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Form No. 102534

Operating Instructions for:

100112

MODEL C
SWING CLAMP

Max. Capacity: 2850 lbs. Clamping Force (with 2" lg. arm) at 5,000 PSI

SAFETY PRECAUTIONS

⚠ WARNING

Hydraulic Hose Attachment

To help avoid personal injury:

- **All hose connections must be tight before applying hydraulic pressure. Use the proper tools to tighten connections**
- **Do not overtighten the hose connections. Connections should only be tightened securely and leak-free. Overtightening can cause premature thread failure or high pressure fittings to split at pressures lower than their rated capacity.**
- **Avoid any conditions that could damage the hose and impair the pump's performance. Never allow the hose to kink, twist, curl or bend so tightly that the oil flow within the hose is blocked or reduced. This could damage the hose and possibly result in serious injury to persons working in the immediate vicinity.**

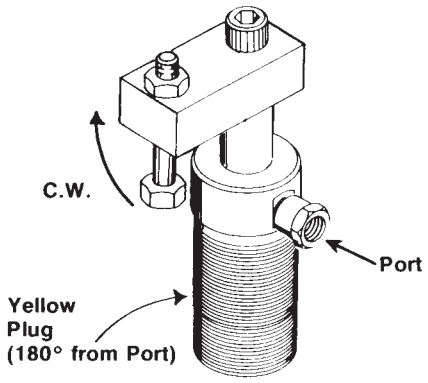

FIGURE 1

- **Do not subject the hose to potential hazard such as fire, heavy impact, sharp surfaces, or extreme heat or cold, because any of these conditions can damage the hose and result in personal injury.**
- **Periodically inspect the hose for signs of wear. Never use a defective hose with any pressurized equipment.**
- **Always consult the manufacturer before painting the hose(s). Never paint the couplers.**
- **Avoid contact with creosote-impregnated timber or fabrics.**

Swing Clamp

To help avoid personal injury:

- **Do not exceed the rated capacity of the swing clamp.**

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SWING CLAMP OPERATION

The swing clamp arm is adjustable to any position in a 360° circle. Once positioned, it will swing 90° in either direction. All units are assembled at the factory for a right-hand swing (CW rotation). When the swing is completed, 1/2" of downward clamping travel is provided.

1. If required, a clamping bolt (3/8-16 UNC-2A X desired length) can be assembled to the top of the swing clamp arm. See Figure 1.

IMPORTANT:
To help prevent equipment damage:

- **Do not remove or attempt to adjust the set screw sealed into the wall of the threaded body. Any tampering with this screw voids warranty on this product.**
- **Do not restrict the arm swing.**
- **The clamping of the workpiece must be completed within the final 1/2" of the vertical stroke.**
- **There must be clearance between the arm and the cylinder when this unit is in the clamped position to ensure that full force is applied to the workpiece.**
- **Seal all external pipe connections with a high quality, nonhardening pipe sealant. Teflon tape can also be used to seal hydraulic connections, if only one layer of tape is used. Apply the tape carefully to prevent it from being pinched by the coupler and broken off inside the system. Loose pieces of tape could travel through the system and obstruct the flow of oil or cause jamming of precision-fit parts.**
- **Do not align any screw with the yellow plugs in the threaded area. The screw can push the yellow plugs through the cylinder wall and prevent rod movement.**
- **Do not overtighten any set screw or clamp at the base of the cylinder. It could deform the cylinder and cause the rod to bind.**
- **Always provide venting in a fixture near or below the base of the clamp. For example: Vent a blind hole in the fixture to provide proper return of the clamp.**

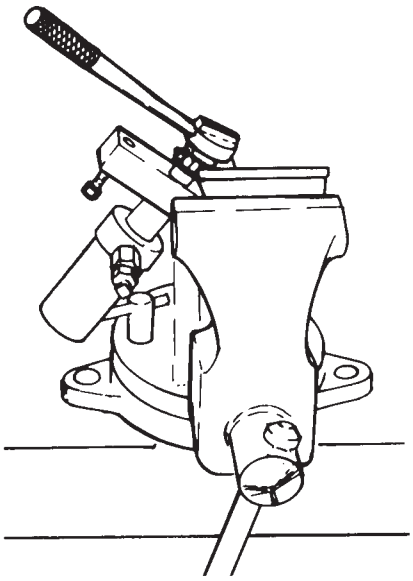

FIGURE 2

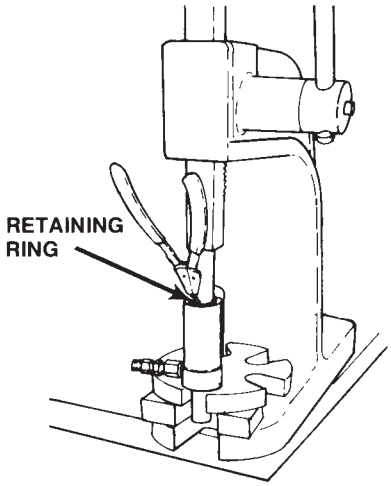

FIGURE 3

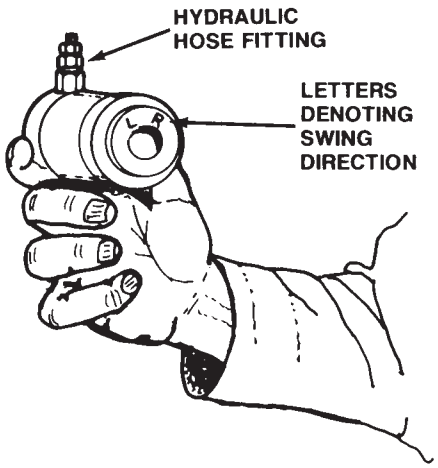

FIGURE 4

Changing the Position of the Swing Clamp Arm

1. Place the arm of the swing clamp in a vise, and loosen the cap screw located on top of the arm. See Figure 2.

2. Adjust the position of the swing clamp arm as desired. Place the arm in the vise again, and torque the cap screw to 100 ft. lbs.

IMPORTANT:
To help prevent equipment damage:

- **Do not place the cylinder in a vise.**
- **Do not apply torque to the rod when loosening or torquing the cap screw located on top of the arm.**
- **The arm must be torqued before the unit is placed in operation.**
- **Do not remove or attempt to adjust the set screw sealed into the wall of the threaded body. Any tampering with this screw voids warranty on this product.**

Changing the Direction of the Swing Clamp Arm

WARNING

- **Spring tension exerts high pressure against the bottom cap of the cylinder. To avoid possible personal injury, SLOWLY release spring tension with an arbor press.**

Refer to Parts List #100649 for the correct assembly order.

1. Place the arm of the swing clamp in a vise, and loosen the cap screw located on top of the arm. Remove the arm of the swing clamp. See Figure 2.

2. Place the cylinder in an arbor press, and remove the retaining ring from the bottom of the cylinder. See Figure 3.

3. Remove the bottom cap, thrust bearing, washers and the internal springs from the cylinder.

4. Push the rod back into the body until the guide ball disengages from the guide path. Do not remove the rod from the cylinder. **IMPORTANT: Do not use a hammer to jar the rod loose, and do not damage the rod. Do not remove or attempt to adjust the set screw sealed into the wall of the threaded body. Any tampering with this screw voids warranty on this product.**

5. View the cylinder from the bottom, and align the letter (marking the direction of swing) with the hydraulic hose fitting. See Figure 4.

6. Turn the rod slightly left and right while pushing it into the cylinder body until the ball inside engages the rod guide path. Push the rod completely up into the cylinder body and reassemble.

7. Assemble the swing clamp arm onto the rod, and adjust as necessary. Place the arm in the vise again, and torque the cap screw to 100 ft. lbs.