



OCTOPUS

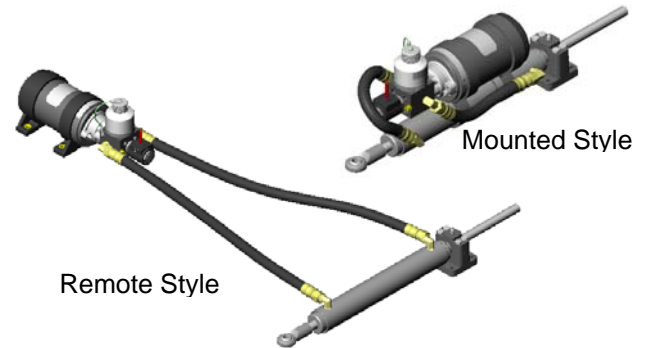
SERVICE PROCEDURE - SP009
REV NEW 04-FEB-2009



ASSEMBLY & PURGE PROCEDURE – LAM & LAR DRIVES

A. APPLICABLE MODELS

- i. Both styles of Octopus Hydraulic Linear Drives (38mm bore & 45mm bore)



B. REQUIRED PARTS:

- i. Cylinder Assembly with elbow fittings installed to approx final orientation (assumed to be empty – no oil inside).
- ii. Pumpset complete with # 8 Bypass Valve fitted and elbow fittings installed to approx final orientation (assumed to be empty – no oil in reservoir or inside the pump housing cavity).
- iii. 2 x Hose Assembly.
- iv. Medium sized funnel.
- v. Approx 500cc of hydraulic fluid (ATF recommended).
- vi. Open flat container for fluid – approx 150 x 150 x 75 (biscuit tin - method 'B' only).
- vii. Syringe or 'pumping' oil can (method 'B' only).

C. METHOD 'A' – PURGE COMPLETE DRY SYSTEM

C1. HOOK UP COMPONENTS & PREPARE TO PURGE

- i. Connect hose assemblies to cylinder and bypass valve. Set orientation to suit final requirement - torque hose fitting nuts to 80-85 in lbs.
- ii. Anchor trunion base of cylinder assembly with clamp or in vice. Orientate cylinder ports uppermost.
- iii. Supply dc power to coil on bypass valve. (12v or 24v as required).
- iv. Remove screw cap off bypass valve reservoir and insert funnel neck. Ensure that funnel neck seals on edge of reservoir fill port. (Rubber collar on funnel neck may be required).
- v. Fill funnel with fluid.
- vi. Crack 2 x brass bleed screws on front of bypass valve body – open 2 full turns.

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C2. PURGE CYLINDER ASSEMBLY

- i. Manually – slowly push/pull cylinder rod to extents of stroke – alternately elevate port on exhaust side to approx 30 degrees while forcing fluid out.
- ii. Maintain a minimum of fluid in funnel while repeating i. above until sign of bubbles in bypass reservoir disappears and sound of air in cylinder disappears.
- iii. Tighten 2 x brass bleed screws.
- iv. Remove power from coil on bypass valve.

C3. PURGE PUMPSET

- i. Elevate pumpset & bypass valve to approx 45 degrees with reservoir high.
- ii. Leave for 30-40 minutes.
- iii. Top up reservoir.

**D. METHOD 'B' – PRE- PURGE DRY SUB ASSEMBLIES BEFORE FINAL SYSTEM PURGE.
(More suitable for LAR style)**

D1. PARTIAL HOOK UP COMPONENTS & PREPARE TO PRE-PURGE

- i. Connect hose assemblies to cylinder. Set orientation to suit final requirement - torque hose fitting nuts to 80-85 in lbs.
- ii. Fill flat container with hydraulic fluid.
- iii. Anchor trunion base of cylinder assembly with clamp or in vice. Orientate cylinder ports uppermost.
- iv. Remove bypass valve assembly from front of pump.

D2. PRE-PURGE CYLINDER & HOSE ASSEMBLY

- i. Submerge open end of 2 x hoses in hydraulic fluid in flat container. Maintain ends below fluid surface.
- ii. Manually – slowly push/pull cylinder rod to extents of stroke – alternately elevate port on exhaust side to approx 30 degrees while forcing fluid out.
- iii. Maintain a minimum of fluid in flat container while repeating ii. above until sign of bubbles in flat container disappears and sound of air in cylinder disappears.
- iv. Remove hose ends from fluid – temporary set hose ends vertically and above cylinder ports (minimize fluid leakage).

SERVICE PROCEDURE - SP007 (continued)
OC17SUK01 & OC17SUK02 – VALVE KIT INSTALLATION – # 8 BYPASS VALVE

D3. PRE-PURGE PUMP ASSEMBLY

- i. Orientate pump to approx 45 degrees from horizontal with pump head uppermost.
- ii. Using syringe or oil can – inject oil into pump body cavity through open port on front of casting.
- iii. Re-assemble bypass valve assembly. (ensure that 3 'O' rings are in place).
- iv. Partly fill valve reservoir with fluid and rotate pump back to horizontal.
- v. Fill valve reservoir.

D4. HOOK UP COMPONENTS & PREPARE FINAL SYSTEM PURGE

- i. Connect hose assemblies to bypass valve. Set orientation to suit final requirement - torque hose fitting nuts to 80-85 in lbs.
- ii. Supply dc power to coil on bypass valve. (12v or 24v as required).
- iii. Crack 2 x brass bleed screws on front of bypass valve body – open 2 full turns.

D5. FINAL SYSTEM PURGE

- i. Manually – slowly push/pull cylinder rod approx 50-60mm.
- ii. Maintain a minimum of fluid in bypass reservoir while repeating i. above until sign of bubbles in bypass reservoir disappears.
- iii. Tighten 2 x brass bleed screws.
- iv. Remove power from coil on bypass valve.