

2010 Chevrolet Equinox



The 2010 Chevrolet Equinox has a completely new look and upgraded design. This vehicle will be the leader in its segment in styling, comfort and fuel economy.

Many features are new for the 2010 Chevrolet Equinox. Customers who owned a previous model Equinox may find operation of some of these features different from their experience.

- Ultrasonic Rear Park Assist System (URPA)
- Rear Vision Camera System
- Active Noise Cancellation (ANC)
- Adjustable Power Liftgate (APL)
- Spark Ignited Direct Injection (SIDI)
- Rack-Mounted Electric Power Steering (EPS)

TIP: Before attempting repair for a customer concern, be sure the customer understands the proper operation of the feature in question.

GM GLOBAL-A ARCHITECTURE

The technological backbone of the new Equinox comes in the form of the GM Global-A Serial Data Electrical Architecture – a high-and low-speed data network that connects system modules and ensures that information is properly communicated and shared among them.

The new Equinox is among the first GM vehicles sold in North American equipped with the architecture, which is one of the most advanced of its kind in the automotive industry. This network transfers data around the vehicle.

TIP: You will use MDI with GDS software and a laptop PC in place of the Tech 2 for diagnosis.

ACTIVE NOISE CANCELLATION (ANC)

The Active Noise Cancellation (ANC) system works to reduce the amount of noticeable noise at certain vehicle speeds and is standard with the 4-cylinder engine. The torque converter clutch is calibrated to provide very low idle speed to improve fuel economy, which may cause

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2010 Buick LaCrosse



LaCrosse (Allure in Canada) is Buick's first global vehicle, designed and engineered in GM centers in Europe, Asia and North America. It is distinguished by premium content, world-class quietness and high-tech powertrains. LaCrosse offers coupe-like styling with 4-door sedan comfort.

LaCrosse is offered in three levels – CX, CXL and CXS – each offering a unique combination of features and equipment, including:

- HID Articulating Headlamps
- Electronic Park Brake
- Panoramic Sunroof
- QuietTuning®

TIP: Before attempting repair for a customer concern, be sure the customer understands the proper operation of the feature in question.

GDS Diagnostics

LaCrosse incorporates the latest in serial data electrical architecture. A high-and low-speed data network connects system modules and ensures that information is properly communicated and shared among them.

TIP: You will use MDI with GDS software and a laptop PC in place of the Tech 2 for diagnosis.

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unwanted noise. Active Noise Cancellation works with the vehicle's audio system to create sound waves which cancel noise. The result is improved quietness with little added mass. Lower mass results in better fuel economy.

TIP: For optimal ANC performance, do not block the cargo area speaker.

POWERTRAINS

There are two powertrain combinations available on the Equinox.



2.4L SIDI VVT 4-CYLINDER ENGINE (RPO LAF)

This is the standard engine on all models. It provides 182 horsepower and 174 lb.-ft. of torque and is available in both front- and all-wheel-drive configurations. Fuel economy of 21 mpg city/30 mpg highway is expected to be segment leading on the highway (10.1 L/100 km city and 6.7 L/100 km highway, Canada). And the 18.5-gallon (71 L) fuel tank allows a 564-mile (1059 km) range.

6T45 SIX-SPEED HYDRA-MATIC AUTOMATIC TRANSMISSION

This transmission is standard with the 2.4L SIDI VVT 4-cylinder engine. It is designed for torque handling capability. Wide overall ratios help contribute to maximized acceleration, enhanced fuel economy and reduced noise, vibration and harshness (NVH). This transmission is equipped with premium fluid, which need not be replaced in normal use.



3.0L SIDI VVT V6 ENGINE (RPO LF1)

This engine is available on LT and LTZ models. It offers 264 horsepower and 214 lb.-ft. of torque, is available in both front- and all-wheel-drive configurations and has a 3500-lb. towing capacity. It provides 18 mpg city and 25 mpg highway (11.9 L/100 km city and 8.1 L/100 km highway, Canada). And the 20.9-gallon (79L) fuel tank allows a 520-mile (975 km) range.

6T70 SIX-SPEED HYDRA-MATIC AUTOMATIC TRANSMISSION

This transmission is standard with the 3.0L SIDI VVT V6 engine. It is designed for torque handling capability to meet the needs of the high-output 3.0L DI VVT V6. Wide overall ratios help provide exceptional launch feel, enhanced fuel economy and reduced NVH.

REARVIEW CAMERA SYSTEM

Equinox offers an available Rearview Camera System that displays images either in the rearview mirror (using a built-in mini display screen) or color interface display on vehicles equipped with the navigation system. This system provides excellent assistance and added security when backing up, parallel parking or trailer towing. The camera is located above the license plate.



Rear Vision mirror

ELECTRONIC RANGE SELECT (ERS) MODE

The switch located on the shifter handle allows the driver to manually select the range of gear positions. This feature can be used to limit the top gear while towing or to downshift when driving on a downhill grade to provide engine braking. All gears below the selected gear will be available to use. If vehicle speed is too high or too low for the requested gear, the shift will not occur.



A ECO button
B Range switch

ECONOMY (ECO) MODE

On vehicles with 4-cylinder engine, the Economy (ECO) Mode can improve the vehicle's fuel economy by changing the transmission shift points and making several other fuel-saving adjustments.

Press the ECO button by the shift lever to turn this feature on

or off. The ECO light in the instrument cluster illuminates.

- The transmission upshifts sooner and downshifts later.
- The torque converter clutch applies sooner and stays on longer.
- The gas pedal is less sensitive.
- The vehicle's computers more-aggressively shut off fuel to the engine under deceleration.
- Reduced idle adjusts idle to economically address required loads/draws depending on what feature is on.

INFOTAINMENT

Rear Seat Entertainment System includes segment exclusive twin seat-back flip-up screens. The second level of radio/infotainment systems includes everything included with the base radio, as well as the following:

- DVD audio and video playback capability, including the ability to play video in surround sound if the vehicle is equipped with the premium audio system;
- USB connectivity.
- A two-gigabyte (2GB) internal flash memory for time-shifting (audio-buffering; e.g. TiVo capability) AM, FM and XM broadcasts; ripping of CDs; and copying content from USB memory sticks.
- Twin seatback mounted flip-up LCD video screen modules with eight-inch (20 cm) WVGA color display.
- Auxiliary video devices such as video games can be played independently on the rear screens, or a DVD movie can be played on one screen, while gaming takes place on the other. Video input jacks are integrated into both screen modules, or can be accessed at the rear of the center console.

ENHANCED NAVIGATION SYSTEM

The Navigation System available on the new Equinox incorporates a satellite-based traffic information service, XM NAV Traffic®.

- In select metro areas, XM Nav Traffic provides real time information on construction, accidents, and congestion.
- XM Weather provides 3-day forecasts and current weather warnings.
- Voice-based destination commands make use intuitive, fast and easy.
- Point of Interest preset buttons enable quick access to information.
- Navigation database DVD does not have to be left in the unit, due to 40 GB hard drive (yearly updates available to the NAV DVD).
- OnStar Turn-by-Turn Navigation provides audio step-by-step directions if desired and is standard equipment on all models.

RACK-MOUNTED ELECTRIC POWER STEERING - EPS



A REPS (rack-mounted electric power steering) system is used on models equipped with the 2.4-liter VVT direct-injection four-cylinder engine, primarily for buyers interested in more fuel efficiency. EPS eliminates the need for a power steering accessory drive that runs off the engine, reducing associated parasitic losses.

Due to its rack-mounted configuration (as opposed to column mounted) and input torque sensor, the steering system delivers more precise reaction to steering inputs and better overall on-line center fee, both of which contribute to the vehicle's unexpected performance balance.

REAR WIPER

The rear wiper controls are on the end of the windshield wiper lever. Press the upper or lower portion



of the button to control the rear wiper and rear wiper delay. The system turns

off when the button is returned to the middle position. Push the windshield wiper lever forward to spray washer fluid on the rear window. The lever returns to its starting position when released.

POWER LIFTGATE



On vehicles with a power liftgate, the switch is located on the overhead console. The vehicle must be in P (Park) to use the power feature. The taillamps flash when the power liftgate moves.

Power Liftgate Modes

The power liftgate has three modes of operation. Mode selection is controlled by the interior or mode switch.



Off Mode (Disable) – Power is disabled. The liftgate will operate as a manual liftgate.

TIP: Manual effort is higher than with a standard non-power liftgate.

3/4 Mode (Programmable) – The liftgate powers open to a height programmed by the owner (to prevent liftgate from hitting overhead obstructions).

Max Mode (Full Open) – The liftgate will power open to the full open height.

Power Liftgate Operation

In either the 3/4 or Max mode, the liftgate can be powered open and closed in the following ways:

Remote Keyless Entry (RKE) – Press and hold the power liftgate button on the RKE transmitter until the liftgate starts moving.

From Inside the Vehicle – Press the power liftgate button on the center of the mode switch

From Outside the Vehicle – Press the touchpad switch on the liftgate outside handle to open the gate. Press the power liftgate button on the liftgate adjacent to the latch to close the gate.

Stopping or Changing the Direction of Liftgate Travel – Pressing any button or the touchpad switch while the liftgate is moving will stop and hold the liftgate at the current position. Pressing the button or touchpad switch again will reverse the direction of travel.

TIP: There is a minimum open angle that the power liftgate system will hold the liftgate open. If stopped below that

angle, the liftgate will close.

TIP: Do not force the liftgate open or closed during a power cycle.

TIP: If the liftgate is powered open and the liftgate support struts have lost pressure, the taillights will flash and a chime will sound. The liftgate will stay open temporarily, then slowly close.

TIP: The liftgate has an electric latch. If the battery is disconnected or has low voltage, the liftgate will not open. The liftgate will resume operation when the battery is reconnected and charged.

Programming 3/4 Mode

With the mode control in the 3/4 position, open the liftgate by any desired method. When it reaches the desired position, press any button to stop it. Manually adjust if necessary. Then press and hold the touchpad by the rear latch until the taillamps blink.

Obstacle Detection Features

If the liftgate encounters an obstacle during a power open or close cycle, a warning chime will sound and the liftgate will automatically reverse direction to the full closed or open position.

TIP: If the liftgate encounters multiple obstacles on the same power cycle, the power function will deactivate.

Pinch sensors are located on the side edges of the liftgate. If an object is caught between the liftgate and the body and presses against a sensor, the liftgate will reverse direction and open fully.

POWER DOOR LOCKS

TIP: When the door is locked, it is necessary to pull the inside handle TWICE – first to unlock, second to release the door latch.

EQUINOX TRAINING

TechAssists:

TechRear Vision Camera/ISRV	18044.24T1
MPIM/PDIM/Audio Bluetooth	19047.18T1
Rack Mounted EPS	13041.13T1

Other Existing Classes (that also apply to the Equinox)

SIDI*	16340.14D (IDL) 16043.51W (Web based)
Rear Vision Camera Gen 4	16041.07W (Web based)
35 PSI Tire Pressure	13044.12T2 (TechAssist)
Multiple Diagnostic Interface (MDI) Familiarization	16048.25W-R2 (Web based)
GM Global Diagnostic System	16048.26W (Web based)

*Applies to both the 2.4L LAF Engine and the 3.0L LF1 Engine

– Thanks to Ange Girolamo, Jon Nowak and Mike Golinski

2010 Buick LaCrosse - continued from page 1

POWERTRAINS

Initially, there will be two V6 powertrain combinations available on the LaCrosse. A 4-cylinder powertrain will be introduced later in the model year, and information will be available at that time.



3.0L SIDI VVT V6 ENGINE (RPO LF1)

This engine is available on CX and CXL models. It offers 255 horsepower and 217 lb.-ft. of torque, and is available in both front- and all-wheel-drive (CXL) configurations. It provides (estimated) 18 mpg city/27 mpg highway (CX) (11.1L/100 km city and 7.4 l/100 km highway, Canada). And it uses regular gasoline.



3.6L SIDI VVT V6 ENGINE (RPO LLT)

This engine is available on the CXL. It offers 280 horsepower and 259 lb.-ft. of torque. It provides (estimated) 17 mpg city/26 mpg highway (11.8 L/100 km city and 8.3 L/100 km highway, Canada).



6T70 SIX-SPEED HYDRA-MATIC AUTOMATIC TRANSMISSION

This transmission is standard with both engines. All gearing is inline with the engine crankshaft, resulting in shorter overall vehicle length, lower powertrain height and more interior room. This transmission features adaptive shift controls, automatic grade braking and tap up/tap down capability. It requires minimal maintenance due to 100,000 mile (160,000 km) DEXRON® VI fluid.

HID ARTICULATING HEADLAMPS

Adaptive forward lighting (available) features Xenon HID lamps that turn in the same direction as the vehicle (up to 15 degrees) to enhance visibility in corners and curves.



QUIETTUNING®

QuietTuning is a Buick exclusive engineering process to reduce, block and absorb cabin noise. Among the noise attenuation features are acoustic-laminated glass, acoustic wheelhouse liners, acoustic dash mat, triple-sealed doors, liquid-applied sound deadener, isolated engine and suspension, and integrated radio antenna.

PANORAMIC SUNROOF

An available panoramic sunroof provides additional interior light for front and rear passengers, using a movable front panel and stationary rear panel.



ENTERTAINMENT PACKAGE

This package is standard on CXS and optional on the others. It includes a harmon/kardon 384 watt, 11-speaker system, USB port and 120V power outlet.

And an available rear seat entertainment system includes two



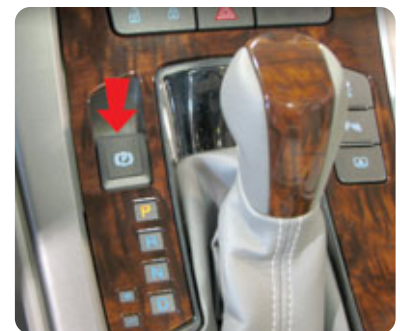
display screens built into the headrests, and wireless headphones.

ELECTRONIC PARK BRAKE

The conventional mechanical park brake is replaced by an innovative button-controlled system with a switch in the center console. The system has two warning lights identified as PARK and (P) and three Driver Information Center (DIC) messages. In case of insufficient electrical power, the EPB cannot be applied or released.

The PARK light is used for all apply and release functions as well as "hard" failures which require the vehicle to be towed to the dealer. The (P) light is used only to indicate there is a problem with the Park Brake System. The vehicle can be driven to the dealer, but is functioning at a reduced level.

– Thanks to Eric Kenar



PARK

PARK symbol



PARK symbol (Export)



(P) symbol

Passenger Presence System – 2010 Camaro

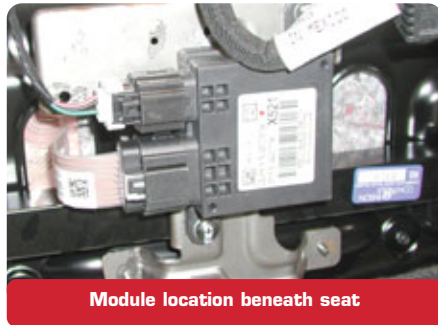
Here are some tips on the Passenger Presence System (PPS) on the 2010 Camaro.

HOW THE SYSTEM WORKS

The main function of the PPS is to determine whether to turn the right front passenger airbag ON or OFF, based on the occupant's size and weight.

There are two components that make up the PPS – the module and sensing mat. The module and sensing mat are part of the seat.

The module is mounted under the seat pan and the sensing mat is assembled between the seat foam cushion and seat pan. The sensing mat converts the front passenger occupant's size and weight into an electrical signal that the module reads and determines the passenger's classification.



For additional information, a streaming video is available from the GM Training website (U.S. only). Click Web Video Library from the main menu, then Technical, and then do key word search on Occupant. The course, 22048.40V – Occupant Safety Systems, is at the top of the list. You can also call 1.800.393.4831 to order a copy of this video. In Canada, a Service Know How DVD is available, Occupant Safety Systems 50325.39V.

PARTS CAN BE SERVICED SEPARATELY

This system allows you to service each component separately, module and/or sensing mat.

Please note that there are two labor codes, C8870 for the module and C8871 for the sensor.

DIAGNOSTIC TROUBLE CODES

The Diagnostic Trouble Code (DTC) information for the PPS can be retrieved with the MDI tool and the Global Diagnostic System.

Refer to SI document 2092991 for details, summarized in the accompanying table.

Generally, if the PPS has history codes only and no active codes are currently set, there is no need to replace either compo-

nent in the PPS system. The history codes still need to be cleared through the MDI tool, and appropriate electrical tests and visual inspections must be conducted in order to ensure that there is no intermittent problem.

After installing any of the PPS components, the system needs to be rezeroed using the MDI tool. This will update the empty seat reference values stored in the ECU and ensure proper system performance.

This is the proper procedure to rezero the PPS system (see SI document 2092991). After the PPS recognizes the rezeroing command:

1. Ensure that the passenger seat is empty before initiating a rezeroing command. Also check that there are no active DTCs in the PPS.
2. With the MDI tool, initiate a rezeroing command.
3. If the system classifies the current seat condition as Empty, it will update the reference values.
4. After 20 seconds, cycle the ignition off to on.
5. Verify that the rezero is successful by sitting on the passenger seat and verifying that the passenger air bag telltale light changes from OFF to ON. If the telltale does not change, follow the SI instructions for DTCs

A DTC B0081 11 will set to indicate that the rezeroing process has failed.

IMPORTANT:

1. If the system fails to rezero, verify the passenger seat is empty and no active DTCs exist. Then resend the zero command and follow the instruction above at least three times.
2. During the rezeroing process, the seat must be empty of all objects and the clearance specified in SI must be observed.

– Thanks to Esther Anderson, Joe Garcia and Sue Rashid

DTC	DESCRIPTION	POSSIBLE ROOT CAUSE
B0074 00	Flex Mat Sensor Performance	Sensing mat open circuit. Check the sensing mat for damage. If parts replacement is required, replace sensor mat only.
B0074 04	Flex Mat Disconnected	Sensing mat disconnected. Check sensing mat connections. Re-connect sensor mat.
B0081 42	Calibration Not Learned	Seat not rezeroed at seat supplier or dealership. Need to rezero the system.
B0081 11	Rezero Error	Failed rezero. Seat must be empty during rezero. Check the system for DTCs. Rerun the rezero sequence.
B101D 00	Electronic control unit (ECU) hardware performance - No additional information required	Check connections. If parts replacement is required, replace ECU only.
B101E 00	Electronic control unit (ECU) hardware performance - No additional information required	Check connections. If parts replacement is required, replace ECU only.
B101D 3a	Incorrect Component Installed	Check if the correct components are installed AOS and SDM
B1325 03	Battery Voltage Low	Check vehicle battery with IGN on RUN
B1325 07	Battery Voltage High	Check vehicle battery with IGN on RUN
U0140 00	Lost Comms BCM	Check BCM and clear DTC
U0151 00	Lost Comms SDM	Check SDM and clear DTC
U0155 00	Lost Comms IPC	Check IPC and clear DTC

Warranty Parts Center Reviews

The Warranty Parts Center (WPC) has been a critical part of GM's business model since 1996. Refer to bulletin 99-00-89-019E (05-00-89-042C for Saturn). It is well known by most dealers that the WPC requests parts to better understand and help resolve product issues. At GM, the continued focus on product quality, fast issue identification, root cause, correction and containment is now more important than ever. That is why the WPC process has been expanded to include parts reviews held at the Vehicle Engineering Center (VEC) at the GM Technical Center in Warren, Michigan.

TIP: Parts are still returned as always to 45 Northpointe Drive, Orion, MI 48359, but many of the parts are now being reviewed at the VEC.

We've done this because the VEC is where many engineers and suppliers have residence. As a result, we've had higher participation, more on-site/on-vehicle part testing, better results in our analysis and quicker resolution of issues.

The parts and repair orders that are requested back are reviewed by key stakeholders for the involved part, including Engineering, suppliers, GM Supplier Quality, production plant, assembly plant and Brand Quality. The part is analyzed to determine the root cause of the issue. Based on the group's analysis, the part is placed into one of three main categories. They are:

- Engineering issue, which can also include plant installation and handling
- Supplier quality issue
- Dealer issue

If it's an Engineering or supplier issue, we have to determine if it is a known issue that is already being addressed, or if the issue is something new that must be placed in our 24-hour process where either the supplier or the plant needs to quickly provide a solution to the problem. Many times the part is sent back to the supplier for a detailed analysis to get a better understanding of what is required to address the issue.

Parts that don't meet the criteria for the Engineering, supplier or plant category are placed in the dealer category. Parts in this category are usually there for the following reasons:

- Dealership returned incorrect or incomplete parts for the repair claimed.
- Insufficient information on the Repair Order (or lack of supporting information or documentation) to perform analysis or justify the replacement
- Dealership didn't follow the published diagnostics, bulletins and/or PIs and unnecessarily replaced the part or replaced more parts than they should have.

The dealer category is the responsibility of the Brand Quality Manager. It's our job to make certain no parts end up in the dealer category without a valid reason. The Brand Quality Manager is the only person in the parts review who can issue a Feedback Report (which usually results in a debit to the dealer). Before that happens, many questions are asked, published service procedures are checked for accuracy and completeness, TAC cases are reviewed, vehicle service history is reviewed in GMVIS, etc.

We always decide in the dealer's favor if there is any gray area. If the part replacement falls into a gray area, either no Feedback Report is issued, or an Info Only Feedback Report is issued, which provides information to the GM DVM (Warranty Manager in Canada) to review with the dealership. An Info Only Feedback may result in a dealer debit after the DVM review. In the reviews, it is Brand Quality's job to act on behalf of the dealer. We work hard to ensure that only those parts that are clearly the result of a dealer issue end up as a Feedback Report. From a product quality perspective, we'd rather have no parts that end up in the dealer category because they provide no value to product improvement.

Because Repair Order information is so critical to analyzing product issues, the more detail the better. Use the following

guidelines to help us expedite the review process, identify issues faster and reduce the likelihood of receiving a dealer debit:

- When tagging parts, tag in areas that don't damage the part being sent back (example – don't wrap a metal tag wire around rubber wiper blade inserts).
- Return the correct/requested part (return all parts related to the labor operation paid on the warranty claim).
- Properly package and protect all parts returned so they are not damaged when received at the WPC.
- Do not return a similar part or a new part, and do not remove pieces from the part sent back.
- Do not replace the entire assembly when only a component of the assembly needs to be replaced.
- Clearly mark or circle the area of concern on the part with a paint pen (i.e. area of defect, leak, etc.) – do not assume WPC will see what you are seeing.
- Thorough repair order documentation is a must:
 - Customer complaint (provide accurate and detailed information)
 - Any characteristics of the fault that were observed
 - Conditions observed when the fault occurred (operating conditions, weather, etc.)
 - List any/all DTCs
 - Proper diagnosis (Bulletins, TAC PIs, SI numbers followed)
 - Scan tool data print out, snapshot, diagnostic worksheets (be sure to return all substantiating service documents with the RO returned with the part)
 - TAC case number (document any other RSE/DVM interface)
 - Use proper labor operation
- Be sure the parts department includes a copy of the RO with technician comments (hard copy of RO copied front and back) along with all related service documentation with each part return.
- Submit warranty claims only on warrantable items (parts damaged by customer or dealer are not warranted).
- Transportation claims should be claimed as a transportation damage claim, not warranty.

Additionally, you should also include any information that provides the reason why the component was replaced. Here are a few examples:

- Any customer or local issue that resulted in a repair that may not be supported by GM service information.
- An assembly was replaced instead of the component indicated by service procedure. If the component was not available, note it on the RO.
- The service procedures were inaccurate and resulted in incorrectly replacing a part that could not be returned to the parts department.
- A part was damaged while following service procedures to access the component with the fault.

In these last two cases, you should submit SI feedback PTR (Problem Tracking Record), and indicate it on the RO. The reviewers will check service information, bulletins and PIs to make certain they are accurate.

TIP: Be sure to review this article with service manager, warranty administrator and parts manager.

In conclusion, this is just one of the many areas in which GM is taking a hard look at the business and asking "How can we improve?" We are also asking all our partners to do the same, which helps achieve the main goal – to engineer, process and build the highest quality products possible.

- Thanks to Ray Romeo

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

Desktop Publishing:

5by5 Design
dkelly@5by5dzn.com

FAX number:

1-248-729-4704

Write to:

TechLink
PO Box 500
Troy, MI 48007-0500

GM TechLink on the Web:

GM GlobalConnect

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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Terminal Release Tool Update

The JST BCM connector family consists of seven unique connector housings differentiated by color and keying. This connector family is designed to use both 0.64 and 2.8 sized terminals.

GM Service P/N	Color
88988838	Lt Green
88988839	Natural
88988840	Lt Blue
88988841	Black
88988837	Brown
88988842	Pink
88988806	Gray

The J-38125-620H manual documents the terminal release tool and terminal release process for the JST BCM connector family (pages 78-79).

According to feedback from the service community, the Terminal Release Tool 12094429/J-38125-12A does not effectively release the terminal for this connector family. Terminal Release Tool 15315247/J-38125-553 is more effective for both 0.64 and 2.8 terminal sizes and replaces the current tool.



Tool 15315247/J-38125-553

The following terminal release procedure supplements the terminal release instructions published in the J-38125-620H manual (pages 78-79).

UNLOCK TPA



Inserting tool into staging cavity



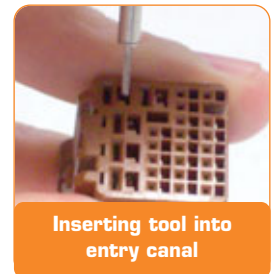
TPA in staged position

Position the connector and locate the TPA staging cavities.

Use connector terminal release tool 15315247/J-38125-553 to lift the TPA into the staged position. You will feel the TPA click into place when fully extended into the staged position. Perform this step on both sides of the TPA.

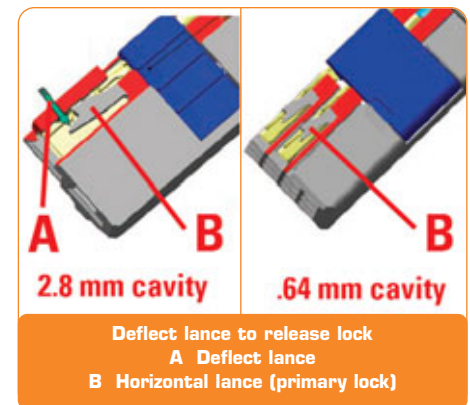
RELEASE TERMINAL FROM CONNECTOR

Position the connector and locate the terminal release entry canal of the suspect terminal. Insert connector terminal release tool 15315247/J-38125-553 into the entry canal with the angled side of the tool facing the connector wall containing cavity 4.



Inserting tool into entry canal

Place the tip of the Terminal Release Tool onto the connector lance and deflect to release the lock. Holding the lance in the released position, slightly pull on the suspect terminal to remove it from the connector housing.



Deflect lance to release lock
A Deflect lance
B Horizontal lance (primary lock)

– Thanks to Chad Cunningham

Vibe Transaxle Tips

TIP: The Vibe has three different automatic transaxle RPOs, and this information applies to all three – MVA, MVB, and MVD.

On a 2009-10 Vibe, if diagnostics leads to transaxle replacement, follow this recommendation. When replacing the transaxle assembly, the torque converter is not included with the transaxle. Be sure to order and replace the torque converter also.

Beginning with the 2009 model year, these transmissions use Automatic Transmission Fluid (meets WS ATF standard) GM p/n U.S. 88863400, in Canada 88863401.

TIP: This is not DEXRON VI. It is different from the fluid used in Vibe automatics through 2008.

– Thanks to Ronald 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
2005-08	Aveo – Oil pressure light flickers at idle	Replace oil pressure sensor	Don't replace oil pump	09-06-04-020
2008-09	CTS – Front door window drops without activation	Replace front window regulator	Don't replace window switches, BCM	09-08-64-009
2008-09	Allure; Impala; LaCrosse – Fuel gauge inaccurate	Repair connectors or reroute wiring	Don't replace sending module or sensor	09-08-49-005
2007-09	AURA; Malibu – Rattle from rear shelf	Align speaker mounting tabs	Don't replace speakers	09-08-59-001
2007-08	SKY; Solstice – Clicking from rear of engine	Replace high pressure fuel pump isolation cover	Don't replace high pressure fuel pump	09-06-01-004
2008-09	VUE – Insufficient cooling from AC	Reprogram ECM, recharge AC system	Don't replace compressor, or other HVAC components	09-01-38-001
2008-09	G8 – Exhaust rattle	Loosen and retorque fasteners	Don't replace catalytic convertor	09-06-05-002
2009	Malibu; G6; AURA – DTCs	Reprogram TCM	Don't replace output speed sensor	PIP 4617
2008-09	G8 – Various electrical symptoms	Connect battery logistics connector		08-08-45-001D
2008-09	CTS – Navigation display squeak	Lubricate gears and guides	Don't replace screen	09-08-44-006A
2008-09	DTS – Rear brake squeal	Replace linings and caliper brackets	Don't use other part numbers, replace rotors, or modify pads	08-05-23-009B
2007-08	Impala; Monte Carlo – HVAC unable to maintain temperature	Reprogram HVAC control module	Don't replace control module	07-01-39-008A
2007-09	Corvette – MIL illuminated	Reprogram ECM	Don't replace catalytic converters	09-06-04-011A
2009	SRX – Power liftgate reversal	Reprogram module	Don't replace module, struts, actuators or latches	09-08-66-006
2006-09	HHR – Loose seat cover	Reattach loose cover	Don't replace seat cover	09-08-50-007
2004-09	SRX – Noise from sunroof	Install new brass fastener insert	Don't replace sunroof frame	09-08-67-008



Truck Issues – Fix It Right the First Time

Model Year(s)	Vehicle Line(s) / Condition	Do This	Don't Do This	Reference Information / Bulletin
2007-10	Sierra; Silverado – Tonneau cover loose, latch not functioning	Adjust rear latch and align tonneau cover	Don't replace tonneau cover	09-08-66-003
2007-09	Acadia; Equinox; Outlook; Torrent; Traverse; VUE; fullsize trucks – Unable to reprogram BCM	Reprogram BCM	Don't replace BCM	09-08-47-001
2009	Acadia; Enclave; Outlook; Traverse – Intermittent MIL	Reprogram ECM	Don't replace thermostat	09-06-02-004
2007-08	Acadia; Outlook – General Water Leak Diagnostic Guide	Seal rear holes in stationary glass, remove restrictors in drain hose grommets	Don't replace sunroof module	07-08-57-002F

**Know-How
Broadcasts
for
July**

10209.07D Emerging Issues
New Model Features

July 9, 2009 9:30 AM and 12:30 PM Eastern Time

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.



– Thanks to John Miller