

HyTronic® User Guide Installation Instructions

For single supply and dual supply HyTronic faucets

Overview

Chicago Faucets deck mounted faucets feature cast brass bodies and precision cartridges for years of reliable operation. Metering models with adjustable cycle time offer true water savings.

Notice to the Installer

- Make sure there is enough space and lighting available during installation and service
- Do not modify or convert this Chicago Faucets product yourself. All warranties will be voided.

Pressurized plumbing fixtures shall be installed in accordance with manufacturer's recommendations. The supply piping to these devices shall be securely anchored to the building structure to prevent installed device from unnecessary movement when operated by the user. Care shall be exercised when installing the device to prevent marring the exposed surface.

NOTE: The information in this manual is subject to change without notice.

Please leave this manual with the facility manager after completing the faucet installation. This document contains information necessary for routine maintenance and servicing.

NOTE: Before installation, turn off water supplies to existing faucet and remove faucet if replacing. Clean faucet basin and clear away debris. Flush all supply lines before connecting to faucet. Failure to do so can result in debris clogging the inlets and/or cartridges.

NOTE: Before installing a new ceramic cartridge flush lines completely.

Safety Information

Read this entire user guide to ensure proper installation. Compliance and conformity to local codes and ordinances is the responsibility of the installer.

The following safety notes must always be complied with during handling of this product:

- FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- Make sure there is enough space and lighting available during installation and service.
- Do not modify or convert this Chicago Faucets product yourself. All warranties will be voided.

Internal Antenna Specifications

- Peak Gain of the antenna: -5.47 dBi
- Frequency range: 2400-2500 MHz
- FCC ID: 2APTX-CFC01

Important

- Installation 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.
- Pressurized plumbing fixtures shall be installed in accordance with manufacturer's recommendations. The supply piping to these devices shall be securely anchored to the building structure to prevent installed device from unnecessary movement when operated by the user. Care shall be exercised when installing the device to prevent marring the exposed significant surface.
- Do not use pipe dope.
- Flush all the water supply lines before making connections.

This faucet comes with all the components needed for installation, however, some tools and supplies are not included.

- | | |
|-----------------------------|--------------------------|
| • Basin Wrench | • Plumber's Putty |
| • Adjustable Wrench | • Hex Key (supplied) |
| • Adjustable Locking Pliers | • Aerator Key (supplied) |

NOTE: Do not use pipe dope on faucet and supply connections.
Possible solenoid contamination could occur and will void any warranty.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 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 the dealer or an experienced radio/TV technician for help.

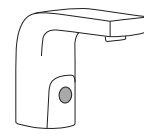
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



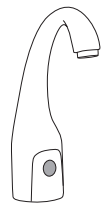
Traditional
Lavatory*



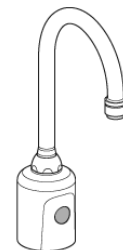
Contemporary
Lavatory*



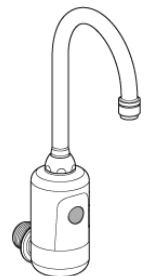
Edge



Curve



Gooseneck*



Wall Mount

*Integrated ASSE 1070-certified mixing is available as an option with Traditional, Contemporary, and Gooseneck designs.

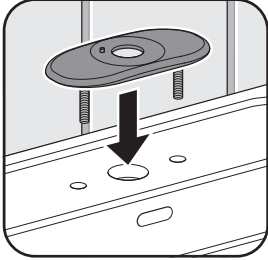
Mounting of Lavatory and Gooseneck Faucet

Prerequisites

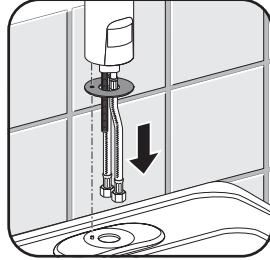
- Supply valve is installed
- Water supply lines are flushed properly
- For AC and faucets with EBPS, power outlet is installed

Important

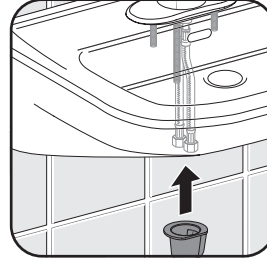
- It is not necessary to unscrew the connection between braided hose and housing to install the product.
- Do not remove protective covering from sensor until starting up faucet operation.
- Do not tighten locknut before step 4 is completed.



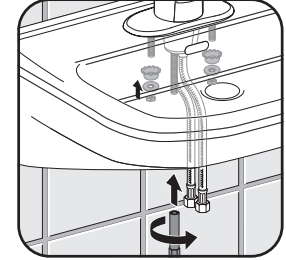
1. Mount cover plate if required. Plumber's putty is recommended to seal cover plate to the sink. Security pin must be located on the left side.



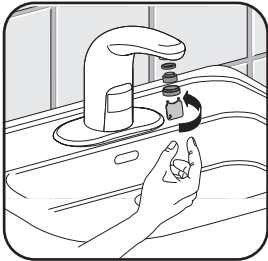
2. Mount gasket and put faucet into sink.



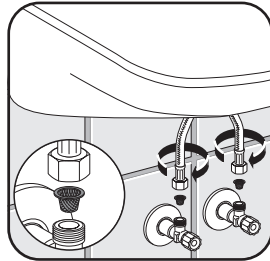
3. Mount bracket from underneath. Place hoses through large opening and mounting rod through small opening. Make sure flange sits securely against surface.



4. Place nut onto mounting rod and tighten with wrench.
5. If faucet was installed with cover plate, secure with basin washer, flat washer and locknut.



6. Install aerator and tighten with aerator key (supplied).
7. For Gooseneck faucets, tighten spout with wrench.



8. Connect braided hose with filter to supply valve.

Cold water > white label
Hot water > no label

Note: For AC faucets and faucets with EBPS, please refer to the plugin or hardwired transformer installation instructions.

9. Connect to power supply.
The faucet is now mounted.

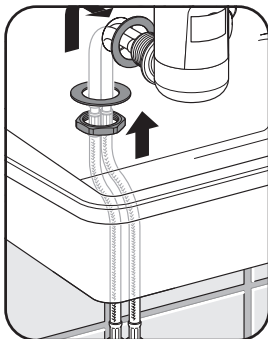
Mounting of Wall Mount Faucet

Prerequisites

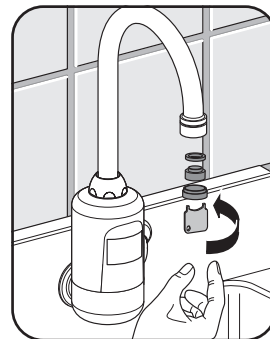
- Supply valve is installed
- Water supply lines are flushed properly
- For AC faucets and faucets with EBPS power outlet is installed

Important

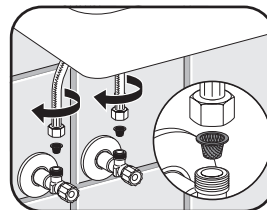
- It is not necessary to unscrew the connection between braided hose and housing to install the product.
- Do not remove protective covering from sensor until starting up faucet operation.



1. Mount gasket, put faucet into opening and tighten
2. Install aerator and tighten with aerator key (supplied)



3. For gooseneck faucets, tighten spout with wrench



4. Connect braided hose with filter to supply valve

Cold water > white label
Hot water > no label

For AC faucets and faucets with EBPS, please refer to the plugin or hardwired transformer installation instructions.

5. Connect to power supply
The Wall Mount faucet is now mounted.

Mounting of SSPS Generator*

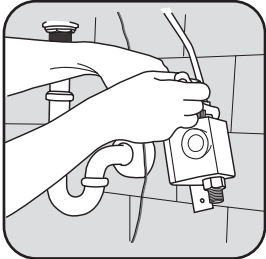
The SSPS Generator comes with all the components needed for installation, however, some tools and supplies are not included.

- Basin Wrench
- Adjustable Wrench
- Hand Drill
- Adjustable Locking Pliers

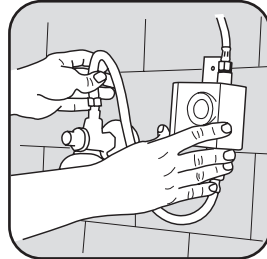
Includes

- SSPS Generator Unit
- Electronics Module and Holder
- Green Power Adapter
- Hose

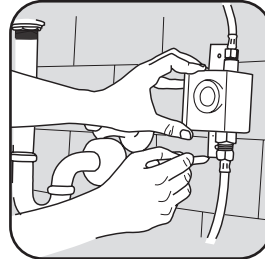
IMPORTANT: Do not use pipe dope on faucet and supply connections. Possible solenoid contamination could occur and will void any warranty.



1. Connect SSPS unit. Attach to faucet and install water supply line.



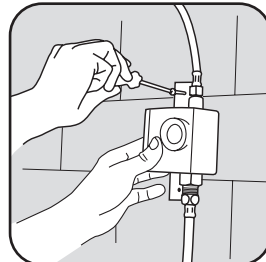
2. Position SSPS under sink. Carefully position to allow connection of water lines and wiring.



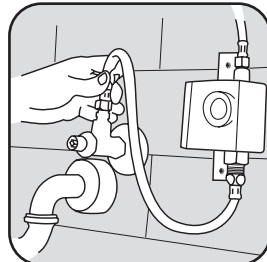
3. Mark holes. Position mounting bracket and mark mounting holes.



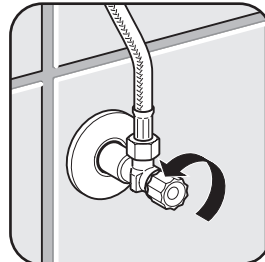
4. Drill holes. Drill holes for screw anchors.



5. Secure SSPS to wall. Insert anchors into holes and mount SSPS unit to wall with supplied screws.



6. Attach inlet hose to supply and turn on water. With water on, check system for leaks.*

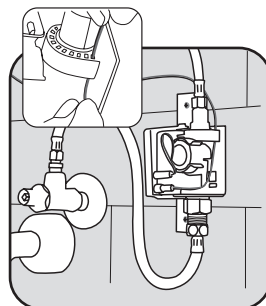


7. Fully open supply valve.

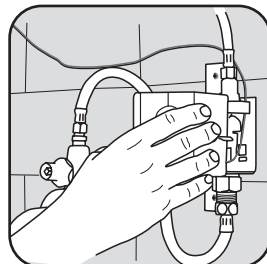


8. Remove all items from sink.

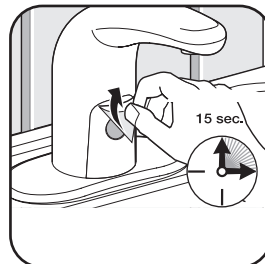
*For dual-supply SSPS models, connect the hot water supply line to the SSPS unit and the cold water supply line directly to the faucet.



9. Remove cover and connect faucet wire to SSPS and secure into wire harness.



10. Attach the cover. Faucet is ready to run through programming sequence.



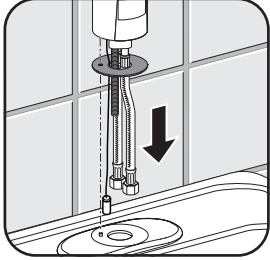
11. Remove protective covering from sensor.

Wait for 15 seconds for faucet to calibrate to its environment.

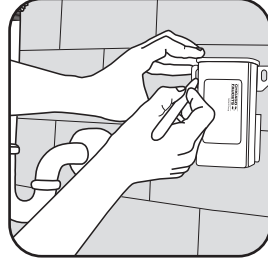
*Not compatible with HyTronic faucets featuring integrated ASSE 1070-certified mixing.

Mounting of Long Term Power System (LTPS) Pack (LTPS Models Only)

The LTPS Power Pack comes with mounting hardware (screws and anchors). You will need a drill and Phillips screwdriver to complete the installation.



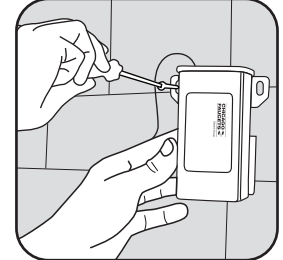
1. Mount faucet by following the standard mounting instructions on page 2.



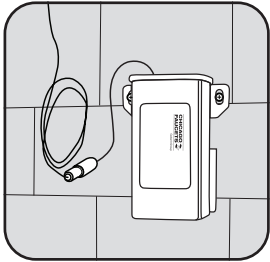
2. Position LTPS unit on wall and mark mounting holes on mounting surface.



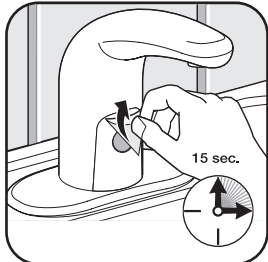
3. Drill holes for screw anchors.



4. Insert anchors into holes and mount LTPS unit to wall with supplied screws.



5. Connect spout wire to LTPS connector wire, making sure connectors are oriented correctly.



6. Remove protective covering from sensor.
Wait 15 seconds for faucet to calibrate to its environment.

LTPS End of Life Directives:

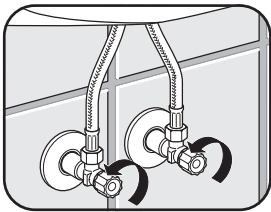
In an effort to produce environmentally conscious products, the LTPS contains materials that are required to be recycled by specialized companies. Please ensure you dispose of your LTPS according to local regulations. Follow applicable laws and regulations for transport, shipping, and disposal of batteries. For details on, and locations for recycling lithium-based batteries, please contact a government recycling agency, your waste-disposal service, or visit reputable online recycling sources such as www.call2recycle.org.

Start-up Operation

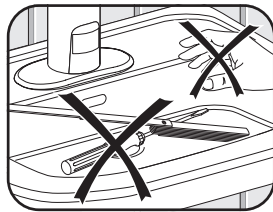
A traditional lavatory faucet is shown as an example. The start-up operation applies to all models.

Prerequisites

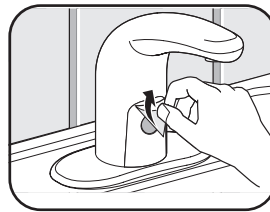
- Faucet is mounted
- Water supply lines are flushed properly
- Water supply is on
- For AC faucets and faucets with EBPS, power outlet is installed



1. Fully open supply valves



2. Remove all items from sink



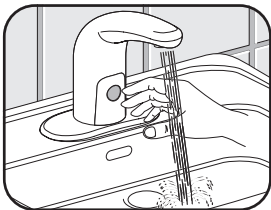
3. Remove protective covering from sensor



4. Wait for 15 seconds for faucet to calibrate to its environment
The faucet is now activated.

Test Function

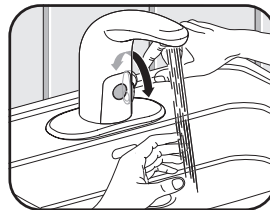
NOTE: If the faucet does not work as described below, see "Troubleshooting" section.



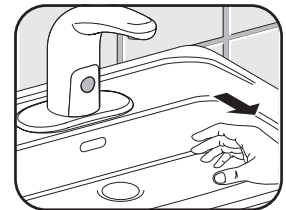
1. Hold hand in front of sensor until water begins to flow.



WARNING: Hot water may burn your skin. Avoid contact with the water stream until the water temperature has been properly adjusted. See page 5 for instructions on adjusting water temperature.



2. For faucets with external mixer, turn mixer handle from cold to warm. You should feel the water temperature increase.



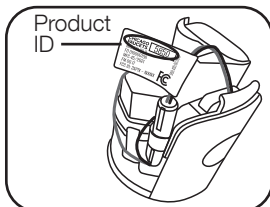
3. Move hand away from sensor until water flow stops.

Adjustments and Mode Settings

Built-in Bluetooth® technology allows for easy adjustments and mode changes using a smartphone or tablet with our CF Connect App.

- Install the CF Connect App on your phone or tablet
- Once registered, follow the prompts to make adjustments to your faucet
- You will need the faucet ID number which can be found on the label included with the electronics module

Look for this symbol to download the CF Connect App:



Look for the product ID number on the label included with the electronics module.

Faucet Adjustment Overview

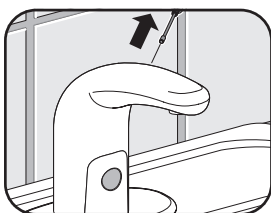
Operating modes and sensor ranges can be adjusted with a manual operation through the infrared sensor. A traditional lavatory faucet is shown as an example. Faucet adjustment operations apply to all models. Alternatively, operating modes and sensor ranges can be adjusted with the Chicago Faucets Commander™ Handheld Programming Unit. For more information, visit chicagofaucets.com/commander.

Operating Modes	Description
Cleaning Mode	The faucet is inactive for 90 seconds.
Normal Mode	The faucet is activated if it senses a hand presence. This is the default operating mode of the faucet.
Metering Mode (10 s)	The faucet will shut off after 10 seconds regardless of hand presence detected.
Scrub Mode (60 s)	The faucet will shut off 60 seconds after the detection of the last hand presence.
Scrub Mode (180 s)	The faucet will shut off 180 seconds after the detection of the last hand presence.
Sensor Range Adjustment	Change the detection distance of the infrared sensor. The default sensor range is approximately 1" beyond the spout.
Reset	All settings will be reset to original factory settings.

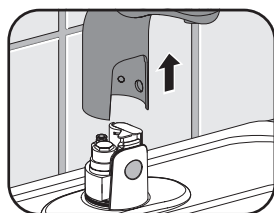
In order to set the operating modes, the faucet needs to be placed into "Manual Setting" mode. At this time, operating modes can be changed within the next 30 minutes.

Adjusting Water Temperature (Internal Mix)

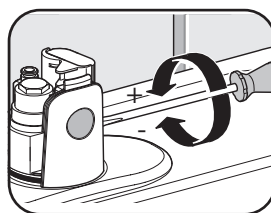
A traditional lavatory faucet is shown as an example. These instructions apply to all models with internal mixers.



1. Remove shut-off screw



2. Remove housing vertically



3. Adjust internal mixer with screwdriver
Clockwise > warm
Counterclockwise < cold



4. Mount housing vertically



5. Install shut-off screw

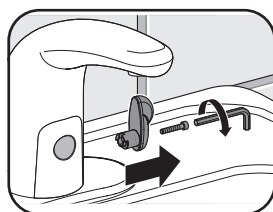
The temperature is now adjusted. Carefully test the new temperature. If necessary, adjust again.

Adjusting Hot Water Limiter (External Mixer)

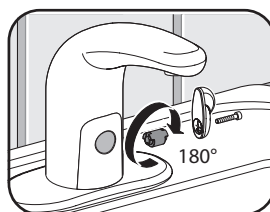
A traditional lavatory faucet is shown as an example. These instructions apply to all models with user adjustable temperature control. The proportion of hot water can be switched from approximately 85% to 95% (or reverse) depending upon inlet water pressures and temperatures. The default setting is 85%.

WARNING: Hot water may burn your skin.

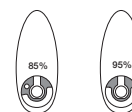
To avoid the risk of scalding, use a thermometer to check water temperature. Avoid contact with the water stream until the water temperature has been properly adjusted.



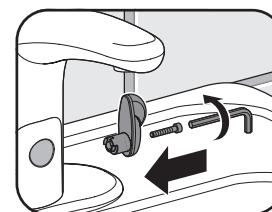
1. Remove mixer handle



2. Carefully pull out hot water limiter from handle (using pliers) and reverse by 180°



Settings of hot water limiter
(View from placement in mixer handle)



3. Mount mixer handle
The proportion of hot water is now changed.

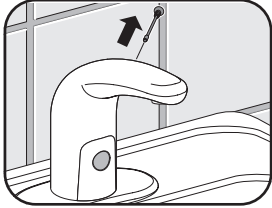
Replacing The Battery

A traditional lavatory faucet is shown as an example. These instructions apply to all DC and EBPS models.

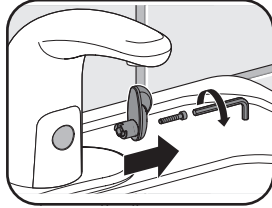
Prerequisites

- Battery is low (LED is lit)
- New 6 V Lithium battery (CR-P2) is required

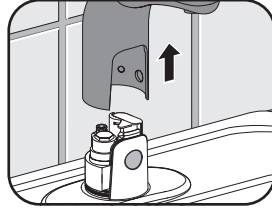
NOTE: For EBPS units, low battery LED will only light when AC power is disconnected



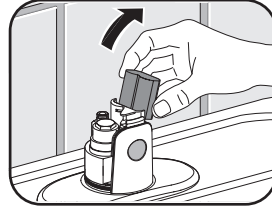
1. Remove shut-off screw



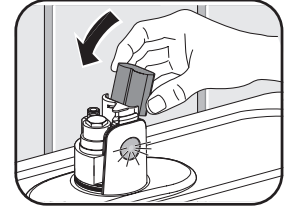
2. Remove mixer handle
(for faucets with external
mixer only)



3. Remove housing
vertically



4. Remove used battery from
holder and recycle



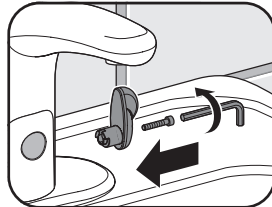
5. Insert new battery.
IMPORTANT: be sure
battery is fully seated. LED
will illuminate when battery
is properly installed.



6. Mount housing vertically

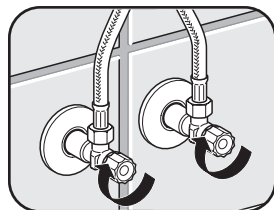


7. Install shut-off screw

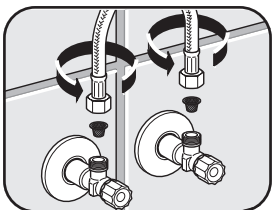


8. Install mixer handle (for faucets
with external mixer
only)

Cleaning or Replacing Inlet Filter

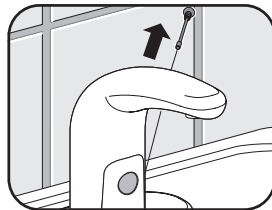


1. Close supply valves

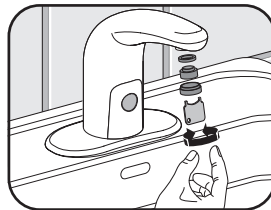


2. Disconnect supply hoses
and carefully remove filter
from hose. Clean or
replace filter. Reconnect
supply hoses and open
the valves.

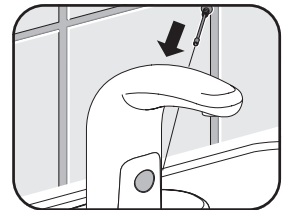
Cleaning or Replacing Aerator



1. Remove shut-off screw



2. Remove outlet with
vandal resistant wrench
supplied with the faucet.
Clean or replace outlet,
then reinstall.



3. Install shut-off screw

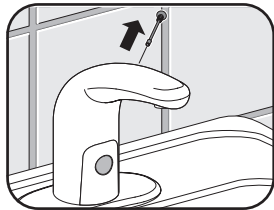
The outlet is now
cleaned or replaced.

Replacing The Solenoid (TempShield® Models Only)

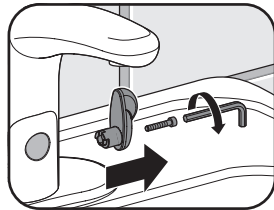
A traditional lavatory faucet is shown as an example.

Prerequisites

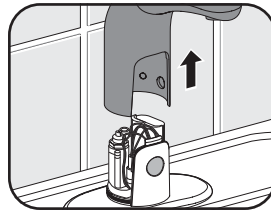
- No water flow and all other troubleshooting solutions have failed
- Water runs continuously and all other troubleshooting solutions have failed



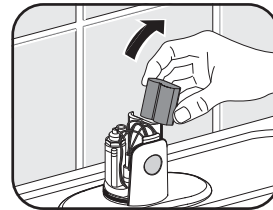
1. Remove shut-off screw



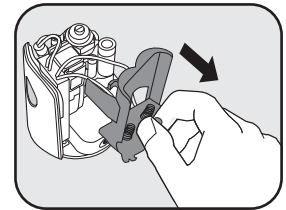
2. Remove mixer handle
(for faucets with external
mixer only)



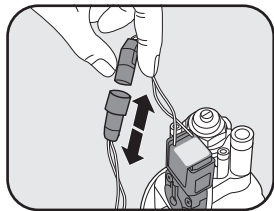
3. Remove housing
vertically



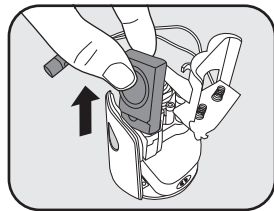
4. Remove the battery from
the holder



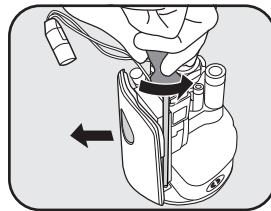
5. Remove battery holder



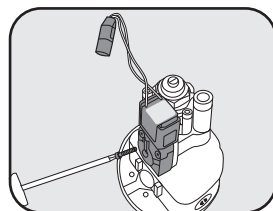
6. Disconnect wires



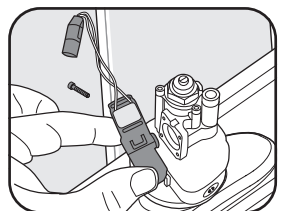
7. Remove sensor



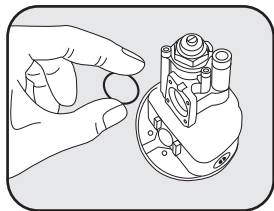
8. Remove the sensor shield
by removing the two
screws at the base and
pulling forward



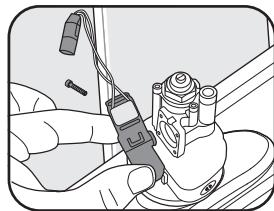
9. Remove the four screws
from the front of the
solenoid



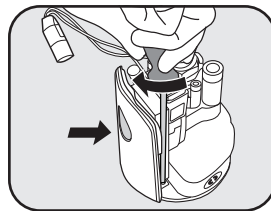
10. Pull the solenoid out of
the valve body



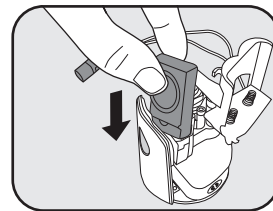
11. Make sure the o-ring
from the old solenoid
is not still in the valve
body



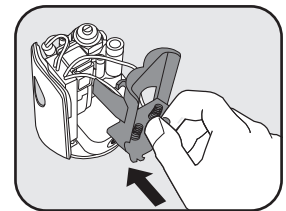
12. Insert the new solenoid
firmly and secure with
four screws



13. Replace the sensor
shield and secure with
the two screws



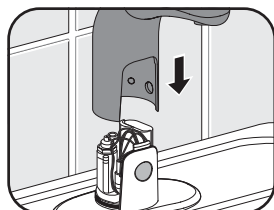
14. Reinsert the sensor
behind the metal shield
and reconnect wires



15. Insert the battery holder



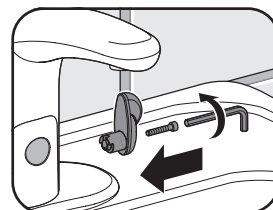
16. Insert the battery



17. Mount the housing
vertically



18. Install shut-off screw



19. Install mixer handle (for
faucets with external
mixer
only)

Care and Maintenance

All Chicago Faucets fittings are designed and engineered to meet or exceed industry performance standards. Care should be taken when cleaning this product. Do not use abrasive cleaners, chemicals or solvents as they can result in surface damage. Use mild soap with warm water for cleaning and protecting the surface of Chicago Faucets fittings.

For additional technical assistance, call 800/TEC-TRUE (800-832-8783) or visit our website at chicagofaucets.com.

TROUBLESHOOTING

No Water Flow	
Cause	Solution
Supply valves are closed	Open supply valves.
Aerator is blocked or dirty	Clean or replace outlet. See "Care and Maintenance".
Water line filter is dirty or blocked	Clean or replace filter. See "Care and Maintenance".
Braided hose is kinked	Eliminate braided hose kink.
No external water pressure	Check water pressure. Provide water pressure.
Battery is drained	Replace SSPS unit. Contact Chicago Faucets technical service or replace power adapter
Reverse green adapter insertion	Insert green adapter correctly.
Connector between SSPS and power adapter unplugged	Plug connector. (green plugs)
Corroded power adapter contacts	Clean contacts.
Connecting cable is kinked or broken	Replace defective parts. See "Replacement Parts" at chicagofaucets.com
Shut-off screw is missing or defective	Replace shut-off screw or defective See "Replacement Parts" at chicagofaucets.com
Solenoid valve inoperable	Replace solenoid valve. See "Replacement Parts" at chicagofaucets.com .
Faucet is in cleaning mode	Wait for cleaning mode to end (appr. 90 seconds)
Electronics module inoperable	Contact technical service or replace power adapter See "Replacement Parts" at chicagofaucets.com
Green Power adapter defective	Contact technical service or replace power adapter See "Replacement Parts" at chicagofaucets.com
Sensor distance is not adjusted properly	Remove and re-install shut-off screw. Do not disturb scanning procedure until water stops and LED is off.
Infrared window scratched or dirty	Clean window with smooth cloth
Interfering reflections from sink	Remove and re-install shut-off screw. Do not disturb scanning procedure until water stops and LED is off. Adjust upper and lower beam to compensate for reflections. (Commander™ Handheld Unit required. Go to www.chicagofaucets.com/commander for details)
Water Runs Continuously and Stops When Object Present	
Cause	Solution
Connector between electronics module and solenoid valve plug is reversed	Plug connector properly
Water Flows Although Shut-Off Screw Is Removed	
Cause	Solution
Electronics module inoperable	Contact technical service or replace power adapter See "Replacement Parts" at chicagofaucets.com
Water drops on infrared window	Clean window with smooth cloth

Water Runs Continuously	
Cause	Solution
Interfering object is in monitoring range	Remove object from monitoring area. Remove and re-install shut-off screw. Do not disturb scanning procedure until water stops and LED is off.
Defective electronics module	Replace electronics module. See "Replacement Parts" at chicagofaucets.com
Improper electronics module	Change mode or reset sensor. See "Care and Maintenance".
External water pressure is too high	Check external water pressure. Provide pressure between 20 - 125 psi.
Solenoid valve inoperable	Replace solenoid valve. See "Replacement Parts" at chicagofaucets.com .
Faucet Turns On By Itself	
Cause	Solution
Infrared window scratched or dirty	Clean window with smooth cloth
Faucet is influenced by room environment (mirror, stainless steel or glass sink, etc.)	Remove and re-install shut-off screw. Do not disturb scanning procedure until water stops and LED is off. Adjust upper and lower beam to compensate for reflections. (Commander™ Handheld Unit required. Go to www.chicagofaucets.com/commander for details)
Input line pressure fluctuates	Install appropriate line pressure regulators
Faucet Is Leaking Water	
Cause	Solution
Connections between housing and braided hose	Check O-rings. Replace damaged or missing O-rings.
Connection between braided hose and inlet supply are loose	Check rubber washers. Replace washers when damaged or missing.
Connection between valve body and solenoid valve is loose	Check O-rings. Replace damaged O-rings. Carefully re-install solenoid valve & do not over tighten.
Faucet drips, solenoid valve does not close	Clean or replace solenoid valve. See "Replacement Parts" at chicagofaucets.com .
Temperature Cannot Be Adjusted Properly	
Cause	Solution
Supply valves not fully opened.	Fully open supply valves.
Water line filter is dirty or blocked	Clean or replace filter. See "Care and Maintenance".
Braided hose is kinked	Eliminate braided hose kink.
Backflow preventer in faucet is blocked	Unblock backflow preventer
Temperature of hot or cold supply is too low	Check inlet temperature or inspect boiler.
Hot water temperature not sufficient	Reverse hot water limiter. See "Care and Maintenance"
Inlet hoses are reversed	Correct the connections.

CHICAGO FAUCETS LIMITED WARRANTY

TO WHOM DOES THIS WARRANTY APPLY? — The Company extends the following limited warranty to the original user only.

WHAT DOES THIS WARRANTY COVER AND HOW LONG DOES IT LAST?

This warranty covers the following Commercial Products:

LIFETIME FAUCET WARRANTY — The "Faucet," defined as any metal cast, forged, stamped or formed portion of the Product, not including electronic or moving parts or other products separately covered by this Limited Warranty or water restricting components or other components, is warranted against material manufacturing defects for the life of the Product.

FIVE YEAR FAUCET WARRANTY — Certain Products and portions of the Product are warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase. Products warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase are referred to by the product numbers 42X, 43X, 15XX and E-Tronic™ - 4X, 5X, 6X, 7X, 8X and 9X. All zinc die cast portions of Product are warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase.

THREE YEAR ELECTRONICS WARRANTY — Electronic components, including the solenoid, are warranted for three (3) years from the date of installation.

FIVE YEAR CARTRIDGE WARRANTY — The "Cartridge", defined as the metal portion of any Product typically referred to by the product numbers containing 1-099, 1-100, 377X, 217X and 274X, excluding any rubber or plastic components, is warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase. All Cartridges included in the Company's Single Control or Shower Products also are warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase.

ONE YEAR FINISH WARRANTY - COMMERCIAL — For Products used in commercial applications, the finish of the Product is warranted against material manufacturing defects for a period of one (1) year from the date of Product purchase.

OTHER WARRANTIES — All other Products not covered above are warranted against material manufacturing defects for a period of one (1) year from the date of Product purchase.

Other restrictions and limitations apply. For complete warranty details, call Chicago Faucets Customer Service at 847-803-5000 or visit chicagofaucets.com.

The Chicago Faucet Company
2100 South Clearwater Drive
Des Plaines, IL 60018
Phone: 847/803-5000
Fax: 847/803-5454
Technical: 800/832-8783
www.chicagofaucets.com