



SAWYER MFG. COMPANY

1031 NORTH COLUMBIA PLACE
TULSA, OKLAHOMA 74110

PHONE (918) 834-2550
FAX (918) 834-0312

Internal Line Up Clamp
Hydraulic Model 245

Manufacturers of Pipeline Equipment

Operating and Maintenance Instructions
Type 245 Manual Hydraulic Internal Pipe Line Up Clamp

Preperation -

Clamp - All standard 245 clamps are shipped greased, full of hydraulic oil and ready for use.

Reach rod, Hook and Crank - The reach rod should be assembled at the job site. There are seven, seven foot sections, six of which have round solid stubs welded in one end, the seventh has a 1" x 1" square welded to one end - this is for the crank. Starting with the section with the square end, insert the stub from the next section into the open end and weld. Connect all seven sections and finally insert the stub end of the hook into the open end of the last section and weld. It is not necessary to weld the crank assembly to the reach rod assembly.

Operation -

The clamp is placed in the pipe, at the first joint to be welded, with the head ring facing out. Push the clamp into the pipe until the latches catch. Now thread the reach rod through the next joint of pipe and attach the hook to the eye on the hydraulic screw pump. Position the pipe over the clamp and turn the crank clockwise until the clamp contacts the pipe then align pipe and space joints according to job specifications. Turn crank until clamp is at desired tightness, weld joint. To release clamp, just turn crank handle to left (counter clockwise) until clamp is free. Use reach rod to pull clamp to next joint, when the latches catch, release the reach rod hook and repeat the above procedure.

Note: When ever lifting the clamp, be sure to use the lifting bail located behind the head ring. Failure to do this will result in problems with the clamp.

Maintenance -

This clamp is ready to work when you receive it, the hydraulic system is a closed circuit and should not require any additional oil unless there is damage to the system. If it should become necessary to refill the hydraulic system the following steps should be followed:

1. Place clamp on level surface.
2. Remove plug from top of filler/bleeder block
3. Screw hose fitting into where plug was.
4. Place other end of hose in clean container, fill with clean SAE 10 wt. hydraulic grade oil. Do not use any type hydraulic brake fluid.
5. Crank clamp up and down fully two or three times. Be sure the end of the hose in the oil container stays below the surface - if not, the system will draw air.
6. Remove hose and replace plug - clamp is ready.

cont:

Lubrication -

Grease toggle assemblies and swivel pins, as noted on parts list - 6 places, with good grade lithium grease, every morning.

All wheels have sealed bearings and should not require additional lubrication.

All products of Sawyer Mfg. Co. are subject to constant innovation and improvements, so changes in manufacture and price will be made without notice or obligation.

The following parts should be greased daily:

1. #3 Pump
2. #8 Hinge
3. #12 Toggle assy.

Oils & Lubricants:

Oil - Good Grade SAE 10 wt. hydraulic oil, Do Not Use Hydraulic Brake Fluid

Lubricant - Good grade chassis lube.

Sawyer Mfg. Co.
Model 245 Manual Hydraulic Line Up Clamp

Heavy duty steel construction.

Clamping ring contacts both pieces of pipe on each side of the weld joint leaving an unobstructed gap under the weld joint.

Manual Hydraulic screw type pump.

Hydraulic cylinder actuates toggle action to expand clamp head - multiply's clamping pressure.

Clamp is pulled through the pipe, positioned, actuated and deactuated by the reach rod, hook & crank assy.

Clamp moves through the pipe on ball bearing wheels.

Maximum hydraulic pressure is 2500 psi. Actual pressure exerted by the hydraulic cylinder is @ 12,250 lbs. which can be multiplied through the toggle action by @ 10 times which would possibly put as much as 122,500 lbs. pressure on the pipe joint.

Clamp is self contained

Clamp is low maintenance.

Clamp head assy is machined to pipe I.D. for true and accurate fit.

Options:

1. Polyurethane wheels are available.
2. Copper or Stainless Steel back up and trim are available.
3. Gas purging is available with copper or stainless steel back up.
4. The standard 49 ft. long reach rod comes in 7ft long sections may be added to or subtracted.



SAWYER MFG. COMPANY

1031 NORTH COLUMBIA PLACE
TULSA, OKLAHOMA 74110

PHONE (918) 834-2550
FAX (918) 834-0318

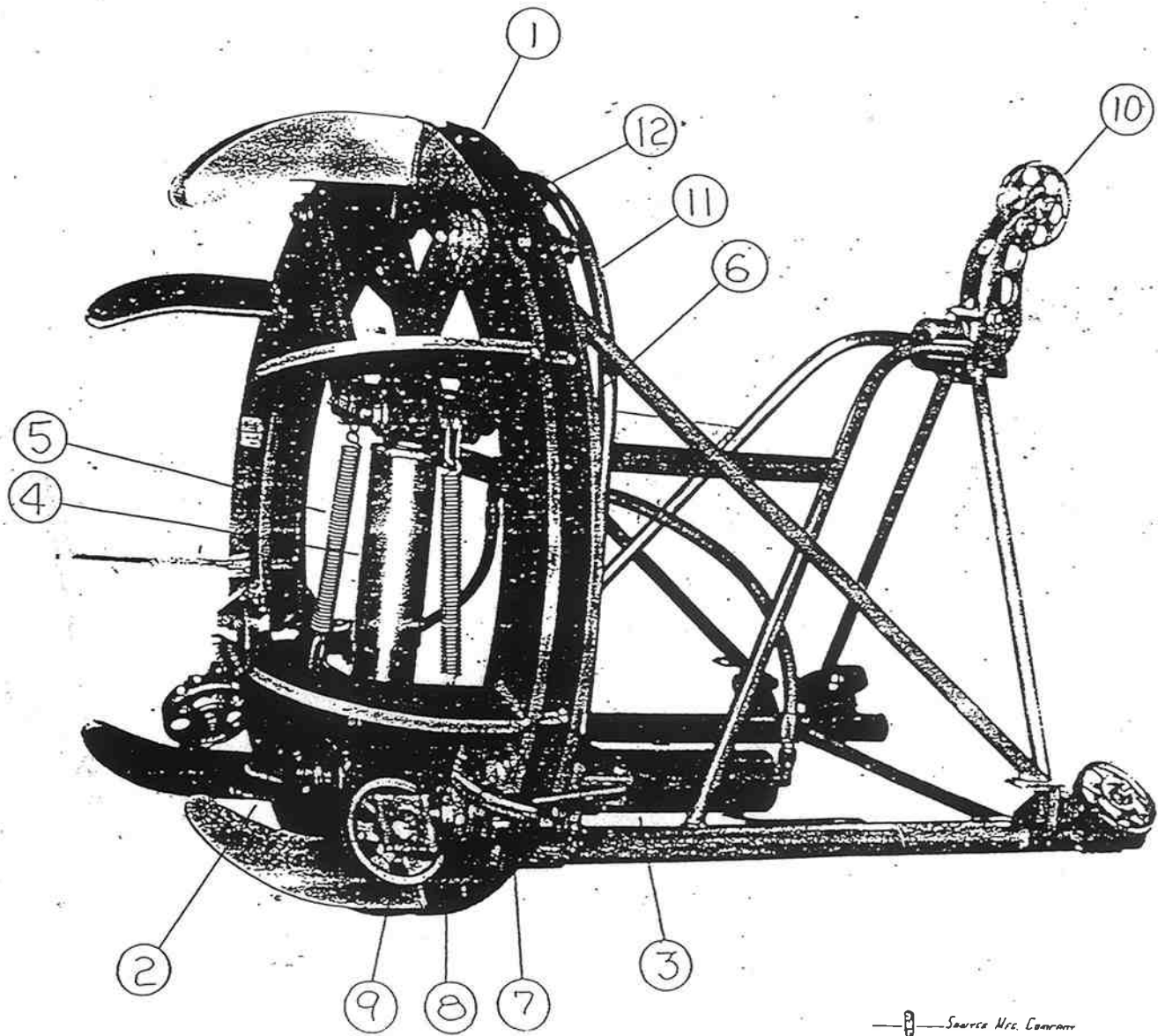
Sawyer Mfg. Co. Model 245 Manual Hydraulic Internal Line-Up Clamp

When requesting information or ordering parts always include size of clamp and serial number.

Parts List

No.	Description	Part No.	Amt.
1.	Head Ring Assembly		1
2.	Crank Eye - Pump	59A	1
3.	Pump		1
4.	Hydraulic Cylinder		1
5.	Spring - Cylinder return		2
6.	Distribution/Filler Block (ns)		1
7.	Latch Assembly	4-D-1	2
8.	Hinge		2
9.	Wheel Assembly	64A-1	4
10.	Tailwheel Assembly		1
11.	Lifting Bail		1
12.	Toggle Assembly	67-A	1
13.	Reach Rod Hook Assembly (ns)	58C-1	1
14.	Crank Assembly (ns)	31E-1	1
15.	Hose - Cylinder		1
16.	Hose - Pump		1

Manufacturers of Pipeline Equipment





SAWYER MFG. COMPANY

1031 NORTH COLUMBIA PLACE
TULSA, OKLAHOMA 74110

PHONE (918) 834-2550
FAX (918) 834-0318

PRODUCT WARRANTY

All products manufactured by or for Sawyer Mfg. Co. are guaranteed against defects due to faulty workmanship or materials for twelve months from date of purchase.

This guarantee is limited to the repair or replacement of any parts found to be defective, and no other liability, expressed, implied or contingent is assumed.

Sawyer Mfg. Co.
1031 N Columbia Place
Tulsa, Okla 74110


Thomas G. Sawyer - President