



# Technical Bulletin

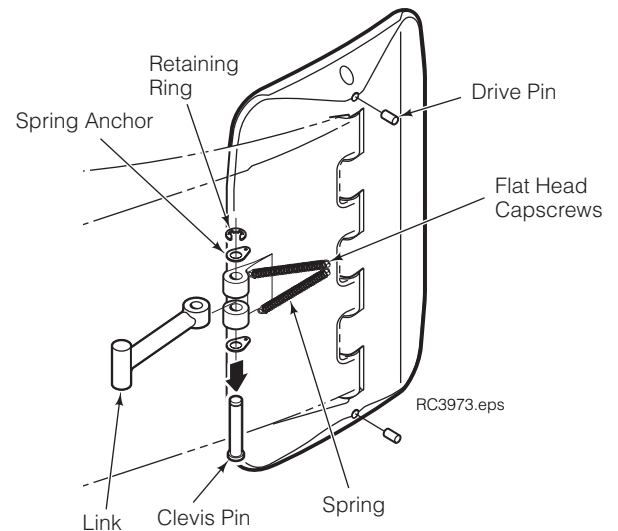
## 22H, 24H, 25H, 30H & 33H Roll Clamp Arm Tip and Wear Plate Service Repair Kits

This sheet describes arm tip removal and wear plate installation procedures for Roll Clamp Service Repair Kits 6814054, 6814103 and 6810076. Metal sawing and welding is required.



**WARNING:** Cascade Corporation recommends that a qualified welder experienced in this type of repair be used for best quality.

- 1 Rotate the clamp to the vertical roll handling position. Lower the clamp until the contact pads are approximately 1 in. (25 mm) from the ground.
- 2 Remove the retaining rings from the clevis pins. While removing the clevis pins, unhook the spring anchors. Springs will remain fixed to the arms.
- 3 Remove the drive pins from the contact pad pivot points and remove pivot pins.
- 4 Remove the contact pad and pad suspension springs. Pad links can be removed from the arm by rotating 90 degrees and pulling out.



**NOTE:** This information should not be interpreted as the basis for warranty claims unless so designated.

**cascade**<sup>®</sup>  
**corporation**

**For Technical Support . . .**

Call: 1-800-CASCADE (227-2233)

**OR**

Write: Cascade Corporation, PO Box 20187, Portland, OR 97294-0187

**To Order Parts . . .**

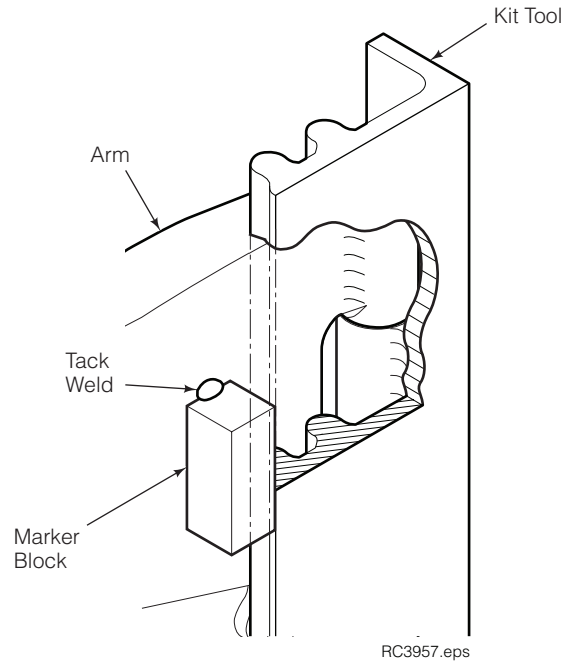
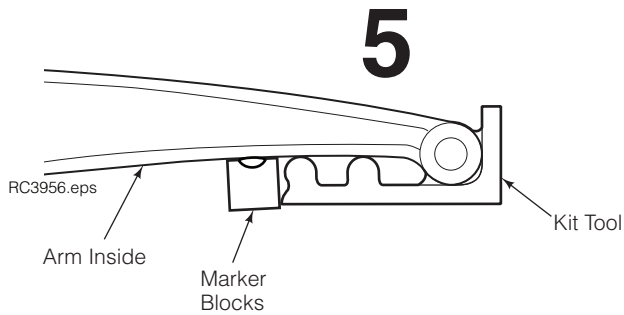
Call: 1-888-CASCADE (227-2233)

**OR**

Write: Cascade Corporation, 2501 Sheridan Ave., Springfield, OH 45505

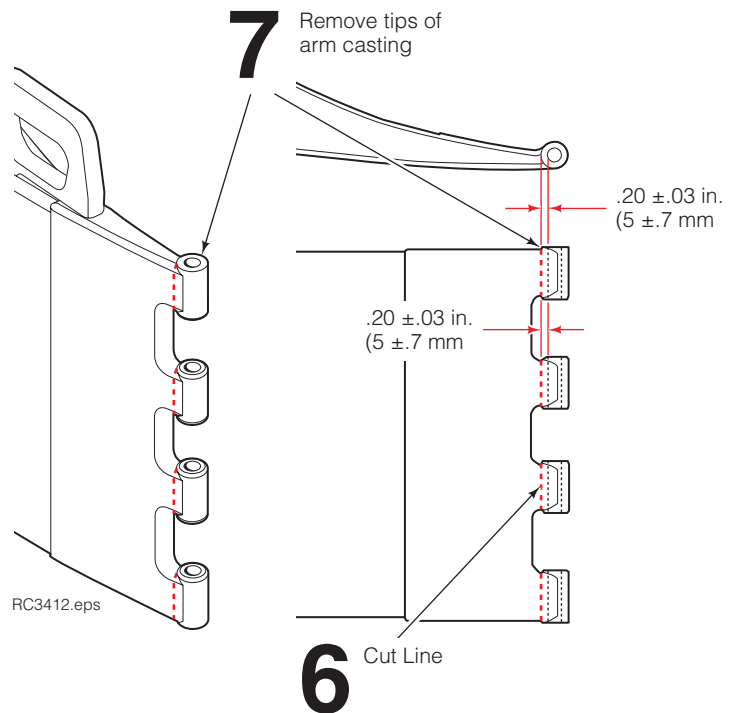
- 5** Place the tool against the tip with raised ribs on the inner arm surface and the spacers in between each tip. Tack weld two blocks (user equipped) to the inside of the arm as a marker at the edge of the tool. Remove the tool.

**IMPORTANT:** Avoid damage to machined features and threaded holes.

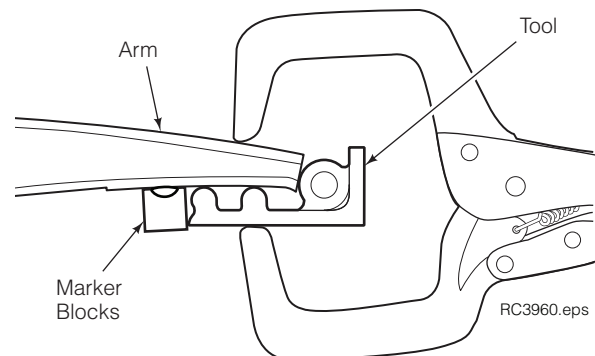


- 6** Scribe a cut line  $.20 \pm .03$  in. ( $5 \pm .7$  mm) back from the inner surface of the existing tip holes on both sides of the arm tips.

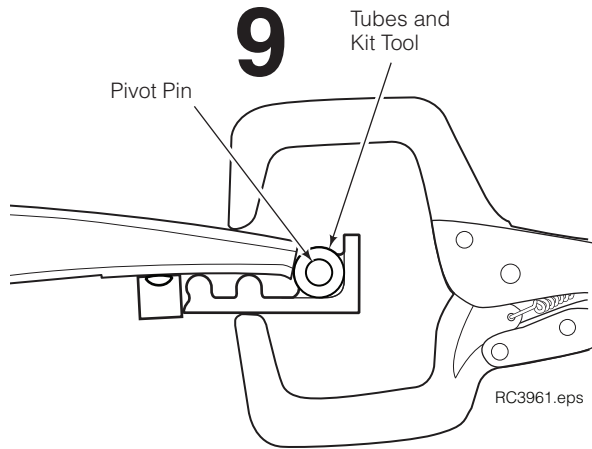
- 7** Remove defective tip area entirely at the cut line by grinding, sawing, torch or arc gouging. Remove any paint contamination from around the repair area. If arc gouging is used, make sure all carbon particles are completely removed.



- 8** Clamp the kit tool against the marker blocks.



**9** Position the new tubes on the arm tips using the kit tool. Place existing pivot pin through all tubes and kit tool for alignment. All repairs should be done in the flat position.

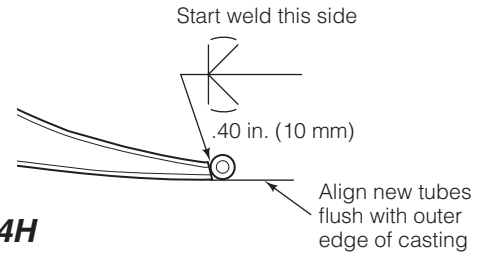


**10** Preheat arm tip base metal to 70°F (21°C) minimum. Tack weld new tubes to the tips. Use the recommended weld procedures listed below. Remove kit tool.

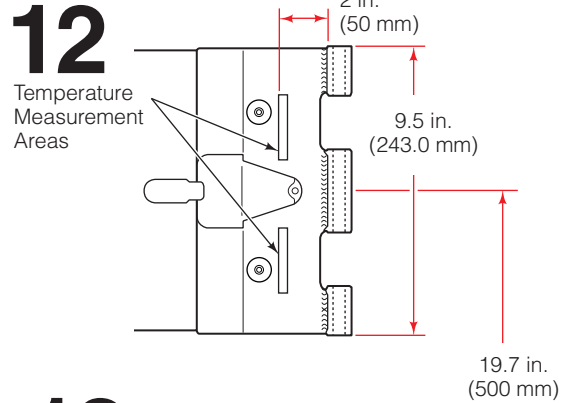
**11** Install the contact pad and pivot pin on the arm. Check the tube alignment, realign as required. Remove the contact pad and pin.

**12** Finish-weld the tubes to the arm tips and wear tiles using the following weld procedures:

- Protect inside of tubes from weld spatter.
- Preheat arm tip base metal to 150°F (66°C). Monitor and maintain arm tip heat at locations shown using suitable temperature-indicating devices.
- **Weld Sequence** – Start weld on side indicated. Terminate each weld at center of tube.
- **WELD METHOD A** – FCAW (Flux-Cored Arc Weld). Attach ground wire to arm. Weld using AWS E70T-1 1/16 in. (1.6 mm) or 5/64 in. (2 mm) diameter wire with 100% CO<sub>2</sub> shielding gas at 35-50 CFH. Set welding amp per manufacturers recommendations. Apply weld holding a close arc. Do not oscillate or use a wash bead pattern.
- **WELD METHOD B** – SMAW (Stick Welding). Attach ground wire to arm. Weld using E-7015 low hydrogen 1/8 in. (3.2 mm) or 5/32 in. (4 mm) diameter electrodes. Set welding amps per manufacturer's recommendations. **Do not use electrode exposed to moisture without first re-drying them at 200°F (75°C) for 2 hours.** Apply weld holding a close arc. Do not oscillate or use a wash bead pattern.
- Cool arm tip base metal at normal air cool.
- Remove marker blocks. Smooth out tack weld spots.

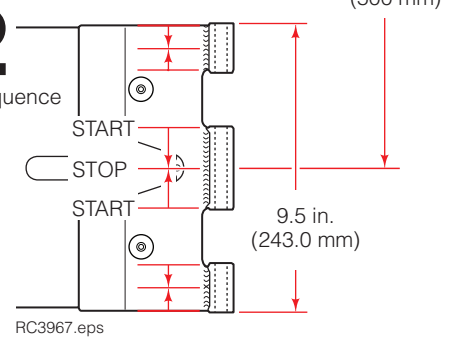


**22H, 24H**



**12**

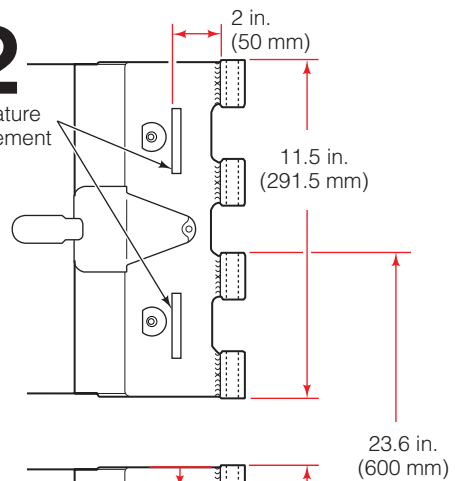
Weld Sequence



**25H, 30H, 33H**

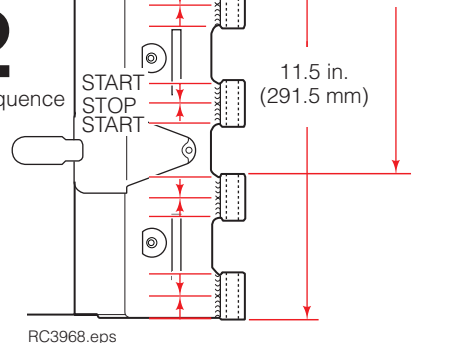
**12**

Temperature Measurement Areas

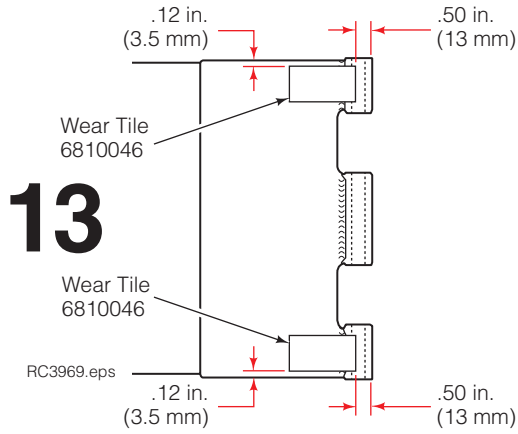
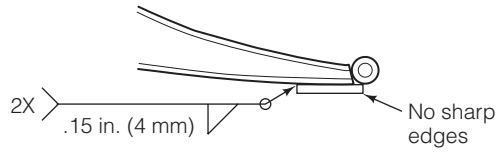


**12**

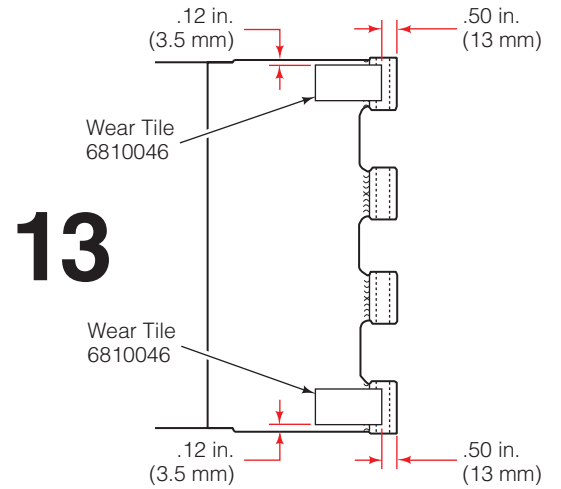
Weld Sequence



- 13** Position the wear tiles on the back of the short arm using the dimensions shown. Tack, then weld the wear tiles using the weld procedures described on the previous page, Step 12.



**22H, 24H**



**25H, 30H, 33H**

- 14** Remove slag after each weld and inspect for defects.  
**NOTE:** Arc craters, undercut, overlap and porosity are not permitted. Repair any defect as required.
- 15** Grind all welds to smooth transitions between parts.
- 16** Install contact pads by reversing Steps 1 through 4.