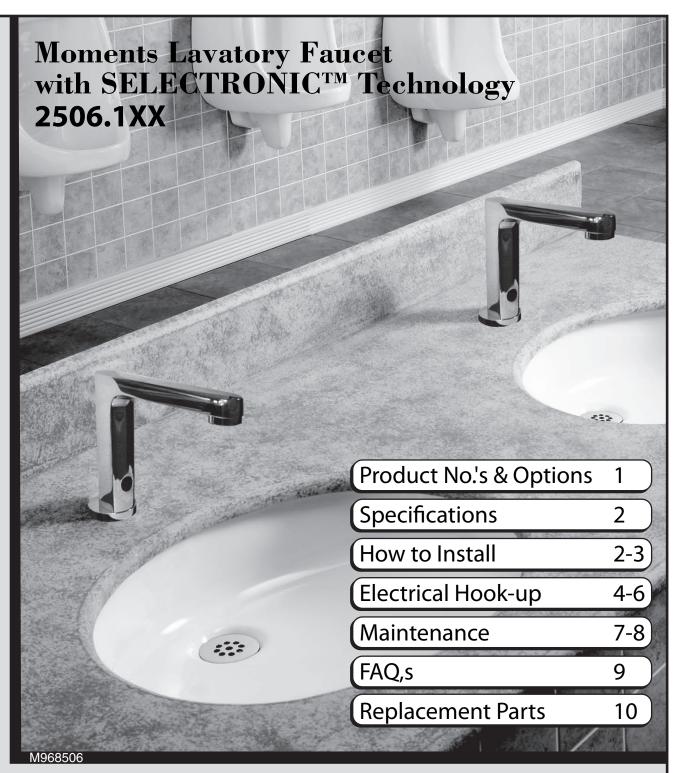
# stallation Instructions



American Standard

#### NOTE TO INSTALLER: Please give this manual to the customer after installation.

To learn more about American Standard Faucets visit our website at: **www.us.amstd.com** or U.S. customer's e-mail us at: **faucetsupport@amstd.com** 

For Parts, Service, Warranty or other Assistance,

please call 1-800-442-1902 (In Canada: 1-800-387-0369)

(In Toronto Area only: 1-905-3061093)

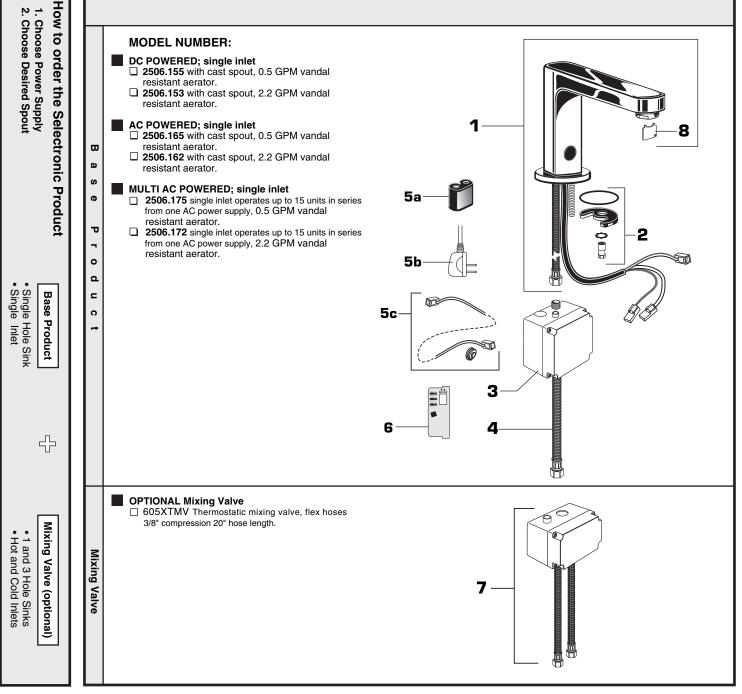
Thank you for selecting American-Standard...the benchmark of fine quality for over 100 years. To ensure that your installation proceeds smoothly--please read these instructions carefully before you

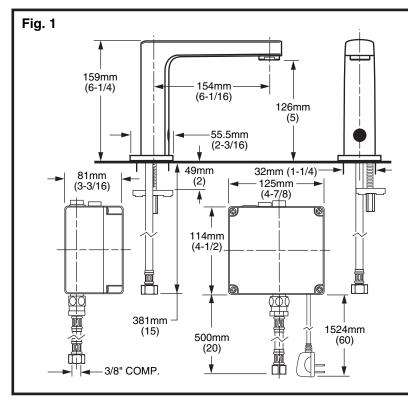
begin.

#### All American Standard Faucets Are Water Tested At Our Factory. UNPACKING Some Residual Water May Remain In The Faucet During Shipping.

1. Remove the fitting and loose items from the carton. The illustration below shows the fitting and all loose items after they have been removed from the carton. Some items may be packaged partially assembled to other items.

- 1. Selectronic Spout Assembly
- 2. Mounting Kit
- **3. Electrical Enclosure**
- 4. Supply Hose
- 5a. DC Power Supply (for 2506.155/153 series)
- 5b. AC Power Supply (for 2506.165/162 series)
- 5c. 10 ft. Extension Wire (for 2506.175/172 series)
- 6. Circuit board
- 7. Mixing Valve ( optional must be ordered separately)
- 8. Key for vandal resistant aerator





#### **TOOLS REQUIRED; Fig. 2**

- 1 Channel Locks
- 2 Adjustable Wrench
- 3 Plumbers' Putty or Caulking
- 4 Phillips Screwdriver
- 5 Flat Blade Screwdriver
- 6 Electric Drill & 1/4" Drill Bit
- 7 Tape Measure

## INSTALLATION

#### INSTALL SPOUT ASSEMBLY; Fig. 1

CAUTION Turn off hot and cold water supplies before beginning

1. Insert WIRES (1), FLEX HOSE (2) and SPOUT SHANK (3) through center hole of mounting surface. Fig. 1a.

2. Assemble "C" WASHER (4), STAR WASHER (5) and LOCKNUT (6) onto threads of SPOUT SHANK (7) from underside of mounting surface. **Fig. 1b.** 

3. Align FAUCET and tighten LOCKNUT (6). Fig. 1b.

#### **Roughing-in Dimensions**

#### **GENERAL DESCRIPTION:**

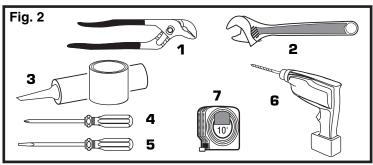
Electronic faucet with proximity operation. Vandal resistant solid brass construction single post mounting. Operates on DC (battery) or AC permanent power. Water pressure range from 20 to 125 psi. In-line strainer for solenoid is integral. Single inlet 3/8 compression, built-in checks, and flexible stainless steel 15" reach inlet hose for spout connection.

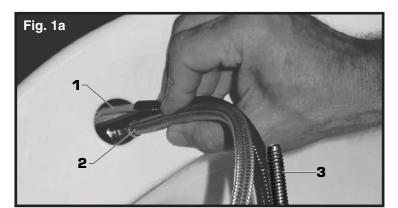
#### **CODES AND STANDARDS:**

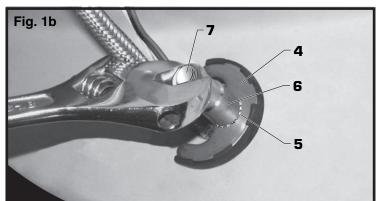
These products meet or exceed the following coded standards:

ANSI A117.1 ASME A112.18.1 CSA B 125 NSF 61/Section 9









### MOUNT ENCLOSURE; Fig. 2

1. Determine location of ENCLOSURE (1). It must be located with-in the 14" (356mm) by 21" (533mm) shaded area shown in Figure 2 in order for electrical connections from the spout assembly to be made. NOTE: ENCLOSURE SUPPLY HOSE is 20". Distance between wall supply and ENCLOSURE (1) must be taken into consideration.

2. Remove 4 screws from COVER (2) and pull off COVER (2). Hold the ENCLOSURE (1) in desired location and mark the four mounting hole locations as shown. **Fig. 2**.

 The ENCLOSURE (1) works best if secured to a wall stud or cross brace within the wall, using the SCREWS
(3) supplied. If the ENCLOSURE (1) is to be installed on a tile or plaster wall the ANCHORS (4) and SCREWS
(3) should be used.

**4.** For installations on drywall or tiled walls; use ANCHORS (**4**) and SCREWS (**3**) for securing ENCLOSURE (**1**) to finished wall. Drill four 1/4" dia. holes a minimum of 1-3/4" deep. Insert the four ANCHORS (**4**) flush with face of the finished wall. Align the ENCLOSURE (**1**) and Install the MOUNTING SCREWS (**3**). Tighten to secure ENCLOSURE (**1**) to mounting surface.

# **CONNECT SPOUT HOSE TO ENCLOSURE; Fig. 3**

1. Connect SUPPLY NUT (1) from spout assembly to nipple on top of ENCLOSURE (2). Tighten with adjustable wrench to make a water tight connection. Fig. 3.

#### CONNECT WATER SUPPLY TO ENCLOSURE AND WALL SUPPLY; Fig. 4

NOTE; If using the optional Mixing Valve See Sheet #M968808 for installation instructions.

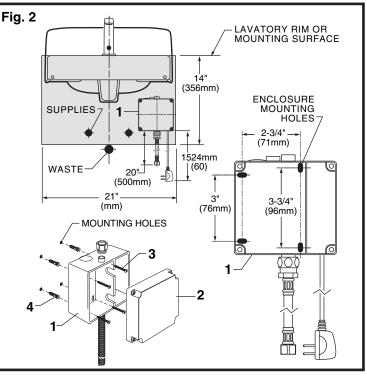
1. Insert FIBER WASHER (4) into SUPPLY NUT (1) on ENCLOSURE (2).

**2.** Connect SUPPLY NUT **(1)** on ENCLOSURE **(2)** to FLEXIBLE SUPPLY HOSE **(3)**. Tighten to make a water tight connection. Use two wrenches to tighten if necessary. **Fig. 4.** 

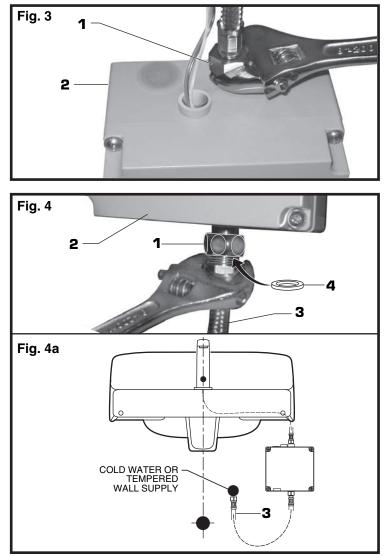
**3.** Connect FLEXIBLE SUPPLY **(3)** directly to wall supply. Connection on FLEXIBLE SUPPLY **(3)** is 3/8" compression. Use adjustable wrench to tighten connection. Do not over tighten. **Fig. 4a.** 

**Note:** FLEXIBLE SUPPLY **(3)** measures 20" from the bottom of the ENCLOSURE **(1)** base. If additional supply length is required, installer must purchase parts separately.

**Important:** If FLEXIBLE SUPPLY (3) is too long, loop to avoid kinking.



NOTE: If using Mixing Valve (optional) See Sheet #M968808 for installation instructions.



## **ELECTRICAL INSTALLATION 1** DC VERSION (BATTERY); Fig. 1

1. Remove ENCLOSURE COVER (1). Fig. 1.

2. Feed the WIRE CONNECTORS (2) through the top of ENCLOSURE (5). Fig. 1a.

3. Remove GROMMET (4) from ENCLOSUR (5). Fig.1.

4. Feed the gray SENSOR WIRE (7) through GROMMET (4), 4" from CONNECTOR. Fig. 1b & 1d Insert gray SENSOR WIRE (7) into SPLIT PLUG (9). Push SPLIT PLUG (9) into GROMMET (4) to seal. Fig. 1d.

5. Insert GROMMET (4) back into ENCLOSURE (5). Fig. 1c.

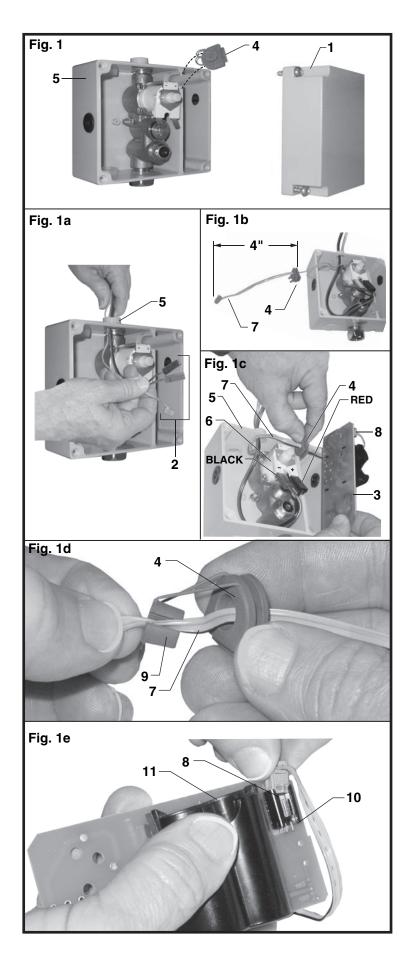
6. Install BATTERY (11) onto DC circuit board. Fig.1e. Note: For BATTERY PACK installation see "Install Battery" page 7.

7. Install CIRCUIT BOARD (3) into ENCLOSURE (5) with SENSOR WIRE (7) under BOARD. Fig. 1c.

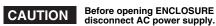
8. Insert SENSOR WIRE CONNECTOR (8) into CIRCUIT BOARD RECEPTOR (10). Fig. 1e.

**9.** Connect wires from SENSOR to SOLENOID VALVE **(6)** (Red to +, Black to -). **Fig. 1c.** 

**10.** Replace ENCLOSURE COVER **(1)**. Tighten cover screws firmly.



#### **2** AC VERSION; Fig. 2



1. Remove ENCLOSURE COVER (1). Fig. 2.

2. Feed the WIRE CONNECTORS (2) through the top of ENCLOSURE (5). Fig. 2a.

3. Remove GROMMET (4) from ENCLOSUR (5). Fig. 2.

**4.** Feed the gray SENSOR WIRE **(7)** through GROMMET **(4)**, 4" from CONNECTOR. **Fig. 2b.** Insert gray SENSOR WIRE **(7)** into SPLIT PLUG **(9)**. Push SPLIT PLUG **(9)** into GROMMET **(4)** to seal. **Fig. 2e.** 

5. Insert GROMMET (4) back into ENCLOSURE (5). Fig. 2d.

6. Remove SPLIT PLUG (11) from POWER SUPPLY GROMMET (12). Insert POWER CORD CONNECTOR (13) through POWER SUPPLY GROMMET (12). Insert POWER CORD (14) into SPLIT PLUG (11). Push SPLIT PLUG (11) into POWER SUPPLY GROMMET (12) to seal. Fig. 2g.

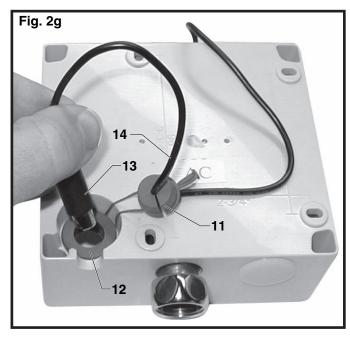
7. Insert POWER SUPPLY CONNECTOR (13) into RECEPTOR (15) on the CIRCUIT BOARD (3). Fig. 2c.

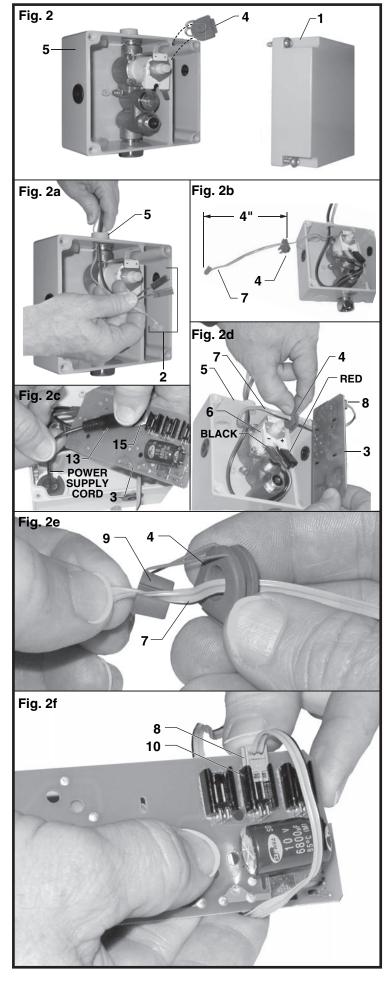
8. Install CIRCUIT BOARD (3) into ENCLOSURE (5) with SENSOR WIRE (7) under BOARD. Fig. 2d.

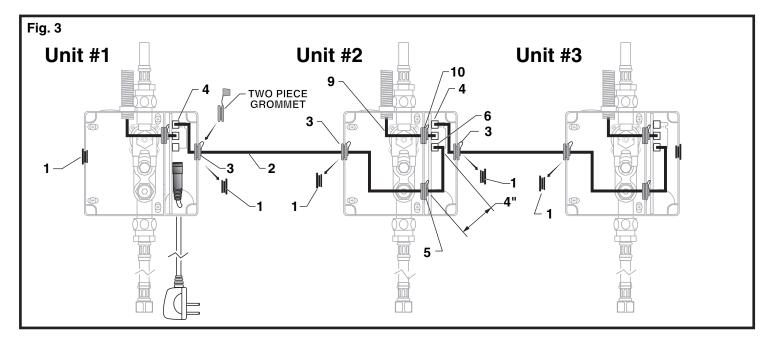
9. Insert SENSOR WIRE CONNECTOR (8) into CIRCUIT BOARD RECEPTOR (10) slot. Fig. 2f.

**10.** Connect wires from SENSOR to SOLENOID VALVE **(6)** (Red to +, Black to -). **Fig. 2d.** 

**11.** Replace ENCLOSURE COVER **(1)**. Tighten cover screws firmly.







#### FOR AC-VERSION (MULTI HOOK-UP); Fig. 3, 4

**1.** See AC Version Electrical Hook-up for first unit of the Multi hook-up.

2. Remove ENCLOSURE COVERS from all ENCLOSURES.

**3.** Remove SOLID BLACK INSERT(1) from right side of ENCLOSURE #1 and replace with gray 2-PIECE GROMMET (3). Replace solid black inserts on Unit #2 with gray 2-PIECE GROMMET (3).

**4.** Take the 10 ft. EXTENSION **(2)** from Unit #2 and install into right side of Unit #1 and Left side of Unit #2 insealing wire into SPLIT PLUG **(7)** as shown in **Fig. 4a.** Push SPLIT PLUG **(7)** into GROMMET **(8)**.

5. Insert CONNECTOR from 10 ft. EXTENSION (2) into CIRCUIT BOARD RECEPTOR (4) top of Unit #1 as shown in Fig. 3.

6. Insert other end of 10 ft. EXTENSION into LOWER U GROMMET (5) of Unit #2 (approximately 4" from connector). Fig. 3. Push SPLIT PLUG (7) into GROMMET (8) to seal.

**7.** Insert connector of 10 ft. EXTENSION into lower receptor as shown in fig. 3 on CIRCUIT BOARD **(6)** of Unit #2.

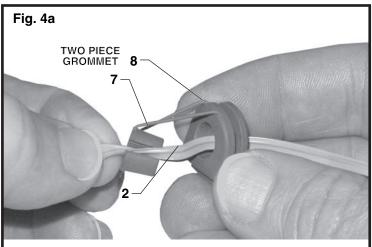
8. Feed gray sensor wire 9 from Unit #2 through upper U GROMMET (10) of Unit #2 ENCLOSURE 4" from connector Fig. 3. Insert wire into SPLIT PLUG (7). Push SPLIT PLUG (7) into GROMMET (8) to seal. Fig. 4a.

9. Insert GROMMET (2) back into ENCLOSURE. Fig. 4b.

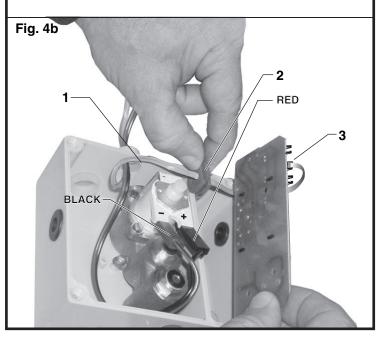
10. Reinstall Circuit Board (3) into Enclosure with all wires under Board. Fig. 4b.

**11.** Connect Unit #2 Red and Black Sensor wires To #2 solenoid valve (Red to +, Black to -). **Fig. 4b.** 

**12.** Repeat Steps 3 through 11 for remaining Units in Multi Hook-up.



Feed the gray 8 ft. EXTENSION (2) through ROUND GROMMETS (3) and U GROMMETS (5) as illustrated above.

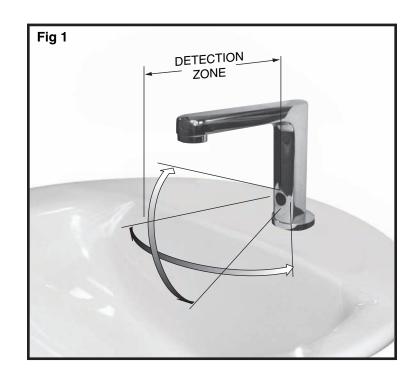


## MAINTENANCE

# HAND WASH SENSOR OPERATION;Fig. 1

When the Sensor detects a user, the water immediately starts to flow. Water flow will stop Two seconds after user is out of sensor range. The off delay allows the user to comfortably move his hands without the flow cycling on to off. As a precaution, a safety timer will turn off the water, after the sensor has been blocked for 59 seconds. The water will stay off until the blockage is removed from the detection zone.

Detection Zone: 2" - 10" (50mm - 250mm) Default: Set at Factory 6" (150mm)



#### HOW TO CHANGE SENSOR RANGE; (Factory set at 6") Fig. 2

1. Setting the Detection Zone (Distance): Remove cover from ENCLOSURE. Disconnect GRAY SENSOR WIRE (1) from circuit board, then reconnect.

2. While the SENSOR CONTROL LED (2) is blinking slowly, place your hand 1 - 2 in. (30-50mm) in front of the sensor. **Fig. 2a.** 

**3.** When the LED stops blinking and stays "ON", move your hand to the desired position and hold in place until the LED begins to blink again. **Fig. 2a.** 

**4.** Once the SENSOR CONTROL LED **(2)** begins to blink again, remove your hand from the detection zone. When the flashing stops, the detection distance is set.

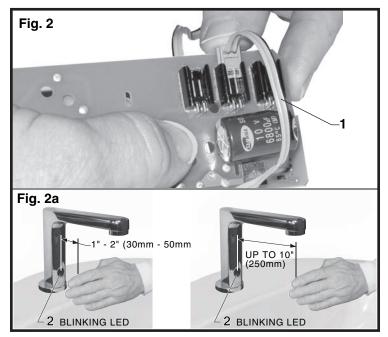
# HOW TO INSTALL AND CHANGE BATTERY; Fig. 3

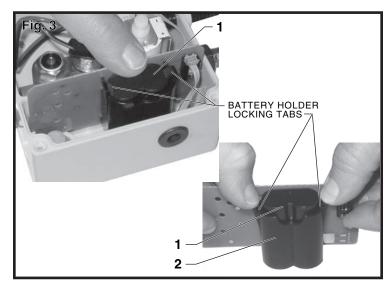
**1.** To install New BATTERY **(1)** align and press down BATTERY (1) (contacts facing downward) into position until tabs lock into place.

To remove the BATTERY (1) spread the two tabs on the HOLDER (2) with your thumbs . The BATTERY (1) will release.

2. Remove the OLD BATTERY (1).

**3.** Install NEW BATTERY **(1)** (contacts facing downward) into HOLDER **(2)** and press down into position until tabs lock into place.





#### HOW TO CLEAN FILTER; Fig. 4

CAUTION Before opening ENCLOSURE disconnect AC power supply.

1. Remove ENCLOSURE COVER.

**2.** Close SUPPLY STOP **(5)** with 4mm Hex wrench. Note: Keep water flowing out of faucet while shutting off.

**3.** Pull off Red (1) and Black **(2)** CONNECTORS from SOLENOID VALVE **(3)**.

4. Unthread STRAINER (4) using a 7/16" socket.

**5.** Pull out the STRAINER **(4)** and clean with an old toothbrush. Rinse thoroughly with water.

**6.** Install the STRAINER **(4)** back in its place and tighten with a 7/16" socket.

Caution: do not over tighten strainer. Note: It is recommended to clean strainer every 6 months.

**7.** Replace ENCLOSURE COVER. Tighten cover screws firmly.

## HOW TO CLEAN AND REMOVE THE AERATOR; Fig. 5

1. Remove AERATOR HOUSING (1) with KEY supplied with faucet.

3. Remove AERATOR (2) from HOUSING (1).

**2.** Clean the AERATOR SCREENS **(3)** with a old tooth brush to remove dirt.

**4.** Rinse Clean with water. Reassemble and install into spout end. Be sure black seal washer is in place.

#### **G GENERAL CLEANING; Fig. 6**

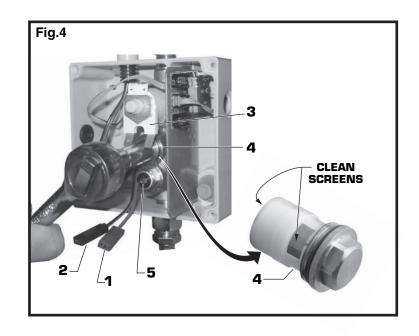
**1.** For general cleaning use a damp, soft cloth to clean the spout and the sensor.

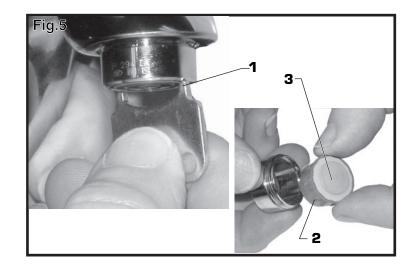
**2.** For cleaning dirt use a soft cloth with diluted dish washing detergent. Wipe the area using a wet cloth and dry using a soft cloth.

#### CAUTION

Do not scratch the sensor when cleaning.

Avoid using anything that may scratch the spout surface. Never use polishing power, detergent or a nylon scrub brush. They will damage the surface of the spout or Sensor.







#### FAQ'S

**Q:** How will I know if battery needs to be replaced? **A:** Valve does not open and sensor blinks 2 times interrupted by pause for up to 7 days.

**Q:** Why has the flow rate of the faucet reduced significantly?

A: Check and clean aerator and strainer.

**Q:** There is no flow out of faucet when I'm in the sensor range?

**A:** Check sensor. If sensor blinks 2 times interrupted by pause, replace battery, or call 1800-442-1902.

Q: Why does the faucet operate the opposite of expected-Turns On when not in sensor range, but turns off when in sensor range?A: Sensor wires to solenoid are reversed. Black to - & Red to + is correct.

**Q:** What is the normal operating pressure range?

**A:** Faucet will operate with supply pressures ranging from 20-80 psi.

