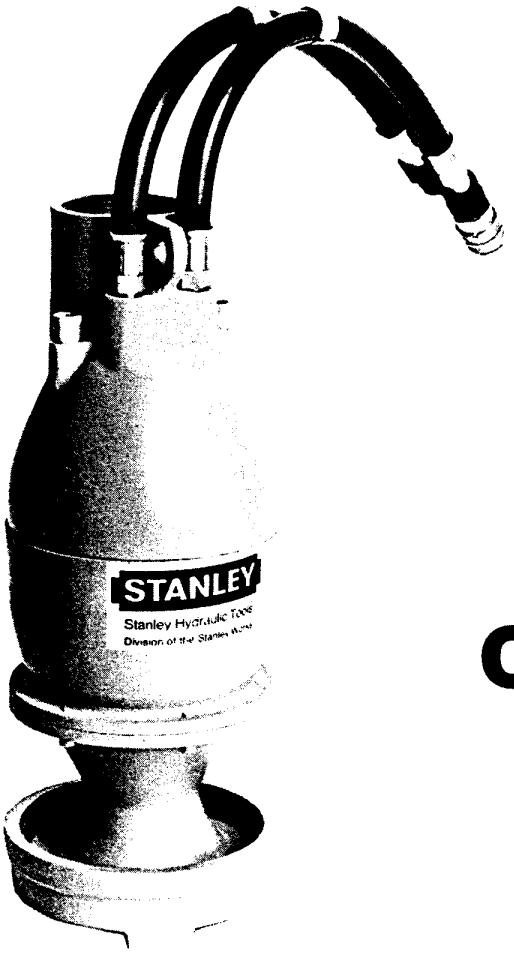
SM21
HYDRAULIC SUMP PUMP



Safety, Operation and Maintenance Manual

Focused on performance ™

STANLEY®
helps you do things right

05450 11/93R

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

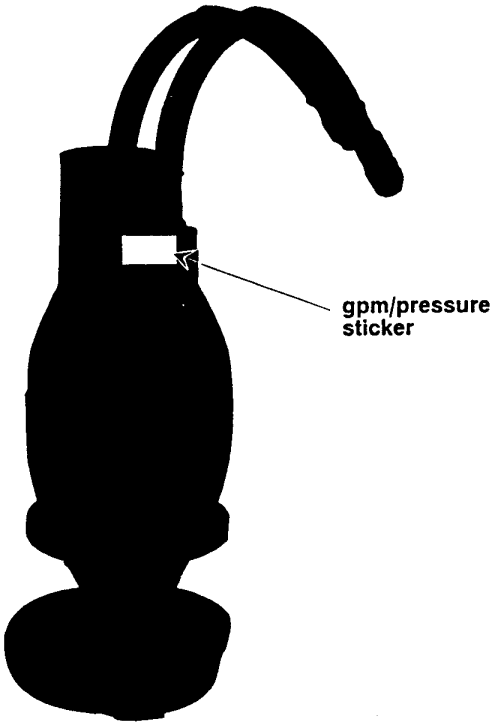
Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations. If so, place the added precautions in the space provided on page 4.

GENERAL SAFETY PRECAUTIONS

The SM21 Sump 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 safety stickers and tags attached to the pump and hose before operation. Failure to do so can result in personal injury or equipment damage.

- Operators 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 operation.
- Do not operate the tool unless thoroughly trained or under the supervision of an instructor.
- Always wear safety equipment such as goggles, ear and head protection, and safety shoes at all times when operating the tool.
- Never use tools near energized transmission lines. Know the location of buried or covered services before starting work.
- Never wear loose clothing that can get entangled in the working parts of the tool.
- Do not overreach. Maintain proper footing and balance at all times.
- Do not inspect or clean the tool while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.
- Always connect hoses to the tool hose couplers before energizing the hydraulic power source. Be sure all hose connections are tight.
- To avoid personal injury or equipment damage, all tool repair, maintenance and service must only be performed by authorized and properly trained personnel.

TOOL STICKERS AND TAGS



A flow and pressure sticker is attached to the pump at the location shown. Never exceed the flow and pressure levels specified on this sticker.

CAUTION

4-9 GPM/15-34 LPM
DO NOT EXCEED 2000 PSI/ 140 BAR

■ 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 HOSE TO TOOL "IN" AND "OUT" PORTS. IMPROPER HANDLING, USE OR MAINTENANCE OF TOOL COULD RESULT IN A LEAK, BURST OR OTHER TOOL FAILURE. ■ CONTACT AT A LEAK OR BURST CAN CAUSE OIL INJECTIONS INTO THE BODY. ■ FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS PERSONAL INJURY.

GPM/PRESSURE STICKER

The information listed on stickers and tags must be legible at all times. Always replace stickers that have become worn or damaged. Replacements are available from your local Stanley distributor.

SAFETY TAG

The safety tag at right is attached to the pump 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 pump when not in use.

DANGER

1. FAILURE TO USE HYDRAULIC HOSE LABELED AND CERTIFIED AS NON-CONDUCTIVE WHEN USING HYDRAULIC TOOLS ON OR NEAR ELECTRICAL LINES MAY RESULT IN DEATH OR SERIOUS INJURY.

   BEFORE USING HOSE LABELED AND CERTIFIED AS NON-CONDUCTIVE ON OR NEAR ELECTRICAL LINES BE SURE THE HOSE IS MAINTAINED AS NON-CONDUCTIVE. THE HOSE SHOULD BE REGULARLY TESTED FOR ELECTRIC CURRENT LEAKAGE IN ACCORDANCE WITH YOUR SAFETY DEPART-MENT INSTRUCTIONS.
2. A HYDRAULIC LEAK OR BURST MAY CAUSE OIL INJECTION INTO THE BODY OR CAUSE OTHER SEVERE PERSONAL INJURY.
   A. DO NOT EXCEED SPECIFIED FLOW AND PRESSURE FOR THIS TOOL. EXCESS FLOW OR PRESSURE MAY CAUSE A LEAK OR BURST.
   B. DO NOT EXCEED RATED WORKING PRESSURE OF HYDRAULIC HOSE USED WITH THIS TOOL. EXCESS PRESSURE MAY CAUSE A LEAK OR BURST.
   C. 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.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

SEE OTHER SIDE15875

DANGER

D DO NOT LIFT OR CARRY TOOL BY THE HOSES. DO NOT ABUSE HOSE. DO NOT USE KINKED, TORN OR DAMAGED HOSE.

3. MAKE SURE HYDRAULIC HOSES ARE PROPERLY CONNECTED TO THE TOOL BEFORE PRESSURIZING SYSTEM. SYSTEM PRESSURE HOSE MUST ALWAYS BE CONNECTED 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.
4. DO NOT CONNECT CLOSED-CENTER TOOLS TO OPEN-CENTER HYDRAULIC SYSTEMS. THIS MAY CAUSE EXTREME SYSTEM HEAT AND/OR SEVERE 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.
5. BYSTANDERS MAY BE INJURED IN YOUR WORK AREA. KEEP BYSTANDERS CLEAR OF YOUR WORK AREA.
6. WEAR HEARING, EYE, FOOT, HAND AND HEAD PROTECTION.
7. TO AVOID PERSONAL INJURY OR EQUIPMENT DAMAGE, ALL TOOL REPAIR, MAINTENANCE AND SERVICE MUST ONLY BE PERFORMED BY AUTHORIZED AND PROPERLY TRAINED PERSONNEL.

IMPORTANT

READ OPERATION MANUAL AND SAFETY INSTRUCTIONS FOR THIS TOOL BEFORE USING IT.

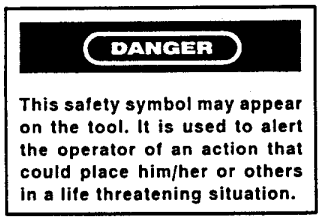
USE ONLY PARTS AND REPAIR PROCEDURES APPROVED BY STANLEY AND DESCRIBED IN THE OPERATION MANUAL.

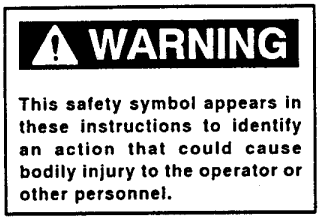
TAG TO BE REMOVED ONLY BY TOOL OPERATOR.

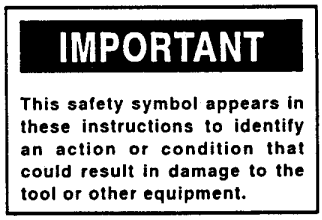
SEE OTHER SIDE15875

SAFETY SYMBOLS

Safety symbols 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.







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.

HYDRAULIC HOSE REQUIREMENTS

HOSE TYPES

Hydraulic hose types authorized for use with Stanley Hydraulic Tools are as follows:

❶ Labeled and certified non-conductive

❷ Wire braided (conductive)

❸ Fabric braided (not certified or labeled non-conductive)

Hose ❶ listed above is the only hose authorized for use near electrical conductors.

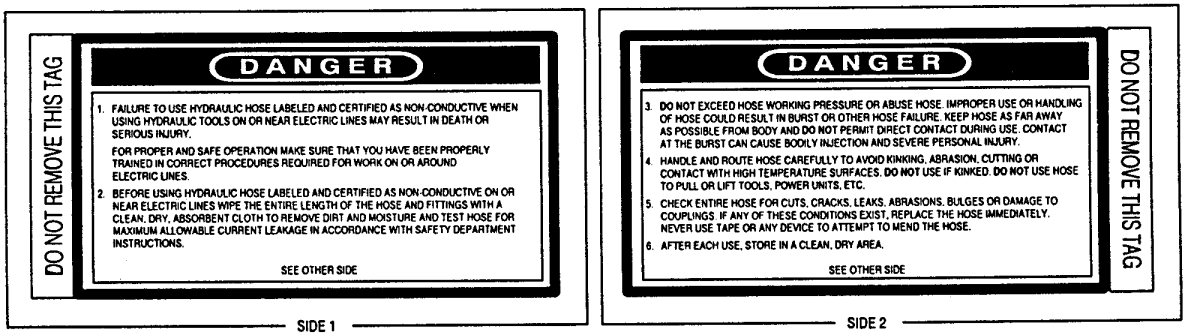
Hoses ❷ and ❸ listed above are **conductive** and **must never** be used near electrical conductors.

To help ensure your safety, the following DANGER tags are attached to all hoses purchased from Stanley Hydraulic Tools. 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 can be obtained at no charge from your Stanley distributor.

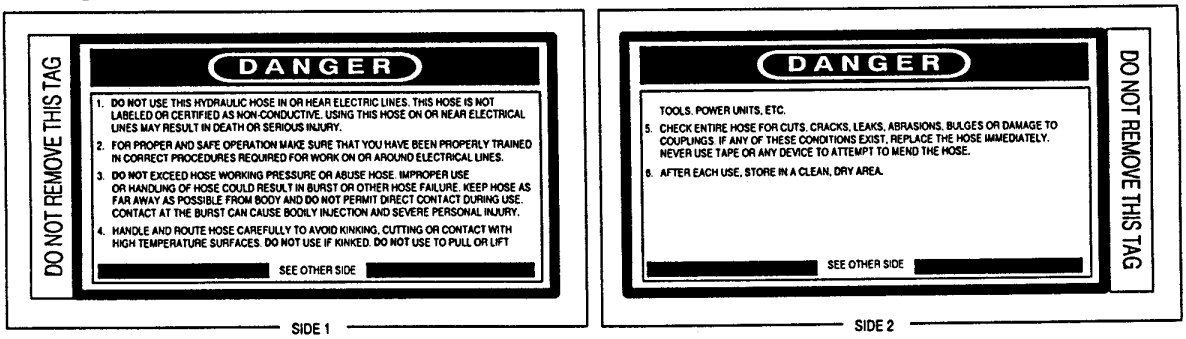
❶ CERTIFIED NON-CONDUCTIVE

This tag is attached to all certified and labeled **non-conductive** hose.



❷ AND ❸ WIRE- AND FABRIC-BRAIDED (NOT CERTIFIED OR LABELED NON-CONDUCTIVE)

This tag is attached to all **conductive** hose.



HOSE PRESSURE RATING

The rated working pressure of the hydraulic hose **must be equal to or higher than** the relief valve setting on the hydraulic system used to power the pump.

OPERATION

IMPORTANT

In addition to the Safety Precautions on page 1 thru 4 of this manual, observe the following for equipment protection and care.

- Always keep critical tool markings, such as labels and warning stickers legible.
- Always replace hoses, couplings and other parts with replacement parts recommended by Stanley Hydraulic Tools. Supply hoses must have a minimum working pressure rating of 2500 psi /175 bar. All hoses must have an oil-resistant inner surface and an abrasive resistant outer surface.
- Whenever near electrical conductors, use **clean,** labeled and certified nonconductive hoses.
- Tool repair should be performed by authorized and trained personnel only.
- 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. Both connect ports on the hydraulic power source should vent to the reservoir when the circuit control valve is in the "OFF" position.

HYDRAULIC SYSTEM REQUIREMENTS

- The hydraulic system should provide a flow of 4-9 gpm/15-34 lpm at an operating pressure of 1500-2000 psi/105-140 bar. Recommended relief valve settings are 2100-2250 psi/145-155 bar.
- The system should have no more than 250 psi/17 bar backpressure measured at the tool end of the operating hoses. The system conditions for measurement are at maximum fluid viscosity of 400 ssu/82 centistokes (minimum operating temperatures).
- The hydraulic system should have sufficient heat rejection capacity to limit the maximum oil temperature to 140°F/60°C at the maximum expected ambient temperature. The recommended minimum cooling capacity is 5 hp/3.73 kW at a 40°F/22°C difference between ambient temperature and oil temperature.
- The hydraulic system should have a minimum of 25 micron filtration. It is recommended that filter elements be sized for a flow of at least 30 gpm/114 lpm for cold temperature startup and maximum dirt holding capacity.
- The hydraulic fluid used should have a viscosity between 100 and 400 ssu/20 and 82 centistokes at the maximum and minimum expected operating temperatures. Petroleum base hydraulic fluids with antiwear properties and a viscosity index over 140 ssu/28 centistokes will meet the recommended requirements over a wide range of operating temperatures.
- The recommended hose size is .500 inch /12 mm I.D. up to 50 ft/15 m long and .625 inch /16 mm I.D. minimum up to 100 ft/30 m long.

PREOPERATION PROCEDURES

CHECK POWER SOURCE

1. Using a calibrated flowmeter and pressure gauge, check that the hydraulic power source develops a flow of 4-9 gpm/15-34 lpm at 1500-2000 psi/105-140 bar.

2. Make certain that the power source is equipped with a relief valve set to open at 2100-2250 psi/145-155 bar.

3. Check that the pump inlet is clear of debris. Remove any obstructions before operating the pump. Refer to CLEANING THE PUMPING CHAMBER.

CONNECT HOSES

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

2. Connect the hoses from the power source to the couplers on the pump or pump hoses. It is good practice to connect return hoses first and

disconnect them last to minimize or avoid trapped pressure in the pump motor and hoses.

3. If hose couplers are used, observe the arrow on the coupler to ensure that the flow is in the proper direction. The female coupler on the pump is the inlet coupler.

Note: If uncoupled hoses are left in the sun, heat may cause a pressure increase inside the hoses and make them difficult to connect. When possible, connect the free ends of the operating hoses together.

PUMP OPERATION

Note: This pump is not designed for use with a suction pipe inlet. The diameter of the suction screen at the bottom of the pump provides maximum pump efficiency. Reducing the size of this inlet will greatly reduce pump performance.

1. Observe all safety precautions.

2. Connect a hose fitted with a 2-1/2 inch male pipe end to the pump outlet fitting. Make sure the fitting is securely tightened. For best performance, keep the hoses as short as possible and lay them out to avoid sharp bends or kinks.

⚠ WARNING

Never point the hose at bystanders.

3. Attach a rope or cable to the lifting eye at the top of the pump. Lower the pump into the liquid to be pumped. Do not raise or lower the pump by its hoses or couplers to avoid damage to the hoses or couplers.

4. Turn on the hydraulic power source.

Note: It will not damage the pump to run "dry" when the pump is not submerged.

5. Watch for solids in the liquid being pumped. If solids are excessive, the discharge flow may decrease. If this happens, stop the pump and check for the cause of the problem.

Under some conditions, the liquid being pumped may be slowed enough so that 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 pump wear. Reduced liquid flow can be caused by the following:

- The pump sinks into bottom solids.
- The end of the outlet hose is too high, causing an excessive lift height for the liquid being pushed by the pump. This slows the flow of liquid to where it can no longer carry solids.
- The flow and pressure of hydraulic oil to the pump is too low which reduces impeller speed. A 20 percent decrease in hydraulic oil 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 40 feet/12 m above the liquid.

6. When pumping is completed, set the hydraulic flow control valve at the hydraulic power source to "OFF". Lift the pump from the liquid using the rope or cable attached to the lifting eye.

COLD WEATHER OPERATION

If the pump is to be used during cold weather, preheat the oil at low engine speed. When using the normally recommended oils, oil should be at or above 50°F/10°C (400 ssu/82 centistokes before use).

Damage to the hydraulic system or pump could result from using oil that is too viscous or thick.

SERVICE INSTRUCTIONS

Note: For orientation of piece parts in the following procedures, refer to the parts location diagram contained in the PARTS LIST section of this manual.

CLEANING THE PUMPING CHAMBER

Debris such as weeds, and other solids may become trapped in the 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 the pump screen by removing the capscrew securing the screen to the inlet bell.

2. Remove any debris from the pump screen.

3. Remove the six capscrews securing the inlet bell to the main body assembly. Separate these components to expose the impeller.

4. Thoroughly clean the inlet bell and impeller. Do not remove the impeller unless necessary for repair or replacement or to remove trapped debris.

5. Assemble the inlet bell and pump screen. Clean the capscrews and lubricate the threads with underwater grease before installation.

PRIOR TO DISASSEMBLY

- Clean exterior of tool.
- Obtain Seal Kit, part number 03081, so all seals exposed during disassembly can be replaced. Note orientation of seals before removing them. Install new seals in same way.

PUMP DISASSEMBLY

1. Remove the outlet cone by removing the two capscrews securing it to the main body assembly.

2. Remove the oil tubes (with o-rings) from the motor end plate.

3. Remove the pump screen and inlet bell following the procedures for CLEANING THE PUMPING CHAMBER.

4. Remove the left-hand threaded conical nut securing the impeller to the pump shaft; then remove the impeller. Take care not to lose the washers or key on the shaft.

5. Remove the motor end plate by removing the eight capscrews securing it to the main body assembly.

6. Slide the gears from the pump and idler shafts. Take care not to lose the key on the pump shaft. Pull the pump shaft out of the main body assembly.

7. Remove the seal body and thrust bearing from the main body assembly by removing the four capscrews securing the seal body to the main body assembly.

CLEANING AND INSPECTION

1. Clean all parts with a degreasing solvent.

2. Inspect all parts for excessive wear or other damage.

3. Inspect the condition of the pump shaft and bushings in the main body assembly.

a. The bushings should be gray in color (bronze indicates excessive wear), and be correctly located in the bore with the first bushing near the gear chamber and the second bushing 2-inches below the gear chamber surface. The bushings should be replaced if worn or loose in the bore.

b. The pump shaft should not be scored or badly worn (some polishing in the bushings and seal body is normal). Replace the pump shaft if required.

4. Inspect the idler shaft. If roughly scored, it should be pulled and replaced.

5. Inspect the idler gear and bushing. The bushing should be positioned within the gear width and grey in color (bronze indicates excessive wear). Replace bushing or idler gear assembly as required.

Note: Worn bushings, gears, gear housings, and shafts (which are sealed in hydraulic fluid), are a sign that the hydraulic supply is contaminated. Pump wear can be limited if the hydraulic supply is kept clean, adequate filtration is used, and condensed moisture is prevented from entering the hydraulic fluid.

6. Check the impeller blades for cracks, chips and signs of excessive wear that can effect pump performance. Replace the impeller if damaged or seriously worn.

7. Inspect the inlet bell bore. The surface around the impeller should appear smooth and cone shaped (round at any height from the end and straight when gaged with a rule on the inside from the small to the large end of the taper). Reduced performance will result when wear has caused the clearance between the impeller blades and the inside wall of the inlet bell to increase beyond specification. Heavy wear is caused by the accumulation of solids - see Pump Operation.

PRIOR TO REASSEMBLY

- Insure that all seals that were exposed are replaced with new parts.
- Apply clean waterproof grease or o-ring lubricant to all parts during reassembly.

PUMP REASSEMBLY

1. Install a new quad ring in the seal body and lubricate with waterproof grease.

2. Insert the pump shaft through the main body, threaded end first, from the gear chamber side. Install the thrust bearing on the pump shaft with the small inside diameter race next to the shaft shoulder.

3. Making sure that the o-ring is in position in the face of the seal body, install the seal body over the pump shaft and secure to the main body with four capscrews.

4. Place the key in the gear end of the pump shaft. Install the two gears and the o-ring (in the groove around the gear chamber of the main body assembly). Place the motor end plate in position and secure with eight capscrews.

5. Place the stainless steel 1-1/8 inch O.D. washer on the pump shaft followed by the small washers. Place the key on the pump shaft and install the impeller. Install the conical nut hand-tight. With the inlet bell held in position, check that there is .030-.060-inch/.76-1.5 mm clearance between the impeller blades and the inside wall of inlet bell. The quantity of the small washers must be adjusted to obtain this clearance. Tighten the conical nut securely.

6. When the desired clearance between the impeller blades and inlet bell is obtained, secure inlet bell to main body with six capscrews. Install the pump screen with a capscrew.

7. Install the oil tubes (with the o-rings lubricated) into the motor end plate. Place the outlet cone over the oil tubes; making sure the oil tube ports are aligned. Secure with two capscrews.

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 pump, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure to the pump as listed in the table. Use a flow meter known to be accurate. Check the flow with the hydraulic fluid temperature at least 80°F/27°C.

PROBLEM	CAUSE	REMEDY
Pump will not run.	No hydraulic flow or pressure.	Turn on hydraulic power source and check that 4-9 gpm/15-34 lpm at 1500-2000/105-140 bar is available at the pump.
	Defective couplers.	Check the couplers by connecting them together with the hydraulic power source operating and the control valve "ON". The power source should operate without "loading" from the couplers.
	Impeller jammed with debris.	Clean the pumping chamber as described in the SERVICE INSTRUCTIONS section of this manual.
	Impeller rubbing against inlet bell.	Check and adjust the impeller clearance as described in the SERVICE INSTRUCTIONS section of this manual.
	Defective hydraulic motor.	Repair or replace motor.
Poor pump performance.	Hydraulic flow reversed.	Check that hoses are correctly connected. The female coupler should be connected to the IN port. The return oil must never flow through a reversing valve.
	Improper hydraulic oil flow.	Check that 4-9 gpm/15-34 lpm at 1500-2000 psi/105-140 bar is available at the pump. (A 20 percent decrease in flow can result in a 50 percent decrease in pump performance).
	Pump submerged in sediment.	Lift the pump from the bottom of the hole or chamber. Use a flat support under the pump if necessary.

PROBLEM	CAUSE	REMEDY
Poor pump performance (Cont).	Pump inlet restricted.	Remove the pump screen and clear thoroughly.
	Discharge hose kinked or restricted.	Staighten the hose. If the hose must bend at the top of hole, use a 90 degree bent piece of rigid conduit split on the outside and having a diameter large enough to accept the O.D. of the expanded hose. This will keep the hose from kinking.
		Check for bebris inside the hose. Clean as required.
	Discharge hose too small.	Use 2 1/2 inch diameter hose. (Fire hose is the easiest to use).
	Water lift too high.	Lower the outlet end of the discharge hose.
		Use a 9 gpm/34 lpm flow rate.
		Obtain a higher lift head pump (SM20).
	Impeller worn or damaged.	Check for impeller damage and excessive wear. Replace the impeller if necessary.
	Inlet bell worn or damaged.	Check for inlet bell damage or excessive wear. Replace if necessary.
	Hose used on suction side of pump.	Don't use a hose on the inlet. The pump is designed for use submerged.
	Excessive clearance between inlet bell bore and impeller blades.	Add small washers between the impeller and a larger washer just above these to reduce clearance within .030-.060 inch/.76-1.5 mm.

SPECIFICATIONS

Capacity	300 gpm/1125 lpm
Weight	20 lbs/9.1 kg
Diameter	6 1/4 inch/15.9 cm
Overall Length	16 inches/40.6 cm
Pressure Range	1500-2000 psi/105-140 bar
Flow Range	4-9 gpm/15-34 lpm
System Type	o.c. HTMA TYPE I and II
Porting	-6 SAE o-ring
Hose Whips	Yes
Water Outlet Size	2 1/2 inch Pipe
Connect Size and Type	3/8 Male Pipe Hose End
Drop-Through Diameter	6 1/2 inch/16.5 cm
Outlet Hose Recommended	2 1/2 inch/64 mm Fire Hose

NOTE

Weights, dimensions, and operating specifications listed are subject to change without notice. Where specifications are critical to your application, please consult the factory.

ACCESSORIES

PART NUMBER	DESCRIPTION
02183	25 ft/8 m Length of 2 1/2 inch Fire Hose with Pin Lug Male x Female Coupler
02317	Fire Nozzle - 1 inch Output
05133	2 1/2 inch Thread Adapter for Fire Hose
05134	50 ft/15 m Length of 2 1/2 inch Fire Hose with Pin Lug Male x Female Coupler
05135	Spanner Wrench for Pin Lug Coupler

WARRANTY

Hand held tools and their parts are warranted against defects in materials and workmanship for a period of 12 months from the date of purchase, except for cutting parts, steels and other parts not manufactured by Stanley (such as impact mechanisms, alternators, regulators and hoses).

The Warranty Registration Card packed with the tool must be filled out and returned to Stanley upon receipt of the tool.

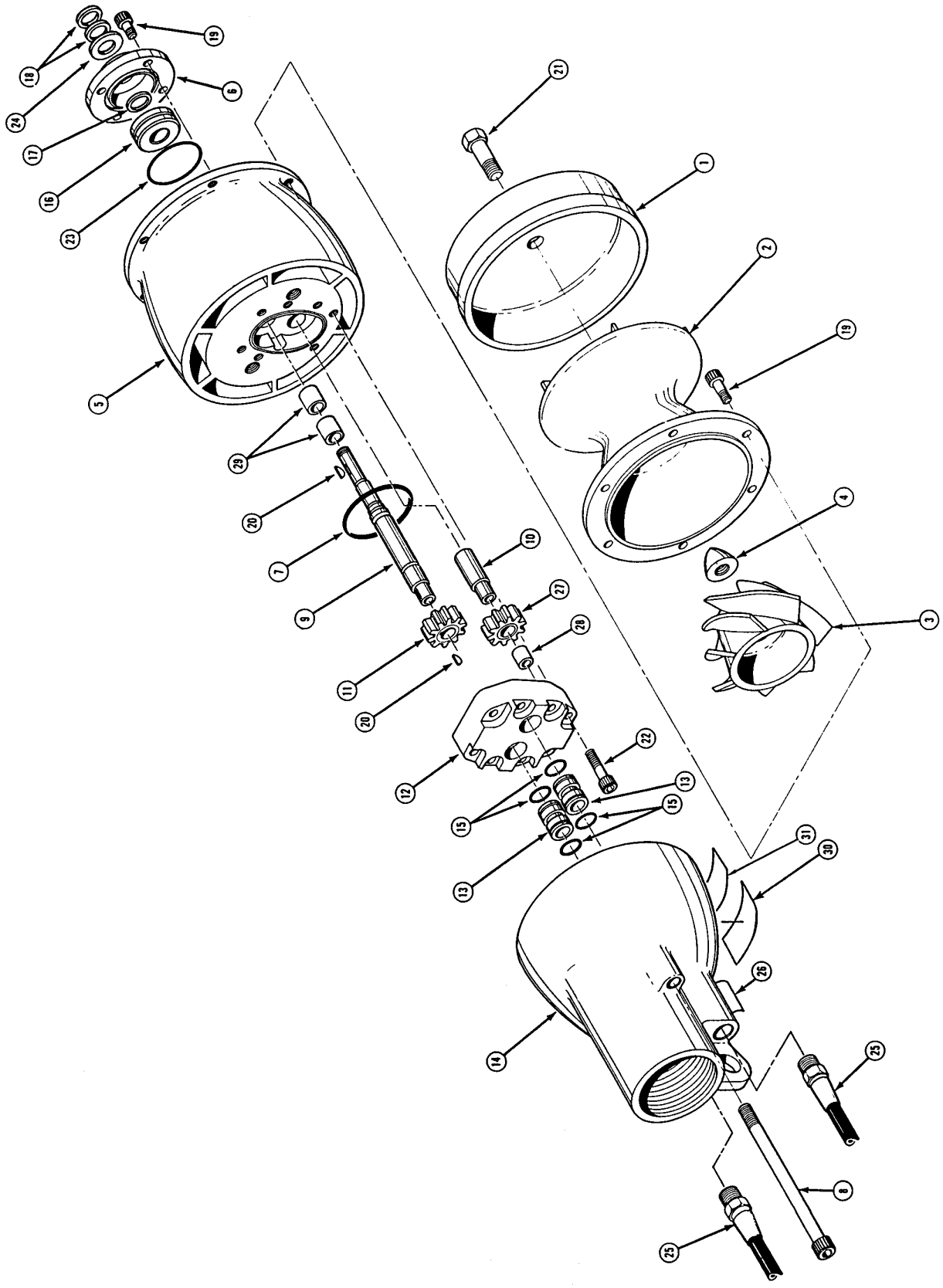
Stanley reserves the right to replace or repair only those parts which under our examination prove to have been defective at the time of purchase.

Shipping charges are pre-paid by the customer unless otherwise authorized by Stanley.

The warranty is void if maximum flow and pressure ratings are exceeded.

There is no other warranty expressed or implied.

SERVICE AND REPAIR NOTES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PARTS LIST

Item No.	Part No.	Qty.	Description
1	02430	1	Pump Screen
2	02431	1	Inlet Bell
3	02432	1	Impeller
4	02433	1	Conical Nut
5	06921	1	Main Body Housing (Incl. Items 10 and 29)
6	02435	1	Seal Body
7	00178	1	O-Ring, 2-1/8 x 2-1/4 x 1/16 ⊙
8	02555	2	Capscrew, 3/8-16 x 5 Soc. Hd. Stnls
9	06922	1	Pump Shaft
10	06917	1	Idler Shaft
11	02440	1	Gear
12	02441	1	Motor End Plate
13	02442	2	Oil Tube
14	02443	1	Outlet Cone
15	00016	4	O-Ring, 9/16 x 11/16 x 1/16 ⊙
16	02444	1	Thrust Bearing
17	02445	1	Quad Ring, 5/8 x 13/16 x 3/32 ⊙
18	01204	A/R	Washer
19	02446	10	Capscrew, 1/4-20 x 5/8 Soc. Hd. Stnls
20	02447	2	Key, USA Std. Woodruff #403
21	02448	1	Capscrew, 7/16-14 x 1 Hex Hd. Stnls
22	02449	8	Capscrew, 5/16-18 x 1-1/8 Hex Soc. Hd. Stnls
23	00020	1	O-Ring, 1-11/16 x 1-13/16 x 1/16 90 DURO ⊙
24	03281	1	Washer, .500 x 1.125 x .062 Stnls
25	01412	2	Pigtail Hose Assembly
26	03786	1	GPM Sticker
27	06919	1	Idler Gear Assy (Incl. Item 28)
28	05207	1	Bushing-Garlock 08DU08
29	06916	2	Bushing-Garlock 10DU08
30	05152	1	Stanley Sticker
31	02750	1	Name Tag

NOTE: Use Part Number and Part Name when ordering.
⊙ Denotes Part in Seal Kit.

SEAL KIT DATA

Part No.	Qty.	Description
Seal Kit Part No. 03081		
00016	4	O-Ring
00020	1	O-Ring
00178	1	O-Ring
02445	1	Quad Ring

STANLEY®

helps you do things right

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