



EHTP500



DPHTP500



EHTP500C

**Troubleshooting, p. 3**

# Power Hydrostatic Test Pumps Operator's Manual

EHTP500, EHTP500C, EHTP500E, EHTP500CE, DPHTP500, DPHTP500E models

## REED Warranty

REED will repair or replace tools with any defects due to faulty materials or workmanship for one (1) year or five (5) years from the date of purchase, as applicable. This warranty does not cover part failure due to tool abuse, misuse, or damage caused where repairs or modifications have been made or attempted by non REED authorized repair technicians. This warranty applies only to REED tools and does not apply to accessories. This warranty applies exclusively to the original purchaser.

**One (1) year warranty:** Power units for pneumatic, electric, hydraulic and battery-powered tools have a one year warranty. This includes, but is not limited to REED pumps, universal pipe cutter motors, power drives, power bevel tools, threading machines, cordless batteries and chargers.

**Five (5) year warranty:** Any REED tool not specified under the one (1) year warranty above is warranted under the REED five (5) year warranty.

NO PARTY IS AUTHORIZED TO EXTEND ANY OTHER WARRANTY. NO WARRANTY FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY.

No warranty claims will be allowed unless the product in question is received freight prepaid at the REED factory. All warranty claims are limited to repair or replacement, at the option of REED, at no charge to the customer. REED is not liable for any damage of any sort, including incidental and consequential damages. This warranty gives you specific legal rights, and you may also have other rights which vary by state, province or country.

**REED MANUFACTURING**

**Warranty Effective December 1, 2018**

1425 WEST EIGHTH ST. ERIE, PA 16502 USA

PHONE: 800-666-3691 ○ 814-452-3691 FAX: 800-456-1697 ○ 814-455-1697

[www.reedmfgco.com](http://www.reedmfgco.com)

0320-58170

**OPERATING INSTRUCTIONS:**

*NOTES:*

- A. If testing a large system,** it is quicker to fill the system by other means. The purpose of the pump is to pressurize the system to be tested. The pump can only fill the system at a rate of 2 gallons per minute.
- B. Remove air pockets if possible.** Air is a compressible gas. For every gallon of trapped air, it takes 0.9 gallons of water to replace the volume of the compressed air, or approximately 1/2 minute of pumping.

*1. Prime the Pump.*

**A. From a Pressurized Supply**

- **IMPORTANT:** Before connecting garden hose, be sure the **washer screen** is in the garden hose fitting. Failure to use a screen will cause damage to the pump.
- Connect a garden hose to the garden hose fitting, making sure the attachment is snug.
- Attach the high pressure hose to the quick connect on the pump.
- Without plugging in or turning on the pump, turn on the supply of water and open the outlet valve.
- Once water begins to flow out of the high-pressure hose and the air is purged out, close the outlet valve.

**B. From a Non-Pressurized Supply**

- **IMPORTANT:** Before connecting garden hose, be sure the washer screen is in the garden hose fitting. Failure to use a screen will cause damage to the pump.
- Connect a garden hose to the garden hose fitting, making sure the attachment is snug.
- Make sure the hose end is not resting on the bottom or side of the supply container. This will not allow water to flow, causing priming and suction problems with the pump.
- Priming the pump is easier if it is at equal or lower height of the supply container.
- Attach the high pressure hose to the quick connect on the pump.
- Turn on the pump with the air bleed off (priming valve) open. Water will flow from this valve once the pump begins to prime. Note: A hose can be attached to the hose barb and run back to the water supply if desired.
- Close the air bleed-off valve and the pump will quickly prime. Make sure the outlet valve is open.
- Once water begins to flow out of the high-pressure hose and the air is purged out, close the outlet valve and turn off the pump.

*Priming Tips:*

- A.** When priming the pump from a non-pressurized supply, it is recommended to fill the input garden hose before turning on the pump.
- B.** The input fitting for the pump is a standard garden hose connection. When this attachment is made it is important to make sure the garden hose is tightened snugly so that the pump does not suck air through the loose connection. A loose connection will make the pump hard to prime.
- C.** The shorter the garden hose, the easier it is to prime the pump. Long hoses tend to collapse from the suction of the pump when drawing from a non-pressurized system, restricting flow.
- D.** Use a hose that is rigid enough so that it does not collapse, especially when drawing water from a non-pressurized system.

*2. Connect the High Pressure Hose to the system being checked.*

- A.** The output fitting at the end of the high-pressure hose is 3/8" NPT. An adapter may be used to attach this hose to the system that is being pressure tested.

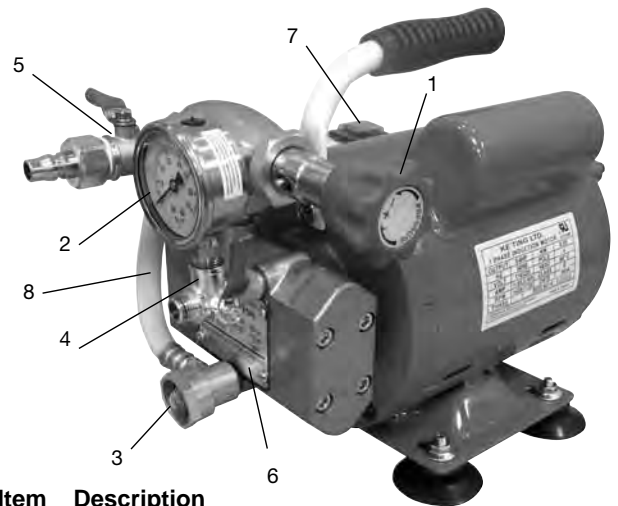
*3. Setting the pressure.*

- A.** Turn on the pump (EHTP500) or attach 1/2" electric or cordless drill to shaft on back of pump (DPHTP500). DPHTP500 pump can be driven in either the clockwise or counterclockwise direction.
- B.** Run the pump for a few seconds to be sure it is pumping fluid into the system. Close the high pressure outlet valve. Pressure can be adjusted by turning the pressure adjustment knob on the side of the pump. Turning clockwise will increase the pressure. Turning counterclockwise will decrease the pressure.
- C.** When the desired pressure indicated on the pump gauge is reached, open high pressure outlet valve and run the pump to pressurize the system.

*4. Once the system reaches the desired pressure, close the high pressure outlet valve and turn off the pump.*

*The gauge on the pump indicates the pump pressure and not the test system pressure. A separate gauge for the test system is required, and is not provided with these test pumps.*

- A.** Once the pump reaches the set pressure, it will continue to run but the water will flow through the Automatic Bypass and recirculate through the pump. It is not recommended to run the pump in bypass mode for more than a couple of minutes. Once the desired pressure is reached, it is unnecessary to continue running the pump. Close the valve, turn off the pump and unplug the cord.
- B.** The pump is equipped with a valve and hose which has a check valve to prevent backflow. The check valve only works when the the hose is detached from the pump. It is recommended to fill the system being tested through a valve which can be shut for backflow prevention as well.



Item	Description
1.	Pressure Adjustment Knob
2.	Pressure Gauge
3.	Garden Hose Fitting with Screen
4.	Air Bleed-Off or Priming Valve
5.	Outlet Hose Quick-Connection and Outlet Valve
6.	Front Cover Plate
7.	On/Off Switch
8.	Automatic Bypass

5. The system is now isolated.

A. The hose can quick disconnect from the pump and remain with the system being tested, if necessary, so that the pump can be used to test another system or stored.

**WARNING: Protect the pump from freezing. Store and transport in a warm place. Or use food grade propylene glycol in the pump to guard against freezing.**

**Safety and Precautionary Instructions:**

- Do not use a damaged or worn High Pressure Hose.
- Do not run the pump without a water supply.
- Before storing the pump, flush it with clean water and then operate it with a solution of water and food grade propylene glycol to protect and lubricate the internal parts.

**TROUBLESHOOTING**

**Pump Loses Pressure:** Do not run the pump without the washer screen #98180 in the intake. Debris may cause damage to the pump or may cause the pump to loose pressure. If the pump does not build pressure, there may be debris lodge in the check valves. There are two check valves under each end cap. Remove the end caps using a 5mm hex wrench and inspect the check valves. If the issue is not solved, the pump seals may have to be replaced using Seal Kit #48181.

**PERIODIC MAINTENANCE:**

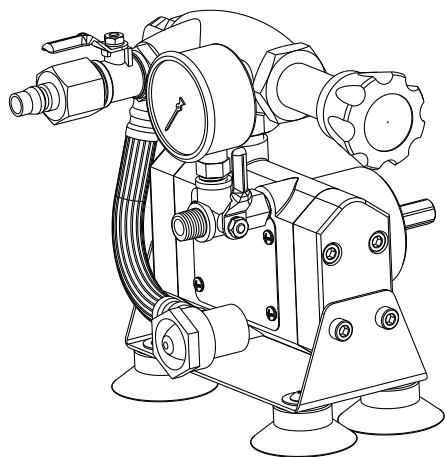
Every 100 hours, inspect and lubricate the piston and bearing. This is behind the front cover plate of the pump. To access this area, remove the four screws and take off the cover plate. Do not remove the front cover plate while the pump is plugged in or running. Never run a pump without reinstalling the front cover plate. Lubricate with a water resistant, all-purpose lithium grease.

**EHTP500 ELECTRIC MODELS**  
**Motor Specifications**  
 UL Certified  
 3/4 HP 0.55KW Single Phase Induction  
 Voltage: 110/220V  
 Amperage: 12/6.2A  
 Frequency: 50/60 Hz.

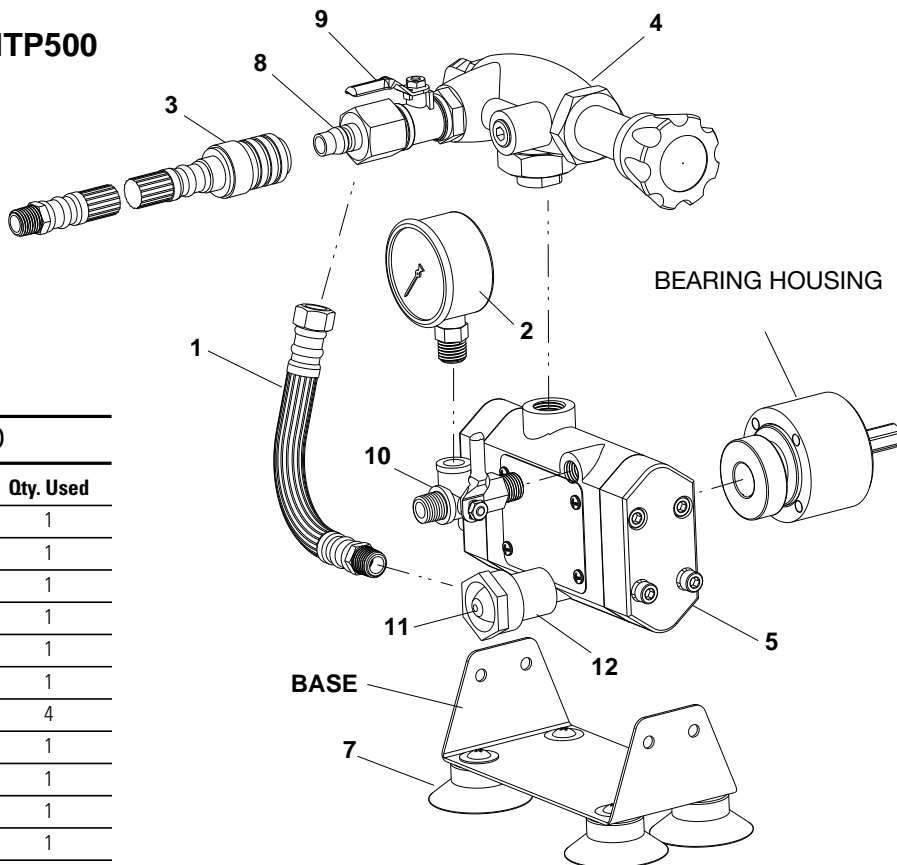
**Pump Specifications**  
 Adjustable Pressure up to a Maximum of 500 psi  
 (34 bar - kg/cm2)  
 2 gallons per minute (7 liters/min)  
 Air bleed-off valve (for easier pump priming)

**DPHTP500 DRILL POWERED MODELS**  
**Drill Motor Recommendations**  
 Corded drill with 1/2" chuck, or 1/2" cordless 18V or higher drill, capable of 1500 RPM

**Pump Specifications**  
 Adjustable Pressure up to a Maximum of 500 psi  
 (34 bar - kg/cm2)  
 1.3 gallons per minute (4.5 liters/min)  
 Air bleed-off valve (for easier pump priming and draining)



DPHTP500



Parts List for DPHTP500

Ref. No.	Description	Item Code	Qty. Used
1	Bypass Hose	48183	1
2	Pressure Gauge	48185	1
3	High Pressure Output Hose	08172	1
4	Regulator Assembly	48189	1
5	Pump Assumbly	48188	1
6	Seal Kit (Not Shown)	48181	1
7	Pump Feet	48190	4
8	1/2" Male Quick Connect	48200	1
9	1/2" High Pressure Valve	48201	1
10	3-Way Valve	48202	1
11	Hose Washer/Screen	98180	1
12	Intake Hose Fitting	48204	1

# POWER HYDROSTATIC TEST PUMP OPERATING INSTRUCTIONS

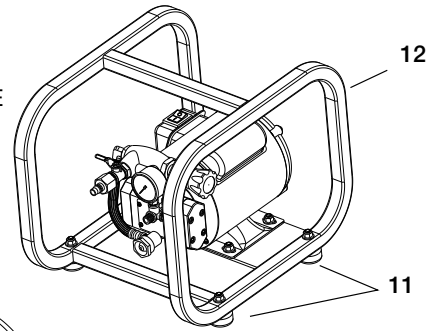
## Parts List for EHTP

Ref. No.	Description	EHTP500	EHTP500C	Qty.
		EHTP500E	EHTP500CE	
Item Code	Item Code			
1	Bypass Hose	48183	48183	1
2	Pressure Gauge	48185	48185	1
3	High Pressure Output Hose	08172	08172	1
4	Regulator Assembly	48189	48189	1
5A*	Motor Assembly 110V.	48187	48187	1
5B*	Motor Assembly 220V.	48196	48196	**
6	Pump Assembly	48188	48188	1
7	Seal Kit	48181	48181	1
8	Pump Feet	48190	—	4
9	Carrying Handle	48191	—	1
10	Electric Switch / Cover	48193	48193	1
11	Cage Feet	—	48186	4
12	Cage With Feet	—	48195	1
13	Male Quick Connect	48200	48200	1
14	High Pressure Valve	48201	48201	1
15	3-Way Valve	48202	48202	1
16	Hose Washer With Screen	98180	98180	1
17	Intake Hose Fitting	48204	48204	1

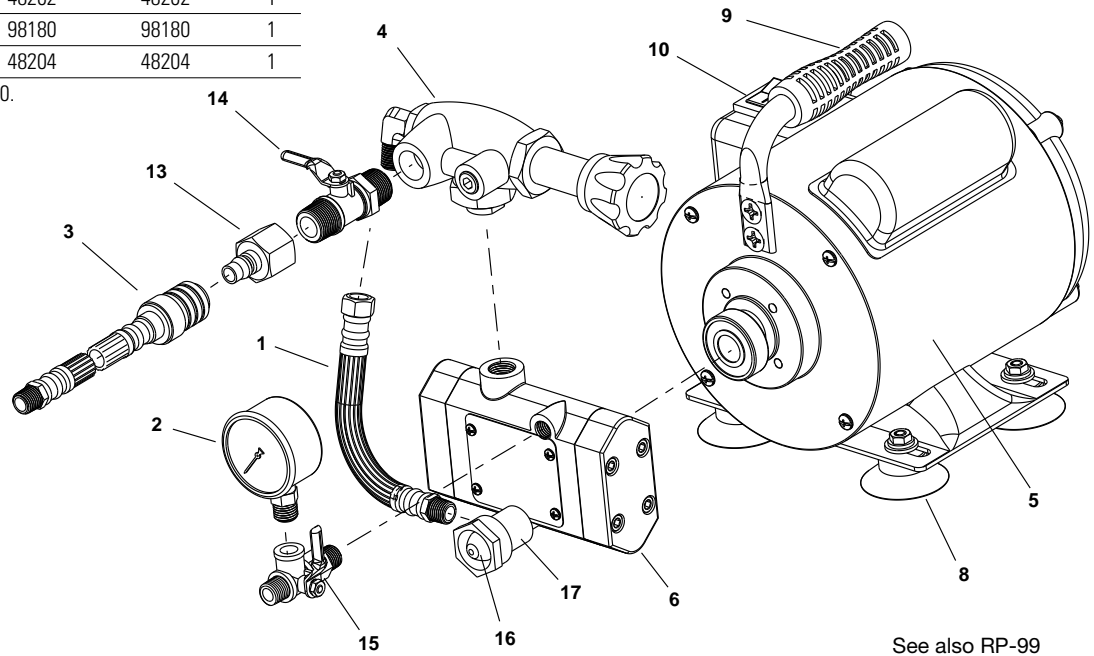
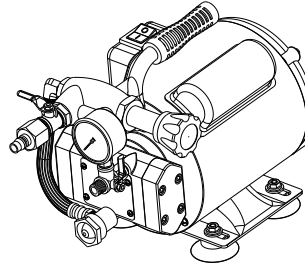
\* Motor Assembly also includes #8, #9 and #10.

\*\* Choose the proper voltage.

EHTP500C  
or EHTP500CE

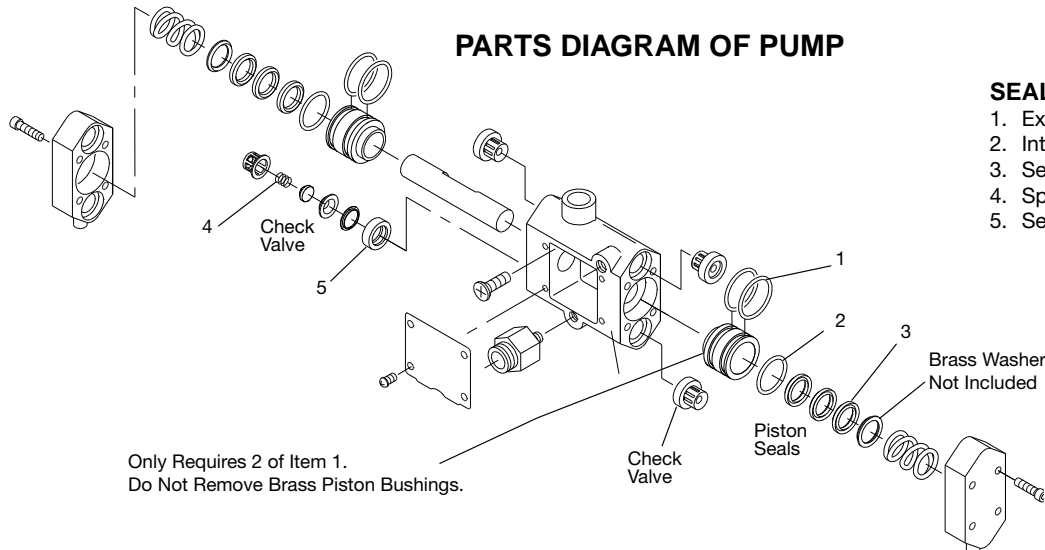


EHTP500  
or EHTP500E



See also RP-99

### PARTS DIAGRAM OF PUMP



SEAL KIT PARTS	QTY
1. External O-Ring	4
2. Internal O-Ring	2
3. Seals	6
4. Spring	4
5. Seal	4

Only Requires 2 of Item 1.  
Do Not Remove Brass Piston Bushings.