

- **Do not over-tighten the connections. Connections need only be tightened securely and leak-free.** Over-torque may cause premature thread failure and may cause high pressure fittings to split at pressures lower than their rated capacities.
- **Do not subject the hose to any potential hazard such as fire, extreme heat or cold, heavy impact or sharp surfaces. Do not use the hose to lift or move the equipment connected to it.** Might rupture or weaken the hose.
- **Periodically inspect the hose for signs of wear. Never use a defective hose with any pressurized equipment.** Escaping hydraulic fluid could cause serious injury.
- **Never paint the couplers, fittings or hose. Make sure that the hose material and coupler seals are compatible with the hydraulic fluid used. Avoid contact with creosote-saturated materials.** May result in hose damage and leaking of hydraulic fluid.

Hydraulic Pump

- **Never exceed the rated capacity of the unit. Never tamper with the internal high pressure relief valve.** May result in pump failure.
- **Always retract the system before replenishing the oil level. Never over-fill the pump reservoir with oil.** Could damage the pump.

Hydraulic Cylinder

- **Keep the cylinder clean at all times. Keep the piston fully retracted when the cylinder is not in use.** Prevents damaging the cylinder.
- **Make certain that the hydraulic fluid added to the system is compatible with the seals and the existing fluid. Never use brake fluid.** May result in leaking of the hydraulic fluid.

Description, Specifications and Standard Equipment

Description

RIDGID Hydraulic Knockout Sets are designed for punching holes of 1/2" through 4" (conduit size) diameter in mild steel of up to 10 gauge (.134" / 3.40mm) maximum thickness.

The RIDGID Model HKO-186 Knockout Set includes the H-18 Hand Pump, 8R111S Hydraulic Cylinder, 3 ft. hose, 1/2"-2" Punch/Die Sets and various accessories. The Model FKO-186 Knockout Set is the same basic set

except that the HF-18 Foot Pump is included in place of the hand pump and a 10 ft. hose is provided.

The single-stage hand pump will develop up to 10,000 PSI pressure with a maximum handle effort of 80 lbs. The two-stage foot pump will develop 10,000 PSI of pressure with maximum lever effort of 143 lbs. Both pumps incorporate an internal relief valve set at 10,000 PSI. The ram will develop up to 100 tons of force at 10,000 PSI and has a 1" stroke.

Specifications

Ram:

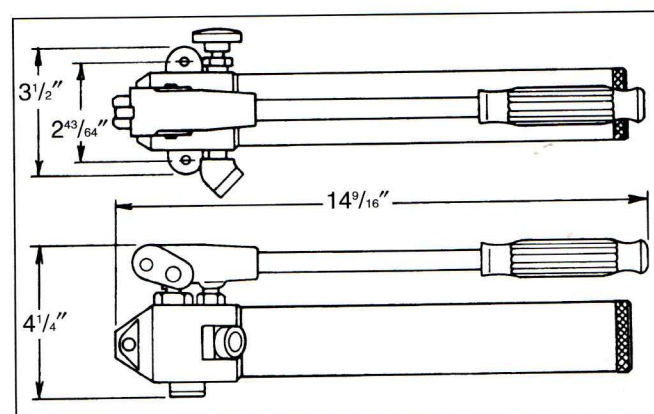
Capacity	11.2 Tons
Stroke	1 Inch
Oil Volume	2.45 cu. in.
Weight	5.3 lbs.
Punch Diameter (Conduit Size)	1/2" through 4"
Maximum Plate Thickness	10 Gauge (.134" / 3.4mm)

Pump:H-18.....HF-18

StageSingle.....Two

Volume Per Stroke:

Low Pressure	670 cu. in.
High Pressure	0.061 cu. in. 0.061 cu. in.
Valve	2-Way 2-Way
Maximum Pressure	10,000 PSI 10,000 PSI
Reservoir Capacity	18.6 cu. in. 18.6 cu. in.
Useable Volume	16 cu. in. 16 cu. in.
Maximum Lever Effort	80 lbs. 143 lbs.
Oil Port	3/8" NPTF 3/8" NPTF
Weight (w/o Oil)	7.5 lbs. 11 lbs.
Relief Valve	Yes Yes



Hydraulic Hand Pump