# Installation Guide

## Drop-In Bath Whirlpool

K-1106,	K-1112,	K-1114,
K-1126,	K-1131,	K-1139,
K-1144,	K-1146,	K-1148,
K-1154,	K-1157,	K-1160,
K-1162,	K-1164,	K-1192,
K-1194,	K-1201,	K-1209,
K-1221,	K-1224,	K-1226,
K-1239,	K-1244,	K-1246,
K-1248,	K-1257,	K-1263,
	K-1337	

M product numbers are for Mexico (i.e. K-12345M) Los números de productos seguidos de M corresponden a México (Ej. K-12345M) Français, page "Français-1" Español, página "Español-1"



# **Important Information**



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

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

Install to permit access for servicing.

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

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.

NOTICE: Follow all local plumbing and electrical codes.

# **Product Information**

#### **Electrical Requirements**

The installation must have a Class A Ground-Fault Circuit-Interrupter (GFCI) or Residual Current Device (RCD). The GFCI or RCD protects against line-to-ground shock hazard. Use a 120 V, 15 A, 60 Hz dedicated service for the whirlpool.

"H" models require a separate 120 V, 15 A, 60 Hz dedicated service for the heater.

**NOTE:** If the pump supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. The heater supply cord cannot be replaced. If the cord is damaged the heater should be replaced.

#### **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. Kohler Co. shall not be liable under its warranty or otherwise for personal injury or damage caused by any such unauthorized modification.



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

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

**WARNING: Risk of injury or property damage.** Please read all instructions thoroughly before beginning installation.

NOTICE: Follow all local plumbing and electrical codes.

#### **Factory-Assembled Features**

Factory installed components include pump with power supply cord and air switch transmitter. No installation is needed.

"H" models are also supplied with a factory assembled heater.

The whirlpool pump and piping are factory-assembled.

#### **Connections and Service Access**

Before installation, ensure proper access to the final connections.

#### **Product Information (cont.)**

**NOTICE: Provide 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 Guide packed with the whirlpool.

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### **Tools and Materials**





**Tape Measure** 

Silicone Sealant





Safety Glasses

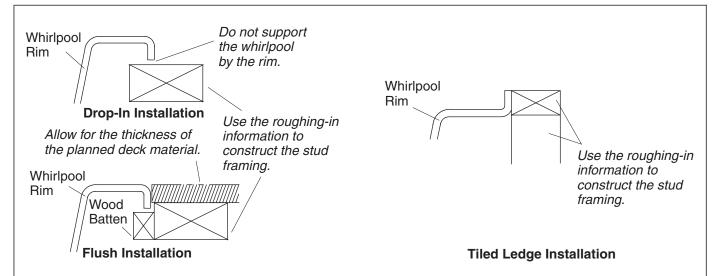
Pipe Wrench

PI

- Plus:
- Conventional woodworking tools and materials
- Drop Cloth
- Construction adhesive (optional)
- Cement or mortar (optional)
- 2x4s or 2x6s
- Screws or Lag Bolts

## **Before You Begin**

- □ Inspect the whirlpool for damage before you begin installation.
- □ Confirm adequate mounting and connection space for the faucet specified for your installation.
- □ Kohler Co. reserves the right to make revisions in the design of products without notice, as specified in the Price Book.



## 1. Prepare the Site

**NOTICE:** Refer to the Roughing-in Guide packed with your whirlpool for the required minimum lb/square foot (kg/square meter) floor support loading.

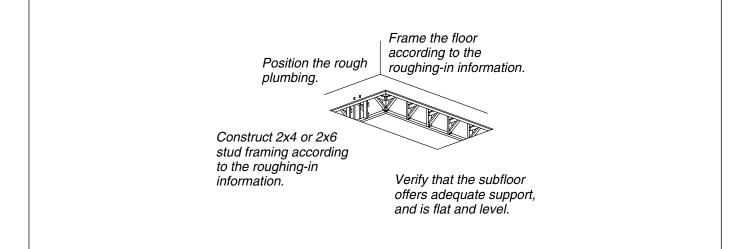
□ Make sure the flooring offers adequate support for your whirlpool, and verify that the subfloor is flat and level.

**NOTICE:** The whirlpool should be installed in a drop-in, flush, or tiled ledge installation.

□ Construct 2x4 or 2x6 stud framing designed for your particular installation.

**NOTICE:** The whirlpool must be supported by its feet or base. Do not support the load weight of the whirlpool by the perimeter of the rim.

- □ **For a raised installation:** Frame the floor or construct a frame in accordance with the roughing-in information packed with the whirlpool.
- Carefully lay out and cut the rough deck material. Use the cut-out template, if one is provided, or refer to the Roughing-In Guide for cutout information.
- Position the plumbing according to the roughing-in information packed. Cap the supplies, and check for leaks.



## 2. Prepare the Whirlpool

- □ 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.

## 3. Secure the Unit — Models With Support Blocks

**NOTICE:** Do not lift the whirlpool by the piping or pump, or use the piping or pump for structural support of the whirlpool. To avoid damage to the whirlpool, lift at the sides of the whirlpool.

**NOTICE:** Do not support the load weight of the whirlpool by the perimeter of the rim. The rim perimeter must be adequately supported, but must not support the load weight of the whirlpool.

□ If the subfloor is not level, shim the whirlpool support blocks as necessary.

Choose the installation option that best applies to your particular installation. Follow the appropriate instructions.

#### **Option Using a Cement or Mortar Bed**

**NOTE:** Do not use gypsum cement or drywall compound for this application, as they will not provide an acceptable, durable bond.

## NOTE: The pump support bracket (when the pump banding straps are cut) and support blocks must rest directly on the subfloor.

- □ Spread a 2″ (5.1 cm) thick layer of cement or mortar on the subfloor where the whirlpool will be set. This will help secure, level, and support the unit. Clear all the material away from the pump support bracket and support block locations.
- Position a piece of plastic drop cloth material on top of the cement or mortar bed. With help, carefully lift the whirlpool into place, and make sure the pump support bracket and support blocks do not rest in the bed material.
- □ Secure the drain tailpiece to the trap. Ensure the whirlpool is level and resting on all support blocks.
- □ Remove the protective tape from the rim. Apply a continuous bead of high-quality silicone sealant around the entire rim of the whirlpool.

#### **Option Using Construction Adhesive**

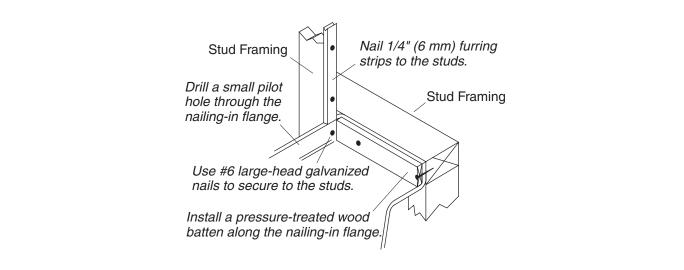
Apply a generous amount of high-quality construction adhesive to the bottom of the support blocks.
 With help, carefully lift the whirlpool into position.

#### Secure the Unit — Models With Support Blocks (cont.)

- □ Insert the drain tailpiece into the trap. Ensure the whirlpool is level and resting on all support blocks.
- □ Remove the protective tape from the rim. Apply a continuous bead of high-quality silicone sealant around the entire rim of the whirlpool.

#### **Option Using Silicone Sealant**

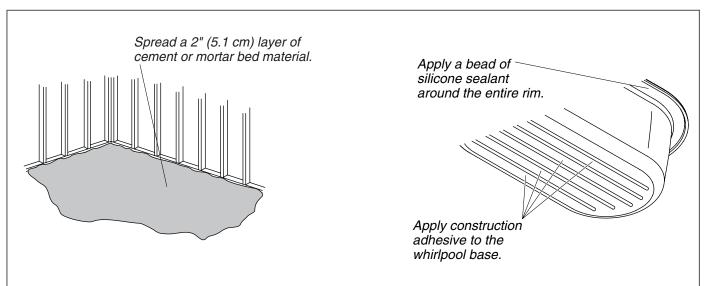
- □ With help, carefully lift the whirlpool into position.
- □ Insert the drain tailpiece into the trap. Ensure the whirlpool is level and resting on all support blocks.
- □ Remove the protective tape from the rim. Apply a continuous bead of high-quality silicone sealant around the entire rim of the whirlpool.



## 4. Secure the Whirlpool to the Stud Framing

#### **Option for Integral Flange Models**

- Drill a small pilot hole through the nailing-in flange at each stud. Add shims between the nailing-in flange and the studs as needed to eliminate gaps.
- $\square$  Nail 1/4" (6 mm) thick furring strips to the stude to shim out to the edge of the nailing-in flange.
- □ Use #6 large-head galvanized nails to secure the nailing-in flange to the studs.
- □ For tile ledge installations, size and install a pressure-treated wood batten along the nailing-in flange. Pre-drill nail holes through the wood batten and nailing-in flange before securing with galvanized nails.



## 5. Secure the Unit — Models With Whirlpool Base

**NOTICE:** Do not lift the whirlpool by the piping or pump, or use the piping or pump for structural support of the whirlpool. To avoid damage to the whirlpool, lift at the sides of the whirlpool.

**NOTICE:** Do not support the load weight of the whirlpool by the perimeter of the rim. The rim perimeter must be adequately supported, but must not support the load weight of the whirlpool.

Choose the installation option that best applies to your particular installation. Follow the appropriate instructions.

□ If the subfloor is not level, shim the whirlpool base as necessary.

#### **Option Using a Cement or Mortar Bed**

**NOTE:** Do not use gypsum cement or drywall compound for this application, as they will not provide an acceptable, durable bond.

- □ Spread a 2″ (5.1 cm) thick layer of cement or mortar on the subfloor where the whirlpool will be set. This will help secure, level, and support the unit.
- □ Position a piece of plastic drop cloth material on top of the cement or mortar bed. With help, carefully lift the whirlpool into place.
- □ Insert the drain tailpiece into the trap. Make sure the whirlpool is level. Use screws or lag bolts (not provided) to secure the whirlpool base to the floor. Drill small pilot holes through the whirlpool base as needed.
- □ Remove the protective tape from the rim. Apply a continuous bead of high-quality silicone sealant around the entire rim of the whirlpool.

#### **Option Using Construction Adhesive**

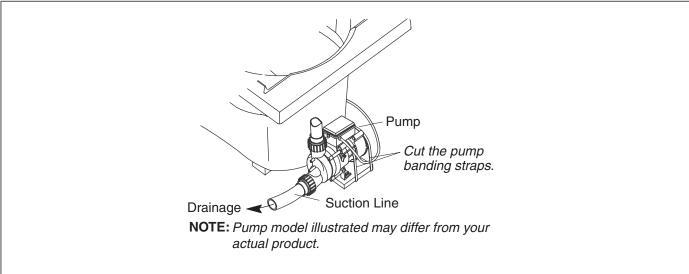
- □ Apply a generous amount of high-quality construction adhesive to the bottom of the whirlpool base. With help, carefully lift the whirlpool into position.
- Insert the drain tailpiece into the trap. Make sure the whirlpool is level. Use screws or lag bolts (not provided) to secure the whirlpool base to the floor. Drill small pilot holes through the whirlpool base as needed.
- □ Remove the protective tape from the rim. Apply a continuous bead of high-quality silicone sealant around the entire rim of the whirlpool.

#### **Option Using Silicone Sealant**

□ With help, carefully lift the whirlpool into position.

#### Secure the Unit — Models With Whirlpool Base (cont.)

- □ Insert the drain tailpiece into the trap. Make sure the whirlpool is level. Use screws or lag bolts to secure the whirlpool base to the floor. Drill small pilot holes through the whirlpool base as needed.
- □ Remove the protective tape from the rim. Apply a continuous bead of high-quality silicone sealant around the entire rim of the whirlpool.



## 6. Cut the Pump Banding Straps

NOTE: If your pump model does not have banding straps, proceed to the next section.

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

**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.

- □ Use tin snips to cut the two pump banding straps. When the banding straps are cut, the pump support bracket and pump will drop about 1/2" (1.3 cm) until they rest on the subfloor. If the pump drops more than 1/2" (1.3 cm), shim under the pump support bracket so there is a 1/2" (1.3 cm) gap between the pump and bracket to allow for proper drainage.
- □ To minimize whirlpool noise and vibration, be sure the pump is not in direct contact with the shipping bracket after the pump banding straps are cut.
- □ Secure the pump support bracket to the subfloor with screws or lag bolts (not provided).

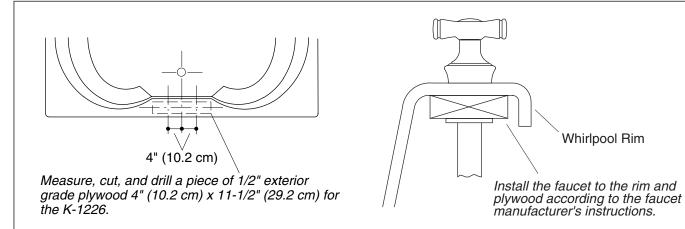
## 7. Install the Plumbing



**CAUTION: Risk of property damage.** A watertight seal must exist on the whirlpool drain. The watertight seal will prevent property damage.

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.



### 8. Install a Rim-Mounted Faucet

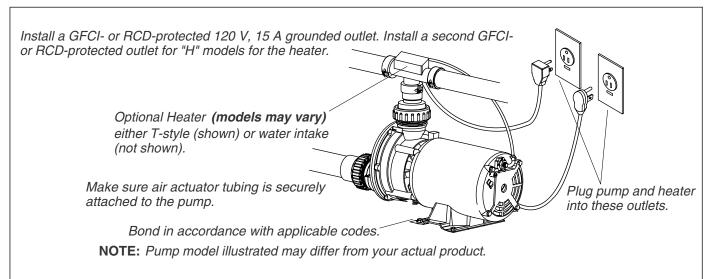
#### K-1226 Only

- □ Measure and cut a piece of 1/2" exterior grade plywood 4" (10.2 cm) x 11-1/2" (29.2 cm) for the K-1226.
- □ The faucet should be located in the center of the flat area of the rim. Refer to the faucet manufacturer's instructions. Use a pencil to mark the faucet centerlines for drilling.

NOTE: The K-1226 will accept faucets with 4" (10.2 cm) centers.

**NOTICE:** Position a thin piece of cardboard on the finished surface of the whirlpool before clamping the plywood in place. Make sure the clamps do not make direct contact with the finished surface of the whirlpool. This will reduce the risk of damaging the surface of the whirlpool.

- □ Set a thin piece of cardboard on the finished surface of the whirlpool rim. Position the plywood on the bottom of the rim, and carefully clamp the plywood in place. Make sure the clamps are in contact with the cardboard, not the finished surface of the whirlpool.
- □ Carefully drill the faucet holes to the size required by the faucet manufacturer. Remove the clamps and cardboard.
- □ Install the faucet to the rim and plywood according to the faucet manufacturer's instructions.
- □ 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.



## 9. Make Electrical Connections



**WARNING: Risk of electric shock.** Make sure the power has been disconnected before performing the following procedures.

**WARNING: Risk of electric shock.** Connect the pump and in-line heater (if included) to properly grounded, grounding-type receptacles protected by Ground-Fault Circuit-Interrupters (GFCI's) or Residual Current Devices (RCD's). Do not remove the grounding pins from the plug. Do not use grounding adapters.

**NOTE:** A label identifying the model number and electrical rating of the whirlpool is located near the whirlpool pump.

**NOTICE:** The pump (supplied) and heater (if supplied) are equipped with a cord and plug. All wiring for the heater has been completed at the factory. A qualified electrician must install a GFCI- or RCD-protected, 120 V, 15 A, grounded outlet. No other load should be on this circuit.

#### Pump Wiring

- □ Locate the outlet behind the whirlpool, and within 24″ (61 cm) of the pump.
- □ Plug the pump into this outlet.

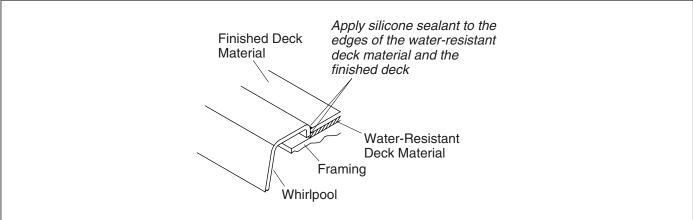
NOTE: Make sure the air actuator tubing is securely attached to the pump, and is not kinked or damaged.

#### Heater Wiring – "H" Models

- □ Locate the outlet behind the whirlpool, and within 24″ (61 cm) of the heater.
- □ Plug the heater into this outlet.

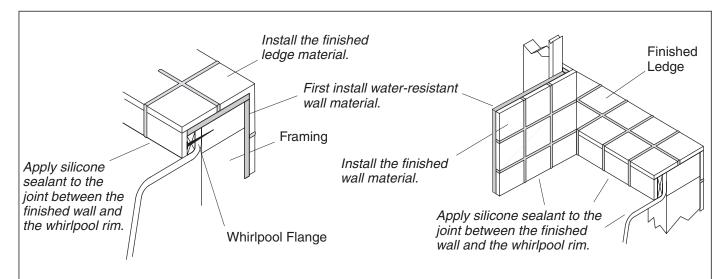
## 10. Test Run the Whirlpool

- □ Check all electrical connections, and make sure the electrical power to the whirlpool and heater (if equipped) is on.
- □ Make sure all union connections to the pump and heater are securely hand tightened.
- □ Verify that the pump banding straps have been cut (if applicable), and that the pump is resting directly on the subfloor or whirlpool base.
- □ Fill the whirlpool to a level at least 2″ (5.1 cm) above the top of the highest jet. Refer to "Confirm Proper Operation" section for additional information.
- □ Operate the whirlpool for 5 minutes, and check all whirlpool piping connections for leaks.



## 11. Complete the Finished Deck

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



## 12. Complete the Finished Wall

#### **Tiled Ledge Installation**

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

## 13. Clean-Up After Installation

- □ When cleaning up after installation, **do not use abrasive cleansers**, as they may scratch and dull the whirlpool surface. Use warm water and a liquid detergent to clean the surface.
- 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.

Fill with water at least 2" (5.1 cm) above the highest jet. Turn the jet trim ring clockwise to direct the water flow as desired. Turn the jet trim ring counterclockwise to increase the flow.

## **14. Confirm Proper Operation**

#### Fill the 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″ (5.1 cm) above the top of the highest jet.

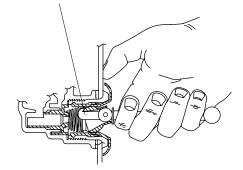
NOTE: The water temperature in the whirlpool should not exceed 104°F (40°C).

#### **Operating Sequence**

- □ Press the air actuator to turn on the whirlpool jets.
- □ Adjust each jet for optimum air/water mixture. Turn the trim ring clockwise to reduce the air flow, and counterclockwise to increase the air flow.
- □ If equipped with a heater, the heater will engage automatically when the pump is turned on and will disengage when the pump is turned off. The heater will not turn on if the water temperature exceeds 104°F (40°C).
- □ Press the air actuator a second time to turn off the whirlpool.

#### **Remove the Jets**

Insert the tool hook as shown and pull the jet out of the housing. The jet should be facing up when this is done.



Housing Inspect and Iubricate the O-ring. Slide the O-ring onto the first shoulder of the jet.

**Reinstall the Jets** 

Insert the jet into the housing, and lightly push and rotate until it snaps in position.

### Troubleshooting

NOTICE: This section is for general aid only. A Kohler Authorized Service Representative or qualified electrician should correct any electrical problems. For warranty service, contact your dealer or wholesale distributor.

#### **Remove the Jets**

**NOTE:** A special tool is provided with the replacement jets that will allow you to remove the jets from the whirlpool. This tool is also supplied with each trim kit.

□ Position the jet ball nozzle so it is pointing upward.

NOTE: The nozzle must remain pointed up or the tool will slip off.

- □ Insert the removal tool, hooked end up, into the opening of the jet and hook the inside top of the nozzle.
- □ Grasp the tool firmly and place your thumb against the whirlpool wall. Pull steadily on the tool until the jet assembly pulls free of the hole. Be careful not to lose the O-ring.

#### **Reinstall the Jets**

**NOTE:** To allow easy rotation and proper operation of the jet, the O-ring must be: (1) correctly positioned, (2) lubricated, and (3) in good condition.

- □ Install the O-ring onto the **first shoulder** of the jet.
- □ Using the silicone lube packet (provided), lubricate the O-ring to prevent noisy operation of the jet.
- □ Carefully insert the jet into the housing, then lightly push and rotate the jet until it snaps into position. **Do not force the jet.**
- □ Verify the jet is installed correctly. The jet should turn smoothly both clockwise and counterclockwise. Remove and reinstall, if necessary.

Sy	mptoms	Probable Causes		Recommended Action	
L.	Whirlpool will not start/stop.	A. No power to pump.	<b>A</b> .	Verify pump is plugged in and the GFCI/RCD is not tripped. Verify the outlet has power using a multi-meter or by connecting a 110V item that you know is working (lamp, radio, etc.) into the outlet. Repair as needed.	
		<b>B.</b> Remove the access panel and press the air switch, if you do not hear a "click," the air switch tubing is loose or disconnected.	В.	Check if the air switch tubing is connected at both the receiver/pump end and the air switch. Reconnect if needed.	
		<b>C.</b> Air switch tubing is pinched or kinked.	C.	Adjust tubing to clear the pinched/kinked area. If the pinch/kink cannot be fixed, or no noticeable pinch/kink is apparent, puncture the tubing with a tack and try the system again.	
		<b>D.</b> Push button assembly is damaged.	D.	Replace the push button assembly.	
		<b>E.</b> Pump has power and a "click" is heard when the air switch is pressed. Pump is not operating.	E.	Replace the pump.	
		<b>F.</b> The receiver in the pump is not operating.	F.	Replace the receiver or pump.	
2.	The system will start but will not stay ON.	<b>A.</b> The receiver in the pump is not operating.	A.	Replace the receiver or pump.	
3.	Whirlpool stops automatically.	<b>A.</b> Pump has overheated and the protection devices have activated.	A.	Check for blockage at the motor vents. Check for suction blockage. Check for jet blockage. Remove any blockage and allow the motor to cool.	
		<b>B.</b> GFCI/RCD circuit has tripped.	В.	Identify source fault and correct. Check that the GFCI/RCD has not been tripped. If problem persists, contact a qualified electrician.	
4.	The motor starts but not	<b>A.</b> Jets are closed.		Rotate the jet trim ring counterclockwise to open/increase flow to the jets.	
	all jets function.	<b>B.</b> Jets are blocked or trim ring rotation is impeded.	В.	Glue may be obstructing the jet opening or preventing the jet trim ring from rotating. Remove the trim ring and remove excess glue.	
		<b>C.</b> Jets not installed correctly.	C.	Reinstall the jet; check for any O-ring damage.	
		<b>D.</b> Pump is not supported correctly and is cavitating.	D.	Review the installation instructions and verify that the pump is at the appropriate height and that the pump banding straps (when applicable) have been cut.	
5.	Noisy pump operation.	<b>A.</b> The pump banding straps have not been cut (models with support blocks only).		Using tin snips, cut pump banding straps	
6.	Heater does not operate (units with	<b>A.</b> No power to heater or it is not connected to a separate outlet from the pump.		Verify that the heater is connected to a separate outlet from the pump and that the connection has power.	
	heaters only).	<b>B.</b> The water temperature is above 104°F (40°C).	<b>B</b> .	As a safety precaution, the heater will not operate when the water temperature is above 104°F (40°C).	