



Service Bulletin

INFORMATION

Subject: Warranty, SPS, Control Module Diagnostics and Configuration Information, Programming, Set-Up

Models: 2018 and Prior GM Passenger Cars and Light Duty Trucks

Attention: This Bulletin also applies to any of the above models that may be Export from North America vehicles.

This Bulletin has been revised to add the 2018 Model Year, information in the Warranty Claim Code table and new Warranty Transaction requirements. Please discard Corporate Bulletin Number 06-08-47-001L.

Module reprogramming labor codes are used to submit warranty claims for reprogramming (without replacement) of a control module with new or updated software and/or calibration files using the TIS Service Programming System (SPS) application. The following labor operation descriptors for the reprogramming labor operations have been revised to specify that they are only to be used for performing the SPS procedure. These labor codes are only applicable for control modules that have valid service software/calibration files released and are not to be used when replacing a module. The module replacement labor operations include the appropriate time for any configuration or programming procedures that are required. Refer to "Programming and Setup" instructions found in the "Control Module References" document in the service manual for any specific re-programming instructions. Re-programming instructions may be different than programming a new control module.

Important:

- While most modules program quickly, some modules, and/or sequential programming events, may require extended programming time and may require the use of the EL-49642 SPS Programming Support Tool to maintain system voltage even on a well charged vehicle. Please consult the Control Module References for module specific programming and set up procedures for detailed instructions.
- Control module replacement labor codes include programming and/or set-up time as appropriate.
- When the component is being replaced, reprogramming labor codes are NOT to be used along with the module replacement labor code.
- Reprogramming a control module with the same calibration is not considered a valid repair.
- When a bulletin is published with a special bulletin-only labor code, the diagnosis time is not included unless there are specific diagnostic steps called out in the bulletin.
- The reprogramming labor codes may not be applicable to all vehicles. For the comprehensive list of applicable reprogramming labor codes please refer to the appropriate Labor Time Guide for usage and times.

Note: This table only provides coding associations to module/labor operation for 5-digit codes. Longer codes may be possible and are not included in this table.

| Warranty Claim Code | Customer Complaint | Description | Labor Operation |
|---------------------|----------------------|--|-----------------|
| All | Campaign or Bulletin | If a labor op was included in the bulletin, please use the listed op number. | As Listed |
| 1Axxx | All | Rear Differential Clutch Control Module Reprogramming with SPS | 2810695 |
| 2Dxxx | All | Trailer Lamp Control Module Reprogramming with SPS | 2810795 |

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|------------------|----------------------|--|---------|
| 2Dxxx | All | Trailer Brake Control Module Reprogramming with SPS | 2810255 |
| 6Cxxx | All | Active Safety Control Module Reprogramming with SPS | 2810435 |
| 81xxx | All | Radio Speaker Amplifier Reprogramming with SPS | 2810855 |
| 86xxx | All | Media Disc Player Reprogramming with SPS | 2810815 |
| 8Exxx | All | Multimedia Player Interface Module Reprogramming with SPS | 2810585 |
| 8Fxxx | All | Human Machine Interface Control Module Reprogramming with SPS | 2810345 |
| 9Cxxx | All | Air Conditioning Compressor Control Module Reprogramming with SPS | 2810985 |
| 9Dxxx | All | Coolant Heater Control Module Reprogramming with SPS | 2810965 |
| 10, 11 or 12xxx | Engine Related | Powertrain Control Module – Engine Reprogramming with SPS | 2810095 |
| 10, 11 or 12xxx | Engine Related | Engine Control Module Reprogramming with SPS | 2810075 |
| 10, 11 or 12xxx | Engine Related | Driver Motor Generator Power Inverter Module Programming with SPS | 2810295 |
| 10, 11 or 12xxx | Engine Related | Driver Motor Generator Battery Control Module Programming with SPS | 2810315 |
| 10, 11 or 12xxx | Transmission Related | Powertrain Control Module – Transmission Reprogramming with SPS | 2810115 |
| 13xxx | All | Fuel Pump Control Module Reprogramming with SPS | 2810085 |
| 13xxx | All | Fuel Injector Control Module Reprogramming with SPS | 2810065 |
| 13, 22 or 25 xxx | All | Chassis Control Module Reprogramming with SPS | 2810705 |
| 16xxx | All | Glow Plug Control Module Reprogramming with SPS | 2810055 |
| 18xxx | All | Transmission Control Module – Transmission Reprogramming with SPS | 2810175 |
| 18xxx | All | Control Solenoid Valve and Transmission Control Module Assembly Reprogramming with SPS | 2810155 |
| 1Axxx | All | Transfer Case Module Reprogramming with SPS | 2810135 |
| 28xxx | All | Electronic Brake and/or Traction Control Module Reprogramming with SPS | 2810035 |
| 2Bxxx | All | Electronic Parking Brake Control Module Reprogramming with SPS | 2810205 |
| 31xxx | All | Power Steering Control Module Reprogramming with SPS | 2810625 |
| 38xxx | All | Electronic Suspension Control Module Reprogramming with SPS | 2810145 |
| 40, 41 or 43xxx | All | Body Control Module Reprogramming with SPS | 2810215 |

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|-----------------|-----|---|---------|
| 40, 41 or 43xxx | All | Door Lock and Side Window Switch Reprogramming with SPS | 2810235 |
| 40, 41 or 43xxx | All | Serial Data Gateway Module Programming with SPS | 2810275 |
| 58xxx | All | Inflatable Restraint Sensing and Diagnostic Module Reprogramming with SPS | 2810525 |
| 59xxx | All | Passenger Presence System Reprogramming with SPS | 2810605 |
| 60 or 65xxx | All | Instrument Panel Cluster Reprogramming with SPS | 2810195 |
| 62xxx | All | Head-Up Display Reprogramming with SPS | 2810495 |
| 66xx | All | Radio Control Reprogramming with SPS | 2810325 |
| 72xxx | All | Headlamp Control Module Reprogramming with SPS | 2810475 |
| 80xxx | All | Radio – Reprogram with SPS | 2810335 |
| 97xxx | All | Communication Interface Module Reprogramming with SPS | 2810415 |
| 97xxx | All | Mobile Telephone Control Module Reprogramming with SPS | 2810595 |
| 99xxx | All | HVAC Control Head Module Reprogramming with SPS | 2810015 |
| A0, A9 or D0xxx | All | Front Seat Heater Control Module Reprogramming with SPS | 2810715 |
| A4xxx | All | Accessory and Liftgate Control Module Reprogramming with SPS | 2810905 |
| A8 or D0xxx | All | Driver or Passenger Seat Adjuster Memory Module Reprogramming with SPS | 2810875 |
| AAxxx | All | Rear Seat Heater Control Module Reprogramming with SPS | 2810745 |
| AD or 11xxx | All | Folding Top Control Module Reprogramming with SPS | 2810455 |
| AFxxx | All | Keyless Entry Control Module Reprogramming with SPS | 2810545 |
| B9 or 5Bxxx | All | Side Object Sensor Reprogramming with SPS | 2810765 |
| BBxxx | All | Parking Assist Control Module Reprogramming with SPS | 2810375 |
| BCxxx | All | Front View Camera Reprogramming with SPS | 2810835 |
| B0xxx | All | Remote Control Door Lock Receiver Reprogramming with SPS | 2810355 |
| C2xxx | All | Steering Column Lock Control Module Reprogramming with SPS | 2810775 |
| CA or CCxxx | All | Battery Charger Reprogramming with SPS | 2810285 |
| CA or CDxxx | All | Battery Energy Control Module Reprogramming with SPS | 2810945 |
| CBxxx | All | Hybrid Powertrain Control Module 2 Reprogramming with SPS | 2810265 |

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| CCxxx | All | Accessory DC Power Control Module Reprogramming with SPS | 2810925 |
| D2xxx | All | Radar Sensor Module - Long Range Reprogramming with SPS | 2810645 |
| D3, D6 or D7xxx | All | Radar Sensor Module - Short Range Reprogramming with SPS | 2810655 |
| FDxxx | All | Multi-Axis Acceleration Sensor Module Reprogramming with SPS | 2810565 |
| FCxxx or FDxxx | All | Occasionally a code generated after an SPS programming sequence or other SPS procedure | See LTG or associated Technical Bulletin |
| FExxx | All | Vehicle Theft Deterrent procedure | See LTG or associated Technical Bulletin |
| Sxxxx or Txxx or Uxxx .. Zxxxx | All | Special SPS Sequential Reprogramming event that generates a Warranty Claim Code | See LTG or associated Technical Bulletin |

Warranty Transaction Information

When a module is reprogrammed using SPS reprogramming, the Warranty Claim Code from the “Programming Complete” screen is **required** to be entered in the “SPS Warranty Claim Code” field on the transaction (in Canada, enter SPS Warranty Claim Code in “Correction” comment field). DTC information (if applicable) must also be included in the Cause field of the transaction.

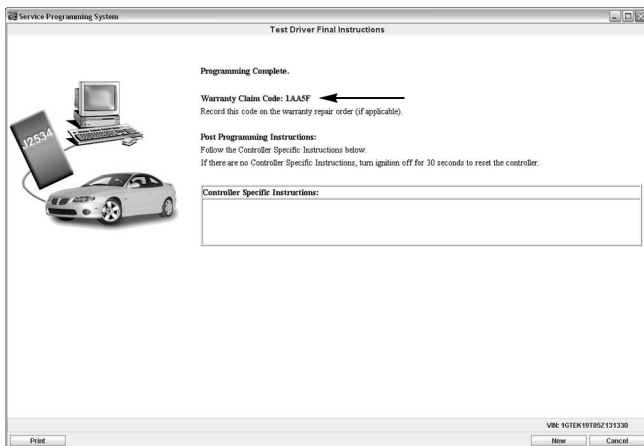
Some control modules will require programming to be completed by using a USB memory stick with uploaded files from the TIS2 Web application. The programming to the USB memory stick will generate a Warranty Claim Code.

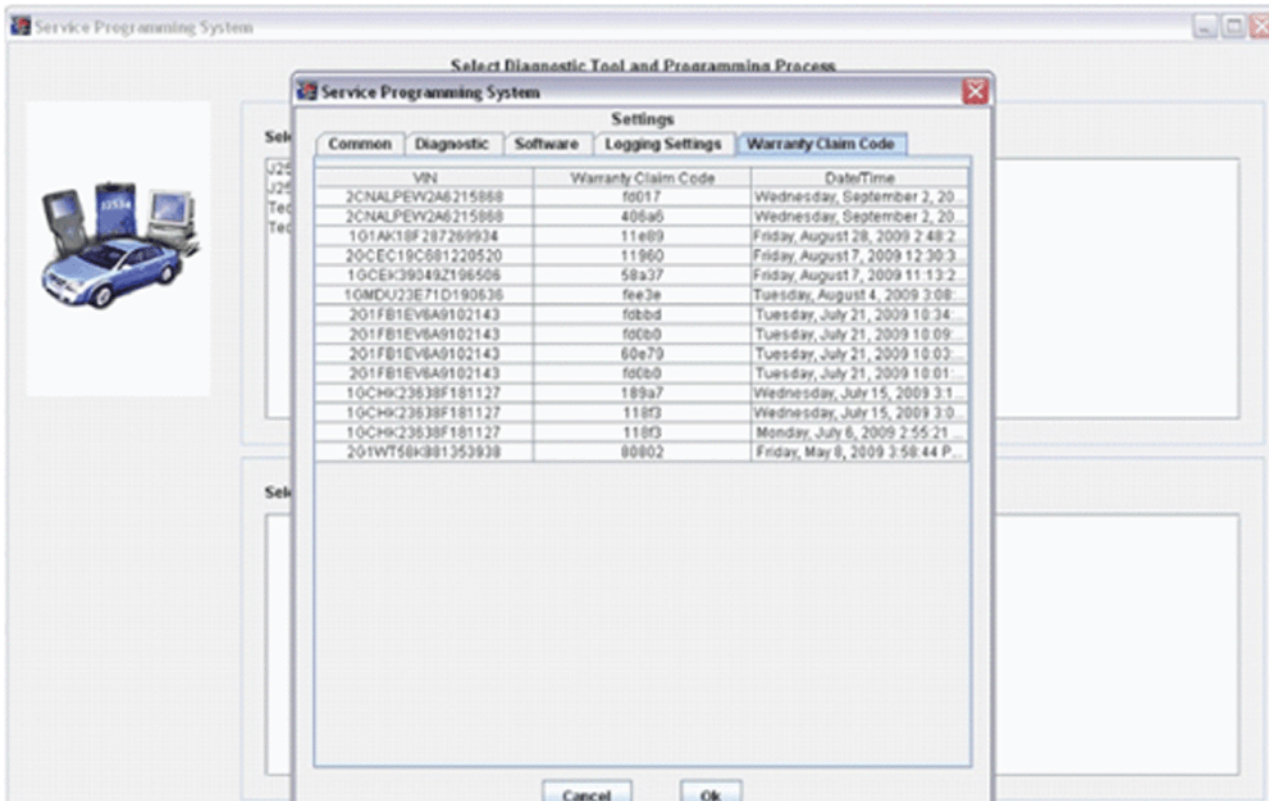
There are also some control modules which may require additional Setup and or Configuration procedures to be completed after the reprogramming event. Each of these events will generate a Warranty Claim Code.

When more than one Warranty Claim Code is generated for a control module programming event, it is **required** to enter all codes into the “SPS Warranty Claim Code” field. Place up to 3 Warranty Claim Codes in the Labor Operation Dependency field using commas to separate each code. Example: 6022A, FDCC6, FD3AC (in Canada, enter SPS Warranty Claim Code in “Correction” comment field)

The Warranty Claim Code is only available when using the TIS-2-Web application. The CD or stand-alone version of TIS does not support the Warranty Claim Code.

Transactions with an inaccurate or missing Warranty Claim Codes are subject to audit and subsequent debit.





Warranty Claim Code retrieval

If the need arises to find out what the specific SPS Warranty Claim Code was on a prior programming event, use the following steps to retrieve the code:

1. Open up TIS on the computer used to program the vehicle.
2. Select and start "Service Programming System (SPS)."
3. Select "Settings."
4. Select "Warranty Claim Code" tab.

Clear All Diagnostic Trouble Code Procedures


An enhancement to the SPS system will enable the technician to clear any DTCs present from all of the ECUs on the vehicle. There is text added to the setup screen reminding that this feature will be available. Since this function clears any DTCs that are present from all controllers on the vehicle, the technician may want to check for and record DTCs before proceeding with the SPS event.

TIS - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Service Programming System

Tech2 Pass Thru: Preparing for Communication



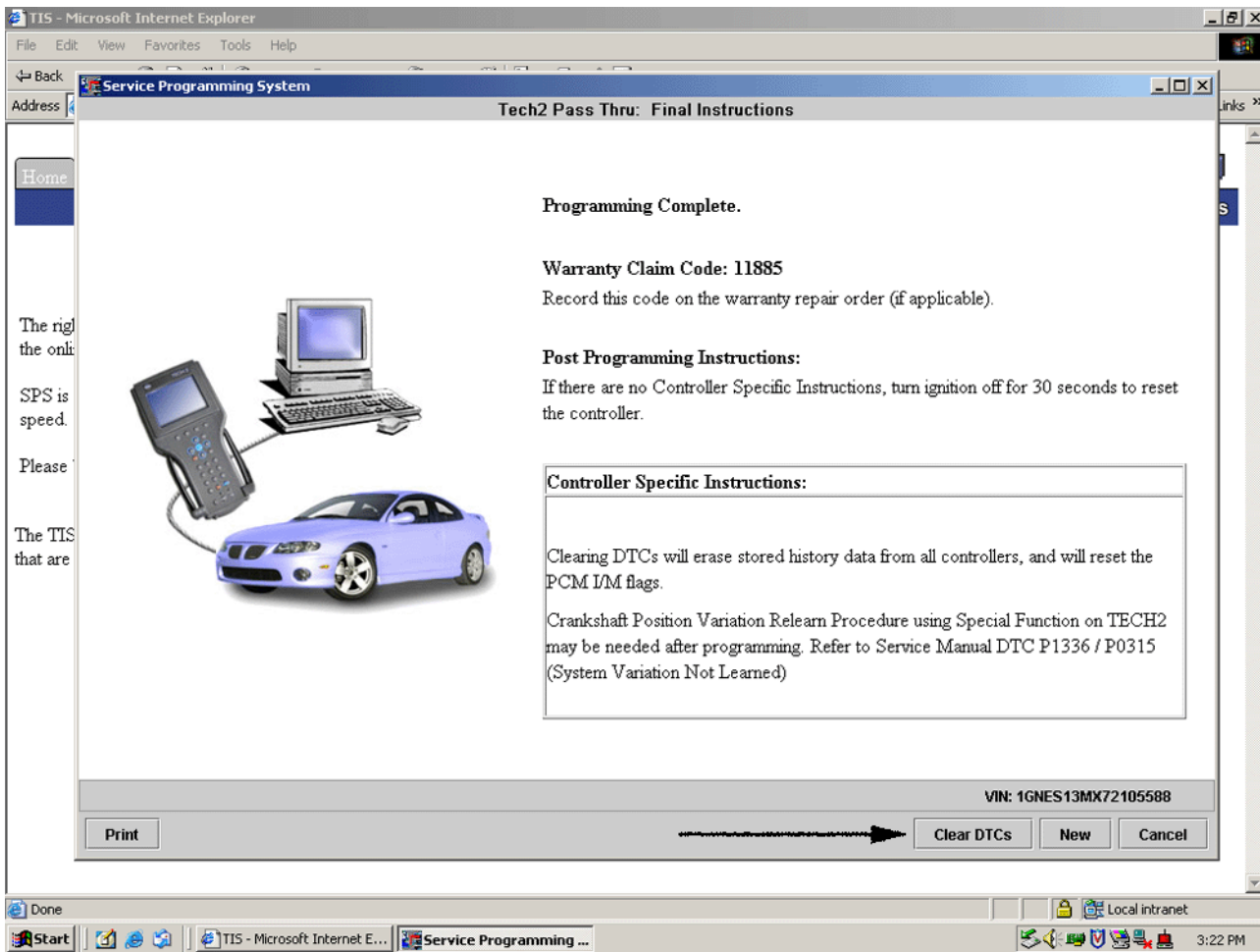
Connect Tech 2 to vehicle and PC:

- Verify vehicle battery fully charged, engine off, ignition on.
- Connect Tech 2 to vehicle.
- Connect RS-232 cable to Tech 2 and PC.
- Switch Tech 2 on and wait for Tech 2 Start Screen.

After Programming, the technician will be given the opportunity to clear Diagnostic Trouble Codes from ALL ECU's on this vehicle. The technician may want to record DTCs and Freeze Frame Data before continuing

Print < Back Next > Cancel

Start | TIS - Microsoft I... | Service Progra... | untitled - Paint | 8:53 AM



After programming is complete, the option to clear all DTCs will be presented. The technician should remember that when used, the clear all DTCs command will clear ECM DTCs, meaning that IM flags will be reset.

Other Electrical Labor Only Procedures

There are other electrical procedures that are not associated with a module part replacement and are also not considered reprogramming. The following table provides examples of these procedures and the appropriate handling from a warranty perspective.

| Procedure | Description | Warranty Policy |
|---------------|---|---|
| Set-Up | A procedure that configures a Control Module to vehicle-specific content, operating location, etc. This is also known as "bit flipping" or "option configuration". This is done one time as part of a Control Module replacement procedure. | Labor times are included in the Control Module replacement procedure. Additional time for setup or reprogramming is not applicable. |
| XM Activation | A procedure that communicates the new radio ID after replacement of Digital Radio Receiver (DRR) to XM to ensure continuation of XM radio service. | Labor times for XM activation are included in the replacement procedures. Additional time is not applicable. |
| Learn | A procedure that stores operating ranges, component identifiers, etc. of components or systems. This is also known as "initializing". This is done one time as part of a component or control module replacement or in some instances after a battery disconnect. | Labor times for component or control module replacement and battery disconnect are included in the procedures. Additional time is not applicable. |

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| Programming | A procedure for loading the operational software or calibration files of a newly installed control module performed using the Service Programming System (SPS) application. | Labor times for module programming are included in replacement procedures. Additional programming time is not applicable. |
| Reprogramming | A procedure to update a module with new software or calibration files. This is a labor-only procedure performed using the Service Programming System (SPS) application. | SPS reprogramming labor codes are specifically released as required for the modules and vehicles that have service software/calibration files released in TIS2000. Diagnostic time is applicable if listed in the Labor Time Guide. |
| USB Programming | A procedure to update a module with new software or calibration files using vehicle USB port. This is a labor-only procedure performed using the Service Programming System (SPS) application. | SPS reprogramming labor codes are specifically released as required for the modules and vehicles that have service software/calibration files released in TIS2000. Diagnostic time is applicable if listed in the Labor Time Guide. |
| Sequential Programming | A procedure to update more than one module with new software or calibration files in a predefined order or sequence. The sequence is critical to the outcome of the event and is done automatically by the SPS application. | A unique Warranty Claim Code generated by SPS must be submitted. |
| Non-SPS Programming/Setup Operations | Some procedures may not produce a warranty claim code when software is downloaded using the Tech 2®. | Labor times for module programming are included in replacement procedures. For a specific repair appropriate labor codes and labor times will be included in the Technical Bulletin or may be allowed using 4069929. |
| Tech 2® Recalibration | A procedure for loading updated calibration files to a control module using the Tech 2®. | Labor times for module programming are included in replacement procedures. Additional programming time is not applicable. |
| CD Software Update | Some entertainment systems may require a software update that is performed through a special data CD release. This type of software update is infrequent and is communicated via a Technical Bulletin. | Appropriate labor codes and labor times will be included in the Technical Bulletin. |
| Personalization | Setting a system configuration that is a customer preference and described in the vehicle owner manual. Examples include door locking preferences, memory seat, radio presets, compass calibration, etc. | Customer vehicle Personalization is not considered a warranty repair. |
| Vehicle Maintenance | Procedures that are performed as part of vehicle maintenance procedures such as Oil Life Reset and Tire Pressure Monitor relearn after tire rotation. | Vehicle maintenance procedures are not considered warranty repairs. |

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| Accessory Configuration | Some GM Accessory installations require SPS reprogramming or set-up procedures. | Procedures associated with the installation of an Accessory are not covered as warranty repairs. |
| Diagnostics | As part of service diagnostic procedures, technicians may re-set Diagnostic Trouble Codes (DTCs) or pull fuses or disconnect connectors to reset software in control modules. | Diagnostics are covered as an add condition in the labor code that is used to repair the vehicle. |
| Customer Concern Not Duplicated (CCND) | When a customer complaint cannot be verified by the service technician after duplicating the conditions described by the customer. This may include checking for DTCs and performing system or circuit verification procedures. | The appropriate CCND labor code should be used. Comments describing the customer concern should be included with all instances of a CCND labor code submission. These labor codes may not be used in conjunction with another labor code for the same customer concern. |

Customer Concern Not Duplicated (CCND) Labor Codes

For more information regarding CCND Labor Codes, refer to the latest version of Corporate Bulletin Number 06-00-89-026.

Electrical and Powertrain Controls Labor-Only Labor Codes

Two labor codes are to be used to claim for Labor only when addressing Electrical and Powertrain Controls issues. The labor codes are:

4069929 (0.2♦hr) — Electrical Controls — Labor Only — (Comment Required – Describing Corrective Action)

4069939 (0.2♦hr) — Powertrain Controls — Labor Only — (Comment Required – Describing Corrective Action)

These labor codes should be used only in instances where a repair procedure is performed to a module that does not require that part to be replaced or any other physical repair. They should NOT be used for setting a system configuration that is a customer preference and described in the vehicle Owner Manual. Examples include door locking preferences, memory seat, radio presets, compass calibrations, etc.

Example: A customer brings their vehicle in for a complaint of the CD player not functioning in the radio. The technician duplicates the complaint and while diagnosing customer complaint the radio connector, which contains the battery power feed, is disconnected and then reconnected 30 seconds later. After the connector is reconnected the CD player starts to operate correctly. No other repairs performed.

A warranty claim should be submitted using labor code 4069929 and an appropriate comment must be included in the *Correction* field, i.e. “disconnected radio connector for 30♦seconds, then reconnect.

As in the above example, 4069929 and 4069939 should be used anytime any module has encountered a software “anomaly” in which the corrective action is to “reset” the module by disconnecting power to the module.

Also, 4069929 and 4069939 should be used in instances when it is discovered that previous repairs made at a different dealer, have included a replacement of a particular module and the set-up of that module was not completed.

Example: A customer brings in their vehicle for the complaint of the remote start not functioning. The BCM was recently replaced at a different dealership. The technician duplicates the complaint and determines that the BCM was not properly configured. The technician enables remote start and corrects the customer's concern.

When submitting 4069929 or 4069939, a full detail comment describing the corrective action that was performed, is **required** in the Correction field of the transaction.

These labor codes may NOT be used in conjunction with another labor code for the same customer concern.

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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