Technical Service Bulletin (TSB) PARTS & SERVICES Technical Service Bulletin (TSB) Headlamp Condensation Clearing Procedure					
REFERENCE:	TSB : 23-004-24 GROUP : 23 - Body	Date:	January 17, 2024	REVISION:	23-029-23
VEHICLES AFFECTED:	**2023 - 2024 (JJ) Avenger** **2019 - 2024** (KL) Jeep Cherokee 2021 - **2024** (WL) Jeep Grand Cherokee / Grand Cherokee L 2021 - **2024** (WK) Jeep Grand Cherokee 2022 - **2024** (WS) Wagoneer / Grand Wagoneer 2021 - **2024** (DT) RAM 1500 Pickup 2021 - **2024** (WD) Dodge Durango 2021 - **2024** (MP) Jeep Compass 2021 - **2024** (MV) Jeep Compass 2021 - **2024** (JT) Jeep Gladiator 2021 - **2024** (JL) Jeep Wrangler 2019 - **2024** (BV) Jeep Renegade			MARKET AI	PPLICABILITY:
CUSTOMER SYMPTOM:	Some customers may report that on occasion, vehicle exterior head lamp assemblies are fogged with a light layer of condensation on the inside of the lenses.				
CAUSE:	Headlamp condensation.				

This bulletin supersedes Technical Service Bulletin (TSB) 23-029-23, date of issue February 25, 2023, which should be removed from your files. All revisions are highlighted with **asterisks** and include additional model years and vehicle.

DISCUSSION:

This TSB is to communicate the procedure for headlamp condensation clearing.

STANDARD PROCEDURE - Lamp Lens Defogging:

NOTE: Figures are not specific to vehicle and only used for showing the headlamps either good or bad, per the TSB.

Customers may report that on occasion, vehicle exterior headlamp assemblies are fogged with a light layer of condensation on the inside of the lenses Fig. 1.

This may be reported after the headlamps have been turned on and brought up to operating temperature, turned off and then rapidly cooled by cold water (such as rain, or the water from a vehicle wash). Headlamp lens fogging can also occur under certain atmospheric conditions after a vehicle has been parked outside overnight (i.e. a warm humid day followed by clear cool night).

This will usually clear as atmospheric conditions change to allow the condensation to change back into a vapor. Turning the headlamp ON will usually accelerate this process.



Fig. 1 Fogged Headlamp Examples

A headlamp that exhibits condensation/fogging should be evaluated in a service bay environment according to the following steps:

- 1. Dry all water from the outside surface of the headlamp lens.
- 2. Operating all outside lamps for 20 minutes by:
 - Starting the vehicle engine.
 - Turning ON the vehicle headlamps and turn ON the hazard warning flashers.

Evaluation Criteria:

If the condensation/fogging has begun to clear Fig. 2 from the headlamp lens after 20 minutes with the lamps operating, this indicates the lamp sealing has not been breached, and **the headlamp does NOT need to be replaced.**



Fig. 2
Condensation/Fogging Beginning To Clear Examples

If the condensation/fogging has not begun to clear after 20 minutes with the headlamps operating, or the headlamp has large amounts of water droplets visible on most internal surfaces, this indicates a problem with the headlamp sealing that has allowed water to enter the headlamp. In this instance, the customer is also likely to report that moisture in the headlamp is always present and never disappears Fig. 3.

NOTE: A headlamp that exhibits internal moisture permanently should be replaced.



Fig. 3
Condensation/Fogging Not Beginning To Clear Examples

Most Common Causes For Heavy Non-normal Condensation/Fogging In Headlamp Assemblies:

Damage: Breakage on the headlamp housing will allow moisture/water to enter to the headlamp (damage, cracks, holes, etc.) Fig. 4. If this is noticed, the Failure Code must be recorded accordingly: 11/BROKEN OR CRACKED.



Fig. 4
Cracked, Damaged Or Broken Headlamp Examples

 Missing Sealing Components: Missing vent caps, access caps or bulb sockets will allow moisture/ water to enter to the head lamp Fig. 5. If this is noticed, the Failure Code must be recorded accordingly: 1C / CONNECTOR LOOSE NOT ATTACHED.

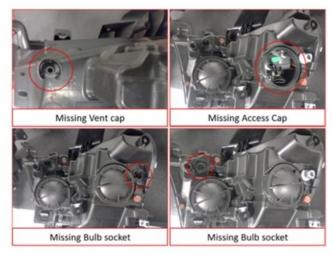


Fig. 5
Missing Sealing Components Examples

Sealing Components: Missing/damaged vent caps, incorrectly installed access caps and bulb sockets, will
allow moisture/water to enter to the head lamp Fig. 6. If this is noticed, the Failure Code must be recorded
accordingly: 1C / CONNECTOR LOOSE NOT ATTACHED.



Fig. 6
Incorrectly Installed Access Caps Examples

If no obvious causes are observed, proceed using the failure code for leaks (65) and replace the headlamps accordingly. Refer to the detailed service procedures available in DealerCONNECT/Service Library under: Service Info>08 - Electrical / 8L - Lamps and Lighting / Lamps/Lighting - Exterior / Unit, Front Lamp / Removal and Installation.

POLICY:

Information Only.