



# TECHNICAL BULLETIN

No: LA501-020

Issue: 2

Date: 20 Dec 2006

CIRCULATE: TO

Service Mgr  
X

Warranty  
X

Workshop  
X

Body Shop  
X

Parts  
X

**ISSUE '2' CHANGES ARE HIGHLIGHTED WITH GREY BACKGROUND**

**SECTION: 501-20B**

## Supplemental Restraint System Overlay Harnesses

### AFFECTED VEHICLE RANGE:

Land Rover LR3 (LA)

VIN: 5A000360 onwards

### CONDITION SUMMARY:

**OVERLAY HARNESS REPAIRS TO SUPPLEMENTAL RESTRAINT SYSTEM (SRS) WIRING**



**NOTE:** Service repair harnesses are now available to repair sections of the fascia/body SRS wiring harness without replacement of the complete harness.

The Worldwide Diagnostic System (WDS) may display Diagnostic Trouble Codes (DTC) from the Restraints Control Module (RCM) indicating an SRS wiring fault for one or more of the following reasons:

- SRS wiring harness open circuit
- SRS wiring harness short circuit
- Air bag deployment during a vehicle collision which causes heat damage to an air bag connector.

**Cause:** SRS wiring harness damage or open circuit/short circuit condition.

**Action:** In the event a DTC from the RCM indicates an SRS wiring fault, refer to the Workshop Manual Service Procedure detailed in this bulletin to identify and replace the problem harness section with the appropriate overlay repair harness.



**CAUTION:** The firing circuit wiring between the air bags and RCM must not be repaired under any circumstances and must be replaced using the overlay harnesses described below.

If an air bag has been deployed, the wiring harness that connects directly to the air bag **MUST** be replaced at the same time as the deployed air bag.

If a seat belt pretensioner has been deployed, replace this component only.

In case of the driver's air bag deployment, the "clock-spring" spiral connector **MUST** be replaced at the same time as the deployed air bag, but it is not necessary to replace the harness from the clock-spring to the fascia/body harness connector.



**CAUTION:** Where an air bag has deployed, the SRS overlay harness sections associated to the deployed air bag **MUST** be installed.

**NOTE:** The information in Technical Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment required to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers." If you are not a Retailer, do not assume that a condition described affects your vehicle. Contact an authorized Land Rover service facility to determine whether the bulletin applies to a specific vehicle.



### PARTS:



**NOTE:** RCM connector part numbers have changed during production. RCM connectors C1649 and C0256 were superseded by C3224 and C3223 which were subsequently superseded by C3224L and C3223L, respectively. Reference should be made to GTR Electrical Circuit Diagrams according to the vehicle MY and VIN.

YMQ502110 .....	C0251 to C0231 Passenger air bag sensor to fascia/body harness	Qty 1
YMQ502110 .....	C0261 to C0231 Passenger air bag sensor to fascia/body harness	Qty 1
YMQ501990 .....	C2126 to C0256/C3223/C3223L LH B-pillar air bag sensor to RCM connector	Qty 1
YMQ501980 .....	C2127 to C0256/C3223/C3223L RH B-pillar air bag sensor to RCM connector	Qty 1
YMQ502030 .....	C1479 to C0256/C3223/C3223L LH curtain air bag sensor to RCM connector	Qty 1
YMQ502020 .....	C1480 to C0256/C3223/C3223L RH curtain air bag sensor to RCM connector	Qty 1
YMQ501970 .....	C1654 to C0256/C3223/C3223L LH rear qtr/C-pillar sensor to RCM connector	Qty 1
YMQ501960 .....	C1655 to C0256/C3223/C3223L RH rear qtr/C-pillar sensor to RCM connector	Qty 1
YMQ502050 .....	C2124 to C0256/C3223/C3223L LH 3 <sup>rd</sup> row curtain a/b sensor to RCM connector	Qty 1
YMQ502040 .....	C2125 to C0256/C3223/C3223L RH 3 <sup>rd</sup> row curtain a/b sensor to RCM connector	Qty 1

Parts also available:

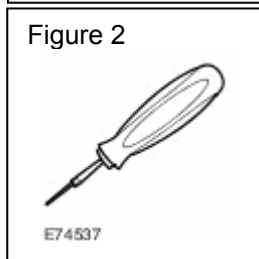
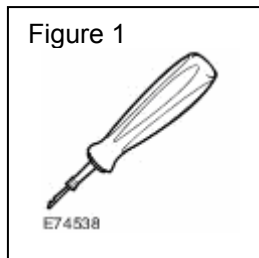
YMQ502100 .....	C2641 to C0229 Clock-spring to fascia/body harness connector	Qty 1
YMQ502080 .....	C0067 to C1649/C3224/C3224L Fascia/body harness to RCM connector	Qty 1
YMQ502090 .....	C0083 to C1649/C3224/C3224L Fascia/body harness to RCM connector	Qty 1
YMQ502060 .....	C2368 to C0256/C3223/C3223L Pretensioner to RCM connector	Qty 1
YMQ502070 .....	C2378 to C0256/C3223/C3223L Pretensioner to RCM connector	Qty 1
YMQ502000 .....	C2368 to C0256/C3223/C3223L Connection under seat to RCM connector	Qty 1
YMQ502010 .....	C2378 to C0256/C3223/C3223L Connection under seat to RCM connector	Qty 1

### TOOLS:

**YRW500030.....Wiring connector anti- back out device removal tool used on connectors C0067, C0083, C0231 & C0229; part of wiring harness repair kit.**

**YRW900010.....Wiring connector anti- back out device removal tool used on connectors C1649/C3224/C3224L & C0256/C3223/C3223L; part of wiring harness repair kit. (Figure 1)**

**YRW500070.....Wiring connector anti-back out device removal tool used on connectors C2368& C2378. Also used on ALL connectors as a wiring connector terminal de-latch tool; part of wiring harness repair kit. (Figure 2)**





## WARRANTY:



**NOTE:** Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Always refer to DDW to obtain the latest repair time.

DDW requires the use of causal part numbers. Labor only claims must show the causal part number with a quantity of zero.

Description	SRO	Time (Hours)	Condition Code	Causal Part
Install SRS overlay harnesses - front	76.74.89/41	4.3	42	YMG501852
Install SRS overlay harnesses - rear	76.74.89/42	3.5	42	YMG501852

*Normal warranty policy and procedures apply.*

## SERVICE INFORMATION



**NOTES:** GTR Workshop Manual does not yet contain overlay harness installation instructions.

- Any harness replacement following accident related damage IS NOT claimable under warranty.
- Refer to the relevant electrical circuit diagrams and electrical library to determine the harness section to be ordered to complete the repair.
- Installation of driver and passenger overlays will require removal of the fascia. For further information refer to the relevant section in Global Technical Reference (GTR).
- Replacement of all other overlays may require removal of some interior trim for access. For further information refer to the relevant section in Global Technical Reference (GTR).
- The routing of the overlay harness MUST follow the routing of the original harness exactly while being secured by proper electrical tape or cable ties at regular intervals.
- Always start securing the overlay harness from the point closest to the air bag and route towards the Restraints Control Module (RCM). In some cases the wiring will be longer than required as the overlay harnesses are designed to be used on left-hand and right-hand drive vehicles. Any surplus MUST be coiled and secured to the harness in the vicinity of the RCM or the body-to-fascia harness connector.
- All DTCs should be cleared after repair using WDS/IDS.




**NOTE:** Global Technical Reference (GTR) lookup sequence is as follows:  
GTR Home > NAS > Service Information/ LA – LR3 > Workshop Manuals > Bookmark "General Information" link to "Standard Workshop Practices" section "Supplementary Restraint System (SRS) Precautions"



**WARNING:** All WARNINGS, CAUTIONS and precautions outlined under the Supplementary Restraint System (SRS) Precautions section, located in the Standard Workshop Practices section of GTR, must be followed.

1. Refer to the attached Workshop Manual extracts for guidance with specific overlay harness installations until GTR is updated.
2. When harness repairs are completed initiate a diagnostic session and clear all DTC's using WDS/IDS.

- a. Secure the redundant wires to the harness with suitable electrical tape.
4. Connect the overlay harness connector to the relevant air bag electrical connector.
5.  **CAUTION: Make sure the electrical harness is not trapped during the installation.**  
Secure the new overlay harness to the existing wiring harness and follow exactly the route of the original back to the fascia/body harness SRS connector located in the A-pillar area.
6. Disconnect the electrical fascia/body harness SRS connector.
7. Cut away and discard the redundant connector.
8. Secure the redundant wires to the original harness with suitable electrical tape.
9. Connect the new overlay harness connector to the fascia/body harness SRS connector.
10. Install the instrument panel upper section. For additional information, refer to Global Technical Reference (GTR) Discovery 3/LR3 Workshop Manual Section 501-12, Instrument Panel Upper Section (76.46.04).

## Service Procedure

### Fascia Air Bag Overlay Harnesses

 **WARNING: The safety precautions detailed in the Workshop Manual relating to supplementary restraint systems (SRS) must be adhered to.**

1. Remove the instrument panel upper section. For additional information, refer to Global Technical Reference (GTR) Discovery 3/LR3 Workshop Manual Section 501-12, Instrument Panel Upper Section (76.46.04).
2. Disconnect the electrical connector from the air bag.
3. Cut away the redundant wire and discard the old connector:

## Service Procedure

### Body Air Bag Overlay Harnesses

 **WARNING: The safety precautions detailed in the Workshop Manual relating to supplementary restraint systems (SRS) must be adhered to.**

**NOTE:** This overlay harness installation procedure is rationalized to reduce the number of repair times and the time provided is based on interior trim removal necessary for a D-pillar air bag wiring harness repair. The procedure should be used for renewals to all other overlay harnesses listed in the parts required section.

1. Disconnect the battery ground cable. For additional information, refer to Global Technical Reference (GTR) Discovery 3/LR3 Workshop Manual Section 414-00, Specifications - Battery Disconnect/Connect.

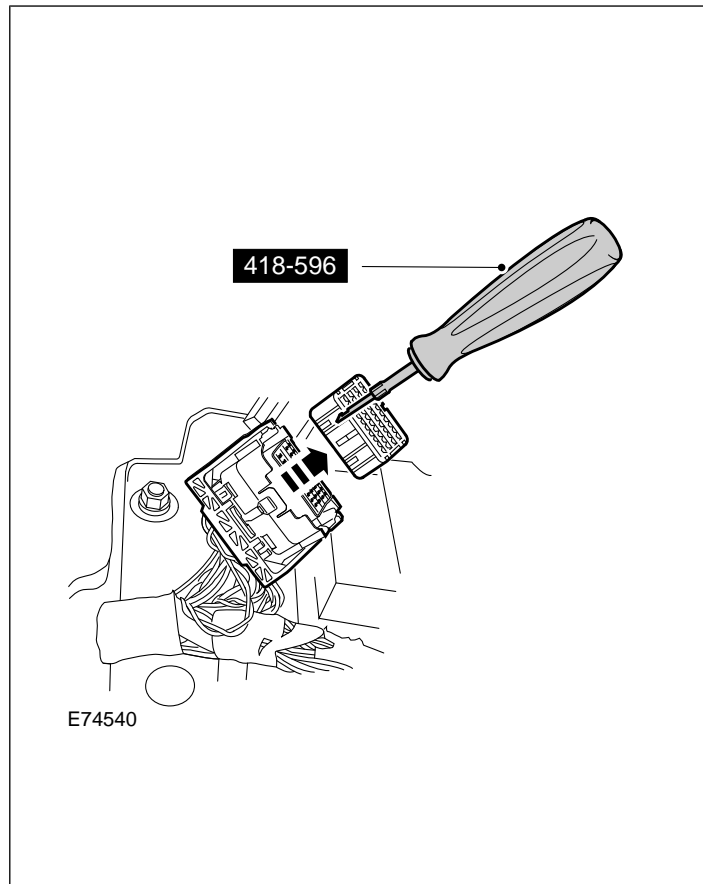
2. Make the SRS system safe. For additional information, refer to Global Technical Reference (GTR) Discovery 3/LR3 Workshop Manual Section 100-00, Standard Workshop Practices.
3. Disconnect the electrical connector from the air bag.
4. Remove interior trim as necessary to gain access to the relevant air bag connector and to follow the original wiring harness route exactly.
5. Cut away the redundant wire and discard the old connector:
  - a. Secure the redundant wires to the harness with suitable electrical tape.
6. Connect the overlay harness connector to the rear air bag electrical connector.
7. **⚠ CAUTION: Make sure the electrical harness is not trapped during the installation.**

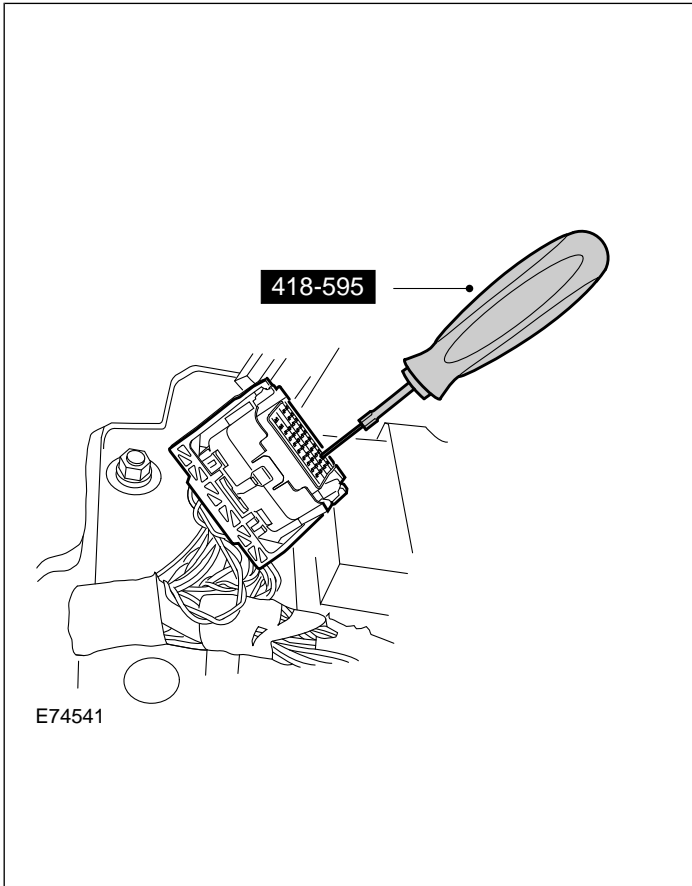
Secure the new overlay harness to the existing wiring harness and follow exactly the route of the original back to the RCM.

8. **⚠ WARNING: Ensure that only one wire is removed from the connector at a time to ensure that the replacement is located in the correct cavity. Refer to the relevant wiring diagram in the electrical library where necessary.**

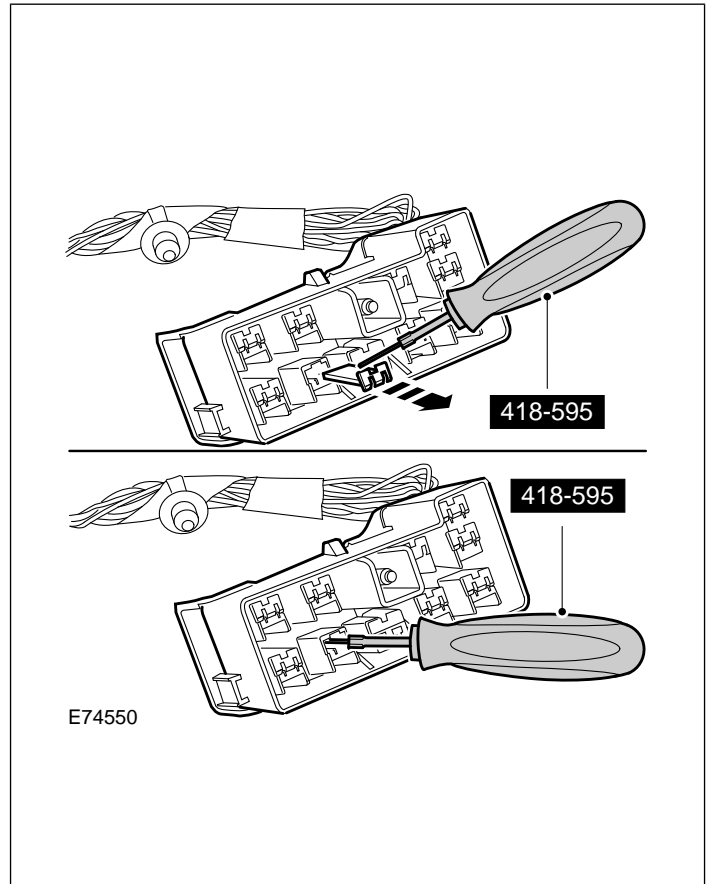
Release the redundant wires from the RCM electrical connector:

1. Disconnect the electrical connector from the RCM.
2. Using special tool YRW900010, remove the red terminal anti-backout device.
3. Using special tool YRW500070, release the terminal latch and withdraw the terminal as shown below.
4. Cut the redundant wire approximately 5mm from the main harness and discard.
5. Secure the redundant wires to the harness with suitable electrical tape.





9. For renewal of seat air bag harnesses, the new overlay harness should be secured to the existing wiring harness and follow exactly the route of the original back to the seat connector.
  - a. Disconnect the seat electrical connector.
  - b. Using special tool YRW500070, remove the terminal anti-backout device.
  - c. Using special tool YRW500070, release the terminal latch and withdraw the terminal as shown.
  - d. Cut the redundant wire approximately 5mm from the main harness and discard.
  - e. Secure the redundant wires to the harness with suitable electrical tape.



10. **⚠ CAUTION: Ensure the new terminal is correctly inserted into the connector and is secure.**

Insert the correct wire from the overlay harness into the correct cavity of the connector.

11. Install the connector anti-backout device and install the connector.
12. Install removed interior trim as necessary.
13. Connect the battery ground cable. For additional information, refer to Global Technical Reference (GTR) Discovery 3/LR3 Workshop Manual Section 414-00, Specifications - Battery Disconnect/Connect.