



Portrait™ 5.5' Whirlpool Baths:

K-1457-AA

K-1457-JA-AA

K-1457-J1-AA

INSTALLATION INSTRUCTIONS



IMPORTANT SAFETY INSTRUCTIONS

ATTENTION INSTALLER: INSTRUCTIONS PERTAINING TO RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS

READ AND FOLLOW ALL INSTRUCTIONS



WARNING: When using this unit, always follow basic precautions, including the following:



DANGER: RISK OF ELECTRICAL SHOCK. The installation must have a Class A Ground-Fault Circuit-Interrupter (GFCI) for the whirlpool system.

This will provide additional protection against line-to-ground shock hazard.

Such a GFCI should be provided by the installer and should be tested on a routine basis.

To test the GFCI, press the test button. The GFCI should interrupt power. Press the reset button. Power should be restored.

If the GFCI fails to operate in this manner, there is a ground current flowing or the GFCI is defective. The possibility of an electric shock may exist. DO NOT use this unit. Disconnect the unit and have the problem corrected by a qualified licensed electrician.

For -J1 and -JA models only: A green colored terminal (or a wire connector marked "G", "GR", "GROUND", or "Grounding") is provided within the terminal compartment. To reduce the risk of electric shock, connect this terminal or connector to the grounding terminal of your electric service or supply panel with a conductor equivalent in size to the circuit conductors supplying this equipment.

All models: A pressure wire connector is provided on the exterior of the pump or control box within this unit to permit connection of a No. 8 AWG (8.4 mm²) solid copper bonding conductor between this unit and all other electrical equipment and exposed metal in the vicinity, as needed to comply with local requirements.

DO NOT operate this unit without the guard on the suction fitting.

Never drop or insert any object into any opening.

Use this unit only for its intended use as denoted in this manual. DO NOT use attachments not recommended by the Kohler Co.



DANGER: To reduce the risk of injury, do not permit children to use this unit unless they are closely supervised at all times.

SAVE THESE INSTRUCTIONS

TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS	2	BEFORE INSTALLING UNIT	7
INTRODUCTION	3	Partially Install Bath Drain	7
ROUGHING-IN: K-1457-AA, K-1457-JA-AA, K-1457-J1-AA	4	Protect Bath Unit	7
Ordering Information	4	INSTALL WHIRLPOOL	8
Required Electrical Service	4	Whirlpool Set-In	8
Product Information	4	Height Adjustment	9
Installation Notes	4	Secure Whirlpool	9
PRODUCT NOTICES	5	Install Plumbing	9
Installer Hazard Notification	5	FIELD WIRE ELECTRONICS	10
Factory-Assembled Features	5	Identify Electrical Requirements	10
PRODUCT REQUIREMENTS	5	Wiring Information - 120 V, 60 Hz	10
Summary of Key Requirements	5	Locate Field Wiring Compartment - 120 V, 60 Hz	10
Plumbing Specifications	5	Field Wiring Diagram - 120 V, 60 Hz	11
Product Inspection	5	Field Wiring Control Box	
Connections and Service Access	5	Compartment - 230 V, 50 Hz	11
Electrical Requirements	6	Connect Control Box - 230 V, 50 Hz	12
INSTALLATION REQUIREMENTS	6	WATER TEST WHIRLPOOL & ELECTRONICS ..	12
Tools Required	6	COMPLETE FINISH WALL	12
Materials Required	6	COMPLETE INSTALLATION	13
Clearance Requirements	6	Install Handles and Spout	13
New or Replacement Installation Requirements	6	Install Whirlpool Trim Kit	13
SITE REQUIREMENTS	7	CLEAN-UP AFTER INSTALLATION	13
Old Bath Removal	7	CONFIRM PROPER OPERATION	14
Subfloor Preparation	7	Start-Up Whirlpool	14
Stud Pocket Preparation	7	Operating Sequence	14
Plumbing Preparation	7	Troubleshoot Whirlpool System	15

INTRODUCTION

Please read these instructions carefully to familiarize yourself with the required tools, materials, and installation sequences. Follow the sections that pertain to your particular installation. This will aid you in avoiding the unnecessary expense associated with improper installation. In addition to proper installation, read all operating and safety instructions.

The variety of installations possible with this whirlpool may require framing procedures other than those described in this manual.

All information in this manual is based on the latest product information available at the time of publication. Kohler Co. reserves the right to make changes in product characteristics, packaging, or availability at any time without notice.

Identify and record below the model and serial number (found at the pump end of the whirlpool):

Model No. _____ Serial No. _____ Date of Manufacture _____

1. ROUGHING-IN: K-1457-AA, K-1457-JA-AA, K-1457-J1-AA

A. ORDERING INFORMATION

Factory installed components include pump with integral timer, and air switch transmitter.

Accessories/hardware:		
Jet trim kit	K-9698	required
Drain	K-7161-AF	recommended

B. REQUIRED ELECTRICAL SERVICE

Dedicated circuits required, protected with Class A Ground-Fault Circuit-Interrupter (60 Hz) or ELCB (50 Hz):

Pump/control	120 V., 15 A, 60 Hz or 230 V., 15 A, 50 Hz
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C. PRODUCT INFORMATION

Fixture:	basin area	top area	weight
Bathing well	50" x 29"	61" x 32"	120 lbs.
	water depth	capacity	
To overflow	16"	100 gals.	

Pump, 1-speed:	low	V	Hz	A
60 Hz	3/4	120	60	10
50 Hz	3/4	230	50	5.5

D. INSTALLATION NOTES

Refer to installation instructions included with fixture before beginning installation.

Fixture should be on job site to determine cut-out dimensions. Use 3/4" inward offset from bath rim.

IMPORTANT: To ensure proper clearance and operation, refer to faucet and drain manufacturer's instructions **before** drilling faucet holes.

If installing a rim-mount faucet, make sure there is no interference with drain overflow and circulating system before drilling any holes. Consult local and national codes for minimum air gap requirements if installing a spout on the faucet deck.

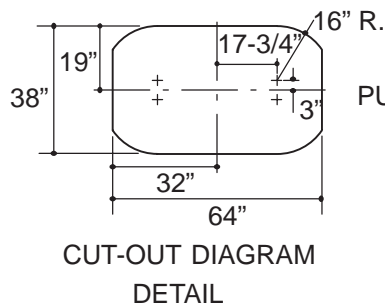
ROUGHING-IN NOTES

Fixture dimensions are nominal and conform to tolerances in ANSI Standard Z124.1.

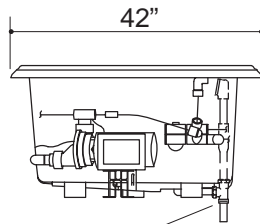
No change in measurements if connected with drain illustrated.

Minimum access:

Pump/control box	20" W x 15" H panel	required
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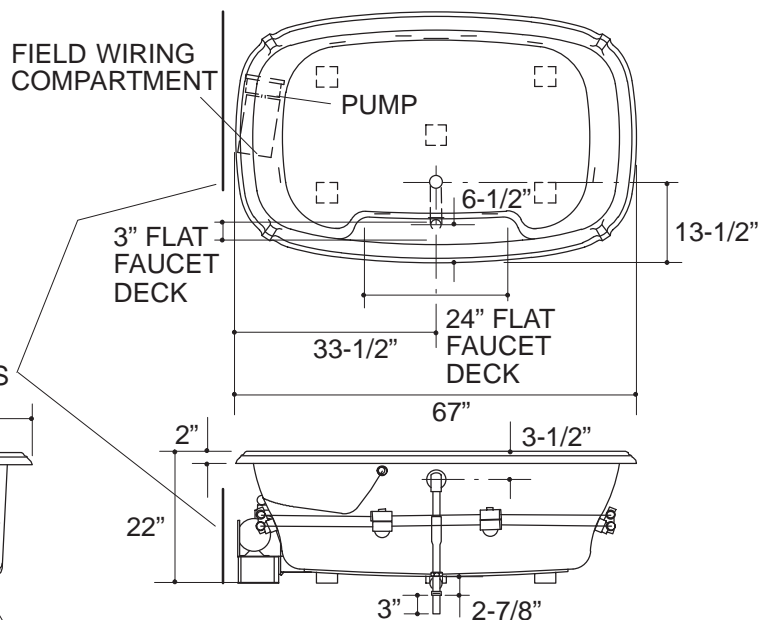


PUMP/CONTROL ACCESS



1-1/2" I.P.S. THR'D.

1-1/2" O.D.



2. PRODUCT NOTICES

A. INSTALLER HAZARD NOTIFICATION



DANGER: Risk of fire, electric shock, or injury to persons. Read important safety instructions on inside front cover of these instructions.



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



WARNING: Risk of electrical shock. Connect only to a circuit protected by a Ground-Fault Circuit-Interrupter (GFCI).



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



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

NOTICE: Follow all local plumbing and electrical codes.

B. FACTORY-ASSEMBLED FEATURES

Factory installed components include pump with integral timer and air switch transmitter. No installation is needed.

The whirlpool pump and piping are factory-assembled.



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.

3. PRODUCT REQUIREMENTS

A. SUMMARY OF KEY REQUIREMENTS

- Install unit to level subfloor.
- Provide properly dimensioned framing.
- Sunken installation is recommended.

B. PLUMBING SPECIFICATIONS

If using a rim mounted bath faucet, flexible connections between the valves and spout may be required. Confirm adequate mounting and connection space of specified faucet for your installation.

Confirm adequate support for faucet; large faucets that may be inadvertently used as a means of support are not appropriate or safe for this installation.

C. PRODUCT INSPECTION

Carefully uncrate and inspect your product for damage. Leave all materials in carton during construction to prevent damage.

NOTICE: Make sure both connections to the whirlpool pump are securely tightened.

D. CONNECTIONS AND SERVICE ACCESS

Before installation, ensure proper access to the final connections.

NOTICE: Provide unrestricted service access to the pump. An access panel 20" W x 15" H minimum must be constructed to allow for sufficient clearance for servicing the pump or controls. The access panel must be located at the pump end of the whirlpool, through an adjoining wall.

E. ELECTRICAL REQUIREMENTS

K-1457-AA: The installation must have a Class A Ground-Fault Circuit-Interrupter (GFCI). The GFCI protects against line-to-ground shock hazard. Use a 120V, 15A, 60 Hz separate service for the whirlpool. Provide a separate equipment grounding conductor for the inside grounding lug. Ground must not be connected to any current-carrying conductor except at the main service breaker box.

K-1457-JA-AA: The installation must have an Earth Leakage Circuit Breaker (ELCB). This will provide additional protection against line-to-ground shock hazard. A 230V, 50 Hz separate circuit that provides 15A of continuous service is required.

4. INSTALLATION REQUIREMENTS

A. TOOLS REQUIRED

- Conventional woodworking tools
- Arc pliers or 14" pipe wrench
- Rule
- Level
- Safety shoes
- Safety glasses
- Square
- Screwdriver
- Pliers
- Utility knife

B. MATERIALS REQUIRED

- Subflooring
- Water-resistant subfloor sealant
- Wall coverings, as necessary
- 2 x 4's
- Nails
- Drop cloth
- Plumbers putty
- RTV silicone sealant
- Four 1/4" x 1" lag screws

C. CLEARANCE REQUIREMENTS

Check roughing-in and room dimensions in order to provide adequate available space for the bath unit.

D. NEW OR REPLACEMENT INSTALLATION REQUIREMENTS

This bath unit can be installed in new or existing bathrooms.

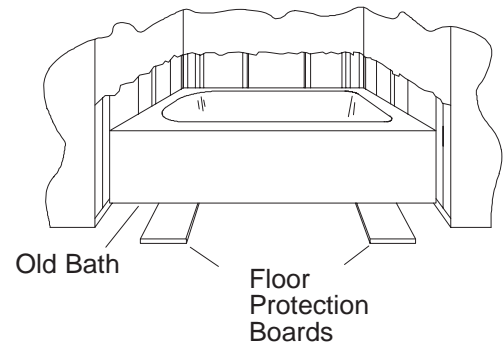
For new installations: position plumbing according to roughing-in dimensions located on page 4. Cap supplies and check for leaks.

For replacement installations: remove old bath, remove old wall material and remove old floor covering from area. Remove old plumbing which does not conform to roughing-in requirements.

5. SITE REQUIREMENTS

A. OLD BATH REMOVAL (IF APPLICABLE)

Disconnect the drain at the trap. Remove old wall material. **Slip boards under old bath feet to protect floor** and slide old bath out of recess as illustrated.



B. SUBFLOOR PREPARATION

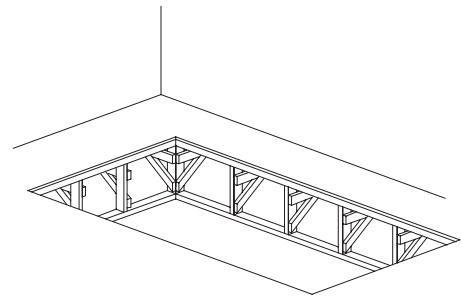
Check flooring under the bath and repair if necessary. Make sure that the subfloor is level. Seal subfloor to reduce the risk of water damage.

C. STUD POCKET PREPARATION

Construct a recess designed for your particular installation. Whirlpool is intended, primarily, for drop-in or sunken installation.

Framing is of 2 x 4 construction. Make sure you allow for access to the pump or power panel in the event the unit requires service. When constructing framing allow for thickness of sub and finished wall materials.

Suggested stud construction is illustrated. Some modifications may be needed for other types of construction, if preferred.



D. PLUMBING PREPARATION

Position plumbing according to roughing-in dimensions. Cap supplies and check for leaks.

6. BEFORE INSTALLING UNIT

A. PARTIALLY INSTALL BATH DRAIN

Install drain on bath/whirlpool according to manufacturer's instructions.

B. PROTECT BATH UNIT

Place a drop cloth or similar material in bath/whirlpool bottom. Be careful not to scratch product.

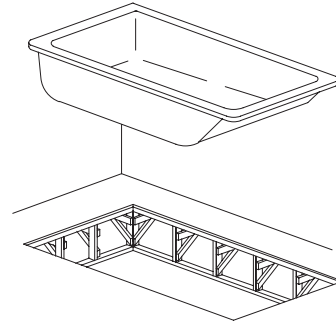
7. INSTALL WHIRLPOOL

A. WHIRLPOOL SET-IN

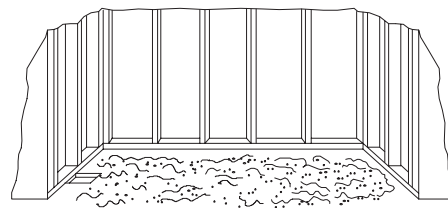
Choose one of the three recommended options below that is best for your particular installation as described in 1., 2., or 3. Follow the appropriate instructions.

If subfloor is not level, some shimming of the bath and pump will be necessary. See 7.B. for height adjustment.

1. **Sunken Installation:** Set unit into sunken installation. Make sure the bath/whirlpool is level and is resting on all blocks. Insert the tailpiece into the trap. Apply a bead of RTV sealant under rim of the bath unit.



2. **Install Using Gypsum:** Place a 2" thick layer of gypsum cement (such as Gyp-Crete 2000) on the floor where the whirlpool is to be set. This will help secure, level and support the bath. Set bath into position. Clear any excess cement from vicinity of the pump.

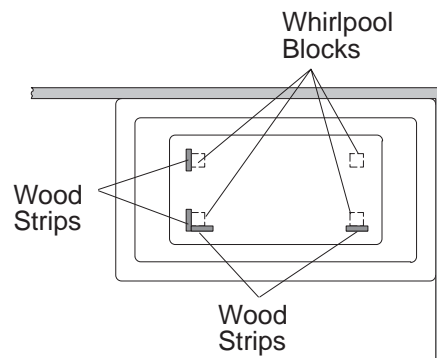


NOTE: Pump bracket must sit flat on the floor.

Insert tailpiece into trap. Make sure bath is level and resting on all supporting blocks.

3. **Install Using 1 x 2 Strips:** Set whirlpool in desired location and level. Nail 1 x 2 wood strips around blocks under the whirlpool to firmly hold it in position. It is not necessary to use strips on all blocks. They are only needed on blocks that are to the outside edges of your installation.

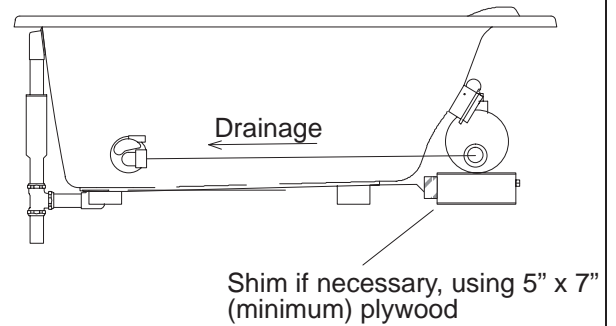
Insert tailpiece into trap. Make sure bath is level and resting on all supporting blocks.



B. HEIGHT ADJUSTMENT

NOTICE: Steps B. and C. are necessary for making your Kohler Whirlpool operate more quietly.

If the subfloor is level, no adjustment is necessary; proceed to Step C. If the subfloor is not level, shim beneath pump bracket (plywood is recommended). Do not change the elevation of the pump relative to the whirlpool bath since this may affect performance. Use a 5" x 7" (minimum) piece of plywood.

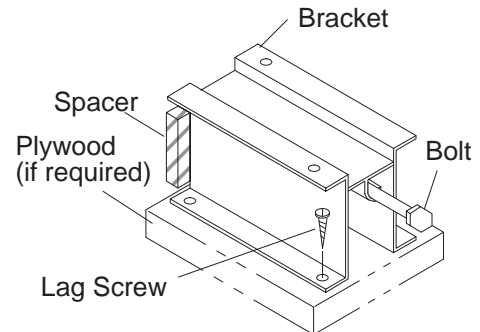


C. SECURE WHIRLPOOL

Using four 1/4" x 1" lag screws, secure pump bracket to subfloor. Predrilling is recommended.

CAUTION: Risk of product damage. Do not use the piping or pump for structural support or positioning of whirlpools.

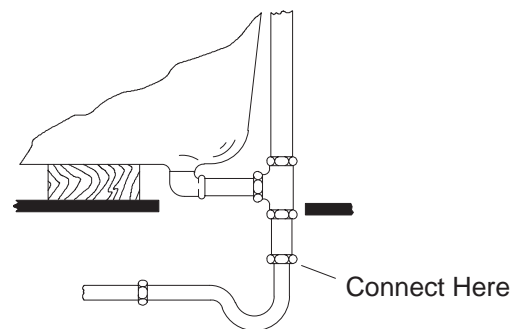
Use a 1/2" wrench to remove the long bolt securing the bracket to the bath. Discard the bolt and spacer located behind bracket.



D. INSTALL PLUMBING

CAUTION: Risk of damage to whirlpool bottom and subfloor. Ensure watertight seal on bath drain connections.

1. When whirlpool is securely positioned, connect drain into trap. An access panel will simplify future maintenance.



2. Install the faucet valving and spout tee. The deck must be finished before handle trim and spout can be installed. Open hot and cold valves and check all supply connections for leaks.

3. Run water in whirlpool and check drain connection for leaks.

8. FIELD WIRE ELECTRONICS

A. IDENTIFY ELECTRICAL REQUIREMENTS

The model number is printed on a plate at the pump end of the module.

The model number identifies electrical rating. Electrical connections for each model vary.

- K-1457-AA: 60 Hz
(Follow Step B. below.)
- K-1457-J1-AA: 60 Hz
(Follow Steps C. and D. below.)
- K-1457-JA-AA: 50 Hz
(Follow Steps E. and F. below.)

See Electrical Requirements section on page 6 of Product Requirements.

B. WIRING INFORMATION - 120V, 60 HZ (EXCLUDING -J1 MODELS)

WARNING: Risk of electrical shock. To reduce the risk of electric shock, connect only to a properly grounded, grounding-type receptacle, protected by a Ground-Fault Circuit-Interrupter (GFCI). Do not remove the plug's grounding pin. Do not use a grounding adapter.

Your Kohler Whirlpool bath is equipped with a cord and plug. All wiring of the pump and control has been completed at the factory. A licensed electrician must install a GFCI protected, 120 Volt, 15 Amp, grounded outlet. Your whirlpool may then be plugged into this outlet. No other load should be on this circuit.

C. LOCATE FIELD WIRING COMPARTMENT - 120V, 60 HZ (-J1 MODELS ONLY)

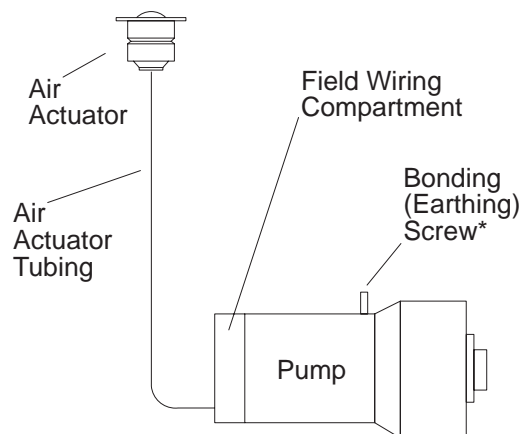
WARNING: Risk of electrical shock. Make sure the power has been disconnected before performing the following procedures. Refer to Important Safety Instructions located on page 2.

CAUTION: Risk of electrical shock. All services must have a Class A Ground-Fault Circuit-Interrupter (GFCI) which will provide additional protection against line-to-ground shock hazard.

A licensed electrician should make a routine service connection to the field wiring compartment of the pump containing black and white wires and ground screw.

NOTE: Electrician must supply a listed strain/relief bushing in accordance with local codes.

* For bonding in accordance with National and Local Codes.



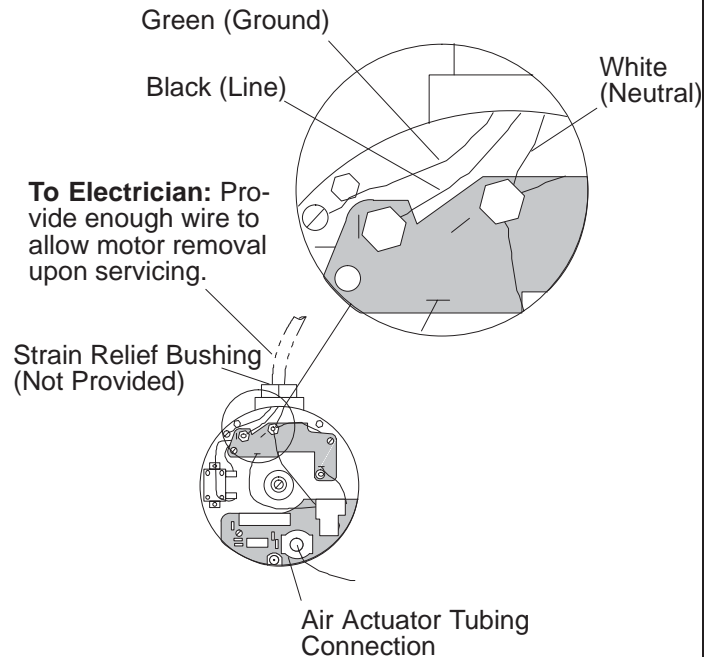
D. FIELD WIRING DIAGRAM - 120V, 60 HZ (-J1 MODELS ONLY)

Remove air actuator tubing from pump by gently pulling. Next, remove the screw at the top of the pump near the strain relief bushing. Save screw. Loosen screw at bottom of pump. Remove pump cover to reveal field wiring compartment.

The factory has prewired the whirlpool control system.

Provide a separate equipment grounding conductor for the inside grounding conductor for the inside grounding screw (14 AWG minimum). Ground **must not** be connected to any current-carrying conductor except at the main service breaker box (per National Electrical Code, Article 250-61-b). A 120 V, 15 A separate circuit is required.

Replace pump cover over field wiring compartment. Fasten screw through cover at hole near strain relief at top of pump. Tighten screw at bottom of pump. Snip off approximately 1" of air actuator tubing and reattach to pump. Make sure tubing is securely attached to pump.



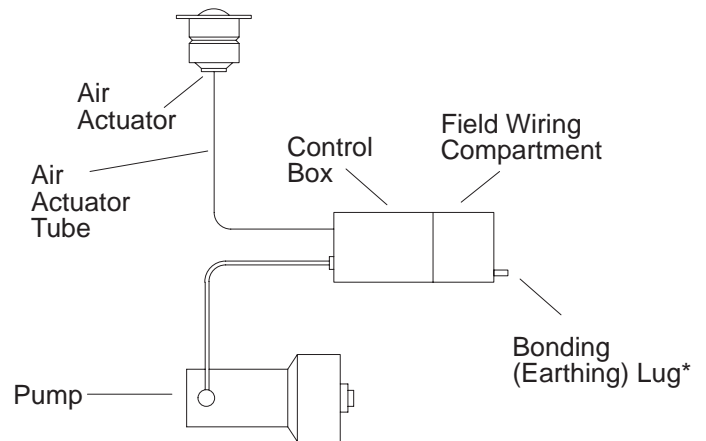
E. FIELD WIRING CONTROL BOX COMPARTMENT - 230V, 50 HZ

⚠ WARNING: Risk of electrical shock. Make sure the power has been disconnected before performing the following procedures. Refer to Important Safety Instructions located on page 2.

⚠ CAUTION: Risk of electrical shock. All services must have an Earth Leakage Circuit Breaker (ELCB) which will provide additional protection against line-to-ground shock hazard. A separate service is required for the whirlpool.

The whirlpool controls and system have been prewired at the factory. A licensed electrician should make a routine service connection to the field wiring compartment of the control box containing blue and brown wires and earth lug.

* For bonding in accordance with National and Local Codes.

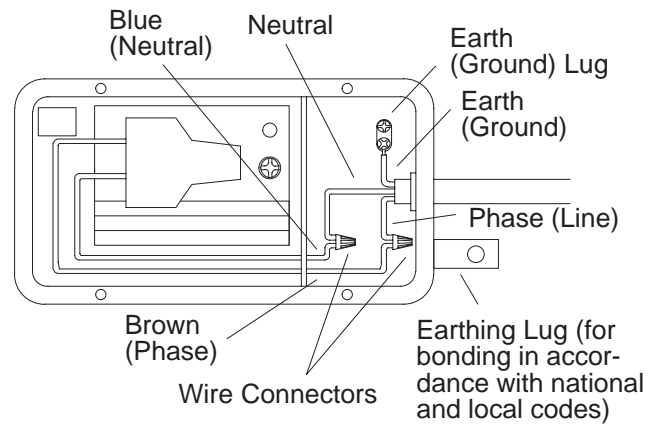


F. CONNECT CONTROL BOX - 230V, 50 HZ

Connect service to the field wiring compartment of the control box. The 50 Hz model control box contains blue and brown wires and earth lug.

A 230V, 15A, 50 Hz dedicated circuit is required. Provide an Earth Leakage Circuit Breaker.

Provide a separate equipment earthing conductor for the inside earth lug. The earthing conductor **must not** be connected to any current carrying conductor. Follow local electrical codes. A 230 V, 15A, 50 Hz separate circuit is required.



9. WATER TEST WHIRLPOOL & ELECTRONICS

Check all electrical connections. Make sure both connections to the pump are securely tightened.

Fill bath to a level at least 2" above the top of the highest jet.

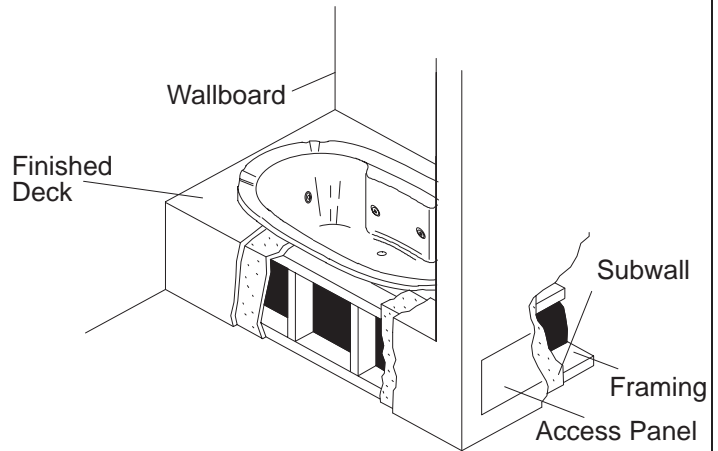
Operate whirlpool for 5 minutes and check all whirlpool harness (piping) connections for leaks.

For additional information on whirlpool operation, see Whirlpool Start-Up Instructions on page 14.

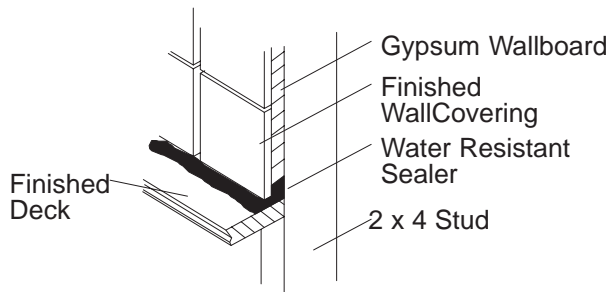
10. COMPLETE FINISH WALL

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

Protect whirlpool surface. Install finished deck. Cover framing and walls with gypsum wallboard.



Tape and mud drywall...seal drywall and joints under bath rim. Install finished wall material to subwall. Seal joints between the whirlpool rim and finished wall using silicone sealant.



11. COMPLETE INSTALLATION

A. INSTALL HANDLES AND SPOUT

After the deck is finished, attach the handles and spout to complete faucet installation per manufacturer's instructions.

B. INSTALL WHIRLPOOL TRIM KIT

Refer to Installation Instructions packed with the trim kit when installing jet trim or suction trim.

12. CLEAN-UP AFTER INSTALLATION

When cleaning up after installation, **do not use abrasive cleaners** as they may scratch and dull the module surface. Use warm water and one of the liquid detergents to clean the surface.

Stubborn stains, paint, or tar can be removed with turpentine or paint thinner. **Do not allow cleaners containing petroleum distillates to remain in contact with whirlpool surfaces for long periods of time.** Plaster can be removed by scraping with a wood edge. Do not use metal scrapers, wire brushes, or other metal tools. One of the powder-type detergents may be used on a damp cloth to provide mild abrasive action to the residual plaster.

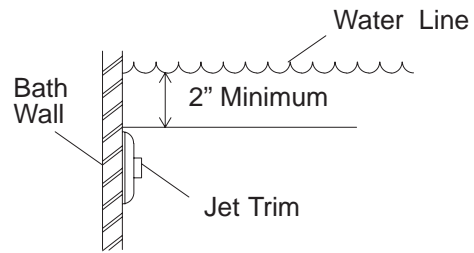
13. CONFIRM PROPER OPERATION

A. START-UP WHIRLPOOL

Refer to Important Safety Instructions on page 2 before operating this whirlpool.

Please perform the following so that the owner may safely receive the benefits of whirlpool bathing.

1. Rotate jets so they are facing down toward basin.
2. Fill the whirlpool bath to a water level at least 2" above the top of the highest jet.



Water temperature in the whirlpool should not exceed 104°F (40°C).

B. OPERATING SEQUENCE

Refer to chart for proper operating sequence.

1. Turn on the whirlpool jets. Adjust each jet for optimum air/water mixture.
2. A built-in timer automatically stops the motor after 20 minutes of operation.

TO	METHOD	OBSERVE
Turn on whirlpool massage.		
Add air to whirlpool action, rotate flange counter-clockwise. To reduce air, turn clockwise.	Reduce Air Add Air	
Shut off whirlpool.		
Restart whirlpool after 20 minute cycle is complete.		

C. TROUBLESHOOT WHIRLPOOL SYSTEM

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

SYMPTOMS	PROBABLE CAUSES	RECOMMENDED ACTION
1. Whirlpool does not start/stop.	A. No power to pump/power module.	A. Set/Reset GFCI/ELCB breaker; check wiring to power module.
	B. Air actuator tubing disconnected, loose, kinked, plugged or damaged.	B. Connect, straighten, clean or replace tubing.
	C. Faulty air actuator.	C. Replace air actuator.
	D. Faulty motor/pump assembly.	D. Rebuild or replace motor and pump assembly.
2. Motor starts, all jets are not functioning.	A. Jet is closed.	A. Rotate jets counterclockwise to open.
	B. Trim kit installed incorrectly.	B. Reinstall trim kit, checking for damage to O-Ring.
	C. Jets are blocked.	C. Remove blockage.
3. Motor turns, water is pumping, but there is no air injection.	A. No aspiration at jets.	A. Rotate jets counterclockwise.
	B. Jet O-Rings are missing.	B. Replace jet O-Rings.
4. Whirlpool stops automatically before 18 minutes.	A. GFCI/ELCB trips.	A. Identify source of fault and correct.
	B. Suction blocked.	B. Remove obstruction.
	C. Jets are blocked.	C. Remove blockage.
	D. Motor overheated and protection device activated.	D. Check for blockage at motor vents. Remove blockage and allow motor to cool. Check for suction blockage. Remove blockage and allow motor to cool. Check for jet blockage. Remove blockage and allow motor to cool.
5. Whirlpool does not automatically stop after 22 minutes.	A. Faulty timer mechanism.	A. Replace timer board.
	B. Wiring error.	B. Refer to dealer.



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