

## Procedure 2004: Installation of Boss™ B49-2 Piggyback Clamps

effective 06/16

### Selection

- 1. Install the B49 clamp using Procedure 2002: Installation of Boss™ 6 Bolt Clamp (page 17).
- 2. Refer to Procedure 3000: Criteria for Sufficient Fit of a Boss™ Clamp (page 49).

### Preparation

- Install the B49 clamp using Procedure 2002: Installation of Boss™ 6 Bolt Clamp (page 17).

### Notes

- 1. Periodic bolt re-tightening is necessary due to "cold-flow" present in all rubber hoses.
- 2. Boss™ clamps (including nuts and bolts) are for a single use only! Once removed, discard. 
- 3. When installing stainless-steel bolts and nuts, the use of anti-seize or anti-galling lubricant is advised. A light coat is required on the bolt threads to prevent thread galling and artificial torque reading.
- 4. Torque values for brass and steel nuts and bolts are based upon "dry bolts." *Caution: Lubricant on bolts will adversely affect clamp performance.* 
- 5. After assembly of Boss™ clamps, Dixon® advises checking the torque setting daily for the first week, weekly for the first month and monthly thereafter.

### Process

- 1. Position the holes in each segment of the piggyback clamp over the pigtails of the B49 clamp just installed.
- 2. Tighten the bolts by hand until there is equal thread engagement on all six nuts and they are snug.  
*Tip: Use the socket to aid hand tightening process.*
- 3. Using a torque wrench, tighten bolts to the recommended torque value listed in the current DPL (Dixon® Product List). *Note: Torque values for steel nuts and bolts are based upon "dry bolts." Lubricant on bolts will adversely affect clamp performance.*   
Tighten nuts on bolts in the following sequence. See illustration below.
  - a. Turn bolt #1 one full turn.
  - b. Turn bolt #2 one full turn.
  - c. Turn bolt #3 one full turn.
  - d. Turn bolt #4 one full turn.
  - e. Turn bolt #5 one full turn.
  - f. Turn bolt #6 one full turn.
- g. Repeat 'a' to 'f' until all bolts are tightened to recommended torque.
- 4. Re-tighten bolts on B49 clamp, as per 'a' through 'g' above.
- 5. Re-tighten bolts on B49-2 piggyback clamp, as per 'a' through 'g' above.
- 6. Repeat until all 12 bolts are tightened to recommended torque. Clamp bolts are designed to bend during tightening. This 'bending' allows the clamp to conform to the hose circumference.
- 7. Inspect results using Procedure 3000: Criteria for Sufficient Fit of a Boss™ Clamp (page 49) and Procedure 3001: Bolt Clamp Inspection (pages 50-51).
- 8. Test the assembly using Procedure 4000: General Hydrostatic Testing Information (page 60) and Procedure 4001: Hydrostatic Testing (page 61).

