

# Installation

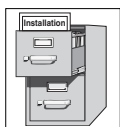
## Aerada™ 1200 Series CS Faucet

### S53-315 Battery Operated Capacitive Sensing Faucet

Centershank with 4-inch Trim Plate  
(Optional: 8-inch or no Trim Plate)



## IMPORTANT!



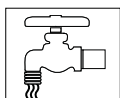
Read this entire installation manual to ensure proper installation, then file this manual with the owner or maintenance department. Compliance and conformity to local codes and ordinances is the responsibility of the installer.



Pressurized plumbing fixtures must be installed in accordance with manufacturer's recommendations. The supply piping to these devices must be securely anchored to the building structure to prevent unnecessary movement of the installed device when operated by the user. Use extreme caution when installing the device to prevent damage to the exposed significant surface.



Separate parts from packaging and make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not begin installation until you obtain the missing parts.



Flush water supply lines before making connections. **DO NOT** use pipe dope on any faucet or supply connections. Possible valve contamination could occur which will void any warranty. Teflon tape is the recommended sealant.



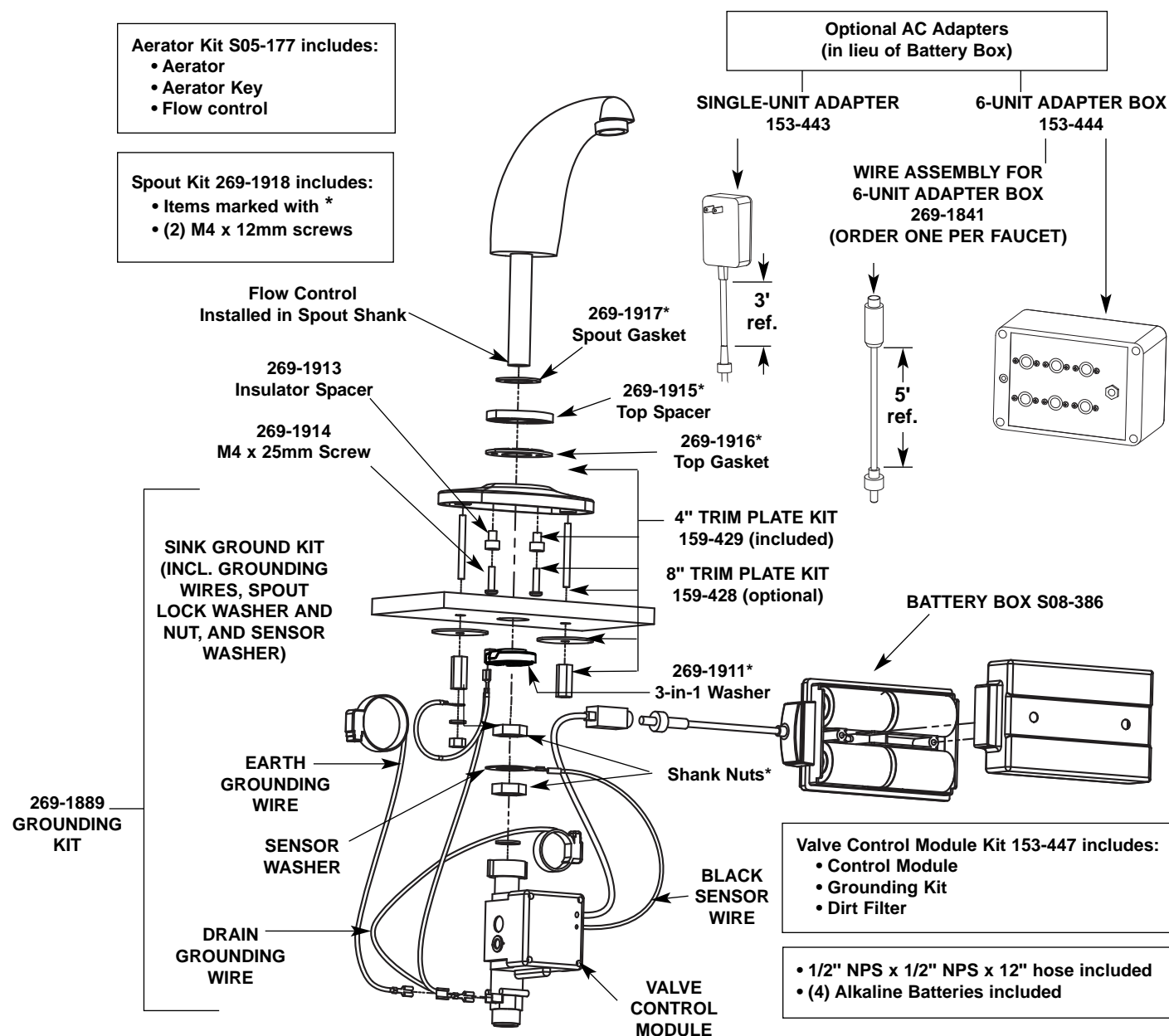
Product warranties may be found in the "Products" section of our web site at [www.bradleycorp.com](http://www.bradleycorp.com).



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## Components for Model S53-315



**1**

# Attach Faucet and Trim Plate to the Deck

**A**

DRILL TWO 3/8" (9.5mm)  
DIA. HOLES. DRILL 1"  
(25mm) DIA. HOLE.

SINK/COUNTER TOP

TRIM PLATE STUDS

**B**

ATTACH TRIM PLATE STUDS  
AND SECURE TRIM PLATE TO  
SINK USING METAL  
WASHERS AND HEX NUTS.

## Optional Trim Plate Removal

**A**

Remove and discard Long  
Trim Plate Screws and white  
plastic screw spacers.

**B**

After removing Trim Plate, re-attach  
gaskets and faucet spacer using  
shorter M4 x 12MM screws (supplied).  
Do not re-install screw spacers.

Gasket and Faucet Spacers

Trim Plate

Long Trim Plate Screws

White Plastic Screw Spacers

Short Trim Plate Screws

**2**

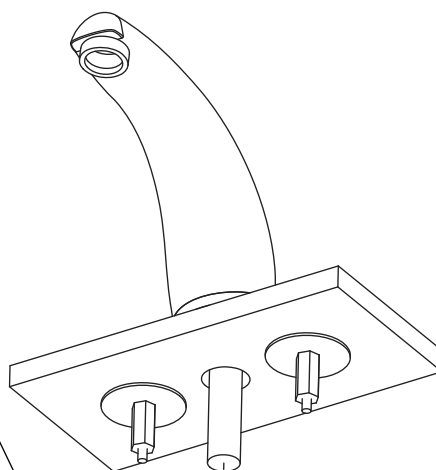
## Attach Activation Hardware to Faucet Shank

**A**

ATTACH GROUNDING  
HARDWARE TO SHANK  
IN THE ORDER SHOWN.

**B**

ATTACH ACTIVATION  
HARDWARE TO SHANK  
IN THE ORDER SHOWN.



Tab on 3-in-1 Washer must be positioned 180 degrees opposite tab on Sensor Connection Washer.

3-in-1 Washer

BRASS MOUNTING NUT

SENSOR WIRE CONNECTION WASHER

BRASS MOUNTING NUT

**3**

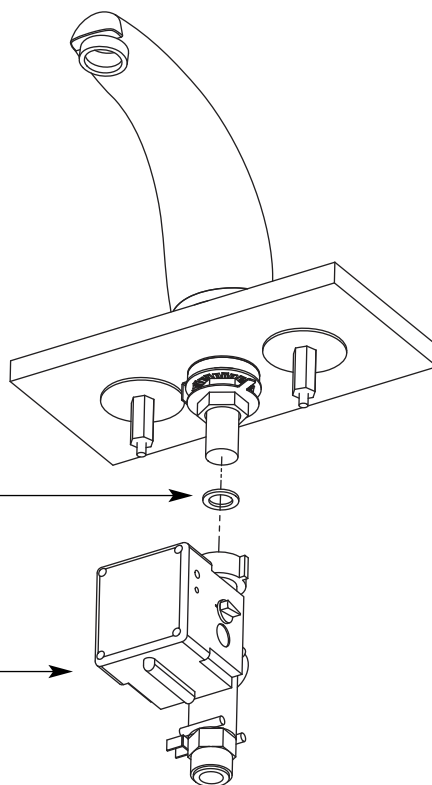
## Connect the Valve Control Module

**A**

PLACE RUBBER  
WASHER INTO WHITE  
TOP NUT FITTING.

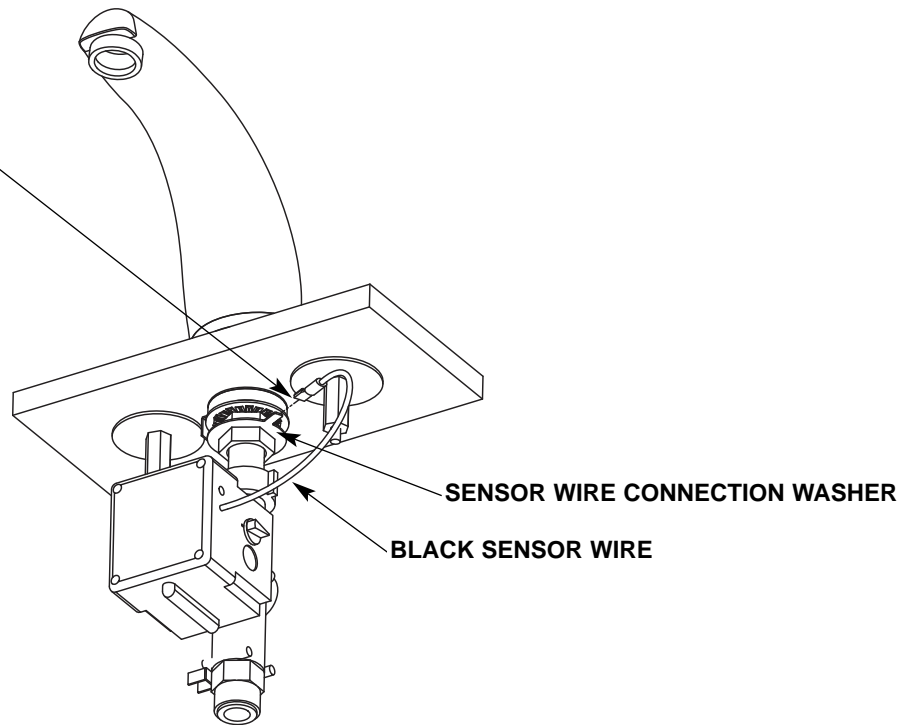
**B**

HAND TIGHTEN VALVE  
CONTROL MODULE TO  
FAUCET SHANK.



## 4 Connect Sensor Wire

**A** CONNECT SENSOR WIRE TO SENSOR WIRE CONNECTION WASHER.



## 5 Connect Sink Ground Wire

SINK GROUNDING TAB WASHER

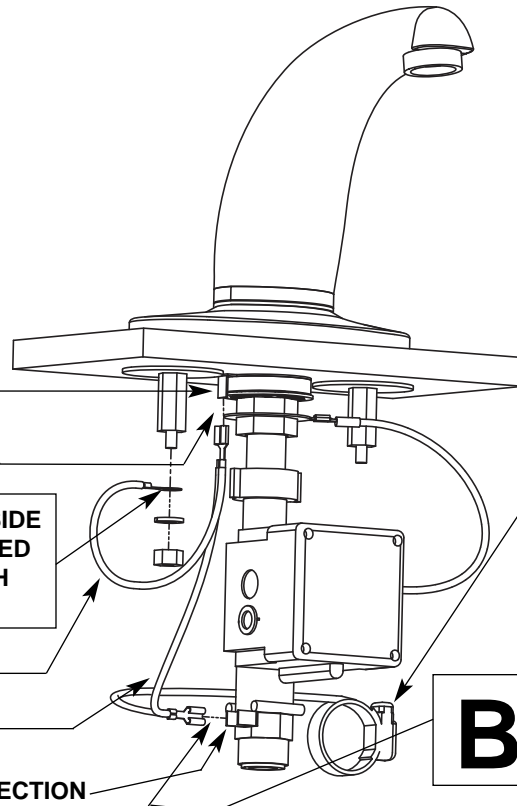
**A** CONNECT SINK/DRAIN GROUND WIRE TO SINK GROUNDING TAB WASHER.

**C** PLACE RING TERMINAL SIDE ON ONE OF THE THREADED STUDS AND FASTEN WITH LOCK WASHER AND NUT.

RING TERMINAL SIDE

SINK GROUND WIRE

U-TAB CONNECTION



**⚠ IMPORTANT ⚠**

*For applications without a Trim Plate, cut off the Ring Terminal Side and discard. The remaining portion of wire can be taped to the Sink Ground Wire using Electric Tape. For applications using Trim Plate, refer to Step C.*

**D** ATTACH DRAIN WIRE CLAMP TO SINK DRAIN

**B** CONNECT THIS END OF SINK GROUND WIRE TO ONE TAB ON U-TAB CONNECTION.

## 6

## Install Earth Ground Assembly

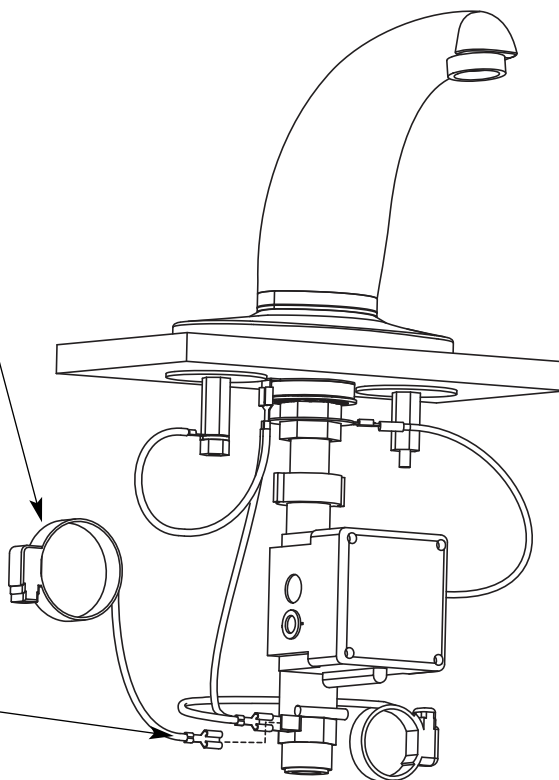
**A** CONNECT EARTH GROUNDING CLAMP TO COLD WATER SUPPLY BETWEEN SHUT OFF VALVE AND WALL PLATE.



**IMPORTANT**

Be sure to attach directly to the Copper Pipe and not to the Shut Off Valve.

**B** CONNECT EARTH GROUNDING CONNECTOR TO REMAINING TERMINAL ON U-TAB CONNECTOR



## 7

## Install and Connect Battery Pack



**IMPORTANT**

For Installations using Optional AC Power Source, connect Power Source as shown in Step C.

**C** CONNECT BATTERY BOX CONNECTOR (OR AC POWER CONNECTOR) TO VALVE CONTROL MODULE POWER CONNECTION.

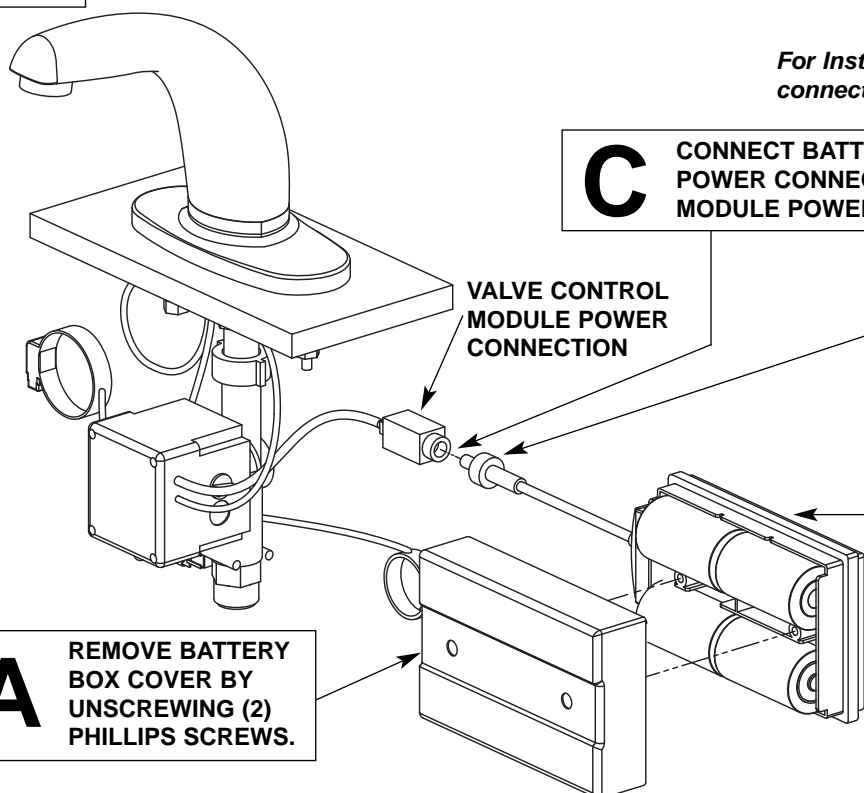
VALVE CONTROL  
MODULE POWER  
CONNECTION

BATTERY BOX CONNECTOR  
(OR AC POWER CONNECTOR)

**A** REMOVE BATTERY BOX COVER BY UNSCREWING (2) PHILLIPS SCREWS.

**B**

SECURE BATTERY COMPARTMENT TO WALL USING WALL ANCHORS OR DOUBLE-SIDED TAPE. INSERT (4) D-CELL ALKALINE BATTERIES AND REPLACE COVER.



## Troubleshooting Guide

Problem	Cause	Solution
Faucet not working (No flashing red indicator located inside clear cover of valve control box)	Batteries not inserted correctly	Remove cover from battery box and check that the batteries have been inserted to the correct orientation and are making connection to the contacts. Refer to the battery icons located on the base of the battery box tray.
	Improper or poor connection to power supply	Check that the connection from the battery box is fully inserted into the female connector on the valve control box and assure the connector round thumbnut is fully fastened.
Faucet not working and no water flows when activated (Red indicator is flashing)	Low batteries	If red indicator is flashing 5 times every 4 seconds, replace with new Alkaline batteries.
	Water source valves turned off	Open water source valves and check that there is water flow.
	Sensor shorted to ground or unit unable to calibrate	If red indicator is flashing once or multiple times every 4 seconds, there is a problem with the installation and the sensor is shorted. To verify the control box is working correctly, carefully disconnect the black sensor wire from the connection washer. With the wire disconnected, touch the connector at the end of the black wire with your fingers. The sensor should activate and water should come on. Let go of the connector and the water should shut off. If the unit works as described above and it malfunctions when you reconnect the black sensor wire to the spout assembly, then there is an error in the spout and cover plate installation. If the faucet does not activate as described when touching the sensor connector, then you have a grounding issue or there is a broken sensor wire (see troubleshooting below).
	Improper ground connection	There is improper earth grounding if the faucet activates when you touch any of the steel braided supply hoses, the brass fitting on the valve box, or the mixing valve. Verify that the ground clamp has been installed and recheck the connections. Verify the clamp is tightly fastened directly to the copper pipe for a proper ground connection. Reset the unit following procedure below*.
Intermittent cycling and/or water runs on after activation	Broken or corrupt sensor wire or defective valve box electronics.	If the connector has broken off of the black sensor wire or the valve box appears to be defective please contact Bradley Technical Service. Do not attempt to repair the valve box or sensor wire.
	Poor sensor washer and wire connection	Verify the brass nuts that fasten the connection washer are fully tightened. Reconnect the sensor wire to the washer. Reset the unit following procedure below*.
Intermittent cycling and/or faucet actuation is overly sensitive	Insufficient ground connection	Verify that the earth ground clamp has been installed and recheck the connections. Verify the clamp is tightly fastened directly to the copper pipe for a robust ground connection. Reset the unit following procedure below*.
	Isolation parts are not installed or not installed correctly.	If the faucet activates when you touch the sink, the unit installation is improper. Check that isolation components are used and installed correctly. Verify the sink ground connection is in place and installed properly.
Water stays on or runs on after you pull your hand away	Drain grounding not connected or assembled.	Check that the drain ground is assembled to the threaded portion of the metal drain ring (not on the pipe) and is connected to the tab on the valve control box. Reset the unit following procedure below*.
Water stays on	There is sensor short to ground or unit is not calibrating.	Reset the unit following procedure below*. If water continues to run, there is an error in the installation and grounding scheme (see above).
	Dial set to the "open" position or not turned to the full "auto" position	Turn the knob on the side of the valve control box fully to the "auto" position (until it hits the stop) and actuate the faucet by placing your hand near the spout. Water should stop running and unit will return to the normal idle operation mode once you remove your hand from the spout.
Water is dripping from spout when not actuated	Debris or particulate matter is trapped in valve	Turn off water source valves. Remove aerator from end of the spout and examine for dirt and particulates. Inspect and clean input dirt filter. Reinsert filter and turn water source back on. Actuate faucet several times without the aerator installed to flush any debris from the valve mechanism until dripping has ceased. Reinstall aerator.
	Dial not turned to the full "auto" position	Turn the knob on the side of the valve control box fully to the "auto" position (until it hits the stop) and actuate the faucet several times by placing your hand near the spout. Water should stop running or dripping and unit will return to the normal idle operation mode once you remove your hand from the spout.

\* **How to Reset the Unit:** Disconnect power source for 10 seconds. The valve will close and the water will stop running. After 10 seconds, reconnect power supply. Let unit recalibrate for another 20 seconds and verify faucet activation.