



TECHNICAL SERVICE BULLETIN

Classification:

EL03-030Q

Reference:

NTB03-074Q

Date:

April 5, 2023

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: 2011-2023 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.

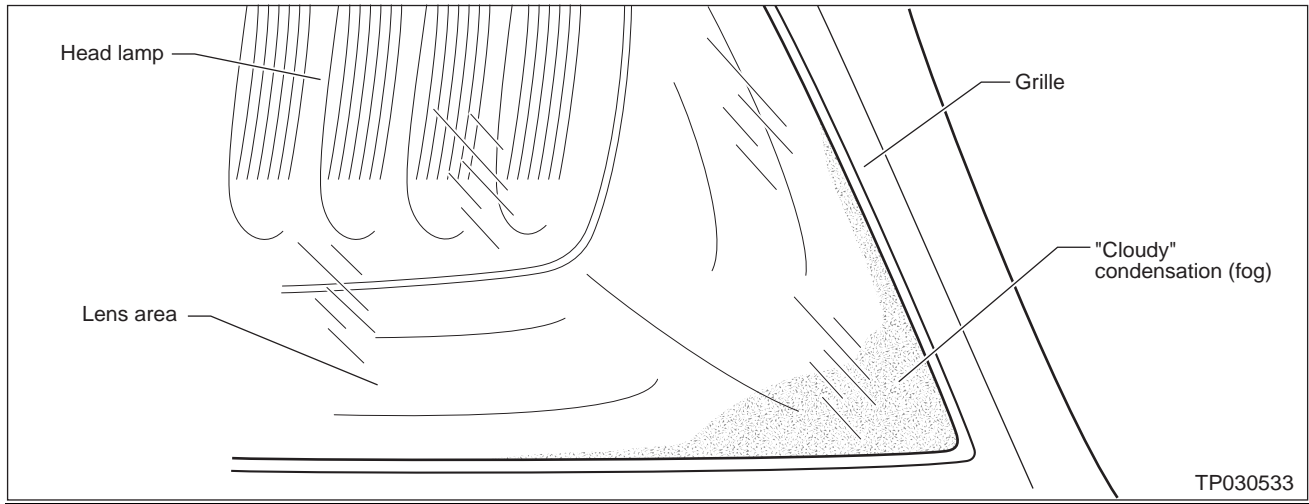


Figure 1: Example of normal condensation, ok

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

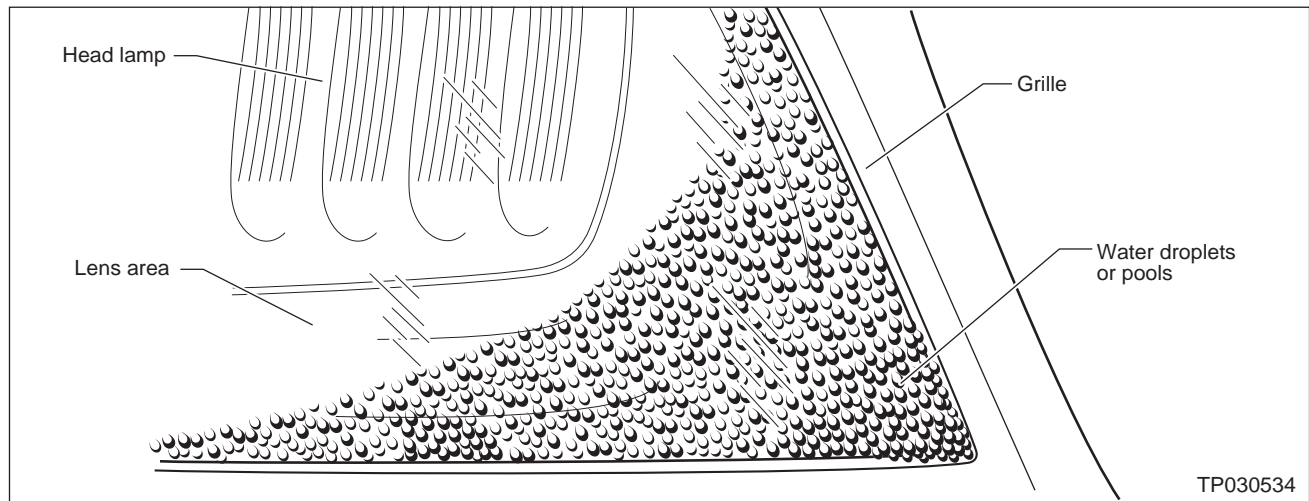


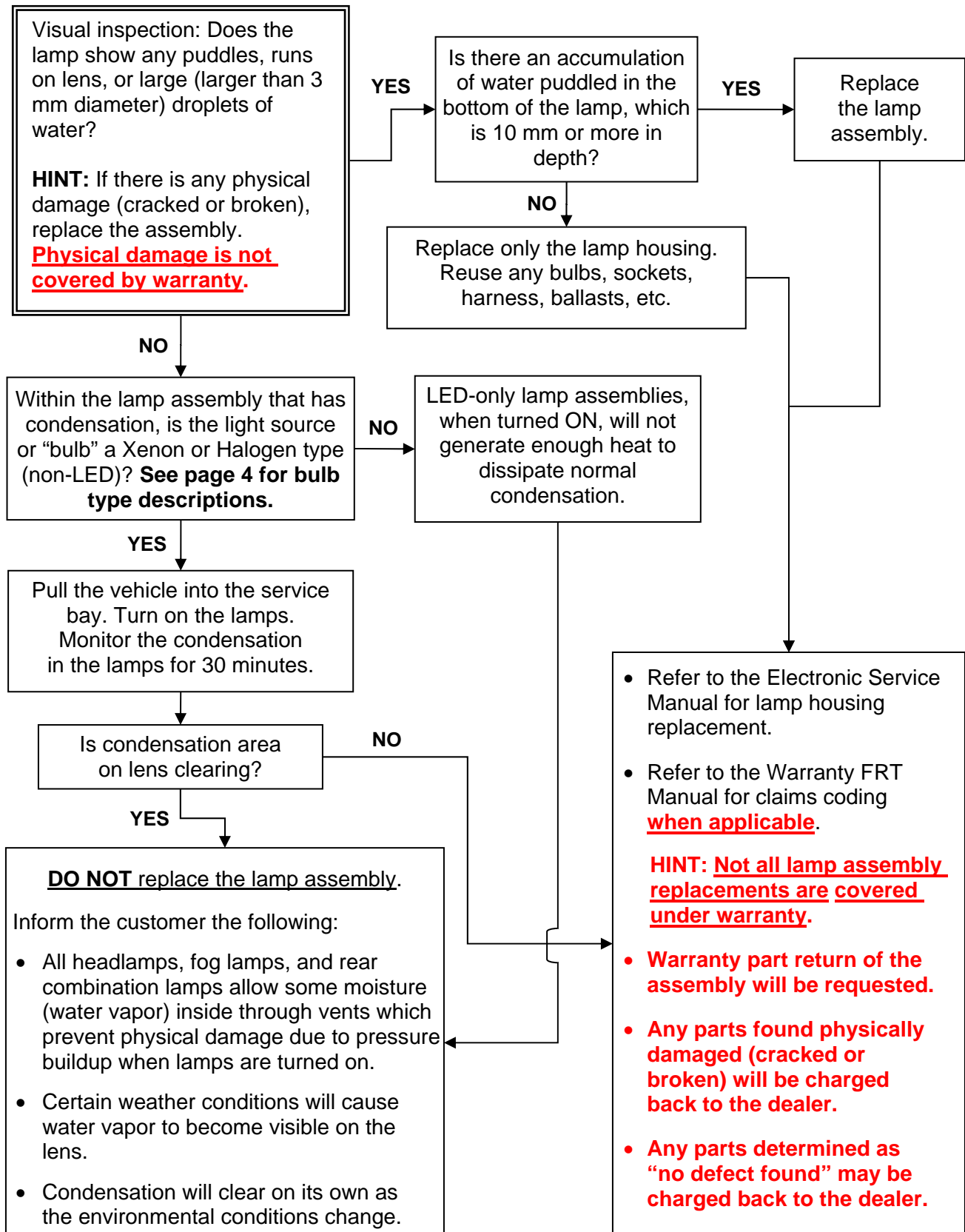
Figure 2: Condition may not be normal (example)

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

HINT: 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	APPLIED VEHICLES updated to include current production models, and SERVICE PROCEDURE added
February 26, 2008	NTB03-074b	APPLIED VEHICLES updated to include current production models
July 21, 2008	NTB03-074c	APPLIED VEHICLES updated to include current production models
August 8, 2008	NTB03-074d	APPLIED VEHICLES updated to include current production models
January 4, 2010	NTB03-074e	APPLIED VEHICLES updated to include current production models, and SERVICE PROCEDURE revised
February 21, 2012	NTB03-074f	APPLIED VEHICLES updated to include current production models, and SERVICE INFORMATION revised
November 27, 2013	NTB03-074g	APPLIED VEHICLES 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	APPLIED VEHICLES updated to include current production models
March 27, 2017	NTB03-074k	APPLIED VEHICLES updated to include current production models, and a description of headlamp assembly bulb types has been added
March 19, 2018	NTB03-074L	APPLIED VEHICLES updated to include current production models
April 20, 2018	NTB03-074m	Fog lamps added, and flow chart modified
July 7, 2020	NTB03-074n	APPLIED VEHICLES updated to include current production models, and rear combination lamps added
January 4, 2021	NTB03-074o	APPLIED VEHICLES updated to include current production models
December 7, 2021	NTB03-074P	APPLIED VEHICLES updated to include current production models
April 5, 2023	NTB03-074Q	APPLIED VEHICLES revised and "NOTE" references changed to "HINT"