

## OnStar® Upgrade



At present, this information applies only to dealers in the United States.

Information will be forthcoming for Canadian dealers

Since it was launched in 1996, OnStar has relied on an analog wireless network to provide communication to and from OnStar-equipped vehicles. As part of an industry wide change in the North American wireless telecommunications industry, wireless carriers are transitioning to digital technology and will no longer support the analog wireless network beginning early 2008.

As a result, beginning January 1, 2008, OnStar service in the United States and Canada will be available only through vehicles that are capable of operating on the digital network.

Certain model years 2002-05 Gen 4 and 5 (analog/digital-ready) GM vehicles are upgradable to a digitally capable OnStar system.

Bulletin 05-08-46-006G is being released to list eligible vehicles and to explain the upgrade process.

### Program Requirements

**TIP:** Only vehicles listed in bulletin 05-08-46-006G are eligible to be upgraded. Vehicle upgradeability can also be determined by typing the VIN into the appropriate field at [onstarenrollment.com](http://onstarenrollment.com), now found in GM DealerWorld.

Effective October 17, the customer must agree to purchase a 1-year, non-refundable non-transferable subscription to OnStar (two packages are available — Safe and Sound, and Directions and Connections). The upgrade kit will be provided at no additional cost with the purchase of the 1-year subscription.

Kit stock levels are very limited, and the supplier of the kits will not have sufficient inventory until January. It's advisable to hold off performing upgrades until January, unless absolutely necessary.

This is a non-warrantable repair.

There is no way to transfer the customer's present telephone number from the analog system to the new digital system. Hands-Free Calling (HFC) nametags stored in the old system will be lost, and will need to be re-established after the upgrade is complete.

### Installation Tips

You must follow the steps in the bulletin exactly in order to ensure a satisfactory installation.

Here are some of the highlights.

Follow the ordering process in the bulletin. It involves obtaining the customer's signature on the Digital Hardware Upgrade Terms and Conditions Form and faxing in to the telephone number in the bulletin. Part numbers for

upgrade kits are listed by eligible vehicle in the bulletin. The proper upgrade kit will be shipped within 24 hours.

**TIP:** The Digital Hardware Upgrade Terms and Conditions Form can be downloaded from the Autocraft website [www.aeorder.com](http://www.aeorder.com).

On some vehicles, the existing antenna mast is discarded and a replacement mast from the kit is screwed to the antenna base.

On other vehicles, the on-glass antenna mast and inner and outer couplers are replaced with components included in the kit. Follow instructions carefully to be sure the antenna is installed in the correct location and that it adheres properly.

On certain Cadillac STSs, a new inside rearview (ISRV) mirror replaces the existing mirror.

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The Vehicle Communication Interface Module (VCIM) from the kit replaces the original VCIM in the vehicle. In some cases, a new mounting bracket is supplied. And some VCIMs may have a small jumper harness attached, which must be plugged into the OnStar connector.

### Configuration

**IMPORTANT:** The new system must be configured. If it is not, the OnStar LED light will remain red and will not change to green. Pressing and holding the white dot button will not reset this version of OnStar, but will set a DTC.

The configuration process involves set-up of the new VCIM with the Tech 2. The complete process is detailed in the bulletin.

### Customer Information

After installation, the customer must be introduced to the features of the Generation 6 equipment, some of which are different from their old equipment. An important difference is the continuous digit dial feature. An owner manual and a tip sheet included in the kit will help the customer better understand their new OnStar system. Be sure to fill out the warranty form and give it to the customer (keep a copy for dealership records).

– Thanks to Frank Pompa

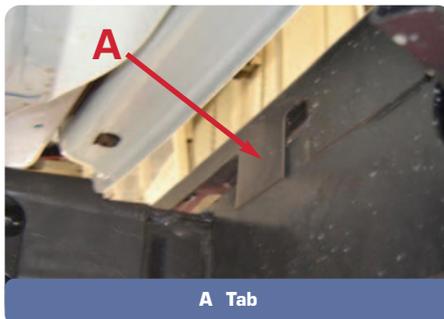
## Rear Bumper Thump

Owners of some 2007 full-size utilities may comment on a clunk or thump noise from the rear of the vehicle when driving on rough roads or over bumps. The noise may be coming from the rear bumper assembly.

There are two metal tabs (right and left side) which fold over the front of the lower bumper reinforcement. The tabs can be seen by raising the vehicle. The noise can be caused by contact between the metal tab and lower bumper reinforcement.

To correct this concern, bend both the left and right tabs away (forward) from the lower reinforcement.

– Thanks to Jim Will



## Sunroof Operation

Owners of some 2007 full-size utilities built April 10, 2006 and later may comment that the sunroof stops at 80% when opening. They have to release and press the switch a second time to fully open the sunroof.

This is normal operation. From the full closed position, the sunroof is designed to stop at 80% of the opening cycle. It is necessary to release the sunroof switch and press the switch again to open the sunroof completely. This change was implemented to reduce a boom/wind buffeting noise at 25-40 mph (40-64 kmh).

**TIP:** Vehicles built before April 10, 2006 will express to the full open position on the first button press.

– Thanks to Paul Radzwilowicz

## Fuel Level Calibration

Owners of some 2007 Chevrolet Cobalts and Pontiac G5s may comment about the fuel gauge.

The fuel gauge goes to empty and the DIC displays a low fuel message, even though there is adequate fuel in the vehicle. A DTC P0461 may show up during diagnosis.

This issue is believed to be a calibration issue, not a problem with the cluster or the fuel level sensor. At this time, the new calibration has not been released, so do not attempt to fix the vehicle by replacing parts.

A follow-up VME will be sent (US only) when the new calibration is available, and a bulletin will also be published.

Refer to PIP3876 for details.

– Thanks to Steve Oakley



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.

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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.

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## Hinge Repair

1996-2007 Chevrolet Express and GMC Savanna

1999-2007 Chevrolet Silverado Classic and GMC Sierra Classic

2000-2006 Chevrolet Suburban, Tahoe, GMC Yukon, Yukon XL, Yukon Denali, Yukon Denali XL

Customers may comment that a door sags or is hard to open or close. This could be caused by worn or corroded door hinge pins and bushings.

To repair this concern, replace the door hinge pins and bushings with kits now available from GM SPO.

89025539	Front Door C/K Trucks/Utilities
89025543	Rear Door C/K Trucks/Utilities
89025545	Side Cargo Door G-Van (Stainless Steel Greaseable Pin Kit)
89025545	Rear Cargo Door G-Van (fits only 2003-07)

– Thanks to Steve Love

## No Forward or Reverse

This information applies to 2006-07 Cadillac STS-V, XLR-V, Chevrolet Corvette, 2007 Cadillac Escalade, STS, SRX, GMC Yukon equipped with 6L50 (MYB) or 6L80 (MYC) Automatic Transmission.

After replacement of the valve body and/or spacer plate, the transmission may have a no forward or reverse condition.

This may occur if any type of grease or petroleum jelly is used to hold the valve body check balls in place. This grease may prevent the check balls from working properly.

When assembling the valve body, do not use any type of grease or other material, including petroleum jelly and jells sold for transmission assembly usage. The transmission will not build enough heat initially to melt the lubricant, which can cause a DTC and range inhibit. Also, the valve body is assembled on the bench. There are no check balls between the body and transmission case, so no assembly lube should be necessary.

– Thanks to Chuck Krepp

## Hybrid Service Information (SI)

Beginning with 2007, hybrid service manual information will be found in the Hybrid section. Within this section are the following subsections.

**Hybrid Controls** – Includes information on the control components and also the generator starter.

**Hybrid Cooling** – Includes information on the cooling of the hybrid components.

**Hybrid Energy Storage** – Includes information on the components within the "battery box" (generator battery carrier) with the exception of the components covered in Hybrid Controls and Hybrid Cooling.

**TIP:** MOST of the Hybrid specific components are in the Hybrid Section, but there are some exceptions. For example, the Brake Delay Valve service information is in the Hydraulic Brakes subsection of the Brakes section.

– Thanks to Jerry Garfield

## Buzz or Static in Radio

Some 2005-07 Chevrolet Corvettes may experience buzz or static in the radio when the engine is off but the HVAC is on. The noise diminishes as blower speed is lowered and increases as the blower speed is increased. The EMI appears to come from the blower motor itself.

A main body IP harness located under the IP on the passenger side is routed past the blower motor. To correct the concern, move the body IP harness forward away from the blower motor and secure with a tie strap. The tie straps should be added either to the HVAC case corner or to the opening in the toe bracket.

– Thanks to Dino Poulos

## Field Product Reporting (U.S.)

### 24 Hour Concerns Detection Process

The primary early warning information source that triggers the 24 Hour Process is the Field Product Reports that dealers phone in, using a toll free number (see bulletin 02-00-89-002F).

Here's what takes place when you submit a Field Product Report.

Reports are entered daily into the 24 Hour Concerns Detection Process (24Hr CDP). These reports are discussed in a 7:00 a.m. daily conference call by:

- 24Hr CDP Facilitator
- Service Operations (Brand Quality)
- Engineering
- Manufacturing (affected assembly plant)
- Supplier Quality

For current production vehicles, the intent of the 24Hr CDP is to investigate the reported problem and contain the issue at the Assembly Plant within a 24 hour period. Product reports for past model vehicles evolve into Service Bulletins as required.

24Hr CDP has successfully resolved well over 900 issues this calendar year in a very expedient manner and has prevented a very large number of customers from experiencing the issues that have been reported.

### Submit Reports Quickly

In some cases, the Field Product Report is filed as much as several weeks after the repair is completed. This makes it difficult to retrieve accurate information and in some cases to obtain the affected parts. But more importantly, the opportunity may be missed to quickly respond to an issue and avoid additional customers experiencing some level of dissatisfaction.

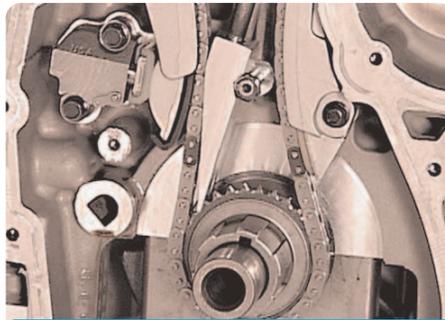
In the spirit of the 24 Hour Process, report all issues at your earliest opportunity. And if you receive a follow-up phone call after you have submitted a Field Product Report, please cooperate in supplying additional information and returning parts promptly.

– Thanks to Terry Nicholas

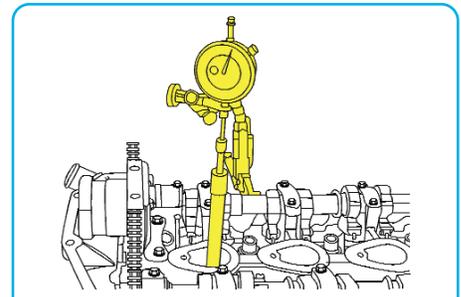
# Cylinder Head Removal Revisited



EN-48464 Lower Timing Gear Tensioner Holding Tool



Tool installed



Using dial indicator to establish TCD

The August 2006 issue of *TechLink* contained an article on a new procedure for removing the cylinder head from the 2.8L (LK5) and 3.5L (L52) engines. It contained an incorrect tool number.

The correct tool number is EN-48464 Lower Timing Gear Tensioner Holding Tool.

This new procedure can now be used on the 4.2L (LL8) engine as well.

The procedure is explained and demonstrated in a recent IDL technician training broadcast 10206.06D.

Canadian Dealers: Refer to your taped copy of the August

2006 TAC TALK IDL broadcast.

There is also information in bulletin 06-06-01-017A.

## Important Assembly Tip

After installing the cylinder head, it is absolutely necessary to check cam timing during reassembly.

Using a dial indicator is the only precise method for establishing piston TDC. Any other method may result in incorrect cam-to-crankshaft timing. This will cause misfire codes, which requires partial disassembly to correct.

– Thanks to Randy Risley

## Seat Recall (memory) or Exit Recall (memory)

On a 2005-07 Chevrolet Corvette, Seat Recall or Exit Recall (memory) for the driver's seat or steering wheel may be inoperative or have erratic operation. This could be the result of the Body Control Module (BCM) not recognizing the driver's door position, either open or closed.

There are two switches in the door latch and two door inputs to the BCM from each door. The door inputs are the "Left Door Ajar" and "Left Door Open" data parameters. In order for the seat recall to function correctly, both door switch parameters must change state. Depending how the Tech 2 is navigated, only one of the two parameters may be located within the Tech 2.

**TIP:** Below is a Tech 2 path that will allow both parameters to be viewed at the same time.

Diagnostics > Select Model Year 2005, 2006 or 2007 > Passenger Car > Chevrolet > Y > Body and Accessories > Theft Deterrent > Data Display > Body Control Module > Keyless/Remote Start Data.

Inspect the "Left Door Ajar" input and "Left Door Open" input for proper operation. If either data parameter is not functioning correctly, refer to SI document 1602023 for the schematic or SI document 1631958 to begin the Diagnostic System Check.

– Thanks to Dino Poulos

## Articulating Running Boards — Reminder

**TIP:** See the August issue of *TechLink* for full information on the Articulating Running Boards.

The 2007 Full Size Utilities will be coming to your dealership with Articulating Running Boards (RPO BRS). These trucks will be shipped from the assembly plants with the articulating running boards in the shipping (disable) mode and in the retracted position. To enable the articulating running boards for normal operation, perform the following steps:

1. Open all front and rear doors.
2. Set the parking brake.
3. Toggle the running board disable switch located below the HVAC control head three times within 20 seconds to activate the running boards.
4. Close all doors.
5. Open the left front or left rear door and the running board on the left side should articulate out.
6. Close the left front or left rear door and the running board should articulate in.
7. Open right front or right rear door and the running board on the right should articulate out.
8. Close the right front or right rear door and the running board should articulate in.

– Thanks to Paul Radzwilowicz

## Erratic Speedometer Operation

The owner of a 2004-07 mid-size utility may comment on erratic speedometer operation or the speedometer needle shakes at or above 60mph (96 km/h). This could be the result of a loose PCM/ECM ground.

Inspect PCM/ECM ground G108 located on the driver's side of the engine block. This ground is the highest on the engine block and most rearward closest to the starter. Remove the ground, clean and secure. Re-evaluate the vehicle.

– Thanks to Dino Poulos

# GM Top Engine Cleaner Replaced



**GM Upper Engine and Fuel Injector Cleaner 88861802 (in Canada 88861804)**

GM Upper Engine and Fuel Injector Cleaner p/n 88861802 (in Canada, 88861804) replaces GM Top Engine Cleaner p/n 12346535 and PN 1050002 (in Canada, 992872).

Use of lower quality fuels may leave harmful engine deposits that can degrade driveability. Some fuels may not burn cleanly or do not contain sufficient doses of deposit control additives, and can leave behind harmful deposits which can retard engine performance.

**Characteristics of GM Top Engine Cleaner (TEC)** — TEC does not mix with gasoline containing 10% or more ethanol. Higher concentrations lead to ineffective fuel injector cleaning as explained in bulletin 03-06-04-030A.

TEC must be mixed with gasoline to perform the injector cleaning. TEC isn't VOC compliant in all 50 states. In the event it finds its way into the fuel tank due to return lines being ineffectively plugged off, TEC can affect epoxy sealer and viton gaskets.

**Characteristics of NEW GM Upper Engine and Fuel Injector Cleaner (UEC)** — UEC is specially formulated to provide superior cleaning properties, meet VOC compliance, mix with fuels containing up to 30% ethanol, and not affect fuel system gaskets and seals.

UEC delivers immediate engine deposit cleaning. It has multiple service applications, including in-rail fuel injector cleaning, fuel induction system deposit removal and piston top soaking clean-up.

One treatment of GM Upper Engine and Fuel Injector

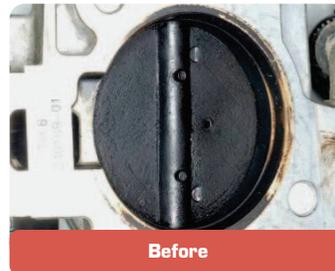
## Cleaning comparison



Before



Cleaned with TEC



Before



Cleaned with UEC

Cleaner can deliver deposit clean-up of carburetors, fuel injectors (when used as a through-the-rail cleaner), intake valves and ports, and combustion chambers. Refer to GM Technical Service Bulletins for specific service procedures.

**IMPORTANT:** Do not add GM Upper Engine and Fuel Injector Cleaner into the fuel tank.

A bottle of GM VehicleCare Fuel System Treatment Plus p/n 88861011 (in Canada, 88861012) should be added to the fuel tank according to label directions after all applications of GM Upper Engine and Fuel Injector Cleaner.

– Thanks to Jay Dankovich

## Airbag Diagnostic Codes After Collision Repair

On a 2006 Saab 9-3, it may not be possible to get codes B010302 or B010002 to clear.

The Front Impact Sensors and/or an Inflatable Restraint Sensing and Diagnosis Module (SDM) may have been replaced during a previous collision repair and it now may be difficult to clear these codes and/or to ADD the replacement SDM.

**TIP:** Sensing and Diagnosis Module (SRS/SDM) is listed as Airbag Control Module in the Tech 2 menu.

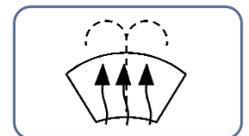
As of VIN breakpoint 61034050, a new Front Impact Sensor was introduced. If the parts department software EPC has not been updated to 2006-3, the newer sensor will not be shown. Additionally, the WIS version needs to be at 2006-1 or above for correct diagnosis.

If the "old" part number sensors are installed on vehicles built after the listed VIN breakpoint, these codes will set and cannot be cleared until the correct sensors are installed.

Verify the correct parts are installed on the vehicle before beginning diagnosis.

– Thanks to Jeff Gorenflo

## Heated Windshield Washer Fluid



Owners of some full-size 2007 utilities with heated windshield washer fluid RPO XA7 may comment that the windshield washers/wipers operate erratically, turn on by themselves or spray too long.

These concerns may be due to a misunderstanding of how the system operates or unknowingly turning on the heated windshield washers.

The heated windshield washer button is located below the HVAC controls, and if personal items are placed on the center console, it is possible to inadvertently activate the heated washers.

**TIP:** If you check a customer concern and find no problem, be sure the customer has a demonstration of normal system operation.

**Normal Operation** – When the heated washers are activated, a light in the button blinks to indicate the system is turned on. In some lighting conditions, it may be difficult to see the light. Once the system is activated, it initiates four heated wash/wipe cycles. The first heated wash/wipe cycle may take up to 40 seconds to occur, depending on outside temperature. After the first wash/wipe cycle, it may take up to 20 seconds for each of the remaining cycles to begin. Press the button again to turn off the heated windshield washer fluid system; it will also automatically turn off after four wipe cycles have been completed.

Refer to the "Windshield Washer" section of the owner manual for more details.

– Thanks to Jim Will and Marty Case

# Fuel Level Sending Units Revisited

Operation of a typical in-tank fuel level sending unit is based on variable resistance. As the float moves up or down according to fuel level, the resistance in the sending unit varies. This varying resistance is processed by the engine control module (ECM) and the resulting information is sent to the instrument panel cluster (IPC) for display on the fuel gauge.

In the past, the sending unit was set up so that high resistance indicated high fuel level, and low resistance indicated low fuel level.

Sulfur contaminants found in some of today's gasolines can form deposits on the sending unit, resulting in higher-than-intended resistance (*TechLink*, Jan. 2006). The high resistance from the deposits could be misinterpreted as a high fuel level, when in fact the fuel level is low. The driver may run out of fuel, even though the fuel gauge is not indicating low or empty.

To offset this effect, engineering has begun "flipping" fuel senders, reversing the circuitry. This means that high resistance now indicates low fuel level and low resistance indicates high



fuel level. So, if deposit build-up adds to sender resistance, the gauge will err in the direction of indicating less fuel than is actually in the tank.

The "flipping" process began in the 2004 model year and continued through model years 2005-06.

These vehicles will have their fuel level sending units "flipped" for the 2007 model year.

- Cadillac XLR
- Chevrolet Corvette
- Chevrolet Impala, Monte Carlo
- Chevrolet Malibu
- Pontiac Grand Prix
- Buick LaCrosse (Allure)

These vehicles will have their fuel level sending units "flipped" for the 2008 model year.

- Cadillac CTS
- Cadillac SRX
- Cadillac STS

**TIP:** When diagnosing fuel sender operation, it's critical to refer to the appropriate model year information in SI, to be sure which resistance specifications apply.

**TIP:** GMSP0 offers GM Fuel System Treatment PLUS p/n 88861011 (88861012 in Canada) which helps protect fuel sending units from contaminating deposits.

- Thanks to Len Tillard

# Power Liftgate Inoperative

Owners of some 2007 full-size utilities with Power Rear Liftgate (RPO E61) may comment that when the ignition is in the off position, the power liftgate is inoperative from all of the switches and the keyless entry transmitter. If the ignition is in the accessory or the run position, the liftgate operates correctly.

To diagnose this concern, check for power on the Accessory Wake Up Data Line going to the ECM and the TCM. With the key in the accessory position, check for battery voltage on circuit 1585 going to pin 18 of connector 1 of the ECM and pin 11 (MT1 Transmission) or pin 9 (for MYC transmission) to the TCM.

If no voltage is present with the key in the accessory position, check for a wiring or pin fit concern.

- Thanks to Paul Radzwilowicz

# Cadillac DTS Professional Vehicles

General Motors supports the servicing and repair of 2006-07 Cadillac DTS professional vehicles. The three professional vehicle models can be identified by the following RPOs:

- B9Q Funeral Coach Package
- V4U Coachbuilder Limousine Package
- W20 DTS Livery Package.

When a professional vehicle is ordered, it comes equipped with dedicated inline connectors that upfitters connect to. Cutting and splicing into the wire harness voids the warranty.

Concerns that are suspected to be caused by upfitter installed electrical components can be isolated by disconnecting the appropriate inline connectors. See the list below. All required service information can be found in SI by selecting Cadillac DTS. Detailed information regarding these harnesses can be found in the Wiring Systems subsection.

If the concern is NOT resolved with the connector disconnected, follow normal diagnostic procedures.

If the concern IS resolved by disconnecting one of these connectors, contact Technical Assistance for further directions.

- Thanks to Michael Ciarkowski



- C209 Body Harness to Cargo Door Harness (B9Q)
- C322 Body Harness to Courtesy Lamp Harness (V4U)
- C323 Left Middle Window Harness to Body Harness (V4U)
- C324 Left Middle Window Harness to Left Middle Trim Harness (V4U)
- C333 Right Middle Window Harness to Body Harness (V4U)
- C334 Right Middle Window Harness to Right Middle Trim Harness (V4U)
- C335 Body Harness to Left Middle Trim Harness (V4U)
- C336 Body Harness to Right Middle Trim Harness (V4U)

# Pickup Truck Designation

During the 2007 model year, both old (GMT800) and new (GMT900) style pickups will be built.

Preliminary Information (PI) bulletins will distinguish between old and new styles like this.

The Tech 2 will use this same terminology when "building" a vehicle.

You can also distinguish between old GMT800 and new GMT900 by observing the 12th digit of the VIN. For the 2007 model year, all old style GMT800 pickups will have a "1" and all new style GMT900 pickups will have a "5" in the 12th VIN position.

– Thanks to Jim Will

	<b>Style:</b> GMT800 old body style		<b>Style:</b> GMT900 new body style
	<b>12th VIN position:</b> 1		<b>12th VIN position:</b> 5

## Erratic RKE Operation

This information applies to 1996-2007 all GM divisions and models.

As more and more electronic devices are incorporated into or carried in vehicles, reports are increasing of remote keyless entry (RKE) systems with poor performance or unable to program.

A number of devices have been identified that can interfere with the RKE: cell phone cords plugged into power outlets without the phone present, wireless doorbell transmitters, garage door openers, TPM sensors, etc.

TIP: If an RKE system receives two transmissions from separate sources at the same time, it will ignore both.

You may be able to locate devices transmitting unwanted signals using the RKE key fob tester J-43241. Because the unwanted transmissions are the same frequency as the key fob, the LED on the tester will light when the tester is slowly swept near the device. Be sure to sweep around all storage areas in the vehicle and under instrument panel and seats.

– Thanks to Jim Will

## Misfire

This information applies to 1999-2007 Cadillac Escalade, Chevrolet Avalanche, Express, Silverado, Suburban, Tahoe, GMC Savana, Sierra, Yukon, and Hummer with Gen III V8 engines.

The vehicle may have the SES light on and an engine misfire. The misfires will accumulate mostly on the number 7 cylinder on returnless fuel systems and both rear cylinders on return fuel systems. A possible cause is fuel contamination. If present, the contaminated fuel will collect around the affected fuel injector(s) due to the fuel rail configuration and engine inclination in these vehicles. Fuel contamination can also cause random misfires to occur on other cylinders.

If the SI misfire diagnostic does not isolate the concern, the following suggestions may help if the misfire is related to fuel contamination.

1. Complete the SI repair procedure for Fuel Rail Assembly Replacement. When the fuel feed pipes are removed, cap off the fuel rail inlet so the contents can be inspected for contamination. Drain the fuel rail into a clean approved container and inspect the fuel.
2. If contamination is found, follow the Fuel System Cleaning procedure in SI.
3. Once the fuel system is cleaned, refill the fuel system with fresh gasoline.
4. Advise the customer to use gasoline only from a high quality, high volume filling station.

**TIP:** On a 1999-2000 Chevrolet Silverado or GMC Sierra, also review bulletin 00-06-04-024. This bulletin relates to an updated EVAP vent valve to prevent water from being drawn in through the EVAP Vent Valve, which may lead to repeat fuel contamination.

– Thanks to Don Langer

## "No Fobs Detected" Message

This information applies to 2005-07 Chevrolet Corvette and Cadillac STS, 2004-2007 Cadillac XLR.

Certain brands of cell phone chargers may produce electromagnetic interference (EMI) or radio frequency interference (RFI) that can disrupt the electrical systems within the vehicle. The concerns created by the use of these chargers may be intermittent and random. The concerns can be present with or without the phone connected to the charger. This condition usually occurs when using a non name-brand charger.

This interference can cause a no start condition with a "No Fobs Detected" message on the DIC.

Disconnect the cell phone charger from the vehicle and evaluate the customer concern. If the concern is corrected, advise the customer that OEM cell phone chargers, provided by the cell phone manufacturer, typically have additional filtering to eliminate this type of interference.

– Thanks to Dino Poulos

## Intake Manifold Tuning Valve

Some owners of a 2007 Saturn Aura with LY7 3.6L V6 engine may comment of a check engine light with DTC P2070 stored. The cause may be excess Loctite on the bushing for the intake manifold tuning valve, causing the valve to stick.

If routine diagnosis using SI indicates a fault in the intake manifold tuning valve, remove the valve and check for Loctite on the end of the valve shaft. If Loctite is present, remove it using emery cloth, reinstall the valve, and check for proper operation.

– Thanks to Ron Mitchell



## Car Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s) / Condition	Do This	Don't Do This	Reference Information / Bulletin
2005	Chevrolet Corvette with Navigation Radio – FM Radio static or no reception	Reprogram radio	Don't replace radio, antenna modules	05-08-44-014A
2005-06	Chevrolet Cobalt, Pontiac Pursuit (Canada) – Shifter binding on automatic shifter	Replace slider and rails	Don't replace shifter assembly	06-07-30-004
1999-2006	All GM Cars, Saab 9-7X and Saturn vehicles (Canada only) – Brake rotor corrosion	Burnish rotors for cosmetic brake corrosion	Don't resurface brake rotors for cosmetic corrosion	00-05-22-002F
2005-06	Uplander, Relay, Terraza, Montana SV6 – headlights or instrument panel lights flicker at night	Replace generator voltage regulator	Don't replace entire generator	05-06-03-003B
2003-06	ION – No Crank or No Start, codes set	Codes set – replace ignition switch. Service part installed – install new BCM	Don't replace BCM unless ignition switch previously replaced	04-08-45-005C
2000-05	DeVille – Instrument panel cluster display erratic or inoperative	Reprogram I/P cluster	Don't replace I/P cluster	04-08-49-029B
2005-06	Cobalt, Pursuit, HHR – Water leak on floor, hot climates, muggy weather	Reseal case halves with new seal, on car	Don't replace entire HVAC case or R&R from car to reseal	05-01-38-016A
2003-07	VUE, Equinox, Torrent – Ignition lock cylinder sticks	Clean ignition cylinder lock and housing	Don't replace ignition cylinder lock and key	06-02-35-016
2007	Cobalt, HHR, Solstice, ION, VUE, SKY – Reduced volume, loss of volume	Reprogram radio	Don't replace radio	06-08-44-030



## Truck Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s) / Condition	Do This	Don't Do This	Reference Information / Bulletin
2003-06	C/K Pickups and Utilities – Bench seat (RPO AE7) center console armrest hinges broken	Replace lid	Don't replace entire console assembly	06-08-50-004
2005-06	All Fullsize and Midsize Pick-ups and Utilities, G Vans, Hummer H2 and H3 – Brake rotor corrosion	Burnish rotors for cosmetic brake corrosion	Don't resurface brake rotors for cosmetic corrosion	00-05-22-002F
2000-07	All platforms with side terminal batteries – Intermittent no crank, no start condition	Clean battery terminal threads and/or replace cable bolt	Don't replace battery	02-06-04-015
2006	Mid-size Utilities – Replacing yaw sensor	Use new calibration	Don't replace EBCM	PIT 3992
2002-06	Avalanche, Cadillac EXT – TPO plastic components fade and stain	Apply Gatorback Textured Plastic Coatings	Don't replace TPO components	04-08-111-001C
2006	HUMMER H3 – Sunroof rattles	Add flocking material	Don't replace sunroof module assembly	06-08-67-007



## Powertrain Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s) / Condition	Do This	Don't Do This	Reference Information / Bulletin
2000-06	Rendezvous, Terraza, Venture, Uplander, Silhouette, Aztek, Montana, RELAY – Moan or groan from RDM during turning maneuvers	Perform fluid refill procedure	Don't replace RDM if it passes AWD System Functional Inspection tests in SI	06-04-114-001
2007	Saturn VUE – Hesitation or sag when accelerating	Reflash ECM	Don't replace ECM	PIP 3889

### Know-How Broadcasts for December

10206.15D Technology Close-Up – Solstice and Sky Service

December 7, 2006 9:00 AM, 12:30 PM and 3:00 PM Eastern Time

10206.12D Emerging Issues

December 14, 2006 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](http://www.gmtraining.com)). Select Service Know-How/TechAssists from the menu, then choose New Model Features for a selection of courses.



– Thanks to Tracy Rozman