



## Technical Service Bulletin

No.LTB00079

13 August 2007

**Subject/Concern:** EPB Screech on Apply/Release When Stationary

### Models:

Discovery 3/LR3

VIN-range: 5A000259 Onwards

Range Rover Sport (LS)

VIN-range: 5A900106 Onwards

**Markets:** All **Section:** 206-00

### Summary:

Screech noise on application/release of the Electronic Parking Brake (EPB) when the car is stationary, with the possibility of the EPB lamp illuminating, with Diagnostic Trouble Code (DTC) C1A43-00, C1A53-68 and/or C1A46-62 stored.

**Cause:** The internal components of the EPB actuator have over-traveled and may be jammed.

**Action:** Should a customer express concern, follow the Diagnostic Procedure outlined below.

### Labour Time:

Operation Description	Operation No.	Time
Electric Park Brake Unjamming Procedure	70.35.89/37	0.2 hours
Service Electric Park Brake Shoes - Range Rover Sport	70.35.89/38	1.8 hours
Service Electric Park Brake Shoes - New Discovery	70.35.89/38	1.5 hours

### Repair/Claim Coding:

**Causal Part:** SNF500180

**ACES Condition Code:** 42

**Defect Code:**

## Diagnostic Procedure

### Unjamming the EPB



- 1 . CAUTION: This procedure requires IDS DVD108 with Patch File 1 loaded or later.

Connect an approved battery charger/power supply to the vehicle.

- 2 . Connect IDS to the vehicle and begin a new diagnostic session, by entering the correct VIN for the current vehicle.
- 3 . Follow the IDS prompts to read the vehicle configuration.
- 4 . When prompted 'Do you wish to read diagnostic trouble codes?', select 'NO' and then press 'tick' to continue.
- 5 . When the 'Content Model' is displayed select 'Vehicle Configuration' tab.
- 6 . Select from the menu 'Set-up and Configuration', and then press 'tick' to continue.
- 7 . Select 'Parking Brake' from the drop down menu.
- 8 . Select 'Parking Brake unjam Procedure' from the menu and then press 'tick' to continue.

- 9 . **NOTE:** If the task completes successfully the parking brake cables will drive out to the 'mount' position.  
Follow all on-screen instructions to complete this task.
- 10 . When the task is completed, exit the current session.
- 11 . Disconnect IDS and the battery charger/power supply.

## Inspect and Service the Park Brake

- 12 . Isolate the parking brake electrical circuit.
  - 1 Remove the EPB 30 Amp fuse 'LINK 8E' from the Battery Junction Box (P108).
- 13 . Remove the rear wheels, brake calipers and brake discs (see Global Technical Reference GTR Workshop Manual, section: 206-05 (70.40.09)).
- 14 . **NOTE:** Renew components as necessary. To be carried out as a separate warranty claim (normal wear and tear is not covered by warranty).  
  
Inspect the general condition of the parking brakes.
  - 1 Look for evidence of brake drag. This may be evident through excessive shoe lining or drum wear. There may also be evidence of heat build-up on the shoes, drums or other internal components.
  - 2 Ensure shoe hold-down clips are not damaged.
  - 3 Remove any build-up of brake dust from the drum/shoe interface.
  - 4 Inspect shoe linings (they should be a minimum of 2.0 mm thick).
  - 5 .
  - 15 . Check that the brake cables are correctly attached by releasing the outer cable retaining nuts from the back plates, and pulling on the cables. The cables should not detach from the brake.
  - 16 . Ensure the E-clips are installed to the outer brake cable ends.

## Install and Adjust

- 17 . Refit the outer cable retaining nuts and torque to 8 Nm (6 lbft).
- 18 . Install the brake discs and brake calipers (see Global Technical Reference GTR Workshop Manual, section: 206-05 (70.40.09)).
- 19 .



**CAUTION: Carry out the parking brake shoe and lining adjustment procedure in full.**

Carry out parking brake shoe and lining adjustment (see Global Technical Reference GTR Workshop Manual, section: 206-05).

- 20 . Reinstall the EPB 30 Amp fuse 'LINK 8E' to the Battery Junction Box (P108).
- 21 .



**CAUTION: This procedure requires IDS DVD108 with Patch File 1 loaded or later.**

Connect an approved battery charger/power supply to the vehicle.

- 22 . Connect IDS to the vehicle and begin a new diagnostic session, by entering the correct VIN for the current vehicle.
- 23 . Select from the menu 'Set-up and Configuration', and then press 'tick' to continue.
- 24 . Select 'Parking Brake' from the drop down menu.
- 25 . Select 'Drive Parking Brake to the Latching Position' from the menu and then press 'tick' to continue.
- 26 . Follow all on-screen instructions to complete this task.
- 27 . Clear all DTCs from the EPB Module fault memory.

## Check Actuator Operation

28 . Select gear position 'NEUTRAL'.

29 . Select gear range 'LOW'.

30 . **NOTE:** If the repair has been successful there will be no abnormal loud screeching noises coming from the EPB actuator while carrying out this exercise. If there are abnormal screeching noises, the EPB actuator may have suffered internal damage and will have to be replaced. To be carried out as a separate warranty claim.

Using the EPB switch in the vehicle's cab, apply and release the parking brake three times.

31 . **NOTE:** If any DTCs have been logged, further investigation is required into possible causes of these DTCs. Refer to the IDS DTC Help Text for further guidance. To be carried out as a separate warranty claim.

Re-check for DTCs in the EPB Module. If the repair has been successful the DTCs listed at the start of this bulletin will not have logged and the EPB red warning lamp will no longer be flashing.

32 . When the task is completed, exit the current session.

33 . Disconnect IDS and the battery charger/power supply.