

HURST RABBIT TOOL™

Instructions

Package consists of:

- 1 Rabbit Tool
- 1 6 ft. hose
- 1 Manual pump
- 1 Pry bar
- 1 Hammer
- 1 Carrying bag with dual purpose detachable sling
(Sling may be used to carry tool without bag)

NOTE: The RABBIT TOOL is not an auto extrication tool.



Patent No. 4,443,001

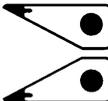
CAUTION
USE ONLY HURST
PHOSPHATE-ESTER
HYDRAULIC FLUID

1

The RABBIT TOOL comes pretested, and ready to use. It is recommended, however, that the system be cycled a few times to test the system for proper operation.

2

Record the serial number (stamped on tool) onto the warranty card and mail the postage paid registration to Hale Products, Inc. to begin warranty.

 **HURST**
JAWS OF LIFE®

PRODUCT SAFETY POLICY

Jaws of Life® products are designed and manufactured to provide excellent service when used for their intended purpose. Operator safety is a major consideration in the product design and operator manuals are provided to promote their safe usage.

Hurst Emergency Products urges all users of Jaws of Life® products to read the Instruction Manual and to seek operating instructions from qualified instructors **before** attempting to use the products.

SAFETY PRECAUTIONS

WARNING

General Operation

- * ALL WARNING statements must be carefully observed to help prevent personal injury.
- * Always wear proper protective clothing, to include bunker gear, gloves, helmets and face shields when operating this equipment.
- * Before operating the pump, make sure all hose connections are tightened with proper tools. Do not over-tighten. Connections need only be tightened securely and leak-free. Overtightening may cause premature thread failure or may cause high pressure fittings to split at pressure lower than their rated capacities.
- * Should a hydraulic hose ever rupture, burst, or need to be disconnected, shift the control valve twice to release all pressure. Never attempt to grasp a leaking hose under pressure with your hands. The force of escaping hydraulic fluid could cause serious injury.
- * Do not subject the hose to potential hazard such as fire, extreme heat or cold, sharp surfaces, or heavy impact. Do not allow the hose to kink, twist, curl, or bend so tightly that the fluid flow within the hose is blocked or reduced. Periodically inspect the hose for wear because any of these conditions can damage the hose and possibly result in personal injury.
- * Hose material and coupler seals must be compatible with the hydraulic fluid used. Hoses also must not come in contact with toxic materials such as creosote impregnated objects and some paints. Consult the manufacturer before painting a hose. Never paint the couplers. Hose deterioration due to toxic materials may result in possible personal injury.

- * Do not use the hose to move attached equipment. Stress may damage the hose and possibly cause personal injury.

Pump

- * Do not exceed the PSI hydraulic pressure rating noted on the pump name plate or tamper with the internal high pressure relief valve. Creating pressure beyond rated capacities may result in personal injury.
- * Before replenishing the fluid level, retract the system to prevent overfilling the pump reservoir. An overfill may cause personal injury due to excess reservoir pressure created when cylinders are retracted.

Jaw/Cylinder Assembly

- * The user must be familiar with the correct operation, maintenance, and use of the RABBIT TOOL. Lack of knowledge in any of these areas may lead to personal injury.
- * Inspect each cylinder before each shift or use. Failure to inspect may allow unsafe conditions to develop.
- * To help prevent material fatigue if the cylinder is to be used in a continuous application, the load should not exceed 85% of the rated cylinder load limit.
- * Never use extreme heat to disassemble a hydraulic ram or cylinder. Metal fatigue can lead to unsafe conditions.

LIMITED WARRANTY

Hale Products, Inc. warrants the Hurst Jaws of Life® products to be free from defects in material and workmanship under normal use conditions. During the period of this warranty, one year on all mechanical parts and labor, Hale will repair or replace the defective parts or equipment at Hale's option without charge. This includes installation of such repair or replacement parts as may be required. The warranty does not include hoses or rubber products in the Jaws of Life® systems assemblies. **In no event will Hale Products, Inc. be responsible for Consequential Damages.** This warranty shall not apply to units which have been subject to misuse, negligence, or alteration.

Return of the warranty registration card is a condition precedent to warranty coverage and performance. Some states do not allow exclusion or limitation of consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

This is the exclusive warranty offered by Hale Products, Inc. for Hurst Jaws of Life® products. Any other warranties or representations made by a distributor or any other person shall be the responsibility of such dealer or other person.

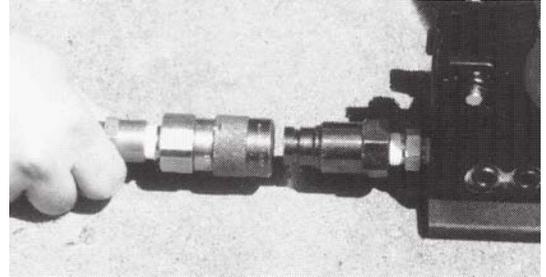
For service, contact your local Jaws of Life® distributor or Hale Products, Inc.

OPERATING INSTRUCTIONS

To use the RABBIT TOOL, insert jaws of tool between door and jamb, as shown. If there is not enough space for jaws (1/4 in.) create a larger opening with pry bar or strike jaw anvil with hammer provided.

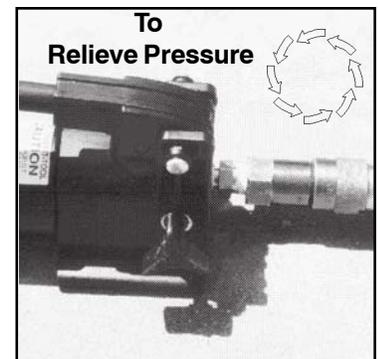
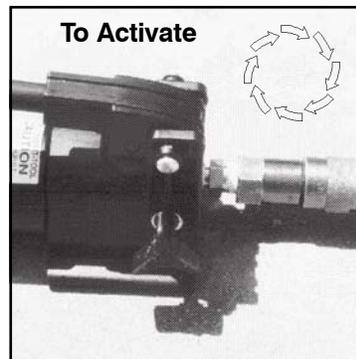


To operate quick disconnect couplings, push the quick disconnect connectors from pump and hose together. Rotate the coupling sleeve 1/4 to 1/2 turn to lock the connection.



While holding RABBIT TOOL in place, activate tool by turning pump relief valve knob toward hose and pumping handle up and down.

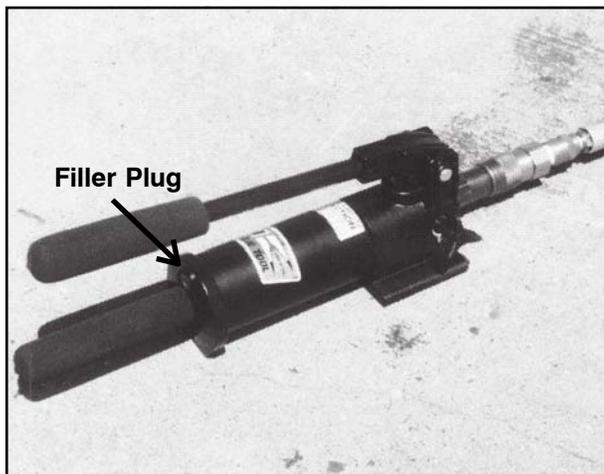
To relieve pressure and close tool, turn relief valve knob toward rear of pump. Tool will retract automatically.



MAINTENANCE AND STORAGE

Tool:

If tool has been exposed to water, sand or dirt, clean unit before storage. The tool should be stored in a vertical position. If the tool has been stored for a year or more, sequence and check system before use. When not in use, store tool fully retracted. Inspect system before use and storage.



Handpump:

Before checking fluid level, retract tool to prevent overfilling system. Pump should be drained and refilled with Jaws of Life® fire-resistant phosphate ester hydraulic fluid after every 300 hours of use. Wipe pump exterior clean before draining and refilling pump.

To Refill:

Remove filler plug and insert a clean filter funnel. Position the pump head down and filler hole up. The reservoir is a sealed type and overfilling is hazardous, so be sure the tool is fully retracted (closed) when adding fluid to the reservoir. To check for over fill, set the pump on its base without the filler plug installed and allow any excess fluid to drain. Keep pump and tool clean. Make certain all hose connections are kept free from grit and dirt. Check fluid level every 10 hours of use.

 **HURST**
JAWS OF LIFE®

TROUBLESHOOTING

IMPORTANT: The troubleshooting and repair procedures listed below should only be performed by qualified personnel familiar with this equipment. Use the proper equipment when troubleshooting!

JAW/CYLINDER ASSEMBLY

PROBLEM	CAUSE	SOLUTION
I. Erratic Action	1. Air in system	<i>A. Bleed* air and check for leaks.</i>
	2. Internal leakage in cylinder	<i>B. Replace worn packings. Check for excessive contamination or wear.</i>
	3. Cylinder sticking or binding	<i>C. Check for dirt, gummy deposits or leaks as above. Check for misalignment, worn parts or defective packing.</i>
II. Cylinder does not advance	1. Pump release valve open	<i>A. Close release valve</i>
	2. Low or no fluid in pump reservoir	<i>B. Fill with fluid and bleed the system</i>
	3. Air locked pump	<i>C. Bleed* the system</i>
	4. Loose couplers	<i>D. Tighten couplers & bleed*</i>
	5. Plugged hydraulic line	<i>E. Flush and clean system</i>
	6. Pump not operating	<i>F. See pump troubleshooting</i>
	7. Load is above the capacity of the system	<i>G. Use other means for entry</i>
III. Cylinder extends only partially	1. Pump reservoir is low on fluid	<i>A. Fill and bleed*</i>
	2. Cylinder piston rod binding	<i>B. Check for dirt, gummy deposits or leaks as above. Check for misalignment, worn parts or defective packing</i>
IV. Cylinder advances slower than normal	1. Loose connection	<i>A. Tighten and bleed*</i>
	2. Leaky connection	<i>B. Clean connection and use a non-hardening pipe thread compound or teflon tape if needed</i>
	3. Restricted hydraulic line or fitting	<i>C. Clean or replace if damaged.</i>
V. Cylinder advances but does not maintain pressure	1. Leaky connection	<i>A. Clean connection and use a non-hardening pipe thread compound or teflon tape if needed</i>
	2. Cylinder seals leaking	<i>B. Replace seals</i>
	3. Pump valve malfunctioning	<i>C. See pump troubleshooting</i>

PROBLEM	CAUSE	SOLUTION
VI. Cylinder leaks fluid	1. Worn or damaged seals	<i>A. Replace seals</i>
	2. Loose connections	<i>B. Tighten fittings</i>
VII. Cylinder will not retract or retracts slower than normal	1. Pump release valve closed	<i>A. Open pump release valve</i>
	2. Couplers not fastened	<i>B. Fasten couplers</i>
	3. Blocked hydraulic lines	<i>C. Clean and flush</i>
	4. Weak or broken retraction springs for repair	<i>D. Send to service center</i>
	5. Cylinder damaged internally	<i>E. Send to service center for repair</i>
	6. Pump reservoir too full	<i>F. Drain fluid to correct level</i>

PUMP

PROBLEM	CAUSE	SOLUTION
Pump not delivering	1. Low fluid level in reservoir	<i>A. Check fluid level per instructions</i>
	2. Dirt in pump body	<i>B. Disassemble pump body and clean all parts</i>
	3. Seats worn and not seating properly	<i>C. Reseat required seats in casting</i>
	4. Reservoir overfilled with fluid	<i>D. Check fluid level per reservoir instructions</i>
Pump losing pressure	1. Fluid leaking past outlet ball seat(s)	<i>A. Reseat ball seat(s)</i>
	2. Pressure control knob leaks, not adjusted properly	<i>B. Reseat pressure control assembly or replace assembly</i>
Pump does not reach full pressure	1. Low fluid level	<i>A. Check fluid level per reservoir instructions</i>
	2. Reservoir overfilled with fluid	<i>B. Check fluid level per reservoir instructions</i>
Handle raises after each stroke	1. Fluid leaking past outlet ball seat(s)	<i>A. Replace ball and/or reseat</i>
Pump handle can be pushed down (slowly) without raising the load	1. The inlet ball is not seating	<i>A. Check for dirt and or reseat valve seat</i>
	1. Air has been trapped in the line	<i>A. Set Rabbit Tool lower than the pump and extend and return tool several times</i>
Pump handle operates with a spongy action	1. Air has been trapped in the line	<i>A. Set Rabbit Tool lower than the pump and extend and return tool several times</i>
	2. Reservoir overfilled with fluid	<i>B. Check fluid level per reservoir instructions</i>

* BLEEDING THE SYSTEM

After all connections are made correctly, the hydraulic system should be bled. Relieve pressure of the pump and loosen the fitting at the tool. Then activate the pump until fluid spurts from the loose connection. Repeat this operation until a continuous clear flow of hydraulic fluid is seen. Relieve pressure and tighten the loosened fitting. You must be sure to refill the pump reservoir to the correct level.

With no load on the system and the pump higher than the tool, cycle the system several times to remove any air which may be trapped in the system.

Hale Products, Inc., reserves the right to make changes at any time, without notice or obligation, in prices, materials, equipment or specifications and to change or discontinue models. Check with distributor for current information.



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