

Section 1

100 Ton Ram

Specifications

Dixon 800 High Street • Chestertown, MD 21620 ph: 877.863.4966 fax: 800.283.4966 dixonvalve.com

100 Ton Ram Instruction Manual



| Item | Part # | Description | Qty |
|------|-----------|---|-----|
| 1 | 001-0003 | Tie rod | 3 |
| 2 | 001-0004 | Tie rod hex nut | 6 |
| 3 | 001-0008 | Hydraulic pump | 1 |
| 4 | 001-0011 | Hydraulic pump support | 1 |
| 5 | 001-0052 | Hydraulic cylinder | 1 |
| 6 | 001-0053 | Cylinder end plate | 1 |
| 7 | 001-0017 | Cylinder backing plate | 1 |
| 8 | 001-0016 | Cylinder tie rod | 4 |
| 9 | 001-0005 | Cylinder tie rod nut | 8 |
| 10 | 0010-064 | Rod cap | 1 |
| 11 | 001-0019 | Hydraulic hose with hydraulic couplings | 2 |
| 12 | 31-300 | Hydraulic quick connect npt plug | 2 |
| 13 | GLSS10000 | 0-10,000 PSI liquid filled gauge | 1 |
| 14 | 001-0024 | Gauge adapter | 1 |
| 15 | 001-0001 | Die bed plate | 1 |
| 16 | 0010-154 | Die retainer strap | 6 |
| 17 | M012-001 | 9" Die carrier | 1 |
| 18 | M012-002 | 12" Die carrier | 1 |
| 19 | M012-003 | 15" Die carrier | 1 |
| 20 | M012-004 | 18" Die carrier | 1 |
| 21 | 001-0009 | Steel wheel (rigid) | 2 |
| 22 | 001-0010 | Steel wheel (swivel) | 2 |

Specifications

| Net Weight | 1,900 lbs. basic equipment only |
|------------------|---|
| Crated Weight | 2,100 lbs. |
| Dimensions | 60" long x 26" wide x 48" high |
| Crated Dimension | 76" long x 40" wide x 48" high |
| Pump Motor | Power Team PE554 1 ¹ / ₈ H.P. Universal Motor; 12,000 RPM; 115V single phase, 60/50 cycle AC (not dual voltage); 25 Amp, lightweight "handle-top" housing |
| Motor Control | "Run-Off-Remote" motor control switch; 25 Amp motor control relay cavity mounted in motor housing, hand held remote switch |
| Safety Valves | Relief valve set at 10,000 PSI |
| Control Valve | Built-in manually operated 4-way control valves with 3/8" NPT port |
| Gauge | Calibrated 0-10,000 PSI |
| Reservoir | Convenient mounting holes in base |
| Oil Delivery | 650 cu. in/min. at 100 PSI 80 cu. in/min. at 1,000 PSI 70 cu. in/min. at 5,000 PSI 55 cu. in/min. at 10,000 PSI |

Note: 2-stage pump provides fast, no load approach speed and then shifts into slow actuation as the load is applied.

- Ram double acting (Power Team RD10013)
- 131/8" stroke
- 103.1 tons of push at 10,000 PSI
- 44.2 tons of pull at 10,000 PSI

Preparations

| Filling the Reservoir | Before removing the filler plug, clean the area around the plug. The pump is a precision built unit, special care should be taken to preclude foreign particles from entering the reservoir. With cylinder fully retracted, fill the tank 1" to 1½" from the top. Replace the filler plug. |
|----------------------------|--|
| Approved Hydraulic Oils | Power Team 9637 Mobile DTE25 or equivalent |
| Available Motor Variations | 220-440, etc. Also 1 ¹ / ₂ H.P. and 3 H.P. |
| Reservoir Variations | 5 gallon or 10 gallon reservoir available |

The standard 1½ H.P., 12,000 RPM, 115 volt motor and the 2½ gallon reservoir has proven highly successful. Dixon feels it is the best design, and variations are not desirable.

Operating Controls

• F-N-R (Forward-Neutral-Reverse) directional control lever.

The F-N-R lever (shown in the neutral position) controls the direction of the ram cylinder. To extend the cylinder (forward) in the direction of the die bed, move the lever toward the pump motor then activate the pump. To retract the cylinder (reverse), move the lever away from the pump motor then activate the pump.

• On-Off-Remote switch, 0 - 10,000 PSI pressure gage and hand held remote.

When the toggle switch is placed in the "On" position, the pump motor will run until the toggle switch is placed in the "Off" position. When the toggle switch is placed in the "Remote" position, the hand held remote is activated. To run the pump motor, depress and hold the switch on the remote. To stop the motor, release the switch on the remote. For practical purposes, leave the toggle switch in the "Remote" position. All future references to activating the pump motor should be understood that the hand held remote is being used.

Caution! Never dead-end the cylinder (fully extended or fully retracted) and leave it with pressure showing on the gage. If the cylinder is dead-ended, always move the lever to the neutral position after stopping the pump. Failure to do so can shorten the life of the cylinder seals.





