



LOCK BOLTING EQUIPMENT

Manufactured by: StaticHydraulicPvt.Ltd.
(AnISO9001-2015company,Since:1993)



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1. Technical Specification of Lock Bolting Power pack
2. Technical Specification of Installation Tool and Nose Assembly
3. Safety Precautions

SL No	Description	Model Number
1	Hydraulic Power pack	SHPL-PP-432-2
2	Hydraulic Hose -15 Mtr	SHPL-HS-15
3	7/8" Lock Bolt Installation Tool	SHPL-2630
4	5/8" and 3/4 " Lock Bolt Installation Tool	SHPL-2628
5	1/2" Lock Bolt Installation Tool	SHPL-2620
6	7/8" Nose assembly	SHPL-99-5014
7	3/4" Nose Assembly	SHPL-99-5010
8	5/8" Nose Assembly	SHPL-99-5008
9	1/2 " Nose Assembly	SHPL-99-5002



Technical Specification of Hydraulic Power unit:

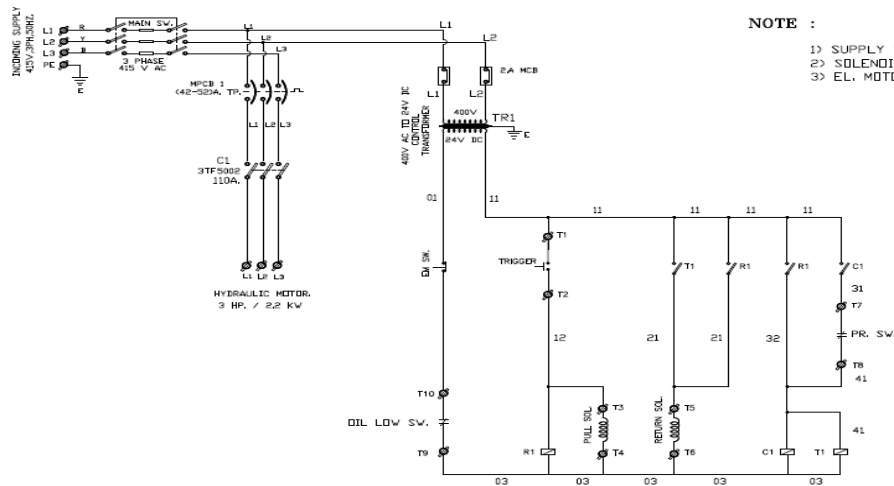
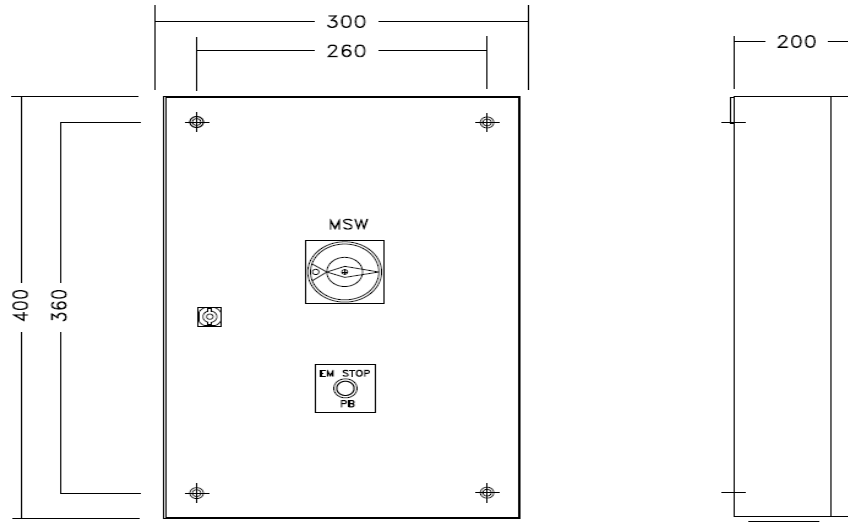
The electrically operated **SHPL-PP-432-2** Powerpack is designed to provide hydraulic pressure for a wide range of Lock Bolt Installation Tools, The Motor has inbuilt fan which helps keep the hydraulic oil temperature to a minimum, especially during constant use. The Power pack automatically starts when the Tool trigger is operated and turns off when the Tool piston is in the fully forward position at the completion of the fastener installation cycle. The Installation Tool is connected to the Power pack by means of Pull & Return Hydraulic Hoses and an electrical Control Cord. Hydraulic Directional Valves are controlled from the Installation Tool by a 24 Volt DC remote control circuit. The operator presses the Tool Trigger which automatically cycles the tool to start the bolt installation.

Power pack Part No	SHPL-432-2
Pull pressure (set)	550 Bar (8,000 psi)
Return Pressure (set)	250 Bar (3600 psi)
Overall Size (L X H X W) approx..	570 X 560 X 465 (mm)
Weight approx.	75 Kg (Including Fluid)
Control Circuit Voltage	24 DC
No. of wheel	02 or 04 nos.
Pressure Gauge (0 to 1000 Bar)	01 no.
Electric Pump-Motor unit	
Motor output (kW)	2.2 (400 V- 3 Phase)
Frequency	50 Hz
Current	4.8 to 8.3 Amps
Type	6 cylinder radial Piston
Flow	3.2 LPM
Pressure	550 Bar (8,000 psi)





ELECTRICAL CONTROL PANEL

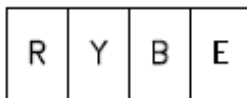


NOTE :

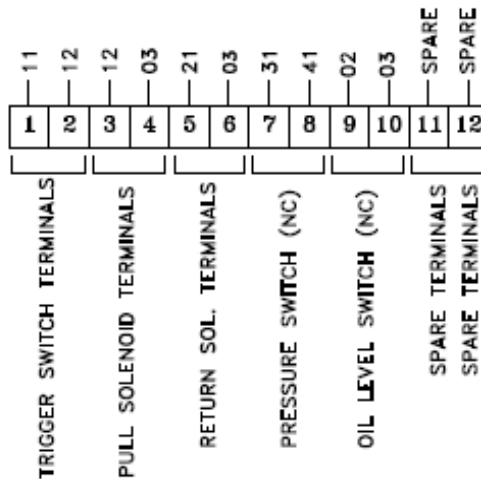
- 1) SUPPLY VOLTAHE - 415V AC 50HZ.
- 2) SOLENOID VOLTAGE - 24V DC.
- 3) EL. MOTOR - 3 HP x 1440.

TERMINAL DETAILS

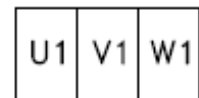
POWER TERMINALS



INCOMING SUPPLY
415V, 3PH, 50HZ



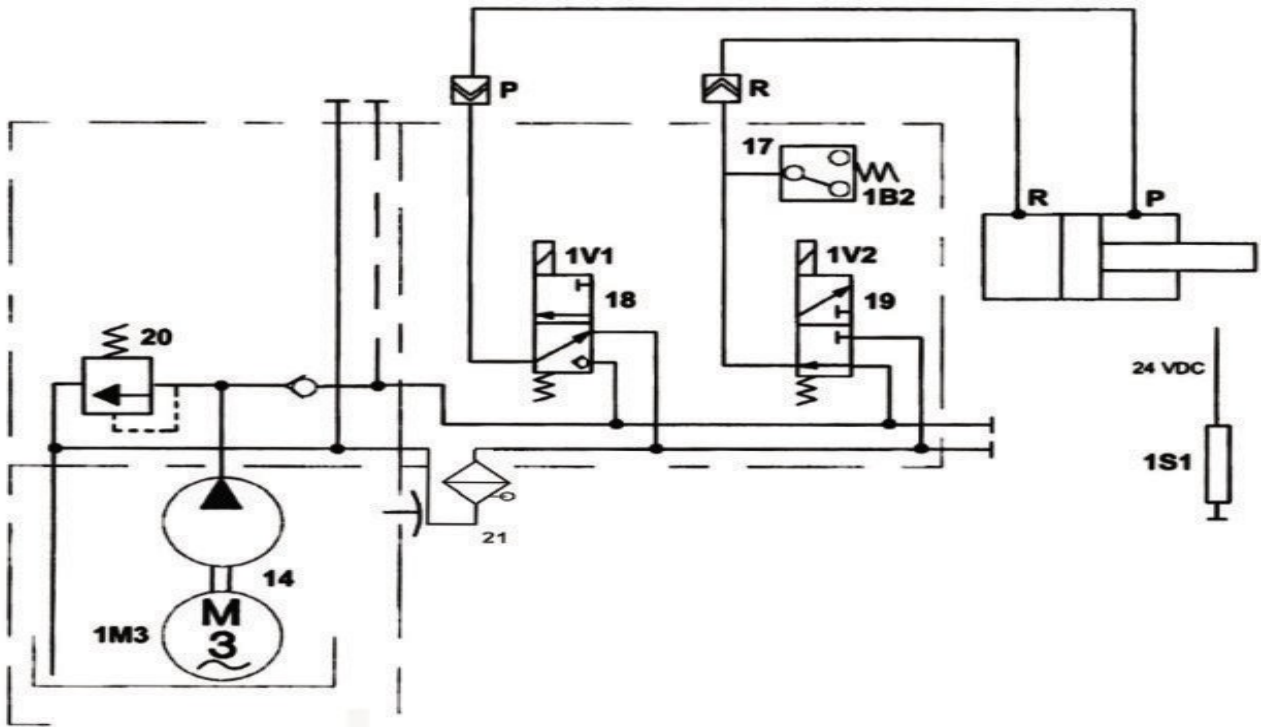
OUTGOING SUPPLY
415V, 3PH, 50HZ



HYDRAULIC MOTOR
2.2KW / 3.0HP

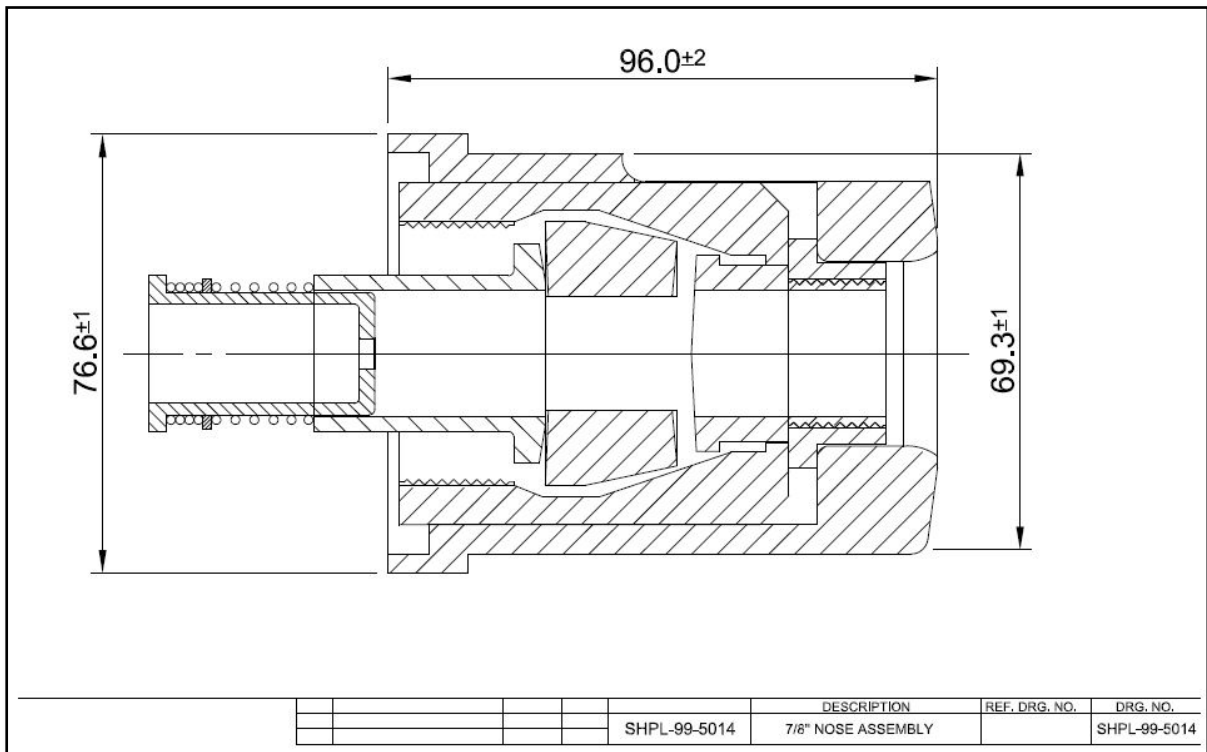
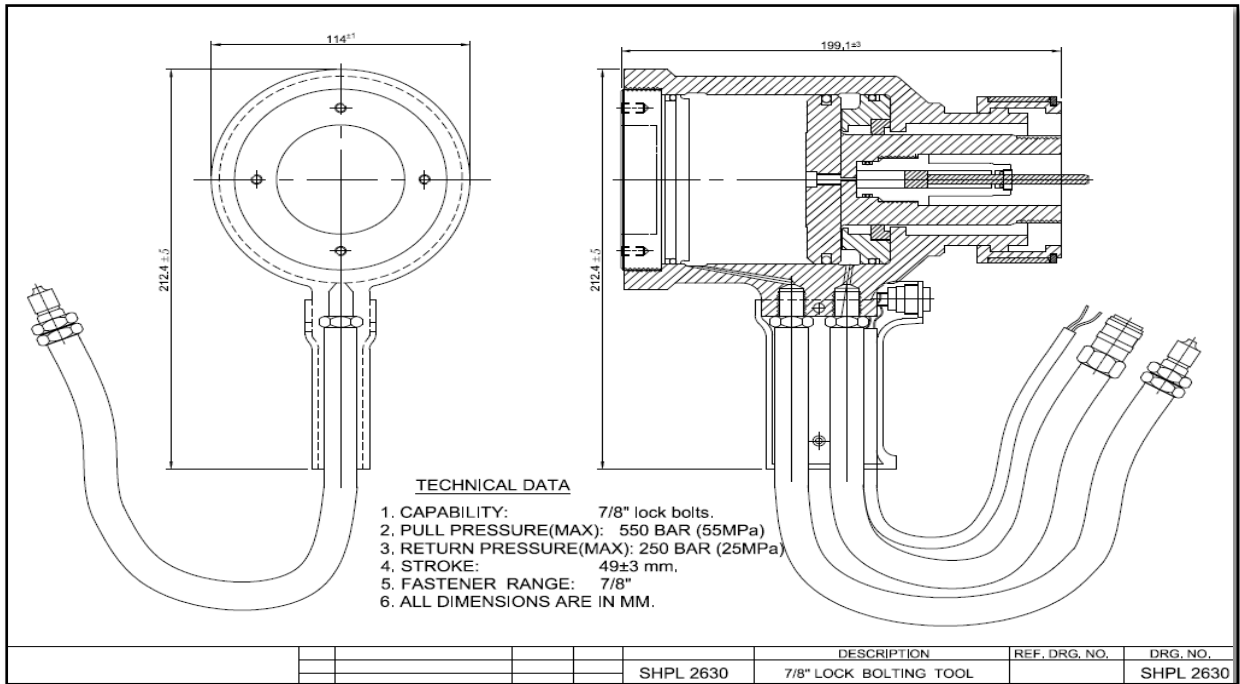


HYDRAULIC SCHEMATIC DIAGRAM OF POWERPACK (SHPL-432-2)



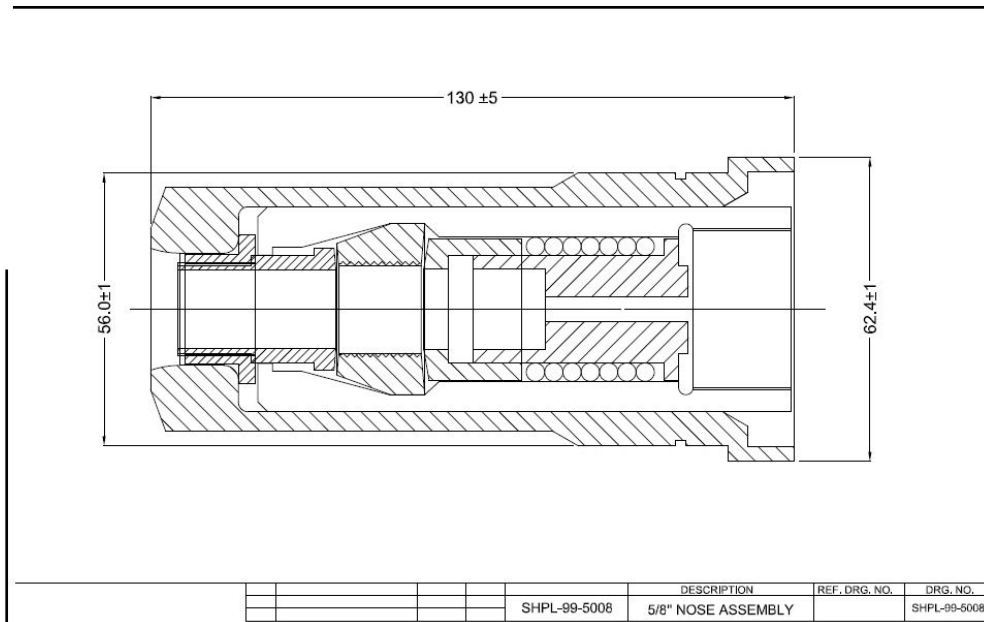
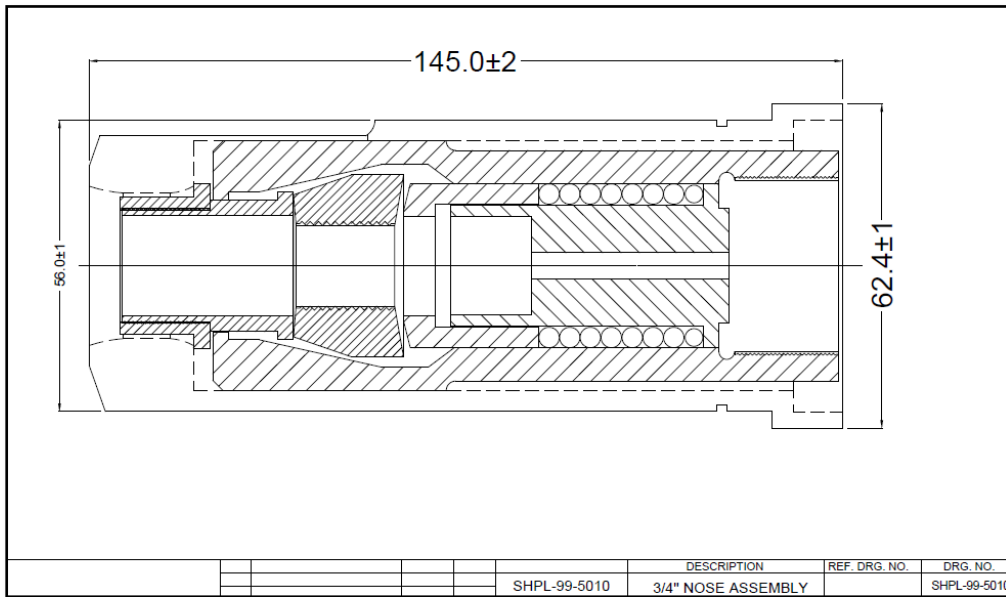
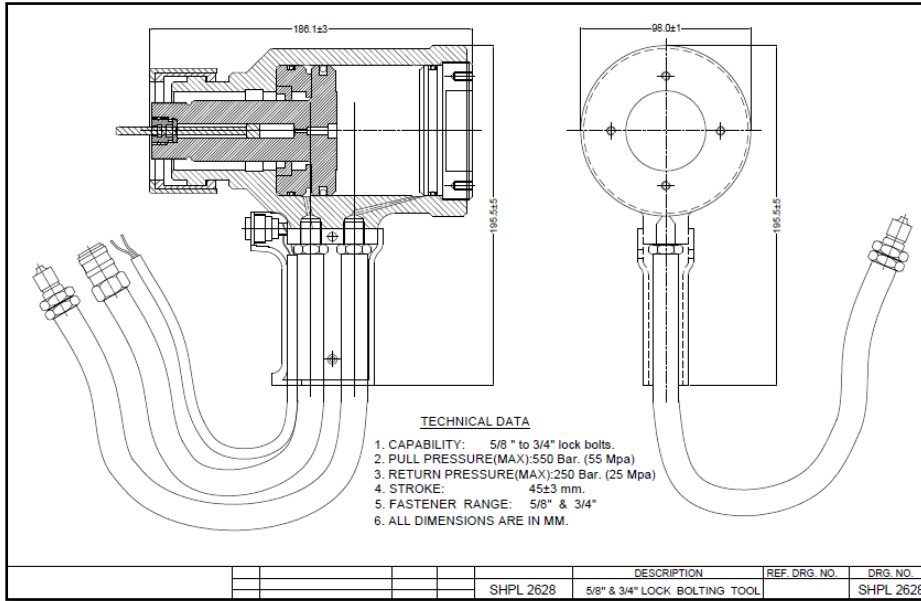


7/8 " LOCK BOLT INSTALLTION TOOL AND NOSE



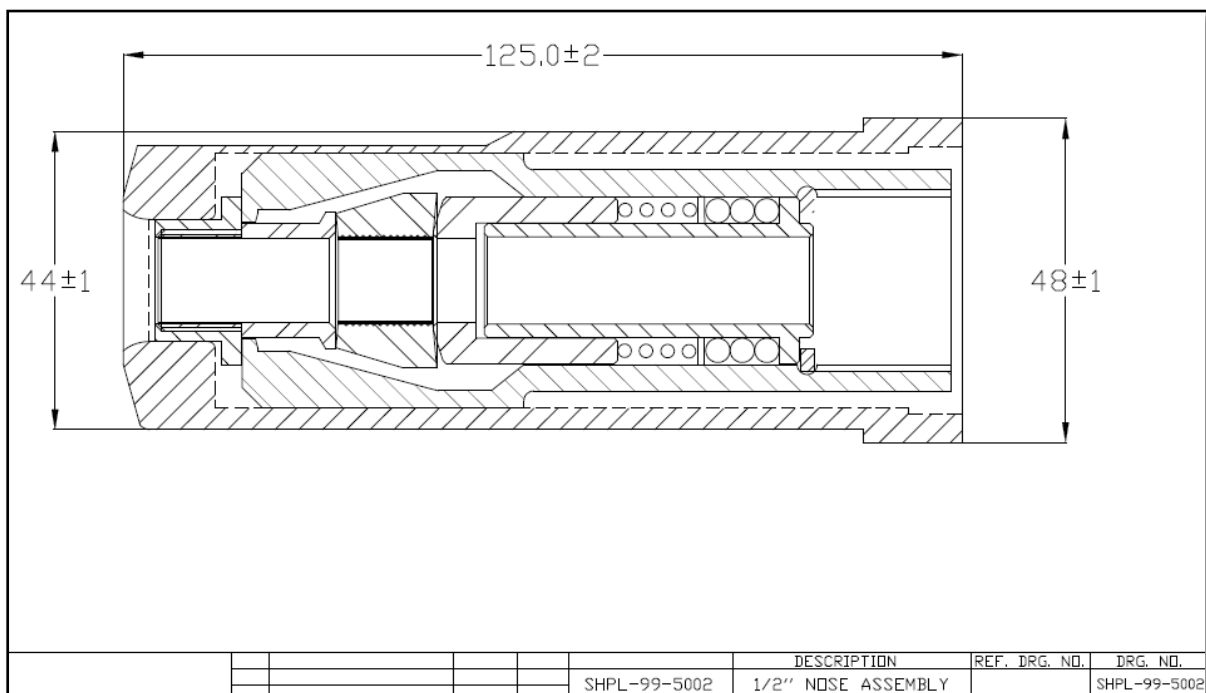
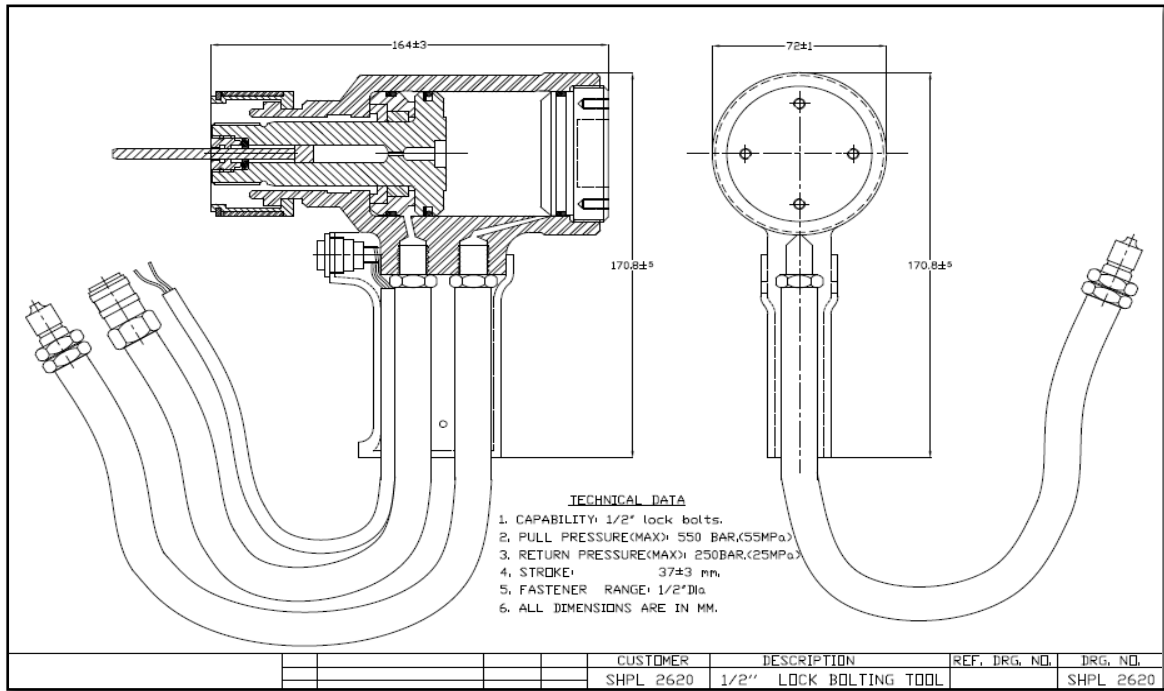


5/8" AND 3/4" BOLT INSTALLATION TOOL AND NOSE:



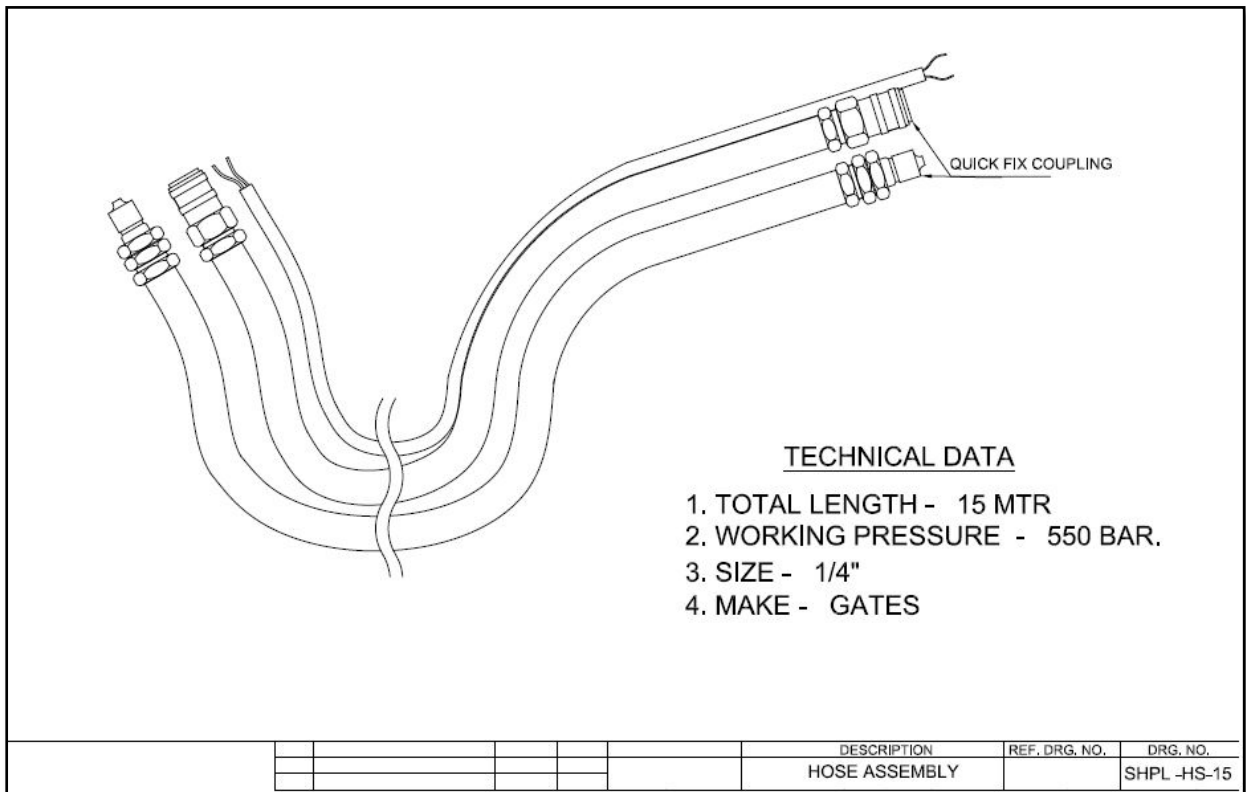


1/2 " BOLT INSTALLATION TOOL AND NOSE:





HOSE ASSEMBLY:





TROUBLESHOOTING:

Always check the simplest possible cause of malfunction first. For example, tripped circuit breaker, defective switch or control cord. Eliminate each possible cause until the defective circuit or part is located. Where possible substitute known good parts for suspected bad parts. A qualified electrician should check the electrical system. Use the guide below as an aid in identifying the problems and make necessary correction.

1. Motor fails to start when trigger is depressed.

- a. Loose or faulty control cord or connectors.
- b. Power source not properly fused.
- c. Defective tool switch.
- d. Loose wire(s).
- e. Defective relay.
- f. Incorrect power source.
- g. Defective motor contractor.
- h. Defective transformer.

2. Motor runs, but tool doesn't reciprocate.

- a. Hoses not coupled properly.
- b. Hydraulic fluid viscosity not proper or level is too low.
- c. Defective pilot valve solenoid or coil.
- d. Unloading valve missing in tool.
- e. Bind in tool or nose assembly.
- f. Defective directional valve
- g. Pump to motor coupling damaged.

3. Pintail fastener fails to break off.

- a. PULL pressure set too low.
- b. Worn or defective hose couplers.
- c. Hydraulic fluid viscosity not proper or level is too low.
- d. Hydraulic fluid over heated.
- e. Worn or defective directional valve.





- f. Internal relief valve set too low or defective.
- g. Worn or defective pump.

4. Tool will doesn't return when switches released.

(Tool will not push nose assembly off swaged fastener.)

- a. RETURN pressure set too low.
- b. Hoses not coupled properly.
- c. Worn or defective solenoid.
- d. Worn or defective pilot valve.

5. Motor fails to switch off when installation cycle is completed.

- a. RETURN pressure is set too high.
- b. Hydraulic fluid viscosity not proper or level is low.
- c. Hydraulic fluid overheated.
- d. Defective limit switch in pressure switch assembly.

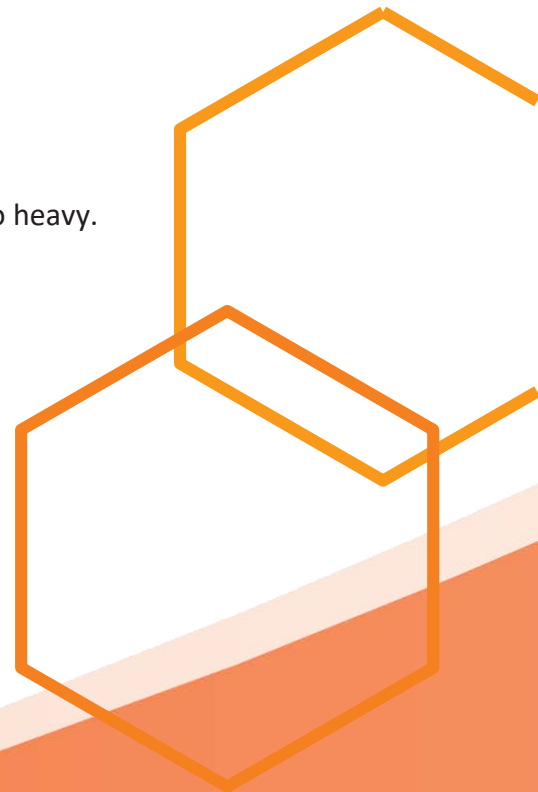
6. Pump makes unwanted noise throughout the entire cycle.

- a. Pump is cavitating. Fluid level may be low or fluid viscosity is too heavy.
- b. Strainer is dirty and clogged.

7. Tool doesn't not return when switch is released.

(Tool will not push nose assembly off swaged fastener.)

- a. Pump is cavitating. Fluid level may be low or fluid viscosity is too heavy.
- b. Strainer is dirty and clogged.
- c. Worn or defective directional valve.
- d. Worn or damaged pump.
- e. Worn or defective hydraulic couplers.





**STATIC HYDRAULIC MAKE LOCK BOLT INSTALLATION TOOL AT WAGON
And VIBRATING SCREEN MANUFACTURING**

Daily Cleaning of the Nose Assembly:

- 1) With Piston in fully forward position, remove retaining ring.
- 2) Remove Retaining Sleeve and both Split Ring.
- 3) Remove Anvil and unscrew Collet from Piston.
- 4) Remove Retaining Ring from inside of collet
- 5) Remove Sleeve with O-rings, spring, Follower and Jaws.
- 6) Clean and inspect the components and refit.
- 7) Slowly screw Collet on to Piston, watch small flat section until top of flat just disappears under edge of the Tool's mouth.
- 8) If fitted, slide Anvil over Collet, push down on Anvil and refit Split Rings, Sleeve and Retaining Ring.
- 9) Cycle the Tool and install test fastener.

Safety Precautions:

- a) Do not look directly at the head or blind side of fasteners during the installation cycle.
- b) Wear eye protection while using this equipment.
- c) Hearing protection required while using this equipment.
- d) Do not attempt to operate the tool without the Tool hoses attached to the Power pack
- e) Before carrying out any maintenance, turn the Main Switch to the off position and disconnect the supply cable plug from the electrical supply.
- f) Wear hand gloves while using this equipment.



EYE PROTECTOR



HEARING PROTECTION



HAND GLOVES