

H0025 Overhaul of Compact S and Super S Series Hydraulic Cylinders Victor Hydraulics

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Overhaul of Compact S and Compact Super S Series Hydraulic Cylinders

- 1. It is essential that the piston is correctly tightened during assembly, or the cylinder will fail.
- 2. Cleanliness is critical. Wash all parts and ensure that all traces of solvent are removed.
- 3. Lightly coat all surfaces with oil. The head and tube contacting surfaces, including the surfaces behind the threads, should be lightly greased.
- 4. Nip the piston just past finger tight (say 5-10 Nm torque)

For Cap Screwed Models:

- 5. Scribe a line across the head of the cap screw and the rear face of the piston.
- 6. Tighten one quarter turn. An angle of 80 to 90 degrees should be formed between the line on the head of the cap screw and the line on the rear of the piston. (Yes, you will probably need an extension handle!)

For Blind Position Models:

7. The piston should be tightened to 800 to 1000 Nm. (Yes, this will need a good length of pipe!) For 6" x 3" and 8' x 4" Compact Extra:

Torquing Prodcedure:

- 8. Torque to 50 newton metres to establish an initial zero point.
- 9. Torque (by angle) 70 73 degrees (for 6" x 3") or 65 68 (for 8" x 4") degrees from the zero point.
- 10. Un-torque.
- 11. Torque to 50 newton metres to establish new zero point.
- 12. For 6" x 3" only, re-torque (by angle) 70 73 degrees from the new zero point.

Pressure Testing Procedure:

- 13. Cycle in and out to remove air.
- 14. Test at approximately 150 P.S.I for pressure drop and leaks.
- 15. Test at approximately 300 P.S.I for pressure drop and leaks.
- 16. Test on retract side with Stroke restricting spacer placed between the head and the eye at 4800 P.S.I.

Use Absolutely Clean Contaminant-Free Hydraulic Oil!

Complete seal kits, which include replacement cap screw, are available ex-stock from Steelbro NZ. Quote internal bore and shaft diameters when ordering.

The cap screwed piston design is the result of detailed research and stress analysis using advanced technology. The best fatigue life performance, and piston to shaft sealing, is obtained when the cap screw is correctly preloaded. A torque wrench is not adequate, as the preload produced on the threads will vary widely depending on lubricants or contaminants in the connection. Following these simple instructions will give the longest possible service life under arduous field conditions.