

TECHNICAL INFORMATION



Headlight Condensation Resolution

No: 86/04/05/NAS
FGN LT417-01
Ref:
Issue: 1
Date: 23 June 2005

AFFECTED VEHICLE RANGE:

Discovery Series II (LT)

3A767790 – 4A870624

SITUATION:

HEADLAMPS HAVE CONDENSATION FORMING INTERNALLY



NOTE: Normal condensation is a natural process. Headlamps are vented to alleviate changes in pressure. Atmospheric air contains water vapor or humidity. When this air enters the headlamp through the vents there is a possibility that condensation can occur if the temperature is cold enough. When normal condensation occurs, a thin film of mist can form on the inside surface of the plastic lens. The thin mist will clear and exit through the vents during normal operation.

Internal "misting" is generally caused by natural condensation and can be expected under certain atmospheric conditions. Vehicles that have been pressure washed, may have had water forced into the headlamp via the headlamp vents, resulting in condensation forming inside the headlamps. Water may also migrate in to the headlamp assembly following bulb replacement if the bulb covers have been installed incorrectly.

RESOLUTION:

INSPECT AND REPAIR HEADLIGHTS IF INDICATED

Should a customer express concern regarding headlamp condensation, refer to the Repair Procedure details in this Bulletin. Additional information relating to installation of the bulb covers can be found in Technical Information Bulletin 86/05/04/NAS "Correct Headlight Cover Installation."

PARTS INFORMATION:

XZX500010.....	Headlamp vent tube set	Qty 1 per headlamp
XBC001660.....	Headlamp - NAS RH	Qty 1 Requires vent tube set
XBC001670	Headlamp - NAS LH	Qty 1 Requires vent tube set
XBC501460.....	Headlamp - NAS RH	Qty 1 New style with new vents
XBC501470.....	Headlamp - NAS LH	Qty 1 New style with new vents

NOTE: The information in Technical Information bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment required to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers."

If you are not a Retailer, do not assume that a condition described affects your vehicle. Contact an authorized Land Rover service facility to determine whether the bulletin applies to a specific vehicle.

TIB	CIRCULATE:	Service Mgr	Warranty	Workshop	Body Shop	Parts
86/04/05/NAS	TO	X	X	X	X	X



DDW WARRANTY CLAIMS:

△ **NOTE:** Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Always refer to DDW to obtain the latest repair time.

DDW requires the use of causal part numbers. Labor only claims must show the causal part number with a quantity of zero.

△ **NOTE:** Headlamps with the following conditions should not be replaced under warranty:

- Headlamps with no visible condensation.
- No drip marks/streaks in the finely condensed film on the interior side of the clear plastic lens. [Refer to Attachment 4.](#)
- No visible water droplets in the thin mist. [Refer to Attachment 5.](#)
- The fine mist does not obstruct the view of the interior of the lamp. [Refer to Attachment 6.](#)
- Condensation covers less than 50% of the interior side of the lens. [Refer to Attachment 7.](#)

Description	SRO	Time (Hours)	Condition Code	Causal Part
Replace headlamp vent tubes (additional time)	86.40.89/41	0.10	01	XZX500010
Replace headlamp assembly	86.40.49	0.20	01	XZX500010

Normal warranty policy and procedures apply.

REPAIR PROCEDURE

INSPECT FOR WATER CONTAMINATION AND REPAIR

1. Inspect headlamps for warrantable repair conditions:
 - Large apparent visible droplets of water on the interior side of the clear plastic lens.
[Refer to Attachment 1.](#)
 - Drip marks/streaks in the film of condensation on the interior side of the clear plastic lens.
[Refer to Attachment 2.](#)
 - Thick mist covering a majority of the interior side of the clear plastic lens. The thick mist also obstructs the view of the interior of the lamp. [Refer to Attachment 3.](#)
 - Puddles/pools of water in the interior of the headlamp.

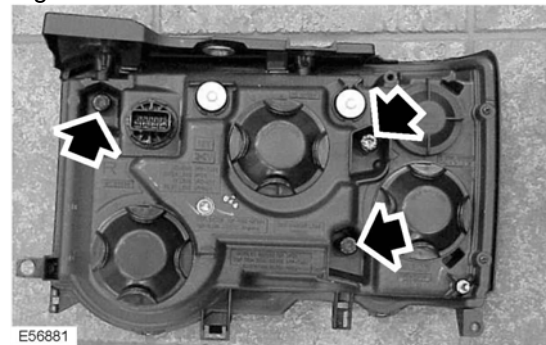


NOTE: GTR lookup sequence is as follows:

GTR Home > NAS > Service Information/ LT Discovery Series II/2004 > Workshop Manual (temporary test style > Expand LIGHTING/REPAIRS > link "Headlamp – from 03 MY"

2. If following a period of normal operation the condensation has **dissipated** or is reduced to an acceptable level, perform the following:
 - Refer to GTR Workshop Manual section 86.40.49 and remove the headlamps.
 - Remove and discard vent tubes from headlamp. (Figure 1)
 - Install new vent tube set from kit XZX500010 to each headlamp.
 - Install modified headlamps.

Figure 1



CAUTION: Replacement headlamp units taken from inventory with Part Number XBC001660 or XBC001670 require the installation of new headlamp vent tubes prior to installation onto the vehicle. Replacement headlamps PN XBC501460 or XBC501470 have the new vent tubes pre-installed.

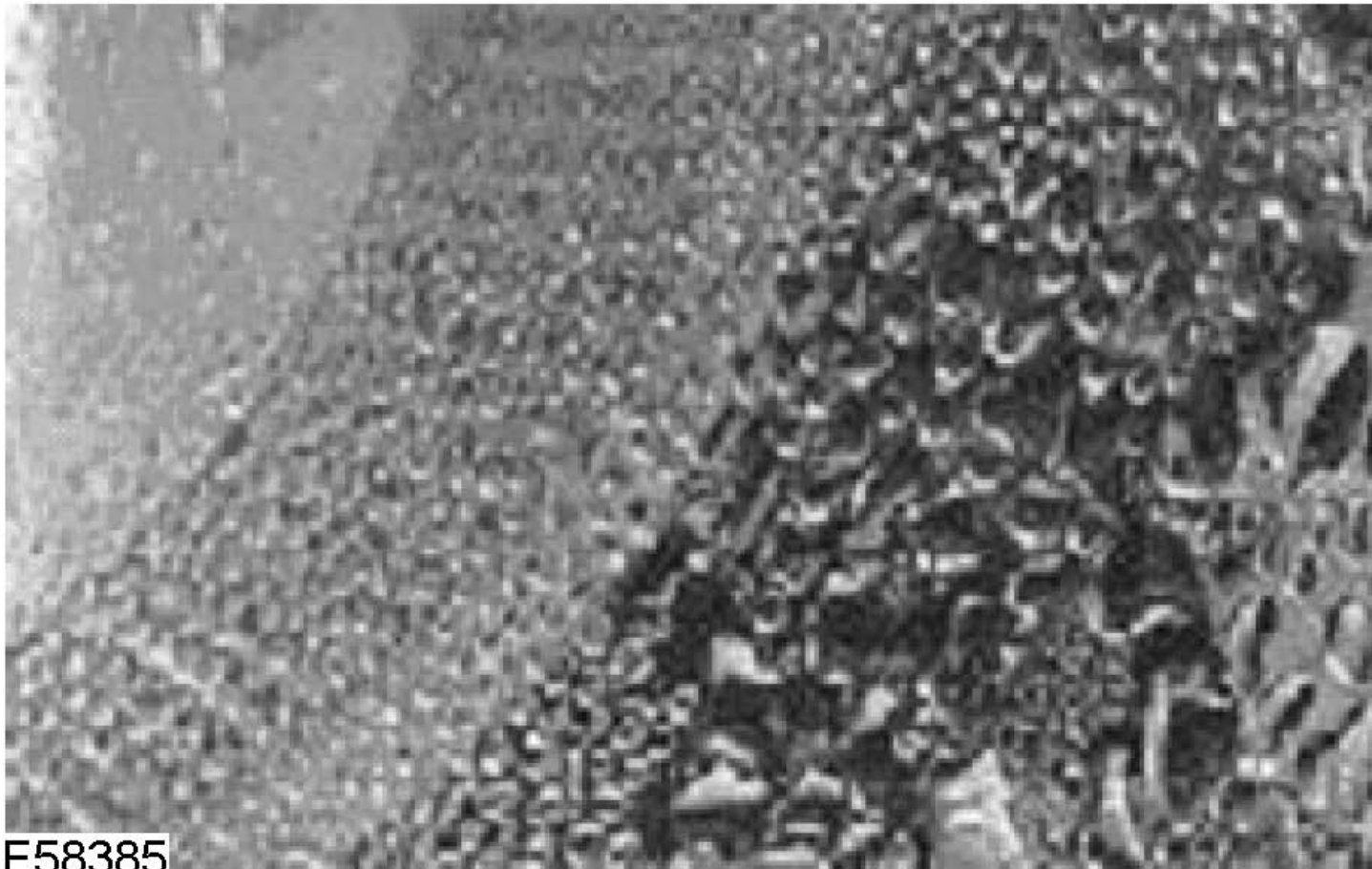
3. If NEW replacement lamps XBC001660 or XBC001670 are to be installed, replace vent tubes with set XZX500010 to each headlamp.
4. If the following conditions apply, install new style or updated headlamps with latest style drain tubes:
 - Considerable water droplets remain on the inside of the headlamp glass after use.
 - Evidence exists of standing water within the headlamp unit.

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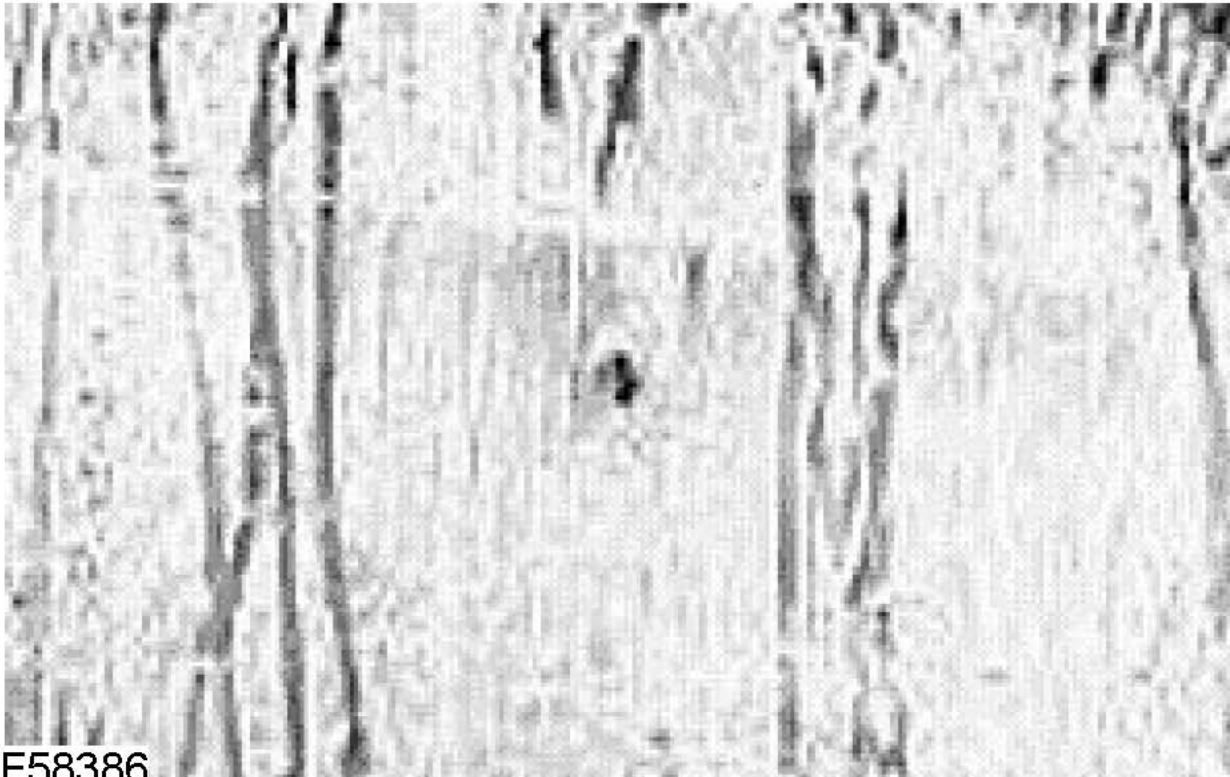
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Attachment 1 Headlamp Condensation Covered by Warranty - 1 (Large water droplets)



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Attachment 2
Headlamp Condensation Covered by Warranty - 2 (Drip marks/streaks in condensation)



Attachment 3

Headlamp Condensation Covered by Warranty - 3 (Thick mist covering the lens with water droplets)



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Attachment 4 Headlamp Condensation NOT Covered by Warranty - 1



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Attachment 5 Headlamp Condensation NOT Covered by Warranty – 2



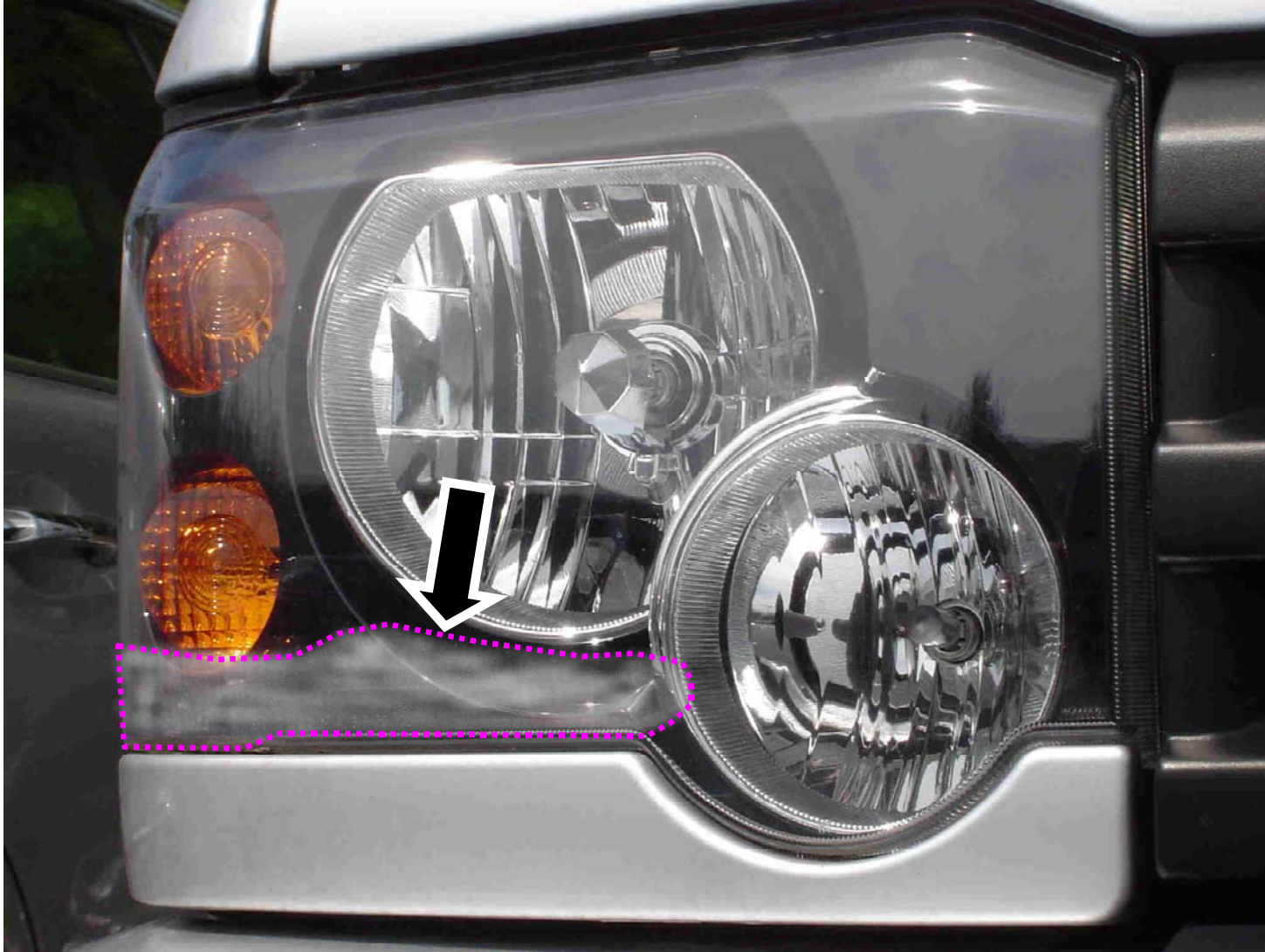
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Attachment 6

Headlamp Condensation NOT Covered by Warranty - 3 (Mist does not obstruct the view of the lamp's interior)



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Attachment 7

Headlamp Condensation NOT Covered by Warranty - 4 (Fine mist covers less than 50% of the lens)

