Field campaign

Topic	Flying Spur - Front seat rail - Proximity sensor check (SC14/15)
Market area	United States E05 Bentley USA and rest America (6E05)
Brand	Bentley
Transaction No.	2037363/1
Campaign number	EA15
Note	
Type	
US code	

Vehicle data

Flying Spur - United States and rest of America

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4W2*	2014	E		*	*	*

Chassis numbers

Manufacturer	Filler	Type	Filler	MY	Factory	From	To	Prod from	Prod to
SCB	*	3W	*	E	*	086303	094772		
SCB	*	ZA	*	E	*	086303	094772		

Documents

Document name
master.xml

Notes

Repair instructions

Technical background

The front seat proximity sensors are located under both front seats at the front of the inner seat rail. The screw which secures the front right hand seat proximity sensor (Figure 1) and the screws which secure the left hand front proximity sensor and proximity sensor bracket (Figure 2) require replacing using a later specification part.

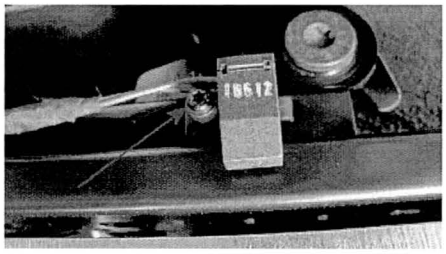


Figure 1

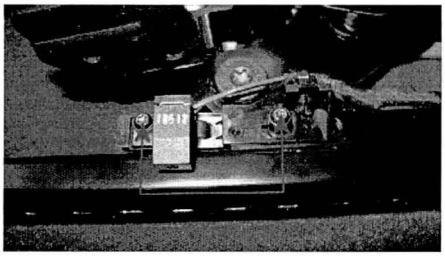


Figure 2

Overview of this campaign

Section 1 – The sensor screw (right hand seat) along with sensor and sensor bracket screw (left hand seat) require replacing using a later specification part. Sensor confirmation checks are also required after the screws are replaced as detailed.

Sections 2 and 3 - Should only be conducted in the event that the proximity sensors are deemed to be as not per specification after the confirmation checks in Section 1 have been conducted

Section 2 details the process to replace all applicable parts on the right and left hand seats **NOTE:** The process to replace the parts on the left hand seat differs from the right hand seat as the right hand seat valance bracket does not require replacement.

If only one sensor is found to be not per specification (for example right hand side) it is only a requirement to change the right hand sensor, it is only a requirement to change the right and left hand sensors if both are deemed as not per specification

Section 3 is a short diagnostic procedure which must be conducted on completion of Section 2

ATTENTION: During this procedure the workshop manual is quoted, it is recommended that all referenced procedures are checked by the operative as the process within the workshop manual may have changed since last viewed.

Remedy

This campaign must be carried out on all applicable vehicles within the specific VIN range to ensure all affected vehicles are checked and repaired as detailed within the onward instructions.

Customer notification

Customers do not need to be informed directly of this campaign please ensure that all affected vehicles are checked and repaired during a service visit. You should also promptly inform your new and used vehicle department so that affected vehicles can be checked straight away and if necessary repaired.

IMPORTANT: Whilst carrying out this campaign please check for any other outstanding workshop actions, please ensure that all relevant VIN related workshop actions are conducted during the same workshop visit.

Warranty accounting instructions

Section 1 – Initial check

Time to change screws and carry out sensor confirmation

Warranty Type	710 or 790
Labour operation code	72 95 41 99
Damage Service Number	EA15
Damage code	0066
Time	20 Time units

Section 2 – Use the following codes if one or both proximity sensors have been replaced

Time to replace x1 proximity sensor, valance bracket and control module cover left hand seat

Warranty Type 710 or 1790

Labour operation code 72 95 41 01

Damage Service Number EA15

Damage code 0066

Time 120 Time units

Time to replace x1 proximity sensor and control module cover right hand seat

Warranty Type 710 or 790

Labour operation code 72 95 41 02

Damage Service Number EA15

Damage code 0066

Time 110 Time units

Section 3 - Diagnostic time to check proximity sensor/s after replacement

Warranty Type 710 or 790

Labour operation code 01 29 00 01

Damage Service Number EA15

Damage code 0066

Time 10 Time units

Genuine parts

IMPORTANT: All vehicles will require x3 of N90 732 103 regardless of the condition of the proximity sensors

Only order the left and right hand parts if both proximity sensors require replacement.

Right hand

Description	Part Number	Quantity
Proximity sensor	8K0 980 341B	1
Proximity sensor screw	N90 732 103	1
Control module cover R/H/S	3W3 959 116B	1
Front seat bolt cover R/H	3W3 881 249C	2
Red splice connectors	WT 10078/7	2
Cable tie	WHT 002 824	2

Left hand

Description	Part Number	Quantity
Proximity sensor	8K0 980 341B	1
Proximity sensor bracket	4W0 971 853	1
Proximity sensor screws	N90 732 103	2
Control module cover L/H/S	3W3 959 115C	1
Front valance bracket L/H/S	3W3 881 461C	1
Front seat bolt cover L/H	3W3 881 249A	2
Red splice connectors	WT 10078/7	2
Cable tie	WHT 002 824	3

Parts supply

The required replacement parts should be ordered through your regional Bentley parts distribution centre.

Parts despatch control

Not applicable

Repair instructions

Notes

Technical background

The front seat proximity sensors are located under both front seats at the front of the inner seat rail. The screw which secures the front right hand seat proximity sensor (Figure 1) and the screws which secure the left hand front proximity sensor and proximity sensor bracket (Figure 2) require replacing using a later specification part.

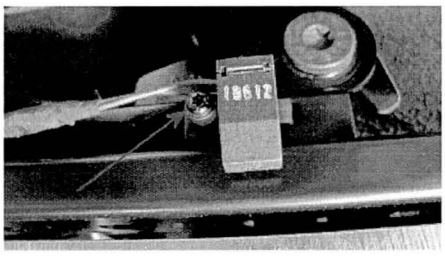


Figure 1

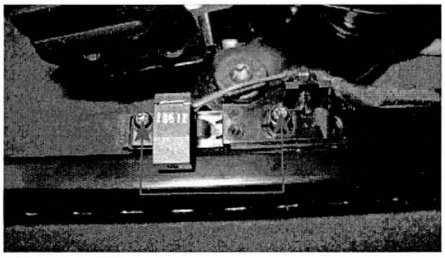


Figure 2

Overview of this campaign

Section 1 – The sensor screw (right hand seat) along with sensor and sensor bracket screw (left hand seat) require replacing using a later specification part. Sensor confirmation checks are also required after the screws are replaced as detailed.

Sections 2 and 3 - Should only be conducted in the event that the proximity sensors are deemed to be as not per specification after the confirmation checks in Section 1 have been conducted

Section 2 details the process to replace all applicable parts on the right and left hand seats **NOTE:** The process to replace the parts on the left hand seat differs from the right hand seat as the right hand seat valance bracket does not require replacement.

If only one sensor is found to be not per specification (for example right hand side) it is only a requirement to change the right hand sensor, it is only a requirement to change the right and left hand sensors if both are deemed as not per specification

Section 3 is a short diagnostic procedure which must be conducted on completion of Section 2

ATTENTION: During this procedure the workshop manual is quoted, it is recommended that all referenced procedures are checked by the operative as the process within the workshop manual may have changed since last viewed.

Check

If the vehicle is not already listed as repaired in the "Repair history" (in Elsa Pro), check for the campaign identification mark which is a yellow paint mark on the right hand proximity sensor (Figure 9) and left hand seat proximity sensor (Figure 10) if the paint marks are not visible please carry out the required work in accordance with these instructions.

Control

All Flying Spur vehicles after VIN SCBEC9ZA7EC094772 are not affected by this campaign.

Genuine parts

IMPORTANT: All vehicles will require x3 of N90 732 103 regardless of the condition of the proximity sensors

Only order the left and right hand parts if both proximity sensors require replacement.

Right hand

Description	Part Number	Quantity
Proximity sensor	8K0 980 341B	1
Proximity sensor screw	N90 732 103	1
Control module cover R/H/S	3W3 959 116B	1
Front seat bolt cover R/H	3W3 881 249C	2
Red splice connectors	WT 10078/7	2

Cable tie	WHT 002 824	2

Left hand

Description	Part Number	Quantity
Proximity sensor	8K0 980 341B	1
Proximity sensor bracket	4W0 971 853	1
Proximity sensor screws	N90 732 103	2
Control module cover L/H/S	3W3 959 115C	1
Front valance bracket L/H/S	3W3 881 461C	1
Front seat bolt cover L/H	3W3 881 249A	2
Red splice connectors	WT 10078/7	2
Cable tie	WHT 002 824	3

Work

Section 1 - Initial check and confirmation

Right hand sensor

1.Referring to Figure 3 - Point A - Change the proximity sensor screw using part number N907 321 03

- Point B - Confirm the overall condition of the sensor outer casing, the outer casing should be not cracked, damaged or distorted

- Point C - Confirm the sensor locating tang is inserted into the seat frame

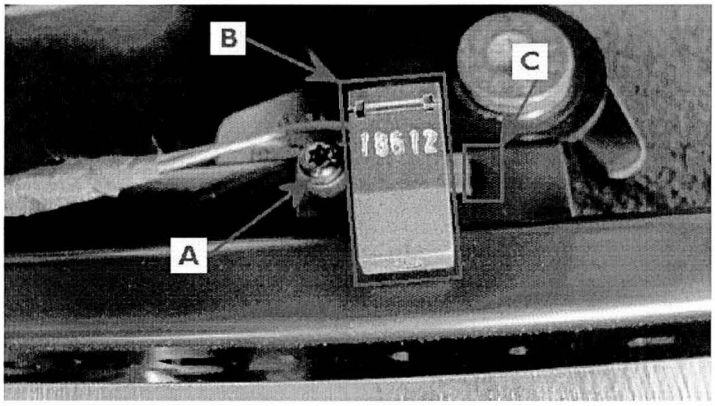


Figure 3

Left hand sensor

- Referring to Figure 4 - Point A - Change the proximity sensor screw and sensor bracket screw using part number N907 321 03

- Point B - Confirm the condition of the sensor outer casing, the outer casing should not be cracked damaged or distorted

- Point C - Confirm the sensor tang is located into the sensor bracket

- Point D - Confirm the sensor bracket tang is located into the seat frame

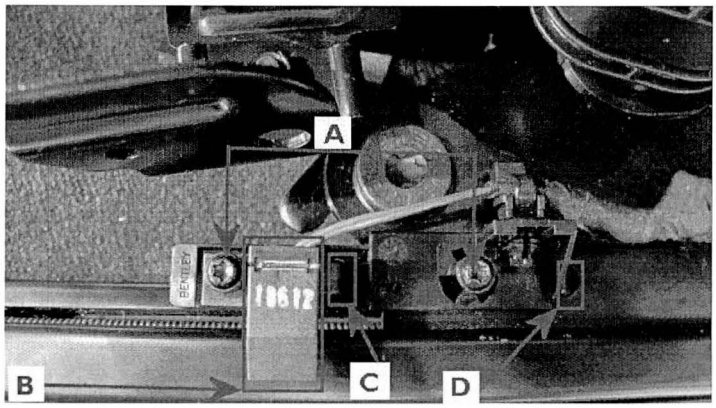
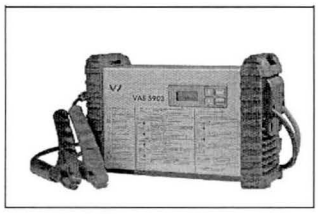


Figure 4

After screw replacement and the condition of both sensors is confirmed as per specification, carry out Section 1 from point (I)

Should one or both of the proximity sensors not be as per specification, carry out Sections 2 and 3

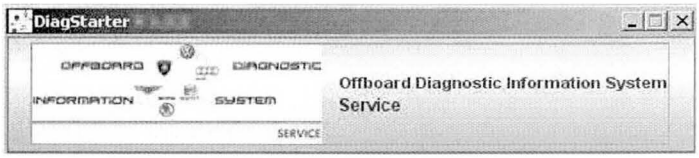
(I). Ensure a suitable battery charger - VAS 5903 - or a charger with the same specification is correctly connected to the vehicle electrical system for the duration of this procedure – Refer to workshop manual Rep.Gr 27 – Batteries to charge



- Connect the Bentley diagnostic tool VAS 5052A or later approved equipment, to the vehicle On Board Diagnostic (OBD) socket

- From the Desktop launch the Offboard Diagnostic Information System Service by using the Diagstarter icon

When prompted, select Offboard Diagnostic Information System Service



IMPORTANT: Please ensure that the correct level of Offboard Diagnostic Information System Service is installed the level should be 2.2.1 or higher

- Ensure the Using guided fault finding box is ticked (Figure 5) – follow all on screen prompts and allow the guided fault finding control module sweep to complete

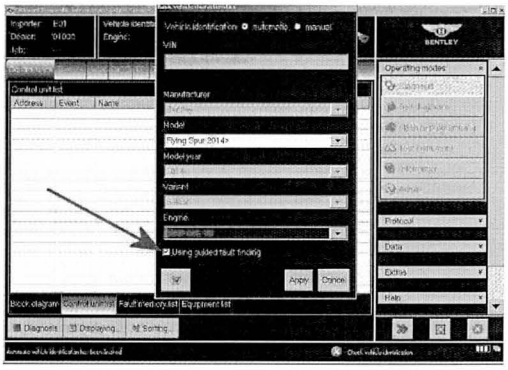


Figure 5

(II). Once Guided Fault Finding is complete, navigate to the block diagram screen

- Referring to Figure 6 (point A), select SVF- 36 Seat Adjustment Driver Side

- The Guided functions box will now appear

- Select 36 – Basic settings (Rep.Gr.72) – (Point B) **NOTE:** Basic settings should now be conducted to allow the seats to be manoeuvred through all positions to clarify that the tolerance between the sensor and control module cover is per specification to ensure that a clash condition is not possible

NOTE: *Please make the customer aware that any previously programmed seat memory settings (if applicable) will be erased during the basic setting procedure which is a requirement for this process*

- Select execute (Point C) and follow all on screen prompts until **all** measurement counters have changed from 0 to 1 as shown in Figure 7 (point A)

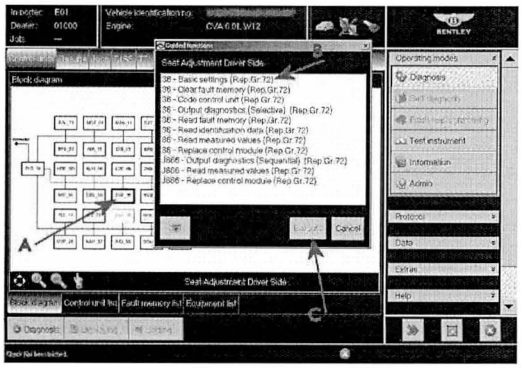


Figure 6

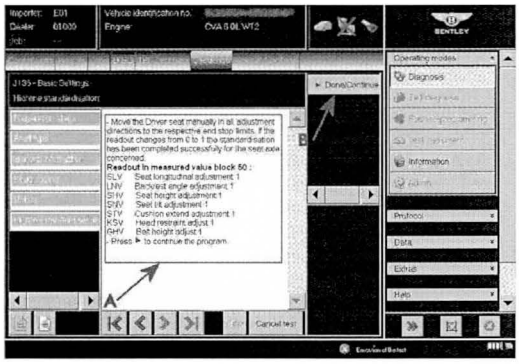


Figure 7

- Select Done/Continue Figure 7 (Point B) and follow all on screen prompts until the Basic settings procedure is complete

(III). From the Block diagram screen select SVB-06 Seat Adjust Passenger Side (Figure 8) and repeat the Basic settings process

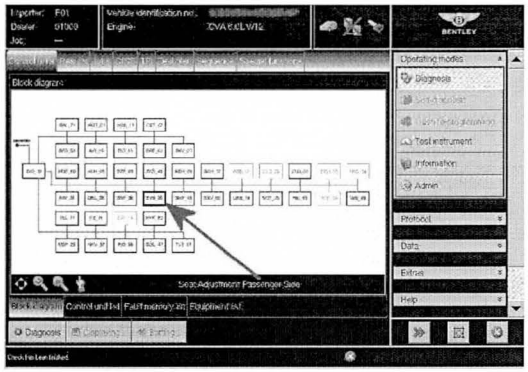


Figure 8

2. Once the Basic settings procedure is complete on both front seats, re-check the overall condition of both sensors to confirm that both are as shown in Figures 3 and 4

3. To confirm the following tasks *(a to c)* have been conducted or replaced as part of this procedure place a yellow confirmation mark on both proximity sensors as shown in Figure 9 (right) and 10 (left)

(a) Both proximity sensors are as described in procedure 1

(b) All applicable proximity sensor and bracket screws have been replaced using the latest specification part

(c) Basic settings was conducted including re-checking the overall condition of both sensors

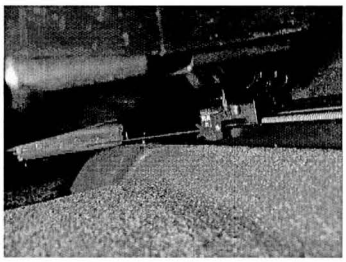


Figure 9

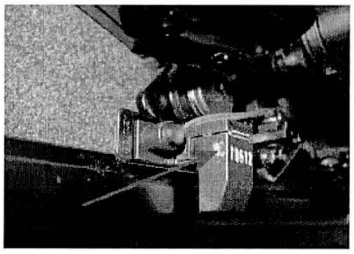


Figure 10

In the event that one or both of the proximity sensors are not mounted as per specification after the after Basic settings procedure was conducted, carry out Sections 2 and 3 to replace the applicable sensors, valance trim (left hand seat only) and control module covers

The process to replace the left hand side components differs slightly from the right hand side, please ensure the applicable process is followed.

The valance bracket on the right hand seat does not require replacement

Section 2 - Proximity sensor replacement

Left hand side

⚠ Ensure that all leather, brightware, RSE display screens and any trim panels are fully protected to ensure that no damage is caused to any components, please adhere to all instructions within the workshop manual to eliminate damage to the seat rail embellishers

1. Remove the left hand front seat – Refer to workshop manual Rep.Gr 72 Seat frames – Front seat assembly to remove and fit

NOTE: The front seat bolt fixing covers (Figure 11) should be discarded once removed as new parts are supplied as part of this procedure.

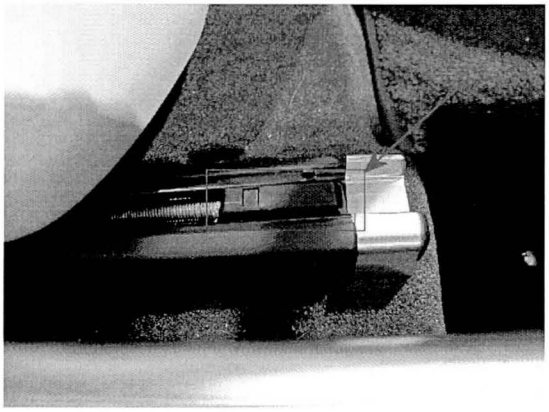


Figure 11

2. To replace the proximity sensor, valance trim and control module cover - Refer to workshop manual Rep.Gr 72 Seat frames - Fronts seat repair stand VAS 6136 to prepare. The repair stand is as shown in Figure 12. The operative should ensure all procedures are followed as detailed to avoid damage to personnel and/or the seat

Figure 12

3. Referring to Figure 13, locate the seat control module cover (Point A) and the front seat valance trim bracket (Point B)

- Remove the original seat control module cover and front seat valance bracket and discard - Refer to workshop manual Rep.Gr 72 – Front seat valance – To remove and fit

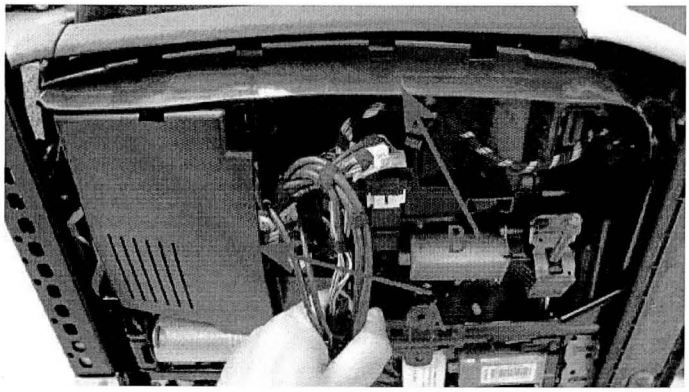


Figure 13

4. Referring to Figure 14 (Point A) cut the cable tie which secures the loom to the sensor bracket

- Undo and remove the screw (Point B) which secures the proximity sensor bracket to the seat rail

- Remove the bracket from the rail

- Using a suitable trim tool, remove the fir tree clip (Point C) from the bracket. **DO NOT** dispose of the fir tree clip as it will be required when refitting

the new sensor

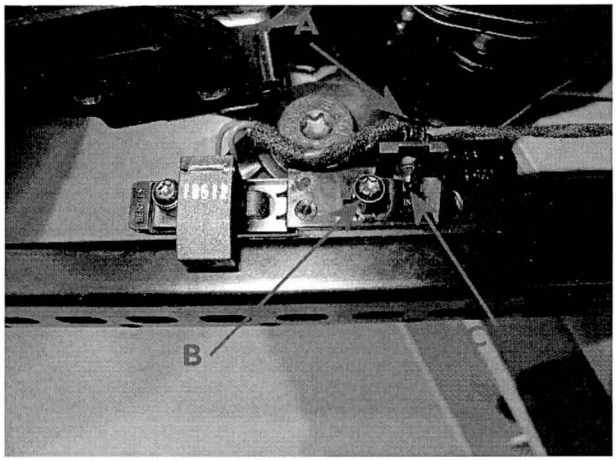


Figure 14

- Remove the two cable ties which secure the loom to the seat rail clips (Figure 15)

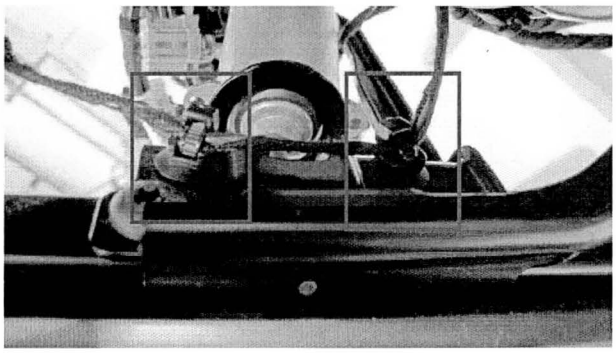


Figure 15

The next part of the process requires the original proximity sensor loom cutting, the measurements provided should only be used as a guide and are **approximate** as loom lengths may vary slightly

- Referring to Figure 16, the cables should be cut as follows:

NOTE: *As a guideline and prior to cutting the cables the loom once spliced should be positioned as shown in Figure 22*

Red = 110 mm from sensor (approximate)

Brown = 90 mm from sensor (approximate)

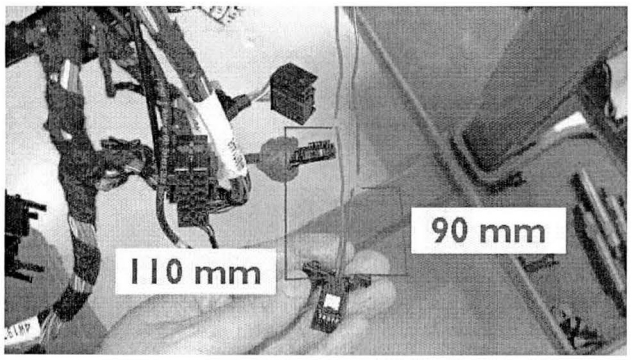


Figure 16

5. Cut the wires of the new replacement proximity sensor to the same length as the original sensor wires

- Referring to Figure 17, remove 14 mm of cable insulator from all four cable ends

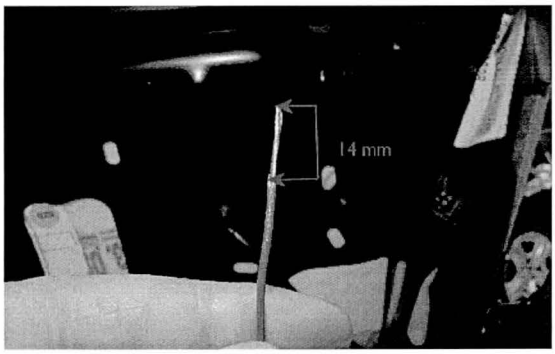


Figure 17

- Fold the conductor of all cut ends to produce a 7mm length (Figure 18)

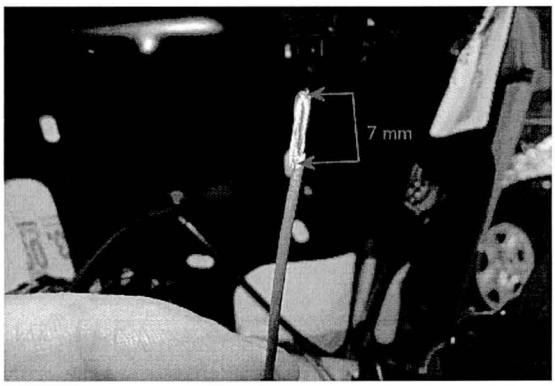


Figure 18

6. Using a red connector insert the cables as Figure 19 into the relevant ends and crimp the connector ends using special tool WT 10078/1, ensure the red crimping jaw of the crimp tool is used, align the jaw so the crimp action is applied to the centre of one half in the splice feral

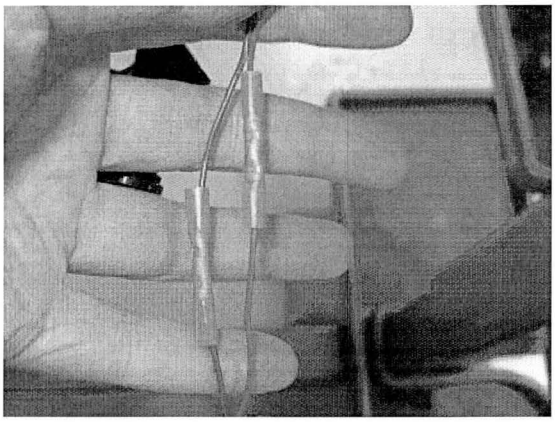


Figure 19

Before using the heat gun, the operator must familiarise themselves with the operating instructions. To eliminate any damage to surrounding components ensure all vulnerable areas and other cables within close proximity are suitably protected when using the heat gun. Always wear suitable gloves and eye protection.

- Using heat gun WT10078 or similar carefully heat and shrink both ends of each splice, the splice should be heated from the centre outwards until it is fully sealed which is indicated by the flow of adhesive from both ends Figure 20 shows an example of this

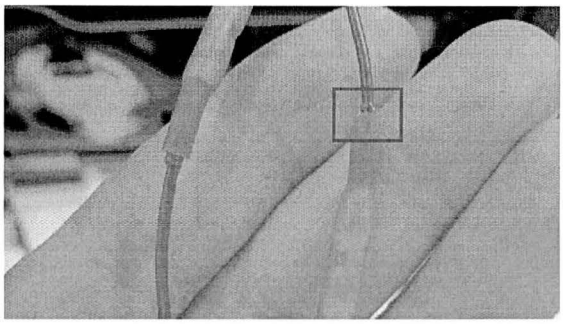


Figure 20

- Insulate both splices and loom using suitable insulation tape

- Referring to Figure 21 (Point A) – secure the sensor to the new bracket using a new screw with the part number N907 321 03

- Refit the original fir tree clip and secure the loom using a new cable tie (Point B)

- Locate the bracket tang and bracket location peg into the seat frame and secure the bracket to the seat frame using a new screw with the part number N907 321 03 (Point C)

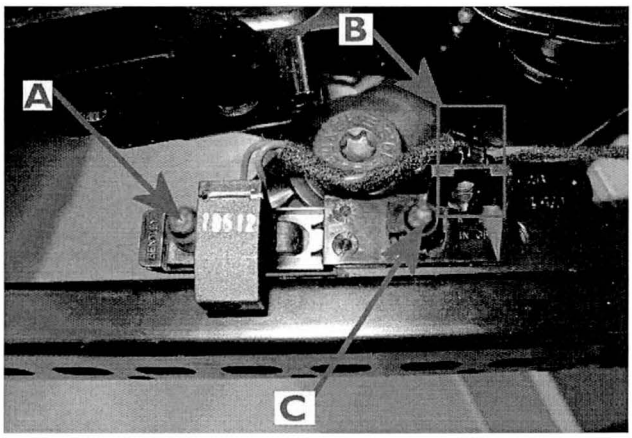


Figure 21

IMPORTANT: The splice connectors should be positioned/stowed within the area shown in Figure 22

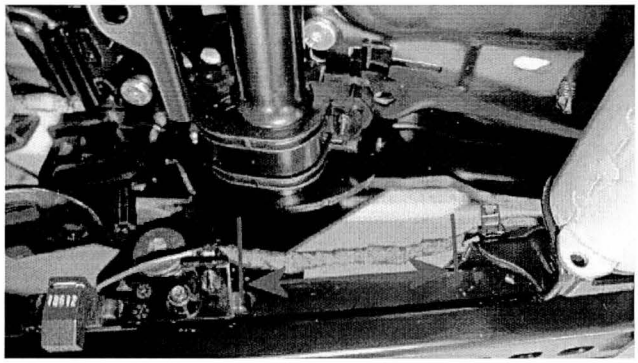


Figure 22

- Cable tie the loom back to its original position as Figure 15

7. Fit the new replacement seat valance bracket and seat control module cover – Refer to workshop manual Rep.Gr 72 – Front seat valance – To remove and fit **CAUTION:** Ensure the valance bracket is located and fully secure as per instructions within the workshop manual before commencing

- Refit the left hand front seat – Refer to workshop manual Rep.Gr 72 Seat frames – Front seat assembly to remove and fit

NOTE*: Referring to Figure 23 when fitting the new seat bolt cover ensure the front edge lip (Point A) is located under the seat rail embellisher and push the cover forward.*

- Once located and before final fitment, ensure the centre part of the cover is in the position shown at *(Point B)*

- Finally push down the cover at (point C) a 'click' confirmation will be heard once located correctly

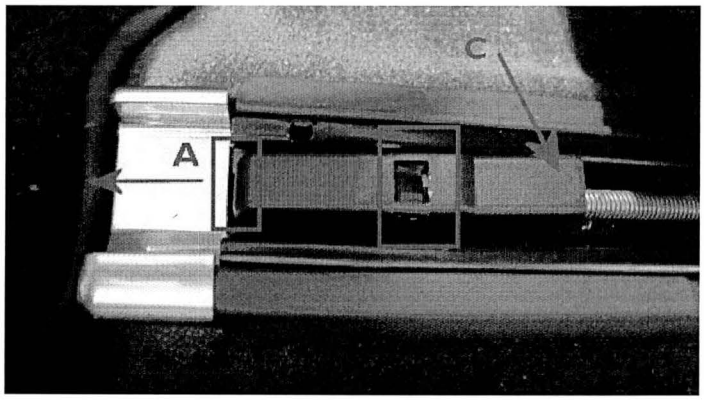


Figure 23

- Once complete carry out Section 3

Proximity sensor replacement

Right hand

⚠ Ensure that all leather, brightware, RSE display screens and any trim panels are fully protected to ensure that no damage is caused to any components, please adhere to all instructions within the workshop manual to eliminate damage to the seat rail embellishers

1. Remove the right hand front seat – Refer to workshop manual Rep.Gr 72 Seat frames – Front seat assembly to remove and fit

NOTE: The front seat bolt fixing covers (Figure 24) should be discarded once removed as new parts are supplied as part of this procedure.

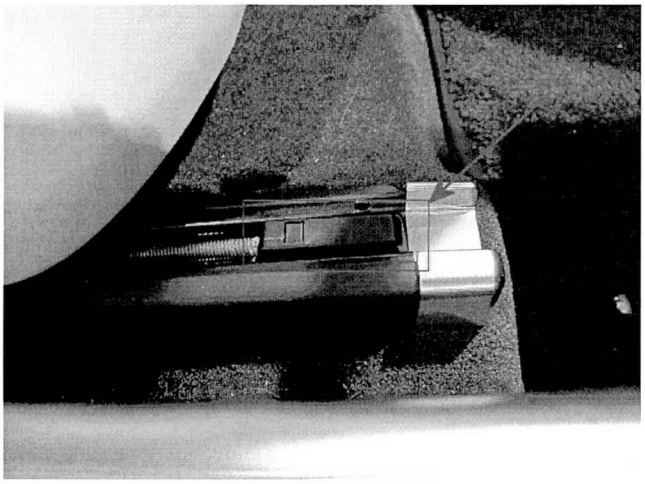


Figure 24

2. To replace the proximity sensor, and control module cover - Refer to workshop manual Rep.Gr 72 Seat frames - Fronts seat repair stand VAS 6136 to prepare the repair stand is as shown in Figure 25. The operative should ensure all procedures are followed as detailed to avoid damage to personnel and/or the seat

Figure 25

3. Referring to Figure 26, locate the seat control module cover (Point A) - Remove the cover and discard - Refer to workshop manual Rep.Gr 72 – To remove and fit

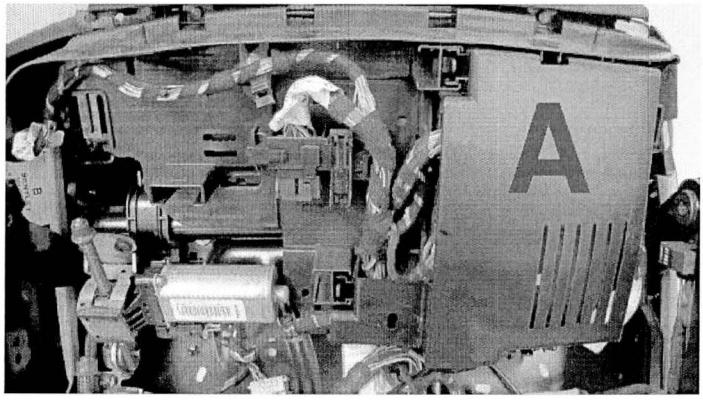


Figure 26

4. Referring to Figure 27, remove and discard the screw which secures the proximity sensor to the seat rail and remove the sensor from the rail

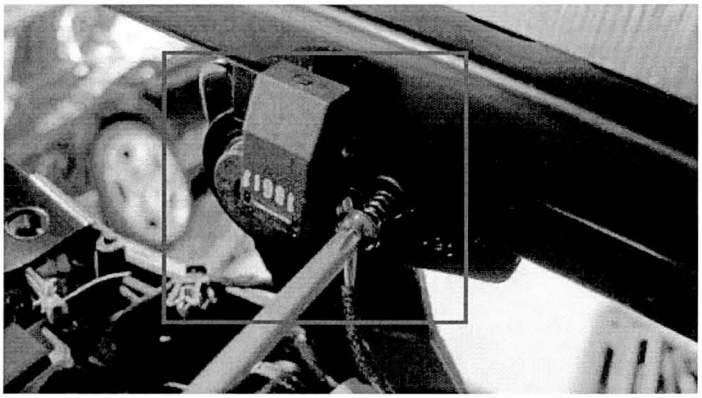


Figure 27

- Remove the two cable ties which secure the loom to the seat rail clips (Figure 28)

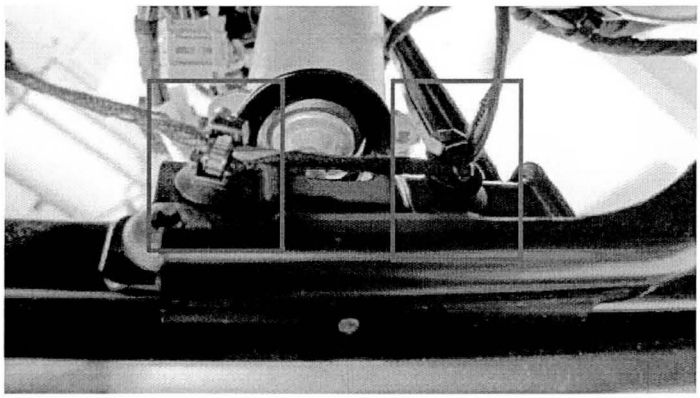


Figure 28

The next part of the process requires the original proximity sensor loom cutting, the measurements provided should only be used as a guide and are **approximate** as loom lengths may vary slightly.

- Referring to Figure 29, the cables should be cut as follows:

NOTE: *As a guideline and prior to cutting the cables the loom once spliced should be positioned as shown in Figure 34*

Red = 90 mm from sensor (approximate)

Brown = 70 mm from sensor (approximate)

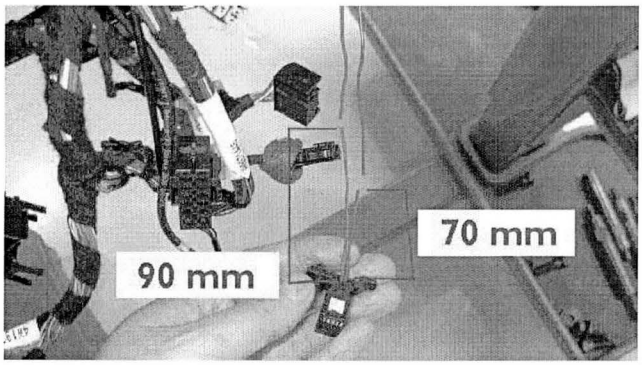


Figure 29

5. Cut the wires of the new replacement proximity sensor to the same length of the original sensor wires

- Referring to Figure 30, remove 14 mm of cable insulator from all four cable ends

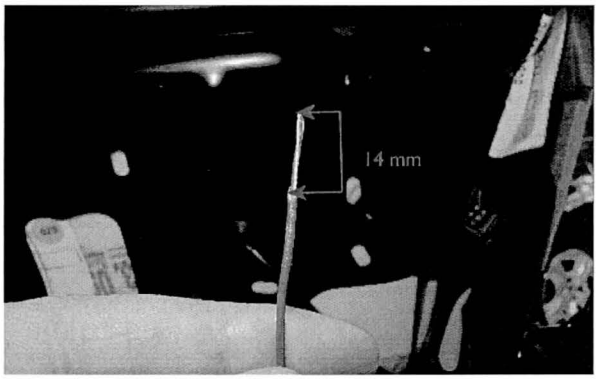


Figure 30

- Fold the conductor of all cut ends to produce a 7mm length (Figure 31)

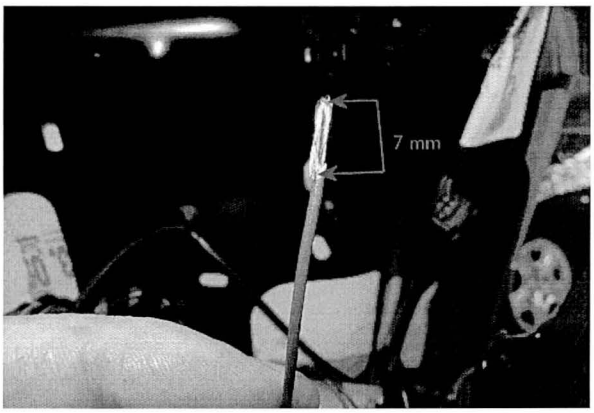


Figure 31

6. Using a red connector insert the cables as Figure 32 into the relevant ends and crimp the connector ends using special tool WT 10078/1, ensure the red crimping jaw of the crimp tool is used, align the jaw so the crimp action is applied to the centre of one half in the splice feral

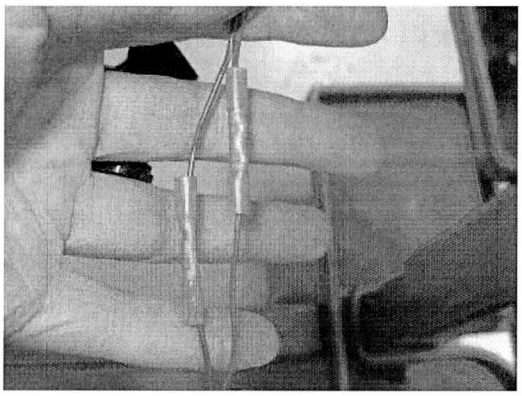


Figure 32

Before using the heat gun, the operator must familiarise themselves with the operating instructions to eliminate any damage to surrounding components, ensure all vulnerable areas and other cables within close proximity are suitably protected when using the heat gun. Always wear suitable gloves and eye protection.

- Using heat gun WT10078 or similar carefully heat and shrink both ends of each splice, the splice should be heated from the centre outwards until it is fully sealed which is indicated by the flow of adhesive from both ends Figure 33 shows an example of this

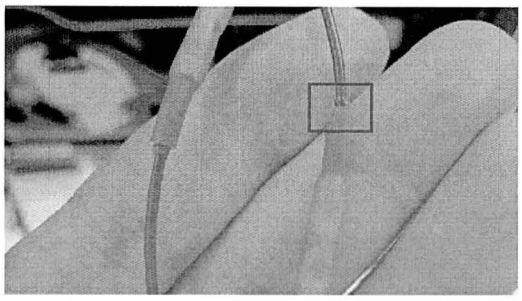


Figure 33

- Insulate both splices and loom using suitable insulation tape

- Referring back to Figure 27 – Locate the sensor tang and push fit the senor into the seat frame, secure the sensor to the frame using a new screw with the part number N907 321 03

IMPORTANT: The splice connectors should be positioned/stowed within the area shown in Figure 34

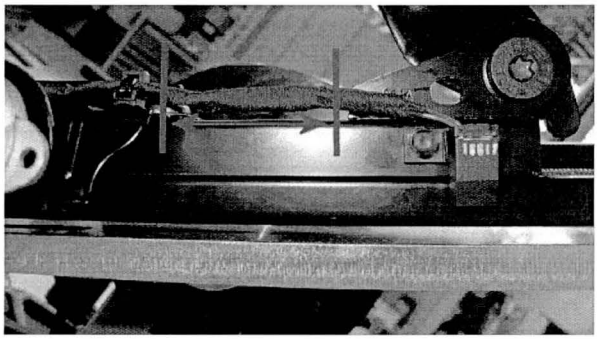


Figure 34

- Cable tie the loom back to its original position as Figure 28

7. Locate and secure the seat control module

- Fit the new seat control module cover

- Refit the right hand front seat – Refer to workshop manual Rep.Gr 72 Seat frames – Front seat assembly to remove and fit

NOTE*: Referring to Figure 35 when fitting the seat bolt cover ensure the front edge lip (Point A) is located under the seat rail embellisher and push the cover forward.*

- Once located, push fit the centre part of the cover (Point B) a 'click' confirmation will be heard once located correctly

- Finally push down the cover at (point C) a 'click' confirmation will be heard once located correctly

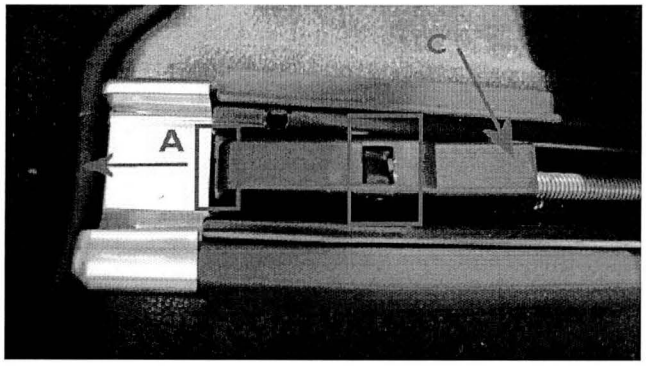


Figure 35

- Once complete carry out Section 3

Section 3 - Proximity sensor confirmation

1. Reconnect the Bentley diagnostic tool VAS 5052A or later approved equipment, to the vehicle On Board Diagnostic (OBD) socket

- Use *Guided Fault Finding* in Offboard Diagnostic Information System to carry out a complete diagnostic sweep of the vehicle, clearing any fault codes generated as a result of performing this campaign

- Referring to Figure 36 - Navigate to the Block diagram screen - select AIR - 15 - Airbag (Point A)

- Select 15 – Read measured values (Rep.Gr.69) – (Point B)

- Select execute (Point C) and follow all on screen prompts

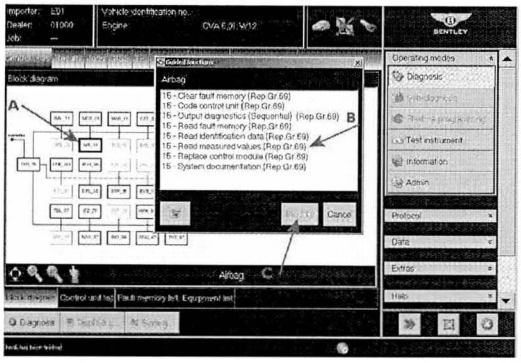


Figure 36

IMPORTANT: *The following procedure details how to select and clarify the status the driver and passenger side position sensor and should be used if both sensors were replaced, in the event that only one sensor was replaced it is only a requirement to select and check the relevant sensor (not both)*

- Referring to Figure 37 (Point A) - Select **15.1 Status seat position sensor front driver** and **15.2 Status seat position sensor front passenger**

- Select OK (Point B)

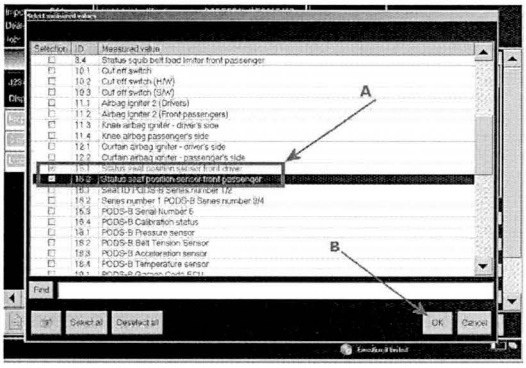


Figure 37

2. Referring to Figure 38 (Point A) use the seat positioning control switch (located on the outer side of the seat base) manoeuvre the applicable seat/s forward until the end of travel

- Select Starting update (Point B) the Value of the front seat/should show as **front**

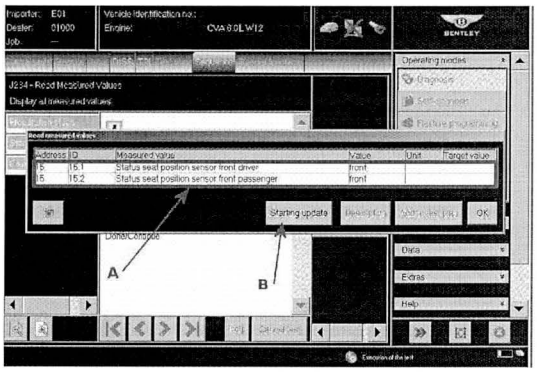


Figure 38

- Using the seat positioning control switch manoeuvre the seat rearwards until end of travel

- Once the seats have travelled rearwards and stopped, select starting update (Point B)

- Referring to Figure 39, the Value status of both seats should now show Rear, on completion of the measured value clarification, follow all on screen prompts to **End of test**

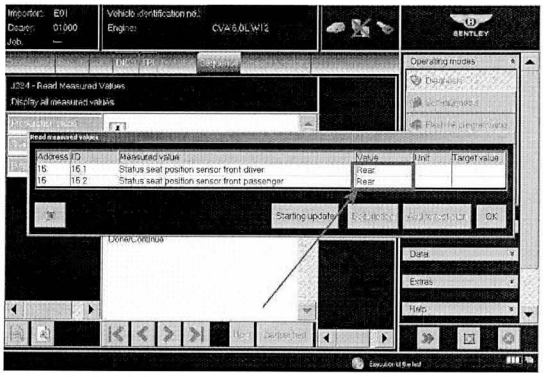


Figure 39

- Place a yellow paint confirmation mark on both the proximity sensors as shown in Figure 9 (right hand) and Figure 10 (left hand)

Identification

Yellow paint completion mark on both of the front seat proximity sensors as shown in Figure 9 (right hand) and Figure 10 (left hand)