

### BEFORE YOU BEGIN

#### HOW TO USE THESE INSTRUCTIONS

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.

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.

These instructions contain important care, cleaning, and warranty information – **please leave for the consumer.**

#### INSTALLER HAZARD NOTIFICATION



**WARNING: Risk of injury or water damage.** Do not flush toilet with float valve cap removed. Pressurized water will spray upward.



**WARNING: Risk of injury or product damage.** Handle vitreous china products very carefully. Vitreous china can break and chip if you over-tighten bolts and nuts.

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

#### PRODUCT PROPERTIES

- Vitreous china siphon jet toilet.
- Water depth from rim is 4-7/8".
- 2-1/4" passageway.
- For roughing-in and overall dimensions, **See Fig. #2**.
- Fixture dimensions are nominal and conform to tolerances by ANSI standards (A112.19.2).

#### PRODUCT REQUIREMENTS

- The supply stop must be 10-1/4" above floor-line and 5-3/4" left of the closet flange centerline.
- Since all toilets do not have the same supply rough-in, you may have to change the location of the supply stop to install this toilet.
- Closet flange must be 12" on-center from wall.
- The seat provided contains elements of the Peacekeeper flush system. **Do not substitute with a normal seat.**
- Seat post holes are on 5-1/2" centers.
- Peacekeeper system requires two D-size 1.5-volt Alkaline batteries (not included).

#### WATER-GUARD ORDERING INFORMATION

Toilet (elongated)	K-3520-X
Toilet (round front)	K-3521-X
Insuliner toilet (elongated)	K-3520-XU
Insuliner toilet (round front)	K-3521-XU
Bowl (elongated)	K-4221
Bowl (round front)	K-4202
Tank Assembly	K-4519-X
Insuliner Tank Assembly	K-4519-XU
Elongated Peacekeeper seat	93228
Round front Peacekeeper seat	93227

When specified:

3/8" supply	K-7638
floor bolts (pr.)	21401

**NOTE:** For service parts ordering information, see separate Service Parts document enclosed with product.

#### MATERIALS REQUIRED

- 3/8" shut-off valve
- (2) D-size 1.5-volt Alkaline batteries
- Closet flange
- Toilet gasket (wax seal)
- Toilet T-bolts (2) 5/16" diameter
- Toilet setting compound (optional)

#### TOOLS REQUIRED

- 10" adjustable wrench
- 12" pipe wrench
- Tubing cutter
- Level
- Putty knife
- Hacksaw/metal file (for shortening T-bolts)

**NOTE:** Site preparation may require additional tools.

# SITE PREPARATION

## REMOVE EXISTING TOILET



**NOTICE:** Carefully inspect new fixture for any sign of damage before removing existing toilet.

Turn off water supply.

Flush the toilet and sponge out remaining water from tank and bowl.

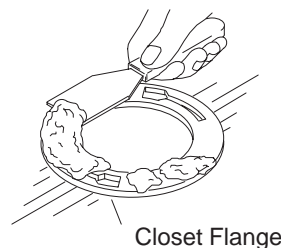
Disconnect supply valve and remove old tank and bowl.

**See Fig. #1 .** Remove old gasket from the floor and closet flange with a putty knife.

Remove old T-bolts (the T-shaped bolts in the closet flange) and discard.



**DANGER:** Risk of hazardous gases. If new toilet is not installed immediately, temporarily stuff a rag in the closet flange.



Closet Flange

**Fig. #1**

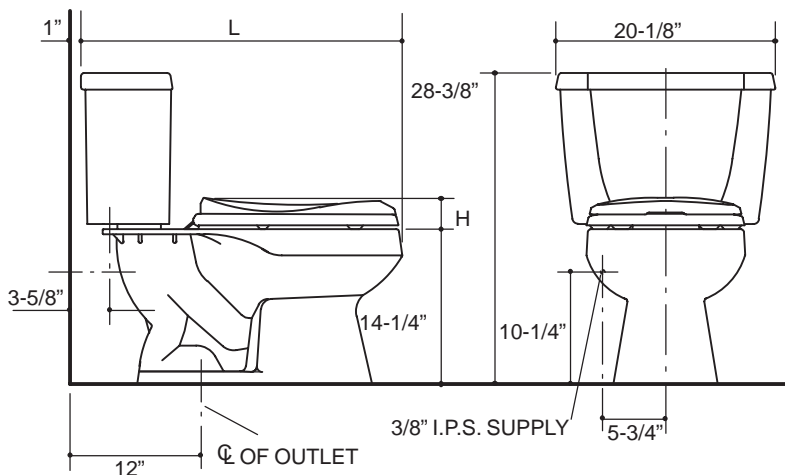
## ROUGH-IN PLUMBING

Turn off water supply.

Install or relocate supplies and outlets as necessary to conform to roughing-in dimensions. **See Fig. #2 .** For shut-off valve location, **See Fig. #3 .**

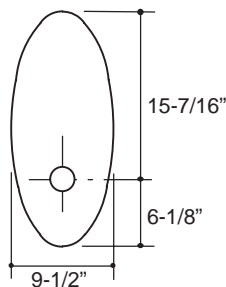
## ROUGHING-IN DIMENSIONS

	<b>L</b>	<b>H</b>
K-3520	29-1/4"	2-13/16"
K-3521	27-1/4"	1-7/8"



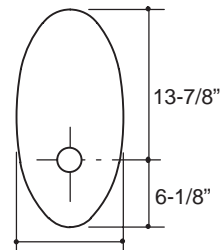
**Fig. #2**

### FRONT OF BOWL



**K-4221 BASE**

### FRONT OF BOWL

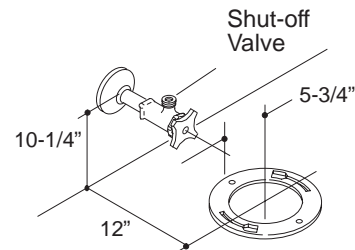


**K-4202 BASE**

## INSTALL SHUT-OFF VALVE

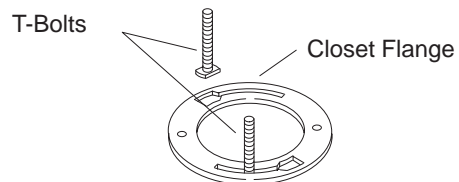
**See Fig. #3 .** For supply installation, refer to instructions packed with supply stop.

Locate supply shut-off valve so it is 10-1/4" above floor-line and 5-3/4" to the left of the centerline of the closet flange.



**Fig. #3**

**See Fig. #4 .** Install new 5/16" diameter T-bolts.



**Fig. #4**

## INSTALLATION

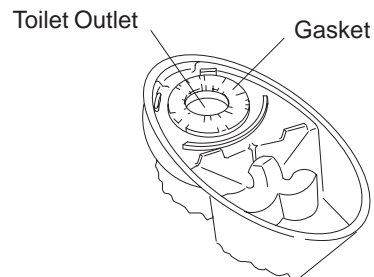
### INSTALL TOILET GASKET

**See Fig. #5 .** Place new toilet upside down onto padding.

Firmly place gasket on toilet outlet. If using a gasket with integral plastic sleeve, position gasket with sleeve facing away from toilet.

If desired, place a 1/4"-thick bead of toilet setting compound around base.

**NOTE:** If a rag or other plug was placed in closet flange, remove rag from closet flange before setting toilet.



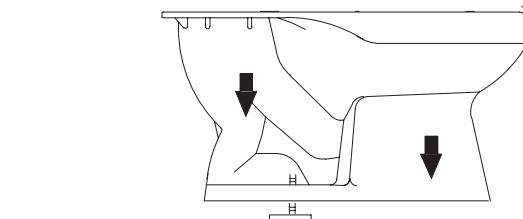
**Fig. #5**

### ALIGN AND SET TOILET

**See Fig. #6 .** Carefully align and lower toilet over the closet flange and T-bolts.

**CAUTION:** Do not lift or rock toilet after placement. A new gasket must be reapplied if you break the watertight seal.

Apply full body weight to toilet rim to set seal.



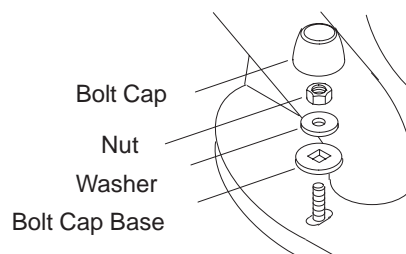
**Fig. #6**

### SECURE TOILET

**See Fig. #7 .** Assemble bolt cap bases, washers, and nuts on exposed T-bolts.

**CAUTION:** Over-tightening may cause breakage or chipping.

Hand-tighten nuts, then tighten an additional 1/2-turn with wrench. If T-bolts extend more than 1/4" from top of nut, cut off excess with a hacksaw and file cut edges. Wipe away any residue. Install bolt caps.



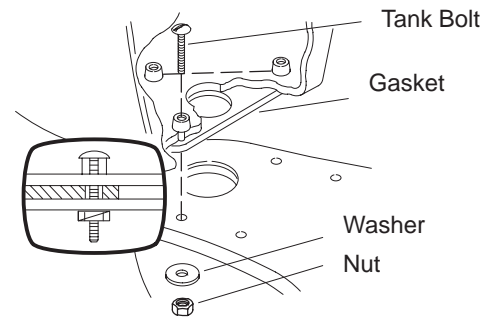
**Fig. #7**

## INSTALL TANK

**See Fig. #8 .** Set the tank onto the bowl using the tank bolts as a guide. Center the gasket on the inlet of the bowl. Assemble a washer and nut onto each bolt and tighten evenly.

**NOTE: Do not over-tighten as breakage or chipping may result.**

To obtain a level tank and watertight seal, alternately tighten three wing nuts evenly so that the top of the tank is level with the top of the bowl. Pushing down on top of the tank will make it easier to tighten the wing nuts.



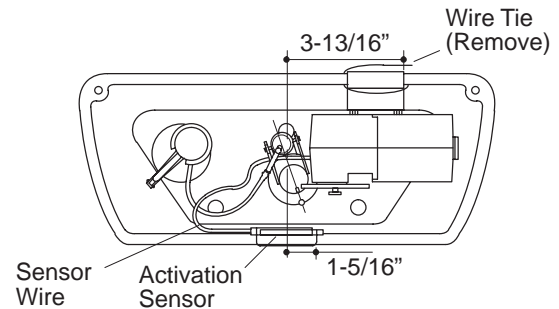
**Fig. #8**

## LOCATE ACTIVATION SENSOR

**NOTICE: The Peacekeeper Housing Assembly must be installed exactly as shown. See Fig. #9 .**

Cut and remove wire tie. Place wire bracket that cradles activation sensor on the center of the front rim of the toilet tank. Position end of activation sensor 1-5/16" to right of toilet centerline as illustrated. For proper operation, it is not necessary to rotate the activation sensor while cradled in the wire bracket.

The sensor activates the toilet flushing mechanism when the magnet contained in the seat is brought to within 3" of it for 20 seconds.

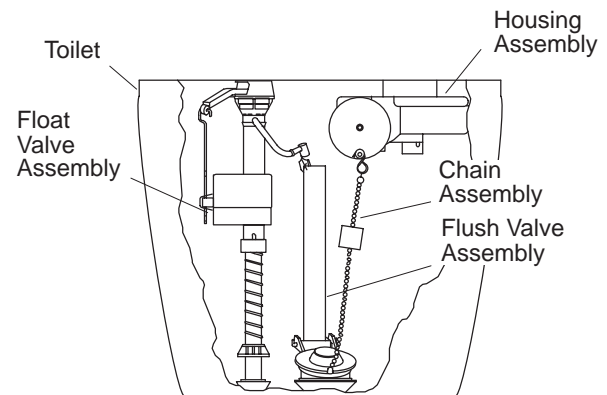


**Fig. #9**

## ROUTE WIRE

**See Fig. #9 .** The wire connecting the activation sensor to the housing assembly must be located on the left side near the float valve. This will ensure proper polarity between the sensor and the magnet located on the underside of the seat.

Check to ensure that the wire does not interfere with the operation of the float valve. **See Fig. #10 .**



**Fig. #10**

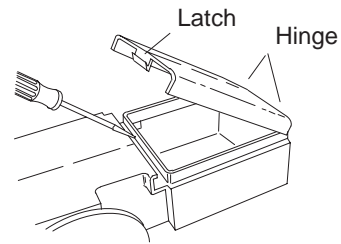
## LOCATE MOUNTING BRACKET

The mounting bracket for the housing assembly must be placed on back of toilet tank 3-13/16" to the right of toilet centerline. **See Fig. #9 .**

## INSTALL BATTERIES

**See Fig. #11** . Insert a blade screwdriver into the seam located on the top surface of the housing assembly. Gently pry open battery compartment latch, lift the lid, and disengage the other side from its hinge. Align two D-size 1.5-volt Alkaline batteries into the compartment. Snap battery lid back into place.

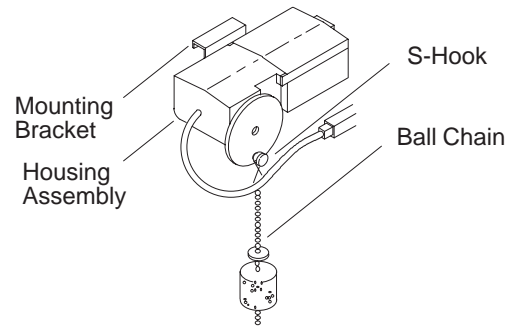
**NOTE:** If the batteries fail, operate the toilet by pulling the chain upwards.



**Fig. #11**

## ADJUST CHAIN ASSEMBLY

**See Fig. #12** . To provide proper flush ball seating, the chain must be slack. Slack can be increased or decreased by moving the position of the "S" hook on the ball chain. Additional adjustment can be made by loosening the screws on the back of the mounting bracket. Raise or lower the mounting bracket to adjust chain slack. If the mounting bracket is adjusted, ensure adequate clearance between the housing assembly, flush valve, tank walls, and tank cover.



**Fig. #12**

## INSTALL SEAT

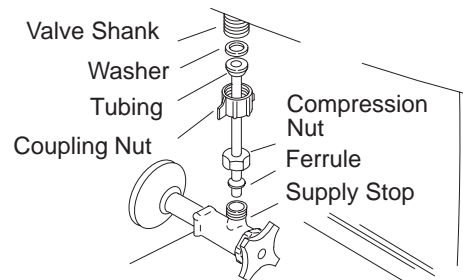
Install seat to toilet. Hand-tighten nuts. Refer to installation instructions packed with toilet seat for further information. Raise and lower seat to check operation of the Peacekeeper mechanism.

## CONNECT SUPPLIES

**See Fig. #13** . Remove coupling nut from accessory pack packed with toilet. Carefully bend supply stop tubing to fit. Measure for required penetration into supply stop. Cut and de-burr tubing. Place connection hardware onto tubing as shown. Hand-tighten coupling nut first and then the compression nut.



**CAUTION:** Do not over-tighten or you may deform connections and cause a leak. Do not use tools to tighten plastic nuts.



**Fig. #13**

## CHECK FOR LEAKS

**See Fig. #14** . Turn shut-off valve on. Check for leaks.

If toilet is leaking in-between the tank and bowl, carefully retighten the three tank bolts evenly. Check all bowl and tank connections for leaks for several days.

**NOTICE:** The valves in this toilet require no adjustment.

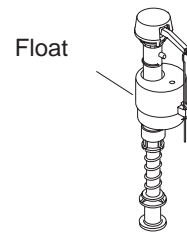
The fittings in this toilet are pre-set. Any adjustment or modifications of the product are not normal usage and void the warranty.



**Fig. #14**

## ADJUST FLOAT BALLAST

**See Fig. #15 .** Turn shut-off valve on. Hold float under water for a few seconds to fill water ballast. Test toilet flush by raising seat to full up position for 20 seconds. Then lower seat. Check for proper operation.



**Fig. #15**

## MAINTENANCE

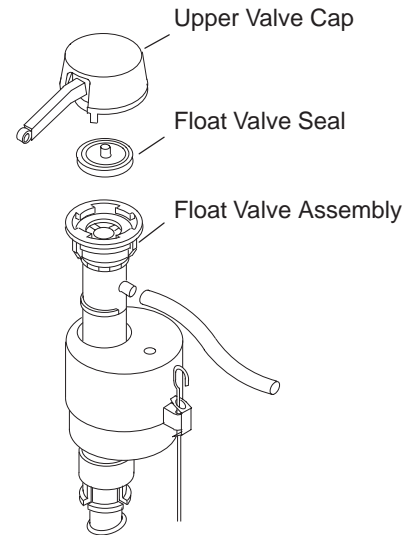
### CLEARING THE FLOAT VALVE SEAL

**See Fig. #16 .** If foreign particles lodge under the float valve seal (located under valve cap), the valve may continue to run, allowing water to enter tank.

To correct this, perform the following procedure:

Shut off water supply. Remove upper valve cap assembly by rotating 1/8 turn counter clockwise. Cover uncapped lower valve unit with an inverted cup holding it to prevent overspray, and turn water on and off a few times. Clean float valve seal surface (located under valve cap). Replace upper valve cap assembly by engaging lugs and rotating 1/8 turn clockwise. Turn water on.

Install filter in supply line to prevent recurring problems.



**Fig. #16**

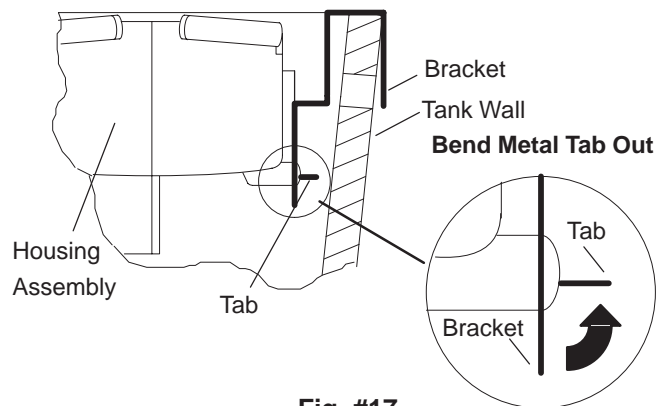
### REPLACING BATTERIES

See procedure within installation sequence. **See Fig. #11 .**

### REPLACING HOUSING ASSEMBLY

**See Fig. #17 .** To replace housing assembly, bend the tab on the metal bracket 90° toward tank wall as shown.

See procedure beginning on Page 4.



**Fig. #17**

# TROUBLESHOOTING CHART

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
1. Valve turns on/off by itself without toilet being flushed.	<p>A. Refill tube pushed too far down on overflow pipe.</p> <p>B. Flush valve flapper worn, dirty or misaligned with flush valve seat.</p> <p>B. Seat corroded so flapper will not seal.</p> <p>C. Lack of slack in chain assembly, housing assembly misaligned.</p> <p>D. Lack of slack in chain assembly holding flapper off seat.</p>	<p>A. Attach refill tube to overflow pipe above the water line.</p> <p>B. Clean or replace flapper.</p> <p>B. Replace seat.</p> <p>C. Move housing assembly to proper position.</p> <p>D. Adjust chain assembly for proper slack. <b>See Fig. #12 .</b></p>
2. Valve continues to run, allowing water to enter tank.	<p>A. Foreign particles lodged under the float valve seal (located under valve cap).</p> <p>B. Float valve seal (located under valve cap) cracked or split.</p> <p>C. Activation sensor wire interferes with float valve operation.</p>	<p>A. Clean float valve seal surface (located under valve cap).</p> <p>B. Replace valve assembly.</p> <p>C. Reposition activator sensor wire.</p>
3. Incorrect water level height.	<p>A. Valve retaining incorrect amount of water in float cup for ballast.</p>	<p>A. During fill cycle, hold float under water a few seconds to allow it to fill with water ballast.</p>
4. Long or noisy tank fill cycle.	<p>A. Plugged valve inlet or supply line.</p>	<p>A. Use corrective action 2.A.</p>
5. Poor flush.	<p>A. Clogged trapway or rim holes.</p> <p>B. Clogged soil pipe or vents.</p> <p>C. Low water level in bowl due to refill tube being out of overflow tube.</p> <p>D. Supply not fully open.</p>	<p>A. Unclog trapway or clean rim holes.</p> <p>B. Unclog soil pipe or vent pipe.</p> <p>C. Attach refill tube to overflow tube above the water line, clean or straighten tube.</p> <p>D. Open supply stop.</p>
6. Seat movement will not flush toilet.	<p>A. Batteries dead.</p> <p>B. Seat must be in up position for 20 seconds.</p> <p>C. Activation sensor not attached to front center of tank.</p> <p>D. Seat does not have oval magnet on underside at front center.</p> <p>E. Defective housing assembly.</p>	<p>A. Replace batteries with two D-size 1.5-volt Alkaline batteries.</p> <p>B. Raise seat (so magnet is within 3" of activation sensor inside tank) for 20 seconds, then lower it to flush toilet.</p> <p>C. Reattach or relocate activation sensor.</p> <p>D. Replace with recommended seat.</p> <p>E. Replace housing assembly. <b>See Fig. #10 .</b></p>

## IMPORTANT CONSUMER INFORMATION

### CONSUMER RESPONSIBILITIES

If you live in a hard water area, you should make certain that the holes in the rim are kept clean for proper bowl flushing. Toilet bowl cleaners should be used at least once a week. Use a long-handled brush to clean the rim holes and to clean as far into the trap as possible to prevent mineral deposits from forming.

Most toilet bowl cleaners are not harmful to the vitreous china surface of the toilet bowl. Some in-the-tank toilet cleaners may contain calcium hypochloride which may be harmful to the brass fittings inside the tank. Please follow the bowl cleaner manufacturer's instructions carefully.

Do not use abrasive cleaners or solvents.

### REQUESTING SERVICE

Please take a moment to familiarize yourself with the Kohler Warranty, its benefits, and limitations. Kohler Co. and its distributors support you with one of the largest Service Networks of its type. Here's what you need to do if you require service:

**FIRST:** Contact the dealer or contractor who sold and installed the product. They should be able to solve any problems you may have.

**SECOND:** If your dealer or contractor cannot solve the problem, they will contact or supply you with the name of the local Kohler Distributor and the:

 KOHLER TECHNICAL SPECIALIST

**THIRD:** If you are unable to obtain warranty service through either your contractor or Kohler Co. distributor, please write us directly at Kohler Co., Attn: Customer Service Department, 444 Highland Drive, Kohler, WI 53044 U.S.A.

**FOURTH:** Include all pertinent information regarding your claim, including a complete description of the product, model numbers, colors, finishes, and the date the product was installed. Include a description of the problem, and a photocopy of your invoice for the products involved. Also give us the name of the contractor and distributor.

### LIMITED ONE-YEAR WARRANTY

Kohler plumbing fixtures and fittings are warranted free of manufacturing defects.

Kohler Co. will, at its election repair, replace, or make appropriate adjustment where Kohler Co. inspection discloses any such defects occurring in normal usage within one year after installation. Kohler Co. is not responsible for installation costs.

To obtain warranty service, contact Kohler Co. either through your Dealer or Plumbing Contractor or by writing Kohler Co., Attn: Customer Service Department, 444 Highland Drive, Kohler, WI 53044 U.S.A., or by calling **1-800-4-KOHLER** from within the U.S.A.

**Implied warranties, including that of merchantability and fitness for a particular purpose, are expressly limited in duration to the duration of this warranty. To the extent permitted by law, Kohler Co. disclaims all implied warranties including merchantability and fitness for a particular purpose. Kohler Co. disclaims any liability for special, incidental, or consequential damages.**

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so this limitation and exclusion may not apply to you. This warranty gives you specific legal rights. You may also have rights which vary from state to state.

This is our exclusive written warranty.

KOHLER CO., KOHLER, WISCONSIN 53044