# Service Bulletin

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Mazda North American Operations Irvine, CA 92618-2922



Subject:	Bulletin No:	09-016/09
CONDENSATION / FOG IN FRONT AND REAR COMBINATION LIGHTS		
	Last Issued:	11/19/2009

## **BULLETIN NOTE**

- This bulletin supersedes the previous bulletins 09-016/09 issued on 03/20/09 and 03/26/09, and 09-007/08 issued on 02/11/08. The APPLICABLE MODEL(S)/VINS and DESCRIPTION have been revised.
- Changes are noted below beside the change bar in Red.

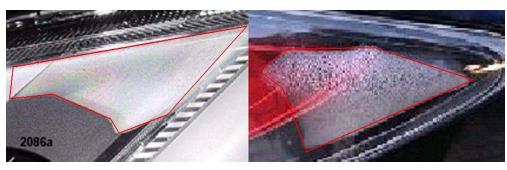
## **APPLICABLE MODEL(S)/VINS**

2003-2010 Mazda6 2004-2010 Mazda3 2006-2010 Mazda5 2006-2010 Mazda MX-5 2007-2010 Mazda CX-7 2007-2010 Mazda CX-9 2004-2010 Mazda RX-8

## DESCRIPTION

Some customers may complain of condensation/fog inside the front or rear combination lights. The recent new models have been fitted with a clear lens which can cause the symptom to be more noticeable, however, it does not affect the performance of the light. This condensation/fog is a natural phenomenon that occurs when there is a fairly large temperature difference between the inside and the outside of the light housing. It is normal for very small water drops to appear in certain locations on the light units where the air is stagnant (condensation), making the lens look whitish (fog). This happens mostly in the corners and narrow spaces, and will typically clear during warmer ambient temperatures, or when the lights have been on for some time.

Explain to the customer that this is a natural phenomenon and not a quality defect. DO NOT attempt repairs as this is considered normal, and is NOT covered under Warranty. Replacing the light unit will not correct this symptom.



#### Page 1 of 8

**CONSUMER NOTICE**: The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/ equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

## **DETERMINATION/TESTING**

### NOTE:

- The location where the bulbs are fitted has a high air volume with good air circulation, therefore, if a large or heavy amount of condensation appears here, the light unit should be replaced. A small amount of condensation here is considered normal and should clear after the lights have been on for some time and the light unit should not be replaced. Refer to the following pictures for examples.
- If the outside conditions are unfavorable (cold and damp), even fog (dew concentration) as shown in the following pictures will take some time to clear up. Therefore, be careful in making a decision. A picture will be required with every claim for Warranty. If a light unit is found with no problem, and no picture is sent in, the claim may be later debited. You can also perform the following test to determine if the light unit should be replaced.
- 1. In sunny weather or inside a warm garage, remove a bulb/socket and add cold/cool (not hot) air with a hair dryer for approximately 5-10 minutes.
  - If the condensation/fog clears, it is normal, and the light unit should not be replaced.
  - If the condensation/fog does not clear, it is abnormal (water entry is suspected), and the light unit should be replaced.

Water entry is where rain water comes into the inner light and stays as waterdrops on the inside of the lens. The possible causes of "water entry" because of a part issue are:

- Poor sealing joint between the lens and housing.
- Missing or poor sealing of gasket. (NOTE: If the light unit was previously repaired and any seals are missing, this is not covered under Warranty. Contact your DSM in this situation before replacing the light.)
- Cracked lens and/or housing.
- Poor installation of respiration tube at ventilation hole.

**NOTE:** Causes of water entry from owner/operator treatment of vehicle (that should be avoided and are not covered under Warranty) are:

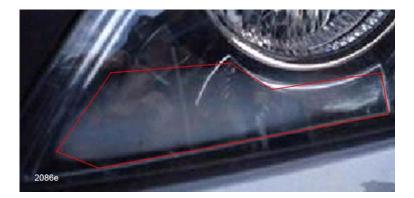
- The light and the surrounding area receive too much water in high-pressure washing.
- The lens cracks from using a special cleaning agent with solvent.

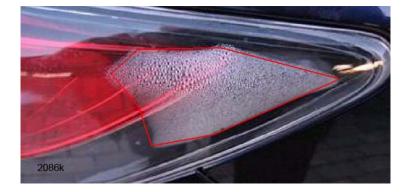
## Examples of Light Units With Condensation/Fog That Should NOT Be Replaced

Condensation/fogging along the edges and in the corners is considered normal.







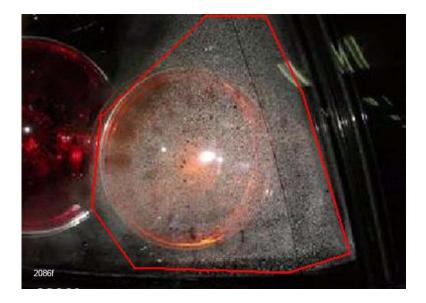






Some condensation/fogging on the lens is considered normal.











## Examples of Light Units With Condensation/Fog That Should Be Replaced

Heavy/large amount of condensation on the lens is not normal.









