

Piston Rod Stud Assembly Instructions

WARNING

When related to hydraulic and pneumatic cylinders, the stud-to-piston rod and the stud-to-machine member threaded connections are critical. The stud unthreading itself from the cylinder's piston rod or unthreading itself from the machine members will cause the cylinder to become detached from the machine member and can cause serious injury or death to nearby personnel. For this reason the Cylinder Division prefers to assemble the stud to the piston rod. However, if you prefer to perform this assembly it must be done by strictly following all the procedures outlined in this bulletin.

Procedure:

STEP 1

All parts must be clean, free of oil and any old adhesives. Clean internal and external threads using a tap, die or wire brush.

STEP 2

Assemble parts to make sure components are properly fitted together. Then disassemble the components.

STEP 3

Thoroughly clean all threaded parts with a solvent such as Loctite 7070, LPS or any other solvent approved by Loctite making sure to remove all oil, water or grease. Allow solvents to evaporate until all components are dry. **DO NOT** dry parts by blowing components with shop air. This will only spray the components with water and oil found in the air line.

STEP 4

Using Loctite Grade 642 or 648, apply one strip of Loctite sealant about as wide as the wrench flats (or at least 1/2" wide on large rods which do not have wrench flats) to both internal and external threads (Figure 2).

STEP 5

Assemble mating parts as usual to full engagement. Back-off two (2) turns to distribute the Loctite sealant. Tighten mating parts as much as possible using a strap wrench, stud driver etc.

STEP 6

Wipe off excess Loctite sealant with a clean cloth and allow a minimum of 4 hours before any other operation is performed and 24 hours before using the equipment in its intended service.

As stated, the stud-to-machine member threaded connection is also very critical. Depending on the application it may be secured using pins, locknuts, etc. It can also be secured using anaerobic adhesive included in this kit by using the cleaning and assembly procedures described below.

Increasing temperature decreases the strength of anaerobic adhesives. Assemblies made using the adhesive included in this kit are not to be exposed to temperatures above +250°F (+120° C) even for short periods of time.

