

**Parts Diagram for Morse Kit # 96REFIT-P Hydraulic Refit Kit**

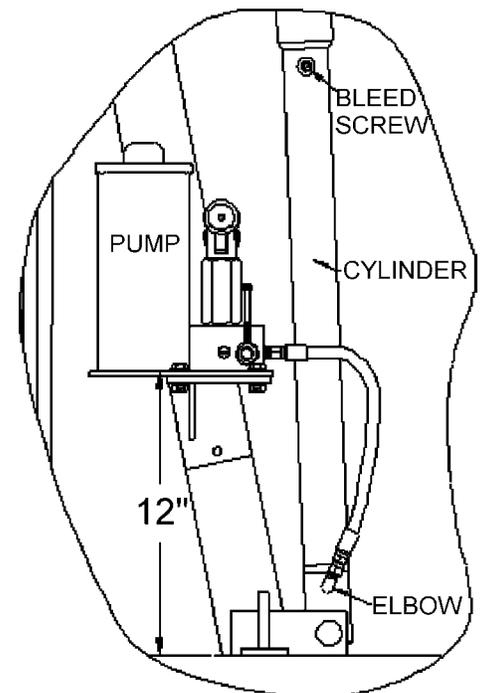
to replace the obsolete hydraulic equipment (pre 08/1985) on manual-lift 400 Series drum handlers with current Star Hand Pump and Hydraulic Cylinder

**Assembly Instructions**

1. Fasten pump mount bracket (item 25) to mast, 12" above top of leg (see figure 1). Ensure that the pump mount plate is horizontal. Bolt bracket (item 25) onto mast using the four bolts (item 21), four washers (item 20), and four lock nuts (item 24).
2. Fasten hydraulic pump (item 26) to pump mount bracket (item 25) using the four bolts (item 19), eight washers (item 20), and four nuts (item 23).

**3. Replacing the Hydraulic cylinder**

- First: Lower the overhead assembly until the cylinder (item 16) is fully retracted.
  - Support the overhead assembly to release the forces on the cylinder.
  - While holding the cylinder, remove the top clevis pin and gently swing cylinder down to rest on the floor.
  - Remove the bottom clevis pin and remove the cylinder.
  - Insert the bottom of the new cylinder into the bottom clevis plates with the tapped port facing toward the hydraulic pump.
  - Insert the clevis pin, and secure with washer and 3/16" roll pin.
  - Swing the cylinder up to the top clevis plates and secure with clevis pin, five washers and 3/16" roll pin.
4. Screw elbow (item 15) into port near bottom of cylinder (hydraulic grade thread sealer is recommended). Tighten elbow until the fitting is oriented at a 45° angle from vertical (see Figure 1).
  5. Screw fixed end of hose (item 27) into pump port (hydraulic grade thread sealer is recommended).
  6. Connect swivel fitting end of hose to elbow on hydraulic cylinder. Use a second wrench to prevent hose from twisting.



**FIGURE 1**

**Do NOT pump the hydraulic pump until the following steps are completed.**

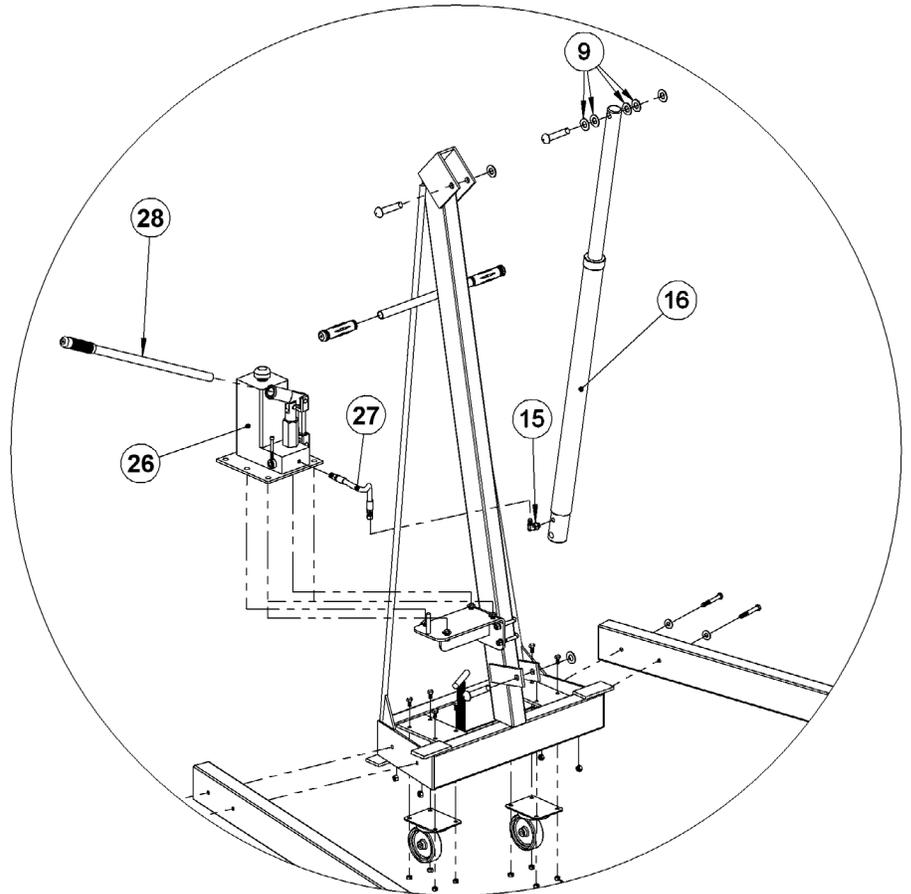
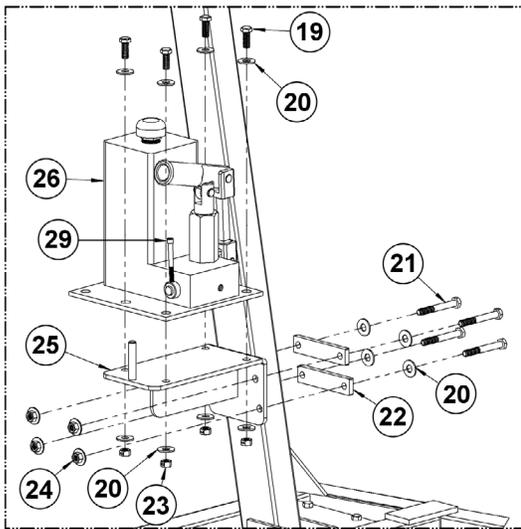
7. Remove the red, square-shaped plastic breather port cap from the top of the hydraulic pump.
8. Thread the black breather screw provided, by hand, into the port.
9. **Bleeding air from cylinder**
  - Open release valve (item 29) at base of hydraulic pump to ensure that there is no pressure in the system.
  - Locate the cylinder bleed screw near the top of cylinder (3/16" socket set screw). Loosen the screw 1/2 turn.
  - While holding the wrench on the cylinder bleed screw, slowly pump the hydraulic pump until hydraulic fluid seeps from the bleed port, then immediately tighten the screw.

**Do NOT operate the hydraulic pump, under load, with the bleed screw loosened.**

- Unit is ready for service.

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ITEM	QTY.	PART #	DESCRIPTION
9	4	17-P	WASHER, 5/8 SAE FL 1-5/16 OD
15	1	3610-P	HYD FIT, MALE ELBOW, SAE
16	1	783K-P	CYLINDER, 1.5 X 22.625 SAE KFP
19	4	1572-P	HHCS, 3/8-16 X 1 GR2 ZINC
20	12	1166-P	WASHER, 3/8 USS 1" OD, ZINC
21	4	1521-P	HHCS, 3/8-16 X 3 GR5
22	2	5848-P	BACK BRACKET, PUMP MOUNT, 400
23	4	3981-P	NUT, 3/8-16 NYLON LOCK
24	4	4002-P	NUT, 3/8-16 WHIZ LOCK
25	1	3642-P	MOUNT PLATE, MANUAL PUMP
26	1	96MK1939-P	PUMP, HYD, HAND STAR
27	1	766-P	HYD HOSE ASM, 12"
28	1	96CP13-23	HANDLE, LEVER W/ GRIP, STAR