

# INSTALLATION INSTRUCTIONS CARE AND MAINTENANCE



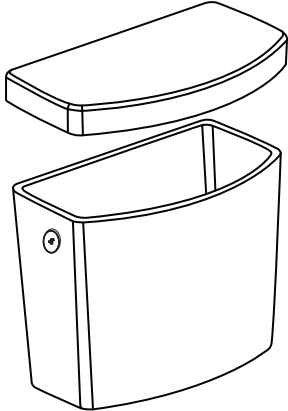
## Touchless Toilet

### Models 2794.709 / 2989.709 / 215AA.709 / 780AA.709

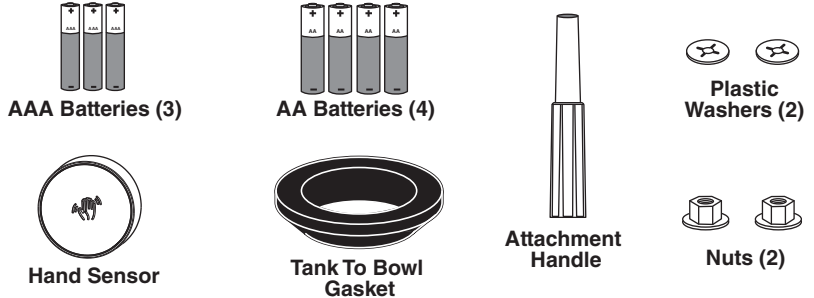
Thank you for selecting American Standard - the benchmark of fine quality for over 140 years. To ensure this product is installed properly, please read these instructions carefully before you begin. (Certain installations may require professional help.) Also be sure your installation conforms to local codes.

**CAUTION: PRODUCT IS FRAGILE. TO AVOID BREAKAGE AND POSSIBLE INJURY HANDLE WITH CARE!**  
NOTE: Pictures may not exactly define contour of china and components.

#### TANK 4000.709



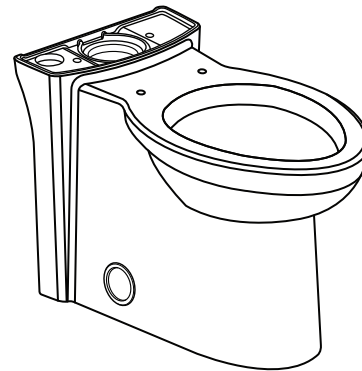
#### KIT INCLUDED WITH TANK



#### 3517A.101 CHAIR HEIGHT ELONGATED BOWL



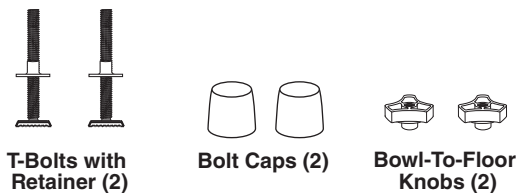
#### 3075.000 / 3075.120 CHAIR HEIGHT ELONGATED BOWLS



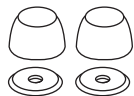
**NOTE: Retail Model 780AA.709 includes tank and bowl kits in single carton box.**

#### KIT INCLUDED WITH BOWL

##### BOWL WITH EXPOSED TRAPWAY

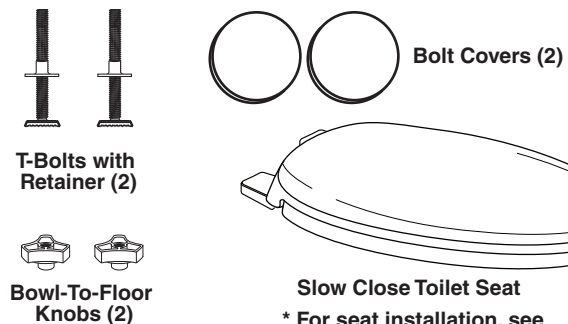


Also includes Standard Bolt Caps (2)



#### KIT INCLUDED WITH BOWLS

##### BOWLS WITH CONCEALED TRAPWAY

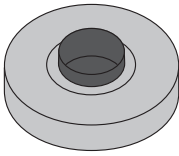


**Slow Close Toilet Seat**  
\* For seat installation, see instructions included with seat.

SAVE FOR FUTURE USE



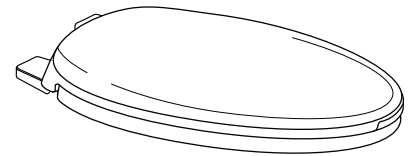
## SOLD SEPARATELY



**Wax Ring**  
(Included with retail model 780AA.709 only.)



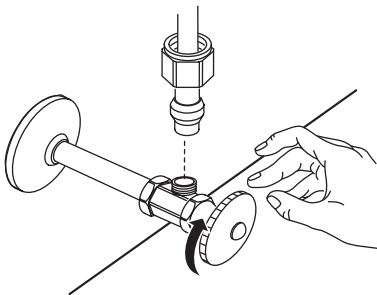
**Water Supply Line**



**Slow Close Toilet Seat**  
(Included with concealed trap toilet and retail model 780AA.709 only.)

## BEFORE YOU START: Please see specification sheet for rough-in information

### Turn Off Water Supply

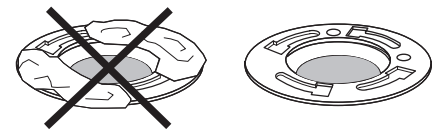


### If Removing An Existing Toilet

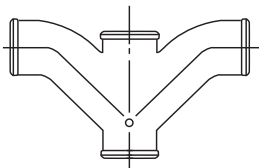
Flush to remove water from tank; sponge remaining water from bowl before removing toilet.



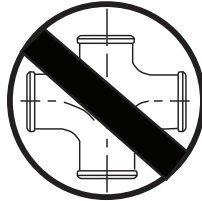
### Clean Flange



**Caution:** If leaving floor flange open for more than 1-2 hours, cover flange to prevent escaping sewer gases.



Recommended fitting type for back-to-back installations.

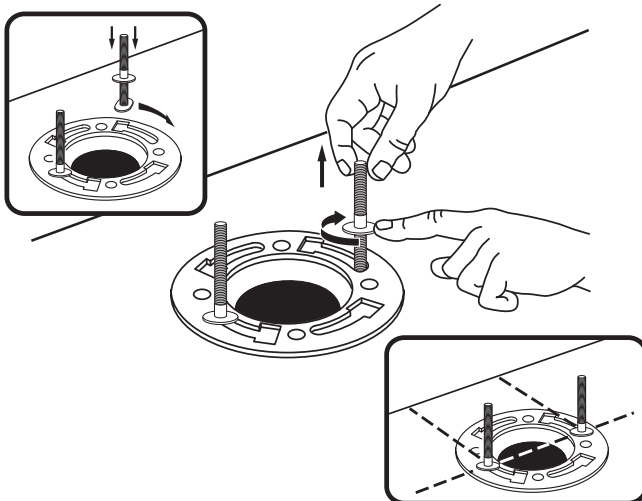


## BACK-TO-BACK INSTALLATION

Depending upon your plumbing and venting conditions, the flow from the toilet in a back-to-back installation may create a vacuum on the system and draw water from the opposing bowl. The National Standards Plumbing Code prohibits the use of a cross fitting for drainage as throw over is possible. The code does approve a directional "Y" style fitting with proper venting to direct the water downward and away from the other toilet.

## INSTALLATION INSTRUCTIONS:

**1**



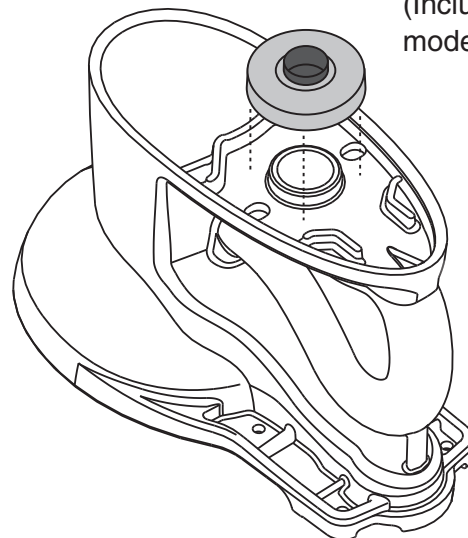
**NOTE:** T Bolts with retainer included.

**2**

Press firmly.

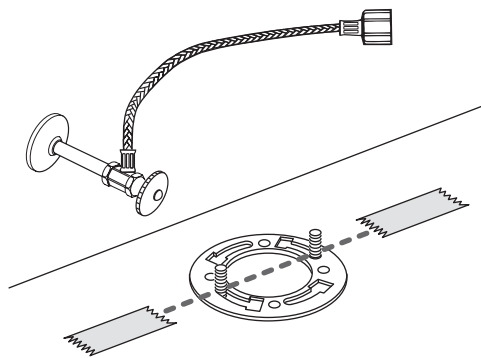


Wax Ring  
(Included with retail model 780AA.709 only.)



**NOTE:** Bowl with exposed trapway shown.

3

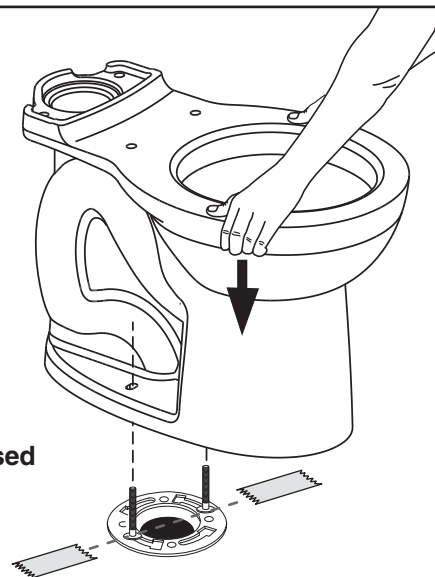


**TIP:** Place 2 pieces of masking tape on floor (as shown) to help with alignment in step 4.

**NOTE:** If installing a Concealed Trap Toilet Bowl, connect supply hose to supply valve.

4

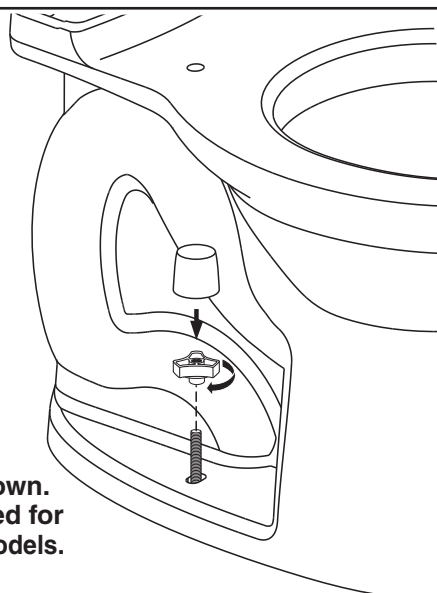
Apply weight evenly. Do not move after placement. Water tight seal may break.



**NOTE:** Bowl with exposed trapway shown.

5

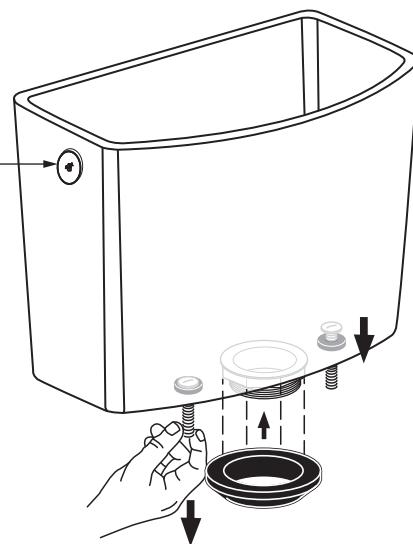
**!** Hand tighten only. Do not overtighten.



**NOTE:** Exposed trap shown. Bolt caps not used for Concealed Trap models.

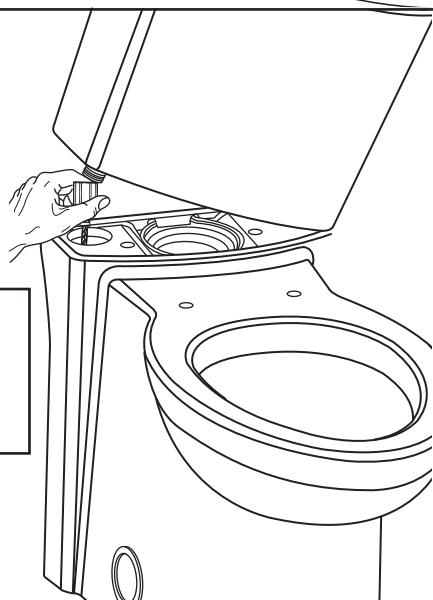
6

MANUAL FLUSH BUTTON



7

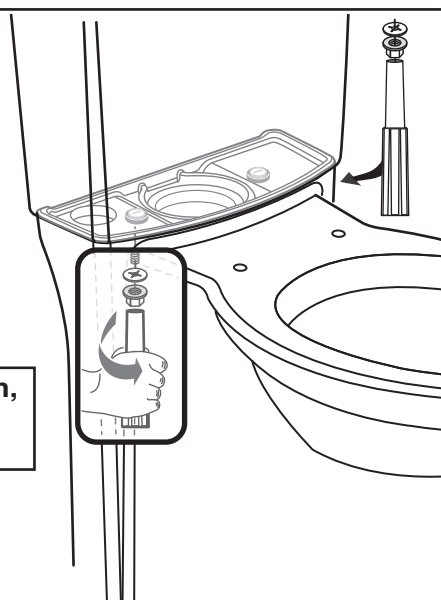
Thread, then hand tighten water supply. This is best done when using Concealed Trap Bowl.



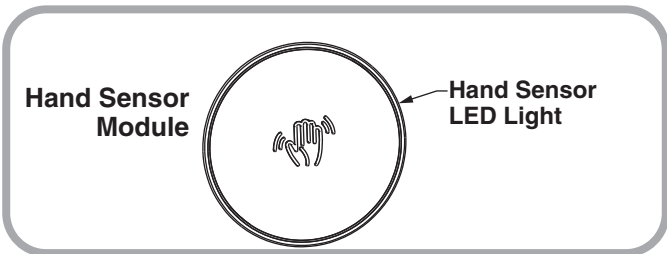
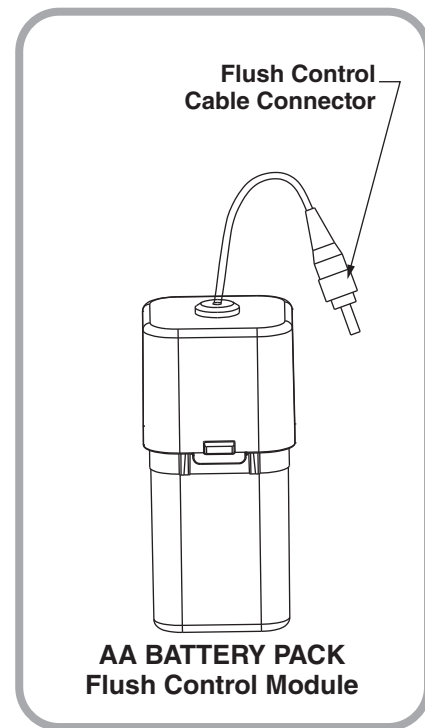
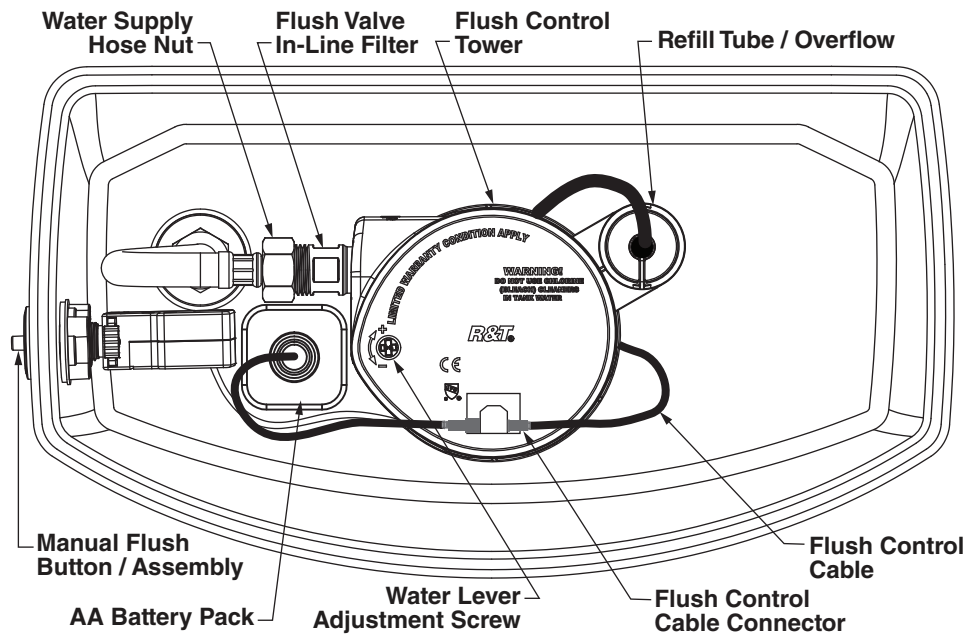
8

Tighten handles alternately until tank contacts bowl. **HAND TIGHTEN ONLY!**

\* For seat installation, see instructions included with seat.

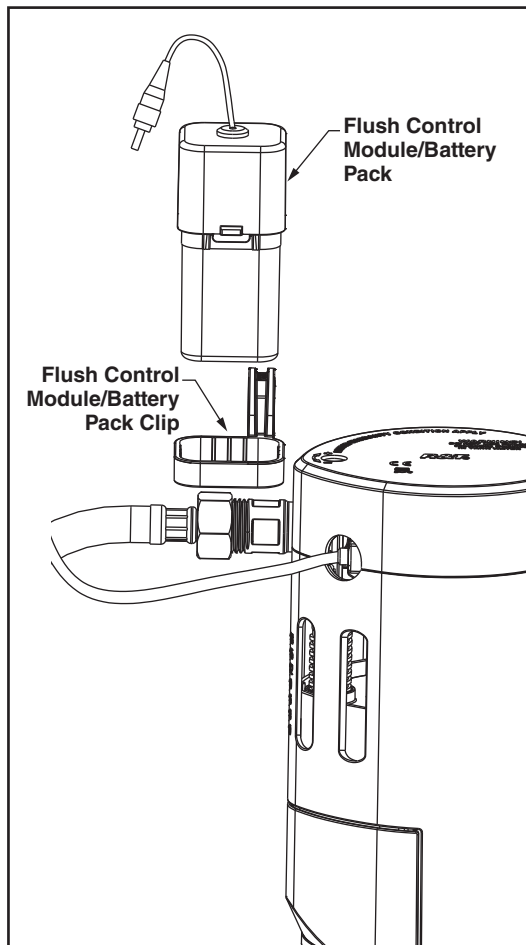


**!** **WARNING:** Overtightening of water supply line nuts could result in breakage and potential flooding. If the connection leaks after hand tightening, replace the supply line. Do not use any type of sealant on the water supply connection. Use of plumber's putty, pipe dope, or any other type of sealant will void the warranty.



**9**

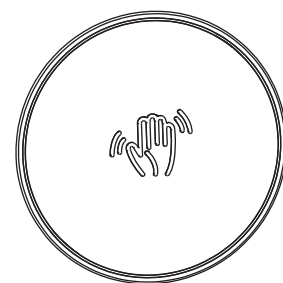
- a. Remove plastic Flush Control Module / Battery Pack Clip from box, snap and place over "Flush Valve In-Line Filter" area.
- b. Remove Flush Control Module / Battery Pack from box and follow procedure in "Operational Guide," steps 4 to 9 under "Changing Batteries / Flush Control Module in Tank to add batteries to module. (ref illustration from attached drawing)



**10**

Remove Hand Sensor Module from box and follow procedure in "Operational Guide," steps 1 to 3 under "Changing Batteries / Hand Sensor Module," while also referencing the **NOTES** portion at the end.

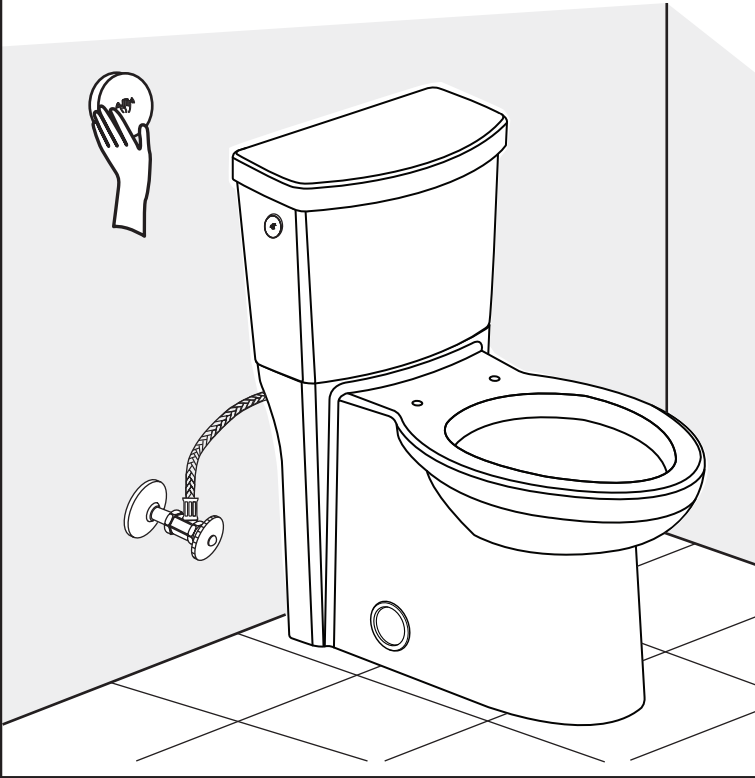
Also reference under the "Operational Guide," "Installation of Hand Sensor Module," for preferable locations to mount the Hand Sensor Module.



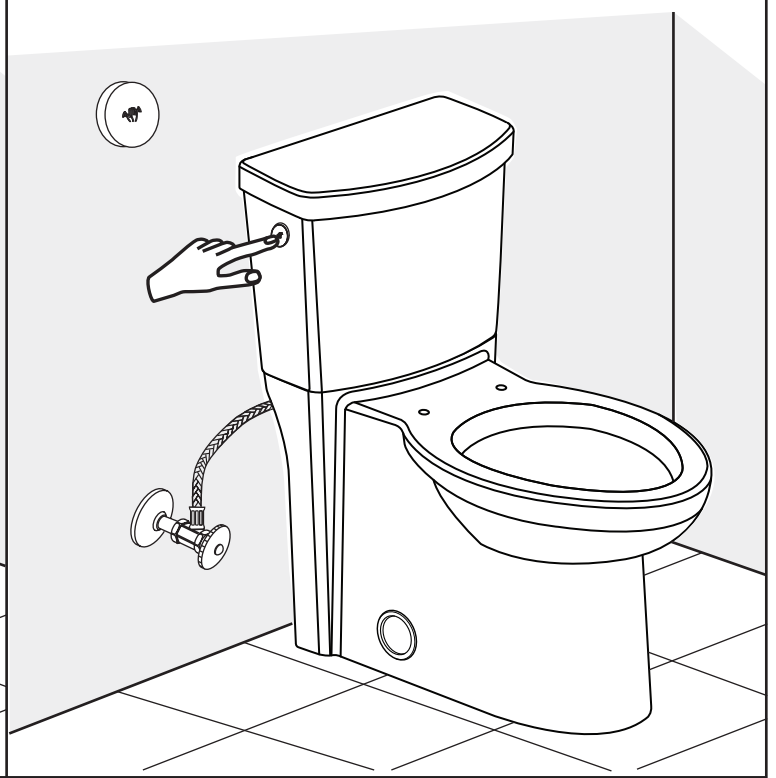
**Hand Sensor Module**

## 11 Operating the Touchless Flush

Simple hand wave over sensor face within 1-1/2 inch distance for two seconds triggers a powerful flush for a more hygienic bathroom experience. The 2-1/2 inch diameter, adhesive tape backed sensor module is supplied with mounting screws and can be installed on the wall within 3 feet of the toilet or on top of the toilet tank itself.



## 12 Press and hold push button actuator on left side of tank for two seconds to induce manual flush in the event batteries need replacing.



Please utilize the included signage should you feel it necessary to communicate to users how to activate the hygienic touchless flush. The signage can be affixed to the top of the tank or around the flush actuator.



Example: on tank cover



Example: around the flushing actuator on wall

## OPERATIONAL GUIDE

**Cadet Touchless Toilet Operational Guide:** Follow instructions below for installing batteries in Flush Control Module and Hand Sensor Module.

### LOW BATTERY Indication:

**FLUSH CONTROL MODULE:** When waving hand over the Hand Sensor Module and it starts to slowly flash 12 times, indicates that the batteries in the Flush Control Module within the tank need to be replaced.

**HAND SENSOR MODULE:** When the batteries are low on the Hand Sensor Module, the module will flash quickly 5 times indicating the batteries need to be replaced.

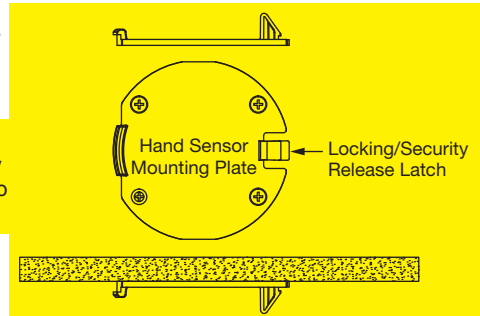
### Changing Batteries / Flush Control Module in Tank:

1. Turn OFF water supply to toilet, then flush toilet to remove water from tank.
2. Remove lid from tank and identify "Flush Control Module" (ref. illustration of module on page 5 above)
3. Disconnect connector wires from flush valve to Flush Control Module to separate Control Module from Flush Valve and remove Flush Control Module/AA Battery Pack (ref. illustration on page 5 above).  
**Note:** Ensure wires do not fall into water or get wet.
4. Using a small Philips Head Screwdriver, remove single screw holding Flush Control Module cover and gently remove cover to reveal AA battery pack.
5. Remove battery pack and remove all 4 AA batteries, then replace with new alkaline batteries.
6. Place battery pack back into Flush Control Module container making note of TOP & BOTTOM and orientation within the container (labeled on battery pack).
7. Snap Flush Control Module cover over battery pack, replace screw and securely tighten.
8. Connect wires from Flush Control Module and flush valve together, replace module back into flush valve holder.
9. Turn On water supply, allow tank to fill with water.

### Changing Batteries / Hand Sensor Module:

1. Remove the 2 screws on back of hand sensor module and remove rear cover. Note: There is a rubber O Ring around the rear cover to reduce moisture from getting into the sensor which provides a snug fit and may require some effort to remove. A small flat head screwdriver will make it easier to remove.
2. Remove 3 AAA batteries and replace with new alkaline batteries.
3. Replace rear cover and screw into place.

If Hand Sensor is equipped with a locking/security feature, it will be necessary to use a flat head screwdriver of approximately 1/8" (3 mm) wide to press and release the latching mechanism to remove the sensor from the location it is mounted.



**NOTE:** Replace Hand Sensor Module batteries within 3 minutes after installing batteries in Flush Control Module to allow codes to match or synchronize to each other. After installing batteries, wave hand over Hand Sensor Module once which will complete code matching. If Hand Sensor Module lights up after battery installation but the toilet does not flush, remove battery, wait 1 minute, then replace battery to match or synchronize codes.

**Sensor NOTE I:** On hand sensor, hand needs to wave slowly over sensor 2 inches from surface. Also hand sensor needs to be within 3 feet of the toilet. Keep hand sensor at a location where it will not accidentally flush if something comes within close proximity of it.

**Sensor NOTE II:** When cleaning around the toilet, mainly the hand sensor, if person cleaning comes close to sensor the toilet may flush when not needed.

### Installation of Hand Sensor Module:

1. The hand sensor module can be installed on a wall or in close proximity of the toilet within 3 feet using wall anchors and screws, double stick tape or Velcro Adhesive strips. Ensure placement of hand sensor can be reached by hand when sitting on the toilet.

### Hand Sensor with Locking Feature:

1. If mounting sensor onto wall using wall anchors and screws, double stick tape or Velcro Adhesive strips, ensure the release latch on the sensors mounting plate is pointing towards the bottom.

### Water Level Adjustment:

1. Turn on water supply. Adjust water level to water level line indicated on the back of the tank. To Raise the water level in the tank, use a Philips screw driver, turn the adjustment screw on top of the flush valve (ref. illustration above on page 5) in a clockwise direction or in the direction of the "+" symbol.
2. To Lower the water level in the tank, turn the adjustment screw on top of the flush valve in a counterclockwise direction or in the direction of the "-" symbol.

### Cleaning Flush Valve In-Line Filter:

1. Shut OFF main water supply to toilet.
2. Disconnect water supply hose to Flush Control Tower using adjustable wrench. (ref. illustration on page 5)
3. To remove filter, there is a white plastic strip (tab) protruding in the center, using a small pleyer, gently pull on the strip to remove the filter.  
**Note:** Filter has a rubber O ring around it which creates a snug fit and may require some effort to remove.
4. Clean the filter with clean water and a soft brush.
5. Re-install filter, securely connect water supply hose, turn ON water supply and check for proper operation.

### Manual Flush Backup

If there is a Low Battery condition or some electronic failure of the Hand Sensor or Flush Control Module, the toilet can still be flushed manually using the Manual Flush Button on the outside of the toilets tank. Fully press and hold the button for 2 to 3 seconds until a complete flush is achieved.

## Troubleshooting Guide

Problem/Indicator	Possible Cause	Corrective Action
No flush or delayed flush	a. No batteries	a. Install 4 alkaline AA batteries to the Flush Control Module and 3 AAA batteries to the Hand Sensor Module.
	b. Low battery in Flush Control or Hand Sensor Module.	b. Follow procedure for low battery indication of Hand Sensor or Flush Control Module.
	c. Incorrect water level in tank	c. If water level is too low or too high, flush performance is affected. Fill water in the tank to the correct level, as specified on the back of the tank. See "Water Level Adjustment" procedure.
	d. The Flush piston or lift rod are stuck.	d. Check if the piston or lift rod moves freely.
	e. No water in the tank	e. Fill the tank with water to the level specified on the label on the back of tank.
	f. Toilet is clogged	f. Lift toilet lid and disconnect "Flush Control Cable" from Battery Pack/Flush Control Module. Unclog toilet. Press and hold "Manual Flush Button" for 2 to 3 seconds to clear trap way and confirm trap is clear of clog. Reattach "Flush Control Cable".
	g. Touchless hand swipe was too fast	g. Initiate a slightly slower hand swipe within the sensor area.
	h. Touchless hand swipe was not in sensor detection area	h. Sensor detection area is directly in front of the sensor face and up to 2 inches away from the surface.
	i. Water supply valve closed	i. Open valve and allow water to fill tank.
	j. Supply line blocked	j. Shut off water supply, disconnect supply line and inspect all gaskets and washers. Reassemble.
	k. Sand or debris lodged in filter screen	k. Shut OFF water supply to toilet. Follow procedure for "Cleaning Flush Valve In-Line Filter".
Leaking	a. Incorrect water level	a. If water level is too low or too high, flush performance is affected and leaking may occur. Fill water in the tank to the correct level, as specified on the label on the back of tank.
	b. Debris on sealing surface	b. Remove debris on sealing surface causing the leak.
	c. Loose Shank Nut	c. Tighten the Shank nut to eliminate the leak.
	d. Refill water level is too high	d. Leaking occurs through the overflow tube due to the Fill Valve float setting too high. Lower the float setting until the Fill Valve refills to the correct water level. See "Water Level Adjustment Procedure".
	e. The refill tube is not installed properly.	e. Adjust refill tube and ensure end of tube is above water line.
Partial Flush	a. Refill tube is not installed in the Overflow Tube	a. Connect the refill tube to the Overflow Tube.
	b. Incorrect water level	b. If water level is too low or too high, flush performance is affected. Fill water in the tank to the correct level, as specified on the label on the back of tank. See "Water Adjustment Procedure".
	c. Manual Flush Button not fully depressed	c. Press the Manual Flush Button in further.
Unintended Flush	a. Motion or object in sensor area	a. Remove item from the sensor activation area.
Manual Flush Button not working	a. Manual Flush Button is not depressed completely	a. Press the Manual Flush Button in further for 2 to 3 seconds for a complete flush.
	b. There is no water in the tank	b. Fill the tank with water to the level specified on the label on the back of tank. See "Water Adjustment Procedure".
	c. Incorrect water level	c. If water level is too low or too high, flush performance is affected. Fill water in the tank to the correct level, as specified on the label on the back of tank. See "Water Adjustment Procedure".
Hand Sensor Module flashes slowly 12 times	a. Indicates battery power is low in Flush Control Module in tank	a. Replace batteries in Flush Control Module in tank.
Hand Sensor Module flashes quickly 5 times	a. Indicates battery power is low in Hand Sensor Module	a. Replace batteries in Hand Sensor Module.
Toilet leaks	a. Poor supply line connection	a. Remove supply line, inspect and reconnect. Replace supply line if leak continues.
	b. Poor bowl to tank/floor connection	b. Review Step 2 through 8 of installation procedure.
Toilet bowl rocks after installation	a. Wax ring not fully compressed	a. Retighten bowl-to-floor knobs.
	b. Floor not level	b. Use toilet shims and/or place a bead of caulk around the base of the toilet.
The Hand Sensor Module can light up by sensing, but does not flush	a. The Flush Control Module in tank is not connected properly.	a. Ensure wire from Flush Control Module to Flush Valve Body is fully connected.
	b. The codes of the Hand Sensor Module and Flush Control Module are not matched or synchronized to each other.	b. Install Hand Sensor Module batteries within 3 minutes after installing Flush Control Module batteries to allow codes to match or synchronize.
	c. The battery pack in the Flush Control Module may not be orientated correctly.	c. Orientate the batteries in the battery pack.

### CARE AND CLEANING

When cleaning your toilet, wash it with mild, soapy water, rinse thoroughly with clear water and dry with a soft cloth.

**WARNING:** Do not use in-tank cleaners. These products can seriously corrode fittings in the tank. This damage can cause leakage and property damage. **American Standard shall not be responsible or liable for any damage caused by the use of in-tank cleaners.**

Control module FCC ID: 2AW23-D7020-01  
Sensor module FCC ID: 2AW23-D7020-02

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

### TOILET LIMITED WORRY-FREE WARRANTY

**This toilet comes with a limited lifetime warranty on chinaware, a limited 5 year warranty on all mechanical parts of the toilet, 1 year warranty on electronic parts and a limited 1 year warranty on the toilet seat if included with product.** If inspection of this AS America, Inc. ("American Standard") plumbing product, inclusive of the chinaware and all mechanical parts, confirms that it is defective in materials or workmanship, American Standard will repair or, at its option, exchange the product for the same or a similar model.

This limited warranty applies only to the original non-commercial purchaser and installation of the products. In the event of a limited warranty claim, proof of purchase will be required – save sales receipts.

For this warranty to become effective, the warranty registration process must be completed via the internet or telephone per the warranty registration instructions.

This limited warranty does not apply to commercial installations. The warranty for commercial installations is 1 year on chinaware and mechanical parts, 1 year warranty on electronic parts and 1 year on the toilet seat if included with product.

This warranty **does not apply** to local building code compliance. Since local building codes vary considerably, the purchaser of the product should check with a local building or plumbing contractor to ensure local code compliance before installation.

This warranty **will be void** if the product has been moved from its initial place of installation; if it has been subjected to faulty maintenance, abuse, misuse, accident or other damage; if it was not installed in accordance with American Standard's instructions; or if it has been modified in a manner inconsistent with the product as shipped by American Standard.

**WARNING: This warranty DOES NOT COVER** any damages caused by the use of in-tank cleaners. These products can seriously corrode the fittings in the tank. This damage can cause leakage and property damage. **American Standard will not be responsible or liable for any damage caused by the use of in-tank cleaners.**

American Standard's option to repair or exchange the product under this warranty does not cover any labor or other costs of removal or installation including any costs of any surrounding material such as tile or marble. **American Standard is not responsible for any other incidental or consequential damages attributed to a product defect or to the repair or exchange of a defective product, all of which are expressly excluded from this warranty.** (Some states or provinces do not allow the exclusion or limitation of implied warranties, so this exclusion may not apply to you.)

This warranty gives you specific rights. You may have other statutory rights that may vary from state to state or province to province, in which case this warranty does not affect such statutory rights.

**In the United States:**

American Standard Brands  
30 Knightsbridge Rd., Suite 301  
Piscataway, NJ 08854  
Attention: Director of Customer Care  
For residents of the United States, warranty information may also be obtained by calling the following toll free number: (855) 815-0004  
[www.americanstandard.com](http://www.americanstandard.com)

**In Canada:**

LIXIL Canada Inc.  
5900 Avebury Rd.  
Mississauga, Ontario  
Canada L5R 3M3  
Toll Free: (855) 836-9615  
[www.americanstandard.ca](http://www.americanstandard.ca)

**In Mexico:**

American Standard B&K Mexico  
S. de R.L. de C.V.  
Via Morelos #330  
Col. Santa Clara  
Ecatepec 55540 Edo. Mexico  
Toll Free: 01-800-839-1200  
[www.americanstandard.com.mx](http://www.americanstandard.com.mx)

### PLEASE COMPLETE AMERICAN STANDARD WARRANTY REGISTRATION PROCESS AND SAVE THIS WARRANTY INFORMATION

**IMPORTANT:** Registration of the toilet must be completed for this warranty to become effective. Your registration will make it easier to contact you in the event of a product recall.\*

**INSTRUCTIONS:** Register your toilet at [www.americanstandard.com](http://www.americanstandard.com). Please save your proof of purchase (sale receipt).

If you need assistance or do not have access to our website, please contact American Standard Customer Care at: (855) 815-9615. An American Standard representative will assist in completing the warranty registration.

\* In California, your warranty rights remain intact even if you do not complete the registration process.

**THIS WARRANTY IS NOT TRANSFERABLE FROM ORIGINAL CONSUMER PURCHASER.**