

# Service Information

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Category <b>T</b>	<b>Technical</b>	Ref. No. <b>E006/09A</b>	Page 1 of 4
Coverage <input type="checkbox"/> Distributor only <input checked="" type="checkbox"/> Please inform your dealers		Date Issued <b>January 27, 2009</b>	
Please convey this information to your <input type="checkbox"/> Director <input checked="" type="checkbox"/> General Manager <input checked="" type="checkbox"/> Warranty Dept. <input checked="" type="checkbox"/> Parts Dept. <input checked="" type="checkbox"/> Training Dept. <input checked="" type="checkbox"/> Field Rep.		Date Revised <b>January 8, 2014</b>	
Applicable Model  <b>All Models</b>		Applicable Countries or Specifications  Worldwide	

**REVISED**

**Note: "Applicable Model" has been changed to "All Models".**

## Subject: Foggy Lens (Condensation) of Headlight, Rear Combination Light and Other Lamps

### DESCRIPTION

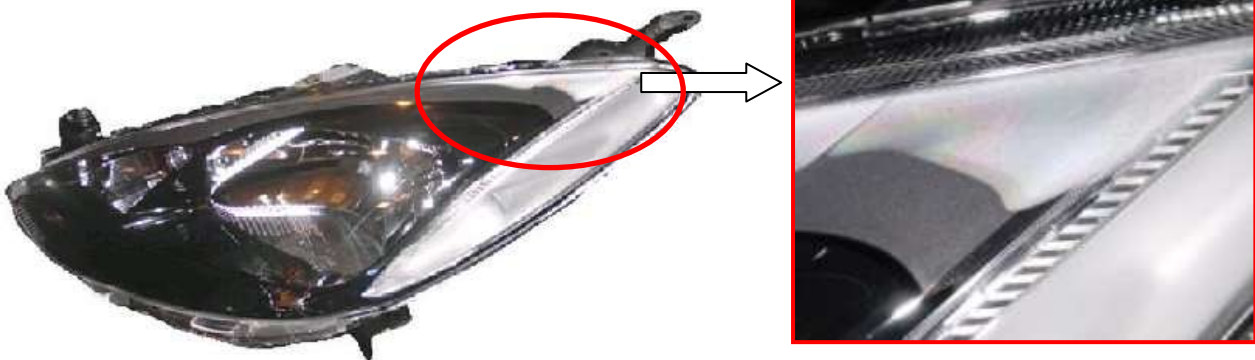
Some customers may complain that the light lens (any light) may get foggy. This is due to condensation caused by moisture inside the light unit and is a natural phenomenon which occurs when the difference in temperature between inside and outside the light unit is too large.

This symptom cannot be corrected by replacing the light unit.

Please explain to the customer that this is a natural phenomenon and not a quality defect as per the **information** below.

Note: The recent new models have been fitted with Clear Lens. Since the lens is clear, the symptom is likely to be more noticeable, however it does not affect the performance of the light.

The fog will be cleared off as the temperature rises with the lights on or as the time passes.



Temporary Measure: Remove the bulb and socket, and send air using a drier through the hole.

Note 1: Do NOT use warm / hot air because there is a possibility that the lamp may get melted.

Note 2: Perform this work in a dry place. (Outside in good weather would be the best.)

**Example of Foggy Lens: Miniscule water droplets stick the lens and lens gets whitish**

This symptom (fog) appears only on a certain location of the lamp unit in which the air is stagnant. Mostly this appears in the corner and narrow space. The location where the bulbs are fitted is of high volume and also the air is circulating, therefore the fog is **unlikely** to appear.

**Note:** Sample photos are provided for the following models as examples. (Not provided for all models)

<BK / CR>



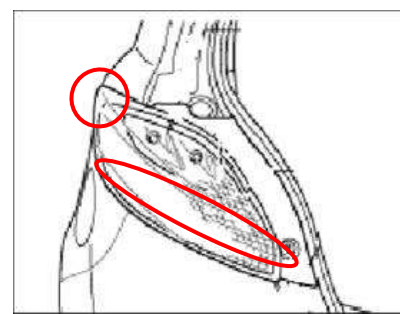
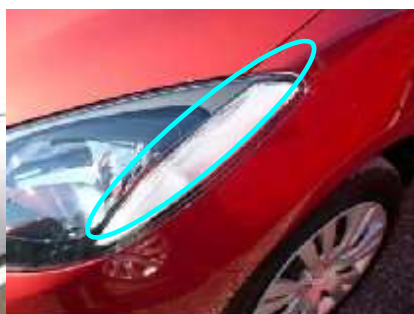
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<GH>



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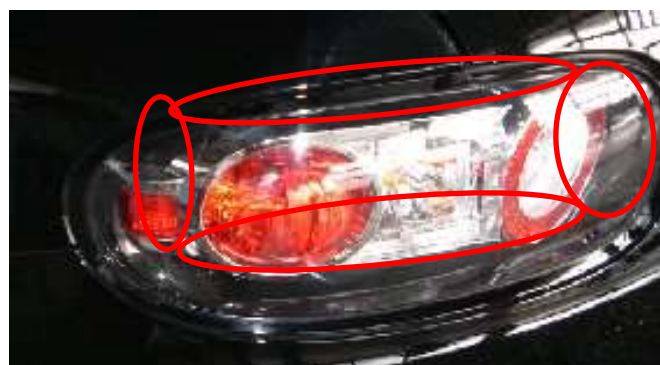
<ER / TB>



<LY>

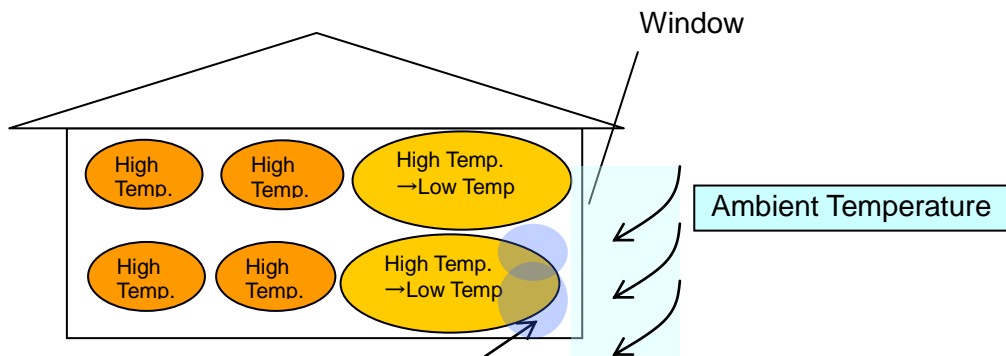


<NC>



## Mechanism of Condensation

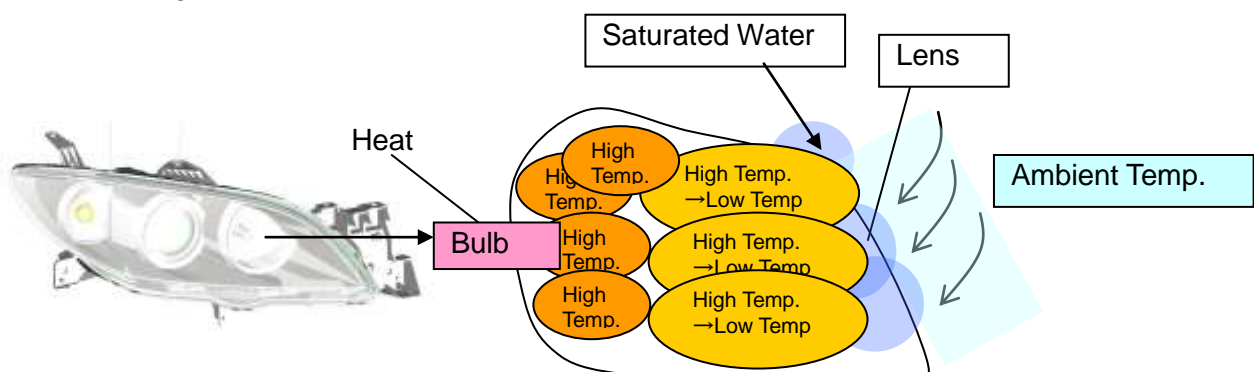
<Example: Condensation on Window Glass inside Room>



When the temperature near the window gets lower due to cool outside air, the humidity gets saturated. As a result, tiny water droplets stick to the window glass.

The mechanism of condensation on the lamps is the same as on the window glass in the house.

- (1) Due to heat emitted from the lamp bulb or sunlight, the temperature inside the lamp unit gets higher. Or, warm and humid air gets into the lamp unit from the engine compartment. This will allow the air inside the lamp unit to include lots of moisture.
- (2) When the lamps are turned off or the outside temperature gets too low, the temperature of the lamp unit surface also gets low. Car wash also allows the light lens temperature to get low. These events will cause a saturated condition.
- (3) Saturated water results in tiny droplets and sticks to the light lens. When the above-mentioned conditions 1 and 2 are caused frequently, high humid air stays inside the lamp unit. As a result, condensation occurs.  
Note: First the condensation appears around the edge of the lamp unit in which the air is stagnant.



When the temperature inside the lamp unit gets lower due to cool outside air, a saturated condition is caused, and as a result, tiny water droplets stick to the lamp unit glass.