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## **Operating Instructions for:**

PMA355 PMA55S PME55 PME355S PME55S

PME355S-50-220 PME55S-E220 PMA55 PME55S-50-220

Form No. 102902

# POWER LIFT HIGH TONNAGE PORTABLE JACK

- Carefully inspect the unit upon arrival. The carrier, not the manufacturer, is responsible for any damage resulting from shipment.
- These instructions should be read and carefully followed. Most problems with new equipment are caused by improper operation or installation.

## INSTRUCTIONS REQUIRED TO PUT POWER LIFT INTO SERVICE

NOTE: Before operating the Power Lift unit, carefully follow all the steps given below.

- **STEP 1.** Carefully read and understand the Safety Precautions and Operating Instructions in form numbers 102527, 102463, 102479 and 102480 attached. These safety precautions and operating instructions describe general safety precautions and the method required to connect the pump, hoses, fittings, and jack. Since this unit has been completely assembled and tested at our factory, follow the succeeding steps to put the Power Lift into service.
- **STEP 2.** Carefully remove all packing materials from the assembled unit.
- STEP 3. Fill pump reservoir to proper operating level using approved Power Team hydraulic oil.
- **STEP 4.** Connect cart to appropriate jack module. Follow cart and jack assembly instructions.
- **STEP 5.** Connect pump to proper power source. Start pump and cycle jack to full extension, then to full retraction, three or more times until the jack advances and retracts smoothly throughout the cycle.
- **STEP 6.** Allow the pump to build to full pressure with the jack first fully extended, and then fully retracted. Stop pump and check each hose, fitting, and other system components for any oil leakage. If any leakage is found, correct the problem and retest.

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Rev. 5 Date: 25 May 2012



# **SAFETY PRECAUTIONS**



#### WARNING

• All WARNING statements must be carefully observed to help prevent personal injury. Keep these instructions at or near the machine location. Only qualified individuals should operate this equipment.

## **Hydraulic Hose**

- Before operating the pump, tighten all hose connections using the proper tools. Do not overtighten the connections. Connections need only be tightened securely and leak-free. Overtightening may cause premature thread failure or high pressure fittings to split at pressures lower than their rated capacities.
- Should a hydraulic hose ever burst, rupture, or need to be disconnected, immediately shut off the pump. Never attempt to grasp a leaking hose under pressure with your hands. The force of the 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 oil flow within the hose is blocked or reduced. Periodically inspect the hose for signs of wear because any of these conditions can damage the hose and may result in personal injury.
- Do not use the hose to move attached equipment. Stress may damage the hose and cause personal injury.
- Hose material and coupler seals must be compatible with the hydraulic fluid used. Hoses also must not come in contact with corrosive materials such as creosote-impregnated objects and some paints. Consult the manufacturer before painting a hose. Never paint the couplers. Hose deterioration due to corrosive materials may result in personal injury.

## **Pump**

- Do not exceed the PSI hydraulic pressure rating noted on the pump nameplate or tamper with the internal high pressure relief valve. Creating pressures beyond rated capacities may result in personal injury.
- Before replenishing the oil level, retract the jack completely to prevent overfilling the pump reservoir. An overfill may cause personal injury due to excess reservoir pressure created with the jack retracted.

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# **SAFETY PRECAUTIONS (CONTINUED)**

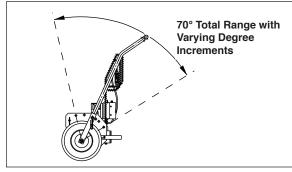
## **General Operation**

- The Power Lift portable jack is intended for lifting applications only. It is <u>not</u> intended to support the load after the lift. Optional cribbing block sets are available to mechanically sustain the load after the lift. <u>No</u> load should ever be held hydraulically.
- Never couple or uncouple the cart from the jack when under any load. The inability to reconnect without releasing the load is likely.
- When changing a jack module, always check the reservoir oil level when either advancing or retracting the jack module.
- Do not beat or hammer on or near any part of this unit! Sharp or sudden impacts can cause undue stress on highly loaded parts which can result in equipment damage or possible personal injury.
- Stand to the side of the unit and back as far as the remote control cord will allow during lifting or lowering operation.
- A qualified individual should carefully inspect the unit before each use. This individual should look for any abnormal condition that may present a potentially hazardous situation. If any abnormal condition is found, do not use the equipment until it is corrected and approved for use.
- It is the user's responsibility to wear protective equipment as dictated by federal, state or local laws. As a minimum, it is suggested that the operator and anyone else in the work area, wear safety glasses, safety shoes, and a hard hat.

# **FEATURES**

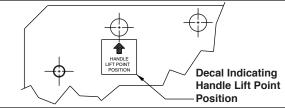
#### HANDLE ADJUSTMENT

For convenience, the Power Lift cart is designed with handle height adjustment. To adjust handle to a desired position, relocate the handle pins.



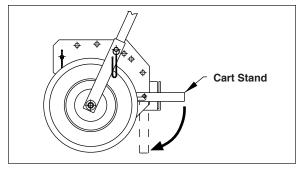
#### LIFTING UNIT

The Power Lift unit is designed to balance when lifted by the handle. Decals indicate the proper handle position for lifting.



#### CART STAND

The Power Lift unit has a stand to balance the cart when it is disconnected from the jack module. To use stand, pull the stand out from the cart, swing down and lock in place vertically. When reconnecting, just reverse the operation.



## **OPERATING INSTRUCTIONS**

#### HOSE CONNECTION

**IMPORTANT:** Seal all hydraulic connections with Power Team HTS6 thread sealant. PTFE tape can be used to seal hydraulic connections if only one layer of tape is used. Apply carefully, two threads back, to prevent it from being pinched by the coupler and broken off inside the system. Any loose pieces of tape could travel through the system and obstruct the flow of oil or cause jamming of precision-fit parts.

#### ASSEMBLING CART TO JACK MODULE

Refer to Figure 1.

- 1. Contain hoses around the pump.
- 2. Remove pin "A" from both sides of the cart.
- 3. Align the cart with jack module engaging pin(s) "B" with relief(s) "C".
- 4. Align the holes for pin(s) "A" with hole(s) "D" and install pin(s) "A".
- 5. Connect hoses from pump to jack. The couplers are assembled to allow only one way connection. **NOTE: Refer** to the "Coupling and Uncoupling Procedure" section of this form for more information if you are having problems making coupler connections.

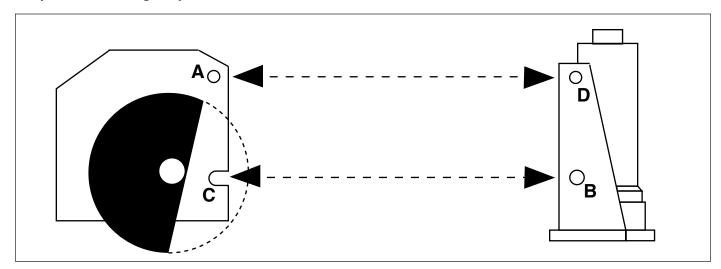


Figure 1

# **DISASSEMBLING JACK MODULE FROM CART**



WARNING: Before disconnecting couplers, <u>always</u> release the pressure from both the advance and retract sides of the jack module. See below.

#### **MANUAL VALVE UNITS:**

Disconnect the pump from its power supply. Shift the valve handle from advance to retract several times.

#### **SOLENOID VALVE UNITS:**

Momentarily press the rocker switch of the remote hand switch from advance to retract positions several times.

- 1. Remove pin "A" from both sides of the cart. Refer to Figure 1.
- 2. Back cart away from jack module and lower cart stand. Refer to the "Features" section of this form.

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## **MAINTENANCE**

### **BLEEDING AIR FROM THE SYSTEM**

The Power Lift unit has been bled at the factory, however, air can accumulate in the hydraulic system if the reservoir oil level is too low or if the unit has not been used for a prolonged period. This air can cause the jack to respond in an unstable or slow manner. Before attempting to lift a load for the first time remove the air:

- 1. With no load on the jack, cycle the hydraulic system three or more times (fully extend and retract the jack).
- 2. Check the pump reservoir level. Refer to the pump operating instructions (Form No. 102463) for the proper fill level and direction on how to add oil if necessary.

#### COUPLING AND UNCOUPLING THE SYSTEM

A problem with coupling and uncoupling the system couplers can occur due to various reasons, such as temperature or internal leakage. If necessary, carefully loosen the swivel fittings to bleed off coupler pressure. Always use caution and maintain coupler position.