Component Procedures: Power and Ground Distribution

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Component Procedures: Power and Ground Distribution

Schematics RPO Code List (Article 13025)

RPO Option Name Country Group
AG5 ADJUSTER PASS ST-MANUAL, 2 WAY U.S.A., PR and USVI (MAH),Canada (MBC)
AH3 ADJUSTER FRT ST-MANUAL, 4 WAY, DRIVER U.S.A., PR and USVI (MAH),Canada (MBC)
AKQ ADJUSTER PASS ST-SEAT, POWER, 6 WAY, VERT, PASS U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
AMM ADJUSTER FRT ST-POWER, 6 WAY, DRIVER U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
BTV REMOTE START-ENGINE U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
CF5 ROOF-SUN, GLASS, SLIDING, ELEC U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
CONVERTIBLE CONVERTIBLE U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
COUPE COUPE U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
DAZ MIRROR O/S-LH and RH, REMOTE CONTROL, ELECTRIC, HEATED, LT SENSITIVE LH SIDE ONLY, ECE China Group (MAO),Japan (MAS),Korea (MAW),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
DBW MIRROR I/S R/V-TILT, VEH COMMUNICATION SYS CONT (DO NOT USE AFTER M.Y. 2015) U.S.A., PR and USVI (MAH),Canada (MBC)
DBX MIRROR I/S R/V-LT SENSITIVE, VEH COMMUNICATION SYS CONT (DO NOT USE AFTER M.Y. 2015) U.S.A., PR and USVI (MAH),Canada (MBC),China Group (MAO)
DD1 MIRROR O/S-LH and RH, REMOTE CONTROL, ELECTRIC, HEATED, LT SENSITIVE LH SIDE ONLY U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Brasil/Paraguay (MDV),S America2 - Andean (MAY)
DD8 MIRROR I/S R/V-LT SENSITIVE Mexico (MCX),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
F55 CHASSIS-CONTINOUSLY VARIABLE REAL TIME DAMPING MAGNETO RHEOLOGICAL U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),S America2 - Andean (MAY)
KA1 HEATER SEAT FRT-DRVR and PASS U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
L99 ENGINE-GAS, 8 CYL, 6.2L, SFI, ALUM, GM U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Japan (MAS),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
LFX ENGINE-GAS, 6 CYL, 3.6L, SIDI, DOHC, VVT, E85 MAX, ALUM, GM U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),S America2 - Andean (MAY),All Europe (MAE)
LS3 ENGINE-GAS, 8 CYL, 6.2L, SFI, ALUM, HO, GM U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),S America2 - Andean (MAY),All Europe (MAE)
LSA ENGINE-GAS, 8 CYL, 6.2L, SFI, ER, ALUM, INTR CLR SC, GM U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),S America2 - Andean (MAY)
M10 TRANSMISSION-MAN 6 SPD, TREMEC, 85MM, 3.01 1ST, 0.84 5TH, 0.57 6TH, O/D U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),S America2 - Andean (MAY),All Europe (MAE)
MG9 TRANSMISSION-MAN 6 SPD, TREMEC, 85MM, 2.66 1ST, 0.63 6TH. U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),S America2 - Andean (MAY)
MM6 TRANSMISSION-MAN 6 SPD, TREMEC, 85MM, 2.66 1ST, 0.50 6TH, O/D U.S.A., PR and USVI (MAH),Canada (MBC)
MN6 MERCHANDISED TRANS-MAN 6 SPD PROVISIONS U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),S America2 - Andean (MAY),All Europe (MAE)
MV5 TRANSMISSION-MAN 6 SPD, AISIN, 85MM, 4.475 1ST, 0.752 6TH, O/D U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),S America2 - Andean (MAY)
MX0 MERCHANDISED TRANS-AUTO PROVISIONS, O/D U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
MYB TRANSMISSION-AUTO 6 SPD, 6L50 U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),S America2 - Andean (MAY),All Europe (MAE)
MYC TRANSMISSION-AUTO 6 SPD, HMD, 6L80 U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Japan (MAS),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)

MYD TRANSMISSION-AUTO 6 SPD, HMD, 6L90 U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),S America2 - Andean (MAY)
NPP EXHAUST SYSTEM-PERFORMANCE U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),S America2 - Andean (MAY)
NV9 STEERING-POWER, VARIABLE, ELECTRIC U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Japan (MAS),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
SRK MODEL CONVERSION-CHEVROLET 2LT U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),S America2 - Andean (MAY),All Europe (MAE)
SRM MODEL CONVERSION-CHEVROLET 2SS U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Japan (MAS),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
T3U LAMP FRT FOG-FRT FOG U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY)
T4A HEADLAMPS-HALOGEN U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY)
T4F HEADLAMPS-HIGH INTENSITY DISCHARGE U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
T79 LAMP-FOG, RR China Group (MAO),Japan (MAS),Korea (MAW),Argentina/Uruguay (MCO),All Europe (MAE)
T90 LAMP-SIGNALING and MARKER, EXPORT China Group (MAO),Japan (MAS),Korea (MAW),Argentina/Uruguay (MCO),All Europe (MAE)
TR7 CONTROL, HEADLAMPS-LEVELING SYSTEM, AUTOMATIC China Group (MAO),Japan (MAS),Korea (MAW),Argentina/Uruguay (MCO),All Europe (MAE)
UB3 ANTENNA-FIXED, RR SPOILER, RADIO U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Japan (MAS),Mid-East (MAM),S America2 - Andean (MAY),All Europe (MAE)
UD7 PARK ASSIST-REAR U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
UDY INFOTAINMENT DISPLAY-COLOR INFO DISPLAY (CID) 7", WVGA, TOUCH SCREEN U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
UE1 COMMUNICATION SYSTEM-VEHICLE, ONSTAR U.S.A., PR and USVI (MAH),Canada (MBC),China Group (MAO)
UG1 OPENER-GARAGE DOOR, UNIVERSAL U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),S America2 - Andean (MAY)
UG7 THEFT DETERENT-VEHICLE TRACKING AND RESTART PREVENTION Brasil/Paraguay (MDV)
UHQ RADIO-AM/FM STEREO, SINGLE CD, MP3 (AUX IN), USB, NAVIGATION (GMNA VERSION) U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX)
UMQ GAGE-AUXILARY, MULTIFUNCTION U.S.A., PR and USVI (MAH)
UPF WIRELESS INTERFACE-SHORT RANGE, VOICE REC U.S.A., PR and USVI (MAH),Canada (MBC),China Group (MAO)
UPH WIRELESS INTERFACE-SHORT RANGE, VOICE REC, SMS Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
UQ3 SPEAKER SYSTEM-ENHANCED AUDIO U.S.A., PR and USVI (MAH),Canada (MBC),Mid-East (MAM),S America2 - Andean (MAY)
UQA SPEAKER SYSTEM-PREMIUM AUDIO BRANDED WITH AMPLIFIER U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
UTP ALARM, HORN-CONTENT THEFT DETERENT Argentina/Uruguay (MCO),All Europe (MAE)
UV6 DISPLAY-HEAD UP U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
UVC VISION-REAR VIEW, MONO U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
UXQ GAGE-METRIC PACKAGE (METRIC ONLY) Canada (MBC),Mexico (MCX),China Group (MAO),Japan (MAS),Korea (MAW),Mid-East (MAM),Brasil/Paraguay (MDV),S America2 - Andean (MAY),Argentina/Uruguay (MCO),All Europe (MAE)
ZL1 MERCHANDISED PKG-SPECIAL PERFORMANCE U.S.A., PR and USVI (MAH),Canada (MBC),Mexico (MCX),Mid-East (MAM),S America2 - Andean (MAY)

Power Mode (Article 12883)

Figure 1: Power Moding D&O Block Diagram
Serial Data Power Mode Master
Power to many of this vehicles circuits is controlled by the module that is designated the power mode master.
This vehicles power mode master is the body control module (BCM). The BCM has multiple B+ circuits that feed

into it. Each of those circuits are partitioned within the controller to drive certain outputs of the vehicle's body functions. An open or short in any one of the B+ circuits may induce multiple codes/or a section of non-functionality within the BCM with the rest of the BCM functioning normally. In this case it is useful to refer to the power distribution schematics to determine if the non-functional partition of the controller shares a common B+ circuit. The ignition switch is a low current switch with multiple discrete ignition sw itch signals to the power mode master for determination of the power mode that will be sent over the serial data circuits to the other modules that need this information. The power mode master will also activate relays and other direct outputs of the power mode master as needed. The power mode master determines which power mode (Off, Accessory, Run, Crank Request) is required, and reports this information to other modules via serial data. Modules which have switched voltage inputs may operate in a default mode if the power mode serial data message does not match what the individual module can see from its own connections.
The power mode master receives ignition switch signals to identify the operators desired power mode. The Power Mode Parameters table below illustrates the correct state of these input parameters (circuits) in correspondence to the ignition switch position:
Ignition Switch Position Power Mode Transmitted Ign. Off/Run/Crank (Off/Run Crank Voltage Circuit) Ignition Accessory/Run (Accessory Voltage Circuit) Ignition Run/Crank (Ignition 1 Voltage Circuit)
Off Key Out Off Key Out / ACC Inactive Inactive
Off Key IN Off Key In / Off Inactive Inactive
Accessory Accessory Key Out / ACC Active Inactive
Run Run Run Active Active
Start Crank Request Crank Inactive Active
Relay Controlled Power Mode
The BCM uses the discrete ignition switch inputs Off/Run/Crank Voltage, Accessory Voltage, and Ignition 1 Voltage, to distinguish the correct power mode. The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.
The retained accessory power relay remains on for a timed period after the Ignition key is removed. Refer to Retained Accessory Power Description and Operation for more information on the retained accessory power function.
Battery Saver Mode (Transport Mode) (If Equipped)
The battery saver mode (transport mode) reduces the parasitic load of some modules during overseas shipment or during vehicle storage conditions. This improves the drain time on the battery (up to 70 days without the battery going dead). When the vehicle is in transport/storage, some features may have reduced functionality while in the battery saver mode (transport mode), such as disabling the Remote Function Actuator or content theft features.
The battery saver mode (transport mode) incorporates a latching relay that when enabled disconnects some modules from their ignition power or memory power sources. Battery saver mode (transport mode) is initiated by turning on the hazard flashers and then turning the ignition key into the crank position or pushing the push button start switch (if equipped) for greater than 15 seconds. The mode is disengaged by repeating the previous process causing the relay to latch in the other direction. After battery saver mode (transport mode) has been enabled, the BCM may not send the command to unlatch the relay until after the ignition has been switched to the off position for up to 1 minute. In battery saver mode (transport mode) the BCM will send a command to latch the relay for operation of those modules while the ignition is in the run position and then again unlatching the relay after the ignition is turned off. The DIC (if equipped) will display Transport Mode is On when the transport mode is enabled and Transport Mode is Off when the transport mode is disabled. For vehicles not equipped with a DIC, the battery indicator light will constantly flash on the Instrument Cluster when transport mode is enabled. Once the vehicle is running and the hazard flashers are on, turning the ignition key into the crank position or pushing the push button start switch (if equipped) for greater than 15 seconds will latch the relay in the other direction. This feature can be used as many times as necessary if the vehicle is to be stored for an extended period of time.
BCM Awake/Sleep States
The BCM is able to control or perform all of the BCM functions in the awake state. The BCM enters the sleep state when active control or normal monitoring of system functions has stopped and a time limit has passed. The BCM must detect certain wake-up inputs before entering the awake state. The BCM monitors for these inputs during the sleep state.
The BCM will enter the awake state if any of the following wake-up inputs are detected:
- Activity on the serial data line
- Detection of a battery reconnect
- Any door open signal
- Headlamps ON
- Key-in-ignition

- Ignition ON
- Park lamps ON
- Keyless entry or remote start message

The BCM will enter a sleep state when all of the following conditions exist:

- The ignition switch is OFF, key out.
- No activity exists on the serial data line.
- No outputs are commanded.
- No delay timers are actively counting.
- No wake-up inputs are present.

If all these conditions are met, the BCM will enter a low power or sleep condition.

Retained Accessory Power (Article 12884)

Figure 1: RAP Description and Operation Block Diagram

Retained Accessory Power

The body control module (BCM) monitors the ignition switch position, battery condition, and each door ajar/open switch status to determine whether the retained accessory power should be initiated or terminated. Retained accessory power is controlled by two different methods; relay control and serial data. Some modules receive a retained accessory power message from the BCM over the serial data circuits. Serial data controlled retained accessory power is deactivated as required by their modules retained accessory power mode operation. Other subsystems are activated directly by the BCM through a relay. Components and systems that are active in retained accessory power are also activated anytime the ignition is any position other than OFF regardless of the door switch signals.

Relay Controlled Retained Accessory Power

The BCM keeps the relay energized during all power modes, except Off-Awake and Crank. The relay is also energized for approximately 10 minutes after shutting the ignition OFF and removing the key , providing no door is opened.

Relay controlled retained accessory power will end when one of the following conditions is met:

- The BCM receives an input from any door ajar or open switch indicating the opening of any door after the ignition key is out of the ignition.
- The BCM internal timer for the retained accessory power expires after approximately 10 minutes.
- The BCM detects a decrease in battery capacity below a prescribed limit.

Systems powered by the retained accessory power relay during the retained accessory power mode are as follows:

- Accessory Power Receptacle
- Cigarette Lighter Receptacle
- Window Switches
- Sunroof Control Module
- Sunroof Switch
- Mobile Device Wireless Charger Module
- Mobile Telephone Control Module
- Traffic Data Receiver
- Transmission Shift Lever Position Indicator (w/floor mounted console gear shift)
- Seat Heating Control Module

Serial Data Controlled Retained Accessory Power

Retained accessory power systems controlled by serial data are as follows:

Radio

Europe With Push Button Start

The Radio may Turn off When the ignition is in the OFF mode.

Europe Without Push Button Start

The Radio may turn off when the key is removed from the ignition.

With UYE Except Europe

Radio retained accessory power activation/termination is the same as relay operation.

Without UYE Except Europe

Radio retained accessory power activation / termination is the same as relay operation with one exception; the only door switch that will turn off the radio during retained accessory power is the driver door open switch.

Vehicle Communication Interface Module (VCIM) (Onstar®) (If Equipped)

VCIM RAP activation/termination is the same as radio operation with 1 exception; if there is an active call when the ignition key is turned off the VCIM will remain in RAP mode, and keep the radio in RAP mode until the call is terminated.

Electrical Center Identification Views (Article 12864)

Figure 1: X50A Fuse Block - Underhood Label (North America)
Figure 2: X50A Fuse Block - Underhood Label (except North America)
Figure 3: X50A Fuse Block - Underhood Top View (North America)
Figure 4: X50A Fuse Block - Underhood Top View (except North America)
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Figure 6: X50A Fuse Block - Underhood X1
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Figure 8: X50A Fuse Block - Underhood X3
Figure 9: X50A Fuse Block - Underhood X4
Figure 10: X51A Fuse Block - Instrument Panel Label
Figure 11: X51A Fuse Block - Instrument Panel Top View
Figure 12: X51A Fuse Block - Instrument Panel Bottom View
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Figure 14: X53A Fuse Block - Rear Body Label
Figure 15: X53A Fuse Block - Rear Body Top View
Figure 16: X53A Fuse Block - Rear Body Bottom View
Figure 17: X50D Fuse Block - Battery Top View
Figure 18: X50D Fuse Block - Battery X1
Figure 19: X50D Fuse Block - Battery X2
Figure 20: X50D Fuse Block - Battery X3

Power Distribution Schematics (Article 13023)

Figure 1: B+ Bus (1 of 2)
Figure 2: B+ Bus (2 of 2)
Figure 3: Ignition Switch
Figure 4: F2UA, F25UA, F26UA, F31UA, F32UA, F33UA, and F34UA Fuses
Figure 5: F35UA, F39UA, F40UA, F42UA, F43UA, F50UA and F51UA Fuses
Figure 6: F5UA and F11UA Fuses
Figure 7: F9UA and F10UA Fuses (LFX)
Figure 8: F7UA and F8UA Fuses
Figure 9: F9UA and F10UA Fuses (L99/LS3/LSA)
Figure 10: F14UA, F15UA, F16UA, F17UA, and F18UA Fuses
Figure 11: F19UA, and F20UA Fuses
Figure 12: F27UA, F38UA, F46UA, F47UA, F55UA, F56UA, and F61UA Fuses
Figure 13: F2DA, F3DA, F4DA, F5DA, F17DA, F18DA, F23DA, and F24DA Fuses
Figure 14: F6DA, F15DA, F16DA, F25DA, F27DA, F28DA, F29DA, F30DA Fuses and CB7DA, CB26DA Circuit Breakers
Figure 15: F8DA, F13DA, F14DA, and F19DA Fuses
Figure 16: F1RA, F2RA, F3RA, F7RA, and F8RA Fuses
Figure 17: F4RA, F5RA, F10RA, F11RA, and F12RA Fuses

Power Moding Schematics (Article 13024)

Figure 1: Power Moding

Ignition Lock Schematics (Article 13021)

Figure 1: Ignition Lock

Ground Distribution Schematics (Article 13018)

Figure 1: G101
Figure 2: G102
Figure 3: G104, G105 and G401
Figure 4: G103 and G106
Figure 5: G107, G108, and G109
Figure 6: G201
Figure 7: G202 and G203
Figure 8: G204
Figure 9: G205
Figure 10: G206 and G301
Figure 11: G402, G403, and G404

Ground Distribution (Article 10299)

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Power Distribution (Article 11155)

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Wiring Systems and Power Management - Fastener Specifications (Article 13028)

Application Specification
Metric English
Accessory Wiring Junction Block Cover Retainer Tab 7 Nm 62 lb in
Accessory Wiring Junction Block Harness Connector Bolt 10 Nm 89 lb in
Accessory Wiring Junction Block Retainer Base Bolt 20 Nm 15 lb ft
Battery Cable Nut 7 Nm 62 lb in
Ground Fastener M6 Nut 9 Nm 80 lb in
Ground Fastener M6 Nut – Repair 8 Nm 71 lb in
Ground Fastener M7 Bolt 9 Nm 80 lb in
Ground Fastener M8 Nut 22 Nm 16 lb ft
Ground Fastener M10 Nut 45 Nm 33 lb ft
Ignition and Start Switch Bolt 2 Nm 18 lb in
Ignition and Start Switch Housing Bolt 8 Nm 71 lb in

All New Technical Service Bulletins (itype_432)

Tsbs
- Information for Electrical Ground Repair – Use New Replacement Fasteners with Conductive Finish (10-08-45-001I, 2026/01/07)
- Information on Reflective High Temperature Heat and/or Insulating Tape for Wiring Harness Repairs (25-NA-087, 2025/04/03)
- J-35616-64B Or EL-35616-58 Terminal Test Probe Information/Repair (PIT5074S, 2025/07/16)

All Technical Service Bulletins (itype_100)

Tsbs
- Accessory Power Outlet and Trailer Lighting Fuse Replacement Labor Operation N1720 Fuse Replacement (12-08-132-001E, 2018/04/20)
- Electrical - Proper Ground Terminal Repair Information (PI1235, 2014/05/13)
- Information for Electrical Ground Repair – Use New Replacement Fasteners with Conductive Finish (10-08-45-001I, 2026/01/07)
- Lighting - Door/IP Accent Lighting Inop/Loses Intensity (09-08-42-005E, 2015/02/13)
- Intermittent Malfunction Indicator Lamp (MIL) Illuminated, DTC P2138 with Reduced Engine Power (07-06-04-019G, 2021/12/08)
- Information on Reflective High Temperature Heat and/or Insulating Tape for Wiring Harness Repairs (25-NA-087, 2025/04/03)
- GM Wiring Repair Strategy Information (13-00-89-008B, 2019/08/19)
- Tire Monitor System - TPMS Lamp On, No Tire Pressures Displayed (PI1241, 2014/05/16)
- Diagnostic Tip: EL-51578 MOST Bus Diagnostic Tool Kit (PIC6073E, 2018/12/17)
- J-35616-64B Or EL-35616-58 Terminal Test Probe Information/Repair (PIT5074S, 2025/07/16)
- Prior To Any Circuit Testing (PIP5094A, 2016/06/14)
- Engine Controls - P00C6, P228C Diagnostic Assistance (PIP5209A, 2014/08/18)

Customer Interest Bulletins (itype_109)

Tsbs
- Lighting - Door/IP Accent Lighting Inop/Loses Intensity (09-08-42-005E, 2015/02/13)

Repair Tips (itype_110)

Tsbs
- Electrical - Proper Ground Terminal Repair Information (PI1235, 2014/05/13)
- Tire Monitor System - TPMS Lamp On, No Tire Pressures Displayed (PI1241, 2014/05/16)
- Engine Controls - P00C6, P228C Diagnostic Assistance (PIP5209A, 2014/08/18)

General Electrical Diagnostic Procedures (Article 12928)

Non Standards
- Symptoms - Wiring Systems (12942)
- Ignition Can/Cannot Be Turned Off w/ Transmission in Any Gear (12929)
- Power Mode Mismatch (12936)
- Retained Accessory Power Malfunction (12938)
- Vehicle Will Not Change Power Mode (12960)
- Testing Ground and Low Reference Circuits (12955)
- Circuit Testing (12944)
- Ignition Key Cannot Be Inserted, Rotated, or Removed from the Ignition Lock Cylinder (12930)

Wiring Systems and Power Management - Special Tools (Article 13027)

Illustration Tool Number / Description
Click for full-size image EL-38125-5A J-38125-5A Ultra Torch
Click for full-size image EL-25070 J-25070 Heat Gun 500–700 F
Click for full-size image EL-35616 KM-609 Tyco Electronic Tool (5–1579007–3) Terminal Test Probe Kit
Click for full-size image EL-35616-200 KM-J-34142–B Test Light– Probe Kit
Click for full-size image EL-35616-20F KM-963 Fused Jumper Wire
Click for full-size image EL-38125–EU (Europe) J-38125-8 (North America Only) EL-38125–10 (Non-North America/Non Europe) Splice Sleeve Crimp Tool
Click for full-size image EL-38125-550 (North America Only) Terminal Release Tool Kit
Click for full-size image EL-38125-580 (Non-North America) Terminal Release Tool Kit
Click for full-size image EL-39200-B Digital Multimeter
Click for full-size image EL-42759 Ignition Switch Connector Release Tool
Click for full-size image EL-43244 Relay Puller Pliers
Click for full-size image EL-47955 J-2534 Multi Diagnostic Interface (MDI)
Click for full-size image EL-50040 (Holden Only) Crimping Tool Kit
Click for full-size image EL-52100 Multi Diagnostic Interface 2 (MDI 2)

Erratic Operation (itype_132)

Tsbs
- Lighting - Door/IP Accent Lighting Inop/Loses Intensity (09-08-42-005E, 2015/02/13)

Inoperative (itype_148)

Tsbs
- Lighting - Door/IP Accent Lighting Inop/Loses Intensity (09-08-42-005E, 2015/02/13)

Miscellaneous Information (itype_111)

Tsbs
- Accessory Power Outlet and Trailer Lighting Fuse Replacement Labor Operation N1720 Fuse Replacement (12-08-132-001E, 2018/04/20)

OEM Policies and Procedures (itype_120)

Tsbs
- Information for Electrical Ground Repair – Use New Replacement Fasteners with Conductive Finish (10-08-45-001I, 2026/01/07)
- Information on Reflective High Temperature Heat and/or Insulating Tape for Wiring Harness Repairs (25-NA-087, 2025/04/03)
- GM Wiring Repair Strategy Information (13-00-89-008B, 2019/08/19)
- Prior To Any Circuit Testing (PIP5094A, 2016/06/14)

Tools and Equipment (itype_113)

Tsbs

- Diagnostic Tip: EL-51578 MOST Bus Diagnostic Tool Kit (PIC6073E, 2018/12/17)