

Air Bag Supplemental Restraint System (SRS)

Inspection and Verification



WARNING:

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

NOTE:

Given the legal implications of a restraints system failure, harness repairs to airbag module circuits are not acceptable. Where the text refers to 'REPAIR the circuit', this will normally mean the replacement of a harness.

Jaguar approved diagnostic system

Given the complexity of the system and the potential for damage/injury, the preferred method of diagnosis is via the Jaguar approved diagnostic system.

If the Jaguar approved diagnostic system is not available, use a scan tool to extract DTCs and follow the pinpoint diagnostics in this section.

1. Verify the customer concern.
2. Confirm the function of the warning lamp (if the warning lamp is inoperative, system faults will be signalled by an audible chime).
3. Visually inspect for obvious signs of electrical damage.

Visual inspection chart

Electrical
<ul style="list-style-type: none">• Battery condition, state of charge• Make sure all electrical connector(s) are engaged correctly on the air bag circuits• Wiring harness• Air bag module(s)• Make sure the restraints control module (RCM) is correctly installed• Fuse(s)• Sensor(s)• Pretensioner(s)• Warning lamp bulb(s)

4. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step.
5. If the cause is not visually evident, verify the symptom and refer to the Jaguar approved diagnostic system.

Diagnostic trouble code (DTC)/Flash code index

2004 XJ RANGE - Supplemental Restraint System - 501-20B

Reading restraints flash codes

Self-check

Turn the ignition switch to the **ON** position

- Warning light **ON** solid for 6 seconds
- Warning light **OFF**

Fault on system

Turn the ignition switch to the **ON** position.

Warning light **ON** solid for 6 seconds

Warning light **OFF** for 2 seconds

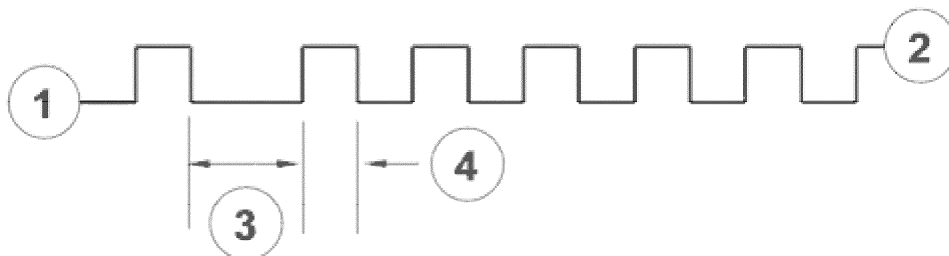
Warning light flashes the appropriate number of times for the fault logged (see table)

Warning light **OFF** for 2 seconds

The sequence is repeated 5 times

Warning light **ON** until the ignition is turned **OFF**

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



E40356

- 1. Lamp **OFF**
- 2. Lamp **ON**
- 3. Time between first digit and second digit (1 second)
- 4. Time **ON** of each flash of the second digit (0.5 second)

Priority

Priority is not assigned to any of the flash codes. They are displayed depending on which code is identified first. If multiple faults are present only one will be flashed. That fault will need to be rectified before the next code will be made available.

2004 XJ RANGE - Supplemental Restraint System - 501-20B

If the driver warning lamp is inoperative and a fault occurs, an audible chime will be sounded 90 seconds after the ignition is turned **ON**.

NOTE:

* = DTC used for more than one fault.

Flash code	Condition	Possible causes	Action
			DTC
None	No communication with RCM	<ul style="list-style-type: none"> • Data link connector (DLC) fault • RCM supply circuits: open circuit, short circuit to ground, short circuit to B+ • ISO circuit: open circuit, short circuit to ground, short circuit to B+ 	For DLC circuit tests, RCM and ISO circuit tests, <<418-00>>
None	Air bag warning lamp inoperative	<ul style="list-style-type: none"> • Warning lamp circuit: short circuit to ground • Warning lamp failure 	For warning lamp circuit tests, Goto <<A>>
DTC B2477	Driver air bag warning lamp and passengers air bag deactivation (PAD) warning lamp ON constantly	<ul style="list-style-type: none"> • RCM not configured 	Re-configure the RCM
Flash code - Constant	Warning lamp ON constantly	<ul style="list-style-type: none"> • RCM disconnected • Warning lamp circuit: open circuit, short circuit to high voltage • Instrument cluster failure 	For warning lamp circuit tests, Goto <>. Contact dealer technical support for advice on possible IC failure
			B1869/B1870
Flash code - 12	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • RCM internal failure 	Contact dealer technical support for advice on possible RCM failure
			B1869/B1870
Flash code - 13	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Crash data memory is full 	INSTALL a new RCM, <<Restraints Control Module (RCM) - >>
			B1231
Flash code - 14	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • RCM bracket incorrectly secured 	Correctly install RCM, tighten securing bolts to the correct torque
			B1921
Flash code - 15	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Incorrect occupant classification module (OCM) fitted • Incorrect RCM fitted 	Check OCM and RCM part numbers
			C1414

2004 XJ RANGE - Supplemental Restraint System - 501-20B

Flash code - 16	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • OCM circuit(s): failure • PWS circuit(s): high resistance, short circuit to high voltage, short circuit to ground • Belt tension sensor circuit(s): high resistance, short circuit to high voltage, short circuit to ground • OCM failure • PWS failure • Belt tension sensor failure 	For OCM, PWS and belt tension sensor circuit tests, Goto <<C>> .
			B2290/B2909
Flash code - 17	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Transducers A,B,C or D circuit(s): high resistance, short circuit to high voltage, short circuit to ground • Transducers A,B,C or D failure • OCM failure 	For transducer circuit tests, Goto <<D>> .
			B2290/B2909
Flash code - 18	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • PAD warning lamp bulb • PAD warning lamp bulb circuit: high resistance, short circuit to ground, short circuit to B+ 	For PAD warning lamp bulb circuit tests, Goto <<E>> .
			B1884/B1890
Flash code - 19	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Driver air bag module circuit(s): high resistance, short circuit to high voltage, short circuit to ground • Driver air bag module • Clock spring failure 	For driver airbag module and clockspring circuit tests, Goto <<F>> .
			2293*
Flash code - 21	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Passenger air bag module 	For passenger air bag module tests, Goto <<G>> .
			B2293*
Flash code - 22	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Driver side air bag module 	For driver side air bag module tests, Goto <<H>> .
			B2295*
Flash code - 23	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Passenger side air bag module 	For passenger side airbag module tests, Goto <<I>> .
			B2295*

2004 XJ RANGE - Supplemental Restraint System - 501-20B

Flash code - 24	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	• Driver side curtain air bag	For driver curtain airbag tests, Goto <<J>> .
'	'	'	B2294*
Flash code - 25	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	• Passenger curtain air bag	For passenger curtain airbag tests, Goto <<K>> .
'	'	'	B2294*
Flash code - 33	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	• Driver seat belt pretensioner	For driver seat belt pretensioner tests, Goto <<L>> .
'	'	'	B2292*
Flash code - 34	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	• Passenger seat belt pretensioner	For passenger seat belt pretensioner tests, Goto <<M>> .
'	'	'	B2292*
Flash code - 35	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	• Driver side rear seat belt pretensioner	For driver side rear seat belt pretensioner tests, Goto <<N>> .
'	'	'	B2292*
Flash code - 36	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	• Center rear seat belt pretensioner	For center rear seat belt pretensioner tests, Goto <<P>> .
'	'	'	B2294*
Flash code - 37	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	• Passenger side rear seat belt pretensioner	For passenger side rear seat belt pretensioner tests, Goto <<O>> .
'	'	'	B2292*
Flash code - 42	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	• Front crash sensor	For front crash sensor circuit tests, Goto <<Q>> .
'	'	'	B2296*
Flash code - 43	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	• Driver side crash sensor	For driver side front crash sensor tests, Goto <<R>> .
'	'	'	B2296*
Flash code - 44	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	• Passenger side crash sensor	For passenger side crash sensor circuit tests, Goto <<S>> .
'	'	'	B2296*

2004 XJ RANGE - Supplemental Restraint System - 501-20B

Flash code - 45	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Driver side rear crash sensor 	For driver side rear crash sensor circuit tests, Goto <<T>> .
'	'	'	B2296*
Flash code - 46	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Passenger side rear crash sensor 	For passenger side rear crash sensor circuit tests, Goto <<U>> .
'	'	'	B2296*
Flash code - 49	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Driver seat position switch • Driver seat position switch circuit(s): high resistance, short circuit to high voltage, short circuit to ground 	For seat position switch circuit tests, Goto <<V>> .
'	'	'	C1981/C1947/C1948
Flash code - 51	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Driver seat belt buckle switch • Driver seat belt buckle switch circuit(s): high resistance, short circuit to high voltage, short circuit to ground 	For driver seat belt buckle switch circuit tests, Goto <<W>> .
'	'	'	B2691/B2434/B2435
Flash code - 52	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Passenger seat belt buckle switch • Passenger seat belt buckle switch circuit(s): high resistance, short circuit to high voltage, short circuit to ground 	For passenger seat belt buckle switch circuit tests, Goto <<X>> .
'	'	'	B2692/B2438/B2439
Flash code - 53	Warning lamp Flashes to indicate code (see Reading restraints flash codes in this section)	<ul style="list-style-type: none"> • Audible warning circuit 	For audible warning circuit tests, Goto <<Y>> .
'	'	'	B1891/B1892

Pinpoint tests

A : AIR BAG WARNING LAMP INOPERATIVE



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A1 : CHECK THE WARNING LAMP CIRCUIT FOR SHORT TO GROUND

2004 XJ RANGE - Supplemental Restraint System - 501-20B

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the restraints control module electrical connector, CR86.
4. Disconnect the instrument cluster electrical connector, IP05.
5. Measure the resistance between CR86, pin 01 (YU) 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**

CHECK the warning lamp LED, replace as necessary. If the LED is good, contact dealer technical support for advice on possible RCM failure.

B : B1869, B1870: WARNING LAMP ON CONSTANTLY

B1 : CHECK THE WARNING LAMP CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the restraints control module electrical connector, CR86.
4. Disconnect the instrument cluster electrical connector, IP05.
5. Reconnect the battery negative terminal.
6. Measure the voltage between IP05, pin 01 (YU) 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**

Goto <<B2>>

B2 : CHECK THE WARNING LAMP CIRCUIT FOR OPEN CIRCUIT

1. Measure the resistance between IP05, pin 01 (YU) and CR86, pin 19 (YU).

•Is the resistance greater than 5 ohms?

-> **Yes**

REPAIR the open circuit. For additional information, refer to the wiring diagrams. CLEAR the DTC.
TEST the system for normal operation.

-> **No**

CONTACT dealer technical support for advice on possible IC failure.

C : DTC B2290, B2909: FLASH CODE 16: OCCUPANT CLASSIFICATION SENSOR (OCM)/PASSENGER WEIGHT SENSOR (PWS)/ BELT TENSION SENSOR MALFUNCTION

C1 : CHECK THE POWER SUPPLY TO THE OCM

2004 XJ RANGE - Supplemental Restraint System - 501-20B

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the OCM electrical connector, SP30.
4. Reconnect the battery negative terminal.
5. Turn the ignition switch to the **ON** position.
6. Measure the voltage between SP30, pin 22 (WU) and GROUND.

•Is the voltage greater than 10 volts?

-> Yes

Goto <<C2>>

-> No

REPAIR the circuit between the OCM and battery. This circuit includes the primary junction box (fuse 29). For additional information, refer to the wiring diagrams. CLEAR the DTC. TEST the system for normal operation.

C2 : CHECK THE GROUND TO THE OCM

1. Turn the ignition switch to the **OFF** position.
2. Measure the resistance between SP30, pin 23 (BK) and GROUND.

•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

CHECK the CAN circuits, <<418-00>>

Goto <<C3>>

C3 : CHECK THE POWER SUPPLY TO THE PWS

1. Disconnect the PWS electrical connector, SP02.
2. Turn the ignition switch to the **ON** position.
3. Measure the voltage between SP02, pin G (R) and GROUND.

•Is the voltage greater than 10 volts?

-> Yes

REPAIR the circuit between SP02, pin G and SP30, pin 09 (R). For additional information, refer to the wiring diagrams. CLEAR the DTC. TEST the system for normal operation.

-> No

Goto <<C4>>

C4 : CHECK THE PWS GROUND CIRCUIT FROM THE OCM FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Disconnect the OCM electrical connector, SP30.
3. Measure the resistance between SP02, pin D (BW) and SP30, pin 10 (BW).

•Is the resistance greater than 5 ohms?

2004 XJ RANGE - Supplemental Restraint System - 501-20B

-> **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 CAN + CIRCUIT BETWEEN THE OPM AND THE PWS FOR HIGH RESISTANCE

1. Measure the resistance between SP02, pin E (OY) and SP30, pin 12 (OY).

•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 <<C6>>

C6 : CHECK THE CAN - CIRCUIT BETWEEN THE OPM AND THE PWS FOR HIGH RESISTANCE

1. Measure the resistance between SP02, pin F (UY) and SP30, pin 11 (UY).

•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 <<C7>>

C7 : CHECK THE BELT TENSION SENSOR SIGNAL CIRCUIT TO THE PWS FOR HIGH RESISTANCE

1. Disconnect the belt tension sensor electrical connector, SP33.

2. Measure the resistance between SP33, pin 02 (B) and SP02, pin A (B).

•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 <<C8>>

C8 : CHECK THE BELT TENSION SENSOR SIGNAL CIRCUIT TO THE PWS FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.

2. Measure the resistance between SP33, pin 02 (B) 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.

2004 XJ RANGE - Supplemental Restraint System - 501-20B

TEST the system for normal operation.

-> **No**

Goto <<C9>>

C9 : CHECK THE BELT TENSION SENSOR SIGNAL CIRCUIT TO THE PWS FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP33, pin 02 (B) 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**

Goto <<C10>>

C10 : CHECK THE BELT TENSION SENSOR GROUND CIRCUIT TO THE PWS FOR HIGH RESISTANCE

1. Measure the resistance between SP33, pin 03 (R) and SP02, pin C (R).

•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 <<C11>>

C11 : CHECK THE BELT TENSION SENSOR GROUND CIRCUIT TO THE PWS FOR SHORT TO GROUND

1. Measure the resistance between SP33, pin 03 (R) 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**

Goto <<C12>>

C12 : CHECK THE BELT TENSION SENSOR GROUND CIRCUIT TO THE PWS FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP33, pin 03 (R) 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**

Goto <<C13>>

C13 : CHECK THE BELT TENSION SENSOR SUPPLY CIRCUIT TO THE PWS FOR HIGH RESISTANCE

1. Measure the resistance between SP33, pin 01 (Y) and SP02, pin B (Y).

•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 <<C14>>

C14 : CHECK THE BELT TENSION SENSOR SUPPLY CIRCUIT TO THE PWS FOR SHORT TO GROUND

1. Measure the resistance between SP33, pin 01 (Y) 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**

Goto <<C15>>

C15 : CHECK THE BELT TENSION SENSOR SUPPLY CIRCUIT TO THE PWS FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP33, pin 01 (Y) 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**

INSTALL a new belt tension sensor. CLEAR the DTC. Allow a self-test to complete. TEST the system for normal operation. if the fault reoccurs, contact dealer technical support for advice on possible weight sensor failure.

D : DTC B2290, B2909: FLASH CODE 17: TRANSDUCER AND/OR CIRCUIT MALFUNCTION, OCM AND/OR CIRCUIT MALFUNCTION

D1 : CHECK THE A PILLAR TRANSDUCER CIRCUIT FOR SHORT CIRCUIT

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the OCM electrical connector, SP30.
4. Disconnect the A pillar transducer electrical connector, CR105.
5. Measure the resistance between SP30, pin 05 (BR) and SP30, pin 06 (GW).

2004 XJ RANGE - Supplemental Restraint System - 501-20B

•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**

Goto <<D2>>

D2 : CHECK THE A PILLAR TRANSDUCER CAN - CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SP30, pin 05 (BR) and CR105, pin 01 (BR).

•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 <<D3>>

D3 : CHECK THE A PILLAR TRANSDUCER CAN - CIRCUIT FOR SHORT TO GROUND

1. Measure the resistance between SP30, pin 05 (BR) 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**

Goto <<D4>>

D4 : CHECK THE A PILLAR TRANSDUCER CAN - CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Reconnect the battery negative terminal.

2. Measure the voltage between SP30, pin 05 (BR) 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**

Goto <<D5>>

D5 : CHECK THE A PILLAR TRANSDUCER CAN + CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SP30, pin 06 (GW) and CR105, pin 02 (GW).

•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**

2004 XJ RANGE - Supplemental Restraint System - 501-20B

Goto <<D6>>

D6 : CHECK THE A PILLAR TRANSDUCER CAN + CIRCUIT FOR SHORT TO GROUND

1. Measure the resistance between SP30, pin 06 (GW) 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**

Goto <<D7>>

D7 : CHECK THE A PILLAR TRANSDUCER CAN + CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP30, pin 06 (GW) 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**

Goto <<D8>>

D8 : CHECK THE ROOF REAR OUTER TRANSDUCER CIRCUIT FOR SHORT CIRCUIT

1. Disconnect the roof rear outer transducer electrical connector, RF18.

2. Measure the resistance between SP30, pin 07 (BO) and SP30, pin 08 (GU).

•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**

Goto <<D9>>

D9 : CHECK THE ROOF REAR OUTER TRANSDUCER CAN - CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SP30, pin 07 (BO) and RF18, pin 01 (BO).

•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 <<D10>>

D10 : CHECK THE ROOF REAR OUTER TRANSDUCER CAN - CIRCUIT FOR SHORT TO GROUND

2004 XJ RANGE - Supplemental Restraint System - 501-20B

1. Measure the resistance between SP30, pin 07 (BO) 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**

Goto <<D11>>

D11 : CHECK THE ROOF REAR OUTER TRANSDUCER CAN - CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP30, pin 07 (BO) 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**

Goto <<D12>>

D12 : CHECK THE ROOF REAR OUTER TRANSDUCER CAN + CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SP30, pin 08 (GU) and RF18, pin 02 (GU).

•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 <<D13>>

D13 : CHECK THE ROOF REAR OUTER TRANSDUCER CAN + CIRCUIT FOR SHORT TO GROUND

1. Measure the resistance between SP30, pin 08 (GU) 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**

Goto <<D14>>

D14 : CHECK THE ROOF REAR OUTER TRANSDUCER CAN + CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP30, pin 08 (GU) and GROUND.

•Is the voltage greater than 3 volts?

2004 XJ RANGE - Supplemental Restraint System - 501-20B

-> **Yes**

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

-> **No**

Goto <<D15>>

D15 : CHECK THE ROOF REAR CENTER TRANSDUCER CIRCUIT FOR SHORT CIRCUIT

1. Disconnect the roof rear center transducer electrical connector, RF16.
2. Measure the resistance between SP30, pin 01 (BG) and SP30, pin 02 (OG).

•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**

Goto <<D16>>

D16 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN - CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SP30, pin 01 (BG) and RF16, pin 01 (BG).

•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 <<D17>>

D17 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN - CIRCUIT FOR SHORT TO GROUND

1. Measure the resistance between SP30, pin 01 (BG) 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**

Goto <<D18>>

D18 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN - CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP30, pin 01 (BG) 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.

2004 XJ RANGE - Supplemental Restraint System - 501-20B

TEST the system for normal operation.

- > **No**
Goto <<D19>>

D19 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN + CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SP30, pin 01 (BG) and RF16, pin 01 (BG).

- 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 <<D20>>

D20 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN + CIRCUIT FOR SHORT TO GROUND

1. Measure the resistance between SP30, pin 01 (BG) 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**
Goto <<D21>>

D21 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN + CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP30, pin 01 (BG) 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**
Goto <<D22>>

D22 : CHECK THE LOWER STACK TRANSDUCER CIRCUIT FOR SHORT CIRCUIT

1. Disconnect the lower stack transducer electrical connector, CL06.

2. Measure the resistance between SP30, pin 03 (NW) and SP30, pin 04 (Y).

- 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**

2004 XJ RANGE - Supplemental Restraint System - 501-20B

Goto <<D23>>

D23 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN - CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SP30, pin 03 (NW) and CL06, pin 01 (NW).

•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 <<D24>>

D24 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN - CIRCUIT FOR SHORT TO GROUND

1. Measure the resistance between SP30, pin 03 (NW) 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

Goto <<D25>>

D25 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN - CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP30, pin 03 (NW) 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

Goto <<D26>>

D26 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN + CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SP30, pin 01 (BG) and RF16, pin 01 (BG).

•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 <<D27>>

D27 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN + CIRCUIT FOR SHORT TO GROUND

1. Measure the resistance between SP30, pin 01 (BG) 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**

Goto <<D28>>

D28 : CHECK THE ROOF REAR CENTER TRANSDUCER CAN + CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP30, pin 01 (BG) 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**

INSTALL a new occupant classification module. <<Front Passenger Seat Occupant Classification Sensor - >> CLEAR the DTC, allow a self-test to complete. TEST the system for normal operation. If the DTC reoccurs, contact dealer technical support for advice on possible transducer failure.

E : DTC B1884, B1890: FLASH CODE 18: PASSENGER AIRBAG DEACTIVATION (PAD) WARNING LAMP CIRCUIT MALFUNCTION

E1 : CHECK THE PAD WARNING LAMP BULB FOR CONTINUITY

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the PAD lamp electrical connector, IP68.
4. Check for continuity between IP68, pins 01 (WU) and 03 (BR).

•Is the circuit continuous?

-> **Yes**

Goto <<E2>>

-> **No**

INSTALL a new bulb. CLEAR the DTC. TEST the system for normal operation.

E2 : CHECK THE POWER SUPPLY TO THE PAD WARNING LAMP

1. Reconnect the battery negative terminal.
2. Turn the ignition switch to the **ON** position.
3. Measure the voltage between IP68, pin 01 (WU) and GROUND.

2004 XJ RANGE - Supplemental Restraint System - 501-20B

•Is the voltage greater than 10 volts?

-> Yes

REPAIR the circuit between the PAD warning lamp and battery. This circuit includes the primary junction box (fuse 29). For additional information, refer to the wiring diagrams. CLEAR the DTC. TEST the system for normal operation.

-> No

Goto <<E3>>

E3 : CHECK THE POWER SUPPLY TO THE PAD WARNING LAMP FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the RCM electrical connector, CR86.
4. Measure the resistance between IP68, pin 03 (BR) and CR86, pin 15 (BR).

•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 <<E4>>

E4 : CHECK THE POWER SUPPLY TO THE PAD WARNING LAMP FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between IP68, pin 03 (BR) 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

Goto <<E5>>

E5 : CHECK THE POWER SUPPLY TO THE PAD WARNING LAMP FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between IP68, pin 03 (BR) 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

Contact dealer technical support for advice on possible RCM failure.

F : DTC B2293: FLASH CODE 19: DRIVER AIR BAG/CLOCKSPRING MALFUNCTION

F1 : CHECK THE DRIVER AIRBAG MODULE AND CIRCUIT USING SIMULATORS

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the driver airbag electrical connectors, SW11 and SW12.
4. Connect a simulator to each connector.
5. Reconnect the battery negative terminal.
6. Turn the ignition switch to the **ON** position.
7. Allow the self-test to complete with the simulators installed.

•Does the self-test pass?

-> Yes

INSTALL a new driver air bag module, <<Driver Air Bag Module - >> CLEAR the DTC. TEST the system for normal operation.

-> No

Goto <<F2>>

F2 : CHECK THE DRIVER AIRBAG FIRST STAGE SIGNAL CIRCUIT THROUGH THE CLOCKSPRING FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the clockspring electrical connector, SW08.
4. Measure the resistance between SW11, pin 01 (SB) and SW08, pin 10.

•Is the resistance greater than 5 ohms?

-> Yes

INSTALL a new clockspring, <<Clockspring - >> CLEAR the DTC. TEST the system for normal operation.

-> No

Goto <<F3>>

F3 : CHECK THE DRIVER AIRBAG FIRST STAGE SIGNAL CIRCUIT THROUGH THE CLOCKSPRING FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between SW11, pin 01 (SB) and GROUND.

•Is the resistance less than 10,000 ohms?

-> Yes

INSTALL a new clockspring, <<Clockspring - >> CLEAR the DTC. TEST the system for normal operation.

-> No

Goto <<F4>>

F4 : CHECK THE DRIVER AIRBAG FIRST STAGE SIGNAL CIRCUIT THROUGH THE CLOCKSPRING FOR SHORT TO HIGH VOLTAGE

2004 XJ RANGE - Supplemental Restraint System - 501-20B

1. Measure the voltage between SW11, pin 01 (SB) and GROUND.

•Is the voltage greater than 3 volts?

-> **Yes**

INSTALL a new clockspring, <<Clockspring - >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<F5>>

F5 : CHECK THE DRIVER AIRBAG FIRST STAGE RETURN CIRCUIT THROUGH THE CLOCKSPrING FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.

2. Wait one minute for the system to become safe.

3. Measure the resistance between SW11, pin 02 (NR) and SW08, pin 09.

•Is the resistance greater than 5 ohms?

-> **Yes**

INSTALL a new clockspring, <<Clockspring - >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<F6>>

F6 : CHECK THE DRIVER AIRBAG FIRST STAGE RETURN CIRCUIT THROUGH THE CLOCKSPrING FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.

2. Measure the resistance between SW11, pin 02 (NR) and GROUND.

•Is the resistance less than 10,000 ohms?

-> **Yes**

INSTALL a new clockspring, <<Clockspring - >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<F7>>

F7 : CHECK THE DRIVER AIRBAG FIRST STAGE RETURN CIRCUIT THROUGH THE CLOCKSPrING FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SW11, pin 02 (NR) and GROUND.

•Is the voltage greater than 3 volts?

-> **Yes**

INSTALL a new clockspring, <<Clockspring - >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<F8>>

F8 : CHECK THE DRIVER AIRBAG SECOND STAGE SIGNAL CIRCUIT THROUGH THE

CLOCKSPRING FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Measure the resistance between SW12, pin 01 (NB) and SW08, pin 02.

•Is the resistance greater than 5 ohms?

-> **Yes**

INSTALL a new clockspring, <<Clockspring - >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<F9>>

F9 : CHECK THE DRIVER AIRBAG SECOND STAGE SIGNAL CIRCUIT THROUGH THE CLOCKSPRING FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between SW12, pin 01 (NB) and GROUND.

•Is the resistance less than 10,000 ohms?

-> **Yes**

INSTALL a new clockspring, <<Clockspring - >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<F10>>

F10 : CHECK THE DRIVER AIRBAG SECOND STAGE SIGNAL CIRCUIT THROUGH THE CLOCKSPRING FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SW12, pin 01 (NB) and GROUND.

•Is the voltage greater than 3 volts?

-> **Yes**

INSTALL a new clockspring, <<Clockspring - >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<F11>>

F11 : CHECK THE DRIVER AIRBAG SECOND STAGE RETURN CIRCUIT THROUGH THE CLOCKSPRING FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Measure the resistance between SW12, pin 02 (SW) and SW08, pin 01.

•Is the resistance greater than 5 ohms?

-> **Yes**

INSTALL a new clockspring, <<Clockspring - >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<F12>>

F12 : CHECK THE DRIVER AIRBAG SECOND STAGE RETURN CIRCUIT THROUGH THE CLOCKSPrING FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between SW12, pin 02 (SW) and GROUND.

•Is the resistance less than 10,000 ohms?

-> **Yes**

INSTALL a new clockspring, <<**Clockspring** - >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<**F13**>>

F13 : CHECK THE DRIVER AIRBAG SECOND STAGE RETURN CIRCUIT THROUGH THE CLOCKSPrING FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SW12, pin 02 (SW) and GROUND.

•Is the voltage greater than 3 volts?

-> **Yes**

INSTALL a new clockspring, <<**Clockspring** - >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

Contact dealer technical support for advice on possible RCM failure.

G : DTC B2293: FLASH CODE 21: PASSENGER AIR BAG MALFUNCTION

G1 : CHECK THE PASSENGER AIRBAG MODULE AND CIRCUIT USING SIMULATORS

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the passenger airbag electrical connectors, IP65 and IP15.
4. Connect a simulator to each connector.
5. Reconnect the battery negative terminal.
6. Turn the ignition switch to the **ON** position.
7. Allow the self-test to complete with the simulators installed.

•Does the self-test pass?

-> **Yes**

INSTALL a new driver air bag module, <<**Driver Air Bag Module** - >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

INSTALL a new passenger airbag harness. CLEAR the DTC. TEST the system for normal operation.

H : DTC B2295: FLASH CODE 22: DRIVER SIDE AIRBAG MALFUNCTION

H1 : CHECK THE DRIVER SIDE AIRBAG MODULE AND CIRCUIT USING A SIMULATOR

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the driver side airbag electrical connector, SD17.
4. Connect a simulator to the connector.
5. Reconnect the battery negative terminal.
6. Turn the ignition switch to the **ON** position.
7. Allow the self-test to complete with the simulators installed.

•Does the self-test pass?

-> Yes

INSTALL a new driver side airbag module, <<Side Air Bag Module - >> CLEAR the DTC. TEST the system for normal operation.

-> No

INSTALL a new driver side airbag harness. CLEAR the DTC. TEST the system for normal operation.

I : DTC B2295: FLASH CODE 23: PASSENGER SIDE AIRBAG MALFUNCTION

I1 : CHECK THE PASSENGER SIDE AIRBAG MODULE AND CIRCUIT USING A SIMULATOR

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the passenger side airbag electrical connector, SP17.
4. Connect a simulator to the connector.
5. Reconnect the battery negative terminal.
6. Turn the ignition switch to the **ON** position.
7. Allow the self-test to complete with the simulators installed.

•Does the self-test pass?

-> Yes

INSTALL a new passenger side airbag module, <<Side Air Bag Module - >> CLEAR the DTC. TEST the system for normal operation.

-> No

INSTALL a new passenger side airbag harness. CLEAR the DTC. TEST the system for normal operation.

J : DTC B2295: FLASH CODE 24: DRIVER CURTAIN AIRBAG MALFUNCTION

J1 : CHECK THE DRIVER CURTAIN AIRBAG MODULE AND CIRCUIT USING A SIMULATOR

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the driver curtain airbag electrical connector, CR62.
4. Connect a simulator to the connector.
5. Reconnect the battery negative terminal.

2004 XJ RANGE - Supplemental Restraint System - 501-20B

6. Turn the ignition switch to the **ON** position.
7. Allow the self-test to complete with the simulators installed.

•**Does the self-test pass?**

-> **Yes**

INSTALL a new driver curtain airbag module, <<**Side Air Curtain Module -** >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

INSTALL a new driver curtain airbag harness. CLEAR the DTC. TEST the system for normal operation.

K : DTC B2295: FLASH CODE 25: PASSENGER CURTAIN AIRBAG MALFUNCTION

K1 : CHECK THE PASSENGER CURTAIN AIRBAG MODULE AND CIRCUIT USING A SIMULATOR

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the passenger curtain airbag electrical connector, CR33.
4. Connect a simulator to the connector.
5. Reconnect the battery negative terminal.
6. Turn the ignition switch to the **ON** position.
7. Allow the self-test to complete with the simulators installed.

•**Does the self-test pass?**

-> **Yes**

INSTALL a new passenger curtain airbag module, <<**Side Air Curtain Module -** >> CLEAR the DTC. TEST the system for normal operation.

-> **No**

INSTALL a new passenger curtain airbag harness. CLEAR the DTC. TEST the system for normal operation.

L : DTC B2292: FLASH CODE 33: DRIVER SIDE SEAT BELT PRETENSIONER MALFUNCTION

L1 : CHECK THE DRIVER SIDE SEAT BELT PRETENSIONER CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the driver seat belt pretensioner electrical connector, SD19.
4. Disconnect the RCM electrical connector, CR87.
5. Measure the resistance between SD19, pin 02 (GR) and CR87, pin 31 (GR).

•**Is the resistance greater than 5 ohms?**

-> **Yes**

INSTALL a new driver side seat belt pretensioner harness. CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<**L2**>>

L2 : CHECK THE DRIVER SIDE SEAT BELT PRETENSIONER CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between SD19, pin 02 (GR) 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**

Goto <<L3>>

L3 : CHECK THE DRIVER SIDE SEAT BELT PRETENSIONER CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SD19, pin 02 (GR) 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**

Goto <<L4>>

L4 : CHECK THE DRIVER SIDE SEAT BELT PRETENSIONER RETURN CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SD19, pin 01 (GU) and CR87, pin 32 (GU).

•Is the resistance greater than 5 ohms?

-> **Yes**

INSTALL a new driver side seat belt pretensioner harness. CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<L5>>

L5 : CHECK THE DRIVER SIDE SEAT BELT PRETENSIONER RETURN CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between SD19, pin 01 (GU) 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**

Goto <<L6>>

L6 : CHECK THE DRIVER SIDE SEAT BELT PRETENSIONER RETURN CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SD19, pin 01 (GU) 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**

INSTALL a new driver side seat belt pretensioner, <<501-20A>><<501-20B>>

M : DTC B2292: FLASH CODE 34: PASSENGER SIDE SEAT BELT PRETENSIONER MALFUNCTION

M1 : CHECK THE PASSENGER SIDE SEAT BELT PRETENSIONER CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the passenger seat belt pretensioner electrical connector, SP19.
4. Disconnect the RCM electrical connector, CR87.
5. Measure the resistance between SP19, pin 02 (WR) and CR87, pin 33 (WR).

•Is the resistance greater than 5 ohms?

-> **Yes**

INSTALL a new passenger side seat belt pretensioner harness. CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<M2>>

M2 : CHECK THE PASSENGER SIDE SEAT BELT PRETENSIONER CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between SP19, pin 02 (WR) 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**

Goto <<M3>>

M3 : CHECK THE PASSENGER SIDE SEAT BELT PRETENSIONER CIRCUIT FOR SHORT TO HIGH VOLTAGE

2004 XJ RANGE - Supplemental Restraint System - 501-20B

1. Measure the voltage between SP19, pin 02 (WR) 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

Goto <<M4>>

M4 : CHECK THE PASSENGER SIDE SEAT BELT PRETENSIONER RETURN CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SP19, pin 01 (WU) and CR87, pin 34 (WU).

•Is the resistance greater than 5 ohms?

-> Yes

INSTALL a new passenger side seat belt pretensioner harness. CLEAR the DTC. TEST the system for normal operation.

-> No

Goto <<M5>>

M5 : CHECK THE PASSENGER SIDE SEAT BELT PRETENSIONER RETURN CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.

2. Measure the resistance between SP19, pin 01 (WU) 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

Goto <<M6>>

M6 : CHECK THE PASSENGER SIDE SEAT BELT PRETENSIONER RETURN CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP19, pin 01 (WU) 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

INSTALL a new passenger side seat belt pretensioner, <<501-20A>><<501-20B>>

N : DTC B2292: FLASH CODE 35: DRIVER SIDE REAR SEAT BELT PRETENSIONER MALFUNCTION

N1 : CHECK THE DRIVER SIDE REAR SEAT BELT PRETENSIONER CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the driver side rear seat belt pretensioner electrical connector, CR64.
4. Disconnect the RCM electrical connector, CR87.
5. Measure the resistance between CR64, pin 02 (Y) and CR87, pin 35 (Y).

•Is the resistance greater than 5 ohms?

-> **Yes**

INSTALL a new driver side rear seat belt pretensioner harness. CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<N2>>

N2 : CHECK THE DRIVER SIDE REAR SEAT BELT PRETENSIONER CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR64, pin 02 (Y) 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**

Goto <<N3>>

N3 : CHECK THE DRIVER SIDE REAR SEAT BELT PRETENSIONER CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR64, pin 02 (Y) 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**

Goto <<N4>>

N4 : CHECK THE DRIVER SIDE REAR SEAT BELT PRETENSIONER RETURN CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between CR64, pin 01 (Y) and CR87, pin 34 (Y).

•Is the resistance greater than 5 ohms?

-> **Yes**

INSTALL a new driver side rear seat belt pretensioner harness. CLEAR the DTC. TEST the system for normal operation.

-> **No**
Goto <<N5>>

N5 : CHECK THE DRIVER SIDE REAR SEAT BELT PRETENSIONER RETURN CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR64, pin 01 (Y) 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**

Goto <<N6>>

N6 : CHECK THE DRIVER SIDE REAR SEAT BELT PRETENSIONER RETURN CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR64, pin 01 (Y) 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**

INSTALL a new driver side rear seat belt pretensioner, <<501-20A>><<501-20B>>

O : DTC B2292: FLASH CODE 37: PASSENGER SIDE REAR SEAT BELT PRETENSIONER MALFUNCTION

O1 : CHECK THE PASSENGER SIDE REAR SEAT BELT PRETENSIONER CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the passenger side rear seat belt pretensioner electrical connector, CR66.
4. Disconnect the RCM electrical connector, CR87.
5. Measure the resistance between CR66, pin 02 (YU) and CR87, pin 37 (YU).

•Is the resistance greater than 5 ohms?

-> **Yes**

INSTALL a new passenger side rear seat belt pretensioner harness. CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<O2>>

O2 : CHECK THE PASSENGER SIDE REAR SEAT BELT PRETENSIONER CIRCUIT FOR SHORT

2004 XJ RANGE - Supplemental Restraint System - 501-20B

TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR66, pin 02 (YU) 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**

Goto <<O3>>

O3 : CHECK THE PASSENGER SIDE REAR SEAT BELT PRETENSIONER CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR66, pin 02 (YU) 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**

Goto <<O4>>

O4 : CHECK THE PASSENGER SIDE REAR SEAT BELT PRETENSIONER RETURN CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between CR66, pin 01 (YU) and CR87, pin 38 (YU).

•Is the resistance greater than 5 ohms?

-> **Yes**

INSTALL a new passenger side rear seat belt pretensioner harness. CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<O5>>

O5 : CHECK THE PASSENGER SIDE REAR SEAT BELT PRETENSIONER RETURN CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR66, pin 01 (YU) 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**

Goto <<O6>>

O6 : CHECK THE PASSENGER SIDE REAR SEAT BELT PRETENSIONER RETURN CIRCUIT

2004 XJ RANGE - Supplemental Restraint System - 501-20B

FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR66, pin 01 (YU) 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**

INSTALL a new passenger side rear seat belt pretensioner, <<501-20A>><<501-20B>>

P : DTC B2294: FLASH CODE 36: CENTER REAR SEAT BELT PRETENSIONER MALFUNCTION

NOTE:

If a center rear pretensioner is not fitted, then a resistor is fitted in it's place. The flash code will still function if a fault occurs in the harness.

P1 : CHECK THE CENTER REAR SEAT BELT PRETENSIONER CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.

2. Wait one minute for the system to become safe.

3. Disconnect the center rear seat belt pretensioner electrical connector, CR65.

4. Disconnect the RCM electrical connector, CR87.

5. Measure the resistance between CR65, pin 02 (YR) and CR87, pin 39 (YR).

•Is the resistance greater than 5 ohms?

-> **Yes**

INSTALL a new center rear seat belt pretensioner harness. <<501-20A>><<501-20B>> CLEAR the DTC. TEST the system for normal operation.

-> **No**

Goto <<P2>>

P2 : CHECK THE CENTER REAR SEAT BELT PRETENSIONER CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.

2. Measure the resistance between CR65, pin 02 (YR) 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**

Goto <<P3>>

P3 : CHECK THE CENTER REAR SEAT BELT PRETENSIONER CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR65, pin 02 (YR) and GROUND.

2004 XJ RANGE - Supplemental Restraint System - 501-20B

•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

Goto <<P4>>

P4 : CHECK THE CENTER REAR SEAT BELT PRETENSIONER RETURN CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between CR65, pin 01 (YR) and CR87, pin 40 (YR).

•Is the resistance greater than 5 ohms?

-> Yes

INSTALL a new center rear seat belt pretensioner harness. <<501-20A>><<501-20B>> CLEAR the DTC. TEST the system for normal operation.

-> No

Goto <<P5>>

P5 : CHECK THE CENTER REAR SEAT BELT PRETENSIONER RETURN CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.

2. Measure the resistance between CR65, pin 01 (YR) 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

Goto <<P6>>

P6 : CHECK THE CENTER REAR SEAT BELT PRETENSIONER RETURN CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR65, pin 01 (YR) 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

INSTALL a new center rear seat belt pretensioner, <<501-20A>><<501-20B>>

Q : DTC B2296: FLASH CODE 42: FRONT CRASH SENSOR CIRCUIT MALFUNCTION

Q1 : CHECK THE FRONT CRASH SENSOR SIGNAL RETURN CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.

2004 XJ RANGE - Supplemental Restraint System - 501-20B

2. Wait one minute for the system to become safe.
3. Disconnect the RCM electrical connector, CR87.
4. Disconnect the front crash sensor electrical connector, EC50.
5. Measure the resistance between CR87, pin 20 (W) and EC50, pin 01 (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 <<Q2>>

Q2 : CHECK THE FRONT CRASH SENSOR SIGNAL RETURN CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR87, pin 20 (W) 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**

Goto <<Q3>>

Q3 : CHECK THE FRONT CRASH SENSOR SIGNAL RETURN CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 20 (W) 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**

Goto <<Q4>>

Q4 : CHECK THE FRONT CRASH SENSOR SIGNAL POWER CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Measure the resistance between CR87, pin 19 (N) and EC50, pin 02 (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**

Goto <<Q5>>

Q5 : CHECK THE FRONT CRASH SENSOR SIGNAL POWER CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR87, pin 19 (N) 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**

Goto <<Q6>>

Q6 : CHECK THE FRONT CRASH SENSOR SIGNAL POWER CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 19 (N) 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**

INSTALL a new front crash sensor, <<Crash Sensor - >>

R : DTC B2296: FLASH CODE 43: DRIVER SIDE FRONT CRASH SENSOR CIRCUIT MALFUNCTION

R1 : CHECK THE DRIVER SIDE FRONT CRASH SENSOR SIGNAL POWER CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the RCM electrical connector, CR87.
4. Disconnect the driver side front crash sensor electrical connector, CR60.
5. Measure the resistance between CR87, pin 27 (NG) and CR60, pin 02 (NG).

•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 <<R2>>

R2 : CHECK THE DRIVER SIDE FRONT CRASH SENSOR SIGNAL POWER CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.

2004 XJ RANGE - Supplemental Restraint System - 501-20B

2. Measure the resistance between CR87, pin 27 (NG) 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**

Goto <<R3>>

R3 : CHECK THE DRIVER SIDE FRONT CRASH SENSOR SIGNAL POWER CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 27 (NG) 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**

Goto <<R4>>

R4 : CHECK THE DRIVER SIDE FRONT CRASH SENSOR SIGNAL RETURN CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.

2. Wait one minute for the system to become safe.

3. Measure the resistance between CR87, pin 28 (WU) and CR60, pin 01 (WU).

•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 <<R5>>

R5 : CHECK THE DRIVER SIDE FRONT CRASH SENSOR SIGNAL RETURN CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.

2. Measure the resistance between CR87, pin 28 (WU) 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**

Goto <<R6>>

R6 : CHECK THE DRIVER SIDE FRONT CRASH SENSOR SIGNAL RETURN CIRCUIT FOR

2004 XJ RANGE - Supplemental Restraint System - 501-20B

SHORT TO HIGH VOLTAGE

1. Measure the resistance between CR87, pin 28 (WU) 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

INSTALL a new driver side front crash sensor, <<Crash Sensor - >>

S : DTC B2296: FLASH CODE 44: PASSENGER SIDE FRONT CRASH SENSOR CIRCUIT

S1 : CHECK THE PASSENGER SIDE FRONT CRASH SENSOR SIGNAL POWER CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the RCM electrical connector, CR87.
4. Disconnect the passenger side front crash sensor electrical connector, CR35.
5. Measure the resistance between CR87, pin 29 (NR) and CR35, pin 02 (NR).

•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 <<S2>>

S2 : CHECK THE PASSENGER SIDE FRONT CRASH SENSOR SIGNAL POWER CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR87, pin 29 (NR) 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

Goto <<S3>>

S3 : CHECK THE PASSENGER SIDE FRONT CRASH SENSOR SIGNAL POWER CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 29 (NR) 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**
Goto <<S4>>

S4 : CHECK THE PASSENGER SIDE FRONT CRASH SENSOR SIGNAL RETURN CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Measure the resistance between CR87, pin 30 (WR) and CR35, pin 01 (WR).

•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 <<S5>>

S5 : CHECK THE PASSENGER SIDE FRONT CRASH SENSOR SIGNAL RETURN CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR87, pin 30 (WR) 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**
Goto <<S6>>

S6 : CHECK THE PASSENGER SIDE FRONT CRASH SENSOR SIGNAL RETURN CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 30 (WR) 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**
INSTALL a new passenger side front crash sensor, <<Crash Sensor - >>

T : DTC B2296: FLASH CODE 45: DRIVER SIDE REAR CRASH SENSOR CIRCUIT

T1 : CHECK THE DRIVER SIDE REAR CRASH SENSOR SIGNAL POWER CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.

2004 XJ RANGE - Supplemental Restraint System - 501-20B

2. Wait one minute for the system to become safe.
3. Disconnect the RCM electrical connector, CR87.
4. Disconnect the driver side rear crash sensor electrical connector, CR61.
5. Measure the resistance between CR87, pin 13 (BO) and CR61, pin 02 (BO).

•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 <<T2>>

T2 : CHECK THE DRIVER SIDE REAR CRASH SENSOR SIGNAL POWER CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR87, pin 13 (BO) 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**

Goto <<T3>>

T3 : CHECK THE DRIVER SIDE REAR CRASH SENSOR SIGNAL POWER CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 13 (BO) 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**

Goto <<T4>>

T4 : CHECK THE DRIVER SIDE REAR CRASH SENSOR SIGNAL RETURN CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Measure the resistance between CR87, pin 14 (WU) and CR61, pin 01 (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 <<T5>>

T5 : CHECK THE DRIVER SIDE REAR CRASH SENSOR SIGNAL RETURN CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR87, pin 14 (WU) 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**

Goto <<T6>>

T6 : CHECK THE DRIVER SIDE REAR CRASH SENSOR SIGNAL RETURN CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 14 (WU) 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**

INSTALL a new driver side rear crash sensor, <<Crash Sensor - >>

U : DTC 2296: FLASH CODE 46: PASSENGER SIDE REAR CRASH SENSOR CIRCUIT MALFUNCTION

U1 : CHECK THE PASSENGER SIDE REAR CRASH SENSOR SIGNAL POWER CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the RCM electrical connector, CR87.
4. Disconnect the passenger side rear crash sensor electrical connector, CR51.
5. Measure the resistance between CR87, pin 15 (YR) and CR51, pin 02 (YR).

•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 <<U2>>

U2 : CHECK THE PASSENGER SIDE REAR CRASH SENSOR SIGNAL POWER CIRCUIT FOR SHORT TO GROUND

2004 XJ RANGE - Supplemental Restraint System - 501-20B

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR87, pin 15 (YR) 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**

Goto <<U3>>

U3 : CHECK THE PASSENGER SIDE REAR CRASH SENSOR SIGNAL POWER CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 15 (YR) 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**

Goto <<U4>>

U4 : CHECK THE PASSENGER SIDE REAR CRASH SENSOR SIGNAL RETURN CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the RCM electrical connector, CR87.
4. Measure the resistance between CR87, pin 16 (O) and CR51, pin 01 (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 <<U5>>

U5 : CHECK THE PASSENGER SIDE REAR CRASH SENSOR SIGNAL RETURN CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR87, pin 16 (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**

Goto <<U6>>

U6 : CHECK THE PASSENGER SIDE REAR CRASH SENSOR SIGNAL RETURN CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 16 (O) 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

INSTALL a new passenger side rear crash sensor, <<Crash Sensor - >>

V : DTC C1947, C1948, C1981: FLASH CODE 49: DRIVER SEAT POSITION SWITCH MALFUNCTION

V1 : CHECK THE DRIVER SEAT POSITION SWITCH SIGNAL CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the RCM electrical connector, CR87.
4. Disconnect the driver seat position switch electrical connector, SD20.
5. Measure the resistance between CR87, pin 23 (UY) and SD20, pin 02 (UY).

•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 <<V2>>

V2 : CHECK THE DRIVER SEAT POSITION SWITCH SIGNAL CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR87, pin 23 (UY) 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

Goto <<V3>>

V3 : CHECK THE DRIVER SEAT POSITION SWITCH SIGNAL CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 23 (UY) and GROUND.

•Is the voltage greater than 3 volts?

2004 XJ RANGE - Supplemental Restraint System - 501-20B

-> **Yes**

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

-> **No**

Goto <<V4>>

V4 : CHECK THE DRIVER SEAT POSITION SWITCH RETURN CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Measure the resistance between CR87, pin 24 (U) and SD20, pin 01 (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 <<V5>>

V5 : CHECK THE DRIVER SEAT POSITION SWITCH RETURN CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR87, pin 24 (U) 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**

Goto <<V6>>

V6 : CHECK THE DRIVER SEAT POSITION SWITCH RETURN CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 24 (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**

INSTALL a new driver seat position switch, <<Seat Position Sensor - >>

W : DTC B2434, B2435, B2691: FLASH CODE 51: DRIVER SEAT BELT BUCKLE SWITCH CIRCUIT MALFUNCTION

W1 : CHECK THE DRIVER SEAT BELT BUCKLE SWITCH CIRCUIT FOR HIGH RESISTANCE

2004 XJ RANGE - Supplemental Restraint System - 501-20B

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the RCM electrical connector, CR87.
4. Disconnect the driver seat belt buckle switch electrical connector, SD19.
5. Measure the resistance between CR87, pin 25 (RW) and SD19, pin 03 (RW).

•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 <<W2>>

W2 : CHECK THE DRIVER SEAT BELT BUCKLE SWITCH CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR87, pin 25 (RW) 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

Goto <<W3>>

W3 : CHECK THE DRIVER SEAT BELT BUCKLE SWITCH CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 25 (RW) 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

Goto <<W4>>

W4 : CHECK THE DRIVER SEAT BELT BUCKLE SWITCH GROUND CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SD19, pin 04 (BK) and GROUND.

•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 <<W5>>

W5 : CHECK THE DRIVER SEAT BELT BUCKLE SWITCH GROUND CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SD19, pin 04 (BK) 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**

INSTALL a new driver seat belt buckle switch, <<501-20A>><<501-20B>>

X : DTC B2438, B2439, B2692: FLASH CODE 52: PASSENGER SEAT BELT BUCKLE SWITCH CIRCUIT MALFUNCTION

X1 : CHECK THE PASSENGER SEAT BELT BUCKLE SWITCH CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.

2. Wait one minute for the system to become safe.

3. Disconnect the RCM electrical connector, CR87.

4. Disconnect the passenger seat belt buckle switch electrical connector, SP19.

5. Measure the resistance between CR87, pin 26 (RU) and SP19, pin 03 (RU).

•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 <<X2>>

X2 : CHECK THE PASSENGER SEAT BELT BUCKLE SWITCH CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.

2. Measure the resistance between CR87, pin 26 (RU) 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**

Goto <<X3>>

X3 : CHECK THE PASSENGER SEAT BELT BUCKLE SWITCH CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR87, pin 26 (RU) and GROUND.

2004 XJ RANGE - Supplemental Restraint System - 501-20B

•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

Goto <<X4>>

X4 : CHECK THE PASSENGER SEAT BELT BUCKLE SWITCH GROUND CIRCUIT FOR HIGH RESISTANCE

1. Measure the resistance between SP19, pin 04 (BK) and GROUND.

•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 <<X5>>

X5 : CHECK THE PASSENGER SEAT BELT BUCKLE SWITCH GROUND CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between SP19, pin 04 (BK) 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

INSTALL a new passenger seat belt buckle switch, <<501-20A>><<501-20B>>

Y : DTC B1891, B1892: FLASH CODE 53: AUDIBLE WARNING CIRCUIT MALFUNCTION

Y1 : CHECK THE AUDIBLE WARNING CIRCUIT FOR HIGH RESISTANCE

1. Disconnect the battery negative terminal.
2. Wait one minute for the system to become safe.
3. Disconnect the RCM electrical connector, CR86.
4. Disconnect the instrument cluster electrical connector, IP05.
5. Measure the resistance between CR86, pin 22 (YR) and IP05, pin 08 (YR).

•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 <<Y2>>

Y2 : CHECK THE AUDIBLE WARNING CIRCUIT FOR SHORT TO GROUND

1. Reconnect the battery negative terminal.
2. Measure the resistance between CR86, pin 22 (YR) 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**

Goto <<Y3>>

Y3 : CHECK THE AUDIBLE WARNING CIRCUIT FOR SHORT TO HIGH VOLTAGE

1. Measure the voltage between CR86, pin 22 (YR) 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**

Contact dealer technical support for advice on possible RCM failure.