

# **Repair Standards**

## 01-011 - Bottom Rail Repairs - Welding

#### 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 on rails or rivets
- Dents/bends (between crossmembers) that don't consist of any holes, cuts or cracks.
- Dents/bends (between crossmembers) that are no more than ½" deep.

#### Requires repair upon return:

- Unacceptable repairs.
- Cuts in bottom rails.

#### **Restrictions:**

- If the damage is greater than 12" in length, do not weld the bottom rail, section the rail.
- A 4 ½' lower angled reinforcement should be used to repair the damaged area, if it is below floor level.
  - An upper flat AND a lowered angled reinforcement should be used if the damage is above floor level.
- The reinforcement should be primed and painted to match the color of the original railing and then should be wrapped in Mylar tape

#### **Procedure: Welding the Bottom Rail**

- 1. Be sure that the area, to be repaired, is clean and ready for welding.
  - 1) The damaged area can be cleaned with a wire brush after it has been straightened back to its original shape.
    - i. If the area is not cleaned, a non-porous weld cannot be guaranteed.
- 2. If a tear is being repaired in the bottom rail, use a hard disc grinder to v-groove the tear or grind the edges of a tear at 45-degrees.
- 3. Weld the cut/tear entirely to seal the railing back to a whole.



- 4. Using a disc grinder, get rid of the high portion of the weld bead and then grind it smooth with a soft grinding wheel.
- 5. If any reinforcements are required, put them into place.