



# Service Bulletin

Bulletin No.: 22-NA-111

Date: May, 2022

## INFORMATION

**Subject: Information On Common Customer Trailer Side Faults**

| Brand:    | Model:   | Model Year: |      | VIN: |    | Engine: | Transmission: |
|-----------|--|-------------|------|------|----|---------|---------------|
|           |  | from        | to   | from | to |         |               |
| Cadillac  | Escalade Models  | 2021        | 2022 |      |    |         |               |
| Chevrolet | Silverado 1500 – (LTD, RPO J22, 12th VIN Digit = 5 or greater) | 2022        | 2022 |      |    |         |               |
|           | Suburban Tahoes Models   | 2021        | 2022 |      |    |         |               |
| GMC       | Sierra 1500 – (LTD, RPO J22, 12th VIN Digit = 5 or greater)    | 2022        | 2022 |      |    |         |               |
|           | Yukon Models   | 2021        | 2022 |      |    |         |               |

|                                   |  |
|-----------------------------------|--|
| <b>Involved Region or Country</b> | United States, Canada, and Mexico  |
| <b>Additional Options (RPOs)</b>  |  |
| <b>Condition</b>                  | Some customers may comment that their trailer does not operate in the manner expected. <ul style="list-style-type: none"> <li>• Trailer lighting is inoperative</li> <li>• Trailer detection is not possible</li> <li>• Trailer lights flash intermittently while the ignition/vehicle is OFF</li> <li>• Trailer message displayed on the DIC</li> </ul> |
| <b>Cause</b>                      | This condition may be caused by a poor connection on the customer's trailer.   |
| <b>Customer Information</b>       | Trailer issues are NOT covered under warranty, but this procedure can be used to help the customer understand any trailer related issues.<br>Discuss with the customer these scenarios and advise to correct the trailer wiring, connector, update the trailer lights or add load resistors to the bulbs/lamps if they so choose.                        |

### Service Procedure

**Warning:** This procedure is a guide to diagnose trailer side problems. Read the service manual before performing any work. Improper repair and/or maintenance could result in death or serious injury.

**Important:** Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs

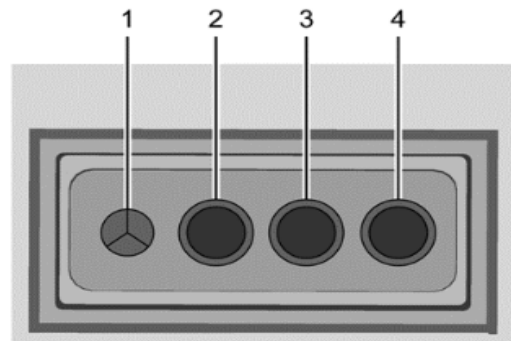
under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.

| Fuses            | Trailer Brakes | Tail Lamps | Backup Lamps | Left Turn/ Stop Lamps | Right Turn/ Stop Lamps | Constant B+ |
|------------------|----------------|------------|--------------|-----------------------|------------------------|-------------|
| Fuse F63UA (40A) | X              | -          | -            | -                     | -                      | -           |
| Fuse F74UA (30A) | -              | X          | -            | -                     | -                      | -           |
| Fuse F82UA (30A) | -              | -          | X            | X                     | X                      | -           |
| Fuse F84UA (30A) | -              | -          | -            | -                     | -                      | X           |

**Note:** All trailering fuses can be found in the under-hood fuse block.

### Trailer Lighting System Description

When a trailer is connected to the vehicle, the Trailer Lamp Control Module on the vehicle responds to the operator's lighting controls by applying voltage to the appropriate control circuit to the trailer connector of the vehicle. When the electrical connector from the trailer is plugged into the trailer connector of the vehicle, the voltage from the vehicle is then applied to the appropriate circuit on the trailer and the corresponding lamp on the trailer will illuminate. Fuse F74UA and F82UA are the power supply fuses to the Trailer Lamp Control Module. If a fuse is blown, an electrical fault likely exists on the trailer causing the fuse to blow.



### Trailer Connector



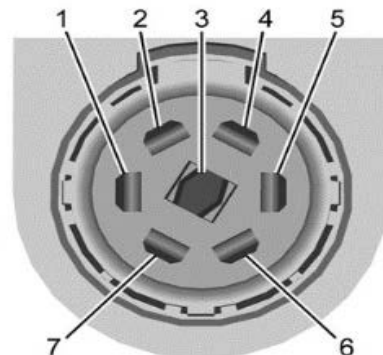
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If equipped, the trailer wiring harness, with a 7-pin connector and a 4-pin connector, is mounted on the vehicle's rear bumper.



6081040

1. Ground
2. Tail Lamps
3. Left Turn/Brake
4. Right Turn/Brake



6081041

1. Left Turn/Brake
2. Tail Lamps
3. Reverse Lamps

4. Battery Feed
5. Right Turn/Brake
6. Electric Brakes
7. Ground

## Common Trailer Faults

Trailers are known to have multiple areas of electrical failure. Below is list of common problems that cause electrical faults on trailers.

**Note:** It is normal for the DIC to display "Check Trailer Wiring" when the trailer is disconnected from the truck while the ignition is in the run position.

### Loose Connections

The trailer connector is a common point of failure. A loose/broken connection will result in intermittent electrical issues or inoperative electrical systems on the trailer.

Trailer lamp assemblies also have connections that can become loose/bad over the life of the trailer which may result in intermittent or inoperative lamps.

Wire nuts should never be used to service trailer wiring. Wire nuts are not properly sealed for automotive use and will allow moisture and debris into the electrical connection which results in a loose/bad connection.

### Faulty Ground Circuits

Ground circuits are usually connected to the frame of the trailer using some form of ground connection made by a screw/bolt. These connections may corrode and/or become weak over time causing a loose/broken connection. A faulty ground connection will not allow the flow of electricity through the circuit resulting in faulty lamp illumination.

### Boat Trailers and/or Water Intrusion

Boat trailers are constantly submerged under water. If the lamps and wiring of the trailer are not sealed properly, water intrusion will usually result in an electrical fault on the trailer and cause a high-current condition which will usually result in a blown fuse.

## Trailer Lighting Verification Procedure

1. Inspect the trailer side connector on the vehicle and trailer for corrosion and/or visible damage.
  - **If corrosion and/or visible damage exists:**
    - Repair or replace the trailer side connector as necessary.
  - **If no condition exists**
2. Connect the electrical connector from the trailer into the trailer connector of the vehicle.
3. Start the vehicle and select the "Start Light Test" function through the trailering App.

4. Verify the appropriate lights on the trailer turns ON and OFF.
  - **If the trailer tail lamps do not turn ON and OFF**
    - Verify Fuse F74UA in the under hood fuse block is not blown.
  - **If the trailer turn/stop lamps do not turn ON and OFF**
    - Verify Fuse F82UA in the under hood fuse block is not blown.
  - **If the trailer backup lamps do not turn ON and OFF**
    - Verify Fuse F82UA in the under hood fuse block is not blown.
  - **If all the trailer lamps turn ON and OFF**
5. A fault is not currently present with the trailer lamps

## Vehicles with Trailering App

Vehicles with the Trailer Interface Module constantly monitor for trailer connection status, trailer lighting faults, and trailer theft deterrent purposes through the lighting circuits of the trailer. Refer to your owner's manual for more details.

### Trailer Connections Status

The flashing or flickering lights is a normal condition. With a trailer connected and the ignition off, the Trailer Lighting Control Module will periodically pulse the lighting circuits of the trailer to verify it is still connected. Depending on the configuration of the trailer lights, the trailer lights may periodically flash as part of the trailer connection detection or theft deterrent functions.

### Connection Problem

If any of the trailer connections are lost, a message about the connection issue will appear on the Driver Information Center (DIC). Depending on the settings, a Trailer Connected or No Trailer Connected status may be displayed by the trailering app on the infotainment screen.

### Connection Trailer Lighting Faults Detected

The Trailering App System monitors for electrical faults on the trailer lights. A message about the lighting issue will appear on the DIC. The infotainment display will also show the lighting issue in the Connection Status view.

### Diagnose View

This view will display the names of the trailer connector pins, a graphic of the trailer connector, and a graphic of the back of the trailer.

Any connector pin that failed will be amber color, and the location of the corresponding connection will be highlighted on the graphic of the back of the trailer.

The Running Lights connection may not detect partial outages. Activate the light test to check all trailer lamps. See "Light Test" following.

### Light Test

To help you check that all of your truck and trailer lights are in working order, this feature activates your brake lights and turn signals so you can perform a visual inspection.

### Warranty Information

No warranty labor operation is provided for concerns related to the trailer.

|          |                       |
|----------|-----------------------|
| Version  | 1                     |
| Modified | Released May 24, 2022 |

