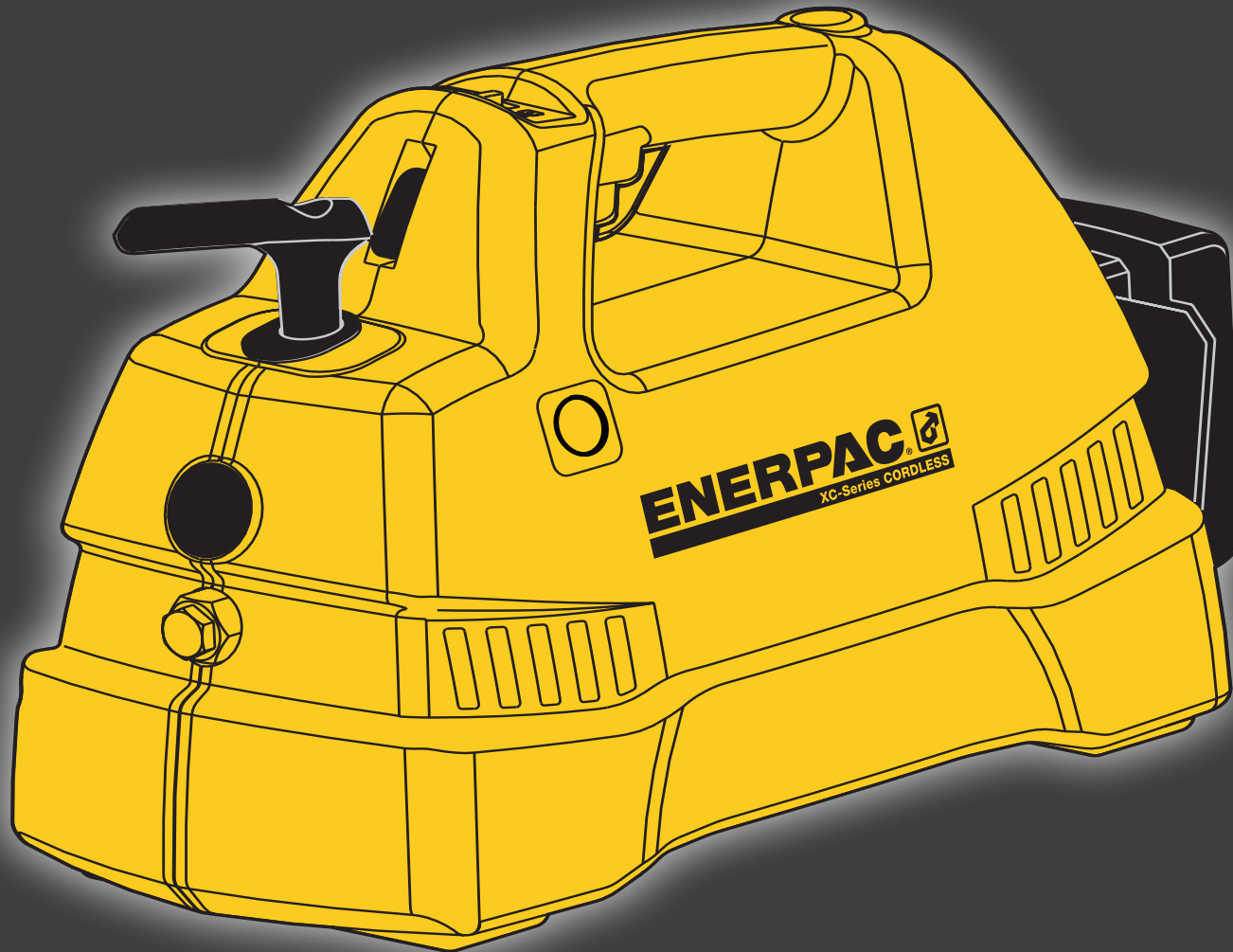


# **ENERPAC** **XC-Series Cordless Hydraulic Pump**

## **Instruction Manual**



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## Important

### Safety First

Read all instructions, DANGER, WARNING and CAUTION paragraphs carefully. Follow all safety precautions to avoid personal injury or property damage during system operation. Save these instructions.

ENERPAC cannot be responsible for damage or injury resulting from unsafe product use, lack of maintenance or incorrect product and/or system operation. Contact ENERPAC when in doubt as to the safety precautions and operations

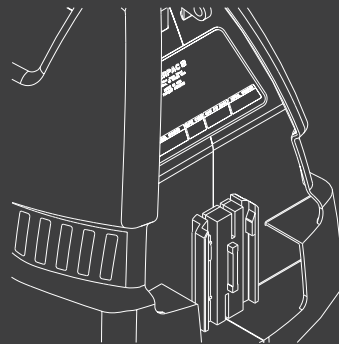
### Conformance to National & International Standards.

We declare that this product has been tested and conforms to applicable standards and is approved to carry the CE, TUV C and US, and FCC certification marks. An EC Declaration of Conformity is enclosed separately.



### Model / Serial Number

The model and serial number are found on the back side of unit, above the battery area.



### DANGER

Danger icons are only used when your action or lack of action may cause serious injury or even death.



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



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























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.



Do not pressurize disconnected couplers.

Failure to comply with DANGER, WARNING or CAUTION statements could cause equipment damage and personal injury.

	<b>WARNING</b>	Indicates a potential danger that requires correct procedures or practices to avoid possible serious personal injury or death.
		Immediately replace worn or damaged parts with genuine ENERPAC parts. Non genuine ENERPAC parts may break, causing personal injury and property damage. ENERPAC parts are designed to fit properly and withstand high loads.
		Stay clear of loads supported by hydraulics. A cylinder, when used as a load lifting device, should never be used as a load holding device. After the load has been raised or lowered, it must always be blocked mechanically.
		Only use hydraulic cylinders in a coupled system. Never use a cylinder with unconnected couplers. If the cylinder becomes extremely overloaded, components can fail catastrophically, causing severe personal injury.
 		Use only rigid pieces to hold loads. Carefully select steel or wood blocks that are capable of supporting the load. Never use a hydraulic cylinder as a shim or spacer in any lifting or pressing application.
		Avoid situations where loads are not directly centered on the cylinder plunger. Off-center loads produce considerable strain on cylinders and plungers. In addition, the load may slip or fall, causing potential danger.
		The system operating pressure must not exceed the pressure rating of the lowest rated component in the system. Install pressure gauge in the system to monitor operating pressure. It is your window to see what is happening in the system.
		Do not exceed equipment ratings. Never attempt to lift a load weighing more than the capacity of the cylinder. Overloading causes equipment failure and possible personal injury. The cylinders are designed for a max. pressure of 700 bar/10,000 psi/70 MPa. Do not connect a jack or cylinder to a pump with a higher pressure rating.
		Wear proper personal protective gear when operating hydraulic equipment.
 		Be sure setup is stable before lifting load. Cylinders should be placed on a flat surface that can support the load. Where applicable, use a cylinder base plate for added stability. Do not weld or otherwise modify the cylinder to attach a base or other support.

	<b>CAUTION</b>	Is used to indicate correct operating or maintenance procedures and practices to prevent minor or moderate injury or damage to / destruction of equipment or other property.
		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.
		Do not drop heavy objects on hose. A sharp impact may cause internal damage to hose wire strands. Applying pressure to a damaged hose may cause it to rupture.
		Distribute the load evenly across the entire saddle surface. Always use a saddle to protect the plunger.
		Do not lift hydraulic equipment by the hoses or swivel couplers. Use the carrying handle.
		Keep hydraulic equipment away from flames and heat. Excessive heat will soften packings and seals, resulting in fluid leaks. Heat also weakens hose materials and packings. For optimum performance do not expose equipment to temperatures of 65 °C [150 °F] or higher. Protect all hydraulic equipment from weld spatter.
		Hydraulic equipment must only be serviced by a qualified hydraulic technician. For repair service, contact the Authorized ENERPAC Service Center in your area. To protect your warranty, use only ENERPAC oil.
		Do not exceed 25 percent duty cycle. Allow sufficient time for the pump to cool between operations.

Failure to comply with DANGER, WARNING or CAUTION statements could cause equipment damage and personal injury.



**WARNING**

## Additional Warnings for Battery Operated Electric Pumps.



Do not operate the pump in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. The pump creates sparks which may ignite the dust or fumes.



Do not expose the pump to rain or wet conditions. Water entering the pump will increase the risk of shock.



To avoid accidental starting, when carrying or moving the pump ensure the safety switch is in the locked position, and do not carry with hand or fingers on the trigger.



Do not operate pump if safety switch does not function. Seek repair assistance from an ENERPAC service center.



Remove battery pack from the pump before making any adjustments, performing maintenance or storing the pump.



Ensure the switch is in the locked position prior to inserting the battery pack.



Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create risk of fire when used with another battery pack.



Use the ENERPAC XC-Series pump only with MILWAUKEE ELECTRIC TOOL M28™ or V28™ Li-Ion battery packs. Use of any other battery packs may create risk of injury or fire.



When battery pack is not in use, keep it away from other metal objects like paperclips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or fire.

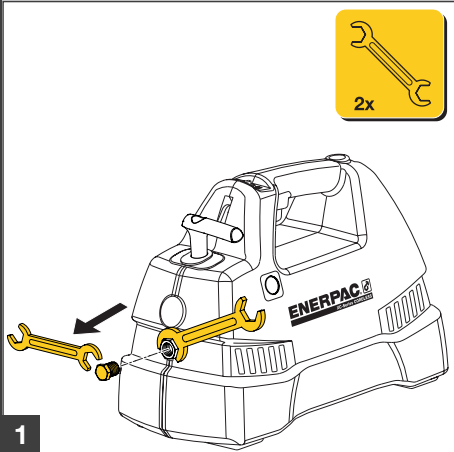
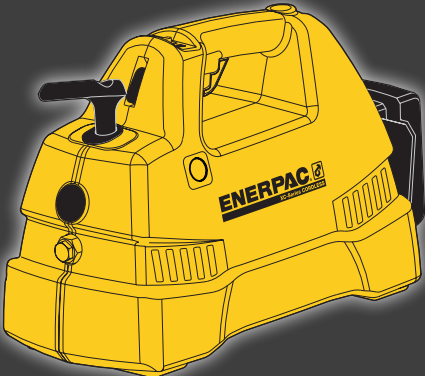



Under abusive conditions, liquid may be ejected from the battery. Avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery can cause irritation or burns.

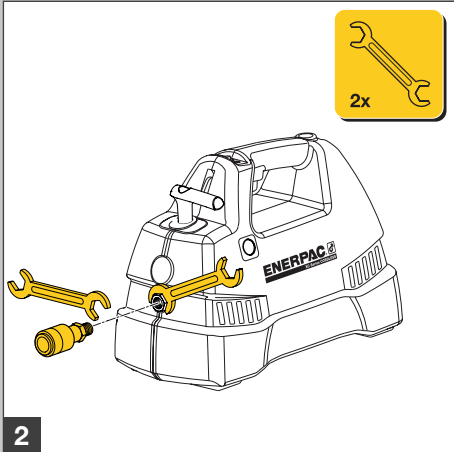


Read and understand the safety and operation instructions provided separately with the MILWAUKEE ELECTRIC TOOL battery and charger.

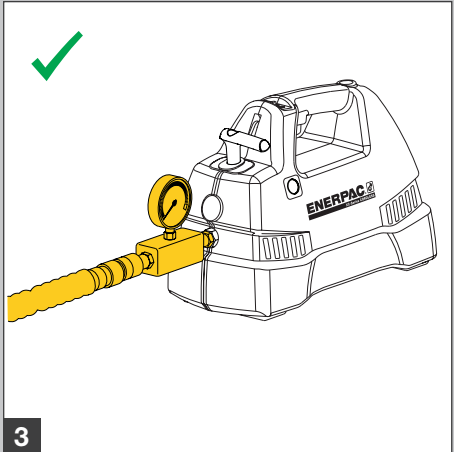
Failure to comply with DANGER, WARNING or CAUTION statements could cause equipment damage and personal injury.



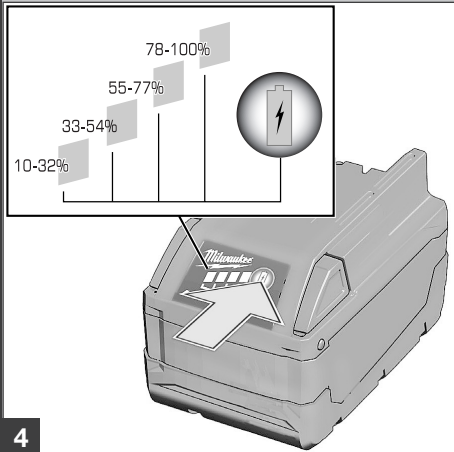
 1 1/16" & 15/16"



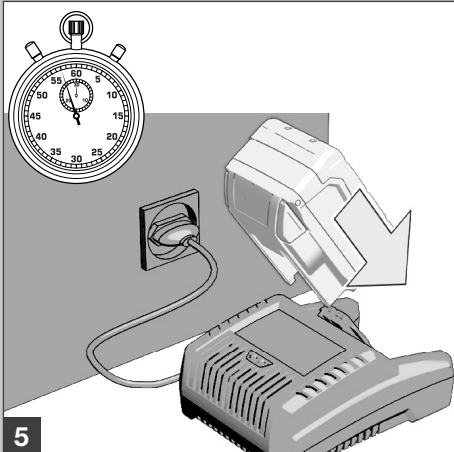
3/8" NPTF  60 - 70 Nm  
44 - 53 ft lb



Gauge Recommended

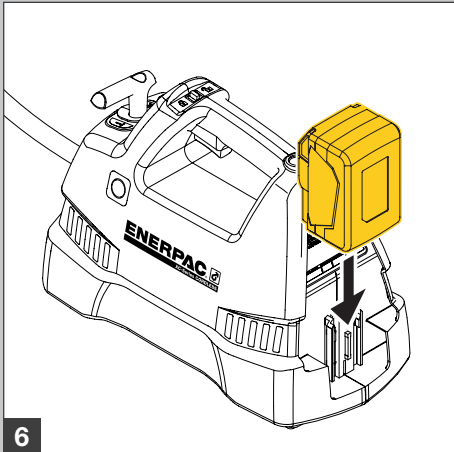


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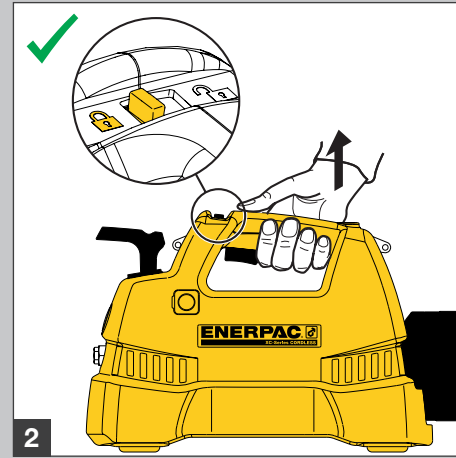
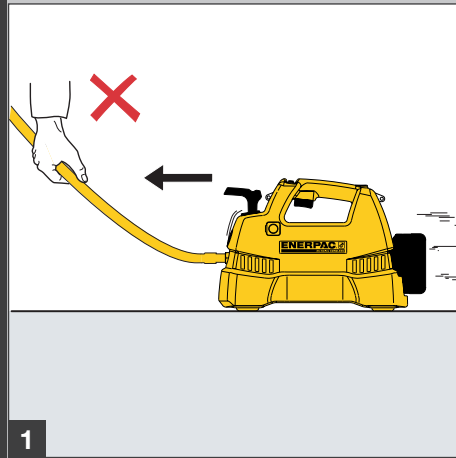


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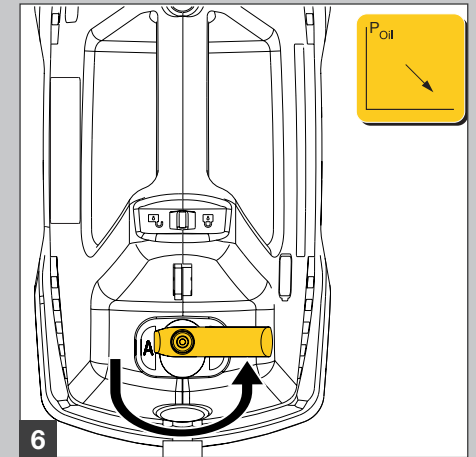
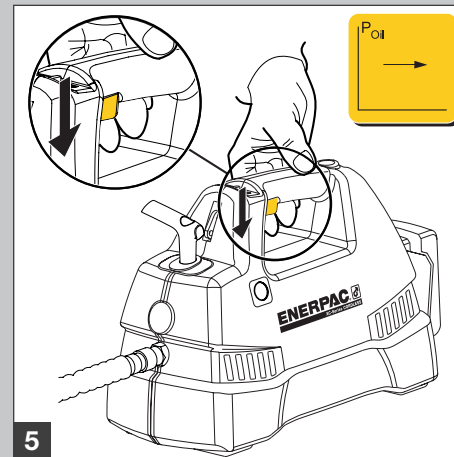
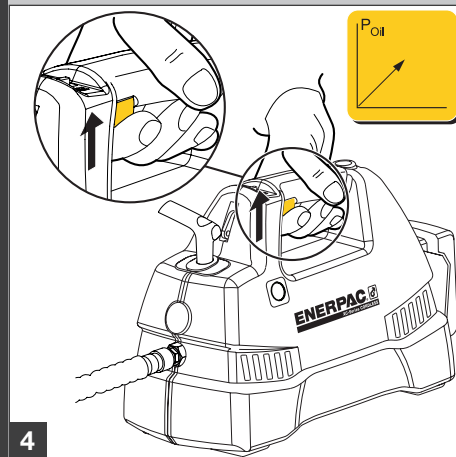
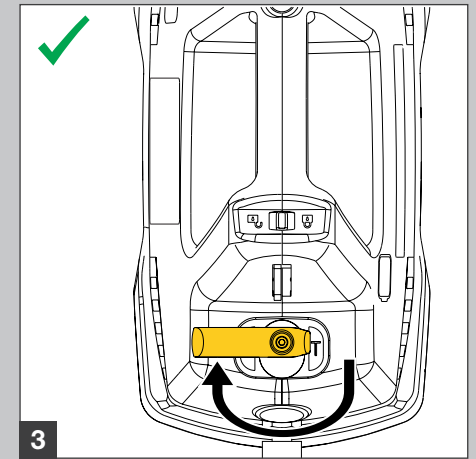
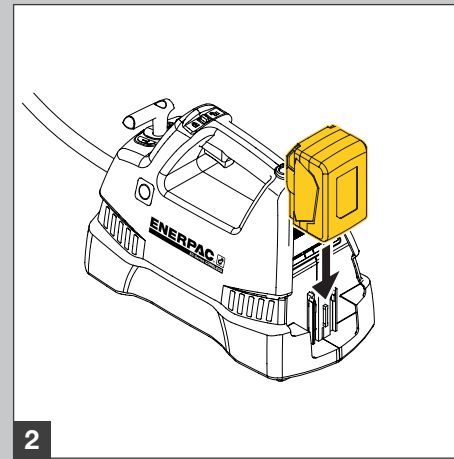
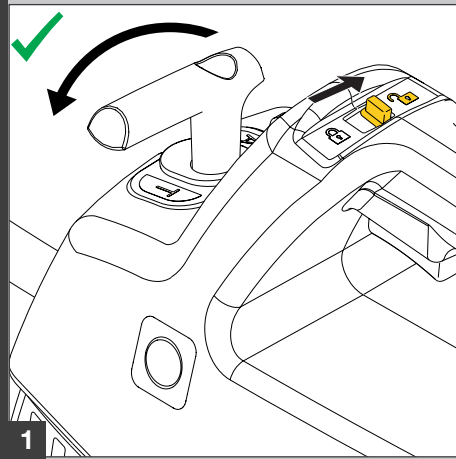
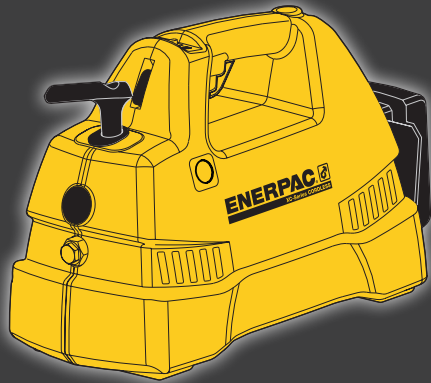
60 Min = 100%

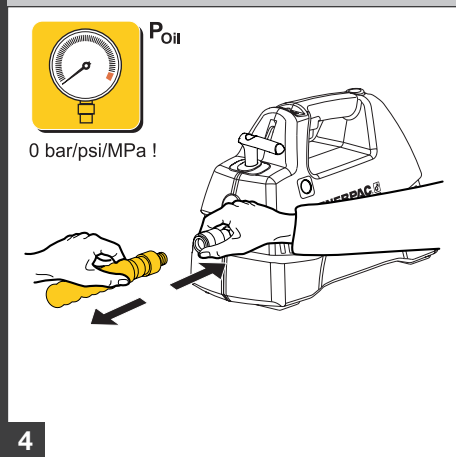
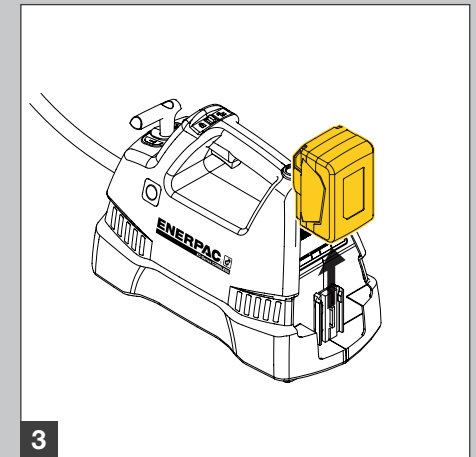
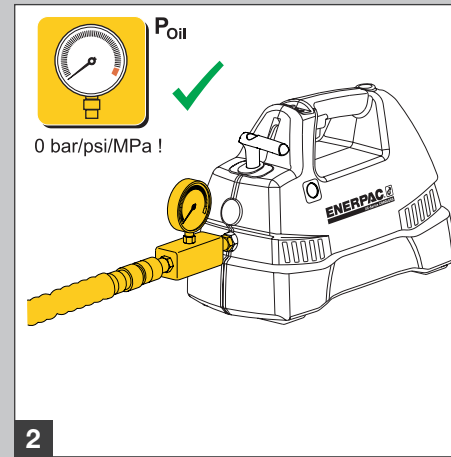
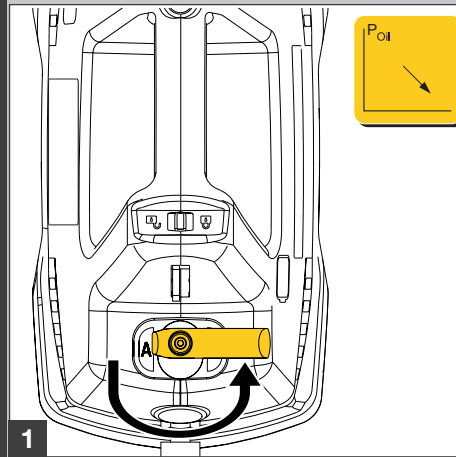
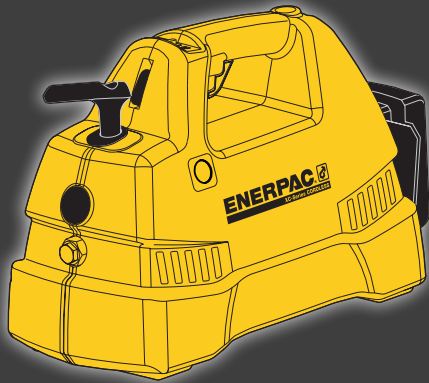


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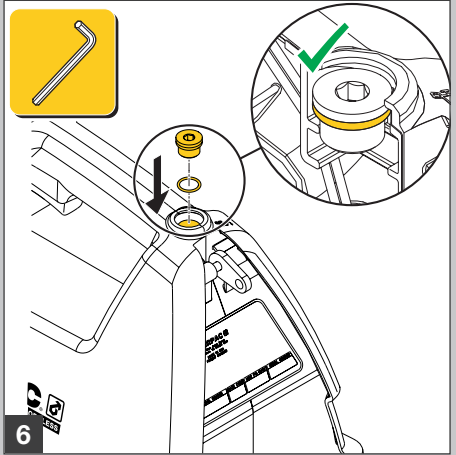
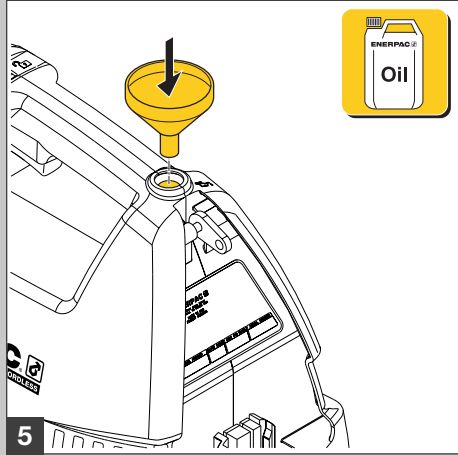
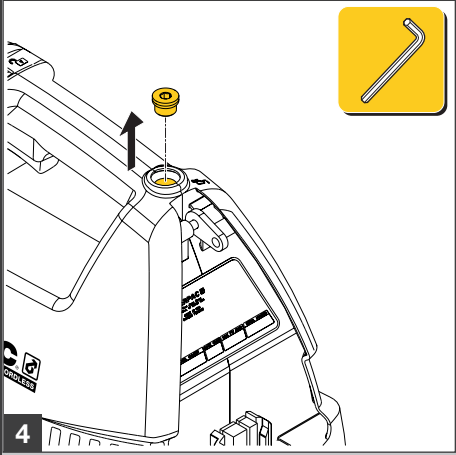
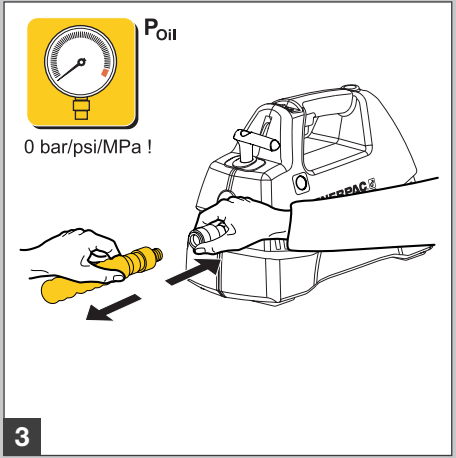
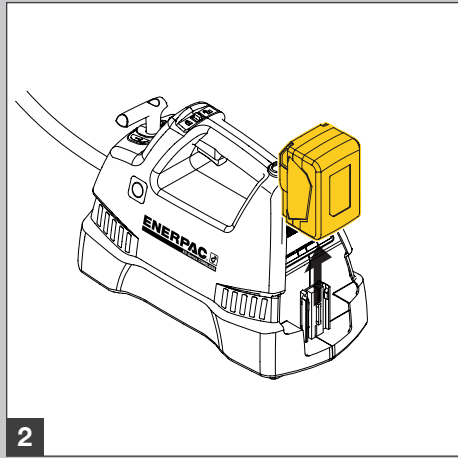
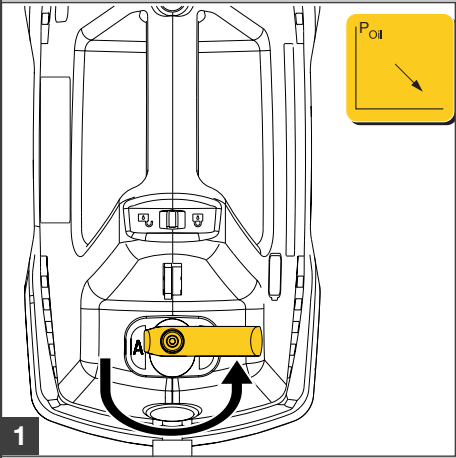


Optional Strap Shown









 1/4"



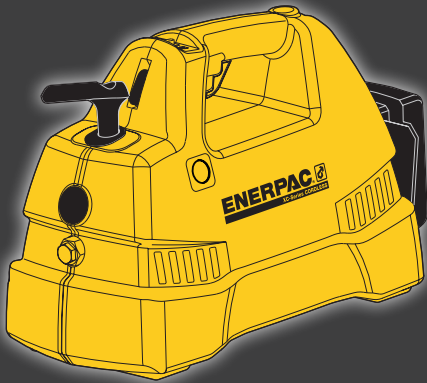
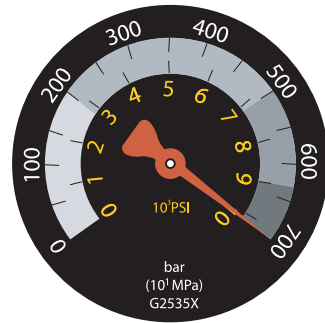
< Ø13mm  
Pour slowly

4.5 - 5.7 Nm  
40 - 50 in lb

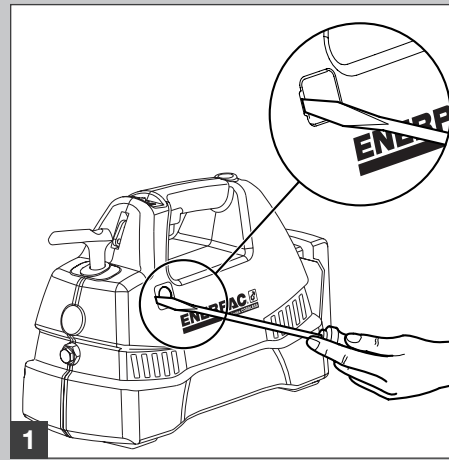
 1/4"

## Factory Setting

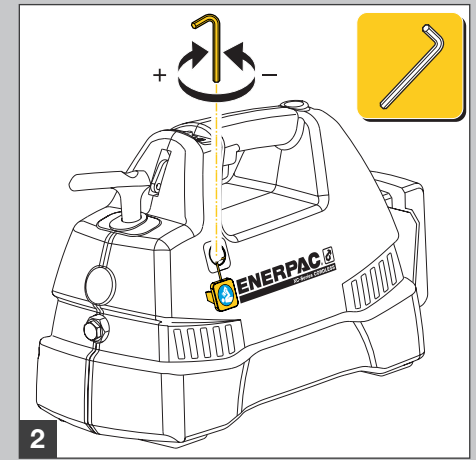
$P_{MAX} = 700 \text{ bar} / 10,000 \text{ psi} / 70 \text{ MPa}$



## User Adjustable

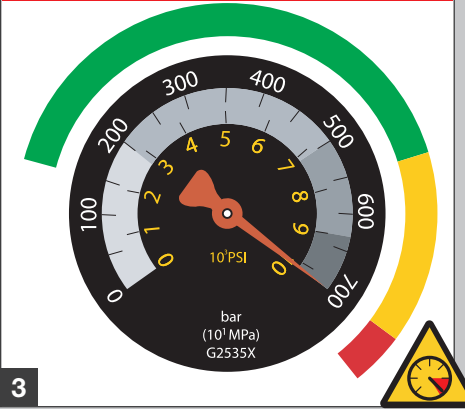


Flat head screwdriver

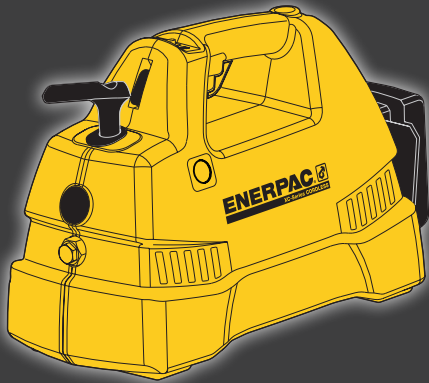


 7/32" x 6"

$P_{MAX} = 700 \text{ bar} / 10,000 \text{ psi} / 70 \text{ MPa}$



$P_{min} = 150 \text{ bar} / 2,175 \text{ psi} / 15 \text{ MPa}$

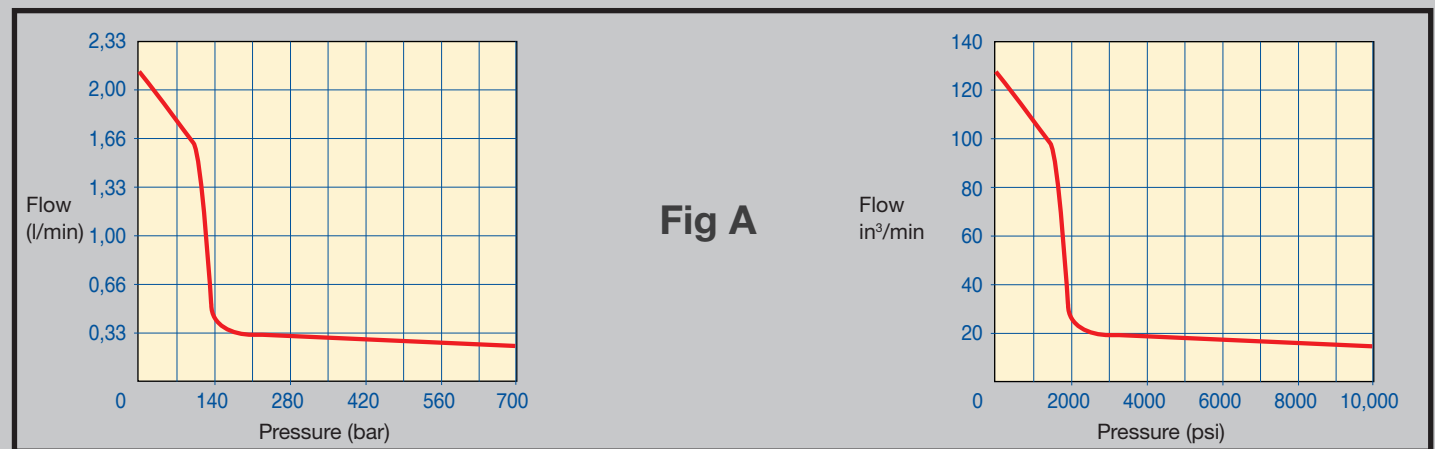


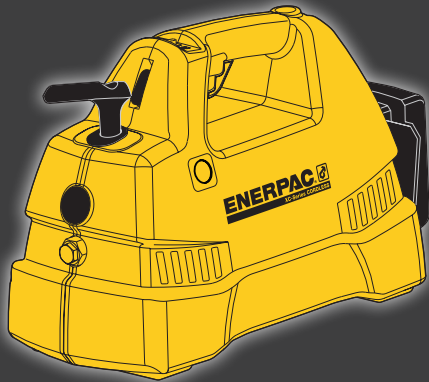
Cylinder / Tool	Valve	Charger Voltage 1 PH, 50/60Hz *	Usable Oil Capacity		Weight		Model Number
			Litres	in <sup>3</sup>	kg	lb	
Single acting	Manual 3 way, 2 position	115 V	1,0	60	9,9	21.9	XC-1201MB
			2,0	120	10,8	23.8	XC-1202MB
		230 V	1,0	60	9,9	21.9	XC-1201ME
			2,0	120	10,8	23.8	XC-1202ME
		---	1,0	60	9,9	21.9	XC-1201M**
			2,0	120	10,8	23.8	XC-1202M**

\* For more information visit [www.milwaukeetool.com](http://www.milwaukeetool.com)

\*\* Batteries and Charger not included.

Maximum Pressure	Flow Rate (Fig A)			Valve Function	Motor	Battery *	
	No load	2,000 psi / 140 bar	Max Load			Voltage	Type
700 bar	2,05 l/min.	0,50 l/min.	0,25 l/min	Advance / Release	0,37 KW 0.50 HP	28 V	Li-Ion
10,000 psi	125 in <sup>3</sup> /min.	30 in <sup>3</sup> /min.	15 in <sup>3</sup> /min.				





Problem	Possible Cause	Solution
Pump will not start.	Battery pack not installed.	Install battery pack.
	Electrical contacts dirty or corroded.	Clean contacts on the battery, pump and charger.
	Battery pack discharged.	Charge battery.
	Battery pack shut off.	Refer to battery/charger instruction sheet.
	Brushes worn.	Contact ENERPAC service center.
	Trigger lock engaged.	Undo trigger lock.
	Motor damaged.	Contact ENERPAC service center.
Pump clicks when trigger is depressed, but does not start.	Electrical contacts dirty or corroded.	Clean contacts on the battery, pump and charger.
	Battery pack discharged.	Charge battery.
	Battery too cool or too warm.	Get battery back to operating range (-20°C / 60°C)
	Battery pack damaged or not functioning.	Replace battery pack.
Low fluid output.	Pump jammed due to obstruction. Possible internal damage to pump.	Contact ENERPAC service center.
	Bypass valve malfunction.	Contact ENERPAC service center.
	Oil intake screens clogged with debris.	Contact ENERPAC service center.
Cylinder will not advance or retract.	Internal damage to pump.	Contact ENERPAC service center.
	Oil level low.	Add oil until reservoir is completely full.
	Oil intake screen clogged.	Contact ENERPAC service center.
Pump slows down and stops.	Valve handle in wrong position.	Shift valve to extend (pressure) position.
	Battery pack discharged.	Charge battery.
Cylinder advances and retracts erratically.	Air in the system.	Extend and retract the cylinder until operation is smooth.
	External hydraulic leak.	Tighten connections. Replace damaged components.
	Internal leakage in valve.	Contact ENERPAC service center.
	Internal damage to valve.	Contact ENERPAC service center.
Pump pulses and/or stops during prolonged or heavy operation.	Internal damage to pump.	Contact ENERPAC service center.
	Current draw too high.	Immediately release the trigger to prevent battery from shutting off. Allow time for battery pack to cool before restarting pump.  <u>Note: If battery pack shuts off, place pack on charger to reset.</u>
Pump does not build pressure.	User adjustable relief valve set too low.	Adjust pressure (see page 10).
Noisy pump operation.	Pump element piston sticking.	Contact ENERPAC service center.
	Motor or gear damaged.	Contact ENERPAC service center.



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**L4004\_b**  
**Rev. B/04/2013**

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**Internet: www.enerpac.com**