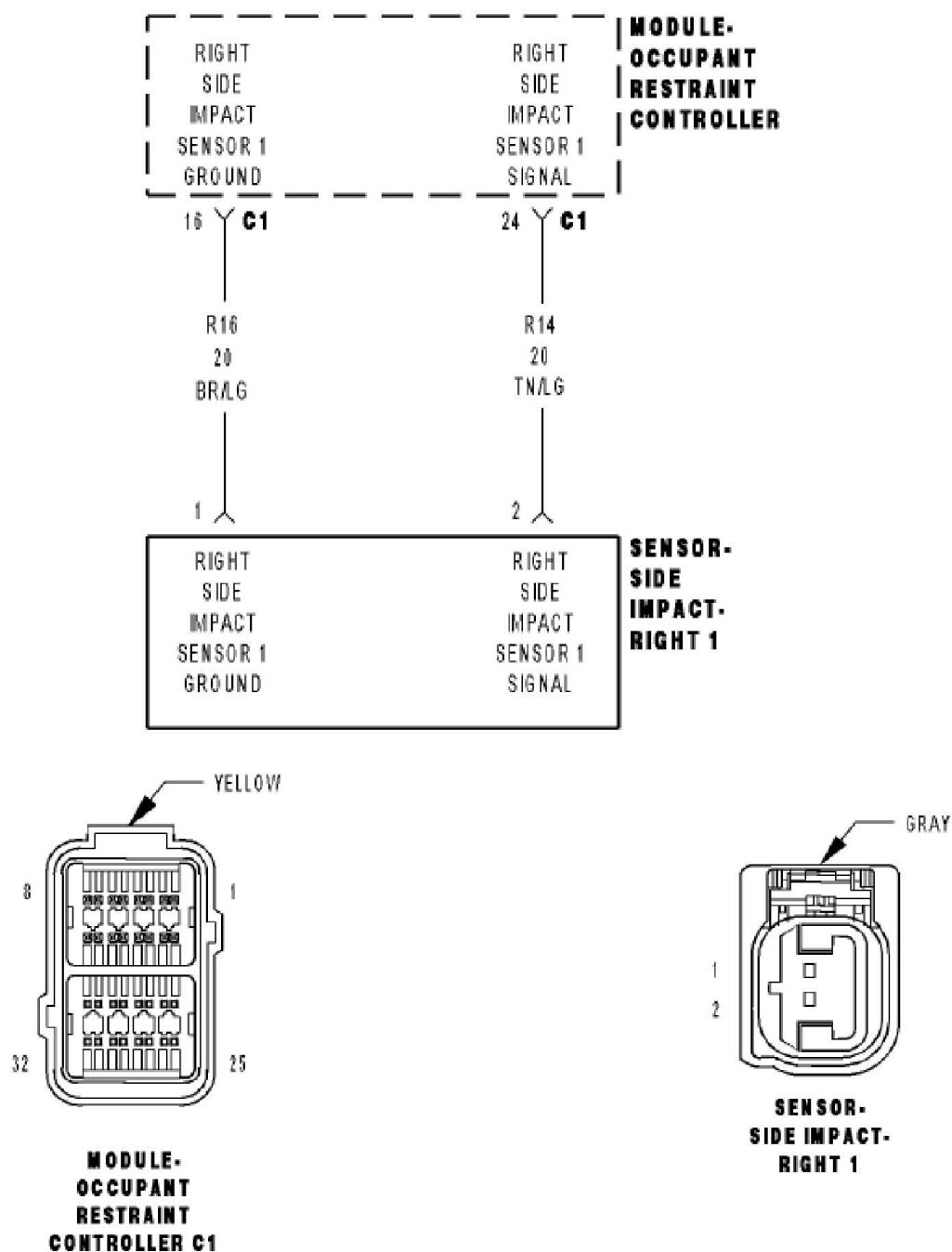


B1B75-RIGHT SIDE SATELLITE ACCELERATION SENSOR 1 INTERNAL



1). When Monitored:

The Occupant Restraint Controller (ORC) continuously communicates with the Right Side Impact Sensor 1 over the sensor signal circuit. The sensor communication and on board diagnostics are powered by the ORC signal.

2). Set Condition:

This code will set, if the ORC and the Right Side Impact Sensor 1 do not establish and maintain valid data communications.

Possible Causes
1. (R14) SIGNAL CIRCUIT SHORTED TO BATTERY
2. (R14) SIGNAL CIRCUIT SHORTED TO GROUND
3. (R14, R16) RIGHT SIDE IMPACT SENSOR 1 CIRCUITS SHORTED TOGETHER
4. (R16) RIGHT SIDE IMPACT SENSOR 1 GROUND CIRCUIT OPEN
5. (R14) RIGHT SIDE IMPACT SENSOR 1 SIGNAL CIRCUIT OPEN
6. ORC, RIGHT SIDE IMPACT SENSOR 1

Diagnostic Test

1). VERIFY THAT DTC B1B75-RIGHT SIDE SATELLITE ACCELERATION SENSOR 1 INTERNAL

NOTE: Ensure the battery is fully charged.

NOTE: When reconnecting Airbag system components, the ignition must be turned off and the battery must be disconnected.

Turn the ignition on.

With the scan tool, read ORC DTCs.

Does the scan tool display active: B1B75-RIGHT SIDE SATELLITE ACCELERATION SENSOR 1 INTERNAL?

Yes >> Go To 2

No >> Go To 9

2). CHECK THE (R14, R16) RIGHT SIDE IMPACT SENSOR 1 SIGNAL AND GROUND CIRCUITS FOR A SHORT TO BATTERY

WARNING: To avoid personal injury or death, turn the ignition off, disconnect the battery and wait two minutes before proceeding.

Disconnect the Right front Impact Sensor 1 connector.

Disconnect the ORC connector.

WARNING: To avoid personal injury or death, turn the ignition on, then reconnect the battery.

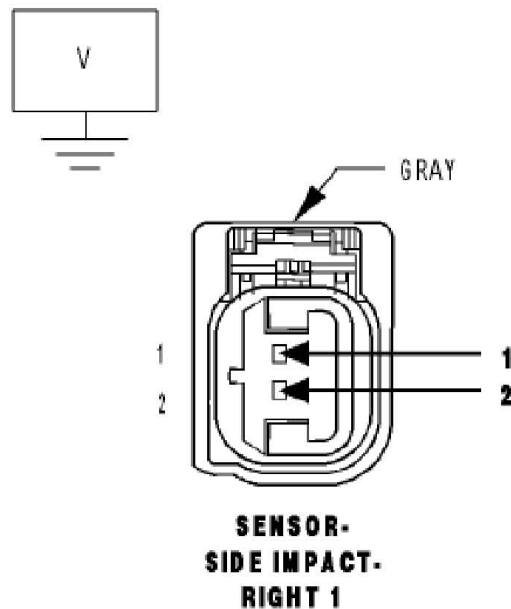
Measure the voltage of the (R14) Right Side Impact Sensor 1 Signal circuit and (R16) Sensor Ground circuit at the Right Side Impact Sensor 1 connector and ground.

Is there any voltage present?

Yes >> Repair the (R14, R16) Right Side Impact Sensor 1 circuits for a short to battery.

Perform the ORC VERIFICATION TEST - VER 1.

No >> Go To 3



3). CHECK THE (R14) RIGHT SIDE IMPACT SENSOR 1 SIGNAL CIRCUIT FOR A SHORT TO GROUND

WARNING: To avoid personal injury or death, turn ignition on, then reconnect the battery.

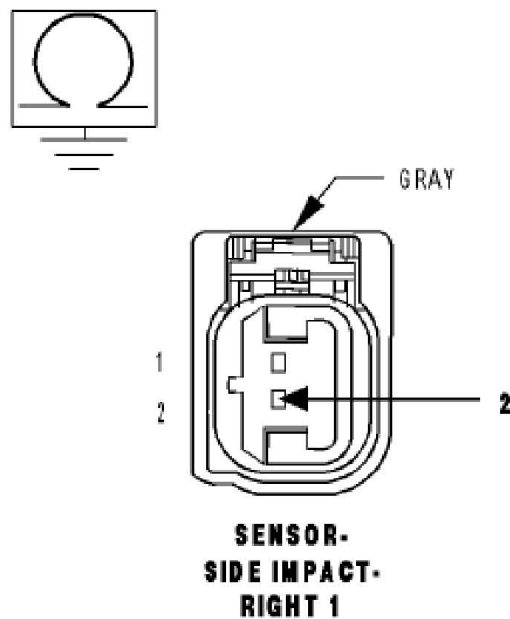
Measure the resistance of the (R14) Right Side Impact Sensor 1 Signal circuit between the Right Side Impact Sensor 1 connector and ground.

Is the resistance below 100K ohms?

Yes >> Repair the (R14) Right Side Impact Sensor 1 Signal circuit for a short to ground.

Perform the ORC VERIFICATION TEST - VER 1.

No >> Go To 4



4). CHECK THE (R14, R16) RIGHT SIDE IMPACT SENSOR CIRCUITS FOR A SHORT TOGETHER

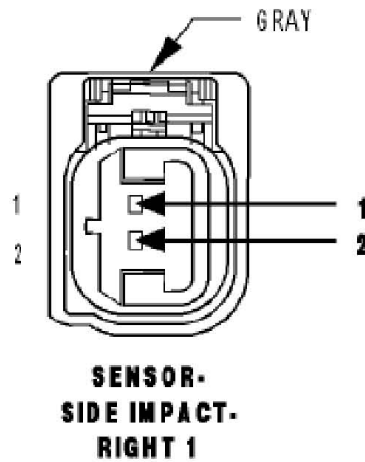
Measure the resistance between the (R14) Right Side Impact Sensor 1 Signal and (R16) Sensor Ground circuits at the Right Side Impact Sensor 1 connector.

Is the resistance below 100K ohms?

Yes >> Repair the (R14, R16) Right Side Impact Sensor 1 circuits shorted together.

Perform the ORC VERIFICATION TEST - VER 1.

No >> Go To 5



5). CHECK THE (R16) RIGHT SIDE IMPACT SENSOR 1 GROUND CIRCUIT FOR AN OPEN OR HIGH RESISTANCE

Connect the 8443 Load Tool ORC Adaptor to the Occupant Control Module connector.

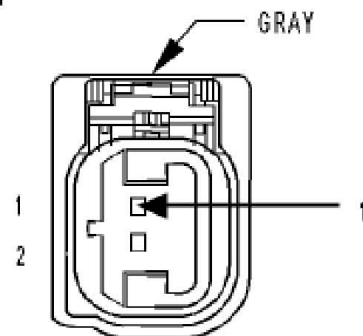
Measure the resistance of the (R16) Right Side Impact Sensor 1 Ground circuit between the Right Side Impact Sensor 1 connector and the 8443 Load Tool ORC Adaptor.

Is the resistance below 1 ohm?

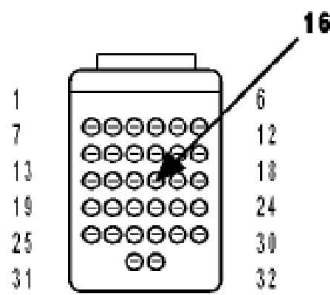
Yes >> Go To 6

No >> Repair the (R16) Right Side Impact Sensor 1 Ground circuit for an open or high resistance.

Perform the ORC VERIFICATION TEST - VER 1.



**SENSOR-
SIDE IMPACT-
RIGHT 1**



**ORC ADAPTER
8443-24**

6). CHECK THE (R14) RIGHT SIDE IMPACT SENSOR 1 CIRCUIT FOR AN OPEN OR HIGH RESISTANCE

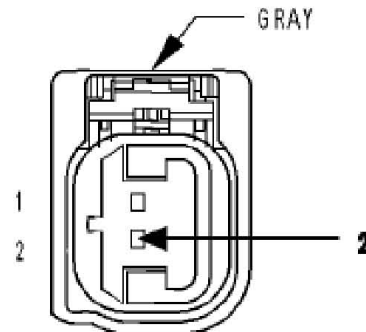
Measure the resistance of the (R14) Right Side Impact Sensor 1 Signal circuit between the Right Side Impact Sensor 1 connector and the 8443 Load Tool ORC Adaptor.

Is the resistance below 1 ohm?

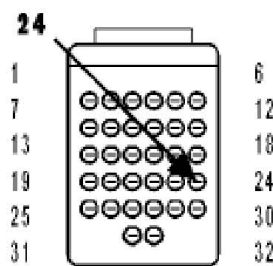
Yes >> Go To 7

No >> Repair the (R14) Right Side Impact Sensor 1 Signal circuit for an open or high resistance.

Perform the ORC VERIFICATION TEST - VER 1.



**SENSOR-
SIDE IMPACT-
RIGHT 1**



**ORC ADAPTER
8443-24**

7). CHECK OPERATION OF THE RIGHT SIDE IMPACT SENSOR 1

Replace the Right Side Impact Sensor 1.

Reconnect the vehicle body harness to the impact sensor.

Remove any special tools or jumper wires and reconnect all previously disconnected components - except the Battery.

WARNING: To avoid personal injury or death, turn the ignition on, then reconnect the battery.

Connect the scan tool to the Data Link Connector - use the most current software available.

Use the scan tool and erase the stored codes in all airbag system modules.

Turn the Ignition Off, and wait 15 seconds before turning the Ignition On.

Wait one minute, and read active codes and if there are none present read the stored codes.

Did the active Right Side Impact Sensor 1 DTC return?

Yes >> Go To 8

No >> Repair is complete.

8). REPLACE THE OCCUPANT RESTRAINT CONTROLLER

WARNING: To avoid personal injury or death, turn the ignition off, disconnect the battery and wait two minutes before proceeding.

WARNING: If the airbag control module is dropped at any time, it must be replaced. Failure to take the proper precautions could result in accidental airbag deployment and personal injury or death.

If there are no possible causes remaining, view repair.

Repair

Replace the Occupant Restraint Controller in accordance with Service Information.

Perform the ORC VERIFICATION TEST - VER 1.

9). TEST FOR AN INTERMITTENT CONDITION

With the scan tool, record and erase all DTC's from all Airbag modules.

If any ACTIVE codes are present they must be resolved before diagnosing any stored codes.

WARNING: To avoid personal injury or death, turn the ignition off, disconnect the battery and wait two minutes before proceeding.

Using the wiring diagram/schematic as a guide, inspect the wiring and connectors.

Look for chaffed, pierced, pinched, or partially broken wires and broken, bent, pushed out, spread, corroded, or contaminated terminals.

The following additional checks may assist you in identifying a possible intermittent problem.

Reconnect any disconnected components and harness connector.

WARNING: To avoid personal injury or death, turn the ignition on, then reconnect the battery.

With the scan tool monitor active codes as you work through the following steps.

WARNING: To avoid personal injury or death, maintain a safe distance from all airbags while performing the following steps.

Wiggle the wiring harness and connectors of the related airbag circuit or component.

If codes are related to the Driver Airbag circuits, rotate the steering wheel from stop to stop.

If only stored codes return continue the test until the problem area has been isolated.

In the previous steps you have attempted to recreate the conditions responsible for setting active DTC in question.

Are any ACTIVE DTCs present?

Yes >> Select the appropriate symptom from Symptom List.

No >> No problem found at this time. Erase all codes before returning vehicle to customer.