



## Repair Standards

### 01-017 – Composite Van Bottom Rail Section

#### 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.
- Scratches no more than 1/8" deep in rails or bottom rail rivets.

#### Requires repair upon return:

- Cuts that have been welded and are greater than 12" in length.
- There is 3/4" or greater bend in the rail.
  - This extent of a bend is the furthest that a rail can bend and therefore it will not return to its original size/appearance.
- The rail damage is greater than eight feet in length.

#### Restrictions:

- A bottom rail section cannot be in the middle of the trailer.
  - This is considered a 3-piece rail, which is unacceptable
    - A 3-piece rail is a rail that has two splices.
- A bottom rail section can be up to, but not exceeding, 75% of the trailer length.
  - Damage that would require greater than 75% of the rail length to be sectioned needs to be replaced entirely.
- A bottom rail section from the front of the trailer must range four-feet past the middle of the landing gear legs.
- In the case that both top rails and both bottom rails need to be sectioned, the top rails should be replaced and the bottom rails sectioned.
  - Sections should be centered between side posts and staggered, no less than, four feet on the bottom rail.
- If a rail is completely replaced, it needs to meet OEM design.
- In the case that there are multiple rail sections (top rail/bottom rail) including roof sections, the cuts need to be staggered by four feet and placed one foot away from the panel seam.



- Pre-drilled splice kits can sometimes be obtained through the trailer manufacturer.

#### **Procedure: Reinforcing the Bottom Rail**

1. Be sure that the bottom rail seam is one foot, or more, in distance from the panel seam.
2. With the lower bottom rail reinforcement being 4' 6" in length, be sure that it ranges two crossmembers on each side of the splice.

#### **Sectioning the Bottom Rail:**

1. Be sure that the damaged area, to be sectioned, is flat and braced.
2. Be aware of any air or electrical lines along the railing and relocate lines, if needed, to make rail removal easier.
3. Starting with the end nearest the damage cut and take out the railing that needs to be repaired.
  - a. The cut should be made in the middle of two crossmembers and be no less than one foot from the composite panel splice.
4. Replace the damaged area with a new piece of railing, cut to size.
5. Add Mylar tape behind the new piece of railing where it comes into contact with steel before putting everything back together. The new piece of railing should be primed and painted to match the color of the original railing and all other parts should be wrapped in Mylar tape. Any steel parts that are unprotected should be cleaned/protected using a non-flammable solvent.
6. The bottom reinforcement should be placed where the original rail and new rail join. It should be located between the new and old rail and the crossmember clips.
  - a. Secure the bottom reinforcement into place using either OEM fastener baserail bolt kits.
    - i. At least 10 bolts should be used on each side of the joint.
7. It is not required to have a reinforcement in the upper section.
  - a. Instead of the upper reinforcement, use a standard rivet pattern and rivet composite wall panels on the upper part of the baserail.
8. The rail joint should be sealed and never welded.