

the ignition is cycled on.

For a detailed description of the Audio System, refer to **DESCRIPTION** .

WHEN MONITORED

When the ignition is cycled on.

SET CONDITION

The Amplifier detects a shorted to ground condition on the speaker output circuit when the ignition is cycled on.

POSSIBLE CAUSES

Possible Causes
(X209) AMPLIFIED LEFT FRONT I/P SPEAKER (+) CIRCUIT SHORTED TO GROUND
(X299) AMPLIFIED LEFT FRONT I/P SPEAKER (-) CIRCUIT SHORTED TO GROUND
LEFT FRONT I/P SPEAKER
AMPLIFIER

DIAGNOSTIC TEST

1. CHECK FOR AN INTERMITTENT CONDITION

1. Turn the ignition on and open one of the front doors.

NOTE: A front door must remain open whenever checking or erasing Amplifier DTCs.

2. With the scan tool, record and erase the Amplifier DTCs.
3. Cycle the ignition switch from on to off, wait five seconds and then back to on.
4. Turn the Radio on.
5. Adjust the speakers to the front and center.
6. With the scan tool, read the active Amplifier DTCs.

Does the scan tool display active: B1460-11-CHANNEL 1 AUDIO SPEAKER OUTPUT - CIRCUIT SHORT TO GROUND?

Yes

- Go To 2

No

- Test complete, the condition or conditions that originally set this DTC are not present at this time. Using the wiring diagrams as a guide, check all related splices and connectors for signs of water intrusion, corrosion, pushed out or bent terminals and correct pin tension.

2. CHECK THE OPERATION OF THE AMPLIFIED LEFT I/P SPEAKER

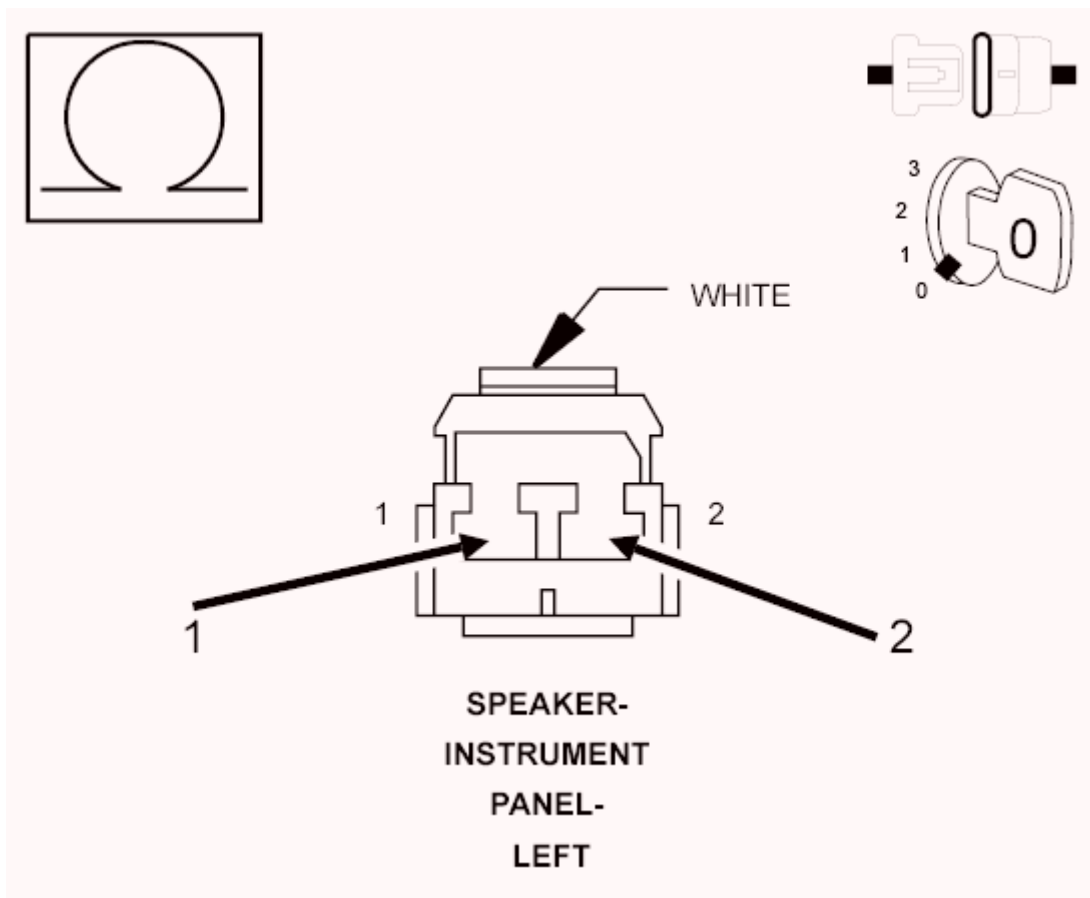


Fig. 13: Measuring Resistance Of Speaker Between Two Terminals
Courtesy of CHRYSLER GROUP, LLC

1. Turn the ignition off.
2. Disconnect the Left I/P Speaker harness connector.
3. Measure the resistance of the speaker between the two terminals.

NOTE: The graphic shows the connector face for reference only. Measure at the speaker terminals.

Is the resistance of the speaker less than 1.0 Ohm?

Yes

- Replace the Left I/P Speaker in accordance with the Service Information. Refer to **SPEAKER, REMOVAL**.
- Perform the BODY VERIFICATION TEST. Refer to **STANDARD PROCEDURE**.

No

- Go To 3

3. CHECK THE (X209) AMPLIFIED LEFT I/P SPEAKER (+) CIRCUIT, AND THE (X299)

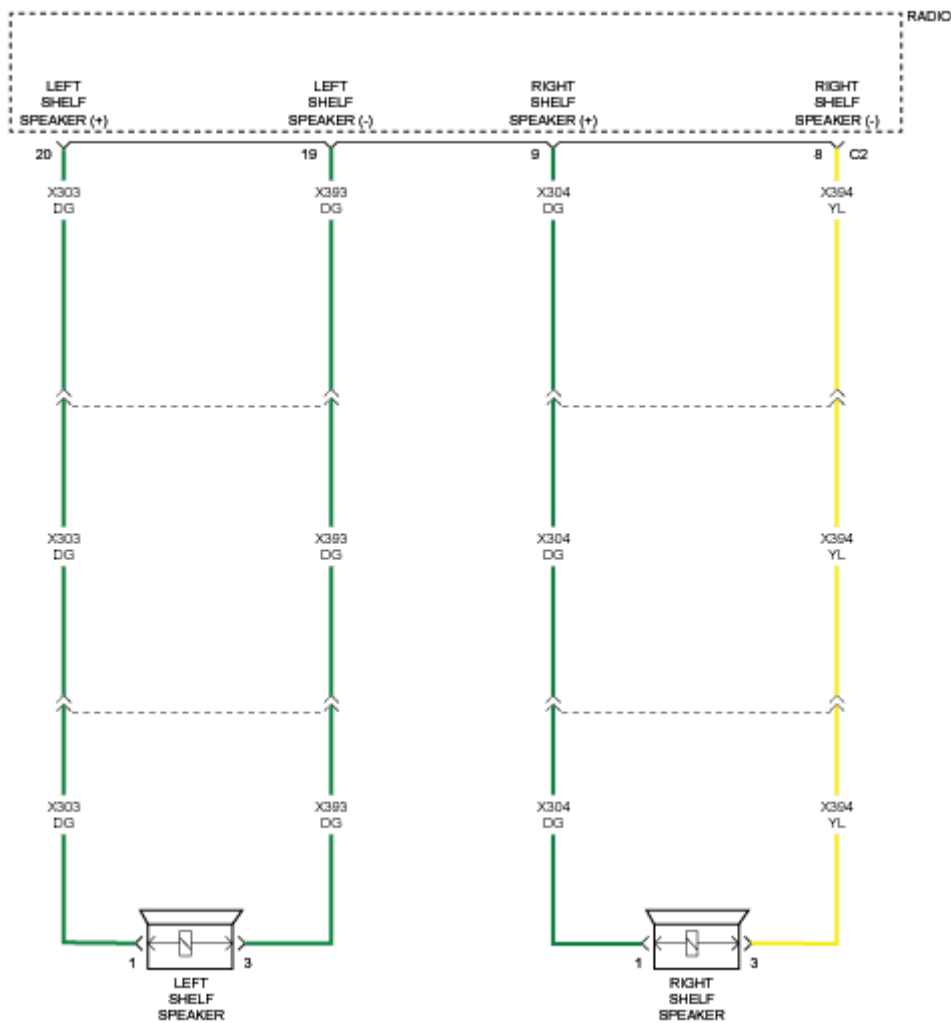


Fig. 57: Shelf Speaker Circuit Diagram
 Courtesy of CHRYSLER GROUP, LLC

THEORY OF OPERATION

The (X304) Right Rear Speaker (+) circuit and the (X394) Right Rear Speaker (-) circuit are outputs of the Radio. The Radio controls and monitors these circuits for a concern.

For a detailed description of the Audio System, refer to **DESCRIPTION** .

WHEN MONITORED

With the ignition on.

SET CONDITION

The Radio detects that the output circuits are shorted together.

POSSIBLE CAUSES

Does the scan tool display DTC: B16E7-18-LICENSE PLATE LAMP CONTROL- UNDER CURRENT?

Yes

- Replace the License Plate Lamp in accordance with the Service Information. Refer to **LAMP, LICENSE PLATE, REMOVAL** .
- Perform the BODY VERIFICATION TEST. Refer to **STANDARD PROCEDURE** .

No

- Go To 3

3. CHECK THE (L3) LICENSE PLATE LAMP DRIVER CIRCUIT FOR A SHORT TO GROUND

1. Turn the ignition off.
2. Disconnect the BCM C6 harness connector.
3. Measure the resistance between ground and the (L3) License Plate Lamp Driver circuit.

Is the resistance above 10K Ohms?

Yes

- Replace the BCM in accordance with the Service Information. Refer to **MODULE, BODY CONTROL, REMOVAL** .
- Perform the BODY VERIFICATION TEST. Refer to **STANDARD PROCEDURE** .

No

- Repair the short to ground in the (L3) License Plate Lamp Driver circuit.
- Perform the BODY VERIFICATION TEST. Refer to **STANDARD PROCEDURE** .

B1707-18-LEFT REVERSE LAMP CONTROL - UNDER CURRENT

For a complete wiring diagram, refer to appropriate **SYSTEM WIRING DIAGRAMS** article .

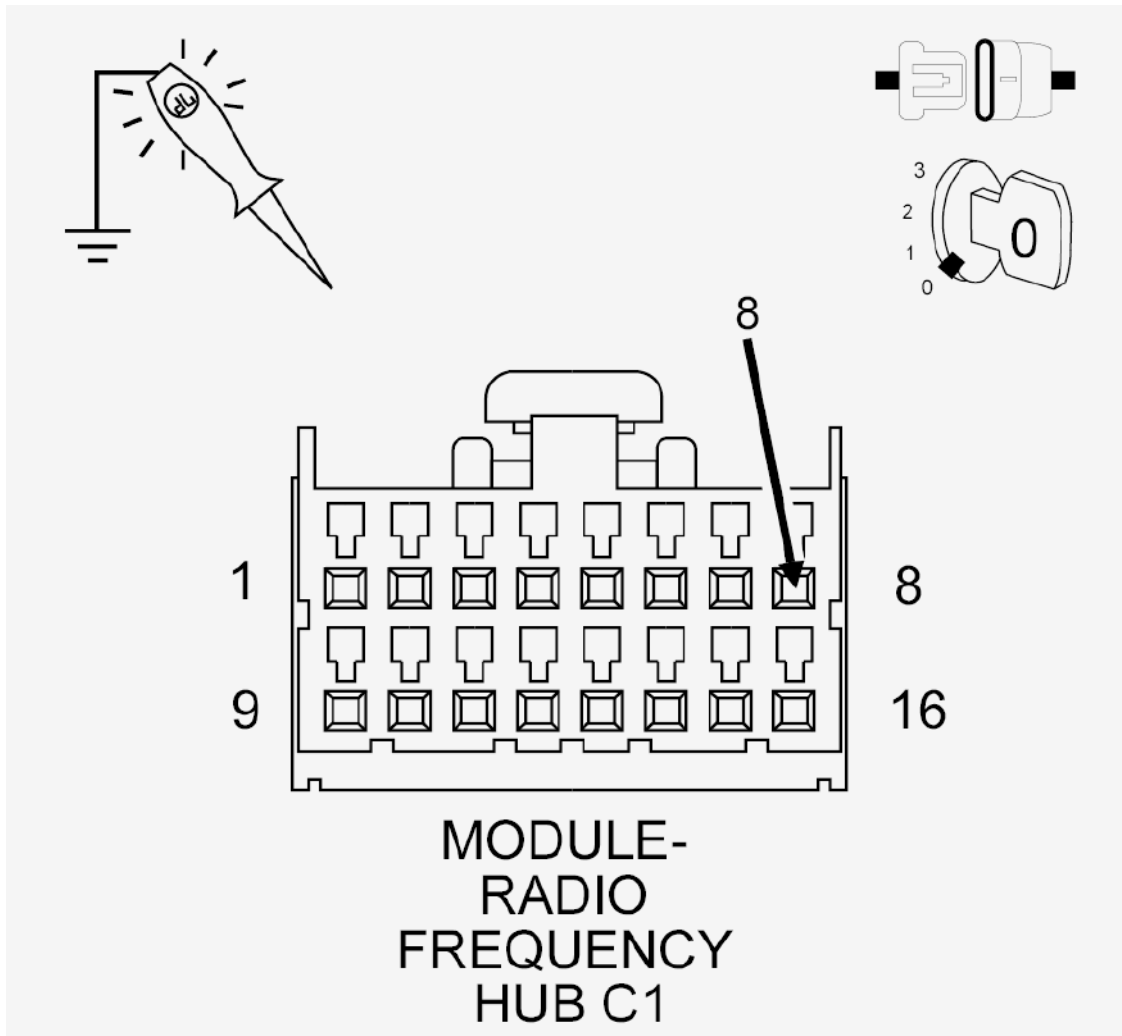


Fig. 27: Checking Fused B(+) Circuit For An Open Or Short
 Courtesy of CHRYSLER GROUP, LLC

1. Turn the ignition off.
2. Disconnect the RF Hub Module C1 harness connector.
3. Using a 12-volt test light connected to ground, check the (A910) Fused B(+) circuit.

Does the test light illuminate brightly?

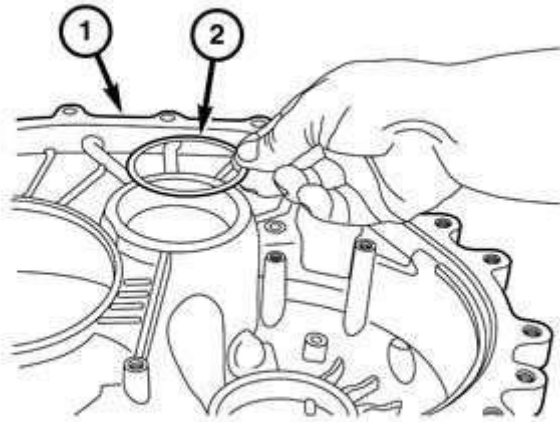
Yes

- Go To 3

No

- Repair the open or short in the (A910) Fused B(+) circuit.
- Perform the RADIO FREQUENCY HUB (RF HUB) VERIFICATION TEST. Refer to **STANDARD PROCEDURE** .

3. CHECK THE (Z924) GROUND CIRCUIT FOR AN OPEN



210171735

Fig. 522: Transfer Gear Bearing Select Shim
Courtesy of CHRYSLER GROUP, LLC

5. Remove select shim (2) from bottom of transfer gear bearing race bore (3). Mark the shim to aid installation (bell housing shown in illustration).

INSTALLATION

TRANSFER GEAR (DRIVEN) BEARING

WARNING: Use welding gloves or tongs when handling heated components. Failure to follow these instructions will result in personal injury.

CAUTION: A bearing heater is used to assembly some components. Use only a bearing heater/hot plate and follow manufacture's instructions. Heat components to 100° - 150° Celsius (212° Min. - 300° Max Fahrenheit). Never use an open flame to heat components. Never leave components on heater for and extended amount of time. If component is discolored after heating, the component has been overheated and must not be used. Failure to follow these instructions will result in component damage.

NOTE: If the bearings are being replaced along with the transfer gear or a transaxle housing component, the select shim thickness will need to be established. If only the bearing and race are being replaced, the original shim can be reused.

- Check the (F894) 5 Volt Supply B circuit for an open or short to ground. If no problem is found, and using the schematics as a guide, check the Transmission Control Module (TCM) pins, terminals, and connectors for corrosion, damage, or terminal push out. Pay particular attention to all power and ground circuits. If no problems are found, replace and program the TCM in accordance with the Service Information.
- Perform the C635 DDCT TRANSMISSION VERIFICATION TEST. Refer to **C635 DDCT TRANSMISSION VERIFICATION TEST** .

No

- Go To 3

3. CHECK THE (T47) 2-4 POSITION SIGNAL CIRCUIT FOR A SHORT TO VOLTAGE

1. Turn the ignition off to the lock position.
2. Disconnect the 2-4 Position Sensor harness connector.
3. Ignition on, engine not running.
4. Measure the voltage on the (T47) 2-4 Position Signal circuit.

Is the voltage greater than 0.5 of a volt?

Yes

- Repair the (T47) 2-4 Position Signal circuit for a short to voltage.
- Perform the C635 DDCT TRANSMISSION VERIFICATION TEST. Refer to **C635 DDCT TRANSMISSION VERIFICATION TEST** .

No

- Go To 4

4. CHECK THE (T191 AND T192) SENSOR GROUND CIRCUITS FOR AN OPEN

1. Disconnect the TCM C2 harness connector.
2. Measure the resistance of the (T191 and T192) Sensor Ground circuit between the 2-4 Position Sensor and the TCM C2 harness connector.

Is the resistance below 5.0 Ohms?

Yes

- Replace the 2-4 Position Sensor.
- Perform the C635 DDCT TRANSMISSION VERIFICATION TEST. Refer to **C635 DDCT TRANSMISSION VERIFICATION TEST** .

No

- Repair the (T191 or T192) Sensor Ground circuit for an open.
- Perform the C635 DDCT VERIFICATION TEST. Refer to **C635 DDCT TRANSMISSION VERIFICATION TEST** .

5. CHECK THE WIRING AND CONNECTORS

stuck off test checks for brake pressure present with the brake switch saying not pressed.

POSSIBLE CAUSES

Possible Causes
STOPLAMP SWITCH INSTALLATION/ADJUSTMENT BODY CONTROL MODULE (BCM) DTCs POWERTRAIN CONTROL MODULE (PCM) DTCS (B134) BRAKE SWITCH NO. 2 SIGNAL CIRCUIT SHORTED TO GROUND (B134) BRAKE SWITCH NO. 2 SIGNAL CIRCUIT OPEN OR HIGH RESISTANCE (B135) BRAKE SWITCH NO. 1 SIGNAL CIRCUIT SHORTED TO VOLTAGE STOPLAMP SWITCH ANTI-LOCK BRAKE SYSTEM (ABS) MODULE

DIAGNOSTIC TEST

1. CHECK BODY CONTROL MODULE (BCM) DTCs

1. Turn the ignition on.
2. With the scan tool, read DTCs in the BCM.

Are there any BCM Stop Lamp Switch related DTCs present?

Yes

- Perform the appropriate diagnostic procedure. Refer to the **BODY CONTROL MODULE (BCM) - DIAGNOSTIC CODE INDEX** article .

No

- Go To 2

2. CHECK POWERTRAIN CONTROL MODULE (PCM) DTCs

1. Turn the ignition on.
2. With the scan tool, read DTCs in the PCM.

Are there any PCM Stop Lamp Switch related DTCs present?

Yes

- Perform the appropriate diagnostic procedure. Refer to the **DTC INDEX** article .

No

- Go To 3

3. STOP LAMP SWITCH OPERATION

1. Start the engine.
2. Using the scan tool, monitor the brake pedal switch status while pressing the brake pedal and releasing.

Courtesy of CHRYSLER GROUP, LLC

10. Clean the oil pan, engine block, oil pump and rear seal retainer mating surfaces with isopropyl alcohol in preparation for sealant application.

CAUTION: Engine assembly requires the use of a unique sealant that is compatible with engine oil. Using a sealant other than Mopar® Engine RTV GEN II may result in engine fluid leakage.

CAUTION: Following the application of Mopar® Engine RTV GEN II to the gasket surfaces, the components must be assembled within 10 minutes and the attaching fasteners must be tightened to specification within the next 10 minutes. Prolonged exposure to the air prior to assembly may result in engine fluid leakage.

11. Apply a 2 to 3 mm wide bead of Mopar® Engine RTV GEN II sealant to the oil pan as shown in illustration in the following locations:
- Oil pan to engine block flange (1)
 - Two oil pump to engine block T-joints (3)
 - Two rear seal retainer to engine block T-joints (2)

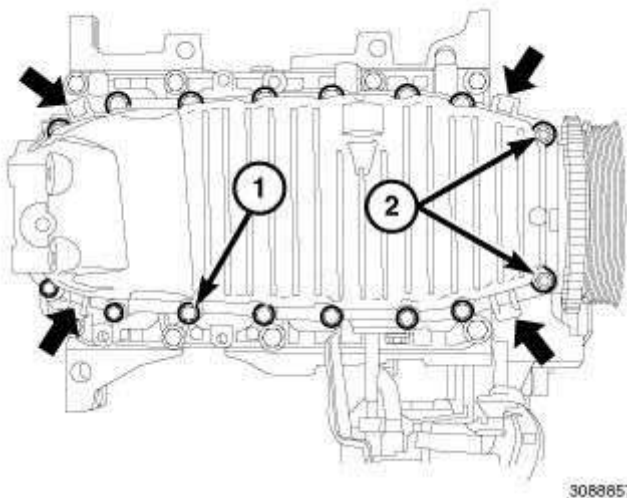


Fig. 369: Oil Pan Flange Fasteners
Courtesy of CHRYSLER GROUP, LLC

12. Install the oil pan with fourteen bolts (1), two studs and two nuts (2) hand tight.

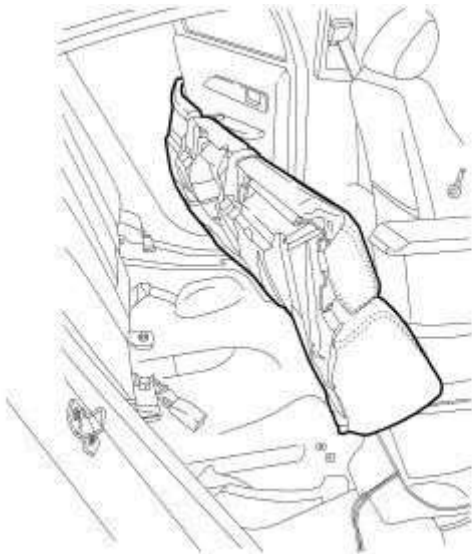
2014 ENGINE

Fuel System - Dart

FUEL DELIVERY, GAS

STANDARD PROCEDURE

FUEL SYSTEM PRESSURE RELEASE PROCEDURE



61924798

Fig. 1: Removing/Installing Rear Seat
Courtesy of CHRYSLER GROUP, LLC

WARNING: The fuel system is under constant pressure even with engine off. Until the fuel pressure has been properly relieved from the system, do not attempt to open the fuel system. Do not smoke or use open flames/sparks when servicing the fuel system. Wear protective clothing and eye protection. Make sure the area in which the vehicle is being serviced is in a well ventilated area.

A separate fuel pump relay is no longer used. A circuit within the Body Control Module (BCM) is used to control the electric fuel pump located within the fuel pump module.

1. Remove fuel fill cap.
2. Remove lower rear seat cushion.

4. POWERTRAIN CONTROL MODULE (PCM)

1. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors between the Wastegate Solenoid and the Powertrain Control Module (PCM).
2. Look for any chafed, pierced, pinched, or partially broken wires.
3. Look for broken, bent, pushed out or corroded terminals. Verify that there is good pin to terminal contact in the related connectors.
4. Perform any Technical Service Bulletins that may apply.

Were any problems found?

Yes

- Repair as necessary.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **POWERTRAIN VERIFICATION TEST** .

No

- Replace and program the Powertrain Control Module (PCM) in accordance with the service information.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **POWERTRAIN VERIFICATION TEST** .

P0261-00-INJECTOR 1 CONTROL CIRCUIT LOW

For a complete wiring diagram, refer to appropriate **SYSTEM WIRING DIAGRAMS** article .

Improper measurement technique could result in poor pin to terminal contact.

3. Measure the resistance of the (K276) CMP 1/2 Control circuit between the Camshaft 1/2 Position Solenoid harness connector and the Powertrain Control Module (PCM) harness connector.

Is the resistance below 5.0 Ohms?

Yes

- Go To 13

No

- Repair the (K276) CMP 1/2 Control circuit for an open circuit or high resistance.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **POWERTRAIN VERIFICATION TEST** .

11. CAMSHAFT 1/2 POSITION SOLENOID

1. Turn the ignition off.
2. Inspect the wiring and connectors between the Camshaft 1/2 Position Solenoid and the Powertrain Control Module (PCM).
3. Look for any chafed, pierced, pinched, or partially broken wires.
4. Look for broken, bent, pushed out or corroded terminals.

Were any problems found?

Yes

- Repair as necessary.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **POWERTRAIN VERIFICATION TEST** .

No

- Replace the Camshaft 1/2 Position Solenoid in accordance with the Service Information.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **POWERTRAIN VERIFICATION TEST** .

12. CAMSHAFT PHASER

1. Turn the ignition off.
2. Remove the appropriate Camshaft Phaser in accordance with the Service information.
3. Inspect the Phaser for contamination, foreign material, or any condition that would restrict operation of the Phaser.
4. Inspect the Phaser oil passages for signs of sludge or foreign material.

NOTE: The Phaser should not be disassembled. If the Phaser is

1. Turn the ignition off.
2. Disconnect the PCM C2 harness connector.
3. Measure the resistance between ground and the (K24) CKP Signal circuit at the Crankshaft Position Sensor harness connector.

Is the resistance above 10K Ohms?

Yes

- Go To 10

No

- Repair the (K24) CKP Signal circuit for a short to ground.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **POWERTRAIN VERIFICATION TEST** .

10. CHECK THE (K24) CKP SIGNAL CIRCUIT FOR AN OPEN/HIGH RESISTANCE

1. Measure the resistance of the (K24) CKP Signal circuit between the Crankshaft Position Sensor harness connector and the PCM C2 harness connector.

Is the resistance below 5.0 Ohms?

Yes

- Go To 11

No

- Repair the (K24) CKP Signal circuit for an open circuit or high resistance.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **POWERTRAIN VERIFICATION TEST** .

11. POWERTRAIN CONTROL MODULE (PCM)

1. Using the wiring diagram/schematic as a guide, inspect the wiring and connectors between the Crankshaft Position Sensor and the Powertrain Control Module (PCM).
2. Look for any chafed, pierced, pinched, or partially broken wires.
3. Look for broken, bent, pushed out or corroded terminals. Verify that there is good pin to terminal contact in the CKP Sensor and Powertrain Control Module connectors.
4. Monitor the scan tool data relative to this circuit and wiggle test the wiring and connectors.
5. Look for the data to change or for the DTC to reset during the wiggle test.

NOTE: Due to the fact that this DTC is set by an intermittent loss of the signal, the most likely cause is a poor connection at the Crank Sensor or PCM terminals, or a poor signal between the Crank Sensor and target wheel. Because of this, unplugging and reconnecting the harness connectors, or repositioning the Crank Sensor will often repair the condition that set the DTC.

- Repair as necessary in accordance with the service information.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **POWERTRAIN VERIFICATION TEST** .

No

- Go To 4

4. CHECKING THE IGNITION COIL OPERATION

1. Perform the diagnostic procedure for CHECKING THE IGNITION COIL OPERATION. Refer to **DIAGNOSIS AND TESTING** .

Were any problems found?

Yes

- Repair as necessary in accordance with the service information.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **POWERTRAIN VERIFICATION TEST** .

No

- Go To 5

5. CHECKING THE ENGINE COOLANT TEMPERATURE SENSOR OPERATION

1. Perform the diagnostic procedure for CHECKING THE ENGINE COOLANT TEMPERATURE SENSOR OPERATION. Refer to **DIAGNOSIS AND TESTING** .

Were any problems found?

Yes

- Repair as necessary in accordance with the service information.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **POWERTRAIN VERIFICATION TEST** .

No

- Go To 6

6. CHECKING THE MAP SENSOR OPERATION

1. Perform the diagnostic procedure for CHECKING THE MAP SENSOR OPERATION. Refer to **DIAGNOSIS AND TESTING** .

Were any problems found?

Yes

- Repair as necessary in accordance with the service information.
- Perform the POWERTRAIN VERIFICATION TEST. Refer to **POWERTRAIN**

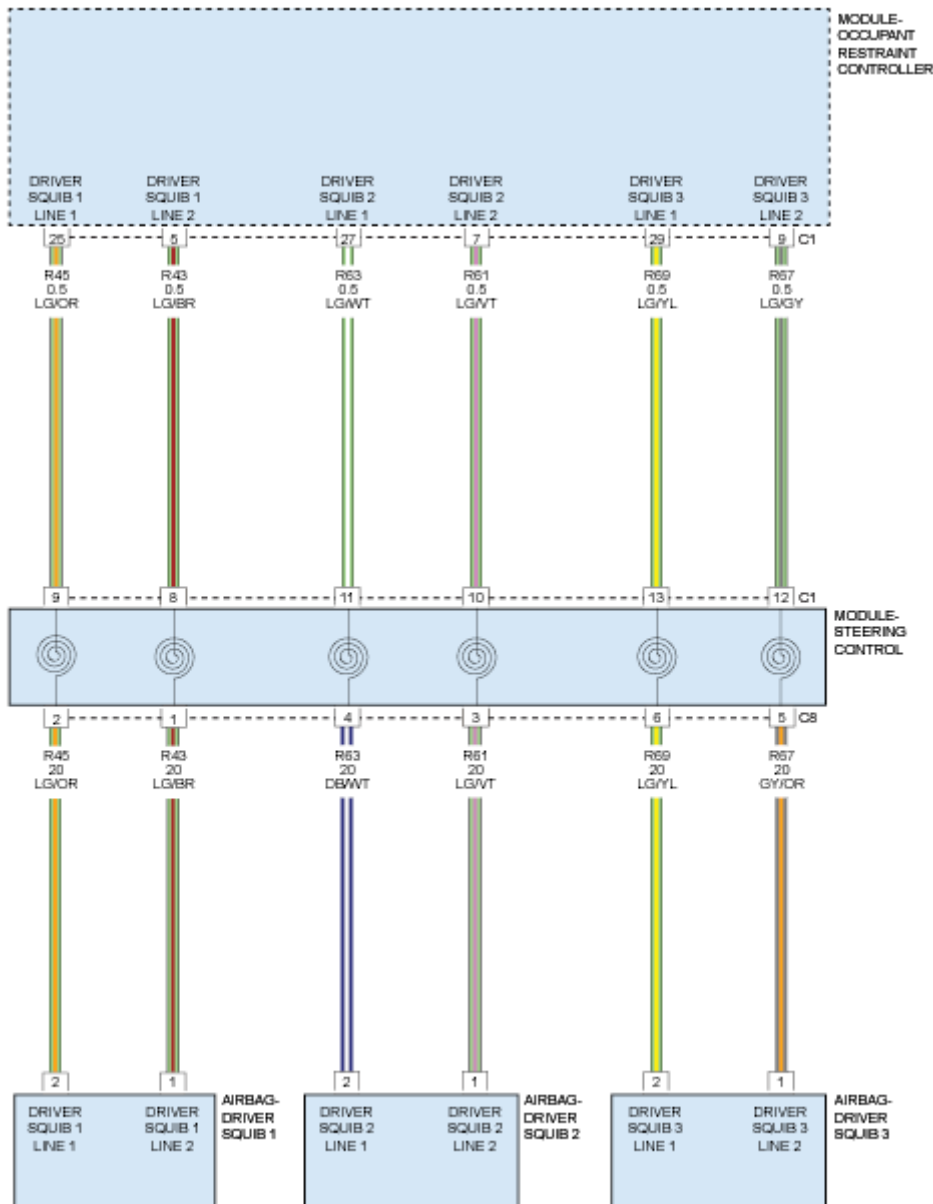


Fig. 3: Driver Frontal Squib Circuit Diagram
 Courtesy of CHRYSLER GROUP, LLC

THEORY OF OPERATION

When powered, the Occupant Restraint Controller (ORC) sends a test current to the squibs to verify the integrity of the squib and wiring. These circuits are maintained in a "floating" configuration at the module (connected to neither power nor ground) as protection against inadvertent deployment. Use of the (special tool #8443A, SRS Load Tool) in the tests below substitutes a suspect squib with a known good component. The use of the (special tool #8443-57, Adapter, Supplemental Restraint System Load Tool) provides a test point as well as a method for opening the shorting bar connections within the harness connector.

WHEN MONITORED

With the ignition on.

Sunday, September 04, 2016 12:48:01 PM	Page 12		