

Hydraulic Technologies
5885 11th Street
Rockford, IL 61109-3699 USA

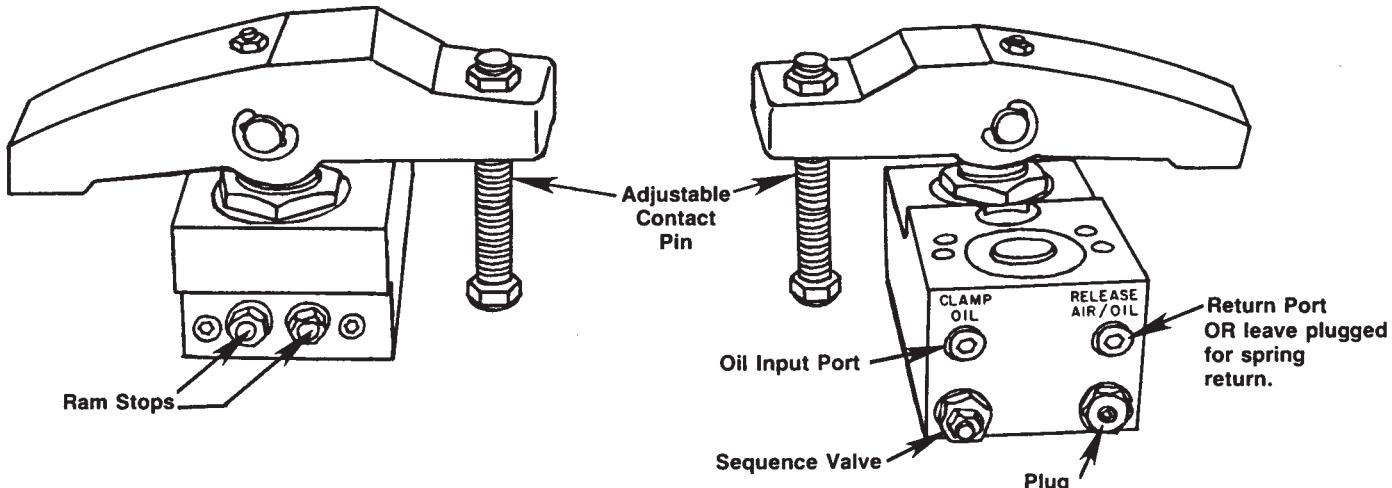
Tech. Services: (800) 477-8326
Fax: (800) 765-8326
Order Entry: (800) 541-1418
Fax: (800) 288-7031

Internet Address:
<http://www.powerteam.com>

Operating Instructions for:

| | |
|--------|--------|
| 100106 | 110101 |
| 100107 | 110102 |
| 100108 | 110103 |
| 100109 | 110104 |
| 100110 | 110105 |
| 100111 | 110106 |

MODEL B
SWING CLAMP
Air/Spring Return



SWING CLAMP, RIGHT HAND

GENERAL INFORMATION

Twelve swing clamps are available; six with right hand swing and six with left hand swing. The clamp force ranges from 1610 lbs. to 8295 lbs. based on 3500 PSI maximum operating pressure. All clamps are spring return, however, air or oil may be used to provide power return for the clamping arm.

IMPORTANT:

All adjustments are made at the factory when the swing clamp is in new condition. If changes are required, it may be a symptom of a problem, and the swing clamp should be taken to a qualified hydraulic technician, an authorized Power Team hydraulic service center or sent to:

Hydraulic Technologies Power Team
2121 W. Bridge Street Owatonna,
Minnesota 55060 Attn: Service
Repair Dept.

NOTE:

- Inspect the unit upon arrival.
- Read carefully and follow these instructions. Most problems with new equipment are caused by improper operation or installation.

SAFETY PRECAUTIONS



WARNING:

- All WARNING statements must be carefully observed to prevent damage to equipment.

Swing Clamp

- Do not exceed the rated capacity of the swing clamp.
- Do not restrict the arm swing.

Sheet No. 1 of 1

Rev. 2 Date: 15 May 1998

Note: Shaded areas reflect last revision(s) made to this form.

SAFETY PRECAUTIONS (CONT'D)



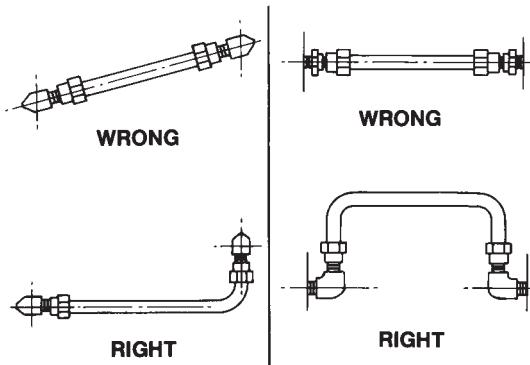
WARNING:

Hydraulic Hose Attachment

- Before applying hydraulic pressure, all connections must be tightened using the proper tools to tighten connections.
- Do not overtighten the connections. Connections need only be tightened securely and leak-free. Overtightening may cause premature thread failure, or high pressure fittings to split at pressures lower than their rated capacity.
- Avoid any conditions which 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.
- Do not subject the hose to any potential hazard (ex: fire, extreme heat or cold, heavy impact or sharp surfaces) which may cause ruptures or weaken the hose.
- 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.

Tubing Attachment

- Avoid straight line tubing connections in short runs. This does not provide expansion and contraction due to temperature changes.
- Care should be taken to eliminate stress from tube lines. Long tubing runs should be supported by brackets or clips. Tubes through bulk heads should have bulk head fittings. This makes easy removal possible, as well as helping to support the tubing.



SWING CLAMP OPERATION

The swing clamp bolts easily to a work station. The swing clam arm will move 90 degrees in either a left hand or right hand movement, depending on the model number.

Operating the swing clamp to maximum pressure several times should bleed any air from the system.

The adjustable contact pin allows fast adjustments for the most secure clamping possible. It also enables the operator to work several pieces without changing the fixture each time.

The clamping process will begin only after the arm has completed its swing.

IMPORTANT:

- Do not restrict the arm swing.
- Seal all external pipe connections with a high quality, non-hardening thread sealant. Teflon tape may also be used to seal hydraulic connections, provided only one layer of tape is used. Apply the tape carefully, two threads back, to prevent it from being pinched by the coupler and broken off inside the system. Any loose pieces of tape could travel through the system and obstruct the flow of oil or cause jamming of precision-fit parts.
- For longest clamp life, adjust the contact pin so the arm is contacted by the center of the clamping cylinder piston when the workpiece is clamped. See illustration at left.

