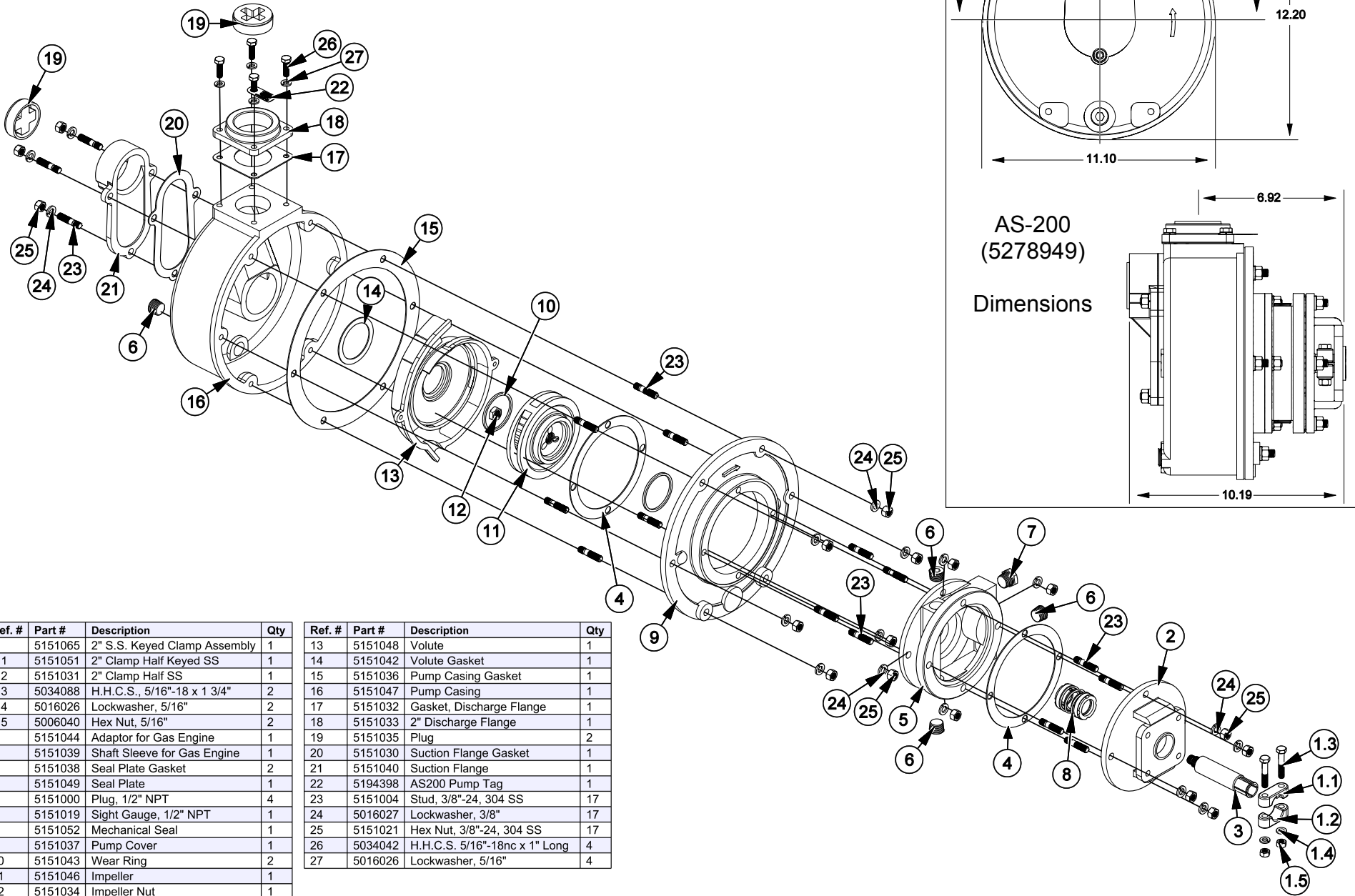


# AS-200 2" Centrifugal Pump

## Exploded View (5278949)



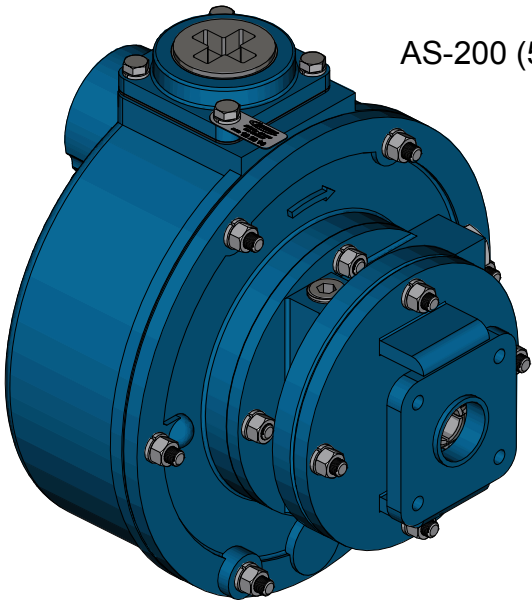
Ref. #	Part #	Description	Qty
1	5151065	2" S.S. Keyed Clamp Assembly	1
1.1	5151051	2" Clamp Half Keyed SS	1
1.2	5151031	2" Clamp Half SS	1
1.3	5034088	H.H.C.S., 5/16"-18 x 1 3/4"	2
1.4	5016026	Lockwasher, 5/16"	2
1.5	5006040	Hex Nut, 5/16"	2
2	5151044	Adaptor for Gas Engine	1
3	5151039	Shaft Sleeve for Gas Engine	1
4	5151038	Seal Plate Gasket	2
5	5151049	Seal Plate	1
6	5151000	Plug, 1/2" NPT	4
7	5151019	Sight Gauge, 1/2" NPT	1
8	5151052	Mechanical Seal	1
9	5151037	Pump Cover	1
10	5151043	Wear Ring	2
11	5151046	Impeller	1
12	5151034	Impeller Nut	1

Ref. #	Part #	Description	Qty
13	5151048	Volute	1
14	5151042	Volute Gasket	1
15	5151036	Pump Casing Gasket	1
16	5151047	Pump Casing	1
17	5151032	Gasket, Discharge Flange	1
18	5151033	2" Discharge Flange	1
19	5151035	Plug	2
20	5151030	Suction Flange Gasket	1
21	5151040	Suction Flange	1
22	5194398	AS200 Pump Tag	1
23	5151004	Stud, 3/8"-24, 304 SS	17
24	5016027	Lockwasher, 3/8"	17
25	5151021	Hex Nut, 3/8"-24, 304 SS	17
26	5034042	H.H.C.S. 5/16"-18nc x 1" Long	4
27	5016026	Lockwasher, 5/16"	4

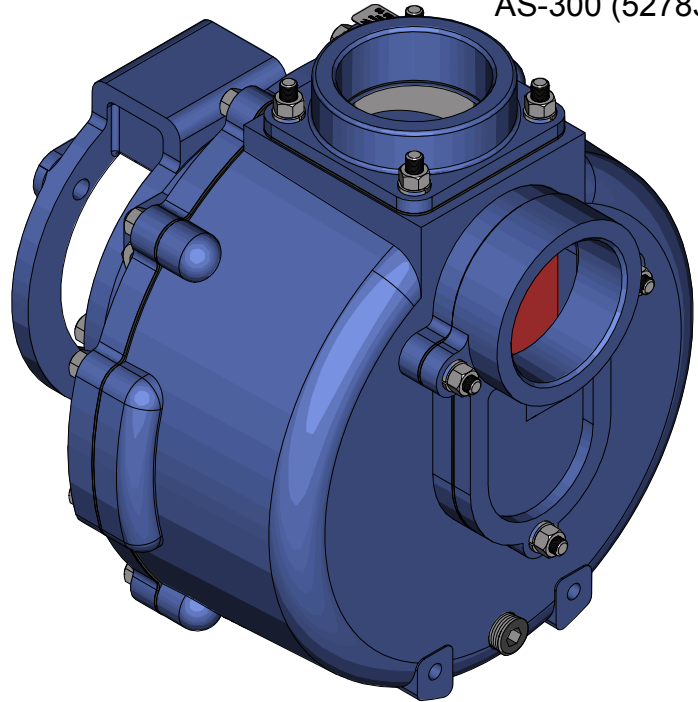
# OWNER'S MANUAL

## Parts & Instruction Manual Centrifugal Pumps

AS-300 (5278333)



AS-200 (5278949)



### General Information

Thank you for purchasing this product. The purpose of this manual is to assist you in operating and maintaining your newly purchased product. Please read it carefully, as it furnishes information which will help you achieve years of trouble-free operation.

### Warranty/Parts/Service

**Products are warranted for a two year unconditional warranty from date of purchase.**

Your authorized dealer is the best source of replacement parts and service, always remember to give the following information...

- Correct Part Description and/or part number
- Model #/Serial # of your sprayer

Part descriptions and numbers can be obtained from the illustrated parts list section(s) of this manual.

Whenever you need parts or service, contact your distributor/dealer first. For warranty work, always take your original sales slip or other evidence of purchase date, to your distributor/dealer.



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

(02/17)

IF YOU SHOULD HAVE A QUESTION OR EXPERIENCE A PROBLEM WITH YOUR AG SPRAY PRODUCT GIVE US A CALL

<b>BAKERSFIELD, CA</b> 877-724-2236	<b>COLUMBUS, NE</b> 800-274-1025	<b>DOTHAN, AL</b> 800-227-4098	<b>FARGO, ND</b> 800-373-4084	<b>GREENWOOD, MS</b> 800-844-4524
<b>HOPKINSVILLE, KY</b> 800-637-7172	<b>MANKATO, MN</b> 800-722-9376	<b>NEWTON, KS</b> 800-394-7662	<b>OTHELLO, WA</b> 800-634-2026	<b>TEMPE, AZ</b> 877-974-7170

**BEFORE YOU CALL, PLEASE HAVE THE FOLLOWING INFORMATION AVAILABLE: SALES RECEIPT & MODEL NUMBER. IN MOST CASES, AN AG SPRAY EMPLOYEE CAN RESOLVE THE PROBLEM OVER THE PHONE**

Model Number: \_\_\_\_\_ Serial Number: \_\_\_\_\_ Purchase Date: \_\_\_\_\_

## INSTALLATION

### Mounting

- The pump should be installed in a clean, dry and well ventilated area, preferably close to the fluid supply
- The pump should be mounted so that the sight window is at the top of the seal reservoir. If necessary, it may be moved to one of the other ports on the seal reservoir
- If the seal reservoir fluid is drained for any reason, a 50/50 mixture of ethylene glycol antifreeze and water should be used to replace it. Fill half way up the window
- Be sure to note the direction arrow cast into the pump body and double check the rotation direction of your power source
- For close-coupling to a motor, engine or pedestal, the following must be observed:
  - The pump must NEVER be used on engines or motors with plain bearings. For use on engines/motors with ball bearings ONLY
  - Make sure to clean and pre-lube the shaft with a light oil prior to sliding into the pump shaft. Do not force, it should slide easily. Investigate any interference
  - Tighten the bolts of the clamp evenly, so that the gaps on each side are equal

### Piping

- The pump is not designed to support piping. If piping is used, it should be supported independently of the pump and connected to the pump with a flexible pipe/hose
- It is recommended that new clean pipe be used at installation and be of the same size as the pump ports. For long distances, the pipe size may need to be increased
- The suction pipe should always be sloped upward to avoid creating air pockets in the line

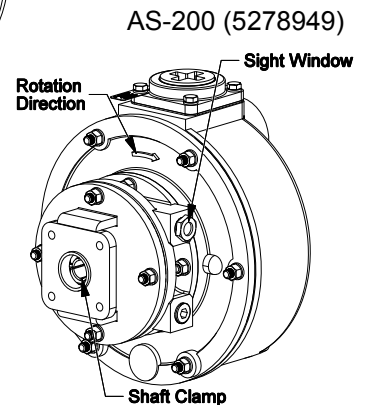
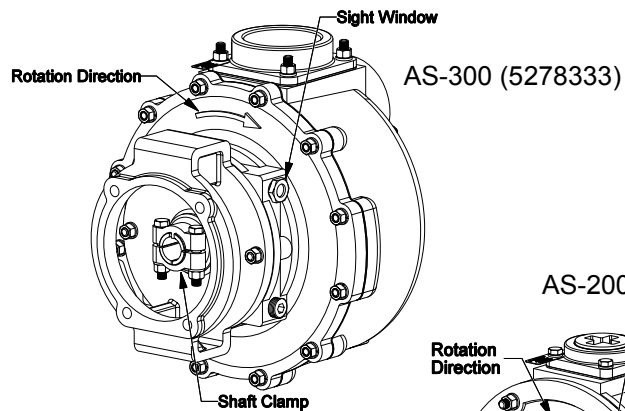
### MAINTENANCE:

- Inspect the seal reservoir fluid level using the sight window. It should be above the middle of the window
- If dirty, replace the fluid in the seal reservoir by draining and replacing with a 50/50 mixture of ethylene glycol antifreeze and water. The recommended service interval for this fluid is 100 hours
- If the fluid in the seal reservoir becomes cloudy or loses fluid after use, the impeller seal is leaking and should be replaced
- Inspect the pump frequently for any leaks from the housing gaskets or shaft seal

### STORAGE

**\*\*IMPORTANT: Keep air out of the pump and keep from freezing**

- Keeping the air out of the pump is the only way to prevent corrosion. Even for short periods of storage, the entrance of air into the pump causes RAPID and SEVERE CORROSION. Freezing temperatures can cause the fluid or water to freeze internally, which can cause severe damage to castings and other components
- To prevent excessive corrosion of the pump's cast iron components, flush the pump thoroughly with FIMCO tank neutralizer and cleaner. Fill with clean water and DO NOT DRAIN. Keep pump sealed to exclude air by placing plugs in the suction and discharge lines to keep the pump full
- For long term storage (more than 2 weeks), use straight RV-antifreeze (which has a corrosion inhibitor) to fill the pump after flushing



### SEAL REPLACEMENT:

1. Loosen the shaft clamp and unbolt the pump adaptor from the engine/motor/pedestal. Penetrating oil should be allowed to soak between the pump shaft and the driving shaft if it is stuck
2. Carefully remove the pump from the engine/motor/pedestal by pulling it straight off the shaft. Do not pry the pump back and forth, as it may bend the tabs of the pump shaft
3. Disassemble the pump by draining the seal reservoir fluid and then removing the motor/engine adapter and reservoir housing
4. Remove the seal seats from the pump castings and carefully clean the counterbores where they fit
5. When re-installing new seal seats, coat the rubber OD with a quality pipe compound and press the seal seat fully into the casting counterbores. The compound will lubricate the seat for installation and prevent corrosion under the seat
6. Using a small hammer and a plastic tube or block on the seal seat, you may lightly tap the seats into the counterbores to make sure they are bottomed out fully
7. Before re-assembly, make sure the ceramic faces (where the rotary seal will touch) are clean
8. Thoroughly clean the shaft and lightly lubricate it with oil or grease before installing the shaft seals and spring onto the shaft
9. Assemble the pump using new rubber gaskets between casting components and replace impeller wear rings as necessary. Note: Wear Rings fit very tightly and must be stretched by hand before being rolled onto the parts
10. Re-install the antifreeze/water mixture as described in the maintenance section

### IMPELLER REPLACEMENT:

1. Remove the plumbing from the pump and then the (12) nuts holding the pump housing to the housing back cover. NOTE: the 2" pump has only (6) nuts
2. Remove the housing. Hold the pump shaft stationary and first unscrew the impeller locknut, then the impeller itself (Both have right-handed threads) using a large screw driver inserted in the vanes
  - Be sure to use new rubber gaskets when re-assembling the pump
  - It is also recommended to replace the 2 teflon wear rings on the impeller

## TROUBLE SHOOTING

ISSUE	PROBABLE CAUSE
Pump makes rattling noise while running	Cavitation or pump starvation (suction lift is too high or the inlet line is too restrictive)
Reduced pump output or pressure	Clogged impeller or inlet piping (including strainer)
	Leaks in suction line or at inlet gasket
	Collapsed suction line
	Trapped air in sections of suction line
	Suction lift is too great
	Worn or damaged parts (impeller or casing)
Pump fails to prime or slow prime	Leaks in suction line or at inlet gasket
	Suction lift is too great
	Collapsed suction line
	Not enough water in casing to prime pump
Seal reservoir fluid changes level	Leak at input shaft seal if level is low
	Leak at the impeller side seal if level is high
Pump makes screeching or metal on metal noises	Improper installation on motor, engine or pedestal shaft. The shaft (and impeller) have been forced into the pump and against the volute

Notes

## Notes