

**INSTALLATION INSTRUCTIONS** 

**MODELS** 300521

CIRCULATING PUMP

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

2190 Boul. Dagenais West

LAVAL (QUEBEC)

CANADA H7L 5X9 TEL: 514.337.4415 FAX: 514.337.4029

info@burcam.com

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>





## 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 A SEPARATE CIRCUIT BE LEAD FROM THE HOME ELECTRICAL DISTRIBUTION PANEL PROPERLY PROTECTED WITH A FUSE OR A CIRCUIT BREAKER. WE ALSO REQUIRE THAT A GROUND FAULT CIRCUIT BE USED. 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, adjustement or repair.
- 2. Clear the surrounding area of the pump.
- 3. Assure that the pump is secure for proper operation.
- 4. Assure that there is adequate clearance from any combustible materials or stucture. Stored materials must be kept away from the pump. Shelves or cabinet structures must not be in close proximity over the pump.
- 5. Assure that the motor is securely plugged into a proper GFCI electrical outlet.
- 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. Determine that the plumbing can direct the water safely into the residence.

### **Material:**

Desired length of appropriate pipes to link up the water heater to the pump and the pump to the plumbing distribution system. The pump treads is 3/4 " NPT.

Fittings required for the piping connections.

- 2 Ball Valve
- 2 Unions
- 2 Shut-off valve under the sink.

### <u>Tools</u>

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.

# PUMP INSTALLATION STEPS

(This product is for indoor use only.)

STEP 1

For your safety, turn the electric power supply off to the water heater at the breaker electric box. For a gaz water heater, the valve should be turned off and make sure that the pilot light is not on and burning. Adjust the thermostat on the water heater to a maximum of 145°F (62°C) prior to the installation.

STEP 2

Prior to installing the pump, shut off the water supply to the hot water tank. Then, open the nearest hot water faucet as well as the hot water faucet which is located at the further distance from the hot water tank. This process will drain the pipes. Leave these faucets open during all of the installation process.

STEP 3

Select the appropriate place to install the pump in vertical or horizontal position above the hot water tank discharge. The pump has to be away from the chimney of any non-electric water heater. A ball valve is required before the pump and another ball valve is also required after the pump. This will allow you to isolate the pump area should service be required in the future. A professional installation will also require that unions be use at the pump intake and discharge to remove and re-install the pump easily if ever required. (Picture A)

STEP 4

Make sure the pump is installed with the arrow pointed upward so it can deliver the water away from the heater, towards to the plumbing distribution piping. The system will not function if the pump is installed with the arrow indication in the wrong direction.

STEP 5

Complete all the piping connections of the pump according to all the appropriate plumbing requirements of your national and local plumbing codes.

STEP 6

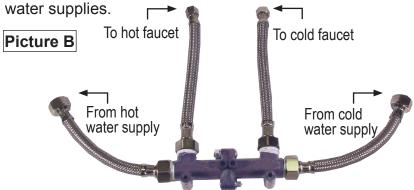
#### (Bypass valve installation) (Picture B)

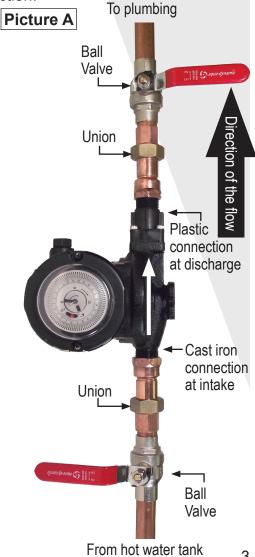
Locate the valve at the fawcet located at the further distance as possible from the hot water heater (greatest piping distance), shut off both the hot and cold water supply valves, under the sink. If you do not have supply valves below the sink, shut off the main water supply and install supply valves at the sink to facilitate servicing in the future.

**Notes:** If you have several piping outlets in your plumbing distribution system, you may have to install more than one bypass valve (one at each greatest piping distance of each location). Communicate with our customer service desk to purchase a supplementary bypass valve at 1.800.361.1820.

STEP 7

Disconnect the hot and cold water flexible hose from the



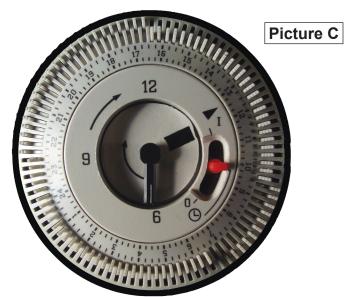


FOR INFORMATION

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- STEP 8
- Screw the bypass valve at an appropriate place, with the hot water side on left and the vertical port facing to the faucet.
- STEP 9
- From these vertical ports, connect the 1/2" to 3/8" flexible hoses to the faucet, respectively for the hot and cold sides.
- STEP 10
- Then, connect the 1/2" to 1/2" flexible hoses from water supplies to the side ports of the bypass valve, respectively for the hot and cold sides
- STEP 11
- Open the sink supply valves and close the hot water faucets previously opened to drain the hot water pipe.
- STEP 12
- Open the water supply to the water heater. Then open the ball valves before and after the pump.
- STEP 13
- Open both the hot and cold water faucets above the bypass valve and wait till all the air has been evacuated from the piping.
- STEP 14
- When the air is completely purge, the electric power supply can now be re-activate to the water heater.
- STEP 15
- (Timer set-up)

The plastic cover can be remove by turning it counter clockwise. Turn the hour hand clockwise to set it with the actual hour time.



STEP 16

When the little red knob is at the 'O' position, the pump is set off. When this red knob is slided to the 'I' position, the pump is set operational. To use the timer to turn the pump on and off, align the red knob to the line in the middle of the 'O' and 'I' position. You can now make your selection between these 3 choices.

STEP 17

Use the timer to turn the pump on and off while required. For example, the system can be on from 5:30am to 9:00am and from 4:30pm to 11:30pm. Each little sliding switch around the timer is representing 15 minutes. To set this example, push the slides out accordingly to the hour scale around the timer, as shown on the picture C.

STEP 18

Install the electric cord of the pump in a 3 prong electrical outlet. Make sure the electrical cord is tied, so it doesn't touch any hot water pipes that may damage same.

## Genie by-pass valve operation:

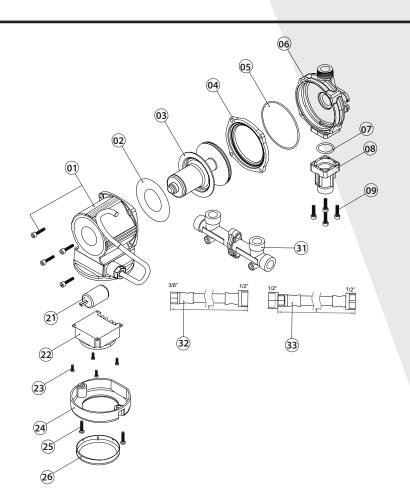
#### **Trouble shooting**

AFTER THE INSTALLATION, IF THERE IS NO HOT WATER AT THE HOT WATER FAWCET OR IF THERE IS HOT WATER ON THE COLD WATER SIDE, PLEASE PROCEED WITH THE FOLLOWING STEPS TO DETERMINE IF THE GENIE BY-PASS VALVE IS FULLY FUNCTIONAL.

- **A.** Close the cold water supply valve under your sink.
- **B.** Open the cold water fawcet to test the Genie by-pass valve.
- **C.** The water should flow from the fawcet until hot water reaches the Genie by-pass valve. Then, the flow should eventually decrease until no more water is flowing from the cold water fawcet when the Genie by-pass valve is closed. If the Genie by-pass valve does not close, you will have a mixture of cold and hot water. Contact our customer service departement at 1.800.361.1820.

## REPAIR PARTS

Ref	Pieces	Descriptions
1	310178	Complete motor
2	310179	Insulation sheet
3	310180	Rotor & impeller assembly
4	310181	Seal plate
5	310182	Pump 'O' ring
6	310183	Pump housing
7	310184	Inlet 'O' ring
8	310186	Inlet adaptor
9	310187	Inlet adaptor screws (4)
21	310177	Capacitor
22	310176	Timer
23	310175	Timer screws (4)
24	310174	Capacitor top cover
25	310173	Screws (2) (Capacotor case)
26	310172	Timer cover
31	310188	Thermostatic valve
32	310189	Threaded flex hose 3/8" X 1/2"
33	310190	Threaded flex hose 1/2" X 1/2"



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Repair parts may be ordered from your autorized point of sale or from

**BUR-CAM 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**

#### PROBABLE CAUSE

#### **ACTION**

Motor does not run.

Switch is off position

Blown fuse

Tripped breaker

Improper timer setting

Defective motor

Motor runs but no water is delivered.

Closed ball valves Improper voltage

Pump does not deliver to full capacity.

Clogged impeller

Excessive friction in pipe

Improper voltage

off

Pump does not shut Improper timer setting

Pump starts and stop too often.

Improper timer setting

Turn switch to on position

Replace

Reset

Check the timer

Replace

Open the valves

Check voltage

Clean

Too small or clogged pipe

Check voltage

Check the timer

Check the timer

#### 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.