

TECHNICAL INFORMATION



No: 51/01/02/NAS
 Ref:
 Issue: 1
 Date: 08/09/02

Rear Axle Breather Extension

AFFECTED VEHICLE RANGE:

Discovery Series II (LT) Up to 2A755880

SITUATION:

WATER CONTAMINATION IN AXLE OIL

Constant water spray or wading may result in ingress of water through the rear axle breather tube, contaminating the axle oil. Rear axle oil may be observed to be pale in color when checking oil levels at service intervals. This indicates that the rear axle oil is contaminated with water.

RESOLUTION:

INSTALLATION OF ALTERNATE BREATHER HOSE

Vehicles that are frequently waded or driven in extremely wet conditions and have verified axle oil contamination should have the revised rear axle breather components installed. The new parts permit relocation of the breather vent to a high point in the body structure. Follow the instructions in this TIB for installation.

PARTS INFORMATION:

- TVP000020Breather tube, lower Qty 1
- TVP000030Breather tube, upper Qty 1
- SYC 000050.....Clip Qty 1 Vehicles with coil springs only
- LRN7590.....Gear Oil Qty as required

WARRANTY CLAIMS:

51.20.89/27Time 0.30 hrs.
 Replace contaminated axle oil and install new breather tube system


FAULT CODE: B

*Normal warranty policy and procedures apply.
 Material allowance is included in labor operation.*

TIB 51/01/02/NAS	CIRCULATE: TO	Service Mgr X	Warranty X	Workshop X	Body Shop X	Parts X
---------------------	------------------	------------------	---------------	---------------	----------------	------------

REPAIR PROCEDURE

INSTALL NEW BREATHER TUBE

 **CAUTION:** Connecting the two breather tubes together before being instructed to do so will result in the breather tubes becoming unusable.

1. Refer to RAVE Workshop Manual, Maintenance – Front and Rear Axle, and replace axle oil.


 **WARNING:** Always support the vehicle on safety stands for your own protection.

2. Raise the rear of the vehicle and support on safety stands.

3. Locate the existing rear axle breather tube and remove as follows:

- Remove and discard the cable tie securing the tube to the radius arm.
- Clean the area surrounding the rear axle breather, disconnect the breather tube and move aside.
- Release and remove the clip securing the axle breather tube to the chassis inner side member.
- Remove and discard the axle breather tube.

4. Connect the lower section of the replacement 2-piece breather tube, to the rear axle. (Left arrow in Figure 1).

 **CAUTION:** It is critical that the breather hose remain clean and unclogged during the assembly process. Plugging or taping the ends before assembly will ensure this.

5. Insert a plug into the open end of the green and black connector to prevent contamination during assembly.

6. Following the route of the original tube from the axle rearward, locate and install the first clip on the breather tube to the chassis inner side member. (Upper inset in Figure 1)

7. Create a loop in the breather tube to the radius arm, allowing for full axle articulation and secure with a cable tie. (Lower inset in Figure 1)

8. Trim the excess material from the cable tie.

9. Apply a paint mark next to the position of the two clips attached to the breather tube to aid final assembly.

10. Remove the location-marked clips from the breather tube.

11. Move the wiring harness upward and feed the green and black connector beneath the harness and between the body mounting bracket and chassis inner side member. (Arrowed in Figure 2).

12. Pull the remaining length of breather tube through the bracket.

13. Install the two removed clips to the marked positions on the breather tube.

14. Align the axle breather tube to the top of the chassis longitudinal.

 **NOTE:** The breather clips are fitted into vacant 6mm diameter holes. The intermediate clip is located above the ABS wheel sensor. The remaining clip is located approximately 50mm rearward of the fuel tank strap.

Figure 1

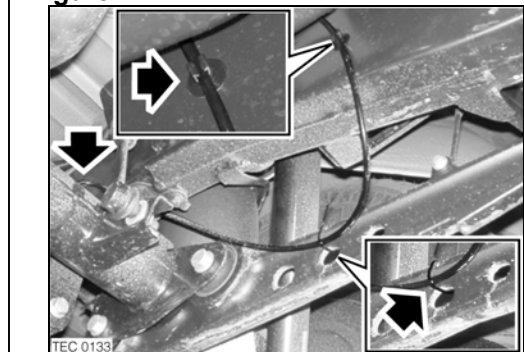
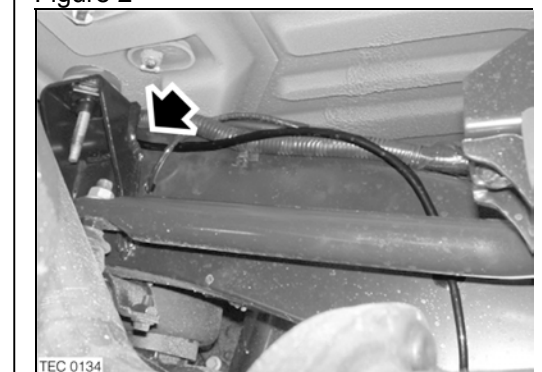


Figure 2



15. Install the breather tube clips to the chassis rail.
16. Remove 4 screws securing the LH rear lamp assembly and move aside for access.



CAUTION: It is critical that the breather hose remain clean and unclogged during the assembly process. Plugging or taping the ends before assembly will ensure this.

17. Plug the open ends of the upper section of the replacement 2-piece breather tube.
18. Feed the straight end of the upper breather tube through the rear lamp body opening until the tube exits from under the vehicle. (Arrowed in Figure 3)
19. Align the yellow mark on the breather tube with the LH lower rear lamp screw hole.
20. Fit and secure the breather tube to the body using the attached flange clip. (Inset in Figure 4)
21. Remove temporary plugs from the axle breather tube and the connector.
22. Connect the upper and lower breather tubes. (Inset in Figure 3).
23. Install the rear lamp assembly.



NOTE: Vehicles with rear coil springs require clip SYC000050 to be installed.

24. If vehicle is fitted with rear coil springs, install clip SYC000050 to the body and secure the axle breather tube into the new clip.
25. If the vehicle is equipped with air suspension, secure the axle breather tube within the clip that secures the air suspension intake filter tube to the body.
26. Remove stands and lower the vehicle.

Figure 3

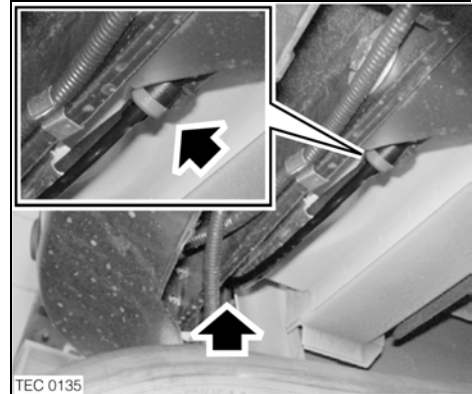


Figure 4

