



A Monthly Publication for GM Dealership Service Professionals

J-44175 Fuel Composition Tester



A vehicle's fuel economy, driveability, and emissions, and the condition of fuel system components, are affected by the quality of the fuel in the vehicle's fuel tank. Two of the factors that define fuel quality may be easily observed and analyzed in your service department — fuel contamination and amount of

ethanol in the gasoline. These will help you diagnose fuel related concerns.

The essential tool Fuel Composition Tester J-44175, a microprocessor-based handheld device, allows you to accurately analyze gasoline and gasoline/ethanol blends.

IMPORTANT:

When using the Fuel Composition Tester J-44175, always observe the safety practices and procedures explained in

the user manual, and in SI. Refer to the manual for test procedure details. The following information contains highlights only.

IMPORTANT: The user manual has recently been revised. See details in the box on page 3.

Tire Pressure Monitor Tips

Here are some diagnostic tips for use with most vehicles equipped with the Tire Pressure Monitor system.

Tire Pressure Monitor Values Show All Dashes on Driver Information Center (DIC)

If power is disconnected from the Remote Control Door Lock Receiver (RCDLR) or if the vehicle battery is disconnected, the TPM sensor IDs are retained BUT the tire pressures are lost. This is because the RCDLR cannot assume that tire pressure is maintained over an unknown period of time. The DIC will display all dashes (- - -) and the Tech 2 will indicate the default value (148 PSI). This is normal operation. Driving the vehicle or performing a pressure release (see next column) will cause the sensors to transmit, returning

the display to normal. Detailed information can be found in SI, in the owner manual, or in PI PIC4296.

TIP: If the system will not reset normally, see bulletin PIC3764N

Pressure Release (Delta P) Method of Sensor Learn (Owner Manual Method)

It takes only a few seconds of pressure release (just over 1 PSI) to activate a sensor. However, when the sensor is stationary, the TPM system is on a 30 second pressure polling cycle time. This means the pressure change may not be transmitted immediately. The time it takes for the system to acknowledge the change (via a horn chirp) is variable and may take up to 30 seconds, so patience is essential.

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OBTAINING FUEL SAMPLES

You will use a pressure gauge, either J-34730-FF or CH-48027, to obtain fuel samples from the vehicle's fuel rail pressure connection.

To properly sample fuel, you must first flush out the fuel pressure gauge hose that is used to obtain the fuel sample. Any fuel that remains in the gauge hose from a previous vehicle must be flushed with fuel from the vehicle being tested.

You will take TWO separate fuel samples from the vehicle. Each sample is tested separately. Perform all testing in accordance with appropriate service information (SI) procedures and applicable diagnostics.

First Sample – Use the first sample to observe any particulate matter or gross water contamination. Allow the sample

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TECHINK !

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<u>GM</u>

Service and Parts Operations

Coolant Fan Motor Replacement

This supplements the information in a December 2006 article about cooling fan replacement on the Equinox/Torrent.

The 2005 Chevrolet Equinox fan blades can be reused, but the retainer used to fasten the blade to the fan motor must be replaced. The replacement retainers are included with each fan motor kit, fan blade kit, and the fan shroud kit.

The fan blade design changed in 2006 to a twist lock design. These fan blades must be replaced once they are removed. This style of fan blade is found on the 2006-07 Chevy Equinox and the 2006-07 Pontiac Torrent.

- Thanks to Kevin Jakobiak

Lifting and **Jacking**

When lifting or jacking a 2007 GMC Acadia or Saturn Outlook, avoid contact with the Underbody Side Rail. This is for cosmetic purposes only. It hides the exhaust system and fuel tank when the vehicle is viewed from the side.

CAUTION: Besides damaging the Underbody Side Rail, the vehicle could shift on the lift. leading to severe vehicle damage and personal injury.

- Thanks to Jerome Bednarchik



Coolant Leak at Upper **Radiator Hose**

Owners of some 2006 Cadillac DTS models may comment on a coolant leak at the radiator inlet (upper) hose where the hose attaches to the radiator. This

may be caused by a nylon tracer thread inside the hose that cuts through the inner layer of the hose during the hose manufacturing process.

Replace the radiator inlet hose with p/n 21999689. Refer to the Radiator Inlet Hose Replacement procedure in the Engine Cooling section of SI for more information.

- Thanks to Bill Denton

Did You Know?

100% Caster/Camber Validation

As continuous improvement, GM Engineering and Manufacturing has implemented 100% check/set of caster, camber and thrust angle for many selected vehicles it produces. This is done in addition to toe check/setting and, where applicable, front suspension trim height on vehicles equipped with torsion bars.

The 100% check/set of caster, camber and thrust angle is done at the plants that assemble all versions of Avalanche, Colorado, Canyon, Envoy, Escalade, Express, HUMMER, Rainier, Saab 9-7X SUV, Savana, Sierra, Silverado, Suburban, Tahoe, TrailBlazer and Yukon model vehicles.

This 100% check/set of caster, camber, thrust angle, front suspension trim height and toe ensures that each customer receives the ultimate quality vehicle for tire wear, steering wheel angle, and driving straight down the road.

TIP: When service is required, please refer to SI for proper procedures and specifications to adjust alignment.

- Thanks to Dan Stress



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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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J-44175 Fuel Composition Tester - continued from page 1

to settle for a few minutes and then visually observe for water separation or sediment. The first sample must NOT be placed into the J-44175.

Second Sample -- Only the second sample taken should be placed into the J-44175.

TESTER TIPS

When using J-44175 to test E85 fuel for ethanol concentration, there are several factors which can have an effect on the accuracy of the test reading.

Effects of Humidity – When testing in high ambient humidity and temperature conditions, it is possible for humidity to be absorbed into the fuel. This can adversely affect your reading. Remember that ethanol will absorb a certain amount of water. There is a connection between the fact that ethanol will easily absorb water and the effect it has on accuracy when testing E85 for ethanol concentration.

TIP: This is the principle used by ethanol-based fuel additives to prevent gas line freeze in the winter. Those products are effective because the ethanol in the additive absorbs water in the fuel.

Depending on the level of humidity in the air and how long the fuel sample is exposed to it, the tester's AC frequency reading may begin to slowly increase. Readings taken after 15 seconds will not be accurate. If the fuel sample sits longer than 15 seconds before it is tested, do not test that sample. Collect a new sample of the vehicle's fuel and test it within 15 seconds.

Effects of Cleanliness – Keep the J-44175 as well as the 100mL sampling beaker as clean as possible. Do not use the shop's compressed air to clean any of the surfaces that will touch the fuel sample, including the 100mL beaker, the tester's fuel bowl or test ports. Compressed air may contain small amounts of water or other contaminants.

Sweat, fingerprints or other materials can also adversely affect accuracy of the readings.

Effects of Temperature – The tester automatically compensates for fuel temperature. If the temperature of the fuel is drastically different from the temperature of the tester, the automatic compensation may not react within the 15 seconds required to test a fuel sample. For instance, if the fuel being tested has just been pumped from an underground storage tank, it can be considerably colder than the tester. For best results, a vehicle that has just been filled with cold fuel should be allowed to normalize before sampling.

TIP: Allowing a fuel sample to warm up in the 100mL beaker before being tested is not acceptable because the fuel sample will be exposed to the air for too long, as explained above.

TOOL ACCURACY vs. LABORATORY TESTING

The Fuel Composition Tester J-44175 tool is primarily intended for technician diagnosis and use with SI diagnostics, not analytical testing of fuel samples

Here's a brief (and somewhat technical) explanation of the differences betwee the J-44175 test results and those obtained in laboratory testing.

The J-44175 is designed to have an accuracy of +/- 5%, and testing of existing tools in the field indicates that they perform well within that specification. When comparing J-44175 test results with a laboratory test, it is important to understand that the lab reports must be stated in Volume Percent to be meaningful and the lab results typically will be 4%-5% lower than levels you will obtain in the shop (at typical E85 alcohol concentration levels). This is due to the addition of denaturing agents in ethanol produced as a fuel additive in the United States.

Tire Pressure Monitor Tips - continued from page 1

TIP: It is NOT necessary to continue to release air from the tire until the vehicle acknowledges. Release pressure for 5-10 seconds and then wait for the vehicle to acknowledge with a horn chirp.

J-46079 Tire Pressure Monitoring Service Tool

The J-46079 tool has significant power consumption and drains batteries quickly. If used only for sensor learn procedures, a set of alkaline batteries should last long enough to learn 12 or more vehicles.

Carbon (non-alkaline) batteries do not have the current capacity to support the tool's power consumption. Use ONLY 100% alkaline or rechargeable batteries in the tool.

TIP: Just one carbon battery in the tool, mixed with alkaline batteries, will restrict the current flow enough to cause problems with tool operation.

TIP: For further information, see bulletin PIC4296

 Thanks to Hiram Gahima and Stephen Falko TIP: The new, revised user guide for J-44175 and SI both mention that, when using the tester, measured ethanol values between 60% and 91% are acceptable for E85. These figures take the tool's +/5% accuracy into account. DO NOT add another 5% to the 91% indicated by the tool

So, it is possible for a test result from the J-44175 to be as much as 10% higher than a laboratory report on the same fuel sample. This is an entirely normal and expected result due to the reasons stated above.

TIP: SI diagnostics are designed to work with the J-44175 test results and not necessarily those of a laboratory.

If for some reason you suspect your J-44175 is not reading fuel samples accurately, there is revised tester verification procedure in the new version 2.0 manual which uses acetone as well as the air test previously used. Also, there is a test cell cleaning procedure which uses acetone, if the test cell or fuel bowl should become contaminated. When using acetone for J-44175 diagnostics or cleaning, always be sure it is fresh acetone from a sealed container.

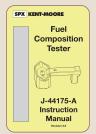
 Thanks to Ken Peacock and Jack Woodward

REVISED USER GUIDE FOR J-44175

SPX/Kent Moore is releasing an updated user guide for the J-44175 in early 2007 for distribution to all dealers

with the J-44175 tool. The new manual is version 2.0 with a yellow cover and should be placed with the J-44175 when received.

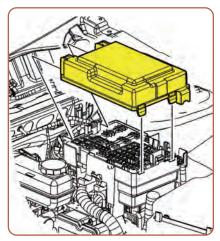
All earlier versions of the manual must be destroyed.



Take a few minutes to read the revised tool usage and sampling procedures before using the tool. Some of the points you should review from the new manual are:

- Tester setup.
- Tester verification with air and acetone.
- Gauge hose flushing.
- Importance of testing the second fuel sample quickly because ethanol absorbs moisture from the air.
- Taking TWO different fuel samples, with different test procedures for each.
- New acceptable levels of ethanol percentage.

Underhood Electrical Center Cover



On the 2007 Chevrolet Equinox and Pontiac Torrent, here's how to remove the Underhood Electrical Center/Junction Block Cover without damage.

To remove the fuse block cover, push in on the four tabs with a flatbladed tool.

- Thanks to Alex McKay and Karem Youkhana

Programming Immobilizer Keys

On a 2006 Saab 9-2x, when trying to program new or replacement key, you are prompted to enter a 4 digit code, but the security code provided with the vehicle is 5 digits.

The 4 digit code that the 9-2x scan tool asks for first is the TEACHING CODE. This code lets the scan tool know what type of vehicle you are working on. For all 2006 Saab 9-2X models, the TEACHING CODE is 3178.

Once this code is entered, the scan tool will prompt for the unique 5 digit security code that was provided with the vehicle. Follow the on screen prompts to complete the key learning procedure.

TIP: All keys must be learned at the same time. Any previously learned key that is not relearned at this time will be rendered useless until another relearn is performed.

- Thanks to Jeff Gorenflo

Rear HVAC System Conditions

Owners of some 2003-06 Cadillac Escalade. Chevrolet Suburban and Tahoe, and GMC Yukon models with RPO CJ2 and C69 may have one or more of the following concerns:

- Intermittent ticking/clicking noise from rear HVAC system
- Unable to control rear system temperature
- Unable to change rear system modes

The HVAC actuators may hunt for the correct commanded position. This cycling can cause a clicking or ticking noise.

Overtravel of the HVAC system control doors can cause one or more of the listed system conditions. If overtravel occurs, a DTC sets and the door goes to a preset default position.

When a system door defaults, that door stays at the default position until the code is cleared. Clearing the code allows the door to operate properly until the overtravel condition re-occurs.

System Door Overtravel DTC		
B0434	Auxiliary (rear) temperature door	
B3764	Auxiliary (rear) mode door	

Replace the auxiliary (rear) HVAC control module (part number listed in the table below). This module contains a new calibration to compensate for the actuator overtravel condition and the hunting/clicking and ticking noises. The new calibration effectively eliminates both codes B0434 and B3764. The new control module also eliminates the default of the doors associated with the codes. The new control module allows door travel from counts 0 to 255 without setting a code or defaulting the door.

Application	Description	Part number
All 2003-06 with CJ2 and C69	Module, Auxiliary HVAC control	15832319
Tahoe, Yukon, Escalade (short wheelbase)	Second design rear blower control module	89024926
Suburban, Yukon XL, Escalade ESV(long wheelbase)	Second design rear blower control module	89018846

When using the new auxiliary HVAC control module, you may notice a slight increase in rear blower speed (approximately 50 rpm). If the customer comments that the increase in blower speed is objectionable, the blower control module may be replaced with the second design blower control module to correct the slight increase in blower speed.

TIP: The new auxiliary HVAC control module is compatible with both the first design and second design blower control module.

TIP: The revised auxiliary HVAC control module should not be used unless one or more of the codes listed above is set. The revised control module will not correct any other DTC or A/C performance concern.

Thanks to Dave Roland

Steering Wheel Position

This information applies to 2007 fullsize pickups and utilities.

The ABS lamp may light, followed by a Service Stability message in the Driver Information Center. Diagnostic code C0710 is set in the EBCM. And, DTC C0455 may or may not be set.

If, after normal diagnosis, the vehicle is not repaired, turn the steering wheel to the straight ahead position. Check the Steering Wheel Position parameter using the Tech 2 scan tool. If the steering wheel position is not reading zero (+/- 3 degrees) with the vehicle wheels straight ahead, check that the steering wheel is properly installed.

The alignment arrow on the steering wheel and a mark on the shaft should be aligned. If the steering wheel is not properly installed, remove the steering wheel and properly align it. Torque to SI specifications. Perform an alignment on the vehicle after the steering wheel has been corrected.

Align marks

- Thanks to Paul Radzwilowicz

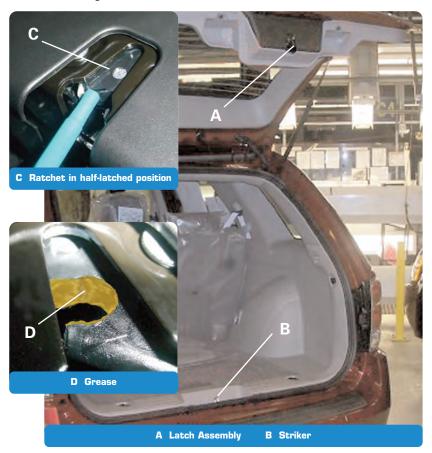
Liftgate Creak Noise

Some owners of an Equinox or Torrent may comment about a liftgate creak or "itch" noise. This condition may be addressed by applying grease to the liftgate latch ratchet.

Begin by opening the liftgate and pushing the latch ratchet to the half-latched position. Then apply a thin layer of grease p/n 26074325 (GM spec 9986108) all around the surface of the ratchet.

TIP: After applying grease, disengage the ratchet to the unlatched position by pulling the liftgate handle.

- Thanks to Angelo Girolamo



PTO Drive Applications

This information applies to the 2001-2007 Chevrolet Silverado Classic, GMC Sierra Classic and 2007 Chevrolet Silverado, GMC Sierra.

Some of these vehicles equipped with Allison LCT1000 transmissions do not have PTO gears installed on the rotating housing. Instead, they have a tone ring for the turbine speed sensor that does not have the ability to drive a PTO (power take-off).

- 1: All 2001-07 8.1 L18 (VIN code G) and 2001-04 6.6 LB7 (VIN code 1) engine equipped trucks will have the PTO gear installed from the factory and has the ability to drive a PTO if desired.
- 2: All 2004-07 6.6 LLY (VIN code 2), 2006-07 6.6 LBZ (VIN code D), 2007 6.6 LMM (VIN code 6) and 2007 8.1 L18 (VIN code G) engine equipped pickup trucks will not have a PTO gear installed but will only have the tone ring.
- 3: All 2004-07 6.6 LLY (VIN code 2), 2006-07 6.6 LBZ (VIN code D), 2007 6.6 LMM (VIN code 6) and 2007 8.1 L18 (VIN code G) engine equipped chassis cab trucks (models *C36*** or *K36***) will have a PTO gear installed. Trucks with box delete option RPO ZW9 do not have a PTO drive gear unless they are 2007 and prior model years equipped with an 8.1 LL18.

If a customer desires to use a PTO on a pickup truck equipped with LLY, LBZ or LMM 6.6 engine, it is necessary to install a rotating housing that has a PTO gear installed on it.

Part numbers for the rotating housings are:

2005 Model Year and older	29540518	
2006-07 Model Year and future	29542802	

This repair is not covered under warranty and is done at the customer's expense.

- Thanks to Chuck Krepp

Front Axle Switch Circuit

Some 2007 Chevrolet Avalanche, Suburban, Tahoe and GMC Yukons equipped with 246EAU Transfer Case (RPO NP8) may exhibit an intermittent Service 4 Wheel Drive lamp and history code C0378 (front axle switch circuit signal invalid).

Inspect the front differential for proper mechanical engagement. Inspect terminal pin tension at the front axle actuator, connector C2 at the TCCM, and C109 and C110. Refer to SI for connector locations.

TIP: Replacement of the TCCM has proven unsuccessful in repairing the intermittent DTC C0378.

- Thanks to Chuck Krepp

Center Cap Installation

The owner of a 2007 Cadillac Utility equipped with 22-inch factory wheels (RPO P56) may experience loose, missing, or noisy center caps.

This may be due to an improperly installed center cap. Check for proper installation of the center cap. It is possible to install the center



cap in several ways, but there is only one correct way to achieve a tight fit.

When installing the center cap, the valve stem icon should point toward the valve stem of the wheel.

- Thanks to Paul Radzwilowicz

Cup Holder Liner

This information applies to 2007 Chevrolet Avalanche, Silverado, Suburban, Tahoe, and GMC Sierra, Yukon, Yukon Denali, Yukon XL, Yukon Denali XL with center console RPO D07.





The rear center console cup holders may not retain a cup properly when turning or accelerating. The original liners are cup mats with no retention tabs.

To address this concern, replace the cup liners with a new updated one-piece liner p/n 25793661.

Before installing the new one-piece liner, remove the 2 tabs located on the front and back of the rubber lining. This provides a better fit and prevents a gap between the liner and the cup holder bezel.

- Thanks to Paul Radzwilowicz



Locating Unit Repair Information in SI

Here's how to locate unit repair information in SI for the following subjects:

- 1. 1997-2006 automatic and manual transmissions
- 2. 1998-2006 transfer cases
- 3. 2001-02 engines

On the SI home page, under the Select Other Options section, click on Unit Repair. It is not necessary to "build" a vehicle. On the next page, select the type of component that is to be repaired. For instance: Driveline/Axle

Then select the actual component, by name. For instance: Transfer Case - Steyr.

Next, select the desired category. For instance: Repair Instructions

On the final page, select the specific repair document you need. For instance: Transfer Case Disassembly

TIP: For 2007 model year and onward, the unit repair sections can be found after "building" the vehicle, in the normal service manual section.

- Thanks to Chuck Krepp

Torsion Bar Front Suspension

The 2007 Silverado Classic and Sierra Classic 2WD 1500 Crew and Extended Cab models with the 5' 8" box now use torsion bar front suspension.

In the past, these models have always used coil springs. Be aware of this change when comparing the new trucks with past model vehicles for ride, handling, alignment and Z-height concerns.

- Thanks to Jim Will

Musty Odor from HVAC

Some owners of 2007 full-size utilities and pickups with Automatic and Manual Climate Control (RPO CJ2, CJ3, or C67) may comment of a musty odor from the Heating, Ventilation and Air Conditioning (HVAC) system. This condition occurs most often on initial startup after the vehicle was driven on a hot, humid day. The condition may be caused by condensation build-up on the evaporator core, which does not evaporate by itself in high humidity conditions.

The 2007 full-size pickup trucks and utilities have an option to enable afterblow on vehicles equipped with Automatic and Manual Climate Control. This is different from previous years, where the only way to prevent repeat

A/C evaporator core odor concerns was to install an afterblow module kit.

TIP: Do not enable the afterblow function until its purpose and operation are explained to the customer and they approve the change.

Once the afterblow option has been enabled, the blower motor will turn on approximately 10 minutes after the vehicle is shut off. The blower motor will run continuously for 10 minutes at a 30% duty cycle. The afterblow function will activate only if the air conditioning compressor was engaged during conditions of high ambient temperature. If the vehicle is started within 10 minutes of the last key off, the afterblow function from the previous

key cycle will be cancelled.

Turn this option ON in the HVAC Control Module instead of installing the Electronic Evaporator Dryer Module Kit referred to in the Air Conditioning Odor bulletin 99-01-39-004A.

To enable afterblow:

- 1. Verify the Tech 2 is updated with the latest software.
- 2. "Build" the vehicle on the Tech 2.
- 3. Use the following Tech 2 pathing:

 Vehicle Control Systems > Select
 engine > Module Setup > HVAC
 Control Module > Afterblow Option
- 4. Follow the on-screen directions.
- Thanks to Paul Radzwilowicz

Pickup Box Dimensions

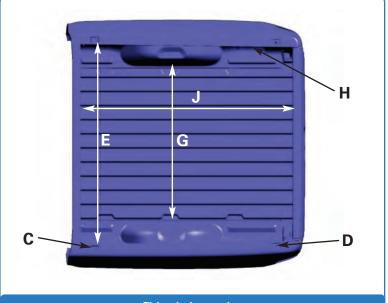
Some owners of the new 2007 Chevrolet Silverado and GMC Sierra may have questions about whether pickup box accessories will carry over from the Silverado Classic or Sierra Classic to the new trucks.

In general, the following accessories should carryover (depending on manufacturer):

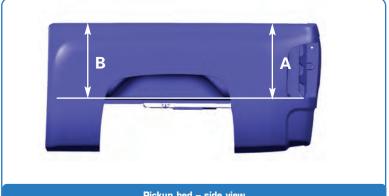
- Tonneau covers
- Pickup box caps (may have styling or color differ-
- Accessories attaching to side bed rail flange
- Accessories attaching to a single stake pocket

Here are some dimensional comparisons between the boxes:

- A. The new box has a 40mm increase in height from the load floor to the top of the side bed rail in the
- B. The new box has a 30mm increase in height from the load floor to the top of the side bed rail in the front.
- C. The front stake pocket location is 52mm rearward compared to the Classic truck box.
- D. The middle (if equipped) and rear stake pocket locations are unchanged.
- E. The distance across the truck (side to side) between the stake pockets is unchanged.
- F. The stake pocket size is unchanged.
- G. The distance between the wheel wells is 25.3mm wider on the new box.
- H. The side bed rail attachment flange is unchanged.
- J. The top view opening of the box is unchanged with one exception. The fore/aft length is shorter by 33mm due to a change in the front panel flange.
- Thanks to Jim Will



Pickup bed - top view



Pickup bed -- side view

Remote Start Features Clarified

This information applies to the Equinox and Torrent.

Here is a description of the features in these vehicles that are controlled by the Remote Start. Upon activation of the RKE, these features will operate as listed until the ignition key is turned on, or the system times out.

Blower/Temperature/Mode	Current position of control
A/C and Recirculation	Last setting before vehicle was turned off
Rear Defrost	Always turns ON
Heated Seats	Always OFF *
HVAC control head	No LEDs, no backlighting

- * There are future plans to add a feature that turns the heated seats ON if outside air temperature is below 5° C (41° F).
- Thanks to Angelo Girolamo

Voltmeter Fluctuation

This information applies to 2005-07 Cadillac Escalade, Chevrolet Avalanche, Silverado, Silverado Classic, Suburban, Tahoe, GMC Sierra, Sierra Classic, Yukon with Regulated Voltage Control (RVC).

Some customers may comment that the voltmeter fluctuates between 12 and 14 volts. Starting with the 2005 model year, light-duty full size pickups and utilities are equipped with a Regulated Voltage Control (RVC) system. See TechLink September 2004 for the full story.

The RVC system controls voltage based on such parameters as battery state of charge, battery electrolyte temperature, battery current, and electrical loads. This causes the voltmeter to fluctuate between 12 and 14 volts. (Non-regulated systems usually maintain a more consistent reading of 14 volts.)

This fluctuation with the RVC system is normal system operation and no repairs should be attempted.

Refer to the owner manual Section 3 (Instrument Panel) Voltmeter Gauge for more information.

Thanks to Jim Will



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 Cobalt Pontiac Pursuit (Canada) – Shifter binding on automatic shifter	Replace slider and rails	Don't replace shifter assy	06-07-30-004
2003-05	CTS – Squeak/creak noise in front end at slow speeds while braking or turning	Intall new insulating spacer and rate washer	Don't replace entire control arm	06-03-08-008
2006-07	All GM Passenger Cars, Saab 9-7X and Saturn Vehicles (Canada Only) – Brake rotor corrossion	Burnish rotors for cosmetic brake corrosion	Don't resurface brake rotors for cosmetic corrosion	00-05-22-002F
2006-07	LaCrosse/Allure, Lucerne, Buick Rainier, DTS, STS, TrailBlazer SS, Saab 9-7 X, Denali, Rendezvous – Sound insulating laminate door glass chipping on the top edge		Don't use key lock boxes on any vehicle	06-08-64-001
2003-05	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
2004-05	Grand Prix, Monte Carlo, Impala, Aztec, Rendevous, DTS, Lucerne, Grand Am, Bonneville, LeSabre, Park Avenue, Century, Regal, LaCrosse, Cavalier, Sunfire, Malibu Classic, U Van, Seville, Deville – Inner tie rod boot snaking. Causes noise with steering wheel rotation	Replace inner tie rod boot or boots if both exhibit condition	Don't replace complete steering gear	06-02-32-005
2004-05	LaCrosse, Allure, Grand Prix – Various OSRVM concerns	Replace serviceable outside rear view mirror components	Don't replace outside rear view mirror assembly	04-08-64-009B
2003-07	VUE, Equinox, Torrent – Ignition lock cylinder sticks or binds after early extended use	Clean ignition cylinder lock and housing	Don't replace ignition cylinder lock and key	06-02-35-016
2006	Impala, Monte Carlo, DTS, Lucerne – Charge light on/Battery message on DIC, codes set	Reflash BCM	Don't replace battery current sensor, generator or BCM	06-06-03-006



Truck Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s) / Condition	Do This	Don't Do This	Reference Information / Bulletin
2005-06	All Fullsize and Midsize Pick-ups and Utilities, G Vans, 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
2002-06	TrailBlazer EXT, Envoy XL and Envoy Denali XL – Repeated liftgate glass breakage	Repair liftgate hinges, replace rubber glass bumpers	Don't replace entire liftgate assembly	06-08-66-011A
2003-06	Express and Savana Vans – Poor radio reception or noise on AM stations	Install filter kit in power outlet wiring harness	Don't replace radio	06-08-44-024
2006	HUMMER H3 – Sunroof rattles	Add flocking material	Don't replace sunroof module assembly	06-08-67-007
2002-07	RPO LL8 engine – Misfire, SES light, codes set	Inspect for build-up on spark plug boot; replace AIP seal	Don't return vehicle without replacing AIP seal	06-06-04-048
2006	Express, Kodiak, Savana,TopKick – Windshield wipers inoperative, linkage disconnected	Replace W/S wiper transmission pivot housing bolts.	Don't replace W/S wiper transmission	06-08-43-006



Powertrain

Model Year(s)	Vehicle Line(s) / Condition	Do This	Don't Do This	Reference Information / Bulletin
1997-2007	Full-size and Mid-size Pickups and Utilities, H2/H3, Saab 9-6, SRX, STS – Transfer case mounted speed sensor connector plastic locks flex/bend during disconnect	Use improved connector p/n 15306187 in place of p/n 88987993	Don't use old part. Don't use sensor component labor operation	06-04-21-001
2005-06	Montana SV6, Terraza, Rendezvous, Uplander, Relay – Extended crank, starter engaged after start, low oil pressure light, fuel gauge inaccuracies	Reprogram PCM	Don't replace EGR valve	06-04-114-001

Know-How
Broadcasts
for
March

207.03D Emerging Issues	Warch 8, 2007	9:30 AIVI and 12:30 PIVI Eastern Time
New Model Features		urses, log on to the GM Training Website
	(www.gmtraining.com). Select Service Know-How/TechAssists from
	the menu, then choose I	New Model Features for a selection of courses

