

This Service Information bulletins supersedes S.I. 72 03 00 dated May 2000

SUBJECT Repair Instructions for Seat Belt Tensioner Ignition Circuit

MODEL

E36, E36/7 (Z3), E38, E39, E46, E53

SITUATION

Airbag warning light is illuminated, and the following fault codes are stored in the SRS Airbag Control Module fault memory:

E36, Z3, E38, E39 - manufactured prior to March of 1999, with ZAE, MRS, or MRS II;
E46 sedan- manufactured prior to September of 1999 with MRS II

-- "05 - Ignition circuit of driver's belt tensioner", and/or

-- "06 - Ignition circuit of passenger's belt tensioner".

Z3, E38, E39 - manufactured from March of 1999 with MRS III;
E46 coupe - manufactured from June of 1999 with MRS III;
E46 sedan - manufactured from September of 1999 with MRS III;
E53 (X5) - from start of production:

-- "02 - Ignition circuit of driver's belt tensioner", and/or

-- "03 - Ignition circuit of passenger's belt tensioner", and/or

-- "1D - Coupling in firing circuit, driver's belt tensioner", and/or

-- "1E - Coupling in firing circuit, passenger's belt tensioner".

CAUSE

Damaged or defective lines and/or interruption in the connections at the ignition circuit of the seat belt tensioner.

CORRECTION

On a customer complaint basis only and when the above mentioned SRS faults are set in the airbag control module replace individual lines/connectors in the driver or passenger seat belt tensioner ignition circuit with the improved harness kit.

PROCEDURE

Caution!

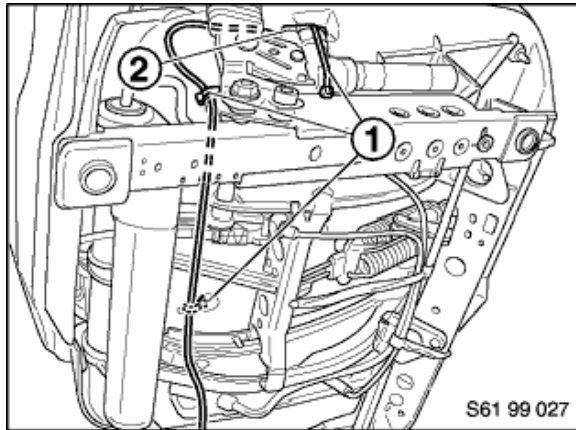
When performing diagnosis or repairs to the airbag system, always follow the "Safety Regulations for Handling Components of the Airbag System" (TIS 32 34..).Comply with airbag safety precautions! Incorrect handling can activate airbag or safety belt tensioner and result in injury.Disconnect the vehicle's battery before commencing any repairs

The following tools (found in the Electrical Repair Kit IV, P/N 61 9 020) are to be used for conducting all repairs in the ignition circuit of the belt tensioner:

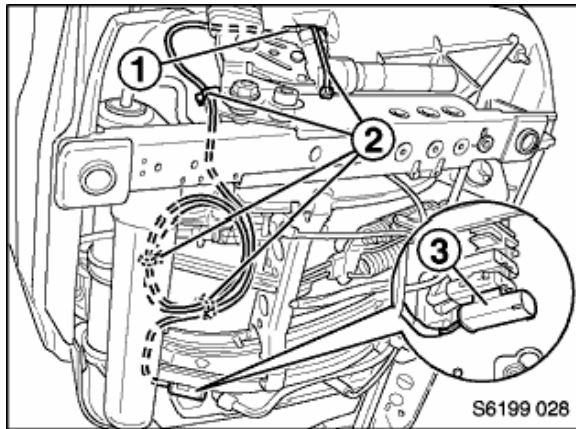
-- Crimping tool (P/N 61 9 041)

- Die for crimping tool (P/N 61 9 042) with holder for 0.35 mm² to 0.50 mm² butt connectors
- Insulation stripper / wire cutter (P/N 61 9 043).

Section 1: Repair instructions for E36



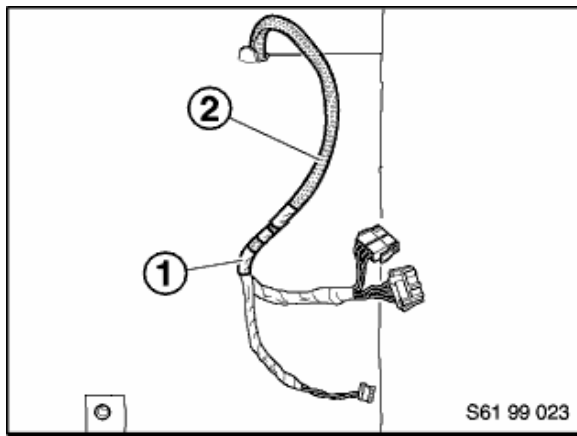
1. Connect DIS/MoDiC 3 tester to a vehicle and read out SRS module fault code memory. If the above mentioned SRS faults are set in the airbag control module, proceed with the repair.
2. Remove corresponding front seat. For a removal instructions refer to RA 52 10 000 , or RA 52 10 001 (sports seat) which can be found in the Technical Information System (TIS).
3. Disconnect vehicle's battery.
4. Remove cable securing wire ties (1), unplug the belt tensioner connector (2) from the belt buckle assembly and from the seat wiring harness connector. Remove and discard the old belt tensioner ignition circuit harness.



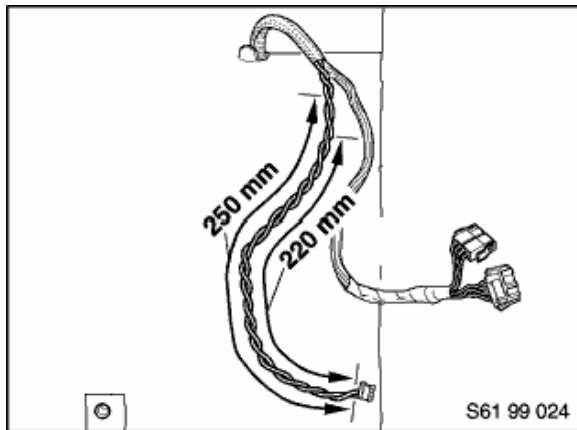
5. Route the seat section of the new harness (P/N 61 12 6 908 853) thorough the seat frame, securing it with four wire ties (2) in loops underneath the seat upholstery (as shown on the illustration).

Plug connector (1) into belt tensioner assembly and secure it with wire tie. The other connector (3) should be attached to the seat connector support bracket.

Important: make sure that there is no tension in the repair wiring harness, and that the harness does not interfere with the movement of the seat.

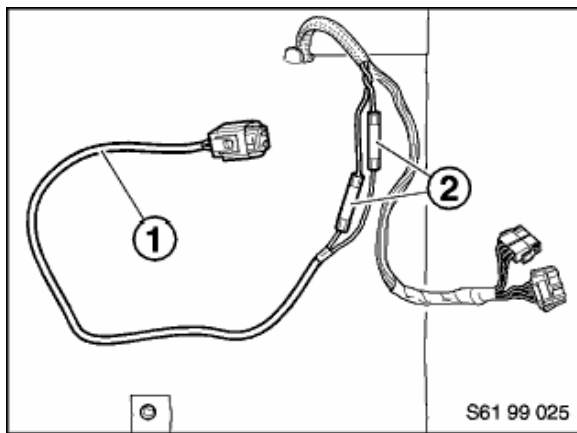


6. Remove fabric tape (1) from the seat wiring harness on the vehicle side (found on the floor, underneath the seat). In addition, slide back the insulation tube (2) by approx. 300 mm.



7. Cut through the yellow/brown twisted ignition circuit wire at approx. 220 mm, and the yellow/red ignition circuit wire at approx. 250 mm from the end of the connector. Discard the cut section of the harness.

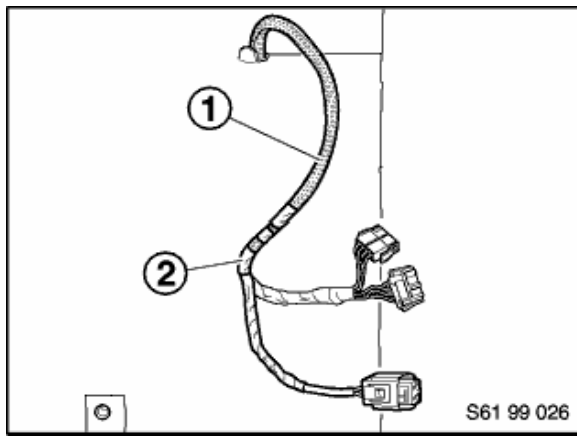
Important: make sure that the two ignition circuit wires are cut through with an offset of about 30 mm, so the crimping connectors will not be immediately adjacent to each other.



8. Connect the other section of the repair wiring harness (1) to the cut wires of the tensioner ignition circuit by using two crimping connectors (P/N 61 13 8 353 746) and shrink tubing insulation (P/N 61 13 1 379 833).

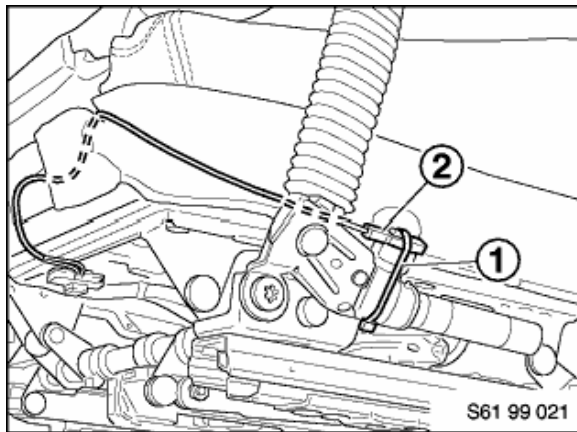
Important: a pin assignment of the repair leads is not relevant.

For the correct procedure of crimping a butt connector in the ignition circuit line, please refer to the Service Information Bulletin 61 02 00 (from April 2000).

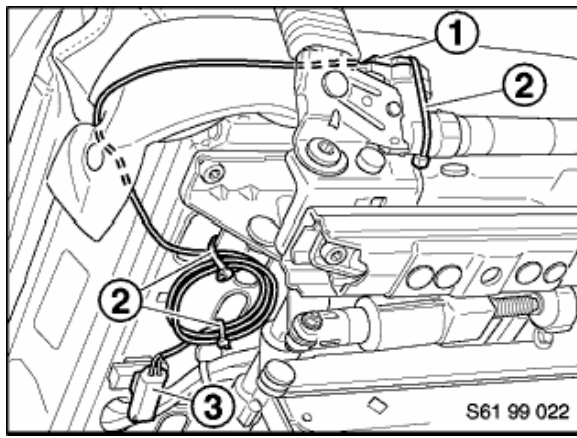


9. Push forward on the insulating tube (1) and secure tensioner ignition harness to the seat harness by means of a fabric tape (2).
10. Install front seat.
11. Connect seat wiring harness connectors.
12. Connect vehicle's battery.
13. Clear the SRS module fault code memory.

Section 2: Repair instructions for E36/7 (Z3)



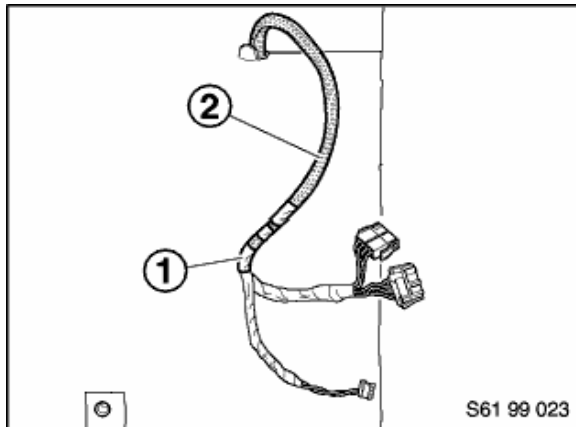
1. Connect DIS/MoDiC 3 tester to a vehicle and read out SRS module fault code memory. If the above mentioned SRS faults are set in the airbag control module, proceed with the repair.
2. Remove corresponding front seat. For removal instructions refer to RA 52 10 000 , which can be found in the Technical Information System (TIS).
3. Disconnect vehicle's battery.
4. Remove cable securing wire tie (1), unplug the belt tensioner connector (2) from the belt buckle assembly and from the seat wiring harness connector. Remove and discard the old belt tensioner ignition circuit harness.



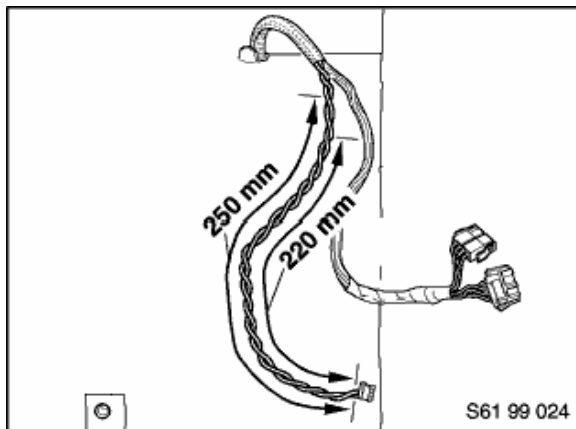
5. Route the seat section of the new harness (P/N 61 12 6 908 853) through the seat frame, securing it with two wire ties (2) in loops underneath the seat upholstery (as shown on the illustration).

Plug connector (1) into belt tensioner assembly and secure it with wire tie. The other connector (3) should be attached to the seat connector support bracket.

Important: make sure that there is no tension in the repair wiring harness, and that the harness does not interfere with the movement of the seat.

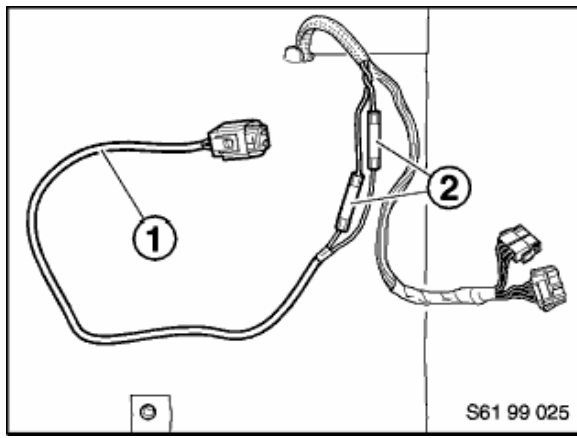


6. Remove fabric tape (1) from the seat wiring harness on the vehicle side (found on the floor, underneath the seat). In addition, slide back the insulation tube (2) by approx. 300 mm.



7. Cut through the yellow/brown twisted ignition circuit wire at approx. 220 mm, and the yellow/red ignition circuit wire at approx. 250 mm from the end of the connector. Discard the cut section of the harness.

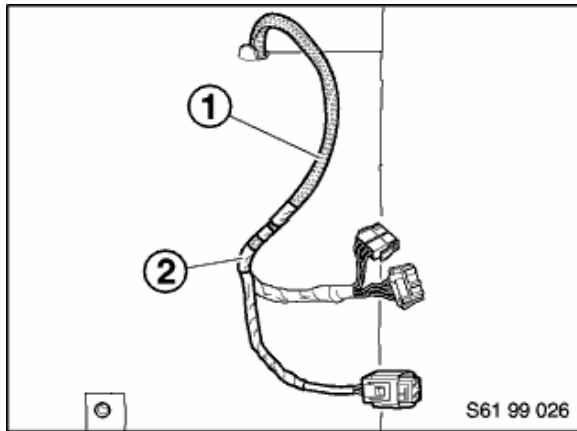
Important: make sure that the two ignition circuit wires are cut through with an offset of about 30 mm, so the crimping connectors will not be immediately adjacent to each other.



8. Connect the other section of the repair wiring harness (1) to the cut wires of the tensioner ignition circuit by using two crimping connectors (P/N 61 13 8 353 746) and shrink tubing insulation (2) (P/N 61 13 1 379 833).

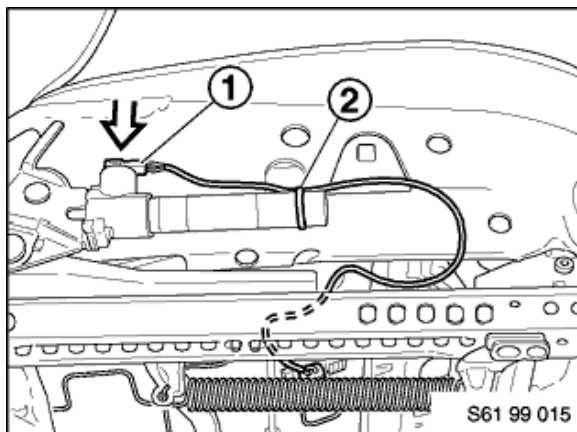
Important: a pin assignment of the repair leads is not relevant.

For the correct procedure of crimping a butt connector into the ignition circuit line, please refer to the Service Information Bulletin 61 02 00 (from April 2000).



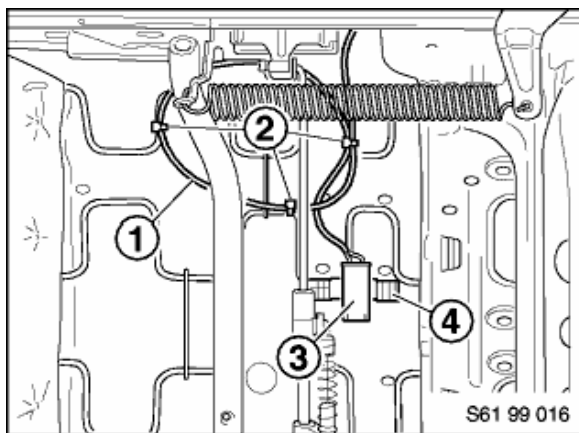
9. Push forward on the insulating tube (1) and secure it to the seat harness by means of a fabric tape (2).
10. Install front seat.
11. Connect seat wiring harness connectors.
12. Connect vehicle's battery.
13. Clear the SRS module fault code memory.

Section 3: Repair instructions for E38/39



1. Connect DIS/MoDiC 3 tester to a vehicle and read out SRS module fault code memory. If the above mentioned SRS faults are set in the airbag control module, proceed with the repair.
2. Remove corresponding front seat. For removal instructions refer to: RA 52 14 000 (electric seat), RA 52 16 000 (sport seat), or RA 52 17 000 (comfort seat), which can be found in the Technical Information System (TIS). Remove side cover above the belt tensioner.
3. Disconnect vehicle's battery.

4. Remove cable securing wire ties, unplug the belt tensioner connector from the belt buckle assembly and from the seat wiring harness connector. Remove and discard the old belt tensioner ignition circuit harness.
5. Plug connector (1) of the new repair wiring harness into belt tensioner. Secure harness to the tensioner with a wire tie (2).

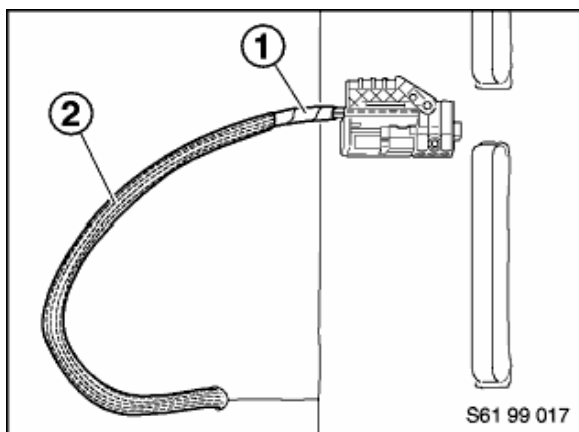


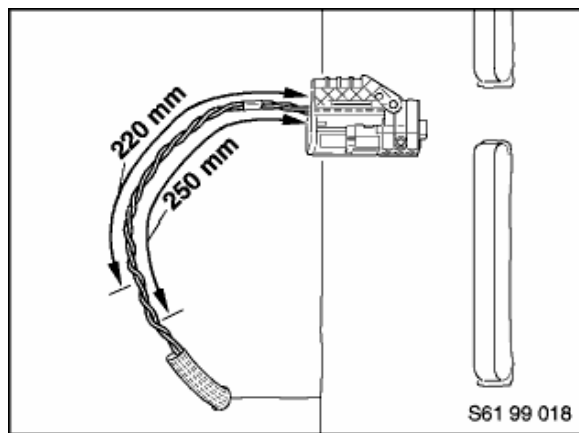
6. Route the seat section of the new harness (1) thorough the seat frame, securing it with three wire ties (2) in loops underneath the seat upholstery (as shown on the illustration).

Attach connector (3) together with the supplied support bracket (4) (P/N 61 13 8 365 543) to springs of seat upholstery.

Important: make sure that there is no tension in the repair wiring harness, and that the harness does not interfere with the movement of the seat.

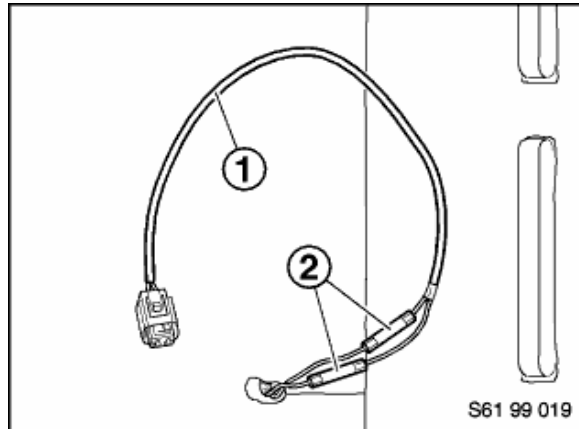
7. Reinstall side cover for belt tensioner assembly.
8. Remove fabric tape (1) from the seat wiring harness on the vehicle side (found on the floor, underneath the seat). In addition, slide back the insulation tube (2) by approx. 300 mm.





9. Cut through the yellow/brown twisted ignition circuit wire at approx. 220 mm, and the yellow/red ignition circuit wire at approx. 250 mm from the end of the connector. Discard the cut section of the harness.

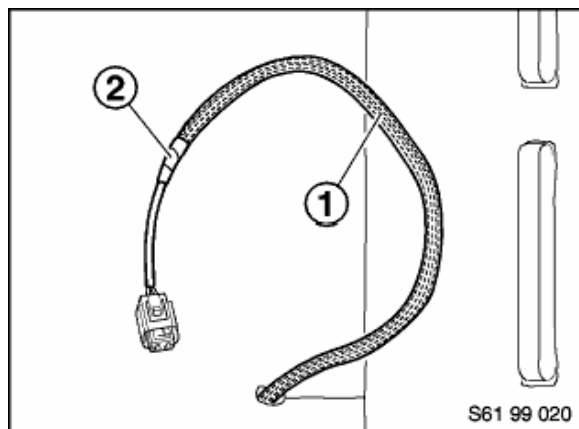
Important: make sure that the two ignition circuit wires are cut through with an offset of about 30 mm, so the crimping connectors will not be immediately adjacent to each other.



10. Connect the other section of the repair wiring harness (1) to the cut wires of the tensioner ignition circuit by using two crimping connectors (P/N 61 13 8 353 746) and shrink tubing insulation (2) (P/N 61 13 1 379 833).

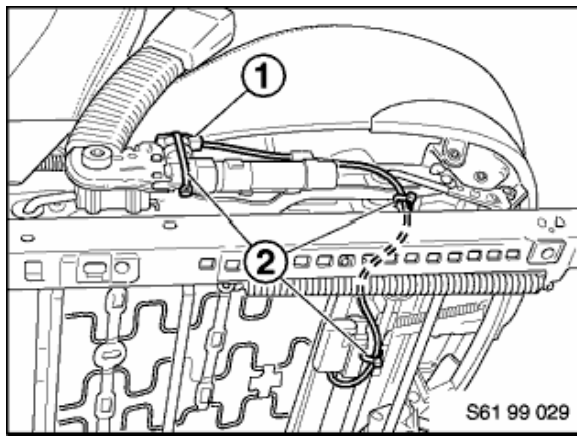
Important: a pin assignment of the repair leads is not relevant.

For the correct procedure of crimping a butt connector into the ignition circuit line, please refer to the Service Information Bulletin 61 02 00 (from April 2000).

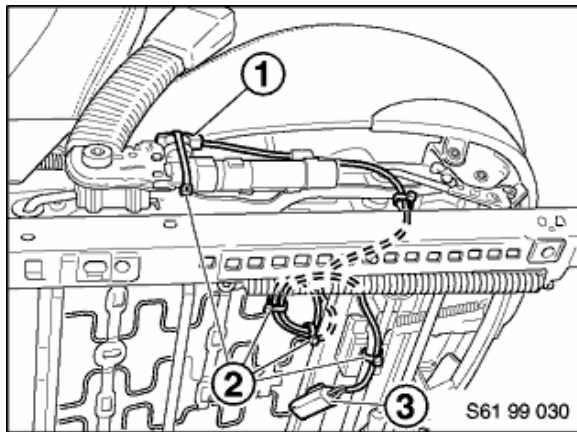


11. Push forward on the insulating tube (1) and secure it to the seat harness by means of a fabric tape (2).
12. Install front seat.
13. Connect seat wiring harness connectors.
14. Connect vehicle's battery.
15. Clear the SRS module fault code memory.

Section 4: Repair instructions for E46



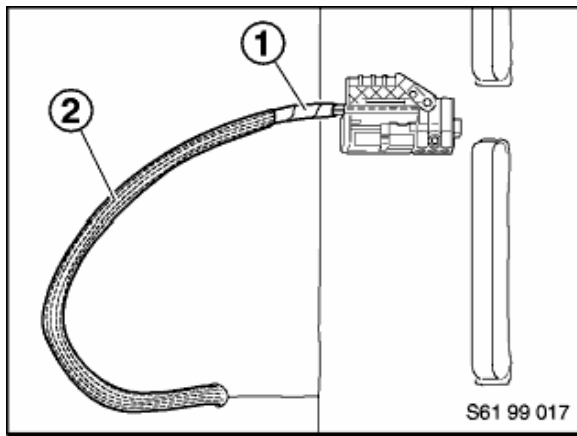
1. Connect DIS/MoDiC 3 tester to a vehicle and read out SRS module fault code memory. If the above mentioned SRS faults are set in the airbag control module, proceed with the repair.
2. Remove corresponding front seat. For removal instructions refer to: RA 52 13 000 (manual seat), RA 52 14 000 (electric seat), which can be found in the Technical Information System (TIS).
3. Disconnect vehicle's battery.
4. Remove cable securing wire ties (2), unplug the belt tensioner connector (1) from the belt buckle assembly and from the seat wiring harness connector. Remove and discard the old belt tensioner ignition circuit harness.



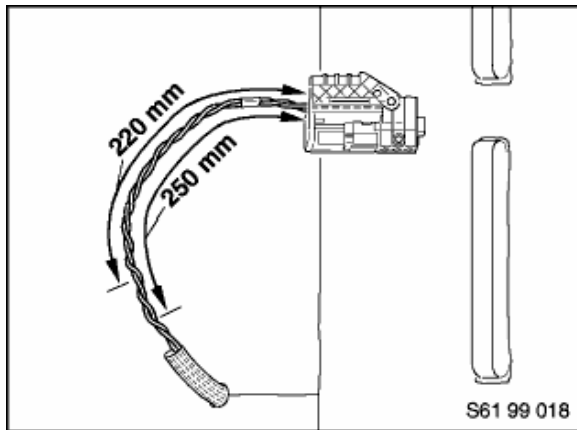
5. Route the seat section of the new repair harness thorough the seat frame, securing it with three wire ties (2) in loops underneath the seat upholstery (as shown on the illustration).

Plug connector (1) into belt tensioner assembly and secure it with wire tie (2). Attach connector (3) together with the supplied support bracket (P/N 61 13 8 365 543) to springs of seat upholstery.

Important: make sure that there is no tension in the repair wiring harness, and that the harness does not interfere with the movement of the seat.

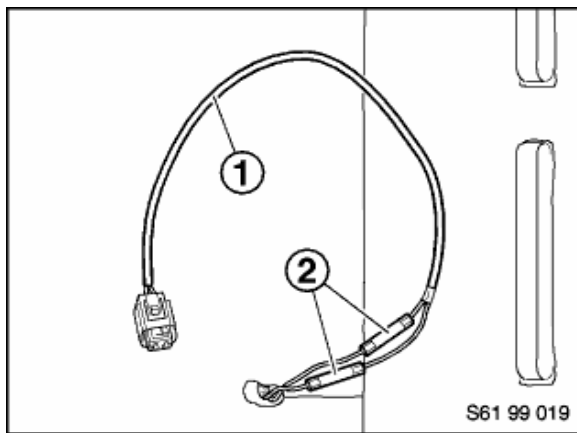


6. Remove fabric tape (1) from the seat wiring harness on the vehicle side (found on the floor, underneath the seat). In addition, slide back the insulation tube (2) by approx. 300 mm.



7. Cut through the yellow/brown twisted ignition circuit wire at approx. 220 mm, and the yellow/red ignition circuit wire at approx. 250 mm from the end of the connector. Discard the cut section of the harness.

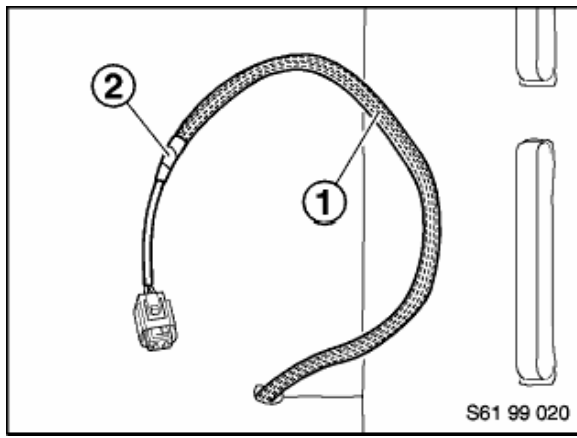
Important: make sure that the two ignition circuit wires are cut through with an offset of about 30 mm, so the crimping connectors will not be immediately adjacent to each other.



8. Connect the other section of the repair wiring harness (1) to the cut wires of the tensioner ignition circuit by using two crimping connectors (P/N 61 13 8 353 746) and shrink tubing insulation (2) (P/N 61 13 1 379 833).

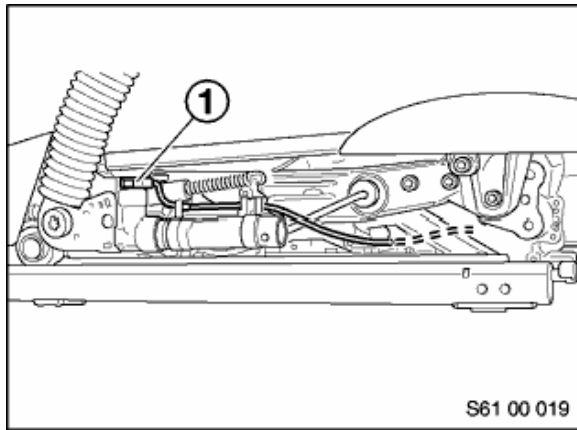
Important: a pin assignment of the repair leads is not relevant.

For the correct procedure of crimping a butt connector into the ignition circuit line, please refer to the Service Information Bulletin 61 02 00 (from April 2000).

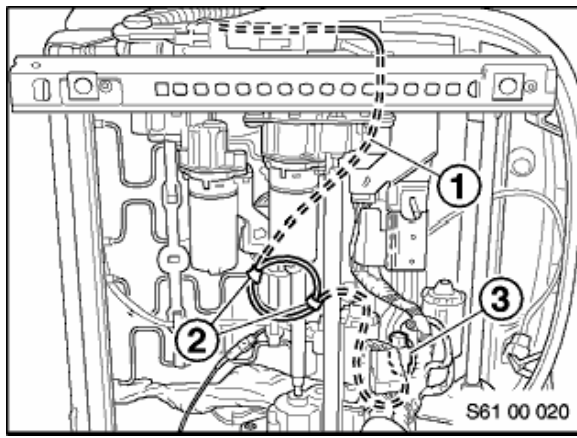


9. Push forward on the insulating tube (1) and secure it to the seat harness by means of a fabric tape (2).
10. Install front seat.
11. Connect seat wiring harness connectors.
12. Connect vehicle's battery.
13. Clear the SRS module fault code memory.

Section 5: Repair instructions for E53



1. Connect DIS/MoDiC 3 tester to a vehicle and read out SRS module fault code memory. If the above mentioned SRS faults are set in the airbag control module, proceed with the repair.
2. Remove corresponding front seat. For removal instructions refer to: RA 52 14 000 (electric seat), or RA 52 16 000 (sport seat), which can be found in the Technical Information System (TIS). Remove side cover above the belt tensioner.
3. Disconnect vehicle's battery.
4. Remove cable securing wire ties, unplug the belt tensioner connector from the belt buckle assembly and from the seat wiring harness connector. Remove and discard the old belt tensioner ignition circuit harness.
5. Plug connector (1) of the new repair wiring harness into belt tensioner



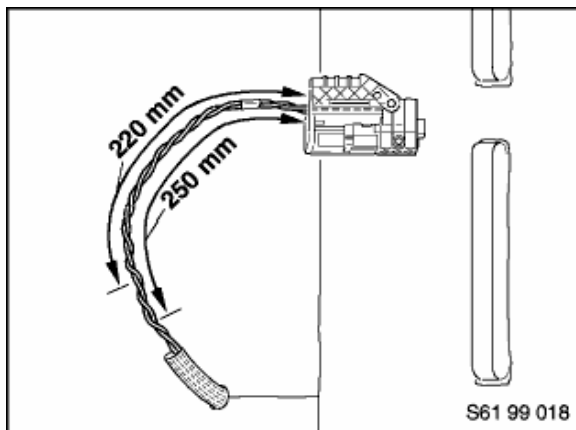
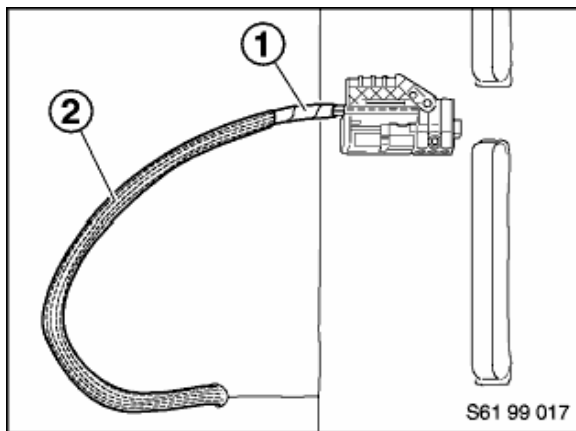
6. Route the seat section of the new harness (1) through the seat frame, securing it with three wire ties (2) in loops underneath the seat upholstery (as shown on the illustration).

Attach connector (3) to the support bracket.

Important: make sure that there is no tension in the repair wiring harness, and that the harness does not interfere with the movement of the seat.

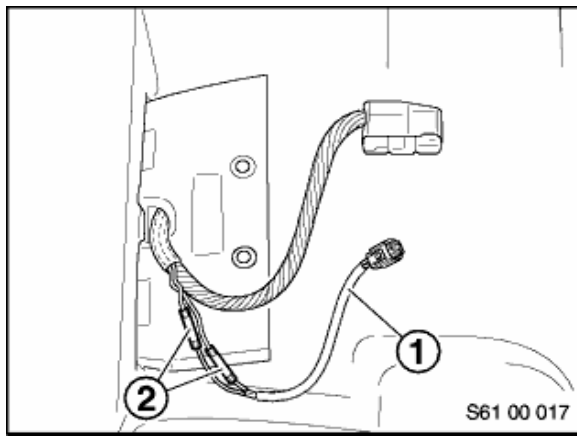
7. Reinstall side cover for belt tensioner assembly.

8. Remove fabric tape (1) from the seat wiring harness on the vehicle side (found on the floor, underneath the seat). In addition, slide back the insulation tube (2) by approx. 300 mm.



9. Cut through the yellow/brown twisted ignition circuit wire at approx. 220 mm, and the yellow/red ignition circuit wire at approx. 250 mm from the end of the connector. Discard the cut section of the harness.

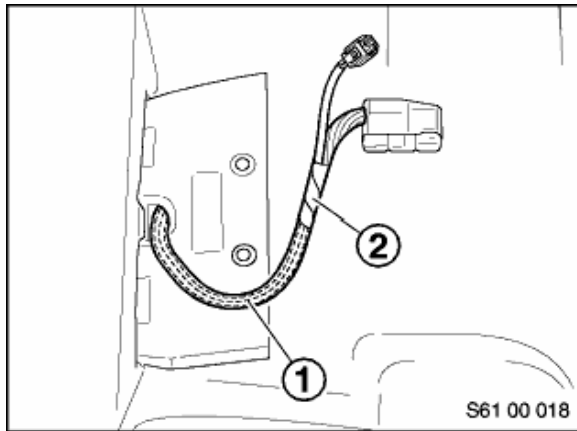
Important: make sure that the two ignition circuit wires are cut through with an offset of about 30 mm, so the crimping connectors will not be immediately adjacent to each other.



10. Connect the other section of the repair wiring harness (1) to the cut wires of the tensioner ignition circuit by using two crimping connectors (P/N 61 13 353 746) and shrink tubing insulation (2) (P/N 61 13 1 379 833).

Important: a pin assignment of the repair leads is not relevant.

For the correct procedure of crimping a butt connector into the ignition circuit line, please refer to the Service Information Bulletin 61 02 00 (from April 2000).



11. Push forward on the insulating tube (1) and secure it to the seat harness by means of a fabric tape (2).
12. Install front seat.
13. Connect seat wiring harness connectors.
14. Connect vehicle's battery.
15. Clear the SRS module fault code memory.

PARTS INFORMATION Vehicle Series Quantity

E36, E36/7 (Z3)

Part Number

61 13 1 367 599
61 13 8 353 746
61 13 1 379 833
61 12 6 908 853

Description

Wire tie 5
Crimping connector 2
Insulation shrink-tube 2
Tensioner repair wiring harness 1

Vehicle Series Quantity

E38, E39, E53

Part Number

61 13 1 367 599
61 13 8 353 746
61 13 1 379 833
61 13 8 365 543
61 12 6 908 852
61 12 6 908 850

Description

Wire tie 4
Crimping connector 2
Insulation shrink-tube 2
Support bracket 1
Tensioner repair wiring harness 1
Tensioner repair wiring harness 1

	Labor Operation	Labor Allowance
Main Work E36	00 52 099	15 FRU; 4-door 14 FRU; 2-door
Associated Work E36	00 52 658	14 FRU; 4-doo 13 FRU; 2-door
Main Work E36/7 (Z3)	00 52 099	15 FRU
Associated Work E36/7 (Z3)	00 52 658	14 FRU
Main Work E38, E39, E53	00 52 099	21 FRU; E38 18 FRU; E39 sedan 19 FRU; E39 sport wagon 16 FRU; E53
Associated Work E38, E39, and E53	00 52 658	19 FRU; E38 20 FRU; 750iL from 9/98 prod. 17 FRU; E39 15 FRU; E53
Main Work E46	00 52 099	16 FRU
Associated Work E46	00 52 658	14 FRU

Note: The following explanations will spell out the correct use of the work times.

Main Work:

Use this labor operation number when the only repair performed is the listed warranty repair.
OR

+Associated Work

Use this labor operation number when other repairs or services are performed along with the listed warranty repair. Under no circumstances should both labor operation numbers be claimed. Attempts to claim both times will result in an unnecessary delay in claim processing and payment.