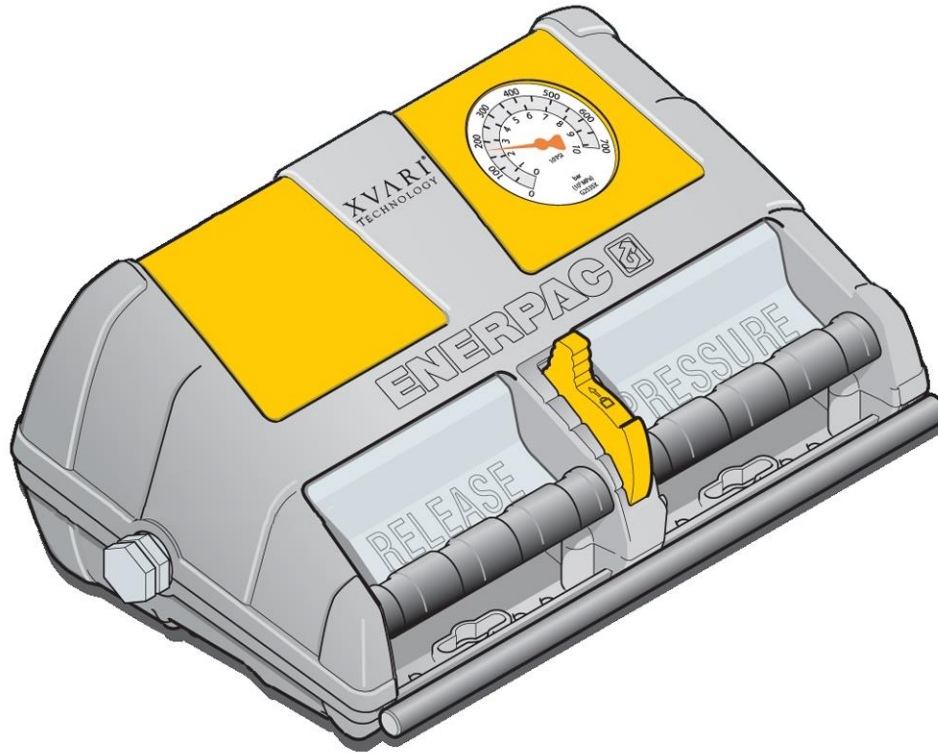


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1.0 IMPORTANT RECEIVING INSTRUCTIONS

- Visually inspect all components for shipping damage. Shipping Damage is **not** covered by warranty. If shipping damage is found, notify carrier at once. The carrier is responsible for all repair and replacement cost resulting from damage in shipment.

2.0 SAFETY

- Read all instructions, warnings, and cautions carefully. Follow all safety precautions to avoid personal injury or property damage during system operation. DMC cannot be responsible for damage or injury resulting from unsafe product use, lack of maintenance, or incorrect product and/or system operation. Contact DMC when in doubt as to the safety precautions and operations.

Failure to comply with the following cautions and warnings could cause equipment damage and personal injury.

A **CAUTION** is used to indicate correct operating or maintenance procedures and practices to prevent damage to, or destruction of equipment or other property.

A **WARNING** indicates a potential danger that requires correct procedures or practices to avoid personal injury.

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A **DANGER** is only used when your action or lack of action may cause serious injury or even death.

WARNING: Wear proper personal protective gear when operating hydraulic equipment.

DANGER: To avoid personal injury keep hands and feet away from cylinder and work piece during operation.

WARNING: Do not exceed equipment ratings. Overloading causes equipment failure and possible injury. The pump is designed for a max. pressure of 700 bars (10,000 psi).

DANGER: Never set the relief valve to a higher pressure than the maximum rated pressure of the pump. Higher settings may result in equipment damage and/or personal injury. Do not remove relief valve.

CAUTION: Avoid damaging hydraulic hose. Avoid sharp bends and kinks when routing hydraulic hoses. Using a bent or kinked hose will cause severe back pressure. Sharp bends and kinks will internally damage the hose leading to premature hose failure.

IMPORTANT: Do not lift hydraulic equipment by the hoses or swivel couplers. Use the carrying handle or other means of safe transport.

CAUTION: Keep hydraulic equipment away from flames and heat. For optimum performance do not expose equipment to temperatures of 65° C (150° F) or higher.

DANGER: Do not handle pressurized hoses. Escaping oil under pressure can penetrate the skin, causing serious injury. If oil is injected under the skin, see a doctor immediately.

IMPORTANT: Hydraulic equipment must only be serviced by a qualified hydraulic technician. For repair service, contact Daniels Manufacturing Corporation.

3.0 SPECIFICATIONS

Usable Oil Capacity		Maximum Pressure	Output Flow Rate @100psi (6.9bar)		Valve Type	Valve Function	Weight		Dynamic Air Pressure Range	Air Consumption
Liters	in ³		No Load	Load			lb	Kg		
1.0	61	10,000psi (700bar)	120in ³ /min (2.0l/min)	15in ³ /min (.25l/min)	3-way, 3-pos.	Adv./Hold /Retract	19.4	8.8	30-125psi (2.1-8.6bar)	10-35ft ³ /min (283-991 l/min)



CAUTION: Use of an airline lubricator is strongly recommended. Set the lubricator to provide one drop of oil per minute of continuous operation. Use a high quality air tool oil such as Mobil Almo 525, Shell Torcula 32, or equivalent.

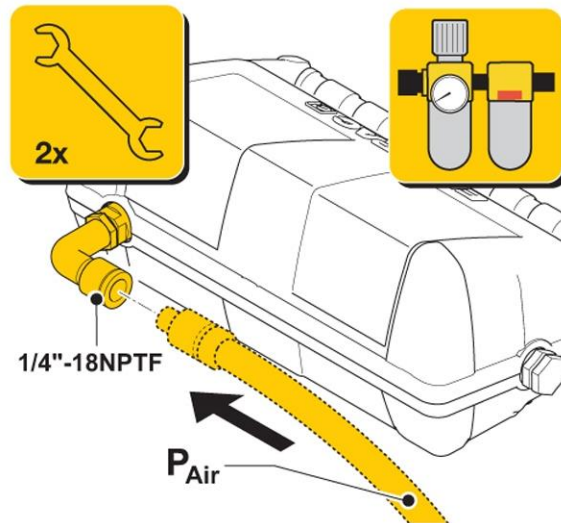
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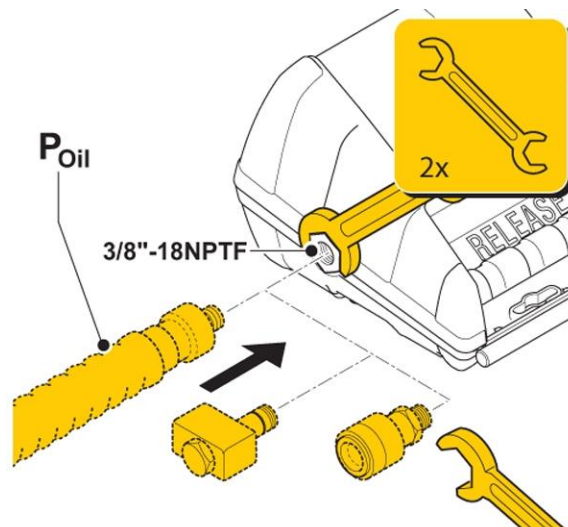
4.0 INSTALLATION

Connecting the Pump

1. Connect an air line to the supplied air pressure inlet.



2. Thread one end of the hydraulic hose (DMC P/N 12-4040) to the hydraulic coupler output.



3. Thread the other end of the hydraulic hose to the crimp head.

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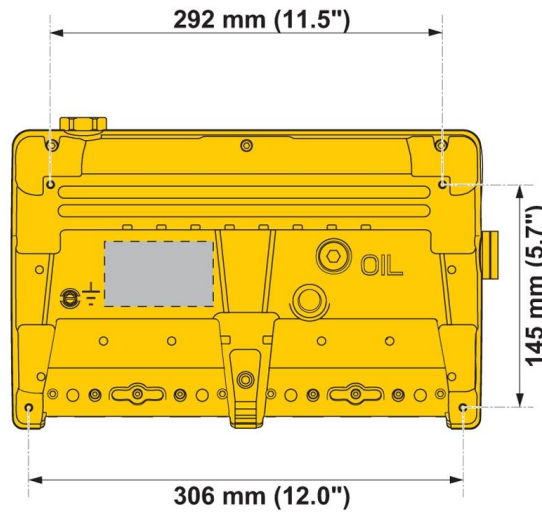
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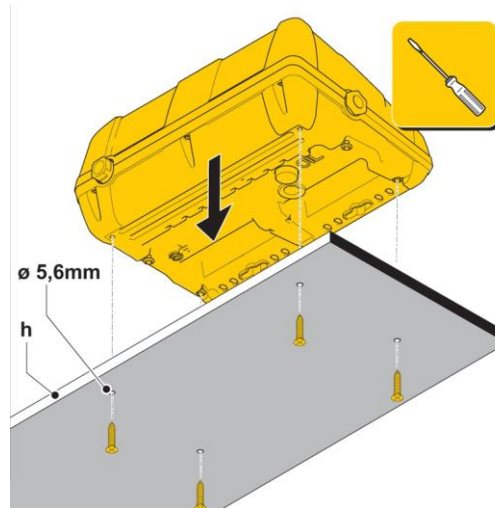
Mounting

The pump can be mounted to a work surface if desired.

Hole spacing shown below is for reference.



Screws used for mounting should be 25/32" (20mm) longer than the thickness of the work surface. The screws should be either #10-16 UN or M5 self tapping type.



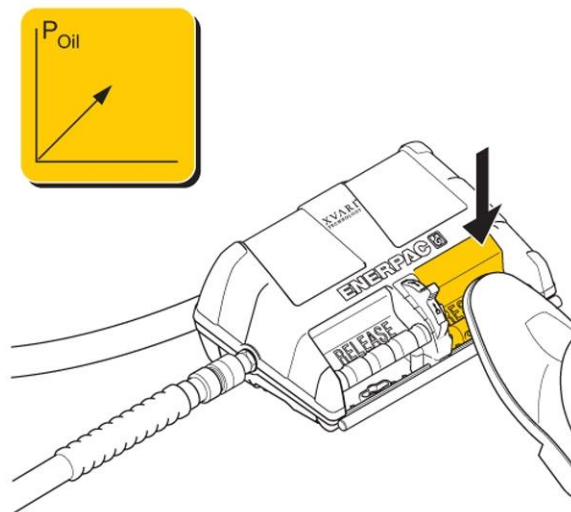
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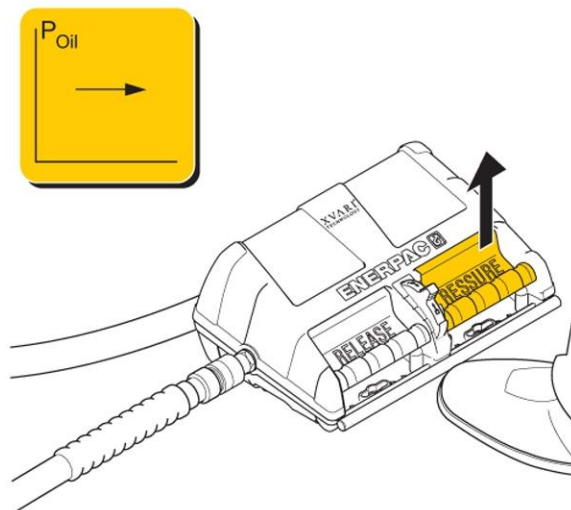
5.0 OPERATION

1. Check all system fittings and connections to be sure they are tight and leak free.
2. Check oil level in reservoir before operating pump. See "Adding Oil to the Pump" on Page 9.
3. After ensuring that a die is installed in the crimp head and the proper contact is loaded. Depress the foot pedal marked pressure to deliver hydraulic pressure.

Note: Press & hold "PRESSURE" until the gage on the pump reads 10,000 psi, and the crimp is complete. If you let off early, the cylinder will stop and hold. From this point the operator can either continue crimping by depressing "PRESSURE", or retract the cylinder by depressing "RELEASE". DO NOT release the pressure in the system until 10,000 psi is reached, EXCEPT in cases of emergency. Crimping with less than 10,000 psi will result in insufficient compression, and produce bad crimps.



4. Release foot from the pressure foot pedal. The die set will be held closed.

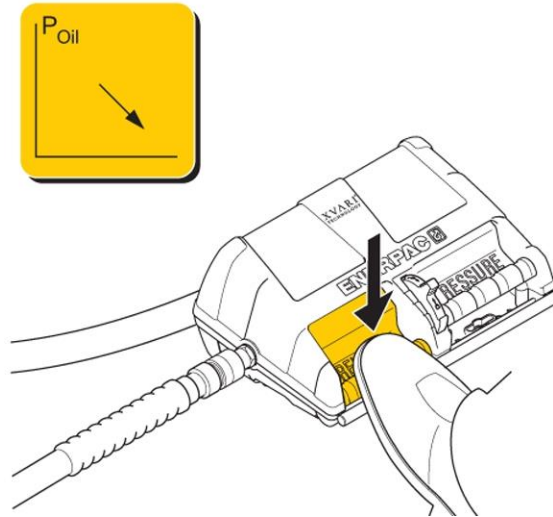


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5. Press the foot pedal marked release to release hydraulic pressure, and open the die set.

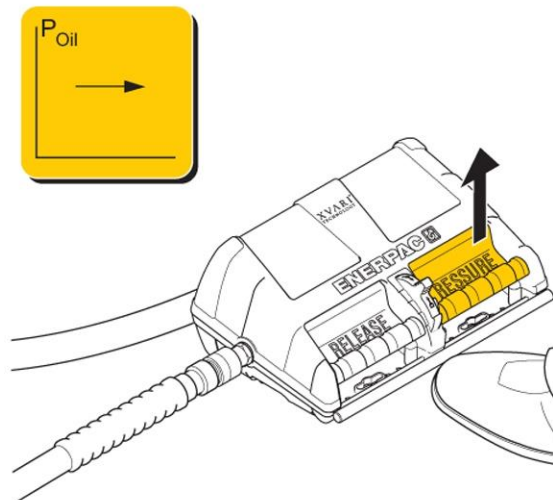


NOTE: If the tool is closed on a part of the body, or incorrectly on the part being crimped, immediately press the release lever and hold it until the tool fully opens

RELEASE PEDAL LOCKING

If it is desired to have the release pedal lock in the depressed position to avoid accidental pressurizing of the crimp head the lock can be engaged.

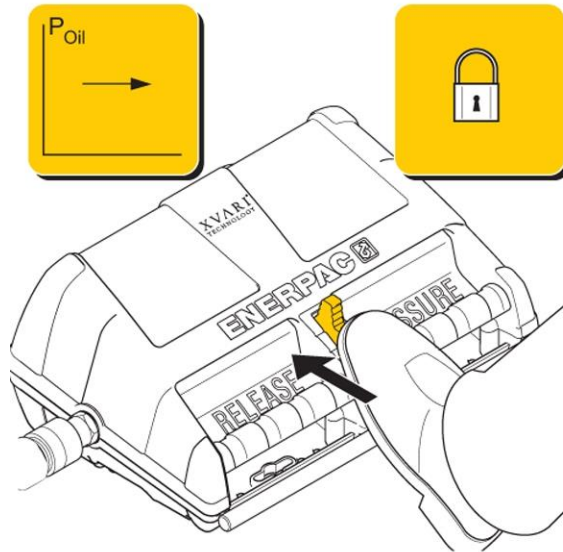
1. After the system has been pressurized, remove foot from the pressure pedal. System will hold crimp pressure.



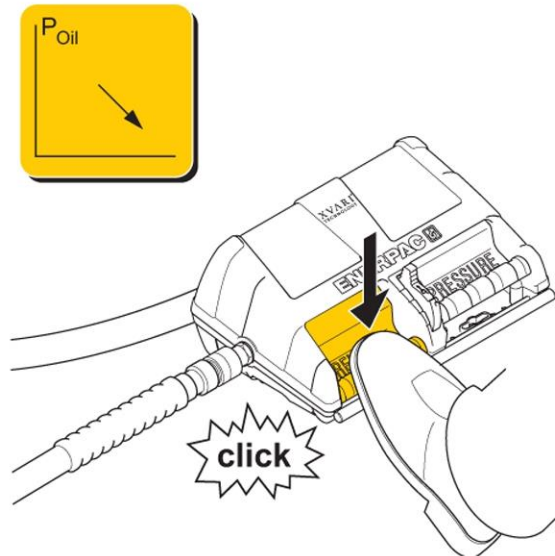
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2. Before pressing the release pedal, move the lock switch to the locked position.



3. Depress the release pedal, system pressure will be released, and the pedal will lock into the down position.

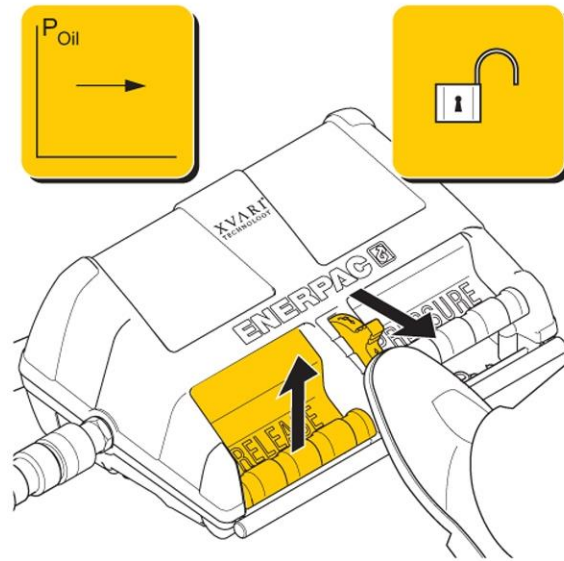


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4. To unlock the release pedal and perform the next crimp, move the lock switch to the unlock position.



NOTE: The HPU11M pump is a non vented/seal unit that can operated in any orientation.

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6.0 MAINTENANCE

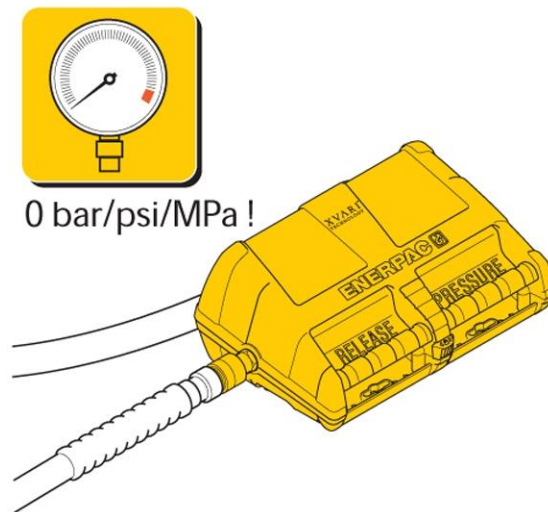
Use only oil that is ISO Viscosity Grade 32, Viscosity SUS @ 100 Degrees Fahrenheit 150/165, Flash Point 400 Degrees Fahrenheit, Pour Point -25 Degrees Fahrenheit.

Adding Oil to the Pump

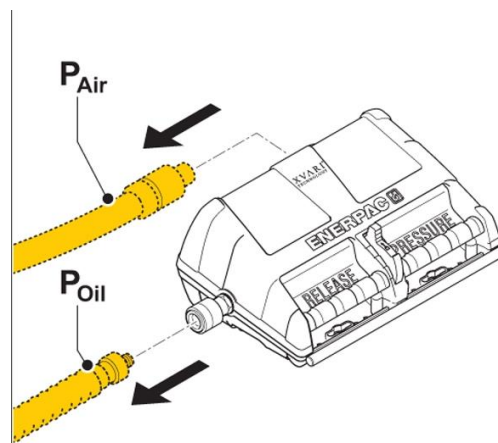
Check oil level regularly

WARNING: Always add oil with the cylinders fully retracted, or the system will contain more oil than the reservoir can hold.

1. Make sure the system is completely depressurized.



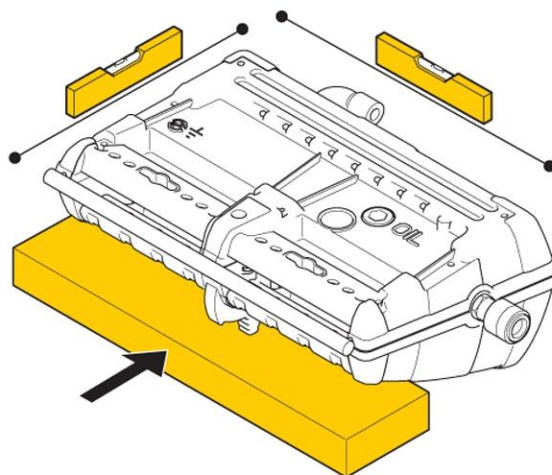
2. Disconnect both the air, and oil lines.



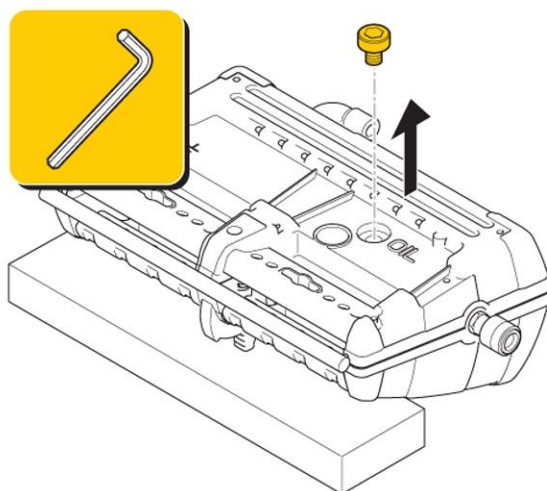
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3. Turn the unit upside down, and ensure that it is level.



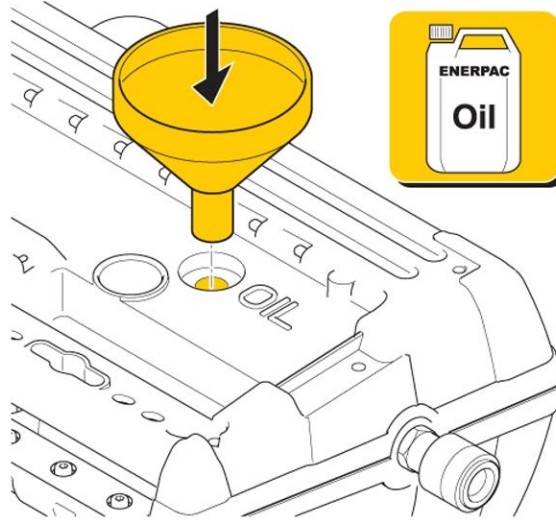
4. Remove the fill plug with an 8mm Allen Wrench.



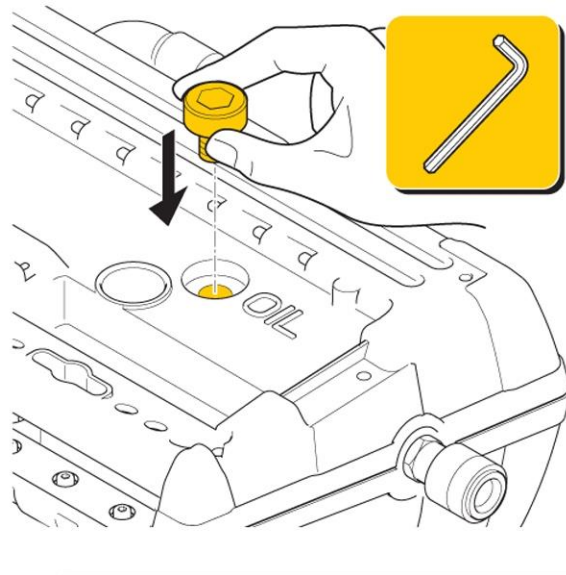
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5. Add oil through the opening in the housing, filling it to just below the opening.



6. Replace the fill plug with an 8mm Allen Wrench.



7.0 TROUBLESHOOTING GUIDE

The following information is intended as aid in determining if a problem exists. For repair service, contact Daniels Manufacturing Corporation.

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PROBLEM	POSSIBLE CAUSE	SOLUTION
Pump will not start.	The air is turned off. Too low air pressure. The air line is blocked. The air line leaks. Air motor malfunction. Object stuck under "Pressure" pedal. Low oil level. Prolonged storage. No lubrication of air motor.	Turn air on. Increase air pressure. Unblock air hose. Fix air leak. Return to DMC. Clear pedal from foreign objects. Replenish oil. Return to DMC. Return to DMC.
Pump fails to build pressure.	External leakage. Internal leakage in pump. Low oil level. Object stuck under "Pressure" pedal. Pump malfunction.	Fix leak-Replace hose and/or actuator. Return to DMC. Replenish oil. Clear pedal from foreign objects. Return to DMC.
Pump builds less than full pressure.	Low air pressure. Internal relief valve set low. External system leak. Internal leak in the system. Pump malfunction.	Increase air intake pressure. Return to DMC. Fix leak-Replace hose and/or actuator. Return to DMC. Return to DMC.
Pump builds pressure, but dies do not close.	Crimp pressure needed exceeds cylinder capacity. Hydraulic flow to cylinder is blocked. Hydraulic coupler not tight.	Use a crimp head with a higher capacity. Check hydraulic hose. Tighten coupler.
Pump does not hold pressure.	External system leak. Internal leak in the system.	Fix leak-Replace hose and/or cylinder. Return to DMC.
Cylinder will not return.	Object stuck under "Release" pedal. Return spring broken in cylinder. Release valve malfunction.	Clear pedal from foreign objects. Return to DMC. Return to DMC.
Low oil flow rate.	Inadequate air supply. Low oil level. Dirty air filter. Reservoir bladder malfunction.	Check air supply for leakage. Replenish oil in pump. Clean air filter in the RFL. Return to DMC.
Moisture under pump.	Condensed water from exhaust air. Too much lubrication in intake air. Oil from reservoir overflow. Oil from internal leakage.	Check air dryer in air supply system. Adjust air lubricator of RFL unit. Do not connect pump to retracted cylinder/actuator. Return to DMC.
Pump feels cold.	Temperature drop from expanding air.	Is normal after intensive use, and is not a problem.
Pump feels hot.	Oil temperature < 140°F (60°C). Oil Temperature > 140°F (60°C).	Is not a problem. Check oil level-Replenish if low. Use pump intermittently to let it cool down. Use pump with a larger usable oil capacity.

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Limitation of Liability

DANIELS MANUFACTURING CORPORATION IS NOT LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY NATURE OR KIND RESULTING FROM THE USE, OR MISUSE, OF ANY OF ITS PRODUCTS. OWNERS AND USERS OF DMC PRODUCTS ASSUME FULL RESPONSIBILITY FOR INSTRUCTING THEIR EMPLOYEES IN THE PROPER AND SAFE USE OF SUCH PRODUCTS.

Limited Warranty

DMC (Daniels Manufacturing Corporation) warrants each new product sold by it to be free from defects in material and workmanship under normal use and service. DMC's obligation under this warranty is limited to the free correction or, at DMC's option, the refund of the purchase price of any such product which proves defective in normal service within ninety (90) days after delivery to the first user, provided that the product is returned to DMC with all transportation charges prepaid and which shall appear to DMC's satisfaction, after DMC's inspection, to have been defective in material and workmanship, it being understood that DMC products are not consumer products. This warranty shall not cover any damage to any product which, in the opinion of DMC, was caused by normal wear, misuse, improper operation, tampering, neglect or accident. This warranty is in lieu of all other warranties express or implied. No warranty, express or implied, is made or authorized to be made or assumed with respect to products of Daniels Manufacturing Corporation other than those herein set forth.