

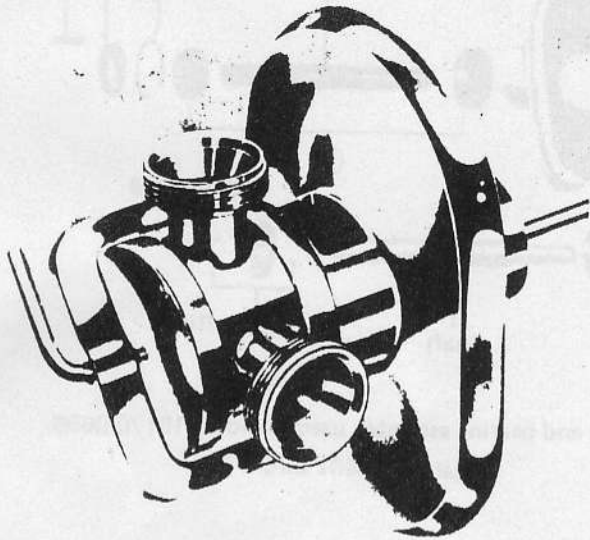
# JABSCO® PUMPS

PUREFLO® Sanitary Pumps

# MODEL 15170-0005

Product Data

FORMERLY 15170-0656  
(S100-F4)



## DESIGN FEATURES

- Body: **Type 316 Stainless Steel**
- Impeller: **Jabco Neoprene Compound**
- Seal: **Sanitary Carbon Face**
- Bearings: **Ball Bearing**
- Shaft: **Type 316 Stainless Steel**
- Ports: **2" Acme Sanitary Threads, Ground Seat**
- Weight: **34 lbs. (approx.)**

Note: Capacitor type motor recommended

## VARIATIONS

MODEL	VARIATION AVAILABLE
15170-0015	2" Clean In Place Ports

15170-0005

## HEAD CAPACITY TABLE

CAPACITY GPM	SUCTION & DISCHARGE LINE SIZE	PUMP SPEED	H/P REQ.
65	1½" ID	1100	1½
90	2" ID	1525	2

Capacities and horsepower ratings are based on maximum head of 20 feet or 10 PSI. Additional horsepower may be required when head pressures exceed 10 PSI. Farm tank outlet inside diameter must be 1¾" with 1½" hose to obtain capacities to 65 GPM and 1¾" with 2" hose for capacities to 90 GPM.

Table shows approximate capacity, in U.S. gallons per minute, for new pump with 20 feet of suction line. All suction connections should be air tight in order to achieve maximum pump efficiencies.

Do not increase pump speed to obtain higher capacity unless suction and discharge lines are increased in size.

## APPLICATION & OPERATING INSTRUCTIONS

Farm pick-up tanker service remote drive. Pureflo pumps are also available pedestal mounted. Capacities to 100 GPM. Write to factory for details.

1. **INSTALLATION**—Pump may be mounted in any position. Pump head rotates 360° to permit desired port location. Intake and discharge ports are determined by the direction of shaft rotation. Before use, rotate pump shaft in direction of operating rotation.
2. **DRIVE**—Belt or Direct.  
**BELT**:—Proper belt tension will insure optimum performance, bearing and belt life.  
**DIRECT**:—Clearance should be left between drive shaft and pump shaft when installing coupling. Mount and align pump and drive shaft before tightening set screw. Flexible coupling usually desirable.  
**NOTE**: Capacitor type motor recommended.
3. **SELF-PRIMING**—Vertical lifts to 10 feet when dry. **INTAKE LINES MUST BE AIR TIGHT** to prevent product foaming and assure self-priming. Use non-collapsible hose.
4. **RUNNING DRY**—The impeller is lubricated by the product being pumped. **DO NOT RUN DRY** for more than 30 seconds. Lack of liquid will damage the impeller.
5. **CAUTION**—If corrosive fluids are handled, pump life will be prolonged if flushed with water after each use, or each work day.
6. **PRESSURES**—Consult performance chart. Contact factory for higher head applications.
7. **TEMPERATURES** +40° to +150°F. Contact factory for impeller recommendation on applications outside this range. Other impeller compounds are available which may be utilized for certain applications at higher or lower temperatures.

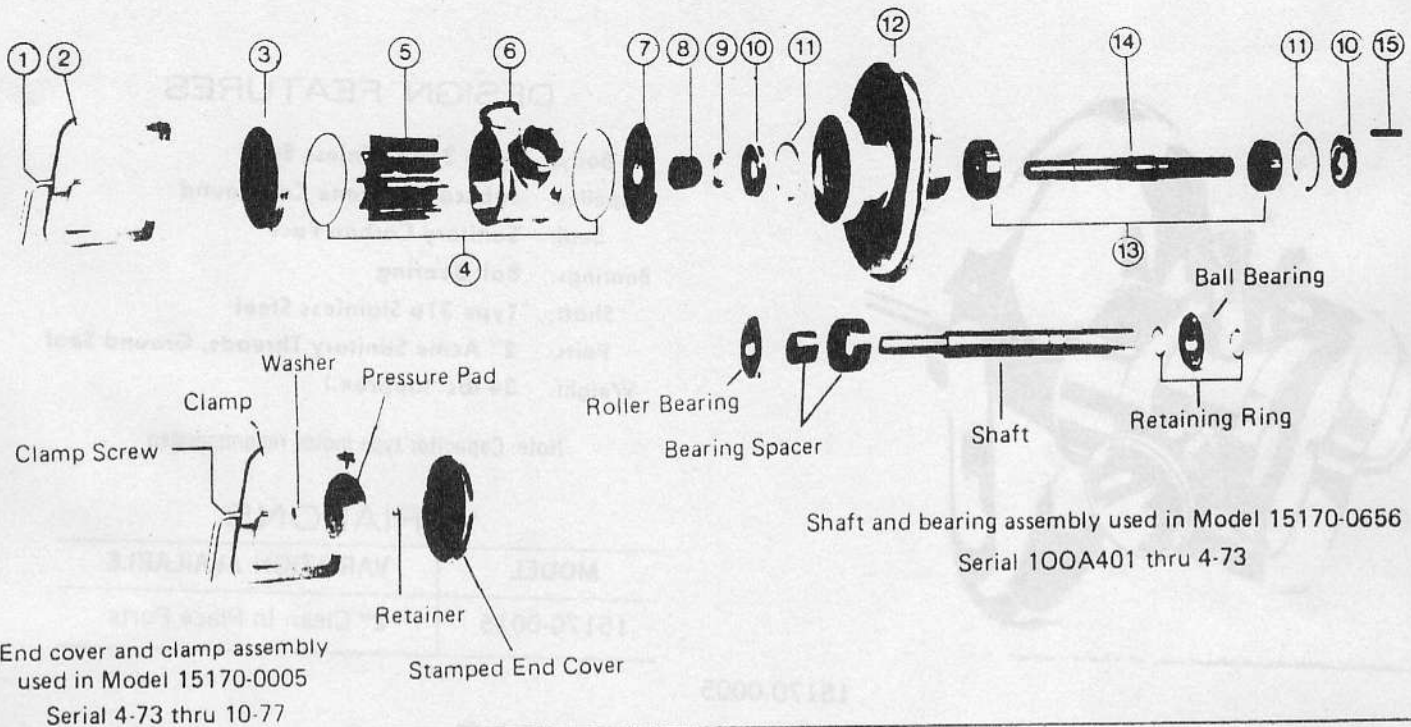
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Form 43000-0031 Rev. 5-78

MODEL 15170-0005

# EXPLODED VIEW

Model 15170-0000 Serial 11-77 & Subsequent



Key	Description	15170-0005/0015		15170-0656	
		**Serial 11-77 & Subsequent	QTY	Serial 100A-401 thru 4073	QTY
1	Clamp Screw	18024-0000	1	18024-0000	1
2	Clamp	12927-0000	1	12927-0000	1
3	End Cover	10345-0001	1	10345-0001	1
4	O Ring	92000-0030	2	92000-0030	2
* 5	Impeller	8984-0005	1	8984-0005	1
6	Body (Acme)	15074-0061	1	15074-0061	1
	Body (CIP)	15074-0071		15074-0071	1
7	Wearplate	10346-0020	1	10346-0020	1
* 8	Seal	9023-0000	1	9023-0000	1
9	Seal Collar	7866-0000	1	7866-0000	1
10	Bearing Seal	92702-0780	2	92702-0780	2
11	Retaining Ring (Hsg)	91701-2830	2	91701-2830	2
12	Bearing Hsg	12925-0000	1	12925-0000	1
13	Ball Bearing	92601-0280	2	92601-0280	2
14	Shaft	18023-0000	1	18023-0000	1
15	Key	9214-0000	1	9214-0000	1
10/15	Brg Hsg Assy Complete	18025-0000		18025-0000	
	Service Kit	90076-0015		90076-0015	

\*\* 15170-0005/.0015 Serial 4-73 thru 10-77 used a stamped sheet metal end cover with pressure pad and clamp. Remove retainer ring, pressure pad and washer from clamp screw, and use clamp screw and clamp with heavy cast end cover.

15170 or S100-F4 Serial 100-11 thru 100-3197 and Serial 100-3198 thru 100-3318, 100-41 thru 100-483. All models manufactured before 1965—end cover, body, wearplate and bearing housing are no longer available as service spares. Impeller is common to all versions.

\* Indicates parts supplied in Service Kit with addition of an Allen Wrench for seal adjustments.

NOTE: Serial number of pump, which is found on the label, must be specified when ordering parts.

Explanation of Serial Numbers:

1. Effective March 30/70 the Serial Number consists of Month and Year of Manufacture, e.g. 570 = May 1970.
2. Prior to March 1970

The first part of the serial number denotes the capacity of the pump. For example, serial number 100-3021 was used on a 100 GPM pump.

The first number in the second series of digits denotes the year the pump was manufactured. For example, serial number 100-3021 reveals the pump was produced in 1963. The use of this digit is VERY IMPORTANT. A pump bearing the serial number 100-401 is a "later" number than serial number 100-3021.

Pumps with serial numbers containing letter "A" or as noted in 1. above are of the latest two single row ball bearing design.

# SERVICE INSTRUCTIONS

## ALL MODEL PUMPS

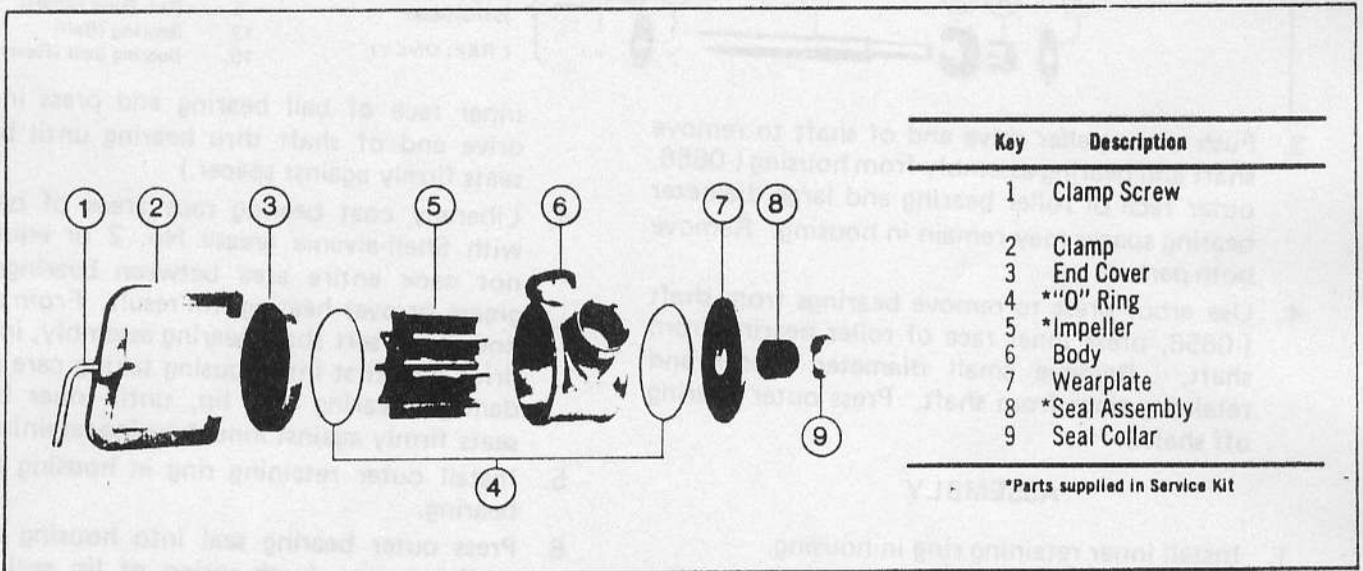
### ASSEMBLY AND DISASSEMBLY OF PUMP HEAD

Before using pump it should be disassembled and cleaned to remove any dust and dirt resulting from storage or shipping. Wash parts in standard cleaning solutions approved for handling stainless steel. Thoroughly rinse before reassembly. **DO NOT USE IODINE BASED SANITIZERS** as the iodine attacks the elastomer materials used in the impeller.

All parts have been expertly machined and polished. **HANDLE WITH CARE. DO NOT DROP OR MISHANDLE.**

#### DISASSEMBLY:

1. Remove end cover clamp, end cover and "O" ring.
2. Grasp pump ports and slide pump body and impeller from shaft.
3. Remove "O" ring and then push the impeller from the pump body.
4. Remove wearplate from pump.
5. Slide seal assembly off the shaft. Do not damage the carbon seal face in handling. Do not loosen or remove seal collar, except as noted below.



#### ASSEMBLY:

1. Slide seal assembly onto shaft (carbon face toward pump head). Position as described in note below.
2. Replace wearplate. **BE SURE THAT FLAT SIDE IS TOWARD PUMP HEAD AND THE SIDE WITH THE RAISED BOSS IS TOWARD CARBON FACE OF SEAL ASSEMBLY.**
3. Lubricate bore of pump body with Orange Solid Grease or suitable substitute and then replace impeller into pump body by twisting and pushing at same time.
4. Replace two "O" rings on either side of body and install assembly on shaft. (Impeller blades bent under cam should point in opposite direction to operational rotation.)
5. Position end cover and then replace end cover clamp. **CLAMP SHOULD BE HAND TIGHTENED.** Do not use wrench or hammer.

**NOTE:** The seal collar is set at the factory to provide proper seal compression and should not require further adjustment.

*If adjustment is required:*

With pump head disassembled; loosen two set screws on seal collar. Replace seal assembly on shaft and then install wearplate in *Reverse Position* with flat side toward seal. While holding wearplate in position against adapter, push seal assembly and seal collar against wearplate and tighten the two set screws in seal collar. Remove wearplate and replace to correct position with raised boss against carbon face of seal before assembling pump. **DO NOT ASSEMBLE PUMP WITH WEARPLATE IN REVERSE POSITION.**

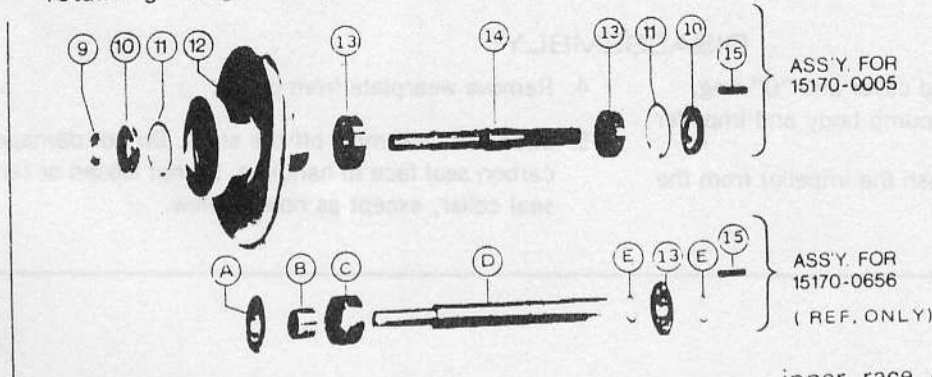
# DETAILED DISASSEMBLY AND ASSEMBLY OF BEARING HOUSING MODEL 15170-0656 AND 15170-0005

In April 1973, the shaft/bearing structure was changed resulting in a model number change from 15170-0656 to 15170-0005. Roller bearing was replaced by ball bearing (same as used as outer bearing) bearing spacers and shaft retaining rings were deleted. Shaft design was changed but new shaft is common to both models.

## DISASSEMBLY

1. Loosen set screws in seal collar. Remove seal collar from shaft.
2. Pry out bearing seals from each end of housing by inserting a thin screwdriver blade between O.D. of seal and housing bore. Remove housing retaining rings using retaining ring pliers.

is not worn replace bearings as follows: Install inner retaining ring on shaft. Support inner race of ball bearing and press drive end of shaft thru bearing until bearing seats firmly against retaining ring. Install second retaining ring on shaft against bearing. Slide small diameter bearing spacer over shaft against inner retaining ring. Delete large diameter spacer. Support



Key	Description
9	Seal Collar
10	Bearing Seal (Front)
11	Retaining Ring (Hsg)
12	Bearing Housing
A	Bearing (Roller)
B	Bearing Spacer (Inner)
C	Bearing Spacer (Outer)
14/D	Shaft
15	Key
E	Ret. Ring (Shaft)
13	Bearing (Ball)
10	Bearing Seal (Rear)

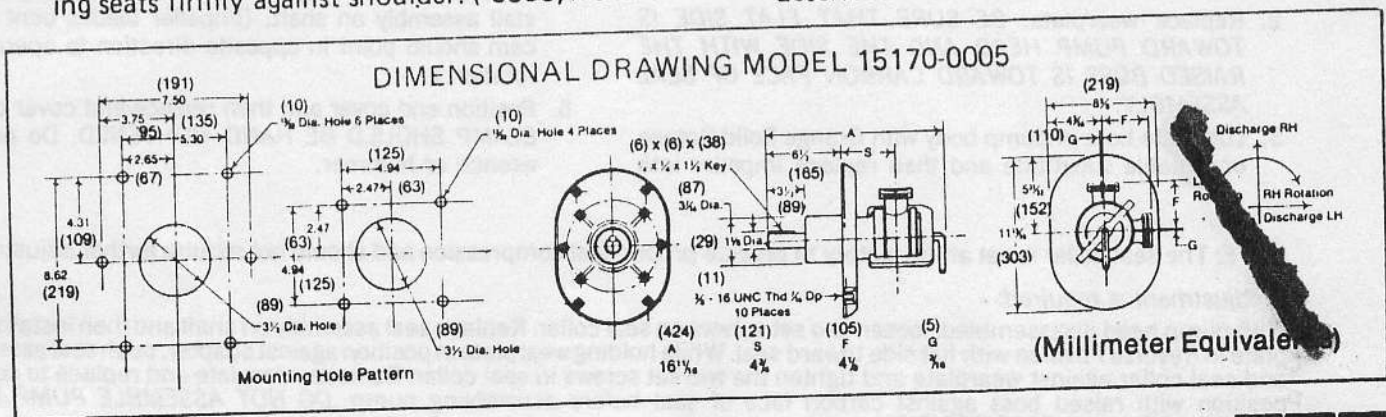
3. Push on impeller drive end of shaft to remove shaft and bearing assembly from housing (-0656, outer race of roller bearing and large diameter bearing spacer may remain in housing. Remove both parts.)
4. Use arbor press to remove bearings from shaft (-0656, press inner race of roller bearing from shaft. Remove small diameter spacer and retaining rings from shaft. Press outer bearing off shaft.)

inner race of ball bearing and press impeller drive end of shaft thru bearing until bearing seats firmly against spacer.)

4. Liberally coat bearing race areas of bearings with Shell-alvania grease No. 2 or equal. Do not pack entire area between bearings with grease or over heating will result. From rear of housing, insert shaft bearing assembly, impeller drive end first into housing taking care not to damage bearing seal lip, until inner bearing seats firmly against inner housing retaining ring.
5. Install outer retaining ring in housing against bearing.
6. Press outer bearing seal into housing against retaining ring (with spring of lip seal facing outwards).
7. Replace seal collar, with counter bore facing impeller end of shaft. Secure to shaft as described in seal adjustment instructions.

## ASSEMBLY

1. Install inner retaining ring in housing.
2. Press inner bearing seal in housing with spring of lip seal facing outwards.
3. Support inner race of ball bearing and press each end of shaft thru each bearing until bearing seats firmly against shoulder. (-0656, if shaft



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