

# Installation Instructions

## In-Wall Tank and Carriage

Record your model number:  
Noter le numéro de modèle:  
Anoté su número de modelo: \_\_\_\_\_

Français, page 15  
Español, página 29

**KOHLER®**

# Thank You for Choosing KOHLER

---

Need help? Contact our Customer Care Center.

USA/Canada: 1-800-4KOHLER (1-800-456-4537)

Mexico: 001-800-456-4537

For service parts information, visit [kohler.com/serviceparts](http://kohler.com/serviceparts).

For care and cleaning information, visit [kohler.com/clean](http://kohler.com/clean).

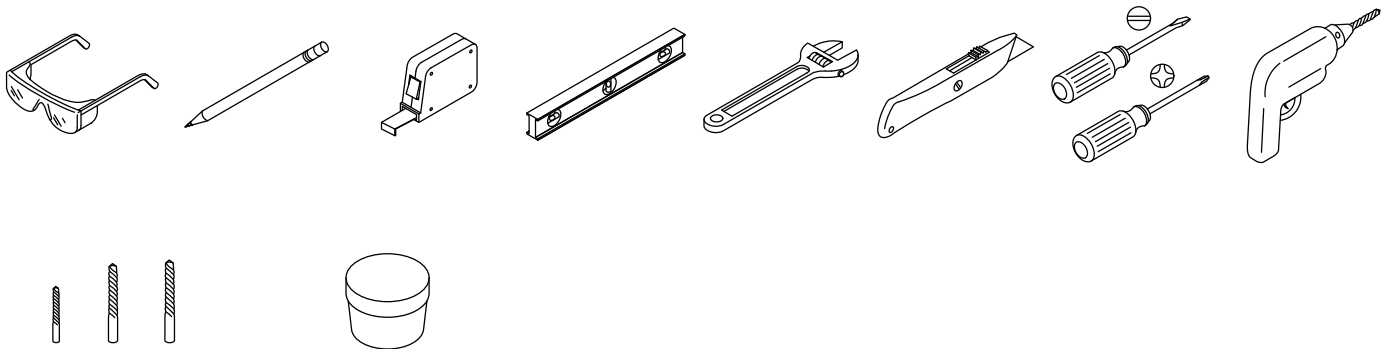
## Warranty

---

This product is covered under the KOHLER® Toilets and Seats Limited Warranty, found at [kohler.com/warranty](http://kohler.com/warranty). For a hardcopy of warranty terms, contact the Customer Care Center.

## Tools and Materials

---




Assorted Drill Bits Silicone Plumbers Grease

### Plus:

- Woodworking Tools and Materials
- 3/8" x 2" (51 mm) Min Lag Bolts
- 3/8" x 2" (51 mm) Min Concrete Expansion Bolts (for concrete subflooring)
- 1/4 Turn, 1/2" NPT Supply Shut-off with 7/8" or Shorter Handle (BrassCraft® G23341X C1 or equivalent)
- Assorted Electrical Tools (Optional)

## Before You Begin

---

 **WARNING: Risk of property or product damage.** Do not use in-tank cleaners. Products containing chlorine (calcium hypochlorite) can damage fittings in the tank. This can cause leakage and property damage.

**IMPORTANT!** Minimum 2x4 framing or larger is required for this installation.

**IMPORTANT!** The water temperature in the tank must remain between 33°F (0.5°C) and 80°F (26.6°C) to avoid freezing and condensation. If installing on an exterior wall, adequate insulation must be used to ensure that the temperature stays in this range.

**NOTE:** If 2x6 framing is used, angle the waste outlet 45 degrees in either direction.

**NOTE:** Do not use this product as a retrofit device for 1.28 gpf (4.8 lpf) water closets.

**NOTE:** Kohler Co. successfully tested this product for compatibility with KOHLER bowls K-6918, K-6299, and K-6300. Performance may vary if this product is used with an incompatible bowl.

**NOTE:** The 1201721 electrical box kit is required when pairing the K-4744 cleansing seat with the bowl.

Unpack and inspect the carrier and tank for damage.

During installation, make sure that the inlet tube connections and gaskets remain fully engaged to ensure a watertight seal.

Follow all local plumbing and building codes.

### For Installations with a Cleansing Seat

 **CAUTION: Risk of personal injury.** Connect the toilet electrical supply to a circuit protected by a dedicated Ground-Fault Circuit-Interrupter (GFCI) or Residual Current Device (RCD).

Follow all local electrical codes.

### Waste Outlet Pipe Information

#### 4" PVC

**IMPORTANT!** Make sure that the height of the waste outlet pipe is sufficient so the rubber ribs on the adapter will be fully inserted into the waste outlet pipe.

The 4" PVC waste outlet pipe is wider than the stud pocket in a 2x4 installation. This requires carving out the wall material on both sides of the installation wall to fit the waste pipe.

The center of a 4" PVC waste outlet pipe should follow the guidelines provided in the "Install Framing and Waste Outlet" section.

#### 3" PVC

A PVC or flexible coupler may be wider than the stud pocket in a 2x4 installation. This requires carving out the wall material on both sides of the installation wall to fit the waste pipe.

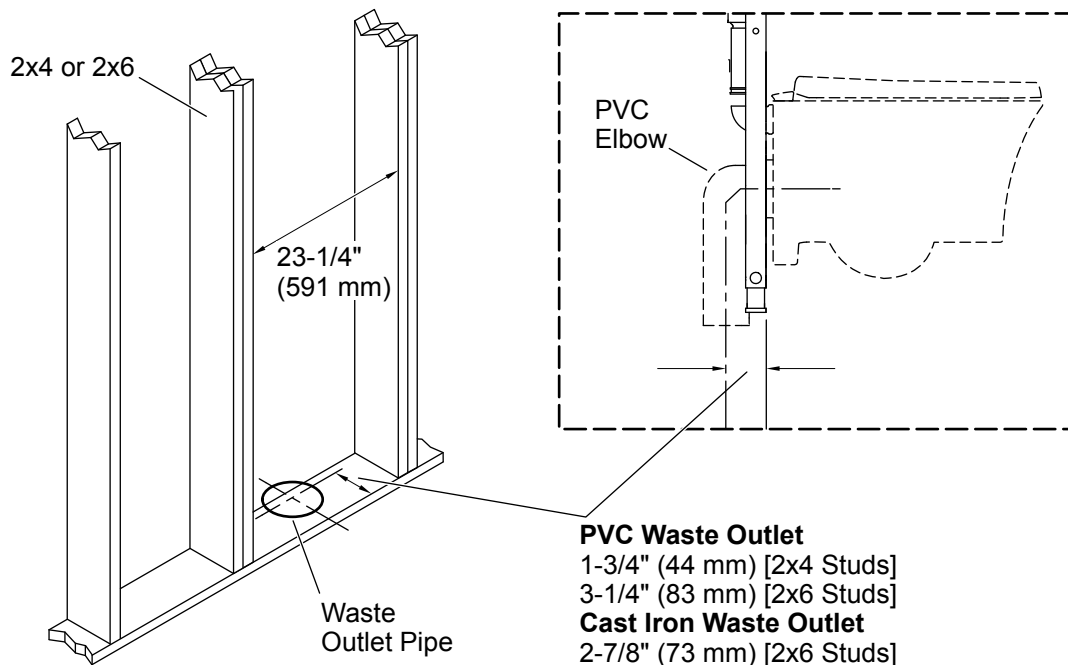
The center of a 3" PVC waste outlet pipe should follow the guidelines provided in the "Install Framing and Waste Outlet" section.

## **Cast Iron**

A cast iron waste pipe will not be centered inside 2x4 framing, and will protrude beyond the back of the stud pocket. Use 2x6 framing or build a chase behind 2x4 framing for cast iron waste pipes.

The center of a KOHLER K-7208 cast iron waste pipe should follow the guidelines provided in the "Install Framing and Waste Outlet" section.

# 1. Install Framing and Waste Outlet



**IMPORTANT!** The waste outlet pipe dimension from the front edge of the framing to the outlet pipe center is critical to this installation. Refer to the illustration above, and see the waste pipe installation options in "Before You Begin" for more details.

**NOTE:** Refer to the product specification sheet for more details and for roughing-in dimensions.

**NOTE:** You may need to relocate the waste outlet pipe for this installation.

**NOTE:** A PVC elbow is supplied with this product. A cast iron elbow may be required by code in some areas. The height of the toilet waste pipe may need to be adjusted if a cast iron elbow is used.

**NOTE:** Use double studs on either side of the stud pocket.

**NOTE:** Follow all applicable codes in your area.

Construct the stud pocket according to the dimensions shown.

The waste outlet centerline location will vary depending upon the waste outlet pipe option chosen. The centerline will be:

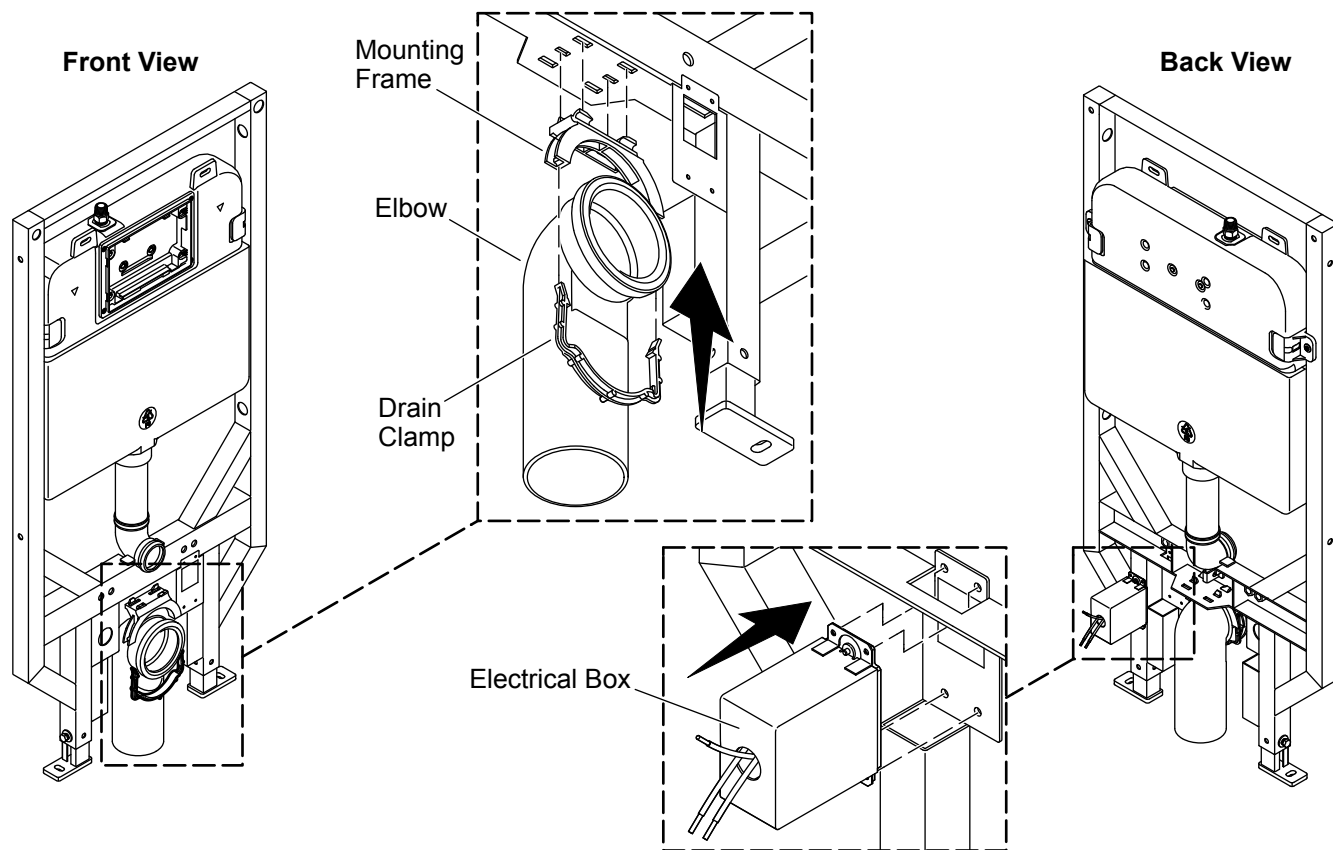
- 1-3/4" (44 mm) for 2x4 framing with a PVC waste outlet
- 3-1/4" (83 mm) for 2x6 framing with a PVC waste outlet
- 2-7/8" (73 mm) for a cast iron waste outlet measured from the front edge of the framing

**4" PVC:** Install the supplied rubber-ribbed adapter onto the carrier's PVC elbow, and insert it into the 4" PVC waste outlet pipe.

**3" PVC:** Couple to the PVC elbow of the carrier using a flexible coupler or a cemented PVC coupler.

**Cast Iron:** Install a cast iron waste pipe according to established installation methods.

## 2. Prepare the Carriage



### All Installations

**NOTE:** If using 2x6 studs, install the mounting frame into the back notches.

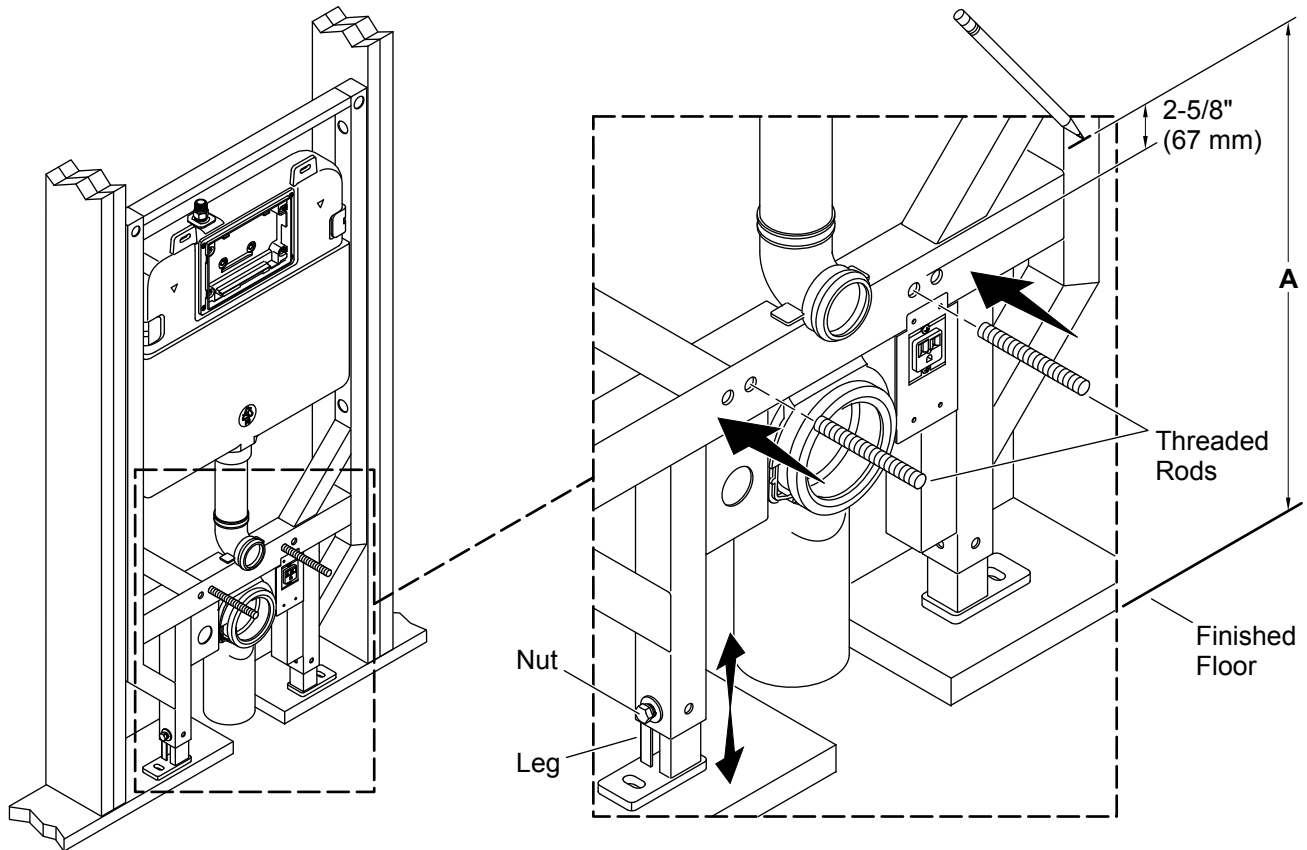
- Install the mounting frame into the front notches on the bottom of the carriage.
- Insert the elbow into the mounting frame.
- Secure the elbow in place with the drain clamp. Press the clamp into the frame until it locks into place.

### For Installations with a Cleansing Seat

**NOTE:** The 1201721 electrical box kit is required when pairing the K-4744 cleansing seat with the bowl.

- Connect the electrical box to the carriage at the location shown.

### 3. Adjust the Carriage Height



**IMPORTANT!** If the carriage has not been adjusted correctly, the bowl rim height may not be compliant with applicable codes. If the bowl height is not correct, the finished wall will need to be removed to make the required adjustments.

**NOTE:** The minimum rim height is 15" (381 mm) when the finished floor is even with the bottom of the carriage legs. The maximum rim height is 23" (584 mm) when the legs are fully raised. The carriage can be adjusted up to 8" (203 mm), with 6" (152 mm) or less of adjustment sufficient in most installations.

- Move the carriage into place in the stud pocket.
- Temporarily secure the carriage in place so it will not fall.
- Install the threaded rods several turns into the carriage.
- Make a mark on the carriage 2-5/8" (67 mm) above the top of the threaded rod.
- Measure from the finished floor to the mark (A) to determine the rim height of the bowl.
- Loosen the nuts that secure the legs to the carriage.

**NOTE:** As you lower the carriage, make sure that the elbow aligns with the waste outlet pipe.

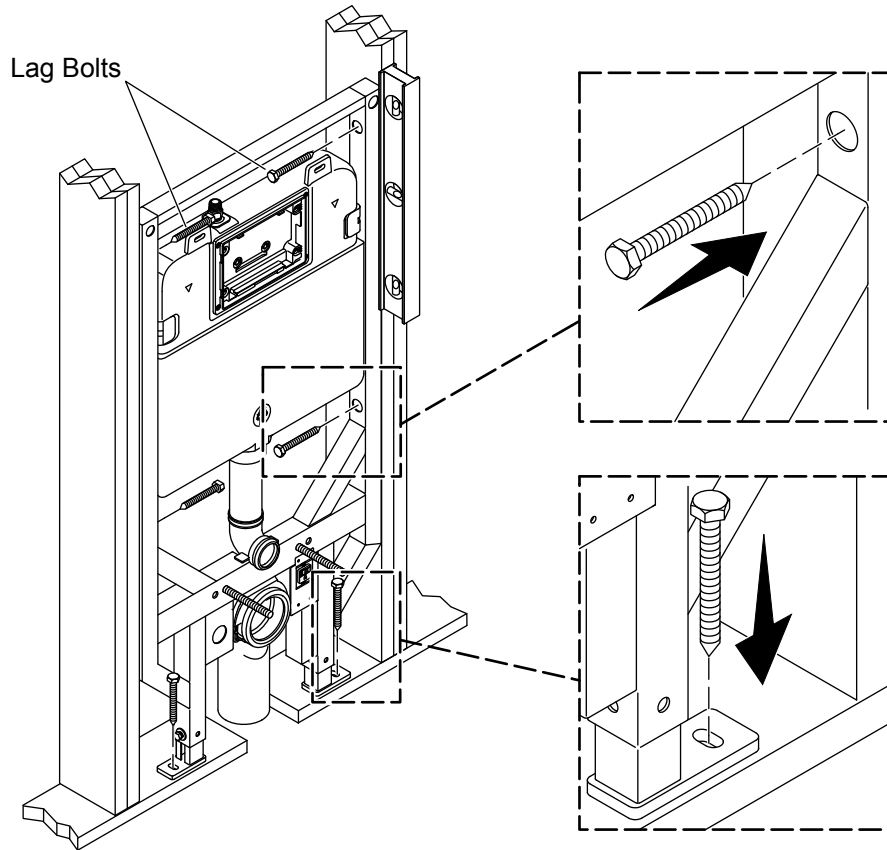
**NOTE:** If applicable, confirm that the gasket on the elbow stays correctly positioned as it enters the waste outlet pipe.

**NOTE:** If a cast iron elbow is required, make the connections following all applicable codes.

- Adjust the carriage until the desired height is reached. Use a wrench to securely tighten the nuts to secure the legs in place.

## 4. Install the Carriage

---



- Align the front of the frame flush or no more than 1/16" (2 mm) behind the face of the studs. If the frame protrudes past the face of the studs, the wall material can be damaged. If the front of the frame is recessed too far, the bowl will not be fully supported and may move during use.
- Verify that the front of the carriage is plumb.
- Mark the hole locations for the six lag bolts, one for each foot and two on each side of the carriage.
- Drill pilot holes (remove the carriage if needed) at the marked locations.

**NOTE:** If the carriage is installed onto a concrete subfloor, use concrete expansion bolts (not supplied) when securing the feet of the carriage.

- Secure the carriage to the support studs using 3/8" x 2" (51 mm) long (minimum) lag bolts (not supplied), one at each location.

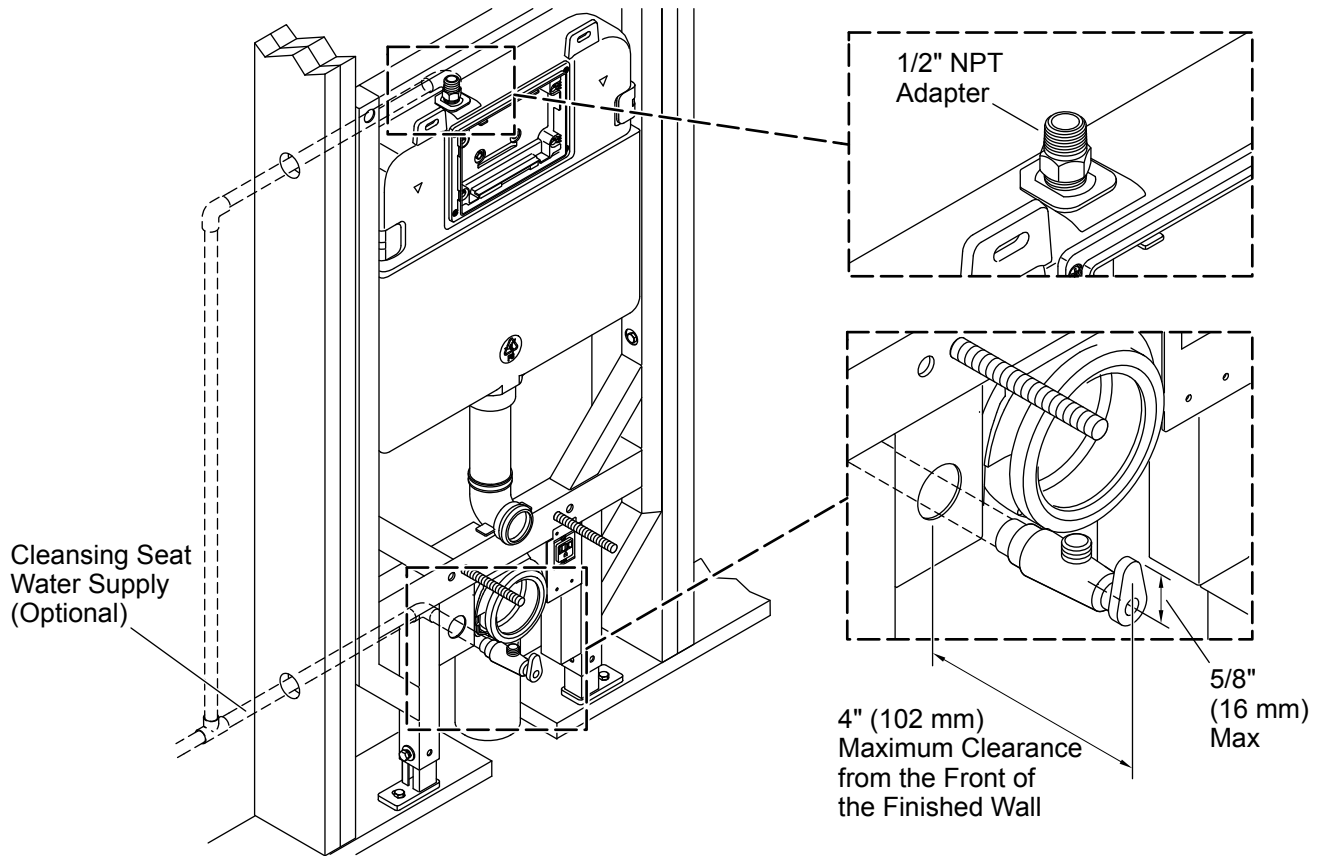
### For Installations with a Cleansing Seat

**⚠ WARNING: Risk of personal injury.** Disconnect the electrical power before connecting the wires.

**NOTE:** Only follow this step if you installed an electrical box in the "Prepare the Carrier" section.

- Connect the electrical power according to applicable codes.

## 5. Install the Water Supply



### All Installations

**IMPORTANT!** An optional cleansing seat water supply is shown. Only install a second water supply if you will install a cleansing seat.

**NOTE:** The tank valve inlet uses G1/2 threads. If desired, install a 1/2" NPT adapter to the tank valve inlet.

- Make sure that the rubber seal is inserted into the 1/2" NPT adapter, if used.
- Install a 1/2" NPT adapter, if desired, and tighten securely.
- Install and connect the water supply lines.
- Connect the waste pipe to the drain elbow.

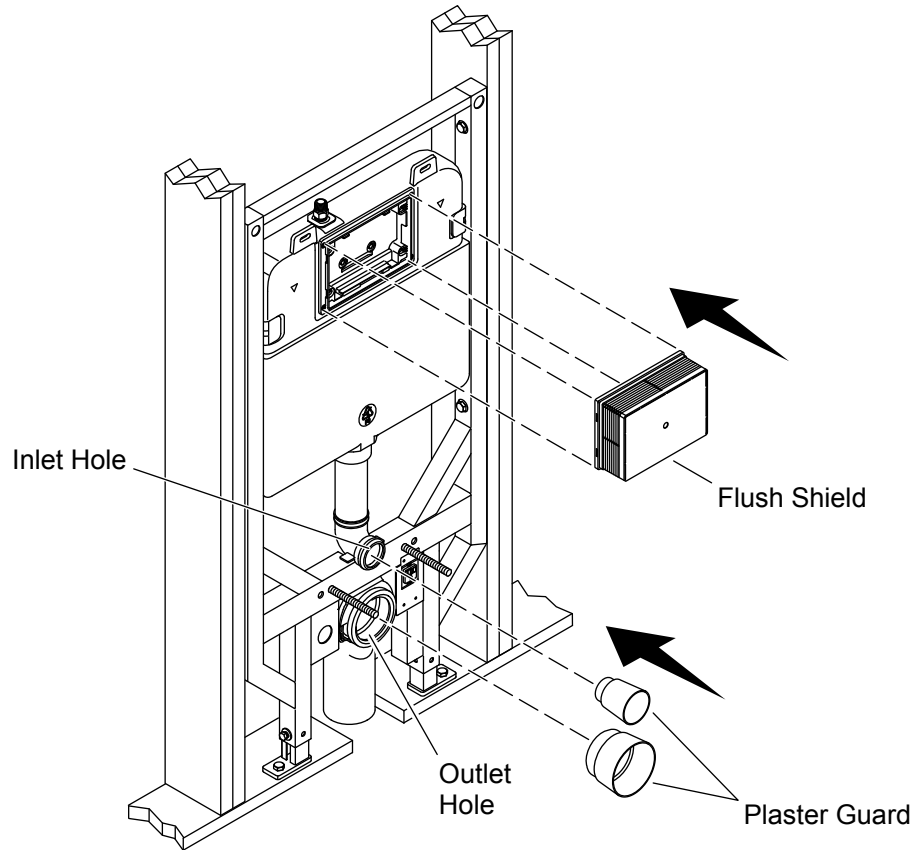
### For Installations with a Cleansing Seat

**IMPORTANT!** The cleansing seat water supply shut-off must extend from the finished wall between 3" (76 mm) minimum and 4" (102 mm) maximum to allow access to the handle. The water supply shut-off handle should be no higher than 7/8" (22 mm) from the center of the water supply.

- Install the cleansing seat water supply and a 1/4 turn, 1/2" NPT supply shut-off valve.

## 6. Install the Plaster Guards

---

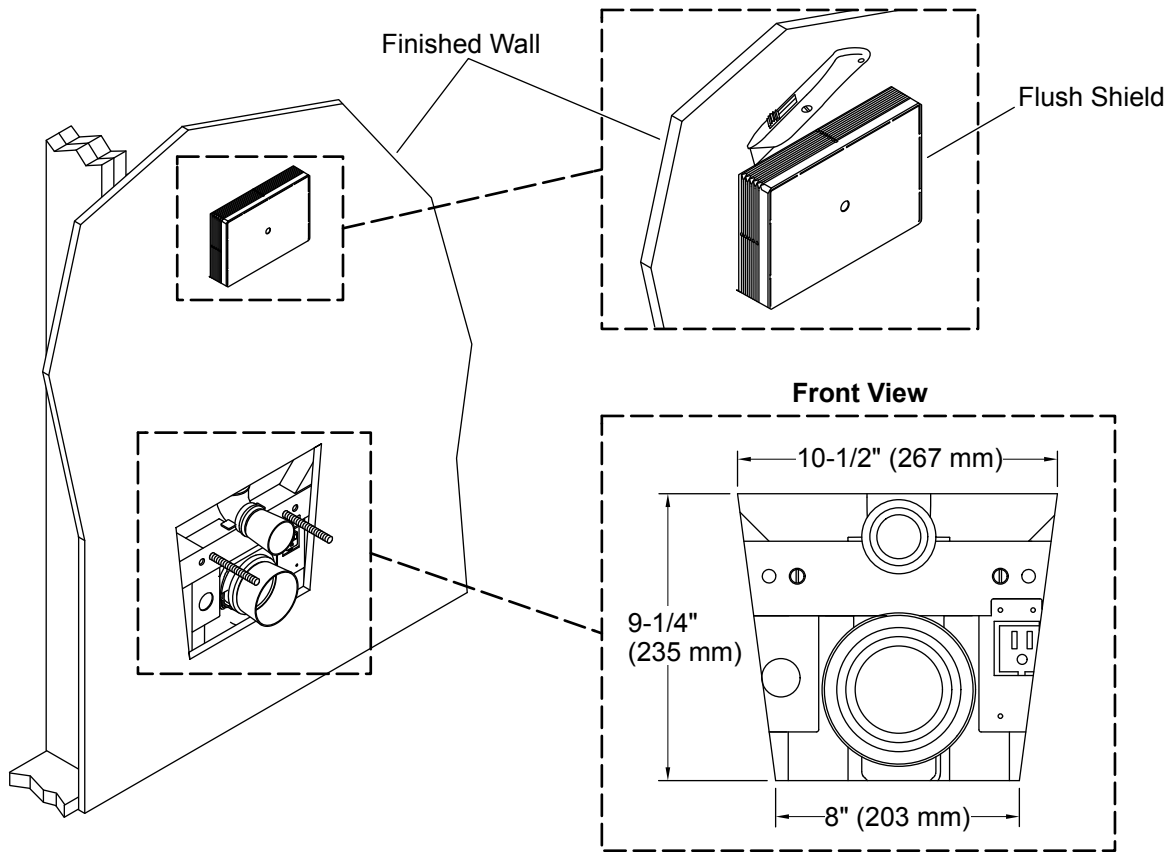


- Insert the plaster guards into the carrier inlet and outlet holes.

**NOTICE:** You will need the remaining parts after you complete the finished wall. Retain these parts.

- Set the actuator frame locking pins and bowl nut, washer, and cap set inside the flush shield so they will be available later when you open the flush shield.
- Install the flush shield in the flush valve opening by snapping it into place.

## 7. Install the Finished Wall



**CAUTION: Risk of product damage.** Do not puncture the water tank with fasteners. A template to assist in securing the finished wall is located on the inside of the box lid. Hang this template on the flush shield to identify the tank location.

**IMPORTANT!** Gypsum board may compromise the load strength of the toilet installation. Kohler Co. recommends the use of cement board or tile backer board for the wallboard backing.

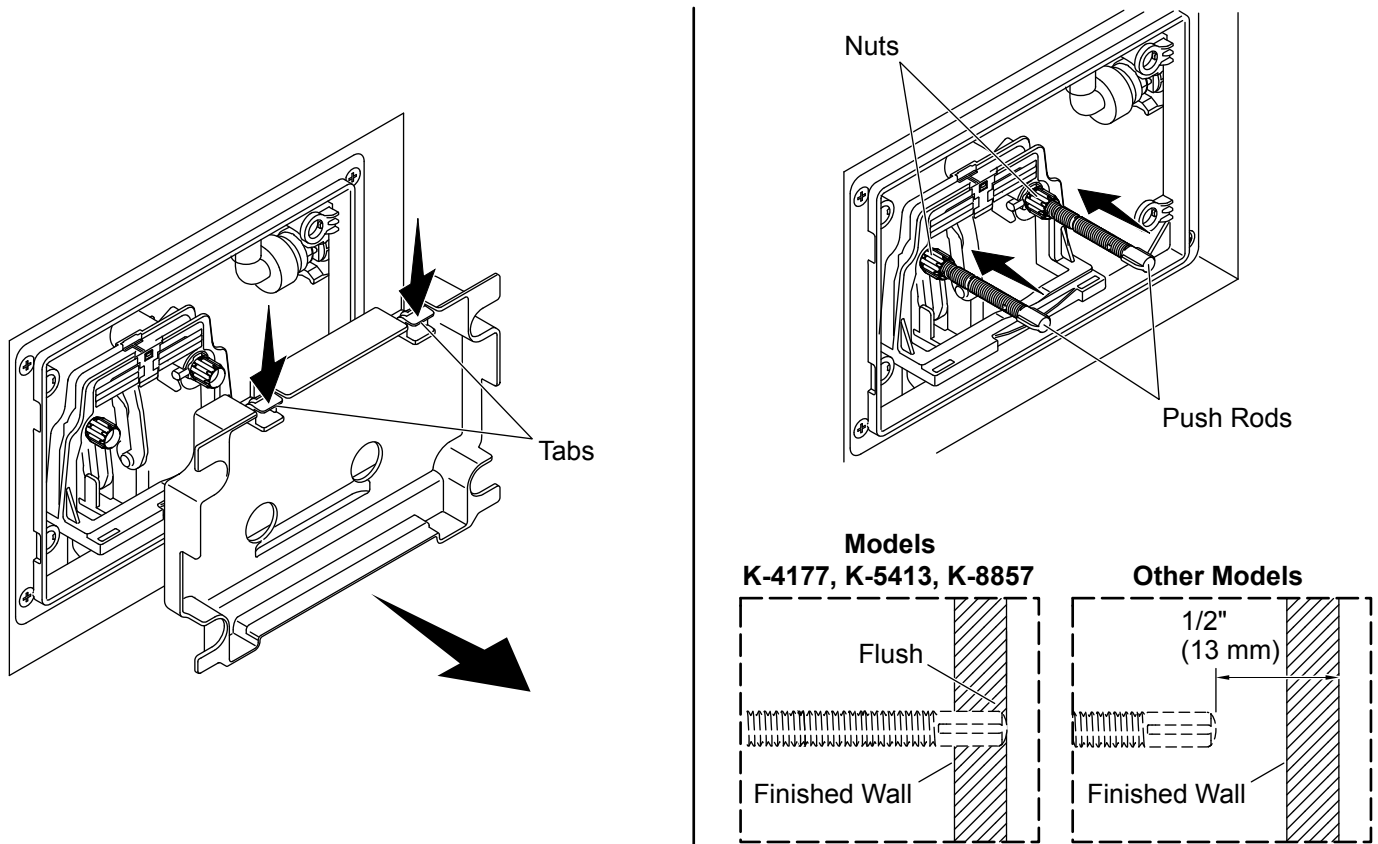
**NOTE:** The wall thickness should not exceed 2-3/4" (70 mm).

- Install the finished wall.
- Use a sharp utility knife to carefully trim the flush shield even with the finished wall.

**NOTICE:** Retrieve and retain the actuator frame locking pins and bowl nut, washer, and cap set from inside the flush shield.

- Discard the trimmed off portion of the shield.

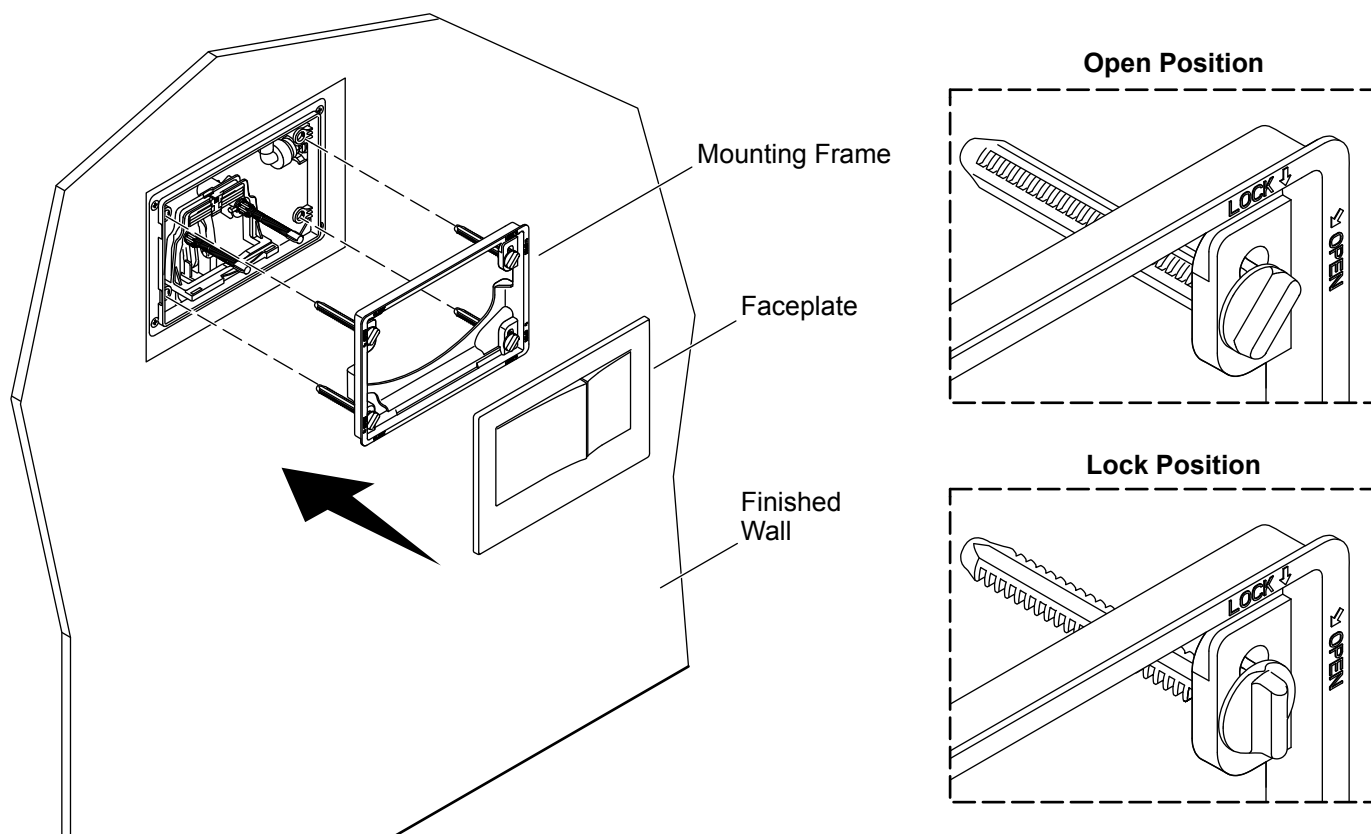
## 8. Install the Push Rods



**NOTICE:** The service cover contains information on removal and adjustment of the flush valve, fill valve, and debris screen. Retain the service cover for future reference.

- Remove and retain the service cover by pressing down on the tabs and pulling forward.
- Faceplates K-4177, K-5413, and K-8857:** Thread the push rods into the actuator assembly so they are flush with the finished wall.
- All Other Faceplates:** Thread the push rods into the actuator assembly 1/2" (13 mm) behind the finished wall.
- All Models:** If needed, trim the threaded end of the push rods.
- Secure the push rods in place with the push rod nuts.

## 9. Install the Faceplate



- Install the locking pins into the mounting frame from the faceplate kit.
- Turn the locking pins to the “Open” position.
- Align the mounting frame with the tank opening, and install the mounting frame against the finished wall.
- If needed trim the locking pins.
- Turn the locking pins to the “Lock” position.
- Position the faceplate over the push rods and press it into place.
- Proceed to the bowl Installation Instructions to complete the installation.

## Troubleshooting

This troubleshooting guide is for general aid only. For service and installation issues or concerns, call 1-800-4KOHLER.

Symptoms	Probable Cause	Recommended Action
1. Poor flush.	<p><b>A.</b> Water level is too low.</p> <p><b>B.</b> Improper drain line venting.</p> <p><b>C.</b> Poorly adjusted rod.</p>	<p><b>A.</b> Raise the tank water level to the marked waterline. Turn the white knob on the fill valve clockwise.</p> <p><b>B.</b> Install venting according to code.</p> <p><b>C.</b> Verify that the threaded rods behind the faceplate make contact with the flush buttons. If they do not make contact, thread the rods out to the correct length, and tighten the nuts to lock the rods in place.</p>
2. Fill valve does not shut off.	<p><b>A.</b> Water level is too high.</p> <p><b>B.</b> Flush valve gasket or flush valve are damaged.</p> <p><b>C.</b> Flush valve is sticking open.</p>	<p><b>A.</b> Lower the tank water level to the marked waterline. Turn the white knob on the fill valve counterclockwise.</p> <p><b>B.</b> Replace the flush valve gasket or flush valve as necessary.</p> <p><b>C.</b> Check the flush valve and actuating mechanism for free movement. Push button actuators should raise the levers and then spring back without force. Replace components as necessary.</p>
3. Leaks from behind the bowl.	<p><b>A.</b> Gaskets are not positioned correctly.</p>	<p><b>A.</b> Remove the bowl and inspect all the gaskets. Reposition the gaskets if needed. Lubricate the gaskets so they slide over the mating part they seal. Reinstall the bowl, making sure the gaskets stay in the correct position.</p>
4. The carriage and bowl flex when used.	<p><b>A.</b> Insufficient support for the frame.</p>	<p><b>A.</b> Add additional support members, and mount the frame with 3/8" or larger lag bolts.</p>
5. No water flow.	<p><b>A.</b> The supply stop located in the tank is closed.</p> <p><b>B.</b> There is an obstruction in the water line.</p> <p><b>C.</b> Fill valve debris screen is plugged.</p>	<p><b>A.</b> Open the supply stop (located on the left side).</p> <p><b>B.</b> Close the external water supply stop, then disconnect the braided hose where it attaches to the fill valve. Turn on the water supply and check the flow through the hose. Inspect the entire water path for obstructions. Clear any blockage.</p> <p><b>C.</b> Refer to the service cover for instructions.</p>