# Recommended Trailer Repairs



### **Industry Standard**

"Industry Standard" – Means installation, modification, or repair methods described in industry-accepted recommended practices as published by:

- The Society of Automotive Engineers (SAE)
- Technology and Maintenance Council (TMC)
- American Trucking Associations
- Canadian Standards Association (CSA)



# Recommended Inspection & Repair Procedures

The following recommended inspection and repair procedures developed by the Technology & Maintenance Council (TMC)

When discrepancy arises between TMC and Original Equipment Manufacture (OEM), the OEM repair procedure will be followed



### Van Trailer Skin Repair

- 1. Patch must be one inch larger then the damaged area per side.
- 2. Patch with .019 pre painted steel or .050 pre-painted aluminum.
- 3. On 1.5 inch centres and a minimum 0.5 inch distance from the edge, drill holes, remove shavings and insert ¼ inch solid aluminum buck rivets.



# Lower Side Rail Inspection Guidelines

- 1. Minor dents, bows or distortions less than ½" from original position do not require repairs.
- 2. Minor cracks in rails must be repaired.
- 3. Major dents, bows, or distortions that cannot be repaired must be either sectioned or replaced.
- 4. One section per rail is allowable.
- 5. Three piece rails are not recommended.
- 6. If there is damage to more than 30 percent of the rail, the entire rail must be replaced.



#### **Repair Guidelines**

- 1. Minor distortions exceeding 1/2" in a 12ft section can be repaired without the use of heat.
- 2. Trailer rails are heat treated aluminum extrusions that can lose 50 percent of the rail's original strength when heat is applied.

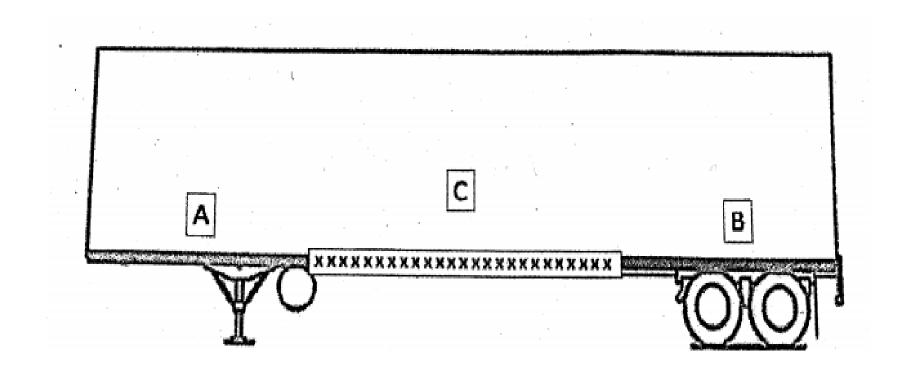


#### **Side Rail Cracks**

- 1. Drill stop holes (max 3/16" diameter) on either side of the crack.
- 2. Remove all side rail fasteners 24" on either side of the cracked area.
- 3. Install reinforcement splice and refasten to lower rail using the OEM pattern.



## **Section Repair Lower Rail**





### **Section Repair Lower Rail**

- 1. Bottom rail section repairs must add adequate strength, and will be of the same material used by the manufacturer.
- 2. Rail sectioning shall not extend over 25% of total length of trailer (for example, 53ft trailer max rail section 13′ 3″). Can be installed from either front (A) or rear of trailer (B) only.
- 3. The bottom rail that is in the area between the front section(A) and rear sections(B) **cannot** be sectioned(C).
- 4. Splice plate is required between original and replacement rail, and will span over a minimum of three cross members.



### **Upper Rail Repair**

- 1. If the roof to upper rail is damaged and it is not cracked or distorted up to ½" in a 12" area, then no repair is needed.
- 2. If damage is beyond ½"or water is entering the trailer, splice and section in the damaged area.
- 3. Rail sections that are less than ¼ or more than ½ of the original undamaged rail length is not recommended.
- Any rails found with unauthorized repairs should be treated as a sectioned member, and reinforced with splice members and fasteners.



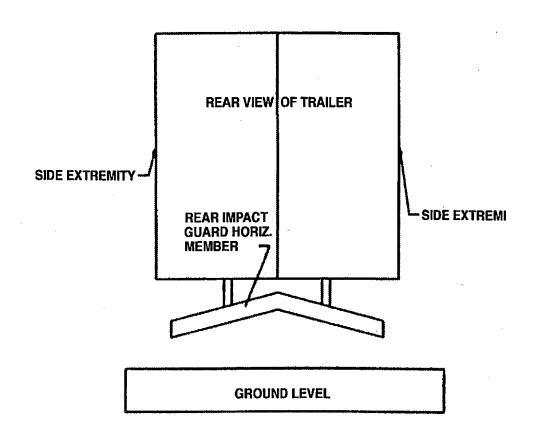
#### **Rear Impact Guard**

#### **Inspection Guidelines**

- Cracked welds
- Vertical members including added bracing from OEM for cracks or fractures
- Fasteners that hold the RIG together, and that hold the unit to rear sill for looseness or cracking
- Bends in any member
- Corrosion, cuts, punctures, and tears in any RIG member
- Proper attachment to the trailer sill
- Rear trailer cross members, trailer sill, and at least the six feet of floor
- Dimensional and over all integrity of the RIG

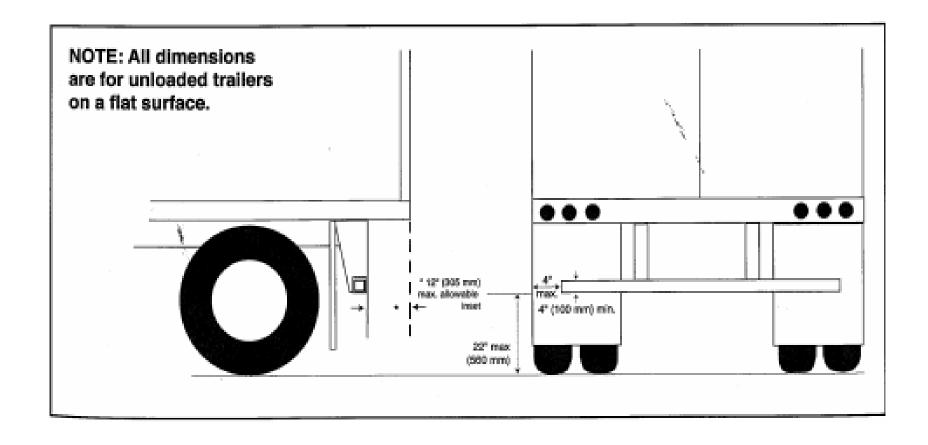


# **Common Rig Damage**





### Rear Impact Guard (RIG)





#### Recommended Rig Repair Procedure

- 1. Cracked welded areas must be repaired by welding.
- 2. Any corrosion, cuts, punctures, excessive wear, and any bent RIG component over 3" must be replaced as per OEM's recommended procedure and parts.
- 3. Damaged sill and flooring within a 6 foot area must be repaired or replaced as per OEM's recommendations.
- 4. Cracked or loose fasteners joining any RIG components must be replaced with OEM's approved replacement parts.
- If there is damage that affects the structural integrity, or dimensional measurements to the RIG. Replacement of the RIG is required.



#### Recommended Rig Repair Procedure

- 6. Any replaceable horizontal components must meet OEM's recommendations.
- All repairs must be performed to ensure RIG conforms to CMVSS and FMVSS requirements

