

SB-10043927-2032

SI M65 08 03
Audio, Navigation, Monitors, Alarms, SRS

March 2012
Technical Service

This Service Information bulletin supersedes SI M65 08 03 **dated July 2006.**

NEW designates changes to this revision

SUBJECT

Airbag Warning Light Is ON: MRS FC 02, 03, 05, 06

MODEL

NEW R50 (Cooper)

NEW R53 (Cooper S - Manual Transmission Only)

Vehicles from start of production to February 17, 2003

SITUATION

The customer may complain that the airbag warning light is on, and the following faults are stored in the MRS (Multiple Restraint System) control unit:

- 02 – Driver’s side belt tensioner ignition circuit
- 03 – Passenger’s side belt tensioner ignition circuit
- 05 – Driver’s side seat airbag ignition coil
- 06 – Passenger’s side seat airbag ignition coil

NEW CAUSE

Faulty crimping of contacts at the seat connectors

NOTE: The first performance of the repair procedure listed below, to correct this specific issue, is covered on eligible affected vehicles for 10 years/150,000 miles, whichever occurs first.

All subsequent repairs would then be covered by the remaining portion of any applicable standard or program coverage that may apply.

The customer was provided with an extended warranty sticker that was to be affixed in page 25 of their Service and Warranty Book. Please see the attached customer letter.

NEW AFFECTED MODELS

Model	Chassis Number Range
Cooper – Manual (R50)	TC30047 – TC43963
Cooper S – Manual (R53)	TD50072 – TD65791

Cooper – Automatic (R50)

TE10037 – TE17624

PROCEDURE

NOTE: Please be sure to follow the procedure as described below. Analysis of parts returned so far shows:

- **Connectors are being returned disconnected. (The connectors must remain connected: see steps 4 and 5.)**
- **Connector wires are cut too close to the connector. (The wires must be cut 100mm from the connector: see steps 4, 5, 10 and 11.)**
- **There is no DIS printout accompanying the returned parts. (A DIS printout, showing which connector failed and its fault codes, must be included.)**
- **Connectors for one vehicle are being returned in more than one bag. (Place all connectors in one return bag.)**

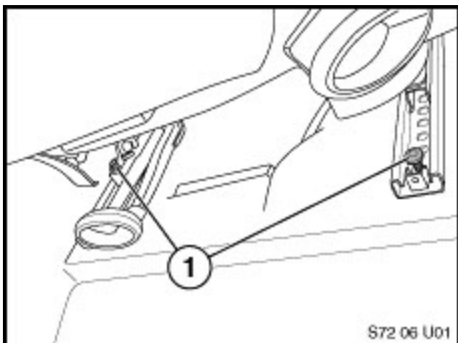
Failure to follow these procedures will result in the warranty claim being debited.

If one of the faults mentioned above is stored:

1. **NEW** Perform a vehicle test using ISTA/D (Integrated Service Technical Application) and complete all the corresponding test module-related fault codes and the printout that shows the failed connector and its stored fault codes. Then replace the wiring to the respective belt tensioner and side airbag for the seat with the repair harnesses, as described below.
2. **NEW** Disconnect the battery. Always comply with the safety instructions when handling airbag devices as outlined in ISTA Repair Instruction REP 72 00...

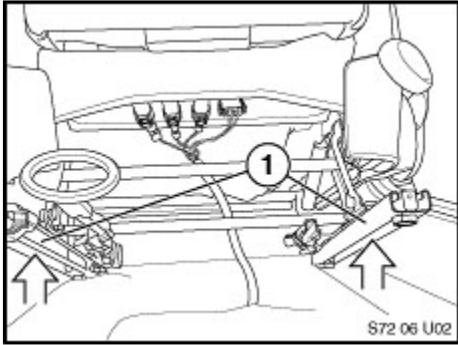
The following tools will be needed in order to perform this repair correctly:

- Pliers (without die plate) 61 9 041
- Die plate for pliers 61 9 042
- Wire strippers 61 9 043
- Hot air blower

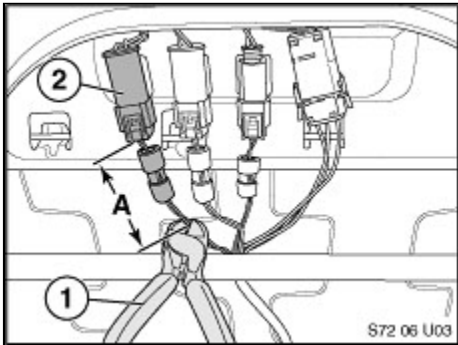


3. Remove the (4) mounting screws from the front seat with the stored fault.

The illustration shows the (2) front screws.

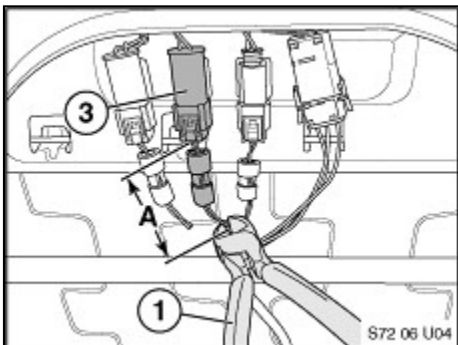


4. Raise the seat at the front (1).



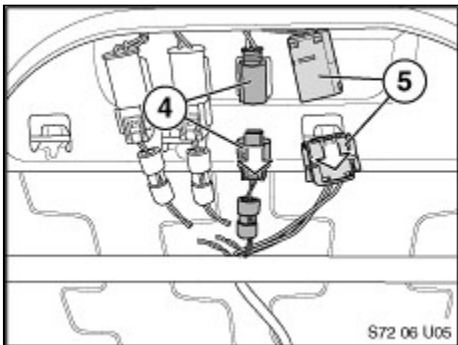
5. Locate the yellow side airbag connector (DO NOT DISCONNECT).

Cut the wire as shown, **100mm from the connector (A)**.

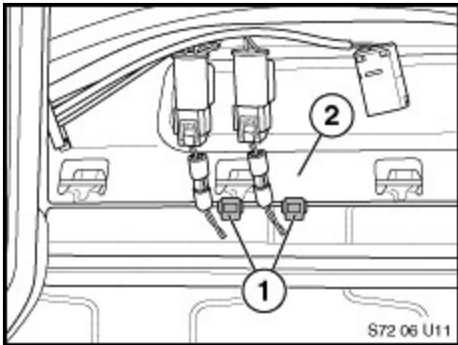


6. Locate the blue seat tensioner (DO NOT DISCONNECT).

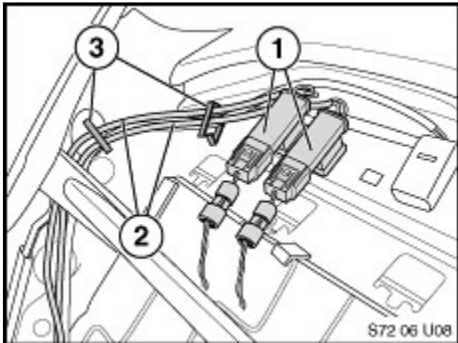
Cut the wire as shown, **100mm from the connector (A)**.



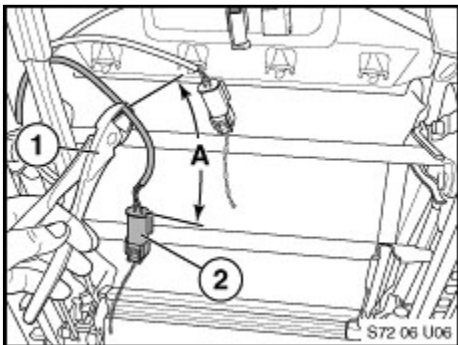
7. Disconnect the remaining connectors (4) and (5), and remove the seat from the vehicle. Connector (4) may not be on all vehicles.



8. Install the new cable tie with holder (1) (P/N 61 13 0 302 824) and fit to the carrier (2). Remove the cable tie for later use.

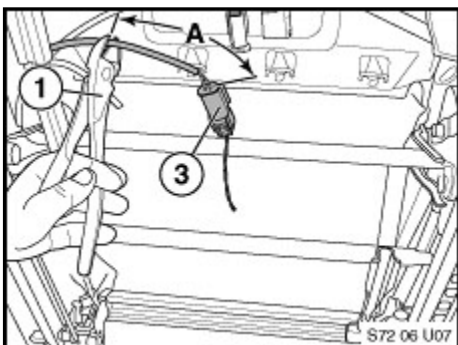


9. Release the connector housing (1) by turning it slightly.
10. Release the seat wiring harnesses (2) for the side airbag and seat belt tensioner from the retainers (3).



11. Locate the yellow side airbag connector (2). Cut the wire as shown, **100mm from the connector (A)**.

Tag the removed part with the VIN. Do not scrap the removed part; it may be necessary to ship the part to BMW for analysis (DO NOT DISCONNECT THE CONNECTOR).



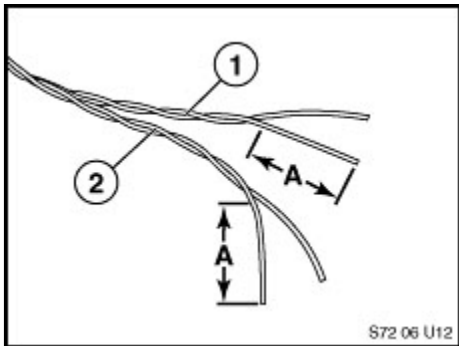
12. Locate the blue seat tensioner connector (3). Cut the wire as shown, **100mm from the connector (A)**.

Tag the removed part with the VIN. Do not scrap the removed part; it may be necessary to ship the part to BMW for analysis (DO NOT DISCONNECT THE CONNECTOR).

NEW Mark the defective connector(s), and then put all the removed parts and ISTA printout together in a plastic bag.

Preparing seat wiring harnesses for repair

13. Shorten the outer sheath of the seat wiring harnesses by approximately 50 mm from the wire ends. Take care not to cut the wiring. Seal the outer sheaths to the wires using fabric adhesive tape.



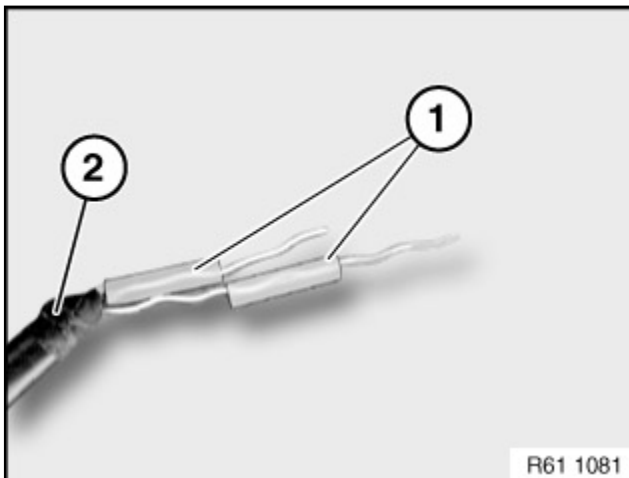
14. Cut the seat wiring harnesses for the side airbag (1) and belt tensioner (2) to offset lengths with the following dimensions (cut only [1] wire of each wire pair):

Seat wiring harness for side airbag (1):

Violet/white triggering circuit wire **A=30 mm**

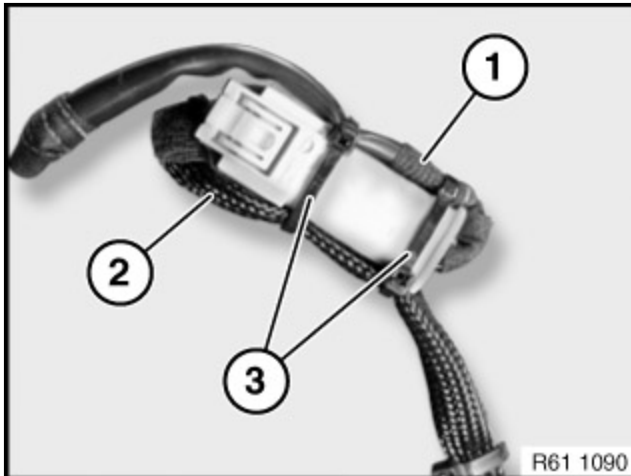
Seat wiring harness for belt tensioner (2):

Green triggering circuit wire **A = 30 mm.**



15. Strip the ends of the triggering circuit wires on the seat wiring harnesses to a length of 4 mm. Install the shrink tube (1) (P/N 61 13 0 149 206) over the wires.

16. Swap over the retainer clips from the old harness connectors to the new repair harness connectors.
17. Connect the repair harness sections (1) and (2) together for both the seat side airbag repair harness (P/N 61 12 6 937 521) and the seat belt tensioner repair harness (P/N 61 12 6 937 522). Fold the repair harness



sections (1) and (2) at the connection to form an “S” shape. Secure with cable ties (3) (P/N 61 13 0 141 326). Take care to note the position of the cable fasteners. **Do not use Stabilant 22 or any other contact enhancer on the connections.**

18. Shorten the outer sheaths of the repair wiring harnesses to **B = 100 mm**. Seal the outer sheaths to the wiring harnesses using fabric adhesive tape.
19. Cut the repair wiring harnesses for the side airbag (1) and the belt tensioner (2) to offset lengths with the following dimensions:

Note: the wire colors are different based on the date of manufacture of the repair harness.

Late production repair wiring harness

Repair wiring harness for side airbag (1):

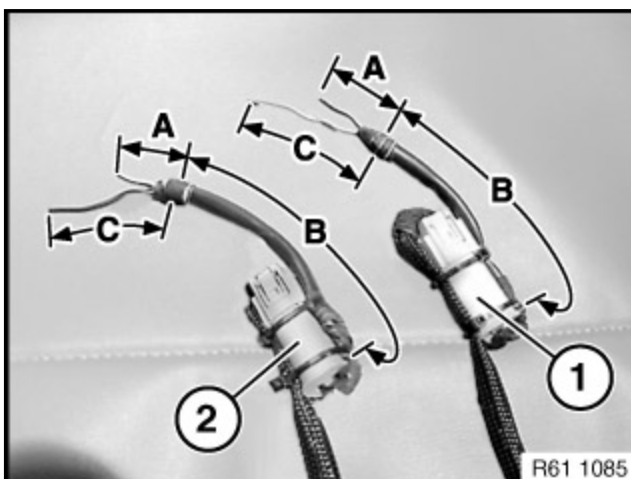
Black/White triggering circuit wire **A=40 mm**

Violet/White triggering circuit wire **C=70 mm**

Repair wiring harness for belt tensioner (2)

Black triggering circuit wire **A=40 mm**

Green triggering circuit wire **C=70**



mm

Early production repair wiring harness

Repair wiring harness for side airbag (1):

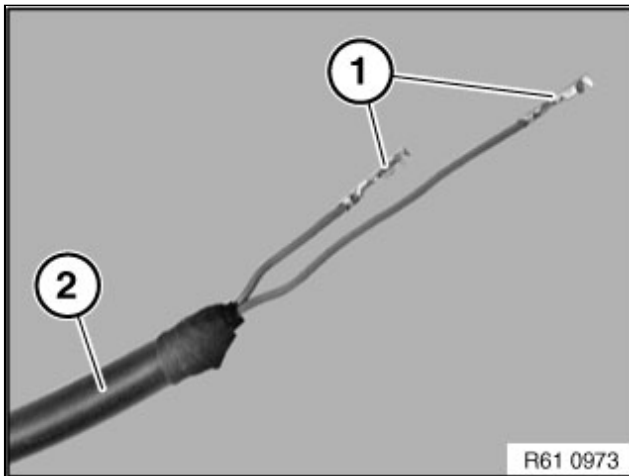
Brown triggering circuit wire **A = 40 mm**

Yellow triggering circuit wire **C = 70 mm**

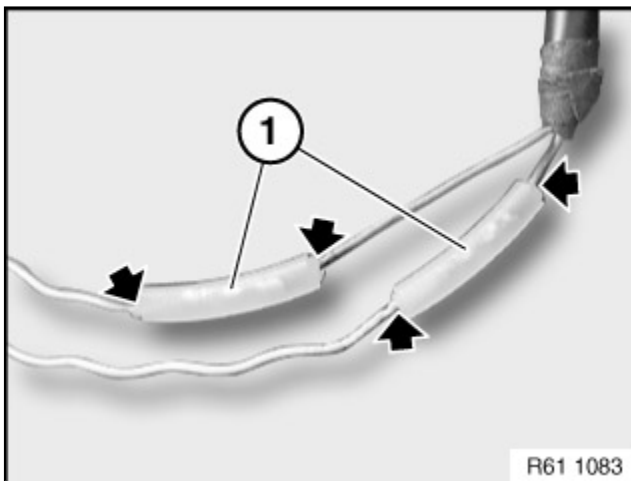
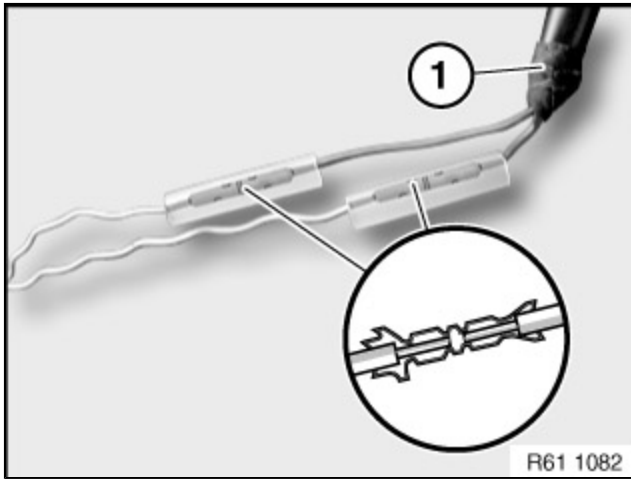
Repair wiring harness for belt tensioner (2)

Yellow/Brown triggering circuit wire **A=40 mm**

Yellow/Red triggering circuit wire **C=70 mm**

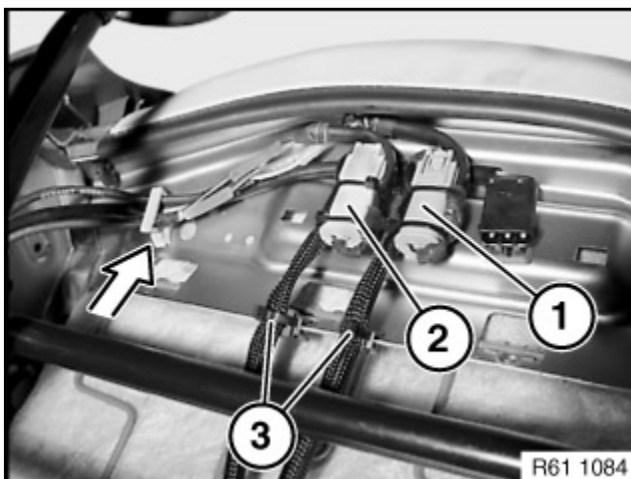


20. Strip the ends of the shortened triggering circuit wires on the repair harnesses to a length of 4 mm.
21. Crimp a butt connector (1) (P/N 61 13 0 149 205) to each seat wiring repair harness (2) wire.
22. Crimp the repair wiring harnesses to the seat wiring harnesses in accordance with the attachment Chart A. Make sure that the proper wire colors are used, based on the manufacturing date of the repair harness.



23. Slide the shrink tube (1) over the crimp connection and heat up with a hot air blower until glue escapes onto the wires, as indicated by arrows.

24. Using fabric adhesive tape, wrap the exposed harness.



25. Press the wiring harnesses into the retainer as indicated by the arrow.

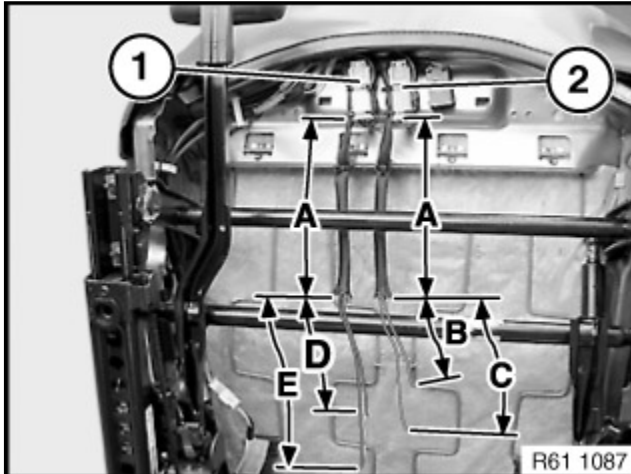
26. Secure the connector for the belt tensioner (1) and side airbag (2) onto the carrier.

27. Secure the repair wiring harnesses to the retainers (3) with cable ties.

Preparing the repair wiring harnesses for connection to the body wiring harness

28. Shorten the repair wiring harness for the side airbag (1) and seat belt tensioner (2) as follows:

29. Shorten the outer sheaths of the repair wiring harnesses to **A = 150 mm**.
30. Cut the repair wiring harnesses for the side airbag (1) and belt tensioner (2) to offset lengths with the following dimensions:



Note: The colors of the triggering circuit wires for the repair harnesses have not changed.

Repair wiring harness for side airbag (1):

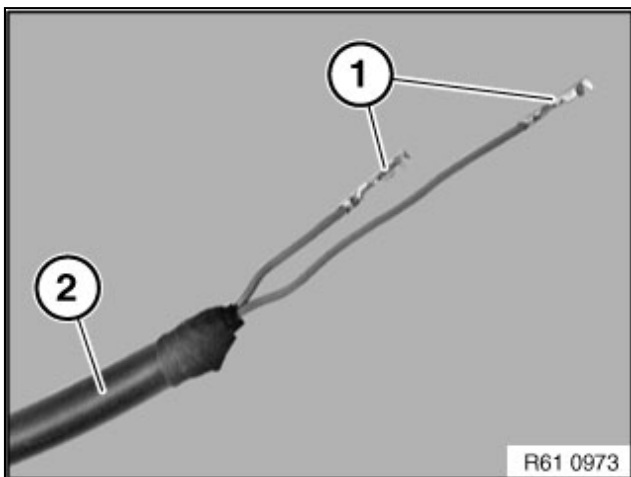
Brown triggering circuit wire
D=50 mm

Yellow triggering circuit wire
E=80 mm

Repair wiring harness for belt tensioner (2):

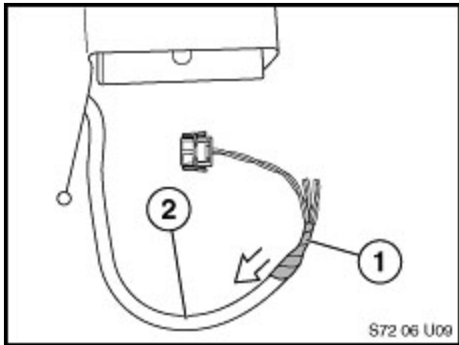
Yellow/Brown triggering circuit wire
B=110 mm

Yellow/Red triggering circuit wire
C=140 mm



31. Strip the ends of the shortened triggering circuit wires on the repair harnesses to a length of 4 mm.
32. Crimp a butt connector (1) (P/N 61 13 0 149 205) to each seat wiring repair harness (2) wire.

Preparing the body wiring harness for repair



33. Remove the fabric adhesive tape (1) from the vehicle wiring harness and **slide back the sheathing (2) by approximately 300 mm.**
34. Fix the sheathing in place with a cable tie or fabric adhesive tape.

35. Cut the body wiring harness for the side airbag (1) and belt tensioner (2) to offset lengths with the following dimensions:

Body wiring harness for side airbag (1):

Brown triggering circuit wire
A=50 mm

Yellow triggering circuit wire
B=80 mm

Driver's side body wiring harness for belt tensioner (2):

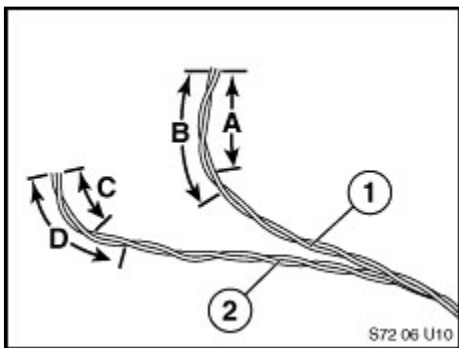
Yellow/Brown triggering circuit wire
C=110 mm

Yellow/Red triggering circuit wire
D=140 mm

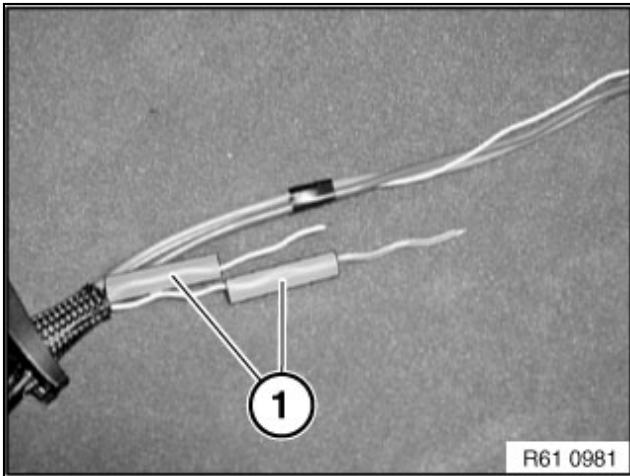
Passenger side body wiring harness for belt tensioner (2):

Blue/Brown triggering circuit wire
C=110 mm

Blue/Red triggering circuit wire
D=140 mm

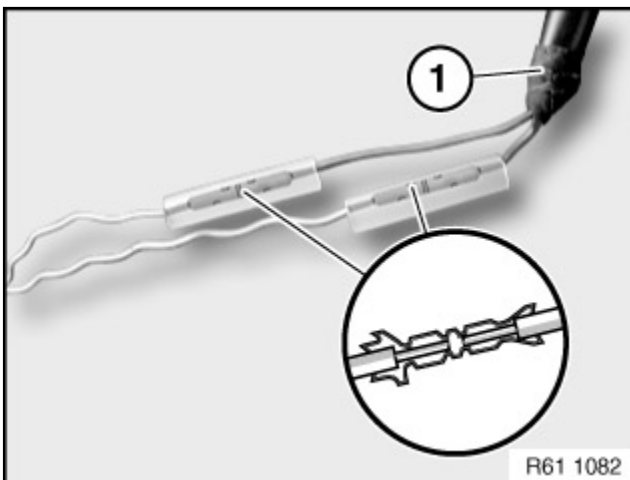


36. Strip a length of 4mm from the end of each wire.

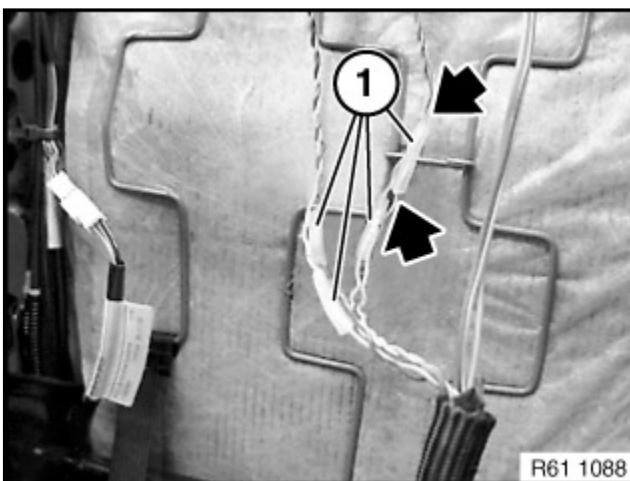


37. Slide a shrink tube (1) over each wire.

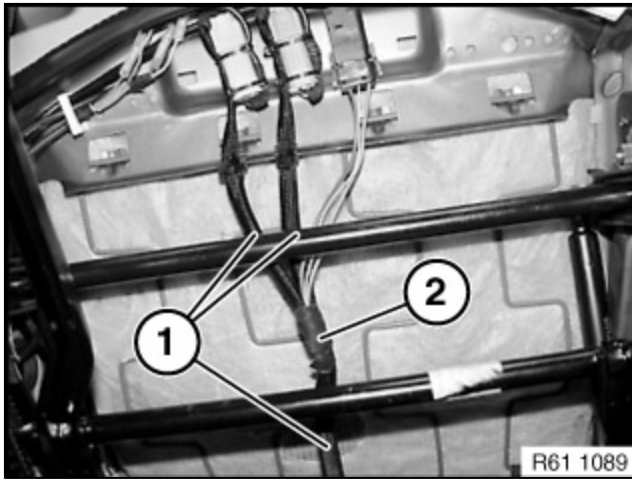
Connecting the repair wiring harness to the body wiring harness



38. Place the seat in the vehicle and tilt back towards the rear seat.
39. Crimp the wiring harnesses (1) together in accordance with the attachment Chart B.



40. Slide the shrink tubing (1) over the crimp connections and heat up using a hot air blower until glue escapes onto the triggering circuit wires, indicated by arrows.



41. Slide the wire sheathing (1) over the wiring harness and secure with fabric tape (2).
42. Reinstall the front seat.
43. Reconnect the battery.
44. Clear the fault memory.

NEW PARTS INFORMATION

Part Number	Description	Quantity*
61 12 9 118 130	Repair harness for side airbag	1
61 12 9 118 132	Repair harness for belt tensioner	1
61 13 1 377 134	Cable tie	4
61 13 8 353 746	Butt connector	8
61 13 1 379 833	Shrink tubing	8
61 13 6 916 946	Cable tie with holder	2

*Quantity is for the repair of one seat only

NEW WARRANTY INFORMATION

The warranty coverage for this specific issue on eligible affected vehicles is 10 years/150,000 miles, whichever occurs first.

Defect Code **61 12 94 79 00**

A. Repairing One Front Seat Only

Labor Operation:	Labor Allowance:	Description:
00 56 127	Refer to KSD2	Install repair cable for seat belt tensioner and repair cable for side airbag, left or right (one front seat)

Labor operation code 00 56 127 is a Main labor operation. If you are using a main labor code for another repair, use the plus code labor operation 00 56 770 instead.

or

B. Repairing Both Front Seats

Labor Operation:	Labor Allowance:	Description:
00 56 126	Refer to KSD2	Install repair cable for seat belt tensioner and repair cable for side airbag, left and right (both front seats)

Labor operation code 00 56 126 is a Main labor operation. If you are using a main labor code for another repair, use the plus code labor operation 00 56 768 instead.

Refer to KSD2 for the corresponding flat rate unit (FRU) allowance. Enter the Chassis Number, which consists of the last 7 digits of the Vehicle Identification Number (VIN). Click on the “Search” button, and then enter the applicable flat rate labor operation in the FR code field.

ATTACHMENTS

view PDF attachment [M650803 Customer Letter](#).

view PDF attachment [M650803 Wiring Info](#).

[MINI, a division of BMW of North America, LLC

Copyright © 2012 BMW of North America, LLC]