



Service Bulletin

File In Section: 05 - Brakes

Bulletin No.: 08-05-22-009

Date: December, 2008

TECHNICAL

Subject: Intermittently Brake Lights (Stop Lamp) Do Not Function Correctly, Extended Travel to Shift Out of Park, Cruise Control Inoperative, DTCs C0161/C0277 Set (Perform Repair as Outlined)

Models: 2004-2007 Chevrolet Malibu, Malibu Maxx
2008 Chevrolet Malibu Classic
2005-2009 Pontiac G6
2007-2009 Saturn AURA

Condition

Some customers may comment that intermittently the brake lights do not function correctly. Other symptoms may include extended pedal travel required to shift out of PARK, cruise control does not function correctly, and DTC C0161 and/or C0277 may be set.

Cause

The most likely cause of this condition is high resistance due to terminal fretting corrosion in the body control module (BCM) C2 connector (specifically pins C2-18, C2-31 and C2-59).

Correction

DO NOT replace the BCM for this condition.

Disconnecting the C2 connector, adding dielectric silicone grease and reconnecting the C2 connector per the procedure below will correct the high resistance condition due to terminal fretting corrosion.

1. Remove the right side front floor console side trim panel to access to the Body Control Module (BCM).
2. Locate the C2 connector on the BCM.
3. Unlatch the C2 connector and disconnect the C2 connector from the BCM.
4. Reconnect the C2 connector back on the BCM and re-latch.
5. Repeat Steps 3 and 4 (this step cleans up the terminal fretting corrosion).
6. Using the Tech 2[®], verify the brake pedal position sensor (BPPS) voltage is between:
 - 0.88V – 2.11V (for 2004-2006 model years)
 - 0.73V – 1.47V (for 2007-2009 model years)

7. Check for proper operation of the brake lights.

- If the brakes lights are operating properly, remove the C2 connector again from the BCM and proceed to Step 8.
- If the brake lights are not operating properly, proceed to Step 12.



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8. Apply dielectric lubricant (clear gel) GM P/N 12377900 (In Canada, use P/N 10953529) on the BCM C2 pins (apply with a one-inch nylon bristle brush) on all the C2 connector pins (this will treat the pins against fretting corrosion).
9. Reconnect the C2 connector back on the BCM and re-latch.
10. Reinstall the right side front floor console side trim panel.

11. Using the Tech 2[®], check that the BPPS ratio is equal to BPPS learned home when the brake pedal is not depressed.
 - If they are equal, brake lamps should be operating correctly and no further steps are necessary.
 - If they are not equal, perform the Brake Pedal Position Sensor Calibration procedure in SI to complete the repair.
12. Check the brake lights for proper operation. If incorrect, refer to SI and perform normal diagnostics.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
N9595*	BCM C2 Connector Repair	0.5 hr
* This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		





Service Bulletin

File In Section: 05 - Brakes

Bulletin No.: 08-05-22-009A

Date: June, 2009

TECHNICAL

Subject: Intermittently Brake Lights (Stop Lamps) Do Not Function Correctly, Extended Travel to Shift Out of Park, Cruise Control Inoperative, DTCs C0161/C0277 Set (Perform Repair as Outlined)

Models: 2004-2007 Chevrolet Malibu, Malibu Maxx
2008 Chevrolet Malibu Classic
2005-2009 Pontiac G6
2007-2009 Saturn AURA

This bulletin is being revised to shorten the required procedure and revise the Warranty Information. Please discard Corporate Bulletin Number 08-05-22-009 (Section 05 — Brakes).

Condition

Some customers may comment that intermittently the brake lights do not function correctly. Other symptoms may include extended pedal travel required to shift out of PARK, cruise control does not function correctly, and DTC C0161 and/or C0277 may be set.

Cause

The most likely cause of this condition is high resistance due to terminal fretting corrosion in the body control module (BCM) C2 connector (specifically pins C2-18, C2-31 and C2-59).

Correction

DO NOT replace the BCM for this condition.

Disconnecting the C2 connector, adding dielectric lubricant and reconnecting the C2 connector per the procedure below will correct the high resistance condition due to terminal fretting corrosion.

1. Remove the right side front floor console side trim panel to access to the Body Control Module (BCM).
2. Locate the C2 connector on the BCM.
3. Unlatch the C2 connector and disconnect the C2 connector from the BCM.
4. Apply dielectric lubricant (clear gel) GM P/N 12377900 (in Canada, use P/N 10953529), or the equivalent, on the BCM C2 pins (apply with a one-inch nylon bristle brush) on all the

C2 connector pins (this will treat the pins against fretting corrosion).

5. Reconnect the C2 connector back on the BCM and re-latch. Wipe away any access lubricant.
6. Reinstall the right side front floor console side trim panel.
7. Using the Tech 2[®], check that the BPPS ratio is equal to BPPS learned home when the brake pedal is not depressed.
 - If they are equal, brake lamps should be operating correctly and no further steps are necessary.
 - If they are not equal, perform the Brake Pedal Position Sensor Calibration procedure in SI to complete the repair.
8. Check the brake lights for proper operation. If incorrect, refer to SI and perform normal diagnostics.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
N9595*	BCM C2 Connector Repair	0.3 hr
* This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these 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 your GM dealer for information on whether your vehicle may benefit from the information.



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Service Bulletin

File In Section: 05 - Brakes

Bulletin No.: 08-05-22-009B

Date: December, 2009

TECHNICAL

Subject: Intermittently Brake Lights (Stop Lamps) Do Not Function Correctly, Extended Travel to Shift Out of Park, Cruise Control Inoperative, DTCs C0131, C0161 or C0277 Set (Perform Repair as Outlined)

Models: 2004-2007 Chevrolet Malibu, Malibu Maxx
2008 Chevrolet Malibu Classic
2005-2009 Pontiac G6
2007-2009 Saturn AURA

This bulletin is being revised to add DTC 0131 to the possible conditions list. Please discard Corporate Bulletin Number 08-05-22-009A (Section 05 – Brakes).

Condition

Some customers may comment that intermittently the brake lights do not function correctly. Other symptoms may include extended pedal travel required to shift out of PARK, cruise control does not function correctly, and DTC C0131, C0161 and/or C0277 may be set.

Cause

The most likely cause of this condition is high resistance due to terminal fretting corrosion in the body control module (BCM) C2 connector (specifically pins C2-18, C2-31 and C2-59).

Correction

DO NOT replace the BCM for this condition.

Disconnecting the C2 connector, adding dielectric lubricant and reconnecting the C2 connector per the procedure below will correct the high resistance condition due to terminal fretting corrosion.

1. Remove the right side front floor console side trim panel to access to the Body Control Module (BCM).
2. Locate the C2 connector on the BCM.
3. Unlatch the C2 connector and disconnect the C2 connector from the BCM.
4. Apply dielectric lubricant (clear gel) GM P/N 12377900 (in Canada, use P/N 10953529), or the equivalent, on the BCM C2 pins (apply with

a one-inch nylon bristle brush) on all the C2 connector pins (this will treat the pins against fretting corrosion).

5. Reconnect the C2 connector back on the BCM and re-latch. Wipe away any access lubricant.
6. Reinstall the right side front floor console side trim panel.
7. Using the Tech 2[®], check that the BPPS ratio is equal to BPPS learned home when the brake pedal is not depressed.
 - If they are equal, brake lamps should be operating correctly and no further steps are necessary.
 - If they are not equal, perform the Brake Pedal Position Sensor Calibration procedure in SI to complete the repair.
8. Check the brake lights for proper operation. If incorrect, refer to SI and perform normal diagnostics.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
N9595*	BCM C2 Connector Repair	0.3 hr
* This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these 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 your GM dealer for information on whether your vehicle may benefit from the information.



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Service Bulletin

File in Section: 05 - Brakes

Bulletin No.: 08-05-22-009C

Date: October, 2010

TECHNICAL

Subject: Intermittently Brake Lights (Stop Lamps) Do Not Function Correctly, Extended Travel to Shift Out of Park, Cruise Control Inoperative, DTCs C0131, C0161 or C0277 Set (Perform Repair as Outlined)

Models: 2004-2008 Chevrolet Malibu, Malibu Maxx
2008 Chevrolet Malibu Classic
2008-2009 Chevrolet Malibu
2005-2009 Pontiac G6
2007-2009 Saturn AURA

This bulletin is being revised to update the models. Please discard Corporate Bulletin Number 08-05-22-009B (Section 05 – Brakes).

Condition

Some customers may comment that intermittently the brake lights do not function correctly. Other symptoms may include extended pedal travel required to shift out of PARK, cruise control does not function correctly, and DTC C0131, C0161 and/or C0277 may be set.

Cause

The most likely cause of this condition is high resistance due to terminal fretting corrosion in the body control module (BCM) C2 or X2 connector (specifically pins 18, 31 and 59).

Correction

DO NOT replace the BCM for this condition.

Disconnecting the C2 or X2 connector, adding dielectric lubricant and reconnecting the connector per the procedure below will correct the high resistance condition due to terminal fretting corrosion.

1. Remove the right side front floor console side trim panel to access to the Body Control Module (BCM).
2. Locate the C2 or X2 connector on the BCM.
3. Unlatch the connector and disconnect the connector from the BCM.
4. Apply dielectric lubricant (clear gel), GM P/N 12377900 (in Canada, use P/N 10953529) or equivalent, on all the connector pins (apply with a one-inch nylon bristle brush). This will treat the pins against fretting corrosion.
5. Reconnect the connector back on the BCM and re-latch. Wipe away any excess lubricant.
6. Reinstall the right side front floor console side trim panel.

7. Using the Tech 2®, check that the BPPS ratio is equal to BPPS learned home when the brake pedal is not depressed.
 - If they are equal, the brake lamps should be operating correctly and no further steps are necessary.
 - If they are not equal, perform the Brake Pedal Position Sensor Calibration procedure in SI to complete the repair.
8. Verify proper operation of the brake lights. If incorrect, refer to SI and perform normal diagnostics.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
N9595*	BCM C2 or X2 Connector Repair	0.3 hr
* This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

Document ID: 2233038

#08317: Product Safety - Brake Lamps Not Working Properly - (Feb 10, 2009)

Subject: 08317 — Brake Lamps Not Working Properly

Models: 2005-2006 Pontiac G6



Condition

General Motors has decided that a defect, which relates to motor vehicle safety, exists in *certain* 2005-2006 model year Pontiac G6 vehicles. Some of these vehicles have a condition where the brake lamps may not operate properly because of fretting corrosion in a wiring connector. Fretting corrosion in the connector could cause the brake lamps to illuminate when the brake pedal has not been depressed, or the lamps may not illuminate when the brake pedal is depressed. In addition, the cruise control may not engage, or greater brake pedal force may be required to shift the vehicle out of PARK. Brake lamps that are not operating properly may not warn a driver in a following vehicle of the braking status and could lead to a crash without prior warning.

Correction

Dealers are to apply a dielectric lubricant to the connector to repair and prevent fretting corrosion.

Vehicles Involved

Involved are *certain* 2005-2006 model year Pontiac G6 vehicles built within these VIN breakpoints:

Year	Division	Model	From	Through
2005	Pontiac	G6	54151522	54160855
2006	Pontiac	G6	64100001	64100093

Important: Dealers are to confirm vehicle eligibility prior to beginning repairs by using the GM Vehicle Inquiry System (GMVIS). Not all vehicles within the above breakpoints may be involved.

For dealers with involved vehicles, a listing with involved vehicles containing the complete vehicle

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identification number, customer name, and address information has been prepared and will be provided through the GM GlobalConnect Recall Reports. Dealers will not have a report available if they have no involved vehicles currently assigned.

The listing may contain customer names and addresses obtained from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this recall is a violation of law in several states/provinces/countries. Accordingly, you are urged to limit the use of this report to the follow-up necessary to complete this recall.

Parts Information

Parts required to complete this recall are to be obtained from General Motors Service and Parts Operations (GMSPO). Please refer to your "involved vehicles listing" before ordering parts. Normal orders should be placed on a DRO = Daily Replenishment Order. In an emergency situation, parts should be ordered on a CSO = Customer Special Order.

Part Number	Description	Qty/ Vehicle
12377900 (US) 10953529 (CN)	Lubricant, Dielectric	1*

* One unit of lubricant will service 25 vehicles.

Service Procedure

1. Remove the right side front floor console side trim panel to access the body control module (BCM).
2. Locate the C2 connector on the BCM.
3. Unlatch the C2 connector and disconnect the C2 connector from the BCM.



4. Apply dielectric lubricant on the BCM C2 pins (apply with a one-inch (25 mm) nylon bristle brush) on all the C2 connector pins. This will treat the pins against fretting corrosion.
5. Reconnect the C2 connector back on the BCM and re-latch.
6. Reinstall the right side front floor console side trim panel.

Customer Reimbursement – For US

All customer requests for reimbursement of previously paid repairs for the recall condition will be handled by the Customer Assistance Center, not by dealers.

A General Motors Customer Reimbursement Procedure and Claim Form is included with the customer letter.

Important: (For GM US Only) Refer to the GM Service Policies and Procedures Manual, section 6.1.12, for specific procedures regarding customer reimbursement and the form.

Customer Reimbursement – For Canada

Customer requests for reimbursement of previously paid repairs for the recall condition are to be submitted to the dealer by February 28, 2010.

All reasonable customer paid receipts should be considered for reimbursement. The amount to be reimbursed will be limited to the amount the repair would have cost if completed by an authorized General Motors dealer.

When a customer requests reimbursement, they must provide the following:

- Proof of ownership at time of repair.

- Original paid receipt confirming the amount of repair expense(s) that were not reimbursed, a description of the repair, and the person or entity performing the repair.

Claims for customer reimbursement on previously paid repairs are to be submitted as required by WINS.

Important: Refer to the GM Service Policies and Procedures Manual, section 6.1.12, for specific procedures regarding customer reimbursement verification.

Courtesy Transportation

The General Motors Courtesy Transportation program is intended to minimize customer inconvenience when a vehicle requires a repair that is covered by the New Vehicle Limited Warranties. The availability of courtesy transportation to customers whose vehicles are within the warranty coverage period and involved in a product program is very important in maintaining customer satisfaction. Dealers are to ensure that these customers understand that shuttle service or some other form of courtesy transportation is available and will be provided at no charge. Dealers should refer to the General Motors Service Policies and Procedures Manual for Courtesy Transportation guidelines.

Claim Information

Submit a Product Recall Claim with the information indicated below:

Repair Performed	Part Count	Part No.	Parts Allow	CC-FC	Labor Op	Labor Hours	Net Item
Apply Dielectric Lubricant to C2 Connector	0	N/A	N/A	MA-96	V2044	0.2	*
Courtesy Transportation for vehicles within the New Vehicle Limited Warranties (US & Canadian GM Dealers)	N/A	N/A	N/A	MA-96	**	N/A	***
Customer Reimbursement (Canadian Dealers/US CAC)	N/A	N/A	N/A	MA-96	V2045	0.2	****
* The amount identified in the "Net Item" column should represent the actual sum total of the current GMSPO							

Dealer net price for the dielectric lubricant needed to perform the required repairs, not to exceed \$0.33 USD, \$0.40 CAD, plus applicable Mark-Up.

** Submit courtesy transportation using normal labor operations for courtesy transportation as indicated in the GM Service Policies and Procedures Manual for vehicles within the New Vehicle Limited Warranties.

*** The amount identified in the "Net Item" column should represent the actual dollar amount for courtesy transportation.

**** The amount identified in the "Net Item" column should represent the dollar amount reimbursed to the customer.

Refer to the General Motors WINS Claims Processing Manual for details on Product Recall Claim Submission.

Customer Notification

General Motors will notify customers of this recall on their vehicle (see copy of customer letter included with this bulletin).

Dealer Recall Responsibility – For US (US States, Territories, and Possessions)

The US National Traffic and Motor Vehicle Safety Act provides that each vehicle that is subject to a recall of this type must be adequately repaired within a reasonable time after the customer has tendered it for repair. A failure to repair within sixty days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the customer may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation. To avoid having to provide these burdensome remedies, every effort must be made to promptly schedule an appointment with each customer and to repair their vehicle as soon as possible. In the recall notification letters, customers are told how to contact the US National Highway Traffic Safety Administration if the recall is not completed within a reasonable time.

Dealer Recall Responsibility – All

All unsold new vehicles in dealers' possession and subject to this recall must be held and inspected/repaired per the service procedure of this recall bulletin before customers take

possession of these vehicles.

Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. A copy of the customer letter is provided in this bulletin for your use in contacting customers. Recall follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this recall enters your vehicle inventory, or is in your dealership for service in the future, you must take the steps necessary to be sure the recall correction has been made before selling or releasing the vehicle.

February 2008

Dear General Motors Customer:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

General Motors has decided that a defect that relates to motor vehicle safety exists in certain 2005 and 2006 model year Pontiac G6 vehicles. As a result, GM is conducting a safety recall. We apologize for this inconvenience. However, we are concerned about your safety and continued satisfaction with our products.

Important:

- Your vehicle is involved in safety recall 08317.
- Schedule an appointment with your GM dealer.
- This service will be performed for you at *no charge*.

Why is your vehicle being recalled?

The brake lamps on your vehicle may not operate properly because of fretting corrosion in a wiring connector. Fretting corrosion in the connector could cause the brake lamps to illuminate when the brake pedal has not been depressed, or the lamps may not illuminate when the brake pedal is depressed. In addition, the cruise control may not engage, or greater brake pedal force may be required to shift the vehicle out of PARK. Brake lamps that are not operating properly may not warn a driver in a following vehicle of the braking status and could lead to a crash without prior warning.

What will we do?

Your GM dealer will apply a dielectric lubricant to the connector to repair and prevent fretting corrosion. This service will be performed for you at *no charge*. Because of service scheduling requirements, it is likely that your dealer will need your vehicle longer than the actual service correction time of approximately 15 minutes.

What should you do?

You should contact your GM dealer to arrange a service appointment as soon as possible. Bring the enclosed customer reply form with you when you visit your dealer. The form identifies the repairs required. If you no longer own this vehicle, please let us know by completing the form and mailing it back to us.

Did you already pay for this repair?

The enclosed form explains what reimbursement is available and how to request reimbursement if you have paid for repairs for the recall condition. Even though you may have already had this condition corrected, you will still need to take your vehicle to your dealer for the dielectric lubrication.

Do you have questions?

If you have questions or concerns that your dealer is unable to resolve, please contact the appropriate Customer Assistance Center at the number listed below. More information about your vehicle can be found at the Owner Center at www.gmownercenter.com.

Division	Number	Text Telephones (TTY)
Pontiac	1-800-620-7668	1-800-833-7668
Guam	1-671-648-8450	
Puerto Rico – English	1-800-496-9992	
Puerto Rico – Español	1-800-496-9993	
Virgin Islands	1-800-496-9994	

If after contacting your dealer and the Customer Assistance Center, you are still not satisfied we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington DC 20590, or call the toll-free Vehicle Safety Hotline at 1.888.327.4236 (TTY 1.800.424.9153), or go to <http://www.safercar.gov>.

Federal regulation requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Scott Lawson

Director,

Customer and Relationship Services

Enclosure

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GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these 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 your GM dealer for information on whether your vehicle may benefit from the information.



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Service Bulletin

File In Section: 06 - Engine

Bulletin No.: 09-06-03-004

Date: June, 2009

TECHNICAL

Subject: Intermittent Illumination of MIL, Service Lamps, Service Messages, or DTC Set by Various Control Modules — Diagnosing and Repairing Fretting Corrosion (Disconnect Affected Connector and Apply Dielectric Lubricant)

Models: 2005-2009 GM Passenger Cars and Trucks (including Saturn)
2005-2009 HUMMER H2, H3
2005-2009 Saab 9-7X

Condition

Some customers may comment on an intermittent malfunction indicator lamp (MIL), service lamp or service message being illuminated or displayed.

Cause

This condition may be caused by a buildup of nonconductive insulating oxidized debris known as fretting corrosion, occurring between two electrical contact surfaces. This may be caused by any of the following conditions:

- Vibration
- Thermal cycling
- Poor connection/terminal retention
- Micro motion
- A connector, component or wiring harness not properly secured resulting in movement

On low current signal circuits this condition may cause high resistance, resulting in intermittent connections.

On high current power circuits this condition may cause permanent increases in the resistance and may cause a device to become inoperative.

Representative List of Control Modules

The following is only a representative list of control modules that may be affected by this condition and **does not** include every possible module for every vehicle.

- Blower Control Module
- Body Control Module (BCM)
- Communication Interface Module (CIM)
- Cooling Fan Control Module
- Electronic Brake Control Module (EBCM)
- Electronic Brake and Traction Control Module (EBTCM)
- Electronic Suspension Control (ESC) Module

- Engine Control Module (ECM)
- Heating, Ventilation and Air Conditioning (HVAC) Control Module
- Inflatable Restraint Sensing and Diagnostic Module (SDM)
- Powertrain Control Module (PCM)
- Remote Control Door Lock Receiver (RCDLR)
- Transmission Control Module (TCM)

Correction

Important: DO NOT replace the control module, wiring or component for the following reasons:

- The condition is intermittent and **cannot** be duplicated.
- The condition is present and by disconnecting/reconnecting the connector the condition **can no longer** be duplicated.

Use the following procedure to correct the conditions listed above.

1. Install a scan tool and perform the Diagnostic System Check – Vehicle. Retrieve and record any existing history or current DTCs from all of the control modules (refer to SI).
 - If any DTC(s) are set, refer to Diagnostic Trouble Code (DTC) List – Vehicle to identify the connector(s) of the control module/component which may be causing the condition (refer to SI).
 - If DTCs are not set, refer to Symptoms – Vehicle to identify the connector(s) of the control module/component which may be causing the condition (refer to SI).
2. When identified, use the appropriate DTC Diagnostics, Symptoms, Schematics, Component Connector End Views and Component Locator documents to locate and disconnect the affected harness connector(s) which are causing the condition.

Note: Fretting corrosion looks like little dark smudges on electrical terminals and appear where the actual electrical contact is being made. In less severe cases it may be unable to be seen or identified without the use of a magnifying glass.



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Important: Use **ONLY** a clean nylon brush that is dedicated to the repair of the conditions in this bulletin.

DO NOT apply an excessive amount of dielectric lubricant to the connectors as hydrolock may result when attempting to mate the connectors.

3. With a one-inch nylon bristle brush, apply dielectric lubricant to both the module/component side and the harness side of the affected connector(s).
 4. Reconnect the affected connector(s) and wipe away any excess lubricant that may be present.
 5. Attempt to duplicate the condition by using the following information:
 - DTC Diagnostic Procedure
 - Circuit/System Description
 - Conditions for Running the DTC
 - Conditions for Setting the DTC
 - Diagnostic Aids
 - Circuit/System Verification
- If the condition cannot be duplicated, the repair is complete.
- If the condition can be duplicated, then follow the appropriate DTC, Symptom or Circuit/System Testing procedure (refer to SI).

Repair Order Documentation

Important: The following information **MUST** be documented on the repair order. Failure to do so may result in a chargeback.

- Customer vehicle condition.
- Was a Service Lamp or Service Message illuminated? If yes, specify which Service Lamp or Service Message.
- Was a DTC(s) set? If yes, specify which DTC(s) were set.
- After following the procedure contained within this bulletin, could the condition be duplicated?
 - If the condition **was not** duplicated, then document the affected module/component connector name and number on the repair order.
- If the condition **was** duplicated after the procedure contained within this bulletin was followed, and additional diagnosis led to the replacement of a module or component, the SI Document ID Number **MUST** be written on the repair order.

Parts Information

Part Number	Description	Material Allowance
12377900 (U.S.) 10953529 (Canada)	Dielectric Lubricant (50 gram tube)	\$11.56 (USD) (\$2.90 per repair) \$17.35 (CDN) (\$4.35 per repair)

Alternate Distributor For All of North America

Note: NyoGel® 760G Lubricant* is equivalent to GMSPO P/N 12377900, and P/N 10953529 (Canada), specified for use to correct the condition in this bulletin.

Product	Contact	Address	Phone
NyoGel® 760G Lubricant*	Tom Madden	TAI Lubricants* P.O. Box 1579 Hockessin, DE 19707	302-326-0200 877-996-9645

*We believe this source and their products to be reliable. There may be additional manufacturers of such products/materials. General Motors does not endorse, indicate any preference for, or assume any responsibility for the products or material from this firm or for any such items that may be available from other sources.

Warranty Information (excluding Saab U.S. Models)

For vehicles repaired under warranty, use the appropriate/closest labor operation depending upon the module/component connection that the dielectric lubricant was applied to:

Labor Operation	Description	Labor Time
N9613*	Lubricate Body Control Module (BCM) Connector With Dielectric Lubricant	0.1-0.3 hr
J7729*	Lubricate Engine Control Module (ECM) Connector With Dielectric Lubricant	0.1-0.3 hr
K9534*	Lubricate Transmission Control Module (TCM) Connector With Dielectric Lubricant	0.1-0.3 hr
J7730*	Lubricate Powertrain Control Module (PCM) Connector With Dielectric Lubricant	0.1-0.3 hr
H9740*	Lubricate Electronic Brake Control Module (EBCM) Connector With Dielectric Lubricant	0.1-0.3 hr

Labor Operation	Description	Labor Time
D9752*	Lubricate Heating, Ventilation and Air Conditioning (HVAC) Control Module Connector With Dielectric Lubricant	0.1-0.3 hr
C9897*	Lubricate Inflatable Restraint Sensing and Diagnostic Module (SDM) Connector With Dielectric Lubricant	0.1-0.3 hr
R9763*	Lubricate Radio Connector With Dielectric Lubricant	0.1-0.3 hr
N9614*	Lubricate Underhood Bussed Electrical Center (UBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9615*	Lubricate Integrated Bussed Electrical Center (IBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9612*	Lubricate "Other" Connector With Dielectric Lubricant**	0.1-0.3 hr

*This labor operation number is for bulletin use only. It will not be published in the Labor Time Guide.

****You Must** Document the Affected Connector on the Repair Order.

Note: Any additional time for component R&R to gain access or for repair time greater than 0.3 hours must be submitted as Other Labor Hours and requires appropriate authorization and service management approval.

Warranty Information (Saab U.S. Models)

For vehicles repaired under warranty, use the appropriate/closest labor operation depending upon the module/component connection that the dielectric lubricant was applied to:

Labor Operation	Description	Failed Object	Fault/Reason Code	Location Code	Warranty Type	Repair/Action Code	Labor Time
3710101*	Lubricate Body Control Module (BCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710102*	Lubricate Engine Control Module (ECM) & Powertrain Control Module (PCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710103*	Lubricate Radio Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710104*	Lubricate Transmission Control Module (TCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710105*	Lubricate Electronic Brake Control Module (EBCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710106*	Lubricate Underhood Bus Electrical Center (UBEC) Connector & Integrated Bus Electrical Center Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710107*	Lubricate Inflatable Restraint Sensing and Diagnostic Module (SDM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710108*	Lubricate Heating, Ventilation and Air Conditioning (HVAC) Control Module Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710109*	Lubricate "Other" Connector With Dielectric Lubricant**	37101	11	0	01/06	08	0.3

*This labor operation number is for bulletin use only. It will not be published in Standard Times Mechanical (STM).

****You Must** Document the Affected Connector on the Repair Order

Note: Any additional time for component R&R to gain access or for repair time greater than 0.3 hours must be submitted as Other Labor Hours and requires appropriate authorization and service management approval.





Service Bulletin

File In Section: 06 - Engine

Bulletin No.: 09-06-03-004A

Date: August, 2009

TECHNICAL

Subject: Intermittent Illumination of MIL, Service Lamps, Service Messages, or DTC Set by Various Control Modules — Diagnosing and Repairing Fretting Corrosion (Disconnect Affected Connector and Apply Dielectric Lubricant)

Models: 2005-2010 GM Passenger Cars and Trucks (Including Saturn)
2005-2010 HUMMER H2, H3
2005-2009 Saab 9-7X

This bulletin is being revised to add the 2010 model year. Please discard Corporate Bulletin Number 09-06-03-004 (Section 06 — Engine).

Condition

Some customers may comment on an intermittent malfunction indicator lamp (MIL), service lamp or service message being illuminated or displayed.

Cause

This condition may be caused by a buildup of nonconductive insulating oxidized debris known as fretting corrosion, occurring between two electrical contact surfaces. This may be caused by any of the following conditions:

- Vibration
- Thermal cycling
- Poor connection/terminal retention
- Micro motion
- A connector, component or wiring harness not properly secured resulting in movement

On low current signal circuits this condition may cause high resistance, resulting in intermittent connections.

On high current power circuits this condition may cause permanent increases in the resistance and may cause a device to become inoperative.

Representative List of Control Modules

The following is only a representative list of control modules that may be affected by this condition and **does not** include every possible module for every vehicle.

- Blower Control Module
- Body Control Module (BCM)
- Communication Interface Module (CIM)
- Cooling Fan Control Module
- Electronic Brake Control Module (EBCM)
- Electronic Brake and Traction Control Module (EBTCM)
- Electronic Suspension Control (ESC) Module
- Engine Control Module (ECM)
- Heating, Ventilation and Air Conditioning (HVAC) Control Module
- Inflatable Restraint Sensing and Diagnostic Module (SDM)
- Powertrain Control Module (PCM)
- Remote Control Door Lock Receiver (RCDLR)
- Transmission Control Module (TCM)

Correction

Important: **DO NOT** replace the control module, wiring or component for the following reasons:

- The condition is intermittent and **cannot** be duplicated.
- The condition is present and by disconnecting/reconnecting the connector the condition **can no longer** be duplicated.

Use the following procedure to correct the conditions listed above.

1. Install a scan tool and perform the Diagnostic System Check – Vehicle. Retrieve and record any existing history or current DTCs from all of the control modules (refer to SI).
 - If any DTC(s) are set, refer to Diagnostic Trouble Code (DTC) List – Vehicle to identify the connector(s) of the control module/component which may be causing the condition (refer to SI).
 - If DTCs are not set, refer to Symptoms – Vehicle to identify the connector(s) of the control module/component which may be causing the condition (refer to SI).
2. When identified, use the appropriate DTC Diagnostics, Symptoms, Schematics, Component Connector End Views and Component Locator documents to locate and disconnect the affected harness connector(s) which are causing the condition.

Note: Fretting corrosion looks like little dark smudges on electrical terminals and appear where the actual electrical contact is being made. In less severe cases it may be unable to be seen or identified without the use of a magnifying glass.



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Important: Use **ONLY** a clean nylon brush that is dedicated to the repair of the conditions in this bulletin.

DO NOT apply an excessive amount of dielectric lubricant to the connectors as hydrolock may result when attempting to mate the connectors.

3. With a one-inch nylon bristle brush, apply dielectric lubricant to both the module/component side and the harness side of the affected connector(s).
 4. Reconnect the affected connector(s) and wipe away any excess lubricant that may be present.
 5. Attempt to duplicate the condition by using the following information:
 - DTC Diagnostic Procedure
 - Circuit/System Description
 - Conditions for Running the DTC
 - Conditions for Setting the DTC
 - Diagnostic Aids
 - Circuit/System Verification
- If the condition cannot be duplicated, the repair is complete.
- If the condition can be duplicated, then follow the appropriate DTC, Symptom or Circuit/System Testing procedure (refer to SI).

Repair Order Documentation

Important: The following information **MUST** be documented on the repair order. Failure to do so may result in a chargeback.

- Customer vehicle condition.
- Was a Service Lamp or Service Message illuminated? If yes, specify which Service Lamp or Service Message.
- Was a DTC(s) set? If yes, specify which DTC(s) were set.
- After following the procedure contained within this bulletin, could the condition be duplicated?
 - If the condition **was not** duplicated, then document the affected module/component connector name and number on the repair order.
- If the condition **was** duplicated after the procedure contained within this bulletin was followed, and additional diagnosis led to the replacement of a module or component, the SI Document ID Number **MUST** be written on the repair order.

Parts Information

Part Number	Description	Material Allowance
12377900 (U.S.) 10953529 (Canada)	Dielectric Lubricant (50 gram tube)	\$11.56 (USD) (\$2.90 per repair) \$17.35 (CDN) (\$4.35 per repair)

Alternate Distributor For All of North America

Note: NyoGel® 760G Lubricant* is equivalent to GMSPO P/N 12377900, and P/N 10953529 (Canada), specified for use to correct the condition in this bulletin.

Product	Contact	Address	Phone
NyoGel® 760G Lubricant*	Tom Madden	TAI Lubricants* P.O. Box 1579 Hockessin, DE 19707	302-326-0200 877-996-9645

*We believe this source and their products to be reliable. There may be additional manufacturers of such products/materials. General Motors does not endorse, indicate any preference for, or assume any responsibility for the products or material from this firm or for any such items that may be available from other sources.

Warranty Information (excluding Saab U.S. Models)

For vehicles repaired under warranty, use the appropriate/closest labor operation depending upon the module/component connection that the dielectric lubricant was applied to:

Labor Operation	Description	Labor Time
N9613*	Lubricate Body Control Module (BCM) Connector With Dielectric Lubricant	0.1-0.3 hr
J7729*	Lubricate Engine Control Module (ECM) Connector With Dielectric Lubricant	0.1-0.3 hr
K9534*	Lubricate Transmission Control Module (TCM) Connector With Dielectric Lubricant	0.1-0.3 hr
J7730*	Lubricate Powertrain Control Module (PCM) Connector With Dielectric Lubricant	0.1-0.3 hr
H9740*	Lubricate Electronic Brake Control Module (EBCM) Connector With Dielectric Lubricant	0.1-0.3 hr

Labor Operation	Description	Labor Time
D9752*	Lubricate Heating, Ventilation and Air Conditioning (HVAC) Control Module Connector With Dielectric Lubricant	0.1-0.3 hr
C9897*	Lubricate Inflatable Restraint Sensing and Diagnostic Module (SDM) Connector With Dielectric Lubricant	0.1-0.3 hr
R9763*	Lubricate Radio Connector With Dielectric Lubricant	0.1-0.3 hr
N9614*	Lubricate Underhood Bussed Electrical Center (UBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9615*	Lubricate Integrated Bussed Electrical Center (IBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9612*	Lubricate "Other" Connector With Dielectric Lubricant**	0.1-0.3 hr

*This labor operation number is for bulletin use only. It will not be published in the Labor Time Guide.

****You Must** Document the Affected Connector on the Repair Order.

Note: Any additional time for component R&R to gain access or for repair time greater than 0.3 hours must be submitted as Other Labor Hours and requires appropriate authorization and service management approval.

Warranty Information (Saab U.S. Models)

For vehicles repaired under warranty, use the appropriate/closest labor operation depending upon the module/component connection that the dielectric lubricant was applied to:

Labor Operation	Description	Failed Object	Fault/Reason Code	Location Code	Warranty Type	Repair/Action Code	Labor Time
3710101*	Lubricate Body Control Module (BCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710102*	Lubricate Engine Control Module (ECM) & Powertrain Control Module (PCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710103*	Lubricate Radio Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710104*	Lubricate Transmission Control Module (TCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710105*	Lubricate Electronic Brake Control Module (EBCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710106*	Lubricate Underhood Bus Electrical Center (UBEC) Connector & Integrated Bus Electrical Center Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710107*	Lubricate Inflatable Restraint Sensing and Diagnostic Module (SDM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710108*	Lubricate Heating, Ventilation and Air Conditioning (HVAC) Control Module Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710109*	Lubricate "Other" Connector With Dielectric Lubricant**	37101	11	0	01/06	08	0.3

*This labor operation number is for bulletin use only. It will not be published in Standard Times Mechanical (STM).

**You Must Document the Affected Connector on the Repair Order.

Note: Any additional time for component R&R to gain access or for repair time greater than 0.3 hours must be submitted as Other Labor Hours and requires appropriate authorization and service management approval.





Service Bulletin

File In Section: 06 - Engine

Bulletin No.: 09-06-03-004B

Date: September, 2009

TECHNICAL

Subject: Intermittent No Crank/No Start, No Module Communication, MIL, Warning Lights, Vehicle Messages or DTCs Set by Various Control Modules (Disconnect Affected Connector and Apply Dielectric Lubricant)

Models: 2005-2010 GM Passenger Cars and Trucks (Including Saturn)
2005-2010 HUMMER H2, H3
2005-2009 Saab 9-7X

This bulletin is being revised to update the subject line and Condition information. Please discard Corporate Bulletin Number 09-06-03-004A (Section 06 – Engine).

Condition

Some customers may comment on any of the following conditions:

- An intermittent no crank/no start
- Intermittent malfunction indicator lamp (MIL) illumination
- Intermittent service lamp illumination
- Intermittent service message(s) being displayed

Cause

This condition may be caused by a buildup of nonconductive insulating oxidized debris known as fretting corrosion, occurring between two electrical contact surfaces. This may be caused by any of the following conditions:

- Vibration
- Thermal cycling
- Poor connection/terminal retention
- Micro motion
- A connector, component or wiring harness not properly secured resulting in movement

On low current signal circuits this condition may cause high resistance, resulting in intermittent connections.

On high current power circuits this condition may cause permanent increases in the resistance and may cause a device to become inoperative.

Representative List of Control Modules

The following is only a representative list of control modules that may be affected by this condition and **does not** include every possible module for every vehicle.

- Blower Control Module
- Body Control Module (BCM)
- Communication Interface Module (CIM)
- Cooling Fan Control Module
- Electronic Brake Control Module (EBCM)
- Electronic Brake and Traction Control Module (EBTCM)
- Electronic Suspension Control (ESC) Module
- Engine Control Module (ECM)
- Heating, Ventilation and Air Conditioning (HVAC) Control Module
- Inflatable Restraint Sensing and Diagnostic Module (SDM)
- Powertrain Control Module (PCM)
- Remote Control Door Lock Receiver (RCDLR)
- Transmission Control Module (TCM)

Correction

Important: **DO NOT** replace the control module, wiring or component for the following reasons:

- The condition is intermittent and **cannot** be duplicated.
- The condition is present and by disconnecting/reconnecting the connector the condition **can no longer** be duplicated.

Use the following procedure to correct the conditions listed above.

1. Install a scan tool and perform the Diagnostic System Check – Vehicle. Retrieve and record any existing history or current DTCs from all of the control modules (refer to SI).
 - If any DTC(s) are set, refer to Diagnostic Trouble Code (DTC) List – Vehicle to identify the connector(s) of the control module/component which may be causing the condition (refer to SI).
 - If DTCs are not set, refer to Symptoms – Vehicle to identify the connector(s) of the control module/component which may be causing the condition (refer to SI).
2. When identified, use the appropriate DTC Diagnostics, Symptoms, Schematics, Component Connector End Views and Component Locator documents to locate and disconnect the affected harness connector(s) which are causing the condition.

Note: Fretting corrosion looks like little dark smudges on electrical terminals and appear where the actual electrical contact is being made. In less severe cases it may be unable to be seen or identified without the use of a magnifying glass.



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Important: Use **ONLY** a clean nylon brush that is dedicated to the repair of the conditions in this bulletin.

DO NOT apply an excessive amount of dielectric lubricant to the connectors as hydrolock may result when attempting to mate the connectors.

3. With a one-inch nylon bristle brush, apply dielectric lubricant to both the module/component side and the harness side of the affected connector(s).

4. Reconnect the affected connector(s) and wipe away any excess lubricant that may be present.
 5. Attempt to duplicate the condition by using the following information:
 - DTC Diagnostic Procedure
 - Circuit/System Description
 - Conditions for Running the DTC
 - Conditions for Setting the DTC
 - Diagnostic Aids
 - Circuit/System Verification
- If the condition cannot be duplicated, the repair is complete.
- If the condition can be duplicated, then follow the appropriate DTC, Symptom or Circuit/System Testing procedure (refer to SI).

Repair Order Documentation

Important: The following information **MUST** be documented on the repair order. Failure to do so may result in a chargeback.

- Customer vehicle condition.
- Was a Service Lamp or Service Message illuminated? If yes, specify which Service Lamp or Service Message.
- Was a DTC(s) set? If yes, specify which DTC(s) were set.
- After following the procedure contained within this bulletin, could the condition be duplicated?
 - If the condition **was not** duplicated, then document the affected module/component connector name and number on the repair order.
- If the condition **was** duplicated after the procedure contained within this bulletin was followed, and additional diagnosis led to the replacement of a module or component, the SI Document ID Number **MUST** be written on the repair order.

Parts Information

Part Number	Description	Material Allowance
12377900 (U.S.) 10953529 (Canada)	Dielectric Lubricant (50 gram tube)	\$11.56 (USD) (\$2.90 per repair) \$17.35 (CDN) (\$4.35 per repair)

Alternate Distributor For All of North America

Note: NyoGel® 760G Lubricant* is equivalent to GMSPO P/N 12377900, and P/N 10953529 (Canada), specified for use to correct the condition in this bulletin.

Product	Contact	Address	Phone
NyoGel® 760G Lubricant*	Tom Madden	TAI Lubricants* P.O. Box 1579 Hockessin, DE 19707	302-326-0200 877-996-9645

*We believe this source and their products to be reliable. There may be additional manufacturers of such products/materials. General Motors does not endorse, indicate any preference for, or assume any responsibility for the products or material from this firm or for any such items that may be available from other sources.

Warranty Information (excluding Saab U.S. Models)

For vehicles repaired under warranty, use the appropriate/closest labor operation depending upon the module/component connection that the dielectric lubricant was applied to:

Labor Operation	Description	Labor Time
N9613*	Lubricate Body Control Module (BCM) Connector With Dielectric Lubricant	0.1-0.3 hr
J7729*	Lubricate Engine Control Module (ECM) Connector With Dielectric Lubricant	0.1-0.3 hr
K9534*	Lubricate Transmission Control Module (TCM) Connector With Dielectric Lubricant	0.1-0.3 hr
J7730*	Lubricate Powertrain Control Module (PCM) Connector With Dielectric Lubricant	0.1-0.3 hr
H9740*	Lubricate Electronic Brake Control Module (EBCM) Connector With Dielectric Lubricant	0.1-0.3 hr

Labor Operation	Description	Labor Time
D9752*	Lubricate Heating, Ventilation and Air Conditioning (HVAC) Control Module Connector With Dielectric Lubricant	0.1-0.3 hr
C9897*	Lubricate Inflatable Restraint Sensing and Diagnostic Module (SDM) Connector With Dielectric Lubricant	0.1-0.3 hr
R9763*	Lubricate Radio Connector With Dielectric Lubricant	0.1-0.3 hr
N9614*	Lubricate Underhood Bussed Electrical Center (UBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9615*	Lubricate Integrated Bussed Electrical Center (IBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9612*	Lubricate "Other" Connector With Dielectric Lubricant**	0.1-0.3 hr

*This labor operation number is for bulletin use only. It will not be published in the Labor Time Guide.

****You Must** Document the Affected Connector on the Repair Order.

Note: Any additional time for component R&R to gain access or for repair time greater than 0.3 hours must be submitted as Other Labor Hours and requires appropriate authorization and service management approval.

Warranty Information (Saab U.S. Models)

For vehicles repaired under warranty, use the appropriate/closest labor operation depending upon the module/component connection that the dielectric lubricant was applied to:

Labor Operation	Description	Failed Object	Fault/Reason Code	Location Code	Warranty Type	Repair/Action Code	Labor Time
3710101*	Lubricate Body Control Module (BCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710102*	Lubricate Engine Control Module (ECM) & Powertrain Control Module (PCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710103*	Lubricate Radio Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710104*	Lubricate Transmission Control Module (TCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710105*	Lubricate Electronic Brake Control Module (EBCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710106*	Lubricate Underhood Bus Electrical Center (UBEC) Connector & Integrated Bus Electrical Center Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710107*	Lubricate Inflatable Restraint Sensing and Diagnostic Module (SDM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710108*	Lubricate Heating, Ventilation and Air Conditioning (HVAC) Control Module Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710109*	Lubricate "Other" Connector With Dielectric Lubricant**	37101	11	0	01/06	08	0.3

*This labor operation number is for bulletin use only. It will not be published in Standard Times Mechanical (STM).

**You Must Document the Affected Connector on the Repair Order

Note: Any additional time for component R&R to gain access or for repair time greater than 0.3 hours must be submitted as Other Labor Hours and requires appropriate authorization and service management approval.





Service Bulletin

File In Section: 06 - Engine

Bulletin No.: 09-06-03-004C

Date: November, 2009

TECHNICAL

Subject: Intermittent No Crank/No Start, No Module Communication, MIL, Warning Lights, Vehicle Messages or DTCs Set by Various Control Modules — Diagnosing and Repairing Fretting Corrosion (Disconnect Affected Connector and Apply Dielectric Lubricant)

Models: 2005-2010 GM Passenger Cars and Trucks (including Saturn)
2005-2010 HUMMER H2, H3
2005-2009 Saab 9-7X

Attention: Any of the intermittent conditions described in this bulletin may be difficult to duplicate.

This bulletin is being revised to add an Attention statement and update the Subject, Condition and Cause information. Please discard Corporate Bulletin Number 09-06-03-004B (Section 06 – Engine).

Condition

Some customers may comment on any of the following conditions:

- An intermittent no crank/no start
- Intermittent malfunction indicator lamp (MIL) illumination
- Intermittent service lamp illumination
- Intermittent service message(s) being displayed

The technician may determine that he is unable to duplicate the intermittent condition.

Cause

This condition may be caused by a buildup of nonconductive insulating oxidized debris known as fretting corrosion, occurring between two electrical contact surfaces of the connection or connector. This may be caused by any of the following conditions:

- Vibration
- Thermal cycling
- Poor connection/terminal retention
- Micro motion
- A connector, component or wiring harness not properly secured resulting in movement

On low current signal circuits this condition may cause high resistance, resulting in intermittent connections. On high current power circuits this condition may cause permanent increases in the resistance and may cause a device to become inoperative.

Representative List of Control Modules and Components

The following is only a representative list of control modules and components that may be affected by this connection or connector condition and **DOES NOT** include every possible module or component for every vehicle.

- Blower Control Module
- Body Control Module (BCM)
- Communication Interface Module (CIM)
- Cooling Fan Control Module
- Electronic Brake Control Module (EBCM)
- Electronic Brake and Traction Control Module (EBTCM)
- Electronic Suspension Control (ESC) Module
- Engine Control Module (ECM)
- Heating, Ventilation and Air Conditioning (HVAC) Control Module

- Inflatable Restraint Sensing and Diagnostic Module (SDM)
 - Any AIR BAG module
 - Seatbelt Lap Anchor Pretensioner
 - Seatbelt Retractor Pretensioner
 - An SIR system connection or connector condition resulting in the following DTCs being set: B0015, B0016, B0019, B0020, B0022, or B0023
- Powertrain Control Module (PCM)
- Remote Control Door Lock Receiver (RCDLR)
- Transmission Control Module (TCM)

Correction

Important: **DO NOT** replace the control module, wiring or component for the following conditions:

- The condition is intermittent and **cannot** be duplicated.
- The condition is present and by disconnecting and reconnecting the connector the condition **can no longer** be duplicated.

Use the following procedure to correct the conditions listed above.

1. Install a scan tool and perform the Diagnostic System Check – Vehicle. Retrieve and record any existing history or current DTCs from all of the control modules (refer to SI).
 - If any DTC(s) are set, refer to Diagnostic Trouble Code (DTC) List – Vehicle to identify the connector(s) of the control module/component which may be causing the condition (refer to SI).
 - If DTCs are not set, refer to Symptoms – Vehicle to identify the connector(s) of the control module/component which may be causing the condition (refer to SI).
2. When identified, use the appropriate DTC Diagnostics, Symptoms, Schematics, Component Connector End Views and Component Locator documents to locate and disconnect the affected harness connector(s) which are causing the condition.

Note: Fretting corrosion looks like little dark smudges on electrical terminals and appear where the actual electrical contact is being made. In less severe cases it may be unable to be seen or identified without the use of a magnifying glass.



2214281

Important: Use **ONLY** a clean nylon brush that is dedicated to the repair of the conditions in this bulletin.

DO NOT apply an excessive amount of dielectric lubricant to the connectors as hydrolock may result when attempting to mate the connectors.

3. With a one-inch nylon bristle brush, apply dielectric lubricant to both the module/component side and the harness side of the affected connector(s).
4. Reconnect the affected connector(s) and wipe away any excess lubricant that may be present.
5. Attempt to duplicate the condition by using the following information:
 - DTC Diagnostic Procedure
 - Circuit/System Description
 - Conditions for Running the DTC
 - Conditions for Setting the DTC
 - Diagnostic Aids
 - Circuit/System Verification
- If the condition cannot be duplicated, the repair is complete.
- If the condition can be duplicated, then follow the appropriate DTC, Symptom or Circuit/System Testing procedure (refer to SI).

Repair Order Documentation

Important: The following information **MUST** be documented on the repair order. Failure to do so may result in a chargeback.

- Customer vehicle condition.
- Was a Service Lamp or Service Message illuminated? If yes, specify which Service Lamp or Service Message.
- Was a DTC(s) set? If yes, specify which DTC(s) were set.
- After following the procedure contained within this bulletin, could the condition be duplicated?
 - If the condition **was not** duplicated, then document the affected module/component connector name and number on the repair order.
- If the condition **was** duplicated after the procedure contained within this bulletin was followed, and additional diagnosis led to the replacement of a module or component, the SI Document ID Number **MUST** be written on the repair order.

Parts Information

Part Number	Description	Material Allowance
12377900 (U.S.) 10953529 (Canada)	Dielectric Lubricant (50 gram tube)	\$11.56 (USD) (\$2.90 per repair) \$17.35 (CDN) (\$4.35 per repair)

Alternate Distributor For All of North America

Note: NyoGel® 760G Lubricant* is equivalent to GMSPO P/N 12377900, and P/N 10953529 (Canada), specified for use to correct the condition in this bulletin.

Product	Contact	Address	Phone
NyoGel® 760G Lubricant*	Tom Madden	TAI Lubricants* P.O. Box 1579 Hockessin, DE 19707	302-326-0200 877-996-9645

*We believe this source and their products to be reliable. There may be additional manufacturers of such products/materials. General Motors does not endorse, indicate any preference for, or assume any responsibility for the products or material from this firm or for any such items that may be available from other sources.

Warranty Information (excluding Saab U.S. Models)

For vehicles repaired under warranty, use the appropriate/closest labor operation depending upon the module/component connection that the dielectric lubricant was applied to:

Labor Operation	Description	Labor Time
N9613*	Lubricate Body Control Module (BCM) Connector With Dielectric Lubricant	0.1-0.3 hr
J7729*	Lubricate Engine Control Module (ECM) Connector With Dielectric Lubricant	0.1-0.3 hr
K9534*	Lubricate Transmission Control Module (TCM) Connector With Dielectric Lubricant	0.1-0.3 hr
J7730*	Lubricate Powertrain Control Module (PCM) Connector With Dielectric Lubricant	0.1-0.3 hr
H9740*	Lubricate Electronic Brake Control Module (EBCM) Connector With Dielectric Lubricant	0.1-0.3 hr

Labor Operation	Description	Labor Time
D9752*	Lubricate Heating, Ventilation and Air Conditioning (HVAC) Control Module Connector With Dielectric Lubricant	0.1-0.3 hr
C9897*	Lubricate Inflatable Restraint Sensing and Diagnostic Module (SDM) Connector With Dielectric Lubricant	0.1-0.3 hr
R9763*	Lubricate Radio Connector With Dielectric Lubricant	0.1-0.3 hr
N9614*	Lubricate Underhood Bussed Electrical Center (UBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9615*	Lubricate Integrated Bussed Electrical Center (IBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9612*	Lubricate "Other" Connector With Dielectric Lubricant**	0.1-0.3 hr

*This labor operation number is for bulletin use only. It will not be published in the Labor Time Guide.

****You Must** Document the Affected Connector on the Repair Order. Note: Any additional time for component R&R to gain access or for repair time greater than 0.3 hours must be submitted as Other Labor Hours and requires appropriate authorization and service management approval.

Warranty Information (Saab U.S. Models)

For vehicles repaired under warranty, use the appropriate/closest labor operation depending upon the module/component connection that the dielectric lubricant was applied to:

Labor Operation	Description	Failed Object	Fault/Reason Code	Location Code	Warranty Type	Repair/Action Code	Labor Time
3710101*	Lubricate Body Control Module (BCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710102*	Lubricate Engine Control Module (ECM) & Powertrain Control Module (PCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710103*	Lubricate Radio Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710104*	Lubricate Transmission Control Module (TCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710105*	Lubricate Electronic Brake Control Module (EBCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710106*	Lubricate Underhood Bus Electrical Center (UBEC) Connector & Integrated Bus Electrical Center Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3

Labor Operation	Description	Failed Object	Fault/Reason Code	Location Code	Warranty Type	Repair/Action Code	Labor Time
3710107*	Lubricate Inflatable Restraint Sensing and Diagnostic Module (SDM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710108*	Lubricate Heating, Ventilation and Air Conditioning (HVAC) Control Module Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710109*	Lubricate "Other" Connector With Dielectric Lubricant**	37101	11	0	01/06	08	0.3

*This labor operation number is for bulletin use only. It will not be published in Standard Times Mechanical (STM).

****You Must** Document the Affected Connector on the Repair Order. Note: Any additional time for component R&R to gain access or for repair time greater than 0.3 hours must be submitted as Other Labor Hours and requires appropriate authorization and service management approval.





Service Bulletin

File In Section: 06 - Engine

Bulletin No.: 09-06-03-004D

Date: December, 2010

TECHNICAL

Subject: Intermittent No Crank/No Start, No Module Communication, MIL, Warning Lights, Vehicle Messages or DTCs Set by Various Control Modules — Diagnosing and Repairing Fretting Corrosion (Disconnect Affected Connector and Apply Dielectric Lubricant)

Models: 2011 and Prior GM Passenger Cars and Trucks

Attention: This repair can be applied to ANY electrical connection including, but not limited to: lighting, body electrical, in-line connections, powertrain control sensors, etc. **DO NOT** over apply lubricant to the point where it prevents the full engagement of sealed connectors. A light coating on the terminal surfaces is sufficient to correct the condition.

This bulletin is being revised to update the Attention statement and add the 2011 model year. Please discard Corporate Bulletin Number 09-06-03-004C (Section 06 – Engine/Propulsion System).

Condition

Some customers may comment on any of the following conditions:

- An intermittent no crank/no start
- Intermittent malfunction indicator lamp (MIL) illumination
- Intermittent service lamp illumination
- Intermittent service message(s) being displayed

The technician may determine that he is unable to duplicate the intermittent condition.

Cause

This condition may be caused by a buildup of nonconductive insulating oxidized debris known as fretting corrosion, occurring between two electrical contact surfaces of the connection or connector. This may be caused by any of the following conditions:

- Vibration
- Thermal cycling
- Poor connection/terminal retention
- Micro motion
- A connector, component or wiring harness not properly secured resulting in movement

On low current signal circuits this condition may cause high resistance, resulting in intermittent connections.

On high current power circuits this condition may cause permanent increases in the resistance and may cause a device to become inoperative.

Representative List of Control Modules and Components

The following is only a representative list of control modules and components that may be affected by this connection or connector condition and **DOES NOT** include every possible module or component for every vehicle.

- Blower Control Module
- Body Control Module (BCM)
- Communication Interface Module (CIM)
- Cooling Fan Control Module
- Electronic Brake Control Module (EBCM)
- Electronic Brake and Traction Control Module (EBTCM)
- Electronic Suspension Control (ESC) Module
- Engine Control Module (ECM)

- Heating, Ventilation and Air Conditioning (HVAC) Control Module
- HVAC Actuator
- Inflatable Restraint Sensing and Diagnostic Module (SDM)
 - Any AIR BAG module
 - Seatbelt Lap Anchor Pretensioner
 - Seatbelt Retractor Pretensioner
 - An SIR system connection or connector condition resulting in the following DTCs being set: B0015, B0016, B0019, B0020, B0022, or B0023
- Powertrain Control Module (PCM)
- Remote Control Door Lock Receiver (RCDLR)
- Transmission Control Module (TCM)

Correction

Important: DO NOT replace the control module, wiring or component for the following conditions:

- The condition is intermittent and **cannot** be duplicated.
- The condition is present and by disconnecting and reconnecting the connector the condition **can no longer** be duplicated.

Use the following procedure to correct the conditions listed above.

1. Install a scan tool and perform the Diagnostic System Check – Vehicle. Retrieve and record any existing history or current DTCs from all of the control modules (refer to SI).
 - If any DTC(s) are set, refer to Diagnostic Trouble Code (DTC) List – Vehicle to identify the connector(s) of the control module/component which may be causing the condition (refer to SI).
 - If DTCs are not set, refer to Symptoms – Vehicle to identify the connector(s) of the control module/component which may be causing the condition (refer to SI).
2. When identified, use the appropriate DTC Diagnostics, Symptoms, Schematics, Component Connector End Views and Component Locator documents to locate and disconnect the affected harness connector(s) which are causing the condition.

Note: Fretting corrosion looks like little dark smudges on electrical terminals and appear where the actual electrical contact is being made. In less severe cases it may be unable to be seen or identified without the use of a magnifying glass.



2214281

Important: DO NOT apply an excessive amount of dielectric lubricant to the connectors as shown, as hydrolock may result when attempting to mate the connectors.

Use **ONLY** a clean nylon brush that is dedicated to the repair of the conditions in this bulletin.

3. With a one-inch nylon bristle brush, apply dielectric lubricant to both the module/component side and the harness side of the affected connector(s).
4. Reconnect the affected connector(s) and wipe away any excess lubricant that may be present.
5. Attempt to duplicate the condition by using the following information:
 - DTC Diagnostic Procedure
 - Circuit/System Description
 - Conditions for Running the DTC
 - Conditions for Setting the DTC
 - Diagnostic Aids
 - Circuit/System Verification
- If the condition cannot be duplicated, the repair is complete.
- If the condition can be duplicated, then follow the appropriate DTC, Symptom or Circuit/System Testing procedure (refer to SI).

Repair Order Documentation

Important: The following information **MUST** be documented on the repair order. Failure to do so may result in a chargeback.

- Customer vehicle condition.
- Was a Service Lamp or Service Message illuminated? If yes, specify which Service Lamp or Service Message.
- Was a DTC(s) set? If yes, specify which DTC(s) were set.
- After following the procedure contained within this bulletin, could the condition be duplicated?
 - If the condition **was not** duplicated, then document the affected module/component connector name and number on the repair order.

- If the condition **was** duplicated after the procedure contained within this bulletin was followed, and additional diagnosis led to the replacement of a module or component, the SI Document ID Number **MUST** be written on the repair order.

Parts Information

Part Number	Description	Material Allowance
12377900 (U.S.) 10953529 (Canada)	Dielectric Lubricant (50 gram tube)	\$11.56 (USD) (\$2.90 per repair) \$17.35 (CDN) (\$4.35 per repair)

Alternate Distributor For All of North America

Note: NyoGel® 760G Lubricant* is equivalent to GMSPO P/N 12377900, and P/N 10953529 (Canada), specified for use to correct the condition in this bulletin.

Product	Contact	Address	Phone
NyoGel® 760G Lubricant*	Tom Madden	TAI Lubricants* P.O. Box 1579 Hockessin, DE 19707	302-326-0200 877-996-9645

*We believe this source and their products to be reliable. There may be additional manufacturers of such products/materials. General Motors does not endorse, indicate any preference for, or assume any responsibility for the products or material from this firm or for any such items that may be available from other sources.

Warranty Information (excluding Saab Models)

For vehicles repaired under warranty, use the appropriate/closest labor operation depending upon the module/component connection that the dielectric lubricant was applied to:

Labor Operation	Description	Labor Time
N9613*	Lubricate Body Control Module (BCM) Connector With Dielectric Lubricant	0.1-0.3 hr
J7729*	Lubricate Engine Control Module (ECM) Connector With Dielectric Lubricant	0.1-0.3 hr
K9534*	Lubricate Transmission Control Module (TCM) Connector With Dielectric Lubricant	0.1-0.3 hr
J7730*	Lubricate Powertrain Control Module (PCM) Connector With Dielectric Lubricant	0.1-0.3 hr
H9740*	Lubricate Electronic Brake Control Module (EBCM) Connector With Dielectric Lubricant	0.1-0.3 hr

Labor Operation	Description	Labor Time
D9752*	Lubricate Heating, Ventilation and Air Conditioning (HVAC) Control Module Connector With Dielectric Lubricant	0.1-0.3 hr
C9897*	Lubricate Inflatable Restraint Sensing and Diagnostic Module (SDM) Connector With Dielectric Lubricant	0.1-0.3 hr
R9763*	Lubricate Radio Connector With Dielectric Lubricant	0.1-0.3 hr
N9614*	Lubricate Underhood Bussed Electrical Center (UBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9615*	Lubricate Integrated Bussed Electrical Center (IBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9612*	Lubricate "Other" Connector With Dielectric Lubricant**	0.1-0.3 hr

*This labor operation number is for bulletin use only. It will not be published in the Labor Time Guide.

****You Must** Document the Affected Connector on the Repair Order.

Note: Any additional time for component R&R to gain access or for repair time greater than 0.3 hr must be submitted as Other Labor Hours and requires appropriate authorization and service management approval.

Warranty Information (Saab Models)

For vehicles repaired under warranty, use the appropriate/closest labor operation depending upon the module/component connection that the dielectric lubricant was applied to:

Labor Operation	Description	Failed Object	Fault/Reason Code	Location Code	Warranty Type	Repair/Action Code	Labor Time
3710101*	Lubricate Body Control Module (BCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710102*	Lubricate Engine Control Module (ECM) & Powertrain Control Module (PCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710103*	Lubricate Radio Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710104*	Lubricate Transmission Control Module (TCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710105*	Lubricate Electronic Brake Control Module (EBCM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710106*	Lubricate Underhood Bus Electrical Center (UBEC) Connector & Integrated Bus Electrical Center Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710107*	Lubricate Inflatable Restraint Sensing and Diagnostic Module (SDM) Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710108*	Lubricate Heating, Ventilation and Air Conditioning (HVAC) Control Module Connector With Dielectric Lubricant	37101	11	0	01/06	08	0.3
3710109*	Lubricate "Other" Connector With Dielectric Lubricant**	37101	11	0	01/06	08	0.3

*This labor operation number is for bulletin use only. It will not be published in Standard Times Mechanical (STM).

**You Must Document the Affected Connector on the Repair Order.

Note: Any additional time for component R&R to gain access or for repair time greater than 0.3 hr must be submitted as Other Labor Hours and requires appropriate authorization and service management approval.



Subject: Intermittent No Crank/No Start, No Module Communication, MIL, Warning Lights, Vehicle Messages or DTCs Set by Various Control Modules – Diagnosing and Repairing Fretting Corrosion (Disconnect Affected Connector and Apply Dielectric Lubricant)

Models: 2013 and Prior GM Passenger Cars and Trucks

This repair can be applied to ANY electrical connection including, but not limited to: lighting, body electrical, in-line connections, powertrain control sensors, etc. DO NOT over apply lubricant to the point where it prevents the full engagement of sealed connectors. A light coating on the terminal surfaces is sufficient to correct the condition.

This bulletin is being revised to add the 2012-2013 model years, update the information and remove the Warranty Information for Saab Models. Please discard Corporate Bulletin Number 09-06-03-004D (Section 06 – Engine/Propulsion System).

Condition

Some customers may comment on any of the following conditions:

- An intermittent no crank/no start
- Intermittent malfunction indicator lamp (MIL) illumination
- Intermittent service lamp illumination
- Intermittent service message or messages being displayed

The technician may determine that he is unable to duplicate the intermittent condition.

Cause

This condition may be caused by a buildup of non-conductive insulating oxidized debris known as fretting corrosion, occurring between two electrical contact surfaces of the connection or connector. This may be caused by any of the following conditions:

- Vibration
- Thermal cycling
- Poor connection/terminal retention
- Micro motion
- A connector, component or wiring harness not properly secured resulting in movement

On low current signal circuits this condition may cause high resistance, resulting in intermittent connections.

On high current power circuits this condition may cause permanent increases in the resistance and may cause a device to become inoperative.

Representative List of Control Modules and Components

The following is only a representative list of control modules and components that may be affected by this connection or connector condition and

DOES NOT

include every possible module or component for every vehicle.

- Blower Control Module
- Body Control Module (BCM)
- Communication Interface Module (CIM)

- Cooling Fan Control Module
- Electronic Brake Control Module (EBCM)
- Electronic Brake and Traction Control Module (EBTCM)
- Electronic Suspension Control (ESC) Module
- Engine Control Module (ECM)
- Heating, Ventilation and Air Conditioning (HVAC) Control Module
- HVAC Actuator
- Inflatable Restraint Sensing and Diagnostic Module (SDM)
 - Any AIR BAG module
 - Seat Belt Lap Anchor Pretensioner
 - Seat Belt Retractor Pretensioner
 - An SIR system connection or connector condition resulting in the following DTCs being set: B0015, B0016, B0019, B0020, B0022, or B0023
- Powertrain Control Module (PCM)
- Remote Control Door Lock Receiver (RCDLR)
- Transmission Control Module (TCM)

Correction

Important:

DO NOT

replace the control module, wiring or component for the following conditions:

- The condition is intermittent and **cannot** be duplicated.
- The condition is present and by disconnecting and reconnecting the connector the condition **can no longer** be duplicated.

Use the following procedure to correct either of the conditions listed above.

1. Install a scan tool and perform the Diagnostic System Check – Vehicle. Retrieve and record any existing History, Current, Passed and Failed and Failed Current DTCs from all of the control modules.
 - ⇒ If any DTCs are set, refer to Diagnostic Trouble Code (DTC) List – Vehicle to identify the connector(s) of the control module/component which may be causing the condition. Refer to SI.
 - ⇒ If DTCs are not set, refer to Symptoms – Vehicle to identify the connector(s) of the control module/component which may be causing the condition. Refer to SI.
2. When identified, use the appropriate DTC Diagnostics, Symptoms, Schematics, Component Connector End Views and Component Locator documents to locate and disconnect the affected harness connector or connectors that are causing the condition.

Note: Fretting corrosion looks like little dark smudges on electrical terminals and appear where the actual electrical contact is being made. In less severe cases it may be unable to be seen or identified without the use of a magnifying glass.



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Important:

DO NOT

apply an excessive amount of dielectric lubricant to the connector as shown, as hydrolock may result when attempting to mate the connector.

Use

ONLY

a clean nylon brush that is dedicated to the repair of the conditions in this bulletin.

3. With a one-inch nylon bristle brush, apply dielectric lubricant to both the module/component side and the harness side of the affected connector.
4. Reconnect the affected connector and wipe away any excess lubricant that may be present.
5. Attempt to duplicate the condition by using the following information:
 - DTC Diagnostic Procedure
 - Circuit/System Description
 - Conditions for Running the DTC
 - Conditions for Setting the DTC
 - Diagnostic Aids
 - Circuit/System Verification
 - ⇒ If the condition cannot be duplicated, the repair is complete.
 - ⇒ If the condition can be duplicated, then follow the appropriate DTC, Symptom or Circuit/System Testing procedure. Refer to SI.

Repair Order Documentation

Important: The following information

MUST

be documented on the repair order. Failure to do so may result in a chargeback.

- Customer Complaint and vehicle Condition.
- Was a Service Lamp or Service Message illuminated? If yes, specify which Service Lamp or Service Message.
- Was a DTC or DTCs set? If yes, specify which DTCs were set.
- After following the procedure contained within this bulletin, could the condition be duplicated?
 - ⇒ If the condition **was not**

able to be duplicated, then document the affected module/component connector name and number on the repair order.

⇒ If the condition

was

able to be duplicated after the procedure contained within this bulletin was followed, and additional diagnosis led to the replacement of a module or component, the SI Document ID Number

MUST

be written on the repair order.

Parts Information

Part Number	Description	Material Advance
12377900 (U.S.) 10953529 (Canada)	Dielectric Lubricant (50 gram tube)	\$11.56 (USD) (\$2.90 per repair) \$17.35 (CDN) (\$4.35 per repair)

Alternate Distributor For All of North America

Note: NyoGel® 760G Lubricant* is equivalent to CC&A P/N 12377900 (in Canada, P/N 10953529) specified for use to correct the various conditions in this bulletin .

Product	Contact	Address	Phone
NyoGel® 760G Lubricant*	Tom Madden	TAI Lubricants* P.O. Box 1579 Hockessin, DE 19707	302-326-0200 877-996-9645

*We believe this source and their products to be reliable. There may be additional manufacturers of such products/materials. General Motors does not endorse, indicate any preference for, or assume any responsibility for the products or material from this firm or for any such items that may be available from other sources.

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Warranty Information

For vehicles repaired under warranty, use the appropriate/closest labor operation depending upon the module/component connection that the dielectric lubricant was applied to:

Labor Operation	Description	Labor Time
N9613*	Lubricate Body Control Module (BCM) Connector With Dielectric Lubricant	0.1-0.3 hr
J7729*	Lubricate Engine Control Module (ECM) Connector With Dielectric Lubricant	0.1-0.3 hr
K9534*	Lubricate Transmission Control Module (TCM) Connector With Dielectric Lubricant	0.1-0.3 hr

Labor Operation	Description	Labor Time
J7730*	Lubricate Powertrain Control Module (PCM) Connector With Dielectric Lubricant	0.1-0.3 hr
H9740*	Lubricate Electronic Brake Control Module (EBCM) Connector With Dielectric Lubricant	0.1-0.3 hr
D9752*	Lubricate Heating, Ventilation and Air Conditioning (HVAC) Control Module Connector With Dielectric Lubricant	0.1-0.3 hr
C9897*	Lubricate Inflatable Restraint Sensing and Diagnostic Module (SDM) Connector With Dielectric Lubricant	0.1-0.3 hr
R9763*	Lubricate Radio Connector With Dielectric Lubricant	0.1-0.3 hr
N9614*	Lubricate Underhood Bussed Electrical Center (UBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9615*	Lubricate Integrated Bussed Electrical Center (IBEC) Connector With Dielectric Lubricant	0.1-0.3 hr
N9612*	Lubricate "Other" Connector With Dielectric Lubricant**	0.1-0.3 hr
*This labor operation is for bulletin use only. It will not be published in the Labor Time Guide. **You Must Document the Affected Connector on the Repair Order. Note: Any additional time for component R&R to gain access or for repair time greater than 0.3 hr must be submitted as Other Labor Hours and requires appropriate authorization and service management approval.		



Service Bulletin

File in Section: 00 - General Information

Bulletin No.: 10-00-89-017L

Date: December, 2011

INFORMATION

Subject: Car and Truck Fix it Right the First Time Issues

Models: 2012 and Prior GM Passenger Cars and Trucks

This bulletin is being revised to include updated information. Please discard Corporate Bulletin Number 10-00-89-017K (Section 00 – General Information).

In order to access this bulletin electronically, go to the SI Home Page and select the "Newest Bulletins" icon. The documents are arranged by sub-section and then by date (newest to oldest). Scroll down to "General Information" then click on the latest "Fix it Right the First Time" bulletin.

Field Product Reminder – Car Issues – Fix it Right the First Time

Model Year(s)	Vehicle Line(s) / Condition	Do This	Don't Do This	Reference Information/Bulletin
2006-2012	All Vehicles — Information on COAX Repair Kit Availability	Utilize the coax repair kit to reduce vehicle down time.	Order complete wiring harnesses for OnStar, XM, and navigation antenna coax concerns.	PI0572
2004-2011	Aura, G6, Malibu, Malibu Maxx — Intermittently Brake Lights (Stop Lamps) Do Not Function Correctly, Cruise Control Inop, DTCs C0131/ C0161/C0277 (Perform Repair Outlined)	Inspect for terminal fretting corrosion in the body control module (BCM) C2 or X2 connector.	Replace Body Control Module.	08-05-22-009C
2008-2009	G8 — Grind, Growl or Moan Type Noise Heard from Front of Vehicle When Turning Steering Wheel	Replace mount & bearing together.	Replace mount and bearing separately.	PI0140
2004-2011	CTS, SRX, STS — Engine Oil Consumption on High Feature V6 Engines - Air Cleaner Housing Test, Repair Procedure (Install Piston Rings, Service PCV System)	Must test air filtration box.	Perform bulletin without testing for debris source, air inlets, air filtration housing for leakage.	11-06-01-004
2011-2012	Equinox, LaCrosse, Lucerne, Regal, Terrain — Steering Wheel Airbag Module May Not Fit Properly (Left and/or Right Side Upper Corners Higher than the Other Side)	From under the air bag module check and correct the wire harness routing.	Replace the steering wheel or air bag module.	PI0576
2011-2012	Cruze, Sonic — DTC P0300 Misfire Diagnosis	Check for these conditions prior to replacement of part.	Change parts without checking for these conditions.	PI0578
2012	LaCrosse, Regal — Malfunction Indicator Lamp On, DTCs P1B37, P1B38 and P1B39 Set	Move the 2-way radio antenna to a trunk mounted location.	Replace BECM.	PI0577



Service Bulletin

File In Section: 05 - Brakes

Bulletin No.: 08-05-22-009C

Date: October, 2010

TECHNICAL

Subject: Intermittently Brake Lights (Stop Lamps) Do Not Function Correctly, Extended Travel to Shift Out of Park, Cruise Control Inoperative, DTCs C0131, C0161 or C0277 Set (Perform Repair as Outlined)

Models: 2004-2008 Chevrolet Malibu, Malibu Maxx
2008 Chevrolet Malibu Classic
2008-2011 Chevrolet Malibu
2005-2010 Pontiac G6
2007-2009 Saturn AURA

This bulletin is being revised to update the models. Please discard Corporate Bulletin Number 08-05-22-009B (Section 05 – Brakes).

Condition

Some customers may comment that intermittently the brake lights do not function correctly. Other symptoms may include extended pedal travel required to shift out of PARK, cruise control does not function correctly, and DTC C0131, C0161 and/or C0277 may be set.

Cause

The most likely cause of this condition is high resistance due to terminal fretting corrosion in the body control module (BCM) C2 or X2 connector (specifically pins 18, 31 and 59).

Correction

DO NOT replace the BCM for this condition. Disconnecting the C2 or X2 connector, adding dielectric lubricant and reconnecting the connector per the procedure below will correct the high resistance condition due to terminal fretting corrosion.

1. Remove the right side front floor console side trim panel to access to the Body Control Module (BCM).
2. Locate the C2 or X2 connector on the BCM.
3. Unlatch the connector and disconnect the connector from the BCM.
4. Apply dielectric lubricant (clear gel), GM P/N 12377900 (in Canada, use P/N 10953529) or equivalent, on all the connector pins (apply with a one-inch nylon bristle brush). This will treat the pins against fretting corrosion.

5. Reconnect the connector back on the BCM and re-latch. Wipe away any excess lubricant.
6. Reinstall the right side front floor console side trim panel.
7. Using the Tech 2[®], check that the BPPS ratio is equal to BPPS learned home when the brake pedal is not depressed.
 - If they are equal, the brake lamps should be operating correctly and no further steps are necessary.
 - If they are not equal, perform the Brake Pedal Position Sensor Calibration procedure in SI to complete the repair.
8. Verify proper operation of the brake lights. If incorrect, refer to SI and perform normal diagnostics.

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
N9595*	BCM C2 or X2 Connector Repair	0.3 hr
* This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these 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 your GM dealer for information on whether your vehicle may benefit from the information.



WE SUPPORT VOLUNTARY
TECHNICIAN
CERTIFICATION

File In Section: Service Bulletin

Bulletin No.: PIC4330B

Date: December, 2008

PRELIMINARY INFORMATION

Subject: Unable To Relearn The Brake Pedal position (BPP) Sensor

Models: 2004-2007 Chevrolet Malibu/Maxx
2008 Chevrolet Malibu Classic
2008-2009 Chevrolet Malibu
2005-2009 Pontiac G6
2007-2009 Saturn Aura

This PI was superceded to update Recommendation/Instructions. Please discard PIC4330A

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition/Concern:

Technician is having difficulty performing the Brake Pedal Position (BPP) relearn.

Recommendation/Instructions:

If you are having difficulty performing the relearn on Brake pedal Position (BPP) sensor:

1. Make sure you have the latest calibration in the PCM.
2. Make sure you have the latest Tech-2 Software
3. Make sure you are NOT pushing on the SERVICE brake when doing the relearn.
4. If the above actions do not allow the relearn, then look at BPP Voltage in the IBCM data list

Information on BPP sensor voltages:

Nominal design voltage with brake pedal not depressed is 1.19 volts. However, there is a defined range of voltages which are allowed to be "learned" as valid with brake pedal at the rest position. In order to learn the BPP sensor, the BPP sensor voltage must fall between:

2006 MY and prior, the valid range is 0.88 Volts to 2.11 Volts.

2007 MY and newer vehicles, the valid range is 0.73 Volts to 1.47 Volts.

If the vehicle you are working on is outside the noted range, refer to TSB 08-05-22-009.

Notice: Do NOT replace the BCM for this concern.

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

Below the line - Internal only - Do not fax or email

Administrative Details: None

Revision Log:

PIC4330B Superseded PIC4330A On 10/10/08 to change the voltage readings as Nominal voltages ranges are different for MY's.

PIC4330A Supersede PIC4330 on 07/17/08 to update to 09 MY

PIC4330 Superseded AIC3027 to change from internal to external and update the model years.

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Publishing Notes:

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EOM

Document ID: 2446045

#PIC4330C: Unable To Relearn The Brake Pedal Position (BPP) Sensor - keywords calibration C0278 DTC light lock LX9 P0703 - (Apr 15, 2010)

Subject: Unable To Relearn The Brake Pedal position (BPP) Sensor



Models: 2004-2007 Chevrolet Malibu / Maxx

2008 Chevrolet Malibu Classic

2008-2010 Chevrolet Malibu

2005-2009 Pontiac G6

2007-2009 Saturn Aura

This PI was superseded to update model years and Recommendation / Instructions.
Please discard PIC4330B

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition / Concern:

Having difficulty performing the Brake Pedal Position (BPP) relearn.

Recommendation / Instructions:

If you are having difficulty performing the relearn on Brake pedal Position (BPP) sensor:

1. Make sure you have the latest calibration in the PCM.
2. Make sure you have the latest Tech-2 Software
3. Make sure you are NOT pushing on the SERVICE brake when doing the relearn.
4. If the above actions do not allow the relearn, then look at BPP Voltage in the IBCM data list

Information on BPP sensor voltages:

Nominal design voltage with brake pedal not depressed is 1.19 volts. However, there is a defined range of voltages which are allowed to be "learned" as valid with brake pedal at the rest position. In order to learn the BPP sensor, the BPP sensor voltage must fall between:

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2006 MY and prior, the valid range is 0.88 Volts to 2.11 Volts.

2007-2009 MY and newer vehicles, the valid range is 0.73 Volts to 1.47 Volts.

2010 MY and newer vehicles, the valid range is 0.63 Volts to 1.41 Volts

If the vehicle you are working on is outside the noted range, consider potential damage to the BPP sensor. Refer to TSB 08-05-22-009.

Note: Do NOT replace the BCM for this concern.

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these 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 your GM dealer for information on whether your vehicle may benefit from the information.



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