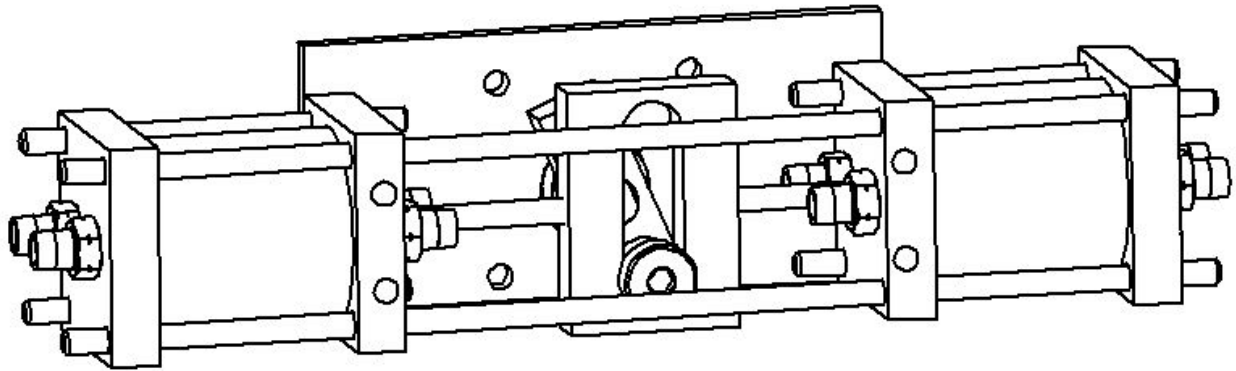


# FistPumps Rotary Liquid Pump Owner's Manual



## WARNING:

Read carefully and understand all INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury

**Item # 109230**

Thank you for choosing FistPumps. The FistPump's Doublefisting-2000 is a rotary powered liquid state pump that addresses problems in remote areas without conventional water pump access. Hook the pump up to any source of rotary motion and it will start pumping. The unique design, superior water output, and numerous installation options confirm the outstanding value of the product. FistPumps has been recognized as a worldwide leading in the lighting industry for over 20 years. The company also offers unique multi-purpose rotary products that range from recreation to industrial use.

For future reference, please complete the owner's record below:

Model: \_\_\_\_\_ Purchase Date: \_\_\_\_\_

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This machine is designed for certain applications only. FistPumps cannot be responsible for issues arising from modification. We strongly recommend this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted FistPumps to determine if it can or should be performed on the product.

For technical assistance and more information call our Toll Free number: 000-000-0000 (only within the US) or visit our website. Please read the instruction manual carefully to obtain the best results from your purchase.

#### TECHNICAL SPECIFICATIONS:

<u>Description</u>	<u>Specification</u>
Max Flow	.27 L/Revolution
Input Pipe Fitting	3/8"
Output Pipe Fitting	3/8"

#### INTENDED USE:

This pump can be used to drain rainwater, infiltration water, domestic wastewater and to remove water from flooded rooms in emergency conditions. The pump can be completely or partially submerged and used to transfer clean or moderately dirty fluids.



**WARNING!** The pump cannot be used for seawater or flammable, corrosive, explosive or dangerous liquids. Always be sure that the pump never runs without liquids.

### GENERAL SAFETY RULES



**WARNING!** Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.



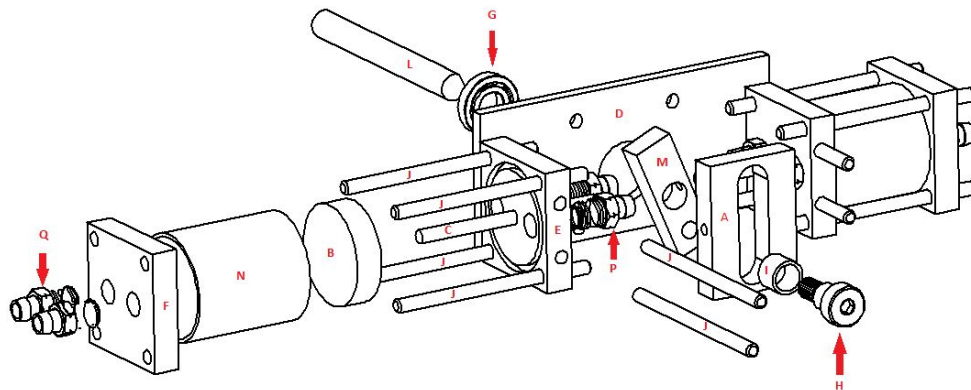
**WARNING!** The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

### SAVE THESE INSTRUCTIONS

Every pump is carefully tested and packed during its packaging. On receiving the pump, check that the components have not been damaged during transportation. If the pump is damaged, immediately inform the dealer within 8 days from the date of purchase.

### INSTALLATION:

Unpack and identify the following components:



Description	Quantity	Letter	Description	Quantity	Letter
Yoke	2	A	6" 1/4-20 Threaded Rod	12	J
Piston	2	B	1/4-20 Nut	24	K (Not Shown)

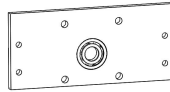
Pushrod	2	C	Drive Shaft	1	L
Faceplate	1	D	Crank Arm	1	M
Inboard end-cap	2	E	Cylinder	2	N
Outboard end-cap	2	F	Set Screw	1	O (Not Shown)
Bearing	1	G	Inboard Pipe Fittings	4	P
Shoulder Screw	1	H	Outboard Pipe Fittings	4	Q
Bronze Bushing	1	I			

### Tools Required:

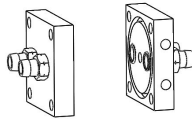
2 x Crescent Wrench

### Assembly:

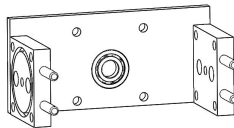
1. Take the Faceplate (D) and press the Bearing (G) into the center hole on the Faceplate.



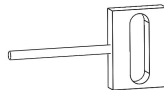
2. Thread the Inboard Pipe Fittings (P) into the Inboard Endcaps (E).
3. Thread the Outboard Pipe Fittings (Q) into the Inboard Endcaps (F).



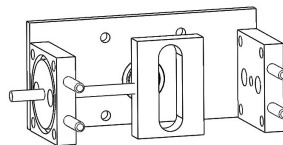
4. Using 4 of the 1/4-20 Threaded Rods (J) and 8 of the 1/4-20 Nuts (K), fasten each Inboard Endcap (E) to the Faceplate (D) on the right and left of the Bearing so that the circular slot faces outwards.



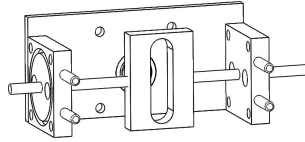
5. Thread one Pushrod (C) into the hole on one sides of the Scotch Yoke (A).



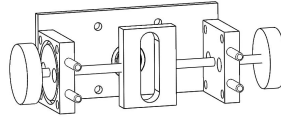
6. Fit the Pushrod (C) through the center hole of the Inboard Endcap (E).



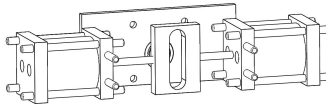
7. Take the other Pushrod (C) and fit it through the other Inboard Endcap (E). Then Thread it to the other side of the Scotch Yoke (A).



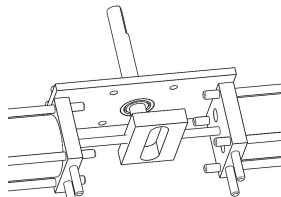
8. Thread the Pistons (B) onto the other end of both of the Pushrods (C).



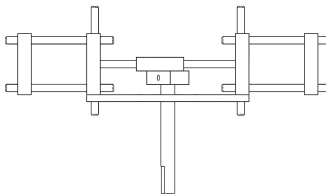
9. Take the Cylinder (N) and slide it over the Piston (B). Then press it between the circular slot on the Inboard Endcap (E) and the Outboard Endcap (F). Secure the Endcaps to each other using the remaining 1/4-20 Threaded Rods (J) and 1/4-20 Nuts (K). Repeat/Mirror for other side.



10. Slide the Drive Shaft (L) through the Bearing (G) with the short flat facing the assembly and sticking out near the Scotch Yoke (A) and the long flat sticking out.



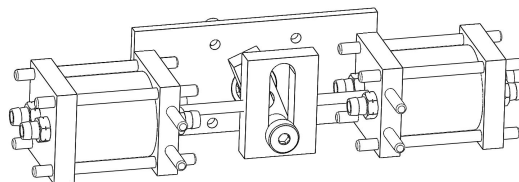
11. Slide the center hole of the Crank Arm (M) over the short flat of the Drive Shaft (L). (top view shown)



12. Insert the Set Screw(O) on the face perpendicular to the Drive Shaft (L) so that it clamps down on the short flat in the drive shaft.
13. Slide the Bronze Bushing (I) over the Shoulder Screw (H).



14. Slide the assembly from step 13 through the Scotch Yoke (A) and thread the Shoulder Screw (H) into the Crank Arm (M).



Congratulations! You have assembled your very own FistPump!



**WARNING:** Do not lubricate the system with any grease/lubricants as it can contaminate the fluid that is being pumped!

#### Maintenance:

Disassemble and clean the pump components regularly with a soapy towel to guarantee optimum performance. Be sure to remove any buildup. Do not use any type of solvent for cleaning and be careful not to put too much pressure on the module while cleaning.

#### Troubleshooting:

If your pump does not begin turning from the provided rotary source, please try the following steps:

1. Check to make sure nothing is tangled in or inhibiting any of the pump's mechanisms.
2. Check input and output valves and hoses to ensure nothing is blocking the lines.
3. Check to make sure Pushrods (C) / Pistons (B) / Cylinders (N) are concentric and in line with each other so that there is no bending loads applied to the system.
4. Try to start the pump rotation by hand while the input rotary source is activated in order to "kick start" the pump.
5. Increase input torque.

Wintertime Tips: Keep snow and debris cleaned off the pump. The pump cannot pump snow so wait for the snow to melt before trying to use it. DO NOT ALLOW water to freeze in the pipes or the pump itself because you will risk breaking everything.



**WARNING:** Please keep out of reach of children.