indicates an object of interest with a single beep at the time of first detection, but will beep continuously when the object is within 60 cm (2 ft.) of the vehicle. The visual indicators remain unchanged.

Additionally, the 2009 Buick Lucerne and Cadillac DTS will use a new part number sensor and module for the parking assist system. These new parts are specific to the 2009 model vehicles. Do not attempt to service 2009 vehicles with a 2008 part.

Parking Assist Diagnostic Aids

When diagnosing a customer concern on the parking assist system, be aware that certain conditions will normally disable the system. Items attached to the vehicle, such as a trailer hitch receiver or a bike rack, will disable the system because the vehicle cannot distinguish the difference between the items attached to the vehicle and an object of interest. The system will also be disabled if snow, mud, or ice is built up on the sensors or the vehicle travels too fast in reverse. Certain outside influences can also disable the system. Noises which vibrate the fascia, such as a jackhammer or large truck air brakes, may disturb the sensor, causing the system to disable.

As an aid to diagnosis, the scan tool Park Assist Disable History parameters can be used to locate any common causes or trends. For example, if the Park Assist Disable History parameters indicate repeated system disable due to an Attached Object, which could be a hitch receiver, system operation should be discussed with the customer before attempting to diagnose.

The parking assist sensor diagnostics have also been revised in SI. The diagnostic strategy advises that if only a single sensor DTC is present, swap that sensor with another sensor in the fascia to determine if the DTC follows the sensor. If the DTC follows the sensor to the new location, the sensor is likely the cause. If the DTC remains at the original location, vehicle wiring or the object alarm module is likely the cause.

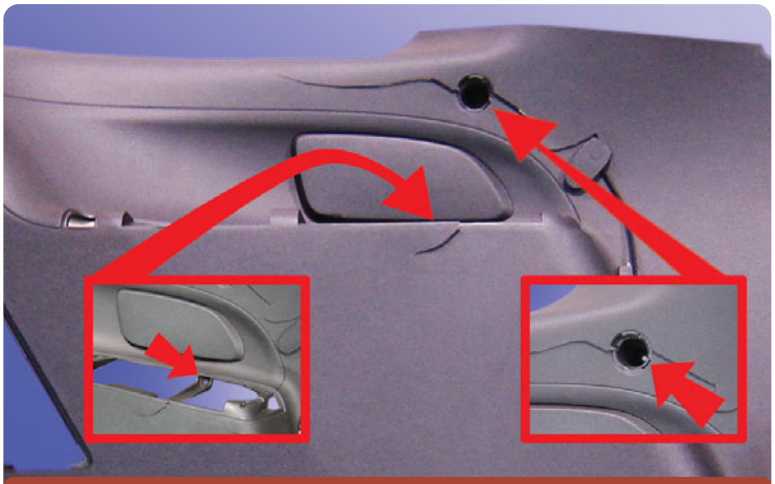
During a system malfunction, it is highly improbable that all of the sensors or all of the sensors and the object alarm module are at fault and require replacement. Further system diagnostics should be performed to determine the specific item causing the malfunction.

TIP: When replacing a sensor, be sure the sensor has corrected the concern before applying paint to the sensor. When painting the sensor, do not apply an excessive amount of paint. High paint thickness may cause a sensor malfunction and system disable.

When servicing the parking assist system, follow standard GM guidelines when documenting the cause and correction on the repair order. Be sure to document all FTBs associated with any DTC(s) that have set.

– *Thanks to Mike Gastmeier*

Trim Panel Cracks



Screw locations

On the Acadia, OUTLOOK and Enclave, the quarter trim panel has hidden screw fasteners above the speaker grille and below the armrest that must be removed before attempting to remove the panel. If the screws are not removed, the panel will crack in the area around the fastener location.

The location of the fasteners can be found in SI document 1903783 for Acadia and OUTLOOK and 1899889 for the Enclave.

– *Thanks to Gary McAdam*

Ambient Temperature Display

At Pre-Delivery Inspection of a 2008 Impala, Grand Prix, LaCrosse or Allure, some technicians may note that the ambient temperature display is not accurate.

The ambient temperature display uses an algorithm that delays updating the temperature display unless certain conditions are met, such as driving the vehicle at a certain speed. This is done to ensure that the ambient sensor does not detect engine heat while the vehicle is idling, which would result in an inaccurate ambient temperature reading.

Don't replace the ambient temperature sensor.

Ensure that the ambient temperature display has updated using the accompanying tables. It is recommended that the vehicle be driven to update the ambient temperature display. However, if one of the methods is used to update the temperature instantly, be aware that if the engine is idling, the ambient temperature sensor may detect engine heat, resulting in an artificially high reading.

– *Thanks to Chris Anderson*

Removing Driver Airbag

Here's a tip for removing the driver airbag (DAB) from a 2008 Malibu.

Obtain a 9/64-inch T-handle Allen wrench with a blunt end. Use a bench grinder to machine a groove into the end of the tool (radius about 2 mm).

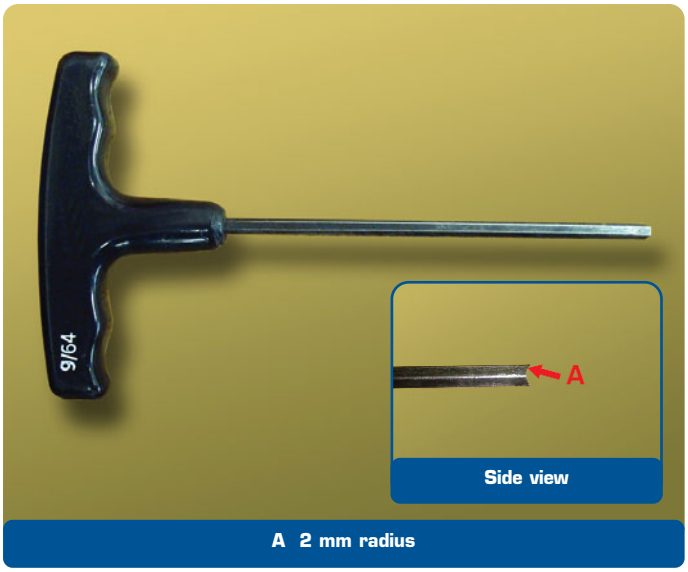
TIP: The groove in the tip should be parallel to the T-handle.

Align the tool handle parallel to the steering wheel rim (which places the groove parallel to the spring). Engage the tool with the DAB spring. The groove helps the tip of the tool remain engaged with the spring. You will feel resistance from the spring.

Place your fingers under the DAB cover at the top edge, about an inch from the switch bezel.

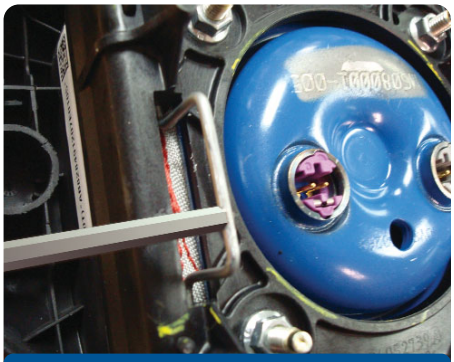
Depress the spring about 5 mm and pull the DAB cover away from the steering wheel.

– *Thanks to Ali Elhadi and Will Godfrey*

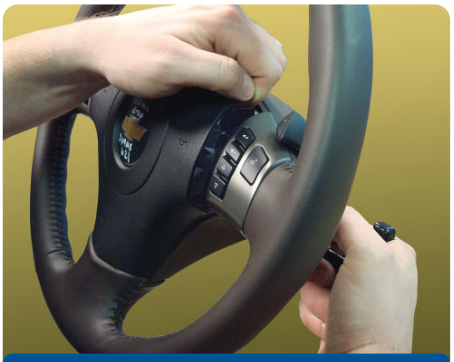


A 2 mm radius

Handle parallel to wheel rim



Tool engaged with DAB spring



Removing airbag from steering wheel

Ambient Temperature Display – 2008 Impala

Condition	Ambient Temperature Display
When the HVAC module A/C and RECIRCULATION buttons are pressed simultaneously	Updates temperature display instantly
At start up with the engine OFF more than 3 hours	Displays actual outside temperature
At start up with the engine OFF less than 3 hours	Displays last stored temperature unless temperature has decreased. The temperature reading is always instantly updated if ambient air temperature has decreased
Vehicle moving above 10 mph (16 km/h) for 5 minutes	Updates temperature display at a slow filtered rate
Vehicle moving at 32 mph (51 km/h) or greater for 2.5 minutes	Updates temperature display rapidly
When the ambient air decreases	Updates temperature display rapidly

Ambient Temperature Display – 2008 LaCrosse, Allure and Grand Prix

Condition	Ambient Temperature Display
At start up with the engine OFF more than 3 hours	Displays actual outside temperature
At start up with the engine OFF less than 3 hours	Displays last stored temperature
Vehicle moving above 10 mph (16 km/h) for 5 minutes	Updates temperature display at a slow filtered rate
Vehicle moving at 32 mph (51 km/h) or greater for 2.5 minutes	Updates temperature display as rapidly as possible
When the sensor reading is less than the displayed value	Updates temperature display as rapidly as possible
When the Front Defrost, Rear Defog and Fan Up buttons are pressed simultaneously	Updates temperature display

Rear Seat Entertainment Display

The overhead Rear Seat Entertainment (RSE) display is an OEM DVD screen that displays images from the DVD player located in the vehicle's radio. The DVD player is integrated into the radio and sends visual images to the overhead RSE display. The RSE display may be prematurely replaced due to misdiagnosis of the system. Here are some reasons that have been identified for these misdiagnoses.

TIP: There is also an SPO headrest DVD system available as a dealer-installed accessory. This system is independent of the factory-installed overhead system. Refer to SI documents for diagnosis and repair of the headrest system.

Audio with no video present

This condition is referred to as half-play. Half-play and detailed diagnosis are explained in bulletin 07-08-44-018, document ID 2006238.

Half-play occurs when the customer is watching a DVD and exits the vehicle. At the next key cycle, the DVD player (in the radio) begins to play the DVD, but the screen remains off or does not automatically come on. The RSE remote control should be used to turn on the RSE display. If the RSE display does not turn on after using the remote control, proceed with the diagnosis of the RSE system.

Other relevant bulletins are listed in the accompanying table.

RSE display blank or Inop

A blank or Inop RSE display is the most common customer concern for the RSE display. If the RSE display does not have all the necessary signals from the radio, it may not turn ON.

When diagnosing a blank or inop RSE display, refer to the RSE display service information, documents, bulletins, and PIs (Preliminary Information).

Relevant bulletins are listed in the accompanying table.

DVD player does not work

The DVD player is integrated into the radio and separate from the DVD screen. It should be diagnosed separately. The previous RSE system consisted of a DVD player and display integrated into the overhead console. These two components are separate in the present RSE system. Diagnosis of this issue should begin at the radio, because the RSE screen just displays what the radio sends it.

Remember – the RSE screen and DVD player are separate components and should be diagnosed as such.

Other issues and concerns

Cracks, lines across the display and distorted images are other customer concerns which have been identified through the warranty return process.

Cracks in the RSE display may be caused by an interference of the two forward screws and the LCD. Steps have been taken to eliminate the cause in the assembly plant.

If there is a mark or gouge in the LCD, be sure the cause is not customer abuse.

Do not attempt to repair a RSE display with a broken latch. Replace the display.

Excessive movement in the screen occurs when the screen is opened past the built-in stops. The metal bracket inside the housing where the screen pivots is bent as a result of being opened past the built-in stops.

If there is physical damage to the plastic housing around the LCD display, be sure the cause is not customer abuse.

Use these bulletins to diagnose the RSE display.

Bulletin Number	Document ID	Subject
	1984958	Video entertainment system inoperative
07-08-44-018	2006238	Rear seat entertainment does not work properly, blank screen, audio heard but no DVD playing, video screen monitor inoperative
06-08-44-026A	1962235	Rear video screen inoperative – blank/black DVD screen with audio present
06-08-44-032A	2015893	Rear DVD screen blank/inop, speaker pop noise, battery draw, OnStar audio inop, nav screen/radio display flashing
06-08-44-035	1866255	Rear DVD screen off after ignition key is cycled
	1984957	Video display is poor or blank
	1876176	DTC B1288
	1876186	DTC B1289

Improper use of labor codes for the GM SPO Headrest DVD systems.

There are separate labor codes for dealer installed GM accessories. The service manual has updated labor codes for dealer installed GM accessories.

The bulletin number is: 02-00-89-014C (document ID 2039059).

The labor code for the SPO Headrest DVD system is R9392. GM does not release an OEM Headrest DVD system, so all headrest systems should use this labor operation code.

The labor code to use for the overhead RSE display is R5554. Part number restrictions have been put in place for warranty claims against R5554. If the part number is not on the list of acceptable part numbers, the claim will be rejected. Be sure the correct labor operation code is used for the system being repaired.

– *Thanks to Katul Patel*

Voice Recognition Button Operation

On a 2007-08 Saab 9-3 or 2006-08 Saab 9-5, a customer may comment that the steering wheel control (SWC) button for Talk/Voice Recognition/OnStar is inoperative.

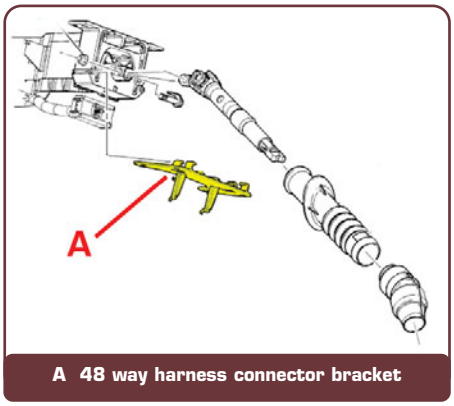
The SWC for Onstar/Voice Recognition is operational only if the vehicle has the BTR Navigation option. Engineering is working to develop software to include all "black tie" radios.

When the software is released, an updated PI will reflect the change. Until then, this is considered normal operation.

– *Thanks to Jeff Gorenflo*

Steering Column Noise

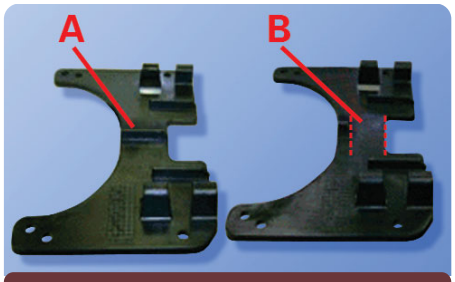
This information applies to the 2006-07 Rainier, and 2006-08 TrailBlazer, Envoy and 9-7X.



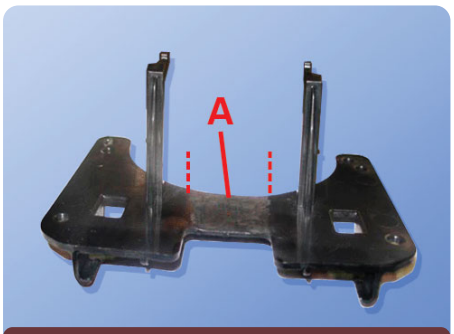
A 48 way harness connector bracket

There may be a squeak/squeal noise from the steering column upon initial rotation of the steering wheel, either with the engine running or turned off. The noise is present if the intermediate shaft is disconnected for testing purposes. The source of this noise may be an interference contact between the 48 way harness connector bracket and the SWPS (Steering Wheel Position Sensor) and harness connector housing.

1. Remove the 48 way harness connector bracket.
2. Remove approximately 2/3 of the center rib material to make it flush with the bracket.



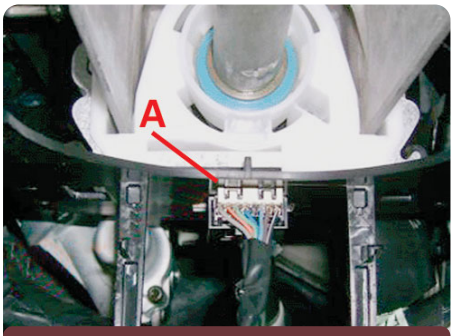
A Bracket center rib B Rib removed



A Remove additional 1 mm

TIP: DO NOT remove the entire rib.

3. Reinstall bracket and check for clearance between the SWPS connector/sensor and the 48 way connector bracket.



A Check for clearance

4. If additional clearance is needed, turn the bracket over and remove approximately 1 mm of additional bracket material. Reassemble and check for clearance as described in step 3. If clearance was adequate, no further modification to the bracket is necessary. Reassemble the vehicle and test drive to verify this noise has been eliminated.

– *Thanks to Dino Poulos*

Phantom Windshield Wiper Operation

According to bulletin 08-08-43-007, on a 2008 Colorado or Canyon, the windshield wipers may intermittently wipe without being commanded to operate. This condition may occur at start up or while driving the vehicle.

This condition may be caused by electrical noise that causes the Body Control Module (BCM) to activate the windshield wipers.

Reprogram the BCM. Do not replace the wiper motor, BCM or multifunction switch.

A revised calibration has been developed to address this condition. Reprogram the BCM with the latest software available on TIS2WEB. Refer to the Service Programming System (SPS) and Body Control Module Programming and Setup procedures in SI for additional information. Be sure your Tech 2 is updated with the latest software version.

– *Thanks to Dan Oden*

"Shift to Park" Message

On some 2004-08 Cadillac XLR and V models, the Driver Information Center (DIC) may display a "Shift To Park" message when the vehicle is in Park, or the Auto Door Lock/Unlock features may be inoperative. Also, the ignition mode switch may not go to the Off position.

One of these may be the cause.

1. **Improperly adjusted shifter cable** – Adjust the shift cable in the Park position. Place the shifter in the Park position, lift the vehicle and rotate the rear wheels to verify that the park pawl is engaged (wheels will not move). Release the cable adjustment lock and allow the cable to relax. Re-seat the cable adjustment lock. Refer to SI document 927794 if needed to verify shift cable adjustment procedures.
2. **Secondary park switch circuit concern** – Check the status of the Internal Mode Switch in the Transmission Control Module (TCM). If the TCM is indicating the correct gear, check the secondary park switch located on the right side of the shifter assembly. This switch is a direct input into the Body Control Module (BCM). This data can be viewed by following the Tech 2 path below.
3. **Secondary park switch concern** – If the secondary park switch shows Park via Tech 2 data, re-check the shift cable adjustment and make sure the shifter button is not stuck. If both items check OK, replace the shifter assembly. At present, the switch is not available separately.

Tech 2 Path for 2004-06

Diagnostics > Select Model Year 2004, 2005 or 2006 > Passenger Car > (6) Cadillac > Y > Vehicle Control Systems > Computer Integrating Systems > Data Display > Body Control Module > Data > Parameter #16 "Park Switch Auto"

Tech 2 Path for 2007-08

Diagnostics > (7) 2007 > Passenger Car > (6) Cadillac > Y > Body > Body Control Module > Data Display > BCM Data > Parameter #16 "Park Switch Auto"

– *Thanks to Dino Poulos*

Car Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s) / Condition	Do This	Don't Do This	Reference Information / Bulletin
2006-07	Colbalt, G5 – TCC shudders	Clear adaptives	Don't replace converter, PCM, transmission or valve body	PIP4314C
2006-07	Lucerne – Poor headliner fit in rear	Repair headliner	Don't replace headliner	PIC4189
2006-07	Lucerne – Armrest, insert, interface, map pocket squeaks	Install new retainers	Don't replace door trim	06-08-64-034
2003-07	ION, Cobalt, G5 – Water leak at dome light sunroof switch	Adjust sunroof and apply lube	Don't replace sunroof module	06-08-67-019
2006-08	HHR – Water leaks	Follow bulletin	Don't stray from completing bulletin	07-08-57-001A
2004-08	SR – Creak/rattle from front of glass panel	Repair threads with Helicoil insert	Don't replace front sunroof glass panel	07-08-67-007
2006-08	All except Saab and Saturn – Replacing batteries on vehicles in dealership inventory	Maintain battery for vehicles in inventory	Don't allow battery to discharge through lack of maintenance	–
2004-09	Corvette, XLR – Rear axle clunk and/or chatter type noise on turns	Drain and fill rear axle using Dexron LS Gear Oil	Don't replace differential clutch discs, remove any axle covers	07-04-20-002A
2004-08	AURA, Malibu, Maxx – Clunk/knock/rattle noise from front of vehicle when driving/turning over bumps at low speed	Lubricate intermediate shaft	Don't replace intermediate shaft	06-02-32-007C
2006-08	Lucerne – Squeak/rattle from map pocket	Apply adhesive-backed polyester felt to perimeter of pocket	Don't replace door pad assembly	08-08-110-009

Truck Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s) / Condition	Do This	Don't Do This	Reference Information / Bulletin
2001-04	LB7 Duramax Diesel – Injector high pressure lines corroded	Clean connection area of line and nut of injector high pressure lines as required	Don't replace lines	03-06-04-036A
2007-08	Silverado, Sierra, Avalanche, Suburban, Tahoe, Yukon – Service 4WD message, DTC B2725	Replace IP switch	Don't replace transfer case control module	PIP 4101
2003-07	Kodiak, TopKick, HTR, HVR, HXR – Arm rest being pulled off door panel	Replace arm rest and install improved fasteners	Don't replace door panel assembly or reuse old fasteners	07-08-64-016
2007-08	Fullsize utilities, pickups – Apparent steering rack leak	Determine source of leak	Don't replace power steering rack	07-02-32-002B
2006-08	Colorado, Canyon, H3 – Loose module, broken tab under passenger seat	Reattach ECU with 3M two-way tape	Don't replace ECU and seat sensing pod assembly	08-08-50-003
2004-07	Colorado, Canyon, H3 – Reduced power mode, P codes	Check battery state of charge, charge or replace	Don't replace throttle body, throttle body module, accelerator pedal, accelerator position sensor, PCM, or ignition switch	08-06-04-014
2008	TrailBlazer, Colorado, Envoy, Canyon – No start condition	Service calibration 25998450	Don't replace BCM or battery	08-08-44-012
2007-08	Enclave, OUTLOOK, Acadia – Squeak noise on brake pedal apply/release	Replace brake fluid with revised fluid	Don't replace brake booster, master cylinder or brake pedal assembly	08-05-22-002
200-08	Tahoe, Yukon, Escalade, Avalanche, Sierra, Silverado – Squeaking/itching in upper door area	Clean top of door frame and install 3M Squeak Reduction Tape	Don't replace upper door sill	06-08-64-035D
2008	Sierra, Silverado – SES P1174	Update PCM calibration	Don't replace catalytic converter, PCM, injector(s), fuel rails, fuel pump	08-06-04-028

Know-How Broadcasts for July

10208.07D Emerging Issues	July 10, 2008	9:30 AM and 12:30 PM Eastern Time
New Model Features	For Web NMF courses, log on to the GM Training Website (www.gmtraining.com). Select Service Know-How/TechAssists from the menu, then choose New Model Features for a selection of courses.	

IDL

– Thanks to John Miller