



Land Rover North America

December 22, 2003

Mr. Kenneth N. Weinstein
Associate Administrator for Enforcement
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
U.S. Department of Transportation
400 7th Street, SW
Washington, DC 20590



RECEIVED

2004 JAN -6 P 3:00

OFFICE OF DEFECTS
INVESTIGATION

04V-006 ① of ③

**RE: Recall Campaign – ACE (Active Cornering Enhancement) Pipe Banjo Bolt Loose
2000 to 2003 Model Year Land Rover Discovery II Vehicles**

Dear Mr. Weinstein:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act of 1966 and 49 CFR Part 573.

Pursuant to Section 573.5 (c) of the above, we submit the following information:

1. Manufacturer Corporate Name:

Land Rover
Solihull, United Kingdom

Affiliated U.S. Importing Company and Agent:

Land Rover North America, Inc.
555 MacArthur Blvd
Mahwah, NJ 07430

2. Identification of Affected Vehicles:

Based on analysis of the failure mode and build records the following vehicle population was identified.

Subject Vehicles: 2000 to 2003 Model Year, Discovery II vehicles fitted with the optional Active Cornering Enhancement (ACE) system.

VIN Range: SALTY124XYA228484 to SALTW16403AB24597
produced from June 18, 2000 to June 17, 2003

Land Rover North America
555 MacArthur Boulevard
Mahwah, New Jersey 07430
Telephone 1-800-637-6837
Fax 1-201-760-8514

3. Total Number of Vehicles Potentially Affected:

8117 vehicles built for sale in the United States in this range are affected by this recall.

4. Percentage of Vehicles Estimated to Actually Contain the Defect:

All vehicles specified in 2 above may potentially exhibit the defect during service.

5. Description of the Defect:

The ACE (Active Cornering Enhancement) pump banjo bolt loses torque and allows fluid to leak past the joint. This is caused through inadequate torquing operations within the manufacturing/rework procedures and general torque loss in service.

When the fluid supply is exhausted a diagnostic warning light will be illuminated and the ACE system will go into a fail-safe mode.

The leak of fluid from the pump joint can ignite resulting in an under hood fire.

Three field reports have been received of ACE fluid leaks US vehicles, including one that reported a fire that could be related to this issue.

6. Chronology of Principal Events:

April through Sept. 2002	8 Reports received (worldwide) of potential ACE fluid loss/leaking, including one under hood fire
September 2002	Parts returned for analysis and investigation by Engineering department began
November 2002	Manufacturing process reviewed and an audit undertaken of reworked vehicles and the vehicle assembly process. In market survey conducted to analyze the ACE Pipe to pump joint performed.
December 2002	Tooling investigation performed. Production process reviewed for capability.
January 2003	Slipper wrench introduced to minimize torquing variation.
February 2003	Production process for joint updated to ensure joint integrity.
March 2003	Durability and strength testing of the banjo bolt to pump joint performed
July 2003	Continued investigation revealed root cause of the bolt loosening in service was more likely under-torquing of the bolt and not over torquing. The joint can appear sealed when the bolt is only finger tight,

due to the lip seal on the "Dowty" washers (special seal washer for banjo bolt).

October 2003

Process change Implemented in production ensuring compliance with joint specification including properly torqued bolts.

December 2003

Root cause of field incidents of ACE fluid leak determined as the under torquing of the joint (banjo bolt to pump). Field action initiated.

7. Case of Non-Compliance

There is no non-compliance.

8. Description of Corrective Repair Action

Vehicles within the affected VIN range will be inspected for leakage of fluid or wetness around the joint area. If no leakage or wetness is evident, banjo bolt will be re-torqued to a nominal 32.5Nm.

If a leakage of fluid or wetness is evident, the banjo bolt and Dowty washers will be replaced.

9. Copies of Dealer Communications

Copies of the dealer notification documents (service bulletin and technical information bulletin (TIB)) will be submitted to NHTSA when available.

10. Copy of Owner Communication

A draft copy of the customer notification letter will be submitted to NHTSA for your review and approval when it is available.

11. Manufacturer's Campaign Number

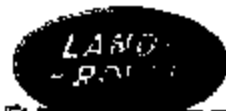
Land Rover's campaign number is B149.

Should there be any questions regarding this report, please feel free to contact me at 201-818-8379.

Sincerely,



Dennis T. Johnston
Manager, Product Compliance



RECEIVED

2004 MAR 29 P 3 43

OFFICE OF THE DIRECTOR
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

March 29, 2004

Mr. Kenneth N. Weinstein
Associate Administrator for Enforcement
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
U.S. Department of Transportation
400 7th Street, SW
Washington, DC 20590

RE: UPDATED Recall Campaign – ACE (Active Cornering Enhancement) Pipe Banjo Bolt Loose – 2000 to 2003 Model Year Land Rover Discovery Series II Vehicles (NHTSA Ref. 04V-006)

Dear Mr. Weinstein:

This is an update to the report issued on December 22, 2003 for recall NHTSA Reference No. 04V-006. The item 2 and 3 are corrected to reflect the accurate range of affected vehicles. This update is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act of 1966 and 49 CFR Part 573.

Pursuant to Section 573.5 (c) of the above, we submit the following information:

1. Manufacturer Corporate Name:

Land Rover
Solihull, United Kingdom

Affiliated U.S. Importing Company and Agent:

Land Rover North America, Inc.
555 MacArthur Blvd
Mahwah, NJ 07430

2. Identification of Affected Vehicles:

Based on analysis of the failure mode and build records the following vehicle population was identified.

Subject Vehicles: 2000 to 2003 Model Year, Discovery II vehicles fitted with the optional Active Cornering Enhancement (ACE) system.

VIN Range: SALTY1242YA258269 to SALTW16403A824597
produced from December 13, 1999 to June 17, 2003

3. Total Number of Vehicles Potentially Affected:

5264 vehicles built for sale in the United States in this range are affected by this recall.

(Previously advised in Land Rover recall B149 (NHTSA #04V-006):

VIN Range: SALTY124XYA228484 to SALTW16403A824597

produced from June 18, 2000 to June 17, 2003

Number of affected vehicles: 8,117)

4. Percentage of Vehicles Estimated to Actually Contain the Defect:

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5. Description of the Defect:

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When the fluid supply is exhausted a diagnostic warning light will be illuminated and the ACE system will go into a fail-safe mode.

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October 2003	Process change implemented in production ensuring compliance with joint specification including properly torqued bolts.
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Land Rover's campaign number is B149.

Sincerely,



Dennis Johnston
Manager, Product Compliance
Land Rover North America, Inc