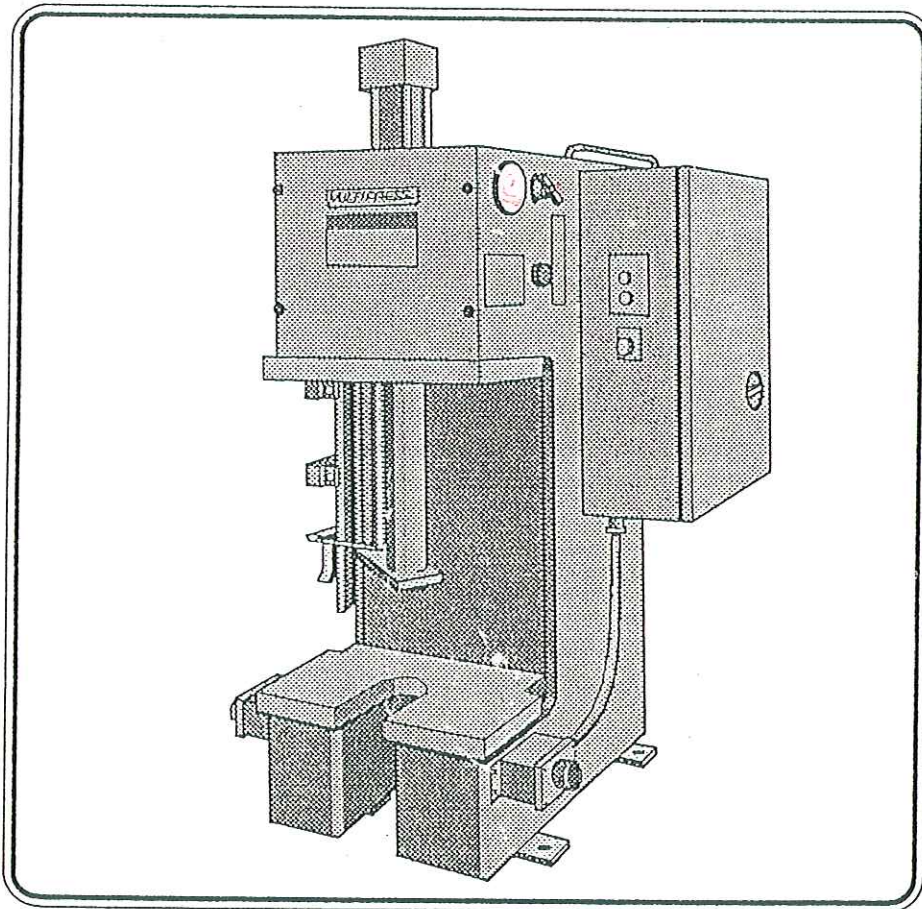


BULLETIN SM-MP681216-94

# MULTIPRESS®

HYDRAULIC EQUIPMENT

operation instructions  
and service manual



MODEL MP 6, 8, 12 & 16 TON

**MULTIPRESS®**

QPI Multipress Corp.  
A Subsidiary of Quality Products, Inc.

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Columbus, Ohio 43215

# INTRODUCTION

## SERVICE POLICY

The simplicity of *MULTIPRESS*® Equipment, the unitized construction of its major components and observance of the instructions in this manual assure ease of servicing by the user.

All field service requested by the user and rendered by our factory representatives will be charged at the established rate per day, plus expenses. *MULTIPRESS*® Equipment may be sent to our factory for inspection and service upon receipt of purchase order for such service.

Electric current characteristics required by the user to be specified at time of order.

## *MULTIPRESS*® EQUIPMENT WARRANTY

If any *MULTIPRESS*® Equipment part of our manufacture which, after prepaid shipment to our factory and upon inspection at our factory or by a qualified factory representative, is proven defective in workmanship or material, it will be replaced free of charge providing that, within a period of six months from date of shipment from our factory it is still owned by the original purchaser and being used in recommended service and using an oil meeting our recommended specifications.

Parts other than of our manufacture bear only such warranties as their manufacturers allow. When upon inspection by a qualified representative, it is indicated that these parts are defective, we will endeavor to secure from the manufacturer the benefits of such warranties for our customers. Please refer to *MULTIPRESS*® standard terms of sale for additional information.

# SEQUENCE OF OPERATION

## STARTING THE PUMP & MOTOR

**IMPORTANT:** Prior to start-up, start and stop the electric motor in order to check for proper rotation. There are arrows clearly marked on the \*pump indicating the correct rotation. If this is incorrect, check the wiring to the motor leads. Lower the setting of the relief valve by loosening lock nut and then turning knob counterclockwise until loose but not removed. (See PRESSURE ADJUSTMENT plate on right side of press.)

### \*\* CAUTION \*\*

If the motor is permitted to operate in the wrong direction of rotation, the pump will be damaged after only a few seconds, due to lack of oil to lubricate its precision machined internal parts. When the oil in the reservoir is at the proper level and the pump is operating in the correct direction of rotation, the pump will prime itself and provide adequate lubrication.

### \*\* CAUTION \*\*

If the press has been shipped to you with the press ram extended, it is necessary to put the selector switch in the "jog up" position and then actuate the pushbuttons. The ram should go up, if the motor and pump are operating in the correct direction of rotation.

**NOTE:** Ram may not retract if Relief Valve has been backed off too far.

When it is determined that the pump and motor are operating in the correct direction, with the power on, actuate the "START" switch. This allows the electric motor to start and energizes the control circuit. Allow the motor to run a few minutes to remove air from the hydraulic system. Check pipe and hose lines for any loosening which may have developed since leaving the factory.

## INCHING

Set the selector switch to "JOG DOWN". Simultaneously actuate and maintain actuation of the dual pushbuttons to the desired position of the press ram. Release of either button allows the ram to stop. Set the selector switch to "JOG UP". Actuation of the dual pushbuttons allows the ram to move up.

**NOTE:** Limit switch must be actuated at top of stroke before switching to cycle mode; if this switch is not made, unit will not cycle.

## SET-UP

Jog the press ram to your desired lower stop position, allowing the ram to exert full pressure against a part or block.

**NOTE:** Set up tooling before setting pressure on ram.

Adjust pressure by loosening the Gauge Shut-off Valve and turn the Ram Pressure Adjustment Knob on the front of the press. Clockwise increases pressure, counterclockwise decreases pressure. Set the selector switch and jog the ram up just off the work. Set the Quality Control Limit Switch to that point. This adjustment allows you to select where the automatic system takes over to approach the work, achieve tonnage and time reverse. Jog the ram to your required upper stop position. Set the Stroke Adjustment Limit Switch at that position. After setting Ram Pressure, close your gauge needle valve to avoid damage to gauge.

**NOTE:** Ram must contact a set-up block, or work piece to deliver force, so pressure gauge can be read.

## CYCLING

Simultaneously actuate and maintain actuation of both Cycle Start buttons. Ram extends and the ram guide bar inside the frame rolls off of the Quality Control Limit Switch (at this time you may release the dual pushbuttons). Release of either button allows the ram to retract to its upper stop position, if the Quality Control Limit Switch has not been released by the ram guide bar. \*\*The timer also starts after this limit switch is released. Ram continues down, contacts the work, achieves pressure and time reverses. Ram returns to the pre-set upper stop position.

**NOTE:** If Quality Control Limit Switch is set too high, and a long work stroke is required, the timer may have to be adjusted.

\* MP press pump is submerged -- user cannot see the arrow on the pump.

\*\* Optional pressure switch also starts timer, if Quality Control Limit Switch is set lower than point of operation.

## ROUTINE (DAILY) MAINTENANCE & INSPECTION

Before operating *MULTIPRESS®* Equipment, each operator should make the inspection checks indicated in the chart on page 4. These checks should be made after each shift change.

In addition, the following inspection checks should be made by each operator before operating Equipment after any break time:

1. Make sure that each Equipment component is in the proper condition and position for start-up, and be aware of any movement which will occur during start-up procedure.
2. Check for loose items foreign to the operation or function of the machine, which might cause damage or injury, and clear such items from the equipment before start-up.
3. Check for oil leaks.
4. Connect electric power to starter box, and then actuate MOTOR START pushbutton. With the motor running and driving the hydraulic pump, make the following inspection checks:
  - a. Check for oil leaks
  - b. Make sure that each Equipment component is in the proper position to start cycling.
  - c. Make sure that press operates in manner prescribed in sequence of operation.

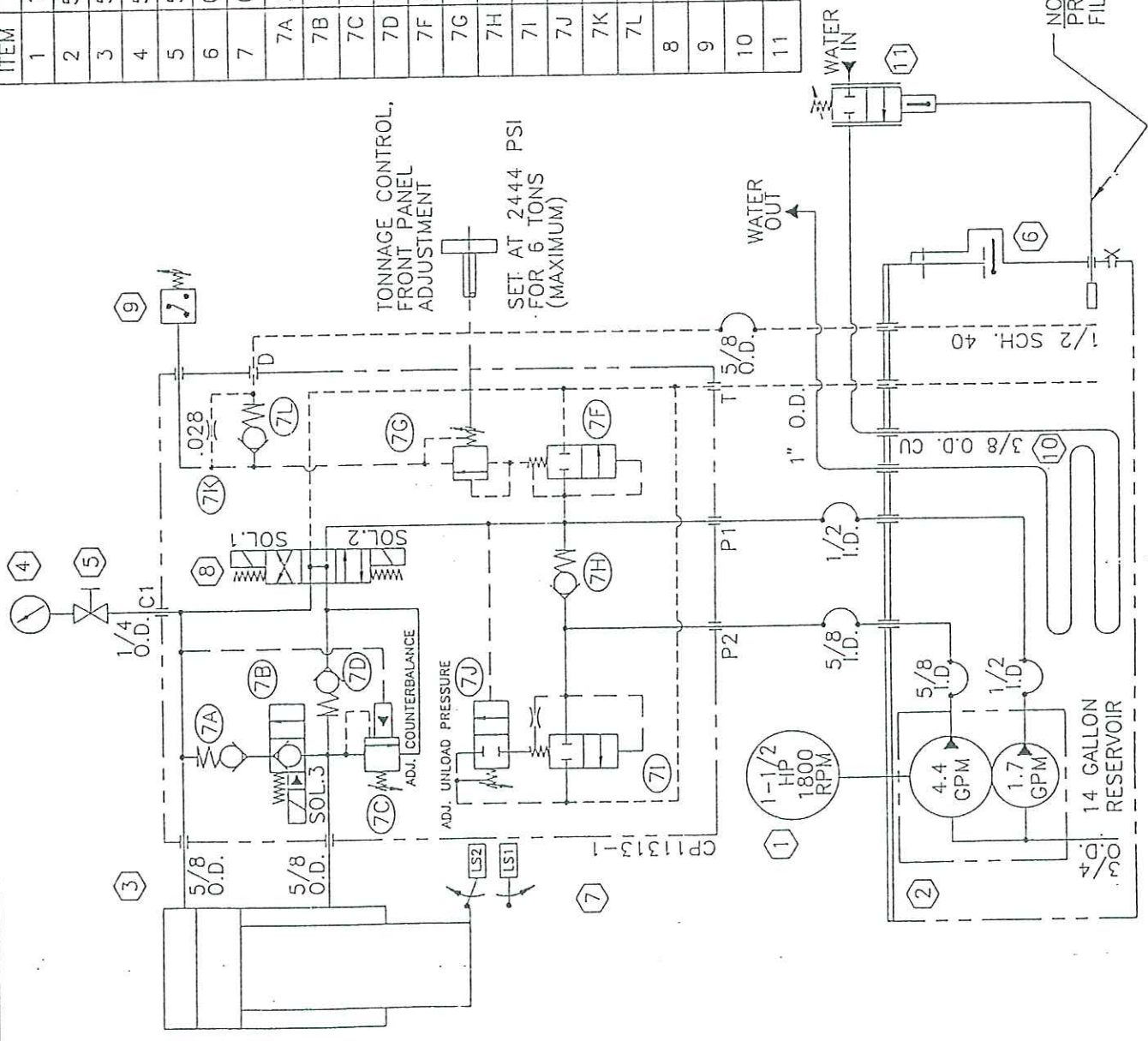
### SAMPLE ROUTINE LOG

If any check points are found to be malfunctioning, or could lead to a malfunction, a written report should be made, indicating the problem, and what was done to correct it, and then made a part of the history of this Equipment.

#### MALFUNCTION CHECK POINTS

Time of isp.	Oper. Press. (PSI)	Total No. of Cycles	Oil Leaks	Oil Level	Oil Temp.	Hyd. Comp.'s	Elec. Comp.'s	Mech. Comp.'s	REMARKS

*TOP RESERVOIR GASKET P.S. 1"*



ITEM	CODE NO.	QTY.	DESCRIPTION
1	158-00067	1	MOTOR - 1-1/2 HP, 1800 RPM, 145 TC
2	512-42211	1	PUMP - BARNES .581/.226 CIR. DISPL.
3	507-00093	1	HYD. CYL. - 2-1/2 BORE, 1-3/4 ROD
4	501-99660	1	PRESSURE GAUGE, 2-1/2 DIAL, 3000 PSI
5	514-01504	1	NEEDLE VALVE, 1/4", PANEL MOUNT
6	010-11889	1	SIGHT GAUGE W/THERMOMETER
7	000-00856	1	MANIFOLD ASSEMBLY CONSISTING OF:
7A	513-50217	1	CHECK CCI-CP101-1-B-0-015
7B	513-50210	1	SOL. VAL. CCI-CP501-1-B-0-120A-H
7C	513-50209	1	RELIEF CCI-CP200-1-B-0-E-C-240
7D	513-50211	1	CHECK CCI-CP100-3-B-0-015
7E	513-50206	1	DIFF. CONTR. CCI-CP700-2L-B-0-040
7F	513-50207	1	RELIEF CCI-CP200-3B-0E-C-210
7G	513-50211	1	CHECK CCI-CP100-3-B-0-015
7H	513-50208	1	DIFF. CONTR. CCI-CP700-2L-B-0-080
7J	513-50205	1	SEQ. VAL. CCI-CP240-2B-0-E-C-60
7K	229-10150	1	ORIFICE PLUG (.028)
7L	513-50238	1	CHECK CCI-CP108-1-B-0-065
8	536-00048	1	4-WAY VALVE - PARKER #D3W2CYW
9	115-15030	OPT.	PRESSURE SWITCH, 30-75 PSI
10	000-00653	OPT.	COOLING ASSEMBLY, COMPLETE
11	515-24603	OPT.	THERMOSTATIC WATER VALVE, 3/8

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Columbus, Ohio 43215

HYDRAULIC CIRCUIT  
M3P-6

MHC-00561-C