



Repair Standards

02-008 – Reefer Roof Replacement

Disclaimer:

Only a certified and experienced person using suitable tools should complete the repairs described below. Repairs should meet or exceed manufacturer's minimum specifications and should be in agreement with all safety and ecological regulations.

Permissible upon return and does not require repair:

- Acceptable repairs.

Requires repair upon return:

- Unacceptable repairs
- Holes/breaks/extreme damage to the roof.

Safety Measures:

- Take appropriate safety precautions when working with fiberglass, polyester, epoxy or acetone.
 - Eyes should be covered with goggles.
 - Face should be protected by an OSHA approved respirator mask.
 - Hands should be protected by gloves.
- Take appropriate safety precautions when working with resins and solvents.
 - Read caution labels on each product used, in every use.
 - Never smoke or use tools that create sparks while making repairs to interior liners.
- Be sure that there is enough air circulation while working inside the trailer, without proper ventilation fumes could build up and cause harm.

Note:

- The interior ceiling liner should never be taken out, only the aluminum roof skin.
- An excess amount of epoxy resin should be added in between the aluminum roof skin and the insulation.
- Trailer must be on a flat surface and perfectly level before any repairs can be made. You can verify that the trailer is level by measuring the distance from the bottom rail to the ground on the front, middle and rear (on both sides) of the trailer.
 - **If the trailer is not level when the repairs are made, this may cause issues, such as a loose roof, when the trailer is loaded and sitting on a level area.**



Procedure:

1. Remove all rivets and fastener strips that are around the entirety of the roof.
 - 1) It is unnecessary to remove the "j" strips, they can be folded.
2. Without removing the interior ceiling liner, take the aluminum roof sheet off of the top of the trailer by uncurling the sheet from the top rail flange.
 - 1) Replenish any lost insulation with a Polyurethane spray foam.
3. Before replacing the roof sheet, add an extensive amount of adhesive to the insulation and the roof bows to be sure that it is held into place.
4. Replace the roof sheet and tighten it with a chain jack.
5. In order to keep the roof right, begin riveting at the front corners, about 10" to the corner of the front and side rails.
6. Starting with only one side, rivet the replacement roof over each roof bow
 - 1) Repeat the same process on the other side.
7. Once riveting is completed over each roof bow, go back and put in all remaining rivets.
8. With rivets in place, take away tension from the chain jack (installed in step 4) and begin cutting/riveting the end from the middle and going out.
 - 1) As necessary, cut and curl the roof sheet under the top rail.
9. Apply load jacks to the roof bows in order for the adhesive to dry completely.
10. Make sure that the new roof sheet is water-tight and sealed by adding sealant to the seams on the top and at the ends, as necessary.