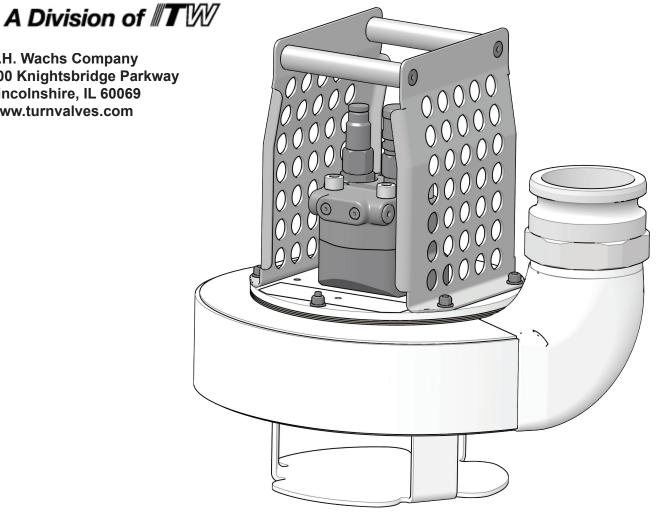


E.H.WACHS[®]

HYDRAULIC TRASH PUMP #WTP4800X

E.H. Wachs Company 600 Knightsbridge Parkway Lincolnshire, IL 60069 www.turnvalves.com



USER MANUAL Safety, Operation and Maintenance



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WARRANTY INFORMATION

Enclosed with the manual is a warranty card. Please fill out the registration card and return to E.H. Wachs Company.

Retain the owner's registration record and warranty card for

your information.

SERVICING: This manual contains safety, operation and routine maintenance instructions. Servicing of hydraulic tools, other than routine maintenance, must be performed by an authorized and certified dealer. Please read the following warning.

SERIOUS INJURY OR DEATH COULD RESULT FROM THE IMPROPER REPAIR OR SERVICE OF THIS TOOL.

REPAIRS AND / OR SERVICE TO THIS TOOL MUST ONLY BE DONE BY AN AUTHORIZED AND CERTIFIED DEALER.

For the nearest authorized and certified dealer, call E.H. Wachs and ask for a Customer Service Representative or visit www.turnvalves.com

SAFETY SYMBOLS

Safety symbols and signal words, as shown below, are used to emphasize all operator, maintenance and repair actions which, if not strictly followed, could result in a life-threatening situation, bodily injury or damage to equipment.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

This safety alert and signal word indicates an imminently hazardous situation which, if not avoided, <u>will</u> result in <u>death or serious injury</u>.

This safety alert and signal word indicates a potentially hazardous situation which, if not avoided, <u>could</u> result in <u>death or serious injury</u>.

This safety alert and signal word indicates a potentially hazardous situation which, if not avoided, <u>could</u> result in <u>death or serious injury</u>.

This signal word indicates a potentially hazardous situation which, if not avoided, <u>may</u> result in <u>property damage</u>.

This signal word indicates a situation which, if not avoided, <u>will</u> result in <u>damage</u> to the equipment.

This signal word indicates a situation which, if not avoided, <u>may</u> result in <u>damage</u> to the equipment.

Always observe safety symbols. They are included for your safety and for the protection of the tool.

LOCAL SAFETY REGULATIONS

Enter any local safety regulations here. Keep these instructions in an area accessible to the operator and maintenance personnel.

SAFETY PRECAUTIONS

Tool operators and maintenance personnel must always comply with the safety precautions given in this manual and on the stickers and tags attached to the tool and hose.

These precautions are given for your safety. Review them carefully before operating the tool and before performing maintenance.

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. Place the added precautions on page 4.

The WTP4800H Hydraulic Trash Pump will provide safe and dependable service if operated in accordance with the instructions given in this manual. Read and understand this manual and any stickers and tags attached to the tool and hoses before operation. Failure to do so could result in personal injury or equipment damage.



- Operator must start in a work area without bystanders. The operator must be familiar with all prohibited work areas such as excessive slopes and dangerous terrain conditions.
- Establish a training program for all operators to ensure safe operations.
- Do not operate the tool unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, head protection and safety shoes at all times when operating the tool.
- Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Do not install or remove this tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Never operate the tool near energized transmission lines. Know the location of buried or covered services before starting work.
- Do not wear loose fitting clothing when operating the tool. Loose fitting clothing can become entangled with the tool and cause serious injury.
- · Supply hoses must have a minimum working

pressure rating of 2500 psi/175 bar.

- Be sure all hose connections are tight.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling the tool. Wipe all couplers clean before connecting. Failure to do so may result in damage to the quick couplers and cause overheating. Use only lint-free cloths.
- Do not operate the tool at oil temperatures above 140 °F/60 °C. Operation at higher oil temperatures can cause operator discomfort and may cause damage to the tool.
- Do not operate a damaged, improperly adjusted or incompletely assembled tool.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.
- Do not exceed the rated limits of the tool or use the tool for applications beyond its design capacity.
- Always keep critical tool markings, such as labels and warning stickers, legible.
- Always replace parts with replacement parts recommended by Wachs.
- Check fastener tightness often and before each use.
- Do not put your hands, or any other body part, under the volute while the trash pump is running.
- Do not lift the trash pump by pulling on the hydraulic hoses. Use a suitable line fastened to the trash pump handle.
- Do not point water discharge toward bystanders.

TOOL STICKERS & TAGS

A CAUTION

DO NOT EXCEED SPECIFIED FLOW OR PRESSURE. Use closed-center tool on closed-center system. Use open-center tool on open-center system. Correctly connect hoses to tool "IN" and "OUT" ports. Improper handling, use, or maintenance of tool could result in a leak, burst, or other tool failure. Contact a leak or burst can cause oil injection into the body. Failure to observe these precautions can result in serious personal injury. 09612

09612

STN-09612

General Caution Decal

NOTE:

THE INFORMATION LISTED ON THE STICKERS SHOWN. MUST BE LEGIBLE AT ALL TIMES.

REPLACE DECALS IF THEY BECOME WORN OR DAMAGED. REPLACEMENTS ARE AVAILABLE FROM YOUR LOCAL WACHS DISTRIBUTOR.

The safety tag (P/N STN-15875) at right is attached to the tool when shipped from the factory. Read and understand the safety instructions listed on this tag before removal. We suggest you retain this tag and attach it to the tool when not in use.

DANGER DANGER FAILURE TO USE HYDRAULIC HOSE LABELED AND CER-TIFIED AS NON-CONDUCTIVE WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY. DO NOT LIFT OR CARRY TOOL BY THE HOSES. DO NOT ABUSE HOSE. DO NOT USE KINKED, TORN OR DAMAGED HOSE. D. DAMAGED HOSE. MAKE SURE HOPRALILIC HOSES ARE PROPERLY CON-NECTED TO THE TOOL BEFORE PRESSURING SYSTEM SYSTEM PRESSURE HOSE WUST ALWAYS BE CON-NECTED TO TOOL "IN" PORT SYSTEM RETURN HOSE MUST ALWAYS BE CONNECTED TO TOOL OUT PORT. REVERSING CONNECTIONS MAY CAUSE REVERSE TOOL OPERATION WHICH CAN RESULT IN SEVERE PERSONAL INJURY. 3. DEATH OF SENIODS INJURT. BEFORE USING DO SING AT A DECRIPTIED AS NON-CONDUCTIVE ON OR NEAR ELECTRIC LINES BE SURE THE HOSE IS MAINTAINED AS NON-CONDUCTIVE THE HOSE SHOULD BE REGULARLY TESTED FOR ELECTRIC CUR-RENT LEAKAGE IN ACCORDANCE WITH YOUR SAFETY DEPARTMENT INSTRUCTIONS. A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJEC-TION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY. PERSONAL INJURY. DO NOT CONNECT OPEN-CENTER TOOLS TO CLOSED-CENTER HYDRAULIC SYSTEMS. THIS MAY RESULT IN LOSS OF OTHER HYDRAULIC FUNCTIONS POWERED BY THE SAME SYSTEM AND/OR SEVERE PERSONAL INJURY. 2 A. DO NOT EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA. B. DO NOT EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL. EXCESS PRESSURE MAY CAUSE A LEAK OR BURST. WEAR HEARING, EYE, FOOT, HAND AND HEAD PRO-TECTION. 6. TEOTION. TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR MAINTENANCE AND SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL. 7. CHECK TOOL HOSE COUPLERS AND CONNECTORS DAILY FOR LEAKS. **DO NOT** FEEL FOR LEAKS WITH YOUR HANDS. CONTACT WITH A LEAK MAY RESULT IN SEVERE PERSONAL INJURY. C. IMPORTANT IMPORTANT READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT. TOOL BEFORE USING IT. USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY WACHS AND DESCRIBED IN THE OPERATION MANUAL. USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY WACHS AND DESCRIBED IN THE OPERATION MANUAL. TAG TO BE REMOVED ONLY BY TAG TO BE REMOVED ONLY BY TOOL OPERATOR TOOL OPERATOR SEE OTHER SIDE SEE OTHER SIDE

SAFETY TAG P/N STN-15875 (Shown smaller then actual size)

HOSE TYPES

The rated working pressure of the hydraulic hose must be equal to or higher than the relief valve setting on the hydraulic system. There are three types of hydraulic hose that meet this requirement and are authorized for use with Wachs hydraulic tools. They are:

Certified non-conductive — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. Hose labeled certified nonconductive is the only hose authorized for use near electrical conductors.

Wire-braided (conductive) — constructed of synthetic rubber inner tube, single or double wire braid reinforcement, and weather resistant synthetic rubber cover. This hose is conductive and must never be used near electrical conductors.

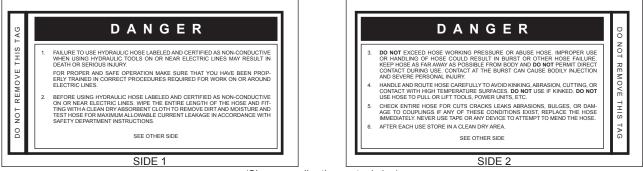
Fabric-braided (not certified or labeled non-conductive) — constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. This hose is not certified non-conductive and must never be used near electrical conductors.

HOSE SAFETY TAGS

To help ensure your safety, the following DANGER tags are attached to all hose purchased from Wachs. DO NOT REMOVE THESE TAGS.

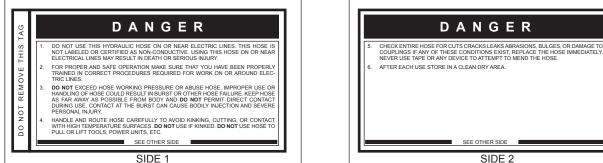
If the information on a tag is illegible because of wear or damage, replace the tag immediately. A new tag may be obtained from your Wachs Distributor.

THE TAG SHOWN BELOW IS ATTACHED TO "CERTIFIED NON-CONDUCTIVE" HOSE



(Shown smaller than actual size)

THE TAG SHOWN BELOW IS ATTACHED TO "CONDUCTIVE" HOSE.



SEE OTHER SIDE SIDE 2

DANGER

(Shown smaller than actual size)

DO

NOT

REMOVE THIS TAG

I to Hydraulic Circuit Hose	Oil F	Oil Flow
commendations	GPM	
chart to the right shows recommended		
num hose diameters for various hose	4-9	15
ths based on gallons per minute (GPM)/		Con
per minute (LPM). These recommenda-	4-6	15
k are intended to keep return line pressure	4-6	15
A pressure) to a minimum acceptable reve ensure maximum tool nerformance	5-10.5	19
	5-10.5	19
oriarts interlaced to be used for injourau- of applications only based on Wachs tool ating requirements and should not be	5-10.5	19
for any other applications.	10-13	38
vdraulic hose must have at least a rated	10,40	00

Pressure BAR

155

S

175 175 175 175 175 175 175 175 175 175 175 175 175 175 175

The c minim lengtr liters l tions i (back el to é This of lic too

opera used

minimum working pressure equal to the maxi-All hydraulic hose must have at least a rated mum hydraulic system relief valve setting.

All hydraulic hose must meet or exceed specifications as set forth by SAE J517.

llio	Oil Flow	Hose Lengths	engths	Inside Diameter	iameter	USE	Min. Working P	J BL
GPM	LPM	FEET	METERS	INCH	MM	(Press/Return)	PSI	
		Certified No	Certified Non-Conductive Hose - Fiber Braid - for Utility Bucket Trucks	Hose - Fiber	· Braid - for	Utility Bucket	Trucks	
4-9	15-34	up to 10	up to 3	3/8	10	Both	2250	
	Conducti	Conductive Hose - Wire Braid or Fiber Braid -DO NOT USE NEAR ELECTRICAL CONDUCTOR	Braid or Fiber	Braid -DO N	IOT USE NE	AR ELECTRIC	AL CONDUCT	OR
4-6	15-23	up to 25	up to 7.5	3/8	10	Both	2500	
4-6	15-23	26-100	7.5-30	1/2	13	Both	2500	
5-10.5	19-40	up to 50	up to 15	1/2	13	Both	2500	
5-10.5	19-40	51-100	15-30	5/8	16	Both	2500	
1 1 1				5/8	16	Pressure	2500	
0.01-0	04-0	000-001	08-00	3/4	19	Return	2500	
10-13	38-49	up to 50	up to 15	5/8	16	Both	2500	
	07 00		ц СС СС	5/8	16	Pressure	2500	
<u>-0</u>	00-40	001-10	02-01	3/4	19	Return	2500	
07 7	07 00		00 00	3/4	19	Pressure	2500	
<u>c</u> -01	00-40 0	002-001	00-00	-	25.4	Return	2500	
1016	10 60	3C 0t 011	0 40 0	5/8	16	Pressure	2500	
0-0-	49-00	cz oj dn	o n n	3/4	19	Return	2500	
	10.00	001 90	0000	3/4	19	Pressure	2500	
01-51	48-00	001-07	α-3U	-	75.1	Daturn	2600	

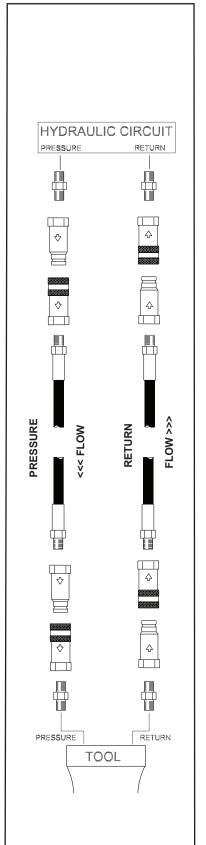


Figure 1. Typical Hose Connections

HOSE RECOMMENDATIONS

2500

Return

25.4

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HTMA / EHTMA REQUIREMENTS

HTMA		TOOL TY	'PE	
HYDRAULIC SYSTEM REQUIREMENTS	TYPE I	TYPE II	TYPE RR	TYPE III
Flow Range Nominal Operating Pressure (at the power supply outlet)	4-6 gpm (15-23 lpm) 1500 psi (103 bar)	7-9 gpm (26-34 lpm) 1500 psi (103 bar)	9-10.5 gpm (34-40 lpm) 1500 psi (103 bar)	11-13 gpm (42-49 lpm) 1500 psi (103 bar)
System relief valve setting (at the power supply outlet)	2100-2250 psi (145-155 bar)	2100-2250 psi (145-155 bar)	2200-2300 psi (152-159 bar)	2100-2250 psi (145-155 bar)
Maximum back pressure (at tool end of the return hose)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)	250 psi (17 bar)
Measured at a max. fluid viscosity of: (at min. operating temperature)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes)	400 ssu* (82 centistokes
Temperature: Sufficient heat rejection capacity to limit max. fluid temperature to: (at max. expected ambient temperature)	140° F (60° C)	140° F (60° C)	140° F (60° C)	140° F (60° C)
Min. cooling capacity at a temperature difference of between ambient and fluid temps NOTE: Do not operate the tool at oil temperatures above 140° f discomfort at the tool.	3 hp (2.24 kW) 40° F (22° C) F (60° C). Operation at	5 hp (3.73 kW) 40° F (22° C) t higher temperatur	6 hp (5.22 kW) 40° F (22° C) res can cause ope	7 hp (4.47 kW) 40° F (22° C) rator
Filter Min. full-flow filtration Sized for flow of at least: (For cold temp. startup and max. dirt-holding capacity)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)	25 microns 30 gpm (114 lpm)
Hydraulic fluid Petroleum based (premium grade, anti-wear, non-conductive) Viscosity (at min. and max. operating temps)	100-400 ssu* (2	100-400 ssu* 20-82 centistokes)	100-400 ssu*	100-400 ssu*
NOTE: When choosing hydraulic fluid, the expected oil tempera most suitable temperature viscosity characteristics. Hyd over a wide range of operating temperatures.				
*SSU = Saybolt Seconds Universal				

*SSU = Saybolt Seconds Universal

EHTMA		CLASSIFICATION					
HYDRAULIC SYSTEM REQUIREMENTS	B ISLEM of 138bor EHTMA CATEGORY	20Lpm at 138bar EHTMA CATEGORY	JOLpm dt 138bdr ErfMa CATEGORY	E 40Lpm at 138bor EHTMA CATEGOORY	F 50Lpm at 138bar EHTMA CATEGORY		
Flow Range	3.5-4.3 gpm (13.5-16.5 lpm)	4.7-5.8 gpm (18-22 lpm)	7.1-8.7 gpm (27-33 lpm)	9.5-11.6 gpm (36-44 lpm)	11.8-14.5 gpm (45-55 lpm)		
Nominal Operating Pressure	1870 psi	1500 psi	1500 psi	1500 psi	1500 psi		
(at the power supply outlet)	(129 bar)	(103 bar)	(103 bar)	(103 bar)	(103 bar)		
System relief valve setting (at the power supply outlet)	2495 psi (172 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)	2000 psi (138 bar)		

NOTE: These are general hydraulic system requirements. See tool specification page for tool specific requirements

OPERATION

PREPARATION PROCEDURES

CHECK POWER SOURCE

- 1. Using a calibrated flow meter and pressure gauge, make sure the hydraulic power source develops a flow of 7-10 GPM/26-38 LPM at 2000 psi/140 bar.
- 2. Make certain that the power source is equipped with a relief valve set to open at 2100-2250 psi/145-155 bar maximum.
- 3. Make certain that the power source return pressure does not exceed 250 psi/17 bar.
- 4. Make sure the trash pump inlet is clear of debris. Remove any obstruction before operating.

CONNECT HOSES

1. Wipe all hose couplers with a clean, lint free cloth before making connections.

IMPORTANT

Do not connect pressure to the return port. Motor shaft seal limit is 250 psl/17 bar.

 Connect the hoses from the hydraulic power source to the couplers on the trash pump. Connect the return hose first and disconnect it last to minimize or avoid trapped pressure within the trash pump motor.

Note: If uncoupled hoses are left in the sun, pressure increase inside the hoses might make them difficult to connect. Whenever possible, connect the free ends of the hoses together.

3. Observe the arrow on the couplers to ensure that the flow is in the proper direction. The female coupler on the trash pump is the inlet (pressure) coupler.

PUMP OPERATION

- 1. Observe all safety precautions.
- 2. Attach a 4-inch/102 mm diameter fire hose to the trash pump outlet. For best performance, keep the fire hose as short as possible and lay it out to avoid sharp bends or kinks.

Do not attach a nozzle to the outlet end of the fire hose. The WTP4800 is designed for high GPM water flow at low water pressure (head).

3. Attach a rope or cable to the trash pump's handle. Lower the trash pump into the liquid to be pumped. Do not raise or lower the trash pump by its hoses or couplers.

IMPORTANT

Never point the hose at bystanders.

4. Turn on the hydraulic power source. Watch for solids in the liquid being pumped. If solids are excessive, the discharge flow might decrease. If this happens, stop the trash pump and check for the cause of the problem.

Under some conditions, the liquid being pumped might be slowed enough so It can no longer push particles in the liquid. If this happens, particles can accumulate in the pumping chamber, causing further restriction. The impeller then acts as a "grinding wheel" which causes accelerated trash pump wear. Reduced liquid flow can be caused by the following:

- The trash pump sinks into solids at the bottom of the hole.
- The end of the outlet hose is too high, causing an excessive lift height for the column of liquid being pushed by the trash pump. This slows the flow of liquid to a level where it can no longer carry solids.
- The flow and pressure of hydraulic fluid to the trash pump is too low, which reduces impeller speed. A 20 percent decrease in hydraulic fluid flow can reduce pump performance by 50 percent. When operating at reduced hydraulic flow and pressure, the end of the outlet hose should not be more than 30 ft/9 m above the liquid.

Note: It will not damage the pump to operate it "dry."

5. When pumping is complete, set the hydraulic control valve to the "OFF" position. Lift the trash pump from the work area using the rope or cable to avoid damage to the hoses or couplers.



Observe the following for trash pump protection and care.

6. The trash pump must maintain a minimum impeller speed in order to move solid particles through the pump. While pumping liquids containing large solids, monitor the flow from the outlet of the fire hose. If it begins to slow, turn off the hydraulic power source

OPERATION

and lift the trash pump from the work area. Disconnect the hydraulic hoses and clean at the water hose and the pumping chamber.

IMPORTANT

Pumping liquids with a solids-to liquid ratio greater than 30 percent will cause impeller wear.

 To maintain optimum performance, it is good practice to periodically inspect the impeller for wear or damage. This is especially important following the pumping of liquids containing sharp, abrasive solids.

COLD WEATHER OPERATION

If the trash pump is to be used during cold weather, preheat the hydraulic fluid at low power source speed. When using recommended fluids, fluid should be at or above 50 °F/10 °C (400 ssu/82 centistokes) before use.

Damage to the hydraulic system or pump motor seals can result if the fluid is too viscous or thick.

TOOL PROTECTION & CARE

NOTICE

In addition to the safety precautions found in this manual, observe the following for equipment protection and care.

- Make sure all couplers are wiped clean before
 connection.
- The hydraulic circuit control valve must be in the "OFF" position when coupling or uncoupling hydraulic tools. Failure to do so may result in damage to the quick couplers and cause overheating of the hydraulic system.
- Always store the tool in a clean dry space, safe from damage or pilferage.
- Make sure the circuit PRESSURE hose (with male quick disconnect) is connected to the "IN" port. The circuit RETURN hose (with female quick disconnect) is connected to the opposite port. Do not reverse circuit flow. This can cause damage to internal seals.
- Always replace hoses, couplings and other parts with replacement parts recommended by Wachs. Supply hoses must have a minimum working pressure rating of 2500 psi/172 bar.
- Do not exceed the rated flow or pressure (refer to "Specifications" on page 14 for correct flow rate and pressure). If specifications are exceeded, rapid failure of the internal seals may result.

- Always keep critical tool markings, such as warning stickers and tags, legible.
- Tool repair should be performed by experienced personnel only.
- Make certain that the recommended relief valves are installed in the pressure side of the system.
- Do not use the tool for applications for which it was not intended.

TROUBLESHOOTING

If symptoms of poor performance develop, the following chart can be used as a guide to correct the problem.

When diagnosing faults in operation of the tool, always make sure the hydraulic power source is supplying the correct hydraulic flow and pressure as listed in the table. Use a flowmeter know to be accurate. Check the flow with the hydraulic fluid temperature at least 80 $^{\circ}$ F/27 $^{\circ}$ C.

PROBLEM	CAUSE	SOLUTION
Pump will not start.	No hydraulic fluid flow or pressure.	Turn on power unit and check that 7–10 GPM/26-38 LPM at 2000 psi/140 bar is available at the trash pump.
	Defective couplers.	Check the couplers by connecting them together with the hydraulic power supply operating and with the control valve in the "ON" position. The power supply should operate without "loading" from the couplers.
	Impeller jammed with debris.	Clean the pumping chamber.
	Impeller rubbing against wear plates.	Check and adjust the impeller clearance.
	Defective power module.	Repair or replace the power module.
Poor pump performance.	Hydraulic flow reversed.	Check that the hoses are correctly connected to the pump motor ports. The female coupler should be connected to the "IN" port. The return fluid must never flow through a reversing valve.
	Improper hydraulic fluid flow.	Check that 7–10 GPM/26–38 LPM at 2000 psi/140 bar is available at the trash pump. A 20% decrease in flow can result in a 50% decrease in pump performance. 8 GPM/30 LPM is the optimum circuit flow.
	Trash pump submersed in sediment.	Lift the pump from the bottom of the hole or chamber. Use a flat support under the pump if necessary.
	Trash pump inlet restricted.	Remove restriction and clean thoroughly.
	Discharge hose kinked or restricted.	Straighten the hose. If the hose must bend at the top of the hole, use a piece of split rigid conduit with large diameter of the expanded hose. This keeps the hose from kinking. Use a 90° 4-inch pipe elbow on the trash pump outlet if necessary.
	Discharge hose too small.	Use a 4-inch diameter fire hose.
	Water lift too high.	Lower the outlet end of the discharge hose.
	Impeller worn or damaged.	Check impeller for damage and excessive wear. Replace if necessary.
	Wear plates worn or damaged.	Check wear plates for damage and excessive wear. Replace if necessary.
Hydraulic fluid in discharge flow.	Motor shaft seal failure.	Replace the motor shaft seal. Ensure power unit is delivering 7-10 GPM/26-38 LPM

SPECIFICATIONS

Weight	
Height (over handle)	
Length	
Pressure	
Flow Range	
Maximum Flow	
Porting	#10 SAE (pressure) #12 SAE (return)
Connect Size and Type	
	4 in./100 mm

ACCESSORIES

Description

Part No.

Male Adapter / Female THD 4-8 NPT	STN-21967
Lay-Flat Discharge Hose Blue, 4 in. × 25 ft with Camlock Fittings	STN-65624

MAINTENANCE

	Daily	As Needed	Hours
Grease motor (Item 16, page 17) with 2 strokes of underwater grease			100
Volute intake (Clean)		С	
Check fasteners for tightness	I		

C Clean.

Inspect.

CLEANING THE PUMPING CHAMBER

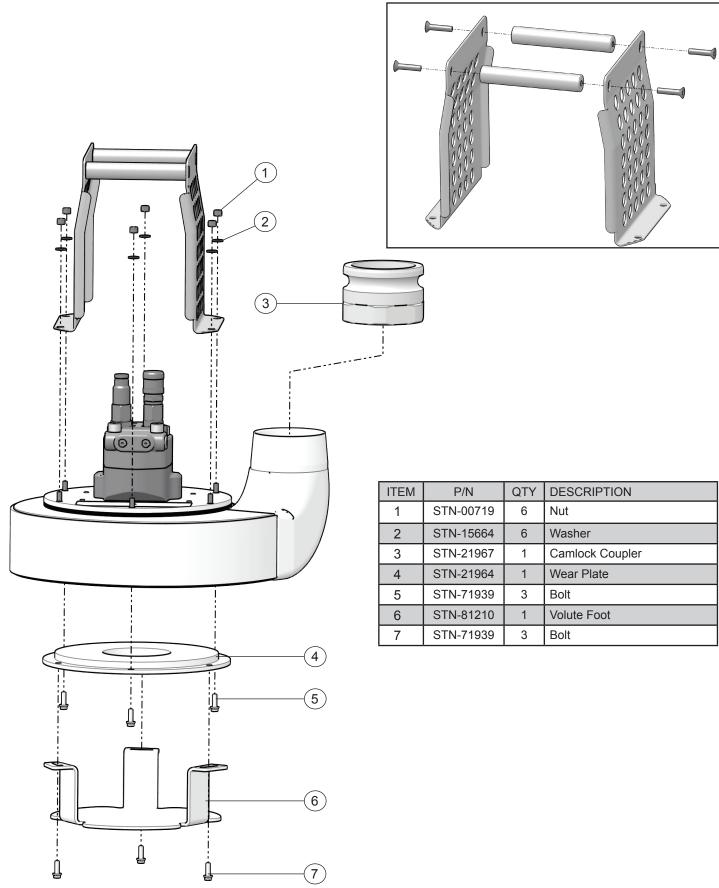
Debris such as weeds, sand and other solids may become trapped in the water hose and pumping chamber.

This can reduce pump performance. It is important that the pumping chamber be kept clean at all times.

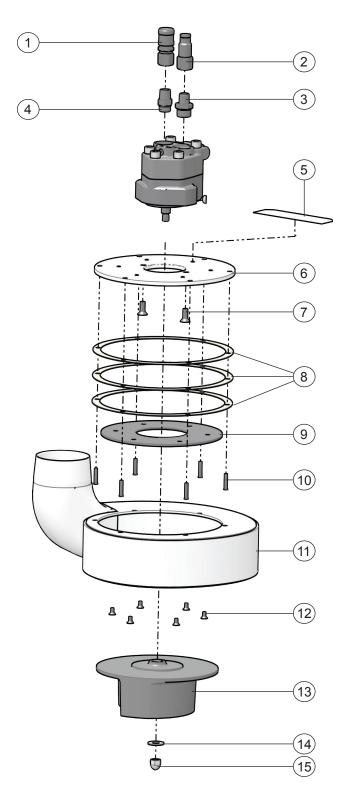
The chamber can be cleaned as follows:

- 1. Remove wear plate (item 8, page 15) by removing the six capscrews.
- 2. Remove all debris from the volute area.
- 3. Thoroughly clean the volute and impeller. Do not remove the impeller unless necessary for repair or replacement or to remove trapped debris.
- 4. Re-assemble and clean the capscrews and lubricate the threads with underwater grease before installation.
- 5. Remove all debris from the hose. Otherwise, solids will backfill the pump.

WTP4800 BODY ILLUSTRATION

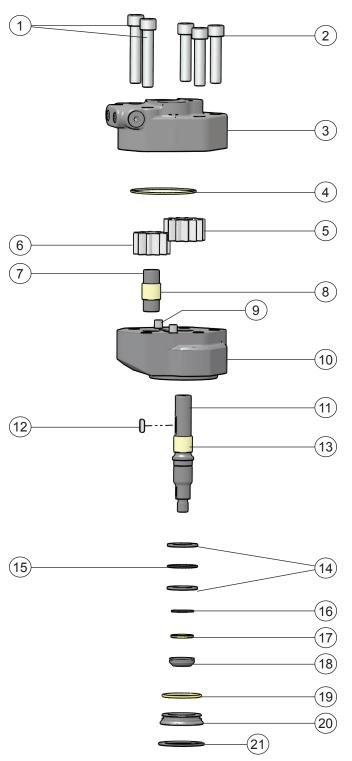


WTP4800 IMPELLER ILLUSTRATION



ITEM	P/N	QTY	DESCRIPTION
1	STN-03975	1	Coupler
2	STN-03976	1	Coupler
3	STN-06264	1	Fitting
4	STN-07882	1	Fitting
5	STN-66893	1	WTP4800 Name Tag
6	STN-81217	1	Motor Adaptor Plate
7	STN-73061	2	Cap Screw
8	STN-81133	3	Shim
9	STN-81260	1	Wear Plate
10	STN-73378	6	Stud
11	STN-73380	1	Volute
12	STN-21989	6	Cap Screw
13	STN-21979	1	Impeller
14	STN-03827	1	Washer
15	STN-21988	1	Acorn Nut

WTP4800 MOTOR ILLUSTRATION



ITEM	P/N	QTY	DESCRIPTION
1	STN-21987	2	Cap Screw
2	STN-21986	3	Cap Screw
3	STN-82595	1	Motor Cap
4	STN-15385	1	O-ring
5	STN-21974	1	Gear
6	STN-21982	1	Gear
7	STN-21984	1	Idler Shaft
8	STN-19793	1	Bushing
9	STN-22065	2	Dowel Pin
10	STN-82592	1	Flange
11	STN-82594	1	Shaft
12	STN-82602	1	Woodruff Key
13	STN-19793	1	Bushing
14	STN-20680	2	Bearing Washer
15	STN-08020	1	Thrust Bearing
16	STN-26812	1	Retaining Ring
17	STN-73064	1	Quad Ring
18	STN-06311	1	V-ring
19	02905	1	O-ring
20	82593	1	Seal Gland
21	STN-25278	1	Retaing Ring

DECLARATIONS OF CONFORMITY

DECLARATION OF CONFORMITY ÜBEREINSTIMMUNGS-ERKLARUNG DECLARATION DE CONFORMITE CEE DECLARACION DE CONFORMIDAD DICHIARAZIONE DI CONFORMITA

STANLEY.

		Shravan	Kumar Gunishetty			
		Surname and First nam	nes/Familiennname und Vornamen/Nom et prénom/Nombre y apellido/Cognome e nome			
bes déc Poi	eby declare that the equi tătige hiermit, daß erklar clare que l'équipement vis la presente declaro que hiaro che le apparecchiat	en Produkt genannten W sé ci-dessous: el equipo se especifica a	erk oder Gerät: continuación:			
1.	Category: Kategorie: Catégorie: Categoria: Categoria:	T	rash Pump, Hydraulic			
2.	Make/Marke/Marque/Mar	ca/Marca STANLE	(
3.	B. Type/Typ/Type/Tipo/Tipo: TP08013, TP08013H, TP0813X, TP08013XB, TP08013XCS, TP08013XL11, TP08013XW					
 Serial number of equipment: Seriennummer des Geräts: Numéro de série de l'équipement: Numero de serie del equipo: Matricola dell'attrezzatura: 		s: ipement: po:	All			
Wu Est Ha	been manufactured in c rde hergestellt in Überein fabriqué conformément sido fabricado de acuerd stata costruita in conform	o con				
R D D	chtlinie/Standards I rectives/Normes I rectriz/Los Normas I	No. Nr Numéro No n.	Approved body Prüfung durch Organisme agréé Aprobado Collaudato			
E M		809:1998+A1:2009 2006/42/EC:2006	Self Self Self			
5.	Special Provisions: Spezielle Bestimmungen: Dispositions particulières: Provisiones especiales: Disposizioni speciali:					
6.			ey Dubuis 17-19, rue Jules Berthonneau-BP 3406 41034 Blois Cedex, France. Ppresentante en la Union/Rappresentante presso l'Unione			
Dor	ne at/Ort/Fait à/Dado en/Fa	tto a <u>STANLEY Infrastruct</u>	ture, Portland, Oregon_USADate/Datum/le/Fecha/Data 1-5-11			
Sig	nature/Unterschrift/Signatu	re/Firma/Firma	1			

Shravan Kumar Gunishetty Quality Engineer

Position/Position/Fonction/Cargo/Posizione_

Test Report #07072016TP08

WACHS





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