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Model 7989T 10"-12" Steel Pipe Squeezer Sch. 40 & Sch. 80

Operations Manual

1.0 Introduction

This manual is issued as a basic operation manual covering the Regent Model 7989T, Pipe Squeezer and Pump as manufactured by Regent Tools, Inc. Houston, TX. USA

2.0 Specifications

Working Load 200 tons

Pipe Size Capacity 8"- 12"

Working Pressure 5000 PSI

Net Weight 1400 lbs.

Cylinder Volume 1280 cubic in.

Dimensions 39" x 73"

3.0 Features

Regent Model 7989T Flow Stop Pipe Squeezer is used for gas, oil and water line repairs and maintenance.

Model 7989T will give flow control on steel pipe, sizes 8 through 12 inch

Hard Chrome plated cylinder for a smooth sealing surface and to resist wear and corrosion.

"O" Ring packing and Teflon backup ring for long life and ease of repair.

Phosphate coated ram to resist corrosion.

Spring return on the ram.

Equipped with a mechanical lock-nut to insure complete pipe closure in case of any hydraulic leakage over an extended period of time.

Engineered to provide optimum operation and maintenance qualities.

Designed to withstand typical field usage in a sturdy design.

4.0 Operating Procedures

The following procedure is recommended to properly close 10" and 12" steel pipe. For satisfactory results, care should be taken and noted on each section of steel pipe squeezed, so that histories of reaction to the squeeze points are documented.

This hydraulically operated tool, pump, and hoses should be inspected for signs of leaks, damage or abuse prior to use, if found Do Not use. Please refer to the Maintenance & Service Manual or contact Regent Tools for repair information.

Select pinch location.

Remove wrappings, coatings and clean pipe, if necessary.

Examine pinch area for location of seam, girth welds, excessive pitting and possible weak spots. Avoid these areas. Make flat weld on seam if it looks weak, consult your company's policy or engineer.

Pump Purging and Set Up

Verify that the pump Hydraulic reservoir has sufficient oil and add SAE 30 Hydraulic oil, if required. Connect air source to inlet side of the regulator on the Pump. Reduce air pressure on the regulator till gage pressure is "0" PSI by turning the black knob on top of the regulator.

Open the inlet ball valve gradually.

Open the black handle outlet valve completely.

Slowly increase regulator from 12-20 PSI continually viewing not to exceed 20 PSI.

Let system actuate for 3 minutes. This should eliminate any entrapped air in the tubing system.

Connect the hose of the pump to the squeezer. The quick disconnects on the hose assembly should be wiped clean prior to attaching to the pump & tool, failure to do so can cause contamination of the hydraulic fluid. Check that compete connection of the quick disconnects is firmly seated prior to tightening of the lock connection collar. Open the return (non pressure) valve on the pump; this is the black star handle valve on the pump. Make sure the Tool Cylinder is in its upmost retracted top position or allow to fully re-tract.

With cylinder ram fully retracted, close the relief valve on pump, by turning the black star handle valve closed on the pump.

Steel Squeeze Tool should be suspended by eyehook for best balance and positioning while squeezing steel pipe, failure to do so can put pressure on the tool and pipe and cause damage or failure. ** While pipe is being squeezed, it may be required the operator to adjust the tool position by lowering or raising the tool to prevent the tool from lifting or bending on the pipe**

Locate squeezer on the line by removing the removable jaw pin thereby releasing the lower jaw. Position the squeezer over the line and lift the lower jaw into position for the removable jaw pin to the reinserted. Confirm that the removable jaw pin is completely inserted. (Do not position squeezer so that pipe seam will be in the fold area.)

Center the pipe to be squeezed between the two jaws in the center of the tool, release and reposition to center fit necessary, failure to do so can damage the tool and not provide a proper squeeze off.

With the black star handle valve in the closed position on the Pump, close the ball valve on the air supply side of the pump. Slowly open the ball valve to activate the pump, care should be taken that the piston pump not run too fast (recommended that the stroke be less than one per second) this can be throttled by the air supply ball valve moving towards the closed position.

Squeeze pipe by applying pump pressure, as the threaded Ram is being extended, hand tighten the cylinder ram knurled lock ring as threads become exposed. This will allow for the lock ring to mechanically lock the cylinder ram. Please note how the pipe is reacting and if any seams are stressed if seen stop, possibly reposition the tool and consult your engineer. The gauge pressure will rapidly rise when metal to metal contact of the pipe is achieved, indicating a competed squeeze off. Do Not exceed 5,000 psi of pressure.

Make necessary repairs.

To remove squeezer from line, re-pressure the pump to apply down force to the cylinder this will allow the pressure to be relived from the cylinder ram knurled lock ring. Retract knurled lock ring to the up most position. Open pump valve allowing ram to completely retract to its upmost position. Remove the removable Jaw Pin to release the bottom jaw to remove the tool.

Caution should always be taken when squeezing off steel pipe to inspect the pipe for quality conditions and weld seams. Complete shut off cannot be guaranteed since conditions such as pipe age, wall corrosion and metal content vary dramatically from location to location.

Caution Steel pipe can split or sheer without warning, care must be taken when doing squeeze off on how the pipe is reacting and do not exceed the amount of pressure required to effect closure, as this may be below maximum pressure.

Always follow your company's safety and squeeze off procedures at all times.