SPEAKMAN®

SM-5490-ADA

Installation, Operation & Maintenance Instructions

SENTINELPRO™ COMBINATION SERIES

DESCRIPTION

Speakman SentinelPro™ Combination, SM-5490-ADA, unites Anti-Scald Thermostatic / Pressure Balance Diverter Shower/Bath Valve with integral Check Stops (CPV-TP-DV), Trim with integral Diverter Handle (CPT-5401), Shower Arm with Wall Flange (S-2500), Hand Shower with flow control (VS-100-PC), Shower Arm Bracket, 60in Shower Hose with built-in vacuum breaker, 24in ADA Combination Grab/Slide Bar (VS-153-ADA), and Tub Spout (S-1554).

SPECIFICATIONS

CPV-TP-DV ANTI-SCALD THERMOSTATIC / PRESSURE BALANCE DIVERTER SHOWER VALVE:

CONNECTIONS: ½" Female Copper Sweat and ½" NPT Male at both the Inlets (Cold, Hot) & Outlets (Shower, Tub)

FLOW RATE: 1.5 gpm (5.7 L/min) or higher

COMPLIANCE: ASSE 1016 / ASME A112.1016 / CSA B125.16 & ASME A112.18.1 / CSA B125.1 Standards

CPT-5401 T/P DIVERTER VALVE TRIM:

FINISH: Polished Chrome

COMPLIANCE: ASME A112.18.1 / CSA B125.1 Standard

S-2500 SHOWER ARM WITH WALL FLANGE:

CONNECTIONS: 1/2" NPT Male Inlet & Outlet

FINISH: Polished Chrome

VS-1001-ADA-PC HANDICAP SHOWER COMBINATION:

VS-100-PC HAND SHOWER WITH FLOW CONTROL:

CONNECTIONS: ½" NPSM Male Inlet FLOW RATE: 2.5 gpm (9.5 L/min)

FINISH: Polished Chrome

COMPLIANCE: ASME A112.18.1 / CSA B125.1 Standard

SHOWER ARM BRACKET:

CONNECTIONS: 1/2" NPSM Male Inlet; 1/2" NPSM Female Outlet

FINISH: Polished Chrome

60in SHOWER HOSE (w/built-in vacuum breaker):

CONNECTIONS: 1/2" NPSM Female Inlet & Outlet

FINISH: Polished Chrome

VS-153-ADA 24in ADA COMBINATION GRAB/SLIDE BAR:

FINISH: Polished Chrome

COMPLIANCE: Meets 250 lbs pull test for Grab Bars per ANSI Standard;

Meets requirements of ADA Lever Handle for adjusting Slide Bar

S-1554 TUB SPOUT:

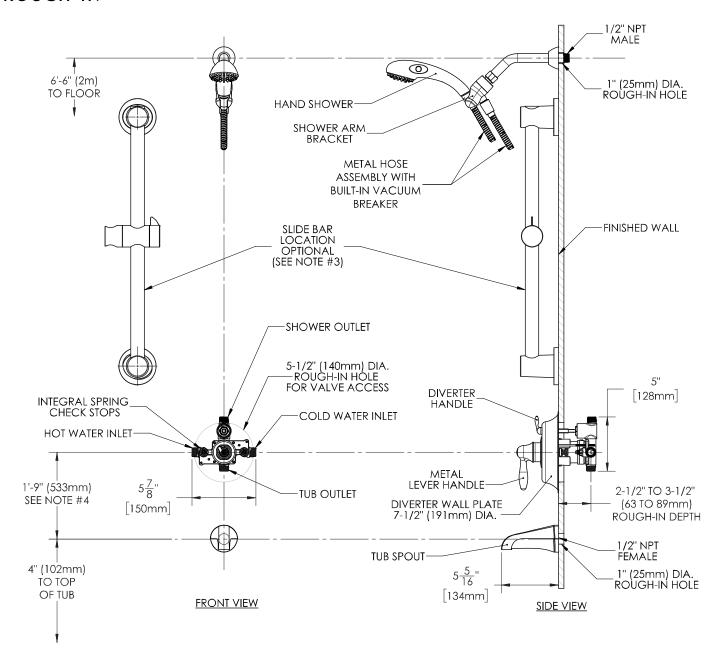
CONNECTIONS: 1/2" NPT Female Inlet

FINISH: Polished Chrome

INSTRUCTIONS

See individual products for installation of the components and warranty information.

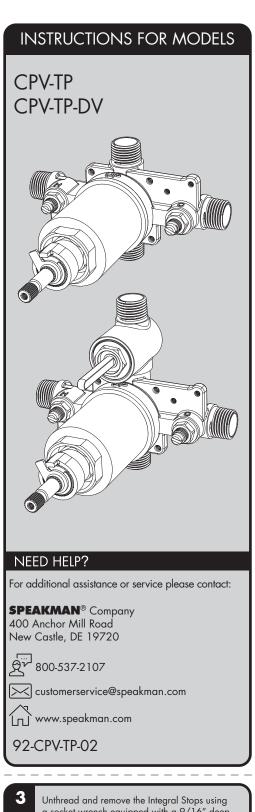
ROUGH-IN



NOTES:

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SPECIFIED AND ARE SUBJECT TO CHANGE WITHOUT NOTICE.
- 2. 3. ALL INLETS AND OUTLETS ARE 1/2" FEMALE COPPER SWEAT AND 1/2" MALE NPT UNLESS OTHERWISE SPECIFIED. THE LOCATION OF THE SLIDE BAR IS OPTIONAL, BUT RESTRICTED BY THE 60" HOSE LENGTH RUNNING FROM THE SHOWER ARM BRACKET TO THE HAND SHOWER
- FOR ADA MOUNTING LOCATIONS CONSULT ADA ACCESSIBILITY GUIDELINES (ADAAG), ANSI A117.1 STANDARD, OR 4. STATE REGULATIONS.

Phone: 800-537-2107









- Be sure to read instructions thoroughly before beginning installation
- Be sure to have properly adjusted the Temperature Limiting Stop (TLS) as outlined in this Installation
- Inspect all connections after installation of valve
- This valve has an operating range of 20-80 Psi.
- This valve is designed to be used in conjunction with a shower-head rated at 1.5 gpm (5.7 L/min) or higher flow rate.
- NOTE: This installation manual covers several models of valves. While the appearance of your valve may differ from those shown, the installation method is the same.
- Maximum water pressure: 125 PSI static; minimum water pressure: 20 PSI flowing; minimum cold supply temperature: 40° F; maximum hot supply temperature: 160° F; minimum hot supply temperature: 5° F above set point.

SAFETY TIPS

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

MAINTENANCE

Your new Shower/Bath Valve 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.

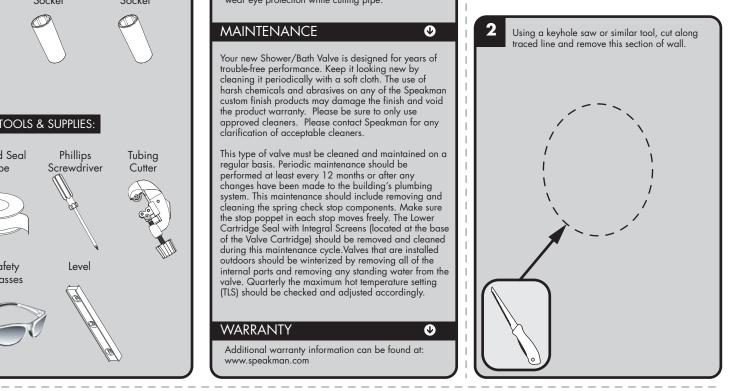
This type of valve must be cleaned and maintained on a regular basis. Periodic maintenance should be performed at least every 12 months or after any changes have been made to the building's plumbing system. This maintenance should include removing and cleaning the spring check stop components. Make sure the stop poppet in each stop moves freely. The Lower Cartridge Seal with Integral Screens (located at the base of the Valve Cartridge) should be removed and cleaned during this maintenance cycle. Valves that are installed outdoors should be winterized by removing all of the internal parts and removing any standing water from the valve. Quarterly the maximum hot temperature setting (TLS) should be checked and adjusted accordingly.

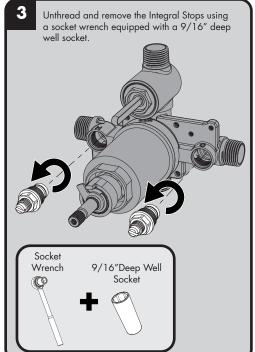
WARRANTY

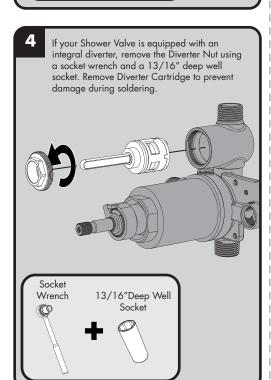
Additional warranty information can be found at:

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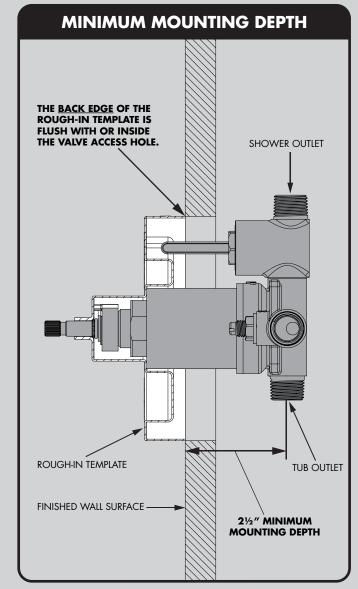
Referencing the supplied rough-in dimensions (located at the end of this manual), determine the preferred location of valve. Align the supplied rough-in template with this location and trace outline of template onto wall. 1'-9" (533mm) TO CENTERLINE OF TUB SPOUT (FOR TUB INSTALLATION) 4'-6" (1.4m) TO FLOOR (SHOWER INSTALLATION)

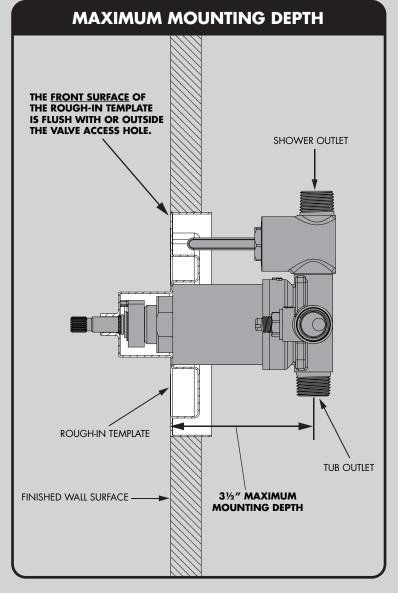


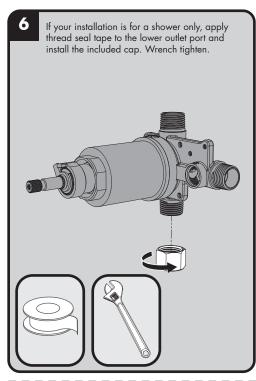


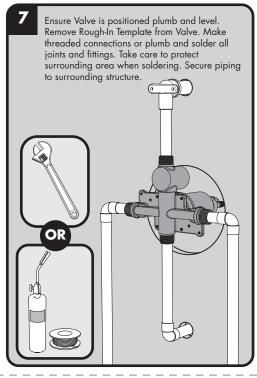


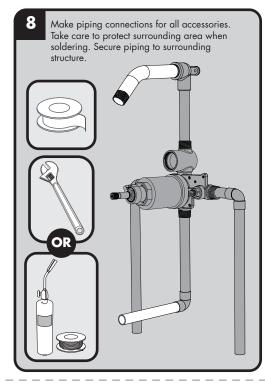
Install the Rough-In Template over the Shower Valve being sure the Rough-In Template sits flush against Shower Valve Bonnet. Following the rough-in dimensions for your model of valve (located ot the end of this manual) as well as the markings on the supplied rough in template, install valve at proper depth. The distance from the centerline of the inlet/outlet ports of the valve assembly to the finished wall MUST be between 2½" - 3½". See images below for reference.

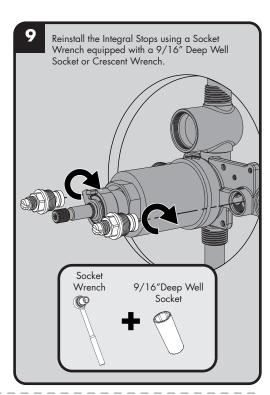


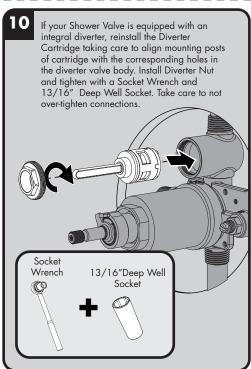






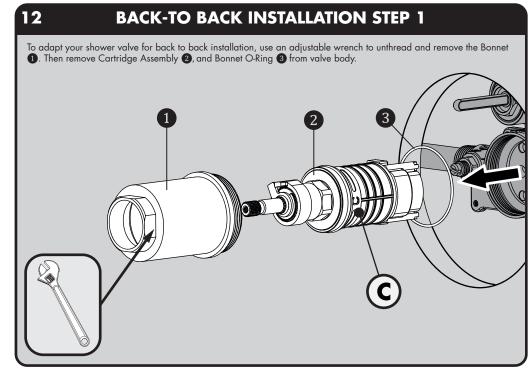


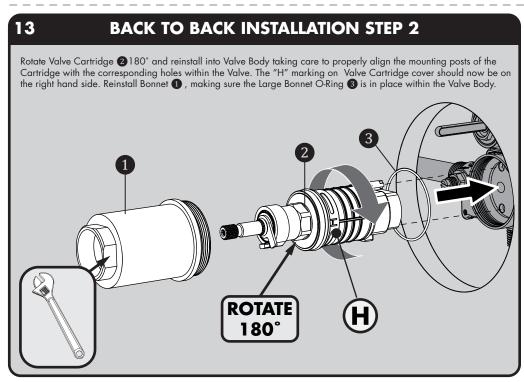


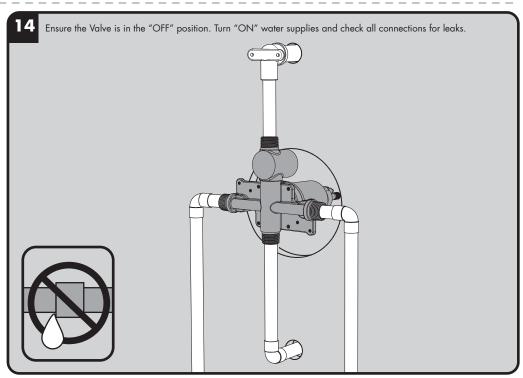




supplies, please proceed to Step 12



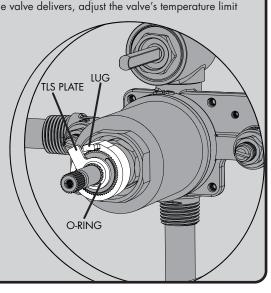


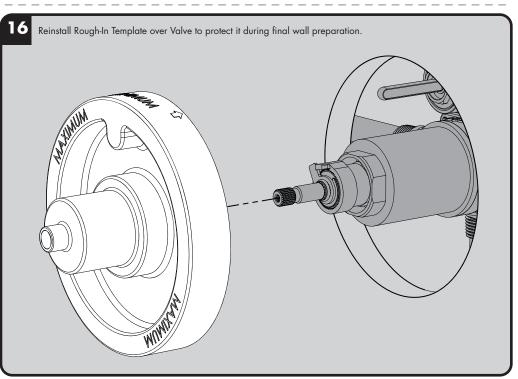


15 TEMPERATURE LIMIT ADJUSTMENT

The maximum hot water temperature setting adjustment (Temperature Limit Stop (TLS)) of the valve has been factory set at 110° F. Important- Check each valve installation with a thermometer to make sure the maximum hot water temperature is set to the recommended setting of 110° F maximum. To lower the limit of the maximum hot water temperature the valve delivers, adjust the valve's temperature limit stop (TLS) plate.

- Slip the retaining O-ring and the TLS plate towards the end of the spindle.
- With the water supplies on, rotate the valve spindle clockwise to the maximum desired hot water temperature.
- Position the TLS plate so it contacts the lug and therefore restricts the clockwise rotation of the spindle.
- Slip the retaining O-ring back into the groove of the spindle to hold the TLS plate in place
- Rotate the spindle counter-clockwise to the "Off" position.





CPV-TP / CPV-TP-DV SERVICE INSTRUCTIONS

Service instructions

Caution- Any repair or servicing of the valve may affect the maximum hot temperature setting of the valve. After working on the valve, make sure the maximum hot water temperature is set to the recommended setting of 110° F

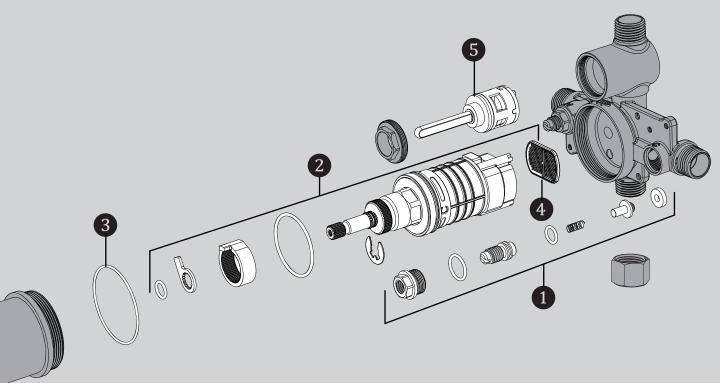
T/P Cartridge Removal

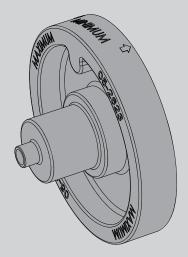
- 1) Shut off the hot & cold water supply integral stops at the valve. Remove valve trim from valve.
- 2) With the valve in the OFF position, remove the Bonnet by unthreading with an adjustable wrench. The cartridge
- 3) If necessary, remove the cartridge from the valve body by pulling on the valve spindle of the cartridge. Make sure the lower cartridge seal is installed in the bottom of the cartridge and not in the valve body. Inspect Lower Cartridge Seal with Integral Screens to verify they are debris free. If debris is present, remove Lower Cartridge Seal and clean Screen material.
- 4) Replace the necessary parts with new parts. When replacing the T/P cartridge, make sure that the Lower Cartridge Seal is properly installed in the recesses on the bottom of the cartridge. This Lower Cartridge Seal is positioned over the hot & cold inlet holes inside the body.
- 5) Make sure the large bonnet O-ring seal is installed and seated properly in the valve body. Reassemble the valve bonnet by threading it into the valve body with an adjustable wrench. Important- Adjust the valve's maximum hot water temperature to the recommended setting of 110° F. See Step #15 of the installation instructions for the TLS
- 6) Turn ON the hot & cold water supply integral stops. Check valve for leaks.
- 7) Reassemble the valve trim parts.

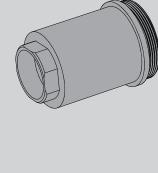
- **Spring Check Stop Parts Removal**1) Shut off hot and cold water supply valves to the integral stops of the valve. Remove valve trim from valve.
- 2) CLOSE integral stops by turning the stop spindles clockwise. Unscrew the stop's retaining nut with wrench. Carefully remove the retaining nut w/spindle, spring, and poppet assembly. Clean and/or replace the necessary parts. Reassemble the parts, reversing the above procedure. Repeat procedure on the other stop.
- 3) OPEN the integral stops by turning the stop spindles counter clockwise. Turn on the hot and cold water supply valves. Check for leaks.
- 4) Reassemble the trim parts.

CPV-TP / CPV-TP-DV REPAIR PARTS

SPEAKMAN®







	ITEM #	PART #	DESCRIPTION
	1	RPG05-0862	CHECK STOP REPAIR KIT
Ī	2	RPG05-1109	T/P CARTRIDGE
Ī	3	RPG49-0012	BONNET O-RING
Ī	4	RPG49-0011	LOWER CARTRIDGE SEAL
	5	RPG05-0897	VOLUME CONTROL/DIVERTER CERAMIC REPAIR CARTRIDGE

NOTES:

COMPLIANCE:

ASME A112.18.1/CSA B125.1

Shower Valve ASSE1016

CONNECTIONS:

Hot/Cold Inlets: 1/2" Female Copper Sweat

1/2" NPT Male

Shower Outlet: 1/2" Female Copper Sweat

½" NPT Male

Tub Outlet: ½" Female Copper Sweat

½" NPT Male

(Cap included for Shower Only Connections)

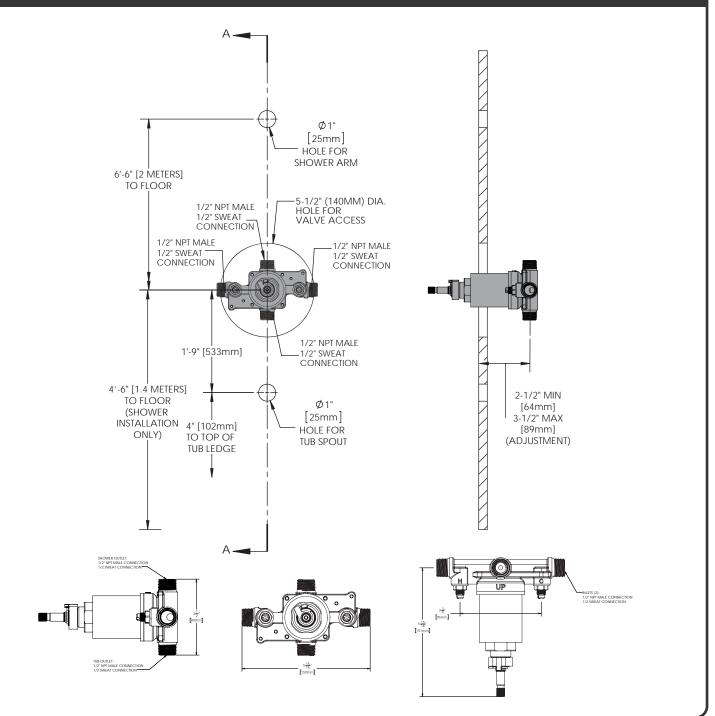
NOTES:

This valve is designed to be used in conjunction with a shower-head rated at 1.5 gpm (5.7 L/min) or higher flow rate

Contractor to supply necessary inlet connections.

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE. FOR ADA MOUNTING LOCATIONS, CONSULT ADAAG, ANSI A117.1, AND STATE REGULATIONS.

DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.



CPV-TP-DV ROUGH-IN DIAGRAM

NOTES:

COMPLIANCE:

ASME A112.18.1/CSA B125.1

Shower Valve ASSE1016

CONNECTIONS:

Hot/Cold Inlets: 1/2" Female Copper Sweat

½" NPT Male

Shower Outlet: ½" Female Copper Sweat

½" NPT Male

Tub Outlet: ½" Female Copper Sweat

½" NPT Male

(Cap included for Shower Only Connections)

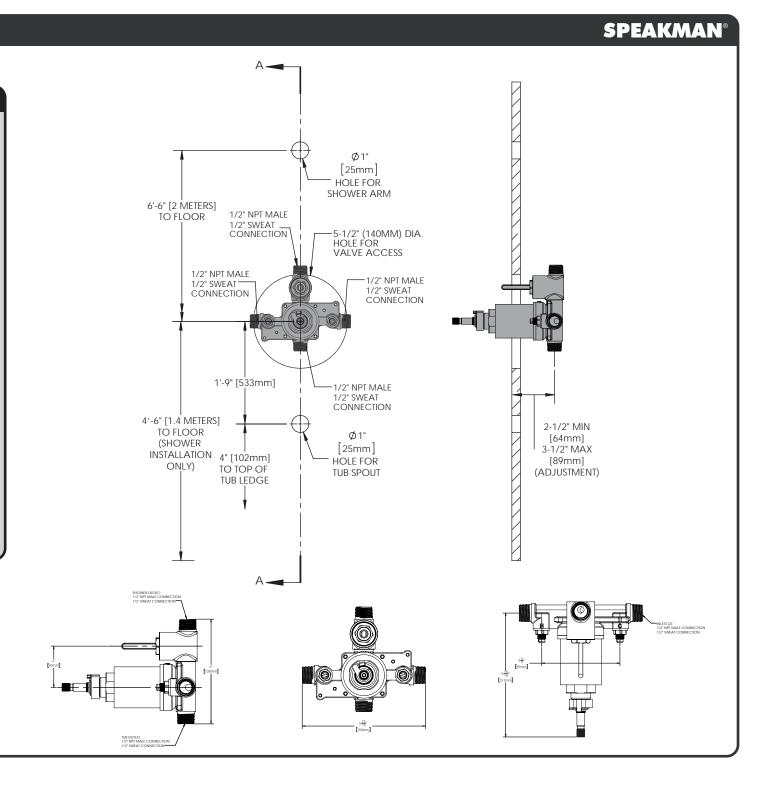
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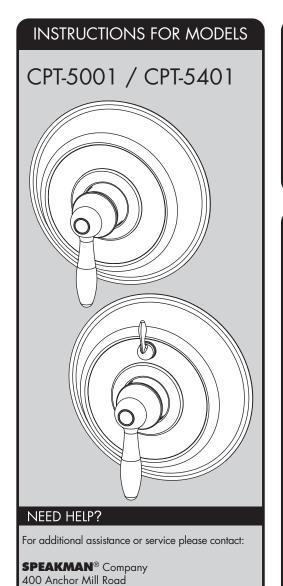
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New Castle, DE 19720

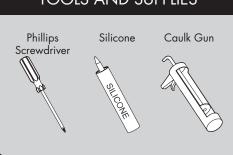
www.speakman.com

92-CPT-5001-01

customerservice@speakman.com

800-537-2107





IMPORTANT

- Do not over-tighten any connections or damage
- Be sure to read instructions thoroughly before beginning installation.
- This valve 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.

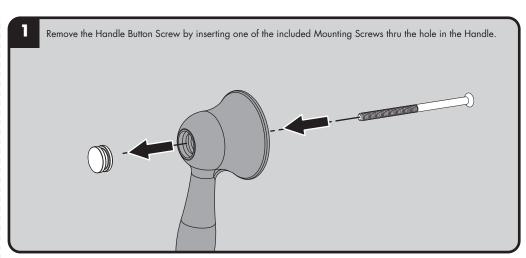
MAINTENANCE

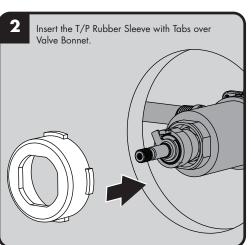
Your new Speakman Product is designed for years of trouble-free performance. Keep it looking new by cleaning it periodically with a soft cloth. The use of harsh chemicals and abrasives on any of the Speakman custom finish products may damage the finish and void the product warranty. Please be sure to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

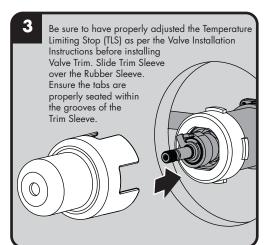
WARRANTY

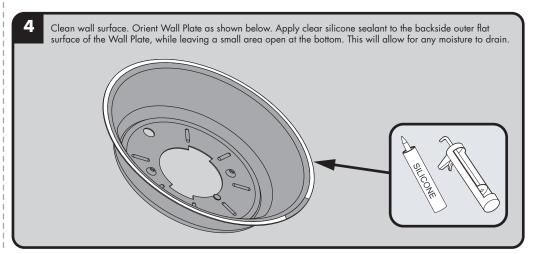
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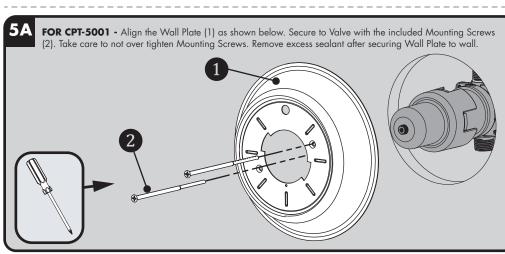
Additional warranty information can be found at: www.speakman.com

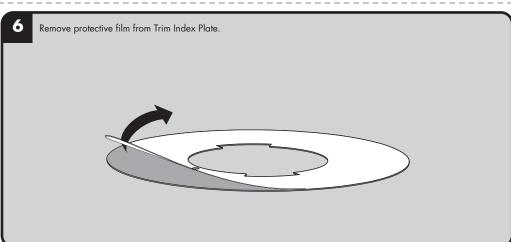


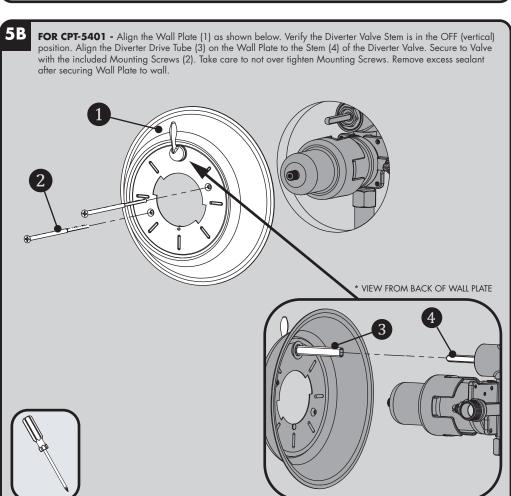


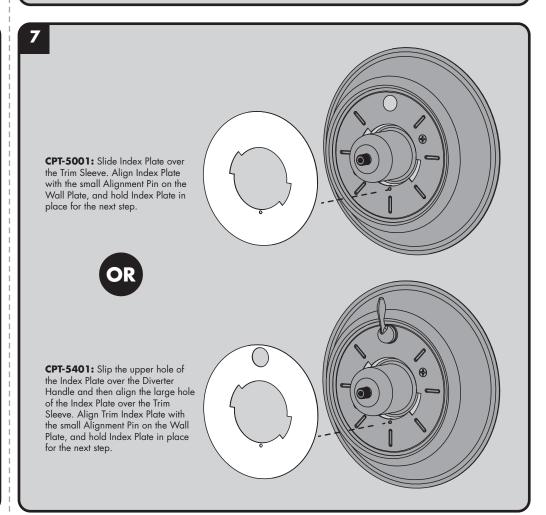


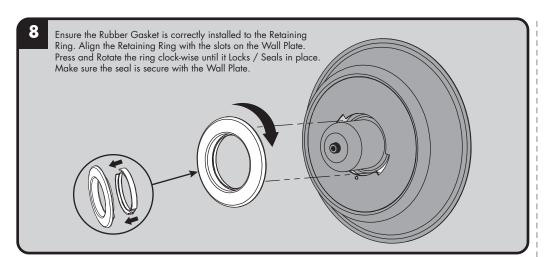


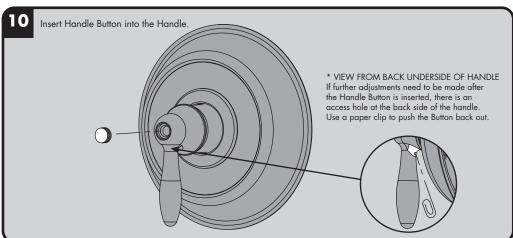


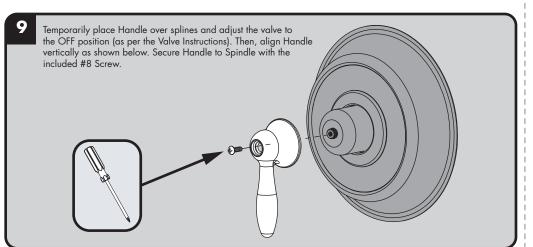


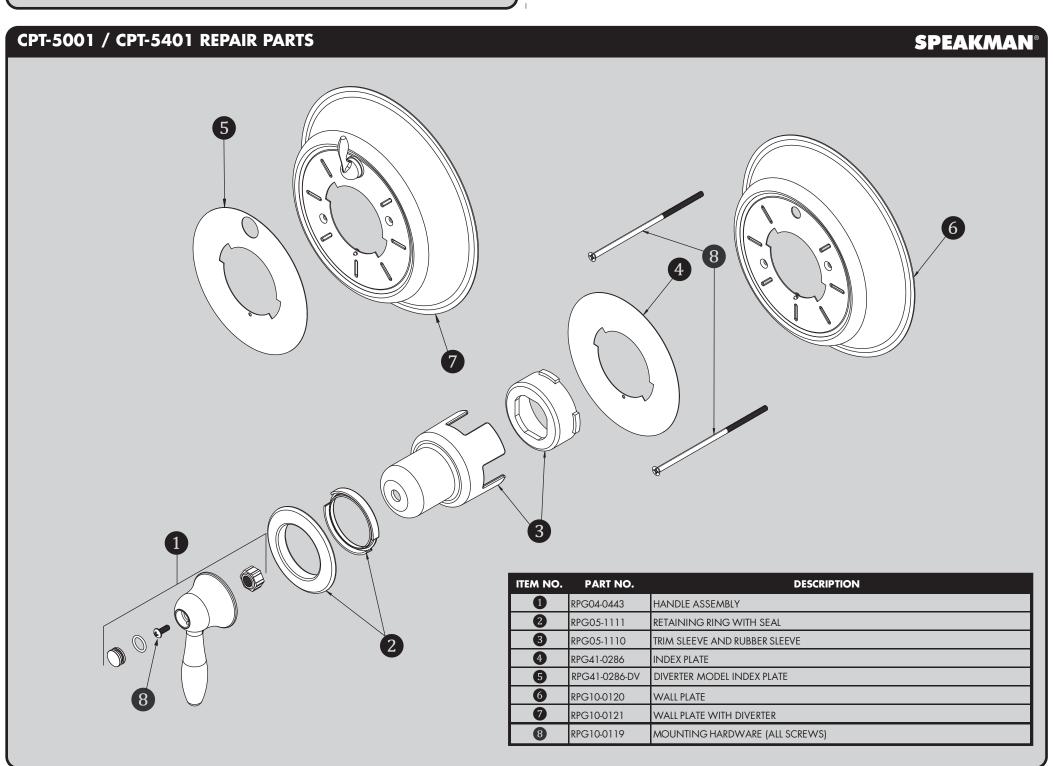


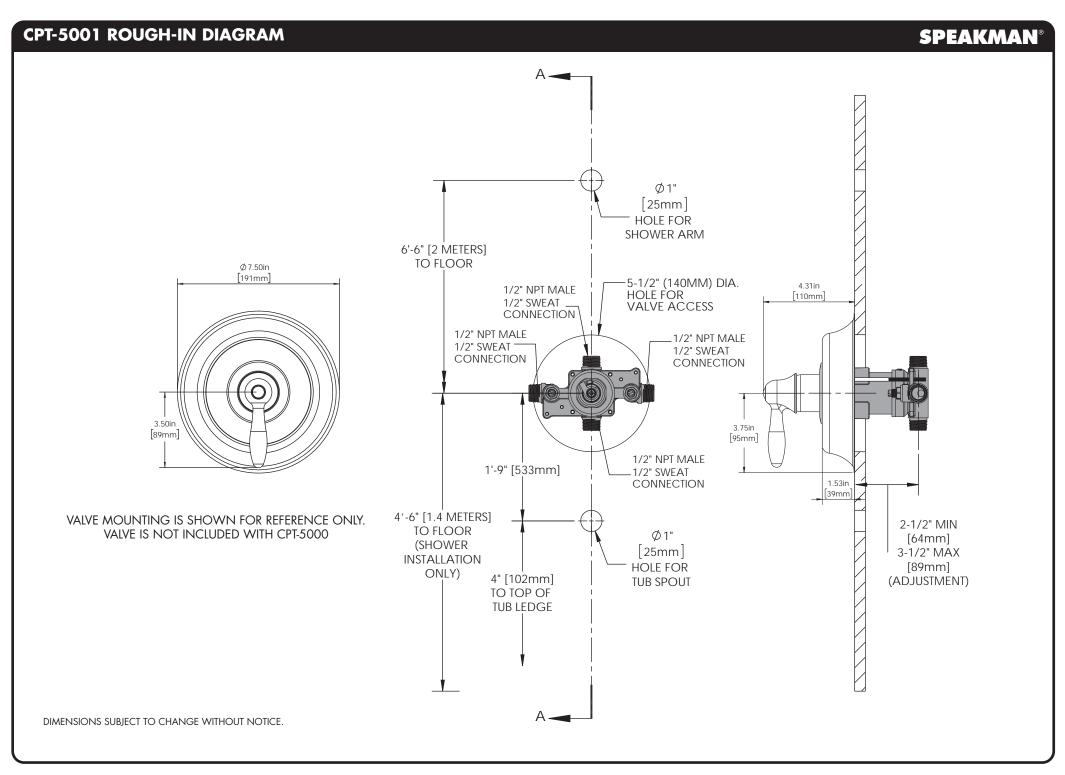


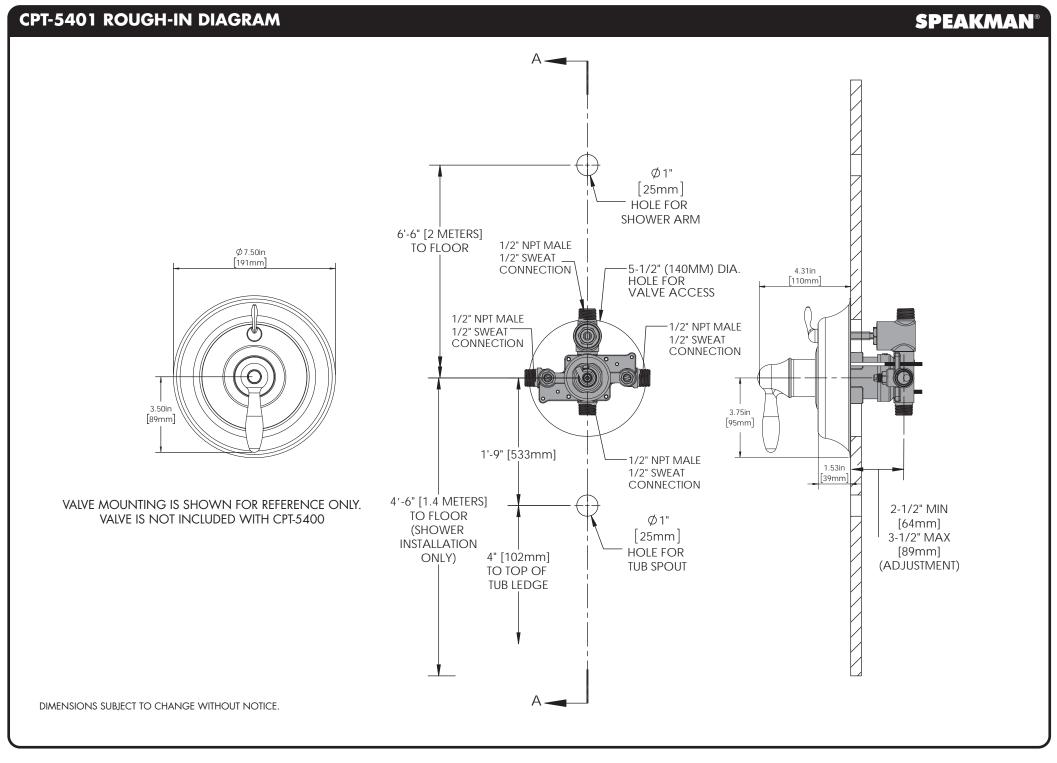






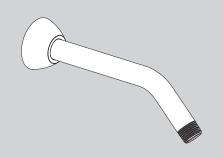






INSTRUCTIONS FOR MODELS

S-2500



NEED HELP?

For additional assistance or service please contact:

SPEAKMAN® Company 400 Anchor Mill Road

New Castle, DE 19720



customerservice@speakman.com



92-S-2500-R5

TOOLS AND SUPPLIES

Thread Seal Tape



\triangle

IMPORTANT



Be sure to read instructions thoroughly before beginning installation. Do not overtighten any connections or damage may occur.

SAFETY TIPS

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Cover your drain to prevent loss of parts.

MAINTENANCE

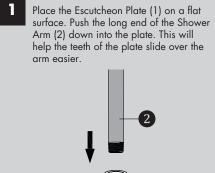
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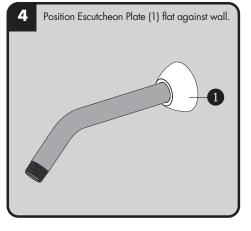
Your new Shower Arm is designed for years of trouble-free performance. Keep it looking new by cleaning it periodically with a soft cloth. Avoid abrasive cleaners, steel wool and harsh chemicals as these will dull the finish and void your warranty.

WARRANTY

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Additional warranty information can be found at: www.speakman.com

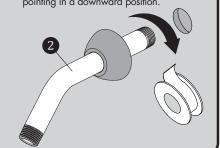


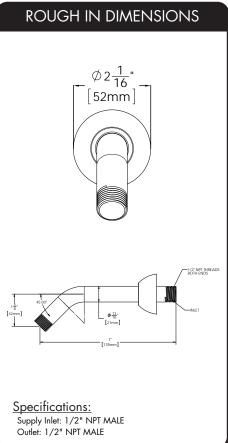


Once the Escutcheon Plate (1) is on the shower arm, slide the plate over the Shower Arm (2).



Apply Teflon Tape to inlet side of Shower Arm (2). Thread Shower Arm (2) into Female Pipe Fitting within the wall. Firmly tighten, and make sure Shower Arm (2) Outlet is pointing in a downward position.





SPEAKMAN®

VS-2954. VS-1001-ADA-PC

Installation, Maintenance & Operation Instructions

ADA / HANDICAP SHOWER AND BAR

DESCRIPTION

Speakman ADA handicap shower system includes hand held shower (VS-100-PC), 5' stainless steel hose with built in vacuum breaker, shower arm bracket, and 24" grab/ slide bar assembly (VS-153-ADA). Connects to standard shower arm. Shower arm flange (10-0219-PC-P) and 8" shower arm (42-0029-PC) for VS-2954 model only. Chrome handheld shower puts out 2.5 GPM/9.46 LPM to meet ANSI A112.18.1 Standard. ADA Compliant.

SPECIFICATIONS

INLET SUPPLY:

(VS-1001-ADA-PC) $\frac{1}{2}$ " NPT FEMALE

(VS-2954) 1/2" NPT MALE

FLOW RATE: 2.5 GPM/9.46 LPM, MAX., HAND HELD VARIABLE

SHIPPING WEIGHT:

(VS-1001-ADA-PC) 4.5 LBS.

(VS-2954) 4.9 LBS.

INSTALLATION

For VS-2954 model only. Slip the wall flange onto the shower arm. Apply thread seal tape clockwise onto the male threads and screw arm into supply piping behind wall. Wrench tighten. Slip wall flange to wall. Check for leaks.

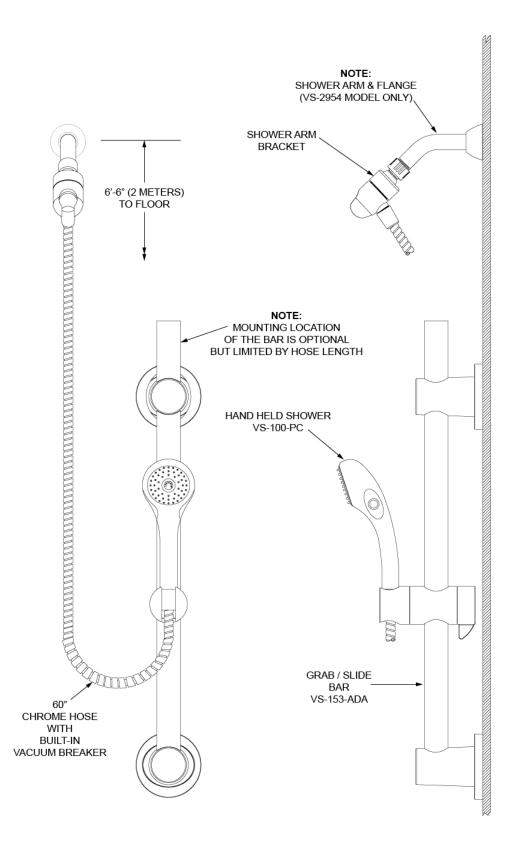
Remove (turn counterclockwise) your existing showerhead from the shower arm. Clean the shower arm threads of any debris and wrap thread seal tape in the clockwise direction around threads. Assemble shower arm bracket to the shower arm. Hand tighten firmly. Assemble the 5' hose to the bottom of the shower arm bracket. Hand tighten firmly. Then attach the other end of the hose to the hand held shower. Make sure the hose to hand held connection seals on the O-ring at the bottom of the hand held to prevent leaks. When installing the bar, the location is optional but limited to the length of the hose. For installation of the grab/slide bar, hold the bar against the wall in the chosen location. Using a pencil, mark the drill hole positions (4 in total) for the lower and upper mounting brackets. If using as a grab bar, be sure to fasten securely to a wall stud. (Note: upper mounting bracket height is adjustable) To mount the brackets, use a No. 10 (0.1935 inches/5.5mm) masonry drill bit to make a hole approximately 1-3/8 inches (35 mm) deep. Push the plastic anchors (4 in total) into the drilled holes, unless your mounting to wall studs, where anchors can be omitted. (Note: plastic anchors may not be suitable for all types of wall construction, seek professional help if in doubt) Fix upper mounting bracket and then the lower mounting bracket to the wall using four (4) screws provided. Push the bracket covers over the mounting brackets while paying close attention to cover orientation for proper placement.

OPERATION

To operate the handheld shower, push the pause button to one side to bring the flow down to a trickle, then simply push it to the other side to turn the flow back on full force.

MAINTENANCE

The finish of your SPEAKMAN VERSATILE® hand held shower and all the other components can be cleaned by using mild soap and warm water. Dry immediately with a soft, clean cloth for best results. The flow control device limits water flow to 2.5 gallons per minute, and is in the base of the handheld. The small orifice in the flow regulator, resulting in lower flow and a weaker performance, may become clogged. To clean the flow regulator, simply remove the hose from the hand shower and clean as necessary.



NOTE:

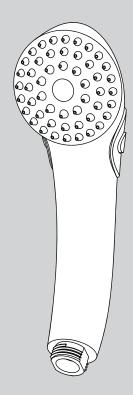
- 1.) ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SPECIFIED AND ARE SUBJECT TO CHANGE WITHOUT NOTICE
- 2.) UNLESS OTHERWISE SPECIFIED, ALL INLETS AND OUTLETS ARE 1/2" NPT FEMALE.
- 3.) THE LOCATION OF THE GRAB/SLIDE BAR IS OPTIONAL, BUT LIMITED BY THE 60" HOSE LENGTH RUNNING FROM THE SHOWER ARM BRACKET LOCATION TO THE HAND HELD SHOWER

92-2681-02 09/17

SPEAKMAN®

INSTRUCTIONS FOR MODELS

VS-100-PC VS-100-PC-E2 VS-100-PC-E175



NEED HELP?

For additional assistance or service please contact:

SPEAKMAN® Company 400 Anchor Mill Road New Castle, DE 19720



800-537-2107



customerservice@speakman.com



www.speakman.com

92-VS-100-PC-04

TOOLS AND SUPPLIES

Thread Seal Таре (included)





IMPORTANT



Be sure to read instructions thoroughly before beginning installation. Do not overtighten any connections or damage may occur. This hand shower has an optimal operating range of 20-80 psi.

SAFETY TIPS



Cover your drain to prevent loss of parts.

MAINTENANCE



Periodic cleaning using a mild soap and warm water will help keep your Hand Shower's appearance in its original condition.

For best results, dry immediately with a soft, clean cloth. <u>DO NOT USE</u> harsh and/or abrasive cleaners.

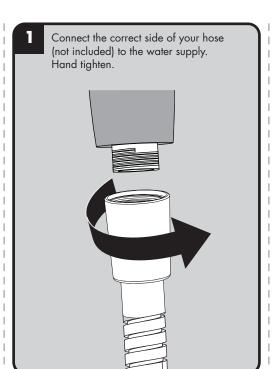
On CHROME PLATED HAND SHOWERS, a two (2) part white vinegar, one (1) part water solution can be used to break down excessive mineral deposits on the sprays. Let the hand shower soak in the solution for about ½ hour then rinse thoroughly. Brush off any remaining mineral deposits if necessary.

<u>DO NOT USE</u> the vinegar/water treatment on any finish other than Chrome.

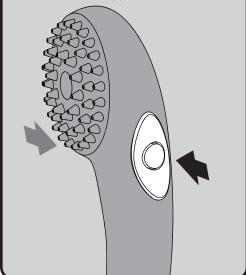
WARRANTY



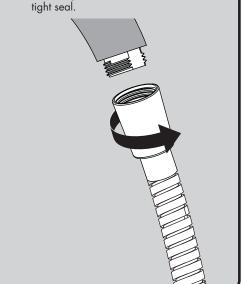
Additional warranty information can be found at: www.speakman.com



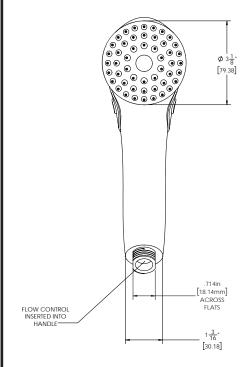
To pause the flow of water, press the integral thumb operated pause/trickle button located on the side of the hand shower. To return the hand held shower to full flow, press the shuttle button from the opposite side.

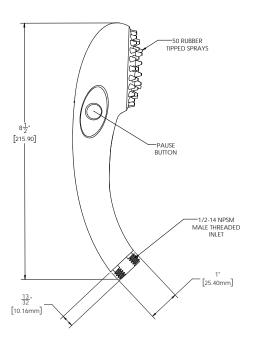


Connect remaining end of Hose to inlet of Hand Shower. Hand tighten. If there are leaks at the hose connections, look into using thicker washers to ensure a



ROUGH IN DIMENSIONS





VS-100-PC

Max. Flow Rate: 2.5 gpm (9.5L/min)

Min. Flow Rate: 2.0 gpm (7.6 L/min) @ 45psi FOR USE WITH AUTOMATIC COMPENSATING VALVES RATED AT 7.6 L/MIN (2.0 GPM) OR LESS.

VS-100-PC-E2

Max. Flow Rate: 2.0 gpm (7.6 L/min)

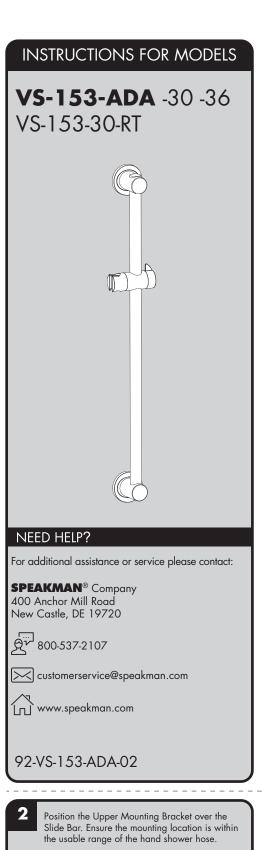
Min. Flow Rate: 1.5 gpm (5.7 L/min) @ 45psi FOR USE WITH AUTOMATIC COMPENSATING VALVES RATED AT 6.6 L/MIN (1.75 GPM) OR LESS.

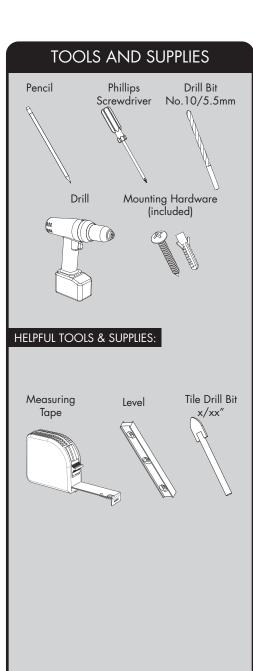
VS-100-PC-E175

Max. Flow Rate: 1.75 gpm (6.6 L/min)

Min. Flow Rate: 1.3 gpm (4.9 L/min) @ 45psi FOR USE WITH AUTOMATIC COMPENSATING VALVES

RATED AT 5.7 L/MIN (1.5 GPM) OR LESS.



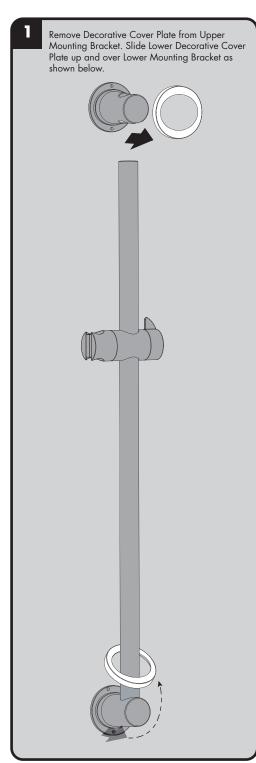


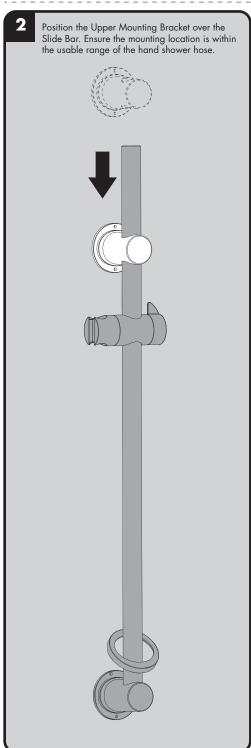


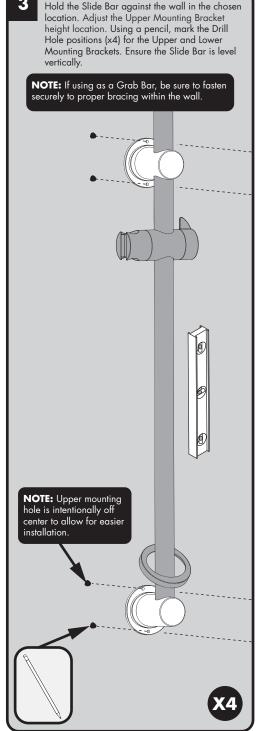
If mounting directly to wood stud or

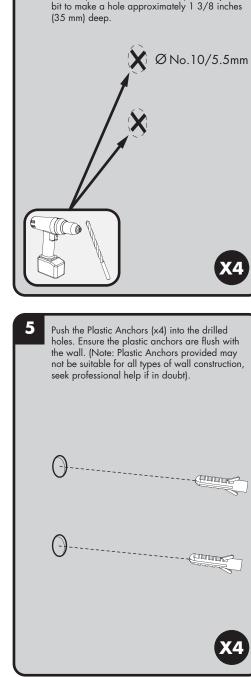
a wood stud behind drywall, proceed

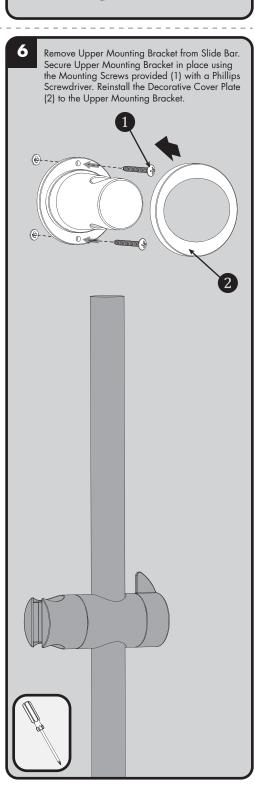
to Step 6. If mounting to tile or masonry wall, Drill holes (x4) in the marked locations using a No. 10 (0.1935 inches/5.5 mm) masonry drill

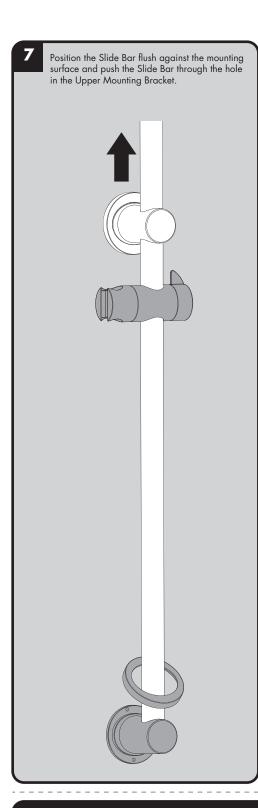


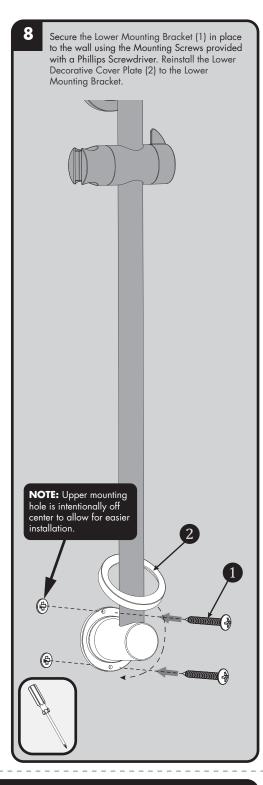


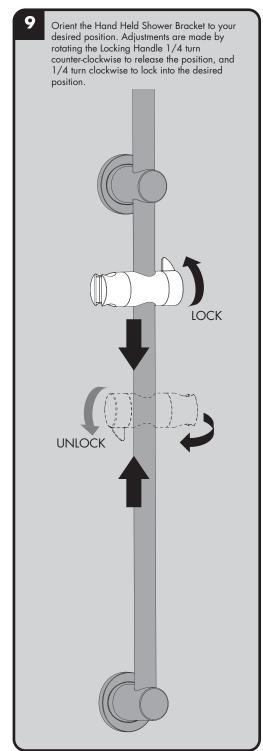












VS-153-ADA ROUGH-IN DIAGRAM

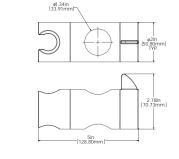
SPEAKMAN®

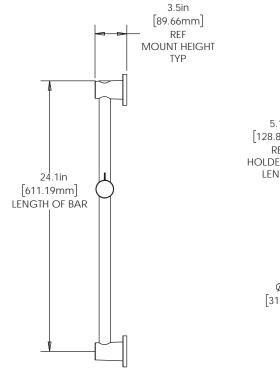
NOTES:

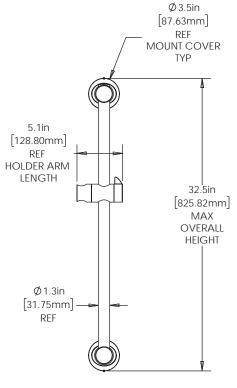
COMPLIANCE:

ADA COMPLIANT

- Meets the ANSI standard 250 lbs. pull-test for grab bars and ADA lever handle for adjusting slide bar.
- The VS-153-ADA Slide Bar meets ADA pull force requirements only. It is not intended to replace an ADA Grab Bar.







DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

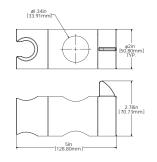
VS-153-ADA-30 / VS-153-30-RT ROUGH-IN DIAGRAM SPEAKMAN°

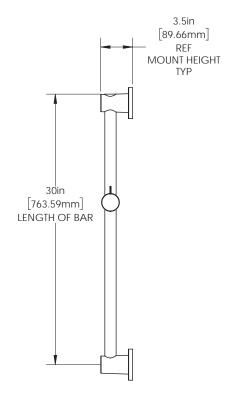
NOTES:

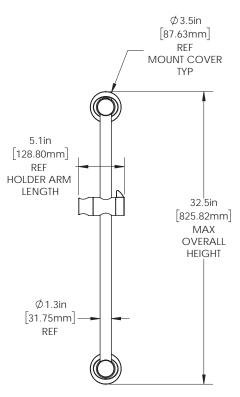
COMPLIANCE:

ADA COMPLIANT

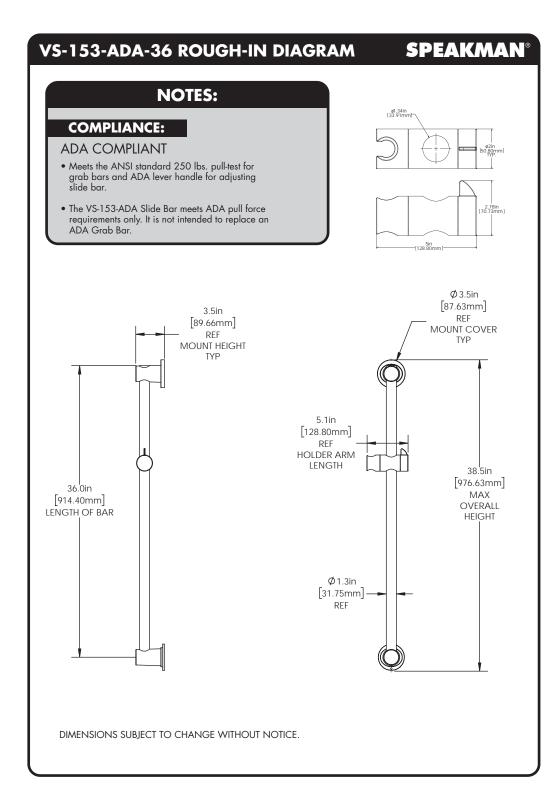
- Meets the ANSI standard 250 lbs. pull-test for grab bars and ADA lever handle for adjusting slide bar.
- The VS-153-ADA Slide Bar meets ADA pull force requirements only. It is not intended to replace an ADA Grab Bar.

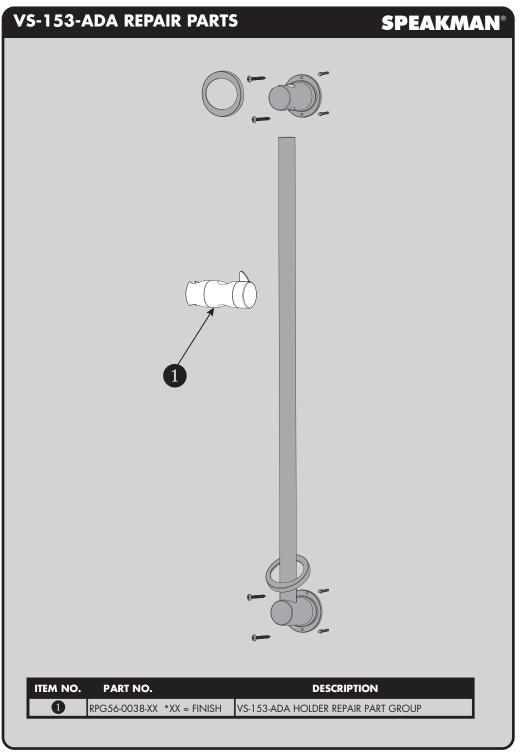






DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.





SPEAKMAN COMPANY

S-1554 Installation, Maintenance & Operation Instructions TUB SPOUT

DESCRIPTION

Speakman polished chrome plated metal tub spout.

SPECIFICATIONS

1/2" NPT FEMALE INLET SHIPPING WEIGHT: XXX LBS.

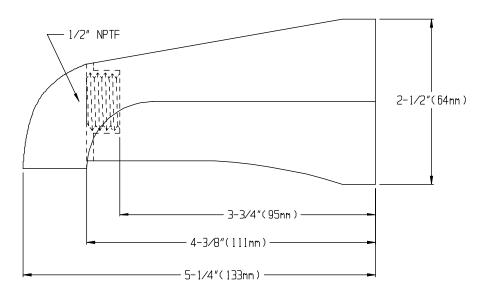
INSTALLATION

Apply teflon tape or pipe dope to male threads and thread spout onto piping. Wrench tighten carefully. Check all connections for leaks.

MAINTENANCE

The gleaming finish of your SPEAKMAN tub spout can be cleaned by using mild soap and warm water. Dry immediately with a soft, clean cloth for best results.

ROUGH-IN MEASUREMENTS



Product improvements may cause specification and dimensional changes without notice.

