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MODEL 506532P TANKLESS CONVERTIBLE JET PUMP

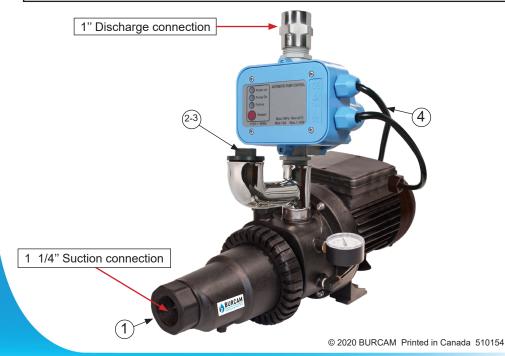
Your pump has been carefully packaged at the factory to prevent damage during shipping. However, occasional damage may occur due to rough handling. **Carefully inspect your pump** for damages that could cause failures. Report any damage to your <u>carrier or your point of purchase.</u>

Please read these instructions carefully. **Failure** to comply to instructions and **designed** operation of this system, may **void** the warranty.

#### READ THIS DOCUMENT IN TOTALITY PRIOR TO STARTING THE INSTALLATION.

#### PRIMING PROCESS

Follow all these step by step instructions to install your pump. Use teflon tape on all threads. (1) Fill the suction line with water and connect it to the suction inlet. (2) Remove the priming plug and fill the pump body with water. (3) Screw the plug to the priming inlet. (4) Connect the power cable to a 115V, 60Hz electrical outlet. The pump should deliver water to the plumbing line within 30 seconds. If not, unplug the pump and repeat the process at step 2.



#### SAFETY INSTRUCTIONS:

This fine pump that you have just purchased is designed from the latest in material and workmanship. Before installation and operation, we recommend the following procedures:

- Check with your local electrical and plumbing codes to ensure you comply with the regulations. These codes have been designed with your safety in mind. Be sure you comply with them.
- We recommend that the pump be used on a separate circuit lead from the home electrical distribution panel, and which is protected with a fuse or a circuit breaker. The motor must be securely plugged into a proper 'GFCI' electrical outlet. Consult a licensed electrician for all wiring.
- The ground terminal on the three prong plugs should never be removed. They are supplied and designed for your protection.
- Never make adjustments to any electrical appliance or product with the power connected. Do not only unscrew the fuse or trip the breaker, remove the power plug from the receptacle.

#### MONTHLY MANDATORY CHECK-UP:

- 1. Inspect the pump for any obvious condition that necessitates cleaning, correction, adjustment or repair.
- 2. Clear the surroundings of any paper, leaves or other debris.
- 3. Ensure that the pump is secure for proper operation.
- 4. Ensure that there is adequate clearance from any combustible materials or structure. Stored materials must be kept away from the pump. Shelves or cabinet structures must not be in close proximity to the pump.
- 5. Ensure that the motor is securely plugged into a proper 'GFCI' electrical outlet.
- 6. Test the 'GFCI' outlet by pressing its test switch. This should prove that the outlet is energized and will trip off to protect against a ground fault. Be sure to reset the 'GFCI' by pressing its reset switch.
- 7. Observe that the plumbing can carry the water safely into the residence.

#### Material required for drilled well application (indoor use only)

#### Shallow well pump installation Deep well pump installation ☐ Desired length of polyethylene 1 1/4" pipe, 100 PSI, CSA ☐ Desired length of polyethylene 1 1/4" or UL approved, to link up from pumping level to pump. and 1" pipe, 100 PSI, CSA or UL approved, □ 1 1 1/4" male adaptor barb to MNPT. to link up from pumping level to pump. □ 1 1 1/4" foot valve 750757 or 750753P. □ 1 1 1/4" nipple. □ 1 well seal, as per well casing diameter (750929 6" x 1"). □ 1 1 1/4" foot valve 750757 or 750753P. □ 1 1 1/4" well seal elbow (750861). ☐ 1 well seal, as per well casing diameter □ 1 1 1/4" male adaptor (750866 or 750872). (750926 6" x 1 1/4" x 1"). ■ 8 1 1/4" stainless steel clamps (750886). ☐ 1 1" well seal elbow (750860). ■ Teflon tape. ■ 1 1 1/4" well seal elbow (750861). □ 1 1" male adaptors (750865 or 750871). □ 1 1 1/4" male adaptor (750872 or 750866).

□ 8 1" stainless steel clamps (750885).
 □ 8 1 1/4" stainless steel clamps (750886).

■ Teflon tape.

#### Tools

Screwdrivers, hacksaw to cut pipe, knife to assist in pipe cutting, round file to smooth pipe ends, pipe wrench, adjustable wrench to tighten fittings, propane torch and welding material.

#### **APPLICATION:**

☐ This pump is designed for shallow well installation for water level up to 25 feet with injector screwed on pump body; or for deep well installation for water level up to 80 feet, with 2 pipes and injector down in the well.

#### □ CAPACITY:

#### SHALLOW WELL DEEP WELL

**25**' 300 US GPH **70**' 200 US GPH **5**' 800 US GPH **30**' 675 US GPH

Friction loss in pipe not included.

#### **FEATURES:**

- ☐ High performance impeller.
- ☐ Industrial motor totally enclosed, fan-cooled.
- □ Full-time connected run capacitor, to eliminate starting wear vs regular motor.
- ☐ Thermal and overload protection.
- Built for continuous use.
- □ 3/4 HP, 115VAC, 60Hz, 9A (18A when the pump start).

## **INSTALLATION STEPS**

## STEP 1

We recommend that you install your pump in a clean and dry location where there is adequate room for servicing at a later date. Protection from freezing temparatures and good ventilation should be considered as well, to provide the pump an environment for long life. Locating the pump as close as possible to the water source will reduce friction losses encountered in the suction pipe.

Friction losses in the suction pipe must be taken into consideration when the horizontal offset is greater than 50 feet. The suction pipes should be increased from 1" to 1 1/4" and 1 1/4" to 1 1/2". This will reduce friction losses and allow the pump to give maximum performance.

A new well should be checked to determine that it is free from sand. Sand will damage the seal and the impeller. Have your well driller clean the well before your installation.

**Never run the pump dry.** Damage to the seal may occur. Fill pump body and suction pipe with water before turning on the power.

#### VERY IMPORTANT

Please be advised that the Fluomac Electronic unit is a state of the art product and will give you years of trouble free service. However, if the unit cycles "ON and OFF", this means there is a leakage in your plumbing. For example: A toilet leak, the leakage must be repaired to maintain the system pressure.

Furthermore, if you are pumpling water from a sand point or if you have indication that your well may contain sand, a sand filter must be installed in the suction of the pump.

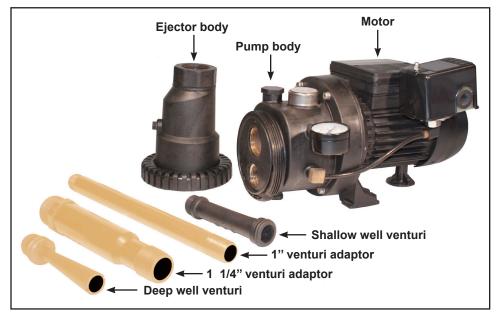
Sand will damage the unit, due to its abrasive nature and will void warranty. For more information, we are enclosing a brochure on our Sand Filter model # 750896, which is available from any Burke Retailers or Wholesalers. In the meanwhile, if you have any questions concerning your pump, please contact us on our toll free number 1-800-361-1820 before returning the pump to the point of purchase.

The above conditions are not on warranties. The warranty covers manufacturing defects only.

THE RUN OF THE HORIZONTAL PIPE FROM THE TOP OF YOUR WELL INTO THE HOUSE, WHERE YOUR PUMP WILL BE LOCATED, MUST BE INSTALLED IN A TRENCH, BELOW THE FROST LEVEL OF YOUR AREA.

## **SELECTION OF APPLICATION**

Prior to continue to step 2, select your application.

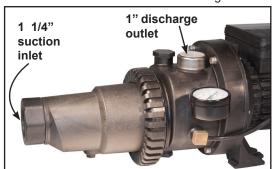


# Shallow well application

Maximum vertical distance from pumping level of water and the pump cannot exceed 25 feet. Your pump is already set for being used in shallow well application. Connect your suction pipe to the 1 1/4" suction inlet and the house plumbing distribution pipe to the 1" discharge outlet. At all time, the ejector draining plug must be aligned down.

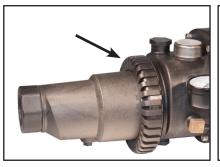


Identification of suction inlet and discharge outlet.



# Deep well application

Maximum vertical distance from pumping level of water and the pump cannot exceed 80 feet. Unscrew the large coupling collar to separate the ejector from the pump body.





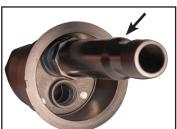
Then unscrew the shallow well venturi from the ejector body.



Screw the deep well venturi to the same opening.



Then screw the 1 1/4" venturi adaptor onto the venturi. Finally, screw the 1" venturi adaptor to the other opening of the ejector body.





## SHALLOW WELL APPLICATION

#### **SEE DIAGRAM ON PAGE 8**

## STEP 2

Cut the desired lenght of poly pipe to run from the top of the well to the pumping level. Smooth the pipe cuttings with your round file. (Check that no cut-out parts are left inside of pipe. This may block pump injector or impeller).

Tape male adaptor threads with teflon tape and thread adaptor into the foot valve. Slide 2 stainless steel clamps over one end of pipe and use torch to soften pipe. Insert the male adaptor and foot valve into this pipe end. Tighten clamps with screwdriver. For security against leaks, we suggest to install 2 stainless steel clamps on each adaptor.

## STEP 3

Insert the well seal elbow thru the opening of the seal. Slide 2 stainless steel clamps over the free end of the previously cut pipe and soften pipe with your torch. Attach pipe to the well seal elbow (end protruding at bottom of well seal). Tighten clamps with screwdriver when cool.

## STEP 4

Install the well seal and piping assembly into your well casing. Tight down the seal bolts using your adjustable wrench.

To facilitate servicing at a later date, you may use a pitless adaptor and a sealed well cap instead of an elbow and a well seal as described in steps 3 and 4.

## STEP 5

Install your pump in the house, on a sound foundation, as close as possible to the basement wall. Thread an adaptor into inlet using teflon tape. Do not over tighten.

## STEP 6

Cut the desired length of pipe from pump location to the well seal and connect both ends using the previous way, with stainless steel clamps and torch. Before connecting your pipe to the pump, fill the suction line with water. Do not fill in your trench to the house until you have checked for any leaks in your connections or trouble in your water system.

## STEP 7 for sand or well point

Sand or well points are limited to areas where water bearing sand or gravel lies below the surface, and where there are no boulders or rocks to interfere with the driving into the ground of the point.

The amount of water any "one" well point will supply is usally rather limited. Sometimes, it is necessary to use more than one point to increase the supply of water entering to the pump's suction.

THE IMPORTANT INSTALLATION STEP IN USING WELL POINTS IS THAT A CHECK VALVE MUST BE USED IN THE SUCTION PIPE LEADING TO THE SUCTION INLET, AS CLOSE TO THE PUMP AS POSSIBLE, TO KEEP LINE AND PUMP WELL PRIMED.

#### **DEEP WELL APPLICATION**

#### **SEE DIAGRAM ON PAGE 9**

## STEP 2

As per the description on page 5, remove the ejector body from the pump body. Then remove the shallow well venturi and replace it by the deep well venturi. Then screw the 1 1/4" venturi adaptor on the deep well venturi and the 1" venturi adaptor on the other opening.

## STEP 3

With teflon tape on threads, install a 1 1/4" nipple into the 1 1/4" foot valve, then screw this assembly into the 1 1/4" bottom opening of the ejector.

#### STEP 4

Cut the desired lenght of 1" and 1 1/4" poly pipes to run from the top of the well to the pumping level. Smooth the pipe cuttings with your round file. (Check that no cut-out parts are left inside of pipe. This may block pump injector or impeller). Slide 2 stainless steel clamps over one end of each pipe and use torch to soften pipe. Fix the 1" and 1 1/4" pipes respectively on the 1" adaptor and 1 1/4" venturi adaptor. Tighten clamps with screwdriver when cool. For security against leaks, we suggest that you install 2 stainless steel clamps on each adaptor.

## STEP 5

Insert both well seal elbows through their opening of the seal. Slide 2 stainless steel clamps over the free ends of the previously cut pipes and soften pipes with your torch. Attach pipes to the well seal elbows (ends protruding at bottom of well seal). Tighten clamps with screwdriver when cool.

### STEP 6

Install the well seal and the ejector piping assembly into your well casing. Tighten down the well seal bolts using your adjustable wrench.

To facilitate servicing at a later date, you may use a pitless adaptor and a sealed well cap instead of an elbow and a well seal as described in steps 3 and 4.

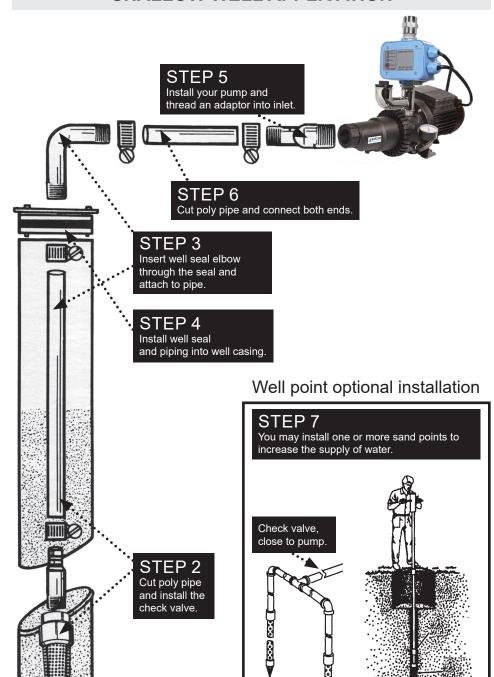
## STEP 7

Install your pump in the house, on a sound foundation, as close as possible to the basement wall. Locate the openings in the front of the pump body. Thread respectively 1" and 1 1/4" adaptors into corresponding openings using teflon tape. Do not over tighten.

## STEP 8

Cut the desired length of pipes from pump location to the well seal and connect both ends using the previous way, with stainless steel clamps and torch. Do not fill in your trench to the house until you have checked for any leaks in your connections or trouble in your water system.

#### SHALLOW WELL APPLICATION



#### **DEEP WELL APPLICATION**

#### STEP 7

Install your pump and thread adaptors into their respective opening.





## STEP 8

Cut 1" and 1 1/4" poly pipes and connect both ends.

## STEP 5

Insert well seal elbows thru the seal and attach to pipe.

#### STEP 6

Install well seal and piping into well casing.

## STEP 4

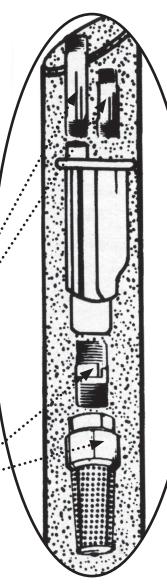
Cut 1" and 1 1/4" poly pipes.



Set the ejector as per the page 5 description.

## STEP 3

Install 1 1/4" nipple into 1 1/4" foot valve, then screw into the ejector.





#### PRIMING INSTRUCTIONS

#### PLEASE, FOLLOW THESE STEPS TO EASILY PRIME YOUR PUMP

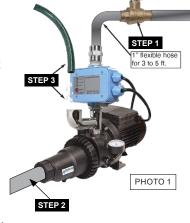
STEP 1 Connect your discharge line, using a ball valve, as illustrated (Photo 1).

STEP 2 Fill the suction line with water and connect it to suction inlet (Photo 1).

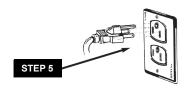
STEP 3 Remove the plug of the priming pipe and fill the pump body with water (Photo 1).

STEP 4 Screw the plug to the priming pipe using teflon tape (Photo 2).

Connect the pump. The pump should delivered water to the plumbing line within 30 seconds. If not, unplug the pump and repeat from step 10. In accordance with the lenght of your suction line, you may have to repeat these steps a few times.



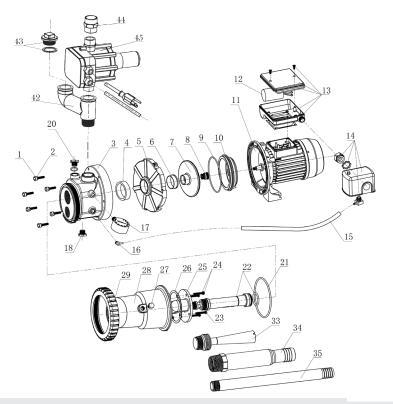




NOTE: After installation, if the pump is cycling "ON-OFF" and/or comes on when you are not visibly using water, the pump is not defective. It means you have a leak on the discharge side of the pump. The leak must be localised and needs to be repaired. If you need assistance to determine same, please call 1-800.361.1820. The pump is warrantied by the manufacturer and you must call us to dertermine procedures. The pump cannot be returned to the point of purchase without our prior consent.

## **REPAIR PARTS**

REF	ITEM	DESCRIPTION	REF	ITEM I	DESCRIPTION
1	510121	Pump body screw	18	510135	Drain plug
2	510122	Flat washer	20	510137	Primming plug
3	510123	Pump body	21	510138	O Ring
4	510124	Rubber ring	22	510139	Shallow well venturi#63
5	510125	Diffuser	23	510140	Nozzle#17
6	510126	Shaft sleeve	24	510141	Screw
7	510127	Impeller	25	510142	Inner ejector body
8	510128	Mechanical seal	26	510143	Gasket
9	510129	O ring	27	510144	Plug
10	510130	Seal plate	28	510145	Ejector body
11	510131	Motor	29	510146	Shallow well ejector collar
12	510132	Capacitor	33	510150	Deep well venturi#2
13	510133	Connection box	34	510151	Outlet venturi tube#32
14	750957S	Pressure switch kit	35	510152	Inlet tube connector
15	750748	Tube	42	506375	SS Priming tube
16	510134	Elbow fitting	43	506377	Priming plug & washer
17	750769	Pressure gauge	44	506376	Discharge fitting
			45	600600GF	Fluomac



Repair parts may be ordered your authorized point of sale of from BURCAM PUMPS

#### TROUBLE SHOOTING GUIDE CHECKLIST

NEVER MAKE ADJUSTMENTS TO ANY ELECTRICAL APPLIANCE OR PRODUCT WITH THE POWER CONNECTED. DON'T JUST UNSCREW THE FUSE OR TRIP THE BREAKER, REMOVE THE POWER FROM THE RECEPTACLE.

#### TROUBLE PR

#### **PROBABLE CAUSE**

#### **ACTION**

#### Motor does not run.

Switch is off position Blown fuse Tripped breaker Dirty pressure switch Defective pressure switch Defective motor

## Motor runs but no water is delivered.

Pump not primed Leaky suction line Foot valve plugged Injector nozzle clogged Water level below foot valve Suction lift to great Improper voltage

## Pump does not deliver to full capacity.

Water level below foot valve Injector nozzle clogged Excessive friction in pipe Improper voltage

#### Pump does not shut off.

Leaky discharge line Motor not up to normal speed Improper setting of pressure switch Ejector nozzle clogged

#### Pump start stop too often.

Pressure tank waterlogged Leaky foot valve Leaky suction line Foot valve do not close properly Pressure switch out of adjustment Leaky discharge line (toilet etc.)

#### Air spurts from faucets.

Gaz in water Airlogged tank (galvanized)

Leaky suction line

#### ACTION

Turn switch to on position Replace Reset Clean Replace Replace

Prime with clean water

Check pipe and pipe connections

Clean Clean

Check foot valve level

Water level lower than lift capacity

Check voltage

Check foot valve level Clean Too small or dirty pipe Check voltage

Check all pipes for leak Check power cable and voltage Reset or replace

Clean

Drain tank and restart Replace Check pipe and pipe connections Clean or replace Adjust ON/OFF setting Check all pipes for leak

Check pipe and pipe connections Check and consult factory Replace air volume control

#### FLUOMAC TROUBLE SHOOTING GUIDE CHECKLIST

Power supply is on, no light are lit.

Unit may be defective.

Power supply is on, pump on light is off, failure light is on.

Lost of prime due to a low water level condition. Water pipe obstructed from water supply to pump.

Power cut-off by thermal protector. Pump cannot reach proper minimum operational pressure.

Power supply is on, pump on light is on, failure light is off, and pump short cycles ON and OFF. Lost of pressure due to leak in the piping.

Test electrical therminals with voltmeter. If there is no power, replace the unit.

Wait for water level resume and press reset buttom. Clean obstruction and press reset button.

Wait 10 minutes and press reset button. Clogged pump nozzle and/or venturi, clean and press reset button.

Make sure all taps are closed and all toilet valves are functionning. If leak not found, install a back valve after the Fluomac. If cycling stops, leak is at the supply line. If cycling occurs, leak is at suction line. Foot valve may be defective or clogged. Replace.

Power supply is on, pump on light is on, failure light is off, tap is open and no flow. Pump is off. The water column to the highest tap exceed 50 feet.

Pessure of water of water column is higher the cut-in pressure (26 PSI). Re-install the unit at a higher level.

#### TO THE END CONSUMER

If you have any problems with the product, before advising the store, where you've purchased the pump, please contact us at 514 337-4415, and ask for our sales department, and they will be pleased to help you with any questions you might have, concerning your installation.