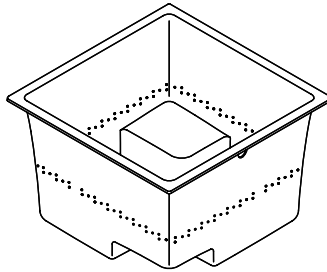


# Installation Guide

## Bath with Airjets

K-1969



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

THE BOLD LOOK  
OF **KOHLER**®

# Important Information



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



**DANGER: Risk of electric shock.** To reduce the risk of electrical shock, connect only to circuits protected by a Ground-Fault Circuit-Interrupter (GFCI) or Residual Current Device (RCD).



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



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

**NOTICE:** Follow all local plumbing and electrical codes.

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

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

Install to permit access for servicing.

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.

## 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 220-240 V, 15 A, 50/60 Hz dedicated service for the bath with airjets.**

Install this unit in accordance with the Canadian Electrical Code, Part I.

## Product Notices



**WARNING: Risk of personal or property damage. Unauthorized modification may cause unsafe operation or effect performance of the bath with airjets.** Do not relocate the blower motor, or make other modifications to the bath system in the absence of kit or other published instructions, as this could adversely affect the performance and safe operation of the product. Kohler Co. shall not be liable under its warranty or otherwise for personal injury or damage caused by any such unauthorized modification. Refer to the "Before You Begin" section for blower motor relocation requirements, recommendations, and section coverage information.

**NOTICE: Keep the area around the blower motor clean and free of debris.** Ensure that the area around the blower motor is free of sawdust, insulation, dirt, or other small loose debris. Such material could plug the blower motor air ducts and reduce the air flow through the blower.

## Factory Assembled Features

Factory assembled components include a blower motor, air harness, control, check valve, butterfly valves, chromotherapy lights (if provided), electrical harnesses, and an illuminated user keypad. Other than power wiring and plumbing, no assembly is required.

## Connections and Service Access

**NOTICE: Provide unrestricted service access to the blower motor.** You must provide access for servicing the blower motor and controls. The access must be located immediately next to the blower motor. Study the roughing-in information packed with the bath with airjets.

## Important Information (cont.)

Before installation, ensure that there is proper access to the blower motor and final connections. If the blower motor is installed in an enclosed area, an access panel is required at the blower motor. This panel should be at least 34" (86.4 cm) wide and 15" (38.1 cm) high.

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## Before You Begin



**CAUTION: Risk of product damage.** Do not lift the bath by the piping or blower motor, or use the piping or blower motor for structural support of the bath.

**NOTE:** This bath allows the blower motor and check valve to remain on the bath support board (standard installation) that it is shipped on **or** to be relocated to another location (remote installation). Refer to the sections, noted as "Standard" or "Remote," throughout this installation guide for your applicable installation.

### For Standard and Remote Blower Installations

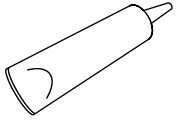
- Please read the installation, operating, and safety instructions carefully to familiarize yourself with the required tools, material, and installation sequences. Follow the sections that pertain to your particular installation. This will help you avoid costly mistakes.
- The variety of installations possible with this bath may require framing procedures other than those described in this manual.
- Confirm adequate mounting and connection space for the faucet specified for your installation.
- You must install this bath to an adequately supported, level subfloor.

### For Remote Installations

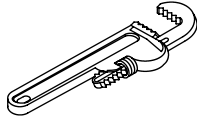
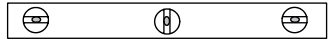
**NOTICE:** It is not necessary that the blower motor and check valve be relocated. The option is provided for the case that a particular installation makes this effort practical.

- The blower motor must be located within 15' (4.6 m) of rigid piping from the bath air harness. This limitation is for total pipe length and applies to any direction changes and elbows. There can be no more than six changes of direction. There should be as few direction changes as possible with no more than six direction changes.
  - The blower motor must be mounted horizontally at least 2" (5.1 cm) above the floor. Do not mount the blower motor with the blower motor discharge pointing up.
  - **The check valve must be relocated with the blower motor.** At the new location, the check valve must be no lower than 24" (61 cm) below the rim of the bath. The check valve must be within 12" (30.5 cm) of the blower motor. The check valve must be oriented vertically with the flow arrow pointing up. **DO NOT relocate the control unit.** The control unit must remain with the unit.
  - Use 1-1/2" PVC or equivalent rigid piping.
  - The piping installation must meet the requirements of local plumbing or building codes. Ensure that the installation does not reduce the fire rating of any walls. Piping must be supported at intervals along the length in accordance with local codes.
  - Ensure that the blower motor location is clean and free of dust or debris.
  - If appropriate, install an additional access panel for blower motor maintenance.
  - The 18 AWG minimum power cable to the blower motor must meet the requirements of the applicable electrical or building codes. Ensure that the installation does not reduce the fire rating of any walls.
  - The power cord must be supported at intervals along its length in accordance with local codes. Power cords must not rest on surfaces or floors that are subject to flooding.
  - All material needed for the relocation must be supplied by the installer.
- Kohler Co. reserves the right to make revisions in the design of products without notice, as specified in the Price Book.

## Tools and Materials



Silicone Sealant



### Plus:

- Conventional woodworking tools and materials or conventional masonry tools and materials, as appropriate
- Drop cloth
- Construction Adhesive (optional)
- Cement or Mortar (optional)
- 2x4s or 2x6s (optional)

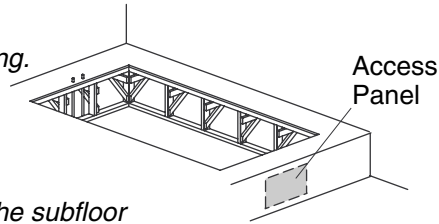
### Additional Tools and Materials for Remote Blower Installation:

- Electrician pliers.
- Assorted screwdrivers.
- Adjustable wrench.
- Drill and bits to install the blower mounting fasteners.
- 18 AWG non-metallic sheathed cable, two conductors with ground, with support clips, as required.
- One 4" (10.2 cm) x 2" (5.1 cm) electrical junction box with cover, gasket, and mounting screws.
- Three strain reliefs. One must fit the blower motor cover with standard NPT (National Pipe Thread) threads. The other two must fit the holes in the new junction box.
- Six wire connectors (wire nuts or equivalent).
- 1-1/2" PVC or other rigid pipe with: fittings, unions, PVC cement (or equivalent fastening method), and support clips, as required.
- Four fasteners (such as flathead wood screws or concrete anchors) to mount the blower motor.
- Flathead wood screws, concrete anchors, or other fasteners for mounting the blower motor.
- Solid copper 8 gauge bonding wire, 36" (91.4 cm).

*Construct 2x4 or 2x6 stud framing according to the roughing-in information.*

*Frame the floor according to the roughing-in information.*

*Position the rough plumbing.*



*Verify that the subfloor offers adequate support, and is flat and level.*

## 1. Prepare the Site - Wood Construction



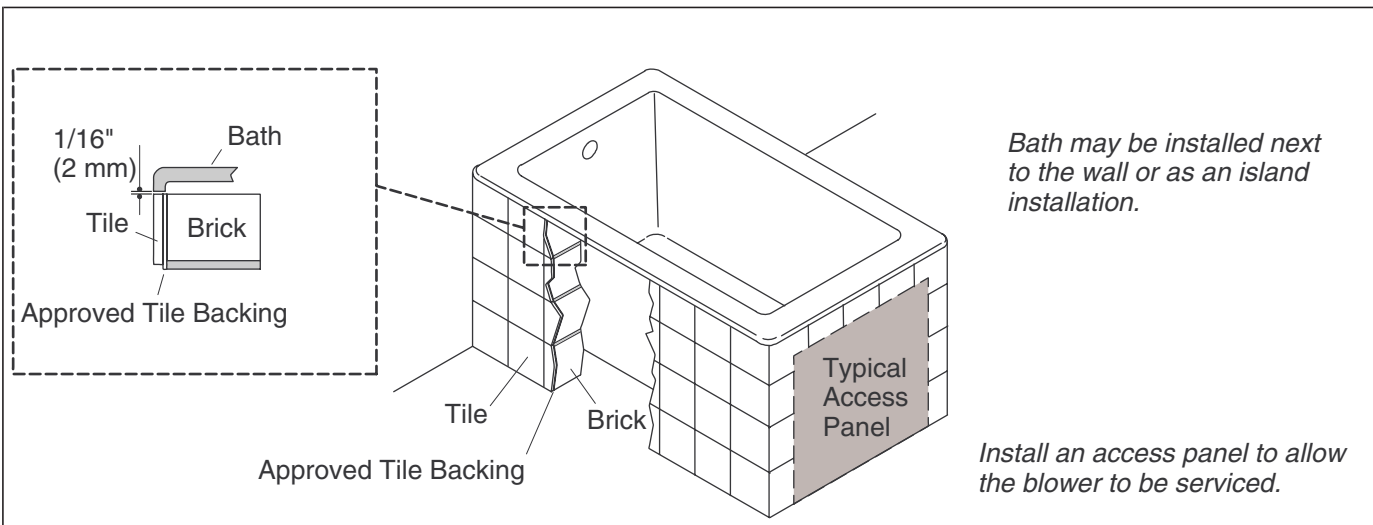
**CAUTION: Risk of property damage.** Do not support the bath by the rim. The bath must be supported by the leveling blocks only.

**NOTICE:** Adequate floor support must be provided. Consult the roughing-in sheet packed with your bath for specific floor loading requirements.

**NOTICE:** Provide adequate ventilation and a minimum of 15 cubic feet (.4 cubic meters) in the installed location for cooling the motor and to supply sufficient air for the blower. Do not install the blower motor closer than 1" (2.5 cm) from the wall or other objects.

**NOTE:** This bath may be installed in a drop-in or an island installation. An island installation requires a four side surround.

- Make sure the flooring offers adequate support for your bath, and verify that the subfloor is flat and level.
- For a drop-in installation:** Carefully lay out and cut the rough deck material. Use the cut-out template if one is provided, or refer to the roughing-in cutout information.
- For an island installation:** Construct a 2x4 frame in accordance with the roughing-in information packed with the bath.
- Provide access panels as required to service the blower motor and control.
- Position the plumbing according to the roughing-in information. Cap the supplies, and check for leaks.



## 2. Prepare the Site - Concrete Construction



**CAUTION: Risk of property damage.** Do not support the bath by the rim. The bath must be supported by the leveling blocks only.

**NOTICE:** Adequate floor support must be provided. Consult the roughing-in sheet packed with your bath for specific floor loading requirements.

**NOTICE:** Provide adequate ventilation and a minimum of 15 cubic feet (.4 cubic meters) in the installed location for cooling the motor and to supply sufficient air for the blower. Do not install the blower motor closer than 1" (2.5 cm) from the wall or other objects.

**NOTE:** This bath may be installed in a drop-in or an island installation. An island installation requires a four side surround. In both instances, make sure the deck is supported by brick or concrete.

- Make sure the flooring offers adequate support for your bath, and verify that the subfloor is flat and level.
- Provide access panels as required to service the blower motor and control.
- Construct brick or concrete supports.
- Provide a 1/16" (2 mm) gap between the bath rim and the concrete or brick framing. Frame the floor, or construct a frame for a raised installation, in accordance with the roughing-in information packed with the bath.
- Position the plumbing according to the roughing-in information packed. Cap the supplies, and check for leaks.

## 3. Prepare the Bath with Airjets

### For All Installations

- Install the drain to the bath 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 bath to protect the finish. Ensure that the airjets are covered. Be careful not to scratch the surface of the bath.

### Blower Motor and Check Valve Options

**NOTE:** This bath allows the blower motor and check valve to remain on the bath support board (standard installation) it is shipped on or to be relocated to another location (remote installation). Refer to your applicable installation, standard or remote, throughout this installation guide.

### Standard Installation Sections

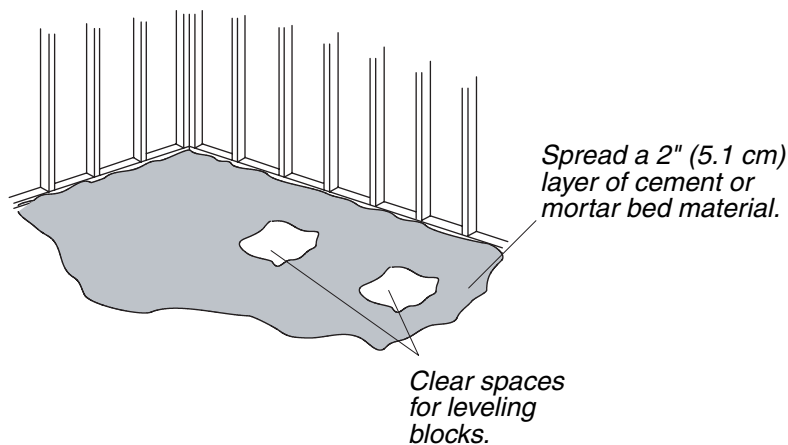
### **Prepare the Bath with Airjets (cont.)**

- Secure to the Subfloor - Standard
- Install the Plumbing - Standard
- Make Power Connections - Standard
- Test Run - Standard
- Then go to the "Complete the Finished Deck" section.

### **Remote Location Sections**

- Disconnect the Blower Motor - Remote
- Secure to the Subfloor - Remote
- Mount the Blower Motor - Remote
- Terminate the Cable at the Blower - Remote
- Install the Power Cord at the Control - Remote
- Install the Plumbing - Remote
- Make Power Connections - Remote
- Test Run - Remote
- Then go to the "Complete the Finished Deck" section.

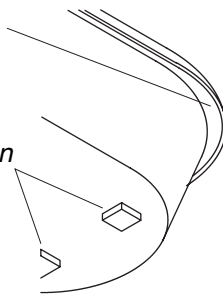




Apply a bead of silicone sealant around the entire rim.

OR

Apply construction adhesive to the leveling blocks.



#### 4. Secure the Subfloor - Standard Installation



**CAUTION: Risk of product damage.** Do not lift the bath by the piping or blower motor, or use the piping or blower motor for structural support of the bath.



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

**NOTICE:** The bath must be secured using one of the following three methods: cement or mortar bed, construction adhesive, or silicone sealant. Choose the installation option that best applies to your particular installation. Follow the appropriate instructions.

**NOTICE:** Ensure the subfloor is level before proceeding. If necessary, use shims to achieve level.

##### Cement or Mortar Bed Method

**NOTICE:** Do not use gypsum cement or drywall compound, as these materials will not provide a durable bond. Only use cement or mortar.

- Spread a 2" (5.1 cm) thick layer of cement or mortar on the subfloor **except** where the leveling blocks will be located.
- Clear any cement or mortar away from the leveling block locations.
- Place a plastic liner or similar material over the cement or mortar.
- With help, carefully move the bath into the installation area. Make sure the blower motor control and leveling blocks do not rest in the bed material.
- Verify the leveling blocks are resting directly on the subfloor. Reposition as needed.
- Verify the bath is level across the top of the bath. If the bath is not level, shims must be used under the leveling blocks.
- Connect the drain tailpiece to the trap.
- Remove the protective tape from the rim.
- Apply a continuous bead of high-quality silicone sealant around the entire rim of the bath. Allow the sealant to cure according to the manufacturer's instructions.

##### Construction Adhesive Method

- Apply a generous amount of high-quality construction adhesive to the bottom of the leveling blocks.
- With help, carefully move the bath into the installation area.
- Verify the leveling blocks are resting directly on the subfloor. Reposition or shim as needed.
- Verify the bath is level across the top of the bath. If the bath is not level, shims must be used under the bath.

### Secure the Subfloor - (cont.)

- Connect the drain tailpiece to the trap.
- Remove the protective tape from the rim.
- Apply a continuous bead of silicone sealant around the entire rim of the bath. Allow the sealant to cure according to the manufacturer's instructions.

### Silicone Sealant Method

- With help, carefully move the bath into the installation area.
- Verify the leveling blocks are resting directly on the subfloor. Reposition or shim as needed.
- Verify the bath is level across the top of the bath. If the bath is not level, shims must be used under the bath.
- Connect the drain tailpiece to the trap.
- Remove the protective tape from the rim.
- Apply a continuous bead of silicone sealant around the entire rim of the bath.
- Allow the sealant to cure according to the manufacturer's instructions.

## 5. Install the Plumbing - Standard Installation



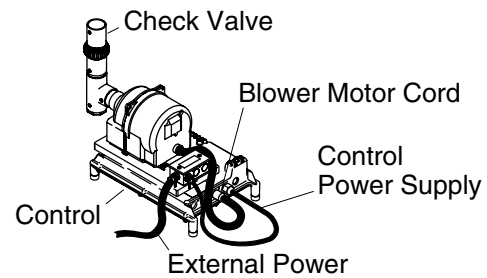
**CAUTION: Risk of property damage.** A watertight seal must exist on all bath drain connections. The watertight seal will prevent property damage.

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

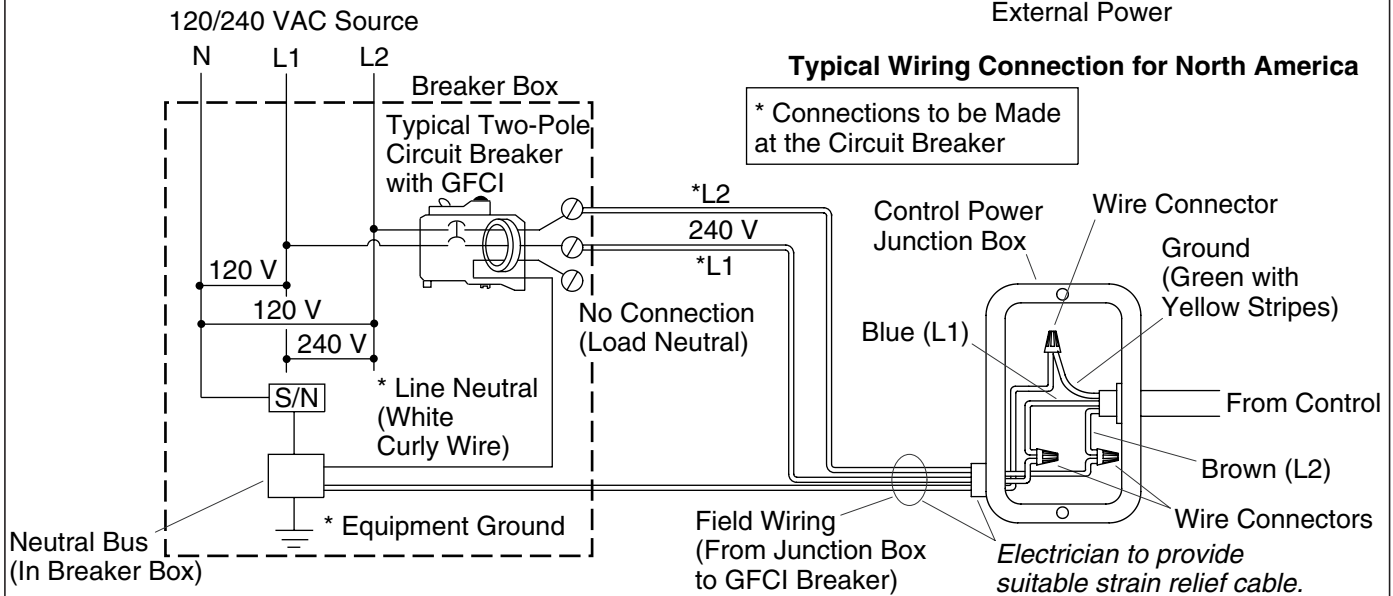
**NOTE:** To simplify future maintenance, provide access to all plumbing connections.

- 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 bath, and check the drain connections for leakage.

Bond in accordance with national and local codes. Open bonding lugs are located at the top of the junction box.



### Typical Wiring Connection for North America



## 6. Make Power Connections - Standard Installation

**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 220 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.** To reduce the risk of electrical shock, connect the pump to a properly grounded Ground-Fault Circuit-Interrupter (GFCI) or Residual Current Device (RCD). This will provide additional protection against line-to-ground shock hazard. A 220-240 V, 15 A, 50/60 Hz dedicated circuit is required.

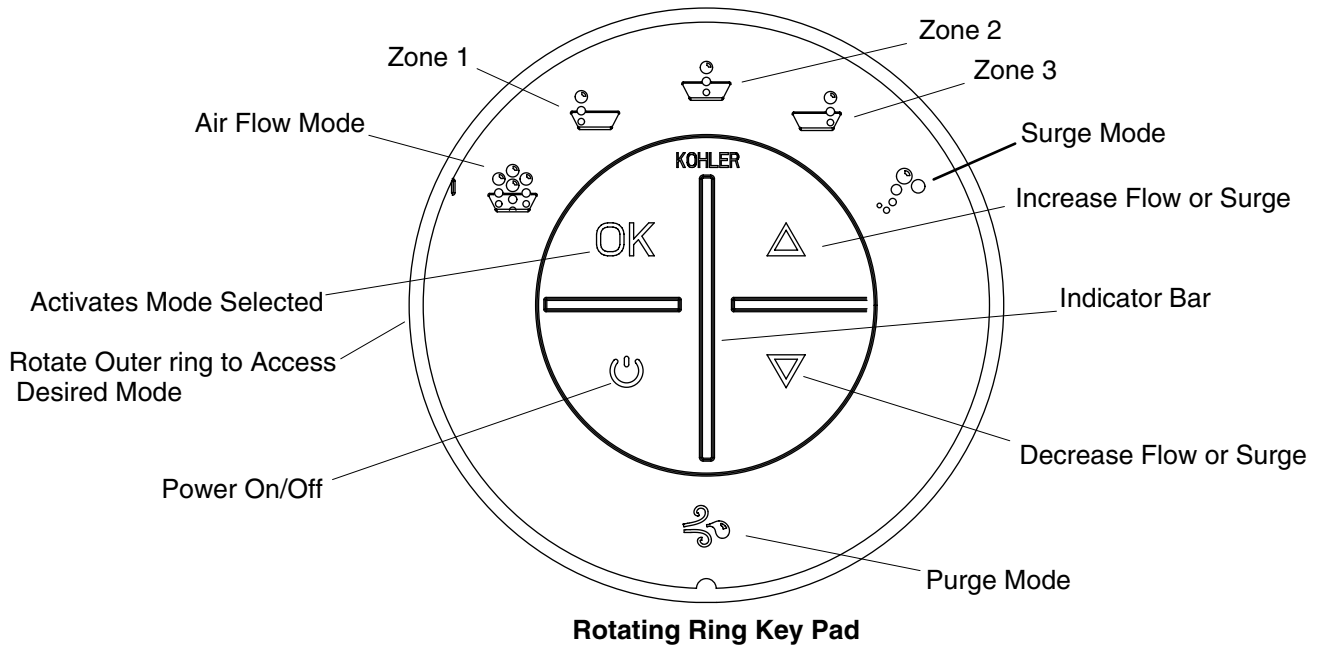
**NOTICE:** The **load neutral** is not used. There should be no connection to the **load neutral** terminal on the Ground-Fault Circuit-Interrupter (GFCI) or Residual Current Device (RCD). The green wire with the yellow stripe is the **equipment ground** and needs to be connected to the neutral bus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

**NOTICE:** The 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 control power 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.

**NOTE:** A wiring harness has been pre-wired at the factory. No additional wiring is required, but ensure that all wires are securely fastened.

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

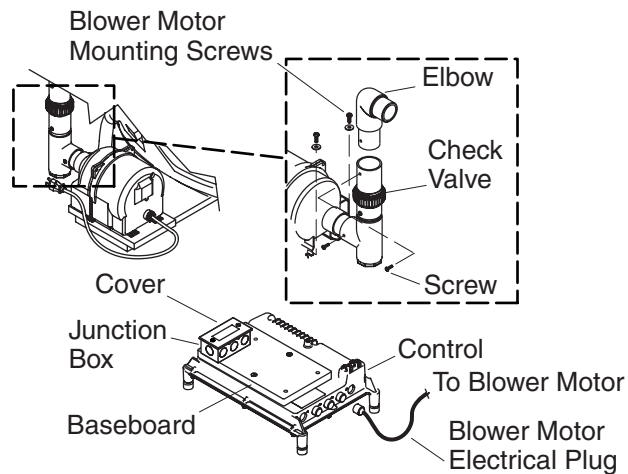


## 7. Test Run the Bath with Airjets - Standard Installation

**NOTE:** If the bath is not operating properly, consult the "Troubleshooting" section of this guide before calling a qualified service representative.

**NOTE:** For additional information on operating the bath, see the "Operate User Keypad" section.

- Check all electrical connections. Verify the electrical power to the bath is turned on.
- Ensure all PVC piping connections are tightened.
- Temporarily remove the protective drop cloth from the bath.
- Fill the bath to a level at least 2" (5.1 cm) above the top of the highest airjet.
- Operate the bath with air flow in all three zones. Check the PVC connections for leaks.
- Stop the blower.
- Check for water leakage at the bath, the bath drain, and the air harness.
- Test other features as desired.
- Drain the bath to start the automatic purge cycle.
- Allow the automatic purge cycle to complete.
- Place the protective drop cloth over the bath.
- Turn off the power to the unit.



## 8. Disconnect the Blower Motor - Remote Blower Installation

**NOTICE:** This section applies only to installations in which the blower motor and check valve are being relocated from the shipping position on the support board.

**NOTICE:** Do not cut the blower harness for this installation.

**NOTICE:** You must relocate the check valve with the blower motor.

### Remove the Blower Motor

- Disconnect the blower motor electrical plug from the control.
- Remove any cable ties that support the blower motor cord.
- Remove and retain the retaining screw holding the blower harness on the blower motor discharge.
- Remove and retain the four motor mounting screws from the blower adapter baseboard.
- While restraining the tee with one hand, slide the blower motor away from the tee.
- Remove the blower motor from the bath.

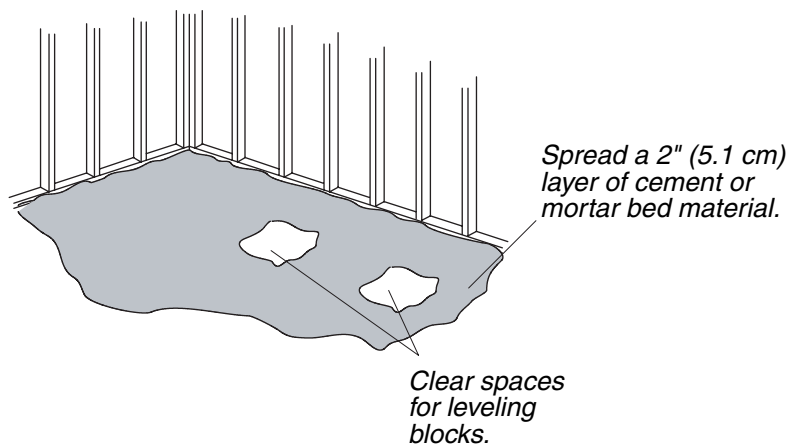
### Remove the Check Valve

- Remove and retain the upper retaining screw at the check valve.
- Remove the check valve and attached PVC elbow from the bath.

### Prepare the Site for the Blower Motor and Check Valve

**NOTE:** Refer to the "Before You Begin" section for detailed requirements for the blower motor relocation.

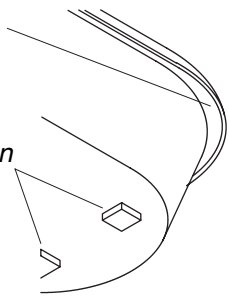
- Prepare the site where the blower motor will be installed. The site must be within 15' (4.5 m) of the bath.
- As appropriate, install an access panel to service the blower motor.
- As appropriate to the installation, prepare the routing paths for the PVC piping and the new blower motor power cable. Follow all applicable codes.



Apply a bead of silicone sealant around the entire rim.

OR

Apply construction adhesive to the leveling blocks.



## Secure the Subfloor - Remote Blower Installation



**CAUTION: Risk of product damage.** Do not lift the bath with airjets by the piping or blower motor, or use the piping or blower motor for structural support of the bath.



**CAUTION: Risk of product damage.** Do not support the bath with airjets by the rim.

**NOTICE:** The bath must be secured using one of the following three methods: cement or mortar bed, construction adhesive, or silicone sealant. Choose the installation option that best applies to your particular installation. Follow the appropriate instructions.

**NOTICE:** Ensure the subfloor is level before proceeding. If necessary, use shims to achieve level.

### Cement or Mortar Bed Method

**NOTICE:** Do not use gypsum cement or drywall compound, as these materials will not provide a durable bond. Only use cement or mortar.

- Spread a 2" (5.1 cm) thick layer of cement or mortar on the subfloor **except** where the leveling blocks will be located.
- Clear any cement or mortar away from the leveling block locations.
- Place a plastic liner or similar material over the cement or mortar.
- With help, carefully move the bath into the installation area. Make sure the blower motor control and leveling blocks do not rest in the bed material.
- Verify the leveling blocks are resting directly on the subfloor. Reposition as needed.
- Verify the bath is level across the top of the bath. If the bath is not level, shims must be used under the leveling blocks.
- Connect the drain tailpiece to the trap.
- Remove the protective tape from the rim.
- Apply a continuous bead of high-quality silicone sealant around the entire rim of the bath. Allow the sealant to cure as per the manufacturer's instructions.

### Construction Adhesive Method

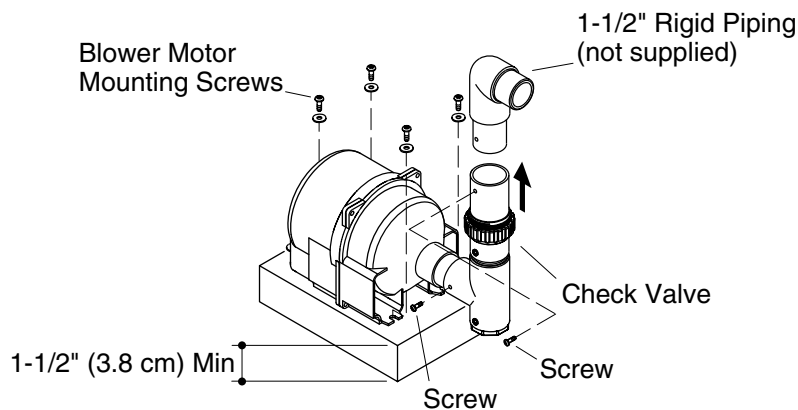
- Apply a generous amount of high-quality construction adhesive to the bottom of the leveling blocks.
- With help, carefully move the bath into the installation area.
- Verify the leveling blocks are resting directly on the subfloor. Reposition or shim as needed.
- Verify the bath is level across the top of the bath. If the bath is not level, shims must be used under the bath.

### **Secure the Subfloor - (cont.)**

- Connect the drain tailpiece to the trap.
- Remove the protective tape from the rim.
- Apply a continuous bead of silicone sealant around the entire rim of the bath. Allow the sealant to cure as per the manufacturer's instructions.

### **Silicone Sealant Method**

- With help, carefully move the bath into the installation area.
- Verify the leveling blocks are resting directly on the subfloor. Reposition or shim as needed.
- Verify the bath is level across the top of the bath. If the bath is not level, shims must be used under the bath.
- Connect the drain tailpiece to the trap.
- Remove the protective tape from the rim.
- Apply a continuous bead of silicone sealant around the entire rim of the bath. Allow the sealant to cure as per the manufacturer's instructions.



## 9. Mount the Blower Motor - Remote Blower Installation

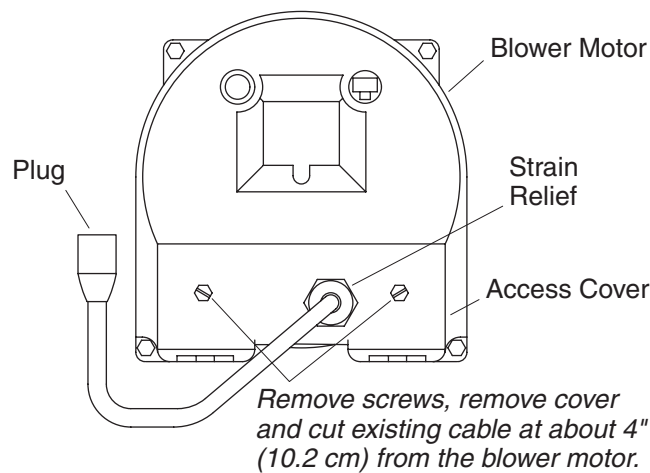
**NOTE:** Do not mount the blower motor with the blower motor discharge pointing up.

**NOTE:** The check valve must be relocated with the blower motor. At the new location, the check valve must be no lower than 24" (61 cm) below the rim of the bath. The check valve must be within 12" (30.5 cm) of the blower motor. The check valve must be oriented vertically with the flow arrow pointing up.

**NOTE:** Refer to the "Before You Begin" section for other detailed requirements for the blower motor relocation.

- At the new blower motor location, install a minimum 1-1/2" (3.8 cm) high block (not supplied) for the blower motor support.
- Use the blower motor as a template to mark the location of the four mounting bolts or screws.
- Drill four 1/8" (3 mm) pilot holes for the blower motor mounting screws.
- Install and support PVC or other 1-1/2" rigid piping (not supplied) between the blower motor location and the bath air harness.
- Connect the new piping to the existing air harness without modifying the air harness. Align the new pipe and secure the connection with PVC cement. **Allow the PVC cement to cure according to the manufacturer's instructions.**
- Connect the check valve assembly to the new piping. Align the new pipe with the check valve assembly and drill a hole for the existing mounting screw. Use silicone or equivalent sealant at the connection and reuse the screw that was removed previously. Allow the sealant to cure according to the manufacturer's recommendations.
- Apply silicone or equivalent sealant to the lower connection of the check valve assembly.
- Align the blower motor with the lower connection of the check valve assembly. Position the motor on the support block. Reinstall the retaining screw. Allow the sealant to cure according to the manufacturer's recommendations.
- Fasten the blower motor to the new support block with the retained mounting screws.





## 10. Connect the Cable at the Blower - Remote Blower Installation

### Route the Power Cable

- Route two conductors with ground 18 AWG or equivalent power cable (not supplied) between the bath and blower motor locations. Follow all applicable electrical and fire codes. Ensure that the cable jacket meets applicable code requirements and the cable is properly supported and protected.

### Prepare the Blower for Remote Installation

- Loosen the cable strain-relief nut on the blower motor. Push the nut back on the cable to provide clearance for the cover removal.
- Remove the two access cover screws from the back of the blower motor. As you are loosening the screws, check periodically if the cover can be slid back on the electrical cable.
- When the cover is loose, use electrician pliers or equivalent to cut the electrical cable at a point about 4" (10.2 cm) from where the cable disappears into the blower motor housing.
- Pull the free end of the electrical cord through the cover, insert, and strain relief nut.
- Discard the existing strain relief nut and insert.
- Reconnect the blower motor plug to the control.
- Install a standard NPT threaded strain relief to the blower motor cover.
- Temporarily store the removed components in a safe location.

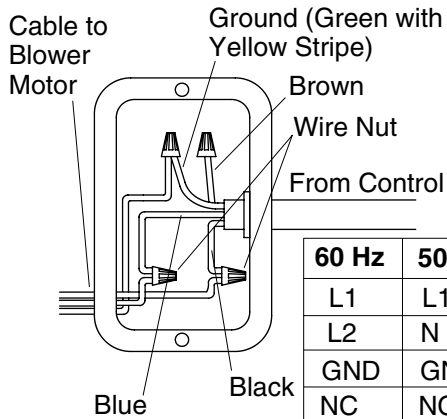
### Connect the New Power Cable at the Blower Motor

- At the blower motor 4" (10.2 cm) pigtail lead, strip back the cable jacket about 3" (7.6 cm).
- At the newly installed blower motor power cable, strip back the cable jacket about 2" (5.1 cm).
- For installations in the United States, mark any white conductors with red or black tape as required by the NEC.
- Strip the wire insulation about 3/8" (1 cm) from the blower motor pigtail leads and from the power cable leads.
- Route the new power cable leads through the blower motor access cover and strain relief.
- Using wire nuts or other approved termination methods, terminate the conductors as follows:
  - Connect the black pigtail lead to the L1 conductor of the power cable.
  - Connect the blue pigtail lead to the L2 conductor of the power cable.
  - Connect the green with yellow stripe pigtail lead to the grounding or earthing conductor of the power cable.
  - The brown wire is not used, and should be terminated with a wire nut.

**Connect the Cable at the Blower - (cont.)**

- With the two screws, reinstall the access cover on the blower motor.
- Tighten the strain relief on the power cable at the blower motor.
- Remove any dust or debris from the blower motor area.

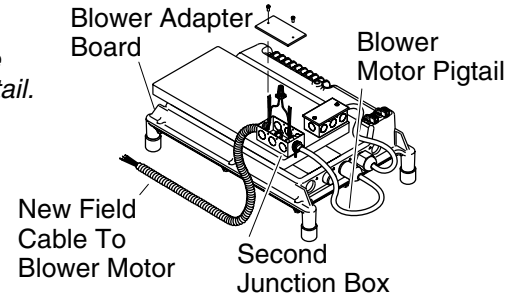
## Second Junction Box



| 60 Hz | 50 Hz | From Control          |
|-------|-------|-----------------------|
| L1    | L1    | Black                 |
| L2    | N     | Blue                  |
| GND   | GND   | Green w/Yellow Stripe |
| NC    | NC    | Brown                 |

Strip back the jackets about 3" (7.6 cm) on the field cable and on the blower motor pigtail. Then cut the unused fourth conductor brown wire off at the point that the cable jacket ends.

## Control Power Junction Box



Route the cut end of the cord to the new junction box. Add strain relief. Install junction box with cover and bonding lug (not provided).

## 11. Install the Power Cord at the Control - Remote Blower Installation

### Install the Second Junction Box on the Control

- Install a second junction box with external bonding lug, two strain reliefs, and a cover (not supplied) on the blower adapter board on the control.
- Connect a solid copper 8 gauge bonding wire from the bonding lug on the new junction box to the spare bonding lug on the control. Follow all local electrical codes.

### Reconnect the Blower Motor Power Cord

- If required, reconnect the blower motor power cord at the control.
- Route the power cord through a strain relief on the second junction box. Tighten the strain relief.
- At the end of the cut power cord, strip back the cable jacket about 3" (7.6 cm).
- Using a wire nut, cap off the unused brown conductor in the cable jacket.
- Strip the wire insulation about 3/8" (1 cm) of the remaining wires from the control.

### Reconnect the Blower New Power Cable

- Route the new power cable from the blower through the other strain relief on the second junction box. Tighten the strain relief.
- Strip back the cable jacket about 3" (7.6 cm).
- For installations in the United States, mark the white wire with either red or black electrical tape as required by the NEC.
- Strip the end of the wires about 3/8" (1 cm).
- Use approved termination devices to terminate the conductors as follows:
  - Connect the black pigtail lead to the L1 conductor of the power cable.
  - Connect the blue pigtail lead to the L2 conductor of the power cable.
  - Connect the green with yellow stripe pigtail lead to the grounding or earthing conductor of the power cable.
  - The brown wire is not used and should be capped with a wire nut.
- Install the cover on the new junction box.

## 12. Install the Plumbing



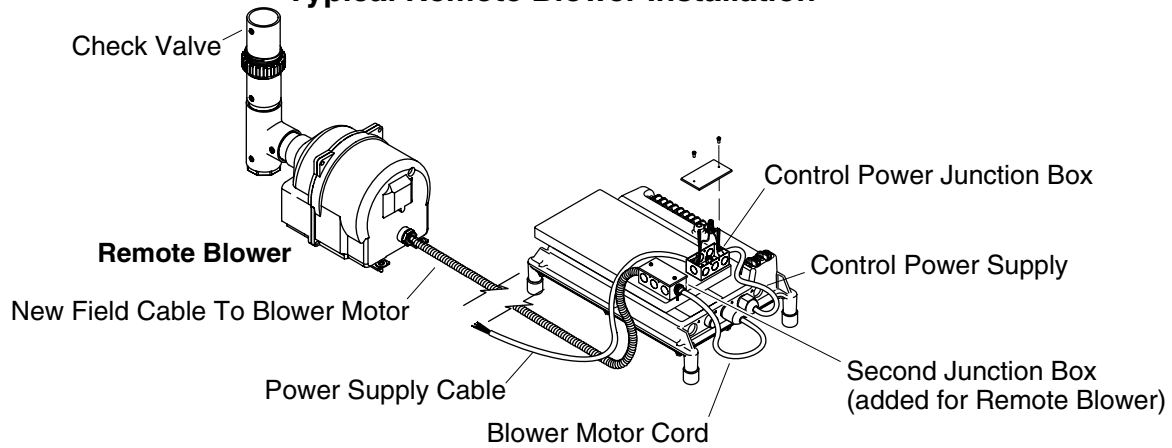
**CAUTION: Risk of property damage.** A watertight seal must exist on all bath drain connections. The watertight seal will prevent property damage.

- 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 bath, and check the drain connections for leakage.

## Typical Remote Blower Installation



## 13. Make Power Connections



**WARNING: Risk of electric shock.** To reduce the risk of electric shock, connect the control to a properly grounded Ground-Fault Circuit-Interrupter (GFCI) or Residual Current Device (RCD). This will provide additional protection against line-to-ground shock hazard. A dedicated 220-240 V, 15 A, 50/60 Hz circuit is required.

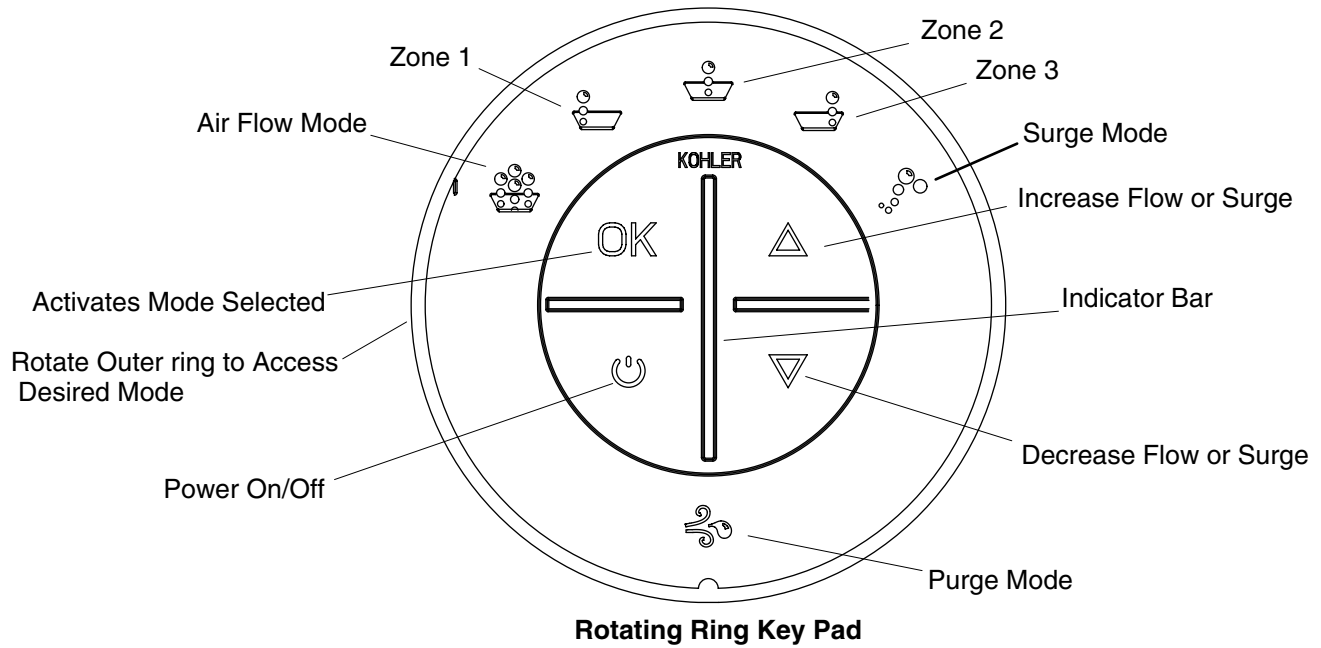


**WARNING: Risk of electric shock.** Make sure the power has been disconnected before performing the following procedures.

**NOTE:** The model number and electrical rating for the bath is printed on a label near the bath blower motor.

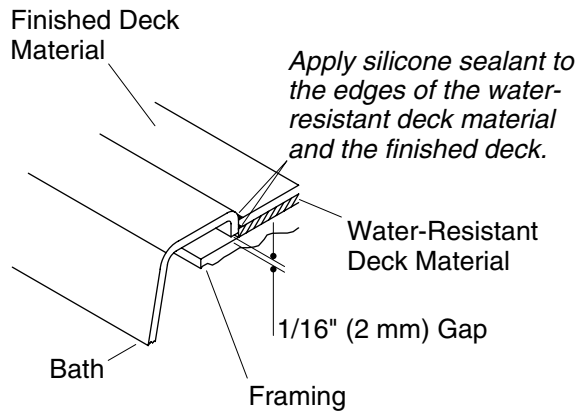
- Ensure that the control power supply cord is properly routed to the control power junction box. The control power supply cord contains a brown wire (Line 1), a blue wire (Line 2), and a green wire with a yellow stripe (ground or earth).
- Install a strain relief (not provided) for the power supply cable to the control power junction box.
- Route the power supply cable to the control power junction box.
- As required, strip the jacket and wire insulation on both cables to make the connections.
- For installations in the United States, mark any white conductor in the supply power wiring with red or black tape as required by the NEC.
- Connect service to the control power junction box.
- Provide a separate equipment earthing or grounding conductor to the spare earth/ground lug located on the control power junction box. This conductor **must not** be connected to any current-carrying conductor. Follow local electrical codes.
- Bond in accordance with national and local codes.
- Clean the area of all dust and debris.
- All wiring harnesses have been pre-wired at the factory. Ensure that all wires are securely fastened.

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



## 14. Test Run the Bath with Airjets

- For additional information on bath with airjets operation, see "Confirm Proper Operation" section.
- Check all electrical connections, and make sure the electrical power to the bath is turned on.
- Make sure all PVC piping connections are properly made.
- Temporarily remove the protective drop cloth from the bath.
- Ensure that the area around the blower motor is clean and free of dust or debris.
- Fill the bath to a level at least 2" (5.1 cm) above the top of the highest airjet.
- Press the power button to start the bath.
- Observe that air flow is present in all three zones of the bath with airjets.
- Check all bath PVC connections for leaks.
- Stop the blower.
- Check for any water leakage at the bath, the bath drain, and the air harness.
- Test other features as desired by rotating the outer ring on the keypad and pressing "OK."
- Drain the bath and observe that the purge cycle starts.
- Allow the automatic purge cycle to complete.
- Reinstall the protective drop cloth in the bath.
- Turn off power to the unit.



## 15. Complete the Finished Deck

### For Drop-In Installations

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

### For Island Installations

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

### For All Installations

- Clean the area around the blower motor of all dust and debris.
- Use warm water and a liquid detergent to clean the surface of the bath. **Do not use abrasive cleansers**, as they may scratch and dull the bath surface. **Do not use powdered cleaners unless the cleaner is fully dissolved in water.** Solid substances could block the airjets. **Do not use bleach or ammonia cleaning solutions.** Chemically active cleaning solutions can damage the bath surface. Refer to the homeowners guide for normal cleaning recommendations.

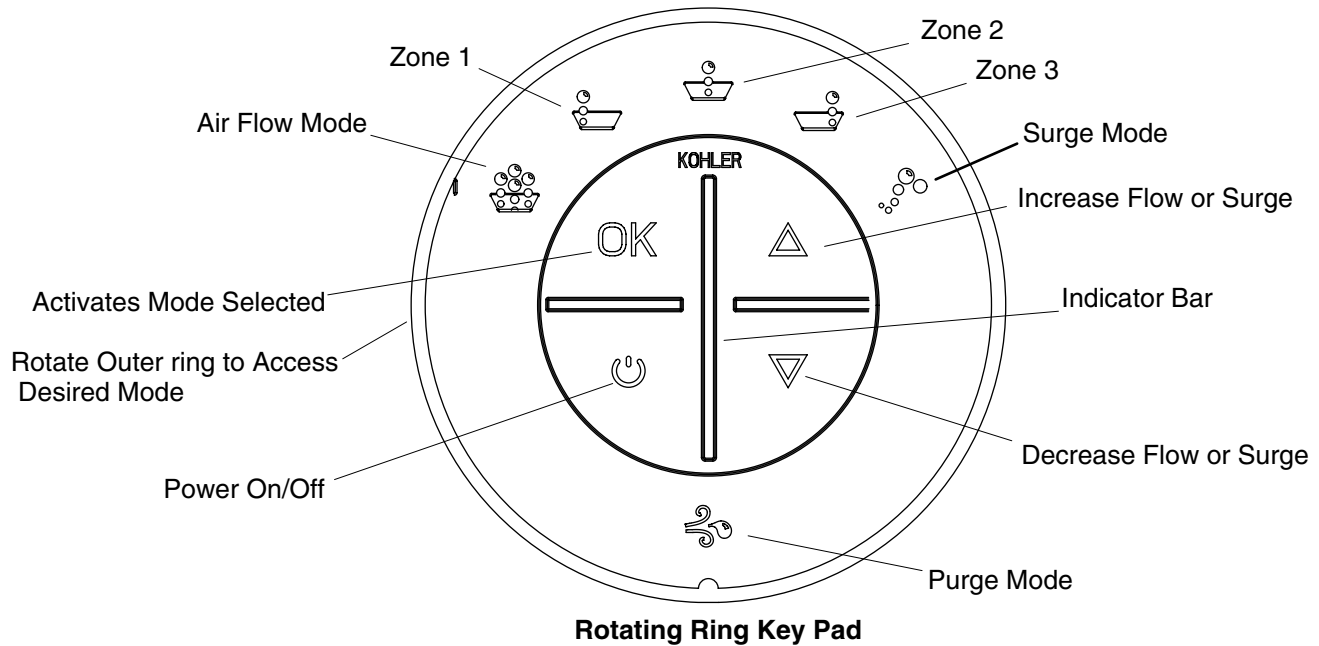
## 16. Complete the Concrete Installation

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

## 17. Clean-Up After Installation

- Clean the area around the blower motor of all dust and debris.
- Use warm water and a liquid detergent to clean the surface of the bath. **Do not use abrasive cleansers**, as they may scratch and dull the bath surface. **Do not use powdered cleaners unless the cleaner is fully dissolved in water.** Solid substances could block the airjets. **Do not use bleach or ammonia cleaning solutions.** Chemically active cleaning solutions can damage the bath surface. Refer to the Homeowners Guide for normal cleaning recommendations.



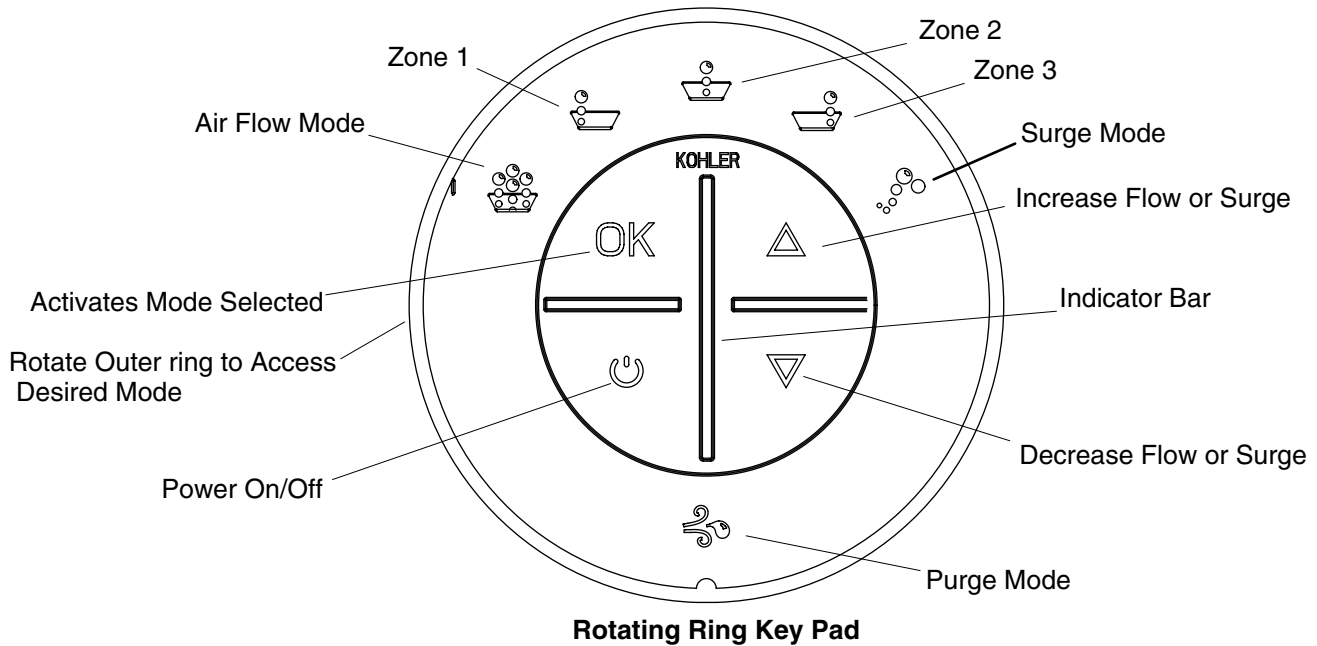


**Rotating Ring Key Pad**

## 18. Confirm Proper Operation

Available modes/features will be illuminated in blue. Active modes will be illuminated in green.

|                      |   |
|----------------------|---|
| <b>Power On/Off</b>  | Turns the blower motor on and off.  |
| <b>Outer Ring</b>    | Rotate the outer ring to the desired mode. The selected mode will flash blue.   |
| <b>OK</b>            | Activates the desired mode. The active mode will flash green.   |
| <b>Air Flow Mode</b> | Air flow is directed through any combination of the airjets in the selected zones. Adjust the air flow with the arrow buttons. When the surge mode is selected, the air flow mode stops. When the air flow mode is selected while operating in the surge mode, the surge mode stops.  |
| <b>Zone 1</b>        | Selects or deselects the air flow through Zone 1.   |
| <b>Zone 2</b>        | Selects or deselects the air flow through Zone 2.   |
| <b>Zone 3</b>        | Selects or deselects the air flow through Zone 3.   |
| <b>Surge Mode</b>    | When active, the air flow ramps up from minimum to maximum and then down again to minimum. Adjust the surge speed between 10 seconds and 60 seconds by using the up or down buttons. Select or deselect zones when in the surge mode.   |
| <b>Up Arrow</b>      | Increases the air flow when the air flow mode is active. Increases the pulse speed when the surge mode is active.   |
| <b>Indicator Bar</b> | Shows the air flow volume when operating in the air flow mode. Shows the surge speed when operating in the surge mode.  |
| <b>Down Arrow</b>    | Decreases the air flow when the air flow mode is active. Decreases the pulse speed when the surge mode is active.   |
| <b>Purge Mode</b>    | Select to initiate the purge mode manually. The purge cycle will not start if there is water in the bath. The purge mode blows any residual water out of the air channels. The blower motor starts and runs at a low speed for about two minutes. An automatic purge cycle occurs when the bath is drained and the water level falls below the level sensors.   |
| <b>Sleep Mode</b>    | To enhance your bathing experience, the keypad is programmed to darken after approximately 15 seconds of inactivity. Only the last feature selected will remain illuminated. To resume normal operation, press any key or turn the outer ring. Approximately 60 seconds after all equipment is turned off, the keypad will darken completely to conserve power. Press the power button or turn the outer ring to reactivate the keypad. |



## 19. Operating Sequence

### Preliminary Checks

- Temporarily remove all access panels.
- Ensure that the area around the blower motor is free of sawdust, insulation, dirt, or other small loose debris. Such material could clog the blower motor's air ducts and reduce the air flow through the blower motor.
- Make sure the union connection at the check valve is securely hand tightened.
- Check that the piping from the blower motor and the check valve to the butterfly valves is properly connected and supported.
- Ensure that cable ties or other clips support the air piping and electrical harnesses at the bath.
- Ensure that any unused electrical connectors are supported above the floor.
- Turn on power to the unit.

**NOTE:** Troubleshoot any problems using the "Troubleshooting" section.

### Confirm Blower Motor Operation

- Fill the bath to a level at least 2" (5.1 cm) above the top of the highest airjet.
- Press the power button on the user keypad.
- Observe that the user keypad icons illuminate. The air flow mode icon and the chromatherapy cycle icon (if provided) are lighted green. The Zone 1, Zone 2, and Zone 3 icons are also illuminated green since all three zones are activated.
- Observe that the blower motor starts at a midrange speed.

**NOTE:** The purge cycle mode cannot be selected while there is water in the bath.

- Rotate the rotating ring through each of the available icon positions.
- Verify that, as each icon is selected, it begins flashing. If the mode is operating, the light will flash green. If the mode is not operating, the icon will flash blue.
- Verify that, as each icon is deselected, it stops flashing.

### **Operating Sequence (cont.)**

- Select and activate the air flow mode icon.
- Press the up or down button to verify the air flow increases or decreases.

### **Confirm Individual Zone Control**

- Select and deactivate Zone 1.
- Verify that air stops flowing in the corresponding zone.
- Activate Zone 1.
- Repeat for Zones 2 and 3.

### **Confirm Surge Mode Operation**

**NOTE:** The surge mode cycles the speed of the blower motor between maximum and minimum settings over an adjustable period of time. Six cycle times are available ranging from about 10 seconds to about one minute. The up and down buttons control the cycle time when in the surge mode. The surge mode will operate with any zone or all zones selected. The indicator bar shows the speed of the surge mode.

- Select and activate the surge mode.
- Verify that the air flow cycles between minimum and maximum.
- Increase or decrease the speed of the surge cycle by pressing the up or down button.
- Turn the unit off.

### **Automatic Purge Cycle Operations**

**NOTE:** The automatic purge cycle occurs after the bath is drained. It operates at low speed for about two minutes to remove any residual water from the air channels.

- If required, fill the bath to a level at least 2" (5.1 cm) above the top of the highest airjet.
- Drain the bath.
- When the water level drops below the level sensor probes, verify that the blower motor starts at low speed.
- After about two minutes, verify that the blower motor stops.

### **Manual Purge Cycle Operation**

- With the bath drained, rotate the ring on the user keypad to the purge cycle icon.
- Press the "OK" button.
- Observe that the blower motor starts in purge cycle to blow any residual water from the air channels.
- After the blower motor has operated for about two minutes, observe that the blower motor stops.

## **20. Troubleshooting Procedures**

**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.

## Troubleshooting Procedures (cont.)

| Symptoms   | Probable Causes   | Recommended Action   |
|--|---|--|
| 1. User keypad does not illuminate when power button is pressed or the outer ring is rotated.                          | A. No power to control.   | A. Check wiring and connect power.   |
|  | B. Ground-Fault Circuit-Interrupter (GFCI) or Residual Current Device (RCD) tripped.        | B. Reset GFCI or RCD. If it trips again, refer to "Ground-Fault Circuit-Interrupter (GFCI) or Residual Current Device (RCD) trips when bath with airjets is turned on".  |
|  | C. Wiring harness from user keypad to control is loose, disconnected or damaged.            | C. Check wiring for proper connections. Replace the wiring harness if necessary.   |
|  | D. User keypad does not work.   | D. Replace the user keypad.  |
|  | E. Control does not work.   | E. Replace the control.  |
| 2. Ground-Fault Circuit-Interrupter (GFCI) or Residual Current Device (RCD) trips when bath with airjets is turned on. | A. Electrical harness is wet or damaged.  | A. Check for wet connections. Dry the connections and repair the leak. Check for insulation or connector damage. Replace the harness if damaged.   |
|  | B. Electrical wiring to the bath junction box is wet or damaged.                            | B. Have a qualified electrician diagnose and correct the problem in accordance with applicable building and electrical codes.  |
|  | C. Electrical wiring to the bath power cord is wet or damaged.                              | C. Have a qualified electrician diagnose and correct the problem in accordance with applicable building and electrical codes.  |
|  | D. Blower motor is shorted internally.  | D. Replace the blower motor.   |
|  | E. Control is shorted internally.   | E. Replace the control.  |
| 3. User keypad is illuminated, but does not respond to buttons or outer ring.  | A. Control program is locked.   | A. Reset GFCI or RCD.  |
|  | B. P5 plug assembly harness from user keypad to control is loose, disconnected, or damaged. | B. Check wiring for proper connections. Replace the wiring harness if necessary.   |
|  | C. User keypad does not work.   | C. Replace the user keypad.  |
|  | D. Control does not work.   | D. Replace the control.  |
| 4. Blower motor will not start.  | A. Power cord from blower motor to control is loose, disconnected, or damaged.              | A. Check wiring for proper connections.  |
|  | B. Blower motor does not work.  | B. Replace the blower motor.   |
|  | C. Control does not work.   | C. Replace the control.  |
| 5. Blower motor stops running and will not immediately restart. Keypad is illuminated.                                 | A. Blower motor overheated and protection device activated.                                 | A. Check for blockage at motor vents. Remove blockage and allow motor to cool. Refer to dealer or wholesale distributor. Otherwise, refer to "User keypad is illuminated, but does not respond to buttons or outer ring. Blower motor will not start." |

## Troubleshooting Procedures (cont.)

| Symptoms  | Probable Causes   | Recommended Action  |
|---|---|---|
| 6. Blower motor starts, some but not all airjets are bubbling.  | A. Blower motor speed is too low.                       | A. Increase speed set point to blower motor.  |
|   | B. Blower motor inlet is blocked.                       | B. Clean blower motor inlet.  |
|   | C. Blower motor does not work.                          | C. Replace the blower motor.  |
|   | D. Blower motor discharge is blocked.                   | D. Check blockage.  |
|   | E. Check valve does not work.                           | E. Replace the check valve.   |
|   | F. Air jets are clogged.                                | F. Use a small between-the-teeth dental brush and white vinegar. Dip the brush in the vinegar, brush the hole, rinse the brush in clean water, and then use the wet rinsed brush to rinse the hole. |
|   | G. Some zones are closed.                               | G. Operate all zones.   |
| 7. Blower motor runs but no air bubbles are formed.   | A. Blower motor inlet is blocked.                       | A. Clean blower motor inlet.  |
|   | B. Air jets are clogged.                                | B. Use a small between-the-teeth dental brush and white vinegar. Dip the brush in the vinegar, brush the hole, rinse the brush in clean water, and then use the wet rinsed brush to rinse the hole. |
|   | C. Check valve does not work.                           | C. Replace the check valve.   |
|   | D. Blower motor does not work.                          | D. Replace the blower motor.  |
|   | E. Control does not work.                               | E. Replace the control.   |
| 8. Blower motor operates, air bubbles are formed, zone controls work, but variable speed feature does not work. | A. Blower motor inlet is blocked.                       | A. Clean blower motor inlet.  |
|   | B. Loose, disconnected, or damaged wiring harness.      | B. Check wiring for proper connections. Replace the wiring harness if necessary.  |
|   | C. User keypad does not work.                           | C. Replace the user keypad.   |
|   | D. Blower motor does not work.                          | D. Replace the blower motor.  |
|   | E. Control does not work.                               | E. Replace the control.   |
| 9. Blower motor won't turn off when the power button on user keypad is pressed.                                 | A. User keypad does not work.                           | A. Replace the user keypad.   |
|   | B. Loose, disconnected, or damaged wiring harness.      | B. Check wiring for proper connections. Replace the wiring harness if necessary.  |
|   | C. Control does not work.                               | C. Replace the control.   |
| 10. A zone does not produce air bubbles but another zone operates normally.                                     | A. Zone is not selected.                                | A. Select the zone according to the instructions in the "Confirm Proper Operation" section.   |
|   | B. Butterfly valve does not work.                       | B. Replace the butterfly valve.   |
|   | C. Loose, disconnected, or damaged wiring harness.      | C. Check wiring for proper connections. Replace the wiring harness if necessary.  |
|   | D. User keypad does not work.                           | D. Replace the user keypad.   |
|   | E. Control does not work.                               | E. Replace the control.   |
| 11. Surge mode does not work.   | A. User keypad does not work.                           | A. Replace the user keypad.   |
|   | B. Control does not work.                               | B. Replace the control.   |
| 12. Water spillage or damage observed under the bath.   | A. Drain or overflow leaking.                           | A. Repair or replace the drain assembly according to the manufacturer's instructions.   |
|   | B. Wall, deck, and/or shower door is improperly sealed. | B. Apply silicone sealant at the seams between the bath and the wall, deck, or door.  |

**Troubleshooting Procedures (cont.)**

| <b>Symptoms</b>                               | <b>Probable Causes</b>                         | <b>Recommended Action</b>                 |
|---|--|---|
|   | <b>C.</b> Cracked acrylic air channels.        | <b>C.</b> Refer to the manufacturer.      |
| <b>13.</b> Bath does not purge automatically. | <b>A.</b> Level sensor wires are disconnected. | <b>A.</b> Connect the level sensor wires. |



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