



# TECHNICAL BULLETIN

No: LA-417-001

Issue: 1

Date: 18 Feb 2004

CIRCULATE: TO

Service Mgr  
X

Warranty  
X

Workshop  
X

Body Shop  
X

Parts  
X

**SECTION: LA417**

## Headlamp Condensation

### AFFECTED VEHICLE RANGE:

Land Rover LR3 (LA)

VIN: All

### CONDITION SUMMARY:

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 into the headlamp assembly following bulb replacement if the bulb covers have been installed incorrectly

Should a customer express concern regarding headlamp condensation, refer to the Repair Procedure detailed in this Bulletin.

### PARTS:

XYD500010.....	Silica Gel Sachet	Qty 2 per vehicle
XBC500362 .....	Headlamp NAS Spec Halogen -RH	Qty 1
XBC500372 .....	Headlamp NAS Spec Halogen -LH	Qty 1
XBC001122 .....	Headlamp NAS Spec Xenon -RH	Qty 1
XBC001132 .....	Headlamp NAS Spec Xenon -LH	Qty 1
XBC500442 .....	Headlamp NAS Spec Adaptive Front Lighting -RH	Qty 1
XBC500452 .....	Headlamp NAS Spec Adaptive Front Lighting -LH	Qty 1



# TECHNICAL BULLETIN

No: LA-417-001

## WARRANTY:



**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.](#)

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

<i>Description</i>	<i>SRO</i>	<i>Time (Hours)</i>	<i>Condition Code</i>	<i>Causal Part</i>
Remove and replace each headlamp assembly	86.40.49	0.10	L29	Use Headlamp part number
Install Silica Gel in one headlamp	86.40.89/42	0.10	L29	Use Headlamp part number
Install Silica Gel in two headlamps	86.40.89/43	0.20	L29	Use Headlamp part number

*Normal warranty policy and procedures apply.*


*Material allowance is included in labor operation.*

## 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.
2. If a headlamp unit meets the above conditions, replace the headlamp with a new unit.

## INSTALL SILICA GEL PACK TO IMPROVE 'NON-WARRANTABLE' CONDITIONS

 **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.](#)
1. Verify that the lamp meets the "non-warrantable" conditions in Attachments 4 through 7.
  2. Remove the affected lamp from the vehicle.
-  **CAUTION:** The work surface must be protected with a soft covering to prevent scratches or damage to the headlamp lens.
3. Place face down on a flat protected surface.
  4. Rotate the lower side lamp bulb cover counter clockwise and remove to expose the void in the back of the lamp assembly. (Figure 1 and Figure 2)
  5. 'Scrunch up' the Silica Gel sachet. (Figure 3)
  6. Insert the sachet into the void ensuring it is pushed fully forward and that it does not obscure the bulb holder. Push firmly in place. (Figure 4)
  7. Install the side lamp bulb cover as follows:
    - Align the two arrows, one of which is on the lamp body the other is located in the moulded finger depressions of the bulb cover.
    - Rotate the cover clockwise until it latches into place, a firm stop can be felt.

Figure 1



Figure 2



Figure 3



Figure 4





# TECHNICAL BULLETIN

No: LA-417-001

## Illustration Attachment 1

Headlamp Condensation Covered by Warranty (Large water droplets)



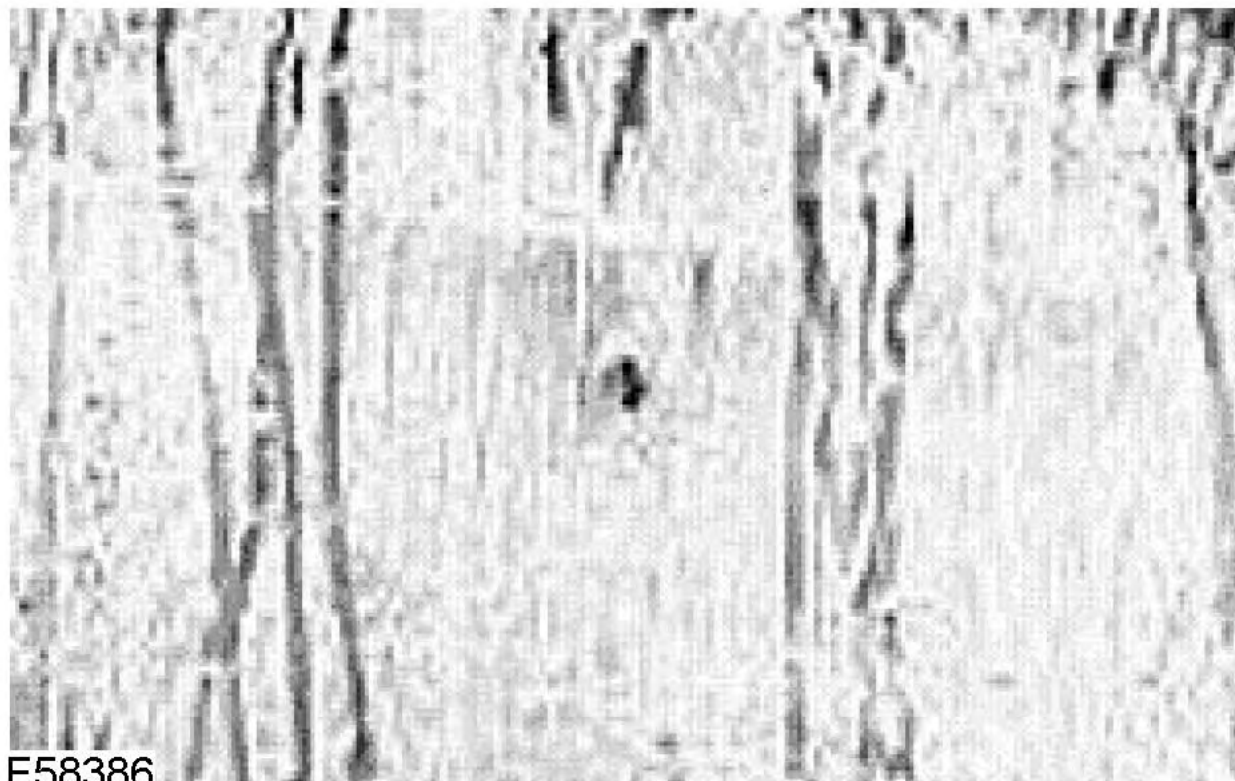


# TECHNICAL BULLETIN

No: LA-417-001

## Illustration Attachment 2

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



E58386

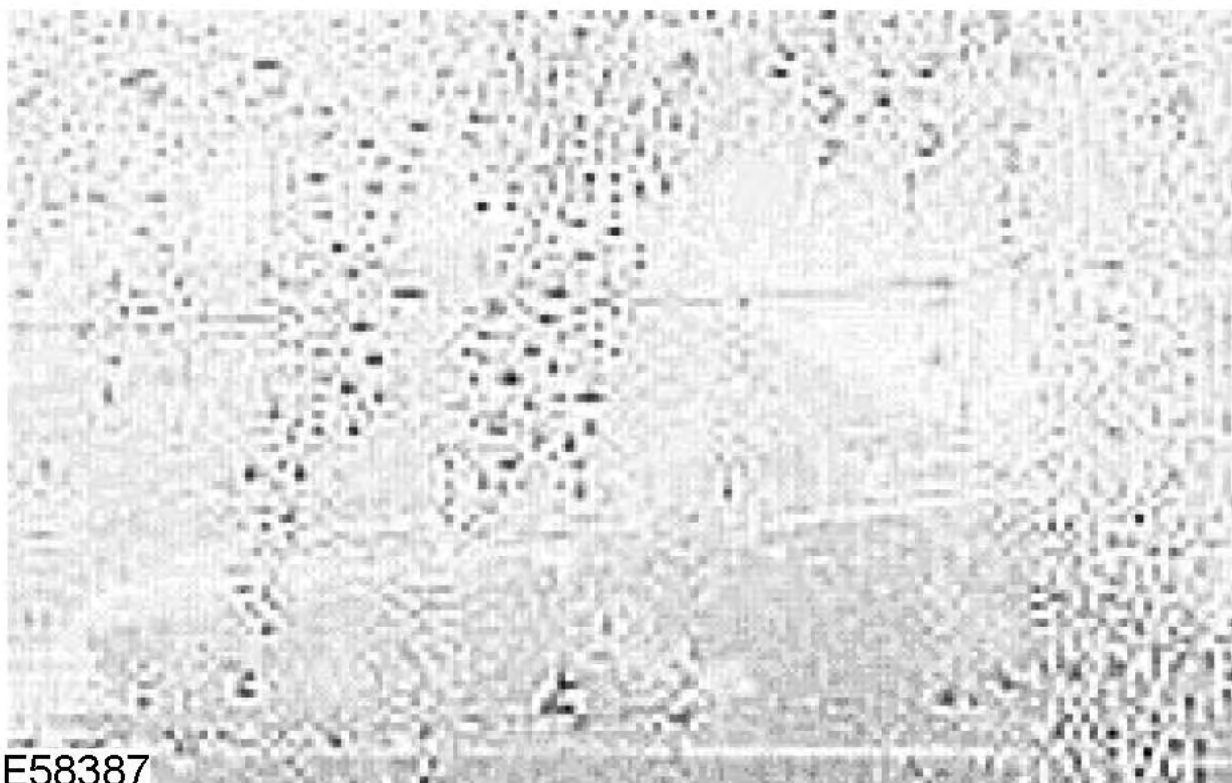


# TECHNICAL BULLETIN

No: LA-417-001

## Illustration Attachment 3

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







## TECHNICAL BULLETIN

No: LA-417-001

Illustration Attachment 4 Headlamp Condensation NOT Covered by Warranty -



E58388



## TECHNICAL BULLETIN

No: LA-417-001

**Illustration Attachment 5 Headlamp Condensation NOT Covered by Warranty**



E58389



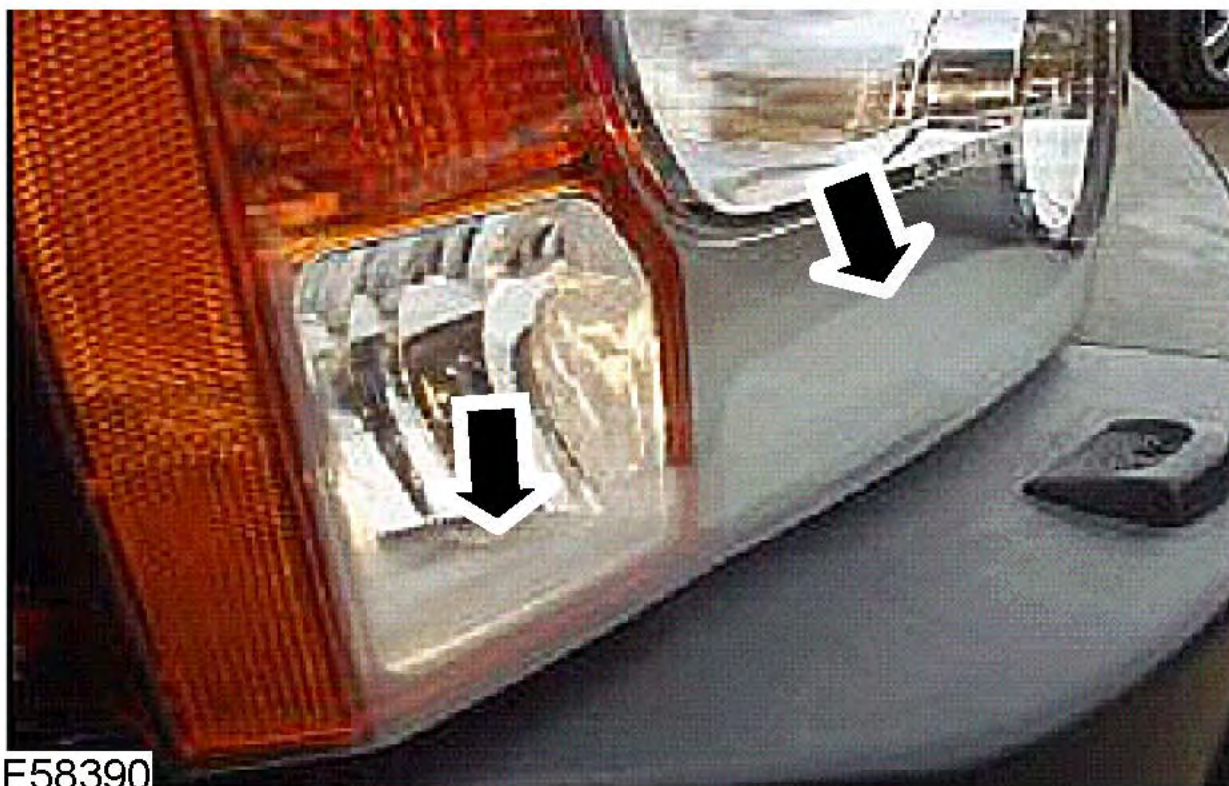


## TECHNICAL BULLETIN

No: LA-417-001

### Illustration Attachment 6

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





# TECHNICAL BULLETIN

No: LA-417-001

## Illustration Attachment 7

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



E58391