




Technical Bulletin

C, D & E-Series Roll Clamp Arm Tip Service Kit Installation Instructions

This sheet describes arm tip removal and installation procedures for C, D and E-Series Pivot Arm Roll Clamps. Service Repair Kits include replacement tips for one arm:

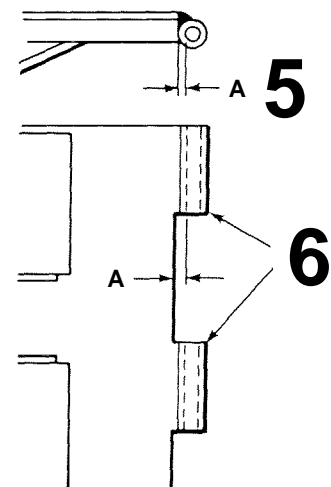
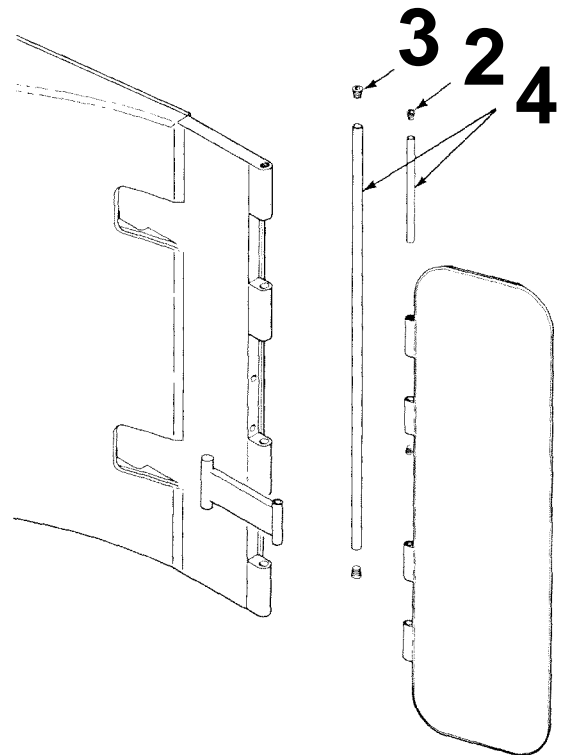
Model	Service Kit
25C/25D	209655
40C/40D	683068
55C/55D	683069
70C/70D/70E	683072
100C/100D	683073

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

- 1 Rotate the Roll Clamp to the vertical roll-handling position. Lower the unit until the contact pads just touch the ground. Do not place the full weight of the Roll Clamp on the contact pad.
- 2 Remove the plugs retaining the link pins.
- 3 Remove the plugs from the contact pad pivot points.
- 4 Remove the pivot pins.
- 5 Scribe a cut line using dimension **A**, back from the inner surface of the existing hole on both sides of the arm.

Model	Dimension A in. (mm)
25C/25D	.53 ± .03 (13.5 ± .7)
40C/40D	.19 ± .03 (4.8 ± .7)
55C/55D	.19 ± .03 (4.8 ± .7)
70C/70D/70E	.25 ± .03 (6.3 ± .7)
100C/100D	.35 ± .03 (8.9 ± .7)

- 6 Remove defective tip area entirely by grinding, sawing, torch or arc gouging. Remove any paint or contaminants from around repair area. If arc gouging is used, make sure all carbon particles are completely removed.



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

Part No. 685009 R-2



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, OH45505

- 7 Position the new tubes on the arm tips using the dimensions **B** and **C** as shown. Place a rod of dimension **F** diameter through the four tubes for alignment. All repairs should be done in the flat position.

Dimensions					
Model	B in. (mm) ^①	C in. (mm) ^②	D in. (mm) ^②	E in. (mm) ^②	F in. (mm) ^②
25C/25D	.12 (3.0)	24.2 (615)	2.75 (70)	4.13 (105)	.43 (11)
40C/40D	.12 (3.0)	28.2 (717)	3.25 (82.5)	4.30 (109)	.50 (13)
55C/55D	.20 (4.8)	32.0 (813)	3.25 (82.5)	4.30 (109)	.50 (13)
70C/70D/70E	.12 (3.0)	28.2 (717)	3.50 (89)	3.90 (99)	.62 (16)
100C/100D	.40 (10)	38.3 (973)	4.20 (107)	6.20 (157.5)	.69 (17.5)

① Tolerance = ± .03 in. (± 0.7 mm) ② Tolerance = ± .06 in. (± 1.6 mm)

- 8 Preheat the arm tip base metal to 70° F (21° C) minimum, and tack weld the new tubes to the tips. Use the recommended weld procedures listed below.

- 9 Install the contact pad and pins on the arm. Check the tube alignment and realign as required. Remove the contact pad and pins.

- 10 Finish-weld the tubes to the arm tips using the following weld procedures:

- Protect threaded end 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 the 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% CO₂ shielding gas at 35–50 CFH. Set welding amps per manufacturer's recommendations. Apply weld holding a close arc. Do not oscillate or use a wash bead pattern. Let welds normal air-cool.
- **WELD METHOD B – SMAW (Stick Welding).** Attach ground wire to arm. Weld using E-7018 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 electrodes 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. Let welds normal air-cool.

- 11 Remove slag after each weld and inspect for defects. **NOTE:** Arc craters, undercut, overlap and porosity are not permitted. Repair any weld defect as required.

- 12 Grind all welds to smooth transitions between parts.

- 13 Install the contact pad to the arm and check for free movement.

- 14 Install the pad links.

