



# SYMMONS® Ultra-Sense™ Lavatory Faucet S-6080

## Battery Powered, Sensor-Operated Installation and Service Instructions



### IMPORTANT:

Water lines **MUST** be thoroughly flushed **BEFORE** and **AFTER** installing the faucet to prevent foreign matter, i.e. copper chips, sand, stones, etc. from clogging and possibly damaging the faucet.

### GENERAL

This installation and Maintenance Guide introduces the installation, maintenance and use of the Ultra-Sense faucet. Please read the instructions carefully prior to the installation and save them for reference where service may be needed. If any fault or malfunction occurs in the faucet, please refer to the troubleshooting chart, or contact Symmons Customer Service at 1-800-SYMMONS.

### TECHNICAL DATA

- After flow period: 1 second
- Maximum water flow period: 10 seconds
- Electrical installation: 2CR5 6V Lithium Battery
- Working pressure: 14.5psi - 145psi
- Normal water flow: .25GAL/cycle

### INSTALLATION

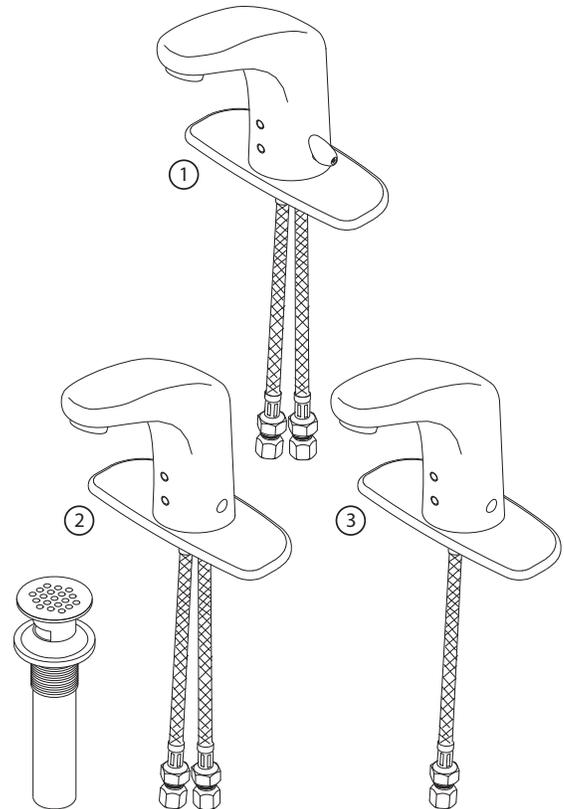
Every S-6080 Series faucet can be installed in one of three possible supply configurations.

### OPTIONS

- Hot and cold supply with lever handle temperature adjustment. (factory standard)
- Hot and cold supply with preset tempered water. (field modified)
- Single supply for pre-mixed water. (field modified)

### OPTION 1

- For 4" center deckplate installation, place faucet and supply(s) through deck plate (SF-138).
- Affix deck plate with studs facing down to faucet using two screws (SF-143) provided in mounting kit (SF-142).  
NOTE: For S-6080-LST (18" long copper supply tube) thread supply tubes into faucet housing. Tubes thread into base with LEFT hand thread. Be sure brass tube bushing with o-ring is fully installed in base and tight.
- Mount the faucet on the wash basin using anchor bar (KN-23), spacer (KN-26), and nut (L-36) on 4" centers. Ensure the gasket (SF-140) is correctly positioned between the faucet and wash basin. For single hole mount installation, attach studs found in single mount kit (SF-158) to base of



housing. Place faucet supply(s) through wash basin and secure using wing fixing plate and nuts from single mount kit.

- Attach supply hose(s) (SF-148) to check strainer assembly (SF-186).
- Connect check strainer assembly (SF-186) to angle stop or water inlet pipe.

NOTE: For S-6080-LST (18" long copper supply tubes) attach check strainer assembly (SF-181) directly to supply stops. Cut tubing to proper length and attach tubing to check strainer assembly using nut (IL-8)) and ferrule (IL-9).OPTION 2  
Modifying the faucet for hot and cold supply with tempered water

- Remove handle screw (SF-155), handle (SF-154) and handle limit stop (SF-156).

- Reinstall handle (SF-154) and adjust the temperature as required.
- Remove handle (SF-154) and push plug (SF-153) in place of the handle.
- Continue with Option 1 installation instructions.

### OPTION 3

Modifying the faucet for single supply pre-mixed water

- Detach parts (SF-155), (SF-154) and (SF-156).
- Unscrew the flexible hot water supply hose (SF-148).  
**Note: left hand thread.**
- Screw on the plug (SF-159) in place of the supply hose.
- Reinstall the temperature adjustment handle (SF-154) and turn counterclockwise (cold position) as far as it goes.
- Push the plug (SF-153) in place of the temperature adjustment handle.
- Continue with option 1 installation instructions.

### Limiting the water temperature

#### S-6080 with temperature adjustment handle

- Remove handle screw (SF-155) and handle (SF-154).
- To limit the maximum water temperature, turn the handle limit stop (SF-156) clockwise.
- To increase the maximum water temperature, turn the handle limit stop (SF-156) counter clockwise.
- Reinstall handle reversing steps above.

#### S-6080 with preset water temperature

- Remove plug (SF-153).
- To limit the maximum water temperature, insert handle (SF-154) in faucet and turn it counter clockwise.
- To increase temperature turn handle (SF-154) clockwise.
- Remove handle (SF-154) and reinstall plug (SF-153)

### Recognition range and after flow

Recognition range is the distance at which the sensor reacts by turning on the faucet. After flow is the period that water continues to flow after the user's hands are removed from the recognition range. Both recognition range and after flow are factory preset for optimal performance.

### Battery (Lithium 2CR5 6V)

The Ultra-Sense's power source is one 6 volt lithium battery that lasts approximately 5 years (210 cycles/day).

### OPERATION

The Ultra Sense lavatory faucet is turned on and off by a sensor-controlled solenoid valve. Placing your hands within the recognition range of the sensor opens the solenoid valve and water starts to flow. When you withdraw your hands, the faucet turns itself off automatically following a preset after flow period. Faucets have a temperature adjustment handle and are equipped with an adjustable handle limit stop. The faucet is taken out of operation, e.g. for cleaning the lavatory, by covering sensor with plastic cleaning cover accessory included with the faucet.

### Cleaning

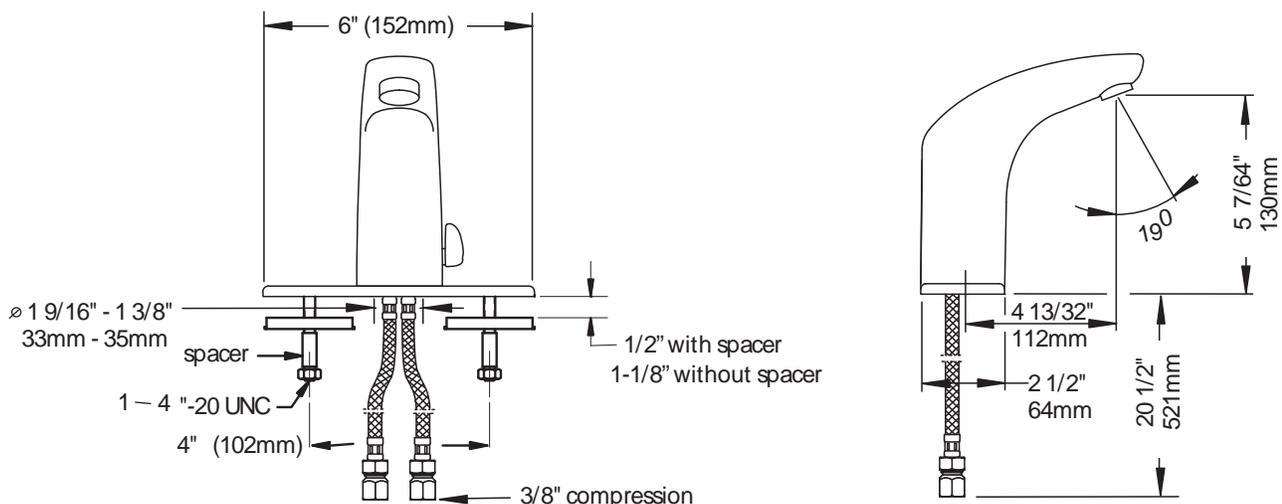
Cleaning of the external faucet surfaces should be carried out using a neutral, liquid cleaner. Scrubbing or corrosive agents must not be used and neither should the faucet be cleaned with a high pressure washer. Keeping the sensor clean assures faultless operation.

### Risk of freezing

When installing the faucet in a place where the temperature may fall below freezing, the entire system must be drained of water to prevent bursting in freezing weather.

1. Shut of water supply.
2. Disconnect all flexible hoses.
3. Drain all parts and hoses of water.

### Dimensions *Ultra-Sense Lavatory Faucet, S-6080*

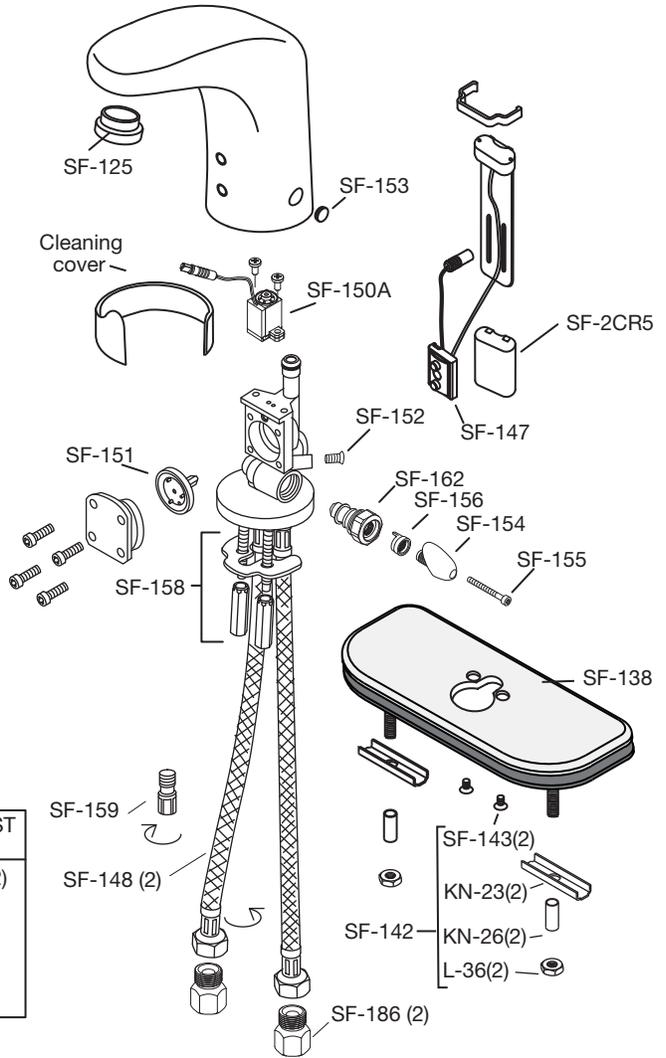


# Parts Assembly *Ultra-Sense Lavatory Faucet, S-6080*

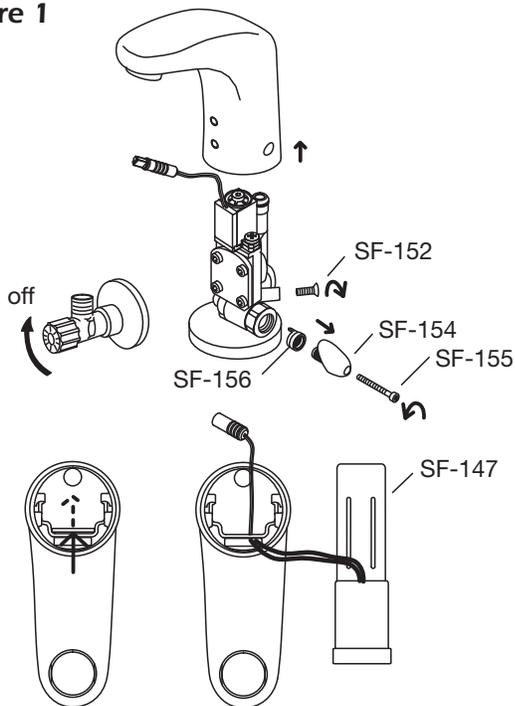
- KN-23 Anchor Bar
- KN-26 Spool Spacer
- L-36 Nut
- SF-125 Aerator
- SF-138 Deck Plate
- SF-140 Gasket
- SF-142 Mounting Kit
- SF-143 Mounting screws
- SF-145 Label
- SF-147 Sensor Repair Kit
- SF-148 Supply Hoses
- SF-150A Pilot Valve Repair Kit
- SF-151 Solenoid Valve Membrane
- SF-152 Housing Screw
- SF-153 Handle Plug Button
- SF-154 Handle
- SF-155 Handle Screw
- SF-156 Handle Limit Stop
- SF-158 Single Mount Kit
- SF-159 Plug
- SF-162 Mixer
- SF-181 Check strainer assembly
- SF-186 Check Strainer Kit
- SF-2CR5 6V Lithium Battery

S-6080-LST ONLY
SF-181 (2)

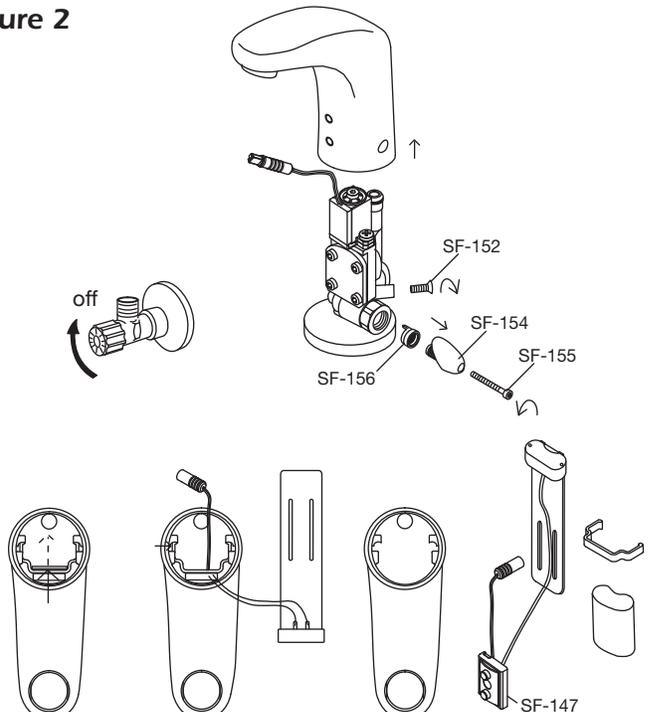




**Figure 1**



**Figure 2**



## SERVICE INSTRUCTIONS

### Changing the mixer

1. Close the water inlet(s).
2. Remove Housing screw (SF-152).
3. Remove Handle screw (SF-155), handle (SF-154), handle limit stop (SF-156), housing and mixer (SF-162).
4. Install new mixer reversing steps above.

### Changing solenoid valve

1. Close the water inlet(s).
2. Remove Housing screw (SF-152).
3. Remove Handle screw (SF-155), handle (SF-154), handle limit stop (SF-156), housing and solenoid valve (SF-150).
4. Install new solenoid valve reversing steps above.

### Cleaning or changing the solenoid valve membrane

1. Close the water inlet(s).
2. Remove Housing screw (SF-152).
3. Remove Handle screw (SF-155), handle (SF-154), handle limit stop (SF-156), housing and solenoid valve membrane (SF-151).

4. Clean the membrane (SF-151) or if necessary replace with a new one reversing the steps above.

### Changing the battery (Lithium 2CR5 6V) (See figure 1)

A blinking signal light on the sensor indicates that the battery needs to be changed.

1. Close the water inlet(s).
2. Remove Housing screw (SF-152).
3. Remove Handle screw (SF-155), handle (SF-154), handle limit stop (SF-156) and housing.
4. Remove battery holder and replace battery as shown reversing steps above.

### Changing the sensor (See figure 2)

#### Note: Special tool required

1. Close the water inlet(s).
2. Remove Housing screw (SF-152).
3. Remove Handle screw (SF-155), handle (SF-154), handle limit stop (SF-156) and housing.
4. Remove battery holder, clip, and sensor (SF-147) as shown and install new sensor reversing steps above.

## TROUBLE SHOOTING CHART

Problem	Cause	Solution (Follow service instructions)
Water flow from the outlet does not stop.	The sensing range is too low or the solenoid valve is damaged. Solenoid valve membrane is dirty.	Check that the photocell is clean. Replace solenoid valve. Clean the solenoid valve membrane.
Water flow is low and weak.	Supply stop(s) not fully opened. The Litter filter(s) or aerator is clogged.	Open supply stop(s). Clean the litter filter(s) and aerator.
No water comes out of the faucet.	Faucet not receiving water. The solenoid valve is damaged. Power failure. The sensor is covered or damaged. Battery not installed correctly.	Check the water supply to the faucet. Replace solenoid valve.  Clean or replace sensor. Check battery installation.
Sensor eye is blinking.	Ultra-Sense's visible diagnostic signal is activated indicating low battery voltage.	Replace battery Lithium 2CR5 6V.
Temperature can't be adjusted.	Mixer is damaged. Litter filters are dirty.	Clean or replace the mixer. Clean the litter filter(s).