



SERVICE BULLETIN

TCE-SB100 | August 30, 2021

Recall ID: 21V693

IMPORTANT SAFETY RECALL INFORMATION



U.S. Department of
Transportation

Issued in Accordance
With Federal Law



THUNDER CREEK EQUIPMENT

ThunderCreek.com

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Subject: Fender Clearance Lamp Wire Not Routed Properly

Affected Products: FST, MTT, MTO, SLT, DW, STT, DEF units produced from 4/15/2021 to 8/27/2021.

Issue Description: The wires, if incorrectly routed, may rub between the axle and frame, resulting in failure of clearance lights.

Repair if damaged: Splice the damaged coating or pinched wires. Reconnect the wires with butt connectors and seal with a repair sleeve.

Solution: Reroute the wires on the inside of the trailer frame.

DAMAGED WIRE HARNESS REPAIR KIT

Parts included if every joint is damaged and needs repaired:

- (8) 14-16 gage – heat shrink butt connectors
- (4) repair sleeves
- Zip ties

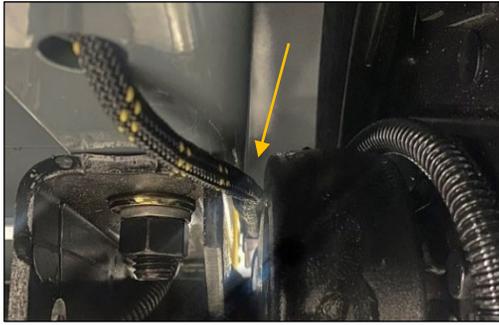
Other tools needed:

- Electrical pliers
- Butane torch
- Floor jack and jack stands
- 5/16" nut setter



PROBLEM

Harness between the axle and the frame

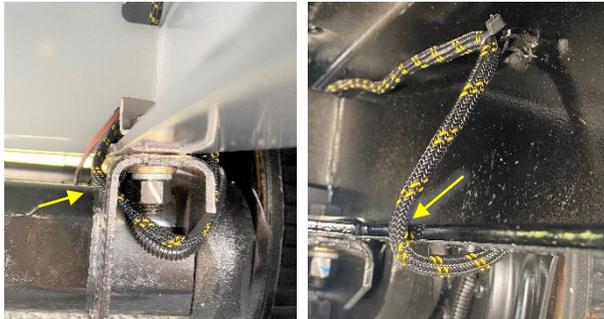


SOLUTION

Harness routed inside the frame and the side of the axle

Front

Back



IMPORTANT SAFETY AND EQUIPMENT INFORMATION



WARNING

Refer to your trailers Owner's Manual for more safety information and function of your trailer.

- After repairing the wiring system, ensure all clearance lights are on and functioning **BEFORE** driving the vehicle.
- Wear proper safety glasses, electrical gloves and remove all jewelry and medal objects when working on the wiring system.
- Never position yourself under the trailer unless it is supported with safety stands. Failing to do so could lead to injury or death.
- Park the trailer on a firm level surface. Movement of the trailer while installing any equipment can lead to injury or death.
- Unplug your harness from the trailers hitch on your vehicle before handling equipment to remove any live circuitry.
- Observe precautions against electrical shock when operating and servicing the system.

1 REMOVE THE WIRE HARNESS FROM THE AXLE AND FRAME

1.1



Damaged wire harness

1.2



1.3



Remove the wires between the axle and frame

- 1 Refer to the section "Uncoupling the Trailer" of your trailers Owner's Manual and follow steps 1-5 for uncoupling instructions.
- 2 Park the trailer on a level surface. Secure the trailer tires with wheel chocks. Insert the wheel chocks on both sides of the tires on the side of the trailer opposite the side of the trailer you will be servicing. Lift your trailer with a jack, and secure with jack stands to allow for access to the harness between the axle and the frame (raise the trailer similar to changing the trailer tire).
- 3 If the wire is correctly routed on the inside of the frame (see solution photos above and photos in section 3), no further action is required, proceed to section 5. If the wire is routed incorrectly on the outside of the frame (see problem photo above), proceed to the next step.
- 4 If damage to the wires or coating has occurred, your wire may look similar to the wires in photo 1.1.

The wires will need repaired if:

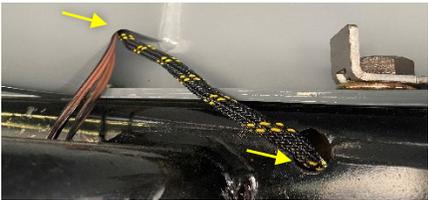
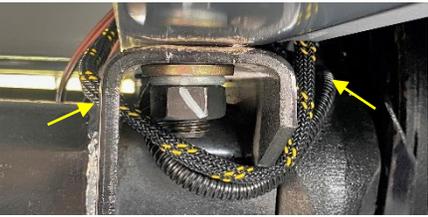
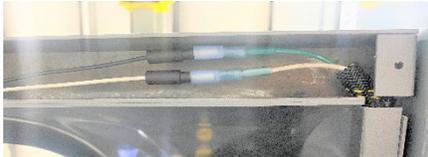
- The wire insulation is cracked
- A cut or corrosion has occurred
- The coating is frayed
- The harness has been pinched

- 5 Remove the screw to the fender bullet light cover with a 5/16" nut setter (photo 1.2). Set the screw and cover aside. Disconnect the white bullet light wire from the white wire of the harness, repeat with the black and green wires.
- 6 Locate the wires between the axle and the frame (photo 1.3). Gently pull the harness to guide the wires out from the fender guide and then out from the axle and frame.
- 7 If your wires have any damage, contact Thunder Creek Equipment for the repair kit and refer to section 2 for repair. The damage must be repaired **BEFORE** rerouting the wires. If there is no damage to your wires, refer to section 3 or 4 for rerouting instructions. **Front and rear routing instructions are not similar, make sure you follow the correct instructions bellow.**

2 REPAIR DAMAGED WIRES

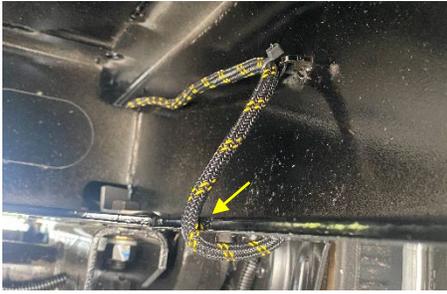
- 2.1 
- 2.2 
- 2.3 
- 2.4 
- 1 With electrical pliers, cut the damaged wire (photo 2.1):
 - **Option 1:** Cut the harness in the middle of the damaged area.
 - **Option 2:** Cut the harness on the outside of the damaged area to remove any damaged wires.
 - 2 Carefully cut the harness coating with electrical pliers. Peel back the coating to expose 1" of the wires. Use the electrical pliers to strip ¼" of the insulation off the white wire. Twist the wire end so the wires inside the insulation are conjoined. Repeat with the green wire, complete this step with both wire harness ends that were cut (photo 2.2).
 - 3 Insert 1 repair sleeve, provided in the kit, onto the wire harness BEFORE connecting the wires to the butt connectors (photo 2.2).
 - 4 Fully insert the white wire into 1 butt connector. Firmly crimp the butt connector with electrical pliers to secure the white wire inside the connector. Repeat with the green wire using a second butt connector (photo 2.3).
 - 5 Repeat this step with the other side of the wire harness that was cut. Insert the wires into the connectors: **White & White | Green & Green**. Firmly crimp the butt connectors with electrical pliers to secure the wires inside the connectors. Before torching the connectors, plug your trailer into your vehicle and test the lights. If the lights work, carefully torch the plastic ends of the butt connectors to further secure the wires inside the butt connectors (photo 2.3).
 - 6 Slide the repair sleeve over the connectors, covering any exposed wires. Make sure the sleeve connects the braided harness. Carefully torch the repair sleeve so it firmly covers the exposed wires and butt connectors (photo 2.4).

3 REROUTE THE WIRE HARNESS | FRONT AXLES

- 3.1 
- 3.2 
- 3.3 
- 3.4 
- 3.5 
- NOTE:** Left and right, front axle routing methods are similar.
- 1 Route the wires above the axle on the inside of the frame. Guide the harness through the bottom cut out in the cross channel (photo 3.1).
 - 2 Guide the wires down, and through the hole on the inside of the axle (photo 3.1 & 3.2).
 - 3 Guide the wires around the outside of the axle bracket and up into the fender guide (photo 3.2). Carefully insert the wires through the fender guide until they reach the bullet light wire harness (photo 3.3). The bullet light harness is the harness disconnected after the fender cover plate was removed (if more wire is needed, remove the zip ties along the trailer frame to loosen the extra harness wire).
 - 4 Attach the wire harness to the bullet light wires. Plug the white wire from the harness into the white bullet light wire. Repeat with the green and black wires. Before securing the harness to the frame, insert the electrical connector into your vehicle and test the lights. Make sure the harness is NOT loosely hanging in the fender cover or around the frame (photo 3.4). Secure the harness with zip ties as needed to prevent the extra wire harness from hanging or moving around.
 - 5 Attach the fender cover plate to the bottom of the fender. Insert the pointed end of the fender cover on the inside of the fender tab. Line up the cover plate cut out, with the fender cut out and insert the screw. Tighten with a 5/16" nut setter (photo 3.5).
- After repairing the wiring system, ensure all clearance lights are on and functioning BEFORE driving the vehicle.**

4 REROUTE THE WIRE HARNESS | REAR AXLES

4.1



NOTE: Left and right, rear axle routing methods are similar.

1 Route the wires around the bottom of the trailer frame, behind the axle. If your trailer has a hole cut out, guide the wires through the hole in the same location (photo 4.1 & 4.2).

2 Insert the wires into the fender guide located on the outside of the frame (photo 4.2).

3 Carefully insert the wires through the fender guide until they reach the bullet light wire harness (photo 4.2 & 4.3). The bullet light harness is the harness disconnected after the fender cover plate was removed (if more wire is needed, remove the zip ties along the trailer frame to loosen the extra harness wire).

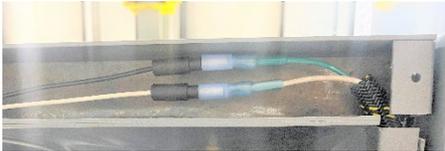
4.2



6 Attach the wire harness to the bullet light wires. Plug the white wire from the harness into the white bullet light wire. Repeat with the green and black wires. Before securing the harness to the frame, insert the electrical connector into your vehicle and test the lights. Make sure the harness is NOT loosely hanging in the fender cover or around the frame (photo 4.3). Secure the harness with zip ties as needed to prevent the extra wire harness from hanging or moving around.

Bottom view of the wires around the frame and into the fender guide.

4.3



7 Attach the fender cover plate to the bottom of the fender. Insert the pointed end of the fender cover on the inside of the fender tab. Line up the cover plate cut out, with the fender cut out and insert the screw. Tighten with a 5/16" nut setter (photo 4.4).

4.4



After repairing the wiring system, ensure all clearance lights are on and functioning BEFORE driving the vehicle.

5 REIMBURSEMENTS

You must submit a photo of the wire harness routed between the axle and frame and the corrective wiring to ryanb@thundercreek.com, along with your trailers VIN number for payment reimbursement of 1 hour/trailer. Contact Ryan Baarda whose contact information can be found at the beginning of this document for more questions.