

# Installation Instructions

# Aerada 1100 Series High Arc Faucet

S53-304 DC High Arc Infrared Faucet
S53-305 AC High Arc Infrared Faucet
232-006 115-volt AC Plug-In Adapter
232-005 Multi-use AC Adapter (maximum 8 faucets)

232-007 4" chrome-plated Trimplate



#### WARNING

Installations may be performed at different times of construction by different individuals. For this reason, this manual should be left on-site with the facility or maintenance manager.

Read this entire installation manual to ensure proper installation, then file these instructions with the owner or maintenance department.

Flush all the water supply lines before making connections, then make sure the water supply is turned off before beginning installation.

Do not use pipe dope on faucet and supply connections. Possible solenoid contamination could occur and will void any warranty. Teflon tape is the recommended sealant.

The installation site should have access to an electrical box with 120 volt AC, 60 Hz cycle for input to a transformer. When installing the transformer, the electrical box should be located within six feet of the sink.

The DC faucet is powered by one factory-installed 6-volt lithium battery.

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 the installed device from unnecessary movement when operated by the user. Use extreme caution when installing the device to prevent damage to the exposed significant surface.

Compliance and conformity to local codes and ordinances is the responsibility of the installer.

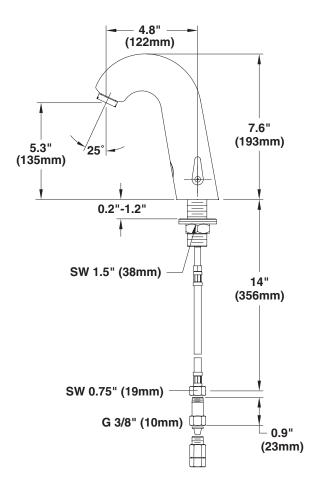
Product warranties may be found under "Product Information" on our web site at www.bradleycorp.com.



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## **Faucet Dimensions**



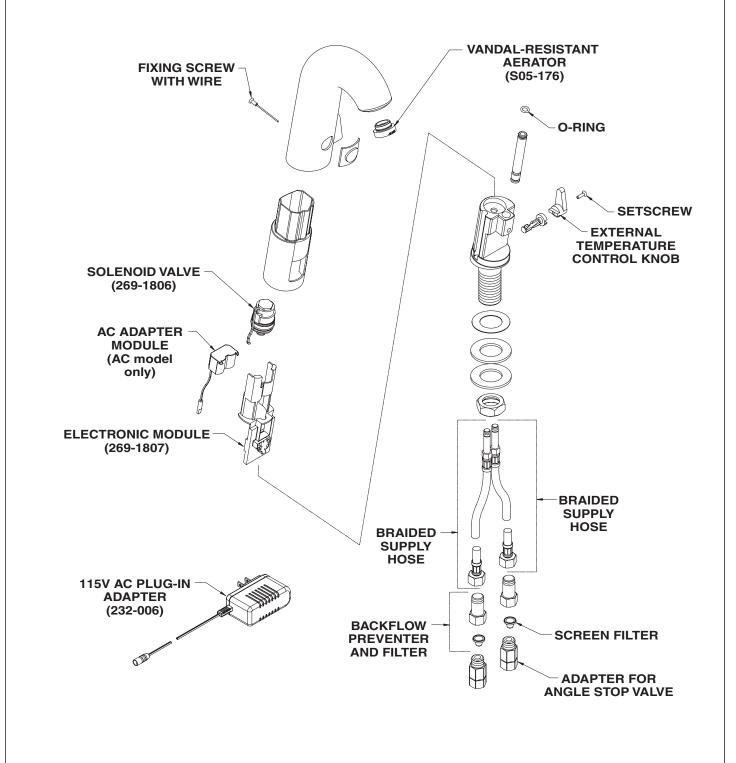
# **Supplies Required for Installation:**

- Teflon Tape
- 1/2" NPT water inlet supply
- Pipe fittings

# **Components for Aerada 1100 Series Faucet**

#### Model S53-305 shown, model S53-304 is similar

Carefully separate all parts from packaging and check each part with the illustrations below. Make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not attempt to install your Bradley Faucet until you obtain the missing parts.



#### Installation Instructions

- Turn off water supply to the existing faucet and remove the faucet.
- Mount the spout and rubber washer to top of base as shown in the illustration. Install the second rubber washer, steel washer and spout nut underneath the base. Securely tighten the spout nut.
- 3. Tighten the spout nut securely to prevent the spout from rotating. If necessary, support the spout from above to prevent twisting. Do not overtighten.

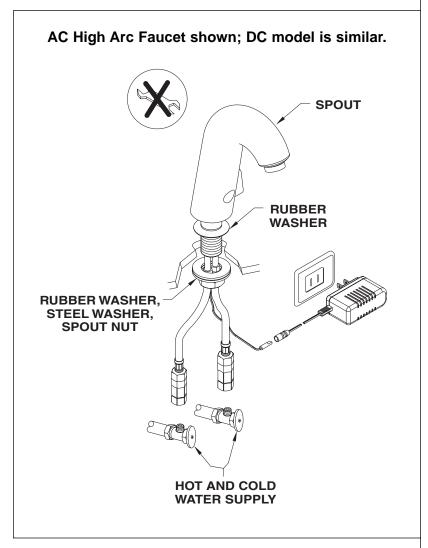


IMPORTANT: Do not use a wrench on spout or inlet tubes.

 AC Only: Plug the power supply into the appropriate 110/115V wall outlet. Connect the power supply female plug into the faucet male plug.

NOTE: Power supply is equipped with an 11.8" (30cm) cord. For multiple faucet installation, an additional extension cord is provided. Refer to the wiring diagram packaged with the faucet.

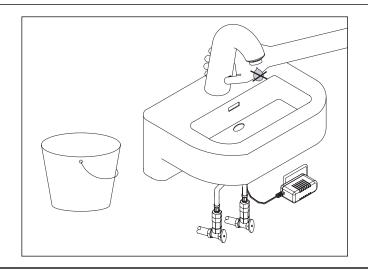
- Connect the hot and cold water lines to the supply pipes. Use **Teflon tape** on the threads to ensure a leak-free joint. Tighten connections securely.
- 6. Turn the water supply on.
- 7. Remove the protective covering from the sensor.
- 8. Place a hand in front of the sensor for 15 seconds to activate for the first time.



# **Cleaning and Maintenance**

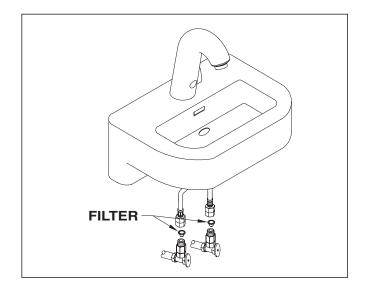
It is not necessary to shut off water supply to clean the sink.

To shut off water flow, cover the infrared window with your hand (as shown) for 5 seconds. Remove your hand. Water flow will be halted for 90 seconds.



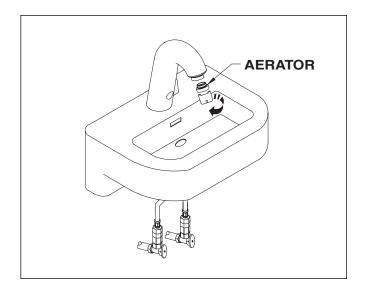
# Cleaning the Inline Filter

- 1. Shut off the hot and cold water supply.
- Disconnect the hot and cold water lines from the supply lines.
- 3. Remove the filters from the connections and clean them thoroughly of any debris.
- Reinstall filters and connect the hot and cold water lines to the supply pipes. Use **Teflon tape** on the threads to ensure a leak-free joint. Tighten connections securely.
- 5. Turn water supply on.



# **Cleaning the Aerator**

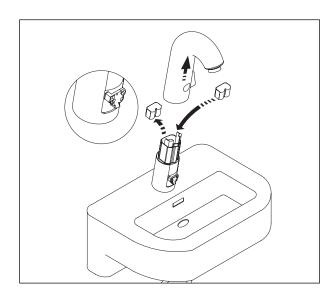
- 1. Shut off the hot and cold water supply.
- 2. Remove the aerator with the spanner wrench and thoroughly clean out any debris.
- 3. Reinstall the aerator using the spanner wrench supplied with the faucet.
- 4. Turn the water supply on.



# **Changing the Battery**

NOTE: When the battery is low, the sensor will display a continuous signal until the battery is completely dead.

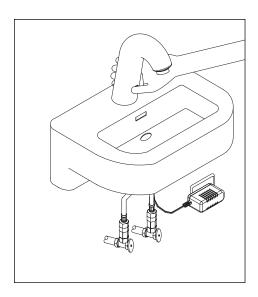
- Remove the fixing screw with wire from the back of the spout and the setscrew from the side of the spout. Remove the external temperature control knob and the spout.
- Remove the old battery and replace with a new 6volt lithium battery.
- 3. Reinstall the spout, fixing screw with wire, temperature control knob and setscrew.

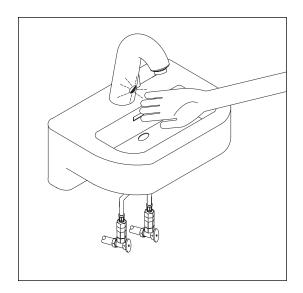


# **Changing the Sensor Detection Range**

NOTE: The detection distance setting can be used to change the detection distance.

- Cover the infrared window as shown below. Water will switch off after 5 seconds. Keep the window covered and the water will come back on after another 5 seconds. Uncover the window. The detection distance function is now active.
- 2. Hold your hand in the current detection area (under the water flow) until the LED flashes.
- Move your hand to the desired detection range. When the LED stays lit for 2 seconds, detection range is set.





Troubleshooting			
Problem	Possible Cause	Possible Solution	
No water flow.	Supply valves are closed.	Open supply valves.	
	Faucet is in cleaning mode (approx. 90 secs).	Wait for cleaning mode to end.	
	Water inlet lines are interrupted or are not in order.  - Inlet water line filter is dirty or blocked.  - Braided supply hose is kinked.  - Backflow preventer (BFP) is blocked.  - No external water pressure.	- Clean inlet line filter - Eliminate braided supply hose kink Eliminate problem at BFP Check water pressure.	
	Aerator is blocked or dirty.	Clean aerator, replace if necessary.	
	Sensor distance (detection) is not adjusted properly.	Check sensor detection distance adjustment. (see Changing the Sensor Detection Range, page 6)	
	Solenoid valve does not open Fixing screw with wire is missing Wire on fixing screw too short or broken off - Electronics inoperable.	- Replace fixing screw with wire Replace fixing screw with wire Contact local Bradley representative	
	Solenoid valve does not open (is inoperable).	Replace solenoid valve.	
	No electric power from battery to electronics Battery is drained Battery contacts are corroded Connecting cable is kinked or broken.	- Replace battery Clean contacts.	
	Infrared does not detect any object.  - IR window is not transparent (scratched or water condensation)  - Interfering reflections from the room	- Clean window, replace if necessary.	
Water runs continuously.	Solenoid valve does not close or closes late External water pressure is high Solenoid valve is inoperable.	- Check external water supply Replace solenoid valve.	
	Sensor detection is not adjusted properly.	Change sensor detection distance	
Faucet turns on by itself.	LED is dirty or has water condensation.	Clean LED.	
	Input line pressure fluctuates.	Install appropriate line pressure regulators.	
Faucet is leaking water.	Faucet is not leak tight.  - Connections between housing and braided supply hose.  - Braided supply hose to inlet supply.	- Tighten gently to prevent damage.  - Check for rubber washers, tighten securely Ensure that solenoid O-rings are not damaged.	
	Connection between valve block and solenoid valve.	Carefully reinstall solenoid and tighten. Do not overtighten.	
	Faucet drips, solenoid valve does not close.	Clean or replace solenoid valve.	
Temperature cannot be adjusted.	Not enough hot or cold water. Supply valves are closed or not open fully.	Open supply valves fully.	
	Individual inlet lines (hot and cold) are blocked or kinked.  - Inlet water line filter is dirty or blocked.  - Braided supply hose is kinked.  - Backflow preventer (BFP) is blocked.  - No external water pressure.	- Clean inlet line filter - Eliminate braided supply hose kink Eliminate problem at BFP Check water pressure.	
	Temperature of hot water is too low.	Inspect boiler.	
	Braided supply hoses are connected improperly (hot water braided supply hose on cold water connection or vice versa).	Correct the connections.	

# **Transformer Connection Detail (232-005)**

NOTE: For bank installation only.

