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# SERVICE BULLETIN

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| Classification:<br>EL03-030P | Reference:<br>NTB03-074P | Date:<br>December 7, 2021 |
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## HEADLAMP, FOG LAMP, OR REAR COMBINATION LAMP FOGGING

This bulletin has been amended. See **AMENDMENT HISTORY** on the last page.  
Please discard previous versions of this bulletin.

**APPLIED VEHICLES:** 2011-2022 Nissan

### SERVICE INFORMATION

Occasionally, customers may notice water vapor or fog in the headlamps, fog lamps, or rear combination lamps.

The following information, illustrations, and flow chart are provided to help you determine if water/condensation in a lamp is normal or not.

**Nissan's New Vehicle Limited Warranty does not cover physically damaged (cracked or broken) headlamps, fog lamps, or rear combination lamps.**

All current headlamp, fog lamp, and rear combination lamp assemblies are vented to the atmosphere (not sealed).

- This is necessary to allow for expansion and contraction of air from temperature "variations" (warmer or colder) without damage to the lamp.
- Moisture in the air sometimes "travels" into and out of the lamp assembly through these vents.
- Certain environmental conditions may cause moisture to condense.
- The fogging/cloudiness should disappear over time when the lamp is in a dry environment.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. **NOTE:** If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

Fog may temporarily form inside the lens of the headlamp, fog lamp, or rear combination lamp assemblies based on environmental conditions or sudden temperature changes (such as in a car wash, or parked on a cold, sunny day). This is normal. See Figure 1.

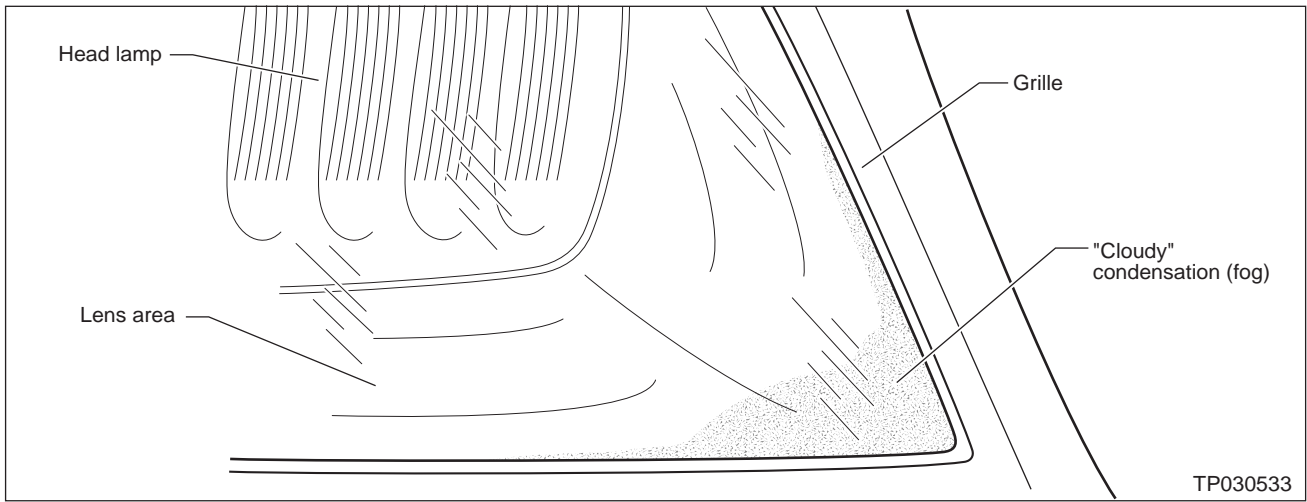


Figure 1: Example of normal condensation, ok

**NOTE:** This condensation can appear anywhere on the outer lens, typically at its coldest location.

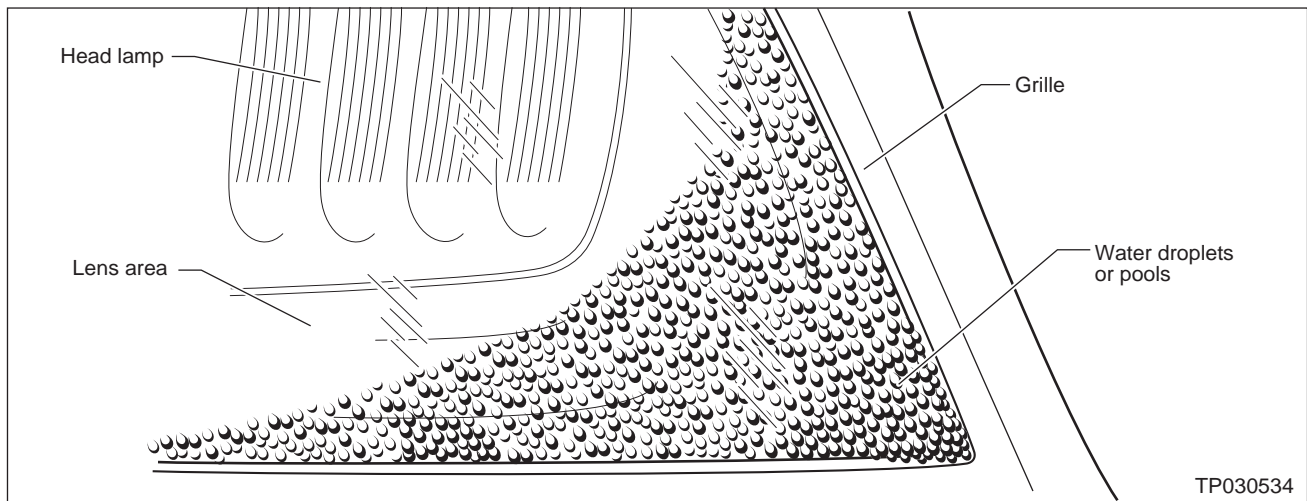


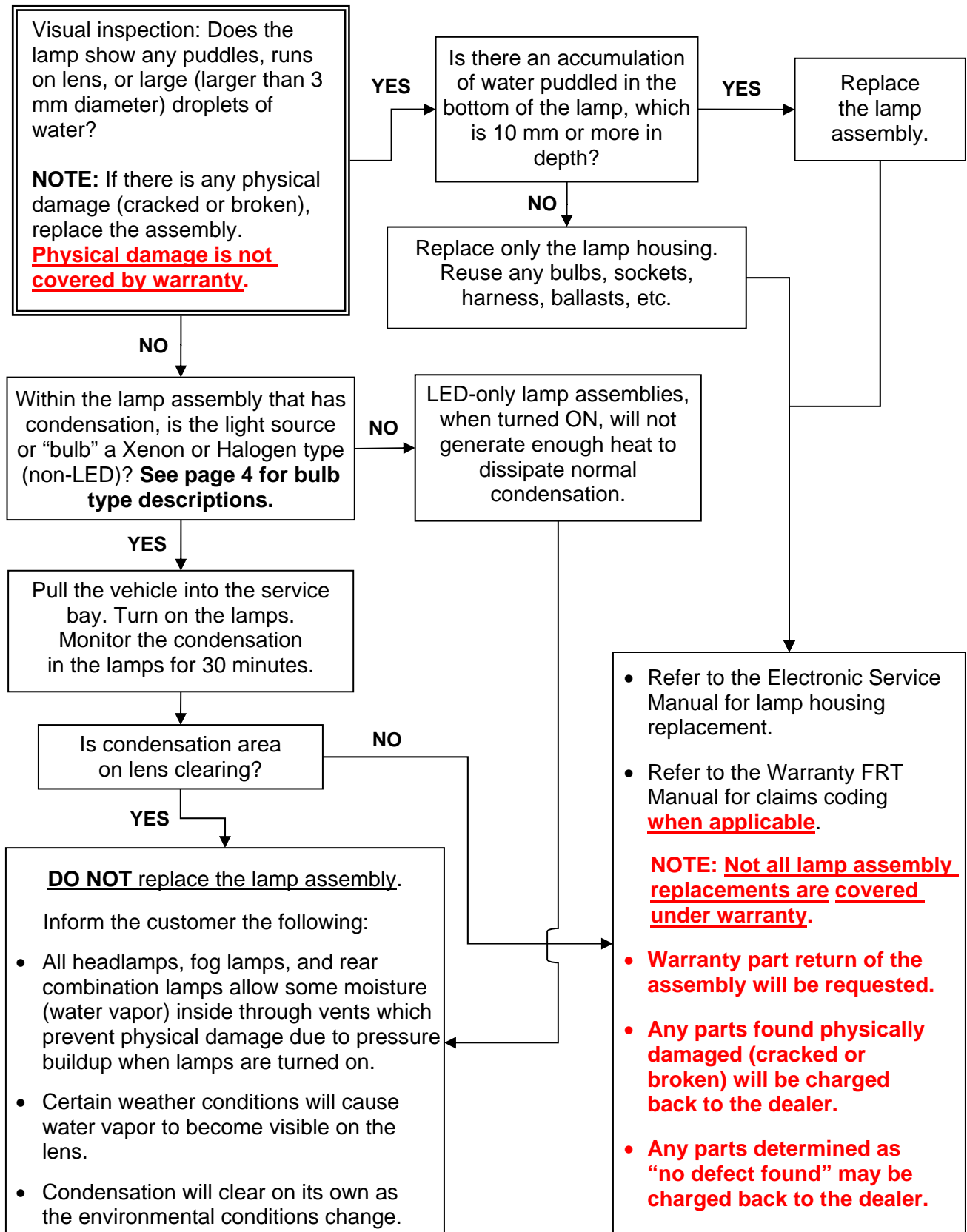
Figure 2: Condition may not be normal (example)

If the moisture trickles, drips, or pools, it may not be considered normal and the lamp assembly may have a water leak path. See Figure 2 for an example.

If large drops of water collect inside the lens, refer to the flow chart on page 3 to find the next step.

## SERVICE PROCEDURE

Should a customer note water in a headlamp, fog lamp, or rear combination lamp assembly, please use the following flow chart to determine if the condition is normal or requires lamp replacement.



## **Headlamp, Fog Lamp, and Rear Combination Lamp Assembly Bulb Types and Identification**

**NOTE:** Headlamp assemblies can be a combination of the bulbs described below.

### **Halogen bulb**

Halogen bulbs use a conventional filament that produces light when electricity is passed through it.

This type of bulb can be identified as follows:

- Has an internal filament inside the bulb.
- When turned OFF, the filament may briefly glow as it cools off.
- No external Control Module or HID Control Unit is needed to operate them.

### **Xenon bulb**

Xenon bulbs do not use a filament. Instead, they produce light when a high voltage current is passed between two tungsten electrodes through a mixture of Xenon (an inert gas) and certain other metal halides.

This type of bulb can be identified as follows:

- Has no filament, but instead has two opposed electrodes that are housed in a capsule the size of a pea, and then is enclosed inside a secondary glass bulb.
- When turned ON, will illuminate immediately and then over the period of several seconds continue to brighten until it has reached its maximum rated output.
- When turned OFF, no afterglow will be present.
- Has an HID Control Unit; usually attached to the headlamp assembly.

### **LED (Light Emitting Diode) bulb**

LED bulbs are semiconductor devices, which illuminate when forward bias electric voltage is applied.

This type of bulb can be identified as follows:

- Has no filament or electrodes as described for Halogen or Xenon bulbs.
- When turned ON, the bulb reaches maximum rated output immediately.
- When turned OFF, the light output immediately stops; no afterglow present.
- Has a Control Module; usually attached to the headlamp assembly.

## AMENDMENT HISTORY

| PUBLISHED DATE    | REFERENCE  | DESCRIPTION  |
|-------------------|------------|--|
| July 29, 2003     | NTB03-074  | Original bulletin published  |
| April 18, 2007    | NTB03-074a | <b>APPLIED VEHICLES</b> updated to include current production models, and <b>SERVICE PROCEDURE</b> added                               |
| February 26, 2008 | NTB03-074b | <b>APPLIED VEHICLES</b> updated to include current production models   |
| July 21, 2008     | NTB03-074c | <b>APPLIED VEHICLES</b> updated to include current production models   |
| August 8, 2008    | NTB03-074d | <b>APPLIED VEHICLES</b> updated to include current production models   |
| January 4, 2010   | NTB03-074e | <b>APPLIED VEHICLES</b> updated to include current production models, and <b>SERVICE PROCEDURE</b> revised                             |
| February 21, 2012 | NTB03-074f | <b>APPLIED VEHICLES</b> updated to include current production models, and <b>SERVICE INFORMATION</b> revised                           |
| November 27, 2013 | NTB03-074g | <b>APPLIED VEHICLES</b> updated to include current production models   |
| January 20, 2015  | NTB03-074h | Changes made throughout  |
| June 15, 2015     | NTB03-074i | Changes made throughout  |
| February 26, 2016 | NTB03-074j | <b>APPLIED VEHICLES</b> updated to include current production models   |
| March 27, 2017    | NTB03-074k | <b>APPLIED VEHICLES</b> updated to include current production models, and a description of headlamp assembly bulb types has been added |
| March 19, 2018    | NTB03-074L | <b>APPLIED VEHICLES</b> updated to include current production models   |
| April 20, 2018    | NTB03-074m | Fog lamps added, and flow chart modified   |
| July 7, 2020      | NTB03-074n | <b>APPLIED VEHICLES</b> updated to include current production models, and rear combination lamps added                                 |
| January 4, 2021   | NTB03-074o | <b>APPLIED VEHICLES</b> updated to include current production models   |
| December 7, 2021  | NTB03-074P | <b>APPLIED VEHICLES</b> updated to include current production models   |