



**RESCUE TOOL**

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**INSTRUCTION MANUAL**

**POWER UNIT**

# 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. Additionally, operator training programs are offered by all authorized Jaws of Life Distributors and this company.

Hale Products, Inc. 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. Although most safety precautions are addressed in factory authorized training programs, as well as throughout this manual, particular attention is directed to the following:

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- Power units and tools should be operated by qualified personnel only.
  - Proper protective clothing should be worn. (i.e. bunker gear, gloves, helmets, face shields, etc.)
  - Inspect the equipment for obvious broken or missing parts or damaged hose before and after use.
  - Keep clear of all moving parts.
  - When pulling, keep clear of chains.
  - When lifting, always use cribbing to shore and stabilize the object being lifted.
  - When storing tool, compensate for possible pressure buildup from thermal expansion of hydraulic fluid by connecting the two short hoses on the tool, completing the circuit. Move trigger in both directions to equalize the pressure on both sides of the piston.
  - When removing the tool from a multi-tool circuit, be sure the other tools are not in use and the dump valve is in the "closed" position before disconnecting unit.
  - Be sure to follow all maintenance procedures.
  - Return your warranty registration card.
  - Use only factory authorized service parts.
  - Use only Jaws of Life fire resistant hydraulic fluid.\* Do not substitute other brands of hydraulic fluid because characteristics may differ. Fluid such as brake fluid or automatic transmission fluid will not work in the Jaws of Life system and will damage the equipment.
  - Ear protection should be worn when operating the 2-cycle and 4-cycle units.

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**DO NOT OPERATE EQUIPMENT WHEN TIRED, STAY ALERT.**

*Jaws of Life*® hydraulic fluid\* is a custom blended phosphate ester fluid. In case of skin contact, wash off with soap and water. In case of eye contact, flush with generous amounts of running water. If discomfort persists following flushing, see physician for symptomatic treatment.

\*Solutia product name MCS-2361 - MSDS on file.

# POWER UNIT ASSEMBLY/STORAGE



Remove power unit from carton; inspect unit and confirm that all bolts and screws are securely fastened and the unit has not been damaged in shipment. The power unit shipment should include 2 gallons of hydraulic fluid & pigtail hoses.



Remove the nylon caps from the pigtails and the power unit. Connect the pigtail hoses to the power unit. Hand tighten only.



Be sure the Male quick disconnect is attached to the PRESSURE side of the dump valve and the FEMALE quick disconnect is attached to the return side of the dump valve. Match the color coded wire ties on the pigtail hose assemblies with the wire ties on the dump valve assembly.



Using a 5/8" wrench, tighten both pigtail connections to the power unit. Check the quick disconnect connections and ensure both connections are tight.

**CAUTION:** Do not over tighten connections. Damage to the swivel connectors may occur.



Remove the dipstick assembly and fill the reservoir to within 1" of the top. Reservoir capacities are listed in the back of this manual.

**CAUTION:** Do not substitute other hydraulic fluids or oils. Damage to the power unit may result.

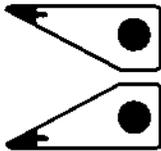


Connect the pigtail hoses to each other.



Store the unit with the dump valve in the dump position so the unit is ready to start.

For gas units, store the power unit with the valve in the 'off' position.

 **HURST**  
**JAWS OF LIFE**<sup>®</sup>  
PERFORMANCE IS EVERYTHING

# POWER UNIT OPERATION



**Electric units** - Place the on-off switch in the OFF position. Plug the unit into a properly protected electrical outlet.

**Gasoline units** - Fill the engine with a high quality oil. Fuel unit with gasoline. Consult the engine manufacturer's manual for oil and fuel specification.



Ensure all hydraulic connections from the power unit to the rescue system are securely connected.

**Gasoline units** - Open the fuel shut-off valve if your engine is equipped with one.



Ensure that the bypass (dump) valve is in the "DUMP" position.



**Electric units** - To start motor, push the Green button.

**Gasoline units** - Move the speed control to the START position. Pull starter grip slowly until resistance is felt, then pull rapidly to start engine. Once engine starts, Adjust the speed control to the FAST or RUN position. See the engine manufacturer's instructions for additional information.



Move the dump valve lever firmly to the "PRESSURE" position.



Open and close the rescue tool several times to purge any air from the hydraulic system.



After use, move the dump valve lever to the "DUMP" position.



Electric units - To stop motor, push the Red button.

Gasoline units - Move the speed control to the "STOP" position.



After initial start-up of the power unit, remove the filler cap from the hydraulic reservoir and check the fluid level. If the level is down, fill to within 1" of the top of the reservoir. Replace the filler cap and hand tighten.

# TROUBLESHOOTING AND GENERAL MAINTENANCE

## GENERAL MAINTENANCE GUIDE\*

### DAILY MAINTENANCE/INSPECTION

- Inspect carefully for Hydraulic leaks
- Inspect hoses and couplings for wear and damage.
- Clean unit with soap and water
- Check hydraulic fluid level in reservoir and fill if necessary. Use only HURST PHOSPHATE ESTER hydraulic fluid. Use of any other fluid will damage seals in Hurst equipment.
- Check that all fasteners are in place and securely fastened.

### AFTER USE MAINTENANCE

- Clean unit.
- Check hydraulic fluid level in reservoir and fill if necessary.

### 6 MONTH MAINTENANCE

- Check hoses and coupling for wear and damage. Replace if necessary
- Replace operating decals as required
- Clean unit with soap and water.

### STORAGE

- Protect unit against moisture.
- Store in adequate space to prevent damage to unit.

### ANNUAL INSPECTION\*

**NOTE: ANNUAL INSPECTION SHOULD ONLY BE PERFORMED BY FACTORY PERSONNEL OR FACTORY TRAINED PERSONNEL.**

- Disassemble and inspect all parts and seals for wear or damage. Replace as necessary. Reassemble and check hydraulic pressure. Hydraulic pressure should be 5000 PSI. Test unit with and without load and check for hydraulic leaks.
- Replace operating decals as needed.
- Replace hoses, couplings and fasteners as required.
- Clean unit with soap and water.

*\* Call your authorized Jaws of Life Distributor for maintenance and annual inspection care.*

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## GASOLINE POWER UNIT TROUBLESHOOTING GUIDE\*

PROBLEM	CAUSE	REMEDY
Engine Hard to start or fails to start	<ul style="list-style-type: none"> <li>• No Fuel in tank</li> <li>• Fuel line or filter clogged</li> <li>• Engine flooded</li> <li>• Spark plug wire shorted, broken or disconnected</li> <li>• Spark plug shorted, fouled or broken</li> <li>• Fuel tank cap vent clogged</li> <li>• Water in fuel or stale fuel</li> </ul>	<ul style="list-style-type: none"> <li>• Fill Tank</li> <li>• Clean or replace fuel line or filter</li> <li>• Remove and dry spark plug</li> <li>• Replace wire or attache to spark plug</li> <li>• Clean, regap or replace spark plug</li> <li>• Open vent hole</li> <li>• Drain and refill fuel system</li> </ul>
Engine runs erratically, no power	<ul style="list-style-type: none"> <li>• Dirt in fuel system</li> <li>• Spar plug fouled or broken</li> <li>• Incorrect gap setting on spark plug</li> <li>• Low oil level</li> </ul>	<ul style="list-style-type: none"> <li>• Remove and clean fuel system</li> <li>• Replace spark plug</li> <li>• set gap to engine mfg. specification</li> <li>• Fill crankcase to proper level</li> </ul>
Engine overheats	<ul style="list-style-type: none"> <li>• Low Oil Level</li> <li>• Air flow obstructed</li> </ul>	<ul style="list-style-type: none"> <li>• Fill crankcase to proper level</li> <li>• Remove obstructions. Operate in well ventilated area.</li> </ul>

*\* Call your authorized Jaws of Life Distributor for maintenance and annual inspection care.*

# ELECTRIC POWER UNIT

## TROUBLESHOOTING GUIDE\*

PROBLEM	CAUSE	REMEDY
Motor fails to start	<ul style="list-style-type: none"> <li>• Open in starting switch or in winding</li> <li>• Defective capacitor</li> <li>• Blown fuses</li> <li>• Tripped circuit breaker</li> <li>• Improper current supply</li> </ul>	<ul style="list-style-type: none"> <li>• Contact local authorized dealer.*</li> <li>• Contact local authorized dealer.*</li> <li>• Replace fuses at least 125% of motor nameplate amperes.</li> <li>• Check and reset circuit breaker</li> <li>• Check to ensure power supply is capable of handling motor nameplate voltage and amperage requirements.</li> <li>• Remove power from unit and check for loose connections</li> </ul>
Motor stalls	<ul style="list-style-type: none"> <li>• Improper line connections</li> <li>• Low voltage to motor</li> <li>• Open Circuit</li> </ul>	<ul style="list-style-type: none"> <li>• Contact local authorized dealer.*</li> <li>• Ensure that nameplate voltage is maintained.</li> <li>• Check for blown fuses, tripped circuit breakers or loose connections.</li> </ul>
Motor overheats	<ul style="list-style-type: none"> <li>• Defective capacitor</li> <li>• Improper ventilation</li> <li>• Improper voltage to motor</li> </ul>	<ul style="list-style-type: none"> <li>• Contact local authorized dealer.*</li> <li>• Provide proper ventilation</li> <li>• Voltage to motor must not exceed <math>\pm 10\%</math> of nameplate voltage</li> </ul>

## WIRING RECOMMENDATIONS

### MINIMUM AWG COPPER WIRE SIZE

	<u>50 FT.</u>	<u>100 FT.</u>	<u>150 FT.</u>	<u>200 FT.</u>
110V AC	10	6	4	4
220V AC	14	12	10	8

## MISCELLANEOUS

### TROUBLESHOOTING GUIDE\*

PROBLEM	CAUSE	REMEDY
Tool operates erratically, slowly or fails to operate.	<ul style="list-style-type: none"> <li>• Hydraulic Fluid is low</li> <li>• Air in Hydraulic System</li> <li>• External Hydraulic leak</li> <li>• Bypass (DUMP) valve not in the pressure position</li> <li>• Couplings not properly connected</li> <li>• Coupling failure - fails to open internal check when connected</li> <li>• No flow from Power Unit</li> <li>• Hoses Reversed on power unit</li> <li>• Couplings reversed on tool</li> <li>• Bypass (DUMP) valve failure</li> <li>• Low flow from power unit</li> <li>• Erratic flow from power unit</li> <li>• Pump worn or damaged</li> <li>• Pump, sequencing valve or relief valve failure</li> </ul>	<ul style="list-style-type: none"> <li>• Check fluid level in reservoir and add fluids as required</li> <li>• Tighten all hydraulic connections. Fill reservoir to the proper level. Fully open and close tool several times.</li> <li>• Replace any damaged valves, hoses or fittings. Tighten leaky connections. Purge air from the system by opening and closing the rescue tool several times.</li> <li>• Move valve lever firmly into the pressure position</li> <li>• Connect couplings correctly</li> <li>• Remove and replace coupling</li> <li>• Check power unit and repair as required.</li> <li>• Remove and reverse hoses</li> <li>• Remove and reverse couplings</li> <li>• Have power unit repaired.*</li> </ul>

**\* Call your authorized Jaws of Life Distributor for maintenance and annual inspection care.**

# HURST POWER UNIT DATA

## Gasoline Power Units

Model	Length	Width	Height	Weight	Fluid Capacity
JL-4GBS-DV	18.90 in.	17.72 in.	19.69 in.	83.7 lb.	2 gallons
JL-4GBS-SV	18.90 in.	17.72 in.	19.69 in.	85.9 lb.	2 gallons
JL-4GH-DV	18.90 in.	17.72 in.	19.69 in.	82.6 lb.	2 gallons
JL-4GH-SV	18.90 in.	17.72 in.	19.69 in.	84.8 lb.	2 gallons
JL-4GH-SI	18.90 in.	17.72 in.	19.69 in.	87.0 lb.	2 gallons

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## Electric Power Units

Model	Length	Width	Height	Weight	Fluid Capacity
JL-AC-SI	18.90 in.	17.72 in.	19.69 in.	88.1 lb.	2 gallons

For parts, service or technical information contact  
your local Distributor or call 1-800-536-2659



# **HALE**

# **IDEX**

IDEX CORPORATION

**SALES**

700 SPRING MILL AVENUE  
CONSHOHOCKEN, PA 19428  
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FAX: (704) 487-7271

