

**DEALER BULLETIN**

**SLR/031/99**

*17 NOVEMBER 1999*

TO: ALL LAND ROVER DEALERS

**For the attention of the Service Manager**

**TECHNICAL BULLETINS**

Please find attached:

<u>REF. NUMBER</u>	<u>SUBJECT</u>	<u>ISSUE</u>
Brakes 0005	ABS warning light illuminated	1
Electrical 0016	Damage to chassis electrical harness	1

Also new index sheets for the above sections.

Would you please arrange for the above bulletins to be circulated or distributed to the following areas:

<b>CIRCULATION - Select as appropriate [X]</b>			
Dealer Principal		Service Reception	X
Service Manager	X	Workshop	X
Sales Manager			
Parts Manager	X		
Warranty Admin.	X		





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# TECHNICAL BULLETIN



**MODEL/DERIVATIVE:**  
**Discovery Series II**

**Bulletin N°:** 0005  
**CDS. ref:** L8559bu  
**Issue:** 1  
**Date:** 17.11.99

**AFFECTED RANGE:**

**All derivatives within VIN ranges: XA 900012 to 907212 - (System 1)  
XA 200412 to 204130 - (System 2)**

**PROBLEM:**

**ABS WARNING LIGHT ILLUMINATED**

The customer reports seeing the ABS warning light illuminated and may also report hearing the three chimes warning sound.

**CAUSE:**

Signals detected within the ABS system have been interpreted as faults.

**ACTION:**

Where a customer has reported seeing ABS warning light illumination, TestBook must be used to establish whether a fault code has been stored within the SLABS ECU. The appropriate checks as described below must then be carried out.

Refer also to the Workshop Manual Brakes Section – Operation – [Diagnostics](#).

In case of the following Fault Code being detected, carry out the checks below:

FAULT CODE	DESCRIPTION
11.3	Modulator shuttle valve switch dynamic failure

- Master cylinder functionality
- ABS modulator earth connection
- ABS ECU earth connection
- Modulator shuttle valve switches functionality

If no fault can be identified, confirm the SLABS ECU Channel Mask and Safety Mask Numbers by carrying out the following procedure using TestBook:

- **Select: DISCOVERY SERIES II - SLS & ABS - VEHICLE MAINTENANCE - ECU INFORMATION**

Near the bottom of the on-screen list, the ECU Channel Mask and Safety Mask Numbers can be found. If these are Number 2 or 3, replace the ECU with new ECU, part number SRD100462.

In case of the following Fault Codes being detected, carry out the checks below:

04.4 to 04.7	Sensor output too low - insufficient
06.4 to 06.7	Sensor electrical failure
08.4 to 08.7	Sensor electrical connection intermittent

- ABS wheel speed sensor output
- ABS wheel speed sensor electrical resistance
- ABS wheel speed sensor cable and connector for integrity and correct route.

If no fault can be identified, confirm the SLABS ECU Channel Mask and Safety Mask Numbers by carrying out the following procedure using TestBook:

- Select: DISCOVERY SERIES II - SLS & ABS - VEHICLE MAINTENANCE - ECU INFORMATION

Near the bottom of the on-screen list, the ECU Channel Mask and Safety Mask Numbers can be found. If these are Number 2 or 3, replace the ECU with new ECU, part number SRD100462.

In case of the following Fault Codes being detected, carry out the check below:

01.3	Pump not running when activated
01.4	Pump failure - sticking

- Confirm the ABS relay part number. If AMR5293 is fitted, replace with YWB101300.

In case of the following Fault Code being detected, carry out the checks below:

01.5	Pump failure - pump running when not activated
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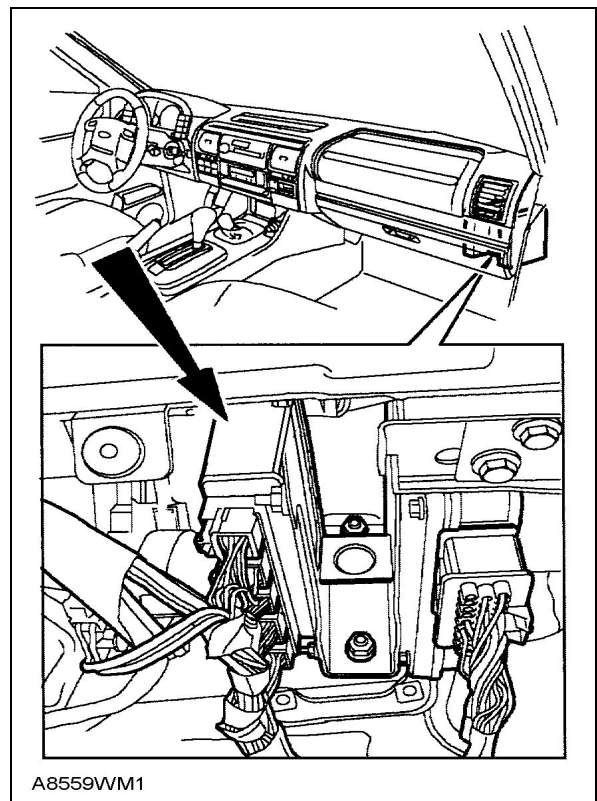
- Confirm the ABS relay part number. If AMR5293 is fitted, replace with YWB101300.
- Establish from the customer whether a sustained noise similar to ABS or Hill Decent Control operation was heard, possibly even with the ignition turned off.

Unless it can be confirmed that 'Pump running when not activated' time was limited to less than 0.5 hour, *replace the ABS modulator.*

Should Fault Codes other than those described above be detected, follow further diagnostics as prompted by TestBook.

Refer to Workshop Manual repair number [70.65.30](#) for the ECU replacement procedure.

Having fitted a new ECU, it must be calibrated using TestBook as described below.



- From TestBook, select SLABS diagnostics.
- Follow the on screen instructions to select 'VEHICLE MAINTENANCE'.
- From 'VEHICLE MAINTENANCE', select 'SLABS ECU REPLACE' and follow instructions with the exception of 'ENTER ORIGINAL ECU NUMBER'.

At this point, enter the full VIN. TestBook will also request confirmation of whether vehicle has self levelling (SLS) or coil sprung rear suspension.

- Follow the on-screen instructions to return to 'VEHICLE MAINTENANCE'.
- Select 'HEALTH CHECK' and follow instructions to test and cancel warning lights.

**NOTE:** When the 'WHEEL ASSIGNMENT' screen is reached, it will be necessary to raise each road wheel clear of the ground / ramp individually, so that the wheel can be rotated. During this operation it is essential that the other three road wheels are restrained to prevent movement via the differential.

- Close TestBook to 'WELCOME' screen.
- For vehicles with SLS, on completion of 'HEALTH CHECK', go to 'SLS CALIBRATION' as prompted and follow on-screen instructions to complete calibration.

*PARTS INFORMATION:*

**USE ONLY AS REQUIRED**

	Old Part No	New Part No
ECU - Self levelling suspension and anti-lock braking system	SRD100461	SRD100462
Relay - ABS pump	AMR5293	YWB101300

*WARRANTY CLAIMS:*

**Use Complaint Code: 7N8Y**

**Use S.R.O.: 70.90.89/26** Carry out preliminary electrical and mechanical checks using TestBook as required

**Time allowance: 0.30Hrs**

**Use S.R.O.: 70.65.04** Relay - pump - renew

**Time allowance: 0.10Hrs**

**Use S.R.O.: 70.65.01** SLABS ECU - renew and calibrate

**Time allowance: 1.50Hrs**

**NOTE:** This is an increased time for ECU renew from that previously published and includes an allowance for calibrating the new ECU using TestBook. An additional TestBook operation for calibration is therefore not required.





Any additional repairs carried out as the result of problems identified during the diagnostic procedure should be claimed in the usual way, referring to the Repair Operation Times Manual for relevant SRO details.







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# TECHNICAL BULLETIN



*MODEL/DERIVATIVE:*

**Defender**

*Bulletin N°:* **0016**  
*CDS. ref:* **L8561bu**  
*Issue:* **1**  
*Date:* **17.11.99**

*AFFECTED RANGE:*

**All derivatives up to 99MY introduction (VIN XA 159810)**

*PROBLEM:*

**DAMAGE TO CHASSIS ELECTRICAL HARNESS**

**Chafing damage to the harness, possibly resulting in electrical failures.**

*CAUSE:*

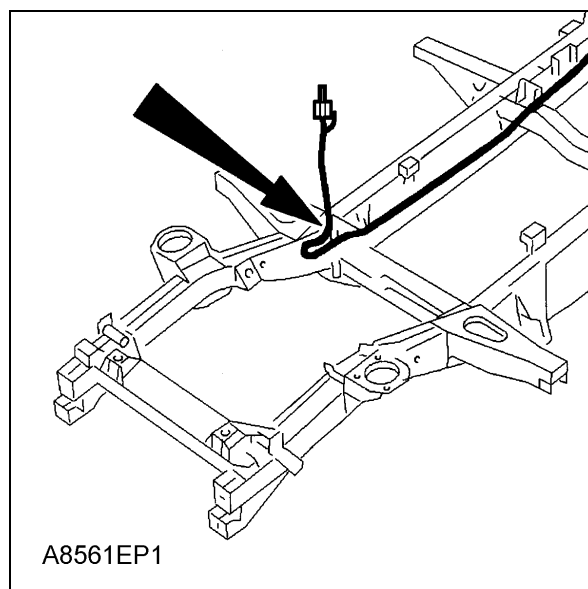
**If incorrectly routed a loop of harness can foul on the front propeller shaft.**

*ACTION:*

**When replacing a damaged harness or carrying out any repairs in the vicinity of the exposed chassis harness / front propeller shaft, ensure on completion of work, that the harness is correctly routed to give adequate clearance.**

**Refer to the following notes for details:**

- **With the battery disconnected and the vehicle raised, from beneath the vehicle locate the harness in the area above the front differential and right hand chassis longitudinal.**
- **The harness emerges below the body and enters the right hand chassis longitudinal. Between these two points there is a loop in the harness, (arrowed in illustration), which *MUST* be clear of the propeller shaft.**
- **To ensure correct installation, locate the white marker tape around the harness. This indicates the point at which the harness and grommet should enter the chassis. Feed the harness into the chassis until this is achieved.**



- Confirm that there is now adequate clearance between the harness and the propeller shaft. ***ON NO ACCOUNT*** must the harness be cable tied to any fuel or brake pipes above the chassis.
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*PARTS INFORMATION:*

**Not applicable**

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*WARRANTY CLAIMS:*

**This bulletin is issue for information purposes only.**