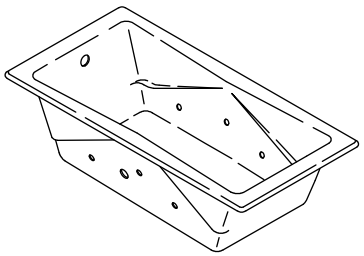
Installation Guide

Cast Iron
Bath Whirlpool

P50035



KALLISTA

1019455-2-E

Important Information

WARNING: When using electrical products, basic precautions should always be followed, including the following:

DANGER: Risk of electric shock. Connect only to circuits protected by a Ground-Fault Circuit-Interrupter (GFCI)*.

WARNING: Risk of electric shock. A qualified electrician should make all electrical connections.

WARNING: Risk of electric shock. Disconnect power before servicing.

WARNING: Risk of injury or property damage. Please read all instructions thoroughly before beginning installation, including the following requirements.

*Outside North America, this device may be known as a Residual Current Device (RCD).

NOTICE: Follow all local plumbing and electrical codes.

Building materials and wiring should be routed away from the pump body and other heat-producing components of the unit.

Install in a manner that permits access for servicing of all critical components.

A pressure wire connector marked "Earth/Ground" is provided within the wiring compartment. To reduce the risk of electric shock, connect this connector to the grounding terminal of your electric service or supply panel with copper wire equivalent in size to the circuit conductor supplying this equipment.

Pressure wire connectors are provided on the exterior of the junction box or control within this unit to permit connection of a bonding conductor between this unit and all other exposed metal in the vicinity, as needed to comply with local requirements.

Grounding is required. The unit should be installed by a qualified service representative, and grounded.

Product Information

Electrical Requirements

The installation must have a Class A Ground-Fault Circuit-Interrupter (GFCI)*. The GFCI protects against line-to-ground shock hazard. **Use a 208 - 240 V, 20 A, 50/60 Hz dedicated service for the whirlpool.**

*Outside North America, this device may be known as a Residual Current Device (RCD).

Product Notices

WARNING: Unauthorized modification may cause unsafe operation and poor performance of the whirlpool. Do not relocate the whirlpool pump, or make other modifications to the whirlpool system, as this could adversely affect the performance and safe operation of the whirlpool. Kallista shall not be liable under its warranty or otherwise for personal injury or damage caused by any such unauthorized modification.

Features

"-H2" Series: Components include a pump, heater, control, Flexjet whirlpool jets, illuminated switch (user keypad) and remote.

The whirlpool pump and piping are factory-assembled.

Connections and Service Access

Before installation, ensure proper access to the final connections.

NOTICE: Provide generous, unrestricted service access to the pump. You must provide access for servicing the pump and controls. The access must be located immediately next to the pump. Study the roughing-in information for your whirlpool model.

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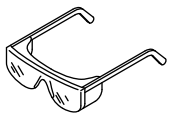
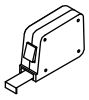
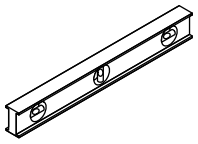
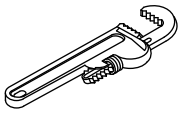
Tools and Materials

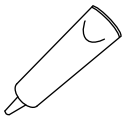




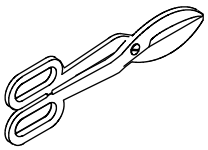


Plus:
- Conventional Woodworking Tools and Materials
- Drop Cloth
- Metal Shims
- 2x4s





Silicone Sealant



Tin Snips

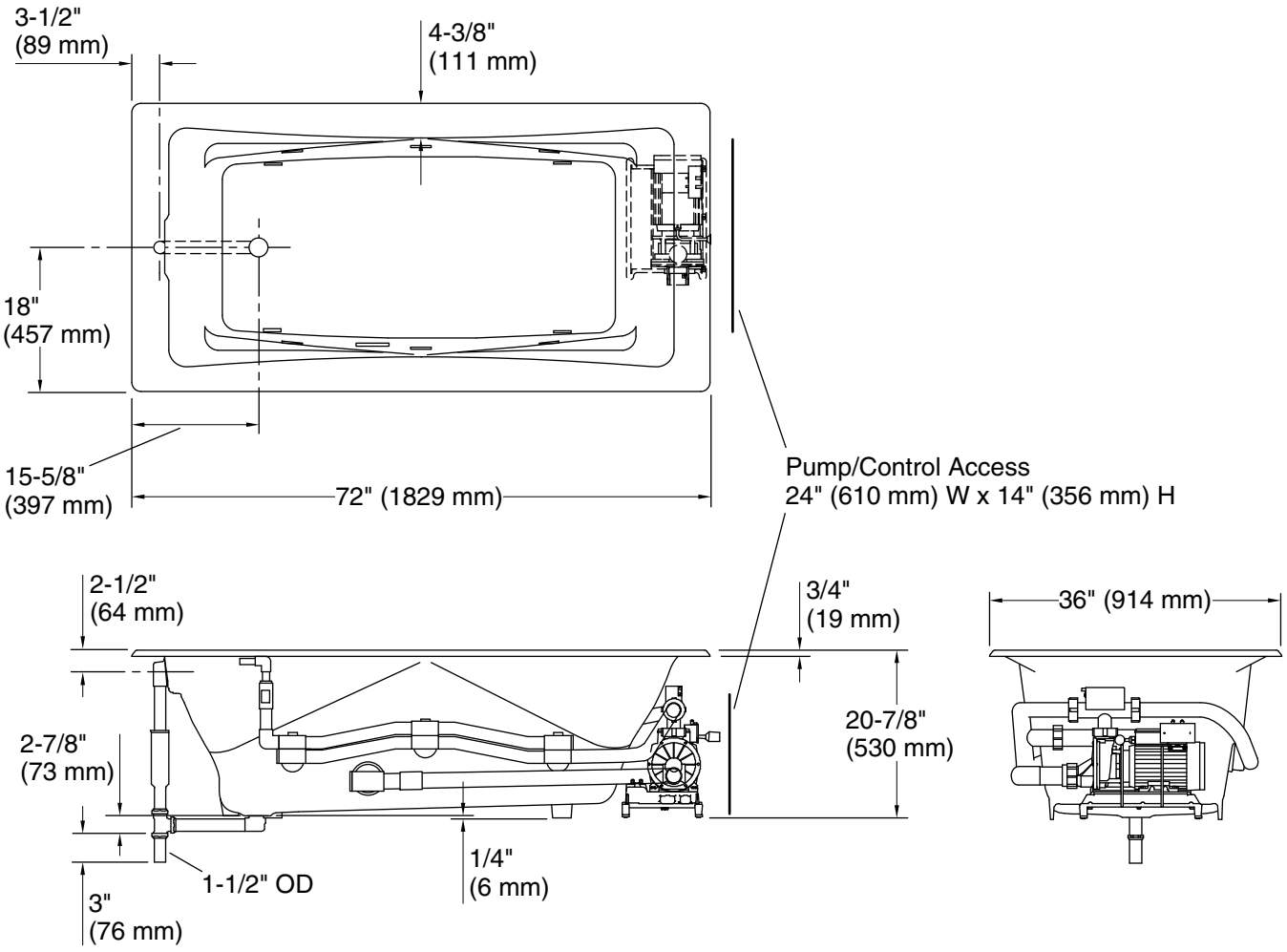
Before You Begin

WARNING: Risk of personal injury. Your cast iron whirlpool is extremely heavy. Obtain sufficient help to carefully lift and move it.

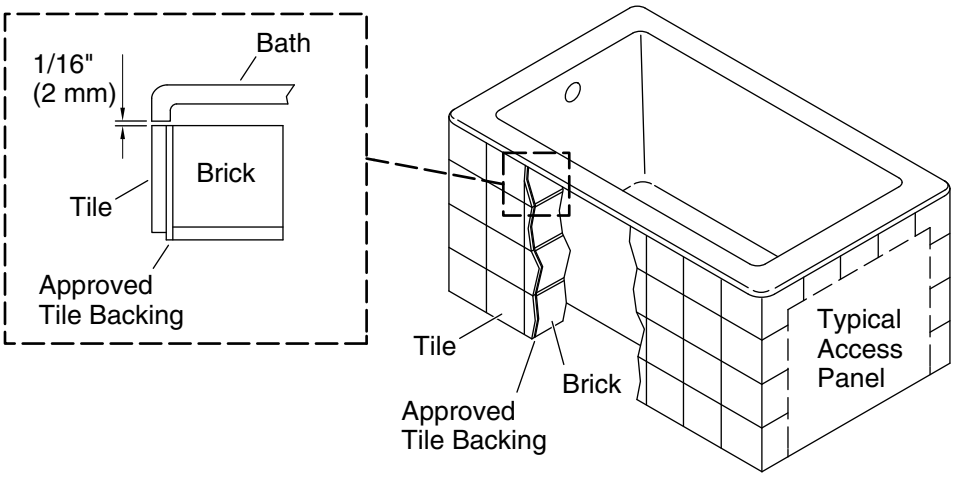
CAUTION: Risk of product damage. Do not lift the whirlpool by the piping or pump, or use the piping or pump for structural support of the whirlpool.

CAUTION: Risk of product damage. Do not support the whirlpool by the rim.

- This whirlpool is intended for drop-in or alcove installation, depending upon the model chosen.
- Inspect the whirlpool for damage before you begin installation.
- You must install this whirlpool to an adequately supported, level subfloor.
- Kallista reserves the right to make revisions in the design of products without notice, as specified in the Price Book.



1. Roughing-In Dimensions



Whirlpool may be installed next to the wall or as an island installation.

Install an access panel to allow the pump to be serviced.

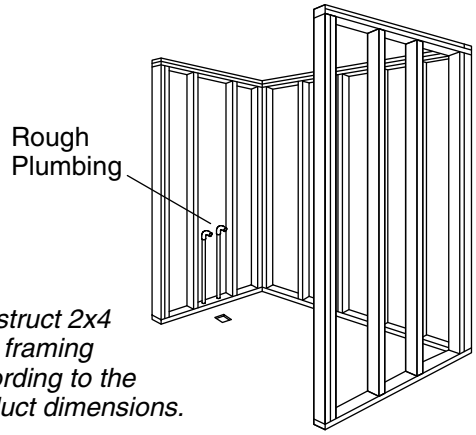
2. Prepare the Site - Concrete Construction

CAUTION: Risk of product damage. Do not support the whirlpool by the rim.

NOTICE: Adequate floor support must be provided. Floor supports under the whirlpool must provide for a minimum of 1800 lbs (816 kg).

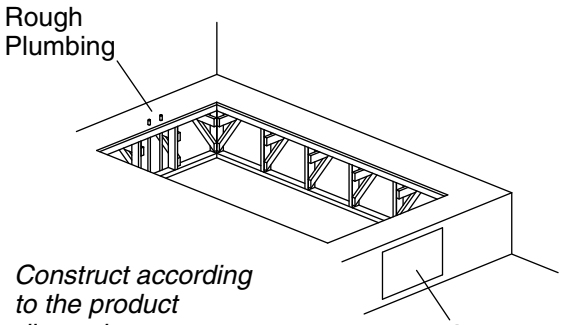
- ☐ Make sure the flooring offers adequate support for your whirlpool, and verify that the subfloor is flat and level.
- ☐ This whirlpool may be installed next to the wall or in an island installation. An island installation requires a four side surround. In both instances, make sure the deck is supported by brick or concrete.
- ☐ Install an access panel to allow the pump to be serviced.
- ☐ Construct brick or concrete supports.
- ☐ Provide a 1/16″ (2 mm) gap between the whirlpool rim and the concrete or brick framing. Frame the floor, or construct a frame for a raised installation, in accordance with the roughing-in section of this guide.
- ☐ Position the plumbing according to the roughing-in information. Cap the supplies, and check for leaks.

Alcove



Construct 2x4 stud framing according to the product dimensions.

Drop-In



Construct according to the product dimensions.

3. Prepare the Site - Wood Construction

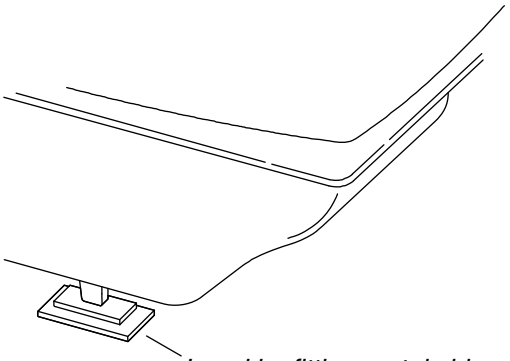
CAUTION: Risk of product damage. Do not support the whirlpool by the rim.

NOTICE: Adequate floor support must be provided. Consult the roughing-in information for your whirlpool for specific floor loading requirements.

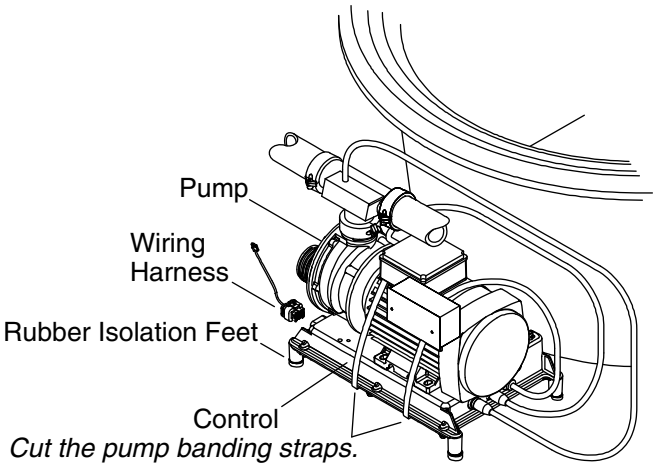
- ☐ Make sure the flooring offers adequate support for your whirlpool, and verify that the subfloor is flat and level.
- ☐ The whirlpool may be used in a drop-in or alcove installation. Construct 2x4 stud framing designed for your particular installation. Frame the floor, or construct a frame for a raised installation in accordance with the roughing-in information packed with the whirlpool.
- ☐ Use the roughing-in information to carefully lay out and cut the rough deck material.
- ☐ Install an access panel to allow the pump to be serviced.
- ☐ Position the plumbing according to the roughing-in information. Cap the supplies, and check for leaks.

4. Prepare the Whirlpool

- ☐ We recommend a tiling-in bead for straight-rimmed whirlpools, if one or more sides of the whirlpool contact a wall. This bead prevents water from seeping between the whirlpool rim and the wall. Follow the instructions packed with the tiling-in bead to install the bead now.
- ☐ Install the drain to the whirlpool according to the drain manufacturer's instructions. Do not connect the trap at this time.
- ☐ Position a clean drop cloth or similar material in the bottom of the whirlpool. Be careful not to scratch the surface of the whirlpool.



Level by fitting metal shims under the feet.



Cut the pump banding straps.

5. Install the Whirlpool

WARNING: Risk of personal injury. This cast iron whirlpool is extremely heavy. Obtain sufficient help to carefully lift and move it.

CAUTION: Risk of product damage. Do not lift the whirlpool by the piping or pump, or use the piping or pump for structural support of the whirlpool.

CAUTION: Risk of product damage. Do not support the whirlpool by the rim.

- ☐ Carefully move the whirlpool into position. Insert the drain tailpiece into the trap.
- ☐ Level the whirlpool by fitting metal shims under the whirlpool feet as needed. Check for level along the top of the whirlpool, and across the drain side. If the feet are not accessible from the back or side, move the whirlpool in and out of position to shim it properly. Make sure the whirlpool is resting on all four feet.

6. Cut the Pump Banding Straps

IMPORTANT! This step is necessary to make your whirlpool operate more quietly.

- ☐ Use tin snips to cut the two pump banding straps from the whirlpool pump.

NOTE: Do not raise the pump higher than it was before you cut the pump banding straps. If the pump is raised too high, it will not prime properly. Make sure the rubber isolation feet are in place.

- ☐ To minimize whirlpool noise and vibration, be sure the pump is not in direct contact with the whirlpool after the pump banding straps are cut. The pump control contains rubber isolation feet to reduce pump noise.

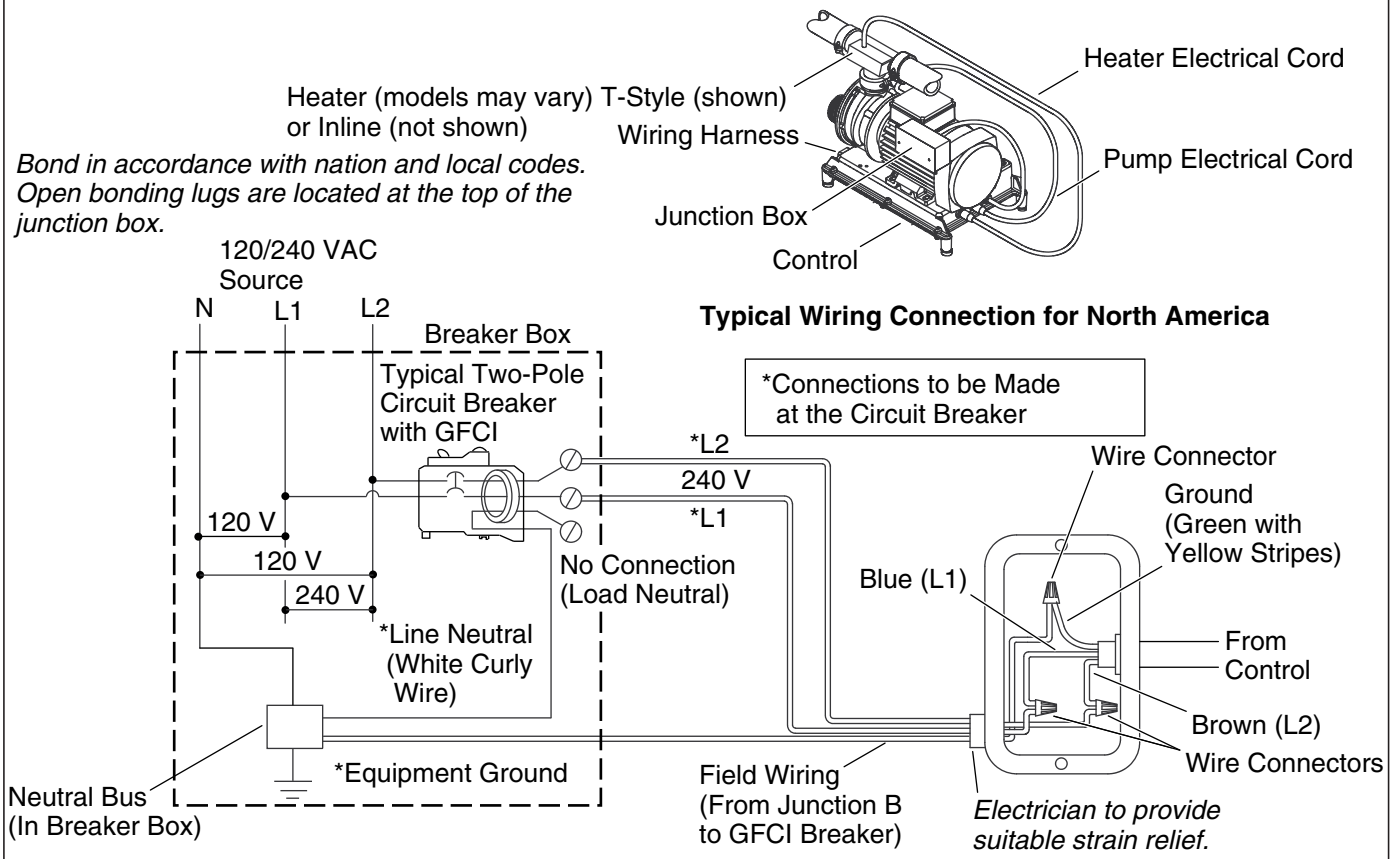
7. Install the Plumbing

CAUTION: Risk of property damage. Ensure a watertight seal on the whirlpool drain.

- ☐ Connect the drain to the trap according to the drain manufacturer's instructions.

NOTICE: An access panel will simplify future maintenance.

- ☐ Install the faucet valving according to the faucet manufacturer's instructions. Do not install the faucet trim until instructed. Open the hot and cold water supplies, and check the supply connections for leakage.
- ☐ Run water into the whirlpool, and check the drain connections for leakage.



Typical Wiring Connection for North America

8. Make Electrical Connections

NOTE: The product model number is printed on a label on the pump side of the whirlpool bath. This label also identifies the electrical rating of the product. All whirlpools come equipped with a wiring junction box and are designed to operate between 208 VAC and 240 VAC at either 50 Hz or 60 Hz.

WARNING: Risk of electrical shock. Make sure the power has been disconnected before performing the following procedures. Refer to the "Important Information" section.

WARNING: Risk of electrical shock. Connect the pump to a properly grounded Ground-Fault Circuit-Interrupter (GFCI)*. This will provide additional protection against line-to-ground shock hazard. A 208-240 V, 20 A, 50/60 Hz dedicated circuit is required.

IMPORTANT! The **load neutral** is not used. There should be no connection to the **load neutral** terminal on the Ground-Fault Circuit-Interrupter (GFCI) breaker. The green wire with the yellow stripe is the **equipment ground** and needs to be connected to the neutral bus in the main circuit breaker box.

*Outside North America, this device may be known as a Residual Current Device (RCD).

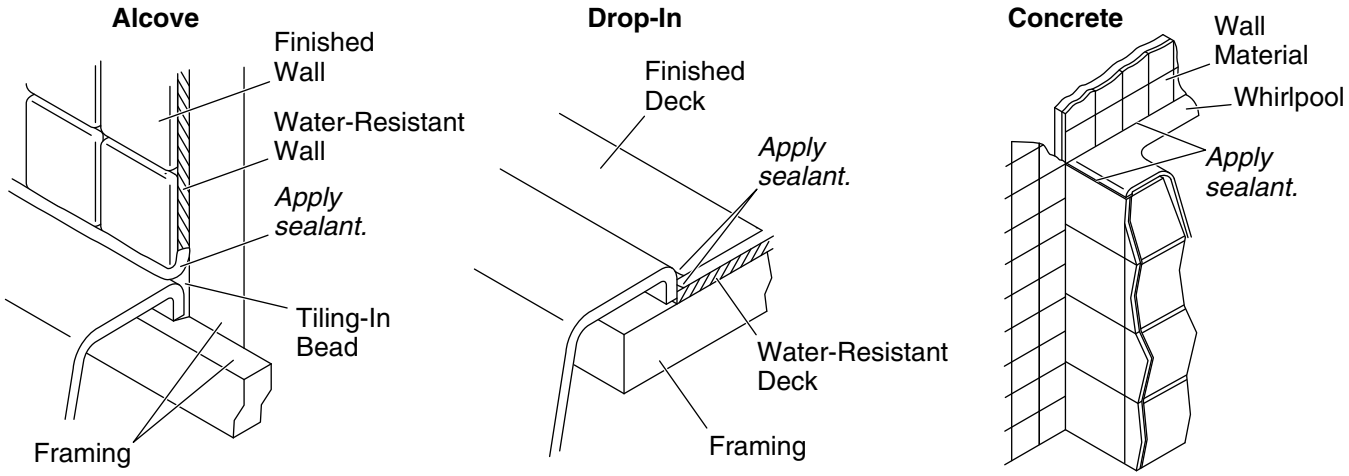
- ☐ The whirlpool bath control and system have been pre-wired at the factory. A qualified electrician should make a routine service connection to the junction box.
- ☐ Connect service to the junction box. The junction box contains blue, brown, and green with a yellow stripe colored wires.
- ☐ Follow local electrical codes. Bond in accordance with national and local codes.
- ☐ A wiring harness has been pre-wired at the factory, allowing communication between the keypad, all features, and the control. No additional wiring is required, but ensure that all wires are securely fastened.

Make Electrical Connections (cont.)

NOTE: Your wiring harness included an antenna for the optional remote control. Do not alter or damage this antenna during installation.

9. Test Run the Whirlpool

- ☐ Check all electrical connections.
- ☐ Make sure all union connections to the pumps and heater are securely hand tightened.
- ☐ Verify that the pump banding straps have been cut, and that the pump controls are resting directly on the subfloor. Ensure that the rubber isolation feet are in place.
- ☐ Turn electrical power to the whirlpool on.
- ☐ Fill the whirlpool to a level at least 2″ (50 mm) above the top of the highest jet.
- ☐ Operate the whirlpool for 5 minutes (refer to the "Operating Sequence" section) and check all whirlpool piping connections, on the back side, for leaks.
- ☐ Turn on each of the whirlpool features and verify proper function. Check for any water leakage on the whirlpool's back side.
- ☐ For additional information on whirlpool operation, see "Confirm Proper Operation" section.



10. Complete the Finished Wall/Deck

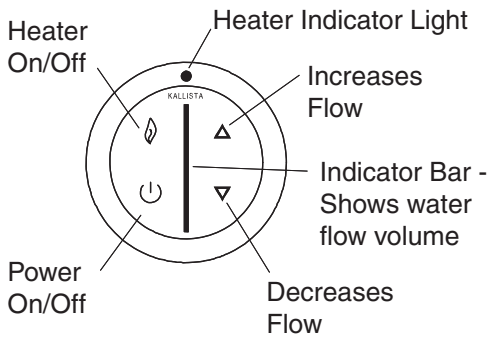
- ☐ If you have not already done so, carefully remove the protective tape from the whirlpool rim.
- ☐ Cover the framing with water-resistant wall/deck material. Seal the joints between the whirlpool rim edge and the water-resistant wall/deck material with silicone sealant.
- ☐ Tape and mud the water-resistant wall/deck material. Install the finished wall/deck to the water-resistant wall/deck material. Seal the joints between the whirlpool rim and the finished wall/deck material with silicone sealant.
- ☐ Install the faucet trim according to the instructions packed with the trim.

11. Complete the Concrete Installation

- ☐ If you have not already done so, carefully remove the protective tape from the whirlpool rim.
- ☐ Apply mortar and tile to the wall, deck, and surround material as needed.
- ☐ Apply a bead of sealant where the tile meets the whirlpool surface.
- ☐ Install the faucet trim according to the instructions packed with the trim.

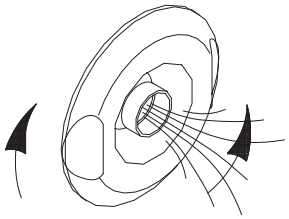
12. Clean-Up After Installation

- ☐ When cleaning up after installation, **do not use abrasive cleansers**, as they may scratch and dull the whirlpool surface. If necessary, use warm water and a liquid detergent to clean the surface of the whirlpool, user keypad, and remote control.
- ☐ Remove stubborn stains, paint, or tar with turpentine or paint thinner. **Do not allow cleaners containing petroleum distillates to remain in contact with any whirlpool surfaces for long periods of time.** Remove plaster by carefully scraping with a wood edge. Do not use metal scrapers, wire brushes, or other metal tools. Use a powder-type detergent on a damp cloth to provide mild abrasive action to any residual plaster.



Lighted User Keypad

Turn the jet trim clockwise to decrease the flow.



Turn the jet trim counterclockwise to increase the flow.

13. Confirm Proper Operation

Fill the Whirlpool

NOTE: Please read these steps carefully before you operate your whirlpool.

- ☐ Position the jet nozzles so they face down toward the basin. Turn the jet trim rings fully counterclockwise.
- ☐ **Fill the whirlpool to a water level at least 2″ (50 mm) above the top of the highest jet.**

NOTE: The water temperature in the whirlpool should not exceed 104°F (40°C). The heater will automatically turn off as the water temperature approaches 104°F (40°C) and will remain off until the water cools.

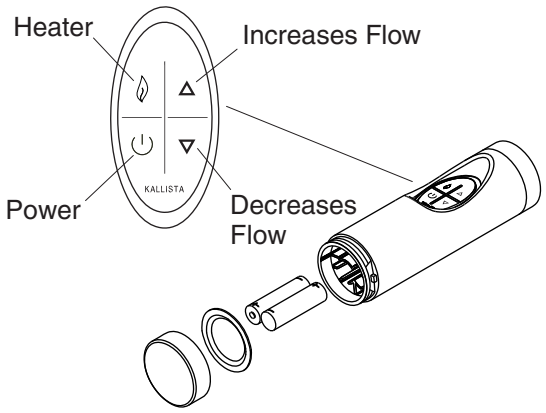
14. Operating Sequence

NOTE: A built-in heater automatically helps to maintain the water temperature when the whirlpool is running. The heater will disengage at higher temperatures exceeding 104°F (40°C).

IMPORTANT! Please refer to your Homeowners Guide for detailed instructions on the user keypad and remote control.

- ☐ Press the power icon to turn on the whirlpool. The whirlpool will start at medium flow.
- ☐ Increase or decrease the water flow by pressing either the up or down arrow icons on the keypad. An indicator bar in the center of the keypad shows the water flow volume.
- ☐ Adjust each jet for optimum air/water mixture. Turn the jet trim clockwise to reduce the air flow, and counterclockwise to increase the air flow.
- ☐ Press the heater icon to turn the heater off and back on. When illuminated, the indicator light shows that the water temperature will be maintained up to 104°F (40°C).
- ☐ Press the power On/Off icon a second time to turn the whirlpool off.

NOTE: A built-in timer automatically stops the pump and motor after approximately 20 minutes of operation.



15. Remote Control Operation

NOTE: Refer to your Homeowners Guide for detailed instructions on your remote control.

- The remote control places the whirlpool functions at your fingertips to further enhance your bathing experience. The functions of the remote are identical to the user keypad. You may turn the whirlpool on and off, turn the heater on and off, and increase or decrease the water flow by the press of a button.
- The waterproof remote control is designed to be used in the bath and will float in the water.
- Two AAA batteries are used in the remote control. To replace, simply unscrew the end cap and insert the batteries, as shown above. Tighten the end cap securely, making sure the end cap makes contact with the seal.

Troubleshooting Procedures

This troubleshooting guide is for general aid only. An Authorized Service Representative (ASR) or qualified electrician should correct all electrical problems. For warranty service, contact your dealer or wholesale distributor.

Symptoms	Probable Causes	Recommended Action
1. User keypad does not illuminate when power button is pressed or outer ring is rotated.	**A.** No power to control.	**A.** Check wiring and connect power.
	B. GFCI or RCD is tripped.	**B.** Reset the GFCI or RCD.
	C. Wiring harness from user keypad to control is loose, disconnected, or damaged.	**C.** Check wiring for proper connections. Replace wiring harness if necessary.
	D. User keypad does not work.	**D.** Replace user keypad.
	E. Control does not work.	**E.** Replace control.
2. Motor starts, but all jets are not functioning.	**A.** Jet is closed.	**A.** Rotate jet trim counterclockwise to open.
	B. Jet not installed correctly.	**B.** Reinstall jet; check for O-ring damage.
	C. Jets are blocked.	**C.** Remove blockage.
3. User keypad is illuminated, but does not respond to buttons or outer ring.	**A.** Control program is locked.	**A.** Reset GFCI or RCD.

Troubleshooting Procedures (cont.)

Symptoms	Probable Causes	Recommended Action
	B. Wiring harness from user keypad to control is loose, disconnected, or damaged.	**B.** Check wiring for proper connections. Replace wiring harness if necessary.
	C. User keypad does not work.	**C.** Replace user keypad.
	D. Control does not work.	**D.** Replace control.
4. User keypad indicator bar keeps scanning at power-up.	**A.** Control program is locked.	**A.** Reset GFCI or RCD.
	B. Wiring harness from user keypad to control is loose, disconnected, or damaged.	**B.** Check wiring for proper connections. Replace wiring harness if necessary.
	C. User keypad does not work.	**C.** Replace user keypad.
	D. Control does not work.	**D.** Replace control.
5. User keypad is illuminated, but pump will not start.	**A.** Power cord from pump to control is loose, disconnected, or damaged.	**A.** Check wiring for proper connections.
	B. Pump does not work.	**B.** Replace pump.
	C. Control does not work.	**C.** Replace control.
6. Motor runs but pump will not prime (cavitates).	**A.** Pump is shimmed too high.	**A.** Lower pump/control to subfloor level.
	B. Small air leak at pump inlet.	**B.** Securely tighten nut(s) on intake side of pump.
	C. Motor/pump does not work.	**C.** Replace motor/pump.
	D. Control does not work.	**D.** Replace control.
7. Pump stops before 18 minutes.	**A.** GFCI or RCD is tripped.	**A.** Identify source of fault, and correct. Reset the GFCI or RCD.
	B. Suction is blocked.	**B.** Remove obstruction.
	C. Jets are blocked.	**C.** Remove blockage.
	D. Motor overheated and protection device activated.	**D.** Check for blockage at suction and/or jets. Remove blockage and allow motor to cool.
8. Pump does not automatically stop after 22 minutes.	**A.** 20-minute timer inadvertently disabled.	**A.** See service manual.
9. Pump will not turn off when the power button on user keypad is pressed.	**A.** User keypad does not work.	**A.** Replace user keypad.
	B. Control does not work.	**B.** Replace control.
10. Pump operates but variable speed feature does not work.	**A.** Motor/pump does not work.	**A.** Replace motor/pump.
	B. Control does not work.	**B.** Replace control.
11. Bath water cools while pump is operating.	**A.** Water temperature above 104°F (40°C).	**A.** Allow bath water to cool.
	B. Heater is turned off on user keypad.	**B.** Turn heater on.
	C. Wiring from heater to control is loose, disconnected or damaged.	**C.** Check wiring for proper connections.
	D. Heater does not work.	**D.** Replace heater.
	E. Control does not work.	**E.** Replace control.
12. Noisy operation.	**A.** Pump banding straps have not been cut.	**A.** Cut pump banding straps with tin snips.

Troubleshooting Procedures (cont.)

Symptoms	Probable Causes	Recommended Action
	B. Dry or dislodged jet O-ring (squeal).	**B.** Remove jet, replace and lubricate O-ring, and reinstall jet.
13. Remote control does not work.	**A.** Batteries improperly installed or dead.	**A.** Replace batteries.
	B. Antenna on wiring harness is damaged.	**B.** Replace wiring harness.
	C. Remote control not programmed correctly.	**C.** See homeowners guide or service manual.
	D. Remote control does not work.	**D.** Replace remote control.
	E. Control does not work.	**E.** Replace control.

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