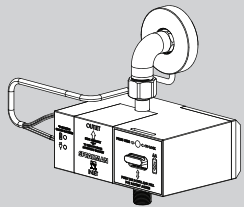
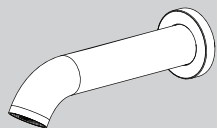
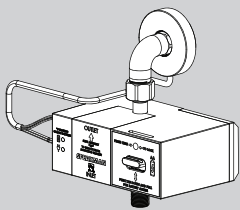
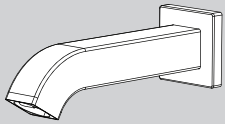


INSTRUCTIONS FOR MODELS

SF-1000



SF-2000



NEED HELP?

For additional assistance or service please contact:

SPEAKMAN®

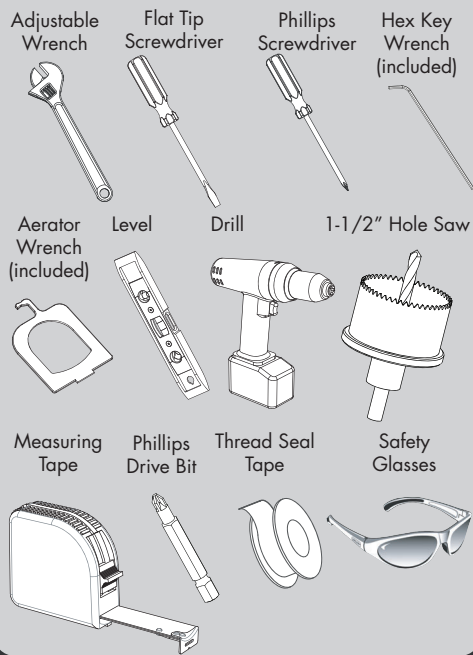
800-537-2107

customerservice@speakman.com

www.speakman.com

92-SF-1000-01

TOOLS AND SUPPLIES



IMPORTANT

- This installation manual covers several models. While you models may look different, it will install in the same manner.
- Do not over-tighten any connections or damage may occur.
- Be sure to read instructions thoroughly before beginning installation.
- This faucet has an operating range of 20-80 psi.

SAFETY TIPS

Cover your drain to prevent loss of parts. Be sure to wear eye protection while cutting pipe.

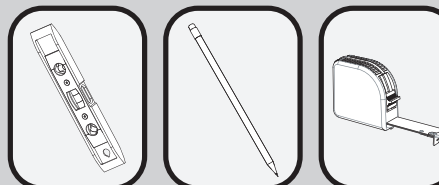
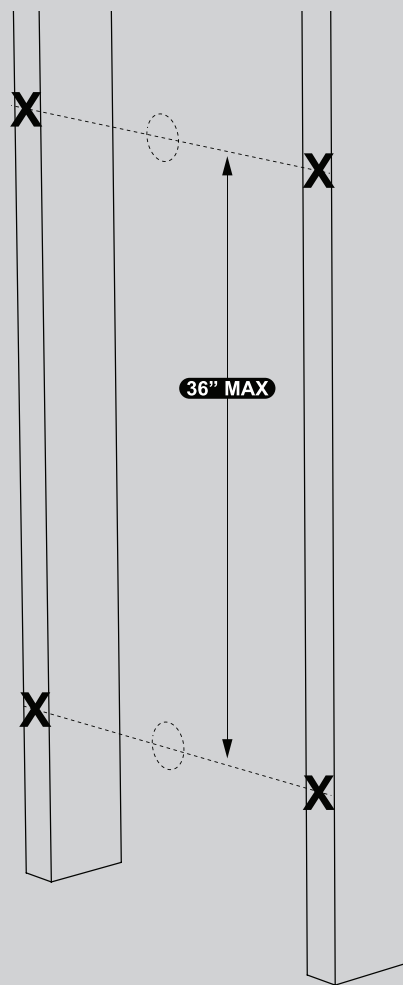
MAINTENANCE

Your new Speakman Product is designed for years of trouble-free performance. Keep it looking new by cleaning it periodically with a soft cloth. The use of harsh chemicals and abrasives on any of the Speakman custom finish products may damage the finish and void the product warranty. Please be sure to only use approved cleaners. Please contact Speakman for any clarification of acceptable cleaners.

WARRANTY

Warranty information can be found at: www.speakman.com

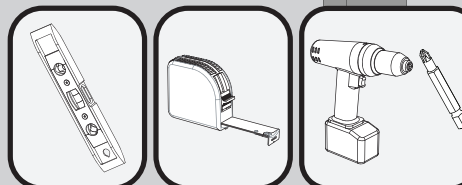
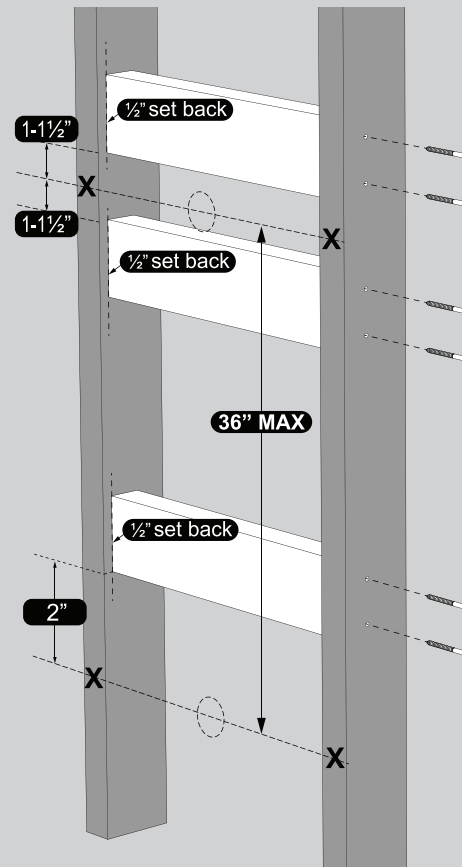
1 Determine the desired mounting location of the Sensor Faucet and Solenoid Box. Mark appropriate locations on the vertical studs of the wall. Draw a level line across the two (2) Vertical Studs as shown. The distance between the Sensor Faucet and Solenoid box must not exceed 36".



NOTE: Steps 1-8 must be completed prior to finish wall installation.

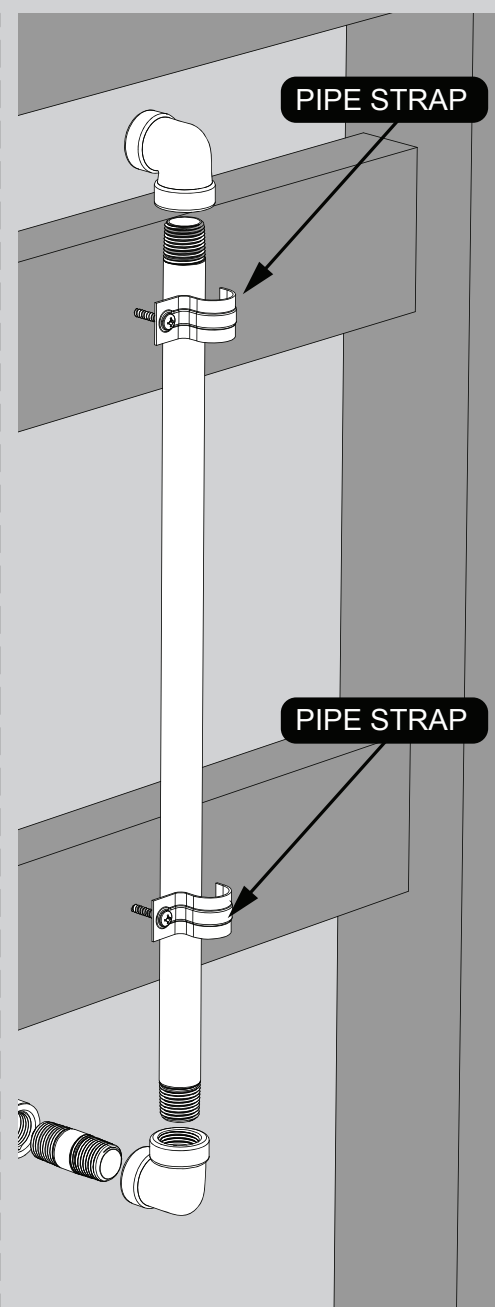
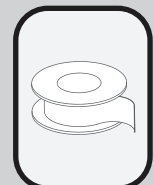
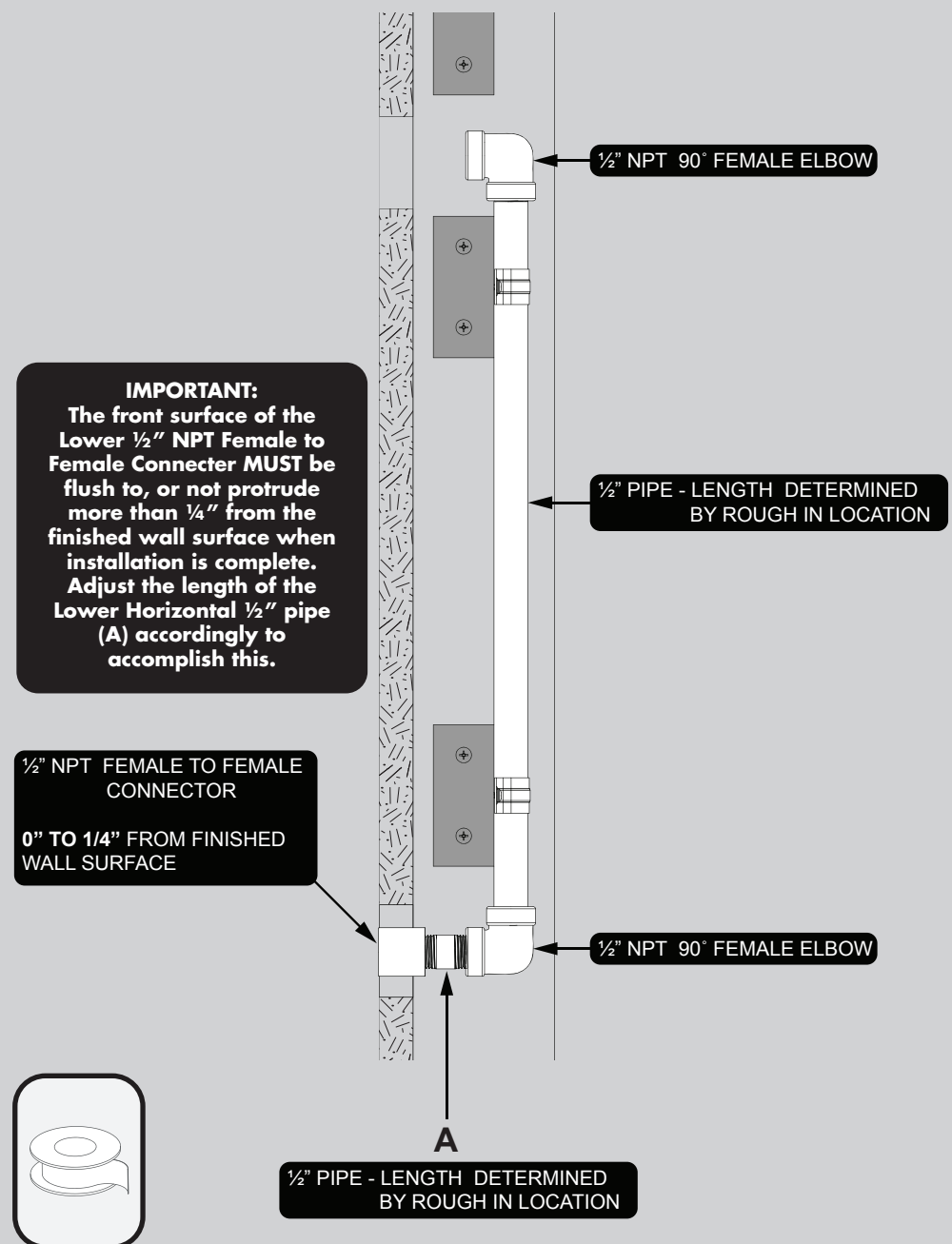
2 Cut three (3) 2"x 4" Horizontal Braces to fit between the Vertical Studs. The two (2) Upper Braces shall each be installed 1-1/2" from the centerline of the desired Sensor Faucet location. The Lower Brace shall be installed 2" above the centerline of the desired Solenoid location.

Secure Horizontal Braces to Vertical Studs. (mounting hardware not included).

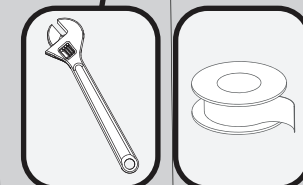
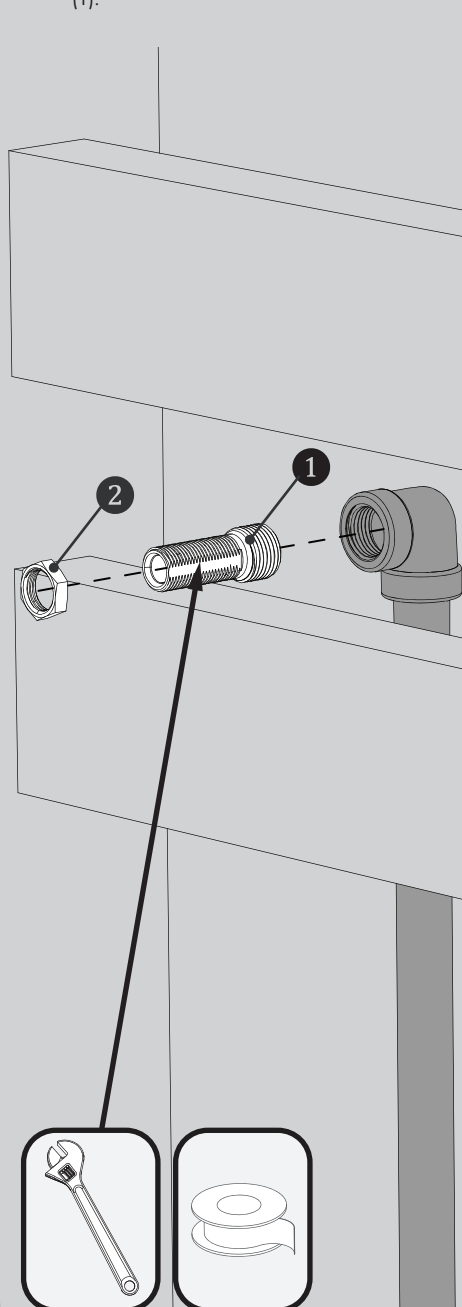


IMPORTANT: All Horizontal Braces **MUST** be set back 1/2" from the front surface of the Vertical Studs.

3 Install rough plumbing as shown below. Secure rough plumbing to Horizontal Bracing using Pipe Straps. Apply Thread Seal Tape on all connections. (Rough Plumbing, Pipe Straps, and Mounting Hardware not included).

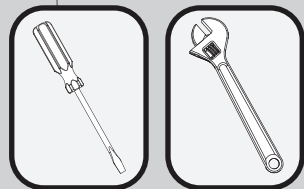
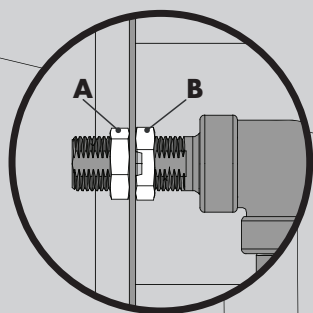
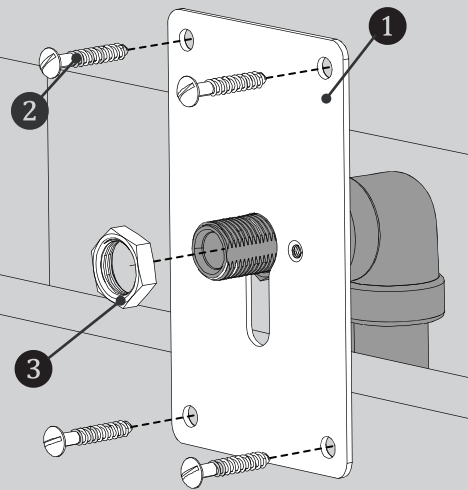


4 Thread Faucet Inlet Pipe (1) into Upper 1/2" NPT Female Elbow. Wrench tighten into position using an Adjustable Wrench on the Flats of the Faucet Inlet Pipe. Install and Hand thread Mounting Nut (2) to the base of Faucet Inlet Pipe (1).

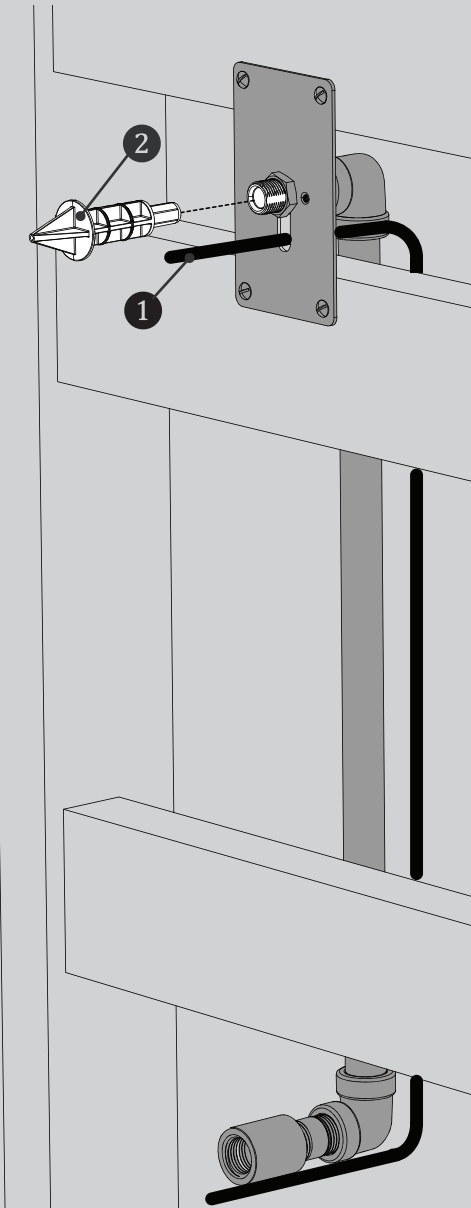


5 Position Mounting Plate (1) over Faucet Inlet Pipe as shown below. Secure to the Horizontal Braces with the four Mounting Screws (2) included. Install Mounting Nut (3) and Hand tighten until it contacts the Mounting Plate (1).

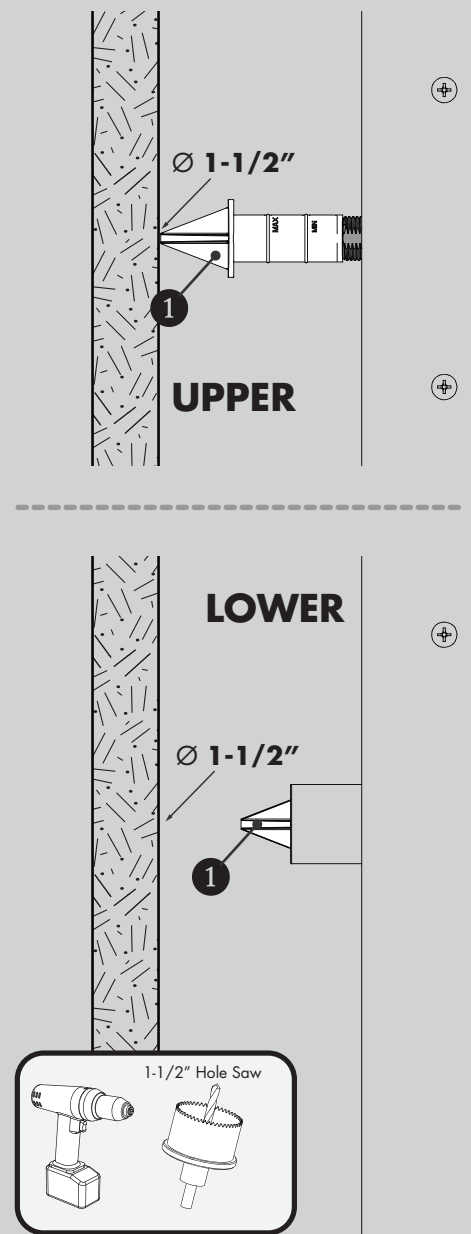
- See Detail View. Wrench tighten Front Mounting Nut (A) and Rear Mounting Nut (B) as to make firm contact with the Mounting Plate (1). Thread locker is recommended.



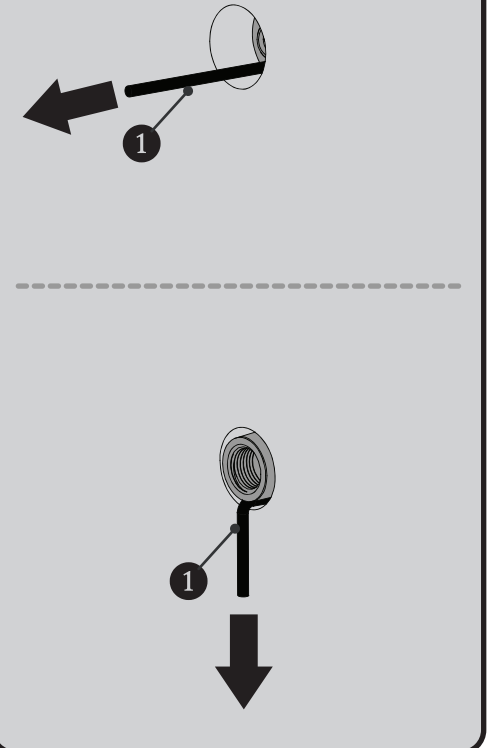
6 Route the included Wire Chase (1) as shown below. Ensure adequate length is present on both ends so it can extend beyond the finished wall surface. Place Protective Sleeve (2) into the Faucet Inlet Pipe.



7 Position back side of finished wall material against the Protective Sleeve (1) and press with moderate pressure. This should leave an indentation mark to indicate where a 1-1/2" hole will need to be drilled in the finished wall material. Repeat process for lower hole position.

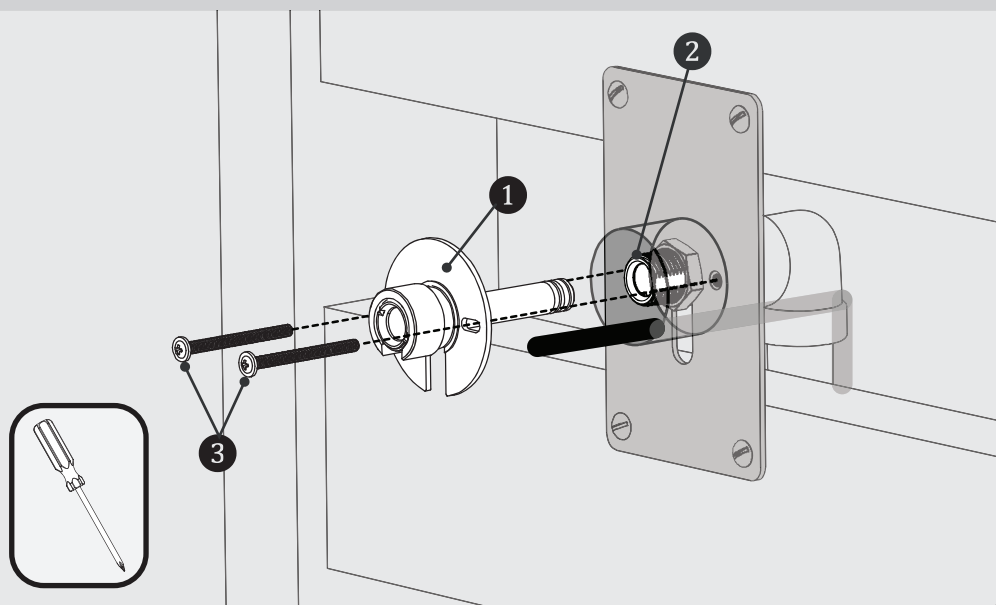


8 Ensure Protective Sleeve is placed into Faucet Inlet Pipe. Position Finished Wall Material against vertical studs, while verifying that the Wire Chase (1) is pulled through both the upper and lower drilled holes.



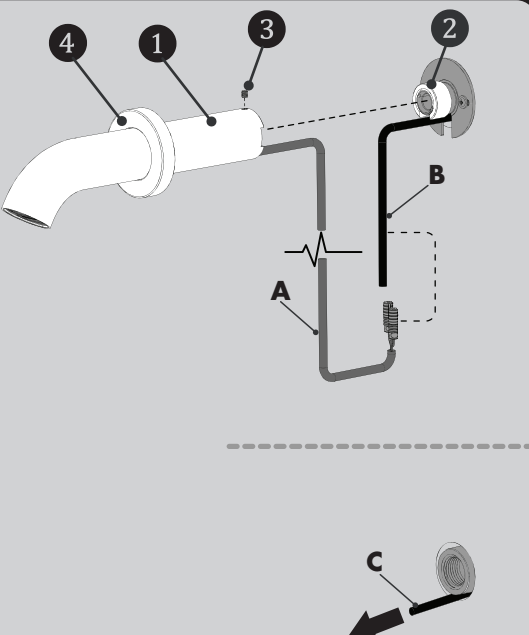
IMPORTANT:
Install and complete finished wall surfaces before proceeding.
Finished wall thickness **MUST NOT EXCEED 1-1/4"**.

9 Once finished wall installation is complete, remove the Protective Sleeve from the Faucet Inlet Pipe. Install the Faucet Mounting Sleeve (1) into the Faucet Inlet Pipe (2) as shown below. Secure into position with the two included Mounting Screws (3).



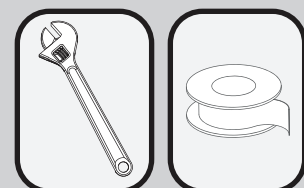
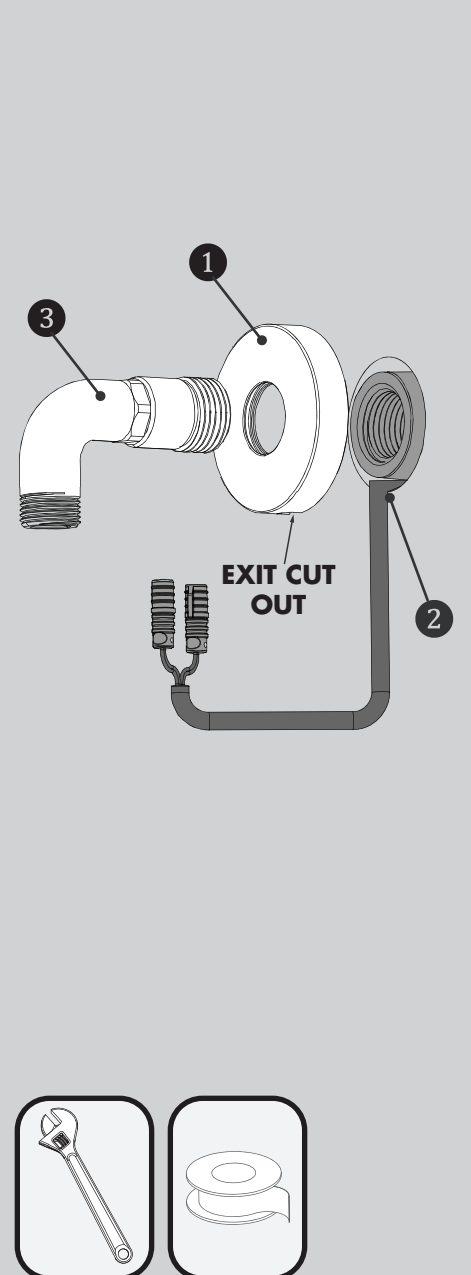
10 Securely attach the Sensor Wire (A) to the upper Wire Chase end (B). Pull lower Wire Chase end (C) to feed the Sensor Wire to the lower exit hole in wall. Ensure adequate Sensor Wire length is outside the lower exit hole in wall to make appropriate connections to the Solenoid.

- Install Spout Assembly (1) to the Faucet Mounting Sleeve (2).
- Secure Spout Assembly (1) into position by tightening the Hex Screw (3). Slide Escutcheon Ring (4) into position.

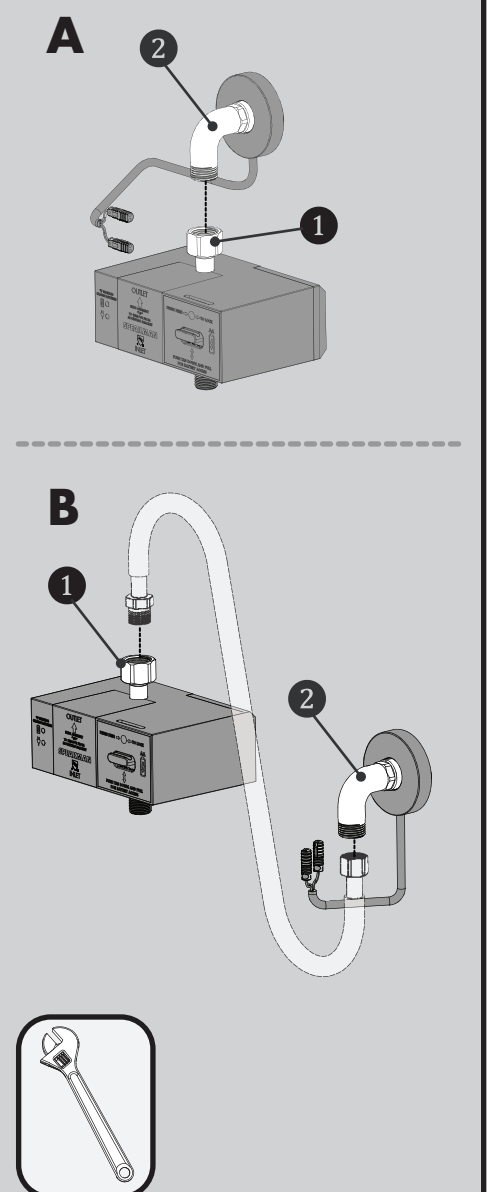


NOTE: You may need to pull on Sensor Wire from the lower exit hole in wall to remove excess slack in wire present at the upper location.

11 Place Lower Escutcheon Ring (1) over lower hole in wall, being sure to orient the Sensor Wire (2) so that it exits through the cut out in the Lower Escutcheon Ring (1). Thread Solenoid Outlet Pipe (3) into Lower 1/2" Female to Female Connector. Wrench Tighten into position.

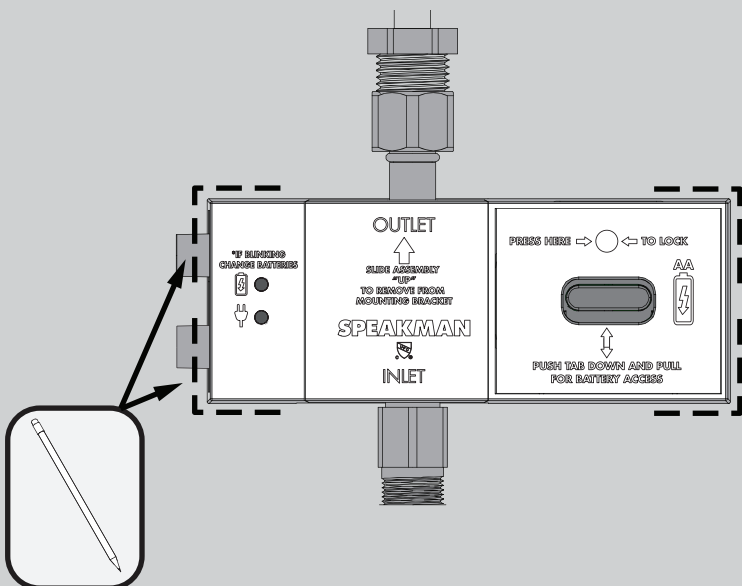


12 The Solenoid Assembly (1) can either be mounted directly to the Solenoid Outlet Pipe (2) (A), or via hose (not included) (B) if a different Solenoid Assembly mounting position is desired.

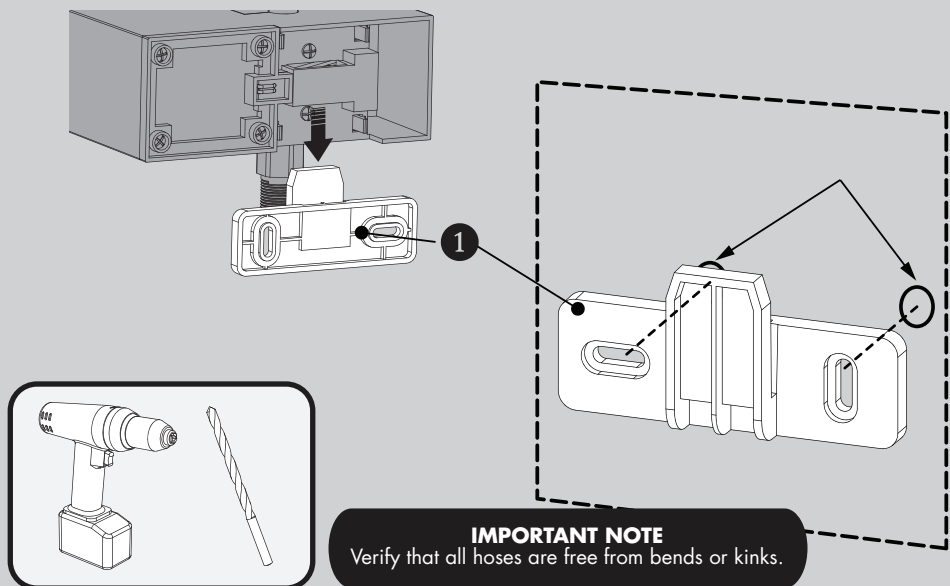


NOTE: If mounting Solenoid Assembly remotely, follow Steps 13-15.

13 When choosing your Solenoid Mounting Location, verify that all electrical connections are within reach. Place the Solenoid Assembly against the desired mounting surface while ensuring adequate clearance for servicing of all connections. Solenoid Assembly should be mounted so the inlet and outlet ports are aligned vertically. Mark location of Solenoid Assembly on the mounting surface using a pencil.

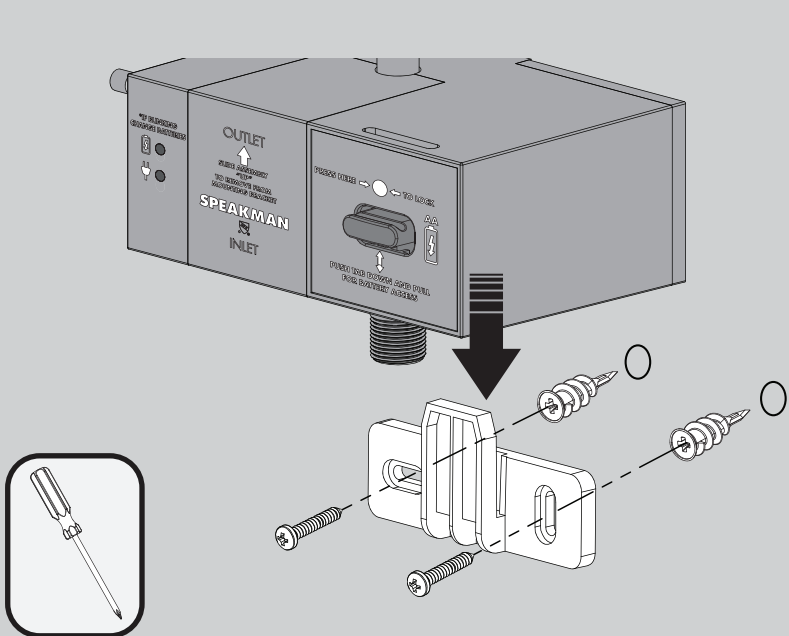


14 Remove Mounting Bracket (1) from Solenoid Assembly. Using the previously marked location on mounting surface, align Mounting Bracket (1) horizontally to approximate position and mark the mounting locations with a pencil. If mounting on drywall and not to stud, use the appropriate anchors and fasteners for application. Recommend screw in easy anchor or equal for drywall.

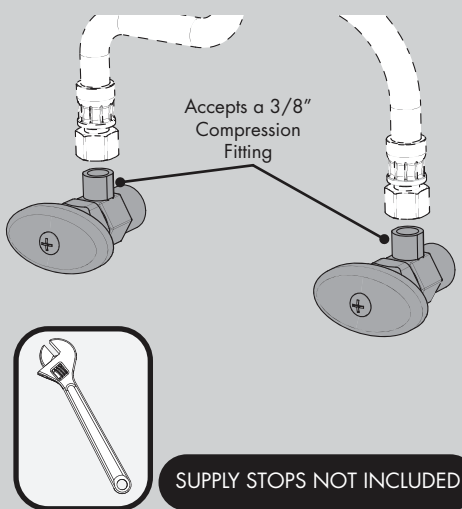


IMPORTANT NOTE
Verify that all hoses are free from bends or kinks.

15 After securing the Bracket to the mounting surface, align and slide Solenoid Assembly over Mounting Bracket.

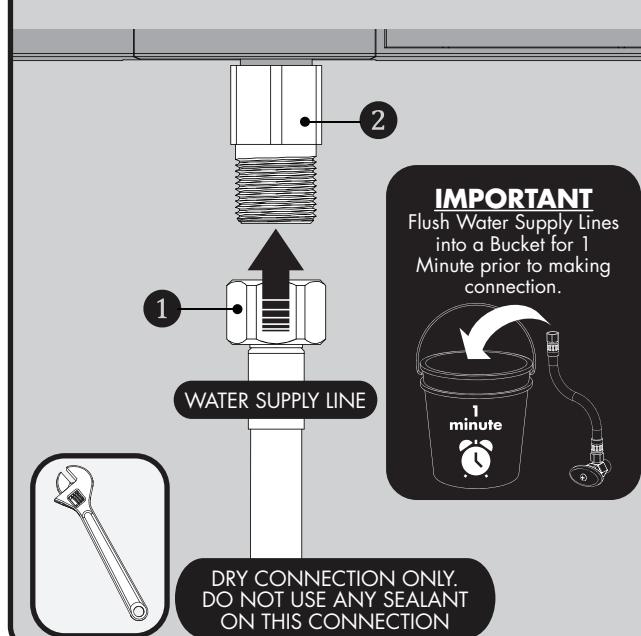


16 If mixed water is desired, a Hot and Cold water mixing device (not included) is needed. Ensure the water supplies are turned "OFF". Make connections between the Shut Off Valve and the inlet of the Solenoid. The inlet thread of the Solenoid is 9/16"-24 UNF and will accept a 3/8" Compression Fitting. Wrench Tighten. (Supply Stops and Inlet Hoses are not included).



SUPPLY STOPS NOT INCLUDED

17 Assemble Solenoid "INLET" Supply Hose (1) to the "INLET" connection (2) of Solenoid. Wrench tighten.

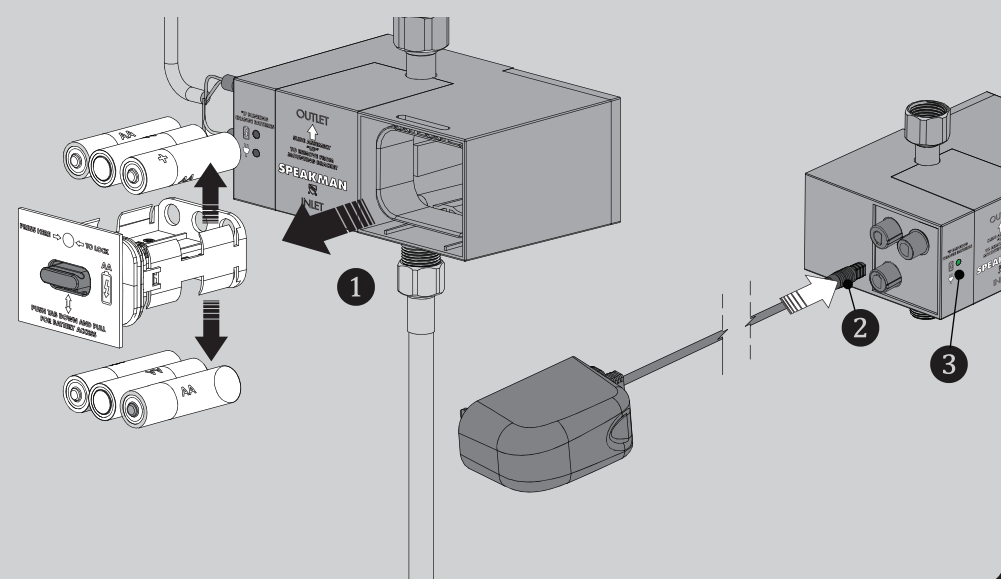


IMPORTANT
Flush Water Supply Lines into a Bucket for 1 Minute prior to making connection.

DRY CONNECTION ONLY. DO NOT USE ANY SEALANT ON THIS CONNECTION

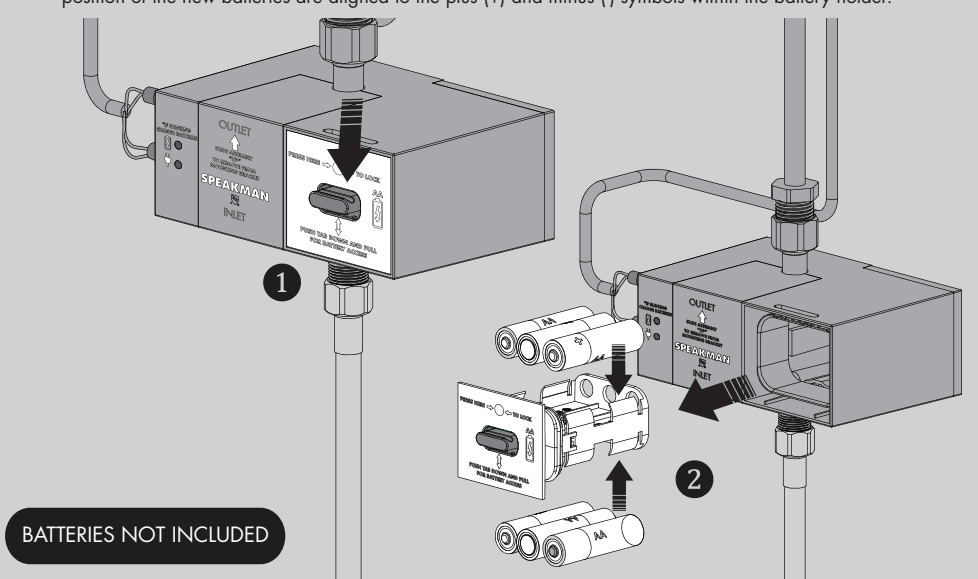
18 FOR A/C POWER

Verify that no batteries are present within the battery enclosure (1). Connect the A/C Adapter to the Solenoid Body (2). Plug the A/C Adapter into the wall outlet. The A/C light (3) should illuminate.



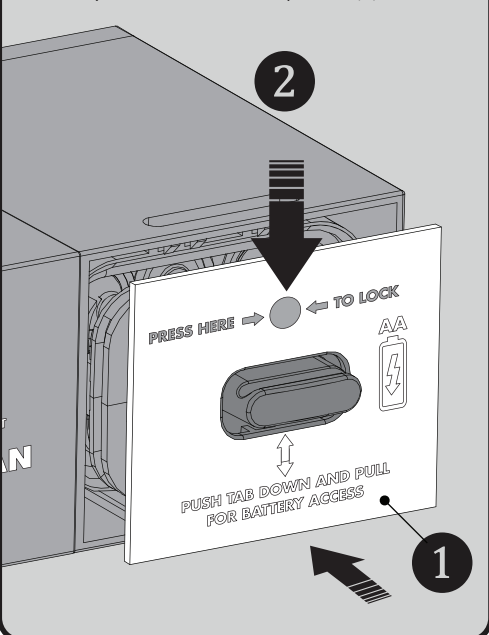
19 FOR BATTERY POWER

Access the interior Battery Enclosure by pressing down on the tab to release the tray holding the batteries (1). Pull out Battery Tray (2). Insert or replace the batteries with six (6) new standard 1.5v AA batteries. Ensure the position of the new batteries are aligned to the plus (+) and minus (-) symbols within the battery holder.

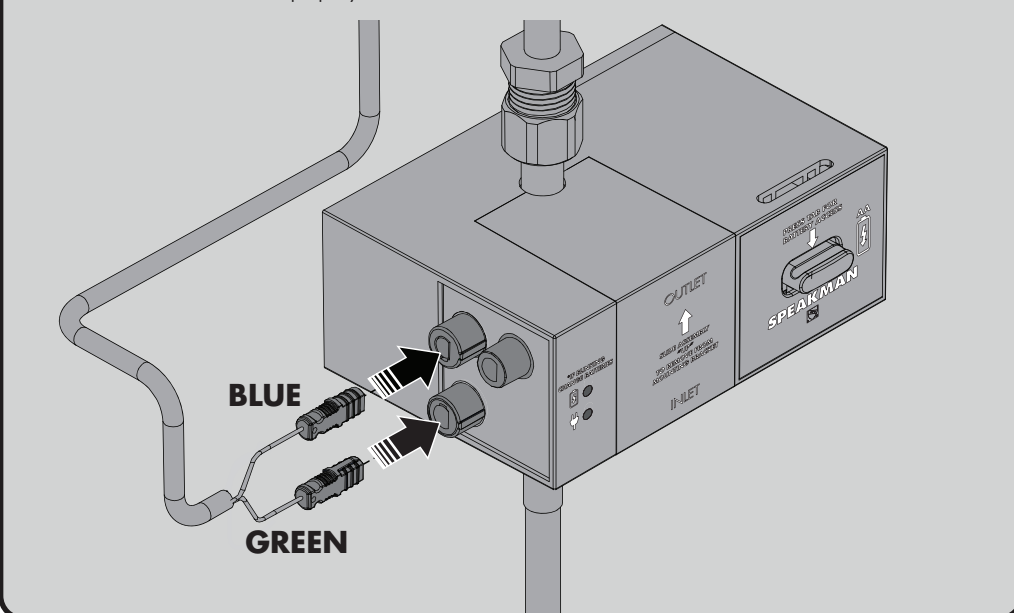


BATTERIES NOT INCLUDED

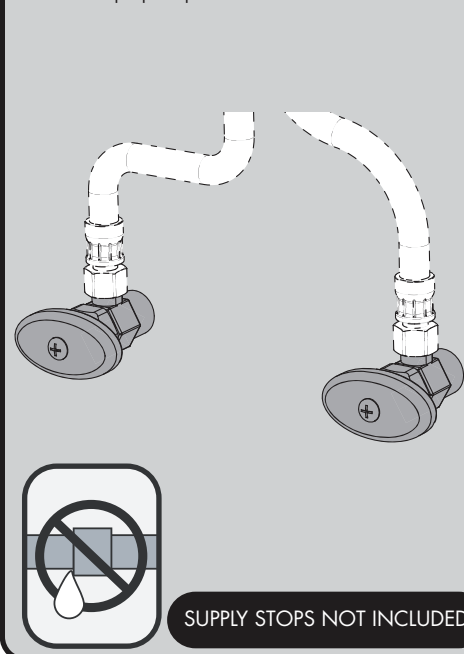
20 Reinstall the Battery Tray (1). Make sure to press the indicated location until the battery door is fully seated and locks into position (2).



21 Make electrical connections from the Sensor Eye to the Solenoid Assembly. Connect the Blue Male Ended Wire to the Blue Female Connection. Connect the Green Male Ended Wire to the Green Female Connection. To further aid proper alignment, there are white alignment lines on the connector ends. These alignment lines should face forward when properly installed.



22 Turn "ON" water supplies and inspect for leaks and proper operation of Sensor Faucet.



SUPPLY STOPS NOT INCLUDED

SF-1000 / SF-2000 CARE AND CLEANING

- 1) Your SENSORFLO® Faucet is designed and engineered in accordance with the highest quality and performance standards. With proper care, it will provide years of hygienic and trouble-free service.
- 2) Periodically, the Faucet will require some minor maintenance to keep it at peak performance. There is a low battery indicator located on the Sensor on the Faucet body. When the low battery light on the Sensor blinks, it indicates that the battery is low. To replace the batteries, follow the installation instructions in the electrical connections section of this document.
- 3) The finish of your Faucet should be cleaned using mild soap and warm water.
- 4) Dry immediately with a soft, clean cloth for best results.
- 5) NEVER use abrasive cleaners, chemicals, alcohol or other solvents. They may damage the surfaces of the non-chrome plated finishes.

SF-1000 / SF-2000 TROUBLESHOOTING

If water flow from the Faucet decreases:

- 1) Make sure the supply stops are open.
- 2) Remove the Aerator from the spout using the outlet wrench. Operate the Faucet with outlet device removed. If water flow is acceptable, disassemble the outlet device and rinse components with clean water.

If no water flows from the Faucet, and

If you can hear a clicking sound of Solenoid opening, but no water flows:

- 1) Verify that the HOT and COLD wall stops are completely open.
- 2) If the Battery Light within the Sensor Eye or Solenoid blinks continuously, even when the Faucet is not in use, the batteries within the Solenoid have low voltage and need replacement.

*If you **do not** hear a clicking sound of Solenoid opening and no water flows:*

- 1) If the Battery Light within the Sensor Eye blinks continuously, even when the Faucet is not in use, the batteries within the Solenoid have low voltage and need replacement.
- 2) Unplug connections to Solenoid for 2 minutes. Plug connections back in. The red light on the Sensor should turn on for several seconds before becoming operational. If not, check power supplies and connections.
- 3) Disconnect the existing Solenoid Assembly and connect a new Solenoid Assembly. Activate the Sensor and check for water flow. If the water flows, the existing Solenoid Assembly should be replaced.

If the batteries have been replaced, but the Faucet still does not operate:

- 1) Check the battery polarity and electrical connections. Make sure all electrical connections are fully inserted.
- 2) If the Faucet does not operate, replace the existing Solenoid Assembly with one you know to be functioning.

If the Faucet activates, but the water will not shut off:

- 1) Hold a hand in front of the Sensor at up to 7" away for more than 1 minute until the water flow stops. Once the water stops, remove your hand and wait 15 seconds. Then place your hand in front of the Sensor and verify that it is operating properly.
- 2) If the Faucet still does not shut off, cover the front of the sink with a towel. This will eliminate the potential of reflections activating the Sensor.
- 3) If it is a new installation and still not working, replace the Solenoid Assembly.

SF-1000 / SF-2000 QUESTIONS & ANSWERS

Q. How does the Sensorflo® Faucet work?

A. It uses laser technology. The Sensor emits a non-visible beam of light. When an object enters the detection area, the Sensor signals the Solenoid Valve to open for water to flow. When an object leaves the detection area, the Sensor signals the valve to close.

Q. Is the Sensorflo® Faucet sensor beam adjustable?

A. No, the Sensorflo® Faucet sensor beam is not adjustable. It has been factory set to factory specifications for these Faucets.

Q. What about water conservation?

A. The Sensorflo® design directly addresses water conservation. Water savings of up to 85% are not unusual. Additional energy savings are realized by conserving hot water.

Q. Does Sensorflo® reduce maintenance?

A. By elimination of on/off handles, control components are reduced and fittings stay cleaner longer. Only a light rinsing and wiping is required to restore the beauty of the Sensorflo® Faucets. Drip stains are eliminated. Fingerprints and soap spots on sinks and fittings are avoided. Finishes last longer and wash areas stay cleaner. Germs and bacteria are not transferred as easily making for a healthier environment.

Q. The finish on my Faucet seems to be deteriorating. What can I do to prevent this from happening?

A. Many commercial cleaning products contain harsh chemicals and abrasives. These products should not be used on any chrome-plated plumbing products. Please use only mild soap and water to clean the Faucet. Dry immediately with a soft cloth.

Q. Does the Sensorflo® system shut off immediately when an object leaves the sensing area?

A. A very short delay of approximately 0 to 1.5 seconds occurs before water is shut off.

Q. Is my Faucet protected from power surges?

A. Yes, Sensorflo® has been designed to have built-in power surge protection.

Q. If we lose power, do I have to do something to get the Faucet to operate again?

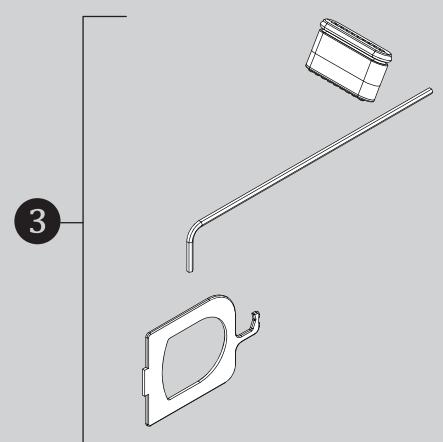
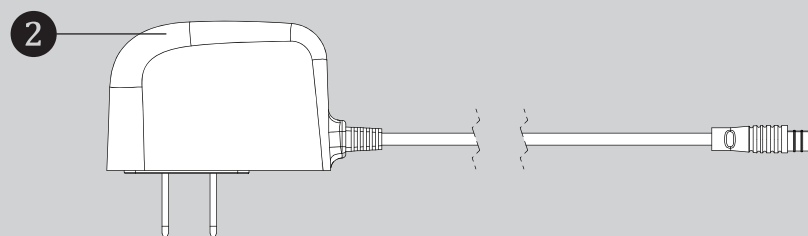
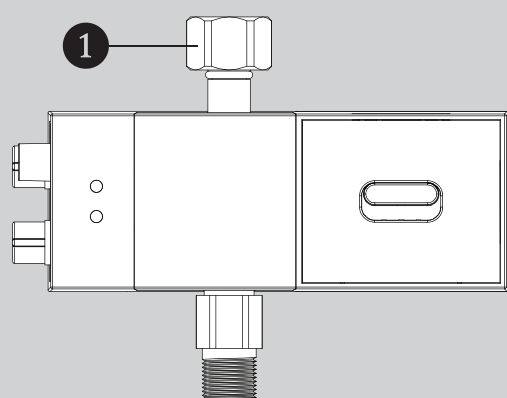
A. After a power outage, the Faucet is automatically ready for operation as soon as the power comes back on.

Q. If I call a plumber to come and install this Faucet, will they know enough to hook it up?

A. Our installation diagrams are very easy to follow.

SF-1000 / SF-2000 REPAIR PARTS

SPEAKMAN®



ITEM NO.	PART NO.	DESCRIPTION
①	RPG76-108060	SOLENOID BOX ASSEMBLY (NO BATTERY)
②	RPG76-107259	A/C CONVERSION KIT (120VAC TO 6VDC)
③	RPG05-111613	FF RECTANGULAR SPRAY AERATOR REPAIR KIT

SF-1000 ROUGH-IN DIAGRAM

SPEAKMAN®

NOTES:

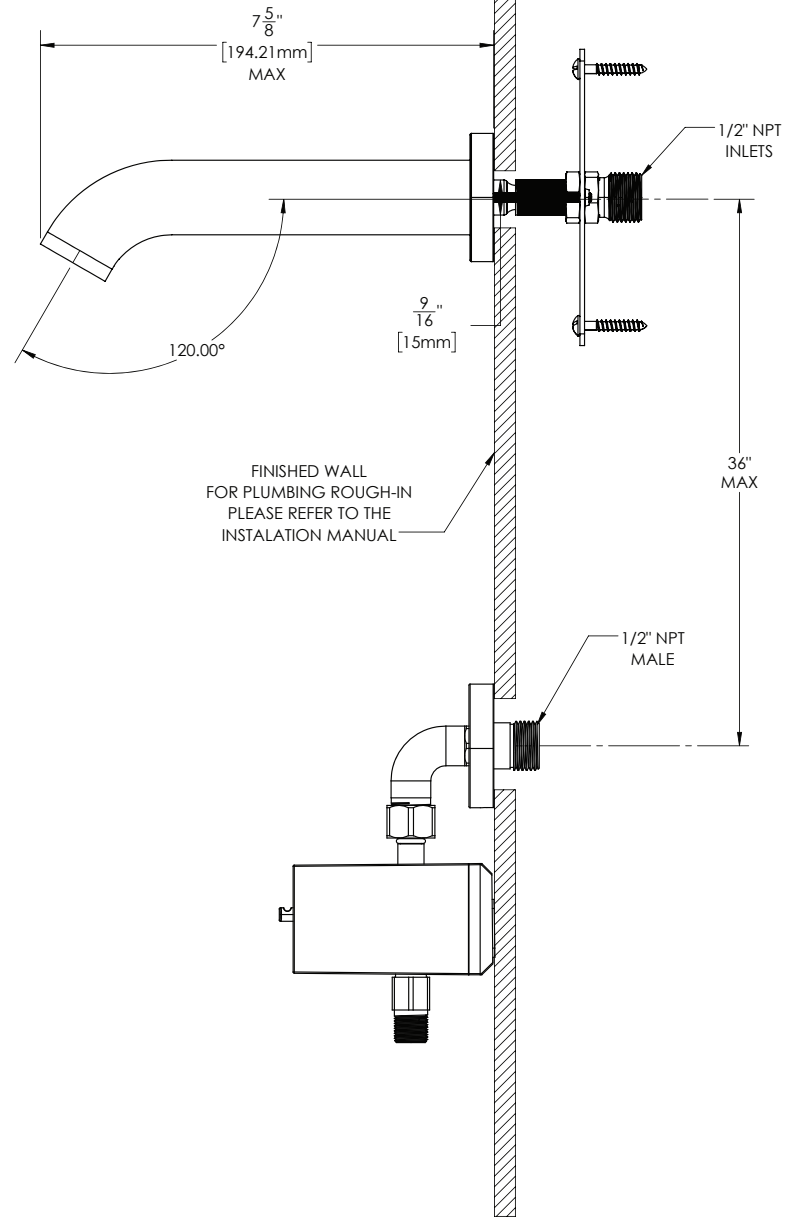
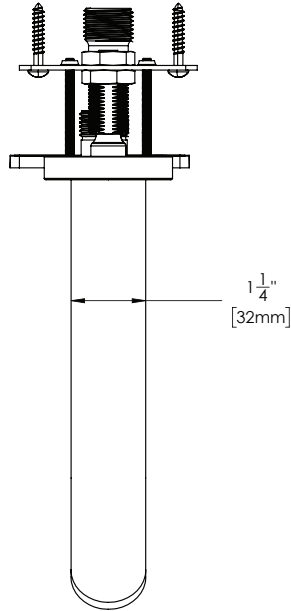
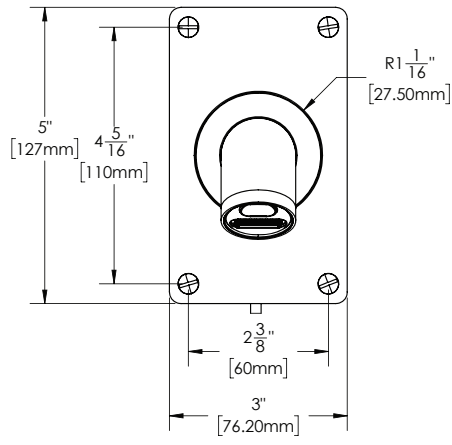
COMPLIANCE:

ASME A112.18.1/CSA B 125.1

FLOW:

Flow Rate: 0.5 gpm (1.9 L/min)
Flow Type: Spray

Contractor to supply necessary connections to the inlets of the end bodies.



DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

SF-2000 ROUGH-IN DIAGRAM

SPEAKMAN®

NOTES:

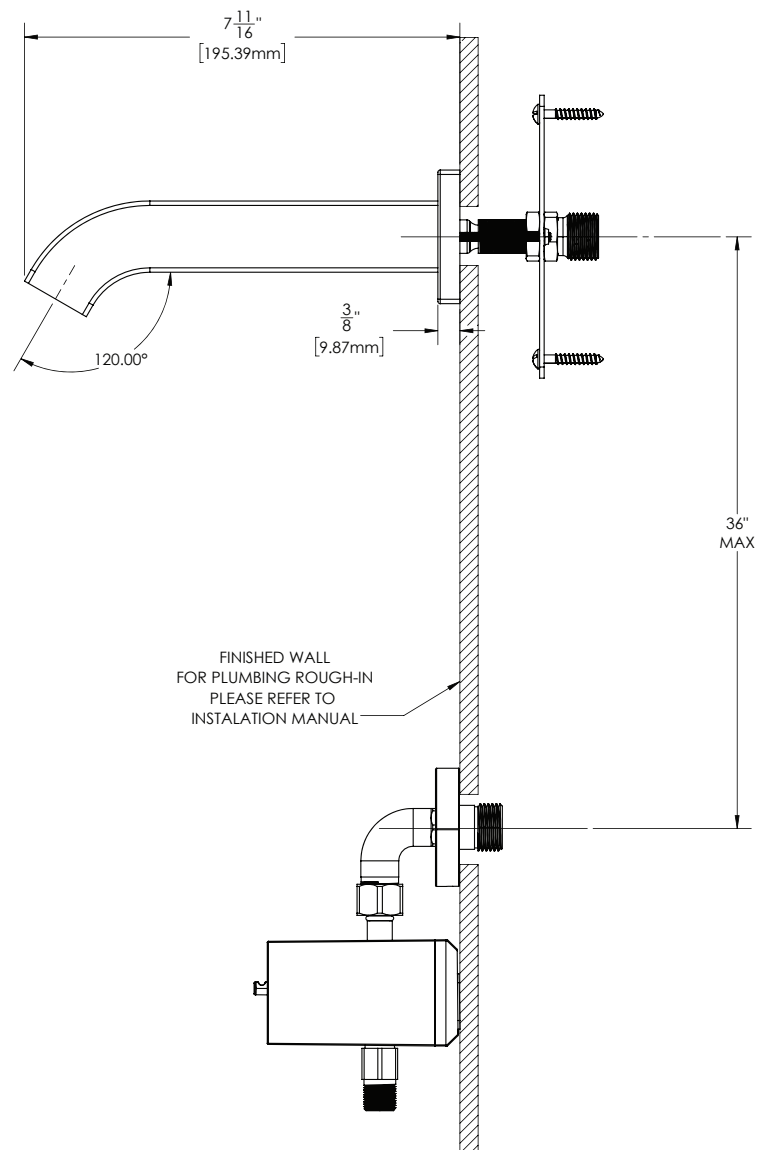
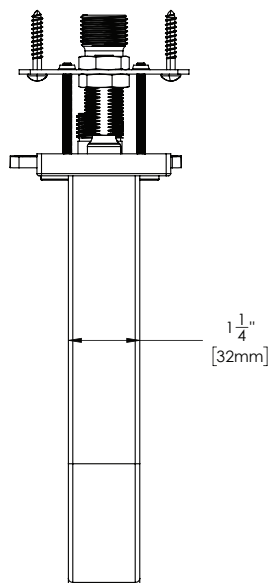
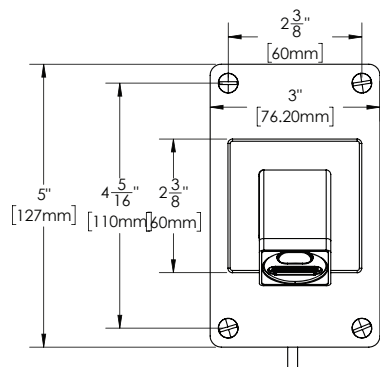
COMPLIANCE:

ASME A112.18.1/CSA B 125.1

FLOW:

Flow Rate: 0.5 gpm (1.9 L/min)
Flow Type: Spray

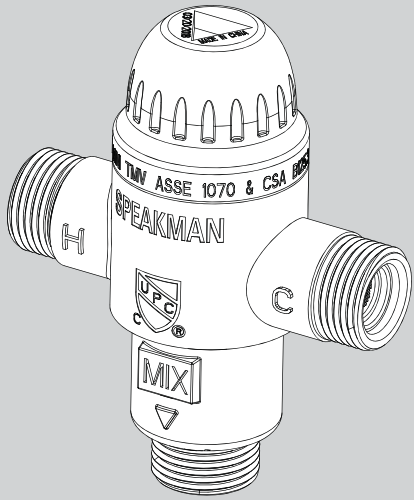
Contractor to supply necessary connections to the inlets of the end bodies.



DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

INSTRUCTIONS FOR MODELS

A-TMV Thermostatic Mixing Valve



NEED HELP?

For additional assistance or service please contact:

SPEAKMAN®

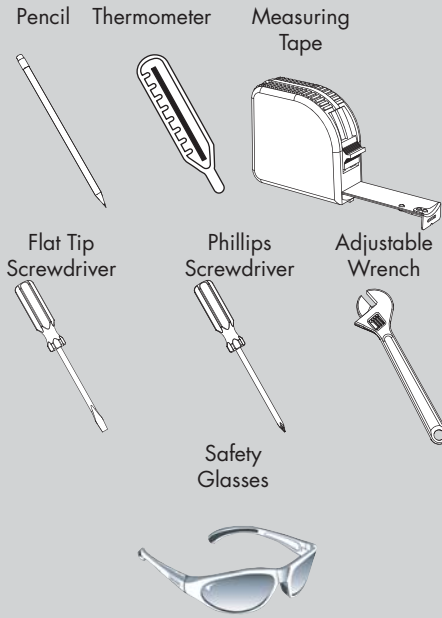
800-537-2107

customerservice@speakman.com

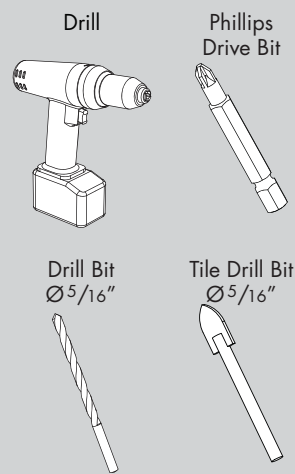
www.speakman.com

92-A-TMV-02

TOOLS AND SUPPLIES



HELPFUL TOOLS & SUPPLIES:



IMPORTANT

- Compliance and conformity to local codes and ordinances is the responsibility of the installer.
- Valve should be accessible for testing, adjustment and maintenance in the installed position.
- Make sure that all water supply lines have been flushed and then completely turned off before beginning installation. Debris in supply lines can cause valves to malfunction.
- Ensure the mounting structure and mounting hardware can safely support the product in use.
- Do not over-tighten any connections or damage may occur.
- Be sure to read instructions thoroughly before beginning installation.

IMPORTANT

SAFETY TIPS

Be sure to wear eye protection.

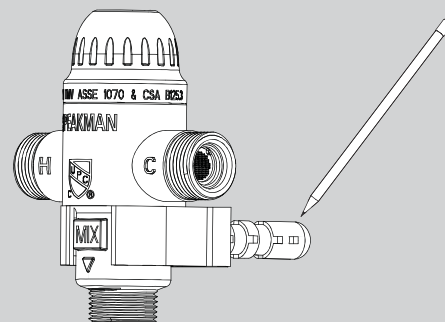
MAINTENANCE

See section "Testing the Mixing Valve".

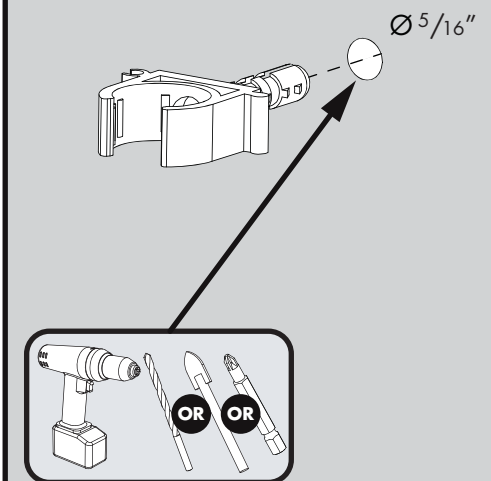
WARRANTY

Warranty information can be found at:
www.speakman.com

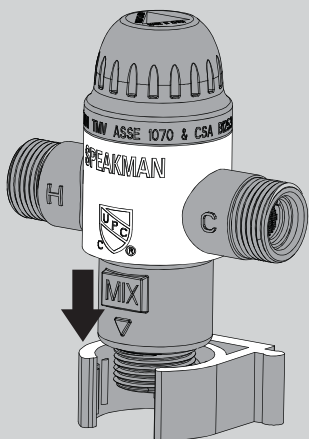
- 1 Determine desired mounting position of the A-TMV with Plastic Wall Bracket. Ensure mounting location is capable of supporting the product in use. Using a pencil, mark the hole location.



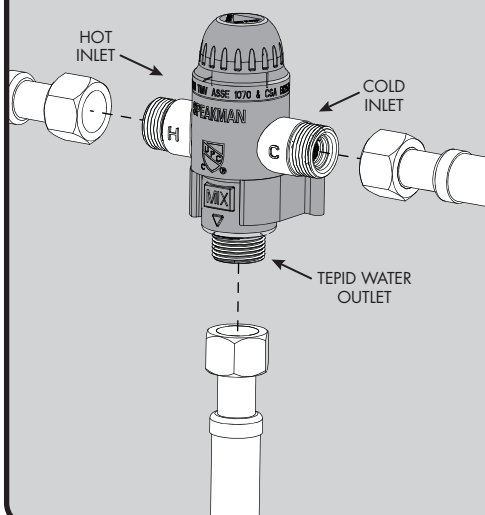
- 2 If mounting to drywall or tile, select appropriate 5/16" drill bit and drill guide hole at marked location. Install the Plastic Wall Bracket into the drilled hole and press/tap into place until the bracket is flush to the wall surface. Secure the Plastic Wall Bracket to the wall with the proper Mounting Screw (included).



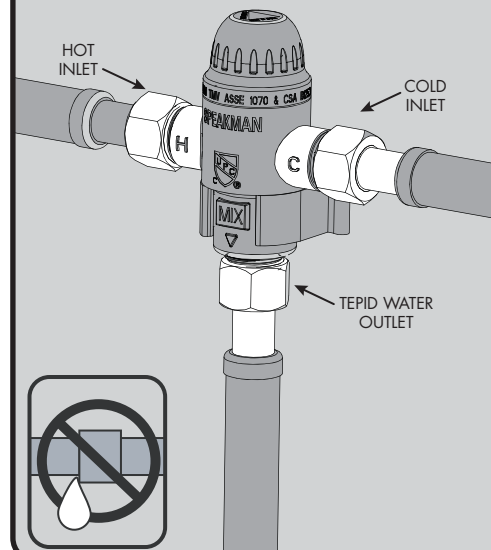
- 3 Ensure the A-TMV is vertical and the body rests on the top face of the Plastic Wall Bracket.



- 4 **Connect Supply Lines and Fixtures.**
 - Ensure incoming water supplies are turned OFF.
 - Install Inlet and Outlet connections to the valve. Wrench Tighten.



- 5
 - Check for leaks by pressurizing the unit SLOWLY.
 - Check the temperature and adjust if necessary.

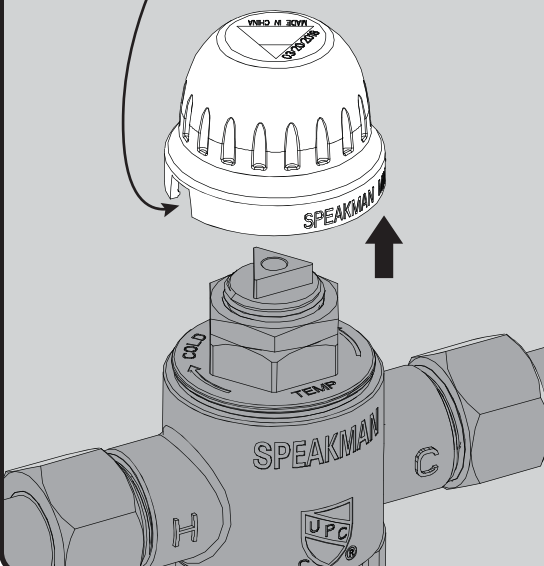


CAUTION

When maintaining and adjusting the Mixing Valve, all fixtures should be isolated from use. Speakman recommends that appropriate personnel shall work safely at all times.

6 SETTING THE MIXING VALVE

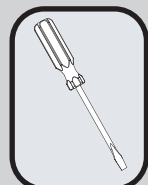
REMOVE THE CAP WITH FLAT TIP SCREWDRIVER FROM THE NOTCH ON THE CAP



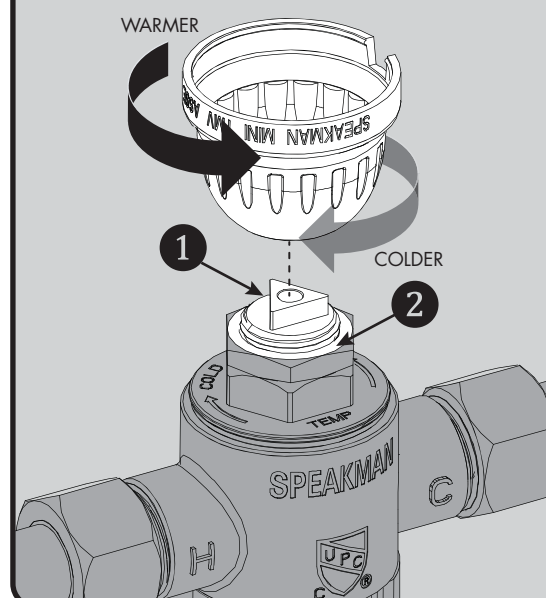
Should the Valve require adjustment, or an application require a different set temperature, proceed as follows:

Adjust Temperature with Water Running

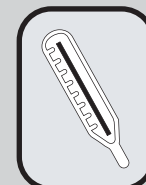
- Check the temperature with a stick thermometer.
- Contact proper medical and safety authorities to determine the correct water temperature for the specific application.
- Remove the Plastic Cap (White) from the Valve using a flat tip screwdriver.



7 SETTING THE MIXING VALVE



- Create a draw on the Mixing Valve by opening the faucet.
- Loosen, but do not remove the Locking Nut (2) using adjustable wrench. Invert Plastic Cap and align triangular recess in cap to the Adjuster Screw (1).
- Set the outlet temperature by turning the Adjuster Screw clockwise to reduce temperature, counterclockwise to increase temperature. Use a stick Thermometer to check the outlet temperature.
- Tighten the Locking Nut to avoid inadvertent adjustment of outlet temperature.



8 TESTING THE MIXING VALVE

After installation, test the Mixing Valve and the faucet it serves for proper operation by following the steps below.

Valve temperature test procedure is as follows:

1. Activate faucet to observe and record the temperature with a stick Thermometer. If the temperature of the Thermometer is not correct, readjust the Mixing Valve according to the section "Setting the Mixing Valve".

9 REPLACING THE THERMOSTATIC ELEMENT

The Thermostatic Element's replacement procedure is as follows:

1. Shut off the hot water supply and cold water supply to the Mixing Valve.
2. Remove the Plastic Cap and disassemble the Valve Cap.
3. Remove Thermostatic Element in conjunction with the Shuttle from the Valve Body. No special tools are required.
4. Inspect the Thermostatic Element. If it feels slippery to the touch, then the Element has lost its wax and requires replacement. If the Thermostatic Element feels normal to the touch, then it is in good condition and operable.
5. Verify that the stainless steel Piston moves freely up and down within the Element's body.

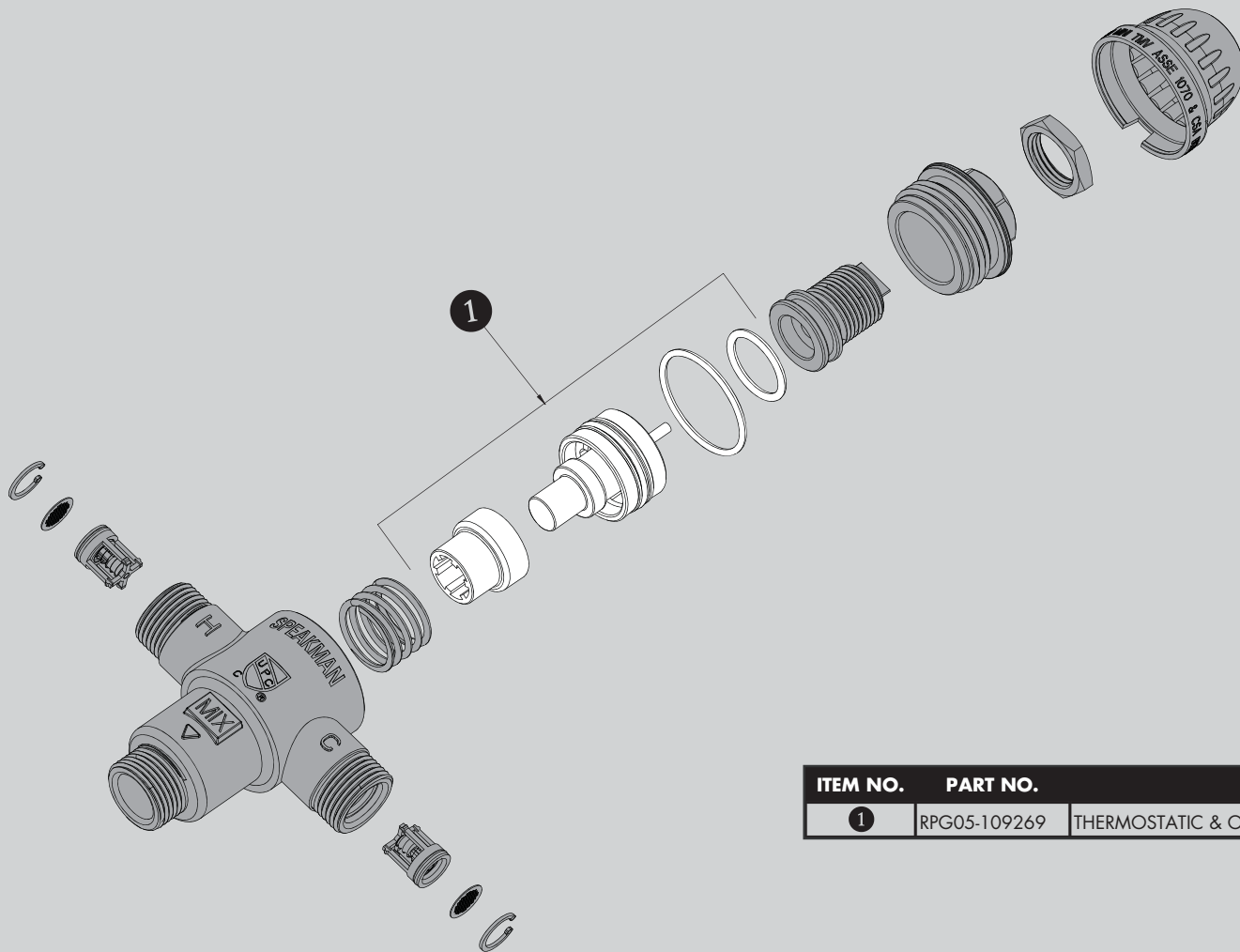
Note:

Gallon per minute ratings may vary depending upon incoming water temperatures and pressures. Hot and cold water inlet pressures must be equal.

Provisions shall be made to thermally isolate the valve.

A-TMV REPAIR PARTS

SPEAKMAN®



ITEM NO.	PART NO.	DESCRIPTION
1	RPG05-109269	THERMOSTATIC & O-RING REPAIR KIT

A-TMV ROUGH-IN DIAGRAM

SPEAKMAN®

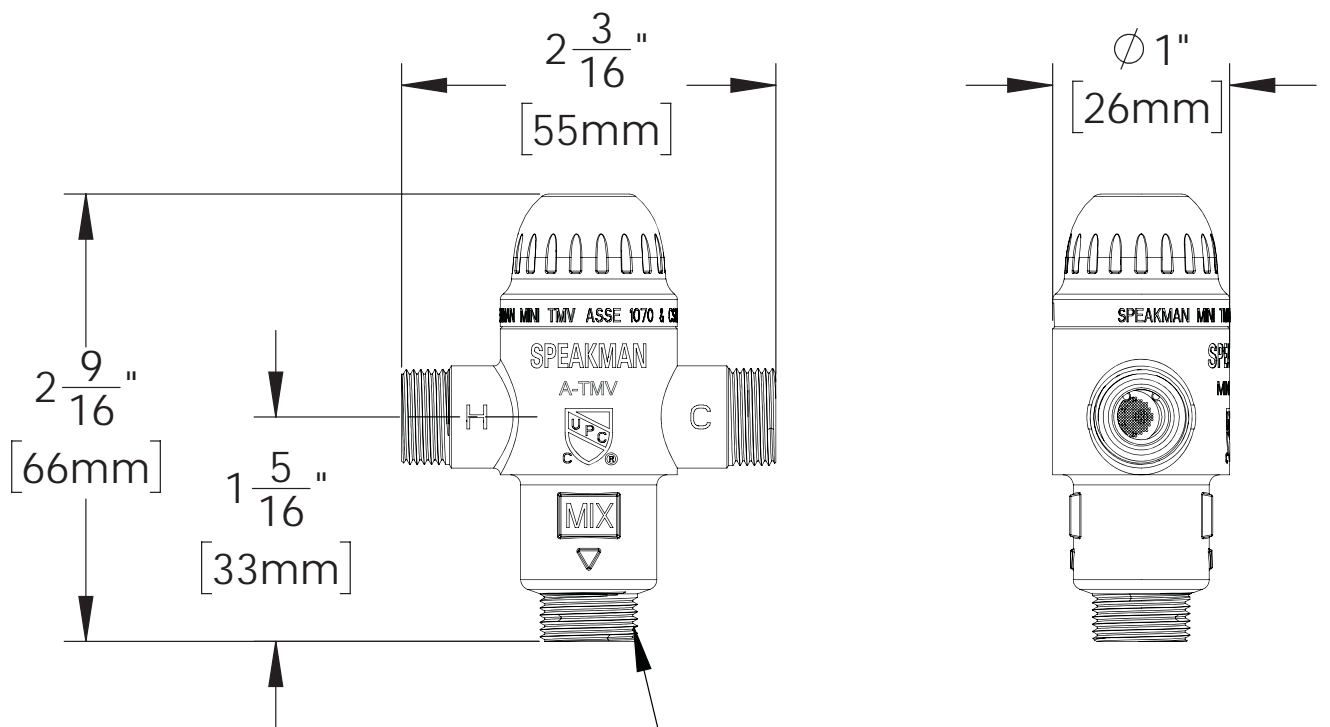
NOTES:

COMPLIANCE:

ASSE 1070 & cUPC Certified

- Inlets: 3/8" Compression Male Threads
- Outlet: 3/8" Compression Male Threads
- Maximum Working Pressure: 125 psi (861.9 kPa)
- Rated flow at 30 psi (206.9 kPa) differential pressure: 2.16 GPM (8.2 L/min)
- Minimum flow rate: 0.35 GPM (1.3 L/min)
- Hot Water Inlet Temperature Range: 120° – 180° F
- Cold Water Inlet Temperature Range: 37° – 80° F
- Outlet Water Temperature Range: 80° – 120° F
- Minimum Temperature Differential (Hot to Mix): 18° F (10° C)

Contractor to supply necessary inlet connections.



9/16"-24 THREAD FOR
3/8" COMPRESSION FITTINGS
(3 PLACES)

FLOW CAPACITY OF A-TMV

PRESSURE DROP,	psi (bar)	5	10	15	20	30	40	45	50
		(0.4)	(0.7)	(1.0)	(1.4)	(2.1)	(2.8)	(3.1)	(3.4)
TEMPERED FLOW,	GPM (L/min)	0.66 (2.5)	1.2 (4.5)	1.5 (5.7)	1.74 (6.6)	2.16 (8.2)	2.51 (9.5)	2.66 (10.1)	2.8 (10.6)

NOTES:

1. ALL DIMENSIONS ARE IN INCHES [MILLIMETERS] UNLESS OTHERWISE SPECIFIED AND ARE SUBJECT TO CHANGE.