

SECTION 501-20B Supplemental Restraint System

VEHICLE APPLICATION: 2011.00 Focus

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SPECIFICATIONS**Special Tool Usage**

Description	Simulator	Test and Deployment Lead (Part of Test and Deployment Lead, Air Bag/Pyrotechnic Safety Belt [418-S055])
Driver air bag module	501-073A	418-525
Passenger air bag module	501-073A	418-525
Side air curtain module	501-073A	418-525
Side air bag module	501-077	418-555
Safety belt buckle pretensioner	501-077	418-555

Torque Specifications

Item	Nm	lb-ft	lb-in
Passenger air bag module bracket retaining bolts	8	-	71
Side air bag module retaining nuts	5	-	44
Restraints control module retaining bolts	10	-	89
Side impact sensor retaining bolt	9	-	80
Crash sensor retaining bolt	9	-	80
Side air curtain retaining bolts	11	8	-
Roll over protection unit bolts	25	18	-
Torsion wall upper trim panel	25	18	-

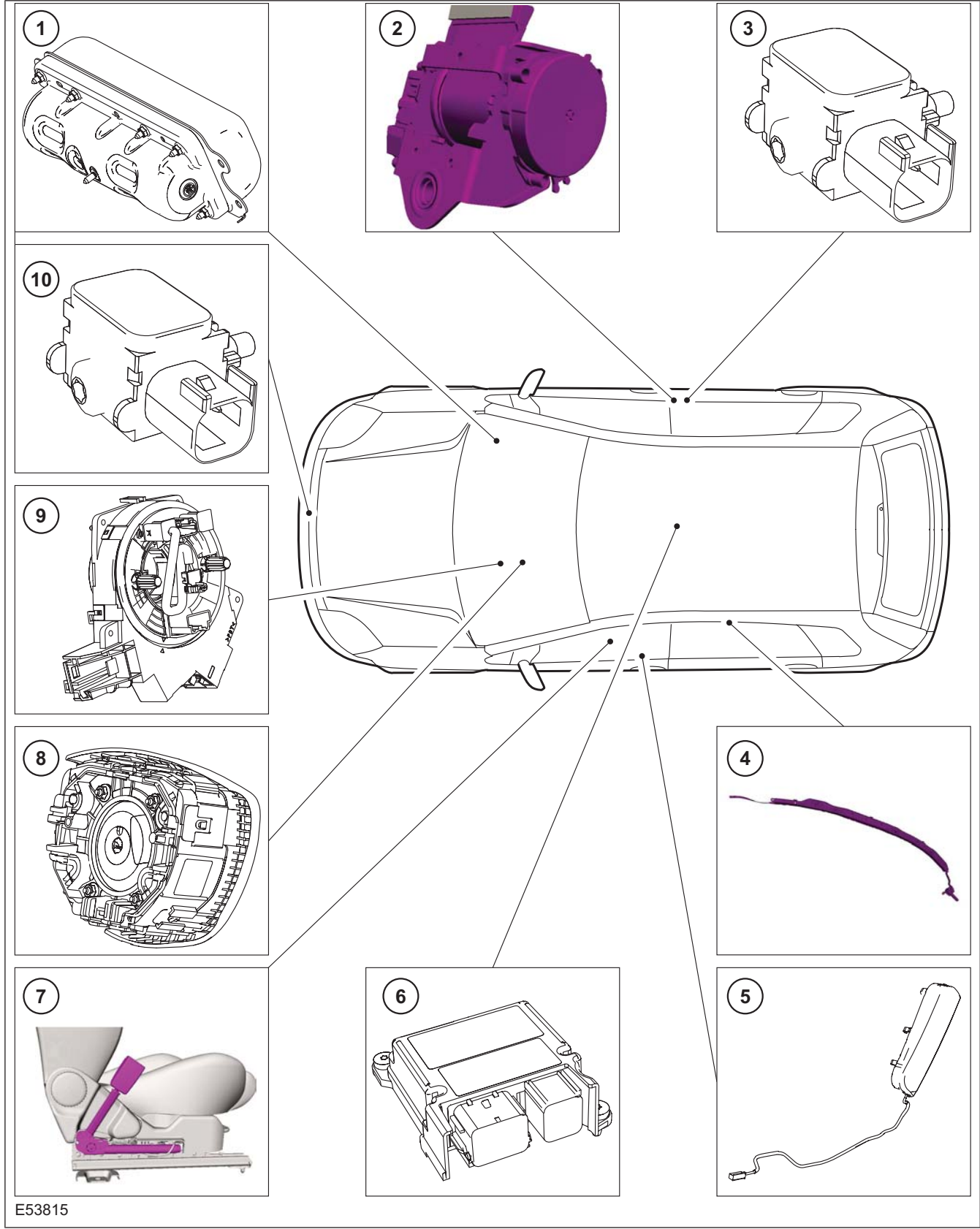
DESCRIPTION AND OPERATION

Air Bag and Safety Belt Pretensioner Supplemental Restraint System (SRS)

System overview

SEE DIAGRAM ON THE NEXT PAGE

DESCRIPTION AND OPERATION



Item	Description
1	Passenger air bag module
2	Safety belt retractor

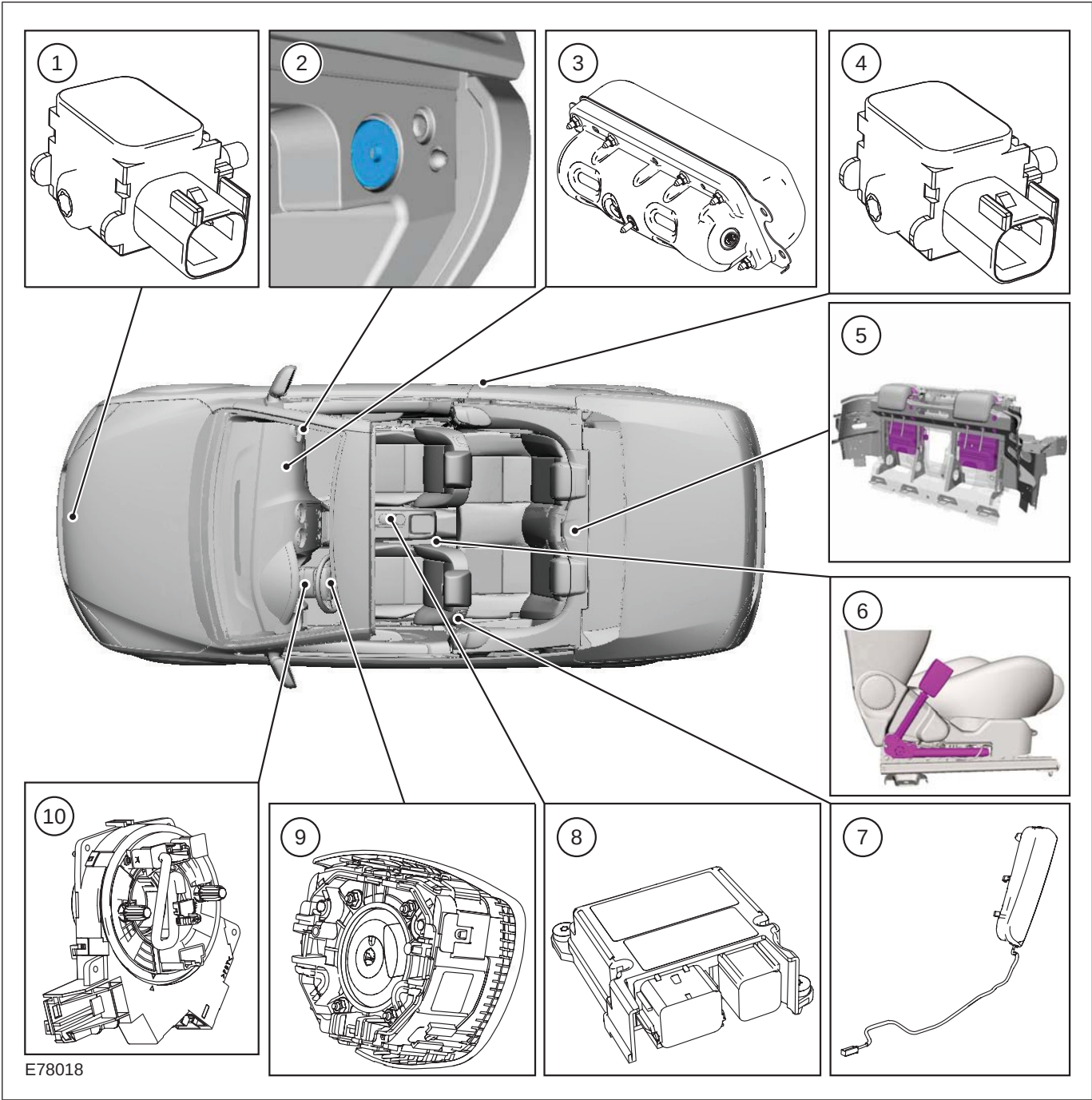
Item	Description
3	Side impact sensor
4	Side air curtain module

DESCRIPTION AND OPERATION

Item	Description
5	Side air bag module
6	Restraints control module (RCM)
7	Safety belt buckle and pretensioner

Item	Description
8	Driver air bag module
9	Clockspring
10	Crash sensor

Vehicles with a convertible top



Item	Description
1	Crash sensor
2	Passenger air bag module deactivation (PAD) switch

Item	Description
3	Passenger air bag module
4	Side impact sensor
5	Torsion wall and roll over protection units

DESCRIPTION AND OPERATION

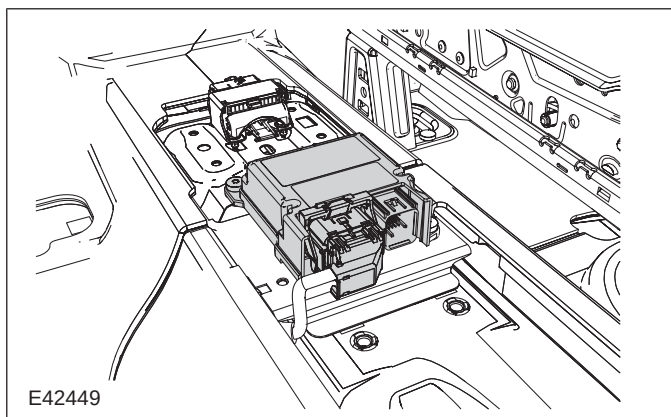
Item	Description
6	Safety belt buckle and pretensioner
7	Side air bag module
8	RCM
9	Driver air bag module
10	Clockspring

System Structure

The following components form part of the supplemental restraint system (SRS):

- RCM
- Single-stage driver and passenger air bag modules
- Side air bag modules
- Side air curtain modules - except vehicles with convertible top
- Crash sensor
- Side impact sensors
- Clockspring
- Front safety belts with front safety belt buckle switch on driver side and front safety belt pretensioners
- Safety belt retractors
- Air bag warning indicator
- Passenger Air Bag Deactivation (PAD) switch (optional)
- Roll over protection unit - vehicles with convertible top

RCM



The RCM is located under the floor console, near to the gearshift lever. Installation marks on the module are to make sure it is aligned correctly.

Micromechanical sensors are incorporated into the RCM; this measures the vehicle's acceleration/deceleration in the event of a collision. The calculated value is evaluated by the RCM to determine the severity of the impact.

The RCM compares the values it receives from the crash sensor (if equipped), the side impact sensors and the internal micromechanical sensors. If the deceleration due to a frontal or side impact exceeds a stored value then the RCM triggers the air bag modules and safety belt pretensioners as required.

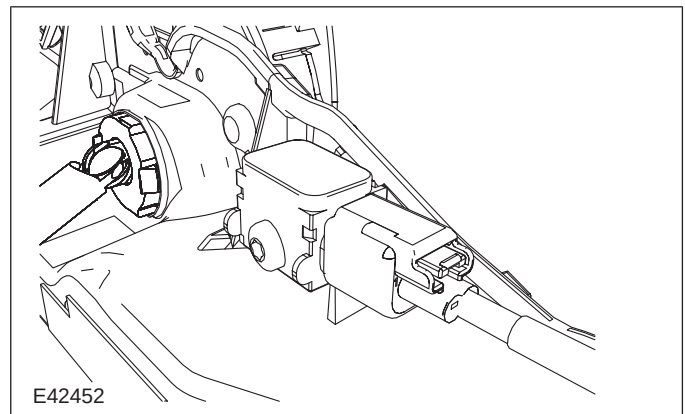
If the vehicle battery is destroyed in the collision, a voltage hold circuit in the RCM will still enable the air bag modules to be triggered up to 150 ms after the start of the impact.

If a system fault is detected by the RCM, the air bag warning lamp is illuminated. The fault can be located by carrying out a diagnostics check using the Worldwide Diagnostic System (WDS).

The RCM can be used again after a collision for up to 5 times, provided that the RCM is not physically damaged and that it passes a self-test.

The air bag modules are triggered by a direct current signal.

Crash Sensor - Vehicles built up to 05/2005



All vehicles, except vehicles with a convertible top, built 05/2005 onwards are not equipped with a crash sensor.

The crash sensor is installed at the front of the vehicle, behind the radiator grille. Data from the crash sensor is evaluated by the RCM to assess the severity of a frontal impact. The crash sensor transmits digitally encoded acceleration information to the RCM.

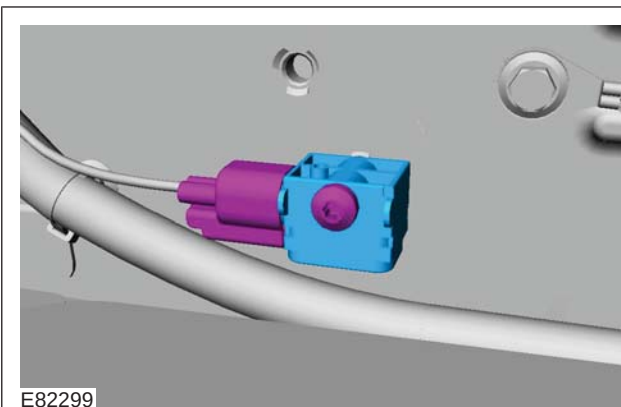
DESCRIPTION AND OPERATION

Power is supplied to the crash sensor by the RCM. If a crash sensor fails, the RCM stores a Diagnostic Trouble Code (DTC) .

Continued use of the crash sensor is permissible provided it has not been physically damaged and it passes a self-test.

The external shape of the crash sensor prevents it from being installed incorrectly.

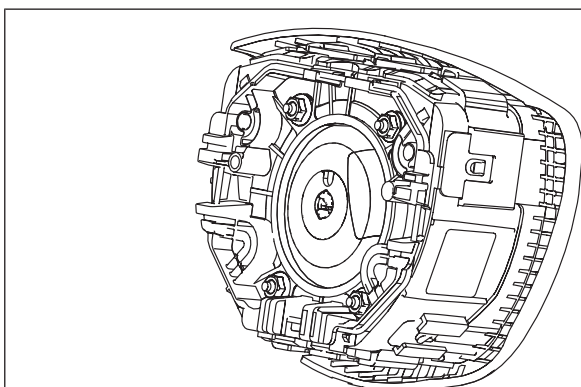
Side Impact Sensors



The side impact sensors are located at the bottom of the B-pillars and transmit digitally encoded acceleration information to the RCM.

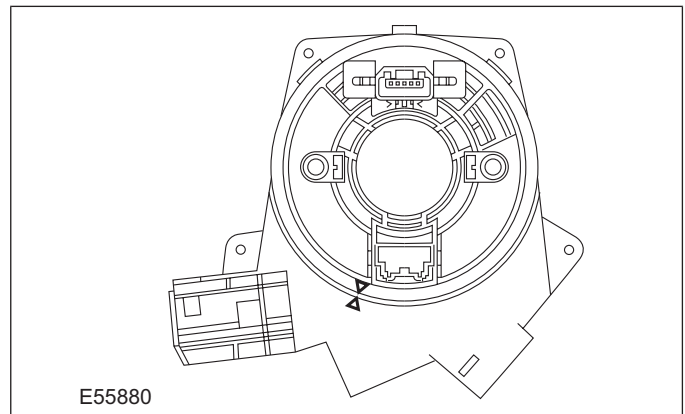
Continued use of the side impact sensor is permissible provided it has not been physically damaged and it passes a self-test.

Driver and Passenger Air Bag Modules



The driver and passenger air bags are single-stage air bags.

Clockspring



The clockspring is designed to carry signals between the RCM and the driver air bag module. The clockspring is installed on the steering column, and consists of fixed and moving parts connected by a coiled Mylar tape with internal conducting tracks. The Mylar tape is able to 'wind up' and 'unwind' as the steering wheel is rotated, maintaining electrical contact at all times between the RCM and the driver air bag module.

Vehicles with stability assist have a steering wheel rotation sensor as an integral part of the clockspring.

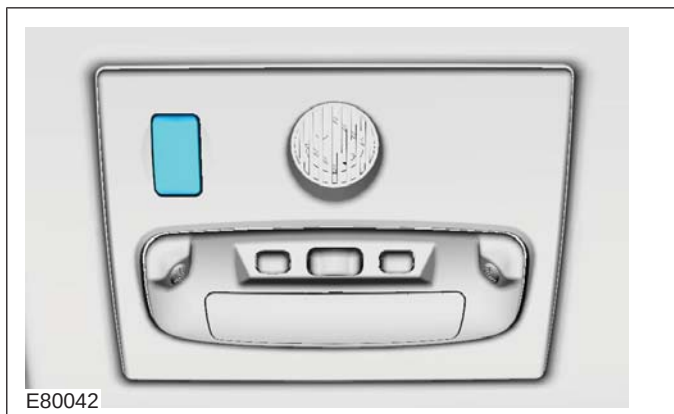
Passenger Air Bag Deactivation



A passenger air bag deactivation (PAD) switch can be fitted by the dealer as an optional extra; the PAD switch is installed in the glove box. The driver can operate the PAD switch with a key to deactivate the passenger air bag module.

When the ignition is switched on, a warning lamp in the instrument panel indicates to the driver and passenger that the passenger air bag module has been deactivated.

DESCRIPTION AND OPERATION



For vehicles with a convertible top, the PAD warning lamp is located in the overhead console.

After installing a PAD switch kit, the RCM must be re-configured using WDS.

Side Air Curtain Modules and Side Air Bag Modules

Side Air Curtains



The side air curtain modules are located in the roof rail between the A-pillar and C-pillar. They are attached to the upper part of the side panel and are hidden behind the vehicle trim panels.

The electrical connections for the 3-door are located at the base of the C-pillar, 4-door/ 5-door are located at the base of the D-pillar in the rear luggage compartment. The electrical connection for the Wagon is located in the roof in front of the liftgate.

In the event of a side impact the relevant side air curtain is deployed and forms a protective cushion between the corresponding side window and the head of the person(s) sat on the front and rear seat.

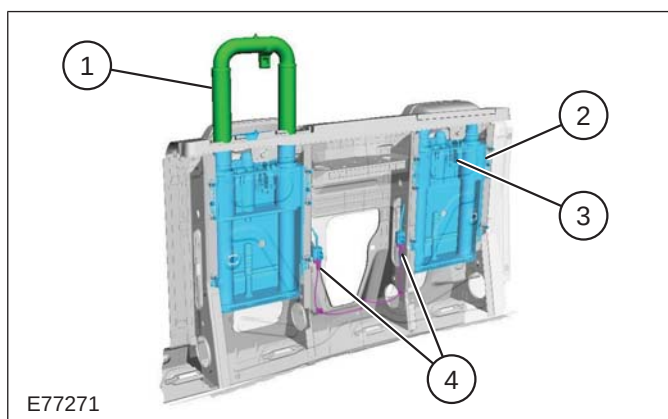
The side air curtains are deployed simultaneously with the side air bags.

Side Air Bags

The side air bags are incorporated in the front seat backrests; a sewn-on label on the respective backrest indicates the vehicle is equipped with side air bag modules.

When a side air bag is deployed, the seam of the seat cover tears open enabling the side air bag to inflate unhindered from the front seat backrest.

Roll Over Protection Unit - Convertible

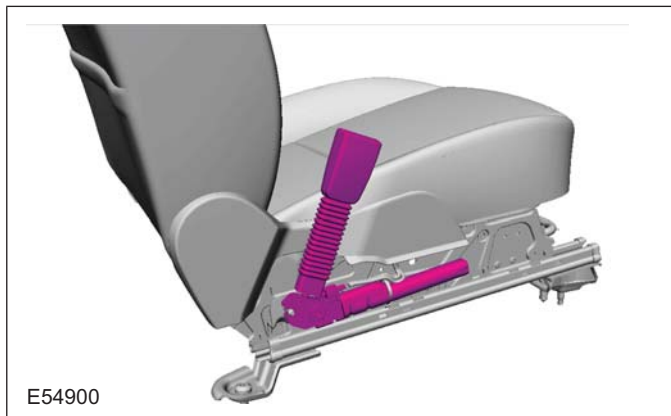


Item	Description
1	Roll over bar deployed
2	Roll over protection unit
3	Roll over bar lock
4	Roll over protection unit electrical connector

Sensors within the RCM monitor the vehicle for roll over in the event of a collision. If the roll over exceeds the stored value the RCM will trigger the roll over protection units.

When a signal is sent from the RCM to the rollover protection unit, the roll over bar lock is released, the roll over bar is deployed by spring pressure and is then locked in its fully extended position.

After a roll over protection unit is deployed the torsion wall and the roll over protection units are to be renewed.

DESCRIPTION AND OPERATION**Safety Belt Buckle and Pretensioners**

The pyrotechnic pretensioners for the driver and front passenger safety belts are incorporated into the safety belt buckle stalks.

The driver's safety belt buckle has a switch for the safety belt monitoring facility, which is required by law in some markets.

The switch is connected to the RCM by means of a wiring harness.

In the event of a collision, the safety belt pretensioners can be deployed in one of two ways:

- On their own
- Simultaneously with the front air bag module(s)

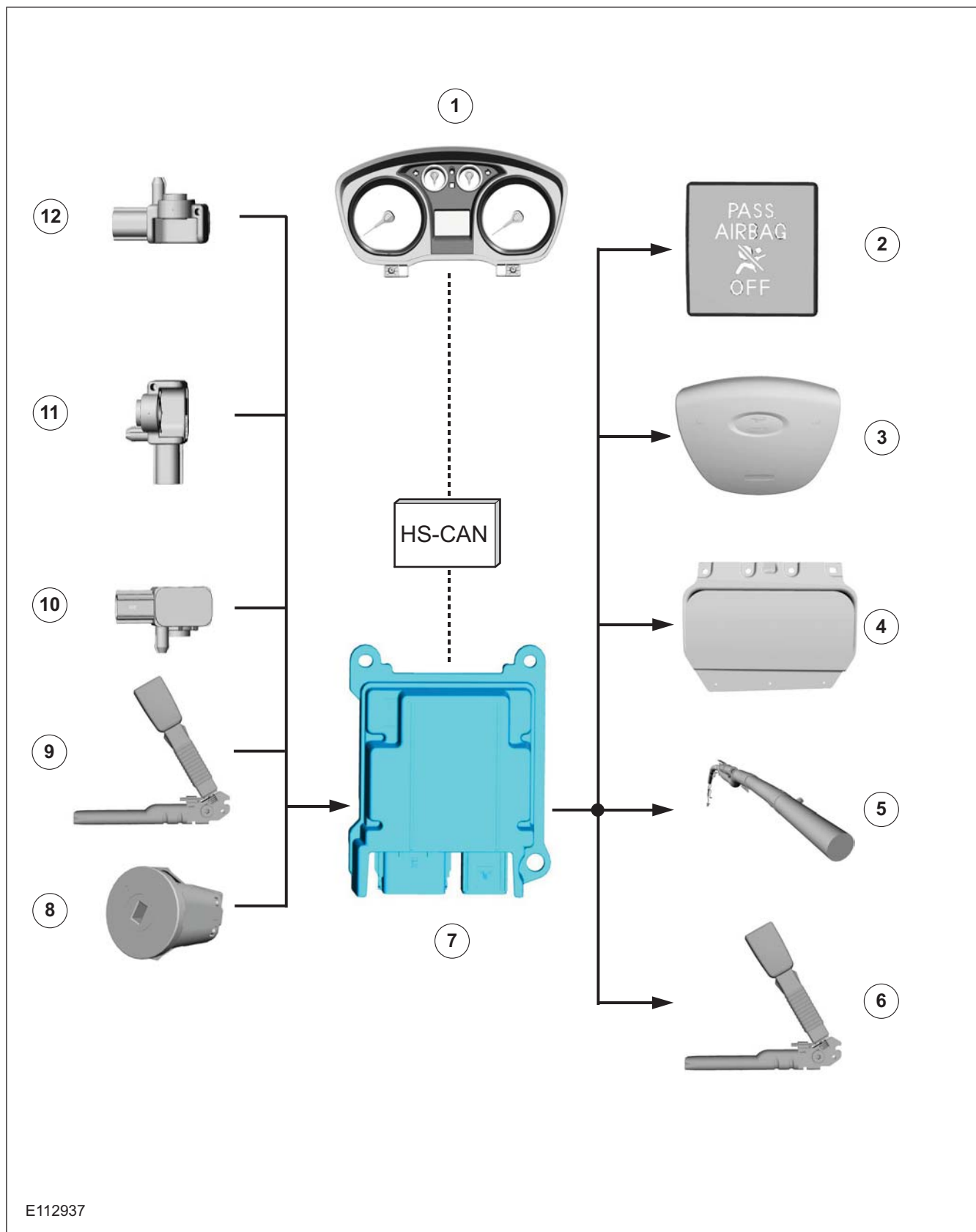
DESCRIPTION AND OPERATION

Air Bag and Safety Belt Pretensioner Supplemental Restraint System (SRS) – System Operation and Component Description

Control Diagram

SEE DIAGRAM ON THE NEXT PAGE

DESCRIPTION AND OPERATION



DESCRIPTION AND OPERATION

Item	Description
1	Airbag indicator light and safety belt warning light in the instrument cluster
2	PAD (passenger air bag deactivation) indicator light
3	Driver Air bag
4	Front passenger airbag
5	Driver and passenger head airbag

Item	Description
6	Driver and passenger-side safety belt pre-tensioners
7	RCM (restraints control module)
8	PAD deactivator switch
9	Safety belt switch
10	Crash sensor – right-hand
11	Front impact sensor
12	Crash sensor – left-hand

System Operation

When the ignition is switched on, the RCM performs a self-diagnostic.

During the self-diagnosis, all of the components of the supplementary restraint system are checked except the seatbelt buckle switch on the driver's side. If a fault is detected, the airbag indicator light is activated for 8 seconds after the ignition is switched on. The first 8 seconds of the ignition cycle always follow the same pattern: 3.2 seconds on followed by 4.8 seconds off. After these 8 seconds the airbag indicator lamp can be used as a fault indicator.

Triggering of the airbags and belt pretensioners is dependent on the impact speed and the impact angle.

Safety Belt Warning Indicator

The seatbelt warning lamp is actuated by the RCM via the MS-CAN (controller area network) databus. The following signals are evaluated by the module for control purposes:

- Driver safety belt buckle switch,
- vehicle speed signal via the HS-CAN data bus.

Driver side function

When the ignition is switched on, the RCM checks by means of the safety belt buckle switch to see whether the driver side safety belt is fastened.

If a road speed of approx. 25 km/h has been reached and the safety belt is not fastened, the safety belt warning lamp lights up and an audible signal is sounded.

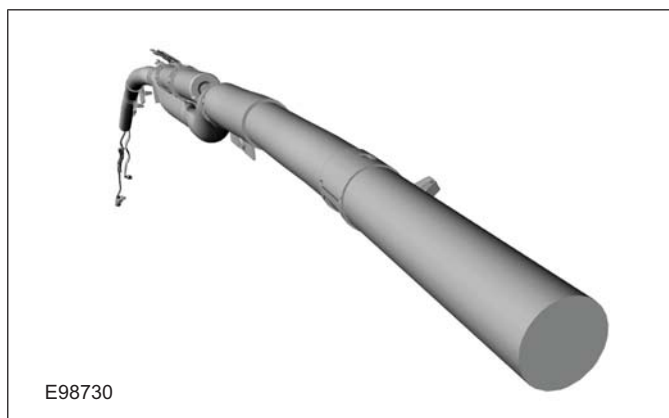
Deactivation/activation of the safety belt warning light

The safety belt warning light can be permanently deactivated. To do this:

- turn the ignition switch to position "II",
- Within a period of 60 seconds, slowly close and reopen the safety belt buckle nine times, then leave it open.
- the safety belt warning indicator flashes three times to confirm the change in status.

Component Description

Head Airbag



Due to the shape of the Recaro seats, **no** side airbag can be integrated in the backrest of the seats. In order to still offer occupants sufficient protection in the event of a side impact, head airbags are fitted to all equipment variants.

In the event of a side impact the relevant side air curtain is deployed and forms a protective cushion

DESCRIPTION AND OPERATION

between the corresponding side window and the head of the person(s) sat on the front and rear seat.

PAD deactivator switch

The PAD deactivator switch can optionally be fitted on all versions.

This device is pre-prepared at the factory and needs to be finalized in an authorized workshop.

A kit is available for this purpose which comprises a deactivation switch (key-operated switch) and a switch panel with integrated PAD indicator lamp.

The deactivator switch is installed in the glove box.

The switch panel with integrated PAD indicator lamp is fitted underneath the air conditioning control unit.

After the components are installed, the RCM must be programmed with IDS (Integrated Diagnostic System).

The driver can operate the PAD deactivator switch with the vehicle key to deactivate the passenger airbag.

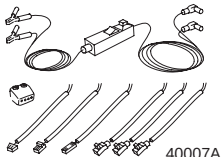
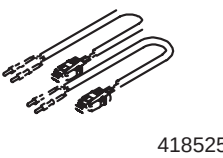
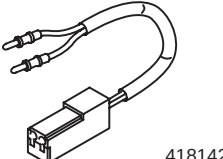
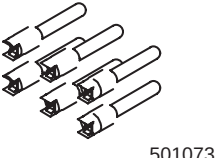
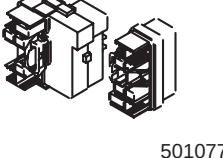
When the passenger airbag is deactivated the PAD indicator lamp lights up.

DIAGNOSIS AND TESTING

Air Bag and Safety Belt Pretensioner Supplemental Restraint System (SRS)

Refer to Wiring Diagrams Section 501-20B, for schematic and connector information.

Special Tool(s)

	Test and Deployment Lead, Air Bag/Pyrotechnic Safety Belt 418-S055
	Test and Deployment Lead; Driver, Passenger and Side Air Curtain Module 418-525
	Test and Deployment Lead, Side Air Bag Module 418-555
	Simulator, Driver and Passenger Air Bags and Side Air Curtains 501-073A
	Simulator, Occupant Restraint Systems 501-077

General Equipment

Ford approved diagnostic tool

Diagnosing Customer Concerns Without Hard DTCs

WARNING: To avoid accidental deployment, the restraints control module (RCM) backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the supplemental restraint system (SRS), or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.

NOTE: Following the pinpoint tests when a diagnostic trouble code (DTC) is not present, or the air bag warning lamp is not permanently illuminated, will result in needless replacement of air bag system components and repeat repairs.

Speak with the customer to determine if a particular set of conditions must be met in order for a fault to occur. If an illuminated air bag warning lamp is reported by the customer but is not present when the vehicle comes in for repair, pinpoint test diagnostics cannot be used.

Diagnosing Customer Concerns with Hard DTCs

WARNING: Do not use substitute air bag simulators when working on the SRS. Use only the appropriate tool. Failure to follow these instructions may result in personal injury.

Most air bag system diagnostic procedures require the use of system deactivation and system reactivation procedures. These procedures require the air bag module(s) and safety belt buckle pretensioners to be disconnected from the SRS, thereby removing the risk of air bag deployment while diagnostics are carried out.

Air bag simulators are required to carry out diagnosis and testing of the air bag system. The simulator contains a resistor, used to simulate an air bag module connection to the system. It is not acceptable to short-circuit the air bag module connections with a 0 ohm jumper wire. If a 0 ohm jumper wire is used to short-circuit the air bag

DIAGNOSIS AND TESTING

module connections, an illuminated air bag warning lamp will be displayed and a DTC logged by the RCM.

Deactivation

 **WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.**

1. Disconnect the battery ground cable.

REFER to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

2. Wait at least one minute for the backup power supply in the RCM to deplete its stored energy.

 **WARNING: To minimize the possibility of premature deployment, live air bag modules must only be placed on work benches which have been ground bonded and with the trim cover facing up. Failure to follow these instructions may result in personal injury.**

3. Remove the driver air bag module from the vehicle.

REFER to: **Driver Air Bag Module** (501-20 Supplemental Restraint System, Removal and Installation).

4. Connect the driver air bag simulator to the sub-harness in place of the driver air bag module at the top of the steering column.
5. Disconnect the passenger air bag module electrical connector.

REFER to: **Passenger Air Bag Module - Vehicles Built From: 04/2006** (501-20 Supplemental Restraint System, Removal and Installation).

6. Connect the passenger air bag simulator to the wiring harness in place of the passenger air bag module.
7. Disconnect the side air curtain module electrical connector on both sides. REFER to: (501-20 Supplemental Restraint System)

Side Air Curtain Module - Vehicles Built From: 22-06-2007 (Removal and Installation),

8. Connect the side air curtain simulators to the wiring harnesses in place of the side air curtain modules.
9. Disconnect the driver side underseat occupant restraint systems electrical connector.
10. Connect the occupant restraint systems simulator to the driver side underseat occupant restraint systems electrical connector in place of the safety belt pretensioner and side air bag module.
11. Disconnect the passenger side underseat occupant restraint systems electrical connector.
12. Connect the occupant restraint systems simulator to the passenger side underseat occupant restraint systems electrical connector in place of the safety belt pretensioner and side air bag module.
13. Connect the battery ground cable.

REFER to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

Reactivation

 **WARNING: The air bag simulators must be removed and the air bag modules reconnected when reactivated to avoid non-deployment in a collision. Failure to follow this instruction may result in personal injury.**

1. Disconnect the battery ground cable.

REFER to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

2. Wait at least one minute for the backup power supply in the RCM to deplete its stored energy.
3. Remove the driver air bag simulator from the sub-harness at the top of the steering column.
4. Connect and install the driver air bag module.

REFER to: **Driver Air Bag Module** (501-20 Supplemental Restraint System, Removal and Installation).

5. Remove the passenger air bag simulator from the passenger air bag module wiring harness.
6. Connect and install the passenger air bag module.
/ **Passenger Air Bag Module - Vehicles Built From: 04/2006** (501-20 Supplemental Restraint System, Removal and Installation).
7. Remove the side air curtain simulators from the side air curtain module wiring harnesses.

DIAGNOSIS AND TESTING

8. Connect and install the side air curtain modules.
REFER to: (501-20 Supplemental Restraint System)

Side Air Curtain Module - Vehicles Built From: 22-06-2007 (Removal and Installation),

9. Remove the driver side underseat occupant restraint systems simulator.
10. Connect the driver side underseat occupant restraint systems electrical connector.
11. Remove the passenger side underseat occupant restraint systems simulator.
12. Connect the passenger side underseat occupant restraint systems electrical connector.
13. Connect the battery ground cable.

REFER to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

14. Prove out the system.

Glossary

Air Bag Simulator

Air bag simulators are used to simulate air bag module connections to the system.

Deactivate the System

Deactivate the system means to carry out the deactivation procedure. REFER to Deactivation in this procedure.

Prove Out the System

The air bag warning indicator will illuminate for three seconds. If there is a fault condition, the air bag warning indicator will stay illuminated or illuminate after a five second delay.

Reactivate the System

Reactivate the system means to carry out the reactivation procedure. REFER to Reactivation in this procedure.

Principles of Operation

SRS Operation

The vehicle is equipped with a DC fired sensing system.

In the event of a severe frontal or three-quarter frontal impact, in excess of a predetermined limit,

the driver and passenger front air bags and safety belt buckle pretensioners will deploy.

In the event of a severe full side impact, in excess of a predetermined limit, either the driver or passenger side air bag, side air curtain (if equipped) and both safety belt buckle pretensioners will deploy.

Air bag deployment will only occur, in the event of a severe collision, when the ignition key is in the RUN position. The passenger air bag deactivation (PAD) switch (if equipped) will deactivate the passenger air bag, passenger safety belt buckle pretensioner and passenger side air bag in the event of a severe frontal or side impact; it will not deactivate the passenger side air curtain.

RCM

The RCM retains full control of the whole system, providing continual system checks and full diagnostic capabilities. The non-volatile memory stores the diagnostic trouble codes, which can then be downloaded through the data link connector (DLC) to the Ford approved diagnostic tool.

In the event of a failure in the vehicle supply during an accident, the RCM provides a backup power supply, sufficient to deploy the air bag(s) for a minimum of 150 ms. The backup power supply is discharged by the RCM within 60 seconds of the battery ground cable being disconnected.

RCM - Vehicles built up to 05/2005

The RCM contains electronic acceleration sensors which measure the longitudinal acceleration and the lateral acceleration and provide both signals to the micro-controller proportional to the amount of acceleration measured. When these sensors sense an impact in excess of a predetermined limit, and the crash sensor or side impact sensor sends a signal to the RCM, the RCM initiates the circuit to deploy the air bag(s). The RCM also contains a safing sensor which enables the front air bags and the safety belt buckle pretensioners in the event of a front impact. The safing sensor also prevents unintentional deployment of the front air bags and safety belt buckle pretensioners in the event of a fault in the electronic acceleration sensor(s).

RCM - Vehicles built from 05/2005

The RCM contains two electronic acceleration sensors which measure longitudinal acceleration and one electronic acceleration sensor which measures lateral acceleration. One longitudinal

DIAGNOSIS AND TESTING

acceleration sensor replaces the crash sensor as a safing sensor. Longitudinal and lateral signals, proportional to the amount of acceleration measured, are fed to a safing micro-controller. The second longitudinal acceleration sensor and the side impact sensors also feed signals, proportional to the amount of acceleration, to a micro-controller. When both micro-controllers sense an impact in excess of a predetermined limit the RCM initiates the circuit to deploy the air bag(s). The safing micro-controller enables the front air bags and the safety belt buckle pretensioners in the event of a front impact. The safing micro-controller also prevents unintentional deployment of the front air bags and safety belt buckle pretensioners in the event of a fault in the electronic acceleration sensor(s).

Crash Sensor – Vehicles built up to 05/2005

NOTE: From 05/2005 onwards the vehicle will not be equipped with a crash sensor.

The crash sensor contains an acceleration sensor, filter, amplifier and an application specific integrated circuit for signal transmitting and is mounted on the radiator grille opening panel reinforcement. The crash sensor sends a signal at a level determined by the crash severity to the RCM. The RCM will evaluate the signal against stored data and deploy the frontal air bags and safety belt buckle pretensioners if required. Both the crash sensor and the internal RCM longitudinal acceleration sensor must exceed a preset limit to initiate the air bag.

Side Impact Sensor

The side impact sensors are mounted at the base of the B-pillar on either side of the vehicle, to facilitate remote lateral impact sensing. Each side impact sensor contains an acceleration sensor, filter, amplifier and an application specific integrated circuit for signal transmitting. In the event of an impact, in excess of a predetermined limit, the side impact sensor sends a signal at a level determined by the crash severity to the RCM. The RCM will evaluate the signal against stored data and deploy the side air bag on the side the deployment request was initiated. Both the side impact sensor and the internal RCM lateral acceleration sensor must exceed a preset limit to initiate the air bag. The RCM retains control of the

side air bags, side air curtains and safety belt buckle pretensioners.

Air Bag Warning Indicator

The air bag warning indicator is incorporated into the instrument cluster, together with the automatic detach detect circuit. The air bag warning indicator illuminates for three seconds at key ON. If the system self-tests OK the indicator extinguishes, if there is a fault condition, the air bag warning indicator will stay illuminated or illuminate after a five second delay.

The system is designed to illuminate the air bag warning indicator continuously if the RCM circuit is broken, either by loss of power, ground supply, module disconnect or CAN BUS failure. The RCM retaining bolts are the ground circuit.

Diagnostic evaluation of the SRS can be made through the DLC and the Ford approved diagnostic tool to establish the nature of the concern. Once the DTC is known the appropriate course of action can be selected from the Symptom Chart.

Inspection and Verification

1. Verify the customer concern by operating the system.
2. Visually inspect for obvious signs of mechanical or electrical damage.

Visual Inspection Chart

Electrical
• Fuse(s) • Electrical connector(s) • Circuit(s) • Wiring harness • Air bag module(s)

3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step.
4. If the cause is not visually evident, connect the Ford approved diagnostic tool to the DLC and select the vehicle to be tested from the Ford approved diagnostic tool menu.
5. Retrieve the DTCs and refer to the Symptom Chart.

DIAGNOSIS AND TESTING

Symptom Chart

NOTE: It is only allowed to repair circuits between connectors. If damage has occurred within a connector a connector replacement kit, if available, must be installed. If a connector replacement kit is not available a new wiring harness must be installed. Connectors must not be disassembled.

Symptom	Possible Sources	Action
No communication with the module	- DLC. - RCM. - Circuit(s).	GO to Pinpoint Test A.
DTC B1046: Driver side air curtain cross link to another firing circuit	Circuit(s).	NOTE: Check for a matching 'cross link to another firing circuit' DTC before carrying out the pinpoint test. GO to Pinpoint Test B.
DTC B1047: Driver side air bag cross link to another firing circuit	Circuit(s).	NOTE: Check for a matching 'cross link to another firing circuit' DTC before carrying out the pinpoint test. GO to Pinpoint Test C.
DTC B1048: Passenger air bag cross link to another firing circuit	Circuit(s).	NOTE: Check for a matching 'cross link to another firing circuit' DTC before carrying out the pinpoint test. GO to Pinpoint Test D.
DTC B1049: Passenger safety belt pretensioner cross link to another firing circuit	Circuit(s).	NOTE: Check for a matching 'cross link to another firing circuit' DTC before carrying out the pinpoint test. GO to Pinpoint Test E.
DTC B104B: Driver side impact sensor cross link to another sensor	Circuit(s).	NOTE: Check for a matching 'cross link to another sensor' DTC before carrying out the pinpoint test. GO to Pinpoint Test F.
DTC B104C: Passenger side impact sensor cross link to another sensor	Circuit(s).	NOTE: Check for a matching 'cross link to another sensor' DTC before carrying out the pinpoint test. GO to Pinpoint Test G.
DTC B104D: Front crash sensor cross link to another sensor	Circuit(s).	NOTE: Check for a matching 'cross link to another sensor' DTC before carrying out the pinpoint test. GO to Pinpoint Test H.
DTC B104E: Driver side impact sensor short to ground or battery	Circuit(s).	GO to Pinpoint Test I.

DIAGNOSIS AND TESTING

Symptom	Possible Sources	Action
DTC B104F: Passenger side impact sensor internal fault	Side impact sensor.	- INSTALL a new side impact sensor. - REFER to: Side Impact Sensor (501-20 Supplemental Restraint System, Removal and Installation) - REPEAT the self-test, CLEAR the DTCs.
DTC B1050: Passenger side impact sensor short to ground or battery	Circuit(s).	GO to Pinpoint Test J.
DTC B1051: Driver side impact sensor internal fault	Side impact sensor.	- INSTALL a new side impact sensor. - REFER to: Side Impact Sensor (501-20 Supplemental Restraint System, Removal and Installation) - REPEAT the self-test, CLEAR the DTCs.
DTC B1052: Passenger safety belt buckle switch cross link to another circuit	Circuit(s).	GO to Pinpoint Test K.
DTC B1053: Driver safety belt buckle switch cross link to another circuit	Circuit(s).	GO to Pinpoint Test L.
DTC B1054: Driver safety belt pretensioner cross link to another firing circuit	Circuit(s).	NOTE: Check for a matching 'cross link to another firing circuit' DTC before carrying out the pinpoint test. GO to Pinpoint Test M.
DTC B1055: Passenger side air bag cross link to another firing circuit	Circuit(s).	NOTE: Check for a matching 'cross link to another firing circuit' DTC before carrying out the pinpoint test. GO to Pinpoint Test N.
DTC B1056: Passenger side air curtain cross link to another firing circuit	Circuit(s).	NOTE: Check for a matching 'cross link to another firing circuit' DTC before carrying out the pinpoint test. GO to Pinpoint Test O.
DTC B1057: Driver air bag cross link to another firing circuit	Circuit(s).	NOTE: Check for a matching 'cross link to another firing circuit' DTC before carrying out the pinpoint test. GO to Pinpoint Test P.

DIAGNOSIS AND TESTING

Symptom	Possible Sources	Action
DTC B105A: Restraints control module (RCM) crash counter full	RCM.	INSTALL a new RCM. REFER to: Restraints Control Module (RCM) (501-20 Supplemental Restraint System, Removal and Installation) REPEAT the self-test, CLEAR the DTCs.
DTC B1231: Longitudinal acceleration threshold exceeded	Crash data memory full.	NOTE: The data memory can be cleared a maximum of five times. Clear the data memory using the Ford approved diagnostic tool. REPEAT the self-test, CLEAR the DTCs.
DTC B1317: Battery voltage high	Charging system.	Check the charging system. REFER to: Charging System (414-00 Charging System - General Information, Diagnosis and Testing). REPEAT the self-test, CLEAR the DTCs.
DTC B1318: Battery voltage low	- Battery. - Charging system. - Circuit.	GO to Pinpoint Test Q.
DTC B1342: Restraints control module (RCM) is defective	RCM.	INSTALL a new RCM. REFER to: Restraints Control Module (RCM) (501-20 Supplemental Restraint System, Removal and Installation) REPEAT the self-test, CLEAR the DTCs.
DTC B1868: Air bag warning indicator lamp circuit failure	Instrument cluster.	Check the instrument cluster. REPEAT the self-test, CLEAR the DTCs.
DTC B1871: Passenger air bag deactivation (PAD) module fault	Mismatch between PAD indicator and PAD switch circuit.	GO to Pinpoint Test R.
DTC B1877: Driver safety belt pretensioner open circuit	- Driver safety belt pretensioner. - Circuit(s).	GO to Pinpoint Test S.
DTC B1878: Driver safety belt pretensioner short to battery	- Driver safety belt pretensioner. - Circuit(s).	GO to Pinpoint Test T.
DTC B1879: Driver safety belt pretensioner short to ground	- Driver safety belt pretensioner. - Circuit(s).	GO to Pinpoint Test U.

DIAGNOSIS AND TESTING

Symptom	Possible Sources	Action
• DTC B1881: Passenger safety belt pretensioner open circuit	• Passenger safety belt pretensioner. • Circuit(s).	• GO to Pinpoint Test V.
• DTC B1882: Passenger safety belt pretensioner short to battery	• Passenger safety belt pretensioner. • Circuit(s).	• GO to Pinpoint Test W.
• DTC B1883: Passenger safety belt pretensioner short to ground	• Passenger safety belt pretensioner. • Circuit(s).	• GO to Pinpoint Test X.
• DTC 1884: Passenger air bag deactivation (PAD) indicator inoperative	• RCM. • PAD indicator. • Circuit(s).	• GO to Pinpoint Test Y.
• DTC B1885: Driver safety belt pretensioner low resistance	• Driver safety belt pretensioner. • Circuit(s).	• GO to Pinpoint Test Z.
• DTC B1886: Passenger safety belt pretensioner low resistance	• Passenger safety belt pretensioner. • Circuit(s).	• GO to Pinpoint Test AA.
• DTC B1890: Passenger air bag deactivation (PAD) indicator short to battery	• PAD indicator. • Circuit(s).	• GO to Pinpoint Test AB.
• DTC B1916: Driver air bag short to battery	• Clockspring. • Circuit(s).	• GO to Pinpoint Test AC.
• DTC B1921: Air bag diagnostic monitor ground circuit open	• RCM internal fault.	• GO to Pinpoint Test AD.
• DTC B1925: Passenger air bag short to battery	• Circuit(s).	• GO to Pinpoint Test AE.
• DTC B1932: Driver air bag open circuit	• Driver air bag module. • Clockspring. • Circuit(s).	• GO to Pinpoint Test AF.
• DTC B1933: Passenger air bag open circuit	• Passenger air bag module. • Circuit(s).	• GO to Pinpoint Test AG.
• DTC B1934: Driver air bag circuit low resistance	• Driver air bag module. • Clockspring. • Circuit(s).	• GO to Pinpoint Test AH.
• DTC B1935: Passenger air bag circuit low resistance	• Passenger air bag module. • Circuit(s).	• GO to Pinpoint Test AI.
• DTC B1936: Driver air bag circuit short to ground	• Driver air bag module. • Clockspring. • Circuit(s).	• GO to Pinpoint Test AJ.
• DTC B1938: Passenger air bag circuit short to ground	• Passenger air bag module. • Circuit(s).	• GO to Pinpoint Test AK.
• DTC B1992: Driver side air bag circuit short to battery	• Driver side air bag module. • Circuit(s).	• GO to Pinpoint Test AL.
• DTC B1993: Driver side air bag circuit short to ground	• Driver side air bag module. • Circuit(s).	• GO to Pinpoint Test AM.

DIAGNOSIS AND TESTING

Symptom	Possible Sources	Action
• DTC B1994: Driver side air bag circuit open circuit	• Driver side air bag module. • Circuit(s).	• GO to Pinpoint Test AN .
• DTC B1995: Driver side air bag circuit low resistance	• Driver side air bag module. • Circuit(s).	• GO to Pinpoint Test AO .
• DTC B1996: Passenger side air bag circuit short to battery	• Passenger side air bag module. • Circuit(s).	• GO to Pinpoint Test AP .
• DTC B1997: Passenger side air bag circuit short to ground	• Passenger side air bag module. • Circuit(s).	• GO to Pinpoint Test AQ .
• DTC B1998: Passenger side air bag circuit open circuit	• Passenger side air bag module. • Circuit(s).	• GO to Pinpoint Test AR .
• DTC B1999: Passenger side air bag circuit low resistance	• Passenger side air bag module. • Circuit(s).	• GO to Pinpoint Test AS .
• DTC B2226: Front crash sensor internal fault	• Crash sensor.	• INSTALL a new crash sensor. REFER to: Crash Sensor (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs.
• DTC B2227: Front crash sensor communications fault	• Crash sensor. • RCM. • Circuit(s).	• GO to Pinpoint Test AT .
• DTC B2433: Driver safety belt buckle switch circuit short to battery	• Driver safety belt buckle switch. • Circuit(s).	• GO to Pinpoint Test AU .
• DTC B2437: Passenger safety belt buckle switch circuit short to battery	• Passenger safety belt buckle switch. • Circuit(s).	• GO to Pinpoint Test AV .
• DTC B2477: Restraints control module (RCM) configuration failure	• New RCM incorrectly configured.	• CHECK model option content. CONFIGURE the RCM. For additional information, REFER to the Ford approved diagnostic tool.
• DTC B2773: Driver side air curtain circuit low resistance	• Driver side air curtain module. • Circuit(s).	• GO to Pinpoint Test AW .
• DTC B2774: Driver side air curtain circuit open circuit	• Driver side air curtain module. • Circuit(s).	• GO to Pinpoint Test AX .
• DTC B2775: Driver side air curtain circuit short to ground	• Driver side air curtain module. • Circuit(s).	• GO to Pinpoint Test AY .
• DTC B2776: Driver side air curtain circuit short to battery	• Circuit(s).	• GO to Pinpoint Test AZ .
• DTC B2777: Passenger side air curtain circuit low resistance	• Passenger side air curtain module. • Circuit(s).	• GO to Pinpoint Test BA .

DIAGNOSIS AND TESTING

Symptom	Possible Sources	Action
• DTC B2778: Passenger side air curtain circuit open circuit	• Passenger side air curtain module. • Circuit(s).	• GO to Pinpoint Test BB.
• DTC B2779: Passenger side air curtain circuit short to ground	• Passenger side air curtain module. • Circuit(s).	• GO to Pinpoint Test BC.
• DTC B2780: Passenger side air curtain circuit short to battery	• Circuit(s).	• GO to Pinpoint Test BD.
• DTC B2855: Front crash sensor circuit short to battery or ground	• Circuit(s).	• GO to Pinpoint Test BE.
• DTC B2856: Front crash sensor to restraints control module (RCM) mismatch	• Incorrect new crash sensor installed.	• INSTALL the correct crash sensor. REFER to: Crash Sensor (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs.
• DTC B2886: Passenger side impact sensor to restraints control module (RCM) mismatch	• Incorrect new side impact sensor installed.	• INSTALL the correct side impact sensor. REFER to: Side Impact Sensor (501-20 Supplemental Restraint System, Removal and Installation) REPEAT the self-test, CLEAR the DTCs.
• DTC B2887: Driver side impact sensor to restraints control module (RCM) mismatch	• Incorrect new side impact sensor installed.	• INSTALL the correct side impact sensor. REFER to: Side Impact Sensor (501-20 Supplemental Restraint System, Removal and Installation) REPEAT the self-test, CLEAR the DTCs.
• DTC U0073: Restraints control module (RCM) communication bus off	• Circuit(s).	• GO to Pinpoint Test BF.
• DTC U1900: CAN communication bus fault	• Circuit(s).	• GO to Pinpoint Test BG.
• DTC U2017: Driver side impact sensor communications fault	• Driver side impact sensor. • RCM. • Circuit(s).	• GO to Pinpoint Test BH.
• DTC U2018: Passenger side impact sensor communications fault	• Passenger side impact sensor. • RCM. • Circuit(s).	• GO to Pinpoint Test BI.

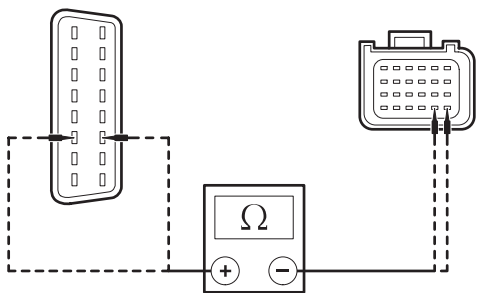
DIAGNOSIS AND TESTING

Pinpoint Tests

PINPOINT TEST A : NO COMMUNICATION WITH THE MODULE

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
A1: CHECK THE AIR BAG WARNING INDICATOR	
	1 Ignition switch in position II. 2 The air bag warning indicator should illuminate when the ignition is in the ON position for three seconds then go out. If a fault is present, the air bag warning indicator will illuminate after five seconds. • Does the air bag warning indicator illuminate after five seconds? → Yes INSTALL a new RCM. REFER to: Restraints Control Module (RCM) (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No GO to A2.
A2: CHECK THE DLC CIRCUIT	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Ignition switch in position 0. 2 Deactivate the SRS. 3 Disconnect RCM C426.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036828	4 Measure the resistance between the: - DLC C200 pin 3, circuit 4-EC10 (GY) and the RCM C426 pin 19, circuit 4-EC10N (GY), harness side. - DLC C200 pin 11, circuit 5-EC10 (BU) and the RCM C426 pin 20, circuit 5-EC10N (BU), harness side. Are the resistances less than 5 ohms? → Yes INSTALL a new RCM. REFER to: Restraints Control Module (RCM) (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 4-EC10N (GY) or circuit 5-EC10N (BU). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST B : DTC B1046: DRIVER SIDE AIR CURTAIN CROSS LINK TO ANOTHER FIRING CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
B1: CHECK THE DRIVER SIDE AIR CURTAIN CIRCUITS	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Disconnect RCM C429. 3 Disconnect Driver Side Air Curtain Module Simulator. 4 Disconnect Inoperative Air Bag Module Simulator.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	NOTE: Refer to the Wiring Diagrams for pin detail. 5 Measure the resistance between the: - RCM C429 pin 1, circuit 91S-JA50 (BK/RD), harness side and the inoperative air bag module circuits. - RCM C429 pin 2, circuit 15S-JA50 (GN/OG), harness side and the inoperative air bag module circuits. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR the circuits. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST C : DTC B1047: DRIVER SIDE AIR BAG CROSS LINK TO ANOTHER FIRING CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
C1: CHECK THE DRIVER SIDE AIR BAG CIRCUITS	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect RCM C429.
	3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.
	4 Disconnect Inoperative Air Bag Module Simulator.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	NOTE: Refer to the Wiring Diagrams for pin detail. 5 Measure the resistance between the: - RCM C429 pin 19, circuit 91S-JA37 (BK/GN), harness side and the inoperative air bag module circuits. - RCM C429 pin 20, circuit 15S-JA37 (GN/BK), harness side and the inoperative air bag module circuits. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR the circuits. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST D : DTC B1048: PASSENGER AIR BAG CROSS LINK TO ANOTHER FIRING CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
D1: CHECK THE PASSENGER AIR BAG CIRCUITS	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect RCM C426.
	3 Disconnect Passenger Air Bag Module Simulator.
	4 Disconnect Inoperative Air Bag Module Simulator.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	NOTE: Refer to the Wiring Diagrams for pin detail. 5 Measure the resistance between the: - RCM C426 pin 9, circuit 15S-JA31 (GN/WH), harness side and the inoperative air bag module circuits. - RCM C426 pin 10, circuit 91S-JA31 (BK/WH), harness side and the inoperative air bag module circuits. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR the circuits. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

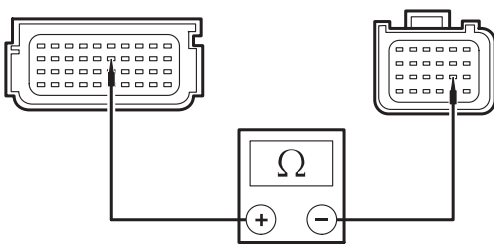
PINPOINT TEST E : DTC B1049: PASSENGER SAFETY BELT PRETENSIONER CROSS LINK TO ANOTHER FIRING CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
E1: CHECK THE PASSENGER SAFETY BELT PRETENSIONER CIRCUITS	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect RCM C429.
	3 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.
	4 Disconnect Inoperative Air Bag Module Simulator.

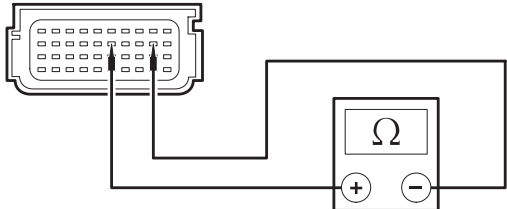
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	NOTE: Refer to the Wiring Diagrams for pin detail. 5 Measure the resistance between the: - RCM C429 pin 9, circuit 91S-JA34 (BK/RD), harness side and the inoperative air bag module circuits. - RCM C429 pin 10, circuit 15S-JA34 (GN/OG), harness side and the inoperative air bag module circuits. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR the circuits. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST F : DTC B104B: DRIVER SIDE IMPACT SENSOR CROSS LINK TO ANOTHER SENSOR

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
F1: CHECK FOR A CROSS LINK BETWEEN THE CRASH SENSOR AND THE DRIVER SIDE IMPACT SENSOR	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect RCM C426.
	3 Disconnect RCM C429.
	4 Disconnect Crash Sensor C420.
	5 Disconnect Driver Side Impact Sensor C427.
 E64733	6 Measure the resistance between the RCM C426 pin 14, circuit 8-JA49 (WH), harness side and the RCM C429 pin 26, circuit 8-JA39 (WH), harness side. Is the resistance greater than 10,000 ohms? → Yes GO to F2. → No REPAIR circuit 8-JA39 (WH) and circuit 8-JA49 (WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

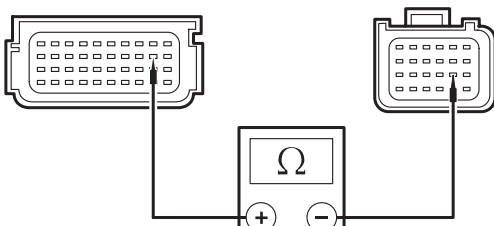
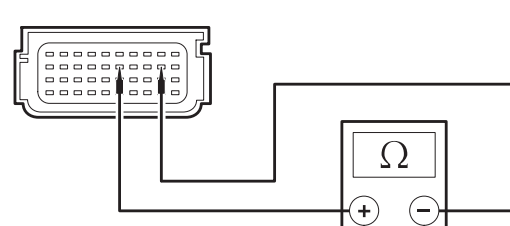
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
F2: CHECK FOR A CROSS LINK BETWEEN THE DRIVER SIDE IMPACT SENSOR CIRCUIT AND THE PASSENGER SIDE IMPACT SENSOR CIRCUIT	
 E64734	1 Disconnect Passenger Side Impact Sensor C428.
	2 Measure the resistance between the RCM C429 pin 26, circuit 8-JA39 (WH), harness side and the RCM C429 pin 29, circuit 8-JA40 (WH/VT), harness side. • Is the resistance greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 8-JA39 (WH) and circuit 8-JA40 (WH/VT). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST G : DTC B104C: PASSENGER SIDE IMPACT SENSOR CROSS LINK TO ANOTHER SENSOR

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
G1: CHECK FOR A CROSS LINK BETWEEN THE CRASH SENSOR AND THE PASSENGER SIDE IMPACT SENSOR	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect RCM C426.
	3 Disconnect RCM C429.
	4 Disconnect Crash Sensor C420.
	5 Disconnect Passenger Side Impact Sensor C428.

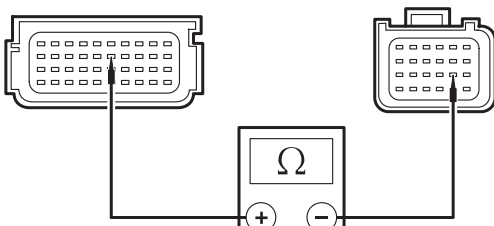
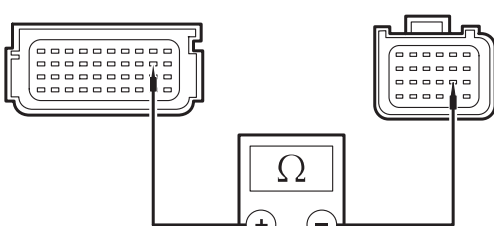
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E64840	6 Measure the resistance between the RCM C426 pin 14, circuit 8-JA49 (WH), harness side and the RCM C429 pin 29, circuit 8-JA40 (WH/VT), harness side. Is the resistance greater than 10,000 ohms? → Yes GO to G2. → No REPAIR circuit 8-JA40 (WH/VT) and circuit 8-JA49 (WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
G2: CHECK FOR A CROSS LINK BETWEEN THE DRIVER SIDE IMPACT SENSOR CIRCUIT AND THE PASSENGER SIDE IMPACT SENSOR CIRCUIT	
 E64734	1 Disconnect Driver Side Impact Sensor C427. 2 Measure the resistance between the RCM C429 pin 26, circuit 8-JA39 (WH), harness side and the RCM C429 pin 29, circuit 8-JA40 (WH/VT), harness side. Is the resistance greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 8-JA39 (WH) and circuit 8-JA40 (WH/VT). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST H : DTC B104D: FRONT CRASH SENSOR CROSS LINK TO ANOTHER SENSOR

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
H1: CHECK FOR A CROSS LINK BETWEEN THE CRASH SENSOR AND THE DRIVER SIDE IMPACT SENSOR	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect RCM C426.
	3 Disconnect RCM C429.
	4 Disconnect Crash Sensor C420.
	5 Disconnect Driver Side Impact Sensor C427.

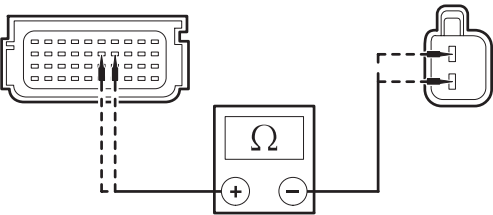
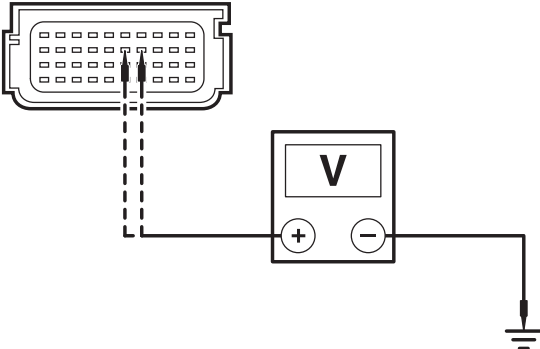
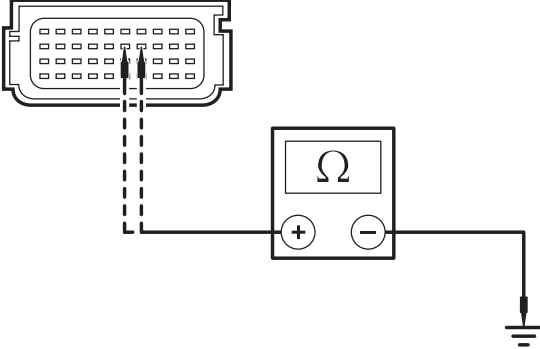
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E64733	6 Measure the resistance between the RCM C426 pin 14, circuit 8-JA49 (WH), harness side and the RCM C429 pin 26, circuit 8-JA39 (WH), harness side. Is the resistance greater than 10,000 ohms? → Yes GO to H2. → No REPAIR circuit 8-JA39 (WH) and circuit 8-JA49 (WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
H2: CHECK FOR A CROSS LINK BETWEEN THE CRASH SENSOR AND THE PASSENGER SIDE IMPACT SENSOR	
 E64840	1 Disconnect Passenger Side Impact Sensor C428. 2 Measure the resistance between the RCM C426 pin 14, circuit 8-JA49 (WH), harness side and the RCM C429 pin 29, circuit 8-JA40 (WH/VT), harness side. Is the resistance greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 8-JA40 (WH/VT) and circuit 8-JA49 (WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST I : DTC B104E: DRIVER SIDE IMPACT SENSOR SHORT TO GROUND OR BATTERY

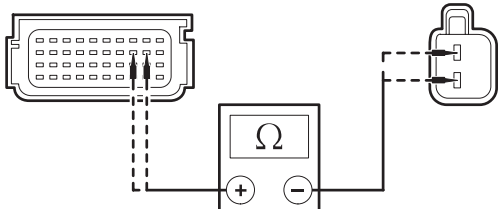
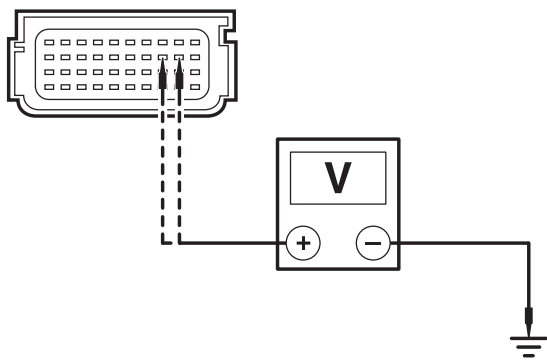
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
I1: DTC B104E: CHECK THE DRIVER SIDE IMPACT SENSOR CIRCUITS	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Disconnect RCM C429. 3 Disconnect Driver Side Impact Sensor C427.

DIAGNOSIS AND TESTING

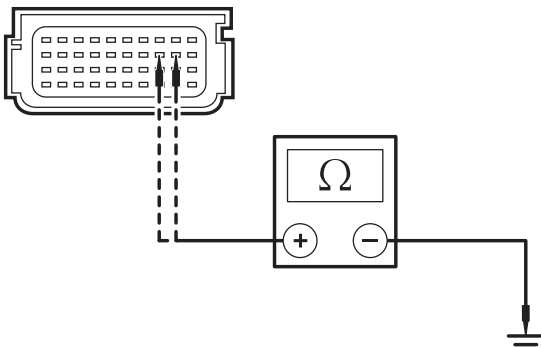
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036518	4 Measure the resistance between the: - RCM C429 pin 26, circuit 8-JA39 (WH), harness side and the driver side impact sensor C427 pin 1, circuit 8-JA39 (WH), harness side. - RCM C429 pin 27, circuit 9-JA39 (BN), harness side and the driver side impact sensor C427 pin 2, circuit 9-JA39 (BN), harness side. - Are the resistances less than 5 ohms? → Yes GO to I2. → No REPAIR circuit 8-JA39 (WH) or circuit 9-JA39 (BN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
I2: CHECK THE DRIVER SIDE IMPACT SENSOR FOR SHORT TO BATTERY	
 E51133	1 Ignition switch in position II. 2 Measure the voltage between the: - RCM C429 pin 26, circuit 8-JA39 (WH), harness side and ground. - RCM C429 pin 27, circuit 9-JA39 (BN), harness side and ground. - Is any voltage present? → Yes REPAIR circuit 8-JA39 (WH) or circuit 9-JA39 (BN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No GO to I3.
I3: CHECK THE DRIVER SIDE IMPACT SENSOR FOR SHORT TO GROUND	
 E51134	1 Ignition switch in position 0. 2 Measure the resistance between the: - RCM C429 pin 26, circuit 8-JA39 (WH), harness side and ground. - RCM C429 pin 27, circuit 9-JA39 (BN), harness side and ground. - Are the resistances less than 5 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 8-JA39 (WH) or circuit 9-JA39 (BN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

DIAGNOSIS AND TESTING

PINPOINT TEST J : DTC B1050: PASSENGER SIDE IMPACT SENSOR SHORT TO GROUND OR BATTERY

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
J1: CHECK THE PASSENGER SIDE IMPACT SENSOR CIRCUITS	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Disconnect RCM C429. 3 Disconnect Passenger Side Impact Sensor C428.
 TIE0036519	4 Measure the resistance between the: - RCM C429 pin 28, circuit 9-JA40 (BN/WH), harness side and the driver side impact sensor C428 pin 2, circuit 9-JA40 (BN/WH), harness side. - RCM C429 pin 29, circuit 8-JA40 (WH/VT), harness side and the driver side impact sensor C428 pin 1, circuit 8-JA40 (WH/VT), harness side. - Are the resistances less than 5 ohms? → Yes GO to J2. → No REPAIR circuit 8-JA40 (WH/VT) or circuit 9-JA40 (BN/WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
J2: CHECK THE PASSENGER SIDE IMPACT SENSOR FOR SHORT TO BATTERY	
	1 Ignition switch in position II. 2 Measure the voltage between the: - RCM C429 pin 28, circuit 9-JA40 (BN/WH), harness side and ground. - RCM C429 pin 29, circuit 8-JA40 (WH/VT), harness side and ground. - Is any voltage present? → Yes REPAIR circuit 8-JA40 (WH/VT) or circuit 9-JA40 (BN/WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No GO to J3.
 E51135	

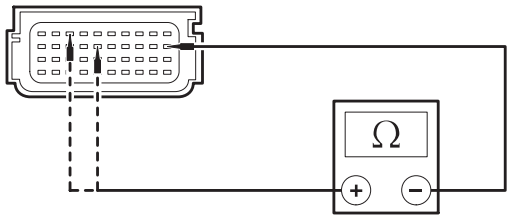
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
J3: CHECK THE PASSENGER SIDE IMPACT SENSOR FOR SHORT TO GROUND	
 E51136	1 Ignition switch in position 0.
	2 Measure the resistance between the: • RCM C429 pin 28, circuit 9-JA40 (BN/WH), harness side and ground. • RCM C429 pin 29, circuit 8-JA40 (WH/VT), harness side and ground. • Are the resistances less than 5 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 8-JA40 (WH/VT) or circuit 9-JA40 (BN/WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST K : DTC B1052: PASSENGER SAFETY BELT BUCKLE SWITCH CROSS LINK TO ANOTHER CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
K1: CHECK THE PASSENGER SAFETY BELT BUCKLE SWITCH CIRCUITS	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect RCM C429.
	3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.
	4 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.

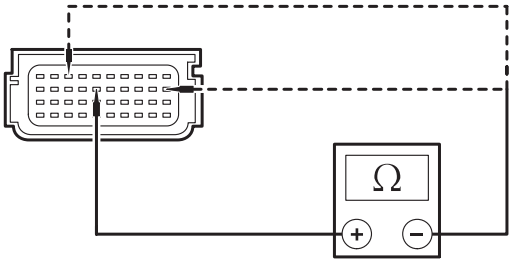
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E64735	5 Measure the resistance between the: - RCM C429 pin 25, circuit 8-JA54 (WH), harness side and the RCM C429 pin 30, circuit 8-JA55 (WH/BK), harness side. - RCM C429 pin 30, circuit 8-JA55 (WH/BK), harness side and the RCM C429 pin 33, circuit 8-JA52 (WH/GN), harness side. Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 8-JA52 (WH/GN) or circuit 8-JA54 (WH) or circuit 8-JA55 (WH/BK). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST L : DTC B1053: DRIVER SAFETY BELT BUCKLE SWITCH CROSS LINK TO ANOTHER CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
L1: CHECK THE DRIVER SAFETY BELT BUCKLE SWITCH CIRCUITS	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	1 Deactivate the SRS. 2 Disconnect RCM C429. 3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator. 4 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 E64841	5 Measure the resistance between the: - RCM C429 pin 25, circuit 8-JA54 (WH), harness side and the RCM C429 pin 30, circuit 8-JA55 (WH/BK), harness side. - RCM C429 pin 25, circuit 8-JA54 (WH), harness side and the RCM C429 pin 33, circuit 8-JA52 (WH/GN), harness side. Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 8-JA52 (WH/GN) or circuit 8-JA54 (WH) or circuit 8-JA55 (WH/BK). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST M : DTC B1054: DRIVER SAFETY BELT PRETENSIONER CROSS LINK TO ANOTHER FIRING CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
M1: CHECK THE DRIVER SAFETY BELT PRETENSIONER CIRCUITS	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Disconnect RCM C429. 3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator. 4 Disconnect Inoperative Air Bag Module Simulator.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	NOTE: Refer to the Wiring Diagrams for pin detail. 5 Measure the resistance between the: - RCM C429 pin 17, circuit 15S-JA33 (GN/BU), harness side and the inoperative air bag module circuits. - RCM C429 pin 18, circuit 91S-JA33 (BK/BU), harness side and the inoperative air bag module circuits. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR the circuits. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST N : DTC B1055: PASSENGER SIDE AIR BAG CROSS LINK TO ANOTHER FIRING CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
N1: CHECK THE PASSENGER SIDE AIR BAG CIRCUITS	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect RCM C429.
	3 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.
	4 Disconnect Inoperative Air Bag Module Simulator.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	NOTE: Refer to the Wiring Diagrams for pin detail. 5 Measure the resistance between the: - RCM C429 pin 7, circuit 15S-JA38 (GN/OG), harness side and the inoperative air bag module circuits. - RCM C429 pin 8, circuit 91S-JA38 (BK/RD), harness side and the inoperative air bag module circuits. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR the circuits. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST O : DTC B1056: PASSENGER SIDE AIR CURTAIN CROSS LINK TO ANOTHER FIRING CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
O1: CHECK THE PASSENGER SIDE AIR CURTAIN CIRCUITS	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect RCM C429.
	3 Disconnect Passenger Side Air Curtain Module Simulator.
	4 Disconnect Inoperative Air Bag Module Simulator.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	NOTE: Refer to the Wiring Diagrams for pin detail. 5 Measure the resistance between the: - RCM C429 pin 11, circuit 91S-JA51 (BK/BU), harness side and the inoperative air bag module circuits. - RCM C429 pin 12, circuit 15S-JA51 (GN/BU), harness side and the inoperative air bag module circuits. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR the circuits. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST P : DTC B1057: DRIVER AIR BAG CROSS LINK TO ANOTHER FIRING CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
P1: CHECK THE DRIVER AIR BAG CIRCUITS	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Disconnect RCM C426. 3 Disconnect Driver Air Bag Module Simulator. 4 Disconnect Inoperative Air Bag Module Simulator.

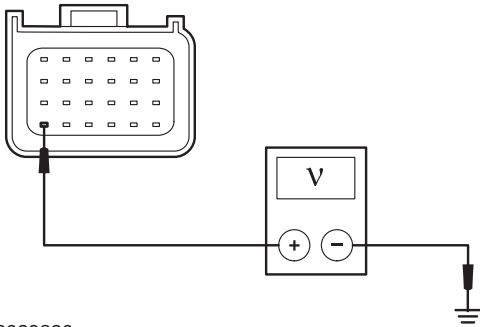
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	NOTE: Refer to the Wiring Diagrams for pin detail. 5 Measure the resistance between the: - RCM C426 pin 3, circuit 15S-JA8 (GN/RD), harness side and the inoperative air bag module circuits. - RCM C426 pin 4, circuit 91S-JA8 (BK/OG), harness side and the inoperative air bag module circuits. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR the circuits. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST Q : DTC B1318: BATTERY VOLTAGE LOW

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
Q1: CHECK THE BATTERY VOLTAGE	
	1 Ignition switch in position II. 2 Check the battery voltage with the ignition in the ON position. Is the battery voltage greater than 8 volts? → Yes GO to Q2. → No CHECK the battery and charging system. REPEAT the self-test, CLEAR the DTCs.
Q2: CHECK THE RCM SUPPLY CIRCUIT	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Ignition switch in position 0. 2 Deactivate the SRS. 3 Disconnect RCM C426. 4 Ignition switch in position II.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 VUE0029820	5 Measure the voltage between the RCM C426 pin 24, circuit 15-JA10 (GN/OG), harness side and ground. Is the voltage greater than 10 volts? → Yes GO to Q3. → No REPAIR circuit 15-JA10 (GN/OG). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

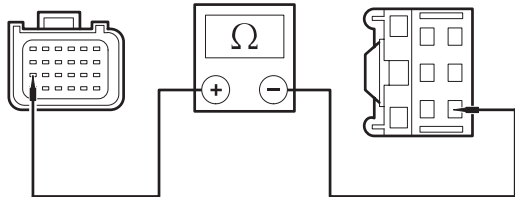
Q3: CHECK THE RCM SUPPLY CIRCUIT

	1 Ignition switch in position 0.
	2 Disconnect Fuse 65.
	3 Measure the resistance between the RCM C426 pin 24, circuit 15-JA10 (GN/OG), harness side and fuse 65, harness side. Is the resistance less than 5 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15-JA10 (GN/OG). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

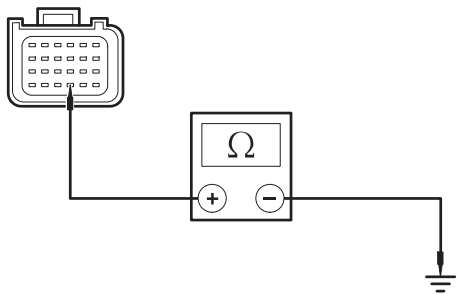
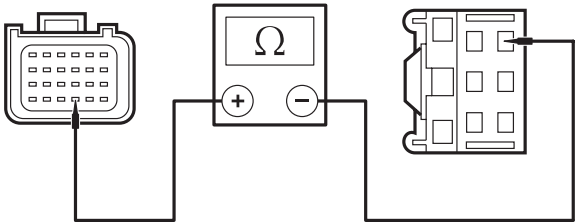
PINPOINT TEST R : DTC B1871: PASSENGER AIR BAG DEACTIVATION (PAD) MODULE FAULT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
R1: CHECK FOR VOLTAGE TO THE PAD CONTROL SWITCH	
	1 Ignition switch in position II.
	2 Operate the PAD control switch to the OFF position. Does the PAD indicator LED illuminate? → Yes GO to R2. → No GO to R3.
R2: CHECK FOR CONTINUITY BETWEEN THE RCM AND THE PAD CONTROL SWITCH	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing	

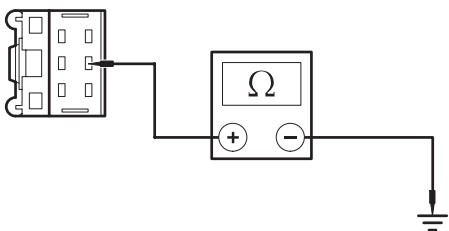
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
 TIE0036491	1 Ignition switch in position 0.
	2 Deactivate the SRS.
	3 Disconnect RCM C426.
	4 Disconnect PAD Switch C619.
	5 Measure the resistance between the RCM C426 pin 18, circuit 31S-JA31 (BK/WH), harness side and the PAD control switch C619 pin 6, circuit 31S-JA31 (BK/WH), harness side. Is the resistance less than 5 ohms? → Yes INSTALL a new PAD control switch. REFER to: Passenger Air Bag Deactivation (PAD) Switch (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 31S-JA31 (BK/WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
R3: CHECK FOR CONTINUITY BETWEEN THE RCM AND GROUND	
	1 Ignition switch in position 0.
	2 Deactivate the SRS.
	3 Disconnect RCM C426.
	4 Operate the PAD switch to the ON position.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0030702	5 Measure the resistance between the RCM C426 pin 21, circuit 31S-JA47 (BK/OG), harness side and ground. Is the resistance less than 5 ohms? → Yes CONFIGURE the PAD switch, REFER to the Ford approved diagnostic tool. CLEAR the DTCs. REACTIVATE the system. If the concern remains, INSTALL a new RCM. REFER to: Restraints Control Module (RCM) (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No GO to R4.
R4: CHECK FOR CONTINUITY BETWEEN THE RCM AND THE PAD SWITCH	
 E0036492	1 Disconnect PAD switch C619. 2 Measure the resistance between the RCM C426 pin 21, circuit 31S-JA47 (BK/OG), harness side and the PAD switch C619 pin 4, circuit 31S-JA47 (BK/OG), harness side. Is the resistance less than 5 ohms? → Yes GO to R5. → No REPAIR circuit 31S-JA47 (BK/OG). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

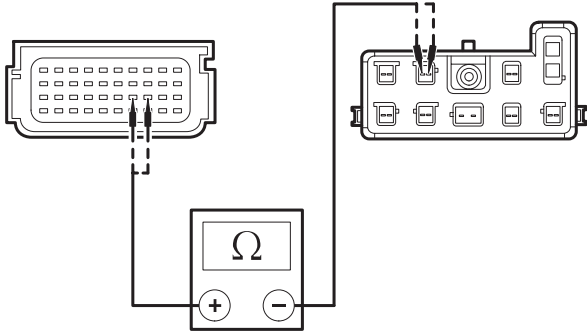
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
R5: CHECK FOR CONTINUITY BETWEEN THE PAD SWITCH AND GROUND	
 TIE0030703	1 Measure the resistance between the PAD switch C619 pin 5, circuit 31-JA47 (BK), harness side and ground. • Is the resistance less than 5 ohms? → Yes INSTALL a new PAD switch. REFER to: Passenger Air Bag Deactivation (PAD) Switch (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 31-JA47 (BK). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST S : DTC B1877: DRIVER SAFETY BELT PRETENSIONER OPEN CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
S1: CHECK THE DRIVER SAFETY BELT PRETENSIONER CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. • Does the system prove out correctly? → Yes GO to S2. → No GO to S3.
S2: PROVE OUT THE DRIVER SAFETY BELT PRETENSIONER CIRCUIT	
	1 Ignition switch in position 0. 2 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator. 3 Connect Driver Side Underseat Occupant Restraint Systems Electrical Connector C30. 4 Ignition switch in position II.

DIAGNOSIS AND TESTING

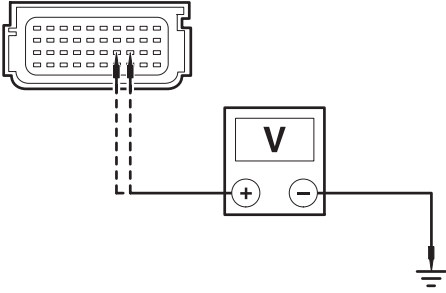
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	5 Carry out the self-test. Does the system prove out correctly? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver safety belt buckle and pretensioner. REFER to: Safety Belt Buckle and Pretensioner (501-20 Safety Belt System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
S3: CHECK THE DRIVER SAFETY BELT PRETENSIONER FOR OPEN CIRCUIT OR HIGH RESISTANCE	
	1 Ignition switch in position 0. 2 Disconnect RCM C429. 3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.
 E57098	4 Measure the resistance between the: - RCM C429 pin 17, circuit 15S-JA33 (GN/BU), harness side and the driver side underseat occupant restraint systems electrical connector C30 pin 7, circuit 15S-JA33 (GN/BU), harness side. - RCM C429 pin 18, circuit 91S-JA33 (BK/BU), harness side and the driver side underseat occupant restraint systems electrical connector C30 pin 8, circuit 91S-JA33 (BK/BU), harness side. Are the resistances less than 5 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA33 (GN/BU) or circuit 91S-JA33 (BK/BU). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

DIAGNOSIS AND TESTING

PINPOINT TEST T : DTC B1878: DRIVER SAFETY BELT PRETENSIONER SHORT TO BATTERY

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
T1: CHECK THE DRIVER SAFETY BELT PRETENSIONER CIRCUIT	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed.
	Does the system prove out correctly? → Yes GO to T2. → No GO to T3.
T2: PROVE OUT THE DRIVER SAFETY BELT PRETENSIONER CIRCUIT	
	1 Ignition switch in position 0.
	2 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.
	3 Connect Driver Side Underseat Occupant Restraint Systems Electrical Connector C30.
	4 Ignition switch in position II.
	5 Carry out the self-test. Does the system prove out correctly? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver safety belt buckle and pretensioner. REFER to: Safety Belt Buckle and Pretensioner (501-20 Safety Belt System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
T3: CHECK THE DRIVER SAFETY BELT PRETENSIONER CIRCUIT FOR A SHORT TO BATTERY	
	1 Ignition switch in position 0.
	2 Disconnect RCM C429.

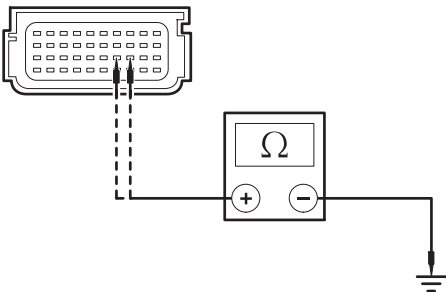
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0021890	3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.
	4 Ignition switch in position II.
	5 Measure the voltage between the: - RCM C429 pin 17, circuit 15S-JA33 (GN/BU), harness side and ground. - RCM C429 pin 18, circuit 91S-JA33 (BK/BU), harness side and ground. Is any voltage present? → Yes REPAIR circuit 15S-JA33 (GN/BU) or circuit 91S-JA33 (BK/BU) and circuit 15-JA10 (GN/OG). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST U : DTC B1879: DRIVER SAFETY BELT PRETENSIONER SHORT TO GROUND

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
U1: CHECK THE DRIVER SAFETY BELT PRETENSIONER CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed. Does the system prove out correctly? → Yes GO to U2. → No GO to U3.
U2: PROVE OUT THE DRIVER SAFETY BELT PRETENSIONER CIRCUIT	
	1 Ignition switch in position 0.
	2 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.
	3 Connect Driver Side Underseat Occupant Restraint Systems Electrical Connector C30.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	4 Ignition switch in position II. 5 Carry out the self-test. Does the system prove out correctly? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver safety belt buckle and pretensioner. REFER to: Safety Belt Buckle and Pretensioner (501-20 Safety Belt System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
U3: CHECK THE DRIVER SAFETY BELT PRETENSIONER CIRCUIT FOR A SHORT TO GROUND	
	1 Ignition switch in position 0. 2 Disconnect RCM C429. 3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.
 TIE0021891	4 Measure the resistance between the: - RCM C429 pin 17, circuit 15S-JA33 (GN/BU), harness side and ground. - RCM C429 pin 18, circuit 91S-JA33 (BK/BU), harness side and ground. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA33 (GN/BU) or circuit 91S-JA33 (BK/BU) and circuit 91-JA10 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

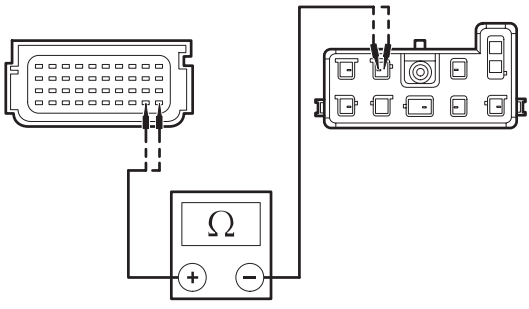
PINPOINT TEST V : DTC 1881: PASSENGER SAFETY BELT PRETENSIONER OPEN CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
V1: CHECK THE PASSENGER SAFETY BELT PRETENSIONER CIRCUIT	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. Does the system prove out correctly? → Yes GO to V2. → No GO to V3.
V2: PROVE OUT THE PASSENGER SAFETY BELT PRETENSIONER CIRCUIT	
	1 Ignition switch in position 0. 2 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator. 3 Connect Passenger Side Underseat Occupant Restraint Systems Electrical Connector C31. 4 Ignition switch in position II. 5 Carry out the self-test. Does the system prove out correctly? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger safety belt buckle and pretensioner. REFER to: Safety Belt Buckle and Pretensioner (501-20 Safety Belt System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
V3: CHECK THE PASSENGER SAFETY BELT PRETENSIONER FOR OPEN CIRCUIT OR HIGH RESISTANCE	
	1 Ignition switch in position 0. 2 Disconnect RCM C429. 3 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.

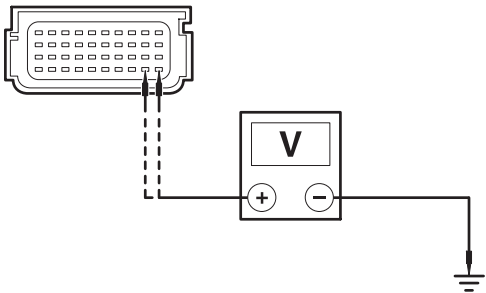
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036493	4 Measure the resistance between the: - RCM C429 pin 9, circuit 91S-JA34 (BK/RD), harness side and the passenger side underseat occupant restraint systems electrical connector C31 pin 8, 91S-JA34 (BK/RD), harness side. - RCM C429 pin 10, circuit 15S-JA34 (GN/OG), harness side and the passenger side underseat occupant restraint systems electrical connector C31 pin 7, 15S-JA34 (GN/OG), harness side. Are the resistances less than 5 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA34 (GN/OG) or circuit 91S-JA34 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST W : DTC B1882: PASSENGER SAFETY BELT PRETENSIONER SHORT TO BATTERY

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
W1: CHECK THE PASSENGER SAFETY BELT PRETENSIONER CIRCUIT	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. Does the system prove out correctly? → Yes GO to W2. → No GO to W3.
W2: PROVE OUT THE PASSENGER SAFETY BELT PRETENSIONER CIRCUIT	
	1 Ignition switch in position 0. 2 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator. 3 Connect Passenger Side Underseat Occupant Restraint Systems Electrical Connector C31. 4 Ignition switch in position II.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	5 Carry out the self-test. Does the system prove out correctly? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger safety belt buckle and pretensioner. REFER to: Safety Belt Buckle and Pretensioner (501-20 Safety Belt System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
W3: CHECK THE PASSENGER SAFETY BELT PRETENSIONER CIRCUIT FOR A SHORT TO BATTERY	
	1 Ignition switch in position 0. 2 Disconnect RCM C429. 3 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator. 4 Ignition switch in position II.
 TIE0036494	5 Measure the voltage between the: - RCM C429 pin 9, circuit 91S-JA34 (BK/RD), harness side and ground. - RCM C429 pin 10, circuit 15S-JA34 (GN/OG), harness side and ground. - Is any voltage present? → Yes REPAIR circuit circuit 15S-JA34 (GN/OG) or circuit 91S-JA34 (BK/RD) and circuit 15-JA10 (GN/OG). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPEAT self-test. CLEAR the DTCs. REACTIVATE the system.

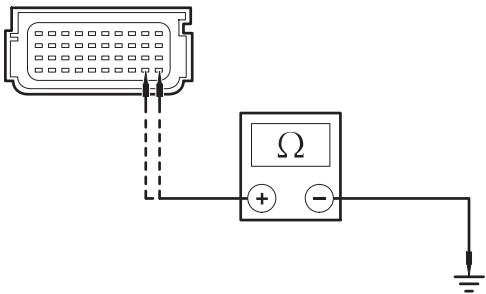
PINPOINT TEST X : DTC B1883: PASSENGER SAFETY BELT PRETENSIONER SHORT TO GROUND

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
X1: CHECK THE PASSENGER SAFETY BELT PRETENSIONER CIRCUIT	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing	

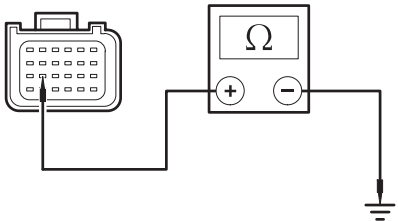
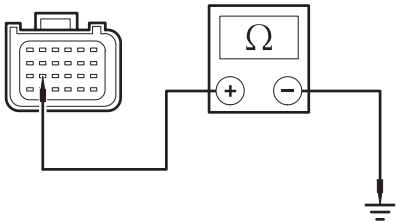
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed.
	Does the system prove out correctly? → Yes GO to X2. → No GO to X3.
X2: PROVE OUT THE PASSENGER SAFETY BELT PRETENSIONER CIRCUIT	
	1 Ignition switch in position 0.
	2 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.
	3 Connect Passenger Side Underseat Occupant Restraint Systems Electrical Connector C31.
	4 Ignition switch in position II.
	5 Carry out the self-test. Does the system prove out correctly? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger safety belt buckle and pretensioner. REFER to: Safety Belt Buckle and Pretensioner (501-20 Safety Belt System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
X3: CHECK THE PASSENGER SAFETY BELT PRETENSIONER CIRCUIT FOR A SHORT TO GROUND	
	1 Ignition switch in position 0.
	2 Disconnect RCM C429.
	3 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.

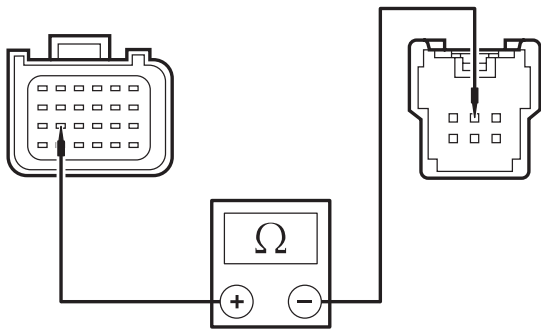
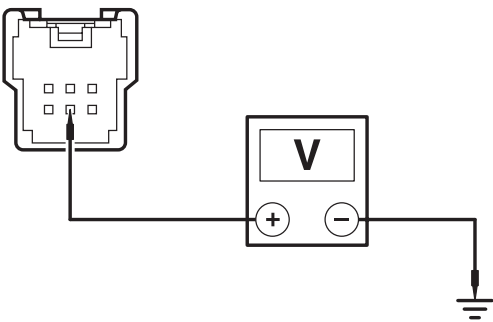
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036495	4 Measure the resistance between the: - RCM C429 pin 9, circuit 91S-JA34 (BK/RD), harness side and ground. - RCM C429 pin 10, circuit 15S-JA34 (GN/OG), harness side and ground. Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA34 (GN/OG) or circuit 91S-JA34 (BK/RD) and circuit 91-JA10 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST Y : DTC B1884: PASSENGER AIR BAG DEACTIVATION (PAD) INDICATOR INOPERATIVE

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
Y1: CHECK FOR CONTINUITY BETWEEN THE RCM AND GROUND	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
 TIE0038192	1 Deactivate the SRS.
	2 Disconnect RCM C426.
 TIE0038192	3 Disconnect PAD Indicator C453.
	4 Measure the resistance between the RCM C426 pin 17, circuit 91S-JA56 (BK/RD), harness side and ground. Is the resistance greater than 10,000 ohms? → Yes GO to Y2. → No REPAIR circuit 91S-JA56 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
Y2: CHECK FOR CONTINUITY BETWEEN THE RCM AND THE PAD INDICATOR	
 E49412	1 Measure the resistance between the RCM C426 pin 17, circuit 91S-JA56 (BK/RD), harness side and the PAD indicator C453 pin 2, circuit 91S-JA56 (BK/RD), harness side. • Is the resistance less than 5 ohms? → Yes GO to Y3. → No REPAIR circuit 91S-JA56 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
Y3: CHECK THE PAD INDICATOR SUPPLY CIRCUIT	
 E49413	1 Ignition switch in position II. 2 Measure the voltage between the PAD indicator C453 pin 5, circuit 15-JA56 (GN/OG), harness side and ground. • Is the voltage greater than 10 volts? → Yes INSTALL a new PAD indicator. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15-JA56 (GN/OG). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

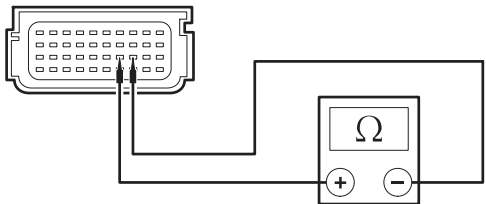
PINPOINT TEST Z : DTC B1885: DRIVER SAFETY BELT PRETENSIONER LOW RESISTANCE

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
Z1: CHECK THE DRIVER SAFETY BELT PRETENSIONER CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	3 Carry out the self-test with the simulators installed. Does the system prove out correctly? → Yes GO to Z2. → No GO to Z3.
Z2: PROVE OUT THE DRIVER SAFETY BELT PRETENSIONER CIRCUIT	
	1 Ignition switch in position 0.
	2 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.
	3 Connect Driver Side Underseat Occupant Restraint Systems Electrical Connector C30.
	4 Ignition switch in position II.
	5 Carry out the self-test. Does the system prove out correctly? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver safety belt buckle and pretensioner. REFER to: Safety Belt Buckle and Pretensioner (501-20 Safety Belt System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
Z3: CHECK THE DRIVER SAFETY BELT PRETENSIONER CIRCUIT FOR LOW RESISTANCE	
	1 Ignition switch in position 0.
	2 Disconnect RCM C429.
	3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.

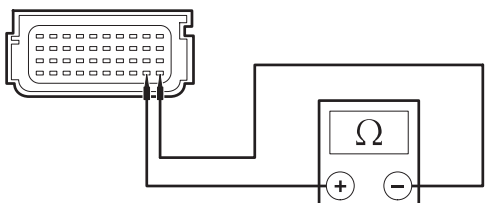
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0033427	4 Measure the resistance between the RCM C429 pin 17, circuit 15S-JA33 (GN/BU), harness side and the RCM C429 pin 18, circuit 91S-JA33 (BK/BU), harness side. Is the resistance greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA33 (GN/BU) and circuit 91S-JA33 (BK/BU). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AA : DTC B1886: PASSENGER SAFETY BELT PRETENSIONER LOW RESISTANCE

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AA1: CHECK THE PASSENGER SAFETY BELT PRETENSIONER CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. Does the system prove out correctly? → Yes GO to AA2. → No GO to AA3.
AA2: PROVE OUT THE PASSENGER SAFETY BELT PRETENSIONER CIRCUIT	
	1 Ignition switch in position 0. 2 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator. 3 Connect Passenger Side Underseat Occupant Restraint Systems Electrical Connector C31. 4 Ignition switch in position II.

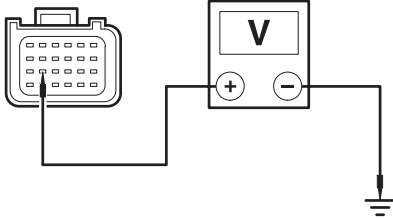
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	5 Carry out the self-test. Does the system prove out correctly? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger safety belt buckle and pretensioner. REFER to: Safety Belt Buckle and Pretensioner (501-20 Safety Belt System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AA3: CHECK THE PASSENGER SAFETY BELT PRETENSIONER CIRCUIT FOR LOW RESISTANCE	
	1 Ignition switch in position 0. 2 Disconnect RCM C429. 3 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.
 TIE0036496	4 Measure the resistance between the RCM C429 pin 9, circuit 91S-JA34 (BK/RD), harness side and the RCM C429 pin 10, circuit 15S-JA34 (GN/OG), harness side. Is the resistance greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA34 (GN/OG) and circuit 91S-JA34 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

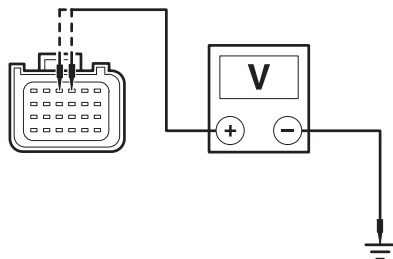
PINPOINT TEST AB : DTC B1890: PASSENGER AIR BAG DEACTIVATION (PAD) INDICATOR SHORT TO BATTERY

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AB1: CHECK THE PAD INDICATOR TO RCM CIRCUIT	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Disconnect PAD Indicator C453.

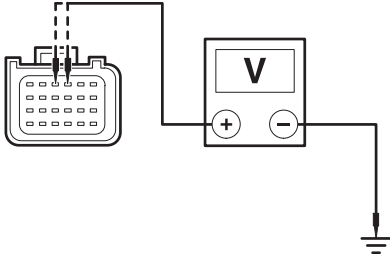
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	3 Disconnect RCM C426.
 TIE0036497	4 Measure the voltage between the RCM C426 pin 17, circuit 91S-JA56 (BK/RD), harness side and ground. - Is any voltage present? → Yes REPAIR circuit 91S-JA56 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new PAD indicator. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

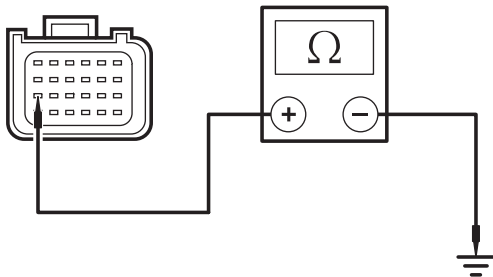
PINPOINT TEST AC : DTC B1916: DRIVER AIR BAG SHORT TO BATTERY

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AC1: CHECK THE DRIVER AIR BAG WIRING HARNESS FOR A SHORT TO BATTERY	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Disconnect Driver Air Bag Module Simulator. 3 Disconnect RCM C426. 4 Ignition switch in position II.
 TIE0020913	5 Measure the voltage between the: - RCM C426 pin 3, circuit 15S-JA8 (GN/RD), harness side and ground. - RCM C426 pin 4, circuit 91S-JA8 (BK/OG), harness side and ground. - Is any voltage present? → Yes GO to AC2. → No CONNECT the driver air bag module simulator and the RCM C426. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AC2: CHECK THE CLOCKSPring FOR A SHORT TO BATTERY	
	1 Ignition switch in position 0. 2 Disconnect Clockspring C896.

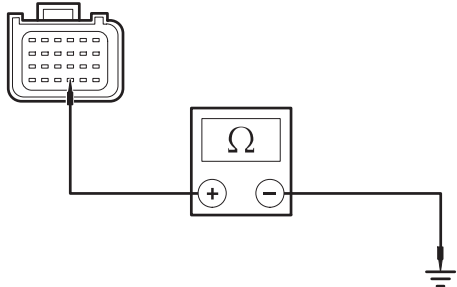
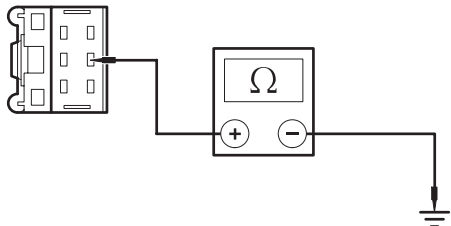
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	3 Ignition switch in position II.
 TIE0020913	4 Measure the voltage between the: - RCM C426 pin 3, circuit 15S-JA8 (GN/RD) harness side and ground. - RCM C426 pin 4, circuit 91S-JA8 (BK/OG) harness side and ground. Is any voltage present? → Yes REPAIR circuit 15S-JA8 (GN/RD) or circuit 91S-JA8 (BK/OG) and circuit 15-JA10 (GN/OG). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new clockspring. REFER to: Clockspring (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AD : DTC B1921: AIR BAG DIAGNOSTIC MONITOR GROUND CIRCUIT OPEN

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AD1: CHECK THE RCM GROUND CIRCUIT - PASSENGER AIR BAG ACTIVATED	
WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
NOTE: CHECK that the PAD switch is in the air bag live position before carrying out this test.	
	1 Deactivate the SRS.
	2 Disconnect RCM C426.
 E51216	3 Measure the resistance between the RCM C426 pin 18, circuit 31S-JA31 (BK/WH), harness side and ground. Is the resistance less than 5 ohms? → Yes GO to AD2. → No GO to AD3.

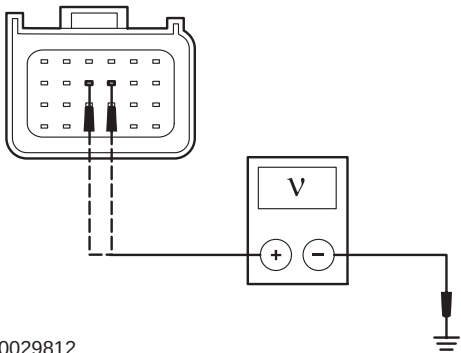
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AD2: CHECK THE RCM GROUND CIRCUIT - PASSENGER AIR BAG DE-ACTIVATED	
 TIE0030702	1 Operate the PAD switch to the OFF position. 2 Measure the resistance between the RCM C426 pin 21, circuit 31S-JA47 (BK/OG), harness side and ground. • Is the resistance less than 5 ohms? → Yes VERIFY the customer concern. → No GO to AD3.
AD3: CHECK THE PAD SWITCH GROUND CIRCUIT	
 TIE0030703	1 Disconnect PAD Switch C619. 2 Measure the resistance between the PAD Switch C619 pin 5, circuit 31-JA47 (BK), harness side and ground. • Is the resistance less than 5 ohms? → Yes INSTALL a new PAD switch. REFER to: Passenger Air Bag Deactivation (PAD) Switch (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 31-JA47 (BK). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AE : DTC B1925: PASSENGER AIR BAG SHORT TO BATTERY

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AE1: CHECK THE PASSENGER AIR BAG CIRCUIT FOR A SHORT TO BATTERY	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	1 Deactivate the SRS. 2 Disconnect Passenger Air Bag Module Simulator.

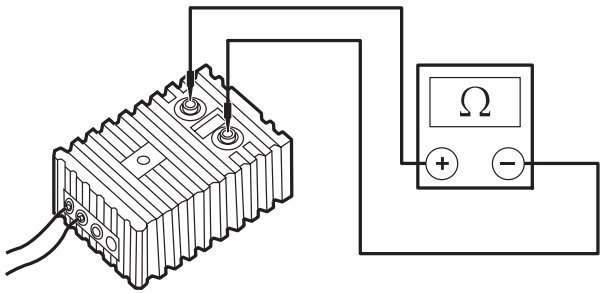
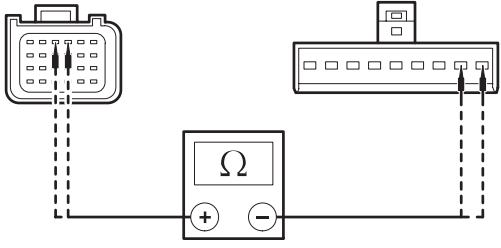
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 VUE0029812	3 Disconnect RCM C426.
	4 Ignition switch in position II.
	5 Measure the voltage between the: - RCM C426 pin 9, circuit 15S-JA31 (GN/WH) harness side and ground. - RCM C426 pin 10, circuit 91S-JA31 (BK/WH) harness side and ground. Is any voltage present? → Yes REPAIR circuit 15S-JA31 (GN/WH) or circuit 91S-JA31 (BK/WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No CONNECT the passenger air bag module simulator and the RCM C426. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AF : DTC B1932: DRIVER AIR BAG OPEN CIRCUIT

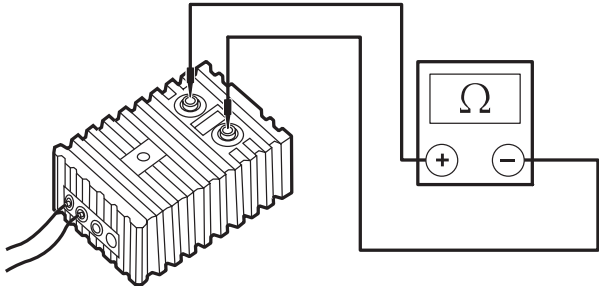
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AF1: CHECK THE DRIVER AIR BAG CIRCUIT RESISTANCE	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed. Does the system prove out correctly? → Yes GO to AF2. → No GO to AF3.
AF2: CHECK THE DRIVER AIR BAG MODULE SQUIB RESISTANCE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the driver air bag module.

DIAGNOSIS AND TESTING

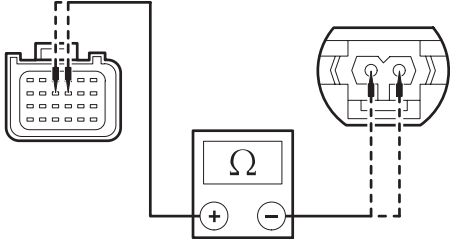
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	2 Select DMM specific on the Ford approved diagnostic tool. 3 Connect the test and deployment lead to the Ford approved diagnostic tool.
	4 Measure the resistance of the driver air bag module squib. - Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver air bag module. REFER to: Driver Air Bag Module (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
 TIE39388	
AF3: CHECK THE CLOCKSPrING FOR OPEN CIRCUIT OR HIGH RESISTANCE	
	1 Ignition switch in position 0. 2 Disconnect RCM C426. 3 Disconnect Clockspring C896.
	4 Measure the resistance between the: - RCM C426 pin 3, circuit 15S-JA8 (GN/RD), harness side and the clockspring C896 pin 1, circuit 15S-JA8 (GN/RD), harness side. - RCM C426 pin 4, circuit 91S-JA8 (BK/OG), harness side and the clockspring C896 pin 2, circuit 91S-JA8 (BK/OG), harness side. - Are the resistances less than 5 ohms? → Yes Install a new clockspring. REFER to: Clockspring (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA8 (GN/RD) or circuit 91S-JA8 (BK/OG). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
 TIE0036499	

DIAGNOSIS AND TESTING

PINPOINT TEST AG : DTC B1933: PASSENGER AIR BAG OPEN CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AG1: CHECK THE PASSENGER AIR BAG CIRCUIT RESISTANCE	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed.
	- Does the system prove out correctly? → Yes GO to AG2. → No GO to AG3.
AG2: CHECK THE PASSENGER AIR BAG MODULE SQUIB RESISTANCE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the passenger air bag module.
	2 Select DMM specific on the Ford approved diagnostic tool.
	3 Connect the test and deployment lead to the Ford approved diagnostic tool.
 TIE39388	4 Measure the resistance of the passenger air bag module squib.
	- Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger air bag module. Passenger Air Bag Module - Vehicles Built From: 04/2006 (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AG3: CHECK THE PASSENGER AIR BAG WIRING HARNESS FOR OPEN CIRCUIT OR HIGH RESISTANCE	
	1 Ignition switch in position 0.

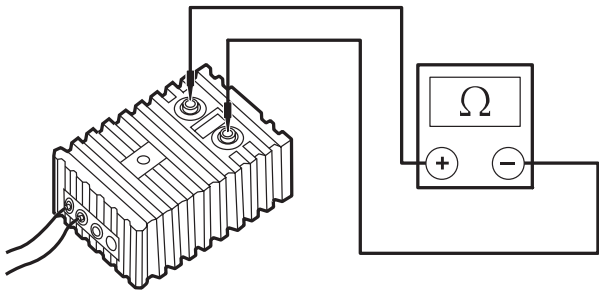
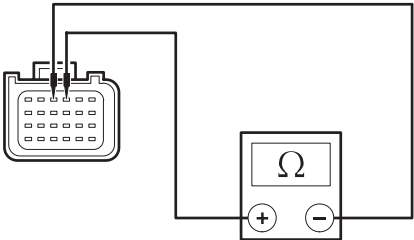
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036500	2 Disconnect RCM C426. 3 Disconnect Passenger Air Bag Module Simulator.
	4 Measure the resistance between the: - RCM C426 pin 9, circuit 15S-JA31 (GN/WH), harness side and the passenger air bag module C425 pin 1, circuit 15S-JA31 (GN/WH), harness side. - RCM C426 pin 10, circuit 91S-JA31 (BK/WH), harness side and the passenger air bag module C425 pin 2, circuit 91S-JA31 (BK/WH), harness side. - Are the resistances less than 5 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA31 (GN/WH) or circuit 91S-JA31 (BK/WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AH : DTC B1934: DRIVER AIR BAG CIRCUIT LOW RESISTANCE

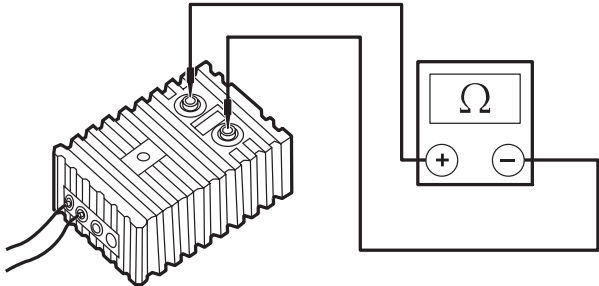
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AH1: CHECK THE DRIVER AIR BAG CIRCUIT RESISTANCE	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed. Does the system prove out correctly? → Yes GO to AH2. → No GO to AH3.

DIAGNOSIS AND TESTING

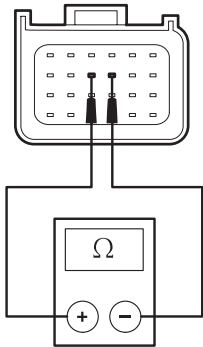
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AH2: CHECK THE DRIVER AIR BAG MODULE SQUIB RESISTANCE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the driver air bag module.
	2 Select DMM specific on the Ford approved diagnostic tool.
	3 Connect the test and deployment lead to the Ford approved diagnostic tool.
 TIE39388	4 Measure the resistance of the driver air bag module squib. - Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver air bag module. REFER to: Driver Air Bag Module (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AH3: CHECK THE CLOCKSPRING FOR LOW RESISTANCE	
	1 Ignition switch in position 0.
	2 Disconnect RCM C426.
	3 Disconnect Clockspring C896.
 TIE0020915	4 Measure the resistance between the RCM C426 pin 3, circuit 15S-JA8 (GN/RD), harness side and the RCM C426 pin 4, circuit 91S-JA8 (BK/OG), harness side. - Is the resistance greater than 10,000 ohms? → Yes INSTALL a new clockspring. REFER to: Clockspring (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA8 (GN/RD) and circuit 91S-JA8 (BK/OG). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

DIAGNOSIS AND TESTING

PINPOINT TEST AI : DTC B1935: PASSENGER AIR BAG CIRCUIT LOW RESISTANCE

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AI1: CHECK THE PASSENGER AIR BAG CIRCUIT RESISTANCE	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. • Does the system prove out correctly? → Yes GO to AI2. → No GO to AI3.
AI2: CHECK THE PASSENGER AIR BAG MODULE SQUIB RESISTANCE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the passenger air bag module. 2 Select DMM specific on the Ford approved diagnostic tool. 3 Connect the test and deployment lead to the Ford approved diagnostic tool.
 TIE39388	4 Measure the resistance of the passenger air bag module squib. • Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger air bag module. / Passenger Air Bag Module - Vehicles Built From: 04/2006 (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AI3: CHECK THE PASSENGER AIR BAG CIRCUIT FOR LOW RESISTANCE	
	1 Ignition switch in position 0.

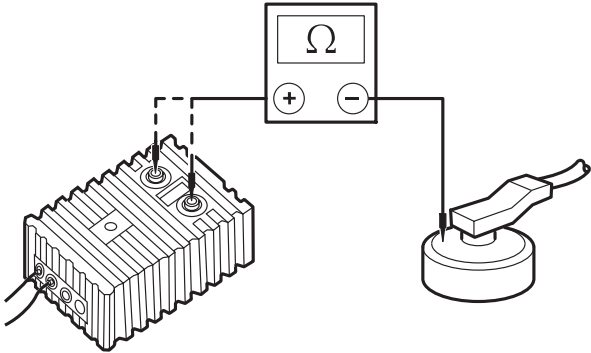
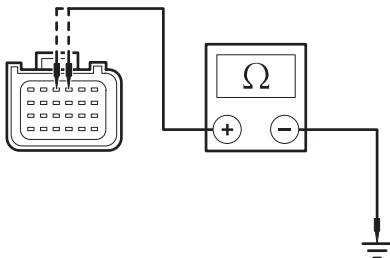
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 VUE0029823	2 Disconnect Passenger Air Bag Module Simulator. 3 Disconnect RCM C426.
	4 Measure the resistance between the RCM C426 pin 9, circuit 15S-JA31 (GN/WH), harness side and the RCM C426 pin 10, circuit 91S-JA31 (BK/WH), harness side. - Is the resistance greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA31 (GN/WH) and circuit 91S-JA31 (BK/WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AJ : DTC B1936: DRIVER AIR BAG CIRCUIT SHORT TO GROUND

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AJ1: CHECK THE DRIVER AIR BAG CIRCUIT	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. - Does the system prove out correctly? → Yes GO to AJ2. → No GO to AJ3.
AJ2: CHECK THE DRIVER AIR BAG MODULE	
 WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the driver air bag module. 2 Select DMM specific on the Ford approved diagnostic tool.

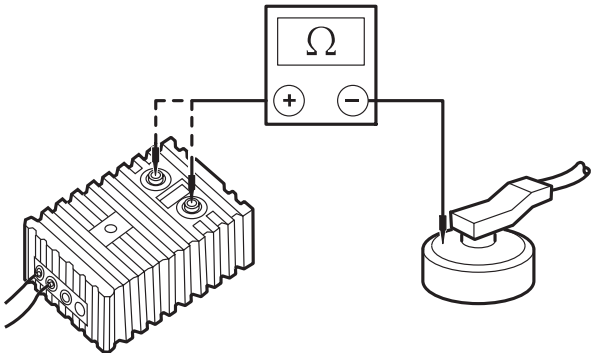
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	3 Connect the test and deployment lead to the Ford approved diagnostic tool.
 E39389	4 Measure the resistance between each of the terminals and the air bag module casing. Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver air bag module. REFER to: Driver Air Bag Module (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AJ3: CHECK THE CLOCKSPRING FOR A SHORT TO GROUND	
	1 Ignition switch in position 0.
	2 Disconnect RCM C426.
	3 Disconnect Clockspring C896.
 TIE0020912	4 Measure the resistance between the: - RCM C426 pin 3, circuit 15S-JA8 (GN/RD), harness side and ground. - RCM C426 pin 4, circuit 91S-JA8 (BK/OG), harness side and ground. - Are the resistances greater than 10,000 ohms? → Yes INSTALL a new clockspring. REFER to: Clockspring (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA8 (GN/RD) or circuit 91S-JA8 (BK/OG). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

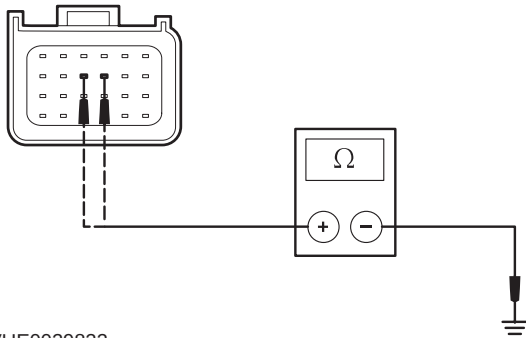
PINPOINT TEST AK : DTC B1938: PASSENGER AIR BAG CIRCUIT SHORT TO GROUND

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AK1: CHECK THE PASSENGER AIR BAG CIRCUIT RESISTANCE	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing	

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed. - Does the system prove out correctly? → Yes GO to AK2. → No GO to AK3.
AK2: CHECK THE PASSENGER AIR BAG MODULE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the passenger air bag module.
	2 Select DMM specific on the Ford approved diagnostic tool.
	3 Connect the test and deployment lead to the Ford approved diagnostic tool.
 E39389	4 Measure the resistance between each of the terminals and the passenger air bag module casing. - Is the resistance greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger air bag module. / Passenger Air Bag Module - Vehicles Built From: 04/2006 (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AK3: CHECK THE PASSENGER AIR BAG MODULE WIRING HARNESS FOR A SHORT TO GROUND	
	1 Ignition switch in position 0.
	2 Disconnect RCM C426.
	3 Disconnect Passenger Air Bag Module Simulator.

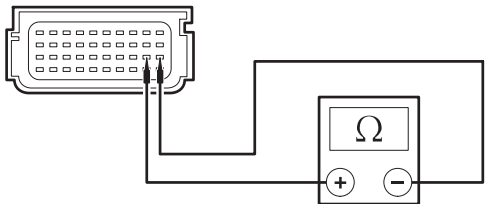
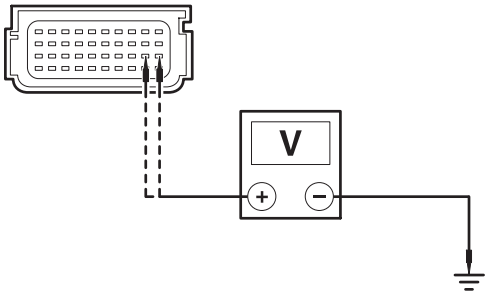
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 VUE0029822	4 Measure the resistance between the: - RCM C426 pin 9, circuit 15S-JA31 (GN/WH), harness side and ground. - RCM C426 pin 10, circuit 91S-JA31 (BK/WH), harness side and ground. Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA31 (GN/WH) or circuit 91S-JA31 (BK/WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AL : DTC B1992: DRIVER SIDE AIR BAG CIRCUIT SHORT TO BATTERY

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AL1: CHECK THE DRIVER SIDE AIR BAG CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. Does the system prove out correctly? → Yes GO to AL2. → No GO to AL3.
AL2: CHECK THE DRIVER SIDE AIR BAG MODULE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Ignition switch in position 0. 2 Select DMM specific on the Ford approved diagnostic tool. 3 Disconnect RCM C429.

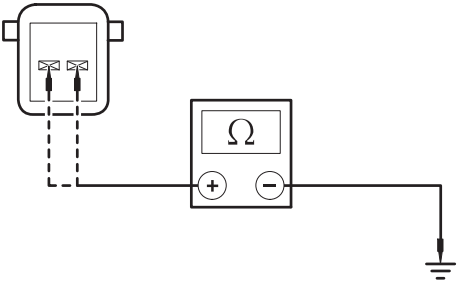
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036502	4 Measure the resistance between the RCM C429 pin 19, circuit 91S-JA37 (BK/GN), harness side and the RCM C429 pin 20, circuit 15S-JA37 (GN/BK), harness side. Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver side air bag module. REFER to: Side Air Bag Module (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AL3: CHECK THE DRIVER SIDE AIR BAG CIRCUIT FOR A SHORT TO BATTERY	
	1 Ignition switch in position 0. 2 Disconnect RCM C429. 3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator. 4 Ignition switch in position II.
 TIE0022427	5 Measure the voltage between the: - RCM C429 pin 19, circuit 91S-JA37 (BK/GN), harness side and ground. - RCM C429 pin 20, circuit 15S-JA37 (GN/BK), harness side and ground. - Is any voltage present? → Yes REPAIR circuit 15S-JA37 (GN/BK) or circuit 91S-JA37 (BK/GN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

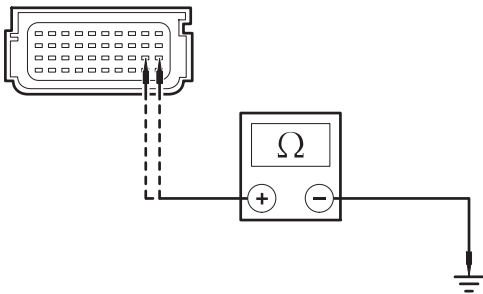
PINPOINT TEST AM : DTC B1993: DRIVER SIDE AIR BAG CIRCUIT SHORT TO GROUND.

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AM1: CHECK THE DRIVER SIDE AIR BAG CIRCUIT	
	WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed. - Does the system prove out correctly? → Yes GO to AM2. → No GO to AM3.
AM2: CHECK THE DRIVER SIDE AIR BAG MODULE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
 TIE0020905	1 Ignition switch in position 0.
	2 Select DMM specific on the Ford approved diagnostic tool.
	3 Measure the resistance between the: - Driver side air bag module underseat connector C331 pin 1, circuit 15S-JA37 (GN/BK) component side and ground. - Driver side air bag module underseat connector C331 pin 2, circuit 91S-JA37 (BK/GN) component side and ground. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver side air bag module. REFER to: Side Air Bag Module (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AM3: CHECK THE DRIVER SIDE AIR BAG CIRCUIT FOR A SHORT TO GROUND.	
	1 Ignition switch in position 0.
	2 Disconnect RCM C429.
	3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.

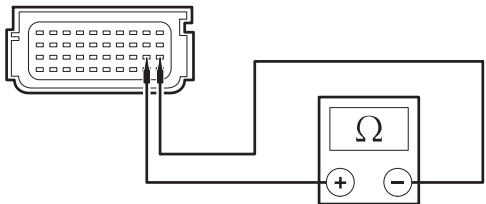
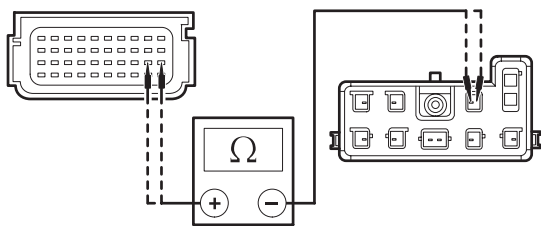
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0022428	4 Measure the resistance between the: - RCM C429 pin 19, circuit 91S-JA37 (BK/GN), harness side and ground. - RCM C429 pin 20, circuit 15S-JA37 (GN/BK), harness side and ground. Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA37 (GN/BK) or circuit 91S-JA37 (BK/GN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AN : DTC B1994: DRIVER SIDE AIR BAG CIRCUIT OPEN CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AN1: CHECK THE DRIVER SIDE AIR BAG CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. Does the system prove out correctly? → Yes GO to AN2. → No GO to AN3.
AN2: CHECK THE DRIVER SIDE AIR BAG MODULE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Ignition switch in position 0. 2 Select DMM specific on the Ford approved diagnostic tool. 3 Disconnect RCM C429.

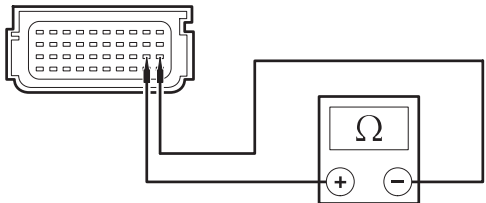
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036502	4 Measure the resistance between the RCM C429 pin 19, circuit 91S-JA37 (BK/GN), harness side and the RCM C429 pin 20, circuit 15S-JA37 (GN/BK), harness side. Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No GO to AN3.
AN3: CHECK THE DRIVER SIDE AIR BAG FOR OPEN CIRCUIT OR HIGH RESISTANCE	
	1 Ignition switch in position 0. 2 Disconnect RCM C429. 3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.
 TIE0036501	4 Measure the resistance between the: - RCM C429 pin 19, circuit 91S-JA37 (BK/GN), harness side and the driver side underseat occupant restraint systems connector C30 pin 6, circuit 91S-JA37 (BK/GN), harness side. - RCM C429 pin 20, circuit 15S-JA37 (GN/BK), harness side and the driver side underseat occupant restraint systems connector C30 pin 5, circuit 15S-JA37 (GN/BK), harness side. - Are the resistances less than 5 ohms? → Yes INSTALL a new driver side air bag module. REFER to: Side Air Bag Module (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA37 (GN/BK) or circuit 91S-JA37 (BK/GN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

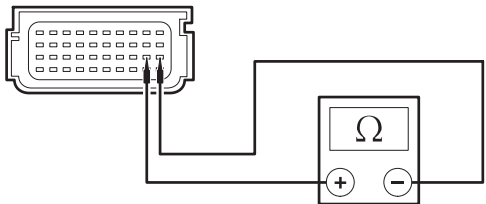
PINPOINT TEST AO : DTC B1995: DRIVER SIDE AIR BAG CIRCUIT LOW RESISTANCE

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AO1: CHECK THE DRIVER SIDE AIR BAG CIRCUIT	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing	

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed. - Does the system prove out correctly? → Yes GO to AO2. → No GO to AO3.
AO2: CHECK THE DRIVER SIDE AIR BAG MODULE	
 WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Ignition switch in position 0.
	2 Select DMM specific on the Ford approved diagnostic tool.
	3 Disconnect RCM C429.
 TIE0036502	4 Measure the resistance between the RCM C429 pin 19, circuit 91S-JA37 (BK/GN), harness side and the RCM C429 pin 20, circuit 15S-JA37 (GN/BK), harness side. - Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No GO to AO3.
AO3: CHECK THE DRIVER SIDE AIR BAG CIRCUIT FOR LOW RESISTANCE	
	1 Ignition switch in position 0.
	2 Disconnect RCM C429.
	3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator.

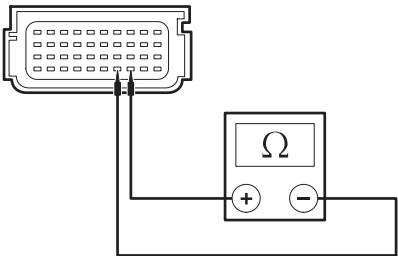
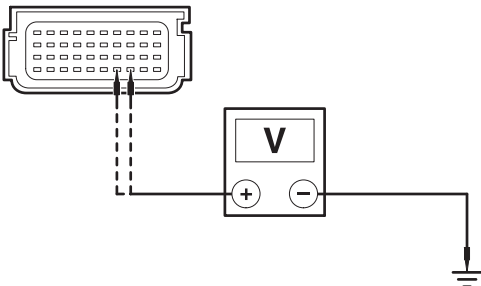
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036502	4 Measure the resistance between the RCM C429 pin 19, circuit 91S-JA37 (BK/GN), harness side and the RCM C429 pin 20, circuit 15S-JA37 (GN/BK), harness side. Is the resistance greater than 10,000 ohms? → Yes INSTALL a new driver side air bag module. REFER to: Side Air Bag Module (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA37 (GN/BK) and circuit 91S-JA37 (BK/GN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AP : DTC B1996: PASSENGER SIDE AIR BAG CIRCUIT SHORT TO BATTERY.

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AP1: CHECK THE PASSENGER SIDE AIR BAG CIRCUIT	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with simulators installed. Does the system prove out correctly? → Yes GO to AP2. → No GO to AP3.
AP2: CHECK THE PASSENGER SIDE AIR BAG MODULE	
 WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Ignition switch in position 0. 2 Select DMM specific on the Ford approved diagnostic tool. 3 Disconnect RCM C429.

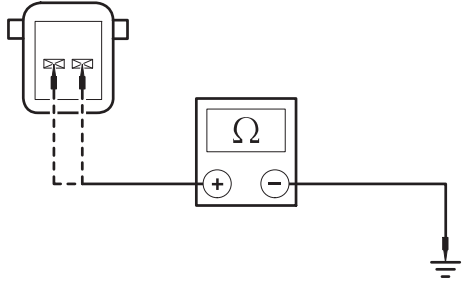
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036506	4 Measure the resistance between the RCM C429 pin 7, circuit 15S-JA38 (GN/OG), harness side and the RCM C429 pin 8, circuit 91S-JA38 (BK/RD), harness side. Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger side air bag module. REFER to: Side Air Bag Module (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AP3: CHECK THE PASSENGER SIDE AIR BAG CIRCUIT FOR A SHORT TO BATTERY	
	1 Ignition switch in position 0.
	2 Disconnect RCM C429.
	3 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.
	4 Ignition switch in position II.
 TIE0036503	5 Measure the voltage between the: - RCM C429 pin 7, circuit 15S-JA38 (GN/OG), harness side and ground. - RCM C429 pin 8, circuit 91S-JA38 (BK/RD), harness side and ground. - Is any voltage present? → Yes REPAIR circuit 15S-JA38 (GN/OG) or circuit 91S-JA38 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

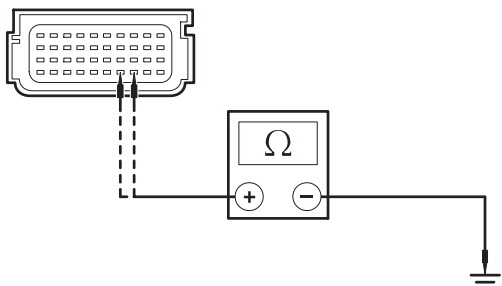
PINPOINT TEST AQ : DTC B1997: PASSENGER SIDE AIR BAG CIRCUIT SHORT TO GROUND

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AQ1: CHECK THE PASSENGER SIDE AIR BAG CIRCUIT	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing	

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with simulators installed. - Does the system prove out correctly? → Yes GO to AQ2. → No GO to AQ3.
AQ2: CHECK THE PASSENGER SIDE AIR BAG MODULE	
 WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Ignition switch in position 0.
	2 Select DMM specific on the Ford approved diagnostic tool.
	3 Disconnect RCM C429.
 TIE0020905	4 Measure the resistance between the: - Passenger side air bag module underseat connector C341 pin 1, circuit 15S-JA38 (GN/OG) component side and ground. - Passenger side air bag module underseat connector C341 pin 2, circuit 91S-JA38 (BK/RD) component side and ground. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger side air bag module. REFER to: Side Air Bag Module (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AQ3: CHECK THE PASSENGER SIDE AIR BAG FOR A SHORT TO GROUND	
	1 Ignition switch in position 0.
	2 Disconnect RCM C429.

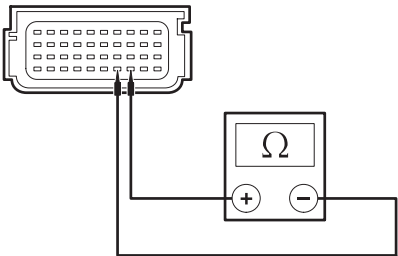
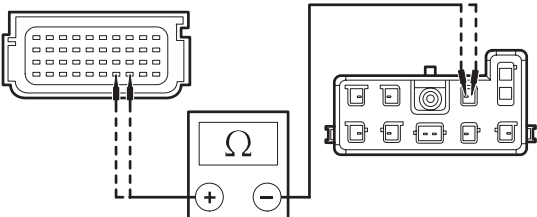
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	3 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.
 TIE0036504	4 Measure the resistance between the: • RCM C429 pin 7, circuit 15S-JA38 (GN/OG), harness side and ground. • RCM C429 pin 8, circuit 91S-JA38 (BK/RD), harness side and ground. • Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA38 (GN/OG) or circuit 91S-JA38 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AR : DTC B1998: PASSENGER SIDE AIR BAG CIRCUIT OPEN CIRCUIT

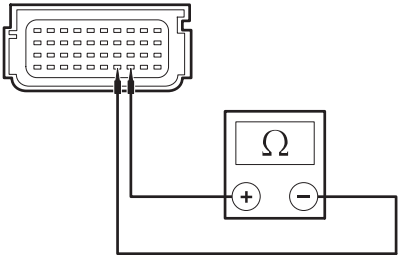
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AR1: CHECK THE PASSENGER SIDE AIR BAG CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. • Does the system prove out correctly? → Yes GO to AR2. → No GO to AR3.
AR2: CHECK THE PASSENGER SIDE AIR BAG MODULE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury	
	1 Ignition switch in position 0. 2 Select DMM specific on the Ford approved diagnostic tool. 3 Disconnect RCM C429.

DIAGNOSIS AND TESTING

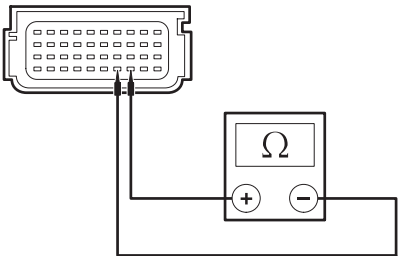
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036506	4 Measure the resistance between the RCM C429 pin 7, circuit 15S-JA38 (GN/OG), harness side and the RCM C429 pin 8, circuit 91S-JA38 (BK/RD), harness side. Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No GO to AR3.
AR3: CHECK THE PASSENGER SIDE AIR BAG FOR OPEN CIRCUIT OR HIGH RESISTANCE	
	1 Ignition switch in position 0. 2 Disconnect RCM C429. 3 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.
 TIE0036505	4 Measure the resistance between the: - RCM C429 pin 7, circuit 15S-JA38 (GN/OG), harness side and the passenger side underseat occupant restraint systems electrical connector C31 pin 5, circuit 15S-JA38 (GN/OG), harness side. - RCM C429 pin 8, circuit 91S-JA38 (BK/RD), harness side and the passenger side underseat occupant restraint systems electrical connector C31 pin 6, circuit 91S-JA38 (BK/RD), harness side.
	Are the resistances less than 5 ohms? → Yes INSTALL a new RCM. REFER to: Restraints Control Module (RCM) (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA38 (GN/OG) or circuit 91S-JA38 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

DIAGNOSIS AND TESTING

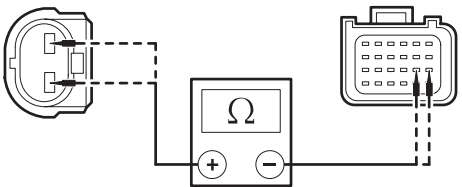
PINPOINT TEST AS : DTC B1999: PASSENGER SIDE AIR BAG CIRCUIT LOW RESISTANCE

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AS1: CHECK THE PASSENGER SIDE AIR BAG CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed. - Does the system prove out correctly? → Yes GO to AS2. → No GO to AS3.
AS2: CHECK THE PASSENGER SIDE AIR BAG MODULE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Ignition switch in position 0.
	2 Select DMM specific on the Ford approved diagnostic tool.
	3 Disconnect RCM C429.
 TIE0036506	4 Measure the resistance between the RCM C429 pin 7, circuit 15S-JA38 (GN/OG), harness side and the RCM C429 pin 8, circuit 91S-JA38 (BK/RD), harness side. - Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No GO to AS3.
AS3: CHECK THE PASSENGER SIDE AIR BAG FOR LOW RESISTANCE	
	1 Ignition switch in position 0.
	2 Disconnect RCM C429.
	3 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.

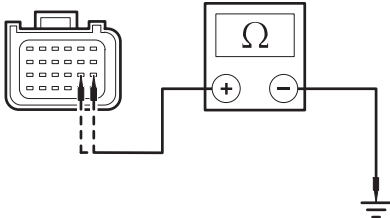
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036506	4 Measure the resistance between the RCM C429 pin 7, circuit 15S-JA38 (GN/OG), harness side and the RCM C429 pin 8, circuit 91S-JA38 (BK/RD), harness side. Is the resistance greater than 10,000 ohms? → Yes INSTALL a new passenger side air bag module. REFER to: Side Air Bag Module (501-20 Supplemental Restraint System, Removal and Installation). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA38 (GN/OG) and circuit 91S-JA38 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AT : DTC B2227: FRONT CRASH SENSOR COMMUNICATIONS FAULT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AT1: CHECK THE CRASH SENSOR CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
 TIE0036507	1 Deactivate the SRS.
	2 Disconnect Crash Sensor C420.
	3 Disconnect RCM C426.
	4 Measure the resistance between the: - RCM C426 pin 13, circuit 9-JA49 (BN), harness side and the crash sensor C420 pin 2, circuit 9-JA49 (BN), harness side. - RCM C426 pin 14, circuit 8-JA49 (WH), harness side and the crash sensor C420 pin 1, circuit 8-JA49 (WH), harness side. - Are the resistances less than 5 ohms? → Yes GO to AT2. → No REPAIR circuit 8-JA49 (WH) and circuit 9-JA49 (BN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

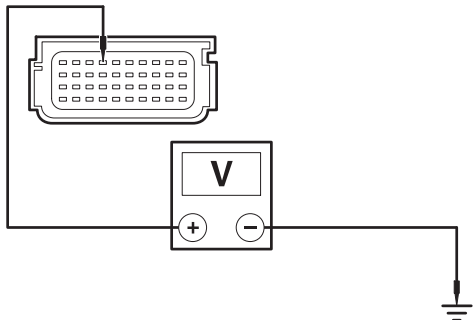
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AT2: CHECK THE CRASH SENSOR FOR A SHORT TO GROUND	
 TIE0020920	1 Measure the resistance between the: • RCM C426 pin 13, circuit 9-JA49 (BN), harness side and ground. • RCM C426 pin 14, circuit 8-JA49 (WH), harness side and ground. • Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 8-JA49 (WH) or circuit 9-JA49 (BN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

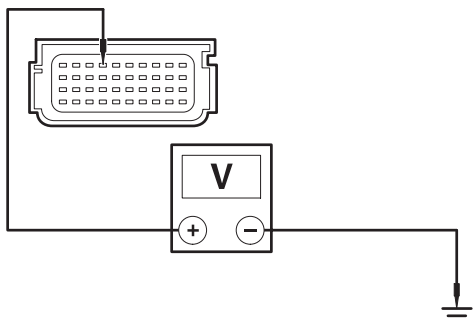
PINPOINT TEST AU : DTC B2433: DRIVER SAFETY BELT BUCKLE SWITCH CIRCUIT SHORT TO BATTERY

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AU1: CHECK THE DRIVER SAFETY BELT BUCKLE SWITCH CIRCUIT FOR A SHORT TO BATTERY	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Disconnect RCM C429. 3 Disconnect Driver Side Underseat Occupant Restraint Systems Simulator. 4 Ignition switch in position II.

DIAGNOSIS AND TESTING

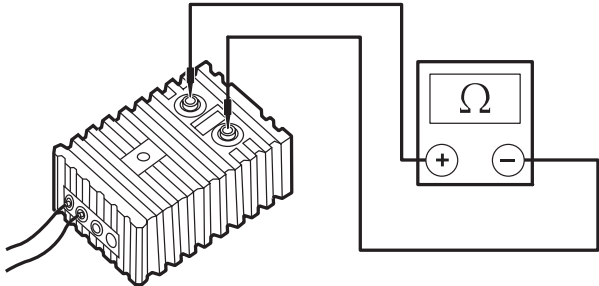
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036510	5 Measure the voltage between the: * Vehicles built up to 11/2004 • RCM C429 pin 34, circuit 9-JA54 (BN), harness side and ground. * Vehicles built from 11/2004 • RCM C429 pin 34, circuit 9-JA10 (BN/YE), harness side and ground. • Is any voltage present? → Yes REPAIR circuit 9-JA10 (BN/YE) or circuit 9-JA54 (BN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AV : DTC B2437: PASSENGER SAFETY BELT BUCKLE SWITCH CIRCUIT SHORT TO BATTERY

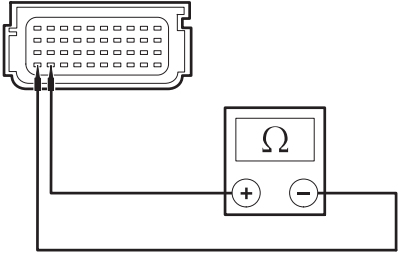
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AV1: CHECK THE PASSENGER SAFETY BELT BUCKLE SWITCH CIRCUIT FOR A SHORT TO BATTERY	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect RCM C429.
	3 Disconnect Passenger Side Underseat Occupant Restraint Systems Simulator.
	4 Ignition switch in position II.
 TIE0036510	5 Measure the voltage between the RCM C429 pin 34, circuit 9-JA10 (BN/YE), harness side and ground. • Is any voltage present? → Yes REPAIR circuit 9-JA10 (BN/YE). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

DIAGNOSIS AND TESTING

PINPOINT TEST AW : DTC B2773: DRIVER SIDE AIR CURTAIN CIRCUIT LOW RESISTANCE

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AW1: CHECK THE DRIVER SIDE AIR CURTAIN MODULE CIRCUIT RESISTANCE	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed.
	- Does the system prove out correctly? → Yes GO to AW2. → No GO to AW3.
AW2: CHECK THE DRIVER SIDE AIR CURTAIN MODULE SQUIB RESISTANCE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the driver side air curtain module.
	2 Select DMM specific on the Ford approved diagnostic tool.
	3 Connect the test and deployment lead to the Ford approved diagnostic tool.
 TIE39388	4 Measure the resistance of the driver side air curtain module squib.
	- Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver side air curtain module. REFER to: (501-20 Supplemental Restraint System) Side Air Curtain Module - Vehicles Built From: 22-06-2007 (Removal and Installation), REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AW3: CHECK THE DRIVER SIDE AIR CURTAIN WIRING HARNESS FOR LOW RESISTANCE	
	1 Ignition switch in position 0.

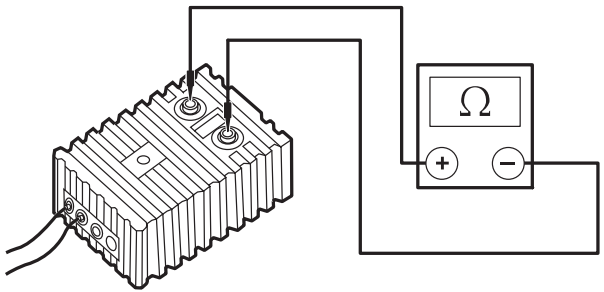
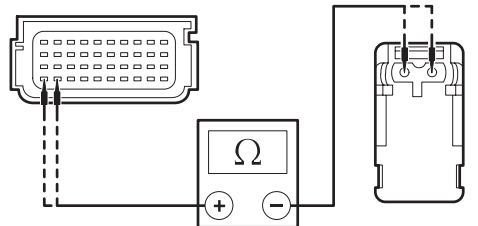
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0020884	2 Disconnect Driver Side Air Curtain Module Simulator.
	3 Disconnect RCM C429.
	4 Measure the resistance between the RCM C429 pin 1, circuit 91S-JA50 (BK/RD), harness side and the RCM C429 pin 2, circuit 15S-JA50 (GN/OG), harness side. - Is the resistance greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA50 (GN/OG) and circuit 91S-JA50 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AX : DTC B2774: DRIVER SIDE AIR CURTAIN CIRCUIT OPEN CIRCUIT

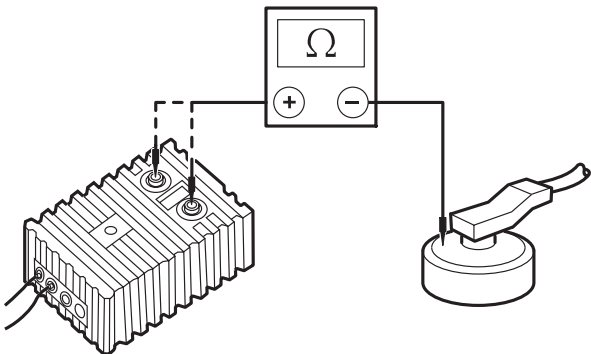
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AX1: CHECK THE DRIVER SIDE AIR CURTAIN CIRCUIT RESISTANCE	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Ignition switch in position II.
	3 Carry out the self-test with the simulators installed. - Does the system prove out correctly? → Yes GO to AX2. → No GO to AX3.
AX2: CHECK THE DRIVER SIDE AIR CURTAIN MODULE SQUIB RESISTANCE	
 WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the driver side air curtain module.
	2 Select DMM specific on the Ford approved diagnostic tool.

DIAGNOSIS AND TESTING

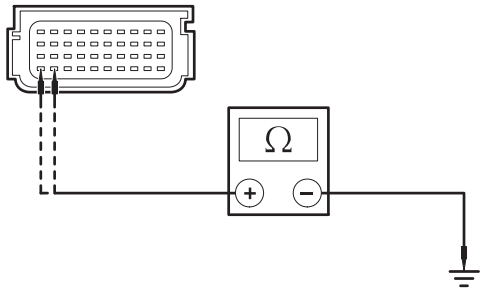
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	3 Connect the test and deployment lead to the Ford approved diagnostic tool.
 TIE39388	4 Measure the resistance of the driver side air curtain module squib. Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver side air curtain module. REFER to: (501-20 Supplemental Restraint System) Side Air Curtain Module - Vehicles Built From: 22-06-2007 (Removal and Installation), REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AX3: CHECK THE DRIVER SIDE AIR CURTAIN WIRING HARNESS FOR OPEN CIRCUIT OR HIGH RESISTANCE	
	1 Ignition switch in position 0. 2 Disconnect RCM C429. 3 Disconnect Driver Side Air Curtain Module Simulator.
 TIE0036512	4 Measure the resistance between the: - RCM C429 pin 1, circuit 91S-JA50 (BK/RD), harness side and the driver side air curtain module C710 pin 2, circuit 91S-JA50 (BK/RD), harness side. - RCM C429 pin 2, circuit 15S-JA50 (GN/OG), harness side and the driver side air curtain module C710 pin 1, circuit 15S-JA50 (GN/OG), harness side. - Are the resistances less than 5 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA50 (GN/OG) or circuit 91S-JA50 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

DIAGNOSIS AND TESTING

PINPOINT TEST AY : DTC B2775: DRIVER SIDE AIR CURTAIN CIRCUIT SHORT TO GROUND

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AY1: CHECK THE DRIVER SIDE AIR CURTAIN CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. • Does the system prove out correctly? → Yes GO to AY2. → No GO to AY3.
AY2: CHECK THE DRIVER SIDE AIR CURTAIN MODULE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the driver side air curtain module. 2 Select DMM specific on the Ford approved diagnostic tool. 3 Connect the test and deployment lead to the Ford approved diagnostic tool.
 E39389	4 Measure the resistance between each of the terminals and the side air curtain module casing. • Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new driver side air curtain module. REFER to: (501-20 Supplemental Restraint System) Side Air Curtain Module - Vehicles Built From: 22-06-2007 (Removal and Installation), REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
AY3: CHECK THE DRIVER SIDE AIR CURTAIN WIRING HARNESS FOR A SHORT TO GROUND	
	1 Ignition switch in position 0.

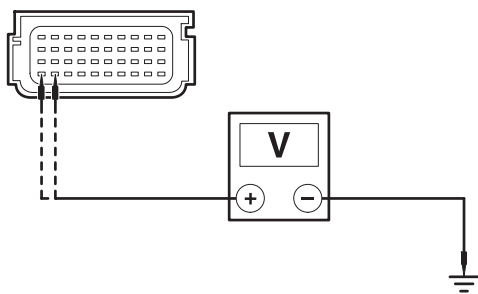
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0020907	2 Disconnect RCM C429.
	3 Disconnect Driver Side Air Curtain Module Simulator.
	4 Measure the resistance between the: • RCM C429 pin 1, circuit 91S- JA50 (BK/RD), harness side and ground. • RCM C429 pin 2, circuit 15S-JA50 (GN/OG), harness side and ground. • Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA50 (GN/OG) or circuit 91S-JA50 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST AZ : DTC B2776: DRIVER SIDE AIR CURTAIN CIRCUIT SHORT TO BATTERY

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
AZ1: CHECK THE DRIVER SIDE AIR CURTAIN WIRING HARNESS FOR A SHORT TO BATTERY OR IGNITION	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect Driver Side Air Curtain Module Simulator.
	3 Disconnect RCM C429.
	4 Ignition switch in position II.

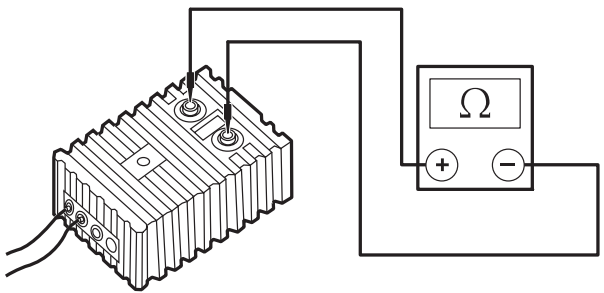
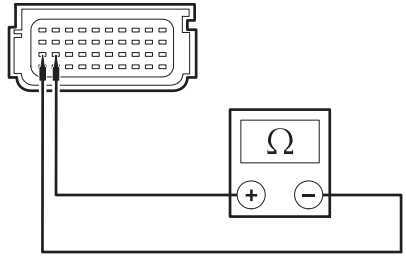
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0020904	5 Measure the voltage between the: - RCM C429 pin 1, circuit 91S- JA50 (BK/RD), harness side and ground. - RCM C429 pin 2, circuit 15S-JA50 (GN/OG), harness side and ground. Is any voltage present? → Yes REPAIR circuit 15S-JA50 (GN/OG) or circuit 91S-JA50 (BK/RD). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No CONNECT the driver side air curtain module simulator and the RCM C429. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST BA : DTC B2777: PASSENGER SIDE AIR CURTAIN CIRCUIT LOW RESISTANCE

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
BA1: CHECK THE PASSENGER SIDE AIR CURTAIN MODULE CIRCUIT RESISTANCE	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. Does the system prove out correctly? → Yes GO to BA2. → No GO to BA3.
BA2: CHECK THE PASSENGER SIDE AIR CURTAIN MODULE SQUIB RESISTANCE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the passenger side air curtain module. 2 Select DMM specific on the Ford approved diagnostic tool. 3 Connect the test and deployment lead to the Ford approved diagnostic tool.

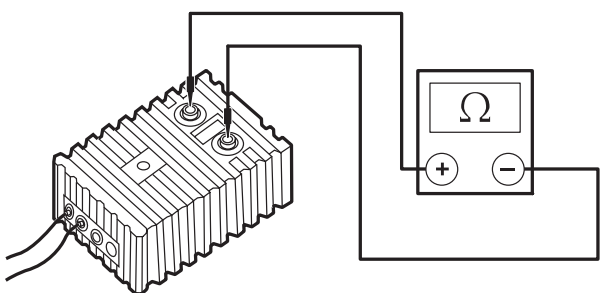
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE39388	4 Measure the resistance of the passenger side air curtain module squib. Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger side air curtain module. REFER to: (501-20 Supplemental Restraint System) Side Air Curtain Module - Vehicles Built From: 22-06-2007 (Removal and Installation), REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
BA3: CHECK THE PASSENGER SIDE AIR CURTAIN WIRING HARNESS FOR LOW RESISTANCE	
	1 Ignition switch in position 0. 2 Disconnect Passenger Side Air Curtain Module Simulator. 3 Disconnect RCM C429.
 TIE0036513	4 Measure the resistance between the RCM C429 pin 11, circuit 91S-JA51 (BK/BU), harness side and the RCM C429 pin 12, circuit 15S-JA51 (GN/BU), harness side. Is the resistance greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA51 (GN/BU) and circuit 91S-JA51 (BK/BU). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

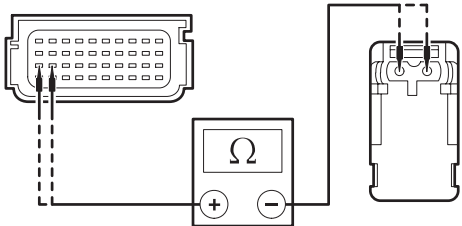
PINPOINT TEST BB : DTC B2778: PASSENGER SIDE AIR CURTAIN CIRCUIT OPEN CIRCUIT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
BB1: CHECK THE PASSENGER SIDE AIR CURTAIN CIRCUIT RESISTANCE	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II.

DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	3 Carry out the self-test with the simulators installed. - Does the system prove out correctly? → Yes GO to BB2. → No GO to BB3.
BB2: CHECK THE PASSENGER SIDE AIR CURTAIN MODULE SQUIB RESISTANCE	
 WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the passenger side air curtain module. 2 Select DMM specific on the Ford approved diagnostic tool. 3 Connect the test and deployment lead to the Ford approved diagnostic tool.
 TIE39388	4 Measure the resistance of the passenger side air curtain module squib. - Is the resistance between 2 and 3 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger side air curtain module. REFER to: (501-20 Supplemental Restraint System) Side Air Curtain Module - Vehicles Built From: 22-06-2007 (Removal and Installation), REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
BB3: CHECK THE PASSENGER SIDE AIR CURTAIN WIRING HARNESS FOR OPEN CIRCUIT OR HIGH RESISTANCE	
	1 Ignition switch in position 0. 2 Disconnect RCM C429. 3 Disconnect Passenger Side Air Curtain Module Simulator.

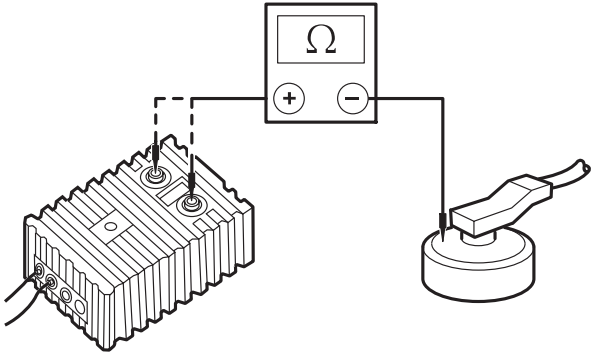
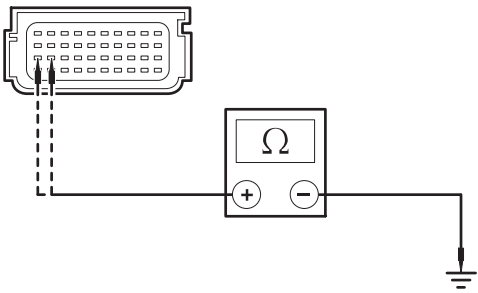
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0036514	4 Measure the resistance between the: - RCM C429 pin 11, circuit 91S-JA51 (BK/BU), harness side and the passenger side air curtain module C711 pin 2, circuit 91S-JA51 (BK/BU), harness side. - RCM C429 pin 12, circuit 15S-JA51 (GN/BU), harness side and the passenger side air curtain module C711 pin 1, circuit 15S-JA51 (GN/BU), harness side. • Are the resistances less than 5 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA51 (GN/BU) or circuit 91S-JA51 (BK/BU). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST BC : DTC B2779: PASSENGER SIDE AIR CURTAIN CIRCUIT SHORT TO GROUND

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
BC1: CHECK THE PASSENGER SIDE AIR CURTAIN CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Ignition switch in position II. 3 Carry out the self-test with the simulators installed. • Does the system prove out correctly? → Yes GO to BC2. → No GO to BC3.
BC2: CHECK THE PASSENGER SIDE AIR CURTAIN MODULE	
⚠ WARNING: Do not proceed with this test unless using the Ford approved diagnostic tool. Failure to follow this instruction may result in personal injury.	
	1 Connect the test and deployment lead to the passenger side air curtain module. 2 Select DMM specific on the Ford approved diagnostic tool.

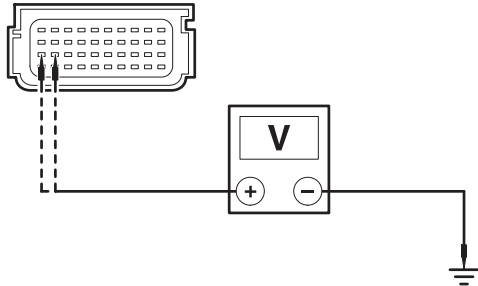
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
	3 Connect the test and deployment lead to the Ford approved diagnostic tool.
 E39389	4 Measure the resistance between each of the terminals and the passenger side air curtain module casing. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No INSTALL a new passenger side air curtain module. REFER to: (501-20 Supplemental Restraint System) Side Air Curtain Module - Vehicles Built From: 22-06-2007 (Removal and Installation), REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
BC3: CHECK THE PASSENGER SIDE AIR CURTAIN WIRING HARNESS FOR A SHORT TO GROUND	
	1 Ignition switch in position 0. 2 Disconnect RCM C429. 3 Disconnect Passenger Side Air Curtain Module Simulator.
 TIE0036515	4 Measure the resistance between the: - RCM C429 pin 11, circuit 91S- JA51 (BK/BU), harness side and ground. - RCM C429 pin 12, circuit 15S-JA51 (GN/BU), harness side and ground. - Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 15S-JA51 (GN/BU) or circuit 91S-JA51 (BK/BU). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST BD : DTC B2780: PASSENGER SIDE AIR CURTAIN CIRCUIT SHORT TO BATTERY

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
BD1: CHECK THE PASSENGER SIDE AIR CURTAIN WIRING HARNESS FOR A SHORT TO BATTERY OR IGNITION	
 WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing	

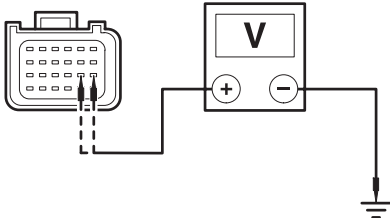
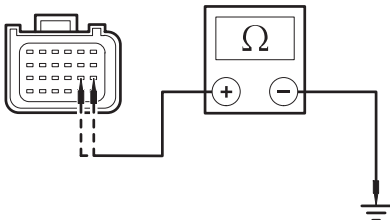
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect Passenger Side Air Curtain Module Simulator.
	3 Disconnect RCM C429.
	4 Ignition switch in position II.
 TIE0036516	5 Measure the voltage between the: - RCM C429 pin 11, circuit 91S- JA51 (BK/BU), harness side and ground. - RCM C429 pin 12, circuit 15S-JA51 (GN/BU), harness side and ground. • Is any voltage present? → Yes REPAIR circuit 15S-JA51 (GN/BU) or circuit 91S-JA51 (BK/BU). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No CONNECT the passenger side air curtain module simulator and the RCM C429. REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST BE : DTC B2855: FRONT CRASH SENSOR CIRCUIT SHORT TO BATTERY OR GROUND

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
BE1: CHECK THE CRASH SENSOR FOR A SHORT TO BATTERY	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect Crash Sensor C420.
	3 Disconnect RCM C426.
	4 Ignition switch in position II.

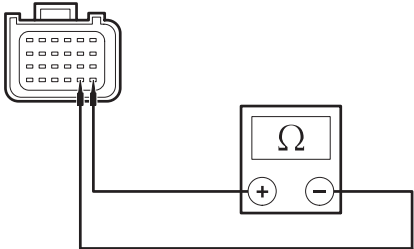
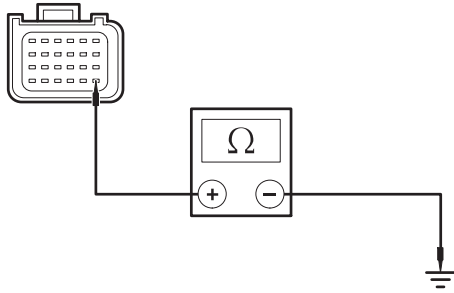
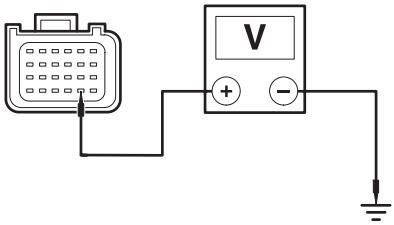
DIAGNOSIS AND TESTING

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0020921	5 Measure the voltage between the: - RCM C426 pin 13, circuit 9-JA49 (BN), harness side and ground. - RCM C426 pin 14, circuit 8-JA49 (WH), harness side and ground. Is any voltage present? → Yes REPAIR circuit 8-JA49 (WH) or circuit 9-JA49 (BN) and circuit 15-JA10 (GN/OG). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No GO to BE2.
BE2: CHECK THE CRASH SENSOR FOR A SHORT TO GROUND	
 TIE0020920	1 Ignition switch in position 0. 2 Measure the resistance between the: - RCM C426 pin 13, circuit 9-JA49 (BN), harness side and ground. - RCM C426 pin 14, circuit 8-JA49 (WH), harness side and ground. Are the resistances greater than 10,000 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 8-JA49 (WH) or circuit 9-JA49 (BN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST BF : DTC U0073: RESTRAINTS CONTROL MODULE COMMUNICATION BUS OFF

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
BF1: CHECK THE RCM COMMUNICATION BUS CIRCUIT FOR A SHORT CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Disconnect RCM C426.

DIAGNOSIS AND TESTING

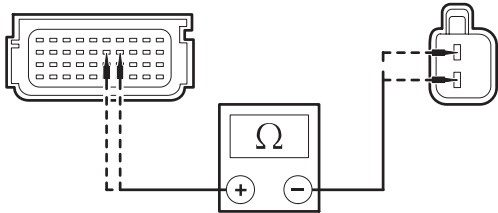
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
 TIE0037880	3 Measure the resistance between the RCM C426 pin 19, circuit 4-EC10N (GY), harness side and the RCM C426 pin 20, circuit 5-EC10N (BU), harness side. Is the resistance greater than 10,000 ohms? → Yes GO to BF2. → No REPAIR circuits 4-EC10N (GY) and 5-EC10N (BU). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
BF2: CHECK THE RCM COMMUNICATION BUS CIRCUIT FOR A SHORT TO GROUND	
 TIE0020987	1 Measure the resistance between the RCM C426 pin 19, circuit 4-EC10N (GY), harness side and ground. Is the resistance greater than 10,000 ohms? → Yes GO to BF3. → No REPAIR circuit 4-EC10N (GY). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.
BF3: CHECK THE RCM COMMUNICATION BUS CIRCUIT FOR A SHORT CIRCUIT TO BATTERY OR IGNITION	
 TIE0037881	1 Ignition switch in position II. 2 Measure the voltage between the RCM C426 pin 20, circuit 5-EC10N (BU), harness side and ground. Is any voltage present? → Yes REPAIR circuit 5-EC10N (BU). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

DIAGNOSIS AND TESTING

PINPOINT TEST BG : DTC U1900: CAN COMMUNICATION BUS FAULT

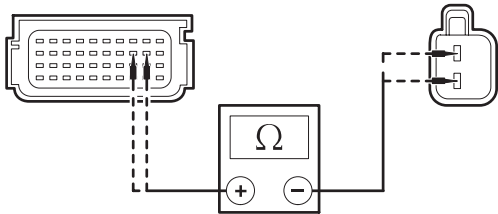
TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
BG1: CHECK THE CAN BUS CIRCUIT	
	1 Select an alternative system to address. - Is the Ford approved diagnostic tool able to communicate with the instrument cluster? → Yes REPAIR circuit 4-EC10N (GY) or circuit 5-EC10N (BU). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No CHECK the CAN bus. CLEAR the DTCs. REACTIVATE the system.

PINPOINT TEST BH : DTC U2017: DRIVER SIDE IMPACT SENSOR COMMUNICATIONS FAULT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
BH1: CHECK THE DRIVER SIDE IMPACT SENSOR CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS. 2 Disconnect Driver Side Impact Sensor C427. 3 Disconnect RCM C429.
 TIE0036518	4 Measure the resistance between the: - RCM C429 pin 26, circuit 8-JA39 (WH), harness side and the driver side impact sensor C427 pin 1, circuit 8-JA39 (WH), harness side. - RCM C429 pin 27, circuit 9-JA39 (BN), harness side and the driver side impact sensor C427 pin 2, circuit 9-JA39 (BN), harness side. Are the resistances less than 5 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 8-JA39 (WH) or circuit 9-JA39 (BN). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

DIAGNOSIS AND TESTING

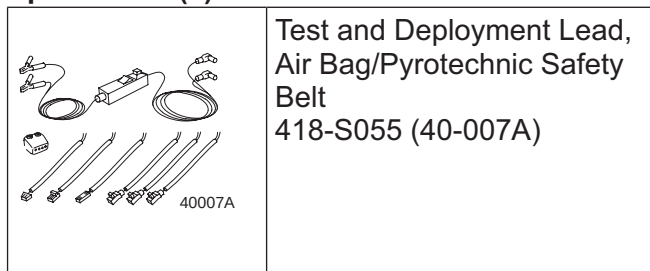
PINPOINT TEST BI : DTC U2018: PASSENGER SIDE IMPACT SENSOR COMMUNICATIONS FAULT

TEST CONDITIONS	DETAILS/RESULTS/ACTIONS
BI1: CHECK THE PASSENGER SIDE IMPACT SENSOR CIRCUIT	
⚠ WARNING: To avoid accidental deployment, the RCM backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the SRS, or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.	
	1 Deactivate the SRS.
	2 Disconnect Passenger Side Impact Sensor C428.
	3 Disconnect RCM C429.
 TIE0036519	4 Measure the resistance between the: - RCM C429 pin 28, circuit 9-JA40 (BN/WH), harness side and the passenger side impact sensor C428 pin 2, circuit 9-JA40 (BN/WH), harness side. - RCM C429 pin 29, circuit 8-JA40 (WH/VT), harness side and the passenger side impact sensor C428 pin 1, circuit 8-JA40 (WH/VT), harness side. • Are the resistances less than 5 ohms? → Yes REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system. → No REPAIR circuit 8-JA40 (WH/VT) or circuit 9-JA40 (BN/WH). REPEAT the self-test, CLEAR the DTCs. REACTIVATE the system.

GENERAL PROCEDURES

Air Bag and Safety Belt Pretensioner Disposal

Special Tool(s)



Test and Deployment Lead,
Air Bag/Pyrotechnic Safety
Belt
418-S055 (40-007A)

General Equipment

12 volt battery

Wooden blocks

All vehicles

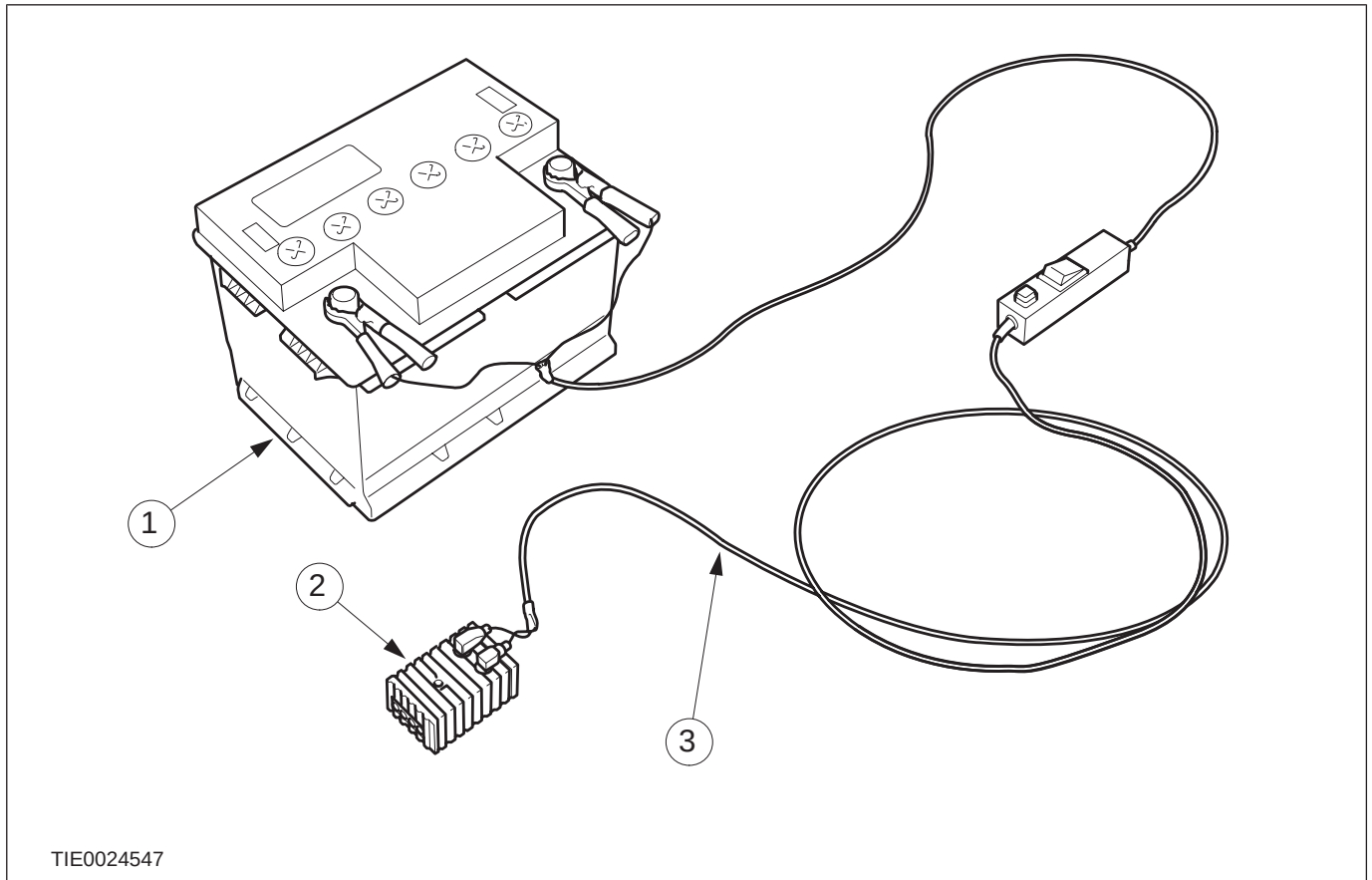
WARNINGS:

- ▲ To minimize the possibility of injury in the event of premature deployment, always carry a live air bag module with the bag and trim cover pointed away from the body. Failure to follow this instruction may result in personal injury.
- ▲ To minimize the possibility of premature deployment, live air bag modules must only be placed on benches which have been ground bonded and with the trim cover facing up. Failure to follow these instructions may result in personal injury.
- ▲ Air bag modules and safety belt pretensioners must be deployed in well ventilated areas. Failure to follow this instruction may result in personal injury.
- ▲ Before deploying the air bag module or safety belt buckle pretensioner, make sure that all personnel in the vicinity are aware that a loud noise (bang) is about to occur. Do not let anybody approach closer than six meters. Failure to follow this instruction may result in personal injury.
- ▲ The air bag module or the safety belt pretensioner should not be handled immediately following deployment as the air bag module or safety belt pretensioner will be hot. Failure to follow this instruction may result in personal injury.
- ▲ After deployment, the inflator(s) become inert, direct contact with the skin or eyes of any free pyrotechnic residues should be avoided. Failure to follow this instruction may result in personal injury.
- ▲ Always wear gloves and safety glasses when handling deployed air bag modules and safety belt pretensioners. Failure to follow this instruction may result in personal injury.
- ▲ If the air bag module or safety belt pretensioner pyrotechnic residue should contact the eyes immediately, wash the eyes thoroughly with clean water and seek medical assistance. Failure to follow this instruction may result in personal injury.
- ▲ If a large amount of air bag module or safety belt pretensioner pyrotechnic residue is inhaled, seek medical assistance. Failure to follow this instruction may result in personal injury.

1. Remove the air bag module(s) to be deployed. For additional information, refer to the relevant procedure(s) in this section.
2. Connect the special tools as shown.

1. 12 volt battery.
2. Adapter box (AC) (Part of Test and Deployment lead, Air Bag/Pyrotechnic Safety Belt).
3. Deployment lead (Part of Test and Deployment lead, Air Bag/Pyrotechnic Safety Belt).

GENERAL PROCEDURES

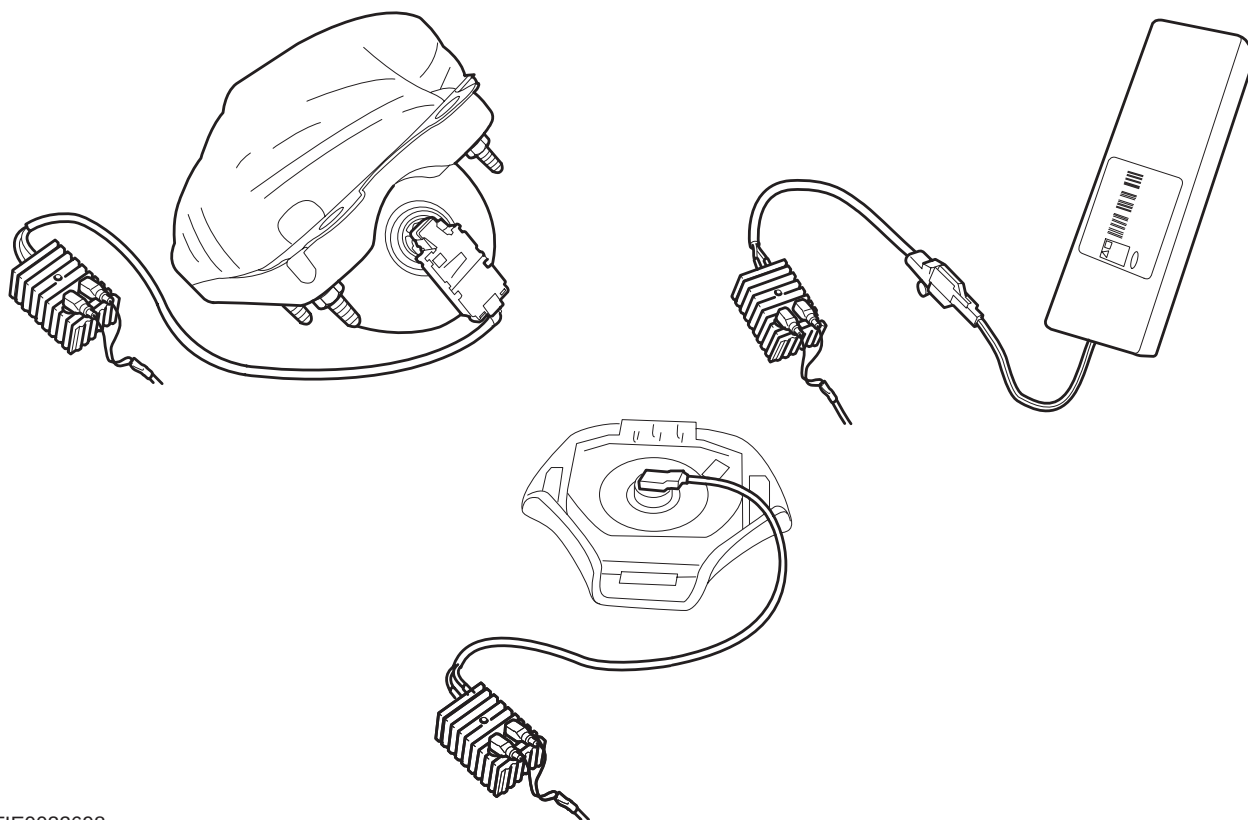


Single stage air bag modules

3. Connect the test lead to the air bag module and the adapter.

For additional information, refer to **Specifications** in this section.

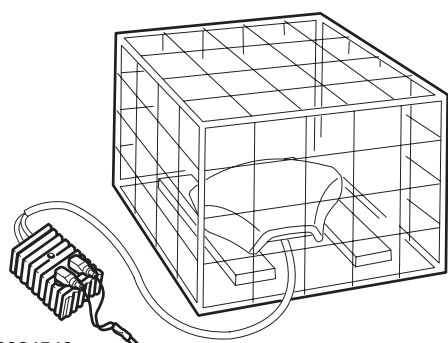
GENERAL PROCEDURES



TIE0032698

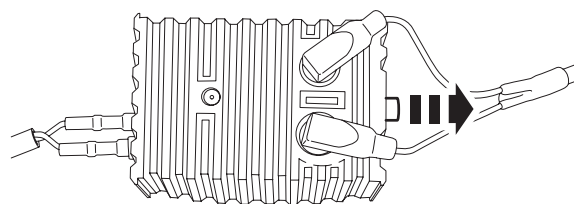
4. **⚠ CAUTION:** To protect the test lead electrical connectors from damage during deployment, raise the air bag off the ground on two wooden blocks.

Place the air bag module inside a suitable rigid wire cage with the air bag module cover upper most (driver air bag shown).



TIE0024549

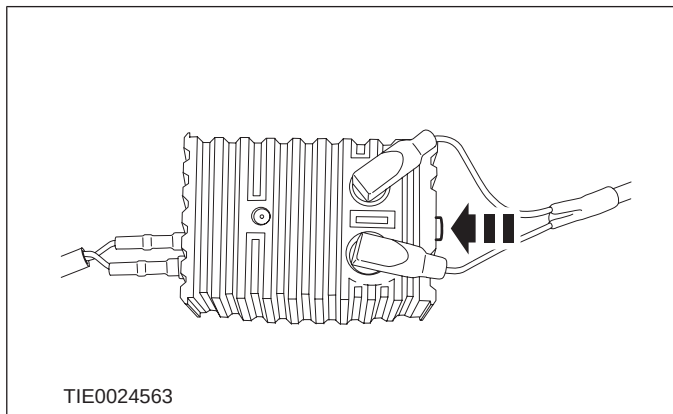
5. To deploy the driver or passenger air bag module, release the adapter box AC button.



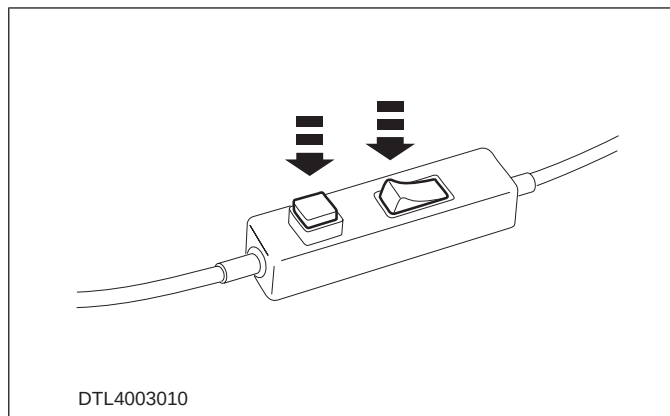
TIE0024562

GENERAL PROCEDURES

6. To deploy the side air bag module, depress the adapter box AC button.



7. Move as far away as possible from the air bag module and depress both switches to deploy the air bag module.

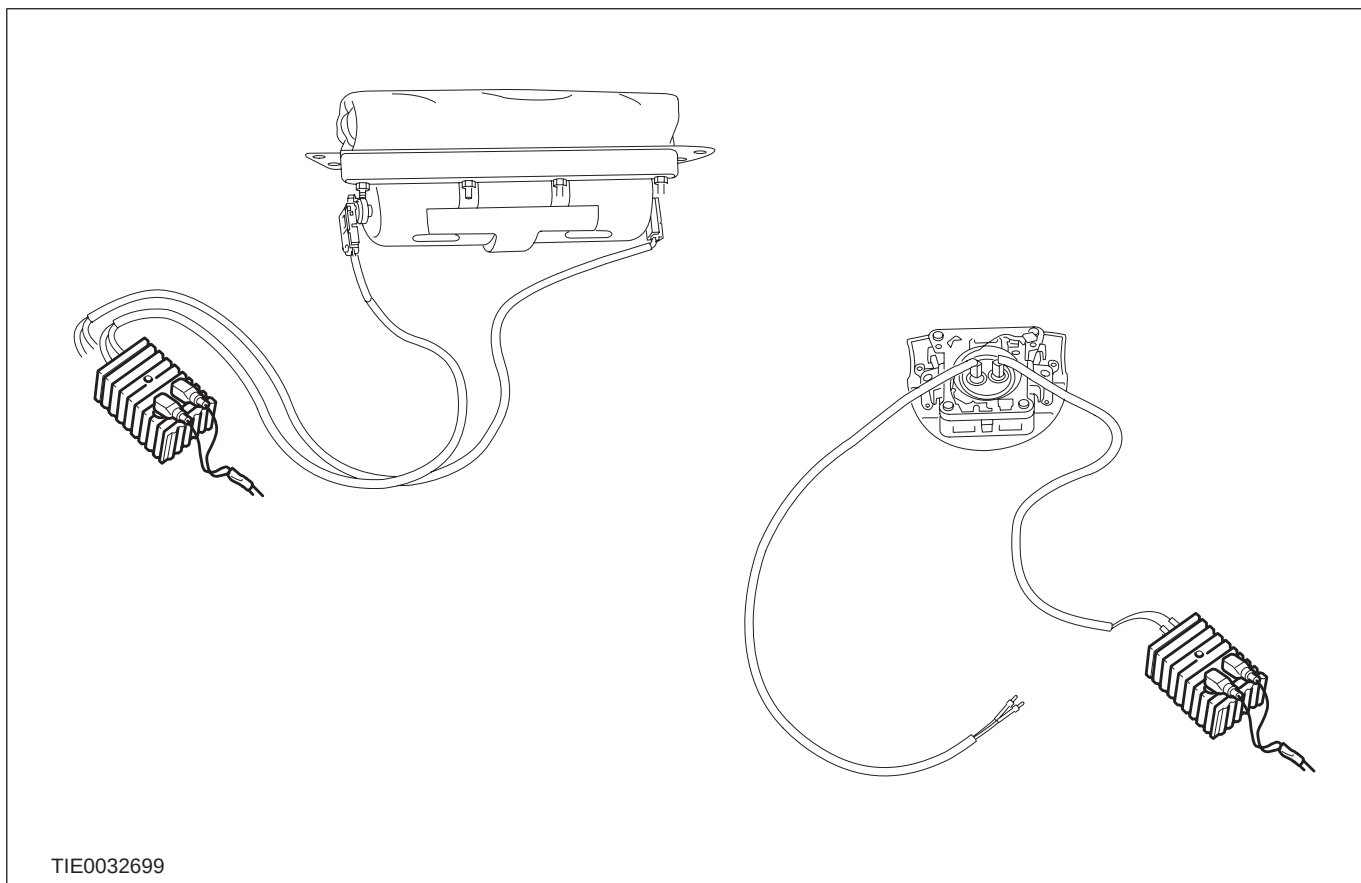


Two stage air bag modules

8. **⚠ WARNING: DO not connect both test leads to the adapter at this stage. Each inflator must be deployed separately. Failure to follow this instruction may result in personal injury.**

Connect the test leads to the air bag module and one of the test leads to the adapter.

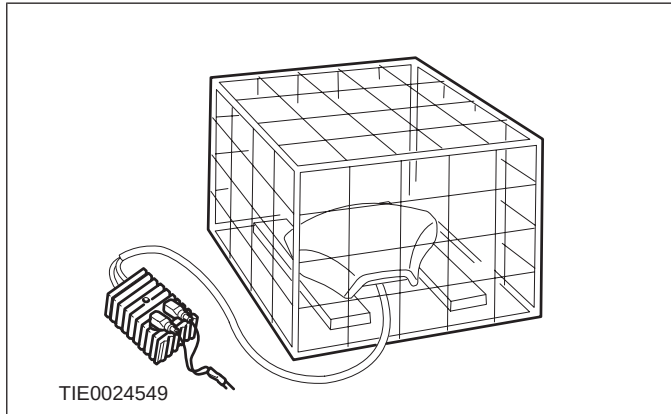
For additional information, refer to **Specifications** in this section.



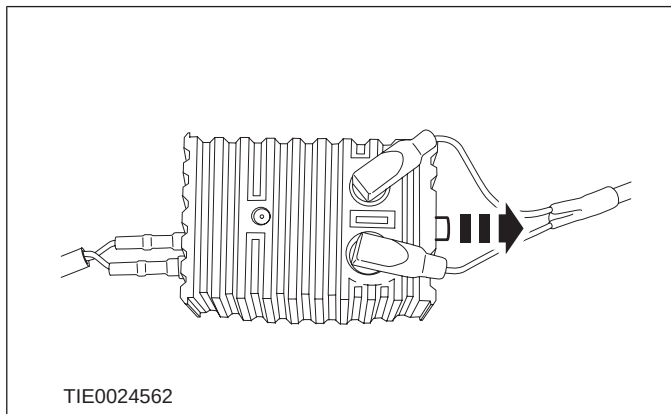
GENERAL PROCEDURES

9. **CAUTION:** To protect the test lead electrical connectors from damage during deployment, raise the air bag off the ground on two wooden blocks.

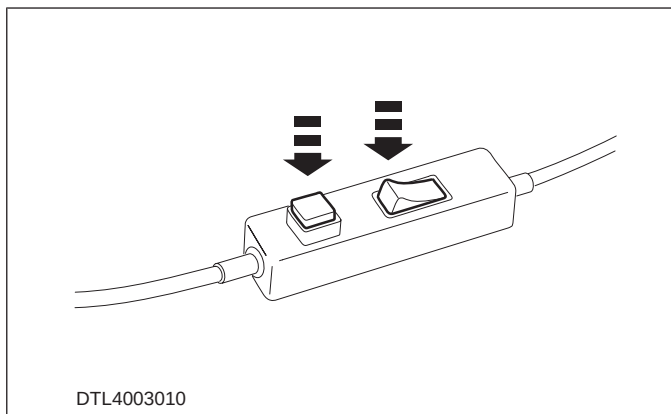
Place the air bag module inside a suitable rigid wire cage with the air bag module cover upper most (driver air bag shown).



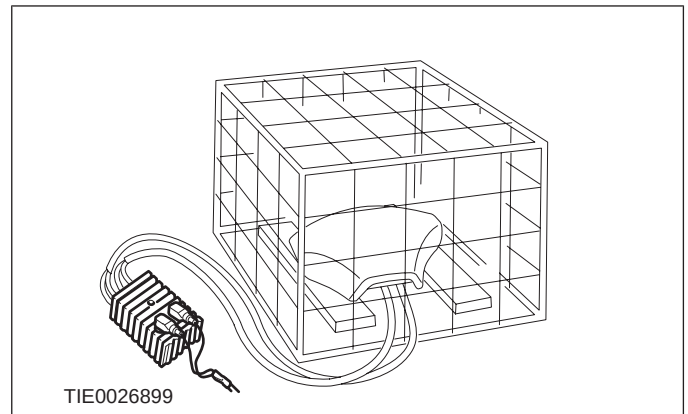
10. To deploy the driver or passenger air bag module first inflator, release the adapter box AC button.



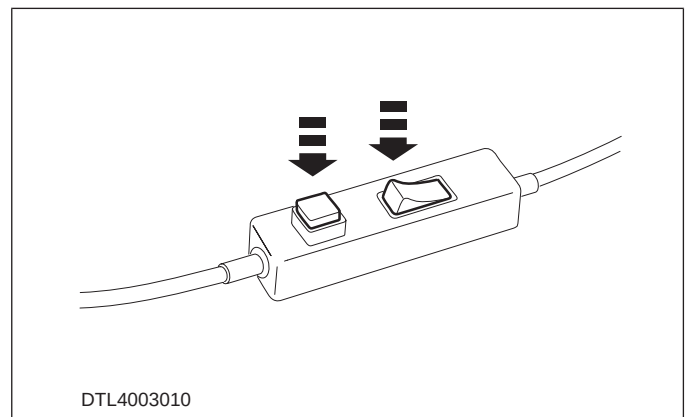
11. Move as far away as possible from the air bag module and depress both switches to deploy the air bag module.



12. To deploy the driver or passenger air bag module second inflator, connect the second test lead to the adapter.



13. Move as far away as possible from the air bag module and depress both switches to deploy the air bag module.



Vehicles with safety belt buckle pretensioners

14. **NOTE:** Certain vehicles require the removal of the front seat to access the safety belt buckle pretensioner electrical connector.

Remove the front seat (if necessary). For additional information, refer to Section **501-10 [Seating]**.

15. Detach the safety belt buckle pretensioner electrical connector from the front seat.

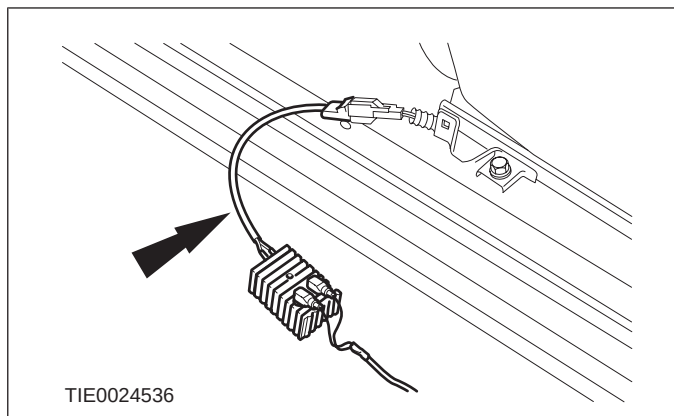
16. Install the front seat (if necessary). For additional information, refer to Section **501-10 [Seating]**.

17. **CAUTION:** Make sure the front seat mounting bolts are installed.

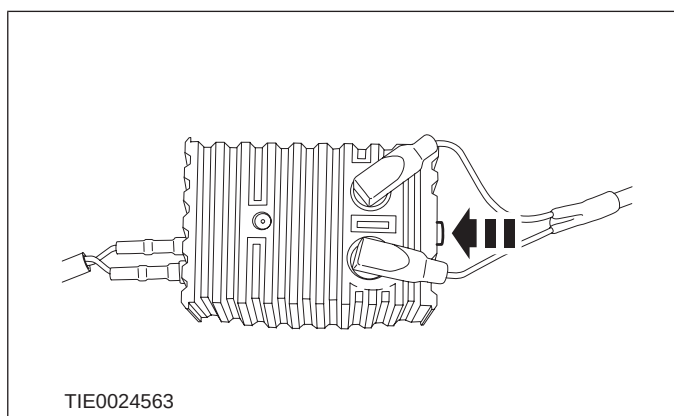
GENERAL PROCEDURES

Connect the test lead to the safety belt buckle pretensioner electrical connector.

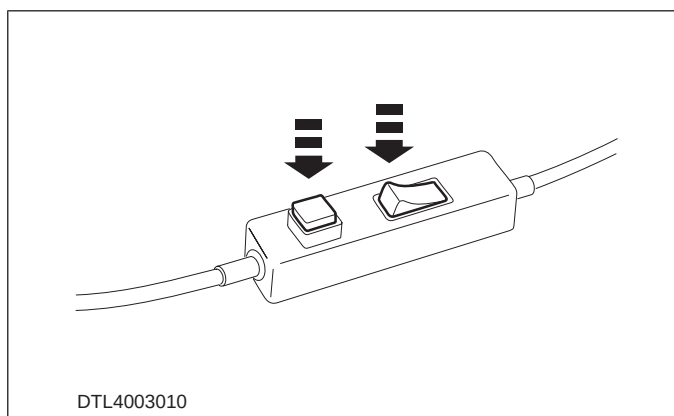
For additional information, refer to **Specifications** in this section.



18. To deploy the safety belt buckle pretensioner, depress the adapter box AC button.



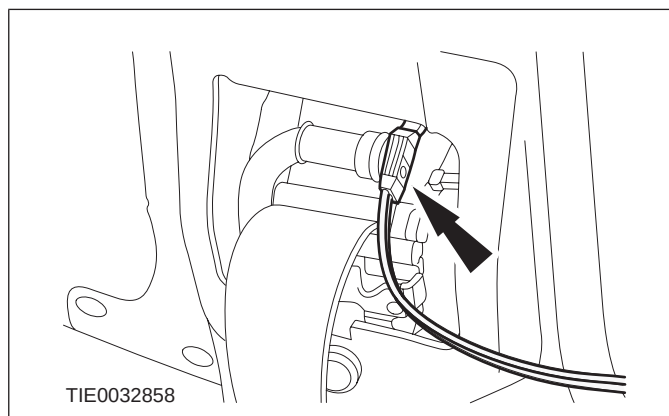
19. Move as far away as possible from the vehicle and depress both switches to deploy the safety belt buckle pretensioner.



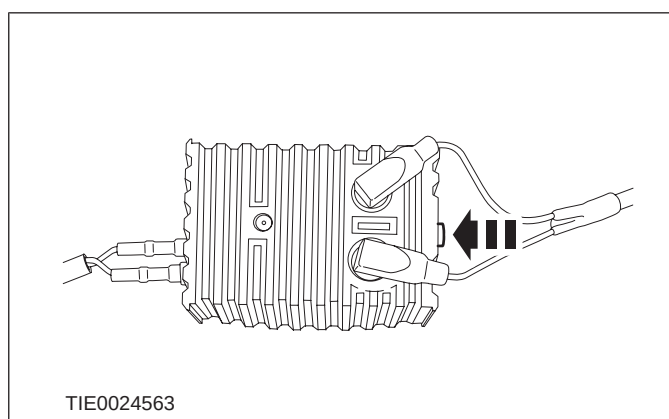
Vehicles with safety belt retractor pretensioners

20. Connect the test lead to the safety belt retractor pretensioner electrical connector.

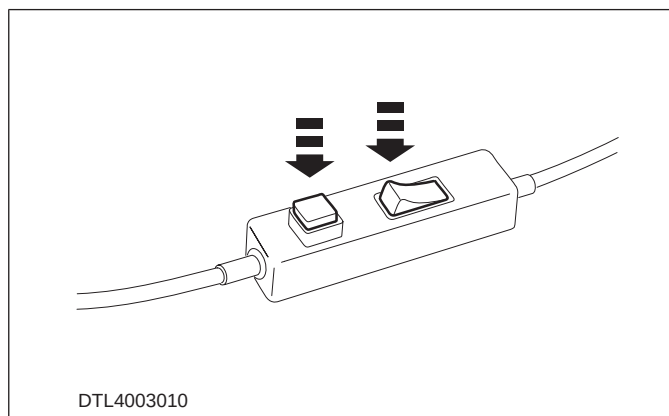
For additional information, refer to **Specifications** in this section.



21. To deploy the safety belt retractor pretensioner, depress the adapter box AC button.



22. Move as far away as possible from the vehicle and depress both switches to deploy the safety belt retractor pretensioner.



GENERAL PROCEDURES

All vehicles

23. Deployed air bag module(s) and safety belt pretensioners should be sealed in suitable bags and then disposed of in accordance with local contaminated waste regulations.

24. WARNINGS:

 **Under no circumstances is an unserviceable air bag module or safety belt buckle pretensioner to be returned through the local mailing system. Failure to follow this instruction may result in personal injury.**

 **Never probe the electrical connectors of air bag modules or any other supplemental restraint system electrical component. Failure to follow this instruction may result in personal injury.**

NOTE: All unserviceable air bag modules have been placed on the Mandatory Return List. All discolored or damaged air bag modules should be treated the same as any unserviceable live air bag module being returned.

If an air bag module or safety belt buckle pretensioner fails to deploy, seal the unserviceable air bag module or safety belt buckle pretensioner in suitable packaging and return to the Exchange Plan Center, as appointed through the local National Sales Company.

GENERAL PROCEDURES**Deployed Air Bag Disposal**

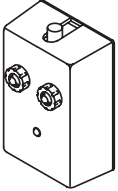
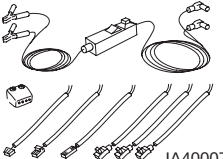
WARNING: After deployment, the air bag module surface may contain deposits of sodium hydroxide, a product of the gas generate combustion, that is irritating to the skin. Use protective gloves when handling any deployed air bag module. Failure to follow this instruction may result in personal injury.

1. Remove the deployed air bag module(s). For additional information, refer to the relevant procedure in this section.
2. Seal the deployed air bag module(s) in the packaging from the new air bag module(s) or a suitable polythene bag, and then dispose of in accordance with local contaminated waste regulations.

GENERAL PROCEDURES

Scrapped Vehicle Air Bag and Safety Belt Pretensioner Disposal - In-Vehicle Disposal

Special Tool(s)

 418143	418-143 Adapter Box (AC)
 IA40007	418-S055C Test and Deployment Lead, Air Bag/Pyrotechnic Safety Belt

Disposal

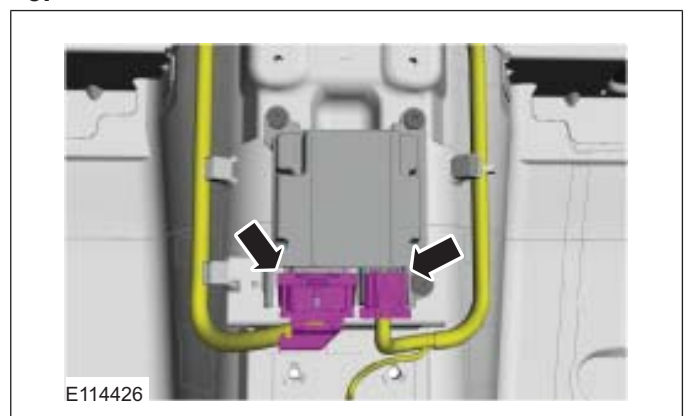
WARNINGS:

- ⚠ To avoid accidental deployment, the restraints control module (RCM) backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the supplemental restraint system (SRS), or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.
- ⚠ To minimize the possibility of premature deployment, do not use radio key code savers when working on the SRS. Failure to follow this instruction may result in personal injury.
- ⚠ Before deploying the air bag module or safety belt pretensioner pyrotechnic make sure that all personnel in the vicinity are aware that a loud noise (bang) is about to occur. Do not let anybody approach closer than 6 meters. Failure to follow this instruction may result in personal injury.
- ⚠ The air bag module or the safety belt pretensioner should not be handled immediately following deployment as the air bag module will be very hot. Failure to follow this instruction may result in personal injury.

- ⚠ After deployment, the inflator(s) becomes inert, direct contact to the skin or eyes of any free pyrotechnic residues should be avoided. Failure to follow this instruction may result in personal injury.
- ⚠ Always wear gloves and safety glasses when handling deployed air bag modules and safety belt pretensioners, Failure to follow this instruction may result in personal injury.
- ⚠ If the air bag module or safety belt pretensioner pyrotechnic residue should contact the eyes, wash the eyes with clean water and seek medical assistance. Failure to follow this instruction may result in personal injury.
- ⚠ If a large amount of air bag or safety belt pretensioner pyrotechnic residue is inhaled, seek medical assistance. Failure to follow this instruction may result in personal injury.

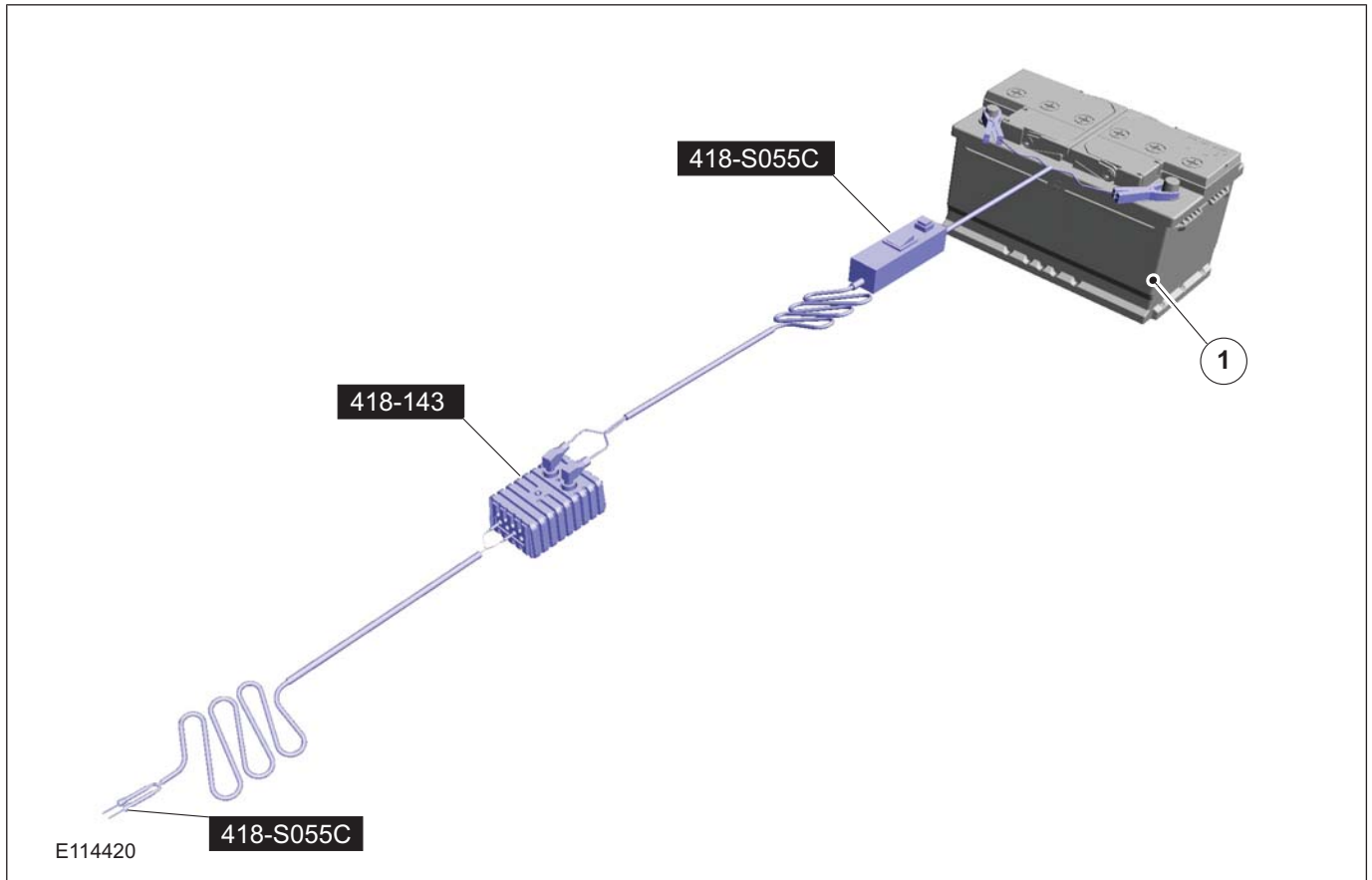
1. Refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).
2. Refer to: **Floor Console** (501-12 Instrument Panel and Console, Removal and Installation). Refer to: **Floor Console - Vehicles Built From: 03/2007, Vehicles With: Center Armrest** (501-12 Instrument Panel and Console, Removal and Installation).

3.

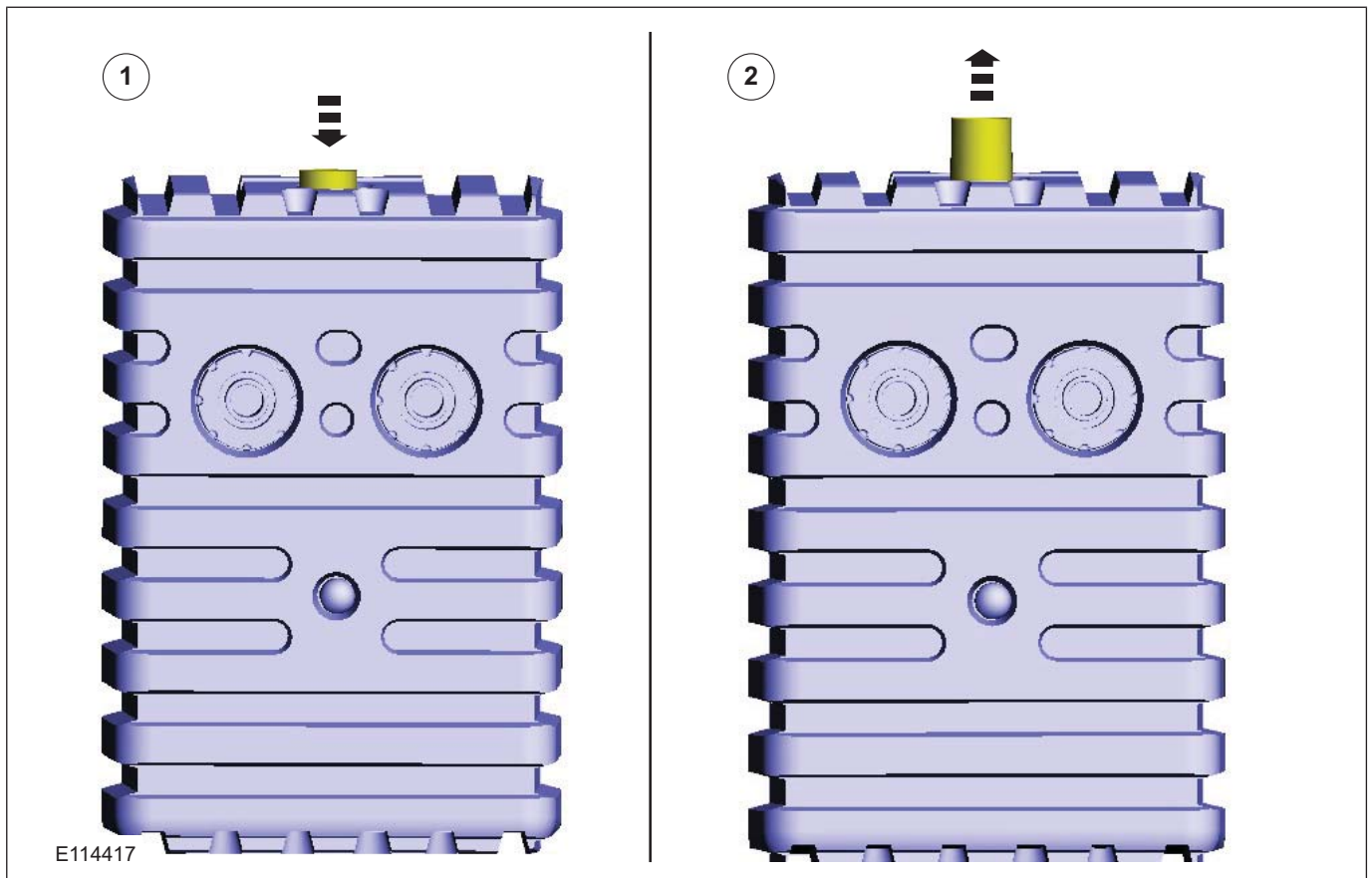


4. 1. 12 volt battery.
Special Tool(s): 418-143, 418-S055C

GENERAL PROCEDURES



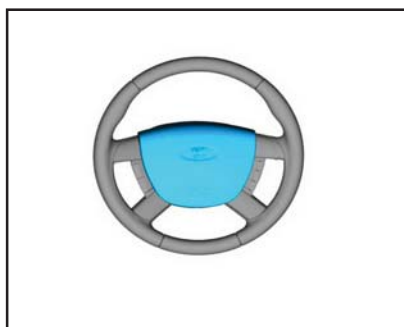
5.



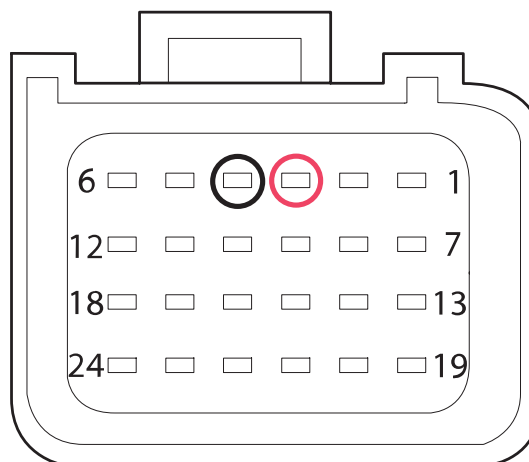
GENERAL PROCEDURES

6. 2.  **WARNING:** Make sure to be a minimum distance of 6 meters from pyrotechnic components during

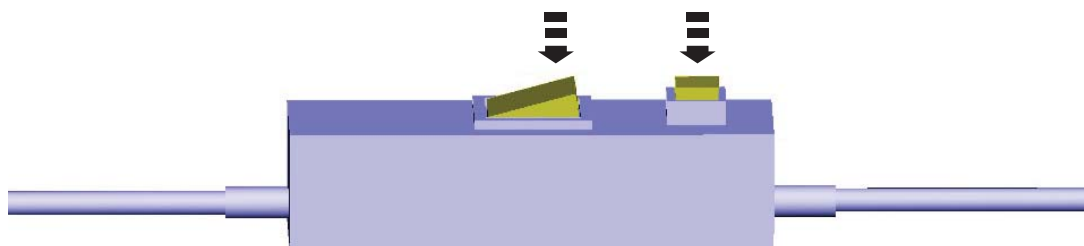
deployment. If possible stand behind a wall.



①



②



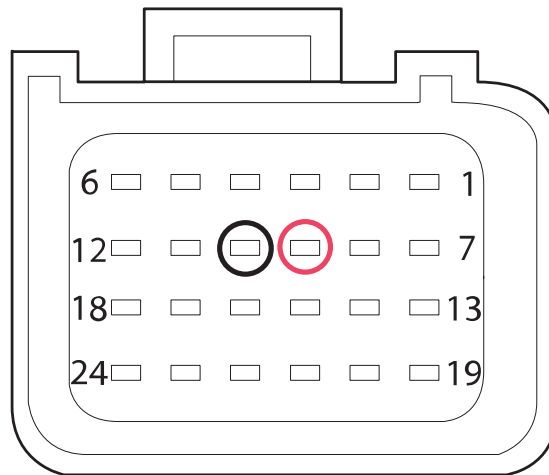
E114339

7. 2.  **WARNING:** Make sure to be a minimum distance of 6 meters from pyrotechnic components during deployment. If possible stand behind a wall.

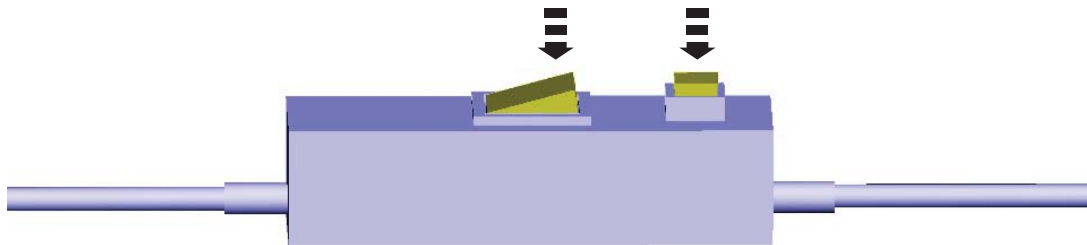
GENERAL PROCEDURES



①



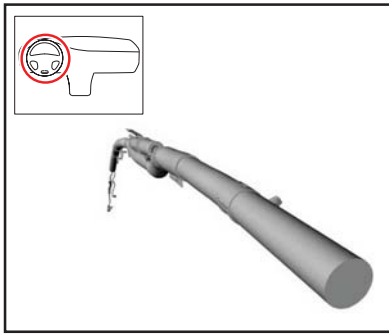
②



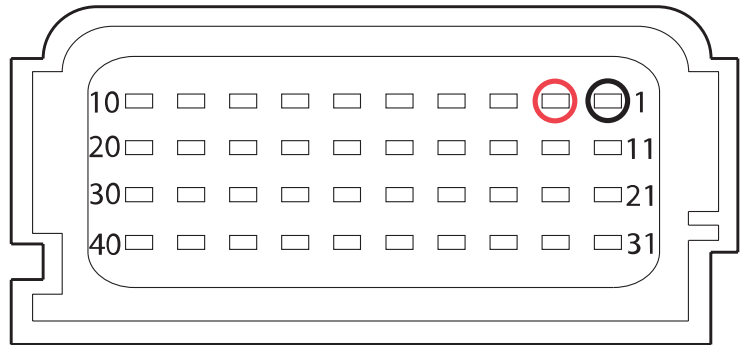
E114340

8. 2.  **WARNING:** Make sure to be a minimum distance of 6 meters from pyrotechnic components during deployment. If possible stand behind a wall.

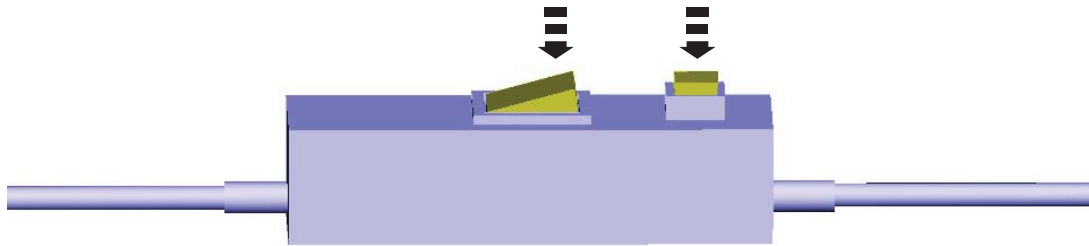
GENERAL PROCEDURES



1



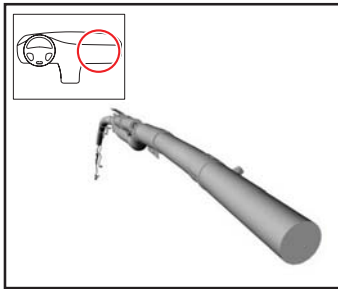
2



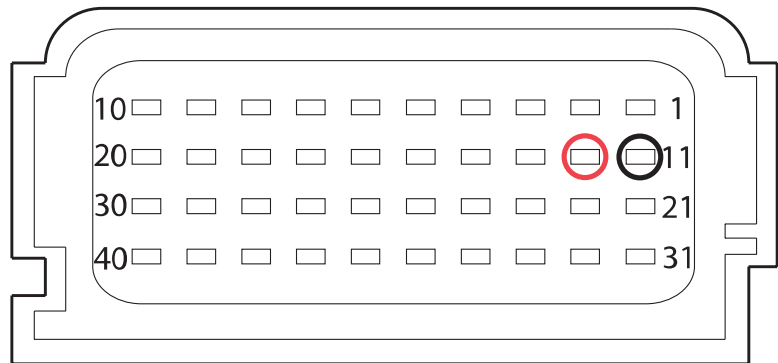
E114260

9. 2.  **WARNING:** Make sure to be a minimum distance of 6 meters from pyrotechnic components during deployment. If possible stand behind a wall.

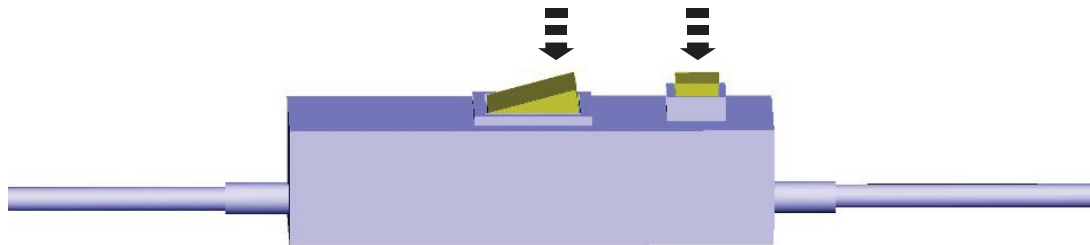
GENERAL PROCEDURES



1



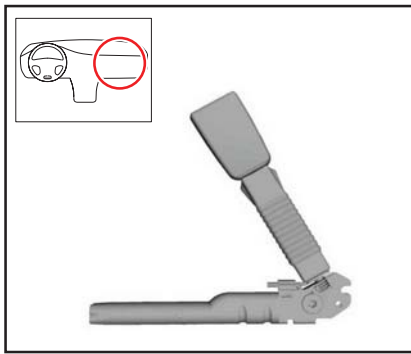
2



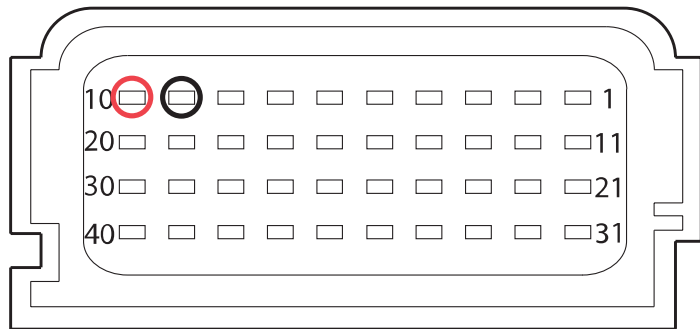
E114259

10. 2.  **WARNING:** Make sure to be a minimum distance of 6 meters from pyrotechnic components during deployment. If possible stand behind a wall.

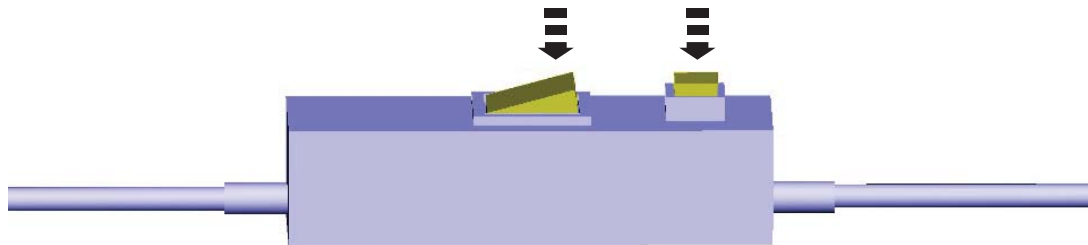
GENERAL PROCEDURES



1



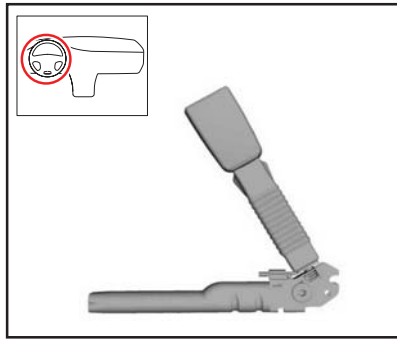
2



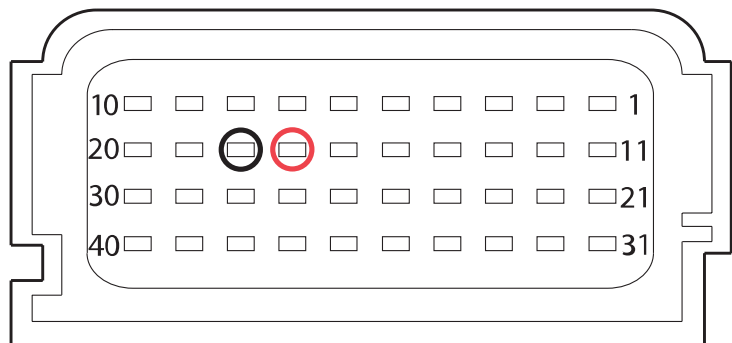
E114258

- 11.2.  **WARNING:** Make sure to be a minimum distance of 6 meters from pyrotechnic components during deployment. If possible stand behind a wall.

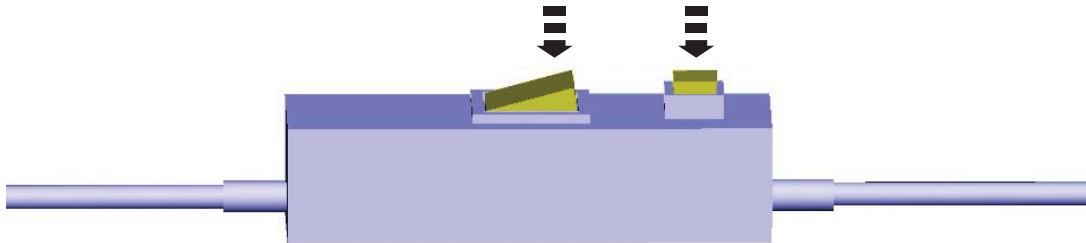
GENERAL PROCEDURES



1



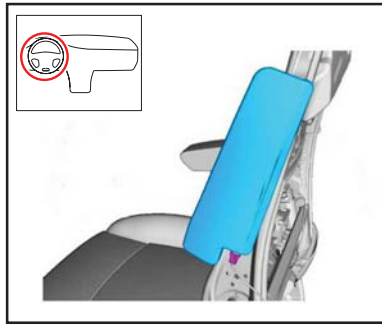
2



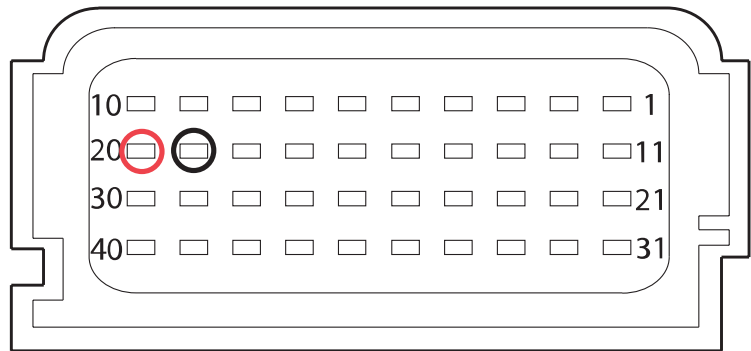
E113776

- 12.2.  **WARNING:** Make sure to be a minimum distance of 6 meters from pyrotechnic components during deployment. If possible stand behind a wall.

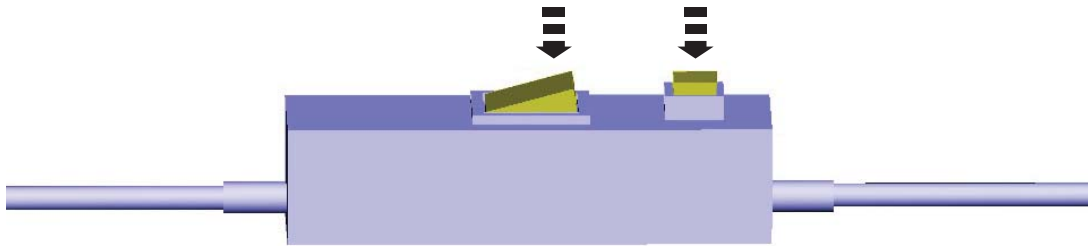
GENERAL PROCEDURES



1



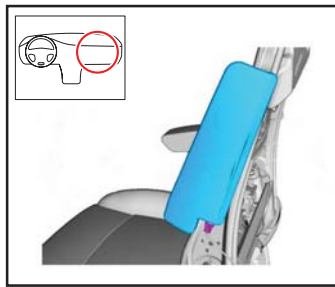
2



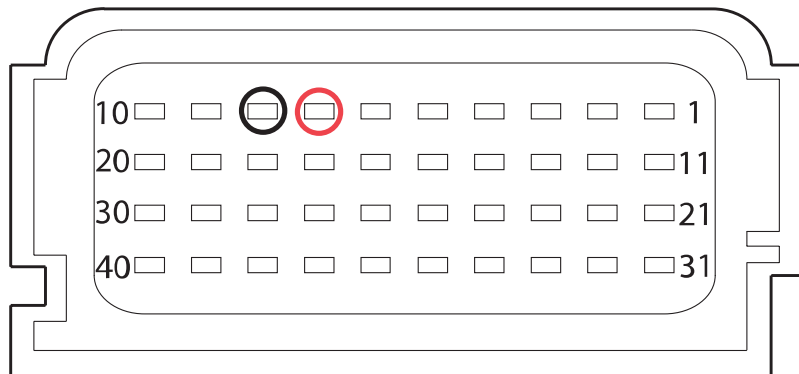
E113778

- 13.2.  **WARNING:** Make sure to be a minimum distance of 6 meters from pyrotechnic components during deployment. If possible stand behind a wall.

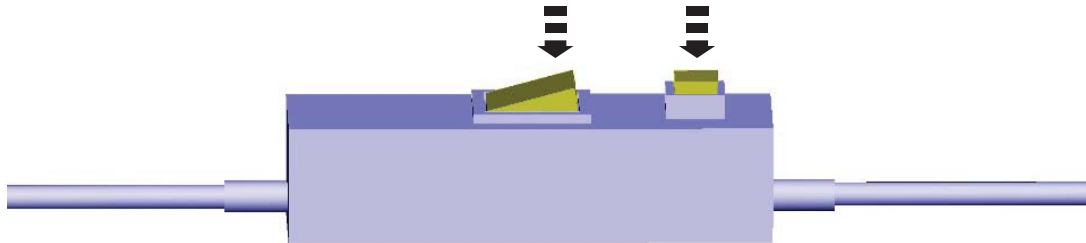
GENERAL PROCEDURES



1



2



E113777

14. Deployed air bag module(s) and safety belt pretensioners should be sealed in suitable bags and then disposed of in accordance with local contaminated waste regulations.

15. **NOTE:** All unserviceable air bag modules have been placed on the Mandatory Return List. All discolored or damaged air bag modules should be treated the same as any unserviceable live air bag module being returned.

Refer to: **Front Safety Belt Retractor - 4-Door/5-Door/Wagon** (501-20 Safety Belt System, Removal and Installation).

Refer to: **Driver Air Bag Module** (501-20 Supplemental Restraint System, Removal and Installation).

Refer to: **Passenger Air Bag Module - Vehicles Built From: 04/2006** (501-20 Supplemental Restraint System, Removal and Installation).

Refer to: **Side Air Bag Module** (501-20 Supplemental Restraint System, Removal and Installation).

Refer to: **Side Air Curtain Module - Vehicles Built From: 22-06-2007** (501-20 Supplemental Restraint System, Removal and Installation).

16. **WARNING:** Under no circumstances is an unserviceable air bag module or

safety belt pretensioner to be returned through the local mailing system. Failure to follow this instruction may result in personal injury.

If an air bag module or safety belt pretensioner fails to deploy, seal the unserviceable air bag module or safety belt pretensioner in suitable packaging and return to the Exchange Plan Center, as appointed through the local National Sales Company

GENERAL PROCEDURES

Scrapped Vehicle Undeployed Air Bag Disposal

Special Tool(s)



General Equipment

12 volt battery

All vehicles

WARNINGS:

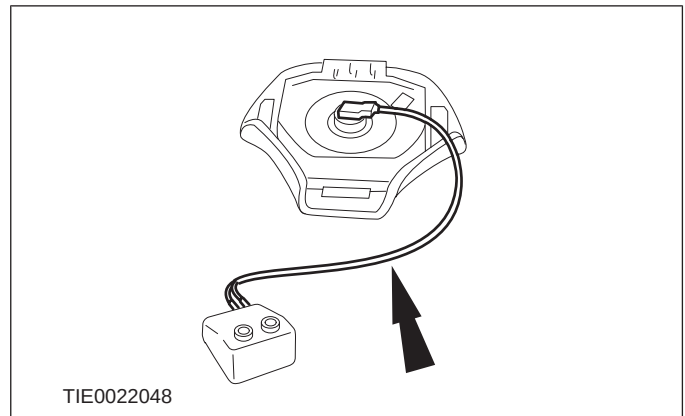
▲ To minimize the possibility of injury in the event of premature deployment, always carry a live air bag module with the bag and trim cover pointed away from the body. Failure to follow this instruction may result in personal injury.

▲ To minimize the possibility of premature deployment, live air bag modules must only be placed on work benches which have been ground bonded. Failure to follow this instruction may result in personal injury.

1. Disconnect the battery ground cable. For
2. Remove the air bag module(s) to be deployed. For additional information, refer to the relevant procedure(s) in this section.

Single stage air bag modules

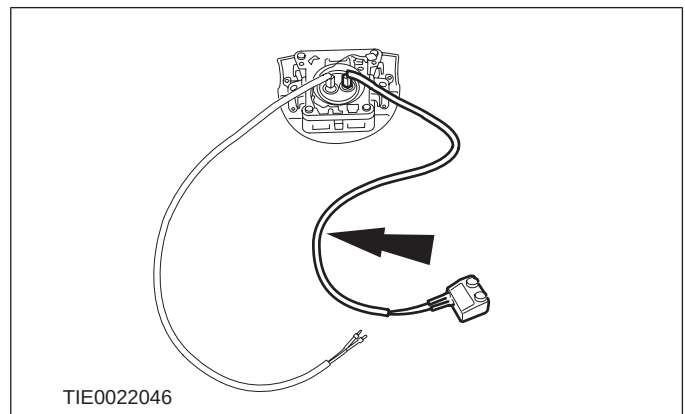
3. **Connect the test lead to the air bag module and the adapter (driver air bag module shown).**



Two stage air bag modules

4. **▲ CAUTION: Do not connect both test leads to the adapter. Both air bag module inflators must be deployed separately.**

Connect two test leads to the air bag module and the other end of one of the test leads to the adapter (driver air bag module shown).

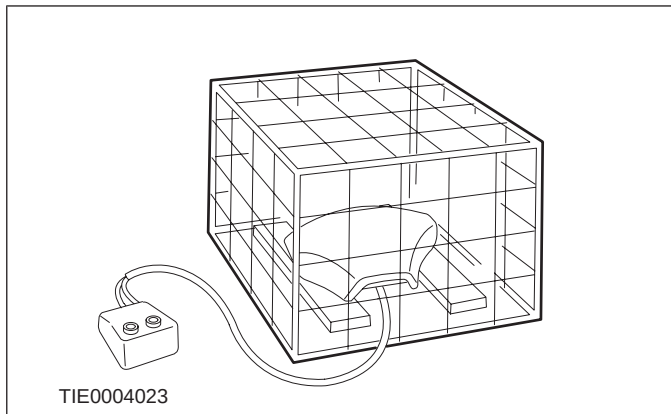


All air bag modules

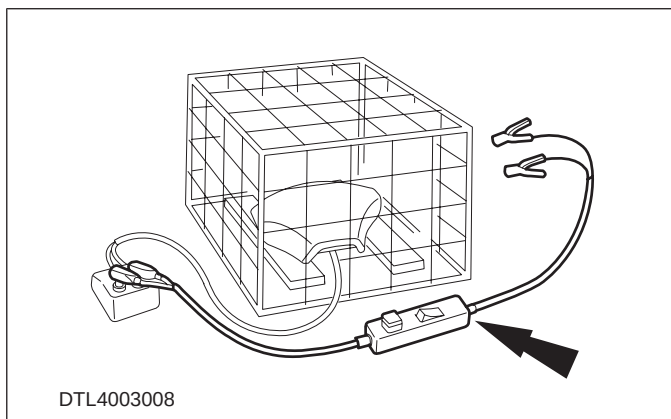
5. **▲ CAUTION: To protect the test lead electrical connector(s) from damage during deployment, raise the air bag module off the ground on two wooden blocks.**

GENERAL PROCEDURES

Place the air bag module inside a suitable rigid wire cage with the air bag module cover uppermost.

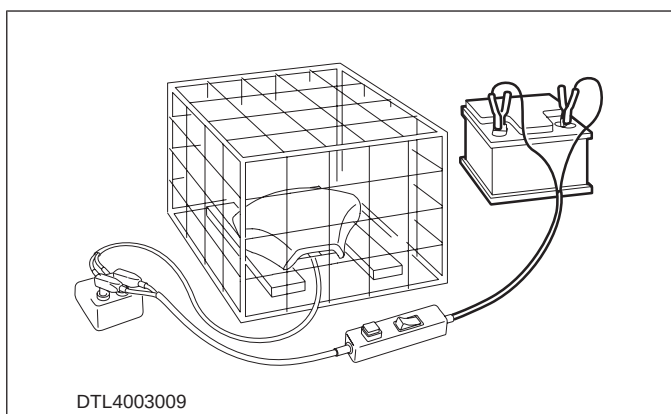


6. Connect the deployment lead to the adapter.



7. **⚠ WARNING:** Before proceeding make sure that all personnel in the vicinity are aware that a loud noise (bang) is about to occur. Do not let anybody approach closer than six meters. Failure to follow this instruction may result in personal injury.

Move as far away as possible from the air bag module and connect the deployment lead to the battery.

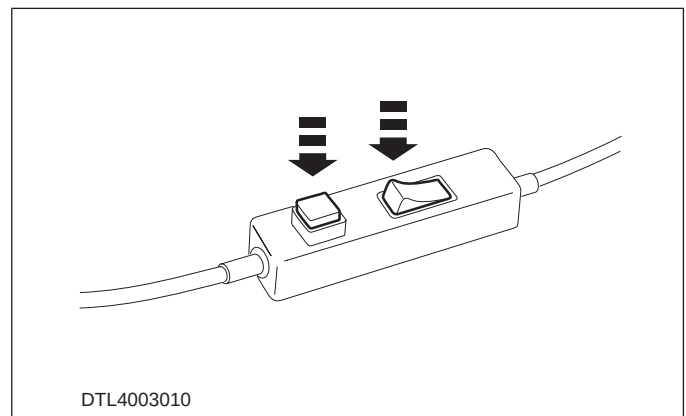


8. CAUTIONS:

⚠ The air bag module should not be handled immediately following deployment as the air bag module will be very hot.

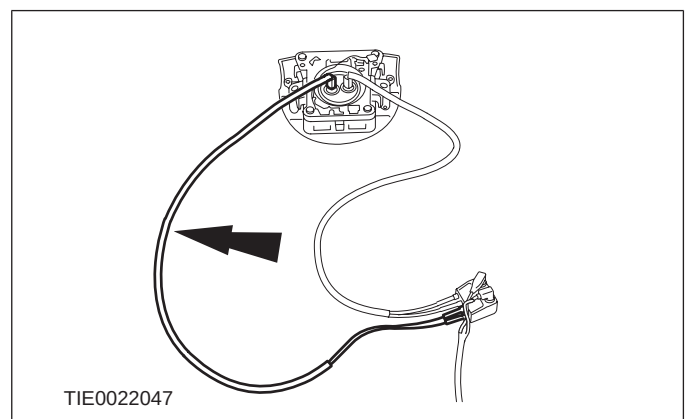
⚠ After deployment, the air bag module surface may contain deposits of sodium hydroxide, a product of the gas generate combustion, that is irritating to the skin. Use protective gloves when handling any deployed air bag module.

Depress both switches to deploy the air bag.



Two stage air bag modules

9. Connect the second test lead to the adapter.



10. **⚠ WARNING:** Before proceeding make sure that all personnel in the vicinity are aware that a loud noise (bang) is about to occur. Do not let anybody approach closer than six meters. Failure to follow this instruction may result in personal injury.

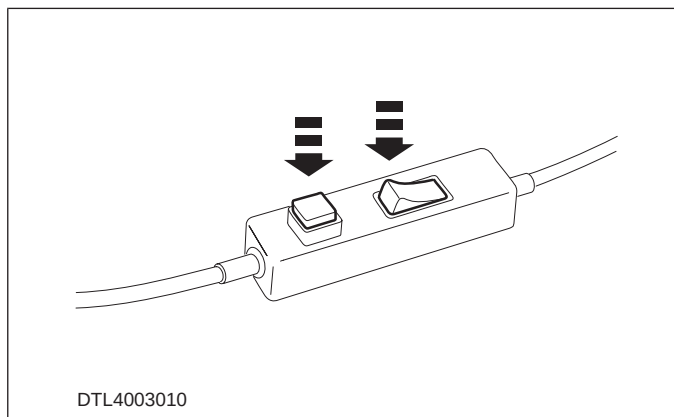
CAUTIONS:

⚠ The air bag module should not be handled immediately following deployment as the air bag module will be very hot.

GENERAL PROCEDURES

- ⚠** After deployment, the air bag module surface may contain deposits of sodium hydroxide, a product of the gas generate combustion, that is irritating to the skin. Use protective gloves when handling any deployed air bag module.

Depress both switches to deploy the air bag.



All air bag modules

- 11. Deployed air bag module(s) should be sealed in a suitable bag and then disposed of in accordance with local contaminated waste regulations.**

GENERAL PROCEDURES

Unserviceable Air Bag Disposal

1. WARNINGS:

 To minimize the possibility of injury in the event of premature deployment, always carry a live air bag module with the bag and trim cover pointed away from the body. Failure to follow this instruction may result in personal injury.

 To prevent premature deployment, live air bag modules must only be placed on work benches which have been ground bonded. Failure to follow this instruction may result in personal injury.

NOTE: All unserviceable air bag modules have been placed on the Mandatory Return List. All discolored or damaged air bag modules should be treated the same as any unserviceable live air bag module being returned.

Remove the unserviceable air bag module. For additional information, refer to the relevant procedure in this section.

2.  **WARNING:** Under no circumstances is an unserviceable air bag module(s) to be returned through the local mailing system. Failure to follow this instruction may result in personal injury.

Seal the unserviceable air bag module(s) in the packaging from the new air bag module(s) and address to the appropriate manufacturer. The package should then be forwarded to the Exchange Plan Center (as appointed through the national sales company) who will arrange forwarding to the manufacturer.

3. **NOTE:** Autoliv air bag modules and seat belt pretensioners.

Autoliv GmbH, Theodor Heuss Strasse 2,
85221, Dachau, Germany.

4. **NOTE:** TRW air bag modules.

TRW Occupant Restraint Systems, FAO Rene Getto, Industriestr 20, 73551, Aldorf, Germany.

5. **NOTE:** TRW seat belt pretensioners.

TRW Occupant Restraint Systems, FAO Helmut Goss, Industriestr 20, 73551, Aldorf, Germany.

6. **NOTE:** Takata Petri air bag modules.

Takata Petri AG, Grossostheimer Strasse
223, D-63741 Aschaffenburg, (Supplier Code
P790M) Germany.

REMOVAL AND INSTALLATION

Crash Sensor

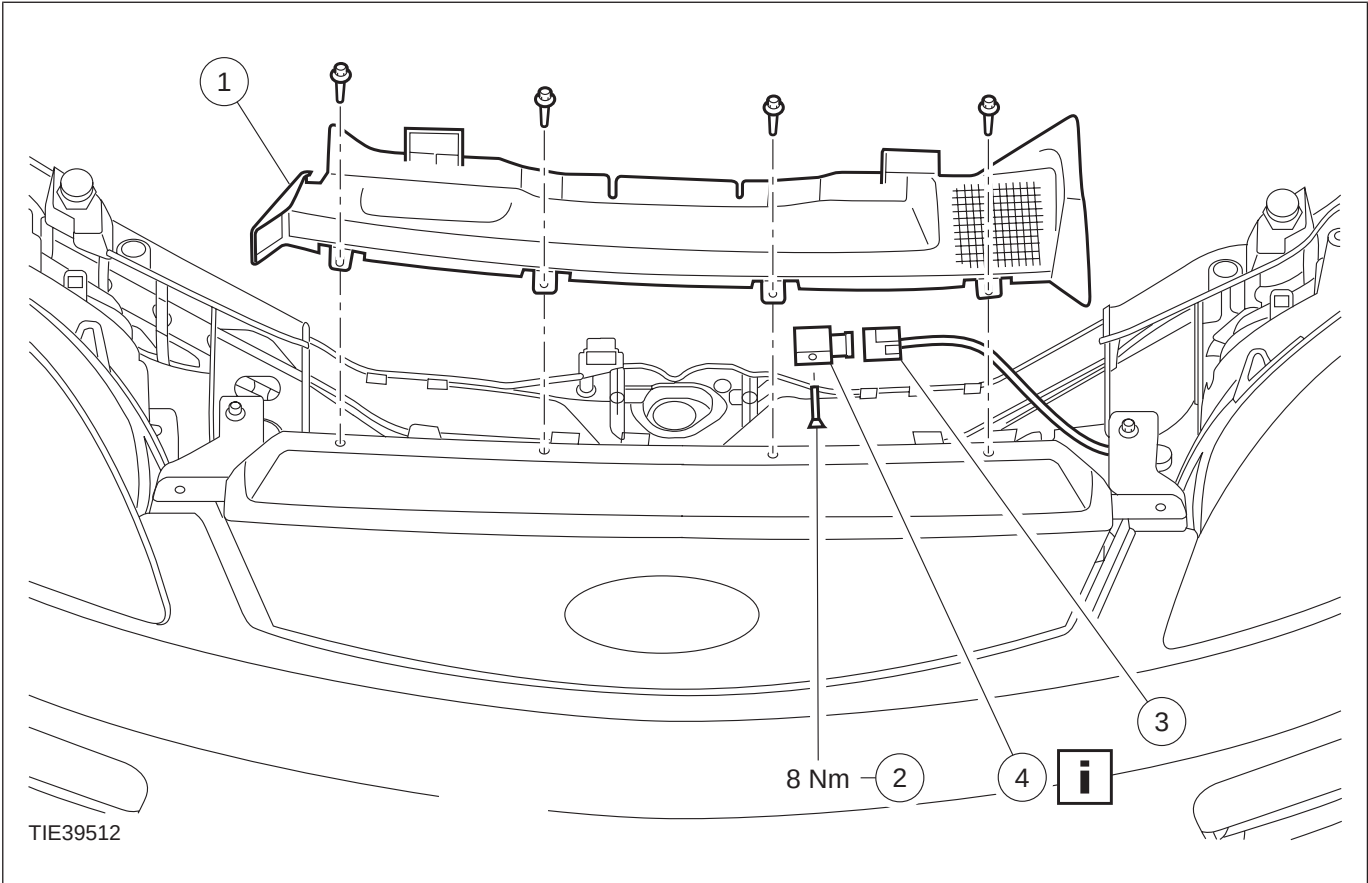
WARNINGS:

- ⚠ To avoid accidental deployment, the restraints control module backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the supplemental restraint system (SRS), or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.
- ⚠ To minimize the possibility of premature deployment, do not use radio key code savers when working on the supplemental

restraint system. Failure to follow this instruction may result in personal injury.

- ⚠ Never probe the electrical connectors of air bag modules or any other supplemental restraint system component. Failure to follow this instruction may result in personal injury.

1. Disconnect the battery ground cable.
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).
2. Remove the components in the order indicated in the following illustration(s) and table(s).



Item	Description
1	Radiator air deflector
2	Crash sensor retaining bolt
3	Crash sensor electrical connector
4	Crash sensor See Installation Detail

- All vehicles
3. To install, reverse the removal procedure.
- Vehicles with global closing
4. Initialize the door window motors.
For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass,

REMOVAL AND INSTALLATION

Frames and Mechanisms, General

Procedures).

Installation Details**Item 4** Crash sensor

WARNING: Make sure the crash sensor locating tang is correctly located in the grille opening panel. Failure to follow this instruction may result in personal injury.

REMOVAL AND INSTALLATION

Side Impact Sensor

WARNINGS:

⚠ To avoid accidental deployment, the restraints control module backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the supplemental restraint system (SRS), or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.

⚠ To minimize the possibility of premature deployment, do not use radio key code savers when working on the supplemental restraint system. Failure to follow this instruction may result in personal injury.

⚠ Never probe the electrical connectors of air bag modules or any other supplemental

restraint system component. Failure to follow this instruction may result in personal injury.

1. Disconnect the battery ground cable.

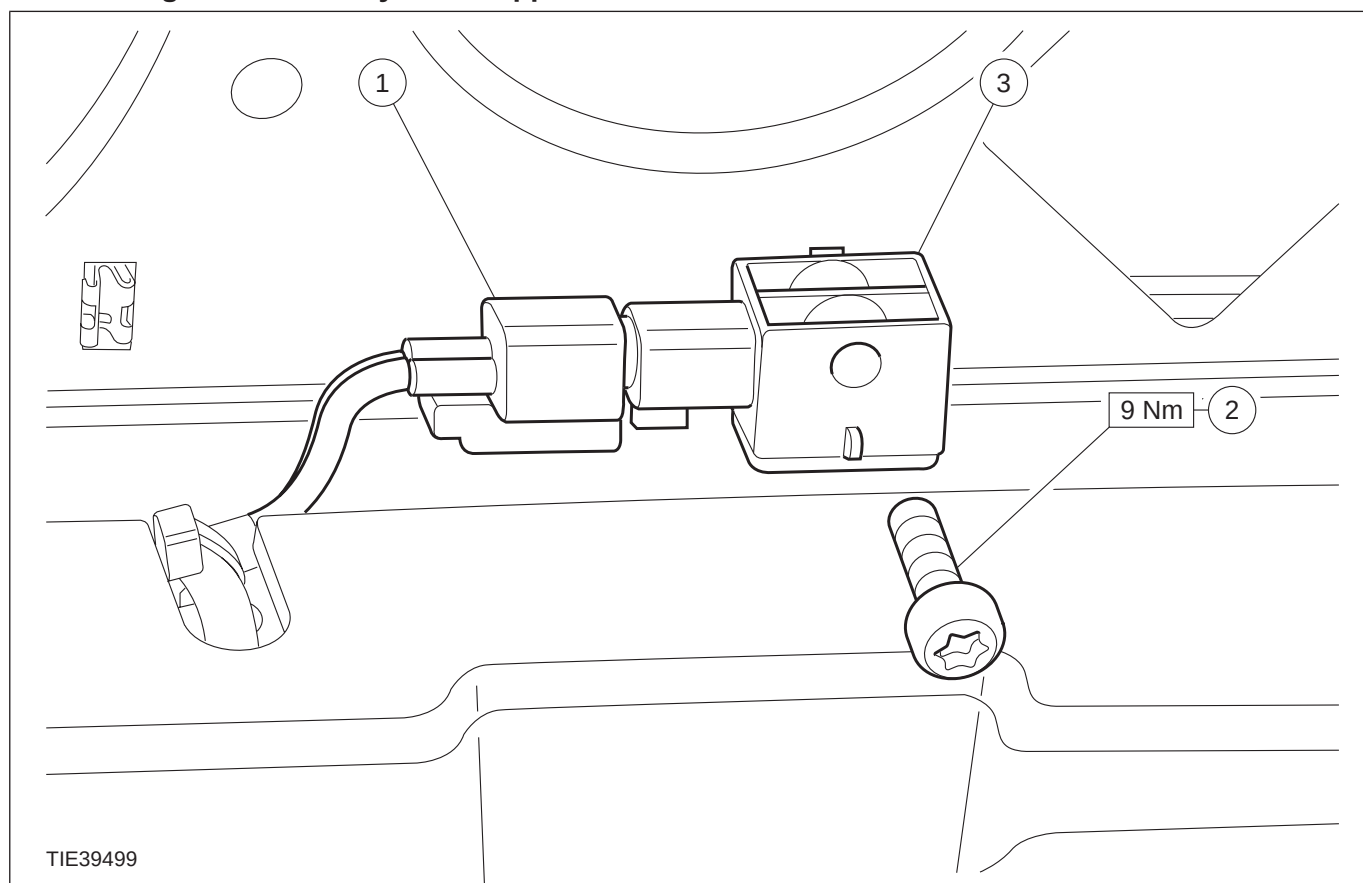
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

2. Remove the B-pillar trim panel. For additional information, refer to: (501-05 Interior Trim and Ornamentation)

B-Pillar Trim Panel - 3-Door (Removal and Installation),

B-Pillar Trim Panel - 4-Door/5-Door (Removal and Installation).

3. Remove the components in the order indicated in the following illustration(s) and table(s).



Item	Description
1	Side impact sensor electrical connector
2	Side impact sensor retaining bolt
3	Side impact sensor

All vehicles

⚠ WARNING: Make sure the side impact sensor locating tangs are correctly located into the floor pan. Failure to follow this instruction may result in personal injury.

REMOVAL AND INSTALLATION

4. To install, reverse the removal procedure.

Vehicles with global closing

5. Initialize the door window motors.

For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

REMOVAL AND INSTALLATION

Restraints Control Module (RCM)

General Equipment

Worldwide diagnostic system (WDS)

WARNINGS:

- ⚠ To avoid accidental deployment, the restraints control module (RCM) backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the supplemental restraint system (SRS), or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.
- ⚠ To minimize the possibility of premature deployment, do not use radio key code savers when working on the supplemental restraint system. Failure to follow this instruction may result in personal injury.

- ⚠ Never probe the electrical connectors of air bag modules or any other supplemental restraint system component. Failure to follow this instruction may result in personal injury.

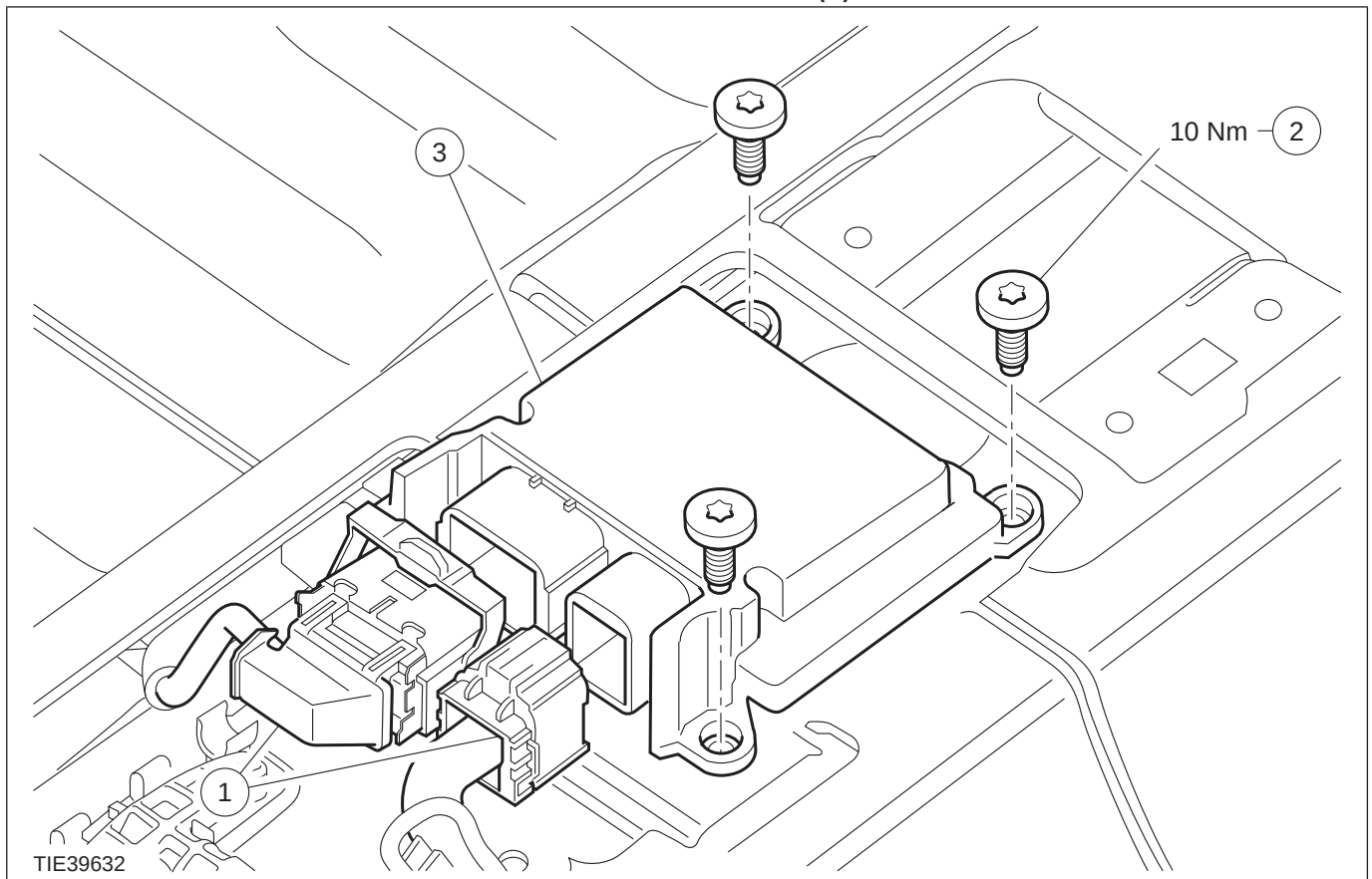
1. Disconnect the battery ground cable.

For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

2. Remove the floor console. For additional information, refer to:

Floor Console (501-12 Instrument Panel and Console, Removal and Installation),
Floor Console - Vehicles Built From: 03/2007, Vehicles With: Center Armrest (501-12 Instrument Panel and Console, Removal and Installation).

3. Remove the components in the order indicated in the following illustration(s) and table(s).



REMOVAL AND INSTALLATION

Item	Description
1	Electrical connectors
2	Retaining bolts
3	Restraints control module

All vehicles

4. To install, reverse the removal procedure.
5.  **WARNING:** A new restraints control module must be configured following installation. Failure to follow this instruction may result in personal injury.

When a new restraints control module is installed, configure the restraints control module using **WDS**.

Vehicles with global closing

6. Initialize the door window motors.
For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

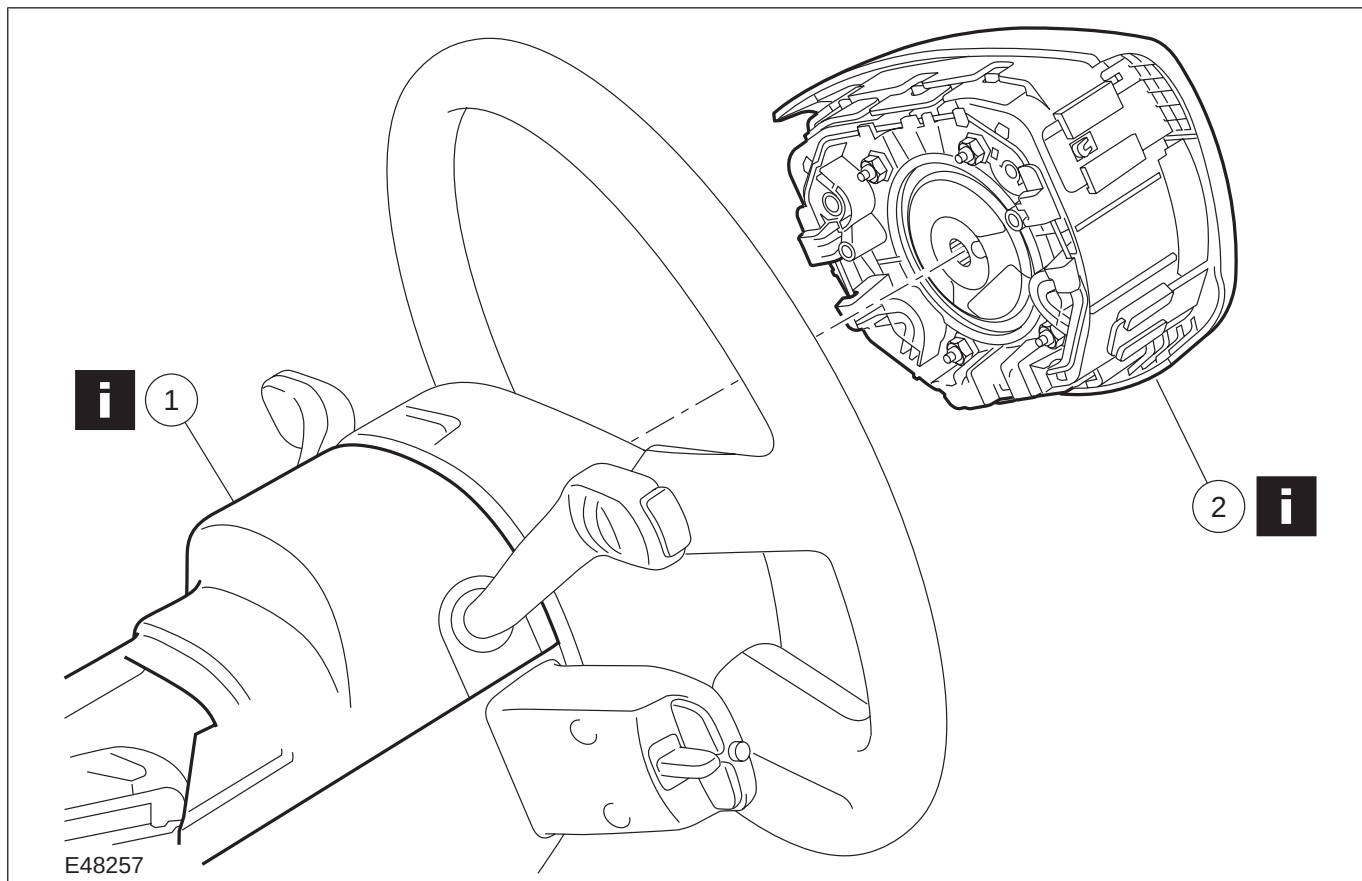
REMOVAL AND INSTALLATION

Driver Air Bag Module

WARNINGS:

-  To avoid accidental deployment, the restraints control module (RCM) backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the supplemental restraint system (SRS), or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.
 -  Always wear safety glasses when working on an air bag equipped vehicle and when handling an air bag module. Failure to follow this instruction may result in personal injury.
 -  To minimize the possibility of premature deployment, do not use radio key code savers when working on the SRS. Failure to follow this instruction may result in personal injury.
 -  To minimize the possibility of injury in the event of premature deployment, always carry a live air bag module with the bag and trim cover pointed away from the body. Failure to follow this instruction may result in personal injury.
 -  To minimize the possibility of premature deployment, live air bag modules must only be placed on work benches which have been ground bonded and with the trim cover facing up. Failure to follow these instructions may result in personal injury.
 -  Never probe the electrical connectors of air bag modules or any other SRS component. Failure to follow this instruction may result in personal injury.
 -  Painting over the driver air bag module trim cover or instrument panel could lead to deterioration of the trim cover and air bags. Do not for any reason attempt to paint discolored or damaged air bag module trim covers or instrument panel. Install a new component. Failure to follow this instruction may result in personal injury.
1. Disconnect the battery ground cable.
For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).
 2. Remove the components in the order indicated in the following illustration(s) and table(s).

REMOVAL AND INSTALLATION



Item	Description
1	Steering column upper shroud See Removal Detail
2	Driver air bag module See Removal Detail

Vehicles with global closing

4. Initialize the door window motors.

For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

All vehicles

3. To install, reverse the removal procedure.

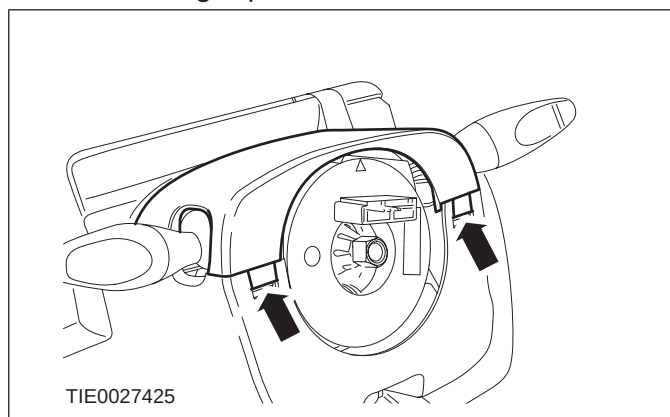
Removal Details

Item 1 Steering column upper shroud

1. **NOTE:** Turn the steering wheel to access the steering column upper shroud retaining clips.

Remove the steering column upper shroud (steering wheel shown removed for clarity).

- Using a thin bladed screwdriver, release the retaining clips.



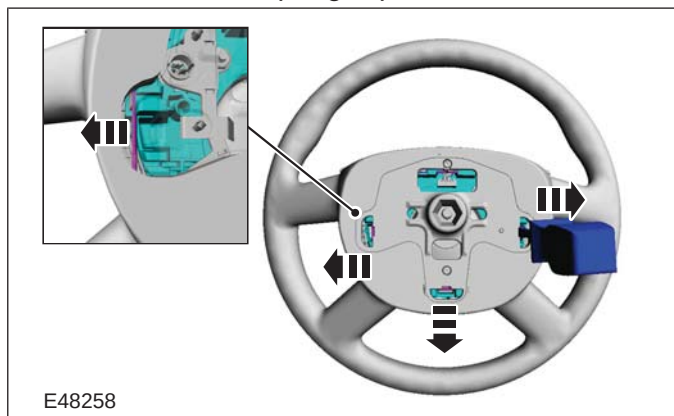
REMOVAL AND INSTALLATION

Item 2 Driver air bag module

1. **NOTE:** Turn the steering wheel to access the driver air bag module retaining clips.

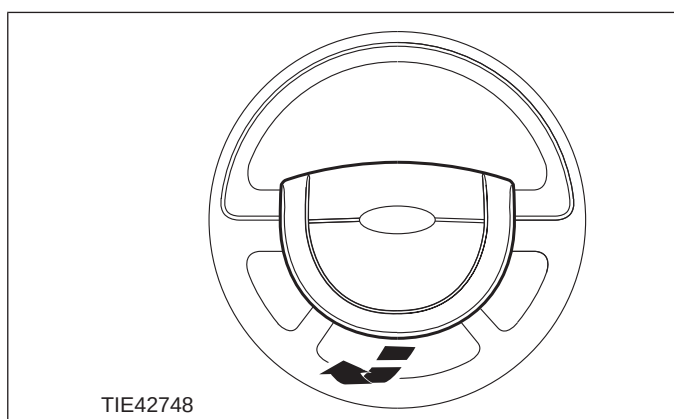
Using a thin bladed screwdriver, detach the driver air bag module from the steering wheel (steering wheel shown removed for clarity).

- Release the spring clip.

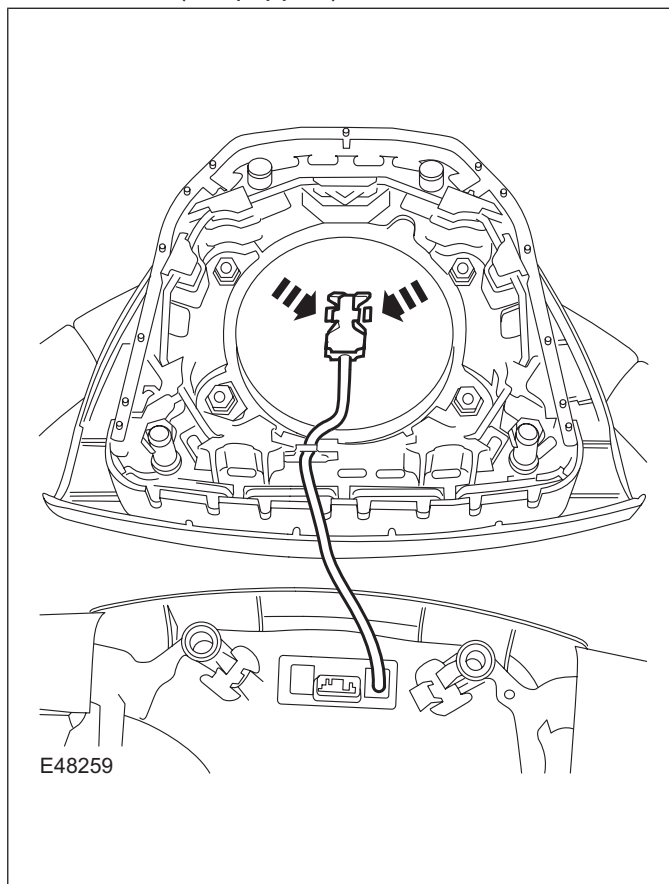


2. **⚠ WARNING:** The driver air bag module should only be inverted long enough to disconnect the driver air bag module electrical connector. Handle with extreme care making sure that, if for any reason this procedure is interrupted, the driver air bag module is turned the correct way up, with the trim cover side uppermost. Failure to follow these instructions may result in personal injury.

Invert the driver air bag module to access the driver air bag module wiring harness.



- Disconnect the driver air bag module ground cable (if equipped).



3. **NOTE:** It may be necessary to use a pair of pointed nose pliers to release the driver air bag module electrical connector locking tangs.

Disconnect the driver air bag module electrical connector.

REMOVAL AND INSTALLATION**Passenger Air Bag Module — Vehicles Built From: 04/2006****Removal****WARNINGS:**

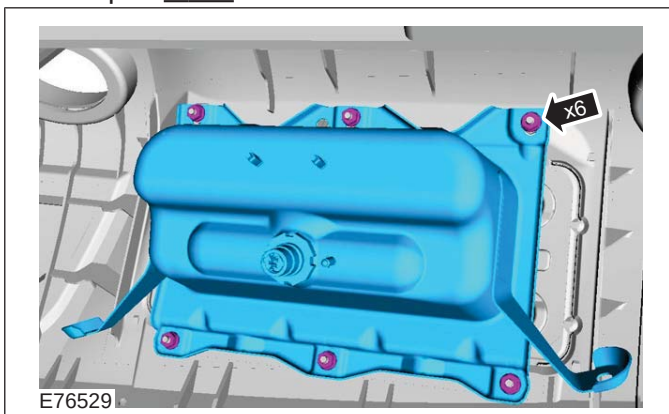
-  The supplemental restraint system (SRS) is active for a certain length of time after the power supply has been disconnected. Wait for a minimum of 3 minutes before disconnecting or removing any SRS components.
-  Wear safety goggles.
-  Make sure that the vehicle electrical system is fully depowered and no other power source is connected.
-  Do not probe supplemental restraint system (SRS) electrical connectors.
-  Refer to: **Supplemental Restraint System (SRS) Health and Safety Precautions** (100-00 General Information, Description and Operation).

NOTE: Removal steps in this procedure may contain installation details.

1. Remove the instrument panel.

Refer to: **Instrument Panel** (501-12 Instrument Panel and Console, Removal and Installation).

2. Torque: 8 Nm

**Installation**

1. To install, reverse the removal procedure.

REMOVAL AND INSTALLATION

Side Air Bag Module

WARNINGS:

-  Always wear safety glasses when working on an air bag equipped vehicle and when handling an air bag module. Failure to follow this instruction may result in personal injury.
-  To minimize the possibility of premature deployment, do not use radio key code savers when working on the supplemental restraint system. Failure to follow this instruction may result in personal injury.
-  To minimize the possibility of injury in the event of premature deployment, always carry a live air bag module with the bag and trim cover pointed away from the body. Failure to follow this instruction may result in personal injury.
-  To minimize the possibility of premature deployment, live air bag modules must only be placed on work benches which have been ground bonded and with the

trim cover facing up. Failure to follow these instructions may result in personal injury.

-  Never probe the electrical connectors of air bag modules or any other supplemental restraint system component. Failure to follow this instruction may result in personal injury.

1. Disconnect the battery ground cable.

For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

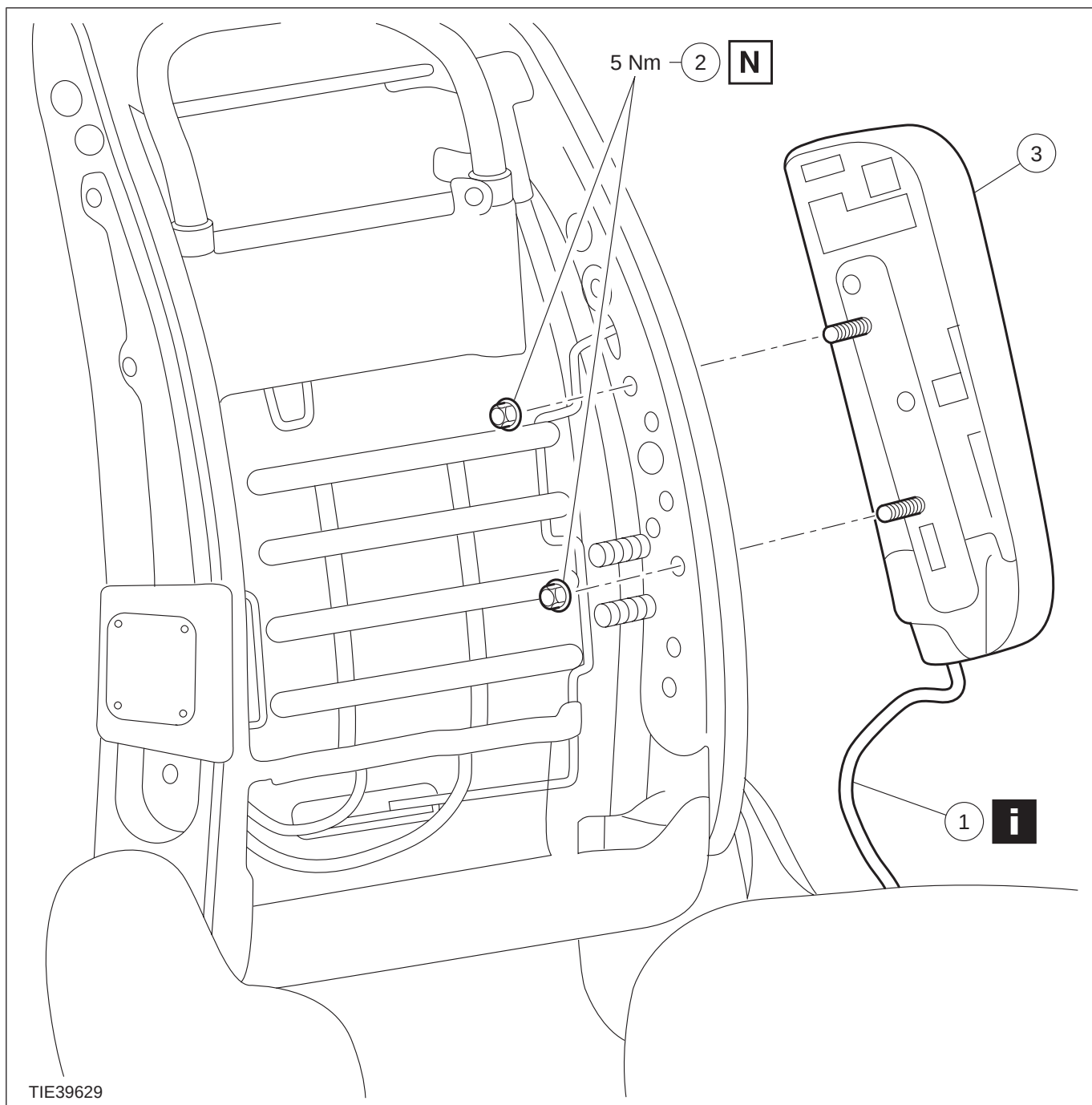
2. Remove the front seat backrest cover. For additional information, refer to: (501-10 Seating)

Front Seat Backrest Cover - 2.5L Duratec-RS (224kW/305PS) - VI5 (Removal and Installation),

Front Seat Backrest Cover - 2.5L Duratec-ST (VI5) (Removal and Installation).

3. Remove the components in the order indicated in the following illustration(s) and table(s).

REMOVAL AND INSTALLATION



Item	Description
1	Side air bag module wiring harness See Removal Detail
2	Side air bag module retaining nuts
3	Side air bag module

Vehicles with global closing

5. Initialize the door window motors.

For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass, Frames and Mechanisms, General Procedures).

All vehicles

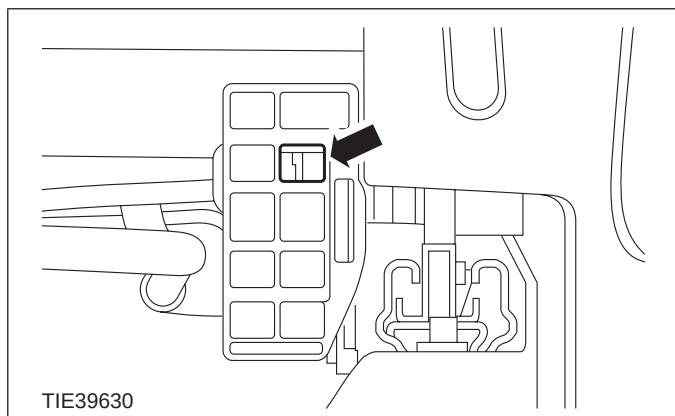
4. To install, reverse the removal procedure.

Removal Details

REMOVAL AND INSTALLATION**Item 1 Side air bag module wiring harness**

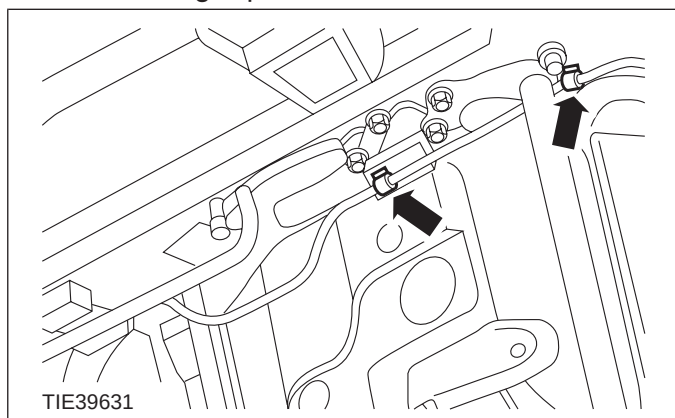
1.  **WARNING:** Note the position of the wiring harness, to aid installation. An incorrectly routed wiring harness could become damaged when the seat is moved. Failure to follow this instruction may result in personal injury.

Detach the side air bag electrical connector from the connector block.



2. **Detach the side air bag module wiring harness from the seat frame.**

- Use a trim tool to carefully release the retaining clips.



REMOVAL AND INSTALLATION

Side Air Curtain Module — Vehicles Built From: 22-06-2007

General Equipment

Long Nose Pliers

Removal

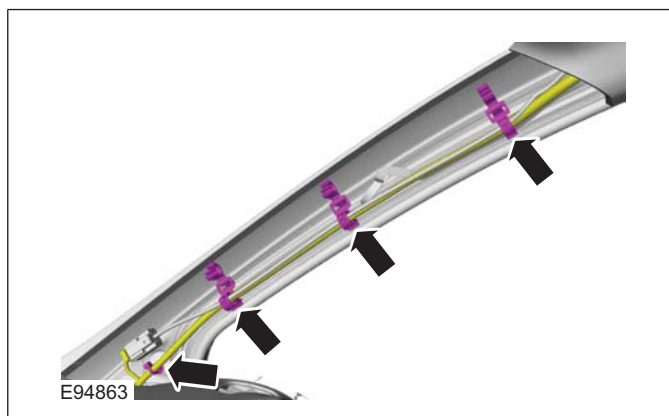
WARNINGS:

-  After the power supply has been disconnected, wait for a minimum of 3 minutes before disconnecting or removing any pyrotechnic components.
-  Make sure that the vehicle electrical system is fully depowered and no other power source is connected.

NOTE: Removal steps in this procedure may contain installation details.

1. Refer to: **Supplemental Restraint System (SRS) Health and Safety Precautions** (100-00 General Information, Description and Operation).
2. Refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).
3. Refer to: **Headliner - 3-Door, Vehicles With: Sliding Roof Opening Panel** (501-05 Interior Trim and Ornamentation, Removal and Installation).
Refer to: **Headliner - 3-Door, Vehicles Without: Sliding Roof Opening Panel** (501-05 Interior Trim and Ornamentation, Removal and Installation).
Refer to: **Headliner - 5-Door, Vehicles With: Sliding Roof Opening Panel** (501-05 Interior Trim and Ornamentation, Removal and Installation).
Refer to: **Headliner - 5-Door, Vehicles Without: Sliding Roof Opening Panel** (501-05 Interior Trim and Ornamentation, Removal and Installation).

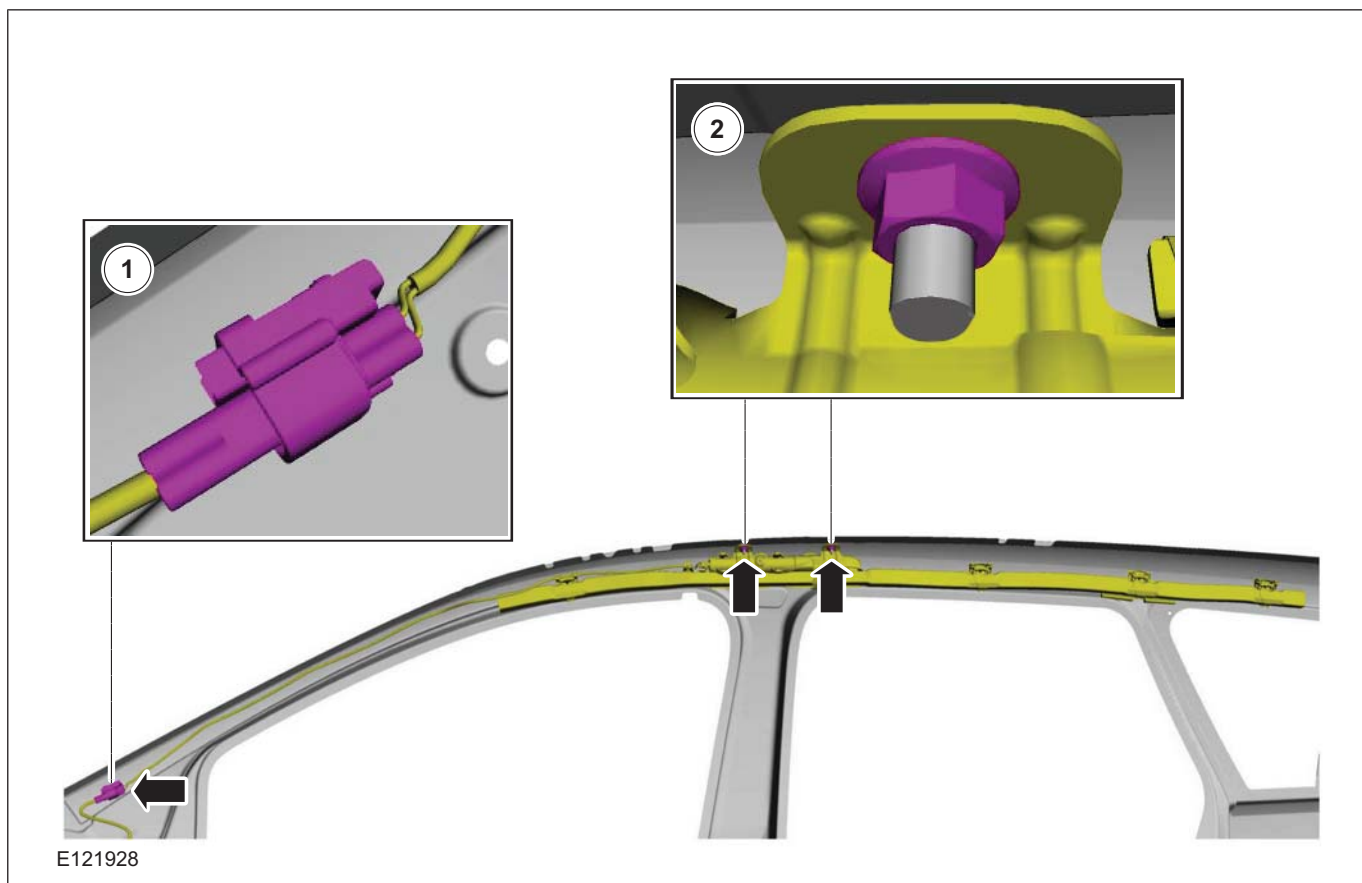
4.



5.



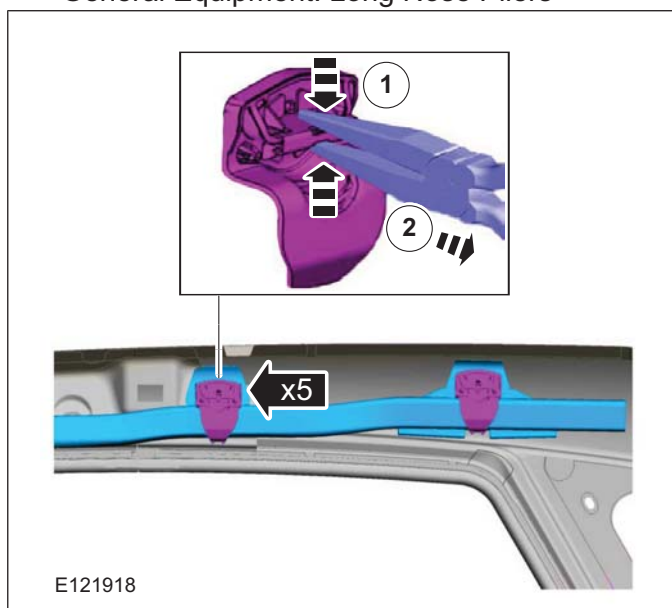
REMOVAL AND INSTALLATION



3-door



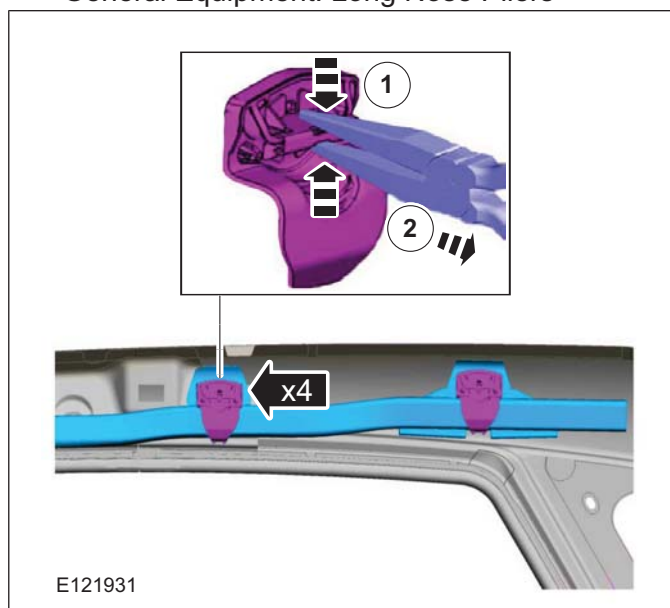
General Equipment: Long Nose Pliers



4-door, 5-door and wagon



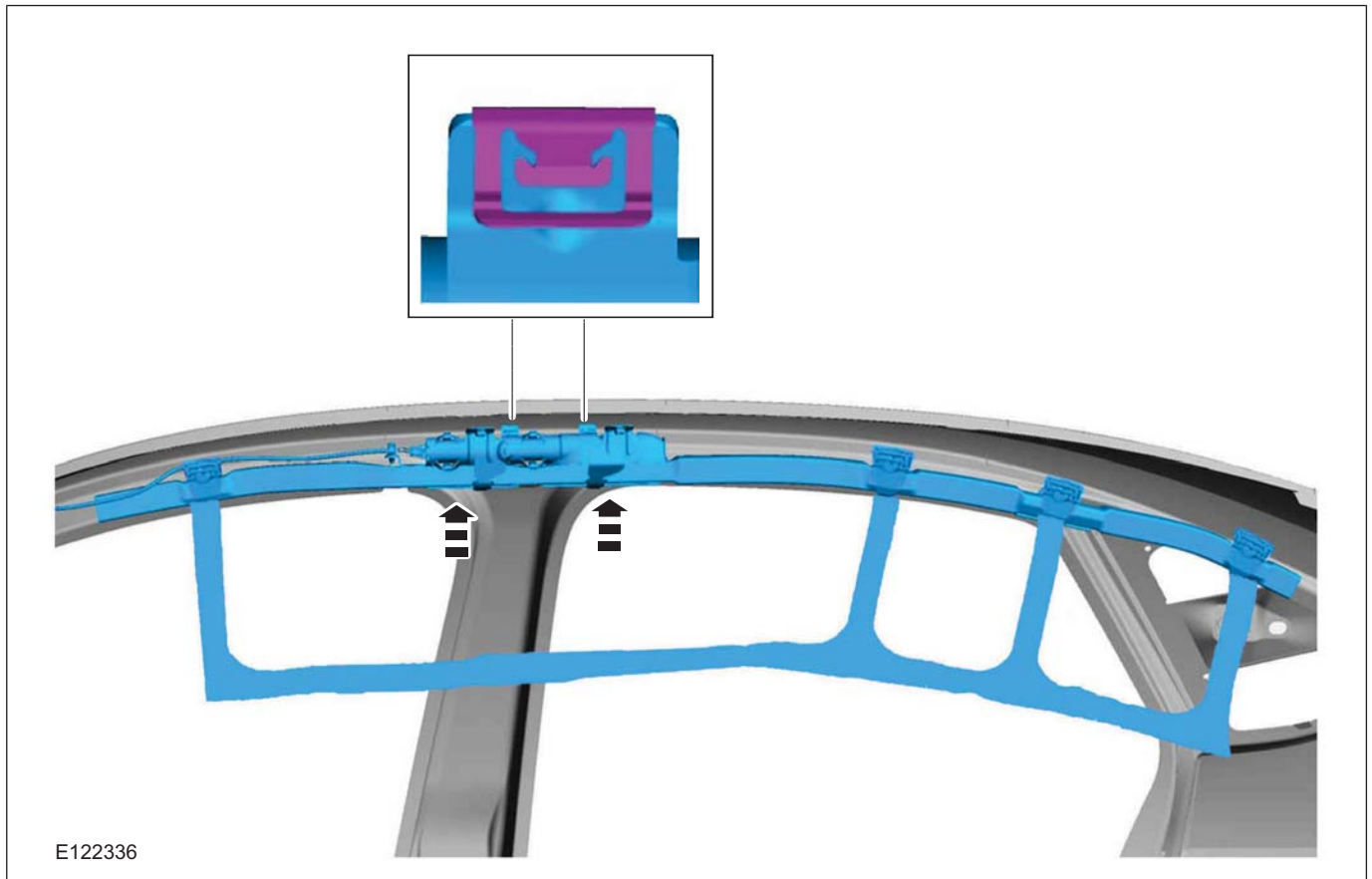
General Equipment: Long Nose Pliers



REMOVAL AND INSTALLATION

Installation

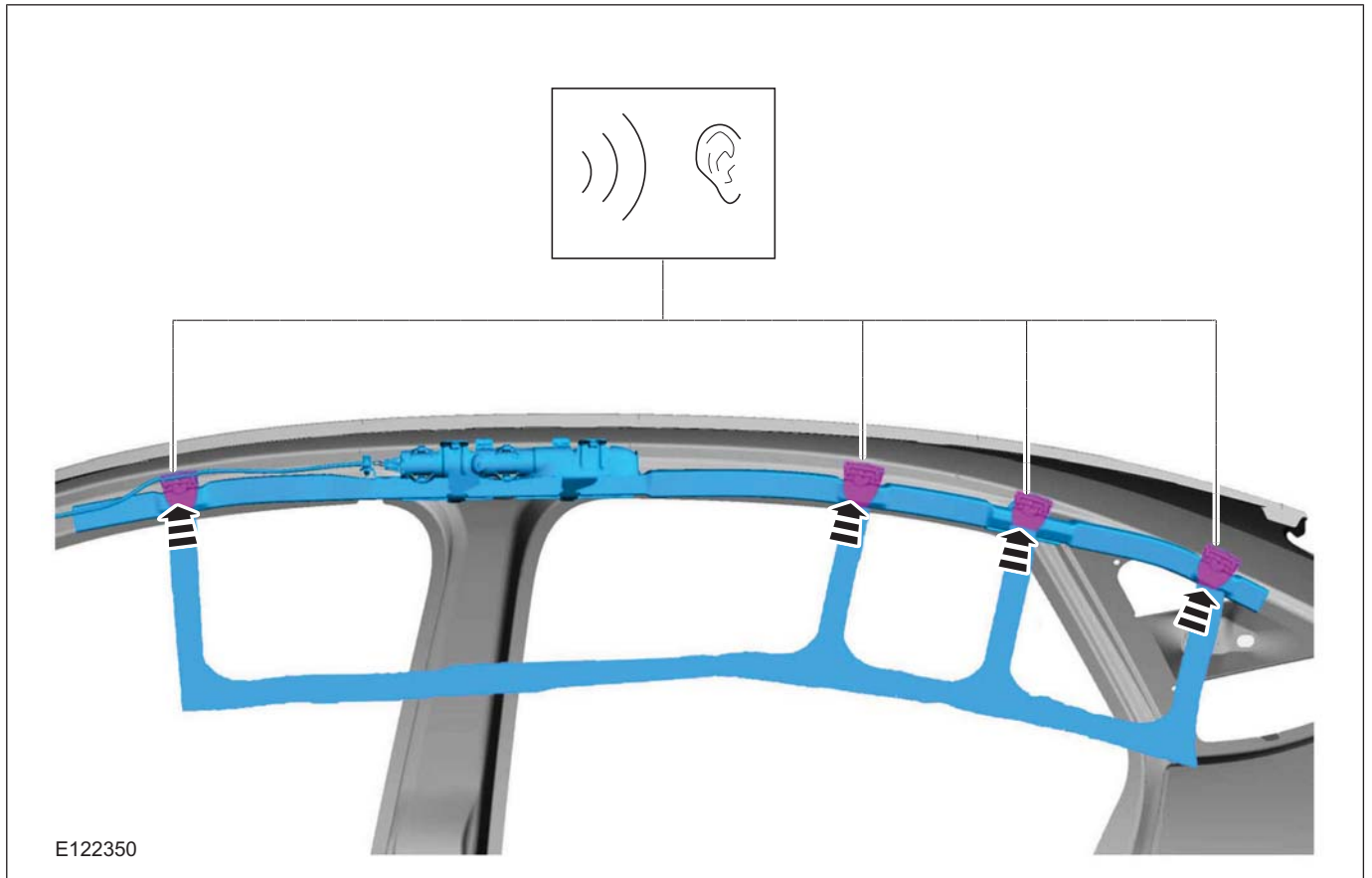
1.



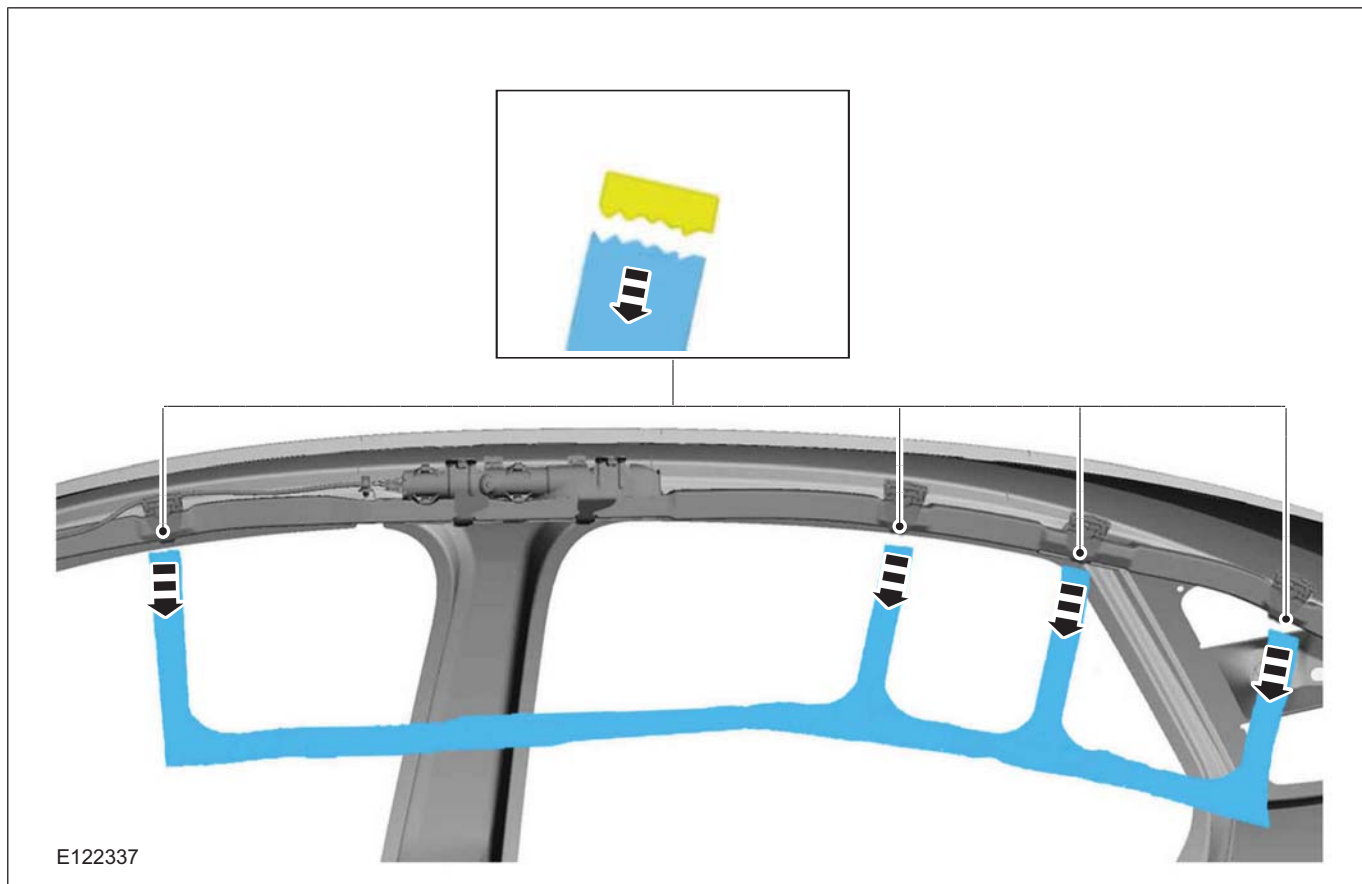
2.



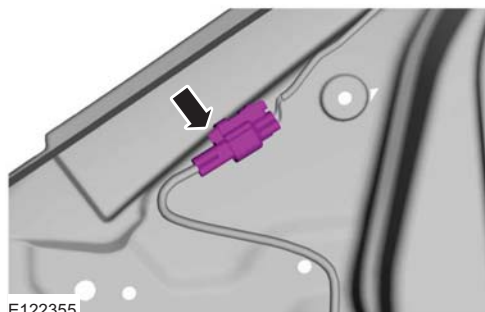
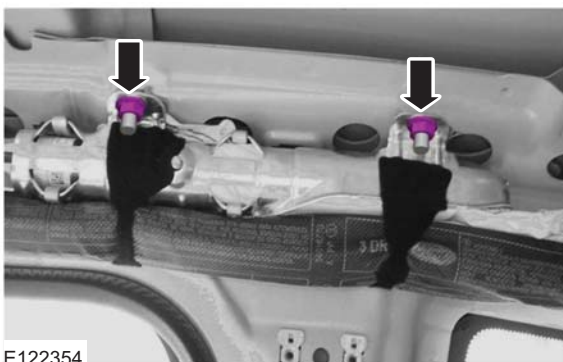
REMOVAL AND INSTALLATION

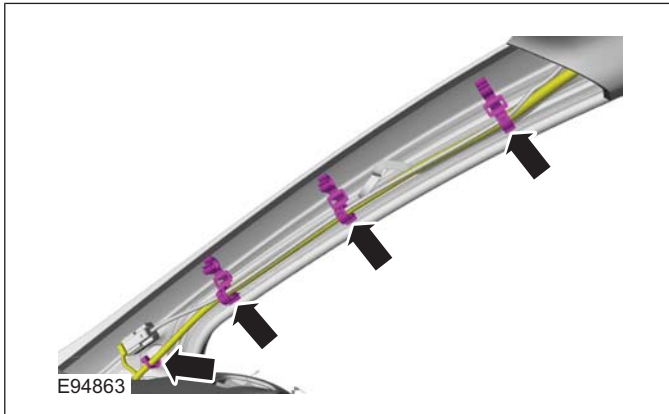


REMOVAL AND INSTALLATION



Torque: 10 Nm



REMOVAL AND INSTALLATION

7. Refer to: **Headliner - 3-Door, Vehicles With: Sliding Roof Opening Panel** (501-05 Interior Trim and Ornamentation, Removal and Installation).
- Refer to: **Headliner - 3-Door, Vehicles Without: Sliding Roof Opening Panel** (501-05 Interior Trim and Ornamentation, Removal and Installation).
- Refer to: **Headliner - 5-Door, Vehicles With: Sliding Roof Opening Panel** (501-05 Interior Trim and Ornamentation, Removal and Installation).
- Refer to: **Headliner - 5-Door, Vehicles Without: Sliding Roof Opening Panel** (501-05 Interior Trim and Ornamentation, Removal and Installation).
8. Refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

REMOVAL AND INSTALLATION

Clockspring

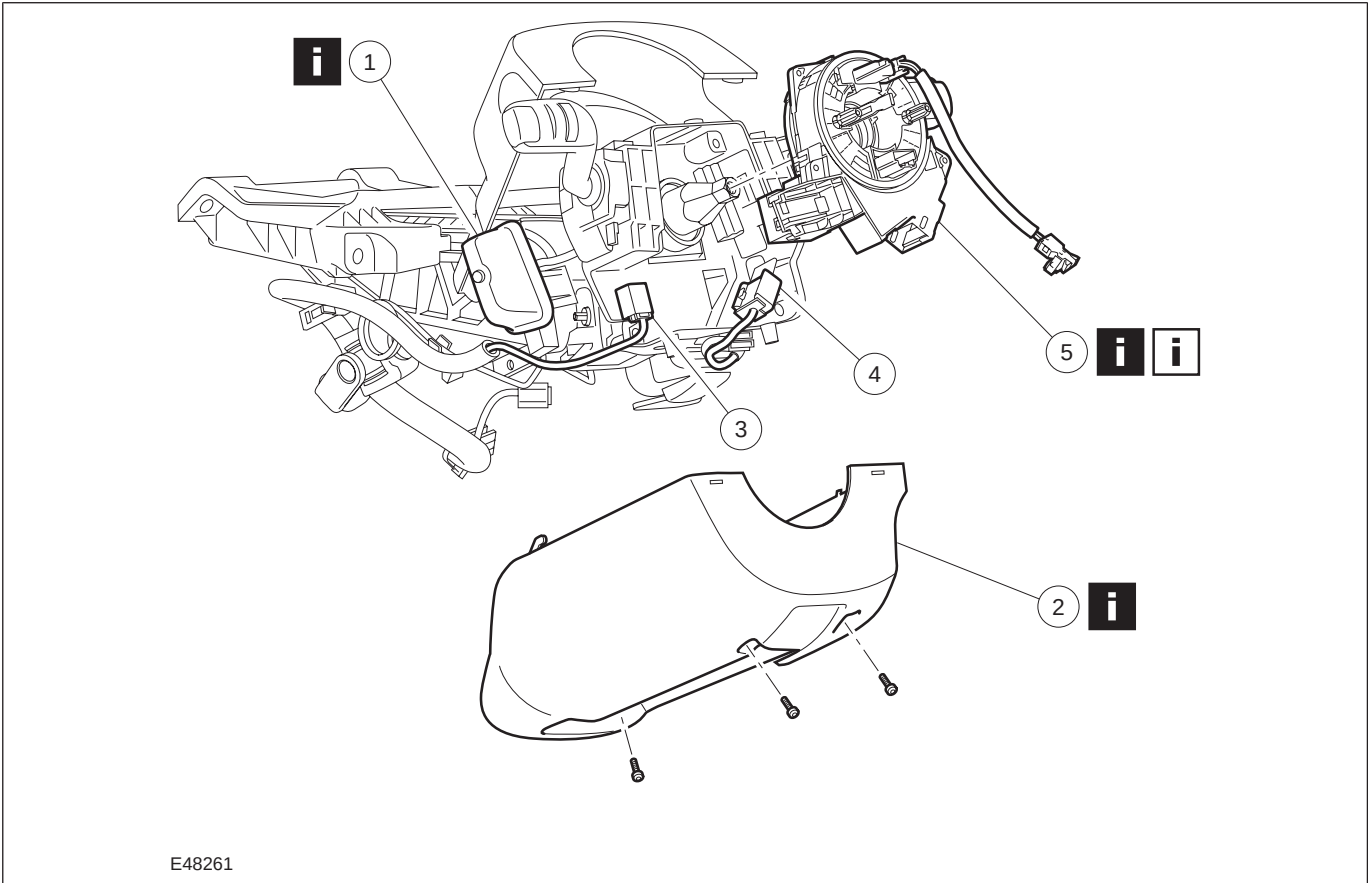
General Equipment

Worldwide diagnostic system (WDS)

1. Remove the steering wheel.

For additional information, refer to: **Steering Wheel** (211-04 Steering Column, Removal and Installation).

2. Remove the components in the order indicated in the following illustration(s) and table(s).



Item	Description
1	Audio control switch (if equipped) See Removal Detail
2	Steering column lower shroud See Removal Detail
3	Steering wheel rotation sensor electrical connector (if equipped)
4	Clockspring electrical connector
5	Clockspring See Removal Detail See Installation Detail

All vehicles

3. To install, reverse the removal procedure.

Vehicles with stability assist

4. **⚠ WARNING:** The electronic stability program must be re-configured. Failure to follow this instruction may result in personal injury.

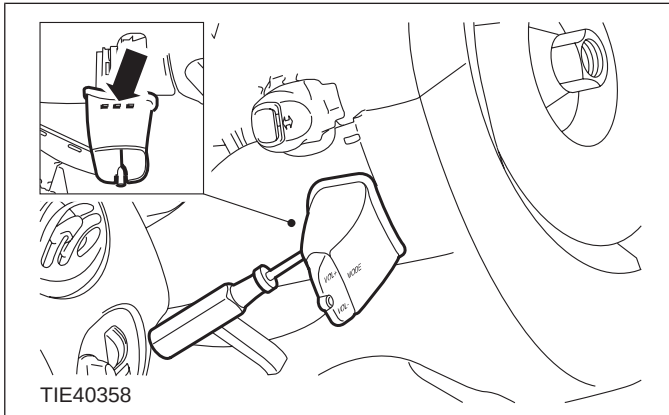
Configure the stability assist program using WDS.

Removal Details

REMOVAL AND INSTALLATION

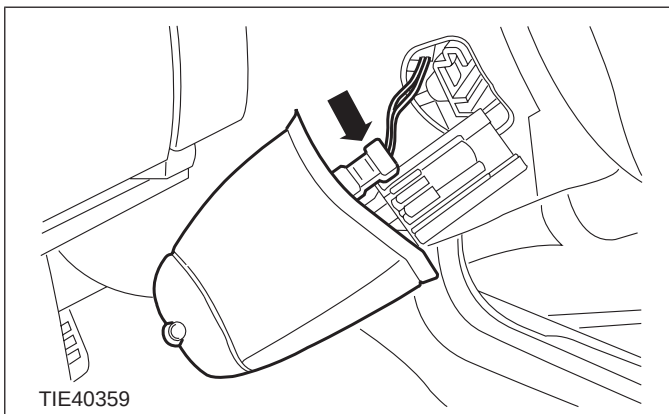
Item 1 Audio control switch (if equipped)

1. Detach the audio control switch from the steering column lower shroud.
 - Using a thin bladed screwdriver, release the locking tang.



2. Remove the audio control switch.

- Disconnect the electrical connector.

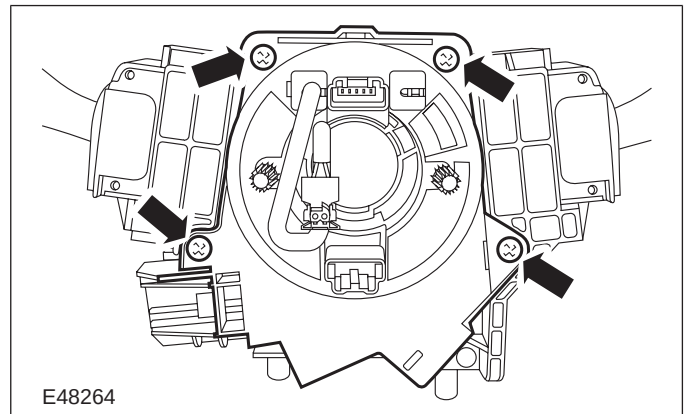


Item 2 Steering column lower shroud

1. Release the steering column locking lever to aid the removal of the steering column lower shroud.

Item 5 Clockspring

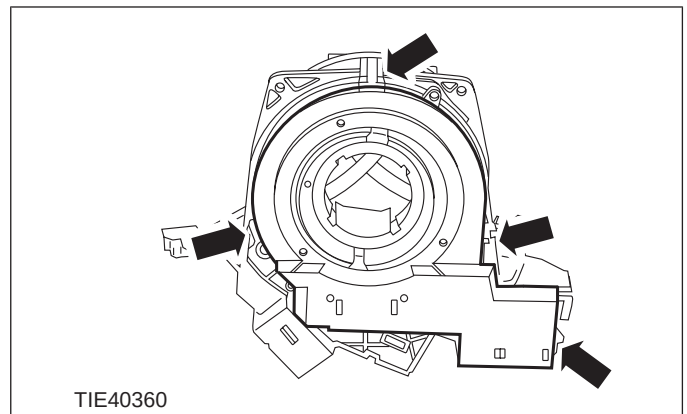
1. Remove the clockspring.



2. **CAUTION:** Make sure the clockspring to steering wheel rotation sensor retaining clips do not get damaged.

Remove the steering wheel rotation sensor (if equipped).

- Release the locking tangs from the clockspring.



Installation Details

Item 5 Clockspring

WARNINGS:

-  If installing a new clockspring, do not remove the clockspring locking key at this stage. Failure to follow this instruction may result in personal injury.
-  If installing the original clockspring, do not remove the tape securing the clockspring

at this stage. Failure to follow this instruction may result in personal injury.

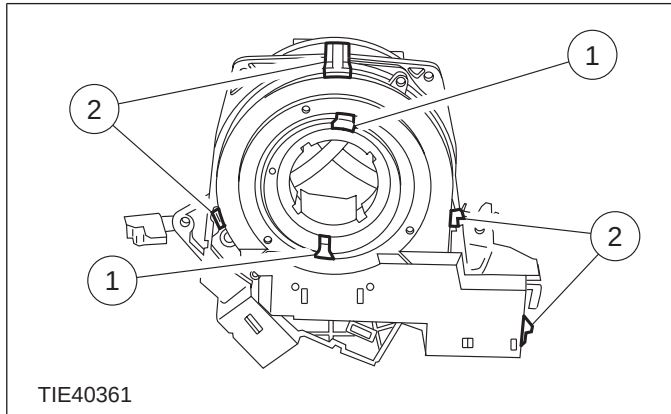
1. **CAUTION:** Make sure the clockspring to steering wheel rotation sensor retaining clips do not get damaged.

Install the steering wheel rotation sensor (if equipped).

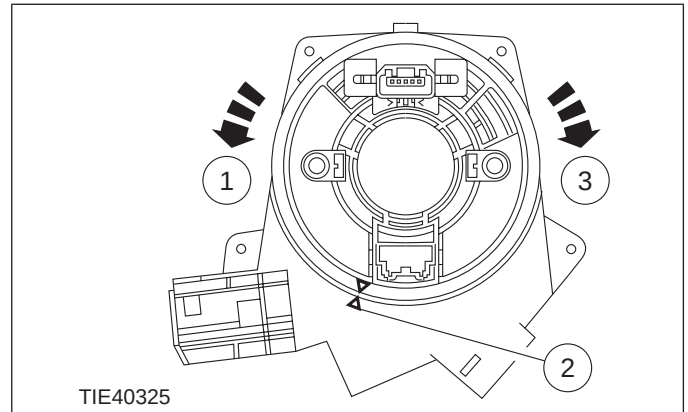
1. Align the steering wheel rotation sensor locating tangs to the clockspring.

REMOVAL AND INSTALLATION

2. Make sure the retaining clips lock into position on the steering wheel rotation sensor.



3. Turn the clockspring in a clockwise direction three turns.



2. **CAUTION:** Make sure the road wheels are in the straight ahead position.

NOTE: Make sure the turn signal lamp switch is in the off position.

Install the clockspring.

3. WARNINGS:

⚠ If there is a break between installing the clockspring and installing the steering wheel, or the vehicle is left unattended by the technician, the centralizing procedure **MUST** be carried out.

⚠ Incorrect centralization may result in premature component failure. If in doubt when centralizing the clockspring, repeat the centralizing procedure. Failure to follow this instruction may result in personal injury.

CAUTIONS:

- ⚠** The clockspring must not be rotated more than three turns in a clockwise direction after the clockspring has been centralized.
- ⚠** Make sure the road wheels are in the straight ahead position.
- ⚠** When carrying out the clockspring centralizing procedure, the first turns must be in the counterclockwise direction.

Centralize the clockspring.

1. Turn the clockspring in a counterclockwise direction until a resistance is felt.
2. Turn the clockspring in a clockwise direction, until the arrow marked on the rotor of the clockspring aligns with the raised 'V' section on the outer cover of the clockspring at approximately the 195 degrees position.

REMOVAL AND INSTALLATION

Rollover Protection Unit

Removal

WARNINGS:

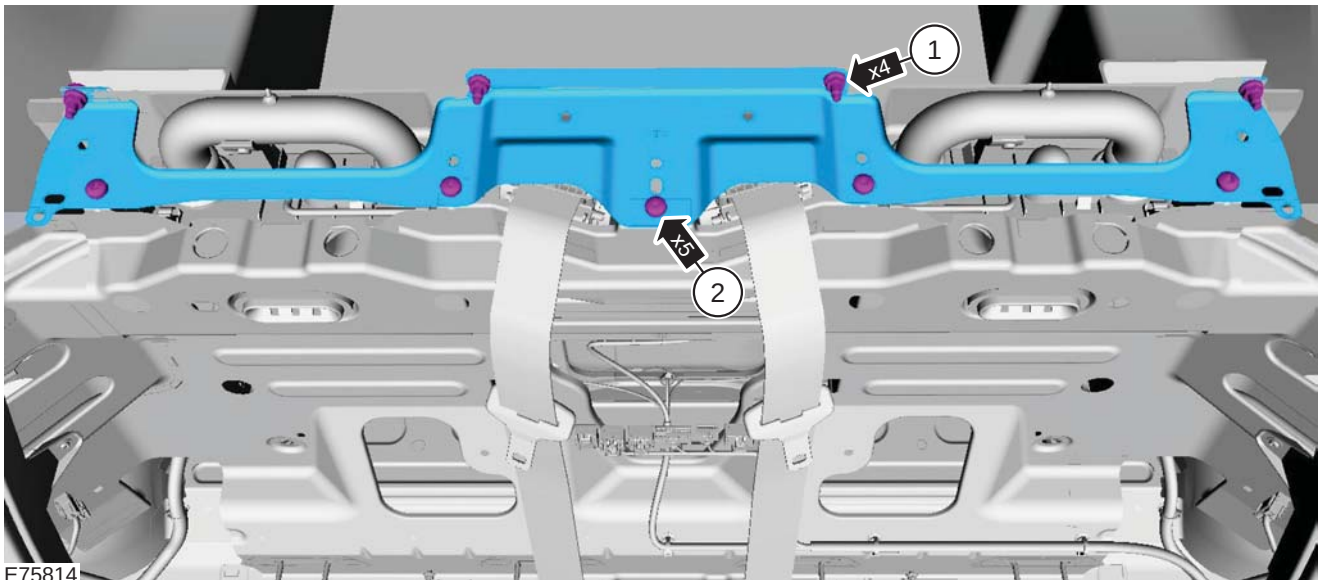
 The supplemental restraint system (SRS) is active for a certain length of time after the power supply has been disconnected. Wait for a minimum of 3 minutes before disconnecting or removing any SRS components.

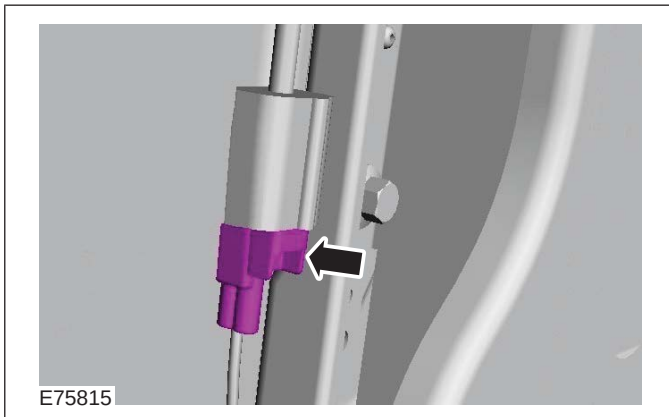
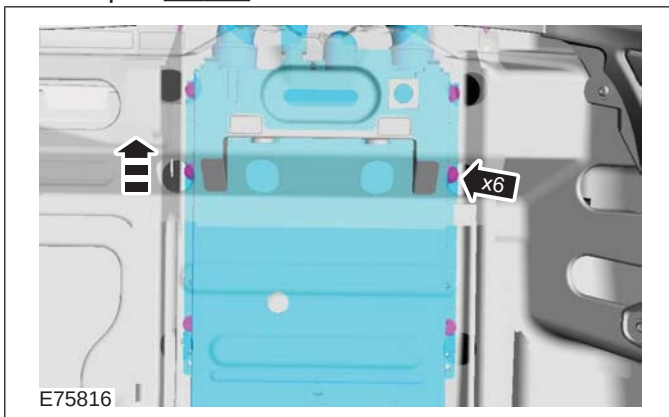
 Wear safety goggles.

 Do not probe supplemental restraint system (SRS) electrical connectors.

NOTE: Removal steps in this procedure may contain installation details.

1. Remove both rear quarter trim panels.
2. 1. Torque: 25 Nm
2. Torque: 25 Nm



REMOVAL AND INSTALLATION**3.****4. Torque: 25 Nm****Installation****1.** To install, reverse the removal procedure.

REMOVAL AND INSTALLATION

Passenger Air Bag Deactivation (PAD) Switch

WARNINGS:

- ⚠ To avoid accidental deployment, the restraints control module backup power supply must be depleted. Wait at least one minute after disconnecting the battery ground cable(s) before commencing any repair or adjustment to the supplemental restraint system (SRS), or any component(s) adjacent to the SRS sensors. Failure to follow these instructions may result in personal injury.
- ⚠ To minimize the possibility of premature deployment, do not use radio key code savers when working on the supplemental

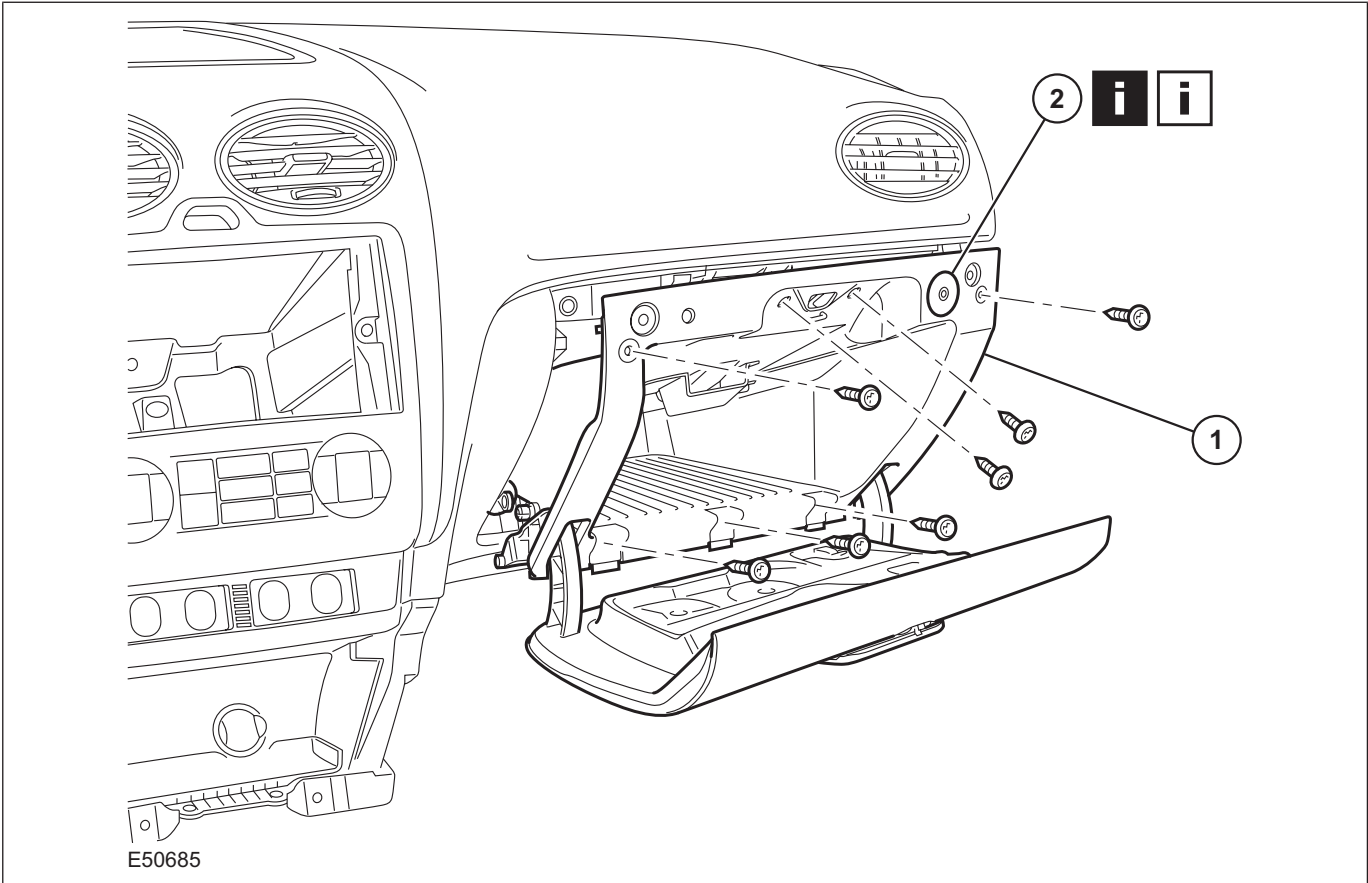
restraint system. Failure to follow this instruction may result in personal injury.

- ⚠ Never probe the electrical connectors of air bag modules or any other supplemental restraint system component. Failure to follow this instruction may result in personal injury.

1. Disconnect the battery ground cable.

For additional information, refer to: **Battery Disconnect and Connect** (414-01 Battery, Mounting and Cables, General Procedures).

2. Remove the components in the order indicated in the following illustration(s) and table(s).



Item	Description
1	Glove compartment
2	Passenger air bag deactivation (PAD) switch See Removal Detail See Installation Detail

All vehicles

3. To install, reverse the removal procedure.

Vehicles with global closing

4. Initialize the door window motors.

For additional information, refer to: **Door Window Motor Initialization** (501-11 Glass,

REMOVAL AND INSTALLATION

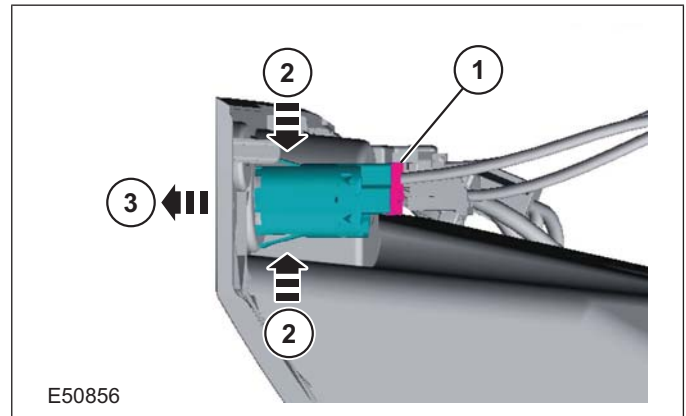
Frames and Mechanisms, General

Procedures).

Removal Details**Item 2 Passenger air bag deactivation (PAD) switch****1. Remove the PAD switch.**

1. Disconnect the PAD switch electrical connector.
2. Depress the PAD switch locking tangs.

3. Pull the PAD switch out of the glove compartment.

**Installation Details****Item 2 Passenger air bag deactivation (PAD) switch**

1. Make sure that the PAD switch locking tangs are fully engaged in the glove compartment.

