

# TECHNICAL BULLETIN



**MODEL/DERIVATIVE:**  
**Discovery Series II (LT)**

**Bulletin N°:** 0022  
**CDS. ref:** L8945bu2  
**Issue:** 2  
**Date:** 29.7.2004

## **AFFECTED RANGE:**

**All derivatives in the following VIN range:**  
**XA 900000 - XA 999999**  
**XA200000 onwards**

**RE – ISSUE INFORMATION: ACTION, and PARTS INFORMATION: part number amended.**

**Please destroy your existing copy and replace with this issue 2.**

## **PROBLEM:**

**A 'CHATTERING' NOISE FROM THE CENTRE CONSOLE AREA/HANDBRAKE**  
The noise can be particularly prominent on Td5 automatic derivatives when operating between 2000 rpm and 3000 rpm.

## **CAUSE:**

The handbrake shoes are not held down sufficiently at the top where the cross strut locates. This allows the shoe to vibrate against the back plate under certain engine loads. The noise is then transmitted into the cabin.

## **ACTION:**

Should a customer express a concern of the above and a chattering noise is confirmed, follow the rectification procedure to replace the handbrake shoe retaining springs and modify the left-hand brake shoe.

### **Rectification procedure**

#### **1. Slacken off the handbrake cable.**

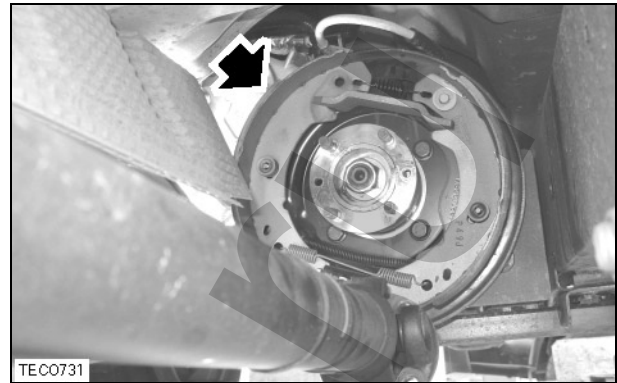
Using the handbrake brake shoes renew procedure in the Workshop Manual (Refer to Global Technical Reference (GTR), Discovery Series II Workshop Manual, part number VDR100090 (8<sup>th</sup> edition), Brakes, Brake Shoes - Handbrake, repair number 70.45.18) as a guide complete the following steps:

2. Disconnect the propeller shaft from the brake drum and position aside so that the brake drum is free to rotate.

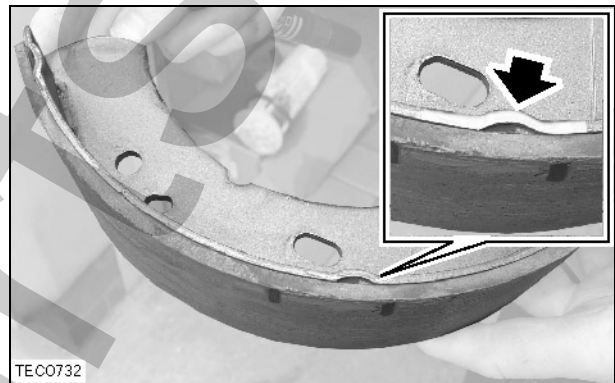
3. Remove the brake drum.

4. Remove the left-hand brake shoe (arrowed in illustration 1). On the rear face of the brake shoe mark 5 mm beyond the contact patch (see illustration 2).

1

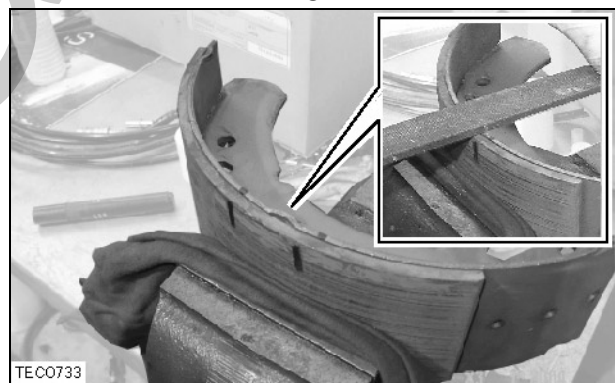


2



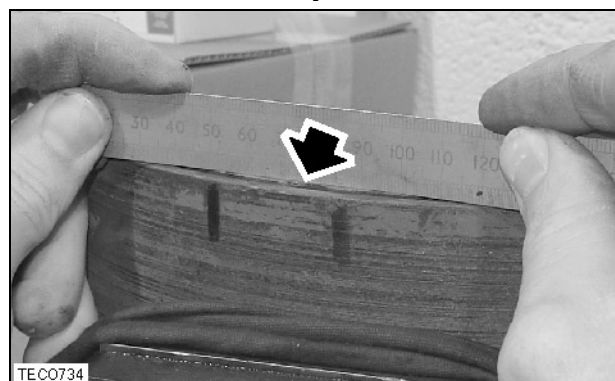
5. Place the brake shoe in a bench vice (protect the brake shoe lining) and using a file remove approximately 0.5 - 0.75 mm of metal from the brake shoe platform (see illustration 3).

3



6. Ensure that a uniform amount of material has been removed between the marks by placing a straight edge across the top of the shoe platform (see illustration 4).

4



7. Apply primer to the bare metal on the brake shoe platform to prevent corrosion.

8. Install the left-hand brake shoe, using a new hold down spring (SMN500050 - red in colour).
9. Using a new hold down spring (red in colour), replace the hold down spring on the right-hand brake shoe.
10. Install the brake drum. Refer to Global Technical Reference (GTR), Discovery Series II Workshop Manual, part number VDR100090 (8<sup>th</sup> edition), Brakes, Brake Shoes - Handbrake, repair number 70.45.18.

#### **Handbrake adjustment**

- For vehicles up to VIN XA 222819:
  11. Refer to GTR, Discovery Series II Workshop Manual, part number VDR100090 (8<sup>th</sup> edition), Brakes, Adjustments, Handbrake, repair number 70.45.09.
- For vehicles from VIN XA 222820:
  12. Raise and support one rear wheel (to turn brake drum).
  13. Tighten the brake shoe adjusting bolt to 25 NM (18lbf.ft).
  14. Check the drum is locked.
  15. Back off the adjusting bolt by 1.5 turns. Check brake drum is free to rotate.
  16. Apply the handbrake lever three notches on the ratchet. The handbrake should be fully operational.
  17. Release handbrake.
  18. Adjust length of the outer cable from under the vehicle.
  19. Apply the handbrake lever three notches on the ratchet. The handbrake should be fully operational.
  20. Lower the vehicle.
  21. If noise persists on a Td5 derivative replace the existing brake drum with part number FRC3502.

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**PARTS INFORMATION:**

**SMN500050 - Hold down spring kit - brake shoe**

**FRC3502 - Hand brake drum**

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**WARRANTY CLAIMS:**

**Use Complaint Code: 6B2K**

**SRO: 70.45.89/26 - Transmission brake shoes - rectification**

**Time allowance: 0.90 hrs**

**SRO: 70.45.09 - Transmission brake - adjust**

**Up to VIN XA 222819:**

**Time allowance: 0.30 hrs**

**From VIN XA 222820:**

**Time allowance: 0.20 hrs**

**Direct Dealer Warranty (DDW) 2**

**All DDW 2 users must enter a causal part number. Labour only claims must show a causal part number with a quantity of zero.**

<b>Description</b>	<b>SRO</b>	<b>Time allowance</b>	<b>CC</b>	<b>Causal part</b>
<b>Transmission brake shoes - rectification</b>	<b>70.45.89/26</b>	<b>0.90 hrs</b>	<b>79</b>	<b>ICW500010</b>
<b>Transmission brake - adjust</b>	<b>70.45.09</b>	<b>Up to VIN XA 222819: 0.30 hrs From VIN XA 222820: 0.20 hrs</b>	<b>79</b>	<b>ICW500010</b>