



XK

DATE 11/01

501-T836

SERVICE

TECHNICAL BULLETIN

Occupancy Sensing System –
Activation Procedure –
Service Action T836

MODEL 2001 MY
XK Range
VIN A11051–A20744

Issue:

Coinciding with the introduction of the 2001 MY XK Series, all vehicles were equipped from production with the Advanced Restraint Technology System (ARTS) that incorporated components and functionality that could be enabled at a later date once the system software was fully developed. This allows owners of these earlier vehicles to benefit by having this system retrofitted with specific components/software to update this system to include occupant position sensing. This is achieved by utilizing ultrasonic sensors already mounted in the roof console, passenger side A-post, and passenger side B-post. Once retrofitted, the Occupant Sensing System now includes passenger seat weight sensing, as well as, occupant position sensing.

Action:

Activate the occupancy sensing system and replace the driver handbook on all vehicles within the VIN range of A11051 – A20744 at the next service opportunity.

To determine the necessary re-work and parts required for each vehicle, by VIN, refer to the tables on the next page. Refer to Warranty Section 1 - **for coupe vehicles** and Section 2 - **for convertible vehicles** of this Service Action. The sections contain the re-work required, SRO, and part number information.

Note: Ensure that the correct kits are ordered for coupe and convertible vehicles.

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XK COUPE ONLY PROCEDURES

VIN Range	Activation Procedure	Sensor replace	Re-flash PSWS Module	New OSM	OSS Activation	Handbook
A11051 - A16447	1	•	•	•	•	•
A16448 - A17685	2		•	•	•	•
A17686 - A19806	3			•	•	•
A19807 - A20744	7				•	•

XK CONVERTIBLE VEHICLES ONLY PROCEDURES

VIN Range	Activation Procedure	Sensor replace	Re-flash PSWS Module	New OSM	OSS Activation	Handbook
A11051 - A17081	4	•	•	•	•	•
A17082 - A17685	5		•	•	•	•
A17686 - A19806	6			•	•	•
A19807 - A20744	7				•	•

PREPARATION - VIN A11051-A20744 ONLY

1. Switch ignition on.
2. Reposition the right hand front seat fully rearwards and upwards for access.
3. Reposition the steering column rearwards and upwards for access.
4. Reposition the left hand front seat fully rearwards and upwards for access.
5. Switch ignition off.
6. Remove battery cover for access.
7. Disconnect battery.

⚠ Warning: Wait one minute after battery disconnection for air bag system to deactivate.

REPLACE OCCUPANCY SENSORS

COUPE - VIN A11051-A16447 ONLY; CONV. - VIN A11051-A17081 ONLY

1. Install new roof console occupancy sensor, see JTIS, section: 501-20B, SRO 76.73.57.

Note: Roof console occupancy sensors are handed. Ensure that the sensor cones point towards the passenger side of the vehicle.

⚠ Caution: The sensor meshes are fragile. Avoid direct contact to eliminate possible damage (Illustration 1).

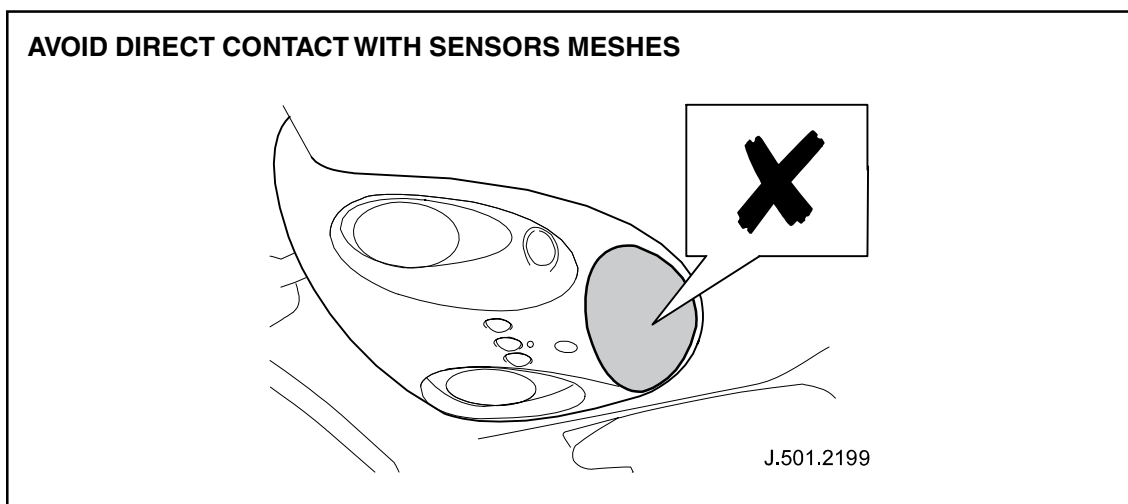


ILLUSTRATION 1

2. Remove A-post upper trim pad for access, see JTIS, section: 501-05, SRO 76.13.31.
3. During the following operation, disconnect A-post occupancy sensor connector.

Note: A-post occupancy sensors were originally secured in two ways; secured with adhesive or by a screw and washer.

4. If a screw and washer secure the A-post sensor, loosen and remove the screw and washer, remove the occupancy sensor and place aside.

⚠ Caution: During the following operation, be extremely careful to minimize any damage to the trim pad substrate.

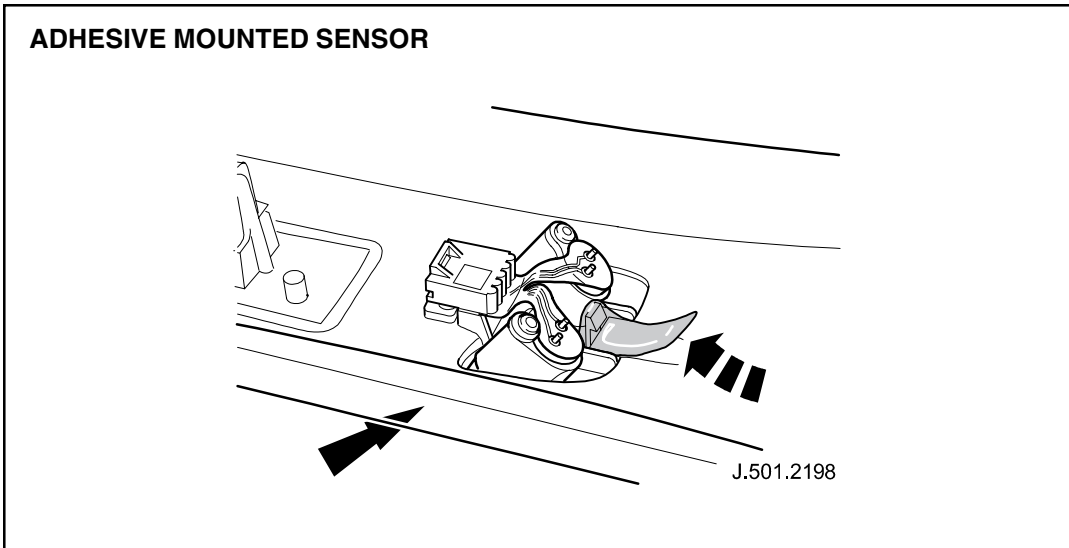


ILLUSTRATION 2

5. If the A-post occupancy sensor is secured with adhesive carefully cut and remove the set adhesive from the A-post upper trim pad and sensor to allow sensor removal (Illustration 2).
6. Carefully, so as not to damage the A-post upper trim pad, displace and remove the sensor and place aside.
7. Place a new A-post occupancy sensor to the front.
8. Loosen and remove the occupancy sensor securing screw and washer of the new sensor.
9. Install and seat the new occupancy sensor to the A-post upper trim pad.

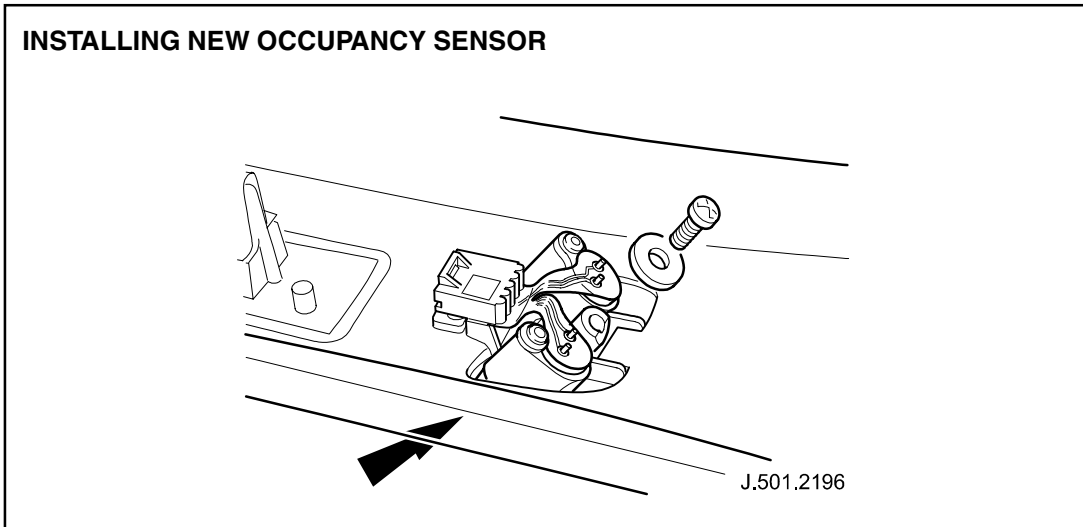


ILLUSTRATION 3

10. Install and tighten the occupancy sensor to the A-post upper trim pad securing screw and washer (Illustration 3).

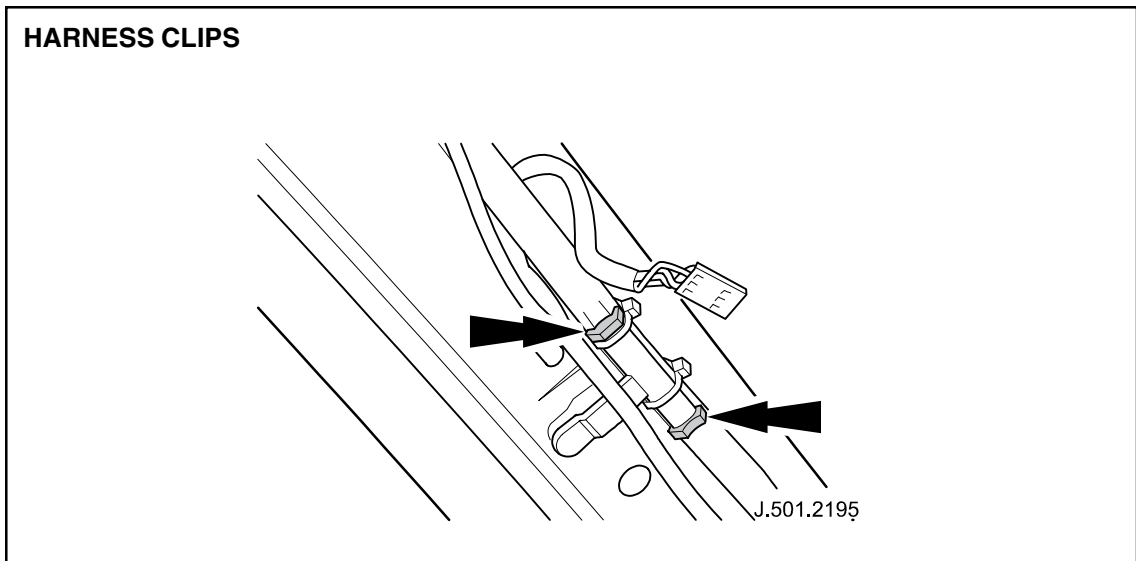


ILLUSTRATION 4

11. Cut wings off the A-post harness clip (Illustration 4).

⚠ Caution: Care must be taken when cutting the wings not to damage the harness.

12. During the following operation connect the A-post occupancy sensor connector.

⚠ Caution: Ensure that the fly lead is free from obstruction and clear of adjacent body structure.

13. Reinstall the A-post upper trim pad.

⚠ Caution: The sensor meshes are fragile. Avoid direct contact with meshes to eliminate possible damage (Illustration 5).

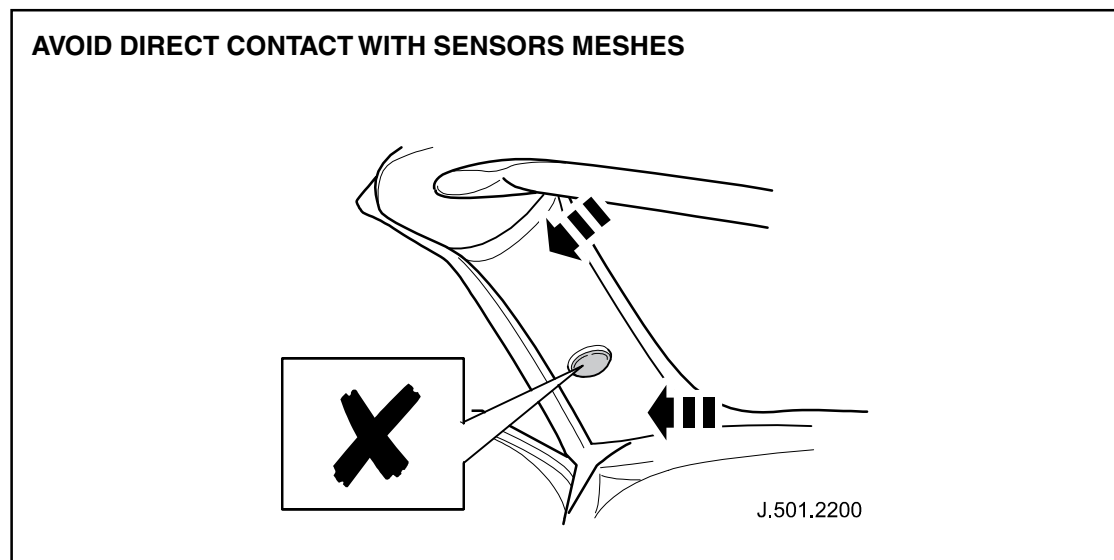


ILLUSTRATION 5

Coupe vehicles only VIN A11051-A16447

1. Remove the rear seat cushion for access, see JTIS, section: 501-10, SRO 76.70.37.
2. Remove the rear seat backrest for access, see JTIS, section: 501-10, SRO 76.70.38.
3. Remove the coat hanger hook, see JTIS, section: 501-05, SRO 76.10.54.
4. Remove the rear quarter trim panel, see JTIS, section: 501-05, SRO 76.13.73.
5. Place the trim panel on a suitable clean surface.

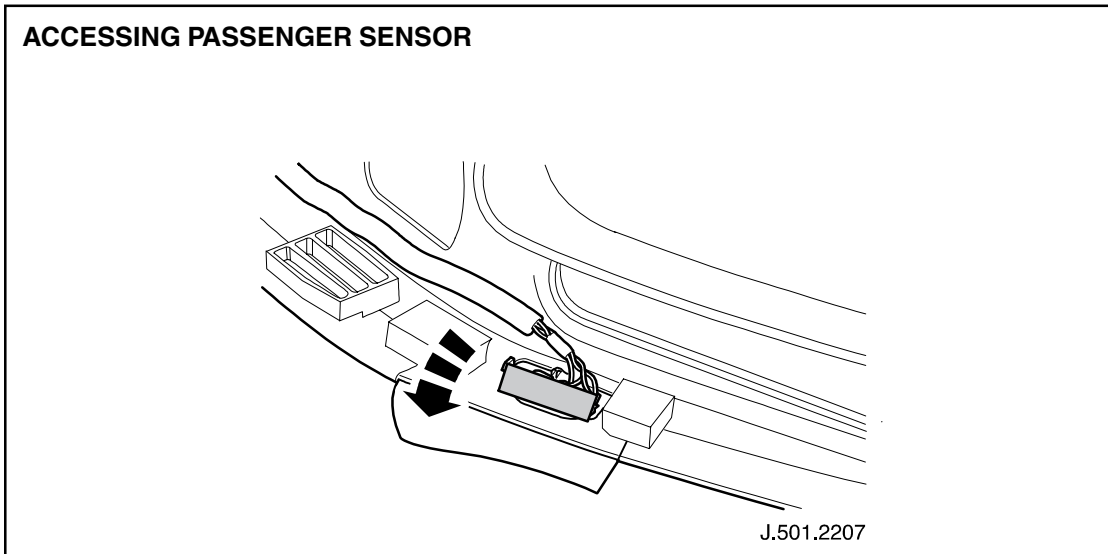


ILLUSTRATION 6

6. Peel back the panel trim locally from the passenger sensor (Illustration 6).
7. Remove the double-sided foam pad from the panel trim or occupancy sensor and discard (Illustration 7).

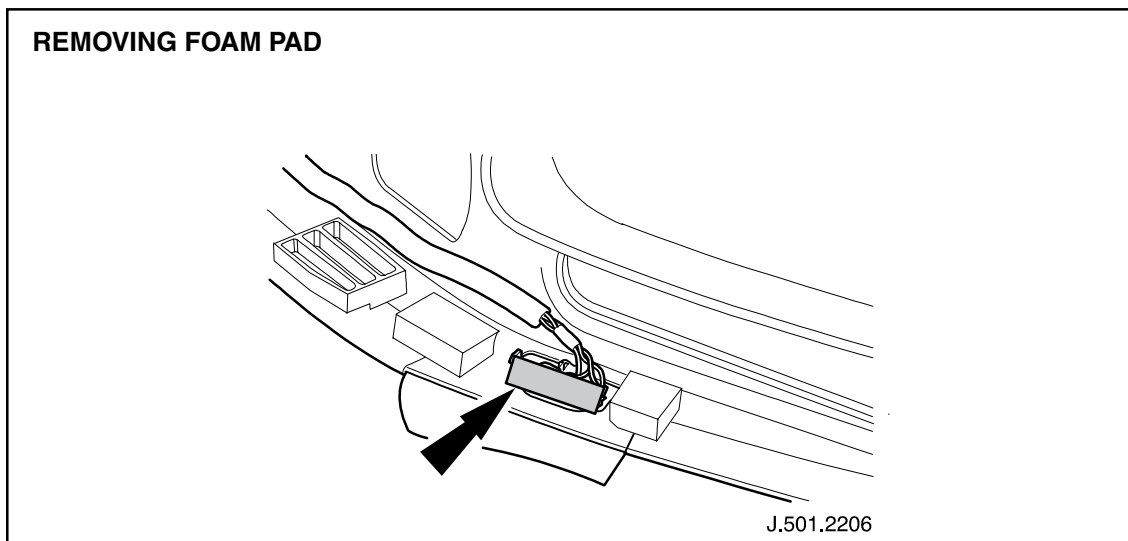


ILLUSTRATION 7

- Carefully release the occupancy sensor harness from the panel set adhesive.

⚠ Caution: During the following operation, be careful to minimize any damage to the panel substrate.

- Carefully cut and remove set adhesive from the trim panel and occupancy sensor to allow sensor removal (Illustration 8).

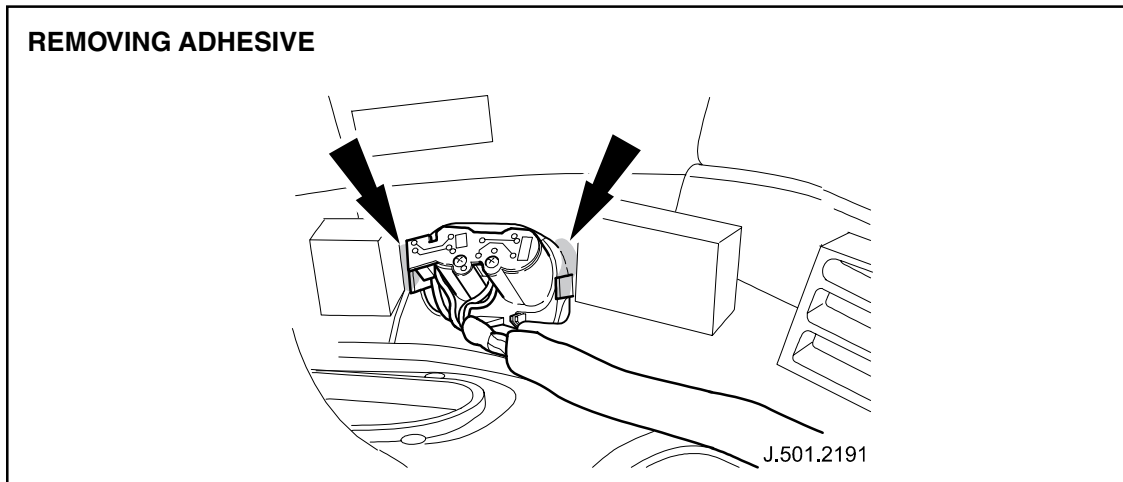


ILLUSTRATION 8

- Carefully, so as not to damage the trim panel, displace and remove the occupancy sensor and place aside.
- Carefully install and seat a new occupancy sensor to the trim panel.

Note: During the previous operation, ensure the sensor tangs engage behind the trim panel substrate.

- Reposition the trim panel so that the occupancy sensor is inverted and horizontal.
- Mix a sufficient amount of the supplied adhesive as per manufacturers instructions.
- Apply adhesive to the occupancy sensor tangs and the trim panel substrate (Illustration 9).

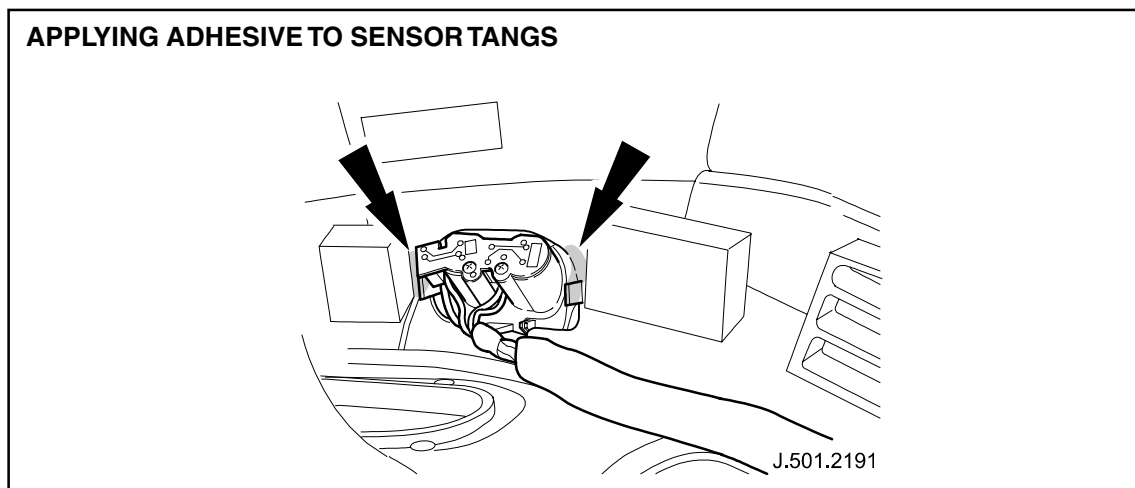


ILLUSTRATION 9

15. Apply adhesive to the trim panel substrate at the original occupancy sensor harness bonded location.
16. Position the occupancy sensor harness on the adhesive on the trim panel.
17. Place a suitable object against the harness to hold its position until the adhesive reaches handling strength.

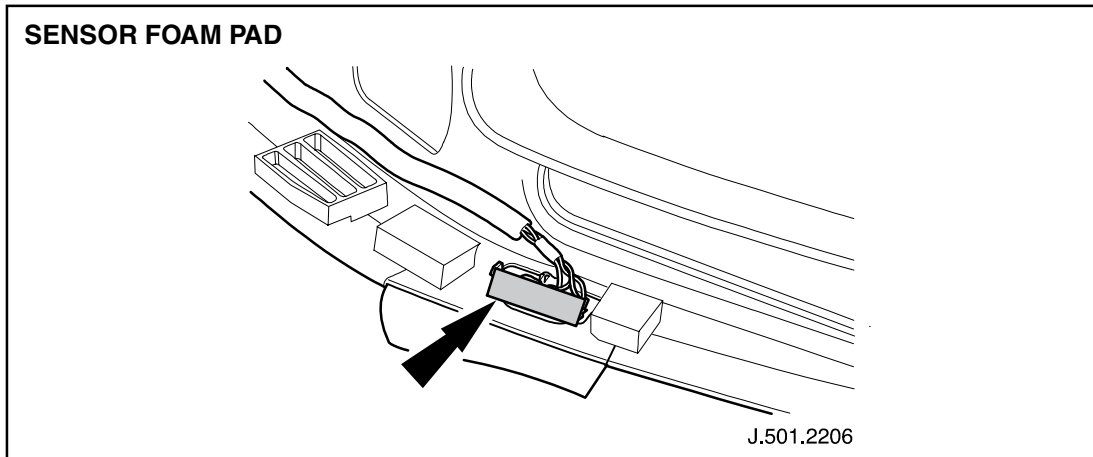


ILLUSTRATION 10

18. Once the adhesive has reached handling strength remove and discard the backing paper from the occupancy sensor foam pad (Illustration 10).

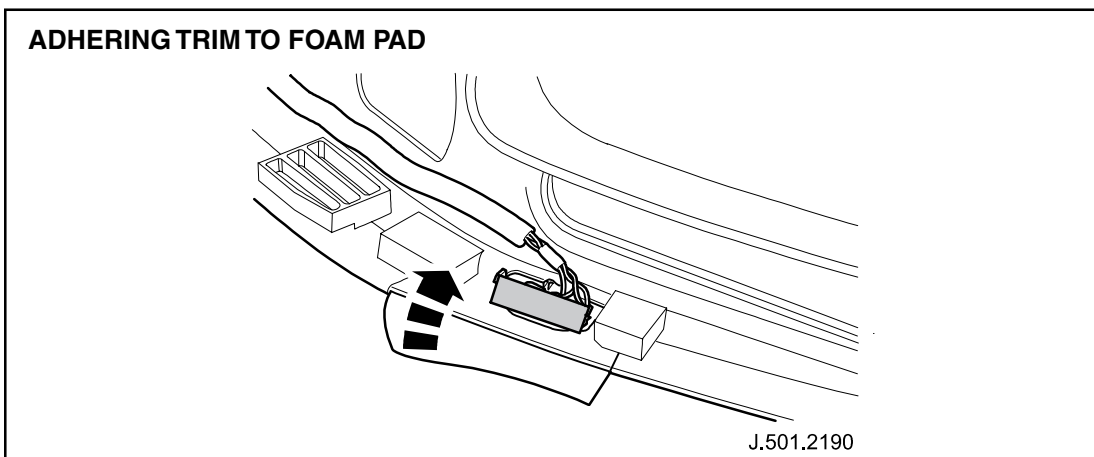


ILLUSTRATION 11

19. Adhere the panel trim locally to the occupancy sensor and foam pad (Illustration 11).
20. Reinstall the rear quarter trim panel, see JTIS, section: 501-05, SRO 76.13.73.
21. Reinstall the coat hanger hook, see JTIS, section: 501-05, SRO 76.10.54.
22. Reinstall the rear seat backrest, see JTIS, section: 501-10, SRO 76.70.38.
23. Reinstall the rear seat cushion, see JTIS, section: 501-10, SRO 76.70.37.

Convertible vehicles only VIN A11051-A17081

1. Remove the rear quarter trim capping, see JTIS, section: 501-05, SRO 76.13.76.

Note: When removing the B-post trim, disconnect the occupancy sensor connector.

2. Place the trim panel on a suitable clean surface.
3. Carefully peel back the corner of the capping foam to release the occupancy sensor harness.

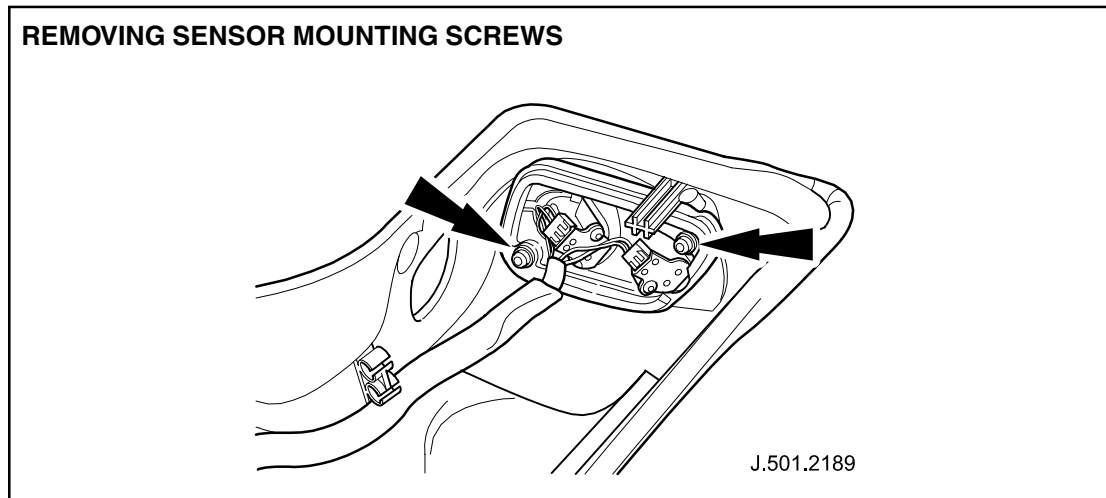


ILLUSTRATION 12

4. Loosen and remove the occupancy sensor securing screws (Illustration 12).
5. Remove the occupancy sensor plastic clamp.
6. Remove the occupancy sensor from the capping.
7. Install a new occupancy sensor on the capping.
8. Install and align the occupancy sensor plastic clamp.
9. Install and tighten the occupancy sensor securing screws (Illustration 13).

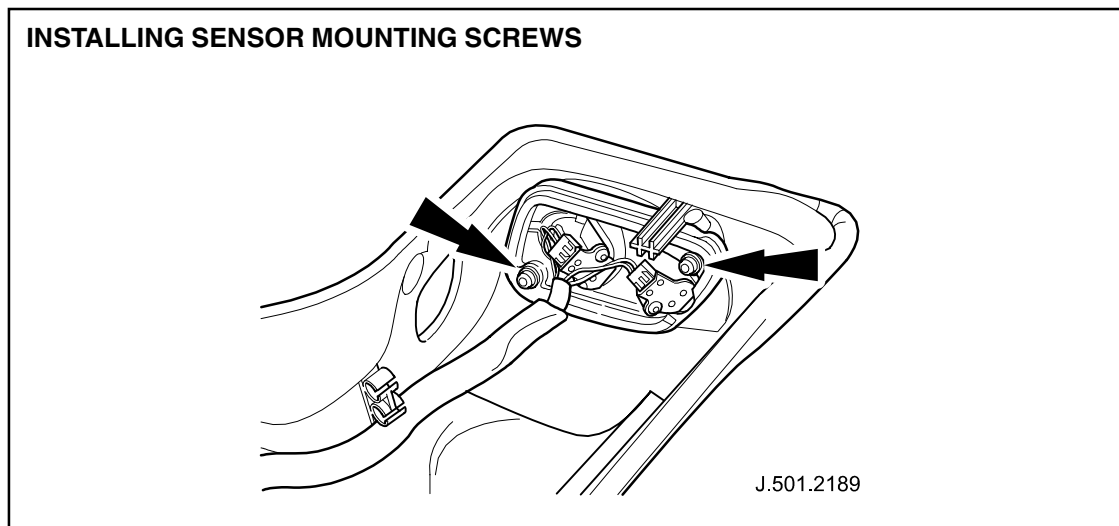


ILLUSTRATION 13

POSITIONING OF HARNESS

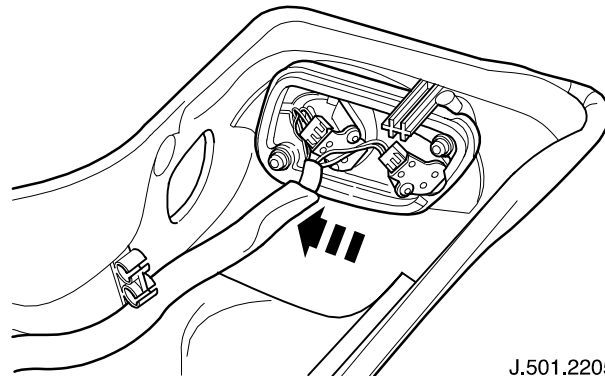


ILLUSTRATION 14

10. Reposition the occupancy sensor harness against the capping.

Note: Ensure the harness is positioned into the corner and along the inner contour of the capping (Illustration 14).

11. Using suitable adhesive tape, secure the harness to the capping corner.
12. Stick down the corner of the capping foam to secure the occupancy sensor harness.
13. Reinstall the rear quarter trim capping, see JTIS, section: 501-05, SRO 76.13.76.

Note: When reinstalling the B-post trim, reconnect the occupancy sensor connector.

REFLASH PASSENGER SEAT WEIGHT SENSING (PSWS) MODULE VIN A11051-A17685 ONLY

1. Disconnect the main passenger seat to cabin harness connector from the seat frame bracket tang.
2. Disconnect the main passenger seat connector from the cabin harness connector (SP001-yellow 14 way).
3. Connect the supplied service three way link lead to the main passenger seat and the cabin harness connectors.
4. Reconnect the battery. The LED on special tool will illuminate
5. Do not switch ignition on. Restraint system DTCs will be logged if ignition is switched on during the procedure.

Note: The WDS must be loaded with the updated JTP 759 issue 9 or later software disc prior to reflashing PSWS Module.

6. Connect the WDS main diagnostic cable to the service three way link lead.

7. Ensure ignition key is in the barrel and switched off and the park brake is applied.
8. From the special applications menu on WDS, select and run XK8 2001 MY passenger seat weight sensor module recognition application.
9. WDS will confirm successful reconfiguration.
10. Disconnect WDS from the service three way link lead.
11. Switch the service three way link lead off by toggling the switch, hold the switch in this position for 15 seconds. During this time the LED on three-way link lead will cease to illuminate.
12. Disconnect battery.

⚠ Warning: Wait one minute after battery disconnection for air bag system to deactivate.

13. Disconnect and remove the service three way link lead from the main passenger seat and cabin harness connectors.
14. Connect the main passenger seat connector to the cabin harness connector (SP001-yellow 14 way).
15. Connect the main passenger seat to cabin harness connector to the seat frame bracket tang.

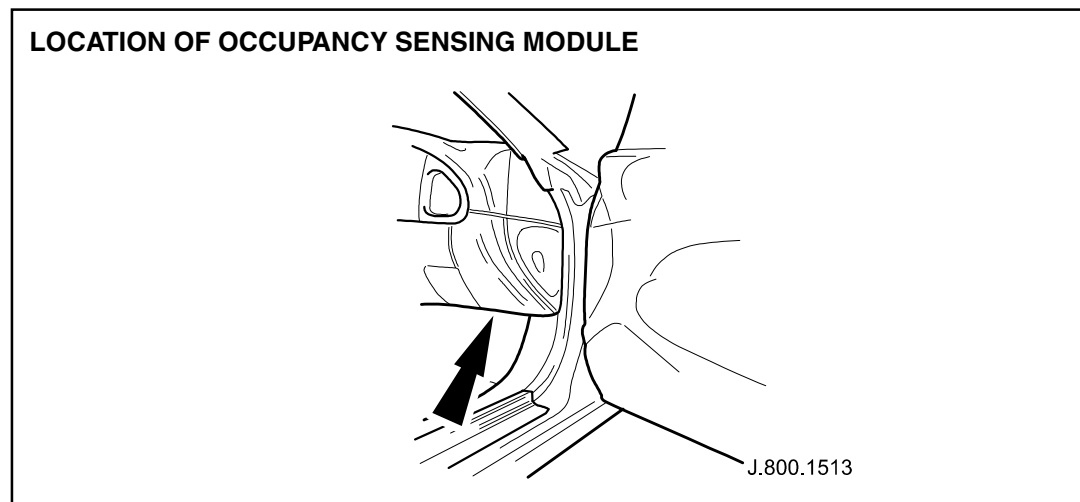


ILLUSTRATION 15

REPLACE OCCUPANCY SENSING MODULE (OSM) VIN A11051-A19806 ONLY

Note: The OSM is located under the dash on the front right side of the vehicle (Illustration 15).

1. Remove the glove compartment, see JTIS, section: 501-12, SRO 76.52.03.
2. Install new OSM, see JTIS, section: 501-20B, SRO 76.73.59.

MODIFY OSM CONNECTOR - VIN A11051-A20744

Note: A terminated repair lead is provided, if required, for damaged pin number 22. If needed, the terminated repair lead should be used in conjunction with the harness repair kit.

Note: A number of vehicles after VIN A13500 will have pin number 22 (white, B+) housed in slot 13 of the OSM connector. Pin number 22 will now be need to be transferred from slot 13 to slot 22 on these vehicles.

1. Disconnect OSM electrical connector.
2. Unwrap and remove the temporary insulation tape securing pin number 22 to the main harness.

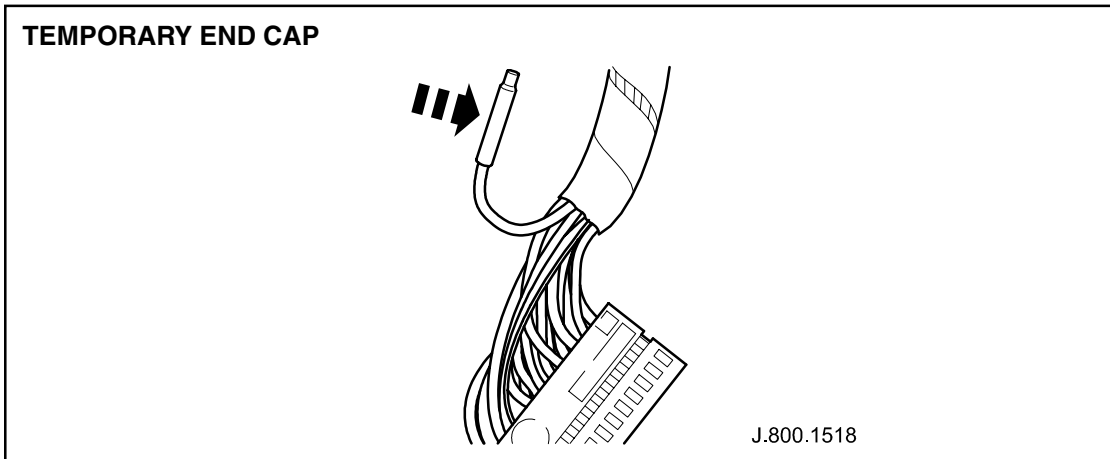
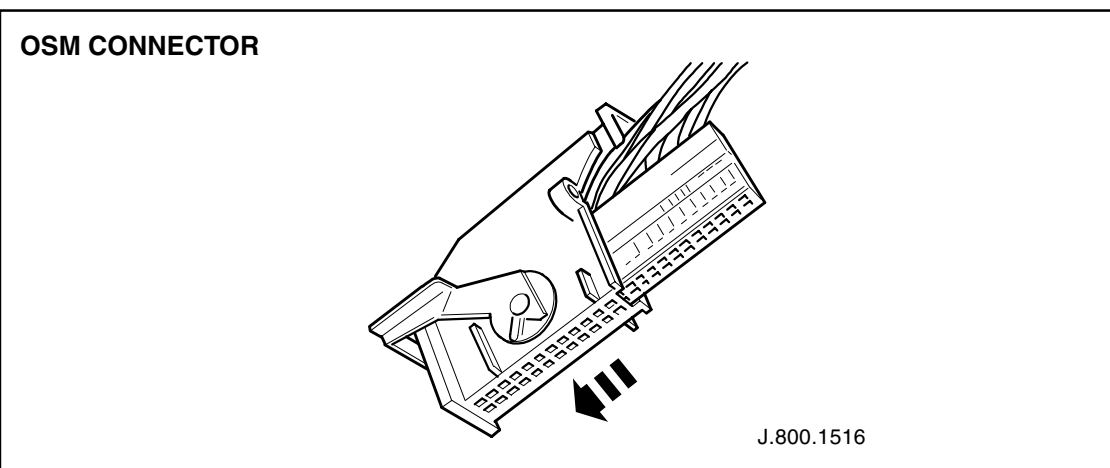


ILLUSTRATION 16

3. Remove the temporary end cap protective sleeve from pin number 22 (Illustration 16).
4. Cut and remove the tie strap from the OSM connector.

Note: Take care not to damage any of the wiring.



5. Remove the end cover from the OSM connector (Illustration 17).

6. Connect pin number 22 to slot number 22 in the OSM connector.

Note: During the previous operation, ensure the pin tang locks into position within the connector.

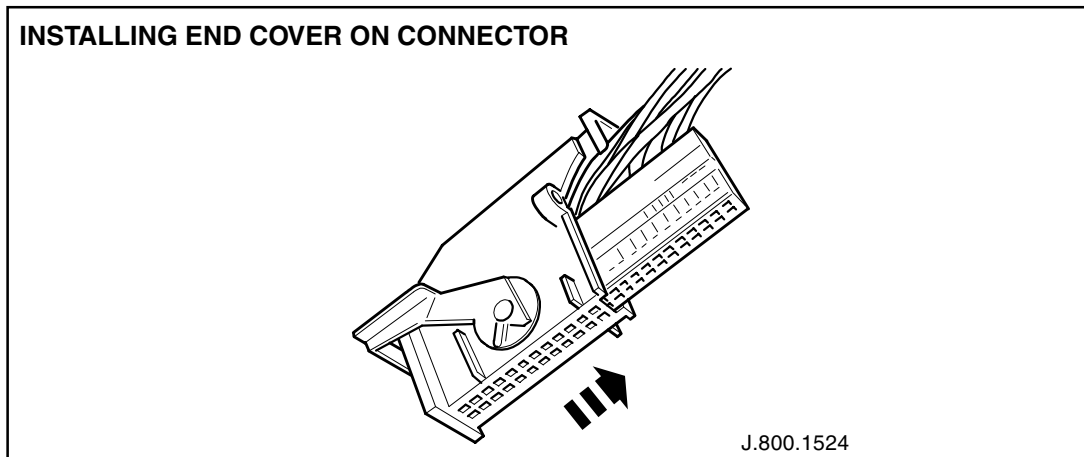


ILLUSTRATION 18

7. Install the end cover on the OSM connector housing (Illustration 18).

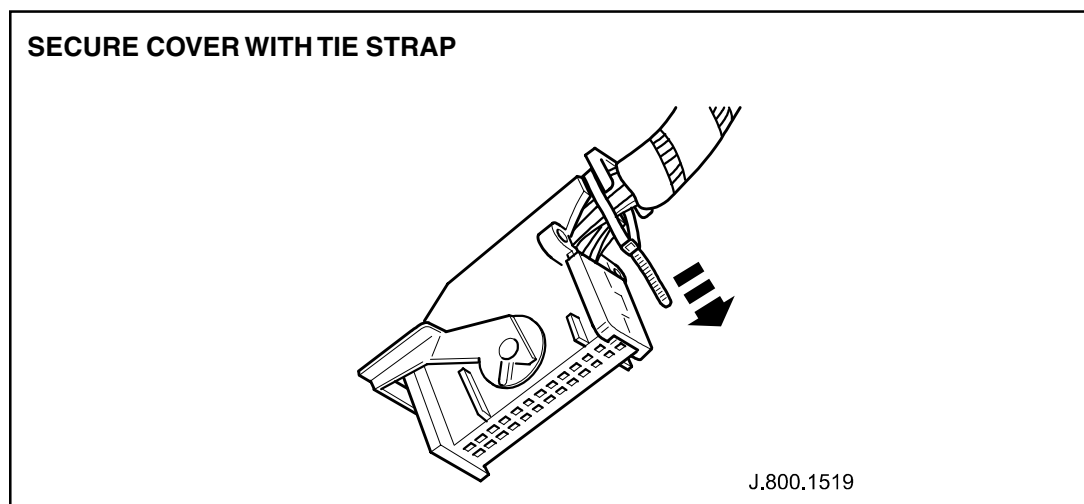


ILLUSTRATION 19

8. Using a tie strap, secure the end cover to the connector housing (Illustration 19).
9. Cut and remove any excess tail from the tie strap.
10. Reconnect OSM electrical connector.
11. Reinstall the glove compartment, see JTIS, section: 501-12 SRO 76.52.03.
12. Reconnect battery.
13. Connect the WDS to the data link connector and activate the OSM (from the special applications menu).

Note: WDS must have been loaded with the updated JTP 759 issue 9 or later software disc prior to reactivation.

14. Using WDS, ensure the restraint system is free from diagnostic trouble codes.

15. Disconnect the WDS lead from the vehicle diagnostic socket.
16. Carry out battery reconnection procedure.

ACTIVATION CHECK - VIN A11051-A20744

1. Sitting in the driver seat, with the passenger seat unoccupied, switch ignition on.
2. Verify that the passenger airbag warning lamp illuminates for about six seconds then goes off and remains off.
3. Sit in the front passenger seat (must be an adult) and reposition the seat to mid position.
4. Verify that the passenger airbag warning lamp remains off (passenger sitting in the normal position).
5. Verify that the passenger warning lamp illuminates when the passenger leans forward to within 20 cm off the fascia.
6. Verify that the passenger airbag warning lamp goes off when the passenger moves back to a normal seated position.
7. Switch ignition off.
8. Cross out the existing blue dot on the VCATS label in a different color to signify that the vehicle is OSS active.
9. Reinstall the luggage compartment carpet.
10. Reinstall the battery cover.
11. Remove interior protection kit.
12. Remove fender protectors.
13. Close luggage compartment.
14. Remove the existing driver handbook and replace it with the appropriate language version. Refer to the Parts Information below.
15. Close doors.

Parts Information:

All of the required parts will be available in a kit. The kits will consist of all the parts required to activate the OSS and can be determined by the model, and trim color. Replacement Handbook part numbers are listed below.

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Handbook - English - USA/Canada	JJM 18 02 14/20	a/r
Handbook - French - French Canadian	JJM 20 02 14/20	a/r
Handbook - Spanish - Mexico	JJM 29 02 14/20	a/r

<p>Note: You must ensure that the correct kits are being ordered for coupe and convertible vehicles.</p>

This table lists the parts contained in the kit, part number HJE 97**AA, referenced in Activation Procedure 1 of Section 1 **for coupe vehicles only** and Activation Procedure 4 of Section 2 **for convertible vehicles only**.

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Kit Part Number includes	HJE 97**AA	-
A-post occupancy sensor	-	1
B-post capping occupancy sensor	-	1
Roof console occupancy sensor	-	1
A-post occupancy sensor washer	-	1
A-post occupancy sensor screw	-	1
Adhesive	-	-
Pre-terminated lead	-	1
Occupancy sensing module (OSM)	-	1
OSM mountings	-	3

This table lists the parts contained in the kit, part number HJE 9720AA, referenced in Activation Procedures 2 and 3 of Section 1 **for coupe vehicles only** and Activation Procedures 5 and 6 of Section 2 **for convertible vehicles only**.

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Kit Part Number includes:	HJE 9720AA	
Occupancy sensing module (OSM)	-	1
OSM mountings	-	3
Pre-terminated lead	LST 6753AA	1

Warranty Information:

Warranty Claims should be submitted quoting T836 along with the relevant SROs and part numbers from the tables listed within this Service Action.

If a vehicle has been brought back into the workshop to perform this action alone, SRO: 10.10.10 may also be claimed. This will result in an additional labor time allowance of 0.1 hours for drive in/drive out.

When the warranty claim input screen changes to show a claim type category of ‘Special Program Code’ the following warranty claim information will apply; ‘Warranty claims should be submitted quoting T836 as the ‘Special Program Code’ together with option code X, part numbers, and the appropriate SROs.’ This will result in payment for the parts and labor time claimed.

Note: The part number in this table, HJE 9720AA, refers to the complete kit required for the necessary rework for coupe vehicles only and consists of the parts listed under Parts Information.

Activation Procedure 2

Model	VIN Range
Coupe	A16448 – A17685

<u>REWORK REQUIRED</u>	<u>SRO</u>	<u>TIME (HOURS)</u>
Replace OSM	86.92.77	1.1
Activate OSS		
Re-flash PSWS Module		
Replace handbook		

<u>PART NUMBER</u>	<u>PARTS DESCRIPTION</u>
HJE 9720AA	Control Module kit
JJM 18 02 14/20	Handbook English - USA/Canada
JJM 20 02 14/20	Handbook French - French Canadian
JJM 29 02 14/20	Handbook Spanish - Mexico

Note: The part number in this table, HJE 9720AA, refers to the complete kit required for the necessary rework for couple vehicles only and consists of the parts listed under Parts Information.

Activation Procedure 3

Model	VIN Range
Coupe	A17686 – A19806

<u>REWORK REQUIRED</u>	<u>SRO</u>	<u>TIME (HOURS)</u>
Replace OSM	86.92.77/01	1.0 Left hand drive
Activate OSS		
Replace handbook		

<u>PART NUMBER</u>	<u>PARTS DESCRIPTION</u>
HJE 9720AA	Control Module kit
JJM 18 02 14/20	Handbook English - USA/Canada
JJM 20 02 14/20	Handbook French - French Canadian
JJM 29 02 14/20	Handbook Spanish - Mexico

Activation Procedure 7

Model

Coupe

VIN Range

A19807 – A20744

REWORK REQUIRED

Activate OSS

Replace handbook

SRO

86.92.76

TIME (HOURS)

0.8 Left hand drive

PART NUMBER

LST 6753AA

JJM 18 02 14/20

JJM 20 02 14/20

JJM 29 02 14/20

PARTS DESCRIPTION

Pre-terminated lead (order separately,
if needed)

Handbook English - USA/Canada

Handbook French - French Canadian

Handbook Spanish - Mexico

SECTION 2 WARRANTY – XK CONVERTIBLE VEHICLES ONLY

Note: The part numbers in this table, HJE 97**AA, refer to the complete kit required for the necessary rework on convertible vehicles only and contain all the parts outlined under Parts Information. You will be required to order one kit plus the appropriate handbook for each vehicle.

Activation Procedure 4

Model

Convertible

VIN Range

A11051 – A17081

REWORK REQUIRED

Replace sensors

Activate OSS

Replace OSM

Re-flash PSWS Module

Replace Handbook

SRO

86.92.78/70

TIME (HOURS)

1.6 Left hand drive

PART NUMBER

HJE 9700AA

HJE 9701AA

HJE 9702AA

HJE 9703AA

HJE 9704AA

JJM 18 02 14/20

JJM 20 02 14/20

JJM 29 02 14/20

COLOR/TRIM DESCRIPTION

LHD Warm Charcoal

LHD Nimbus

LHD Oatmeal

LHD Ivory

LHD Cashmere

Handbook English - USA/Canada

Handbook French - French Canadian

Handbook Spanish - Mexico

Note: The part number in this table, HJE 9720AA, refers to the complete kit required for the necessary rework on convertible vehicles only and consists of the parts listed under Parts Information.

Activation Procedure 5

Model **VIN Range**
 Convertible A17082 – A17685

<u>REWORK REQUIRED</u>	<u>SRO</u>	<u>TIME (HOURS)</u>
Activate OSS	86.92.77	1.1
Replace OSM		
Re-flash PSWS Module		
Replace Handbook		

<u>PART NUMBER</u>	<u>PARTS DESCRIPTION</u>
HJE 9720 AA	Control Module Kit
JJM 18 02 14/20	Handbook English - USA/Canada
JJM 20 02 14/20	Handbook French - French Canadian
JJM 29 02 14/20	Handbook Spanish - Mexico

Note: The part number in this table, HJE 9720AA, refers to the complete kit required for the necessary rework on convertible vehicles only and consists of the parts listed under Parts Information.

Activation Procedure 6

Model **VIN Range**
 Convertible A17686 – A19806

<u>REWORK REQUIRED</u>	<u>SRO</u>	<u>TIME (HOURS)</u>
Activate OSS	86.92.77/01	1.0 Left hand drive
Replace OSM		
Replace Handbook		

<u>PART NUMBER</u>	<u>PARTS DESCRIPTION</u>
HJE 9720 AA	Control Module Kit
JJM 18 02 14/20	Handbook English - USA/Canada
JJM 20 02 14/20	Handbook French - French Canadian
JJM 29 02 14/20	Handbook Spanish - Mexico

Activation Procedure 7

Model

Convertible

VIN Range

A19807 – A20744

REWORK REQUIRED

Activate OSS

Replace handbook

SRO

86.92.76

TIME (HOURS)

0.8 Left hand drive

PART NUMBER

LST 6753AA

JJM 18 02 14/20

JJM 20 02 14/20

JJM 29 02 14/20

PARTS DESCRIPTION

Pre-terminated lead (order separately, if needed)

Handbook English - USA/Canada

Handbook French - French Canadian

Handbook Spanish - Mexico

NOTE: Always perform a DCS claim search first to determine whether this service action has been performed on this vehicle. The warranty selection under the vehicle inquiry will give a listing of all claims against the vehicle. If S835 appears in the fault code field, do not perform this service action.