2004 ACCESSORIES & EQUIPMENT

Wiring Systems - Corvette

DIAGNOSTIC INFORMATION AND PROCEDURES

PASSENGER CAR ZONING

All grounds, in-line connectors, pass-through grommets, and splices have identifying numbers that correspond to where they are located in the vehicle. The following table explains the numbering system.



Fig. 1: Passenger Car Zoning Component View Courtesy of GENERAL MOTORS CORP.

Vehicle Zoning Table

Callout		
Numbers	Zone Description	
100-199	Engine compartment- All forward of the dash panel	
	Note: 001-099 are additional for the engine compartment - ONLY to be used if all 100-	
	199 items are used	
200-299	Within the instrument panel area	
300-399	Passenger compartment - From the instrument panel to the rear wheelhouse	
400-499	Luggage compartment - From the rear wheelhouse to the rear of the vehicle	

500-599	Within the left front door
600-699	Within the right front door
700-799	Within the left rear door
800-899	Within the right rear door
900-999	Within the luggage compartment lid or hatch

ELECTRICAL SYMBOLS

Electrical Symbols

Symbol	Description
	Supplemental Inflatable Restraint (SIR) or Supplemental Restraint System (SRS) Icon This icon is used to alert the technician that the system contains SIR/SRS components that require certain precautions before servicing.
OBD II	On-Board Diagnostic (OBD II) Icon This icon is used to alert the technician that the circuit is essential for proper OBD II emission controls circuit operation. Any circuit which, if it fails, causes the malfunction indicator lamp (MIL) to turn on, is identified as an OBD II circuit.
	Important Icon This icon is used to alert the technician that there is additional information





























M	Motor
3	Solenoid





GENERAL ELECTRICAL DIAGNOSIS PROCEDURES

Basic Knowledge Required

Without a basic knowledge of electricity, it will be difficult to use the diagnostic procedures contained in the service manual. You should understand the basic theory of electricity, and know the meaning of voltage (volts), current (amps), and resistance (ohms). You should also be able to read and understand a wiring diagram, as well as understand what happens in a circuit with an open or a shorted wire.

CHECKING AFTERMARKET ACCESSORIES

Do not connect aftermarket accessories into the following circuits:

CAUTION: Refer to <u>SIR Caution</u> in Cautions and Notices.

• SIR circuits, all such circuits are indicated on circuit diagrams with the SIR symbol.

NOTE: Refer to OBD II Symbol Description Notice in Cautions and Notices.

• OBD II circuits, all such circuits are indicated on circuit diagrams with the OBD II symbol.

Always check for aftermarket accessories (non-OEM) as the first step in diagnosing electrical problems. If the vehicle is so equipped, disconnect the system to verify that these add-on accessories are not the cause of the problems.

Possible causes of vehicle problems related to aftermarket accessories include:

- Power feeds connected to points other than the battery
- Antenna location
- Transceiver wiring located too close to vehicle electronic modules or wiring
- Poor shielding or poor connectors on antenna feed line
- Check for recent service bulletins detailing installation guidelines for aftermarket accessories.

CIRCUIT TESTING

The Circuit Testing section contains the following diagnostic testing information. Using this information along with the diagnostic procedures will identify the cause of the electrical malfunction.

- <u>Using Connector Test Adapters</u>
- Probing Electrical Connectors
- <u>Troubleshooting with a Digital Multimeter</u>
- Troubleshooting with a Test Lamp
- Using Fused Jumper Wires
- Measuring Voltage
- <u>Measuring Voltage Drop</u>
- Measuring Frequency
- Testing for Continuity
- Testing for Short to Ground
- <u>Testing for a Short to Voltage</u>

USING CONNECTOR TEST ADAPTERS

NOTE: Do not insert test equipment probes (DVOM etc.) into any connector or fuse block terminal. The diameter of the test probes will deform most terminals. A deformed terminal will cause a poor connection, which will result in a system failure. Always use the J-35616 GM-Approved Terminal Test Kit or the J 42675 Flat-Wire Probe Adapter in order to front probe terminals. Do not use paper clips or other substitutes to probe terminals.

> When using the J-35616 GM-Approved Terminal Test Kit, ensure the terminal test adapter choice is the correct size for the connector terminal. Do not visually choose the terminal test adapter because some connector terminal cavities may appear larger than the actual terminal in the cavity. Using a larger terminal test adapter will damage the terminal. Refer to the J-35616 GM-Approved Terminal Test Kit label on the inside of the J-35616 GM-Approved Terminal Test Kit for the correct adapter along with the connector end view for terminal size.

PROBING ELECTRICAL CONNECTORS

IMPORTANT: Always be sure to reinstall the connector position assurance (CPA) and terminal position assurance (TPA) when reconnecting connectors or replacing terminals.

Frontprobe

Disconnect the connector and probe the terminals from the mating side (front) of the connector.

Do not insert test equipment probes (DVOM etc.) into any connector or fuse NOTE: block terminal. The diameter of the test probes will deform most terminals. A deformed terminal will cause a poor connection, which will result in a system failure. Always use the J-35616 GM-Approved Terminal Test Kit or the J 42675 Flat-Wire Probe Adapter in order to front probe terminals. Do not use paper clips or other substitutes to probe terminals.

> When using the J-35616 GM-Approved Terminal Test Kit, ensure the terminal test adapter choice is the correct size for the connector terminal. Do not visually choose the terminal test adapter because some connector terminal cavities may appear larger than the actual terminal in the cavity. Using a larger terminal test adapter will damage the terminal. Refer to the J-35616 GM-Approved Terminal Test Kit label on the inside of the J-35616 GM-Approved Terminal Test Kit for the correct adapter along with the connector end view for terminal size.

Refer to the following table as a guide in selecting the correct test adapter for frontprobing connectors:

Probing Electrical Connectors		
Test Adapter	Description	

J-35616-64	Male .64 Series Connector (lt blue)
J-35616-65	Female .64 Series Connector (It blue)
J-35616-6	Male Flex MICRO-PACK Series Connector (brown)
J-35616-7	Female Flex MICRO-PACK Series Connector (brown)
J-35616-2A	Male Flex 150 Series Connector (gray)
J-35616-3	Female Flex 150 Series Connector (gray)
J-35616-4A	Male Spade 280 Series Connector (purple)
J-35616-5	Female Spade 280 Series Connector (purple)
J-35616-40	Male Flex 480 Series Connector (dk blue)
J-35616-41	Female Flex 480 Series Connector (dk blue)
J-35616-42	Male Flex 630 Series Connector (red)
J-35616-43	Female Flex 630 Series Connector (red)
J-35616-44	Male 800 Series Connector (yellow)
J-35616-45	Female 800 Series Connector (yellow)
J-35616-8	Male Weather Pack Connector (orange)
J-35616-9	Female Weather Pack Connector (orange)

Backprobe

- IMPORTANT: Backprobe connector terminals only when specifically required in diagnostic procedures.
 - Do not backprobe a sealed (Weather Pack(R)) connector, less than a 280 series Metri-Pack connector, a Micro-Pack connector, or a flat wire (dock and lock) connector.
 - Backprobing can be a source of damage to connector terminals. Use care in order to avoid deforming the terminal, either by forcing the test probe too far into the cavity or by using too large of a test probe.
 - After backprobing any connector, inspect for terminal damage. If terminal damage is suspected, test for proper terminal contact.

Do not disconnect the connector and probe the terminals from the harness side (back) of the connector.

TROUBLESHOOTING WITH A DIGITAL MULTIMETER

NOTE: Refer to Test Probe Notice in Cautions and Notices.

IMPORTANT: Circuits which include any solid state control modules, such as the PCM, should only be tested with a 10 megohm or higher impedance digital multimeter such as the J 39200.

The **J 39200** instruction manual is a good source of information and should be read thoroughly upon receipt of the DMM as well as kept on hand for future reference.

A DMM should be used instead of a test lamp in order to test for voltage in high impedance circuits. While a test lamp shows whether voltage is present, a DMM indicates how much voltage is present.

The ohmmeter function on a DMM shows how much resistance exists between 2 points along a circuit. Low resistance in a circuit means good continuity.

IMPORTANT: Disconnect the power feed from the suspect circuit when measuring resistance with a DMM. This prevents incorrect readings. DMMs apply such a small voltage to measure resistance that the presence of voltages can upset a resistance reading.

Diodes and solid state components in a circuit can cause a DMM to display a false reading. To find out if a component is affecting a measurement take a reading once, then reverse the leads and take a second reading. If the readings differ the solid state component is affecting the measurement.

Following are examples of the various methods of connecting the DMM to the circuit to be tested:

- Backprobe both ends of the connector and either hold the leads in place while manipulating the connector or tape the leads to the harness for continuous monitoring while you perform other operations or test driving. Refer to **Probing Electrical Connectors**.
- Disconnect the harness at both ends of the suspected circuit where it connects either to a component or to other harnesses.
- If the system that is being diagnosed has a specified pinout or breakout box, it may be used in order to simplify connecting the DMM to the circuit or for testing multiple circuits quickly.

TROUBLESHOOTING WITH A TEST LAMP

Tools Required

J 35616-200 12-Volt Unpowered Test Lamp

NOTE: Refer to Test Probe Notice in Cautions and Notices.

A test lamp can simply and quickly test a low impedance circuit for voltage.

The J 35616-200 is Micro-Pack compatible and comprised of a 12-volt light bulb with an attached pair of leads.

To properly operate this tool use the following procedures.

When testing for voltage:

- 1. Attach 1 lead to ground.
- 2. Touch the other lead to various points along the circuit where voltage should be present.
- 3. When the bulb illuminates, there is voltage at the point being tested.

When testing for ground:

- 1. Attach 1 lead to battery positive voltage.
- 2. Touch the other lead to various points along the circuit where ground should be present.
- 3. When the bulb illuminates, there is ground at the point being tested.

USING FUSED JUMPER WIRES

Tools Required

J 36169-A Fused Jumper Wire. See Special Tools and Equipment .

IMPORTANT: A fused jumper may not protect solid state components from being damaged.

The **J 36169-A** includes small clamp connectors that provide adaptation to most connectors without damage. See <u>Special Tools and Equipment</u>. This fused jumper wire is supplied with a 20-A fuse which may not be suitable for some circuits. Do not use a fuse with a higher rating than the fuse that protects the circuit being tested.

MEASURING VOLTAGE

NOTE: Refer to Test Probe Notice in Cautions and Notices.

The following procedure measures the voltage at a selected point in a circuit.

- 1. Disconnect the electrical harness connector for the circuit being tested, if necessary.
- 2. Enable the circuit and/or system being tested. Use the following methods:
 - Turn ON the ignition, with the engine OFF.
 - Turn ON the engine.
 - Turn ON the circuit and/or system with a scan tool in Output Controls.
 - Turn ON the switch for the circuit and/or system being tested.
- 3. Select the V (AC) or V (DC) position on the DMM.
- 4. Connect the positive lead of the DMM to the point of the circuit to be tested.
- 5. Connect the negative lead of the DMM to a good ground.
- 6. The DMM displays the voltage measured at that point.

MEASURING VOLTAGE DROP

NOTE: Refer to Test Probe Notice in Cautions and Notices.

The following procedure determines the difference in voltage potential between 2 points.



Fig. 2: Measuring Voltage Drop Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 1. Set the rotary dial of the DMM to the V (DC) position.
- 2. Connect the positive lead of the DMM to 1 point of the circuit to be tested.
- 3. Connect the negative lead of the DMM to the other point of the circuit.
- 4. Operate the circuit.
- 5. The DMM displays the difference in voltage between the 2 points.

MEASURING FREQUENCY

NOTE: Refer to Test Probe Notice in Cautions and Notices.

The following procedure determines the frequency of a signal.

IMPORTANT: Connecting the DMM to the circuit before pressing the Hz button will allow the DMM to autorange to an appropriate range.

- 1. Apply power to the circuit.
- 2. Set the rotary dial of the DMM to the V (AC) position.
- 3. Connect the positive lead of the DMM to the circuit to be tested.
- 4. Connect the negative lead of the DMM to a good ground.
- 5. Press the Hz button on the DMM.
- 6. The DMM will display the frequency measured.

TESTING FOR CONTINUITY

NOTE: Refer to Test Probe Notice in Cautions and Notices.

The following procedures verify good continuity in a circuit.

With a DMM

- 1. Set the rotary dial of the DMM to the ohm position.
- 2. Disconnect the power feed (i.e. fuse, control module) from the suspect circuit.
- 3. Disconnect the load.
- 4. Press the MIN MAX button on the DMM.
- 5. Connect one lead of the DMM to one end of the circuit to be tested.
- 6. Connect the other lead of the DMM to the other end of the circuit.
- 7. If the DMM displays low or no resistance and a tone is heard, the circuit has good continuity.

With a Test Lamp

IMPORTANT: Only use the test lamp procedure on low impedance power and ground circuits.

- 1. Remove the power feed (i.e. fuse, control module) from the suspect circuit.
- 2. Disconnect the load.
- 3. Connect 1 lead of the test lamp to 1 end of the circuit to be tested.
- 4. Connect the other lead of the test lamp to battery positive voltage.
- 5. Connect the other end of the circuit to ground.
- 6. If the test lamp illuminates (full intensity), then the circuit has good continuity.

TESTING FOR SHORT TO GROUND

NOTE: Refer to Test Probe Notice in Cautions and Notices.

The following procedures test for a short to ground in a circuit.

With a DMM

- 1. Remove the power feed (i.e. fuse, control module) from the suspect circuit.
- 2. Disconnect the load.
- 3. Set the rotary dial of the DMM to the ohm position.
- 4. Connect 1 lead of the DMM to 1 end of the circuit to be tested.
- 5. Connect the other lead of the DMM to a good ground.
- 6. If the DMM does NOT display infinite resistance (OL), there is a short to ground in the circuit.

With a Test Lamp

- 1. Remove the power feed (i.e. fuse, control module) from the suspect circuit.
- 2. Disconnect the load.
- 3. Connect 1 lead of the test lamp to battery positive voltage.
- 4. Connect the other lead of the test lamp to 1 end of the circuit to be tested.
- 5. If the test lamp illuminates, there is a short to ground in the circuit.

Fuse Powering Several Loads

- 1. Review the system schematic and locate the fuse that is open.
- 2. Open the first connector or switch leading from the fuse to each load.
- 3. Connect a DMM across the fuse terminals (be sure that the fuse is powered).
 - When the DMM displays voltage the short is in the wiring leading to the first connector or switch.
 - If the DMM does not display voltage refer to the next step.
- 4. Close each connector or switch until the DMM displays voltage in order to find which circuit is shorted.

TESTING FOR A SHORT TO VOLTAGE

NOTE: Refer to Test Probe Notice in Cautions and Notices.

The following procedure tests for a short to voltage in a circuit.

- 1. Set the rotary dial of the DMM to the V (DC) position.
- 2. Connect the positive lead of the DMM to 1 end of the circuit to be tested.
- 3. Connect the negative lead of the DMM to a good ground.
- 4. Turn ON the ignition and operate all accessories.
- 5. If the voltage measured is greater than 1 volt, there is a short to voltage in the circuit.

TESTING FOR INTERMITTENT CONDITIONS AND POOR CONNECTIONS

Tools Required

- J 35616 GM-Approved Terminal Test Kit
- J-38125 Terminal Repair Kit. See Special Tools and Equipment .
- J 42675 Flat-Wire Probe Adapter. See Special Tools and Equipment .

Most intermittent conditions are caused by faulty electrical connections or wiring. Inspect for the following items:

- Wiring broken inside the insulation
- Poor connection between the male and female terminal at a connector.
- Poor terminal to wire connection-Some conditions which fall under this description are poor crimps, poor solder joints, crimping over the wire insulation rather than the wire itself and corrosion in the wire to terminal contact area, etc.
- Wire insulation which is rubbed through-This causes an intermittent short as the bare area touches other wiring or parts of the vehicle.
- Refer to <u>Inducing Intermittent Fault Conditions</u> in order to duplicate the conditions required in order to verify the complaint.
- Refer to <u>Testing for Electrical Intermittents</u> for test procedures to detect intermittent open, high resistance, short to ground, and short to voltage conditions.
- Refer to <u>Scan Tool Snapshot Procedure</u> for advanced intermittent diagnosis.

Testing for Proper Terminal Contact

It is important to test terminal contact at the component and any inline connectors before replacing a suspect component. Mating terminals must be inspected to ensure good terminal contact. A poor connection between the male and female terminal at a connector may be the result of contamination or deformation.

Contamination may be caused by the connector halves being improperly connected. A missing or damaged connector seal, damage to the connector itself, or exposing the terminals to moisture and dirt can also cause contamination. Contamination, usually in the underhood or underbody connectors, leads to terminal corrosion, causing an open circuit or intermittently open circuit.

Deformation is caused by probing the mating side of a connector terminal without the proper adapter. Always use the **J 35616** when probing connectors. Other causes of terminal deformation are improperly joining the connector halves, or repeatedly separating and joining the connector halves. Deformation, usually to the female terminal contact tang, can result in poor terminal contact causing an open or intermittently open circuit.

Round Wire Connectors

Follow the procedure below to test terminal contact of Metri-Pack or 56 series terminals. Refer to the **J-38125** or the J 38125-4 Instruction Manual for terminal identification. See <u>Special Tools and Equipment</u>.

Follow the procedure below in order to test terminal contact.

- 1. Separate the connector halves.
- 2. Visually inspect the connector halves for contamination. Contamination may result in a white or green build-up within the connector body or between terminals. This causes high terminal resistance, intermittent contact, or an open circuit. An underhood or underbody connector that shows signs of contamination should be replaced in its entirety: terminals, seals, and connector body.
- 3. Using an equivalent male terminal from the **J-38125**, test that the retention force is significantly different between a good terminal and a suspect terminal. See <u>Special Tools and Equipment</u>. Replace the female terminal in question.

Flat Wire (Dock and Lock) Connectors

There are no serviceable parts for flat wire (dock and lock) connectors on the harness side or the component side.

Follow the procedure below in order to test terminal contact.

- 1. Remove the component in question.
- 2. Visually inspect each side of the connector for signs of contamination. Avoid touching either side of the connector as oil from your skin may be a source of contamination as well.
- 3. Visually inspect the terminal bearing surfaces of the flat wire circuits for splits, cracks, or other imperfections that could cause poor terminal contact. Visually inspect the component side connector to ensure that all of the terminals are uniform and free of damage or deformation.
- 4. Insert the appropriate adapter from the **J 42675** on the flat wire harness connector in order to test the circuit in question. See **Special Tools and Equipment**.

INDUCING INTERMITTENT FAULT CONDITIONS

In order to duplicate the customer's concern, it may be necessary to manipulate the wiring harness if the malfunction appears to be vibration related. Manipulation of a circuit can consist of a wide variety of actions, including:

- Wiggling the harness
- Disconnecting a connector and reconnecting
- Stressing the mechanical connection of a connector
- Pulling on the harness or wire in order to identify a separation/break inside the insulation
- Relocating a harness or wires

All these actions should be performed with some goal in mind. For instance, with a scan tool connected, wiggling the wires may uncover a faulty input to the control module. The snapshot option would be appropriate here. Refer to <u>Scan Tool Snapshot Procedure</u>. You may need to load the vehicle in order to duplicate the concern. This may require the use of weights, floorjacks, jackstands, frame machines, etc. In these cases you are attempting to duplicate the concern by manipulating the suspension or frame. This method is useful in finding

harnesses that are too short and their connectors pull apart enough to cause a poor connection. A DMM set to Peak Min/Max mode and connected to the suspect circuit while testing can yield desirable results. Refer to **Testing for Electrical Intermittents**.

Certainly, using the senses of sight, smell, and hearing while manipulating the circuit can provide good results as well.

There may be instances where circuit manipulation alone will not meet the required criteria for the fault condition to appear. In such cases it may be necessary to expose the suspect circuit to other conditions while manipulating the harness. Such conditions would include high moisture conditions, along with exceptionally high or low temperatures. The following discusses how to expose the circuit to these kinds of conditions.

Salt Water Spray

Some compounds possess the ability to conduct electricity when dissolved in water such as ordinary salt. By mixing table salt with water in sufficient quantities, you can enhance the conductive properties of water so that any circuit which may be sensitive to moisture will more readily fail when liberally sprayed with this mixture.

Mixing 0.35L (12 oz) of water with approximately 1 tablespoon of salt will yield a salt solution of 5 percent. Fill a normal spray bottle with this mixture. This mixture is sufficient to enhance the water's own conductivity. This may cause the circuit to fail more easily when sprayed. Once the mixture is completed, spray the suspect area liberally with the solution. Then, while monitoring either a scan tool or DMM, manipulate the harness as discussed previously.

High Temperature Conditions

Tools Required

J 25070 Heat Gun

If the complaint tends to be heat related, you can simulate the condition using the J 25070.

Using the heat gun, you can heat up the suspected area or component. Manipulate the harnesses under high temperature conditions while monitoring the scan tool or DMM to locate the fault condition.

The high temperature condition may be achieved simply by test driving the vehicle at normal operating temperature. If a heat gun is unavailable, consider this option to enhance your diagnosis. This option does not allow for the same control, however.

Low Temperature Conditions

Depending on the nature of the fault condition, placing a fan in front of the vehicle while the vehicle is in the shade can have the desired effect.

If this is unsuccessful, use local cooling treatments such as ice or a venturi type nozzle (one that provides hot or cold air). This type of tool is capable of producing air stream temperatures down to $-18^{\circ}C$ (0°F) from one end and 71°C (160°F) from the other. This is ideally suited for localized cooling needs.

Once the vehicle, component, or harness has been sufficiently cooled, manipulate the harness or components in an effort to duplicate the concern.

TESTING FOR ELECTRICAL INTERMITTENTS

Perform the following procedures while wiggling the harness from side to side. Continue this at convenient points (about 6 inches apart) while watching the test equipment.

- Testing for Short to Ground
- Testing for Continuity
- Testing for a Short to Voltage

If the fault is not identified, perform the procedure below using the MIN MAX feature on the **J 39200** DMM. This feature allows you to manipulate the circuit without having to watch the **J 39200**. The **J 39200** will generate an audible tone when a change is detected.

IMPORTANT: The J 39200 must be used in order to perform the following procedure since the J 39200 can monitor current, resistance or voltage while recording the minimum (MIN), and maximum (MAX) values measured.

- Connect the J 39200 to both sides of a suspected connector (still connected), or from one end of a suspected circuit to the other. Refer to <u>Troubleshooting with a Digital Multimeter</u> for information on connecting the J 39200 to the circuit.
- 2. Set the rotary dial of the J 39200 to the V (AC) or V (DC) position.
- 3. Press the range button of the **J 39200** in order to select the desired voltage range.
- 4. Press the MIN MAX button of the **J 39200**. The **J 39200** displays 100 ms RECORD and emits an audible tone (beep).

IMPORTANT: The 100 ms RECORD mode is the length of time an input must stay at a new value in order to record the full change.

- 5. Simulate the condition that is potentially causing the intermittent connection, either by wiggling the connections or the wiring, test driving, or performing other operations. Refer to **Inducing Intermittent Fault Conditions**.
- 6. Listen for the audible Min Max Alert which indicates that a new minimum or maximum value has been recorded.
- 7. Press the MIN MAX button once in order to display the MAX value and note the value.
- 8. Press the MIN MAX button again in order to display the MIN value and note the value.
- 9. Determine the difference between the MIN and MAX values.
 - If the variation between the recorded MIN and MAX voltage values is 1 volt or greater an intermittent open or high resistance condition exists. Repair the condition as necessary.
 - If the variation between the recorded MIN and MAX voltage values is less than 1 volt an intermittent open or high resistance condition does not exist.

SCAN TOOL SNAPSHOT PROCEDURE

Snapshot is a recording of what a control module on the vehicle was receiving for information while the snapshot is being made. A snapshot may be used to analyze the data during the time a vehicle condition is current. This allows you to concentrate on making the condition occur, rather than trying to view all the data in anticipation of the fault. The snapshot contains information around a trigger point that you have determined. Only a single data list may be recorded in each snapshot. The **Scan Tool** has the ability to store 2 snapshots. The ability to record 2 snapshots allows comparing hot versus cold and good versus bad vehicle scenarios. The snapshots are stored on a first-in, first-out basis. If a third snapshot is taken, the first snapshot stored in the memory will be lost.

Snapshots can be 1 of 2 types:

- Snapshot taken from the Snapshot menu choice
- Quick Snapshot taken from the Data Display soft key choice, does not contain DTC information

When a snapshot is taken, it is recorded on the memory card and may contain as many as 1200 frames of information. Because the snapshot is recorded onto the memory card, snapshots are not lost if the **Scan Tool** is powered down.

The snapshot replay screen has a plot soft key that can be of great value for intermittent diagnosis. The snapshot plot feature can help you to quickly determine if a sensor is outside of its expected values by plotting 3 parameters at a time. The data will be displayed both graphically and numerically showing the minimum and maximum values for all frames captured. This is helpful, especially if the fault occurs only once and does not set a DTC.

CIRCUIT PROTECTION - FUSES



Fig. 3: View Of Good Fuse & Open Terminal Identification (Melted) Fuse Courtesy of GENERAL MOTORS CORP.

The fuse is the most common method of an automotive wiring circuit protection. Whenever there is an excessive amount of current flowing through a circuit the fusible element will melt and create an open or incomplete circuit. Fuses are an one time protection device and must be replaced each time the circuit is overloaded. To determine if a fuse is open, remove the suspected fuse and examine the element in the fuse for an open (2). If not broken (1), also check for continuity using a DMM or a continuity tester. If the element is open or continuity is suspect, replace the fuse with one of equal current rating.

Tube Types		
Color		
ises		
Gray		
Violet		
Tan		
Brown		
Red		
Blue		
Yellow		
White or Natural		
Green		
Yellow		

Fuse Types

30	Light Green
40	Orange or Amber
60	Blue
50	Red

CIRCUIT PROTECTION - CIRCUIT BREAKERS

A circuit breaker is a protective device that is designed to open the circuit when a current load is in excess of the rated breaker capacity. If there is a short or other type of overload condition in the circuit, the excessive current will open the circuit between the circuit breaker terminals. Two types of circuit breakers are used.

Circuit Breaker

This type opens when excessive current passes through it for a period of time. It closes again after a few seconds, and if the cause of the high current is still present, it will open again. The circuit breaker will continue to cycle open and closed until the condition causing the high current is removed.

Positive Temperature Coefficient (PTC) Circuit Breaker

This type greatly increases its resistance when excessive current passes through it. The excessive current heats the PTC device, as the device heats its resistance increases. Eventually the resistance gets so high that the circuit is effectively open. Unlike the ordinary circuit breaker the PTC unit will not reset until the circuit is opened, by removing the voltage from its terminals. Once the voltage is removed the circuit breaker will re-close within a second or 2.

CIRCUIT PROTECTION - FUSIBLE LINKS

Fusible link is wire designed to melt and break continuity when excessive current is applied. It is often located between or near the battery and starter or electrical center. Use a continuity tester or a DMM at each end of the wire containing the fusible link in order to determine if it is broken. If broken, it must be replaced with fusible link of the same gage size.

Repairing a Fusible Link

IMPORTANT: Fusible links cut longer than 225 mm (approximately 9 in) will not provide sufficient overload protection.

Refer to Splicing Copper Wire Using Splice Clips .

WIRING REPAIRS

The Wiring Repairs section contains the following types of wiring repair information. Using these elements together will make wiring repair faster and easier:

• Circuit Protection - Fuses

- Circuit Protection Circuit Breakers
- Circuit Protection Fusible Links
- <u>Repairing Damaged Wire Insulation</u>
- Splicing Copper Wire Using Splice Clips
- Splicing Copper Wire Using Splice Sleeves
- Splicing Twisted or Shielded Cable
- <u>Splicing Inline Harness Diodes</u>
- Heated Oxygen Sensor (HO2S) Wiring Repairs
- SIR/SRS Wiring Repairs
- Flat Wire Repairs

REPAIRING DAMAGED WIRE INSULATION

If the conductive portion of the wire is not damaged, locate the problem and apply tape around the wire. If the damage is more extensive, replace the faulty segment of the wire. Refer to **Splicing Copper Wire Using Splice Clips** and follow the instruction to repair the wire.

Metric Wire Sizes (mm 2)	AWG Sizes
0.22	24
0.35	22
0.5	20
0.8	18
1.0	16
2.0	14
3.0	12
5.0	10
8.0	8
13.0	6
19.0	4
32.0	2
50.0	1/0

Wire Size Conversion

FLAT WIRE REPAIRS

NOTE: The flat wire within the flex wiring harness is not serviceable. If an open or short exists within the flex wiring harness the complete harness must be replaced.

HEATED OXYGEN SENSOR (HO2S) WIRING REPAIRS

Tools Required

J-38125 Terminal Repair Kit. See Special Tools and Equipment .

NOTE: Do not solder repairs under any circumstances as this could result in the air reference being obstructed.

If the heated oxygen sensor pigtail wiring, connector, or terminal is damaged the entire oxygen sensor assembly must be replaced. Do not attempt to repair the wiring, connector, or terminals. In order for the sensor to function properly it must have a clean air reference. This clean air reference is obtained by way of the oxygen sensor signal and heater wires. Any attempt to repair the wires, connectors or terminals could result in the obstruction of the air reference and degrade oxygen sensor performance.

The following guidelines should be used when servicing the heated oxygen sensor:

- Do not apply contact cleaner or other materials to the sensor or vehicle harness connectors. These materials may get into the sensor, causing poor performance. Also, the sensor pigtail and harness wires must not be damaged in such a way that the wires inside are exposed. This could provide a path for foreign materials to enter the sensor and cause performance problems.
- Neither the sensor nor vehicle lead wires should be bent sharply or kinked. Sharp bends, kinks, etc., could block the reference air path through the lead wire.
- Do not remove or defeat the oxygen sensor ground wire (where applicable). Vehicles that utilize the ground wire sensor may rely on this ground as the only ground contact to the sensor. Removal of the ground wire will also cause poor engine performance.
- To prevent damage due to water intrusion, be sure that the peripheral seal remains intact on the vehicle harness connector.

The engine harness may be repaired using the J-38125 . See Special Tools and Equipment .

SPLICING COPPER WIRE USING SPLICE CLIPS

IMPORTANT: When making a splice in an area that may be exposed to moisture use a crimp and seal splice sleeve instead of a Splice Clip. Refer to <u>Splicing Copper Wire</u> <u>Using Splice Sleeves</u>

Tools Required

J-38125 Terminal Repair Kit. See Special Tools and Equipment .

- 1. Open the harness.
 - If the harness is taped, remove the tape.
 - To avoid wiring insulation damage, use a sewing ripper in order to cut open the harness.
 - If the harness has a black plastic conduit, pull out the desired wire.
- 2. Cut the wire.
 - Cut as little wire off the harness as possible.
 - Ensure that each splice is at least 40 mm (1.5 in) away from other splices, harness branches and
connectors. This helps prevent moisture from bridging adjacent splices and causing damage.

- 3. Select the proper size and type of wire.
 - The wire must be of equal or greater size than the original (except fusible link).
 - The wire's insulation must have the same or higher temperature rating.
 - Use general purpose insulation for areas that are not subject to high temperatures.
 - Use a cross-linked polyethylene insulated wire for areas where high temperatures are expected.

IMPORTANT: Use cross-linked polyethylene wire to replace PVC, but do not replace cross-linked polyethylene with PVC. Cross-linked polyethylene wire is not fuel resistant. Do not use to replace wire where there is the possibility of fuel contact.

- 4. Strip the insulation.
 - Select the correct size opening in the wire stripper or work down from the largest size.
 - Strip approximately 7.5 mm (5/16 in) of insulation from each wire to be spliced.
- 5. Select the proper clip to secure the splice. Follow the instructions in the **J-38125** in order to determine the proper clip size crimp tool and anvil. See <u>Special Tools and Equipment</u>.
- 6. Overlap the 2 stripped wire ends and hold them between thumb and forefinger.



Fig. 4: Identifying Splice Clip & Stripped Wires Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 7. Center the splice clip (2) over the stripped wires (1) and hold the clip in place.
 - Ensure that the wires extend beyond the clip in each direction.
 - Ensure that no insulation is caught under the clip.



Fig. 5: Centering Crimp Tool Over Splice Clip & Wires Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 8. Center the crimp tool over the splice clip and wires.
- 9. Apply steady pressure until the crimp tool closes.

Ensure that no strands of wire are cut.



Fig. 6: Crimping Splice Clip & Wires Terminal Identification Courtesy of GENERAL MOTORS CORP.

10. Crimp the splice on each end (2).



Fig. 7: Applying Solder To Back Of Clip Opening Terminal Identification Courtesy of GENERAL MOTORS CORP.

11. Apply 60/40 rosin core solder to the opening in the back of the clip. Follow the manufacturer's instructions for the solder equipment.



Fig. 8: Applying Electrical Tape Terminal Identification Courtesy of GENERAL MOTORS CORP.

12. Tape the splice. Roll on enough tape in order to duplicate the thickness of the insulation on the existing wires.



Fig. 9: Additional Splice Taping Terminal Identification Courtesy of GENERAL MOTORS CORP. 13. Additional tape can be applied to the wire if the wire does not belong in a conduit or another harness covering. Use a winding motion in order to cover the first piece of tape.

SPLICING COPPER WIRE USING SPLICE SLEEVES

Tools Required

J-38125 Terminal Repair Kit. See Special Tools and Equipment .

IMPORTANT: Use only duraseal splice sleeves, other splice sleeves may not protect the splice from moisture or provide a good electrical connection.

Use duraseal splice sleeves to form a one-to-one splice on all types of insulation except tefzel and coaxial. Use duraseal splice sleeves where there is special requirements such as moisture sealing. Follow the instructions below in order to splice copper wire using duraseal splice sleeves.

Splicing Copper Wire Using Splice Sleeves

Splice Sleeve Color	Crimp Tool Nest Color	Wire Gage AWG/(Metric)
Salmon 12089189	Red	20,18 / (0.5, 0.8)
Blue 12089190	Blue	16, 14 / (1.0, 2.0)
Yellow 12089191	Yellow	12, 10 / (3.0, 5.0)

1. Open the harness.

- If the harness is taped, remove the tape.
- To avoid wiring insulation damage, use a sewing ripper in order to cut open the harness.
- If the harness has a black plastic conduit, pull out the desired wire.
- 2. Cut the wire.
 - Cut as little wire off the harness as possible.
 - Ensure that each splice is at least 40 mm (1.5 in) away from other splices, harness branches and connectors. This helps prevent moisture from bridging adjacent splices and causing damage.





Fig. 10: Proper Crimping Of Solderless Connector Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 3. Select the proper size and type of wire.
 - The wire must be of equal or greater size than the original.
 - The wires insulation must have the same or higher temperature rating (4).
 - Use general purpose insulation for areas that are not subject to high temperatures.
 - Use a cross-linked polyethylene insulated wire for areas where high temperatures are expected.

IMPORTANT: Use cross-linked polyethylene wire to replace PVC, but do not replace cross-linked polyethylene with PVC. Cross-linked polyethylene wire is not fuel resistant. Do not use to replace wire where there is the possibility of fuel contact.

- 4. Strip the insulation.
 - Select the correct size opening in the wire stripper or work down from the largest size.
 - Strip approximately 7.5 mm (5/16 in) of insulation from each wire to be spliced (1).
- 5. Select the proper duraseal splice sleeve (2) and the required crimp nest tool, refer to the Crimp and Seal Splice Table.
- 6. Place the duraseal splice sleeve in the J-38125-8 (12085115) crimp tool nest so that the crimp falls at point 1 on the splice.
- 7. Close the hand crimper handles slightly in order to hold the duraseal splice sleeve firmly in the proper crimp tool nest.
- 8. Insert the wires into the duraseal splice sleeve until the wire hits the barrel stop. The splice sleeve has a stop in the middle of the barrel in order to prevent the wire from passing through the splice (3).
- 9. Close the handles of the J-38125-8 (12085115) until the crimper handles open when released. The crimper handles will not open until the proper amount of pressure is applied to the splice sleeve.
- 10. Shrink the insulation around the splice.
 - Using the heat torch apply heat to the crimped area of the barrel.
 - Gradually move the heat barrel to the open end of the tubing.
 - The tubing will shrink completely as the heat is moved along the insulation.
 - A small amount of sealant will come out of the end of the tubing when sufficient shrinkage is achieved.

SPLICING TWISTED OR SHIELDED CABLE

Twisted/shielded cable is used in order to protect wiring from electrical noise. Two-conductor cable of this construction is used between the radio and the Delco-Bose(R) speaker/amplifier units and other applications where low level, sensitive signals must be carried. Follow the instructions below in order to repair the twisted/shielded cable.



Fig. 11: Outer Wiring Jacket Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 1. Remove the outer jacket (1). Use care not to cut into the drain wire of the mylar tape.
- 2. Unwrap the tape. Do not remove the tape. Use the tape in order to rewrap the twisted conductors after the splice is made.



Fig. 12: Inspecting Wiring Connections Terminal Identification Courtesy of GENERAL MOTORS CORP.

3. Prepare the splice. Untwist the conductors and follow the splicing instructions for copper wire. Staggering the splices by 65 mm (2.5 in) is recommended.

IMPORTANT: Apply the mylar tape with the aluminum side inward. This ensures good

electrical contact with the drain wire.



Fig. 13: View Of Diode On Wire Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 4. Re-assemble the cable.
 - Rewrap the conductors with the mylar tape.
 - Use caution not to wrap the drain wire in the tape (1).
 - Follow the splicing instructions for copper wire and splice the drain wire.
 - Wrap the drain wire around the conductors and tape with mylar tape.



Fig. 14: Repaired Wire Covered With Electrical Tape Terminal Identification Courtesy of GENERAL MOTORS CORP.

5. Tape over the entire cable. Use a winding motion when you apply the tape.

SPLICING INLINE HARNESS DIODES

Many vehicle electrical systems use a diode to isolate circuits and protect the components from voltage spikes.

When installing a new diode use the following procedure.

- 1. Open the harness.
 - If the harness is taped, remove the tape.
 - To avoid wiring insulation damage, use a sewing ripper in order to cut open the harness.
 - If the harness has a black plastic conduit, pull out the diode.
- 2. If the diode is taped to the harness, remove all of the tape.
- 3. Check and record the current flow direction and orientation of diode.
- 4. Remove the inoperative diode from the harness with a suitable soldering tool.

IMPORTANT: If the diode is located next to a connector terminal remove the terminal(s) from the connector to prevent damage from the soldering tool.

- 5. Carefully strip away a section of insulation next to the old soldered portion of the wire(s). Do not remove any more than is needed to attach the new diode.
- 6. Check current flow direction of the new diode, being sure to install the diode with correct bias. Reference the appropriate service manual wiring schematic to obtain the correct diode installation position.
- 7. Attach the new diode to the wire(s) using 60/40 rosin core solder. Before soldering attach some heat sinks (aluminum alligator clips) across the diode wire ends to protect the diode from excessive heat. Follow the manufacturer's instruction for the soldering equipment.
- 8. Reinstall terminal(s) into the connector body if previously removed.

IMPORTANT: To prevent shorts to ground and water intrusion, completely cover all exposed wire and diode attachment points with tape.

9. Tape the diode to the harness or connector using electrical tape.

SIR/SRS WIRING REPAIRS

Tools Required

J-38125 Terminal Repair Kit. See Special Tools and Equipment .

The Supplemental Inflatable Restraint (SIR) System/Supplemental Restraint System (SRS) requires special wiring repair procedures due to the sensitive nature of the circuitry. Follow the specific procedures and instructions when working with the SIR/SRS system wiring, and the wiring components (such as connectors and terminals).

IMPORTANT: Do not use the terminals in the kit in order to replace damaged SIR/SRS system terminals unless specifically indicated by the terminal package.

The tool kit J-38125 contains the following items:. See Special Tools and Equipment .

- Duraseal splice sleeves-In order to repair the SIR/SRS system wiring
- A wire stripping tool
- A special crimping tool
- A heat torch
- An instruction manual

The duraseal splice sleeves have the following 2 critical features:

- A special heat shrink sleeve environmentally seals the splice. The heat shrink sleeve contains a sealing adhesive inside.
- A cross hatched (knurled) core crimp provides necessary contact integrity for the sensitive, low energy circuits.

The **J-38125** also serves as a generic terminal repair kit. See <u>Special Tools and Equipment</u>. The kit contains the following items:

- A large sampling of common electrical terminals
- The correct tools in order to attach the terminals to the wires
- The correct tools in order to remove the terminals from the connectors

SIR/SRS Connector (Plastic Body and Terminal Metal Pin) Repair

Use the connector repair assembly packs in order to repair the damaged SIR/SRS wire harness connectors and the terminals. Do not use the connector repair assembly pack in order to repair the pigtails. These kits include an instruction sheet and the duraseal splice sleeves. Use the duraseal splice sleeves in order to splice the new wires, connectors, and terminals to the harness. The splice crimping tool is color keyed in order to match the splices from the **J-38125**. See <u>Special Tools and Equipment</u>. You must use the splice crimping tool in order to apply these splices.

The terminals in the SIR/SRS system are made of a special metal. This metal provides the necessary contact integrity for the sensitive, low energy circuits. These terminals are only available in the connector repair assembly packs. Do not substitute any other terminals for those in the assembly packs.

If the individual terminals are damaged on the sensing and diagnostic module (SDM) harness connector, use one of the following 2 components in order to replace the SDM harness connector:

- The SDM harness connector pigtail assembly
- The SDM harness connector replacement kit

If the individual terminals are damaged on any other SIR/SRS connection, use the appropriate connector repair assembly pack in order to replace the entire connection. Replace the entire SIR/SRS wiring harness, if needed, in order to maintain SIR/SRS circuit integrity.

SIR/SRS Wire Pigtail Repair

IMPORTANT: Do not make wire, connector, or terminal repairs on components with wire pigtails.

A wire pigtail is a wire or wires attached directly to the device (not by a connector). If a wiring pigtail is damaged, you must replace the entire component (with pigtail). The inflatable restraint steering wheel module coil is an example of a pigtail component.

SIR/SRS Wire Repair

IMPORTANT: Refer to <u>Wiring Repairs</u> in order to determine the correct wire size for the circuit you are repairing. You must obtain this information in order to ensure circuit integrity.

If any wire except the pigtail is damaged, repair the wire by splicing in a new section of wire of the same gage size (0.5 mm, 0.8 mm, 1.0 mm etc.). Use the duraseal splice sleeves and splice crimping tool from the **J-38125**. See **Special Tools and Equipment**. Use the following wiring repair procedures in order to ensure the integrity of the duraseal splice sleeves.

Splice Sleeve Color	Crimp Tool Nest Color	Wire Gage mm ² / (AWG)
Salmon (Yellow-Pink) 12089189	Red (1)	0.035-0.8/(18-20)
Blue 12089190	Blue (2)	1-2/(14-16)
Yellow 12089191	Yellow (3)	3-5/(10-12)

SIR/SRS Wiring Repairs

IMPORTANT: You must perform the following procedures in the listed order. Repeat the procedure if any wire strands are damaged. You must obtain a clean strip with all of the wire strands intact.

- 1. Open the harness by removing any tape:
 - Use a sewing seam ripper (available from sewing supply stores) in order to cut open the harness in order to avoid wire insulation damage.
 - Use the duraseal splice sleeves on all types of insulation except tefzel and coaxial.
 - Do not use the crimp and duraseal splice sleeve to form a splice with more than 2 wires coming together.
- 2. Cut as little wire off the harness as possible. You may need the extra length of wire in order to change the location of a splice.

Adjust splice locations so that each splice is at least 40 mm (1.5 in) away from the other splices, harness branches, or connectors.

3. Strip the insulation:

- When adding a length of wire to the existing harness, use the same size wire as the original wire.
- Perform one of the following items in order to find the correct wire size:
 - Find the wire on the schematic and convert the metric size to the equivalent AWG size.
 - Use an AWG wire gage.
 - If you are unsure of the wire size, begin with the largest opening in the wire stripper and work down until achieving a clean strip of the insulation.
- Strip approximately 7.5 mm (0.313 in) of insulation from each wire to be spliced.
- Do not nick or cut any of the strands. Inspect the stripped wire for nicks or cut strands.
- If the wire is damaged, repeat this procedure after removing the damaged section.
- 4. Select the proper duraseal splice sleeve according to the wire size. Refer to the above table at the beginning of the repair procedure for the color coding of the duraseal splice sleeves and the crimp tool nests.



Fig. 15: Identifying Splice Crimp Tool Nests Terminal Identification Courtesy of GENERAL MOTORS CORP. Use the Splice Crimp Tool from the J-38125 to crimp duraseal splice sleeve. See <u>Special Tools and</u> <u>Equipment</u>. In order to position the duraseal splice sleeve in the proper color nest of the Splice Crimp Tool, refer to the table at the beginning of this repair procedure.



Fig. 16: Identifying Durasteel Splice Sleeve Terminal Identification Courtesy of GENERAL MOTORS CORP.

6. Place the duraseal splice sleeve in the nest. Ensure that the crimp falls midway between the end of the barrel and the stop. The sleeve has a stop (3) in the middle of the barrel (2) in order to prevent the wire (1) from going further. Close the hand crimper handles slightly in order to firmly hold the duraseal splice sleeve in the proper nest.



Fig. 17: Crimped Duraseal Splice Sleeve Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 7. Insert the wire into the splice sleeve barrel until the wire hits the barrel stop.
- 8. Tightly close the handles of the crimp tool until the crimper handles open when released.

The crimper handles will not open until you apply the proper amount of pressure to the duraseal splice sleeve. Repeat steps 4 and 5 for the opposite end of the splice.



Fig. 18: Identifying Heated Splice Sleeve Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 9. Using the heat torch, apply heat to the crimped area of the barrel.
- 10. Gradually move the heat barrel to the open end of the tubing:
 - The tubing will shrink completely as the heat is moved along the insulation.
 - A small amount of sealant will come out of the end of the tubing when sufficient shrinkage is achieved.

SIR/SRS System Wire Splice Repair

Apply a new splice (not sealed) from the **J-38125** if damage occurs to any of the original equipment splices (3 wires or more) in the SIR/SRS wiring harness. See **Special Tools and Equipment**. Carefully follow the

instructions included in the kit for proper splice clip application.

Connector Position Assurance (CPA)

The connector position assurance (CPA) is a small plastic insert that fits through the locking tabs of all the SIR/SRS system electrical connectors. The CPA ensures that the connector halves cannot vibrate apart. You must have the CPA in place in order to ensure good contact between the SIR/SRS mating terminals.

Terminal Position Assurance (TPA)

The terminal position assurance (TPA) insert resembles the plastic combs used in the control module connectors. The TPA keeps the terminal securely seated in the connector body. Do not remove the TPA from the connector body unless you remove a terminal for replacement.

CONNECTOR REPAIRS

The Connector Repairs section contains the following types of connector repair information. Using these elements together will make connector repair faster and easier:

- <u>Connector Position Assurance Locks</u>
- <u>Terminal Position Assurance Locks</u>
- Push to Seat Connectors
- Pull to Seat Connectors
- <u>Micro-Pack 100W Connectors</u>
- Micro .64 Connectors

CONNECTOR POSITION ASSURANCE LOCKS

The connector position assurance (CPA) is a small plastic insert that fits through the locking tabs of the connector. CPAs are used in various connectors throughout the vehicle. CPAs are also used in all SIR system electrical connectors. The CPA ensures that the connector halves cannot vibrate apart. You must have the CPA in place in order to ensure good contact between the mating terminals, of the connector.

TERMINAL POSITION ASSURANCE LOCKS

The terminal position assurance (TPA) insert resembles the plastic combs used in the control module connectors. The TPA keeps the terminal securely seated in the connector body. Do not remove the TPA from the connector body unless you remove a terminal for replacement.

PUSH TO SEAT CONNECTORS

Terminal Removal

Follow the steps below in order to repair push to seat connectors.



Fig. 19: Separating Weather Pack Connector Halves Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 1. Remove the terminal position assurance (TPA) device, the connector position assurance (CPA) device, and/or the secondary lock.
- 2. Separate the connector halves (1).



Fig. 20: Removing Cable & Terminal From Connector Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 3. Use the proper pick or removal tool (1) in order to release the terminal.
- 4. Gently pull the cable and the terminal (2) out of the back of the connector.



Fig. 21: Aligning Locking Device Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 5. Re-form the locking device if you are going to reuse the terminal (1).
- 6. To repair the terminal, refer to Terminal Repair.

Terminal Repair

- 1. Slip the cable seal away from the terminal.
- 2. Cut the wire as close to the terminal as possible.
- 3. Slip a new cable seal onto the wire.
- 4. Strip 5 mm (3/16 in) of insulation from the wire.
- 5. Crimp a new terminal to the wire.
- 6. Solder the crimp with rosin core solder.
- 7. Slide the cable seal toward the terminal.
- 8. Crimp the cable seal and the insulation.
- 9. If the connector is outside of the passenger compartment, apply grease to the connector.

Reinstalling Terminal

1. In order to reuse a terminal or lead assembly. Refer to Wiring Repairs .

- 2. Ensure that the cable seal is kept on the terminal side of the splice.
- 3. Insert the lead from the back until it catches.
- 4. Install the TPA, CPA and/or the secondary locks.

PULL TO SEAT CONNECTORS

Terminal Removal

If the terminal is visibly damaged or is suspected of having a faulty connection, the terminal should be replaced.

Follow the steps below in order to repair pull-to-seat connectors:



Fig. 22: Aligning Removal Tool Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 1. Remove the connector position assurance (CPA) device and/or the secondary lock.
- 2. Disconnect the connector from the component or separate the connectors for in-line connectors.
- 3. Remove the terminal position assurance (TPA) device.
- 4. Insert the proper pick or removal tool into the front of the connector body.

IMPORTANT: On connectors with more than one terminal the service loop may not be large enough to remove the terminal and crimp on a new one. If the terminal wire does not have a large enough service loop for removal, cut the wire 5 cm (2 in) behind the connector before removal.

5. Grasp the wire at the back of the connector body and gently push the terminal (1) out the front of the

connector body (3).

Terminal Repair

- 1. If the wire needed to be cut in order to remove the terminal, gently push a small length of the same size wire through the back of the connector cavity until there is enough wire exposed in order to crimp on a new terminal. If the wire was not cut, cut the existing wire as close to the old terminal as possible.
- 2. Strip 5 mm (3/16 in) of insulation from the wire.
- 3. Crimp a new terminal to the wire.
- 4. Solder the crimp with rosin core solder.

Terminal Installation

- 1. Align the terminal and pull the wire from the back of the connector in order to seat the terminal.
- 2. If necessary, cut the new wire to proper length and splice with existing circuit. Refer to <u>Splicing Copper</u> <u>Wire Using Splice Sleeves</u>.
- 3. If the connector is outside of the passenger compartment, apply dielectric grease to the connector.
- 4. Install the TPA, CPA and/or the secondary locks.

MICRO-PACK 100W CONNECTORS

Terminal Removal Procedure

1. Disconnect the connector from the component or separate the connector halves for in-line connectors.



Fig. 23: Locating Nose Piece Locking Tabs Terminal Identification Courtesy of GENERAL MOTORS CORP.

2. Locate the nose piece locking tabs that are positioned on the side of the connector nose piece.



Fig. 24: Pushing In Locking Tabs Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 3. Use a small flat-bladed tool to push in one of the locking tabs while gently pushing on the same side of the nose piece.
- 4. Repeat the procedure for the other locking tab and remove the nose piece.
- 5. Remove the wire dress cover. The following is a general procedure for wire dress cover removal. Use this procedure as a guide, some dress cover removal procedures may vary.



Fig. 25: Squeezing Cover Locking Legs Terminal Identification Courtesy of GENERAL MOTORS CORP.

6. Use fingers to squeeze the 2 locking legs of the cover.



Fig. 26: Unseating Locking Legs Terminal Identification Courtesy of GENERAL MOTORS CORP.

7. Apply pressure and gently rock the cover until one locking leg is unseated.



Fig. 27: Removing Wire Dress Cover Terminal Identification Courtesy of GENERAL MOTORS CORP.

8. Continue to apply pressure and rock the cover until the second locking leg is unseated. Repeat procedure for the other side of the dress cover and remove the cover.



Fig. 28: Lifting Terminal Retaining Tab Terminal Identification Courtesy of GENERAL MOTORS CORP.

9. Use J 38125-12A tool to gently lift the terminal retaining tab while gently pulling the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector. If the terminal is severely bent or damaged, push the wire out of the front of the connector instead of pulling it through. This will prevent damage to the internal seals of the connector. Once the terminal is pushed out of the connector, cut the wire as close to the terminal as possible and pull the wire through the connector.

Terminal Repair Procedure

Use the appropriate wire assembly kit available through Saturn Service Parts.

- 1. Slide the new terminal into the correct cavity at the back of the connector.
- 2. Push the terminal into the connector until it locks into place. The new terminal should be even with the other terminals. Insure that the terminal is locked in place by gently pulling on the wire.
- 3. Replace the nose piece.
- 4. Replace the dress cover.

MICRO .64 CONNECTORS

Tools Required

J-38125 Terminal Repair Kit. See Special Tools and Equipment .

Terminal Removal Procedure

Follow the steps below in order to remove terminals from Micro 64 connectors.



Fig. 29: Disengaging Lever Lock Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 1. Locate the lever lock on the wire dress cover. While depressing the lock, pull the lever over and past the lock.
- 2. Disconnect the connector from the component.



Fig. 30: Releasing Locking Tabs Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 3. Locate the dress cover locking tabs at the front of the connector. Using a small flat-blade tool push down on one of the locking tabs and pull the cover up until the dress cover releases. Repeat this procedure for the other locking tab.
- 4. Once the front 2 locks are unlocked, lift the front of the dress cover and pull it forward.



Fig. 31: Removing Nose Piece Terminal Identification Courtesy of GENERAL MOTORS CORP.

5. If the connector has a nose piece, use a small flat-blade tool to remove the nose piece by inserting the blade into the slot on the front of the connector and prying up on the nose piece.



Fig. 32: Removing Terminal Position Assurance Terminal Identification Courtesy of GENERAL MOTORS CORP.

IMPORTANT: Always use care when removing a terminal position assurance (TPA) in order to avoid damaging it.

6. Remove the TPA by inserting a small flat-blade tool into the small slot on the TPA and pushing down until the TPA releases. Gently pry the TPA out of the connector.



Fig. 33: Inserting J 38125-13A Into Terminal Cavities Canal Terminal Identification Courtesy of GENERAL MOTORS CORP.

IMPORTANT: Be careful not to angle or rock the J 38125-13A tool when inserting it into the connector or the tool may break.

7. Insert the J 38125-13A (GM P/N 12031876-1) tool into the round canal between the terminals cavities at the front of the connector. See the release tool cross reference in the Reference Guide of the Terminal Repair Kit to ensure that the correct release tool is used.



Fig. 34: Removing Wire From Back Of Connector Terminal Identification Courtesy of GENERAL MOTORS CORP.

8. While holding the removal tool in place, gently pull the wire out of the back of the connector. Always remember never use force when pulling a terminal out of a connector.

Terminal Repair Procedure

Follow the steps below in order to repair Micro 64 connector terminals.

The Micro 64 connectors have small terminals that are difficult to handle and hold when crimping. In order to aid the technician when crimping these terminals, a new crimping tool was developed. The J 38125-64 (M jaw) was developed to crimp Micro 64 terminals. The J 38125-64 crimping tool has a terminal holding block that will hold the terminal in place while the terminal is being crimped. The J 38125-64 crimping tool is also designed to crimp both the wire and the insulation at the same time.

After the terminal is removed from the connector perform the following procedure in order to repair Micro 64 terminals.

IMPORTANT: After cutting the damaged terminal from the wire, determine if the remaining

wire is long enough to reach the connector without putting a strain on the wire. If the wire is not long enough, splice a small length of the same gage wire to the existing wire, then crimp the new terminal on the added wire.

- 1. Cut the wire as close to the damaged terminal as possible.
- 2. Strip 5 mm (3/16 in) of insulation from the wire.



Fig. 35: Identifying Crimping Tool Spring Loaded Locator Terminal Identification Courtesy of GENERAL MOTORS CORP.

3. Depress the spring loaded locator of the crimping tool until the terminal holder is completely visible.


Fig. 36: Inserting Terminal Into Terminal Holder Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 4. Insert terminal into the appropriate terminal holder until it hits bottom and stops. The correct terminal holder is determined by the wire size. Also ensure that the terminals wings are pointing towards the former on the tool and the release locator.
- 5. Insert the stripped cable into the terminal. Insulation should be visible on both sides of the terminal insulation wings.
- 6. Compress the handles until the ratchet automatically releases.

7. Place the terminal into the appropriate cavity and assemble the connector.

WEATHER PACK CONNECTORS

The following is the proper procedure for the repair of Weather Pack(R) Connectors.



Fig. 37: Separating Weather Pack Connector Halves Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 1. Separate the connector halves (1).
- 2. Open the secondary lock. A secondary lock aids in terminal retention and is usually molded to the connector (1).
- 3. Grasp the wire and push the terminal to the forward most position. Hold the wire in this position.



Fig. 38: Removing Cable & Terminal From Connector Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 4. Insert the Weather Pack(R) terminal removal tool into the front (mating end) of the connector cavity until it rests on the cavity shoulder (1).
- 5. Gently pull on the wire to remove the terminal through the back of the connector (2).

IMPORTANT: Never use force to remove a terminal from a connector.

- 6. Inspect the terminal and connector for damage. Repair as necessary. Refer to <u>Repairing Connector</u> <u>Terminals</u>.
- 7. Reform the lock tang (2) and reset terminal in connector body.
- 8. Close secondary locks and join connector halves.

- 9. Verify that circuit is complete and working satisfactorily.
- 10. Perform system check.

REPAIRING CONNECTOR TERMINALS

Tools Required

J-38125 Terminal Repair Kit. See Special Tools and Equipment .

Use the following repair procedures in order to repair the following:

- Push to Seat terminals
- Pull to Seat terminals

Some terminals do not require all of the steps shown. Skip the steps that do not apply for your terminal repair. The **J-38125** contains further information. See <u>Special Tools and Equipment</u>.

1. Cut off the terminal between the core and the insulation crimp. Minimize any wire loss.

For cable seal terminals, remove the seal.

2. Apply the correct cable seal per gage size of the wire, if used.

Slide the seal back along the wire in order to enable insulation removal.

- 3. Remove the insulation.
- 4. For sealed terminals only, align the seal with the end of the cable insulation.
- 5. Position the strip in the terminal.

For sealed terminals, position the strip and seal in the terminal.

- 6. Hand crimp the core wings.
- 7. Hand crimp the insulation wings.

For sealed terminals, hand crimp the insulation wings around the seal and the cable.

8. Solder all of the hand crimp terminals excepting Micro-Pack 100 .64 size. Soldering Micro-Pack 100 World terminals may damage the terminal.

SCHEMATIC AND ROUTING DIAGRAMS

POWER AND GROUNDING SCHEMATIC ICONS

Power and Grounding Schematic Icons

Icon	Icon Definition
	Resistance wire with a stainless steel core. Approximately 6.6 ohm of resistance per meter (21.7 Feet).
	CAUTION: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

POWER DISTRIBUTION SCHEMATICS



Fig. 39: Fuse Block Schematic - Underhood Bussing (1 of 2) Courtesy of GENERAL MOTORS CORP.



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Fig. 41: Fuse Block Schematic - I/P Bussing (1 of 2)

Courtesy of GENERAL MOTORS CORP.



Fig. 42: Fuse Block Schematic - I/P Bussing (2 of 2) Courtesy of GENERAL MOTORS CORP.



Fig. 43: Fuse Block Schematic - Underhood Fuses 52, 53, 4, 3, 23, 51, 11 And Relay 36 Courtesy of GENERAL MOTORS CORP.



Fig. 44: Fuse Block Schematic - Underhood Fuses 1, 6, 2 And Relays 37, 39, 38 And Instrument Panel Electrical Center Relays 40 And 38 Courtesy of GENERAL MOTORS CORP.



Fig. 45: Fuse Block Schematic - Underhood Fuse 19 And Relay 33 Courtesy of GENERAL MOTORS CORP.



Fig. 46: Fuse Block Schematic - Underhood Fuses 18, 17 And 22 Courtesy of GENERAL MOTORS CORP.



Fig. 47: Fuse Block Schematic - I/P Fuses 33, 34, 30, 31, 4 And Circuit Breaker 35 Courtesy of GENERAL MOTORS CORP.



Fig. 48: Fuse Block Schematic - I/P Fuses 3, 5, 24 And Circuit Breaker 36 Courtesy of GENERAL MOTORS CORP.



Fig. 49: Fuse Block Schematic - I/P Fuses 51, 27, 8, 1 And 7 Courtesy of GENERAL MOTORS CORP.



Fig. 50: Fuse Block Schematic - I/P Fuses 32, 26, 52 And Relay 39 Courtesy of GENERAL MOTORS CORP.



Fig. 51: Fuse Block Schematic - I/P Fuses 2, 25, 23 And Relay 37 Courtesy of GENERAL MOTORS CORP.



Fig. 52: Fuse Block Schematic - I/P Fuses 6, 29, Circuit Breaker 54, Relays 43, 44 And 42 Courtesy of GENERAL MOTORS CORP.



Fig. 53: Fuse Block Schematic - I/P Fuses 47, 10, 9, And 11 Courtesy of GENERAL MOTORS CORP.



Fig. 54: Fuse Block Schematic - I/P Fuses 15, 16, 13, 20 And 19 Courtesy of GENERAL MOTORS CORP.



Fig. 55: Fuse Block Schematic - I/P Fuses 50, 14, 21, 22, 18 And Relay 44 Courtesy of GENERAL MOTORS CORP.



Fig. 56: Fuse Block Schematic - Underhood Fuses 14, 13, 16, 15, 5 And Relays 43, 44, 35 And 42 Courtesy of GENERAL MOTORS CORP.

GROUND DISTRIBUTION SCHEMATICS



Fig. 57: G101 And G102 Schematic Courtesy of GENERAL MOTORS CORP.



Fig. 58: G104 Schematic Courtesy of GENERAL MOTORS CORP.



Fig. 59: G106 And G105 Schematic Courtesy of GENERAL MOTORS CORP.



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Fig. 60: G107, G108 And G103 Schematic Courtesy of GENERAL MOTORS CORP.



Fig. 61: G201 Schematic Courtesy of GENERAL MOTORS CORP.



Fig. 62: G202 Schematic Courtesy of GENERAL MOTORS CORP.



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Fig. 63: G205 Schematic Courtesy of GENERAL MOTORS CORP.



Fig. 64: G301, G402 And G302 Schematic Courtesy of GENERAL MOTORS CORP.



Fig. 65: G401 Schematic Courtesy of GENERAL MOTORS CORP.



Fig. 66: SP402 Schematic (Japan) Courtesy of GENERAL MOTORS CORP.



Fig. 67: SP402 Schematic (Europe) Courtesy of GENERAL MOTORS CORP.

HARNESS ROUTING VIEWS



Fig. 68: Front Body Harness Component View Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 68

Callout	Component Name
1	S304
2	Inline to Defogger Grid (Power)
3	Rear Compartment Courtesy Lamp - Right
4	Rear Compartment Lid Latch - Right C2
5	Remote Playback Device - CD Changer
6	Rear Compartment Courtesy Lamp - Left
7	Rear Compartment Lid Latch-Left C2
8	Rear Compartment Lid Latch-Left C1
9	Fuel Door Lock Actuator
10	Rear Compartment Lid Latch - Right C1
11	Remote Control Door Lock Receiver (RCDLR)
12	Inline to Defogger Grid (Ground)
13	Speaker - LR

14	G301
15	C302
16	Fuse Block - I/P C3
17	C204
18	S314 and S312
19	G302
20	SP302
21	S302
22	S303
23	Speaker - RR



Fig. 69: Forward Lamp Harness Component View Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 69

Canouts For Fig. 07		
Callout	Component Name	

1	Fuse Block - Underhood C3		
2	A/C Compressor Clutch		
3	S106		
4	S107		
5	Electronic Brake Control Module (EBCM)		
6	Cooling Fan - Left		
7	C107		
8	Brake Fluid Pressure Sensor		
9	Brake Differential Switch		
10	Brake Fluid Level Switch		
11	Windshield Washer Fluid Pump		
12	Repeater Lamp - Left		
13	Windshield Washer Fluid Level Switch		
14	G103		
15	SP101		
16	G101		
17	Headlamp Door Assembly - Left		
18	Fog Lamp - LF		
19	Secondary Air Injection (AIR) Pump		
20	S108		
21	Cooling Fan - Right		
22	Ambient Air Temperature Sensor		
23	Fog Lamp - RF		
24	Horn Assembly		
25	C100		
26	C113		
27	Headlamp Door Control Module C2		
28	Headlamp Door Control Module C1		
29	Headlamp Door Assembly - Right		
30	G102		
31	SP100		
32	Secondary Air Injection (AIR) Solenoid		
33	A/C Refrigerant Pressure Sensor		
34	Repeater Lamp - Right		
35	G108		
36	C102		
37	UHEC C6		
38	C148		
39	C140		
40	C150		




Fig. 70: Forward Lamp Jumper Harness Component View Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 70

Callout	Component Name
1	C100
2	Sp102



Fig. 71: Body Rear End Harness Routing Component View Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 71

Callout	Component Name
1	C400
2	S420 - Europe
3	S496 - Japan
4	S490 - Japan/Europe
5	S485 - Japan
6	S482
7	S484 - Domestic
8	S480 - Japan/Europe
9	S492 - Domestic
10	S494 - Japan/Europe
11	License Lamp Inline Fuse-RH (Export)
12	S498
13	S483 - Japan/Europe
14	S481 - Japan/Domestic
15	License Lamp Inline Fuse-LH (Export)
16	Sp400, Sp402 - Export



Fig. 72: Fuel Tanks Component View Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 72

Callout	Component Name
1	Fuel Tank - Left
2	Fuel Pump and Sender Assembly
3	C402
4	Fuel Tank Pressure (FTP) Sensor
5	Fuel Level Sensor - Right
6	Fuel Tank - Right
7	C414
8	C412



Fig. 73: Pass Through Locations Component View Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 73

Callout	Component Name
1	P200
2	P202
3	P600
4	P401
5	P501
6	P201
7	P203

COMPONENT LOCATOR

MASTER ELECTRICAL COMPONENT LIST

Master Electrical Component List

Name	Location	Locator View	Connector End View
		Automatic	Automatic

1-2 Shift Solenoid (1- 2SS) Valve	Inside the automatic transmission	Transmission Electronic Component Views in Automatic Transmission-4L60- E/4L65-E	Transmission Internal Connector End Views in Automatic Transmission-4L60- E/4L65-E
2-3 Shift Solenoid (2- 3SS) Valve	Inside the automatic transmission	<u>Automatic</u> <u>Transmission</u> <u>Electronic</u> <u>Component Views</u> in Automatic Transmission-4L60- E/4L65-E	Automatic <u>Transmission Internal</u> <u>Connector End Views</u> in Automatic Transmission-4L60- E/4L65-E
3-2 Shift Solenoid (3- 2SS) Valve	Inside the automatic transmission	Automatic <u>Transmission</u> <u>Electronic</u> <u>Component Views</u> in Automatic Transmission-4L60- E/4L65-E	Automatic Transmission Internal Connector End Views in Automatic Transmission-4L60- E/4L65-E
A/C Compressor Clutch	Part of the A/C compressor, attached to the RH front of the engine block	HVAC Component <u>Views</u> in HVAC Systems - Automatic	HVAC Connector End Views in HVAC Systems - Automatic
A/C Compressor Clutch Diode	In the forward lamp harness, at the A/C compressor clutch coil connector	HVAC Component <u>Views</u> in HVAC Systems - Automatic	-
A/C Refrigerant Pressure Sensor	Attached to the A/C high side line	HVAC Component Views in HVAC Systems - Automatic	HVAC Connector End Views in HVAC Systems - Automatic
Accelerator Pedal Position (APP) Sensor	Mounted to the accelerator pedal, LH footwell at the top of the accelerator pedal	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Air Temperature Actuator - Left (CJ2)	Attached to the LH side of the HVAC module case	HVAC Component <u>Views</u> in HVAC Systems - Automatic	HVAC Connector End Views in HVAC Systems - Automatic
Air Temperature Actuator - Right (CJ2)	Attached to the RH side of the HVAC module case	HVAC Component Views in HVAC Systems - Automatic	HVAC Connector End Views in HVAC Systems - Automatic
Air Temperature Sensor - Inside (CJ2)	In air outlet vent, RH side of the steering column	HVAC Component Views in HVAC Systems - Automatic	HVAC Connector End Views in HVAC Systems - Automatic
Ambient Air Temperature Sensor	RH front of engine compartment, on the radiator support	HVAC Component <u>Views</u> in HVAC Systems - Automatic	HVAC Connector End Views in HVAC Systems - Automatic

Ambient Light Sensor	LH side of dash under the defroster grille	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
A/T Shift Lock Control Solenoid	Center console, part of the shifter	Automatic <u>Transmission Shift</u> <u>Lock Control</u> <u>Component Views</u> in Shift Lock Control	Automatic <u>Transmission Shift</u> <u>Lock Control</u> <u>Connector End Views</u> in Shift Lock Control
Automatic Transmission	Rear of the vehicle, mounted to the front of the axle	Automatic Transmission Electronic Component Views in Automatic Transmission-4L60- E4L65-E	Automatic Transmission Related Connector End Views in Automatic Transmission-4L60- E4L65-E
Automatic Transmission Fluid Pressure Manual Valve Position Switch	Inside the automatic transmission	<u>Automatic</u> <u>Transmission</u> <u>Electronic</u> <u>Component Views</u> in Automatic Transmission-4L60- E/4L65-E	<u>Automatic</u> <u>Transmission Internal</u> <u>Connector End Views</u> in Automatic Transmission-4L60- E/4L65-E
Auxiliary Power Outlet Connector	In the center console, front LH side	Power and Grounding Component Views	Power and Grounding Connector End Views
Backup Lamp - Left	Rear of vehicle	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Backup Lamp - Right	Rear of vehicle	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Backup Lamp Switch (MM6)	RH side of the manual transmission	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Battery			
Dattery	compartment, rearward of the RH wheelhouse	Engine Electrical Component Views in Engine Electrical	-
Blower Motor	Rear RH side of the engine compartment, rearward of the RH wheelhouse Behind the lower RH side of the instrument panel	Engine Electrical Component Views in Engine Electrical HVAC Component Views in HVAC Systems - Automatic	- <u>HVAC Connector</u> <u>End Views</u> in HVAC Systems - Automatic
Blower Motor Blower Motor Control Processor	Rear RH side of the engine compartment, rearward of the RH wheelhouse Behind the lower RH side of the instrument panel Behind the LH side of the blower motor, under the RH side of the instrument panel	Engine Electrical Component Views in Engine Electrical HVAC Component Views in HVAC Systems - Automatic HVAC Component Views in HVAC Systems - Automatic	- HVAC Connector End Views in HVAC Systems - Automatic HVAC Connector End Views in HVAC Systems - Automatic

			System
Bose(R) Signal Processor	Under the LH side of the instrument panel (I/P), above the accelerator pedal	Entertainment Component Views in Entertainment	Entertainment Connector End Views in Entertainment
Brake Fluid Level Switch	LH rear engine compartment, on the LH side of the brake fluid reservoir	Hydraulic Brakes Component Views in Hydraulic Brakes	Hydraulic Brakes Connector End Views in Hydraulic Brakes
Brake Fluid Pressure Sensor	Left side of the brake pressure modulator valve (BPMV)	ABS Component Views in Antilock Brake System	ABS Connector End Views in Antilock Brake System
Brake Pressure Modulator Valve (BPMV)	LH side of the engine compartment, near power steering pump	ABS Component Views in Antilock Brake System	-
Brush-Horn Slip Ring	Inside the steering column, behind the steering wheel	Horns Component Views in Horns	-
Camshaft Position (CMP) Sensor	Top center, rear of the engine	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Center High Mounted Stop Lamp (CHMSL)	Top center of the rear fascia	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Cigar Lighter	Front center console, below the HVAC control head, in front of the shifter	Power and Grounding Component Views	Power and Grounding Connector End Views
Clutch Pedal Position Switch (CPP)	Under the LH side of the instrument panel, mounted to the bracket behind clutch pedal	Cruise Control Component Views in Cruise Control	Cruise Control Connector End Views in Cruise Control
Clutch Pedal Start Switch	Mounted on the bracket in front of the brake pedal	Engine Electrical Component Views in Engine Electrical	Engine Electrical Connector End Views in Engine Electrical
Cooling Fan-Left	Front of the engine compartment behind the LH side of the radiator	Cooling System Component Views in Engine Cooling	Cooling System Connector End Views in Engine Cooling
Cooling Fan - Right	Front of the engine compartment behind the RH side of the radiator	Cooling System Component Views in Engine Cooling	Cooling System Connector End Views in Engine Cooling
Crankshaft Position (CKP) Sensor	Lower RH side of the engine, behind the starter	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Cruise Control ON/OFF	Part of the multifunction	<u>Cruise Control</u> Component Views in	Inline Harness

Switch	turn signal lever	Cruise Control	Connector End Views
	I H side of instrument	Data Link Communications	Data Link Communications
Data Link Connector	panel below the steering	Component Views in	Connector End Views
(DLC)	column	Data Link	in Data Link
		Communications	Communications
		Stationary Windows	Stationary Windows
Defogger Grid	On rear window	Component Views in	Connector End Views
		Stationary Windows	in Stationary Windows
		Instrument Panel.	y
	LH side of the instrument	Gages, and Console	
Dimmer/Head Up Display	panel, LH side of the	Component Views in	-
(HUD) Switch	instrument cluster	Instrument Panel,	
		Gages, and Console	
	LH side of the instrument	Lighting Systems	
Dimmer Switch	panel, LH side of the	Component Views in	-
	instrument cluster	Lighting Systems	
		Power Door Systems	Power Door Systems
Door Latch-Driver	In rear LH door	Component Views in	Connector End Views
		Doors	in Doors
Door Latch - Front		Power Door Systems	Power Door Systems
Passenger	In rear of RH door	Component Views in	Connector End Views
i assenger		Doors	in Doors
	On the front center of the LH door trim panel	Power Door Systems	<u>Power Door Systems</u>
Door Switch-Driver		Component Views in	Connector End Views
		Doors	in Doors
Door Switch - Front	On the front center of the	Power Door Systems	Power Door Systems
Passenger	RH door trim panel	Component Views in	Connector End Views
		Doors	in Doors
Driver Door Module	Behind the LH door trim	Power Door Systems	Power Door Systems
(DDM)	panel, bottom center of the	Component views in	<u>Connector End views</u>
	door, lear of the speaker	Doors	III DOOIS
	I II side of the instrument	Instrument Panel, Cagoa and Cangala	
Driver Information Center	nonal DH side of the	<u>Gages, and Console</u> Component Views in	
(DIC) Switch - Right	instrument cluster	Instrument Penel	-
		Gages and Console	
	Front I U side of the engine	ABS Component	ABS Connector End
Electronic Brake Control	compartment mounted on	Views in Antilock	Views in Antilock
Module (EBCM)	the frame rail	Brake System	Brake System
		Suspension Controls	Suspension Controls
Electronic Suspension	Rear compartment, inside	Component Views in	Connector End Views
Control (ESC) Module	the LH storage	Electronic Suspension	in Electronic
	compartment	Controls	Suspension Controls
			T T T T T T T T T T T T T T T T T T T
Engine Coolant		Engine Controls	Engine Controls

Temperature (ECT) Sensor	Front LH side of the engine below the generator	<u>Component Views</u> in Engine Controls-5.7L	Connector End Views in Engine Controls- 5.7L
Engine Oil Level Switch	RH side of the oil pan	Instrument Panel, Gages, and Console Component Views in Instrument Panel, Gages, and Console	Instrument Panel, Gages, and Console Connector End Views in Instrument Panel, Gages, and Console
Engine Oil Pressure (EOP) Sensor	Top center, rear of the engine	Instrument Panel, Gages, and Console Component Views in Instrument Panel, Gages, and Console	Instrument Panel, Gages, and Console Connector End Views in Instrument Panel, Gages, and Console
Engine Oil Temperature (EOT) Sensor	Rear of the engine, bottom LH side	Instrument Panel, Gages, and Console Component Views in Instrument Panel, Gages, and Console	Instrument Panel, Gages, and Console Connector End Views in Instrument Panel, Gages, and Console
Evaporative Emission (EVAP) Canister Purge Solenoid	On the front LH side of the intake manifold	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Evaporative Emission (EVAP) Canister Vent Solenoid	Mounted to the right side rear compartment brace, inside RR wheelhouse panel	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Fog Lamp-LF	Lower front LH side of the vehicle	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Fog Lamp - LR (Europe)	Attached to the LH side of the license plate	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Fog Lamp - RF	Lower front of the vehicle, RH side	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Fog Lamp - RR (Europe)	Attached to the RH side of the license plate	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Fog Lamp/Rear Compartment Lid Release Switch (Domestic)	Left of the steering column, mounted in the instrument panel	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Fog Lamp Switch (Export)	LH side of the steering column, mounted in the instrument panel	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
	Part of the folding top lid	Body Rear End	Body Rear End

Folding Top Actuator	latch	<u>Component Views</u> in Body Rear End	Connector End Views in Body Rear End
Folding Top Ajar Indicator Switch	Part of the folding top lid latch	Body Rear End Component Views in Body Rear End	Body Rear End Connector End Views in Body Rear End
Folding Top Lid Latch	Attached to the stowage lid extension panel bracket	Body Rear End Component Views in Body Rear End	Body Rear End Connector End Views in Body Rear End
Folding Top Release Switch	Under the RH side of the storage compartment lid	Body Rear End Component Views in Body Rear End	Body Rear End Connector End Views in Body Rear End
Footwell Courtesy Lamp - Left	Mounted in the LH footwell, top LH side	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Footwell Courtesy Lamp - Right	Mounted in the RH footwell, top RH side	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Front Window Antenna (Coupe/Hardtop)	In windshield	Entertainment Component Views in Entertainment	Entertainment Connector End Views in Entertainment
Fuel Door Lock Actuator	LH side of vehicle, inside rear compartment, above the fuel tank filler door	Body Rear End Component Views in Body Rear End	Body Rear End Connector End Views in Body Rear End
Fuel Door Lock Release Switch (Domestic)	Inside center console, front RH side	Body Rear End Component Views in Body Rear End	Body Rear End Connector End Views in Body Rear End
Fuel Injector 1	Top of the engine in the fuel rail below the fuel rail covers, above each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Fuel Injector 2	Top of the engine in the fuel rail below the fuel rail covers, above each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Fuel Injector 3	Top of the engine in the fuel rail below the fuel rail covers, above each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Fuel Injector 4	Top of the engine in the fuel rail below the fuel rail covers, above each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Fuel Injector 5	Top of the engine in the fuel rail below the fuel rail covers, above each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls-

			5.7L
Fuel Injector 6	Top of the engine in the fuel rail below the fuel rail covers, above each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Fuel Injector 7	Top of the engine in the fuel rail below the fuel rail covers, above each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Fuel Injector 8	Top of the engine in the fuel rail below the fuel rail covers, above each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Fuel Level Sensor-Right	Inside the top of the RH fuel tank	Instrument Panel, Gages, and Console Component Views in Instrument Panel, Gages, and Console	Instrument Panel, Gages, and Console Connector End Views in Instrument Panel, Gages, and Console
Fuel Pump and Sender Assembly	Inside the top of the LH fuel tank	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Fuel Tank Pressure (FTP) Sensor	Inside the top of the RH fuel tank	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Fuse Block-I/P	RH footwell, mounted on the toe board, behind the carpet	Power and Grounding Component Views	Electrical Center Identification Views
Fuse Block-Underhood	RH side of the engine compartment, between the wheelhouse and the dash panel, front of the battery	Power and Grounding Component Views	Electrical Center Identification Views
Generator	Front of the LH valve cover	Engine Electrical Component Views in Engine Electrical	Engine Electrical Connector End Views in Engine Electrical
Hazard Switch	Top center of instrument panel	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Headlamp Door Assembly-Left	In LH front side of the vehicle, between the LH fender and hood	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Headlamp Door Assembly - Right	In RH front side of the vehicle, between the RH fender and hood	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems

Headlamp Door Control Module	Front RH side below the RH headlamp assembly	Lighting Systems Component Views in	Lighting Systems Connector End Views
		Instrument Panel,	in Lighting Systems
Head Up Display (HUD)	Top LH side of instrument panel, behind instrument cluster	Gages, and Console Component Views in Instrument Panel, Gages, and Console	-
Heated Oxygen Sensor (HO2S) Bank 1 Sensor 1	In LH exhaust manifold	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Heated Oxygen Sensor (HO2S) Bank 1 Sensor 2	In exhaust system rearward of the catalytic converter	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Heated Oxygen Sensor (HO2S) Bank 2 Sensor 1	In RH exhaust manifold	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Heated Oxygen Sensor (HO2S) Bank 2 Sensor 2	In exhaust system rearward of the catalytic converter	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Hood Ajar Switch (Export)	Engine compartment support bracket	Theft Deterrent System Component Views in Theft Deterrent	Theft Deterrent System Connector End Views in Steering Wheel and Column - Tilt
Horn Assembly	Mounted outboard of the RH front skid plate	Horns Component Views in Horns	Horns Connector End Views in Horns
Horn Switch	In the center of the steering wheel	Horns Component Views in Horns	-
HVAC Control Module	Center of the instrument panel, under the radio	HVAC Component <u>Views</u> in HVAC Systems - Automatic	HVAC Connector End Views in HVAC Systems - Automatic
Ignition Coil/Module 1	On the valve cover at the top of each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Ignition Coil/Module 2	On the valve cover at the top of each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
		Engine Controls	Engine Controls

Ignition Coil/Module 3	On the valve cover at the top of each cylinder	<u>Component Views</u> in Engine Controls-5.7L	Connector End Views in Engine Controls- 5.7L
Ignition Coil/Module 4	On the valve cover at the top of each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Ignition Coil/Module 5	On the valve cover at the top of each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Ignition Coil/Module 6	On the valve cover at the top of each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Ignition Coil/Module 7	On the valve cover at the top of each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Ignition Coil/Module 8	On the valve cover at the top of each cylinder	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Ignition Switch	LH side of the instrument panel between the radio and the steering column	Power and Grounding Component Views	Power and Grounding Connector End Views
Ignition Switch Inflatable Restraint I/P Module	LH side of the instrument panel between the radio and the steering column Center of the RH side of the instrument panel	Power and Grounding Component Views SIR Component Views in SIR	Power and Grounding Connector End Views SIR Connector End <u>Views</u> in SIR
Ignition Switch Inflatable Restraint I/P Module Inflatable Restraint I/P Module Disable Switch LED	LH side of the instrument panel between the radio and the steering column Center of the RH side of the instrument panel In Instrument Panel accessory trim panel in front of the center console compartment	Power and Grounding Component Views SIR Component Views in SIR SIR Component Views in SIR	Power and Grounding Connector End ViewsSIR Connector End Views in SIRSIR Connector End Views in SIRSIR Connector End Views in SIR
Ignition Switch Inflatable Restraint I/P Module Inflatable Restraint I/P Module Disable Switch LED Inflatable Restraint I/P Module Disable Switch	LH side of the instrument panel between the radio and the steering column Center of the RH side of the instrument panel In Instrument Panel accessory trim panel in front of the center console compartment RH side of glove box	Power and Grounding Component Views SIR Component Views in SIR SIR Component Views in SIR SIR Component Views in SIR SIR Component Views in SIR	Power and Grounding Connector End ViewsSIR Connector End Views in SIRSIR Connector End Views in SIRSIR Connector End Views in SIRSIR Connector End Views in SIRSIR Connector End Views in SIR
Ignition Switch Inflatable Restraint I/P Module Inflatable Restraint I/P Module Disable Switch LED Inflatable Restraint I/P Module Disable Switch Inflatable Restraint Sensing and Diagnostic Module (SDM)	LH side of the instrument panel between the radio and the steering column Center of the RH side of the instrument panel In Instrument Panel accessory trim panel in front of the center console compartment RH side of glove box Behind the center of the instrument panel, under the HVAC control head	Power and Grounding Component ViewsSIR Component Views in SIRSIR Component Views in SIRSIR Component Views in SIRSIR Component Views in SIRSIR Component Views in SIRViews in SIR	Power and Grounding Connector End ViewsSIR Connector End Views in SIRSIR Connector End Views in SIR
Ignition Switch Inflatable Restraint I/P Module Inflatable Restraint I/P Module Disable Switch LED Inflatable Restraint I/P Module Disable Switch Inflatable Restraint Sensing and Diagnostic Module (SDM) Inflatable Restraint Steering Wheel Module	LH side of the instrument panel between the radio and the steering column Center of the RH side of the instrument panel In Instrument Panel accessory trim panel in front of the center console compartment RH side of glove box Behind the center of the instrument panel, under the HVAC control head In center of the steering wheel	Power and Grounding Component ViewsSIR Component Views in SIRSIR Component Views in SIR	Power and Grounding Connector End ViewsSIR Connector End Views in SIRSIR Connector End Views in SIR
Ignition Switch Inflatable Restraint I/P Module Inflatable Restraint I/P Module Disable Switch LED Inflatable Restraint I/P Module Disable Switch Inflatable Restraint Sensing and Diagnostic Module (SDM) Inflatable Restraint Steering Wheel Module Inflatable Restraint Steering Wheel Module Coil	LH side of the instrument panel between the radio and the steering column Center of the RH side of the instrument panel In Instrument Panel accessory trim panel in front of the center console compartment RH side of glove box Behind the center of the instrument panel, under the HVAC control head In center of the steering wheel In steering column behind the center of the steering wheel	Power and Grounding Component ViewsSIR Component Views in SIRSIR Component Views in SIR	Power and Grounding Connector End ViewsSIR Connector End Views in SIRSIR Connector End Views in SIRInline Harness Connector End ViewsInline Harness Connector End Views
Ignition SwitchInflatable Restraint I/P ModuleInflatable Restraint I/P Module Disable Switch LEDInflatable Restraint I/P Module Disable SwitchInflatable Restraint I/P Module Disable SwitchInflatable Restraint I/P Module Disable SwitchInflatable Restraint Sensing and Diagnostic Module (SDM)Inflatable Restraint Steering Wheel ModuleInflatable Restraint Steering Wheel Module CoilInside Rearview Mirror	LH side of the instrument panel between the radio and the steering column Center of the RH side of the instrument panel In Instrument Panel accessory trim panel in front of the center console compartment RH side of glove box Behind the center of the instrument panel, under the HVAC control head In center of the steering wheel In steering column behind the center of the steering wheel Top center of the front windshield, bottom of mirror	Power and Grounding Component ViewsSIR Component Views in SIRSIR Component Views in SIR	Power and Grounding Connector End ViewsSIR Connector End Views in SIRSIR Connector End Views in SIRInline Harness Connector End ViewsInline Harness Connector End ViewsStationary Windows in Stationary Windows in Stationary Windows

Instrument Panel Cluster (IPC)	Top LH side of instrument panel, behind the steering wheel	Instrument Panel, Gages, and Console Component Views in Instrument Panel, Gages, and Console	Instrument Panel, Gages, and Console Connector End Views in Instrument Panel, Gages, and Console
I/P Compartment Lamp	In instrument panel compartment, top RH side	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Key Resistor Pellet	In the ignition key	-	-
Knock Sensor (KS) 1	Center of the engine below the intake manifold	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Knock Sensor (KS) 2	Center of the engine below the intake manifold	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Lateral Accelerometer Sensor	Mounted to the floor panel under the RH seat	ABS Component Views in Antilock Brake System	ABS Connector End Views in Antilock Brake System
License Lamp-Left	Center of rear vehicle, above the LH side of license plate	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
License Lamp-Right	Center of rear vehicle, above the RH side of license plate	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
License Lamp Inline Fuse -LH (Export)	Rear body harness, approximately 10.0 cm (4.0 in) from breakout for LR backup lamp	Harness Routing <u>Views</u>	Lighting Systems Connector End Views in Lighting Systems
License Lamp Inline Fuse-RH (Export)	Rear body harness, approximately 10.0 cm (4.0 in) from breakout for RR backup lamp	Harness Routing <u>Views</u>	Lighting Systems Connector End Views in Lighting Systems
Manifold Absolute Pressure (MAP) Sensor	Rear of the intake manifold	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Marker Lamp-LF	Lower front LH side of the vehicle	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Marker Lamp-LR	LH rear quarter panel, rear of the wheelwell	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
	Lower front RH side of the	Lighting Systems	Lighting Systems

Marker Lamp - RF	vehicle	Component Views in Lighting Systems	Connector End Views in Lighting Systems
Marker Lamp - RR	RH rear quarter panel, rear of the wheelwell	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Mass Air Flow (MAF) Sensor	In the intake duct before air filter assembly	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Multifunction Turn Signal Lever	LH stalk of the steering column	Lighting Systems Component Views in Lighting Systems	Inline Harness Connector End Views
Outside Rearview Mirror - Driver	Mounted on outside of the LH door, top front corner	Power Door Systems Component Views in Doors	Power Door Systems Connector End Views in Doors
Outside Rearview Mirror - Passenger	Mounted on outside of the RH door, top front corner	Power Door Systems Component Views in Doors	Power Door Systems Connector End Views in Doors
Park Brake Switch	Center console, below the park brake	Hydraulic Brakes Component Views in Hydraulic Brakes	Hydraulic Brakes Connector End Views in Hydraulic Brakes
Park/Neutral Position (PNP) Switch	LH side of the automatic transmission	Engine Controls Component Views in Engine Controls-5.7L	Automatic Transmission Related Connector End Views in Automatic Transmission-4L60- E/4L65-E
Park Lamp-LF (Export)	Lower front LH side of vehicle	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Park Lamp - RF (Export)	Lower front RH side of vehicle	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Park/Turn Signal Lamp- LF (Domestic)	Lower front LH side of the vehicle	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Park/Turn Signal Lamp - RF (Domestic)	Lower front RH side of the vehicle	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Passenger Door Module (PDM)	Behind the RH door trim panel, bottom center of the door, rear of the speaker	Power Door Systems Component Views in Doors	Power Door Systems Connector End Views in Doors
Powertrain Control Module (PCM)	Behind the RF fender, between the wheelhouse and the dash panel, below	Engine Controls Component Views in	Powertrain Control Module (PCM) Connector End Views

the battery	Engine Controls-5.7L	in Engine Controls- 5.7L
Inside the transmission	Automatic Transmission <u>Electronic</u> <u>Component Views</u> in Automatic Transmission-4L60- E/4L65-E	Automatic Transmission Internal Connector End Views in Automatic Transmission-4L60- E/4L65-E
Center of instrument panel above the HVAC control assembly	Entertainment Component Views in Entertainment	Entertainment Connector End Views in Entertainment
Behind the lower B-pillar trim panel	Entertainment Component Views in Entertainment	Entertainment Connector End Views in Entertainment
Behind the RR quarter inner trim panel	Entertainment Component Views in Entertainment	Entertainment Connector End Views in Entertainment
Attached to the LH rear compartment trim panel	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Attached to the RH rear compartment trim panel	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Rear compartment, on the rear compartment lid latch	Body Rear End Component Views in Body Rear End	Body Rear End Connector End Views in Body Rear End
LH rear compartment	Body Rear End Component Views in Body Rear End	Body Rear End Connector End Views in Body Rear End
RH rear compartment	Body Rear End Component Views in Body Rear End	Body Rear End Connector End Views in Body Rear End
Inside the center of the rear compartment, attached to the latch bracket	Body Rear End Component Views in Body Rear End	Body Rear End Connector End Views in Body Rear End
Inside the center console, front RH side	Body Rear End Component Views in Body Rear End	Body Rear End Connector End Views in Body Rear End
LH side of the rear compartment, behind the side trim panel	<u>Keyless Entry</u> <u>Component Views</u> in Keyless Entry	Keyless Entry Connector End Views in Keyless Entry
Rear compartment, in the center storage compartment	Entertainment Component Views in Entertainment	Entertainment Connector End Views in Entertainment
	the battery the battery Inside the transmission Center of instrument panel above the HVAC control assembly Behind the lower B-pillar trim panel Behind the RR quarter inner trim panel Attached to the LH rear compartment trim panel Attached to the RH rear compartment unce trim panel Rear compartment, on the rear compartment LH rear compartment RH rear compartment Inside the center of the rear compartment, attached to the latch bracket Inside the center console, front RH side LH side of the rear compartment, in the side trim panel Rear compartment, in the center storage compartment	the batteryEngine Controls-5.7LInside the transmissionAutomatic Transmission Electronic Component Views in Automatic Transmission-4L60- E/4L65-ECenter of instrument panel above the HVAC control assemblyEntertainment Component Views in EntertainmentBehind the lower B-pillar trim panelEntertainment Component Views in EntertainmentBehind the RR quarter inner trim panelEntertainment Component Views in EntertainmentAttached to the LH rear compartment trim panelLighting Systems Component Views in EntertainmentAttached to the RH rear compartment trim panelBody Rear End Component Views in Eighting SystemsRear compartment, on the rear compartment lid latchBody Rear End Component Views in Body Rear EndRH rear compartmentBody Rear End Component Views in Body Rear EndInside the center of the rear compartment, attached to the latch bracketBody Rear End Component Views in Body Rear EndInside the center console, front RH sideBody Rear End Component Views in Body Rear EndInside the center console, front RH sideKeyless Entry Component Views in Body Rear EndLH side of the rear compartment, behind the side trim panelBody Rear End Component Views in Body Rear EndInside the center console, front RH sideKeyless Entry Component Views in Body Rear EndRear compartment, in the center storage compartmentKeyless EntryRear compartment, in the center storage compartmentEntertainment

Repeater Lamp-Left (Export)	On LF fender behind LF wheel, side of the vehicle	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Repeater Lamp - Right (Export)	On RF fender behind RF wheel, side of the vehicle	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Reverse Inhibit Solenoid	Top of the manual transmission	Manual Transmission Component Views in Manual Transmission	Manual Transmission Connector End Views in Manual Transmission
Seat Adjuster Switch- Driver	Front LH side of the LH seat	Power Seat Systems Component Views in Seats	Power Seat Systems Connector End Views in Seats
Seat Adjuster Switch - Passenger	Front RH side of the RH seat	Power Seat Systems Component Views in Seats	Power Seat Systems Connector End Views in Seats
Seat Belt Switch - Driver	LH passenger compartment, part of the LH seat belt buckle assembly	Seat Belt Component Views in Seat Belts	Seat Belt Connector End Views in Seat Belts
Seat Control Module (SCM)-Driver (W/ memory seats)	Under the front of the LH seat	Power Seat Systems Component Views in Seats	Power Seat Systems Connector End Views in Seats
Seat Lower Motor - Driver	Under the center of the LH seat	Power Seat Systems Component Views in Seats	Power Seat Systems Connector End Views in Seats
Seat Lower Motor - Passenger	Under the center of the RH seat	Power Seat Systems Component Views in Seats	Power Seat Systems Connector End Views in Seats
Seat Pump - Driver	Under the center of the drivers seat	Power Seat Systems Component Views in Seats	Power Seat Systems Connector End Views in Seats
Seat Pump - Passenger	Under the center of the passengers seat	Power Seat Systems Component Views in Seats	Power Seat Systems Connector End Views in Seats
Seat Relay Center - Driver (W/O Memory Seats)	Under the center of the LH seat	Power Seat Systems Component Views in Seats	Power Seat Systems Connector End Views in Seats
Seat Relay Center - Passenger	Under the center of the RH seat	Power Seat Systems Component Views in Seats	Power Seat Systems Connector End Views in Seats
Secondary Air Injection (AIR) Pump	LH front outboard of the skid bar	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
	Behind RF fender, between		Engine Controls

Secondary Air Injection (AIR) Solenoid	the wheel house and dash panel, above the Powertrain Control Module (PCM)	Engine Controls Component Views in Engine Controls-5.7L	Connector End Views in Engine Controls- 5.7L
Skip Shift Solenoid	LH side of the manual transmission	Manual Transmission Component Views in Manual Transmission	Manual Transmission Connector End Views in Manual Transmission
Speaker-LF Door	On the inside of the LH door, lower front corner	Entertainment Component Views in Entertainment	Entertainment Connector End Views in Entertainment
Speaker - LR	LH side of the rear compartment, behind the LH seat	Entertainment Component Views in Entertainment	Entertainment Connector End Views in Entertainment
Speaker - RR	RH side of the rear compartment, behind the RH seat	Entertainment Component Views in Entertainment	Entertainment Connector End Views in Entertainment
Speaker - RF Door	On the inside of the RH door, lower front corner	Entertainment Component Views in Entertainment	Entertainment Connector End Views in Entertainment
Star Connector #1	Instrument panel harness, serial data, LH side of the body control module (BCM)	Data Link Communications Component Views in Data Link Communications	Data Link Communications Connector End Views in Data Link Communications
Star Connector #2	Instrument panel harness, serial data, LH side of the body control module (BCM)	Data Link Communications Component Views in Data Link Communications	Data Link Communications Connector End Views in Data Link Communications
Starter	RH side of engine block	Engine Electrical Component Views in Engine Electrical	-
Steering Column Lock	RH side of the steering column, inside steering column shroud	Steering Wheel and Column Component <u>Views</u> in Steering Wheel and Column	Inline Harness Connector End Views
Steering Column Lock Relay	RH footwell, mounted to the toe board, above the body control module	Steering Wheel and Column Component <u>Views</u> in Steering Wheel and Column	Steering Wheel and Column ConnectorEnd ViewsWheel and Column
Steering Wheel Position Sensor	Base of the steering column, under the instrument panel	Steering Controls Component Views in Variable Effort Steering	Steering Controls Connector End Views in Variable Effort Steering
	Mounted on the bracket in	Lighting Systems	Lighting Systems

Stop Lamp Switch	front of the brake pedal	<u>Component Views</u> in Lighting Systems	Connector End Views in Lighting Systems
	On top of the instrument	HVAC Component	HVAC Connector
Sunload Sensor	panel, RH side of the	Views in HVAC	End Views in HVAC
	defroster grid	Systems - Automatic	Systems - Automatic
		Suspension Controls	Suspension Controls
	Inside of the LF shock	Component Views in	Connector End Views
Suspension Damper - LF	absorber	Electronic Suspension	in Electronic
		Controls	Suspension Controls
		Suspension Controls	Suspension Controls
	Inside of the IR shock	Component Views in	Connector End Views
Suspension Damper - LR	absorber	<u>Electronic Suspension</u>	in Electronic
	absorber	Controls	Suspension Controls
		Controls	Suspension Controls
	Incide of the DE sheets	Suspension Controls	Suspension Controls
Suspension Damper - RF	absorbor	<u>Component views</u> in Electropic Suspension	in Electronic
	absorber	Controlo	Sugrangian Controls
		Suspension Controls	Suspension Controls
Suspension Damper - RR	Inside of the RR shock	Component Views in	Connector End Views
1 1	absorber	Electronic Suspension	in Electronic
		Controls	Suspension Controls
	LH front wheelhouse	Suspension Controls	Suspension Controls
Suspension Position	rearward of the shock	Component Views in	<u>Connector End Views</u>
Sensor-LF		Electronic Suspension	in Electronic
		Controls	Suspension Controls
		Suspension Controls	Suspension Controls
Suspension Position	LH rear wheelhouse front	Component Views in	Connector End Views
Sensor - LR	of the control arm	Electronic Suspension	in Electronic
		Controls	Suspension Controls
		Suspension Controls	Suspension Controls
Suspension Position	RH front wheelhouse	Component Views in	Connector End Views
Sensor - RF	rearward of the shock	Electronic Suspension	in Electronic
	absorber	Controls	Suspension Controls
		Suspension Controls	Suspension Controls
Suspension Position	RH rear wheelhouse front	Component Views in	Connector End Views
Sensor - RR	of the control arm	Electronic Suspension	in Electronic
		Controls	Suspension Controls
		Lighting Systems	Lighting Systems
Tail/Stop Lamp - Left	Rear of the vehicle I H side	Component Views in	Connector Fnd Views
(Export)	Rear of the venicle, Eff side	Lighting Systems	in Lighting Systems
		Lighting Systems	I ishting Sustans
Tail/Stop Lamp - Right	DU side roor of the vehicle	Component Views in	Lighting Systems Connector End Vicera
(Export)	KI Side rear of the venicle	Lighting Systems	in Lighting Systems
		Lignung Systems	in Lignung Systems
Tail/Stop and Turn Signal	Deer of the web istantial	Lighting Systems	Lighting Systems
Lamp - Left (Domestic)	Rear of the venicle, LH side	Component Views in	Connector Fnd Views
- · /		<u>Component views</u> III	Connector Ella views

		Lighting Systems	in Lighting Systems
Tail/Stop and Turn Signal Lamp - Right (Domestic)	Rear of the vehicle, RH side	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Telescoping Sensor	RH side of steering column, above telescoping drive motor	Steering Wheel and Column Component <u>Views</u> in Steering Wheel and Column	Inline Harness Connector End Views
Telescoping Actuator Switch	RH side of steering column	Steering Wheel and Column Component Views in Steering Wheel and Column	Inline Harness Connector End Views
Telescoping Drive Motor	RH side of steering column base	Steering Wheel andColumn ComponentViews in SteeringWheel and Column	Inline Harness Connector End Views
Theft Deterrent Relay	RH footwell, mounted to the toe board, above the body control module	Theft DeterrentSystem ComponentViewsin TheftDeterrent	Theft DeterrentSystem ConnectorEnd Views in TheftDeterrent
Throttle Actuator Control (TAC) Module	Behind the RF fender, between the wheelhouse and the dash panel, below the battery, attached to the powertrain control module (PCM)	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Throttle Actuator Control (TAC) Motor	LH side of the throttle body	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Throttle Position (TP) Sensor	RH side of the throttle body	Engine Controls Component Views in Engine Controls-5.7L	Engine Controls Connector End Views in Engine Controls- 5.7L
Tire Pressure Monitor Sensor - LR	Inside LR wheel, part of the valve stem	Tire PressureMonitoring SystemComponent ViewsInTire PressureMonitoring	-
Tire Pressure Monitor Sensor-LF	Inside LF wheel, part of the valve stem	Tire PressureMonitoring SystemComponent ViewsInTire PressureMonitoring	-
		Tire Pressure	

Tire Pressure Monitor Sensor - RF	Inside RF wheel, part of the valve stem	Monitoring System Component Views in Tire Pressure Monitoring	_
Tire Pressure Monitor Sensor - RR	Inside RR wheel, part of the valve stem	Tire PressureMonitoring SystemComponent ViewsInTire PressureMonitoring	-
Torque Converter Clutch Pulse Width Modulation Solenoid (TCC PWM SOL) Valve	Inside the automatic transmission	Automatic <u>Transmission</u> <u>Electronic</u> <u>Component Views</u> in Automatic Transmission-4L60- E/4L65-E	Automatic Transmission Internal Connector End Views in Automatic Transmission-4L60- E/4L65-E
Torque Converter Clutch (TCC) Solenoid Valve	Inside the automatic transmission	<u>Automatic</u> <u>Transmission</u> <u>Electronic</u> <u>Component Views</u> in Automatic Transmission-4L60- E/4L65-E	Automatic Transmission Internal Connector End Views in Automatic Transmission-4L60- E/4L65-E
Traction/Suspension Control Switch	Center console, between the shifter and the storage compartment	ABS Component Views in Antilock Brake System	ABS Connector End Views in Antilock Brake System
Traction/Suspension Control Switch Transmission Fluid Temperature (TFT) Sensor	Center console, between the shifter and the storage compartment Inside the transmission	ABS Component Views in Antilock Brake System Manual Transmission Component Views in Manual Transmission	ABS Connector End Views in Antilock Brake System Manual Transmission Connector End Views in Automatic Transmission-4L60- E/4L65-E
Traction/Suspension Control Switch Transmission Fluid Temperature (TFT) Sensor Turn Signal Lamp - RR (Export)	Center console, between the shifter and the storage compartment Inside the transmission Rear of the vehicle, RH side	ABS Component Views in Antilock Brake System Manual Transmission Component Views in Manual Transmission Lighting Systems Component Views in Lighting Systems Lighting Systems	ABS Connector End Views in Antilock Brake System Manual Transmission Connector End Views in Automatic Transmission-4L60- E/4L65-E Lighting Systems Connector End Views in Lighting Systems
Traction/Suspension Control Switch Transmission Fluid Temperature (TFT) Sensor Turn Signal Lamp - RR (Export) Turn Signal Lamp-LF (Export)	Center console, between the shifter and the storage compartment Inside the transmission Rear of the vehicle, RH side Lower front LH side of the vehicle	ABS Component Views in Antilock Brake System Manual Transmission Component Views in Manual Transmission Lighting Systems Lighting Systems Lighting Systems Component Views in Lighting Systems Lighting Systems	ABS Connector End <u>Views</u> in Antilock Brake System Manual Transmission Connector End Views in Automatic Transmission-4L60- E/4L65-E Lighting Systems Connector End Views in Lighting Systems Connector End Views in Lighting Systems
Traction/Suspension Control SwitchTransmission Fluid Temperature (TFT) SensorTurn Signal Lamp - RR (Export)Turn Signal Lamp-LF (Export)Turn Signal Lamp - LR (Export)	Center console, between the shifter and the storage compartment Inside the transmission Rear of the vehicle, RH side Lower front LH side of the vehicle Rear of the vehicle, LH side	ABS Component Views in Antilock Brake System Manual Transmission Component Views in Manual Transmission Lighting Systems Lighting Systems Component Views in Lighting Systems Lighting Systems Lighting Systems Lighting Systems Lighting Systems Lighting Systems	ABS Connector End Views in Antilock Brake System Manual Transmission Connector End Views in Automatic Transmission-4L60- E/4L65-E Lighting Systems Connector End Views in Lighting Systems Lighting Systems Lighting Systems Lighting Systems Lighting Systems Connector End Views in Lighting Systems
Traction/Suspension Control SwitchTransmission Fluid Temperature (TFT) SensorTurn Signal Lamp - RR (Export)Turn Signal Lamp-LF (Export)Turn Signal Lamp - LR (Export)Turn Signal Lamp - LR (Export)Turn Signal Lamp - RF (Export)	Center console, between the shifter and the storage compartment Inside the transmission Rear of the vehicle, RH side Lower front LH side of the vehicle Rear of the vehicle, LH side Lower front RH side of the vehicle	ABS Component Views in Antilock Brake System Manual Transmission Component Views in Manual Transmission Lighting Systems Component Views in Lighting Systems Lighting Systems Lighting Systems Lighting Systems Lighting Systems Lighting Systems Component Views in Lighting Systems Lighting Systems Lighting Systems Lighting Systems Lighting Systems	ABS Connector End <u>Views</u> in Antilock Brake System Manual Transmission Connector End Views in Automatic Transmission-4L60- E/4L65-E Lighting Systems Connector End Views in Lighting Systems Lighting Systems Connector End Views in Lighting Systems Connector End Views in Lighting Systems

Vacuum Control Assembly (CJ2)	RH side of the blower motor	HVAC Component Views in HVAC Systems - Automatic	HVAC Connector End Views in HVAC Systems - Automatic
Vanity Mirror Lamp - Left	Behind the LH sunshade	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Vanity Mirror Lamp - Right	Behind the RH sunshade	Lighting Systems Component Views in Lighting Systems	Lighting Systems Connector End Views in Lighting Systems
Variable Effort Steering Actuator	Inside of the steering gear	Steering Controls Component Views in Variable Effort Steering	Steering Controls Connector End Views in Variable Effort Steering
Vehicle Speed Sensor (VSS)	Top RH side of the differential	Manual Transmission Component Views in Manual Transmission	Manual Transmission Connector End Views in Automatic Transmission-4L60- E/4L65-E
Wheel Speed Sensor (WSS)-LF	LF wheel between steering knuckle and brake rotor	ABS Component Views in Antilock Brake System	ABS Connector End Views in Antilock Brake System
Wheel Speed Sensor (WSS) - LR	Rear LH wheel between steering knuckle and brake rotor	ABS Component Views in Antilock Brake System	ABS Connector End Views in Antilock Brake System
Wheel Speed Sensor (WSS) - RF	Front RH wheel between steering knuckle and brake rotor	ABS Component Views in Antilock Brake System	ABS Connector End Views in Antilock Brake System
Wheel Speed Sensor (WSS) - RR	Rear RH wheel between steering knuckle and brake rotor	ABS Component Views in Antilock Brake System	ABS Connector End Views in Antilock Brake System
Window Motor - Driver	Behind the LH door trim panel, part of the window assembly	Power Door Systems Component Views in Doors	Power Door Systems Connector End Views in Doors
Window Motor - Passenger	Behind the RH door trim panel, part of the window assembly	Power Door Systems Component Views in Doors	Power Door Systems Connector End Views in Doors
Windshield Washer Fluid Pump	LH rear engine compartment, on the bottom front of the washer fluid reservoir	Wiper/Washer System Component Views in Wipers/Washer Systems	Wiper/Washer System Connector End Views in Wipers/Washer Systems
Windshield Washer Fluid Level Switch	Rear side of the washer fluid reservoir	<u>Wiper/Washer</u> <u>System Component</u> <u>Views</u> in Wipers/Washer	Wiper/Washer System Connector End Views in Wipers/Washer Systems

		Systems	
Windshield Wiper Motor	LH side of the plenum	Wiper/Washer System Component Views in Wipers/Washer Systems	Wiper/Washer System Connector End Views in Wipers/Washer Systems
Windshield Wiper/Washer Switch	RH stalk of the steering column	Wiper/Washer System Component Views in Wipers/Washer Systems	<u>Inline Harness</u> Connector End Views
YAW Rate Sensor	Mounted to the lower left instrument panel support bracket, under the HVAC control head	ABS Component Views in Antilock Brake System	ABS Connector End Views in Antilock Brake System
C100 (8 cavities)	Forward lamp harness to forward lamp jumper harness, RH skid bar in front of the horns	<u>Harness Routing</u> <u>Views</u>	<u>Inline Harness</u> Connector End Views
C102 (20 cavities)	Instrument panel harness to forward lamp harness, RH side rear of engine compartment	<u>Harness Routing</u> <u>Views</u>	Inline Harness Connector End Views
C105 (2 cavities)	Transmission harness to LF wheel speed sensor, mounted on the engine above the lower control arm	-	Inline Harness Connector End Views
C108 (2 cavities)	Transmission harness to RF wheel speed sensor, mounted on the engine above the lower control arm	-	Inline Harness Connector End Views
C109 (8 cavities)	LH ignition control module jumper harness to engine harness, top center of the valve cover	<u>Power and Grounding</u> <u>Component Views</u>	Inline Harness Connector End Views
C110 (8 cavities)	RH ignition control module jumper harness to engine harness, top center of the valve cover	Power and Grounding Component Views	Inline Harness Connector End Views
C112 (2 cavities)	Knock sensor (KS) jumper harness to engine harness, top rear of the engine mounted to the vacuum hose	Power and Grounding Component Views	<u>Inline Harness</u> Connector End Views
	Forward lamp harness to		

C113 (2 cavities)	underhood lamp jumper harness, right side of the lower radiator support	<u>Harness Routing</u> <u>Views</u>	Inline Harness Connector End Views
C140 (10 cavities) (W/O F55)	Transmission harness to forward lamp harness, RH side in engine compartment, below the battery	<u>Harness Routing</u> <u>Views</u>	Inline Harness Connector End Views
C140 (14 cavities) (W/ F55)	Transmission harness to forward lamp harness, RH side in engine compartment, below the battery	<u>Harness Routing</u> <u>Views</u>	Inline Harness Connector End Views
C142 (20 cavities)	Engine harness to transmission harness, RH side rear of engine compartment, below the battery	-	<u>Inline Harness</u> <u>Connector End Views</u>
C144 (20 cavities)	Engine harness to transmission harness, RH side rear of engine compartment, below the battery	-	<u>Inline Harness</u> Connector End Views
C146 (10 cavities)	Transmission harness to instrument panel harness, RH side rear of engine compartment, below the battery	_	Inline Harness Connector End Views
C148 (10 cavities)	Transmission harness to forward lamp harness, RH side rear of engine compartment, below the battery	<u>Harness Routing</u> <u>Views</u>	Inline Harness Connector End Views
C150 (20 cavities)	Forward lamp harness to engine harness, RH side rear of engine compartment, below the battery	<u>Harness Routing</u> <u>Views</u>	Inline Harness Connector End Views
C152 (3 cavities)	Forward lamp harness to brake fluid pressure sensor jumper harness, LH side of engine compartment on left fender well	<u>Harness Routing</u> <u>Views</u>	<u>Inline Harness</u> Connector End Views
C200 (6 cavities)	Instrument panel harness to RH door harness, in the rubber grommet on the RH door	Power and Grounding <u>Component Views</u>	Inline Harness Connector End Views
	Instrument panel harness to LH door harness, in the	Power and Grounding	Inline Harness

C201 (6 cavities)	rubber grommet on the LH door	<u>Component Views</u>	Connector End Views
C202 (10 cavities)	Instrument panel harness to RH door harness, in the rubber grommet on the RH door	Power and Grounding Component Views	Inline Harness Connector End Views
C203 (10 cavities)	Instrument panel harness to LH door harness, in the rubber grommet on the LH door	Power and Grounding Component Views	Inline Harness Connector End Views
C204 (4 cavities)	Instrument panel harness to front body harness, Right of the fuse block - I/P. Mounted to toe board behind the carpet	<u>Harness Routing</u> <u>Views</u>	<u>Inline Harness</u> <u>Connector End Views</u>
C207 (4 cavities)	Instrument panel harness to steering column harness, LH side of the steering column, attached to the lower instrument panel bar - for steering column lock	Power and Grounding Component Views	<u>Inline Harness</u> Connector End Views
C208 (3 cavities)	Instrument panel harness to steering column harness, LH side of the steering column attached to the instrument panel lower beam	_	<u>Inline Harness</u> <u>Connector End Views</u>
C209 (23 cavities)	Instrument panel harness to steering column harness, LH side of the steering column, attached to the lower instrument panel bar - headlamp and turn signal switches	<u>Power and Grounding</u> <u>Component Views</u>	<u>Inline Harness</u> Connector End Views
C210 (2 cavities)	Instrument panel harness to steering column harness, LH side of the steering column attached to the instrument panel lower beam	-	<u>Inline Harness</u> <u>Connector End Views</u>
C211 (2 cavities)	Instrument panel to inflatable restraint steering wheel module coil, LH side of the steering column, attached to the lower instrument panel bar	Power and Grounding <u>Component Views</u>	<u>Inline Harness</u> <u>Connector End Views</u>

C212 (3 cavities)	Instrument panel harness to steering column harness, LH side of the steering column attached to the instrument panel lower beam	-	<u>Inline Harness</u> <u>Connector End Views</u>
C213 (2 cavities)	Instrument panel harness, taped to the instrument panel harness near the BOSE(R) signal processor	Power and Grounding Component Views	<u>Inline Harness</u> Connector End Views
C215 (10 cavities)	Instrument panel harness to hazard warning switch jumper harness, behind the hazard warning switch	-	Inline Harness Connector End Views
C217 (4 cavities)	Instrument panel harness to steering column harness, LH side of the steering column, attached to the lower instrument panel bar	<u>Power and Grounding</u> <u>Component Views</u>	<u>Inline Harness</u> Connector End Views
C219 (6 cavities)	Instrument panel harness to steering column harness, LH side of the steering column attached to the instrument panel lower beam	<u>Power and Grounding</u> <u>Component Views</u>	Inline Harness Connector End Views
C220 (8 cavities)	Instrument panel harness to vanity mirror jumper	-	Inline Harness Connector End Views
C301 (6 cavities)	Instrument panel harness to LH seat harness, under LH seat	Power and Grounding Component Views	<u>Inline Harness</u> <u>Connector End Views</u>
C302 (6 cavities)	Front body harness to RH seat harness, under RH seat	Harness Routing <u>Views</u>	Inline Harness Connector End Views
C303 (8 cavities)	Instrument panel harness to LH seat harness, under LH seat	-	Inline Harness Connector End Views
C400 (8 cavities)	Transmission harness to rear body harness, RR wheelhouse, rear of the control arm	<u>Harness Routing</u> <u>Views</u>	Inline Harness Connector End Views
C402 (10 cavities)	Transmission harness to fuel tank jumper harness	Harness Routing Views	Inline Harness Connector End Views
C403 (2 cavities)	Transmission harness to LR suspension damper jumper harness, mounted to the frame below the shock	-	Inline Harness Connector End Views

	absorber	!	
C406 (2 cavities)	Transmission harness to RR suspension damper jumper harness, mounted to the frame below the shock absorber	_	<u>Inline Harness</u> Connector End Views
C410 (1 cavity)	Front body harness to antenna/defogger jumper harness	Harness Routing <u>Views</u>	<u>Inline Harness</u> Connector End Views
C412 (4 cavities)	Fuel Tank Jumper Harness to Left Fuel Tank Harness	Harness Routing <u>Views</u>	Inline Harness Connector End Views
C414 (6 cavities)	Fuel Tank Jumper Harness to Right Fuel Tank Harness	Harness Routing <u>Views</u>	<u>Inline Harness</u> Connector End Views
G101	Forward lamp harness, on LH frame rail, near brake pressure modulator valve (BPMV) (CKT 150)	Power and Grounding Component Views	-
G102	Forward lamp harness, on the top of the RH frame rail, behind the RH headlamp assembly, ground for SP100 (CKT 250)	Power and Grounding Component Views	-
G103	Forward lamp harness, on LH frame rail, near brake pressure modulator valve (BPMV) (CKT 1250)	Power and Grounding Component Views	-
G104	Instrument panel harness, below the battery tray, on the RH frame rail, ground for SP208 (CKT 851)	Power and Grounding Component Views	-
G105	Engine harness, LH side bottom of engine, ground for SP122 (CKT 150)	Power and Grounding Component Views	-
G106	Engine harness, RH side of the engine, above the starter (CKT 451)	-	-
G107	Engine harness, LH side top, rear of engine (CKT 151)	Power and Grounding Component Views	-
G108	Forward lamp harness, below the battery tray on the frame rail (CKT 1251)	Power and Grounding Component Views	-
G201	Instrument panel harness, at base of LH A-Pillar, ground for SP201 and SP203 (CKT	Power and Grounding Component Views	-

	150 and CKT 351)		
G205	Instrument panel harness, behind the LH seat, at the antenna module (CKT 150)	Power and Grounding Component Views	-
G301	Front body harness, behind the LH seat, at the antenna module (CKT 350)	Power and Grounding Component Views	-
G302	Front body harness, on the RH BP-Pillar, ground for SP302 (CKT 150)	Power and Grounding Component Views	-
G401	Transmission harness, rear of the vehicle, on the inner side of the LH frame rail (CKT 150)	Power and Grounding Component Views	-
G402	Transmission harness, rear of the vehicle, on the inner side of RH frame rail (CKT 1351 and CKT 1251)	Power and Grounding Component Views	_
P200	Instrument panel harness, RH side of instrument panel on dash panel	Harness Routing <u>Views</u>	-
P201	Instrument panel harness, LH side of Instrument panel in A-Pillar	Harness Routing <u>Views</u>	-
P202	Instrument panel harness, RH side of instrument panel in A-Pillar	Harness Routing <u>Views</u>	-
P203	Instrument panel harness, LH side of instrument panel (for windshield motor)	Harness Routing <u>Views</u>	_
P401	Transmission harness, LH rear of vehicle	Harness Routing <u>Views</u>	_
P501	In front of the LH door	Harness Routing Views	-
P600	In front of the RH door	Harness Routing Views	-
S100	RH ignition control module jumper, approximately 6.0 cm (2.3 in) from connector C110 breakout (CKT 151)	-	-
S101	LH ignition control module jumper, approximately 6.0 cm (2.3 in) from connector C109 breakout (CKT 151)	-	-
	RH ignition control module		

jumper, approximately 5.0 cm (1.9 in) from breakout for connector C110 (CKT 39)	_	_
LH ignition control module jumper, approximately 5.0 cm (1.9 in) from breakout for connector C109 (CKT 39)	_	_
RH ignition control module jumper, approximately 4.0 cm (1.5 in) from breakout for ignition coil/module 4 (CKT 2129)	_	-
LH ignition control module jumper, approximately 4.0 cm (1.5 in) from breakout for ignition coil/module 5 (CKT 2129)	_	-
Forward lamp harness, approximately 12.5 cm (4.9 in) from the EBCM connector breakout (CKT 556)	Harness Routing <u>Views</u>	-
Forward lamp harness, approximately 20 cm (7.9 in) from the EBCM connector breakout (CKT 20)	<u>Harness Routing</u> <u>Views</u>	-
Forward lamp harness, approximately 6.0 cm (2.3 in) from EBCM connector breakout (CKT 1056)	Harness Routing <u>Views</u>	-
Forward lamp harness, approximately 10.0 cm (3.9 in) from A/C Compressor Clutch connector breakout (CKT 59)	-	-
Engine harness, approximately 39.0 cm (15.3 in) from the main harness in the branch leading to the powertrain control module (PCM) connectors (CKT 451)	-	-
-	jumper, approximately 5.0 cm (1.9 in) from breakout for connector C110 (CKT 39) LH ignition control module jumper, approximately 5.0 cm (1.9 in) from breakout for connector C109 (CKT 39) RH ignition control module jumper, approximately 4.0 cm (1.5 in) from breakout for ignition coil/module 4 (CKT 2129) LH ignition control module jumper, approximately 4.0 cm (1.5 in) from breakout for ignition coil/module 5 (CKT 2129) Forward lamp harness, approximately 12.5 cm (4.9 in) from the EBCM connector breakout (CKT 556) Forward lamp harness, approximately 20 cm (7.9 in) from the EBCM connector breakout (CKT 20) Forward lamp harness, approximately 6.0 cm (2.3 in) from EBCM connector breakout (CKT 1056) Forward lamp harness, approximately 10.0 cm (3.9 in) from A/C Compressor Clutch connector breakout (CKT 59) Engine harness, approximately 39.0 cm (15.3 in) from the main harness in the branch leading to the powertrain control module (PCM) connectors (CKT 451)	jumper, approximately 5.0 cm (1.9 in) from breakout for connector C110 (CKT 39) LH ignition control module jumper, approximately 5.0 cm (1.9 in) from breakout for connector C109 (CKT 39) RH ignition control module jumper, approximately 4.0 cm (1.5 in) from breakout for ignition coil/module 4 (CKT 2129) LH ignition control module jumper, approximately 4.0 cm (1.5 in) from breakout for ignition coil/module 5 (CKT 2129) Forward lamp harness, approximately 12.5 cm (4.9 in) from the EBCM connector breakout (CKT 556) Forward lamp harness, approximately 20 cm (7.9 in) from the EBCM connector breakout (CKT 20) Forward lamp harness, approximately 6.0 cm (2.3 in) from EBCM connector breakout (CKT 1056) Forward lamp harness, approximately 10.0 cm (3.9 in) from A/C Compressor Clutch connector breakout (CKT 59) Engine harness, approximately 39.0 cm (15.3 in) from the main harness in the branch leading to the powertrain control module (PCM) connectors (CKT 451) Engine harness

S112	approximately 6.0 cm (2.3 in) from the camshaft position sensor breakout (CKT 150)	-	_
S120	Engine harness, approximately 11.5 cm (4.5 in) from the main harness in the branch leading to the powertrain control module (PCM) connectors (CKT 451)	-	_
S200	Instrument panel harness, approximately 22.5 cm (8.8 in) from the inside rearview mirror breakout (CKT 640)	-	_
S201 (CJ2)	Instrument panel harness, approximately 35.0 cm (13.7 in) from the HVAC control head connector (CKT 1791)	-	_
S202	Instrument panel harness, approximately 39.5 cm (15.5 in) from the inside rearview mirror breakout (CKT 150)	-	-
S203	Instrument panel harness, approximately 6 cm (2.4 in) from the connector breakout for the BCM (CKT 1640)	-	_
S204	Engine harness, approximately 6.5 cm (2.5 in) from the C150 breakout (CKT 817)	-	-
S205	Instrument panel harness, approximately 6.5 cm (2.5 in) from the data link connector (DLC) breakout (CKT 9)	-	-
S206	Instrument panel harness, approximately 5 cm (1.9 in) from the blower motor control module connector breakout (CKT 1132)	-	-
S208	Instrument panel harness, approximately 32.5 cm (12.7 in) from the radio	-	-

	connectors (CKT 145)		
S210	Instrument panel harness, approximately 10.0 cm (3.9 in) from the blower motor control module breakout (CKT 159)	-	-
S212	Instrument panel harness, approximately 22.5 cm (8.8 in) from the electronic accessory plug connector	-	-
S213	Instrument panel harness, approximately 7.5 cm (2.9 in) right of the brake switch connectors breakout (CKT 339)	-	-
S215 (CJ2)	Instrument panel harness, approximately 6.5 cm (2.5 in) left of the inflatable restraint instrument panel module breakout (CKT 1798)	-	-
S300 - IDC	RH power seat harness, approximately 4.0 cm (1.5 in) from the breakout for the RH seat relay center connector C1 (CKT 1140)	-	-
S301 - IDC	LH power seat harness, approximately 2.5 cm (0.9 in) from the breakout for C301 (CKT 150)	-	-
S302	Front body harness, approximately 12.0 cm (4.7 in) from the RH rear speaker breakout (CKT 383)	<u>Harness Routing</u> <u>Views</u>	-
S303	Front body harness, approximately 15.0 cm (5.9 in) from the RH rear speaker breakout (CKT 740)	<u>Harness Routing</u> <u>Views</u>	-
S304	Front body harness, approximately 22.5 cm (8.8 in) from the RH rear speaker breakout, toward RH rear compartment lamp (CKT 744)	Harness Routing <u>Views</u>	-

S308	Instrument panel harness, approximately 19.0 cm (7.4 in) from the yaw rate connector (CKT 556)	_	_
S310	Instrument panel harness, approximately 11.0 cm (4.3 in) from the yaw rate connector (CKT 1056)	-	_
\$312	Front body harness, rear defogger capacitor, approximately 20.0 cm (7.8 in) from the SP302 breakout (CKT 293 and CKT 899)	Harness Routing <u>Views</u>	-
S314	Front body harness, rear defogger capacitor, approximately 20.0 cm (7.8 in) from the SP302 breakout (CKT 2050 and CKT 899)	Harness Routing <u>Views</u>	-
S391	LH power seat harness, under the seat base	-	-
S392	LH power seat harness, under the seat base	-	-
S400	Transmission harness, approximately 6.5 cm (2.5 in) from the C402 breakout (CKT 339)	-	-
S402	Transmission harness, approximately 55.0 cm (21.6 in) from RR shock absorber breakout (CKT 150)	-	-
S408	Fuel tank jumper harness, approximately 6.5 cm (2.5 in) from the C402 breakout (CKT 150)	-	-
S410	Fuel tank jumper harness, approximately 81.5 cm (32 in) from C408 breakout (CKT 720)	-	-
S412	Right side fuel tank harness, approximately 22.5 cm (8.9 in) from C414 breakout (CKT 808)	-	-
	,		

S420 (Europe)	Rear body harness, approximately 6.5 cm (2.5 in) from the C400 breakout (CKT 122)	<u>Harness Routing</u> <u>Views</u>	_
S480 (Japan/Europe)	Rear body harness, approximately 3.5 cm (1.3 in) from the splice pack 400 breakout (CKT 9)	<u>Harness Routing</u> <u>Views</u>	-
S481 (Japan/Domestic)	Rear body harness, approximately 6.5 cm (2.5 in) from the LH backup lamp connector breakout (CKT 18)	Harness Routing <u>Views</u>	-
S482	Rear body harness, approximately 21.5 cm (8.4 in) left of the splice pack 400 breakout (CKT 24)	Harness Routing <u>Views</u>	-
S483 (Japan/Europe)	Rear body harness, approximately 6.5 cm (2.5 in) from the LH back up lamp connector breakout (CKT 9)	<u>Harness Routing</u> <u>Views</u>	_
S484 (Domestic)	Rear body harness, approximately 8.0 cm (3.1 in) left of the splice pack 400 breakout (CKT 24)	Harness Routing <u>Views</u>	-
S485 (Japan)	Rear body harness, approximately 5 cm (1.9 in) from LR license lamp breakout (CKT 150)	Harness Routing <u>Views</u>	-
S490 (Japan/Europe)	Rear body harness, approximately 13.0 cm (5.1 in) from the C400 breakout (CKT 820)	Harness Routing <u>Views</u>	-
S492 (Domestic)	Rear body harness, approximately 6.5 cm (2.5 in) from the RH turn signal breakout (CKT 19)	Harness Routing <u>Views</u>	-
S494 (Japan/Europe)	Rear body harness, approximately 6.5 cm (2.5 in) from the RH turn signal breakout (CKT 9)	Harness Routing <u>Views</u>	-
S496 (Japan)	Rear body harness, approximately 6.5 cm (2.5 in) from the C400 breakout (CKT 19)	<u>Harness Routing</u> <u>Views</u>	-

S498 (Japan)	Rear body harness, at the RR backup lamp breakout (CKT 150)	Harness Routing <u>Views</u>	-
S501 - IDC	LH door harness, approximately 6.0 cm (2.3 in) from the outside rearview mirror connector breakout, toward P501 (CKT 360)	_	_
S503	Antenna/Defogger jumper harness, approximately 10.0 cm (3.9 in) from C2 of the rear defogger (CKT 350)	-	-
S505	Antenna/Defogger jumper harness, approximately 32.0 cm (12.6 in) from C2 of the radio antenna module (CKT 350)	-	-
S507	Antenna/Defogger jumper harness, approximately 20.0 cm (7.9 in) from the C 410 breakout (CKT 293)	-	-
S509	Antenna/Defogger jumper harness, approximately 20.0 cm (7.9 in) from C1 of the rear defogger (CKT 293)	-	-
S600 - IDC	RH door harness, approximately 6.0 cm (2.3 in) from the outside rearview mirror connector breakout, toward P600 (CKT 360)	-	-
Splice Pack, SP100	Forward lamp harness, grounded to G102, at the RH headlamp opening door assembly connector breakout (CKT 150)	Power and Grounding Component Views	<u>Splice Pack</u> Connector End Views
Splice Pack, SP101	Forward lamp harness, grounded to G101, on LH frame rail, near brake pressure modulator valve (BPMV) (CKT 150)	Power and Grounding Component Views	Splice Pack Connector End Views
Splice Pack, SP102	Forward lamp jumper, taped to harness approximately 10.0 cm (3.9 in) left of C100, grounded	Power and Grounding <u>Component Views</u>	<u>Splice Pack</u> Connector End Views

	to G102 (CKT 150)		
Splice Pack, SP201	Instrument panel harness, grounded to G201 (CKT 150)	Power and Grounding Component Views	Splice Pack Connector End Views
Splice Pack, SP202	Instrument panel harness, grounded to G202 (CKT 150)	Power and Grounding Component Views	Splice Pack Connector End Views
Splice Pack, SP203	Instrument panel harness, grounded to G201 (CKT 351)	Power and Grounding Component Views	Splice Pack Connector End Views
Splice Pack, SP208	Instrument panel harness, RH side of instrument panel, grounded to G104 (CKT 851)	Power and Grounding Component Views	Splice Pack Connector End Views
Splice Pack, SP302	Front body harness, approximately 83.5 cm (33.4 in) from RH power seat breakout (C302), grounded to G302 (CKT 150)	<u>Power and Grounding</u> <u>Component Views</u>	Splice Pack Connector End Views
Splice Pack, SP400	Rear body harness, taped back to harness between RR backup lamp and RR tail/stop lamp breakout, grounded to G401 (CKT 150)	<u>Power and Grounding</u> <u>Component Views</u>	Splice Pack Connector End Views
Splice Pack, SP402 (Export)	Rear body harness, taped back to harness between auto fuse and RR license lamp breakout, grounded to G401 (CKT 150)	<u>Power and Grounding</u> <u>Component Views</u>	Splice Pack Connector End Views

POWER AND GROUNDING COMPONENT VIEWS



Fig. 74: Engine Compartment Under The Battery Component View Courtesy of GENERAL MOTORS CORP.

	Call	outs	For	Fig.	74
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Callout	Component Name	
1	Battery	
2	Battery Cables	
3	G104	
4	Engine Coolant Reservoir	
5	Fuse Block-Underhood	


Fig. 75: View of Vehicle Without Body Panels Component View Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	G302
2	G402
3	G401
4	G205 and G301
5	G201
6	Grounding Point for Engine Ground Strap
7	G101
8	G102
9	G104 and G108



Fig. 76: Behind The Lf Wheel Component View Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	Engine Grounding Strap
2	Frame Rail-LH
3	Engine Grounding Strap Location



Fig. 77: Bottom of the A-Pillar Component View - LF Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	SP203
2	SP201
3	G201
4	C203
5	C201



Fig. 78: Bottom of the A-Pillar Component View - RF Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	C202
2	C200
3	G202
4	SP202



Fig. 79: Instrument Panel Component View Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	Sunload Sensor
2	HVAC Module Assembly
3	Air Temperature Actuator (C60)
4	Vacuum Control Assembly (CJ2)
5	Blower Motor
6	Blower Motor Control Processor
7	Fuse Block-IP
8	Body Control Module (BCM)
9	Ignition Switch
10	Air Temperature Sensor - Inside
11	Telescoping Actuator Switch

12	Data Link Connector (DLC)
13	Multifunction Turn Signal Lever
14	Ambient Light Sensor
15	Windshield Wiper/Washer Switch



Fig. 80: Cockpit Component View Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	Outside Rearview Mirror-Driver
2	Fog Lamp/Rear Compartment Lid Release Switch (Domestic), Fog Lamp Switch (Export)
3	Dimmer Switch
4	Dimmer/Head Up Display (HUD) Switch
5	Instrument Panel Cluster (IPC)
6	Vanity Mirror Lamp-Left
7	Driver Information Center (DIC) Switch-Right
8	Hazard Switch
9	Radio
10	HVAC Control Module

11	Vanity Mirror Lamp-Right
12	Door Switch-Passenger
13	Outside Rearview Mirror-Passenger
14	Footwell Courtesy Lamp-Right
15	Fuel Door Lock Release Switch (Domestic), Rear Compartment Lid/Fuel Door Lock Release Switch (Export)
16	Traction/Suspension Control Switch
17	Auxiliary Power Outlet Connector
18	Cigar Lighter
19	Horn Switch
20	Seat Control Module (SCM)-Driver (W/Memory Seats), Seat Relay Center-Driver (W/O Memory Seats)
21	Seat Adjuster Switch-Driver
22	Footwell Courtesy Lamp-Left
23	Door Switch-Driver



Fig. 81: Steering Column Component View Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 81

Callout	Component Name
1	Telescoping Sensor
2	Steering Column Lock
3	C219
4	C207
5	C211
6	C217
7	C209
8	Steering Wheel Position Sensor
9	Telescoping Drive Motor
10	C210



Fig. 82: Under RH Side Of Dash Component View Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	Theft Deterrent Relay

2	Fuse Block-IP
3	Blower Motor Relay
4	Star Connector #2
5	Body Control Module (BCM) C3
6	Body Control Module (BCM) C1
7	Star Connector #1
8	Body Control Module (BCM) C2
9	Steering Column Lock Relay



Fig. 83: Under Side Of The Dash Component View - Left Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	Stop Lamp Switch C1

2	Stop Lamp Switch C3
3	C213
4	Bose Signal Processor
5	Accelerator Pedal Position (APP) Sensor
6	Accelerator Pedal
7	Brake Pedal
8	Steering Wheel Position Sensor
9	Clutch Pedal
10	Clutch Pedal Start Switch
11	Clutch Pedal Position Switch
12	Stop Lamp Switch
13	Stop Lamp Switch Connector C2



Fig. 84: Speakers And Antennas Component View

Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	Front Window Antenna
2	Speaker-RR
3	Antenna Buffer
4	Rear Window Antenna
5	Speaker-LR
6	G205
7	Radio Antenna Module (Coupe)
8	C301
9	Speaker-LF Door
10	Speaker-RF Door

Callouts For Fig. 84



Fig. 85: Body Rear End Harness Routing Component View Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	C400
2	S420 - Europe
3	S496 - Japan

4	S490 - Japan/Europe
5	S485 - Japan
6	S482
7	S484 - Domestic
8	S480 - Japan/Europe
9	S492 - Domestic
10	S494 - Japan/Europe
11	License Lamp Inline Fuse-RH (Export)
12	S498
13	S483 - Japan/Europe
14	S481 - Japan/Domestic
15	License Lamp Inline Fuse-LH (Export)
16	Sp400, Sp402 - Export



Fig. 86: Engine Component View

Courtesy of GENERAL MOTORS CORP.

Callouts For Fig. 86	
Callout	Component Name
1	Fuel Injector 6
2	Fuel Injector 8
3	Fuel Injector 3
4	Fuel Injector 5
5	Fuel Injector 7
6	Ignition Coil/Module 7
7	Ignition Coil/Module 5
8	C109
9	Ignition Coil/Module 3
10	Ignition Coil/Module 1
11	Engine Oil Temperature (EOT) Sensor
12	Engine Coolant Temperature (ECT) Sensor
13	Evaporative Emission (EVAP) Canister Purge Solenoid
14	Fuel Injector 1
15	Throttle Actuator Control (TAC) Motor
16	Throttle Position (TP) Sensor
17	Fuel Injector 2
18	Ignition Coil/Module 2
19	Ignition Coil/Module 4
20	Fuel Injector 4
21	C110
22	Ignition Coil/Module 6
23	Ignition Coil/Module 8





Fig. 87: Forward Lamp Jumper Harness Component View Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	C100
2	Sp102



Fig. 88: Lower Side Of Engine Component View - Left Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	G105
2	Engine Oil Temperature (EOT) Sensor
3	Heated Oxygen Sensor (HO2S) Bank 1 Sensor 1



Fig. 89: Rear Of Engine Component View Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	Engine Oil Pressure (EOP) Sensor
2	Manifold Absolute Pressure (MAP) Sensor
3	Camshaft Position (CMP) Sensor
4	G107
5	C112



Fig. 90: Front Of Engine Compartment Component View Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	A/C Refrigerant Pressure Sensor
2	Secondary Air Injection (AIR) Pump
3	SP100
4	G102
5	Headlamp Door Assembly-Right Connector



Fig. 91: Left Front Of Engine Compartment Component View Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	Electronic Brake Control Module (EBCM)
2	Brake Pressure Modulator Valve (BPMV)
3	SP101
4	G101



Fig. 92: Front Body Harness Component View Courtesy of GENERAL MOTORS CORP.

Callout	Component Name
1	S304
2	Inline to Defogger Grid (Power)
3	Rear Compartment Courtesy Lamp - Right
4	Rear Compartment Lid Latch - Right C2
5	Remote Playback Device - CD Changer
6	Rear Compartment Courtesy Lamp - Left
7	Rear Compartment Lid Latch-Left C2
8	Rear Compartment Lid Latch-Left C1
9	Fuel Door Lock Actuator
10	Rear Compartment Lid Latch - Right C1
11	Remote Control Door Lock Receiver (RCDLR)
12	Inline to Defogger Grid (Ground)
13	Speaker - LR

14	G301
15	C302
16	Fuse Block - I/P C3
17	C204
18	S314 and S312
19	G302
20	SP302
21	\$302
22	S303
23	Speaker - RR

ELECTRICAL CENTER IDENTIFICATION VIEWS

Fuse Block - I/P Label



Fig. 93: Electrical Center Identification Component View Courtesy of GENERAL MOTORS CORP.

Fuse Block - I/P Table

No.	Fuse/Circuit Breaker/Relay	Rating	Description	
1	CNSL CIG Fuse	20A	Auxiliary Power Outlet	
2	MONITORED LD Fuse	10A	Underhood Lamp, Body Control Module (BCM), I/P Compartment Lamp, Vanity Mirror Lamp - Left, Inside Rearview Mirror, Vanity Mirror Lamp - Right	
3	LUMBAR Fuse	15A	Seat Pump - Passenger, Seat Adjuster Switch - Passenger, Seat Relay Center - Passenger	
4	SCM-L Fuse	10A	Seat Adjuster Switch - Driver, Seat Control Module (SCM) - Driver (w/AQ9), Seat Relay Center-Driver (w/AR9)	
5	RDO/CD Fuse	15A	Radio, Remote Playback Device - CD Changer	
6	PK T/LP Fuse	10A	ALC PRK LP Relay, A/T Shift Lock Control Solenoid, Multifunction Turn Signal Lever	
7	C/LTR Fuse	20A	Cigar Lighter	
8	STP HZD Fuse	20A	Stop Lamp Switch, Hazard Switch	
9	BCM A Fuse	10A	Body Control Module (BCM)	
10	WSW Fuse	25A	Windshield Wiper/Washer Switch, Windshield Wiper Motor	
11	ASRYOFF Fuse	20A	Accessory Power (Blunt Cut)	
12	-	-	Not Used	
13	BCM I1 Fuse	10A	Body Control Module (BCM)	
14	CRK Fuse	10A	Clutch Pedal Start Switch, Park/Neutral Position (PNP) Switch	
15	HZDT/SG Fuse	20A	Hazard Switch	
16	SDM Fuse	15A	Inflatable Restraint Sensing and Diagnostic Module (SDM)	
17	TONN REL Fuse	10A	TONN REL Relay	
18	HVAC Fuse	10A	HVAC Control Module, Air Temperature Actuator - Right, Vacuum Control Assembly, RR DEFOG Relay, Air Temperature Actuator - Lef (C60), Blower Motor Relay	
19	IPC Fuse	10A	Instrument Panel Cluster (IPC)	
20	CR CONT Fuse	10A	Multifunction Turn Signal Lever	
21	BTSI BU Fuse	10A	Park/Neutral Position (PNP) Switch, Backup Lamp Switch, Inside Rearview Mirror	
22	-	-	Not Used	
23	BCM 2 Fuse	10A	Body Control Module (BCM), Steering Column Lock Relay	
24	RDO/ANT Fuse	20A	Bose Signal Processor, Radio Power Antenna	
25	BCMI and IPC Fuse	10A	Body Control Module (BCM), Instrument Panel Cluster (IPC)	
26	HTCHTRK Fuse	10A	Rear Compartment Lid Latch/Latches	
27	HVACCON Fuse	10A	HVAC Control Module, Remote Control Door Lock Receiver (RCDLF	
28	BOSE Fuse	20A	BOSE Relay	
29	C/LADL Fuse	10A	Data Link Connector (DLC), CTSY LP Relay	
30	DCM-R Fuse	10A	Passenger Door Module (PDM)	
	1			

31	PWRFDR Fuse	25A	Passenger Door Module (PDM)	
32	F/TNKDR Fuse	15A	Rear Compartment Lid/Fuel Door Lock Release Switch (Export), Fuel Door Lock Release Switch (Domestic), Traction/Suspension Control Switch, Fog Lamp/Rear Compartment Lid Release Switch (Domestic) Fog Lamp Switch (Export)	
33	DCM-L Fuse	10A	Driver Door Module (DDM)	
34	PWRFDL Fuse	25A	Driver Door Module (DDM)	
35	PWR ST/DRV Circuit Breaker	20A	Seat Control Module (SCM) - Driver (w/AQ9), Seat Relay Center - Driver (w/AR9)	
36	PWR ST/PAS Circuit Breaker	20A	Seat Relay Center - Passenger	
37	MONITORED LD Relay	-	Underhood Lamp, Body Control Module (BCM), I/P Compartment Lamp, Vanity Mirror Lamp - Left, Inside Rearview Mirror, Vanity Mirror Lamp - Right	
38	DRL R Relay	-	Park/Turn Signal Lamp - RF, Turn Signal Lamp - RF, Repeater Lamp - Right	
39	HTCHTRK REL Relay	-	Rear Compartment Lid Latch/Latches	
40	DRL L Relay	-	Park/Turn Signal Lamp - LF, Turn Signal Lamp - LF, Repeater Lamp - Left Park/Turn Signal Lamp - RF, Turn Signal Lamp - RF, Repeater Lamp - Right	
41	TONN REL Relay	-	Folding Top Lid Latch, Folding Top Release Switch, Body Control Module (BCM)	
42	CTSY LP Relay	-	Courtesy Lamps	
43	ALC PRK LP Relay	-	A/T Shift Lock Control Solenoid, Multifunction Turn Signal Lever	
44	ALC HDLP Relay	-	Multifunction Turn Signal Lever	
45	BOSE Relay	-	Speaker - LF Door, Speaker - RF Door	
46	RRDEFOG Relay	-	Rear Defogger	
47	IGN 1 Fuse	60A	Ignition Switch	
48	RRDEFOG Fuse	40A	RR DEFOG Relay	
49	-	-	Not Used	
50	IGN 2 Fuse	60A	Ignition Switch	
51	BLO MOT Fuse	30A	Blower Motor Relay, Blower Motor Control Processor	
52	STARTER Fuse	60A	Theft Deterrent Relay	
53	-	-	Not Used	
54	HDLP Circuit Breaker	20A	Multifunction Turn Signal Lever, ALC HDLP Relay	



Fig. 94: Fuse Block Component View - I/P Top View Courtesy of GENERAL MOTORS CORP.

Fuse Block - I/P Bottom View



Fig. 95: Fuse Block Component - I/P Bottom View Courtesy of GENERAL MOTORS CORP.

Fuse Block-I/P C1

Connector	Part Information	• 12 • 68	2177206 3-Way F Metri-Pack 280 Series (BLU)			
Pin	Wire Color	Circuit No.	Function			
Δ 1	ORN	640	Battery Positive Voltage			
AI	ORN	640	Battery Positive Voltage			
A2-A4	-	-	Not Used			
۸.5	YEL	1139	Ignition 1 Voltage			
AJ	YEL	1139	Ignition 1 Voltage			
A6-A8	-	-	Not Used			
A9	ORN	2740	Battery Positive Voltage			
A10-A12	-	-	Not Used			
B1	ORN	640	Battery Positive Voltage			
BJ	ORN	140	Battery Positive Voltage			
D2	ORN	140	Battery Positive Voltage			
B3	YEL	443	Accessory Voltage			
B4-B6	-	-	Not Used			
D7	ORN	2540	Battery Positive Voltage			
D/	ORN	2540	Battery Positive Voltage			
P Q	LT BLU	14	Left Turn Signal Lamps Supply Voltage			
Во	LT BLU	14	Left Turn Signal Lamps Supply Voltage			
B9	-	-	Not Used			
B10	LT BLU	14	Left Turn Signal Lamps Supply Voltage			
B 10	LT BLU	14	Left Turn Signal Lamps Supply Voltage			
B11	ORN	2240	Battery Positive Voltage			

B12	ORN	2640	Battery Positive Voltage	
C1	ORN	640	Battery Positive Voltage	
C2-C3	-	-	Not Used	
C4	PNK	1039	Ignition 1 Voltage	
C5	-	-	Not Used	
C8	ORN/BLK	1976	Left Front Turn Signal Relay Control	
C9	LT BLU/WHT	1314	Left Front Turn Signal Lamp Supply Voltage	
C10	-	-	Not Used	
C11	ORN	2340	Battery Positive Voltage	
C12	ORN	2140	Battery Positive Voltage	
D1-D2	-	-	Not Used	
D3	YEL	143	Accessory Voltage	
D4	-	-	Not Used	
D5	PNK	3	Ignition Switch Voltage-Hot in On and Start	
D8-D12	-	-	Not Used	
E1	-	-	Not Used	
E2	DK BLU	1393	Courtesy Lamp Relay Control	
E3-E4	-	-	Not Used	
E5	PNK	3	Ignition Switch Voltage-Hot in On and Start	
E6	PNK	1239	Ignition 1 Voltage	
E7-E8	-	-	Not Used	
E9	GRY	2169	Convertible Top Relay Cover Release Control	
E10-E11	-	-	Not Used	
E12	ORN	2840	Battery Positive Voltage	
F1	RED/BLK	744	Trunk Ajar Switch Signal	
F2	-	-	Not Used	
F3	BRN	4	Accessory Voltage	
F4	-	-	Not Used	
F5	PNK	1739	Ignition 1 Voltage	
F6	-	-	Not Used	
F7	ORN	300	Ignition 3 Voltage	
E 9	ORN	1640	Battery Positive Voltage	
гð	ORN	1640	Battery Positive Voltage	
F9	ORN	540	Battery Positive Voltage	
F10	PNK	79	Fuel Door Release Solenoid Supply Voltage	
F11	-	-	Not Used	
F12	ORN	2840	Battery Positive Voltage	

F12 A	12			
				F1 A1

Connector Part Information		• 12177207			
Connector	1 art mormation	68-Way F Metri-Pack 280 Series (GRY)			
Pin Wire Color		Circuit No.	Function		
A1-A2	-	-	Not Used		
A3	YEL	243	Accessory Voltage		
Λ./	DK BLU	15	Right Turn Signal Lamps Supply Voltage		
A4	DK BLU	15	Right Turn Signal Lamps Supply Voltage		
A5	WHT	193	Rear Defog Relay Control		
A6	-	-	Not Used		
A7	ORN	300	Ignition 3 Voltage		
A8-A9	-	-	Not Used		
A10	BRN	199	Left Rear Speaker Output (+)		
A11	ORN	1240 Battery Positive Voltage			
A12	-	-	Not Used		
B1	ORN	1140	Battery Positive Voltage		
DJ	ORN	840	Battery Positive Voltage		
D2	ORN	840	Battery Positive Voltage		
D2	DK BLU	15	Right Turn Signal Lamps Supply Voltage		
DO	DK BLU	15	Right Turn Signal Lamps Supply Voltage		
B4	LT GRN	1966	Right Front Turn Signal Relay Control		
B5	DK BLU /WHT	1315	Right Front Turn Signal Lamp Supply Voltage		
B6	PNK	VK 139 Ignition 1 Voltage			
D7	BRN	341	Ignition 3 Voltage		
D /	BRN	341	Ignition 3 Voltage		
B8	-	-	Not Used		
B9	ORN	1840	Battery Positive Voltage		

B10	YEL	116	Left Rear Speaker Output (-)		
D11	DK GRN	835	Entertainment and Comfort Serial Data		
BII	DK GRN	835	Entertainment and Comfort Serial Data		
D10	ORN	740	Battery Positive Voltage		
B12	ORN	740	Battery Positive Voltage		
C1-C3	-	-	Not Used		
C.4	DK BLU	2167	Convertible Top Cover Ajar Switch Supply Voltage		
C4	DK BLU	2167	Convertible Top Cover Ajar Switch Supply Voltage		
C5	PPL	1606	Crank Voltage		
C8	LT BLU	1344	Trunk Release Relay Control		
C9	-	-	Not Used		
C10	PNK	1045	RFA Class 2 Serial Data		
C11	GRY/BLK	690	Courtesy Lamp Low Control		
C12	ORN	740	Battery Positive Voltage		
D1	ORN	1540	Battery Positive Voltage		
D2	ORN	240	Battery Positive Voltage		
D2	ORN	240	Battery Positive Voltage		
D2	WHT	103	Headlamp Switch Headlamps On Signal		
D5	WHT	103	Headlamp Switch Headlamps On Signal		
D4	RED	842	Battery Positive Voltage		
D5	YEL	5	Crank Voltage		
D8-D9	-	-	Not Used		
D10	BLK	150	Ground		
D11	LT GRN	2166	Convertible Top Cover Release Switch Supply Voltage		
D12	-	-	Not Used		
E1	ORN	440	Battery Positive Voltage		
E2	-	-	Not Used		
E3	ORN	1740	Battery Positive Voltage		
E4	RED	842	Battery Positive Voltage		
E5	YEL/BLK	1784	Twilight Sentinel Enable Signal		
F6	BRN	9	Park Lamp Supply Voltage		
E0	BRN	9	Park Lamp Supply Voltage		
E7	-	-	Not Used		
E8	ORN	40	Battery Positive Voltage		
E9	-	-	Not Used		
E10	ORN	360	Amplifier Feed		
E11	LT BLU	115	Right Rear Speaker Output (-)		
E12	-	-	Not Used		
F1	DK BLU	46	Right Rear Speaker Output (+)		
F2	-	-	Not Used		
F3	WHT	352	Headlamp Relay Coil Supply Voltage		

F4	RED	842	Battery Positive Voltage		
F5	BLK/WHT	351	Ground		
E6	BRN	41	1 Ignition 3 Voltage		
10	BRN	41	Ignition 3 Voltage		
F7	BRN	41	41 Ignition 3 Voltage		
Г/	BRN	41	Ignition 3 Voltage		
F8-F9	-	-	Not Used		
F10	ORN	360	Amplifier Feed		
F11	DK GRN	145	Antenna Relay Coil Supply Voltage		
F12	BLK/WHT	851	Ground		



Connector P	art Information	• 12177205		
D'			8-way F Metri-Pack 280 Series (GRN)	
Pin	wire Color	Circuit No.	Function	
A1	DK BLU	46	Right Rear Speaker Output (+)	
A2-A4	-	-	Not Used	
A5	BLK/WHT	351	Ground	
A6-A7	-	-	Not Used	
A8	ORN	40	Battery Positive Voltage	
A9	LT BLU	383 Trunk Release Control		
A10-A11	-	-	Not Used	
A12	BLK/WHT	851	Ground	
B1	-	-	Not Used	
B2	ORN/BLK	1140	Battery Positive Voltage	
B3	-	-	Not Used	
B4	RED/BLK	744	Trunk Ajar Switch Signal	

B5-B6	-	-	Not Used		
B7	ORN	540	Battery Positive Voltage		
B8	-	-	Not Used		
B9	BRN	199	Left Rear Speaker Output (+)		
B10	YEL	116	Left Rear Speaker Output (-)		
B11	-	-	Not Used		
B12	ORN	740	Battery Positive Voltage		
C1-C4	-	-	Not Used		
C5	DK BLU	2167	Convertible Top Cover Ajar Switch Supply Voltage		
C8	-	-	Not Used		
C9	PNK	79	Fuel Door Release Solenoid Control		
C10	DK GRN	835	Entertainment and Comfort Serial Data		
C11	-	-	Not Used		
C12	RED /DK GRN	2166	Convertible Top Cover Release Switch Supply Voltage		
D1	-	-	Not Used		
D2	ORN	1440	Battery Positive Voltage		
D3-D11	-	-	Not Used		
D12	PNK	1045	RFA Class 2 Serial Data		
E1-E2	-	-	Not Used		
E3	ORN	440	Ignition 1 Voltage		
E4	-	-	Not Used		
E5	BLK	293	Rear Defog Element Supply Voltage		
E6-E10	-	-	Not Used		
E11	LT BLU	115	Right Rear Speaker Output (-)		
E12	DK GRN	145	Antenna Relay Coil Supply Voltage		
F1-F10	-	-	Not Used		
F11	PPL	2168	Folding Top Actuator Supply Voltage		
F12	-	-	Not Used		

Con	 Connector Part Information 12146038 2-Way F MaxiFuse (LT GRY) 						
Pin	Wire Color	Circuit No.	Function				
A	RED	842	Battery Positive Voltage				
В	RED	1442	Battery Positive Voltage				



Con	Connector Part Information • 12160605 • 2 Way E MayiEuse (LT CBN)						
Pin	Wire Color	Circuit No.	Function				
Δ	RED	1342	Battery Positive Voltage				
A	RED	1342	Battery Positive Voltage				
В	RED	1542	Battery Positive Voltage				

			B	
Сог	nnector Part Information	 12160606 2-Way F MaxiFuse (BRN) 		
Pin	Wire Color	Circuit No.	Function	
А	RED	542	Battery Positive Voltage	
В	-	-	Not Used	



Fig. 96: Fuse Block Component View - Underhood Label Courtesy of GENERAL MOTORS CORP.

Fuse Block - Underhood Table

No.	Fuse/Relay	Rating	Description	
1	RRFOGLP (Export) Fuse	10A	Fog Lamp Switch, Fog Lamp LR, Fog Lamp RR	
2	APPROACH Fuse	15A	BACKUP LP Relay, DRL L Relay, DRL R Relay	
3	HDLPMOTRH Fuse	10A	Headlamp Door Control Module	
4	HDLPMOTLH Fuse	10A	Headlamp Door Control Module	
5	ABSTRNS Fuse	10A	Electronic Brake Control Module (EBCM), Electronic Suspension	

			Control (ESC) Module	
6	FOG LP Fuse	10A	Fog Lamp/Rear Compartment Lid Release Switch (Domestic), Fog Lamp Switch (Export), Fog Lamp - RF, Fog Lamp - LF	
7	-	-	Not Used	
8	HDLOBMR Fuse	10A	Headlamp Low Beam - Right	
9	HDHIBMR Fuse	10A	Headlamp High Beam - Right	
10	HDLOBML Fuse	10A	Headlamp Low Beam - Left	
11	HORN Fuse	20A	Horn Assembly	
12	HDHIBML Fuse	10A	Headlamp High Beam - Left	
13	F/PMP Fuse	20A	Fuel Pump Relay	
14	COOLFAN3 Fuse	10A	COOL FAN 2 Relay, COOL FAN 3 Relay	
15	OXY SEN Fuse	15A	Heated Oxygen Sensors (HO2S) Bank 1 Sensor 1, Bank 1 Sensor 2, Bank 2 Sensor 1, Bank 2 Sensor 2	
16	PCM Fuse	10A	Powertrain Control Module (PCM), IGN Relay	
17	THROTCONT Fuse	15A	Throttle Actuator Control (TAC) Module	
18	INJR2 Fuse	15A	Fuel Injectors 2,4,6,8, Ignition Coil/Modules 2,4,6,8	
19	ENGIGN1 Fuse	10A	Cruise Control Release Switch, Stop Lamp Switch, Mass Air Flow (MAF) Sensor, Evaporative Emission (EVAP) Canister Purge Solenoid, Evaporative Emission (EVAP) Canister Vent Solenoid, Automatic Transmission, Secondary Air Injection (AIR) Solenoid, Reverse Inhibit Solenoid (MM6), Skip Shift Solenoid (MM6), AIR PMP Relay	
20- 21	-	-	Not Used	
22	INJR1 Fuse	15A	Fuel Injectors 1,3,5,7, Ignition Coil/Modules 1,3,5,7	
23	PCM B Fuse	10A	Powertrain Control Module (PCM)	
24	A/C Fuse	10A	A/C CLU Relay	
25- 26	-	-	Not Used	
27	SPARE	-	Spare Fuse	
28	SPARE	-	Spare Fuse	
29	SPARE Fuse	-	Spare Fuse	
30	SPARE Fuse	-	Spare Fuse	
31	SPARE Fuse	-	Spare Fuse	
32	SPARE Fuse	-	Spare Fuse	
33	AIR PMP Relay	-	Secondary AIR Injection (AIR) Pump, Powertrain Control Module (PCM)	
34	A/C CLU Relay	-	A/C Compressor Clutch, A/C Compressor Clutch Diode, Powertrain Control Module (PCM)	
35	F/PMP Relay	-	Fuel Pump and Sender Assembly	

36	HORN Relay	-	Horn Fuse, Horn Assembly	
37	RRFOGLP Relay	-	RR FOG LP Fuse, Body Control Module (BCM)	
38	BACKUP LP Relay	-	Backup Lamp - Left, Backup Lamp - Right, Body Control Module (BCM)	
39	FOG LP (Export) Relay	-	FOG LP Fuse, Body Control Module (BCM)	
40- 41	-	-	Not Used	
42	IGN Relay	-	A/C Fuse, THROTCONT Fuse, INJR 1 Fuse, INJR 2 Fuse, ENGIG 1 Fuse	
43	COOLFAN2 Relay	-	Power Control Module (PCM), Cooling Fan - Right	
44	COOLFAN3 Relay	-	Power Control Module (PCM), Cooling Fan - Right, Cooling Fan - Left	
45	COOLFAN1 Relay	-	Power Control Module (PCM), Cooling Fan - Right, Cooling Fan - Left	
46	COOLFAN2 Fuse	30A	COOL FAN 2 Relay	
47- 48	-	-	Not Used	
49	COOLFAN1 Fuse	30A	COOL FAN 1 Relay	
50	AIR PMP Fuse	20A	AIR PMP Relay	
51	RTD Fuse	25A	Electronic Suspension Control (ESC) Module	
52	ABS Fuse	40A	Electronic Brake Control Module (EBCM)	
53	ABS ELEC Fuse	20A	Not Used	
54	FUSE PULLER	_	Fuse Puller	

Fuse Block - Underhood Top View



Fig. 97: Fuse Block Component View - Underhood Top View Courtesy of GENERAL MOTORS CORP.

Fuse Block - Underhood Bottom View



Fig. 98: Fuse Block Component View - Underhood Bottom View Courtesy of GENERAL MOTORS CORP.

Fuse Block Terminal Identification - Underhood C1

Connector Part Information		 15303513 68-Way F Metri-Pack 280 Series (BLK) 		
Pin	Wire Color	Circuit No.	Function	
A1	PNK	839	Ignition 1 Voltage	
A2	-	-	Not Used	
A3	BLK/WHT	451	Ground	
A4-A5	-	-	Not Used	
A6	PNK	639	Ignition 1 Voltage	
A7-A12	-	-	Not Used	
B1	PNK	839	Ignition 1 Voltage	
B2	PNK	339	Ignition 1 Voltage	
B3	-	-	Not Used	
B4	BRN/WHT	419	MIL Control	
B5	PNK	639	Ignition 1 Voltage	
B6	ORN	340	Battery Positive Voltage	
B7	ORN	340	Battery Positive Voltage	
B8	BRN	241	Ignition 3 Voltage	
B9-B12	-	-	Not Used	
C1	PNK	839	Ignition 1 Voltage	
C2-C3	-	-	Not Used	
C4	GRY/BLK	87	Cruise Control Resume/Accel Switch Signal	
C5	PNK	639	Ignition 1 Voltage	
C8	DK GRN	59	A/C Compressor Clutch Supply Voltage	
	DK GRN			

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C9	/WHT	459	A/C Clutch Relay Control
C10	WHT	375	Skip Shift Indicator Control
C11-C12	-	-	Not Used
D1	PNK	539	Ignition 1 Voltage
D2-D3	-	-	Not Used
D4	WHT	121	Engine Speed Signal
D5	PNK	639	Ignition 1 Voltage
D8	PPL	420	TCC Brake Switch Signal
D9	-	-	Not Used
D10	PPL	421	AIR Solenoid Control
D11-E1	-	-	Not Used
E2	PNK	839	Ignition 1 Voltage
E3	PNK	339	Ignition 1 Voltage
E4	GRY	397	Cruise Control On Switch Signal
E5	PNK	639	Ignition 1 Voltage
E6	BRN	241	Ignition 3 Voltage
E7	BRN	241	Ignition 3 Voltage
E8-E9	-	-	Not Used
E10	DK BLU	473	High Speed Cooling Fan Relay Control
E11	-	-	Not Used
E12	DK GRN/WHT	465	Fuel Pump Relay Control
F1	DK GRN	335	Low Speed Cooling Fan Relay Control
F2	PNK	839	Ignition 1 Voltage
F3	LT BLU	20	Stop Lamp Supply Voltage
F4	DK BLU	84	Cruise Control Set/Coast Switch Signal
F5-F6	-	-	Not Used
F7	BRN	241	Ignition 3 Voltage
F8	-	-	Not Used
F9	BRN	436	AIR Pump Relay Control
F10	PPL	6	Starter Solenoid Crank Voltage
F11	PNK	239	Driver 36 Volt Reference
F12	BLK	150	Ground

F12	A12 /				0	
						F1 A1

Connector Part Information		• 15328719			
		68-Way F Metri-Pack 280 Series (GRY)			
Pin	Wire Color	Circuit No. Function			
A1-A2	-	-	Not Used		
A3	WHT	121	Engine Speed Signal		
A4	DK BLU	84	Cruise Control Set/Coast Switch Signal		
A5	DK BLU	38	Backup Lamp Relay Control		
A6	LT GRN	24	Backup Lamp Supply Voltage		
A7	ORN	300	Ignition 3 Voltage		
A8-A9	-	-	Not Used		
A10	PPL	6	Starter Solenoid Crank Voltage		
A11	PNK	3	Ignition Switch Voltage-Hot in On and Start		
A12	-	-	Not Used		
B1	GRY	1901	Left Front Modulator Hold Control		
B2-B3	-	-	Not Used		
B4	GRY/BLK	87 Cruise Control Resume/Accel Switch Signal			
B5	-	-	Not Used		
B6	PPL	420	TCC Brake Switch Signal		
B7	PNK	339	Ignition 1 Voltage		
B8	-	-	Not Used		
B9	ORN	2740	Battery Positive Voltage		
B10-B12	-	-	Not Used		
C1-C3	-	-	Not Used		
C4	GRY	397	Cruise Control On Switch Signal		
C5	BRN/WHT	419	MIL Control		
C 8	BLK	28	Horn Relay Control		
<u> </u>	BLK	28	Horn Relay Control		

C9-C12	-	-	Not Used	
D1	PPL	34	Front Fog Lamps Supply Voltage	
D2	-	_	Not Used	
D3	TAN	12	Headlamp Low Beam Supply Voltage	
D4	PPL	333	Brake Fluid Level Sensor Signal	
D5	-	-	Not Used	
D8	YEL	143	Accessory Voltage	
D9	-	-	Not Used	
D10	LT GRN	11	Headlamp High Beam Supply Voltage	
D11	BRN	9	Park Lamp Supply Voltage	
D12	-	-	Not Used	
E1	DK GRN /WHT	1317	Fog Lamp Relay Control	
E2-E3	-	-	Not Used	
E4	RED	122	Rear Fog Lamp Supply Voltage	
E5	LT BLU/WHT	1314	Left Front Turn Signal Lamp Supply Voltage	
E6	DK GRN	306	Headlamp Switch Headlamps Off Signal	
E0	DK GRN	306	Headlamp Switch Headlamps Off Signal	
E7	BLK/WHT	99	Windshield Washer Fluid Level Signal	
E8	YEL	143	Accessory Voltage	
E9-E12	-	-	Not Used	
F1	LT BLU	20	Stop Lamp Supply Voltage	
F2	-	-	Not Used	
F3	ORN	640	Battery Positive Voltage	
E4	WHT	103	Headlamp Switch Headlamps On Signal	
Г4	WHT	103	Headlamp Switch Headlamps On Signal	
F5	DK BLU/WHT	1315	Right Front Turn Signal Lamp Supply Voltage	
F6	PNK	94	Windshield Washer Switch Signal	
F7-F9	-	-	Not Used	
F10	WHT	375	Skip Shift Indicator Control	
F11	BRN	9	Park Lamp Supply Voltage	
F12	-	_	Not Used	

F12 A12	Į	
		F1 A1

Connector Part Information		• 15303512			
		68-Way F Metri-Pack 280 Series (LT GRY)			
Pin	Wire Color	Circuit No.	Function		
Δ 1	LT BLU	20	Stop Lamp Supply Voltage		
AI	LT BLU	20	Stop Lamp Supply Voltage		
A2	-	-	Not Used		
A3	ORN	640	Battery Positive Voltage		
A4	WHT	103	Headlamp Switch Headlamps On Signal		
4.5	DK BLU/WHT	1315	Right Front Turn Signal Lamp Supply Voltage		
AS	DK BLU/WHT	1315	Right Front Turn Signal Lamp Supply Voltage		
A6	PNK	94	Windshield Washer Switch Signal		
A7-A8	-	-	Not Used		
A9	DK GRN	29	Horn Control		
A10	LT GRN/BLK	311	Right Headlamp High Beam Supply Voltage		
A11	-	-	Not Used		
A12	GRY	120	Fuel Pump Supply Voltage		
B1-B2	-	-	Not Used		
B3	LT BLU	409	Cooling Fan Motor Supply Voltage		
B4	-	-	Not Used		
D5	LT BLU/WHT	1314	Left Front Turn Signal Lamp Supply Voltage		
ВЭ	LT BLU/WHT	1314	Left Front Turn Signal Lamp Supply Voltage		
B6	DK GRN	306	Headlamp Switch Headlamps Off Signal		
B7-B8	-	-	Not Used		
B9	DK GRN	59	A/C Compressor Clutch Supply Voltage		
B10-B11	-	-	Not Used		
B12	BRN	9	Park Lamp Supply Voltage		
C1	PPL	34	Front Fog Lamps Supply Voltage		

C2	-	-	Not Used
C3	YEL	712	Left Headlamp Low Beam Supply Voltage
C4	TAN/WHT	312	Right Headlamp Low Beam Supply Voltage
C5-C8	-	-	Not Used
C9	BLK/WHT	99	Windshield Washer Fluid Level Signal
C10	DK GRN/WHT	711	Left Headlamp High Beam Supply Voltage
C11	-	-	Not Used
C12	BRN	9	Park Lamp Supply Voltage
D1-D2	-	-	Not Used
D3	PPL	421	AIR Solenoid Control
D4-D9	-	-	Not Used
D10	GRY	532	Cooling Fan Motor Supply Voltage
D11	-	-	Not Used
D12	BRN	9	Park Lamp Supply Voltage
E1-E2	-	-	Not Used
E3	PPL	333	Brake Fluid Level Sensor Signal
E4	PPL	34	Front Fog Lamps Supply Voltage
E5	-	-	Not Used
E6	ORN	3040	Battery Positive Voltage
E7	ORN	2940	Battery Positive Voltage
EQ	BRN	641	Ignition 3 Voltage
Еð	BRN	641	Ignition 3 Voltage
E9	LT GRN	24	Brake Lamp Supply Voltage
E10	WHT	504	Cooling Fan Motor Ground
E11	-	-	Not Used
E12	BRN	9	Park Lamp Supply Voltage
F1	RED	122	Rear Fog Lamp Supply Voltage
F2	PNK	339	Ignition 1 Voltage
F3	-	-	Not Used
F4	PNK	339	Ignition 1 Voltage
F5	RED	78	AIR Pump Supply Voltage
F6-F8	-	-	Not Used
F9	GRY	1524	Backup Lamp Supply Voltage
F10	-	-	Not Used
F11	BLK	250	Ground
F12	BRN	9	Park Lamp Supply Voltage

Connector Part Information 12146038 2-Way F MaxiFuse (LT GRY) 					
Pin	Wire ColorCircuit No.Function				
A	-	-	Not Used		
В	-	-	Not Used		



Con	Connector Part Information 12160605 2-Way F MaxiFuse (LT GRN) 						
Pin	Wire Color	Circuit No.	Function				
А	-	-	Not Used				
В	RED	1642	Battery Positive Voltage				



POWER AND GROUNDING CONNECTOR END VIEWS

Auxiliary Power Outlet Terminal Identification

	B C C C		A			
Conne	Connector Part Information 12176446 3 Way F Matri-Pack 280 Sories Flavlack (BLK) 					
Pin	Wire Color	Circuit No. Function				
А	ORN	1540	Battery Positive Voltage			
В	-	-	Not Used			
С	BLK	150	Ground			

Cigar Lighter Terminal Identification



B BLK 150 Ground	В
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Ignition Switch Terminal Identification C1

	A B C		F E D			
Con	Connector Part Information • 12110075					
		6-Way F Metri-Pack Mixed Series (NAT)				
Pin	Wire Color	Circuit No.	Function			
Α	RED	1442	Battery Positive Voltage			
В	YEL	5	Crank Voltage			
С	ORN	300	Ignition 3 Voltage			
D	LT GRN/BLK	80	Key In Ignition Switch Signal			
E-F	_	-	Not Used			

Ignition Switch Terminal Identification C2



Conn	ector Part Information	 12162229 6-Way F Metri-Pack Mixed Series (BLK) 			
Pin	Wire Color	Circuit No.	Function		
Α	RED	1542	Battery Positive Voltage		
В	PNK	3	Ignition 1 Voltage		
С	BRN	4	Accessory Voltage		
D	TAN	159	Key Out Ignition Switch Signal		
E	BLK	150	Ground		
F	-	-	Not Used		

Ignition Switch Terminal Identification C3



INLINE HARNESS CONNECTOR END VIEWS

C100 Forward Lamp Harness Terminal Identification To Forward Lamp Jumper Harness

E							
C Int	onnector Part formation		 12047932 8-Way F Metri-Pack 150 Series (BLK) 		Connector Part Information		
Din	Wire	Circuit	Function	Din	Wine Color	Circuit	
Δ	BRN	1 NU. Q	Park Lamp Supply Voltage	ΓΠ	BRN	NU.	Park I a
B	BRN	9	Park Lamp Supply Voltage	B	BRN	9	Park La
C	BRN	9	Park Lamp Supply Voltage	C	BRN	9	Park La
D	BRN	9	Park Lamp Supply Voltage	D	BRN	9	Park La
Е	LT BLU/ WHT	1314	Left Front Turn Signal Lamp Supply Voltage	Е	LT BLU/ WHT	1314	Left Fro Supply
F	DK BLU/ WHT	1315	Right Front Turn Signal Lamp Supply Voltage	F	DK BLU/ WHT	1315	Right Fr Supply
G	BLK	150	Ground	G	BLK	150	Ground
Η	-	-	Not Used	Η	-	-	Not Use

<u>C102</u> Instrument Panel Harness Terminal Identification To Forward Lamp Harness





C In	connector Part formation		 115326863 16-Way F 150 GT Series (BLK) 		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
А	LT BLU	1764	Steering Wheel Position Signal B	А	LT BLU	1764	Steering
В	DK GRN /WHT	817	Vehicle Speed Signal	В	DK GRN /WHT	817	Vehicle S
С	DK GRN	1049	PCM Class 2 Serial Data	С	DK GRN	1049	PCM Cla
D	DK GRN /WHT	762	A/C Request Signal	D	DK GRN /WHT	762	A/C Req
Е	GRY	48	Cruise Control Release Switch Signal	Е	GRY	48	Cruise C
F	LT GRN /BLK	735	Ambient Temperature Sensor Signal	F	LT GRN /BLK	735	Ambient
G	GRY/BLK	1798	Ground	G	GRY/BLK	1798	Ground
Н	LT GRN	1763	Steering Wheel Position Signal A	Н	LT GRN	1763	Steering
J	BLK	470	Low Reference	J	BLK	470	Low Ref
К	GRY	1056	Steering Wheel Position Sensor 5V Reference Voltage	К	GRY	1056	Steering Reference
L	ORN/BLK	556	Low Reference	L	ORN/BLK	556	Low Ref
М	LT BLU	1122	ABS/TCS Class 2 Serial Data	М	LT BLU	1122	ABS/TC
Ν	DK BLU	716	Yaw Rate Sensor Signal	N	DK BLU	716	Yaw Rat
Р	LT GRN	1338	Lateral Accelerometer	Р	LT GRN	1338	Lateral A

	/BLK		Signal		/BLK		
R	GRY	847	Extended Travel Brake Switch Signal	R	GRY	847	Extendec
S	DK GRN /WHT	357	Oil Temperature Sensor Signal	S	DK GRN /WHT	357	Oil Tem _l

C105 Transmission Harness To Terminal Identification LF Wheel Speed Sensor

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Co Inf	onnector Part ormation		 12052638 2-Way F Metri-Pack 150 Series (GRY) 		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
А	LT BLU	830	Left Front Wheel Speed Sensor Signal	А	BLK	830	Left Fro
В	YEL	873	Left Front Wheel Speed Sensor Low Reference	В	WHT	873	Left Fro Referen

C108 Transmission Harness To Terminal Identification RF Wheel Speed Sensor

ļ			B) }
Co Info	nnector Part ormation		 12052638 2-Way F Metri-Pack 150 Series (GRY) 		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
А	DK GRN	872	Right Front Wheel Speed Sensor Signal	A	WHT	872	Right Fr Signal
В	TAN	833	Right Front Wheel Speed Sensor Low Reference	В	BLK	833	Right Fr Reference

<u>C109 Left Ignition Control Module Jumper Harness Terminal Identification To Engine Harness</u>





Co 1	onnector Part Information	• 12 • 8 • P	2047934 -Way F Metri- ack 150 Series (LT ¦RY)]	Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
А	BLK/WHT	151	Ground	А	BLK	151	Gro
В	RED	2127	IC 7 Control	В	RED	2127	IC
С	DK GRN	2125	IC 5 Control	С	DK GRN	2125	IC
D	-	-	Not Used	D	-	-	No
E	BRN	2129	Low Reference	Е	BRN	2129	Lo
F	LT BLU	2123	IC 3 Control	F	LT BLU	2123	IC
G	PPL	2121	IC 1 Control	G	PPL	2121	IC
Н	PNK	639	Ignition 1 Voltage	Н	PNK	39	Ign

C110 Right Ignition Control Module Jumper Harness Terminal Identification To Engine Harness



D	-	-	Not Used	D	-	-	No
Е	BRN/WHT	2130	Low Reference	Е	BRN	2129	Lo
F	LT BLU /WHT	2126	IC 6 Control	F	LT BLU	2123	IC
G	PPL/WHT	2128	IC 8 Control	G	PPL	2121	IC
Н	PNK	839	Ignition 1 Voltage	Н	PNK	39	Ign

C112 Knock Sensor Jumper Harness Terminal Identification To Engine Harness

A (с с в				
Con Inf	nector Part formation	• 12 • 2- 15	2052635 Way F Metri-Pack 50 Series (BLK)		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
А	DK BLU	496	Knock Sensor 1 Signal	A	DK BLU	496	Kr
В	LT BLU	1876	Knock Sensor 2 Signal	В	LT BLU	1876	Kr

C113 Forward Lamp Harness Terminal Identification To Underhood Lamp Jumper Harness

A (B				
Con Inf	nector Part formation	• 12 • 2- 15	2052635 Way F Metri-Pack 50 Series (BLK)		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
A	BLK	40	Battery Positive Voltage	А	ORN	40	Ba
В	BLK	150	Ground	В	BLK	150	Gr

C140 W/O F55 Transmission Harness Terminal Identification To Forward Lamp Harness



Inf	ormation		GT Series (BLK)		Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	BRN	9	Park Lamp Supply Voltage	Α	BRN	9	Park La
В	LT GRN	24	Backup Lamp Supply Voltage	В	LT GRN	24	Backup
С	GRY	120	Fuel Pump Supply Voltage	C	GRY	120	Fuel Pu
D	BRN	641	Ignition 3 Voltage	D	BRN	641	Ignition
Е	PNK	339	Ignition 1 Voltage	Е	PNK	339	Ignition
F	LT BLU	820	CHMSL Supply Voltage	F	YEL	820	CHMSI
G	GRY	1524	Backup Lamp Supply Voltage	G	GRY	1524	Backup
Н	RED	122	Rear Fog Lamp Supply Voltage (Europe)	Н	RED	122	Rear Fo
J-K	_	_	Not Used	J-K	-	-	Not Use

C140 W/F55 Transmission Harness Terminal Identification To Forward Lamp Harness

ſ							P
			• 15326856		Connector		
Coı In	nnector Part nformation		 14-Way F Metri-Pack 150 GT Series (BLK) 		Part Information		
Con Ir Pin	nnector Part nformation Wire Color	Circuit No.	14-Way F Metri-Pack 150 GT Series (BLK) Function	Pin	Part Information Wire Color	Circuit No.	
Con Ir Pin A	nnector Part formation Wire Color BRN	Circuit No. 9	14-Way F Metri-Pack 150 GT Series (BLK) Function Park Lamp Supply Voltage	Pin A	Part Information Wire Color BRN	Circuit No. 9	Park La
Con Ir Pin A B	Wire Color BRN LT GRN	Circuit No. 9 24	14-Way F Metri-Pack 150 GT Series (BLK) Function Park Lamp Supply Voltage Backup Lamp Supply Voltage	Pin A B	Part Information Wire Color BRN LT GRN	Circuit No. 9 24	Park La Backup
Con Ir Pin A B C	Mire Color BRN LT GRN GRY	Circuit No. 9 24 120	14-Way F Metri-Pack 150 GT Series (BLK) Function Park Lamp Supply Voltage Backup Lamp Supply Voltage Fuel Pump Supply Voltage	Pin A B C	Part Information Wire Color BRN LT GRN GRY	Circuit No. 9 24 120	Park La Backup Fuel Pu

Е	PNK	339	Ignition 1 Voltage	E	PNK	339	Ignition
F	LT BLU	820	CHMSL Supply Voltage	F	YEL	820	CHMSL
G	GRY	1524	Backup Lamp Supply Voltage	G	GRY	1524	Backup I
Н	RED	122	Rear Fog Lamp Supply Voltage (Europe)	Н	RED	122	Rear Fog (Europe)
J-K	-	-	Not Used	J-K	-	-	Not Used
L	LT BLU/WHT	1116	Right Front Suspension Damper Solenoid Control	L	LT BLU	1116	Right Fre Solenoid
М	GRY	1117	Right Front Suspension Damper Solenoid Low Reference	М	GRY	1117	Right Fro Solenoid
N	LT BLU/WHT	1107	Left Front Suspension Damper Solenoid Control	N	LT BLU	1107	Left From Solenoid
Р	GRY	1113	Left Front Suspension Damper Solenoid Low Reference	Р	GRY	1113	Left From Solenoid

C142 Engine Harness Terminal Identification To Transmission Harness



Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	1
A	GRY	587	Skip/Shift Solenoid Control	A	GRY	587	Skip/Shit Control
В	YEL	400	Signal High - Front	В	YEL	400	Signal H
С	PPL	401	Signal Low - Front	С	PPL	401	Signal Lo
D	YEL/BLK	1227	TFT Sensor Signal	D	YEL/BLK	1227	TFT Sen
Е	DK GRN /WHT	817	Vehicle Speed Signal	Е	DK GRN /WHT	817	Vehicle S
F- K	-	-	Not Used	F-K	-	-	Not Usec
L	DK GRN	890	Fuel Tank Pressure Sensor Signal	L	DK GRN	890	Fuel Tan Signal
М	LT BLU	1937	Fuel Level Sensor Signal- Right	М	LT BLU	1937	Fuel Lev Right
Ν	PNK/WHT	1101	Damping Lift/Dive Signal	Ν	PNK/WHT	1101	Damping
Р	WHT	1310	Left Rear Position Sensor Signal	Р	WHT	1310	Left Real Signal
R	GRY	598	5 Volt Reference	R	GRY	598	5 Volt Re
S	GRY	720	Low Reference	S	GRY	720	Low Ref
Т	LT GRN	1652	Reverse Lockout Solenoid Control	Т	LT GRN	1652	Reverse] Control
U	DK BLU	1936	Fuel Level Sensor Signal- Secondary	U	DK BLU	1936	Fuel Lev Secondar
V	ORN/BLK	1057	Low Reference (Europe)	V	ORN/BLK	1057	Low Ref
W	-	-	Not Used	W	-	-	Not Usec

C144 Engine Harness Terminal Identification To Automatic Transmission Harness (4L60E)

Connector Part Information		 12160280 20-Way F Metri-Pack 100 Series (GRY) 			Connector Part Information		•
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	1
Α	ORN/BLK	1057	Low Reference	А	ORN/BLK	1057	Low Refe
В	LT GRN	1222	1-2 Shift Solenoid Valve Control	В	LT GRN	1222	1-2 Shift : Control
С	YEL/BLK	1223	2-3 Shift Solenoid Valve Control	C	YEL/BLK	1223	2-3 Shift : Control
D	PNK	1224	Transmission Fluid Pressure Switch Signal A	D	PNK	1224	Transmiss Pressure S
Е	DK BLU	1225	Transmission Fluid Pressure Switch Signal B	E	DK BLU	1225	Transmiss Pressure S
F-J	-	-	Not Used	F-J	_	-	Not Used
К	WHT	687	3-2 Shift Solenoid Valve Control	K	WHT	687	3-2 Shift S Control
L	RED	1226	Transmission Fluid Pressure Switch Signal C	L	RED	1226	Transmiss Pressure S
Μ	YEL/BLK	1227	TFT Sensor Signal	М	YEL/BLK	1227	TFT Sens
N	RED/BLK	1228	PC Solenoid Valve High Control	N	RED/BLK	1228	PC Solend Control

Р	LT BLU /WHT	1229	PC Solenoid Valve Low Control	Р	LT BLU /WHT	1229	PC Solend Control
R	BLK/WHT	771	Transmission Range Switch Signal A	R	BLK/WHT	771	Transmiss Signal A
S	YEL	772	Transmission Range Switch Signal B	S	YEL	772	Transmiss Signal B
Т	GRY	773	Transmission Range Switch Signal C	Т	GRY	773	Transmiss Signal C
U	WHT	776	Transmission Range Switch Signal P	U	WHT	776	Transmiss Signal P
v	BRN	418	TCC PWM Solenoid Valve Control	V	BRN	418	TCC PWI Control
W	TAN/BLK	422	TCC Solenoid Valve Control	W	TAN/BLK	422	TCC Sole Control

C146 Transmission Harness Terminal Identification To Instrument Panel Harness





Connector Part Information		 15326842 10-Way F Metri-Pack 150 CT Series (BLV) 		Connector Part Information			
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	YEL	18	Left Rear Stop/Turn Lamp Supply Voltage	А	YEL	18	Left Rea Voltage
В	DK GRN	19	Right Rear Stop/Turn Lamp Supply Voltage	В	DK GRN	19	Right Ro Voltage
С	YEL	269	Starter Enable Relay Coil Supply Voltage	С	YEL	269	Starter H Voltage
D	PPL	1606	Crank Voltage	D	PPL	1606	Crank V

Е	BRN	341	Ignition 3 Voltage	Е	BRN	341	Ignition
F	ORN/BLK	434	Neutral Safety Switch Signal Selective Ride Control Switch Signal	F	ORN/BLK	434	Neutral
G	TAN/WHT	1384	Electronic Traction Suspension Control Switch Input	G	TAN/WHT	1384	Selectiv
Η	PNK/BLK	1385	Ground	Н	PNK/BLK	1385	Ground
J	DK BLU /WHT	1126	SCM (Suspension) Class 2 Serial Data	J	DK BLU /WHT	1126	SCM (S Data
Κ	BLK/WHT	851	Ground	K	BLK/WHT	851	Ground

C148 Transmission Harness Terminal Identification To Forward Lamp Harness

E Image: Connector • 15326842							
Co Infe	onnector Part ormation		 15326842 10-Way F Metri-Pack 150 GT Series (BLK) 		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	BLK	884	Left Rear Wheel Speed Sensor Signal	А	BLK	884	Left Rea
В	RED	885	Left Rear Wheel Speed Sensor Low Reference	В	RED	885	Left Rea Reference
С	BRN	882	Right Rear Wheel Speed Sensor Signal	С	BRN	882	Right Re Signal
D	WHT	883	Right Rear Wheel Speed Sensor Low Reference	D	WHT	883	Right Reference
Е	LT BLU	830	Left Front Wheel Speed Sensor Signal	Е	LT BLU	830	Left Fro

F	YEL	873	Left Front Wheel Speed Sensor Low Reference	F	YEL	873	Left Fro Reference
G	DK GRN	872	Right Front Wheel Speed Sensor Signal	G	DK GRN	872	Right Fr Signal
Н	TAN	833	Right Front Wheel Speed Sensor Low Reference	Н	TAN	833	Right Fr Reference
J	LT BLU	2627	Steering Position Sensor Signal	J	LT BLU	2627	Steering
Κ	-	-	Not Used	K	-	-	Not Use

C150 Forward Lamp Harness Terminal Identification To Engine Harness

	A			L T			
Con In	nector Part formation	 12160280 20-Way F Metri-Pack 100 Series (GRY) 			Connector Part Information		•
D .	Wire	Circuit		D .		Circuit	
Pin	Color	N0.	Function	Pin	wire Color	NO.	
Α	RED/BLK	380	A/C Refrigerant Pressure Sensor Signal	A	RED/BLK	380	A/C Refr.
В	GRY	474	5 Volt Reference	В	GRY	474	5 Volt Re
С	BLK	407	Low Reference	С	BLK	407	Low Refe
D	ORN/BLK	463	Requested Torque Signal	D	ORN/BLK	463	Requeste
E	TAN/BLK	464	Delivered Torque Signal	E	TAN/BLK	464	Delivered
-	1			1		1	1

F-K	-	-	Not Used	F-K	-	-	Not Used
L	DK GRN /WHT	817	Vehicle Speed Signal	L	DK GRN /WHT	817	Vehicle S
Μ	DK GRN	1049	PCM Class 2 Serial Data	М	DK GRN	1049	PCM Cla
N	DK GRN /WHT	762	A/C Request Signal	Ν	DK GRN /WHT	762	A/C Requ
Р	DK GRN /WHT	357	Oil Temperature Sensor Signal	Р	DK GRN /WHT	357	Oil Temp Signal
R	BLK	470	Low Reference	R	BLK	470	Low Refe
S	GRY	48	CPP Switch Signal	S	GRY	48	CPP Swit
Т	GRY	847	Extended Travel Brake Switch Signal	Т	GRY	847	Extended Switch Si
U- W	-	-	Not Used	U-W	-	-	Not Used

C152 Forward Lamp Harness Terminal Identification To Brake Fluid Pressure Sensor Jumper Harness

							¢ P
Co Info	nnector Part ormation	 12110293 3-Way F Metri-Pack 150 Series (BLK) 			Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	GRY	1056	Steering Wheel Position Sensor 5V Reference Voltage	А	ORN	1056	Steering Reference
В	BLK	2626	Brake Pressure Sensor Signal	В	BLK	2626	Brake Pr
С	ORN/ BLK	556	Low Reference	С	GRY	556	Low Ret

C200 Instrument Panel Harness To Terminal Identification RH Door Harness





C In	Connector Part nformation • 12064752 • 6-Way F Metri-Pack 280 Series (BLK)		nector • 12064752 Con • art • 6-Way F Metri-Pack 280 H Series (BLK) Information		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.]
А	ORN	2240	Battery Positive Voltage	А	ORN	2240	Battery F
В	BLK	150	Ground	В	BLK	150	Ground
С	ORN	2340	Battery Positive Voltage	С	ORN	2340	Battery F
D	TAN	1047	PDM Class 2 Serial Data	D	TAN	1047	PDM Cla
Е	BLK	150	Ground	Е	BLK	150	Ground
F	BLK/WHT	746	Right Front Door Ajar Switch Signal	E		746	Right Fro
F	BLK/WHT	746	Right Front Door Ajar Switch Signal	Г	BLK/WHI	/40	Switch S

C201 Instrument Panel Harness To Terminal Identification LH Door Harness





C In	Connector Part formation	 12064752 6-Way F Metri-Pack 280 Series (BLK) 			Connector Part Information		(
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.]
Α	ORN	2640	Battery Positive Voltage	А	ORN	2640	Battery F
В	BLK	150	Ground	В	BLK	150	Ground
С	ORN	2140	Battery Positive Voltage	С	ORN	2140	Battery F
D	BRN	1046	DDM Class 2 Serial Data	D	BRN	1046	DDM Cl
Е	BLK	150	Ground	Е	BLK	150	Ground
F	GRY/BLK	745	Left Front Door Ajar Switch Signal	F		745	Left From
F	GRY/BLK	745	Left Front Door Ajar Switch Signal	Г	UK I/DLK	/43	Switch S

C202 Instrument Panel Harness To Terminal Identification RH Door Harness

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C In	onnector Part formation	nector Part mation • 12064871 • 10-Way F Metri-Pack 150 Series (BLU)		Connector Part Information			•
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	I
А	LT GRN	200	Right Front Speaker Output (+)	А	LT GRN	200	Right Fro Output (+
В	DK GRN	117	Right Front Speaker Output (-)	В	DK GRN	117	Right Fro Output (-)
С	BLK/WHT	351	Ground	С	BLK/WHT	351	Ground
D	ORN	360	Speaker Supply Voltage	D	ORN	360	Speaker S
Е	BLK/WHT	351	Ground	Е	BLK/WHT	351	Ground
F- G	-	-	Not Used	F-G	-	-	Not Used
Н	ORN/BLK	1726	Audio Signal-RH Subwoofer	Н	YEL	1726	Audio Sig Subwoof
J	LT GRN	512	Right Front Low Level Audio Signal (+)	J	LT GRN	512	Right Fro Audio Si
K	Bare	514	Ground	K	Bare	514	Ground

C203 Instrument Panel Harness To Terminal Identification LH Door Harness

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C In	Connector Part formation	 12064871 10-Way F Metri-Pack 150 Series (BLU) 		Connector Part Information			(
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	I
А	TAN	201	Left Front Speaker Output (+)	А	TAN	201	Left From (+)
В	GRY	118	Left Front Speaker Output (-)	В	GRY	118	Left From (-)
С	BLK/WHT	351	Ground	С	BLK/WHT	351	Ground
D	ORN	360	Speaker Supply Voltage	D	ORN	360	Speaker S
Е	BLK/WHT	351	Ground	Е	BLK/WHT	351	Ground
F	GRY	1690	Automatic Day-Night Mirror Signal	F	GRY	1690	Automation Mirror Sig
G	PNK	1691	Automatic Day-Night Mirror Low Reference	G	PNK	1691	Automatic Mirror Lc
Н	TAN	511	Left Front Low Level Audio Signal (+)	Н	TAN	511	Left Fron Audio Sig
J	BLK	1725	Audio Signal-LH Subwoofer	J	BLK	1725	Audio Sig Subwoofe
K	Bare	514	Ground	K	Bare	514	Ground

C204 Instrument Panel Harness Terminal Identification To Front Body Harness

	$\begin{array}{c c} & & & & \\ & & & \\ & & & \\ & & & \\ \hline \\ \\ & & & \\ \hline \\ \\ \hline \\ \\ & & \\ \hline \\ \\ \hline \\ \hline \\ \\ \hline \\ \hline \\ \hline \\ \\ \hline \\$					B A	c D
C In	Connector Part formation	•	12047785 4-Way F Metri-Pack 150 Series (BLK)		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.]
А	BRN/WHT	367	Remote Radio Left Audio Signal	А	BRN/WHT	367	Remote] Signal
В	DK GRN /WHT	368	Remote Radio Right Audio Signal	В	DK GRN /WHT	368	Remote] Audio Si
С	BLK/WHT	372	Remote Radio Audio Output (-)	С	BLK/WHT	372	Remote] Output (·
D	Bare	514	Ground	D	Bare	514	Ground

<u>C207 Instrument Panel Harness Terminal Identification To Steering Column Harness</u>

						B	
Co Info	nnector Part ormation		 12047785 4-Way F Metri-Pack 150 Series (BLK) 		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	BLK	150	Ground	А	BLK	150	Ground
В	LT GRN	1601	Steering Column Lock Signal	В	LT GRN	1601	Steering
С	PPL	1604	Steering Column Unlock	С	PPL	1604	Steering
	ORN	2630	Steering Column Lock (Domestic and Export Manual Transmission)		WHT	2630	Steering (Domesti Transmis
	ORN	1603	Steering Column Lock (Domestic Automatic Transmission)		ORN	1603	Steering (Domesti Transmis

C208 Instrument Panel Harness Terminal Identification To Steering Column Harness

						CE	3 A
Co Info	nnector Part ormation		 12064758 3-Way F Metri-Pack 150 Series (BLK) 		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
А	ORN	2094	Steering Column Tilt and Telescope Forward Switch Signal	A	PNK	2094	Steering C Telescope Signal
В	PNK	2095	Steering Column Tilt and Telescope Reverse Switch Signal	В	ORN	2095	Steering C Telescope Signal
С	BLK	150	Ground	С	BLK	150	Ground

C209 Instrument Panel Harness Terminal Identification To Steering Column Harness





Co Inf	onnector Part ormation	•	 12092249 23-Way F Metri-Pack 280 Series (BLK) 		Connector Part Information		1
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
А	WHT	27	Hazard Flasher Signal	А	BRN	27	Hazard F
В	DK GRN	19	Right Rear Stop/Turn Lamp Supply Voltage	В	DK GRN	19	Right Rea Supply V
С	YEL	18	Left Rear Stop/Turn Lamp Supply Voltage	С	YEL	18	Left Rear Supply V
D	PPL	16	Turn Signal Flasher Signal	D	PPL	16	Turn Sigr
Е	-	-	Not Used	Е	-	-	Not Used
F	DK BLU	15	Right Turn Signal Status Signal	F	DK BLU	15	Right Tur Signal
G	LT BLU	14	Left Turn Signal Status Signal	G	LT BLU	14	Left Turn Signal
Η	DK BLU	38	Backup Lamp Relay Control	Н	DK BLU	38	Backup L
J	BLK	58	Right Cornering Lamp Supply Voltage	J	BLK	58	Right Coi Supply V
V	I T CDN	T GRN 11 Headlamp High Beam K Supply Voltage	1 Headlamp High Beam Supply Voltage	V	LT GRN	11	Headlamı Supply V
К	LIGRN II Su			age K	LT GRN	11	Headlamı Supply V
L	TAN	12	Headlamp Low Beam Supply Voltage	L	TAN	12	Headlam _j Voltage
Μ	-	-	Not Used	М	-	-	Not Used
Ν	BLK	150	Ground	Ν	BLK	150	Ground
Р	-	_	Not Used	Р	-	-	Not Used
R	BRN	9	Park Lamp Supply Voltage	R	BRN	9	Park Lam
S	WHT	103	Headlamp Switch Headlamps On Signal	S	WHT	103	Headlamı On Signa

Т	DK GRN	306	Headlamp Switch Headlamps Off Signal	Т	DK GRN	306	Headlamı Off Signa
U	ORN	57	Left Cornering Lamp Supply Voltage	U	ORN	57	Left Corn Voltage
V	BLK	28	Horn Relay Control	V	BLK	28	Horn Rela
W	RED	842	Battery Positive Voltage	W	RED	842	Battery P
Х	RED	842	Battery Positive Voltage	Х	RED	842	Battery P
Y	LT BLU	74	Park Lamp Switch Signal	Y	LT BLU	74	Park Lam
Ζ	ORN	240	Battery Positive Voltage	Z	ORN	240	Battery P

C210 Instrument Panel Harness Terminal Identification To Steering Column Harness





Co Info	onnector Part ormation • 12047662 • 2-Way F Metri-Pack Series (BLK)		12047662 2-Way F Metri-Pack 150 Series (BLK)		Connector Part Information		(
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
А	RED	2098	Steering Column Telescope Motor Forward	А	RED	2098	Steering Motor Fc
В	BLK	2110	Steering Column Telescope Motor Reverse	В	BLK	2110	Steering Motor Re

C211 Instrument Panel Harness Terminal Identification To Inflatable Restraint Steering Wheel Module Coil

						B	
		L					
Co	onnector Part ormation	L	12077923 2-Way F Metri-Pack 280 Series (YEL)		Connector Part Information		
C Inf Pin	onnector Part ormation Wire Color	Circuit No.	12077923 2-Way F Metri-Pack 280 Series (YEL) Function	Pin	Connector Part Information Wire Color	Circuit No.	
Co Inf Pin A	onnector Part formation Wire Color WHT	Circuit No. 347	12077923 2-Way F Metri-Pack 280 Series (YEL) Function Steering Wheel Module - High Control	Pin A	Connector Part Information Wire Color WHT	Circuit No. 347	Steering High Co

C212 Instrument Panel Harness Terminal Identification To Steering Column Harness

Connector Part Information		 12047781 3-Way F Metri-Pack 150 Series (BLK) 		Connector Part Information			•	
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.		
Α	PPL	1985	5 Volt Reference	A	PPL	1985	5 Volt Re	
В	BLK	782	Memory Seat/Mirror Sensor Low Reference	В	BLK	782	Memory Low Refe	
С	ORN	2153	Steering Column Telescope Motor Signal	С	ORN	2153	Steering (Motor Si	

<u>C213 Instrument Panel Harness Taped Terminal Identification To Instrument Panel Harness</u>




Connector Part Information		 12077921 2-Way F Metri-Pack 280 Series (YEL) 		Connector Part Information			
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	WHT/BLK	1403	I/P Module - High Control	А	WHT/BLK	1403	I/P Mod Control
В	DK GRN /WHT	1404	I/P Module - Low Control	В	DK GRN /WHT	1404	I/P Mod Control

C215 Instrument Panel Harness Terminal Identification To Hazard Warning Switch Jumper Harness





C In	Connector Part Information		12064769 10-Way F Metri-Pack 150 Series (NAT)		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	BLK	150	Ground	Α	BLK	150	Ground
В	ORN	140	Battery Positive Voltage	В	ORN	140	Battery
С	PNK	1739	Ignition 1 Voltage	С	PNK	1739	Ignition
D	-	-	Not Used	D	-	-	Not Use
Е	GRY/BLK	1458	Hazard Switch Signal	Е	GRY/BLK	1458	Hazard
F	LT BLU	14	Left Turn Signal Status Signal	F	LT BLU	14	Left Tu Signal
G	DK BLU	15	Right Turn Signal Status Signal	G	DK BLU	15	Right T Signal
Η	PPL	16	Turn Signal Flasher Signal	Н	PPL	16	Turn Si
J	BRN	27	Hazard Flasher Signal	J	BRN	27	Hazard
Κ	WHT	17	Stop Lamp Switch Signal	K	WHT	17	Stop La

<u>C217 Instrument Panel Harness Terminal Identification To Steering Column Harness</u>





Connector Part Information	 1206476 4-Way I Series (1 	50 F Metri-Pack 150 BLK)	Connector Part Information	

Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	1
Α	GRY	397	Cruise Control On Switch Signal	А	GRY	397	Cruise Co Signal
В	PNK/BLK	1239	Ignition 1 Voltage	В	PNK	1239	Ignition 1
С	DK BLU	84	Cruise Control Set/Coast Switch Signal	C	DK BLU	84	Cruise Co Switch Si
D	GRY/BLK	87	Cruise Control Resume/Accel Switch Signal	D	GRY/BLK	87	Cruise Cc Resume/A Signal

C219 Instrument Panel Harness Terminal Identification To Steering Column Harness





C Inf	onnector Part formation	 12064752 6-Way F Metri-Pack 280 Series (BLK) 		Connector Part Information			
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	DK GRN	95	Windshield Wiper Motor Low Speed	А	DK GRN	95	Windshie Low Spe
В	GRY	91	Windshield Wiper Switch Signal 2	В	GRY	91	Windshie Signal 2
C	VEI	142	A accessory Voltage	C	YEL	143	Accessor
C	TEL	YEL 143	Accessory voltage	C	YEL	143	Accessor
			Windshield Wiper Motor				Windshie

D	PPL	92	High Speed	D	PPL	92	High Spe
E	PNK	94	Windshield Washer Switch Signal	Е	PNK	94	Windshi Signal
F	-	-	Not Used	F	-	-	Not Usec

C220 Instrument Panel Harness Terminal Identification To Vanity Mirror Jumper Harness





Connector Part Information		 12047886 8-Way F Metri-Pack 150 Series (BLK) 		Connector Part Information			(
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	ORN	640	Battery Positive Voltage	А	ORN	640	Battery P
В	BLK	150	Ground	В	BLK	150	Ground
С	LT GRN	24	Backup Lamp Supply Voltage	С	LT GRN	24	Backup L Voltage
D	GRY	1690	Automatic Day/Night Mirror Signal	D	GRY	1690	Automati Signal
Е	PNK	1691	Automatic Day/Night Mirror Low Reference	Е	PNK	1691	Automati Low Refe
F	ORN	740	Battery Positive Voltage	F	ORN	740	Battery P
G	BRN	341	Ignition 3 Voltage	G	BRN	341	Ignition 3
Η	-	-	Not Used	Н	-	-	Not Used

C301 Instrument Panel Harness Terminal Identification To Drivers Seat Harness





Connector Part Information		 12064752 6-Way F Metri-Pack 280 Series (BLK) 			Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
•	BLK/WHT	LK/WHT 238	Seat Belt Switch Signal - Driver	•	BLK/WHT	238	Seat Bel Driver
A				A	BLK/WHT	238	Seat Bel Driver
В	BRN/WHT	1048	SCM (Seat) Class 2 Serial Data	В	BRN/WHT	1048	SCM (So Data
С	ORN	1840	Battery Positive Voltage	С	ORN	1840	Battery 1
Л	BLK	150	Ground	D		150	Cround
D	BLK	150	Ground (W/AR9)	D	DLK	150	Ground
Б	ORN	1740	Battery Positive Voltage	Б	ODN	1740	Dottom 1
E	ORN	1740	Battery Positive Voltage	Ľ	UKN	1740	Dattery I
F	ORN	1140	Battery Positive Voltage	F	ORN	1140	Battery 1

C302 Front Body Harness Terminal Identification To Passengers Seat Harness





Connector Part Information		 12064752 6-Way F Metri-Pack 280 Series (BLK) 		Connector Part Information		• [
	Wire						
Pin	Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	Fur
A-B	-	-	Not Used	A-B	-	-	Not Used
С	ORN	1440	Battery Positive Voltage	С	ORN	1440	Battery F Voltage
D	BLK	150	Ground	D		150	Crownd
D	BLK	150	Ground	D	BLK	150	Ground
Е	-	-	Not Used	Е	-	-	Not Used
F	ORN	1140	Battery Positive Voltage	F	ORN/BLK	1140	Battery F Voltage

C303 Instrument Panel Harness Terminal Identification To Drivers Seat Harness





Co Info	nnector Part rmation	 12064766 8-Way F Metri-Pack 150 Series (BLU) 		Connector Part Information			
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	RED	2098	Steering Column Telescope Motor Forward	A	RED	2098	Steering C Motor Foi
В	BLK	2110	Steering Column Telescope Motor Reverse	В	BLK	2110	Steering C Motor Re
С	PPL	1985	Steering Column Telescope Motor 5 Volt Reference	C	PPL	1985	Steering (Motor 5 V
D	BLK	782	Memory Seat/Mirror Sensor Low Reference	D	BLK	782	Memory S Low Refe
Е	ORN	2153	Steering Column Telescope Motor Signal	Е	ORN	2153	Steering C Motor Sig
F	PNK	2094	Steering Column Tilt and Telescope Forward Switch Signal	F	PNK	2094	Steering C Telescope Signal
G	ORN	2095	Steering Column Tilt and Telescope Reverse Switch Signal	G	ORN	2095	Steering C Telescope Signal
Η	-	-	Not Used	Н	-	-	Not Used

C400 Transmission Harness Terminal Identification To Rear Body Harness

Б Г Г	
D	



Connector Part Information		 12047932 8-Way F Metri-Pack 150 Series (BLK) 			Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	BLK	150	Ground	Α	BLK	150	Ground
В	YEL	820	CHMSL Supply Voltage	В	YEL	820	CHMSL
С	LT GRN	24	Backup Lamp Supply Voltage	C	LT GRN	24	Backup I Voltage
D	YEL	18	Left Rear Stop/Turn Lamp Supply Voltage	D	YEL	18	Left Rear Supply V
Е	BRN	9	Park Lamp Supply Voltage	E	BRN	9	Park Larr
F	-	-	Not Used	F	-	-	Not Used
G	DK GRN	19	Right Rear Stop/Turn Lamp Supply Voltage	G	DK GRN	19	Right Rea Supply V
Н	RED	122	Rear Fog Lamp Supply Voltage (Europe)	Н	RED	122	Rear Fog Voltage (

C402 Transmission Harness Terminal Identification To Fuel Tank Jumper Harness

					E		
C In	Connector Part formation	 12186688 10-Way F Metri-Pack 150 Series (BLK) 		Connector Part Information			
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	PNK	339	Ignition 1 Voltage	А	PNK	339	Ignitior
В	WHT	1310	EVAP Canister Vent Solenoid Control	В	WHT	1310	EVAP Control
С	GRY	720	Low Reference	С	GRY	720	Low Re
D	DK GRN	890	Fuel Tank Pressure Sensor Signal	D	DK GRN	890	Fuel Ta
Е	GRY/BLK	598	5 Volt Reference	Е	GRY	598	5 Volt 1
F	BLK	150	Ground	F	BLK	150	Ground
G	GRY	120	Fuel Pump Supply Voltage	G	GRY	120	Fuel Pu
Н	DK BLU	1936	Fuel Level Sensor Signal - Secondary	Н	DK BLU	1936	Fuel Le Second
J	LT BLU	1937	Fuel Level Sensor Right Signal	J	LT BLU	1937	Fuel Le
Κ	-	-	Not Used	K	-	-	Not Us

C403 Transmission Harness To Terminal Identification LR Suspension Damper Jumper

Co Info	nnector Part ormation	or • 12052635 • 2-Way F Metri-Pack 150 Series (BLK)			Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
A	RED	901	Left Rear Suspension Damper Solenoid Control	A	DK BLU/WHT	1114	Left Rear Solenoid
В	BLK	902	Left Rear Suspension Damper Solenoid Low Reference	В	DK GRN	1115	Left Rear Solenoid

C406 Transmission Harness To Terminal Identification RR Suspension Damper Jumper



Inf	Part ormation	 • 12052635 • 2-Way F Metri-Pack 150 Series (BLK) 		Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circ No
А	RED	901	Right Rear Suspension Damper Solenoid Control	А	DK BLU/WHT	111
В	BLK	902	Right Rear Suspension Damper Solenoid Low Reference	В	DK GRN	111

410 Front Body Harness Terminal Identification To Rear Window Defogger



C412 Fuel Tank Jumper Harness Terminal Identification To Left Fuel Tank Harness

	D				B		
C In	Connector Part formation	•	15326631 4-Way F GT 280 Series Sealed (BLK)		Connector Part Information		
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
А	GRY	120	Fuel Pump Supply Voltage	А	GRY	120	Fue
В	GRY	720	Low Reference	В	BLK	808	Lov
С	DK BLU	1936	Fuel Level Sensor Signal	С	DK BLU	1936	Fue
D	BLK	150	Ground	D	BLK	9531	Gro

C414 Fuel Tank Jumper Harness Terminal Identification To Right Fuel Tank Harness



Part Information		•	6-Way F GT 150 Series Sealed (BLK)	Part Information			I
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	
Α	LT BLU	1937	Fuel Level Sensor Signal	А	LT BLU	1937	Fuel]
В	GRY	720	Low Reference	В	BLK	808	Low
С	BLK	150	Ground	С	BLK/WHT	850	Grou
D	DK GRN	890	Fuel Tank Pressure Sensor Signal	D	DK GRN	890	Fuel ' Signa
Е	GRY/BLK	598	5 Volt Reference	Е	GRY	2709	5 Vol
F	-	-	Not Used	F	_	_	Not L

SPLICE PACK CONNECTOR END VIEWS

Splice Pack Terminal Identification SP100





Connector Part Information		 15305294 12-Way F Metri-Pack 280 Series Splice Saver DBL (BLK) 		
Pin	Wire Color	Circuit Number	Function	
A-D	-		Not Used	
Е	BLK	150	Ground	
F	-		Not Used	
G-H	BLK	150	Ground	
J	BLK	150	Ground (Export)	
K	-	-	Not Used	
L	BLK	150	Ground	
М	-		Not Used	



Connector Part Information		• 12-Way F Metri-Pack 280	Series Splice Saver DBL (BLK)
Pin	Wire Color	Circuit Number	Function
A-G	BLK	150	Ground
H-M	-	-	Not Used

Connect	tor Part Information	 15305294 12-Way F Metri-Pao	ck 280 Series Splice Saver DBL (BLK)		
Pin	Wire Color	Circuit Number	Function		
A-G	BLK	150	Ground		
ттт	BLK	150	Ground		
П- Ј	BLK	150	Ground		
K	BLK	150	Ground		
L	-		Not Used		
М	BLK	150	Ground (W/ N37)		

	M (
Connector Part Information		 15305294 12-Way F Metri-Pack 280	Series Splice Saver DBL (BLK)
Pin	Wire Color	Circuit Number	Function
A-M	BLK	150	Ground





Connector Part Information		 15305291 12-Way F Metri-Pack 280 Series Splice Saver DBL (BLK) 		
Pin	Wire Color	Circuit Number	Function	
A-C	BLK/WHT	851	Ground	
D	-	-	Not Used	
E-G	BLK/WHT	851	Ground	
H-J	-	-	Not Used	
K-L	BLK/WHT	851	Ground	
М	-	_	Not Used	



Pin	Wire Color	Circuit Number	Function
А	BLK	150	Ground
В	-	-	Not Used
С	BLK	150	Ground
D-E	-	-	Not Used
F-G	BLK	150	Ground
Н	-	-	Not Used
J-M	BLK	150	Ground



Splice Pack Terminal Identification SP402 (Export)

	M (A		
Connector Part Information		1530529112-Way F Metri-Pack	x 280 Series Splice Saver DBL (BLK)
Pin	Wire Color	Circuit Number	Function
A-L	BLK	150	Ground
М	-	_	Ground - Not Used

REPAIR INSTRUCTIONS

RELAY REPLACEMENT (WITHIN AN ELECTRICAL CENTER)

Tools Required

J 43244 Relay Puller Pliers. See Special Tools and Equipment .

Removal Procedure

- 1. Remove the electrical center cover.
- 2. Locate the relay. Refer to **Electrical Center Identification Views** to locate the electrical center where the relay exists.
 - **IMPORTANT:** Always note the orientation of the relay.
 - Ensure that the electrical center is secure, as not to put added stress on the wires or terminals.



Fig. 99: Removing Or Installing Relay In Electrical Center Component View Courtesy of GENERAL MOTORS CORP.

3. Using the J 43244 (1) position the tool on opposing corners of the relay (2). See Special Tools and

Equipment .

NOTE: Use J43244 to pull the relay straight out from the electrical center terminals. The use of pliers or a flat bladed tool could damage the electrical center.

4. Remove the relay (2) from the electrical center.

Installation Procedure



Fig. 100: Removing Or Installing Relay In Electrical Center Component View Courtesy of GENERAL MOTORS CORP.

1. Install the relay (2) in the same position as removed.

2. Install the electrical center cover.

RELAY REPLACEMENT (ATTACHED TO WIRE HARNESS)

Removal Procedure



Fig. 101: Identifying Relay & Wire Harness Connector Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 1. Locate the relay. Refer to the **Master Electrical Component List** to locate the relay in the vehicle.
- 2. Remove any fasteners which hold the relay in place.
- 3. Remove any connector position assurance (CPA) devices or secondary locks.

IMPORTANT: Use care when removing a relay in a wiring harness when the relay is secured by fasteners or tape.

4. Separate the relay (1) from the wire harness connector (2).

Installation Procedure



Fig. 102: Identifying Relay & Wire Harness Connector Terminal Identification Courtesy of GENERAL MOTORS CORP.

- 1. Connect the relay (1) to the wire harness connector (2).
- 2. Install any connector position assurance (CPA) devices or secondary locks.
- 3. Install the relay using any fasteners or tape that originally held the relay in place.

UNDERHOOD ELECTRICAL CENTER OR JUNCTION BLOCK REPLACEMENT

Removal Procedure

1. Disconnect the negative battery cable. Refer to <u>Battery Negative Cable Disconnect/Connect Procedure</u> in Engine Electrical.



Fig. 103: Cable Lead To Junction Block Courtesy of GENERAL MOTORS CORP.

- 2. Remove the positive battery cable lead nut from the junction block. Reposition the cable lead away from the junction block.
- 3. Remove the junction block cover.



Fig. 104: IP Wiring Harness Connector To Junction Block Courtesy of GENERAL MOTORS CORP.

- 4. Disengage the electrical cable retainers at the rear of the junction block.
- 5. Turn the junction block upside down and open the lower cover.
- 6. Loosen the bolts retaining the engine, IP, and forward lamp wiring harness connectors to the junction block.
- 7. Disconnect the engine wiring harness connector from the junction block.
- 8. Disconnect the IP wiring harness connector from the junction block.
- 9. Remove the junction block.

Installation Procedure



Fig. 105: IP Wiring Harness Connector To Junction Block Courtesy of GENERAL MOTORS CORP.

- 1. Connect the IP wiring harness connector to the junction block.
- 2. Connect the engine wiring harness connector to the junction block.

NOTE: Refer to Fastener Notice in Cautions and Notices.

3. Install the underhood junction block connector bolts.

Tighten: Tighten the underhood junction block connector bolts to 7 N.m (62 lb in).

- 4. Turn the electrical center right side up.
- 5. Connect the electrical cable retainers at the rear of the junction block.



Fig. 106: Cable Lead To Junction Block Courtesy of GENERAL MOTORS CORP.

- 6. Install the junction block cover.
- 7. Install the positive battery cable lead to the junction block stud. Install the positive battery cable lead nut.

Tighten: Tighten the positive battery cable lead nut to 10 N.m (89 lb in).

8. Connect the negative battery cable. Refer to **<u>Battery Negative Cable Disconnect/Connect Procedure</u> in Engine Electrical.**

INSTRUMENT PANEL ELECTRICAL CENTER OR JUNCTION BLOCK REPLACEMENT

Removal Procedure



Fig. 107: Bracket To Electrical Wiring Junction Block Courtesy of GENERAL MOTORS CORP.

- 1. Disconnect the negative battery cable. Refer to **<u>Battery Negative Cable Disconnect/Connect Procedure</u>** in Engine Electrical.
- 2. Remove the right door sill plate. Refer to **Door Sill Plate Replacement** in Interior Trim.
- 3. Remove the floor kick-up pad on the passenger side. Refer to <u>Kick-Up Panel Replacement Front</u> <u>Floor</u> in Interior Trim.
- 4. Remove the retaining bolt which secures the multi-use bracket to the electrical wiring junction block.



Fig. 108: 64-Way Block Connectors & 3 I/P Wiring Harness Connectors Courtesy of GENERAL MOTORS CORP.

- 5. Disengage the retaining clip from the outboard side, twist the electrical wiring block, and pull outward.
- 6. Remove the battery cable lead.
- 7. Disconnect 3 64-way block connectors and 3 I/P wiring harness connectors.
- 8. Transfer all fuses and relays as required.

Installation Procedure



Fig. 109: Electrical Wiring Junction Block, I/P Wiring Harness Connectors & 3 64-Way Block Connectors Courtesy of GENERAL MOTORS CORP.

- 1. Position the electrical wiring junction block and connect 3 I/P wiring harness connectors and 3 64-way block connectors.
- 2. Install the electrical wiring junction block to the multi-use bracket with the retaining bolt.
- 3. Install the battery cable lead.
- 4. Install the floor kick-up pad on the passenger side. Refer to <u>Kick-Up Panel Replacement Front Floor</u> in Interior Trim.
- 5. Install the right door sill plate. Refer to **Door Sill Plate Replacement** in Interior Trim.
- 6. Connect the negative battery cable. Refer to **<u>Battery Negative Cable Disconnect/Connect Procedure</u> in Engine Electrical.**

SPECIAL TOOLS AND EQUIPMENT

SPECIAL TOOLS

Special Tools

Illustration	Tool Number/ Description
	J 25070 Heat Gun 500-700 F
	J 35616 GM Terminal Test Kit
	J 35616-200 Test Light - Probe Kit
	J 36169-A Fused Jumper Wire





SYSTEM WIRING DIAGRAMS

Chevrolet - Corvette

AIR CONDITIONING


Fig. 1: Automatic A/C Circuit



Fig. 2: Compressor Circuit

ANTI-LOCK BRAKES



Fig. 3: Anti-lock Brakes Circuit

ANTI-THEFT



Fig. 4: Anti-theft Circuit

BODY CONTROL MODULES



Fig. 5: Body Control Modules Circuit

COMPUTER DATA LINES



Fig. 6: Computer Data Lines Circuit

COOLING FAN



Fig. 7: Cooling Fan Circuit

CRUISE CONTROL



Fig. 8: Cruise Control Circuit

DEFOGGERS



ELECTRONIC POWER STEERING



Fig. 10: Electronic Power Steering Circuit

ELECTRONIC SUSPENSION



Fig. 11: Electronic Suspension Circuit

ENGINE PERFORMANCE

5.7L VIN G



Fig. 12: 5.7L VIN G, Engine Performance Circuit (1 of 4)



Fig. 13: 5.7L VIN G, Engine Performance Circuit (2 of 4)



Fig. 14: 5.7L VIN G, Engine Performance Circuit (3 of 4)



Fig. 15: 5.7L VIN G, Engine Performance Circuit (4 of 4)

5.7L VIN S



Fig. 16: 5.7L VIN S, Engine Performance Circuit (1 of 4)



Fig. 17: 5.7L VIN S, Engine Performance Circuit (2 of 4)



Fig. 18: 5.7L VIN S, Engine Performance Circuit (3 of 4)


Fig. 19: 5.7L VIN S, Engine Performance Circuit (4 of 4)

EXTERIOR LIGHTS



Fig. 20: Back-up Lamps Circuit



Fig. 21: Exterior Lamps Circuit

GROUND DISTRIBUTION



Fig. 22: Ground Distribution Circuit (1 of 3)



Fig. 23: Ground Distribution Circuit (2 of 3)



Fig. 24: Ground Distribution Circuit (3 of 3)

HEADLIGHTS



Fig. 25: Headlamp Doors Circuit



Fig. 26: Headlamps & Fog Lamps Circuit

HORN



Fig. 27: Horn Circuit

INSTRUMENT CLUSTER



Fig. 28: Instrument Cluster Circuit

INTERIOR LIGHTS



Fig. 29: Courtesy Lamps Circuit



Fig. 30: Instrument Illumination Circuit

MEMORY SYSTEMS



Fig. 31: Memory Seat & Mirrors Circuit



Fig. 32: Steering Column Memory Circuit

POWER ANTENNA



Fig. 33: Power Antenna Circuit

POWER DISTRIBUTION



Fig. 34: Power Distribution Circuit (1 of 4)



Fig. 35: Power Distribution Circuit (2 of 4)



Fig. 36: Power Distribution Circuit (3 of 4)


Fig. 37: Power Distribution Circuit (4 of 4)

POWER DOOR LOCKS



Fig. 38: Power Door Locks Circuit

POWER MIRRORS



Fig. 39: Electrochromic Mirror Circuit



Fig. 40: Power Mirrors Circuit

POWER SEATS



Fig. 41: 6-Way Power Seat Circuit



Fig. 42: Lumbar Circuit

POWER WINDOWS



Fig. 43: Power Windows Circuit

RADIO



Fig. 44: Radio Circuit

SHIFT INTERLOCK



Fig. 45: Shift Interlock Circuit



Fig. 46: Steering Column Circuit

STARTING/CHARGING



Fig. 47: Charging Circuit



Fig. 48: Starting Circuit

SUPPLEMENTAL RESTRAINTS



Fig. 49: Supplemental Restraints Circuit

TRANSMISSION



Fig. 50: A/T Circuit



Fig. 51: M/T Circuit

TRUNK, TAILGATE, FUEL DOOR



Fig. 52: Folding Top Lid Release Circuit



Fig. 53: Fuel Door Release Circuit



Fig. 54: Hatch Release Circuit

WARNING SYSTEMS


Fig. 55: Warning Systems Circuit

WIPER/WASHER



Fig. 56: Wiper/Washer Circuit