



KHP5000 Hydraulic Pump

Operating Instructions Manual



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DANGER:

Is used when your action or lack of action may cause serious injury or even death.



WARNING:

Indicates a potential danger that requires correct action to avoid personal injury.



CAUTION:

Indicates a potential to damage your product and possibly void any warranty associated with the product.

Pump Data

Use this to fill out information about your pump for quick reference.

Purchase Date: _____ - _____ - _____

Purchase Order: _____

Purchased From: _____

Delivery Date: _____

Serial No.: _____

Note:

Make sure to register your warranty online at www.kurtworkholding.com to receive the full benefits of the Kurt Manufacturing 1 Year Limited Warranty.

Introduction

This manual provides descriptive operation and maintenance instruction for the Kurt KPH5000 Hydraulic Pump. Additional information may be obtained from Kurt Manufacturing by referencing the Unit's Model Number and Serial Number printed on the nameplate attached to the unit.

This Electric pump provides compressed hydraulic fluid to products such as Kurt swing clamps and Kurt hydraulic vises. They would be used where up to 5000psi of hydraulic pressure is required.



WARNING:

It is very important that anyone involved in the installation, service and/or operation of this product be familiar with how it operates. Personnel should have knowledge of hydraulic safety and maintenance. They should be aware of the limitations this systems has.

Preparation For Use

The Kurt KHP5000 is carefully packaged for shipping. Visually inspect all components for shipping damage. DO NOT attempt to use this product if any damage is found. Report all damage immediately to the carrier. All ports have been sealed with plugs for shipping to prevent contamination. Do Not remove plugs until piping connections are ready to be made. Read all instructions carefully before using. The Kurt KHP5000 pump is shipped filled WITH oil. Check to be sure the reservoir is full before using.

IMPORTANT:

Before operating the pump for the first time be sure to change out the vent plug as shown in Fig. 1 on page 4.)



CAUTION:

Failure to change vent plug may cause damage to the pump and also void your warranty.

Electrical Connections

Verify that the voltage on the nameplate is the same as the voltage available. Many motors have dual voltage rating. Be sure to confirm that yours match. Connect the pump motor to the power source using the attached plug and cord.

Hydraulic Connections

Be sure to make all necessary connections using qualified hydraulic type fittings. Be sure that any thread compounds used DO NOT infiltrate the port orifices.

Fluid type: ISO 46 anti-wear hydraulic fluid (medium grade)
Fluid Capacity: 127 cu.in. (.54GAL) total capacity
75 cu.in. (.32GAL) usable capacity



WARNING:

Check to make sure that all hoses and piping used is properly rated for your pressure pump.

Average Pump Output

	PSI	AMPS	Volume (Theoretical)	Volume (Actual)	% Efficient
Low Pressure	220	7.4	692 CU. IN.	448 CU. IN.	65%
Shift Pressure	408	7.4	42.3 CU. IN.	31.3 CU. IN.	74%
Bypass Pressure	232	7.4	42.3 CU. IN.	31.3 CU. IN.	74%
High Pressure	5000	12.14	42.3 CU. IN.	31.3 CU. IN.	74%

Start-Up Procedure

1. Prior to operation, remove the red shipping plug and replace with the supplied vent as shown below. (Vent is in plastic bag.) (See Fig. 1)
2. The Kurt KHP5000 will be mounted to it's own mounting base. The base provides 4 each 3/8" mounting holes in the corners.
3. Complete all necessary plumbing connection to and from the pump to the hydraulic devises. Be sure you are using the proper rated hose or tubing for your application.
4. Adjust the pressure to the recommended devise pressure before turning on the power switch.
5. After you have completed all your hydraulic connection and have identified the correct power source, plug in the pumps electric cord.
6. Cycle or Jog the motor to build pressure and check for leaks. If no leaks are detected run the pump until it turns off.
7. With pressure on the lines bleed the air by gently cracking a fitting farthest from the pump.
8. Open at the farthest point from pump to allow the air to bleed out. NOTE: The pump may kick back on when pressure is released.
9. After all the air is bled out your pump is ready to operate normally.

Fig.1

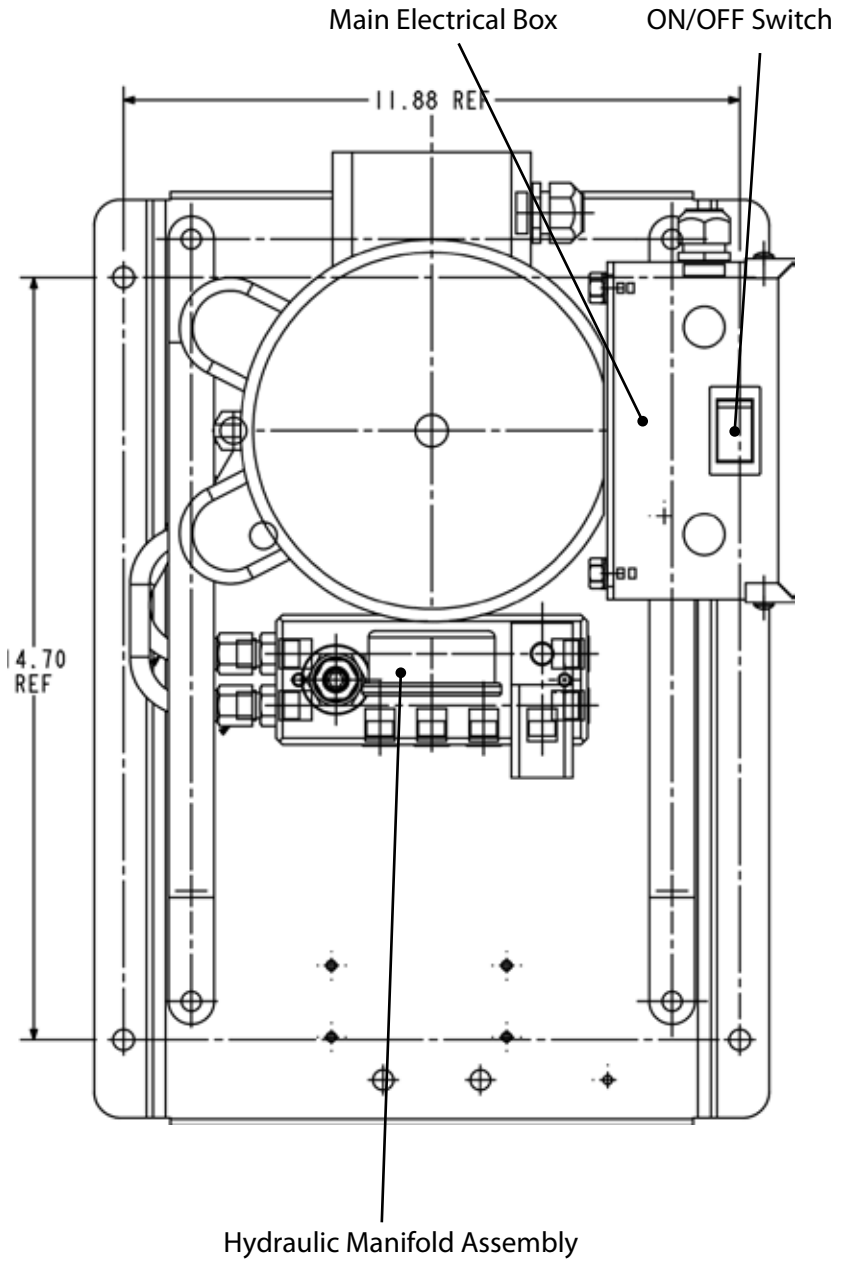


1. Remove plug.

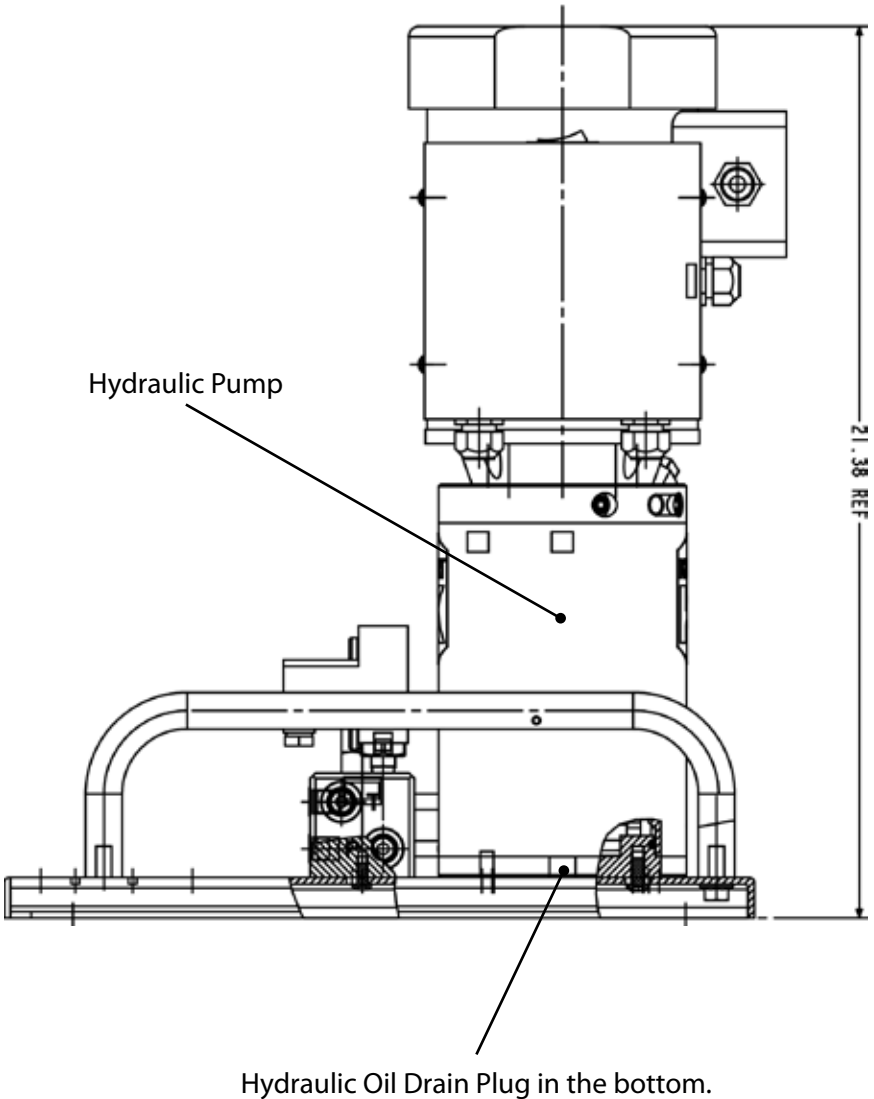


2. Replace with vent.

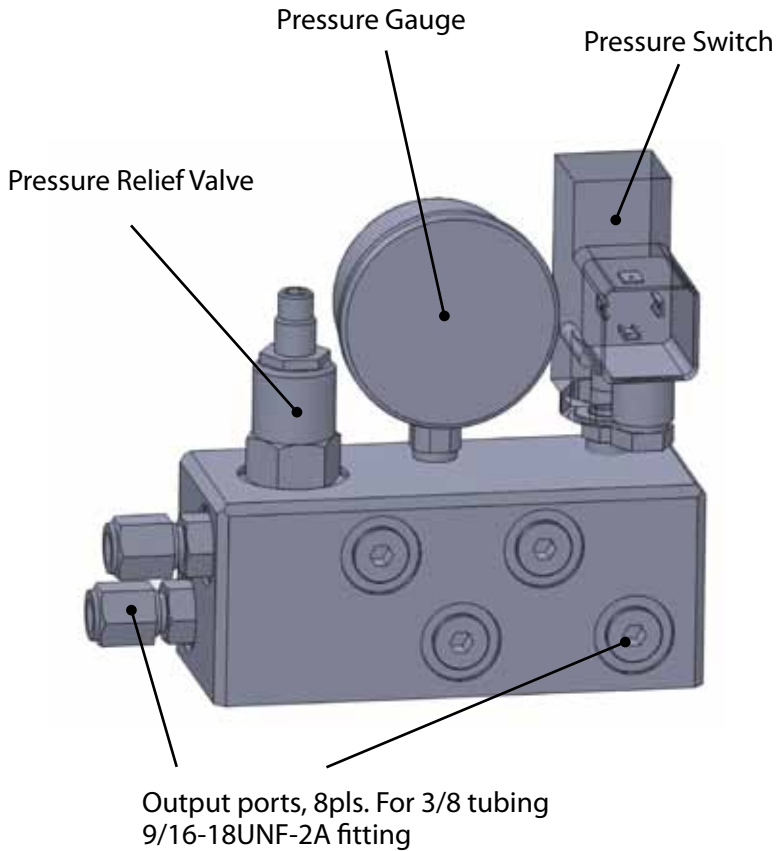
KHP5000 Mechanical Drawing



KHP5000 Mechanical Drawing



Hydraulic Manifold Assembly



Hydraulic Clamp Systems for your fixtures and machine tools.

A full line of Hydraulic Swing Clamps, Pumps, valves and a Wireless Sensing System. This new workholding system has been designed to increase productivity, reduce labor costs and scrap while improving part quality.



1 Treatment

- Hard chromed and polished for better wear resistance and smooth piston action
- Heat treated piston (HRC 60-63) to reduce abrasion and for better wear resistance

2 Flexible Mounting Type

- Upper and lower flange mounting styles for added flexibility
- Clamping force range from 475 lb to 6000 lb
- Max. pressure : 5000 psi

3 Guide Rod

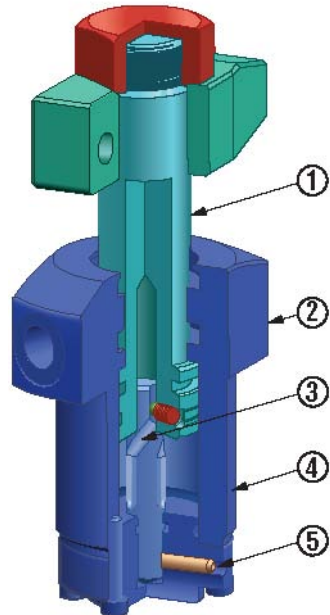
- 3 guide slots design for larger sizes to ensure long life and reduces stress.
- Special guide slot design to reduce the wear and ensure long life (reduces stress)
- To change the direction (left 90°/ right 90°/ pull-push) is easily done by rotating piston.

4 Cylinder Body

- Hardened to HRC 38-46 - reduces the wear of inner face of cylinder body, to ensure longer life (1,000,000 cycles)
- Polished to ensure longer life (reduces wear to the oil seal)

5 Pin

- Heat treated to HRC 38-40 – gives strength to the pin and reduces breakage.





**Thank you for your purchase!
If you have any feedback or questions.**

**Please contact us at:
workholding@kurt.com
or
1-877-226-7823**

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1 YEAR LIMITED WARRANTY

On all Kurt® Hydraulic Workholding Products

All Kurt Manufacturing Company industrial workholding products and parts with the exceptions noted below, are warranted against defects in material and workmanship for the 1 year of the product or part. Failure to properly maintain and/or properly operate the product or part that has been worn out, abused heated ground or otherwise altered, used for a purpose other than that for which it was intended, or used in a manner inconsistent with any instructions regarding its use. The sole obligation of Kurt Manufacturing Company, Inc. (Kurt) and the purchaser's SOLE AND EXCLUSIVE REMEDY hereunder, shall be limited to the replacement or repair of any Kurt product or part (by an authorized Kurt technician) which are returned to Kurt Manufacturing Company's place of business, transportation, shipping and postal charges prepaid, and there determined by Kurt Manufacturing Company to be covered by the warranty contained herein.

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