Air Bag Supplemental Restraint System (SRS)

Principle of operation

The SRS is an intelligent system, in that it deploys the appropriate airbag module for any impact event, based on information provided by the sensors around the vehicle.

Working in conjunction with the safety belt system, the SRS will provide the maximum protection for the vehicle occupants wherever the impact occurs.

In the event of a severe frontal impact, the **restraints control module (RCM)** will deploy the safety belt pretensioners and/or the front airbags as necessary, by measuring the impact via the **crash sensor** and comparing the measurement against data stored in it's memory.

In the event of a side impact, the RCM uses information from the **side impact sensors** to determine if the **thoracic** and/or **curtain airbags** should be deployed.

Occupancy classification sensor

In addition to determining the best deployment of the airbags from impact data, the system uses information from the occupancy classification sensor to control the two-stage airbag used in the **passenger airbag module**, and relays this information to the driver via the **passenger airbag deactivation (PAD)** lamp.

PAD lamp strategy

Passenger seat status	Passenger airbag status	PAD lamp status
Empty	OFF	OFF
Empty, but safety belt fastened	OFF	ON
Occupied (small occupant)	OFF	ON
Occupied (large occupant)	ON	OFF

Seat track position sensor

To determine the level of deployment of the **driver airbag module**, the system also uses inputs from the seat track position sensor.

The system will not deploy the second stage of the airbag if the driver is too close to the steering wheel.

Safety information



WARNING:

TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.



WARNING:

ALWAYS WEAR SAFETY GLASSES WHEN REPAIRING AN AIR BAG SRS VEHICLE AND WHEN HANDLING AN AIR BAG MODULE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.



WARNING:

CARRY A LIVE AIR BAG MODULE WITH THE AIR BAG AND TRIM COVER POINTED AWAY FROM

1

YOUR BODY. THIS WILL REDUCE THE RISK OF INJURY IN THE EVENT OF AN ACCIDENTAL DEPLOYMENT. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.



WARNING:

DO NOT SET A LIVE AIR BAG MODULE DOWN WITH THE TRIM COVER FACE DOWN. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.



WARNING:

AFTER DEPLOYMENT, THE AIR BAG SURFACE CAN CONTAIN DEPOSITS OF SODIUM HYDROXIDE, A PRODUCT OF THE GAS GENERANT COMBUSTION THAT IS IRRITATING TO THE SKIN. WASH YOUR HANDS WITH SOAP AND WATER AFTERWARDS. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.



WARNING:

NEVER PROBE THE CONNECTORS ON THE AIR BAG MODULE. DOING SO MAY RESULT IN AIR BAG DEPLOYMENT. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.



WARNING:

IN THE EVENT OF AN INCIDENT IN WHICH THE AIR BAGS HAVE BEEN DEPLOYED, ALL SAFETY BELTS THAT WERE IN USE AT THE TIME OF THE INCIDENT MUST BE REMOVED AND NEW SAFETY BELTS MUST BE INSTALLED. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.



WARNING:

AFTER FIVE INCIDENTS INVOLVING THE DEPLOYMENT OF SRS COMPONENTS, THE RESTRAINTS CONTROL MODULE MUST BE REPLACED. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

1. These warnings should be observed whenever working on the SRS and/or it's components.

Flash codes

Self check

- 1. Turn the ignition switch to the **ON** position.
- 2. Observe the airbag warning light function.
 - Warning light **ON** solid for six seconds.
 - · Warning light goes off and stays off.

Fault on system

- 3. Turn the ignition switch to the **ON** position.
- 4. Observe the airbag warning light function.
- Warning light ON solid for six seconds.
- Warning light goes off for two seconds.
- Warning light flashes the appropriate number of times for the fault logged (see below).
- Warning light goes off for two seconds.
- The sequence is repeated five times.
- Warning light stays **ON** until the ignition is switched **OFF**.

Example

Flash code 16 would be shown as lamp **ON** for one occurrence of 0.5 seconds, then lamp **OFF** for one second, followed by six occurrences of lamp flashing **ON/OFF** for 0.5 seconds each (1 - 6).

Diagnostic trouble code (DTC) flash code index

NOTE:

Other DTCs and flash codes may be stored, relating to the safety belt system. <<**501-20A**>>[Safety Belt System]

DTC/Flash code	Condition	Possible source	Action
B1869	Airbag MIL circuit fault	Airbag MIL circuit: open circuit	For MIL circuit tests, Goto << A >> .
B1870	Airbag MIL circuit fault	Airbag MIL circuit: short circuit to B+	For MIL circuit tests, Goto << A>>
B1884	Passenger airbag deactivated (PAD) indicator lamp circuit fault	PAD indicator lamp circuit: open circuit, short circuit to ground	For PAD circuit tests, Goto << B >>
,	1	1	Flash code 18
B1890	Passenger airbag deactivated (PAD) indicator lamp circuit fault	PAD indicator lamp circuit: open circuit, short circuit to B+	For PAD circuit tests, Goto << B >>
B1921	RCM internal airbag diagnostic monitor ground circuit fault	RCM mounting bracket contact: open circuit, high resistance	Ensure a clean electrical contact between the RCM and GROUND. Ensure the fasteners are correctly torqued.
'	1	1	Flash code 14
B2293	Airbag circuit status fault	Driver airbag circuit fault	For airbag circuit tests, Goto << C >>
		Passenger airbag circuit fault	
1	1	'	Flash code 19 - driver
			Flash code 21 - passenger
B2294	Curtain airbag circuit status fault	Driver curtain airbag circuit status fault	For curtain airbag circuit tests, Goto << D >>
		Passenger curtain airbag circuit status fault	•
'	ı	'	Flash code 24 - driver
			Flash code 25 - passenger
B2295 ,	Side airbag circuit status fault	Driver side airbag circuit status fault	For side airbag circuit tests, Goto << E >>
		Passenger side airbag circuit status fault	•

3

'	'	'	Flash code 22 - driver
			Flash code 23 - passenger
B2296	Front impact sensor circuit status fault	Impact sensor circuit status fault	For front impact sensor circuit tests, Goto << F >>
'	•	1	Flash code 42 - front impact sensor
B2296	Front driver side impact sensor circuit status fault	Impact sensor circuit status fault	For front driver side impact sensor circuit tests, Goto << G >>
•	,	1	Flash code 43 - front driver side impact sensor
B2296	Front passenger side impact sensor circuit status fault	Impact sensor circuit status fault	For front passenger side impact sensor circuit tests, Goto < <h>>> .</h>
1	•	'	Flash code 44 - front passenger side impact sensor
B2296	Impact sensor circuit status fault	Impact sensor circuit status fault	For rear driver side impact sensor circuit tests, Goto << l>> .
1	,	'	Flash code 45 - rear driver side impact sensor
B2296	Impact sensor circuit status fault	Impact sensor circuit status fault	For rear passenger side impact sensor circuit tests, Goto << J >>
1	•	1	Flash code 46 - rear passenger side impact sensor
B2477	RCM configuration failure	Incorrect module configuration	Reconfigure the module using the Jaguar approved diagnostic system
1	1	1	Flash code 54

Pinpoint tests

A: B1869, B1870: AIRBAG MIL CIRCUIT FAULT

A1: CHECK THE AIRBAG WARNING LIGHT CIRCUIT FOR HIGH RESISTANCE



TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Disconnect the battery negative terminal.
- 2. Wait one minute for the backup power supply to deplete.

- 3. Disconnect the RCM connector, IP74.
- 4. Disconnect the instrument cluster connector, IP11.
- 5. Measure the resistance between IP74, pin 19 (U) and IP11, pin 19 (U).

•Is the resistance greater than 5 ohms?

-> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

Goto << A2>>

A2: CHECK THE AIRBAG WARNING LIGHT CIRCUIT FOR SHORT CIRCUIT TO B+

- 1. Reconnect the battery negative terminal.
- 2. Measure the voltage between IP74, pin 19 (U) and GROUND.

•Is the voltage greater than 3 volts?

-> Yes

REPAIR the short circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

The LEDs in the instrument cluster are not serviceable. Install a new instrument cluster. Clear the DTC, test the system for normal operation. If the fault is still apparent, install a new RCM. <<Restraints Control Module (RCM)>>

B: B1884, B1890: PASSENGER AIRBAG DEACTIVATION (PAD) LAMP CIRCUIT FAULT

B1: CHECK THE PAD LAMP LED

- 1. Disconnect the PAD lamp connector, IP140.
- 2. Measure the resistance between IP140, pins 01 (GR) and 03 (O).
 - •Is the resistance less than 10,000 ohms?
 - -> Yes

Goto << B2>>

-> No

INSTALL a new PAD lamp LED. Clear the DTC, test the system for normal operation.

B2: CHECK THE PAD LAMP SUPPLY CIRCUIT FOR OPEN CIRCUIT

- 1. Turn the ignition switch to the **ON** position.
- 2. Measure the voltage between IP140, pin 01 (GR) and GROUND.

•Is the voltage less than 10 volts?

-> Yes

REPAIR the circuit between the PAD lamp and battery. This circuit includes the primary junction box, fuses 31 and 41, the ignition switch, and the front power distribution box, fuse 39. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

Goto << B3>>

B3: CHECK THE PAD LAMP SUPPLY CIRCUIT FOR SHORT CIRCUIT TO B+

- 1. Turn the ignition switch to the **OFF** position.
- 2. Measure the voltage between IP74, pin 19 (U) and GROUND.

•Is the voltage greater than 3 volts?

-> Vec

REPAIR the short circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

Goto << B4>>

B4: CHECK THE PAD LAMP TRIGGER CIRCUIT FOR HIGH RESISTANCE

- 1. Disconnect the RCM connector, IP74.
- 2. Measure the resistance between IP140, pin 03 (O) and IP74, pin 15 (O).

•Is the resistance greater than 5 ohms?

-> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

Goto << **B5**>>

B5: CHECK THE PAD LAMP TRIGGER CIRCUIT FOR SHORT CIRCUIT TO GROUND

1. Measure the resistance between IP40, pin 03 (O) and GROUND.

•Is the resistance less than 10,000 ohms?

-> Yes

REPAIR the short circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

INSTALL a new RCM. << Restraints Control Module (RCM)>>

C: B2293 (FLASH CODE 19 AND/OR 23): AIRBAG CIRCUIT STATUS FAULT

C1: CHECK THE AIRBAG CIRCUIT STATUS WITH SIMULATORS IN PLACE



TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Disconnect the battery negative terminal.
- 2. Wait one minute for the backup power supply to deplete.

For flash code 19

• Disconnect the driver airbag module connectors, SW01 and SW02.

For flash code 23

- Disconnect the passenger airbag module connectors, IP36 and IP37.
- 3. Connect the simulators in place of the airbag modules.
- 4. Reconnect the battery negative terminal.
- 5. Clear the DTC.
- 6. Turn the ignition switch to the **ON** position.
- 7. Recheck the DTCs and flash codes.
 - •Are there any DTCs and/or flash codes set with the simulators in place?
 - -> Yes

Goto << C2>>

-> No

INSTALL a new airbag module for the relevant side,

C2: CHECK THE STAGE 1 CIRCUIT BETWEEN THE AIRBAG MODULE AND THE RCM FOR OPEN CIRCUIT



WARNING:

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- 1. Disconnect the battery negative terminal.
- 2. Wait one minute for the backup power supply to deplete.
- 3. Disconnect the RCM connector, IP74.
- 4. Disconnect the simulators.
- 5. Measure the resistance between:

For flash code 19

- SW02, pin 01 (G) and IP74, pin 01 (G)
- SW02, pin 02 (B) and IP74, pin 02 (B)

For flash code 23

- IP36, pin 01 (RW) and IP74, pin 03 (RW)
- IP36, pin 02 (BW) and IP74, pin 04 (BW)
- •Are any of the resistances greater than 5 ohms?
- -> Yes

Goto << C4>>

-> No

Goto << C3>>

C3: CHECK THE STAGE 2 CIRCUIT BETWEEN THE AIRBAG MODULE AND THE RCM FOR OPEN CIRCUIT

1. Measure the resistance between:

For flash code 19

- SW01, pin 01 (G) and IP74, pin 05 (G)
- SW01, pin 02 (B) and IP74, pin 06 (B)

For flash code 23

- IP37, pin 01 (RW) and IP74, pin 13 (RW)
- IP37, pin 02 (BW) and IP74, pin 14 (BW)
- •Are any of the resistances greater than 5 ohms?
- -> Yes

Goto << C4>>

-> No

INSTALL a new RCM. << Restraints Control Module (RCM)>> Clear the DTC, test the system for normal operation.

C4: CHECK THE CIRCUITS BETWEEN THE CLOCKSPRING AND THE RCM FOR OPEN CIRCUIT

- 1. Disconnect the clockspring connector, IP34.
- 2. Measure the resistance between:
 - IP34, pin 10 (B) and IP74, pin 02 (B)
 - IP34, pin 09 (G) and IP74, pin 01 (G)
 - IP34, pin 02 (B) and IP74, pin 06 (B)
 - IP34, pin 01 (G) and IP74, pin 05 (G)
 - •Are any of the resistances greater than 5 ohms?
 - -> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

Goto << C5>>

C5: CHECK THE CIRCUITS THROUGH THE CLOCKSPRING FOR HIGH RESISTANCE

- 1. Measure the resistance between:
 - SW01, pin 01 (G) and IP34, pin 01 (G)
 - SW01, pin 02 (B) and IP34, pin 02 (G)
 - SW02, pin 01 (G) and IP34, pin 01 (G)
 - SW02, pin 02 (B) and IP34, pin 02 (B)
 - •Are any of the resistances greater than 5 ohms?

-> Yes

INSTALL a new clockspring. << Clockspring>>

INSTALL a new RCM. << Restraints Control Module (RCM)>> Clear the DTC, test the system for normal operation.

D: B2294: (FLASH CODE 24 AND/OR 25): CURTAIN AIRBAG CIRCUIT STATUS FAULT

D1: CHECK THE CURTAIN AIRBAG CIRCUIT STATUS WITH SIMULATORS IN PLACE



TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Disconnect the battery negative terminal.
- 2. Wait one minute for the backup power supply to deplete.

For flash code 24

• Disconnect the driver curtain airbag module connector, CA144.

For flash code 25

- Disconnect the passenger curtain airbag module connector, CA145.
- 3. Connect the simulator(s) in place of the airbag module(s).
- 4. Reconnect the battery negative terminal.
- 5. Clear the DTC.
- 6. Turn the ignition switch to the **ON** position.
- 7. Recheck the DTCs and flash codes.
 - •Are there any DTCs and/or flash codes set with the simulator(s) in place?
 - -> Yes

Goto << D2>>

-> No

INSTALL a new curtain airbag module for the relevant side, << Side Air Curtain Module>>

D2: CHECK THE CIRCUITS BETWEEN THE CURTAIN AIRBAG MODULE AND THE RCM FOR **OPEN CIRCUIT**



🗥 WARNING:

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1. Disconnect the battery negative terminal.

- 2. Wait one minute for the backup power supply to deplete.
- 3. Disconnect the simulator(s).
- 4. Disconnect the RCM connector, CA460.
- 5. Measure the resistance between:

For flash code 24

- CA460, pin 03 (RW) and CA144, pin 01 (RW)
- CA460, pin 04 (BW) and CA144, pin 02 (BW)

For flash code 25

- CA460, pin 05 (RW) and CA145, pin 01 (RW)
- CA460, pin 06 (BW) and CA145, pin 02 (BW)
- •Are any of the resistances greater than 5 ohms?
- -> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

INSTALL a new RCM. << Restraints Control Module (RCM)>> Clear the DTC, test the system for normal operation.

E: B2295 (FLASH CODE 22 AND/OR 23): SIDE AIRBAG CIRCUIT STATUS FAULT

E1: CHECK THE SIDE AIRBAG CIRCUIT STATUS WITH SIMULATORS IN PLACE



WARNING:

TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Disconnect the battery negative terminal.
- 2. Wait one minute for the backup power supply to deplete.

For flash code 22

• Disconnect the driver side airbag module connector, AL01.

For flash code 23

- Disconnect the passenger side airbag module connector, AD01.
- 3. Connect the simulator(s) in place of the airbag module(s).
- 4. Reconnect the battery negative terminal.
- 5. Clear the DTC.
- 6. Turn the ignition switch to the **ON** position.
- 7. Recheck the DTCs and flash codes.
 - •Are there any DTCs and/or flash codes set with the simulator(s) in place?

-> Yes

Goto <<**E2**>>

-> No

INSTALL a new side airbag module for the relevant side. Clear the DTC, test the system for normal operation.

E2: CHECK THE CIRCUITS BETWEEN THE SIDE AIRBAG MODULE AND THE RCM FOR OPEN CIRCUIT



WARNING

TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Disconnect the battery negative terminal.
- 2. Wait one minute for the backup power supply to deplete.
- 3. Disconnect the simulator(s).
- 4. Disconnect the RCM connector, CA460.
- 5. Measure the resistance between:

For flash code 22

- CA460, pin 01 (RW) and AL01, pin 01 (RW)
- CA460, pin 02 (BW) and AL01, pin 02 (BW)

For flash code 23

- CA460, pin 21 (RW) and AD01, pin 01 (RW)
- CA460, pin 22 (BW) and AD01, pin 02 (BW)
- •Are any of the resistances greater than 5 ohms?
- -> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

INSTALL a new RCM. << Restraints Control Module (RCM)>> Clear the DTC, test the system for normal operation.

F: B2296 (FLASH CODE 42): FRONT IMPACT SENSOR CIRCUIT STATUS FAULT

F1: CHECK THE POWER SUPPLY TO THE FRONT IMPACT SENSOR



WARNING:

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- 1. Disconnect the battery negative terminal.
- 2. Wait one minute for the backup power supply to deplete.
- 3. Disconnect the front impact sensor connector, JB93.
- 4. Reconnect the battery negative terminal.
- 5. Turn the ignition switch to the **ON** position.
- 6. Measure the voltage between JB93, pin 02 (W) and GROUND.

•Is the voltage less than 4 volts?

-> Yes

Goto << F2>>

-> No

Goto << F3>>

F2: CHECK THE FRONT IMPACT SENSOR SUPPLY CIRCUIT FOR OPEN CIRCUIT

- 1. Turn the ignition switch to the **OFF** position.
- 2. Disconnect the battery negative terminal.
- 3. Disconnect the RCM connector, CA460.
- 4. Measure the resistance between JB93, pin 02 (W) and CA460, pin 19 (W).

•Is the resistance greater than 5 ohms?

-> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

Goto << F3>>

F3: CHECK THE FRONT IMPACT SENSOR RETURN CIRCUIT FOR OPEN CIRCUIT

1. Measure the resistance between JB93, pin 01 (N) and CA460, pin 20 (N).

•Is the resistance greater than 5 ohms?

-> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

INSTALL a new front impact sensor, << Crash Sensor>> Clear the DTC, test the system for normal operation. If the fault persists, install a new RCM. << Restraints Control Module (RCM)>> Clear the DTC, test the system for normal operation.

G: B2296 (FLASH CODE 43): FRONT DRIVER SIDE IMPACT SENSOR CIRCUIT STATUS FAULT

G1: CHECK THE POWER SUPPLY TO THE FRONT DRIVER SIDE IMPACT SENSOR



TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE

BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Disconnect the battery negative terminal.
- 2. Wait one minute for the backup power supply to deplete.
- 3. Disconnect the front driver side impact sensor connector, CA215.
- 4. Reconnect the battery negative terminal.
- 5. Turn the ignition switch to the **ON** position.
- 6. Measure the voltage between CA215, pin 02 (W) and GROUND.
 - •Is the voltage less than 4 volts?
 - -> Yes

Goto << G2>>

-> No

Goto << G3>>

G2: CHECK THE FRONT DRIVER SIDE IMPACT SENSOR SUPPLY CIRCUIT FOR OPEN **CIRCUIT**



🗥 WARNING:

TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Turn the ignition switch to the **OFF** position.
- 2. Disconnect the battery negative terminal.
- 3. Disconnect the RCM connector, CA460.
- 4. Measure the resistance between CA215, pin 02 (W) and CA460, pin 27 (W).

•Is the resistance greater than 5 ohms?

-> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

Goto << G3>>

G3: CHECK THE FRONT DRIVER SIDE IMPACT SENSOR RETURN CIRCUIT FOR OPEN **CIRCUIT**

1. Measure the resistance between CA215, pin 01 (N) and CA460, pin 28 (N).

•Is the resistance greater than 5 ohms?

-> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

INSTALL a new front driver side impact sensor, << Side Impact Sensor>> Clear the DTC, test the system for normal operation. If the fault persists, install a new RCM. << Restraints Control Module (RCM)>> Clear the DTC, test the system for normal operation.

H: B2296 (FLASH CODE 44): FRONT PASSENGER SIDE IMPACT SENSOR CIRCUIT STATUS **FAULT**

H1: CHECK THE POWER SUPPLY TO THE FRONT PASSENGER SIDE IMPACT SENSOR



TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Disconnect the battery negative terminal.
- 2. Wait one minute for the backup power supply to deplete.
- 3. Disconnect the front passenger side impact sensor connector, CA216.
- 4. Reconnect the battery negative terminal.
- 5. Turn the ignition switch to the **ON** position.
- 6. Measure the voltage between CA216, pin 02 (W) and GROUND.
 - •Is the voltage less than 4 volts?
 - -> Yes Goto <<H2>> -> No Goto << H3>>

H2: CHECK THE FRONT PASSENGER SIDE IMPACT SENSOR SUPPLY CIRCUIT FOR OPEN **CIRCUIT**



🗥 WARNING:

TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Turn the ignition switch to the **OFF** position.
- 2. Disconnect the battery negative terminal.
- 3. Disconnect the RCM connector, CA460.
- 4. Measure the resistance between CA216, pin 02 (W) and CA460, pin 29 (W).
 - •Is the resistance greater than 5 ohms?
 - -> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

Goto << H3>>

H3: CHECK THE FRONT PASSENGER SIDE IMPACT SENSOR RETURN CIRCUIT FOR OPEN

CIRCUIT

1. Measure the resistance between CA216, pin 01 (N) and CA460, pin 30 (N).

•Is the resistance greater than 5 ohms?

-> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

INSTALL a new front passenger side impact sensor, << Side Impact Sensor>> Clear the DTC, test the system for normal operation. If the fault persists, install a new RCM. << Restraints Control Module (RCM)>> Clear the DTC, test the system for normal operation.

I: B2296 (FLASH CODE 45): REAR DRIVER SIDE IMPACT SENSOR CIRCUIT STATUS FAULT

11: CHECK THE POWER SUPPLY TO THE REAR DRIVER SIDE IMPACT SENSOR



🗥 WARNING:

TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Disconnect the battery negative terminal.
- 2. Wait one minute for the backup power supply to deplete.
- 3. Disconnect the rear driver side impact sensor connector, CA140.
- 4. Reconnect the battery negative terminal.
- 5. Turn the ignition switch to the **ON** position.
- 6. Measure the voltage between CA140, pin 02 (W) and GROUND.

•Is the voltage less than 4 volts?

-> Yes

Goto <<12>>

-> No

Goto << 13>>

12: CHECK THE REAR DRIVER SIDE IMPACT SENSOR SUPPLY CIRCUIT FOR OPEN CIRCUIT



🗥 WARNING:

TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Turn the ignition switch to the **OFF** position.
- 2. Disconnect the battery negative terminal.
- 3. Disconnect the RCM connector, CA460.
- 4. Measure the resistance between CA140, pin 02 (W) and CA460, pin 13 (W).

•Is the resistance greater than 5 ohms?

-> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

Goto << 13>>

13: CHECK THE REAR DRIVER SIDE IMPACT SENSOR RETURN CIRCUIT FOR OPEN CIRCUIT

1. Measure the resistance between CA140, pin 01 (N) and CA460, pin 14 (N).

•Is the resistance greater than 5 ohms?

-> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

INSTALL a new rear driver side impact sensor, << Side Impact Sensor>> Clear the DTC, test the system for normal operation. If the fault persists, install a new RCM. << Restraints Control Module (RCM)>> Clear the DTC, test the system for normal operation.

J : B2296 (FLASH CODE 46): REAR PASSENGER SIDE IMPACT SENSOR CIRCUIT STATUS FAULT

J1: CHECK THE POWER SUPPLY TO THE REAR PASSENGER SIDE IMPACT SENSOR



🗥 WARNING:

TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Disconnect the battery negative terminal.
- 2. Wait one minute for the backup power supply to deplete.
- 3. Disconnect the rear passenger side impact sensor connector, CA131.
- 4. Reconnect the battery negative terminal.
- 5. Turn the ignition switch to the **ON** position.
- 6. Measure the voltage between CA131, pin 02 (W) and GROUND.

•Is the voltage less than 4 volts?

-> Yes

Goto <<**J2**>>

-> No

Goto << **J3**>>

J2: CHECK THE REAR PASSENGER SIDE IMPACT SENSOR SUPPLY CIRCUIT FOR OPEN CIRCUIT



WARNING:

TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER

SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIR BAG SRS COMPONENTS. TO DEPLETE THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT FOR ONE MINUTE. FAILURE TO FOLLOW THIS INSTRUCTION MAY RESULT IN PERSONAL INJURY.

- 1. Turn the ignition switch to the **OFF** position.
- 2. Disconnect the battery negative terminal.
- 3. Disconnect the RCM connector, CA460.
- 4. Measure the resistance between CA131, pin 02 (W) and CA460, pin 15 (W).

•Is the resistance greater than 5 ohms?

-> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

Goto << **J3**>>

J3: CHECK THE REAR PASSENGER SIDE IMPACT SENSOR RETURN CIRCUIT FOR OPEN CIRCUIT

1. Measure the resistance between CA131, pin 01 (N) and CA460, pin 14 (N).

•Is the resistance greater than 5 ohms?

-> Yes

REPAIR the high resistance circuit. For additional information, refer to the wiring diagrams. Clear the DTC, test the system for normal operation.

-> No

INSTALL a new rear passenger side impact sensor, << Side Impact Sensor>> Clear the DTC, test the system for normal operation. If the fault persists, install a new RCM. << Restraints Control Module (RCM)>> Clear the DTC, test the system for normal operation.