



OPERATING AND MAINTENANCE INSTRUCTIONS

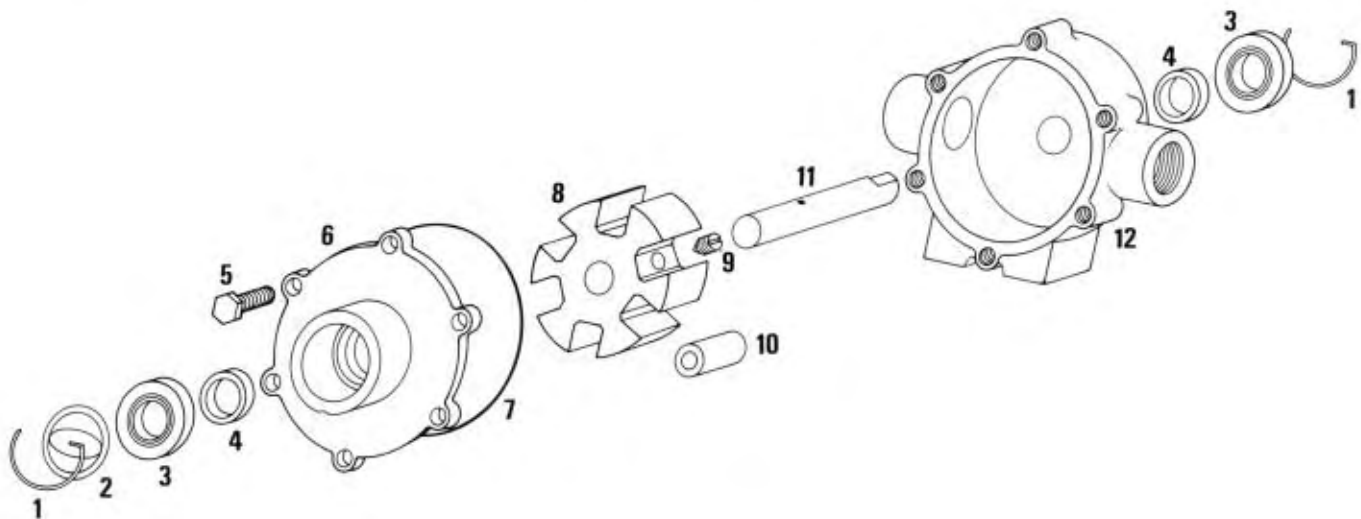


MODEL 661-C AND MODEL 881-C ROLLER PUMPS

MODEL 661-C

TECHNICAL DATA

PUMP SPEED (RPM)	0 PSI		50 PSI		100 PSI		150 PSI		200 PSI		250 PSI		300 PSI	
	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
400	7.0	.07	4.8	.49	4.0	.75	3.0	.80	1.5	1.00	—	—	—	—
540	10.0	.10	9.0	.60	7.6	.95	6.8	1.20	5.7	2.0	4.2	2.2	3.5	3.0
800	14.5	.20	13.3	.92	12.5	1.28	12.0	1.75	11.1	2.25	10.0	2.75	9	3.25
1000	17.5	.25	16.8	1.00	15.8	1.75	15.0	2.50	14.4	3.00	13.2	4.00	11.8	4.50



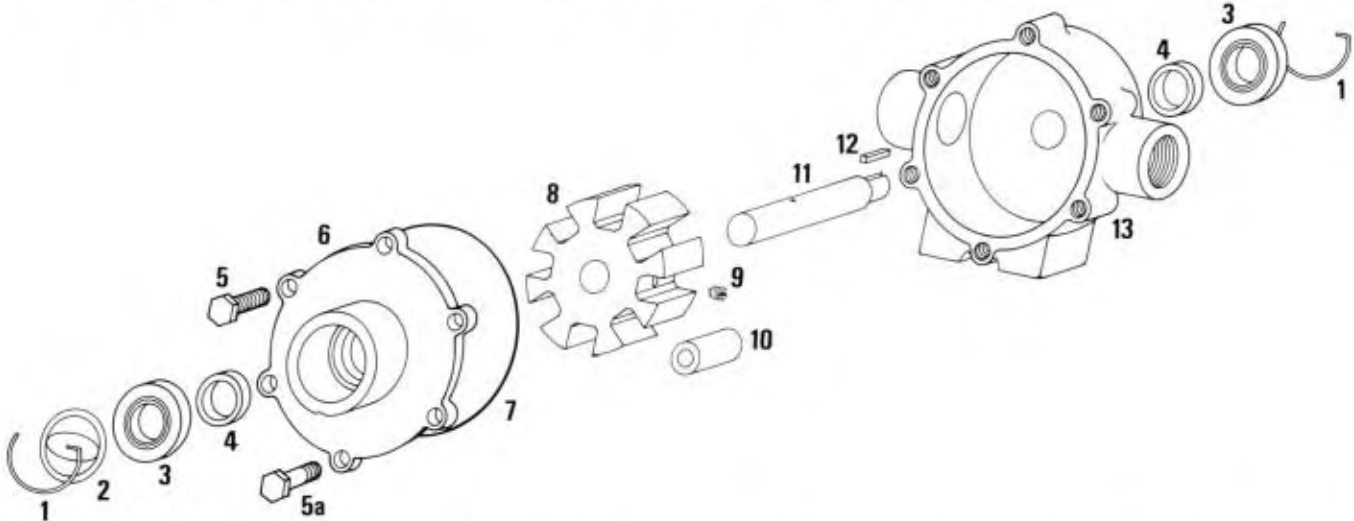
REFERENCE NO.	PART NO.	EDP NO.	DESCRIPTION	NO. REQUIRED
1	41070	41070	Retaining Ring	2
2	6610C	10275	Nameplate	1
3	*40870	40870	Ball Bearing	2
4	*605L	10170	Seal, Leather (STD)	2
4	*605N	10180	Seal, Buna-N (optional)	2
4	*605V	10190	Seal, Viton (optional)	2
5	41330	41330	Hex Head Cap Screw-5/16" N.C. X 3/4"	6
6	662-C	10031	End Plate, Cast Iron	1
7	*6081	10251	"O" ring	1
8	663-C	10095	Rotor, Cast Iron	1
(not shown)	663-C-664	10105	Rotor and Shaft assembly	1
9	609	10260	Set Screw, 5/16" N.C., Shaft to Rotor	1
10	*10670	10670	Roller, Nylon (STD)	6
10	*10672	10672	Roller, Polypropylene (optional)	6
11	664	10155	Shaft, 5/8" diameter	1
12	661C	10011	Housing, Cast Iron	1

*Items included in repair kit no. RK-661. When ordering kit, specify seal material and roller material desired.

MODEL 881-C

TECHNICAL DATA

PUMP SPEED (RPM)	0 PSI		50 PSI		100 PSI		150 PSI		200 PSI		250 PSI		300 PSI	
	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP
400	9.8	.25	7.8	.50	6.0	1.00	4.1	1.25	3.5	1.45	3.1	1.80	2.5	2.25
540	12.7	.33	10.9	.75	9.5	1.20	8.9	1.62	7.1	2.20	6.5	2.68	5.9	3.3
800	18.6	.90	17.1	1.25	15.2	1.85	14.5	2.25	12.6	3.10	11.8	3.90	10.5	4.25
1000	22.1	1.40	21.0	1.70	19.2	2.50	18.7	3.40	17.6	4.22	16.9	4.95	15.5	5.89



REFERENCE NO.	PART NO.	EDP NO.	DESCRIPTION	NO. REQUIRED
1	811	10750	Retaining Ring	2
2	8810-C	10710	Nameplate	1
3	*10650	10650	Ball Bearing	2
4	*805L	10620	Seal, Leather (STD)	2
4	*805N	10630	Seal, Buna-N (optional)	2
4	*805V	10640	Seal, Viton (optional)	2
5	41330	41330	15/16" N.C. X 3/4" Hex Head Cap Screw	5
5a	10830	10830	5/16" N.C. x 5/16" Shoulder Bolt	1
6	882-C	10460	End Plate, Cast Iron	1
(not shown)	882-CP	10465	End Plate w/roller change-out plug (optional)	1
7	*8081	10695	"O" Ring, Buna-N	1
8	883-C	10500	Rotor, Cast Iron	1
(not shown)	883-C-884	10510	Rotor and Shaft assembly	1
9	41300	41300	3/8" N.C. Set Screw, Shaft to Rotor	1
10	*10670	10670	Roller, Nylon (STD)	8
10	*10672	10672	Roller, Polypropylene (optional)	8
11	884	10580	Shaft, 15/16" diameter	1
12	820	10850	Steel Key, Pump Shaft	1
13	881-C	10410	Housing, Cast Iron	1
(not shown)	10950	10950	Roller change-out plug (optional)	1

*Items included in repair kit no. RK 881-C. When ordering kit, specify seal material and roller material desired.

INSTALLATION, OPERATION AND MAINTENANCE

1. FOR TRACTOR PTO INSTALLATION-Tighten the PTO coupling set screw down on the key or flat of the pump shaft. Slide the pump and coupling on the tractor PTO shaft and tighten the two set screws down to the spline of the PTO shaft.
 2. Check the rotation of the pump. Arrows on the pump ports indicate proper rotation direction.
 3. Always check to see that the pump can be turned by hand before mounting. If it cannot be turned, see section 3 under Troubleshooting Tips.
 4. To keep the pump from rotating with the shaft, bolt one end of a chain to the pump base with a 5/16" - 16 X 3/4" cap screw and secure the other end to the tractor. Do not fasten pump rigidly to the tractor.
 5. Connect 3/4" suction and discharge hoses.
 6. Use a large suction strainer with a minimum of a 50 mesh screen.
 7. Install a simple relief or by-pass valve at some point in the discharge line.
 8. FOR ENGINE DRIVEN INSTALLATION-Pump has a flat base with 2-5/16" - 18 tapped holes for direct mounting on frame.
 9. The proper selection of reduction gears or belt and pulley ratios will permit you to select the proper RPM and rotation.
- NOTE:** Do not operate the pump at over 1600 R.P.M. For speed in excess of 800 R.P.M. use 1" I.D. suction hose.
10. This pump is equipped with factory lubricated ball bearings and requires no further lubrication.
 - a. Do not put oil or grease in the two "Weep holes" on the under side of the bearing housing. These holes are to reveal seal leakage and to prevent the solution from forcing its way into the bearings. These "Weep holes" must be kept clean. Because of the drain feature of the weep holes, we do not recommend that the pump be operated in an upside down position.
 11. It is desirable to flush out the pump after use. Squirt a little light oil in the pump and rotate to cover the inner surfaces with a protective film.
 12. To prime, elevate suction hose and prime with about one pint of liquid. A squirt of oil in the suction side of the pump will accelerate priming action.
 13. Do not run the pump dry. Excessive heat may damage rollers and seals.



Phone 901-948-8514
TELEX 534072 - FAX 901-774-6147
P.O. Box 13187 - 1650 Channel Ave.
Memphis, Tennessee 38113

DISASSEMBLY

1. Remove snap ring and nameplate.
2. Remove the cap screws holding the end plate to the pump housing.
3. With the end plate positioned down, place pump ports on an arbor press anvil. Use arbor press to push the shaft down through the pump housing, bearing, and seals. The housing can then be checked for wear.
4. Examine rollers and replace if necessary.
5. To replace bearings, use a piece of soft metal and tap with hammer on the inner edges of the bearing.
6. Seals cannot be removed without damage. Use a screw driver and drive them out.

ASSEMBLY

1. Place seal in housing cavity with folded edge down. Press seal down firmly until it fits snugly against cavity shoulder.
2. Press in bearing and replace snap ring.
3. Press rotor and shaft assembly into pump housing. Take care to ease the shaft through the seal.
4. Insert rollers in rotor slots.
5. Clean "O" Ring groove in housing and smear "O" Ring with grease.
6. After pressing seal and bearing in end plate, position end plate on the shaft and press into place with an arbor press.
7. Secure end plate with cap screws.
8. Rotate shaft to see if motor binds. Tap shaft ends gently to unbind.
9. Replace nameplate and snap ring.

TROUBLESHOOTING TIPS

1. LOSS OF PRESSURE OR VOLUME OR FAILURE TO PRIME
 - a. Check for air leak in suction line. Check for collapsed suction hose.
 - b. Check for clogged strainer.
 - c. Pump may be air locked. Release trapped air on pressure side.
 - d. Pump may be worn internally. Disassemble and inspect. Replace worn parts.
2. NOISY PUMP
 - a. Check for excessive RPM, leak in suction hose, or clogged strainer.
3. UNABLE TO TURN PUMP
 - a. If due to corrosion or gumming—loosen end plate bolts and turn shaft with wrench until rotor is free. Tighten bolts and run in with kerosene or similar material.
 - b. If due to a foreign object being lodged inside the pump—disassemble pump and remove in accordance with the above instructions.