

# AquaSense®

Z6920-XL and Z6922-XL Series

Sensor-Operated Lavatory Faucets for Battery, Plug-In, or Hardwire Installations, Connected Installation, Operation, Maintenance, and Parts Manual











★ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

⚠ ADVERTENCIA: Cáncer y daño reproductivo - www.P65Warnings.ca.gov

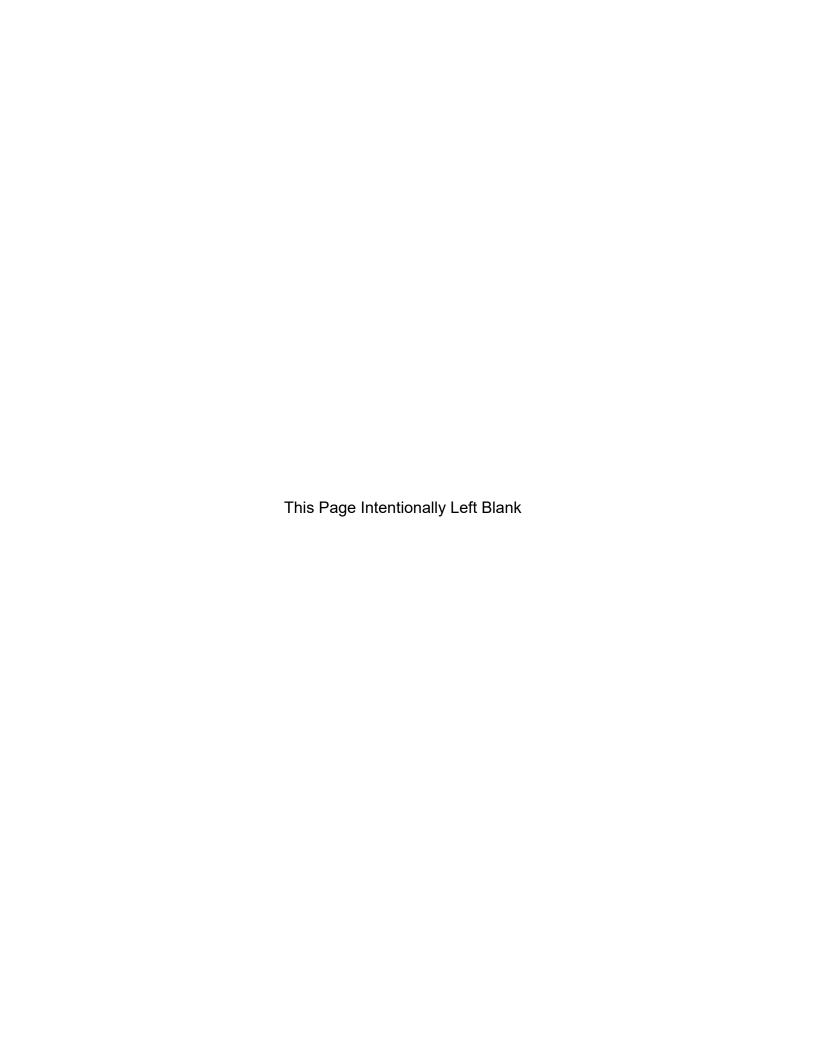
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#### LIMITED WARRANTY

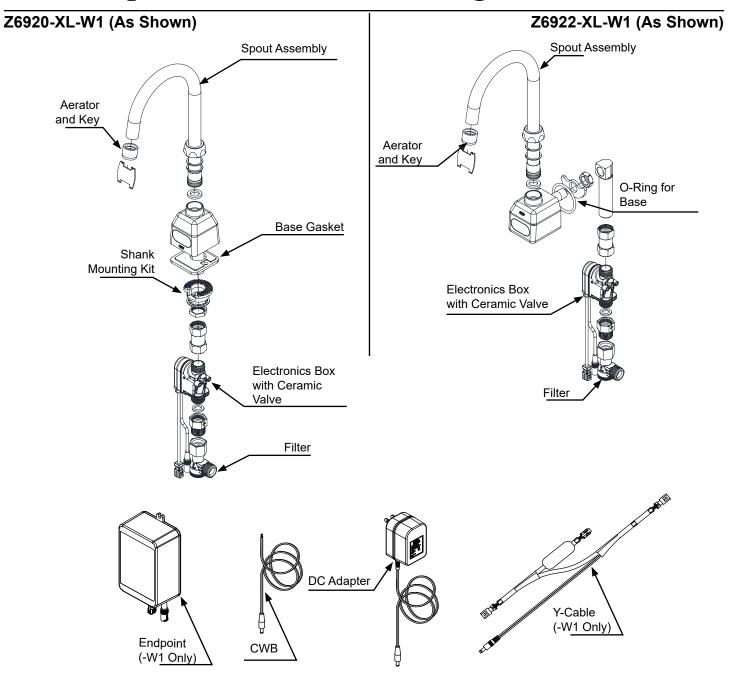
All goods sold hereunder are warranted to be free from defects in material and factory workmanship for a period of three years from the date of purchase. Decorative finishes warranted for one year. We will replace at no costs goods that prove defective provided we are notified in writing of such defect and the goods are returned to us prepaid at Sanford, NC, with evidence that they have been properly maintained and used in accordance with instructions. We shall not be responsible for any labor charges or any loss, injury or damages whatsoever, including incidental or consequential damages. The sole and exclusive remedy shall be limited to the replacement of the defective goods. Before installation and use, the purchaser shall determine the suitability of the product for his intended use and the purchaser assumes all risk and liability whatever in connection therewith. Where permitted by law, the implied warranty of merchantability is expressly excluded. If the products sold hereunder are "consumer products," the implied warranty of merchantability is limited to a period of three years and shall be limited solely to the replacement of the defective goods. All weights stated in our catalogs and lists are approximate and are not guaranteed.

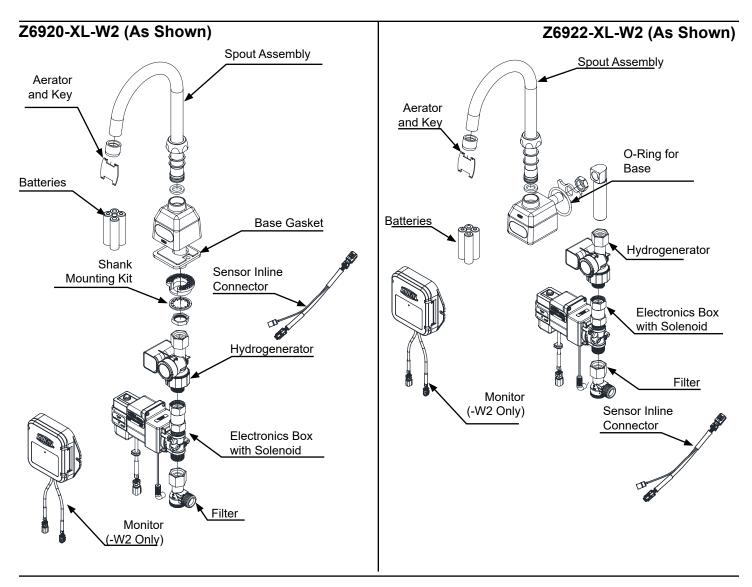
NOTICE: READ ENTIRE MANUAL PRIOR TO INSTALLING PRODUCT.

Rev. D | Date: 01/03/23 | C.N. No. 144945 | Prod./Dwg. No. FV808

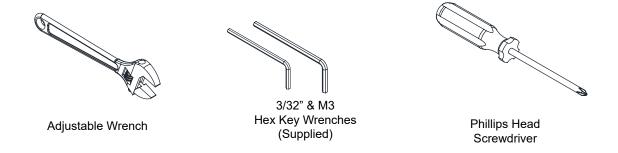


# **Aqua Sense® Faucets Package Contents**





## **Required Tools**



## **Optional Accessories**



Magic Magnet P6900-AT-MAG

#### Overview:

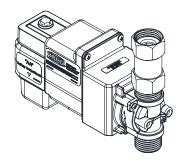
#### -W1 & -W2 Only:

Zurn connected faucets transmit data 24/7 to the Zurn plumbSMART™\* web portal and mobile app. Proactively monitor your faucet activations and water usage, receive real-time alerts for preset high and low usage parameters, and access system data for trends and predictive maintenance anytime and anywhere.

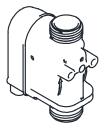
#### All Configurations:

AquaSense® sensor faucets are ideal for high-use applications where durability and hands-free operation are necessary. ADA compliant, battery powered, polished chrome-plated cast brass sensor faucet with infrared proximity sensor for retrofit and new construction. Unit is furnished with a standard 0.5 GPM aerator and mounting hardware.

Zurn Lead Free products (-XL) are designed and manufactured to comply with Section 1417 of the Safe Drinking Water Act (SDWA) which mandates the weighted average lead content of no more than 0.25% of the wetted surface.



Solenoid Valve Box



Ceramic Gear Valve Box

#### **Specifications (Ceramic Valve):**

Power: 7.5 VDC external power supply for faucet and -W1 endpoint

P6000-ACA: 800 mA maximum output P6000-HW6: 2 A maximum output

Sensor Range: Fixed

Operating Water Pressure: 10-125 psi

Operational Water Temperature: 33°F to 140°F (1°C to 60°C)

Aerator: 0.5 GPM Vandal-Resistant (Standard)

#### Specifications (Solenoid Valve):

Power: 6 VDC Series [4 "AA" (Alkaline ONLY)] for faucet

6 VDC Series [4 "AA" (Alkaline or Lithium)] for -W2 monitor

Sensor Range: Fixed

Operating Water Pressure: 10-125 psi

Operational Water Temperature: 33°F to 140°F (1°C to 60°C)

Aerator: 0.5 GPM Vandal-Resistant (Standard)

#### **Electronic Emission Notices (-W1/-W2):**

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. The following information refers to Zurn Smart Connected Products, types: -W1 and -W2. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference intended for use in non-residential/non-domestic environments. 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 an authorized dealer or service representative for help.

Zurn is not responsible for any radio or television interference caused by using other than specified or recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

#### Important Safety Information (All Configurations):

- Installer is responsible for ensuring the product is installed and conforms to all plumbing codes and ordinances.
- Do not convert or modify this Zurn product yourself. All warranties will be voided.
- · Water supply lines must be sized according to building designer in order to provide adequate water supply for each fixture.
- Flush all water lines prior to making connections.

Warning: Do not connect an external power supply to the hydrogenerator's barrel jack connector. Doing so could reduce product performance or pose a fire hazard

#### **Prior to Installation (All Configurations):**

Before installing your Zurn® Aqua-Sense® Faucet, the items listed below should already be installed on site:

- Lavatory/sink
- Drain Line
- Hot and cold water supply line or pre-tempered water supply line.
- Installer/Servicer should not use pipe dope or teflon/thread sealant anywhere on this product, most notably threads and connection points.
- · Care shall be taken when installing this product to prevent marring of any exposed or decorative surfaces.

half Be sure the sink/lavatory/basin is clear from any objects upon making the sensor to electronics connection.

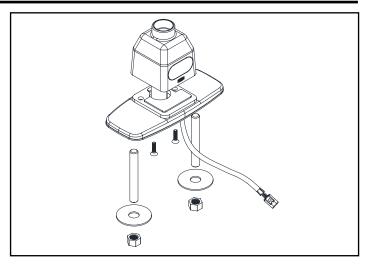
<u>NOTE</u>: The information in this manual is subject to change at any time without notice. Installations may be performed at different times of construction by different individuals. For this reason, these instructions should be left on-site with the facility or maintenance manager.

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## **Cover Plate Installation Instructions (Z6920 Only)**

1. (For faucets with -CP4 or -CP8 suffix).

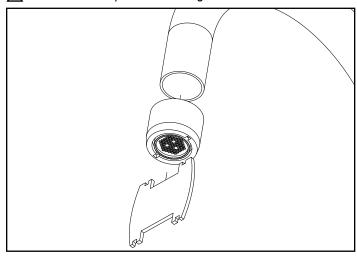
Pass sensor connector wire and shank through gasket. Align gasket with faucet bottom and press firmly together. Pass sensor connector and shank through cover plate and fasten to the faucet with the provided screws.



## **Spout Installation Instructions (All Configurations)**

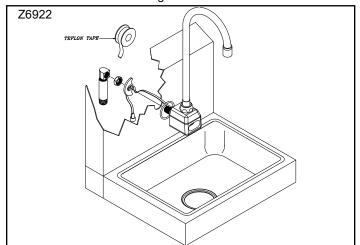
<u>NOTE</u>: Before installation, turn off water supplies to existing faucet and remove faucet if replacing an existing device. Clean the faucet basin and clear away debris. Flush all supply lines before connecting the faucet. Failure to do so may result in debris clogging the inlets and/or internal control and mixing valve of the faucet.

Carefully screw aerator into spout using included tool.
 Take care to not pinch blue o-ring



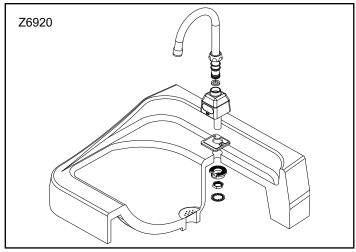
2b. (Z6922): Install spout to sink wall using spout base o-ring, plastic mounting washer, mounting nut, and shank elbow.

Note: Faucet location needs to be within 3 feet radius above electrical outlet for ACA configurations.



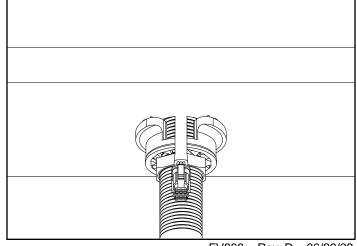
2a. (Z6920): Install spout to sink using spout base gasket, plastic mounting washer, star washer and mounting nut.

Note: Faucet location needs to be within 3 feet radius above electrical outlet for ACA configurations.



3. Ensure that slot in plastic washer is facing forward.

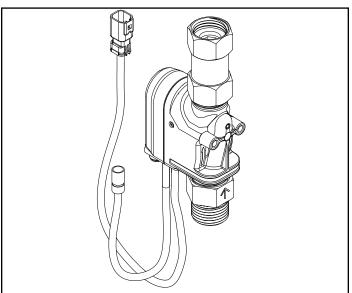
↑ Sensor cable should not pass through plastic mounting washer.



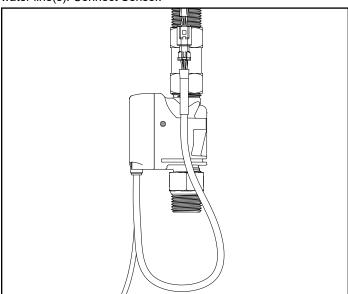
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## **Endpoint & Electronic Module Installation Instructions (-ACA/-CWB)**

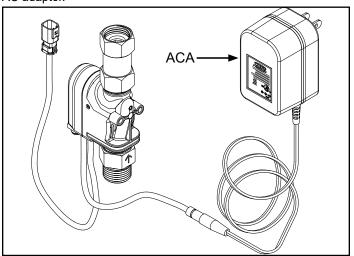
1. Remove the electronics module from box



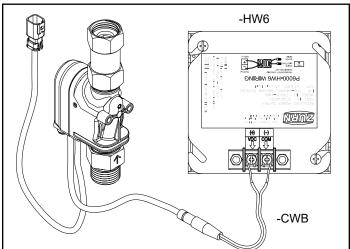
2. Tighten electronics module assembly to shank and connect water line(s). Connect Sensor.



 $\ensuremath{\mathtt{3a}}.$  Optional ACA version: Connect supplied inline connector and AC adapter.



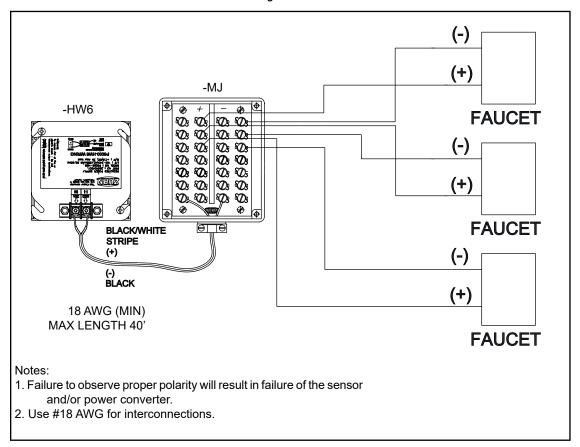
3b. Optional HW6 (Hardwired 6V) version: Connect supplied inline connector and hardwire adapter. When securing the CWB wires to the screw terminals on HW6 unit, the BLACK WITH DASHED MARKINGS should be connected to the Positive (+) terminal, and the SOLID BLACK wire should be connected to the Negative (-) terminal.



4. Turn on water supply(ies).

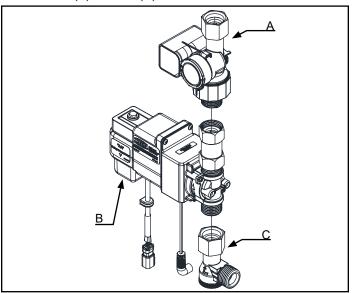
#### Optional MJ unit (sold separately)

Note: Do not connect more than 3 boxes to a single transformer

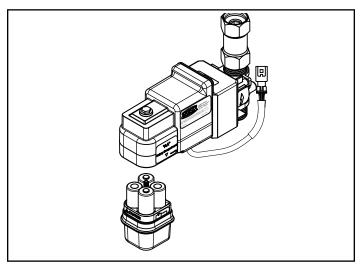


## **Electronics Module Installation Instructions (-HYD)**

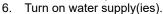
1. Connect hydrogenerator(A) downstream of electronics module(B) and filter(C) to bottom of electronics module.

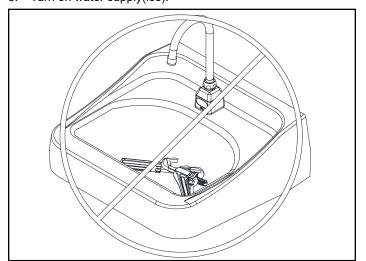


3. Open battery module using supplied Allen wrench and install supplied alkaline batteries in the electronics module.



5. Ensure sink is clear of tools/debris and is in normal operating condition. Remove protective film from sensor lens if needed.

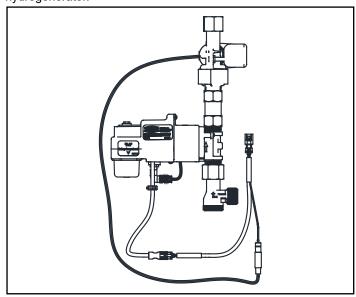




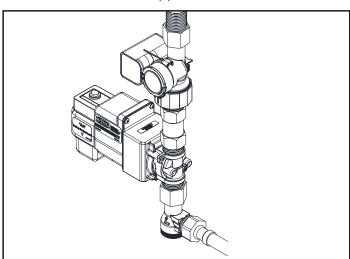
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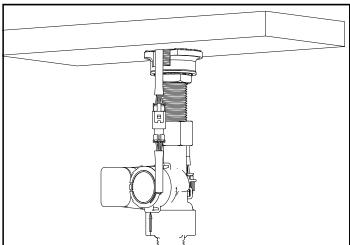
2. Connect sensor inline connector to electronics module and hydrogenerator.



4. Tighten electronics module assembly with hydrogenerator to shank and connect water line(s).

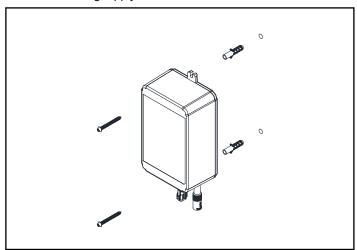


7. Connect sensor inline connector to sensor cable from spout.

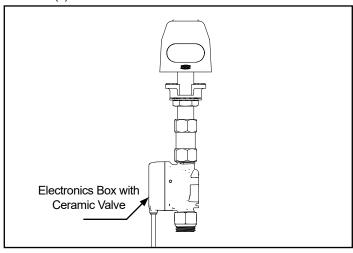


## **Endpoint & Electronic Module Installation Instructions (-W1)**

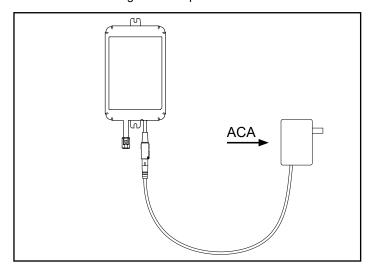
- 1.a. Install endpoint on wall surface within 2 feet radius of faucet with dry wall anchors & screws or doubled sided VHB tape
- 1.b. For concealed wiring installation, drill 3/16" hole in wall surface for DC power cable, route wire-end through hole to HW6 unit. After routing, apply sealant around wire in hole.



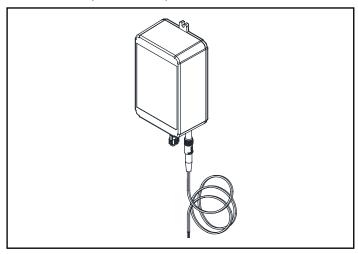
3. Tighten electronics module assembly to shank and connect water line(s).



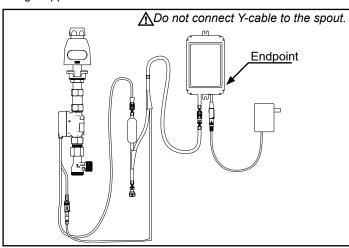
5.a. ACA version: Plug in AC adapter to wall outlet.



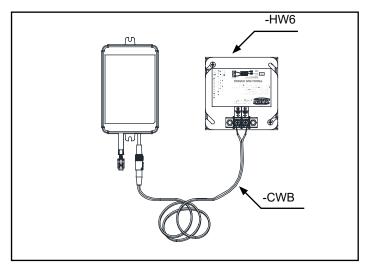
2. Connect endpoint and DC power cable.



4. Connect endpoint and electronics module assembly using supplied Y cable.



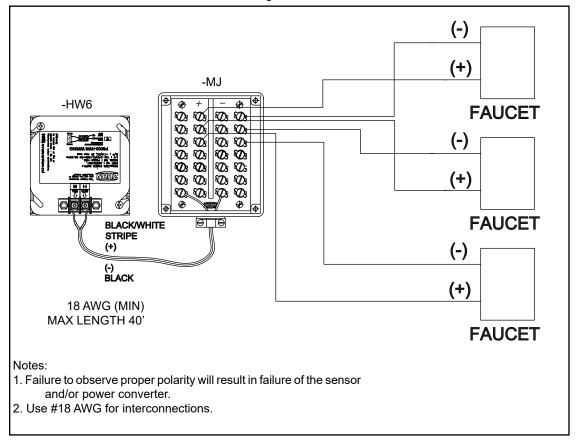
5.b. Optional HW6 version: Connect supplied inline connector and hardwire adapter. When securing the CWB wires to the screw terminals on HW6 unit, the BLACK WITH DASHED MARKINGS should be connected to the Positive (+) terminal, and the SOLID BLACK wire should be connected to the Negative (-) terminal.



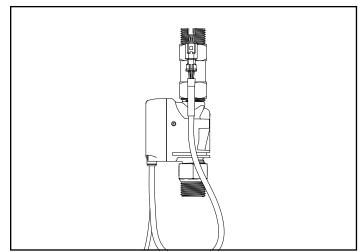
#### 5.c.

#### Optional MJ unit (sold separately)

Note: Do not connect more than 3 boxes to a single transformer



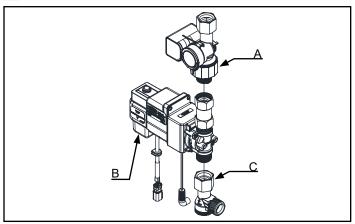
6. Connect Y-cable to the spout sensor.



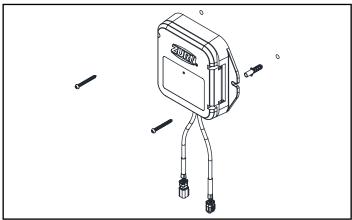
## Monitor & Electronic Module Installation Instructions (-W2)

 Connect hydrogenerator(A) downstream of electronics module(B); connect the electronics module(B) downstream of filter(C).

⚠ Do not connect the electronic module to spout.

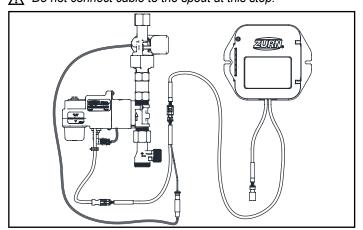


3. Install Monitor on wall surface within 2 feet radius of faucet with dry wall anchors & screws or doubled sided VHB tape.

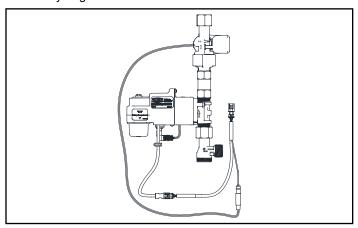


5. Connect monitor and electronics module assembly.

• Do not connect cable to the spout at this step.



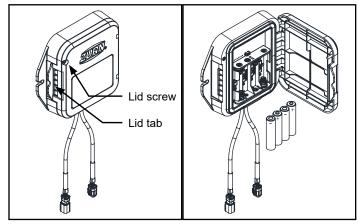
2. Connect sensor inline connector to electronics module and to the hydrogenerator.



 Loosen lid screw with supplied 3mm Allen wrench. Open lid and install supplied lithium batteries. Close lid and secure by pressing on the lid tab until it snaps into place. Then tighten lid screw.

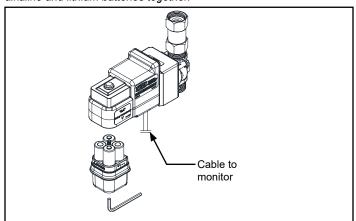
During initial installation, use the supplied lithium batteries. During subsequent battery changes, use either alkaline or lithium batteries; however, do not mix alkaline and lithium batteries together.

During servicing or changing of batteries, wipe down monitor to ensure water does not enter the housing when the lid is opened.

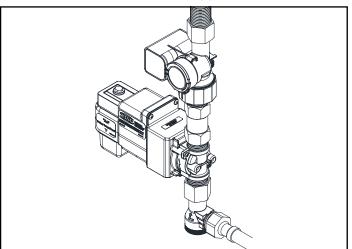


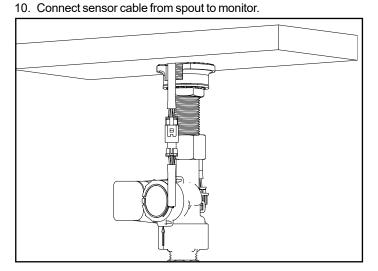
 Open battery module using supplied 3mm Allen wrench and install supplied alkaline batteries in the electronics module. Then close and tighten battery module.

During initial installation, use the supplied alkaline batteries. During subsequent battery changes, ONLY use alkaline batteries. Do not mix alkaline and lithium batteries together.

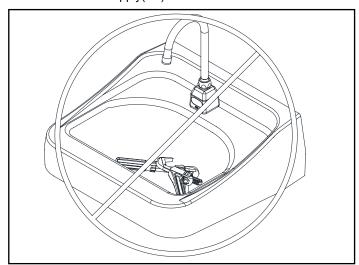


7. Tighten electronics module assembly with the hydrogenerator to shank and connect water line(s).





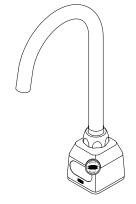
- Ensure that sink is clear of tools/debris and is in normal operating condition. Remove protective film from sensor lens if one is present.
- 9. Turn on water supply(ies).



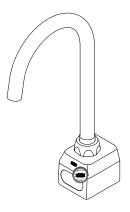
## Sensor Range Adjustment (All configurations when necessary)

- 1. Ensure that the faucet is installed and powered has been applied.
- 2. Place and hold the Magic Magnet (optional accessory: P6900-AT-MAG) in the lower right hand corner of the sensor as shown. An indicating light will activate when the magnet is correctly positioned.
- 3. Wait until the light starts to blink, then remove the magnet. (Faucet has entered the calibration mode.)
- 4. Place a target at the desired activation range in front of the faucet sensor. (Cardboard, hand, etc.)
- 5. Wait approximately 10 seconds during the calibration cycle. Do not move the target during this period.
- 6. Calibration is complete when the light stops blinking.
- 7. Confirm calibration distance by moving the target back, then slowly forward until the faucet activates at the desired calibration distance.

Z6920-XL



Z6922-XL



## Care and Cleaning Instructions (All Configurations)

- Do not use any abrasive or chemical cleaners to clean the faucets. Do not use any cleaners with an acid base.
- If abrasives or chemicals are used it can lead to dulling of luster, attacking of chrome plating or decorative finishes.
- ONLY use mildly warm soapy water, and then wipe the device dry with a clean/soft towel or cloth.
- Upon cleaning other areas of the restroom be sure the sensor lenses are protected from other cleaning chemicals/solvents to prevent potential damages to the sensor and/or electronics.

## Gateway Instruction (-W1/-W2)

#### Step 1. Request Gateway:

You can request your Ethernet or LTE gateway by visiting

Zurn.com/plumbsmart-gateway-request

or call Zurn Customer Care at 1-844-987-6737

#### **Step 2. Cabling, Powering and Connecting Your Device:**

- Connect one end of the RJ45 Ethernet cable (supplied) to the gateway's Ethernet port and plug the cable's other end into the nearest wall port of the building's Ethernet network.
- 2. Connect the power supply to the power jack.
- 3. Wait for status LED to go from ON to double flash every second, the LoRa LED to turn ON solid, and the cell LED (if LTE enabled) to flash once every 3 seconds. Should take around 1-2 minutes depending on location. Your gateway is now ready to transmit data from your Zurn connected product.
- 4. Zurn Gateways have been set to DHCP by default. Please consult local IT support for possible additional access requirements for your network.

#### Step 3. Determining General Location for the Zurn Gateway:

- Select a location central to all devices to be connected to this gateway. Ideal mapping of Gateway to connected devices will resemble a wagon wheel.
- Place the gateway as high as possible, such as near the top of a wall.
- Avoid obstructions. Thick walls and reflective surfaces, such as metal, weaken the signal between the gateway and other devices.
- The LoRa antenna is an omni-directional antenna, but for best results, mount the device so the LoRa antenna is in a vertical position near the top of a wall. We recommend conducting a site survey to test the signal strength in different locations before you mount the device.

#### Step 4. Mounting the Zurn Gateway:

The device ships with a mounting bracket. You will also need:

- · Four #6 screws with anchors
- Screwdriver
- Drill
- 1. Determine where you want to mount the device.
- 2. Mark where you want the screws to go.
- 3. Drill holes for the screws and insert anchors.
- 4. Place the mounting bracket and secure it with screws.
- 5. Attach the device to the bracket and rotate to lock into place.

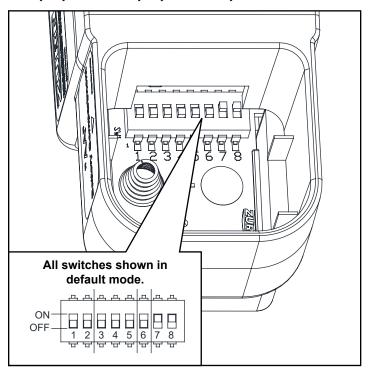
## Register in plumbSMART (-W1/-W2)

NOTE: Instructions below are duplicated from registration card supplied with monitor

- 1. Install Zurn Connected Product(s)
- 2. Install Zurn Gateway per the Gateway Instructions Manual
- 3. Request plumbSMART Administrator Account at 844-987-6737
- 4. Zurn creates your Enterprise Account for you! (You will be required to identify your building location, number of floors, and number of rooms.)
- 5. Log in to plumbsmart.zurn.com
- 6. Register each Connected Product in plumbSMART (Watch How-To Videos to Get Started. Located in the support section inside the portal.)

## Adjustable modes and features selection (-W2/-HYD)

To adjust features from default configuration, you must remove the battery tray. Once battery tray is removed you will see the switches.



Switch Position:	1	2	3	4	5	6	7	8
Purge (Hours) Disable: 12: 24: 48:	Off On Off On	Off Off On On						
Time 30: (Seconds) 5: 10: 15: 60: Less Time-out			Off On Off On Off On	Off Off On On Off Off	Off Off Off On On			
Mode Select Sensing Mode: Metering Mode:						<b>Off</b> On		
Sensor Sensitivity Low: Normal:							Off <b>On</b>	
Mode A: <b>Mode B:</b>								Off <b>On</b>

Default switch positions/modes are shown in **bold**.

#### Purge Features:

The purge switches can be configured for 4 modes of operation: Disabled (standard configuration), 12 hour, 24 hours, or 48 hours. Purge water flow duration is 2 minutes. Note: Purge activation occurs every switch selected time (0,12, 24, or 48 hours) after last activation.

#### Flow Time:

There are 6 optional time configurations: 30 seconds (standard), 5s, 10s, 15s, 60s, & "Less Time-out". The "Less Time-out" option actually ceases water flow (turns off) after 20 minutes to limit chance of water damage in the event a sink drain becomes blocked.

#### Sensing Mode (DEFAULT):

During this mode the valve will shut off after hands are removed. If hands are not removed the time out delay will turn off the faucet (ex: standard configuration is 30 seconds).

#### **Metering Mode:**

When hands are detected by the sensor, water will run for 'X' seconds (standard configuration is 30 seconds) before turning off.

#### Sensor Sensitivity: (Default setting - Normal):

There are 4 sensitivity options, which can be selected to achieve the optimal detection performance related to the sink material, shape, & finish. The faucet sensor sensitivity is configured during pack-out but the mode can be changed upon installation to optimize the performance within the sink. Sensor sensitivity and sensor detection Modes A & B may be tried for various lighting conditions, sink materials and shape.

Switch 7 controls the sensitivity

- -On (default) is normal sensitivity for most sinks providing max range.
- -Off sets the sensor to a lower sensitivity level for sinks that cause false activation. The detection range maybe less for all hands. Switch 8 controls sensor mode
  - -On (default) enables the mode that filters the effects of flowing in the bottom of problematic sinks. Detection maybe less for some hands.
  - -Off disables the filter mode, so detection is expanded deeper into the sink for max detection range for all hands. Some sinks may only be able to operate in this mode.

NOTE: After a configuration switch change has been made. Disconnect sensor cable from electronics box, wait 30 seconds, then reconnect sensor cable.

## **Trouble Shooting: Faucet (Ceramic Valve)**

Problem	Possible Cause	Corrective Action
Faucet is non-responsive	No power.	Verify power provided by HW6 or ACA
	Sensor and electronic connector cable has bent or broken pins.	Check to see if pins are missing, bent, or broken. If yes, then the electronic box needs replaced
	Sensor lens could have surface damage, scratches, or deposit build ups.	Inspect the sensor lens. May require cleaning with a damp cloth or sensor replacement
	Micro-processor has locked up.	Disconnect power. Wait 10 seconds. Reconnect power
Water does not stop	Sensor and electronic connector cable has bent or broken pins.	Check to see if pins are missing, bent, or broken. If yes, then the electronic box needs replaced
	Micro-processor has locked up.	Disconnect power. Wait 10 seconds. Reconnect power
Ghost Activation	Sensor lens could be obstructed or environmental factors such as highly reflective surfaces and/or bright sunlight conditions could be present.	Check/clean sensor lens of any debris or buildup. Remove reflective surfaces or adjust lighting conditions if sunlight or IR interference is a factor
Sensor faucet is leaking underneath the sink or counter	Mounting hardware is not tight- ened sufficiently (faucet shank, electronic box, supply hoses, etc).	Check and ensure the nuts and joints are tight and secure from the supply stop all the way to the faucet shank
	Missing the gasket located in the valve box nut where it assembles to the faucet shank.	Make sure the water supply stops are shut off. Check to ensure the gasket is installed and not damaged. If not installed, install gasket. If gasket is damaged, replace with new

For further assistance with troubleshooting visit http://www.zurn.com

## **Trouble Shooting: Faucet (Solenoid Valve)**

Problem	Possible Cause	Corrective Action
Faucet is non-responsive	Battery voltage low.	Change out batteries
	Electronic box connector cable has bent or broken pins.	Check to see if pins are missing, bent, or broken. If yes, then the electronic box needs to be replaced
	Sensor lens could have surface damage, scratches, or deposit build ups.	Inspect the sensor lens. May require cleaning with a damp cloth or spout/sensor replacement
	Sensor lens could be obstructed by environmental factors such as highly reflective surfaces or bright lighting conditions.	If this is the case, then adjust the dip switch settings for sensor sensitivity per the diagram on page 16 (switches 7 and 8). Direct sunlight could effect unit operation. Do not allow direct sunlight onto unit.
		If one mode does not help try one of the following: -switching 7 to Off to set the sensor to the lowest sensitivity level (detection range may be less for all hand types)switching to alternate mode using switch 8; mode A or B depending on current configuration
		Reset sensor after dip switch changes.
Faucet does not activate after initial installation	Check if protective film was removed from lens.	Check if protective film was removed from lens. If it was not, then remove it.
Water does not stop	Electronic box connector cable has bent or broken pins.	Check to see if pins are missing, bent, or broken. If yes, then the electronic box needs to be replaced
Ghost Activation	Sensor lens could be obstructed or environmental factors such as highly reflective surfaces and/or bright sunlight conditions could be present.	Check/clean sensor lens of any debris or buildup and remove any obstructions. If sunlight or IR interference is a factor, refer to page 16 "Sensor Sensitivity" and adjust faucet for Mode B operation. Also, decreasing the sensitivity setting (switch 7) may help. If possible/needed, adjust lighting conditions and/or remove nearby reflective surfaces.  Reset sensor after dip switch changes.
Sensor faucet is leaking underneath the sink or counter	Mounting hardware is not tightened sufficiently (faucet shank, electronic box, supply hoses, etc).	Check and ensure the nuts and joints are tight and secure from the supply stop all the way to the faucet shank
	Missing the gasket located in the valve box nut where it assembles to the faucet shank.	Make sure the water supply stops are shut off. Check to ensure the gasket is installed and not damaged. If not installed, install gasket. If gasket is damaged, replace with new

For further assistance with troubleshooting visit http://www.zurn.com

## **Trouble Shooting: LoRa Monitor (-W1/-W2)**

# "Device Not Communicating" posted in plumbSMART Device Not Communicating Firmware Update Global Water Center 6th Floor Adv Electronics Engr Labs Frank's home bench Battery Powered Faucet-ZFFBV6X44

#### **Corrective Action**

#### Step 1

Verify LoRa Monitor electronics are plugged in / Verify batteries installed in LoRa Monitor electronics and have sufficient charge (whichever applies). Install new batteries, as needed. Alert on product's page in plumbSMART should clear within 1 hour or on next faucet activation. (Refresh web page by clicking on reload icon in the browser to clear the alert.)

#### Step 2

If problem still present, verify gateway is within range of LoRa Monitor and functioning (see Gateway Troubleshooting section)

#### Step 3

If problem is still present, verify plumbSMART subscription status on product page's Details tab is listed as "Activated"

**NETWORK:** Senet

**SUBSCRIPTION STATUS:** Activated

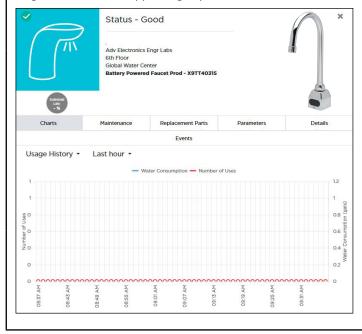
**LAST HEARD FROM:** 07/14/2020, 04:29 PM CDT

If listed as "Deactivated", contact Zurn Customer Service at 1.855.ONE.ZURN (1.855.663.9876) for assistance.

## "Status – Good" posted in plumbSMART and faucet not actuating



"Status – Good" posted in plumbSMART and faucet actuates but usage event data not appearing in plumbSMART Charts



#### Step 1

Verify LoRa Monitor's cables are connected to IR sensor and Faucet actuator electronics. Restore proper electrical connection, as needed.

#### Step 2

Test activate the faucet.

If problem persists, see Faucet Troubleshooting section in this guide for other steps.

#### Step 1

Verify gateway is powered and LoRa Status LED is ON. If not, apply power per Zurn Gateway Installation Guide or see Gateway Troubleshooting section in this guide for other steps.

#### Step 2

If problem still present, verify plumbSMART subscription status on product page's Details tab listed as "Activated"

**NETWORK:** Senet

**SUBSCRIPTION STATUS:** Activated

**LAST HEARD FROM:** 07/14/2020, 04:29 PM CDT

If listed as "Deactivated", contact Zurn Customer Service at 1.855.ONE.ZURN (1.855.663.9876) for assistance.

#### Step 3

If problem still present, the LoRa Monitor electronics may be faulty. Contact Zurn Customer Service at 1.855.ONE.ZURN (1.855.663.9876) for assistance with additional troubleshooting steps and, if needed, unit replacement.

For further assistance with troubleshooting, visit https://plumbsmart.zurn.com/app/training

## Trouble Shooting: Gateway (-W1/-W2)

Problem

"Status – Good" posted in plumbSMART and faucet actuation

event data not appearing in plumbSMART (< 2 hours) or



#### **Corrective Action**

#### Step 1

Verify gateway Status LED flashes twice every 2 seconds. If LED is OFF or ON solid, power cycle the gateway and wait for no more than 5 minutes for unit to initialize and connect.

#### Step 2

After initialization is finished, LORA LED should turn ON solid within an additional minute.

#### Step 3

If LORA LED does not turn ON solid and ethernet cable connected, contact facility IT administrator to modify port rules to allow Zurn gateway to access the internet via local router.

If gateway model is ETH/LTE, visually verify SIM card is installed in designated slot on the side of gateway. If unit has a SIM card, then disconnect ethernet cable and power cycle the gateway and wait for unit to initialize and connect. LORA LED should turn ON solid after initialization.

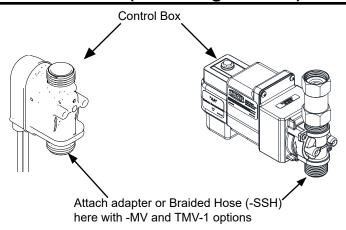
#### Step 4

If problem still present, move gateway closer to LoRa monitors and/or verify gateway mounting, orientation and connections comply with requirements listed in Zurn Gateway Installation Guide.

Contact Zurn Customer Service at 1.855.ONE.ZURN (1.855.663.9876) for assistance with additional troubleshooting steps.

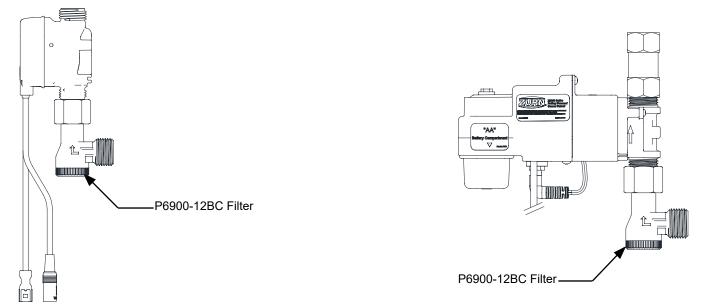
For further assistance with troubleshooting, visit https://plumbsmart.zurn.com/app/training

## Filter and Mixing Valve Installation (All Configurations)

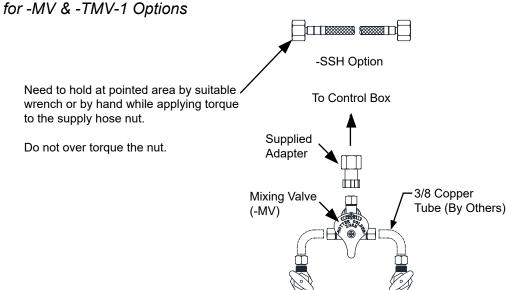


P6900-120BC,

### Filter in standard faucet installation

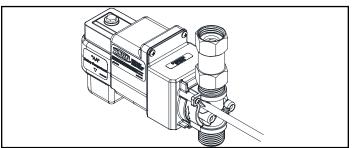


P6900-MV-ADAP [Supplied Adapter]

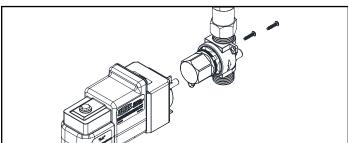


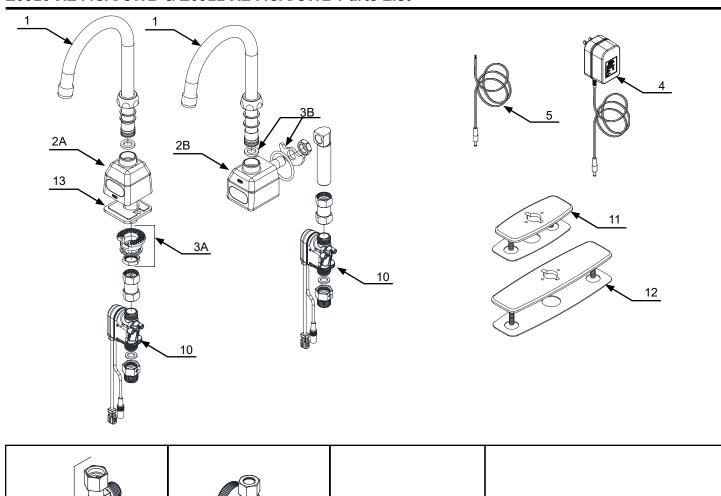
## Accessing the Solenoid (-W2/-HYD)

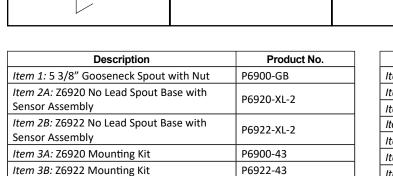
To service solenoid use Phillips head screw driver to remove the screws on both sides of the electronics box.



With screws removed, the electronics box can slide off and allow access to the solenoid for service.







P6900-ACA

P6900-CWB

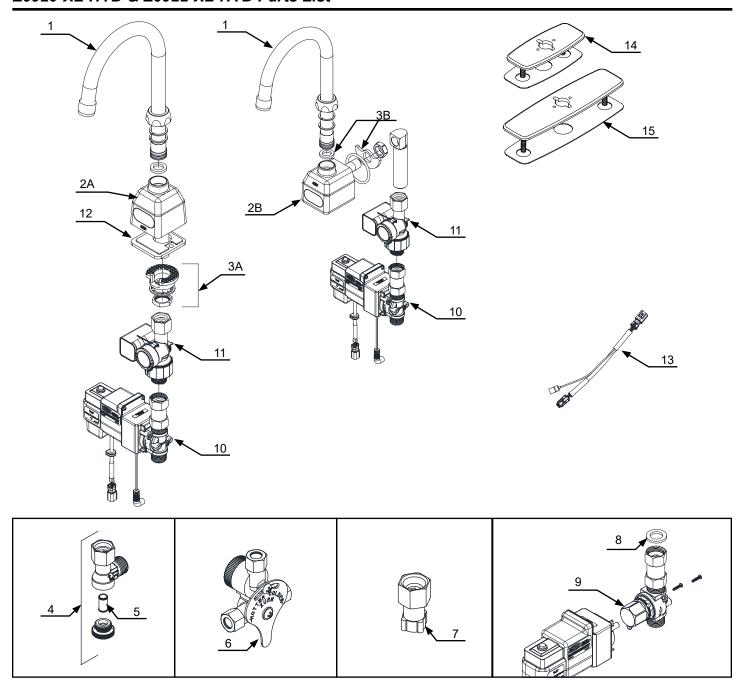
P6900-120BC

Item 4: Plug-In Power Converter

Item 5: -CWB Pigtail

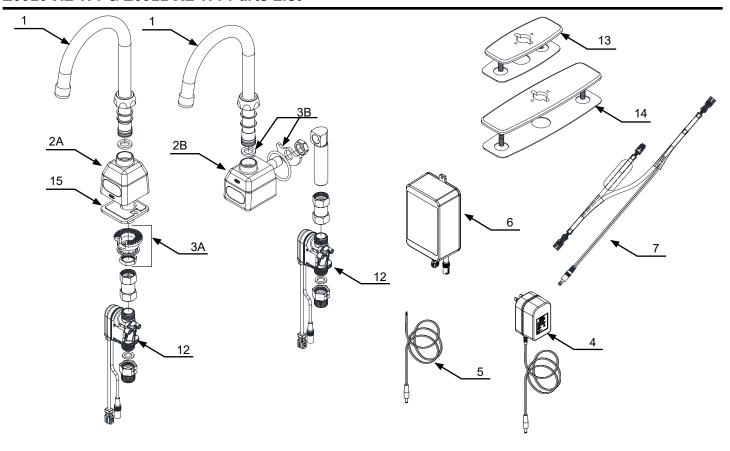
Item 6: Filter Kit

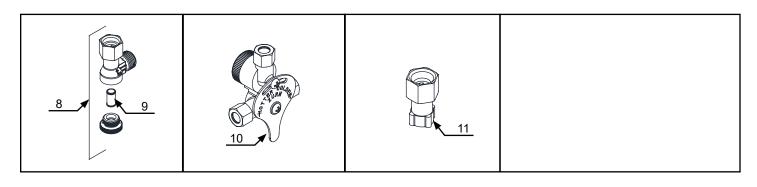
Description	Product No.
Item 7: Filter Screen	P6900-MV-7
Item 8: Mixing Valve with Filter	P6900-MV-XL
Item 9: Composite Mixing Valve Adapter	P6900-MV-ADAP
Item 10: Ceramic Valve	P6950-XL-CV-B-L
Item 11: 4" Cast Cover Plate w/ Gasket	P6900-CP4
Item 12: 8" Cast Cover Plate w/ Gasket	P6900-CP8
Item 13: Z6920 Base Plate Gasket	P6920-42-WEDGE



Description	Product No.
Item 1: 5 3/8" Gooseneck Spout with Nut	P6900-GB
Item 2A: Z6920 No Lead Spout Base with Sensor Assembly	P6920-XL-2
Item 2B: Z6922 No Lead Spout Base with Sensor Assembly	P6922-XL-2
Item 3A: Z6920 Mounting Kit	P6900-43
Item 3B: Z6922 Mounting Kit	P6922-43
Item 4: Filter Kit	P6900-120BC
Item 5: Filter Screen	P6900-MV-7
Item 6: Mixing Valve with Filter	P6900-MV-XL
Item 7: Composite Mixing Valve Adapter	P6900-MV-ADAP

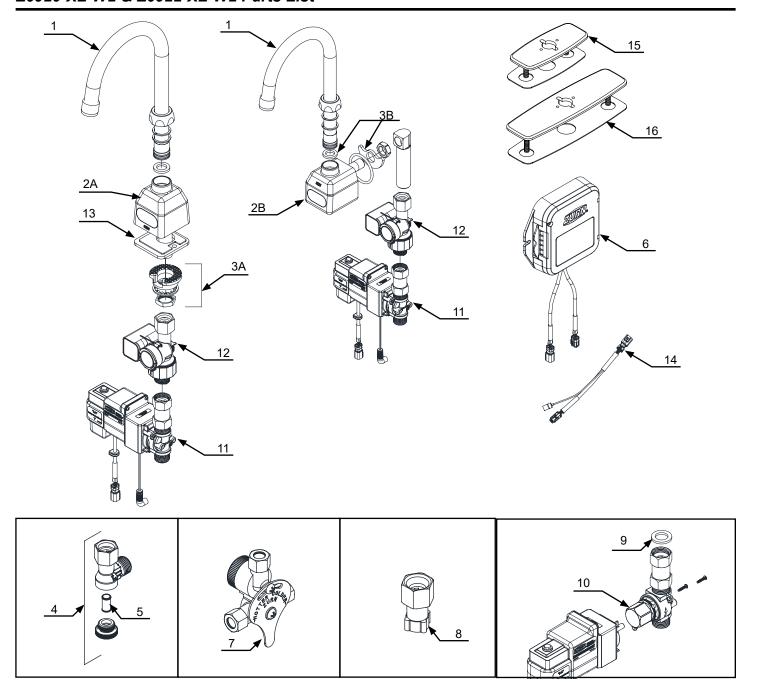
Description	Product No.
Item 8: Shank Connection Gasket	P6900-SG
Item 9: Solenoid Rebuilt Kit (Diaphragm and Plunger w/ Spring)	P6950-SRK-V2
Item 10: Electronics Box with Solenoid	P6950-XL-B-L-V2
Item 11: Hydrogenerator Assembly	P6900-HYD
Item 12: Z6920 Base Plate Gasket	P6920-42-WEDGE
Item 13: Sensor Inline Connector	P6950-XL-DC
Item 14: 4" Cast Cover Plate w/ Gasket	P6900-CP4
Item 15: 8" Cast Cover Plate w/ Gasket	P6900-CP8





Description	Product No.
Item 1: 5 3/8" Gooseneck Spout with Nut	P6900-GB
Item 2A: Z6920 No Lead Spout Base with Sensor Assembly	P6920-XL-2
Item 2B: Z6922 No Lead Spout Base with Sensor Assembly	P6922-XL-2
Item 3A: Z6920 Mounting Kit	P6900-43
Item 3B: Z6922 Mounting Kit	P6922-43
Items 4-7: Smart Connected Faucet Retrofit Kit	P6900-RK-W1
Item 8: Filter Kit	P6900-120BC

Description	Product No.
Item 9: Filter Screen	P6900-MV-7
Item 10: Mixing Valve with Filter	P6900-MV-XL
Item 11: Composite Mixing Valve Adapter	P6900-MV-ADAP
Item 12: Ceramic Valve	P6950-XL-CV-B-L
Item 13: 4" Cast Cover Plate w/ Gasket	P6900-CP4
Item 14: 8" Cast Cover Plate w/ Gasket	P6900-CP8
Item 15: Z6920 Base Plate Gasket	P6920-42-WEDGE



Description	Product No.
Item 1: 5 3/8" Gooseneck Spout with Nut	P6900-GB
Item 2A: Z6920 No Lead Spout Base with Sensor Assembly	P6920-XL-2
Item 2B: Z6922 No Lead Spout Base with Sensor Assembly	P6922-XL-2
Item 3A: Z6920 Mounting Kit	P6900-43
Item 3B: Z6922 Mounting Kit	P6922-43
Item 4: Filter Kit	P6900-120BC
Item 5: Filter Screen	P6900-MV-7
Item 6: Smart Connected Faucet Retrofit Kit	P6900-RK-W2
Item 7: Mixing Valve with Filter	P6900-MV-XL

Description	Product No.
Item 8: Composite Mixing Valve Adapter	P6900-MV-ADAP
Item 9: Shank Connection Gasket	P6900-SG
Item 10: Solenoid Rebuilt Kit (Diaphragm and Plunger w/ Spring)	P6950-SRK-V2
Item 11: Electronics Box with Solenoid	P6950-XL-B-L-V2
Item 12: Hydrogenerator Assembly	P6900-HYD
Item 13: Z6920 Base Plate Gasket	P6920-42-WEDGE
Item 14: Sensor Inline Connector	P6950-XL-DC
Item 15: 4" Cast Cover Plate w/ Gasket	P6900-CP4
Item 16: 8" Cast Cover Plate w/ Gasket	P6900-CP8

