

SM-5490-ADA

# Installation, Operation & Maintenance Instructions

SENTINELPRO™ COMBINATION SERIES

# DESCRIPTION

Speakman SentinelPro<sup>™</sup> Combination, SM-5490-ADA, unites Anti-Scald Thermostatic / Pressure Balance Diverter Shower/Bath Valve with integral Check Stops (CPV-TP-DV), Trim with integral Volume Control / Diverter Handle (CPT-5401), Shower Arm with Wall Flange (S-2500), Hand Shower with flow control (VS-100-PC), Shower Arm Bracket, In-line Vacuum Breaker, 60in Shower Hose (VS-152), 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: ½" 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: ½" NPSM Male Inlet; ½" NPSM Female Outlet FINISH: Polished Chrome

IN-LINE VACUUM BREAKER:

CONNECTIONS: ½" NPSM Female Inlet; ½" NPSM Male Outlet FINISH: Polished Chrome

### VS-152 60in SHOWER HOSE:

CONNECTIONS: ½" 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

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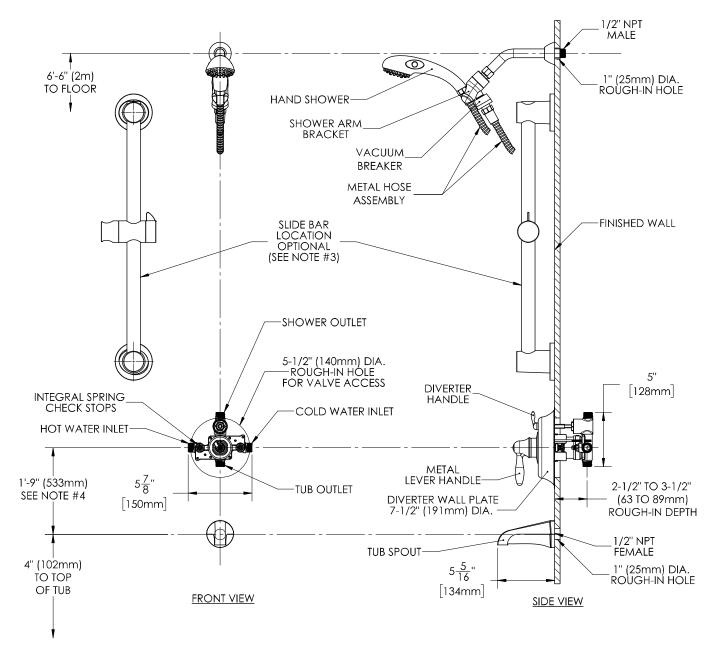
#### S-1554 TUB SPOUT:

CONNECTIONS: ½" NPT Female Inlet FINISH: Polished Chrome

## INSTRUCTIONS

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

# **ROUGH-IN**



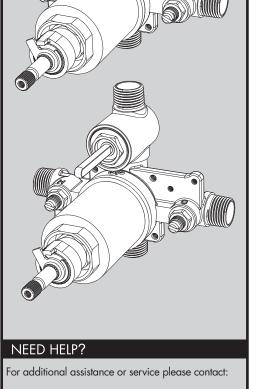
NOTES:

- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SPECIFIED AND ARE SUBJECT TO CHANGE WITHOUT NOTICE.
- 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 69" HOSE LENGTH RUNNING FROM THE SHOWER
- ARM TO THE HAND SHOWER.
- 4. FOR ADA MOUNTING LOCATIONS CONSULT ADA ACCESSIBILITY GUIDELINES (ADAAG), ANSI A117.1 STANDARD, OR STATE REGULATIONS.

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# INSTRUCTIONS FOR MODELS TOOLS AND SUPPLIES CPV-TP Pencil Saw CPV-TP-DV



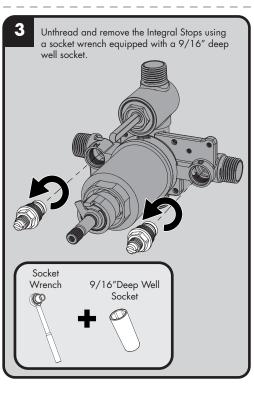
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ع 800-537-2107

customerservice@speakman.com

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92-CPV-TP-02





#### **IMPORTANT**

- 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 Manual

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- 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

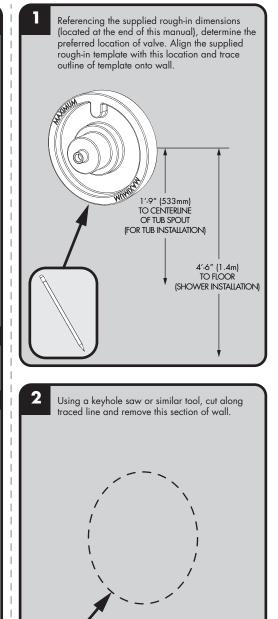
# MAINTENANCE

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.

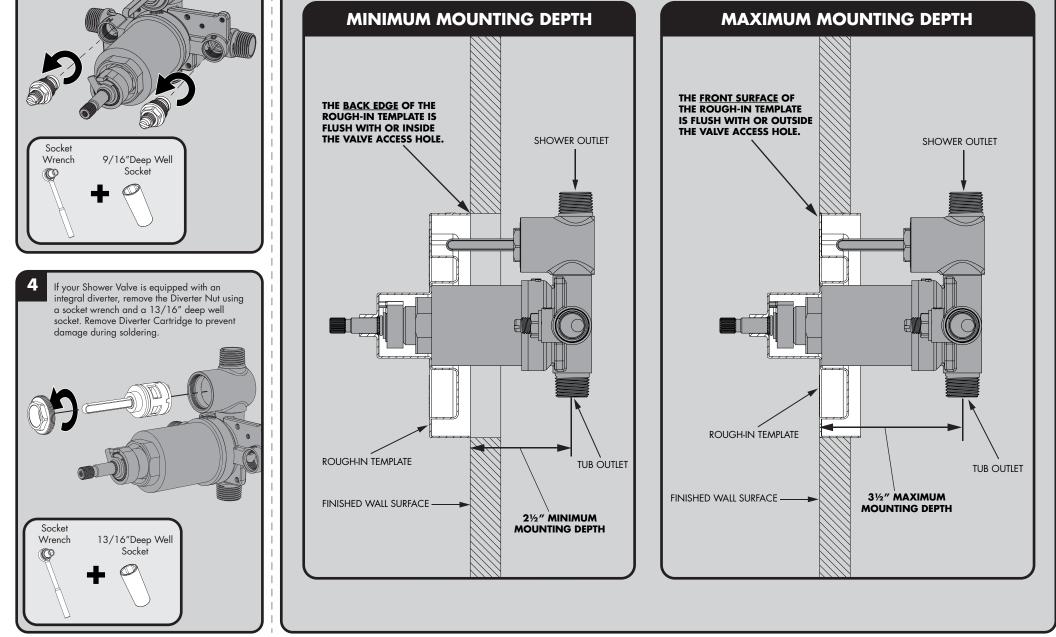
# WARRANTY

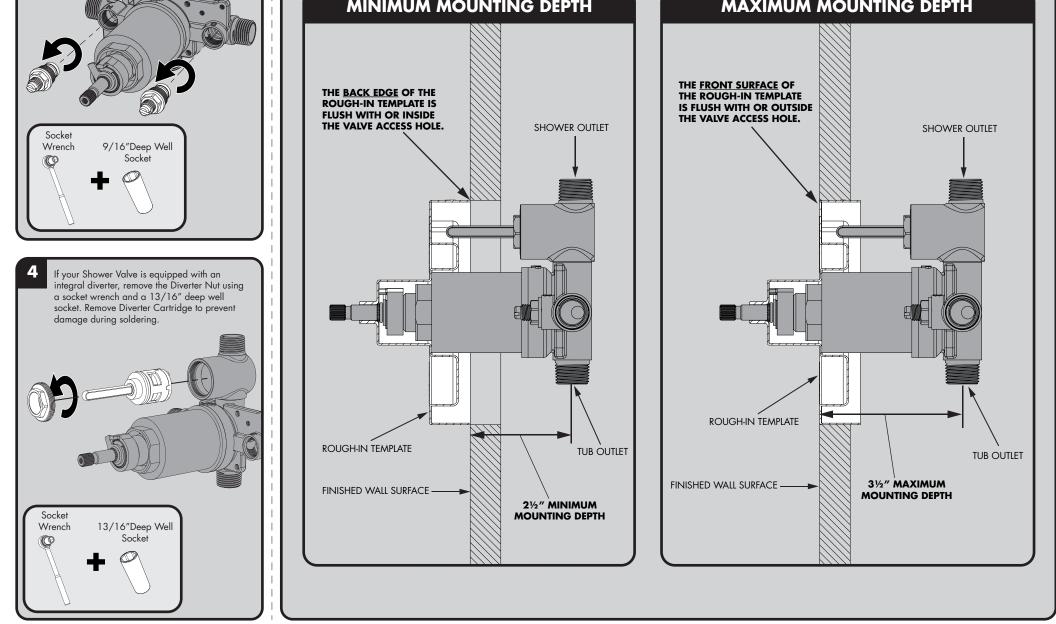
Additional warranty information can be found at: www.speakman.com

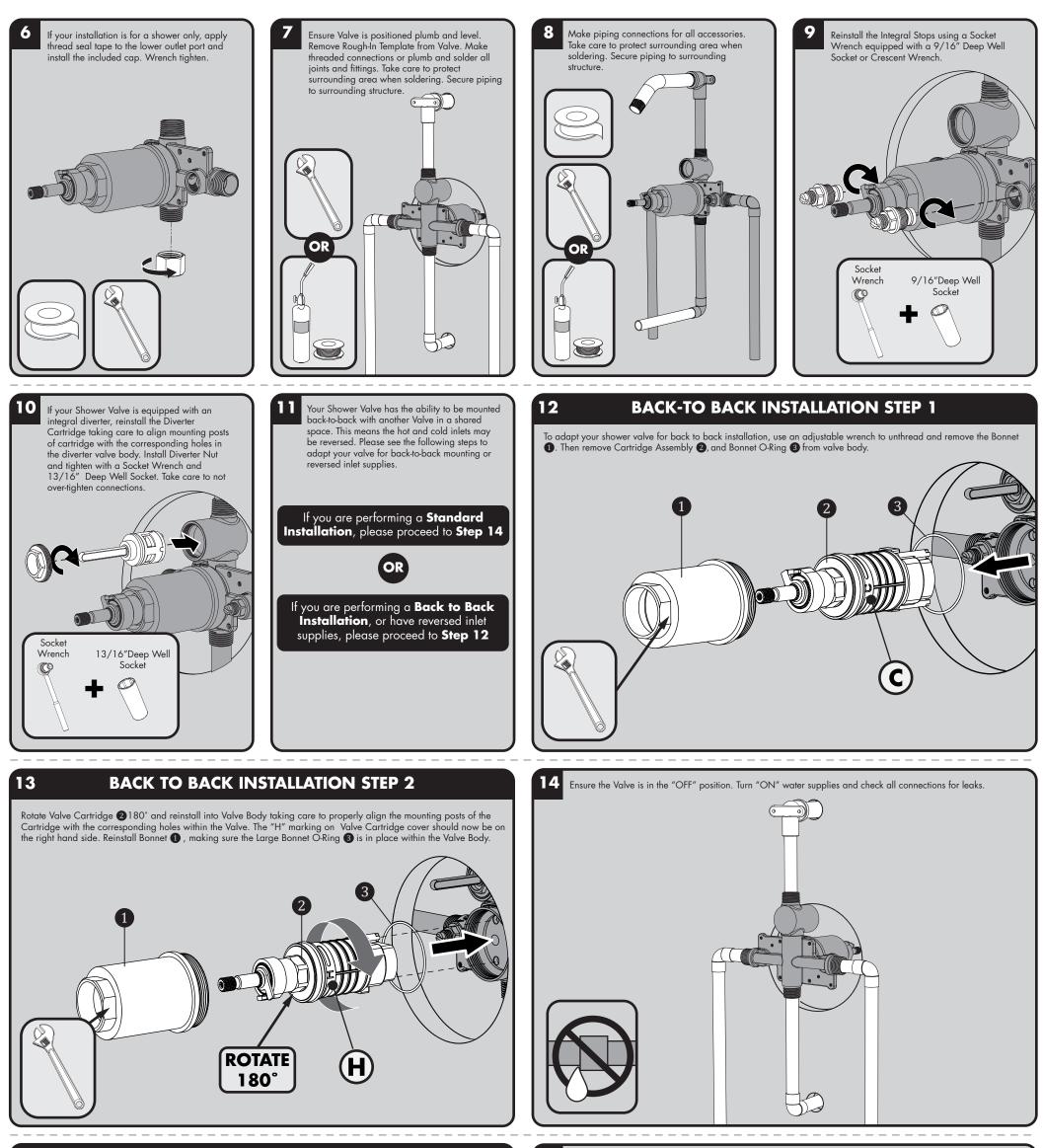


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5 Install the Rough-In Template over the Shower Valve being sure the Rough-In Template sits flush against Shower Valve Bonnet. Following the rough-in dimensions for your model of valve (located ot the end of this manual) as well as the markings on 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 21/2" - 31/2". See images below for reference.

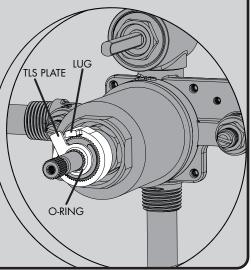




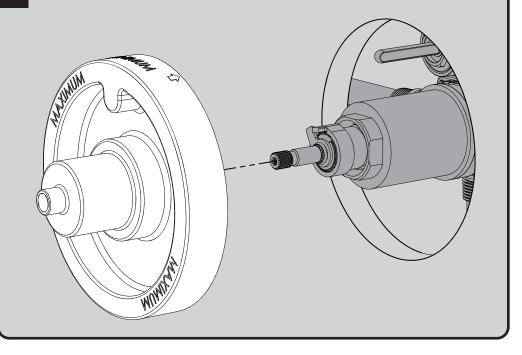


The maximum hot water temperature setting adjustment (Temperature Limit Stop (TLS)) of the valve has been factory set at 110° F. Important- Check each valve installation with a thermometer to make sure the maximum hot water temperature is set to the recommended setting of 110° F maximum. To lower the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



16 Reinstall Rough-In Template over Valve to protect it during final wall preparation.



# **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 maximum.

#### 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 may come out with the bonnet.

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 adjustment instructions

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.

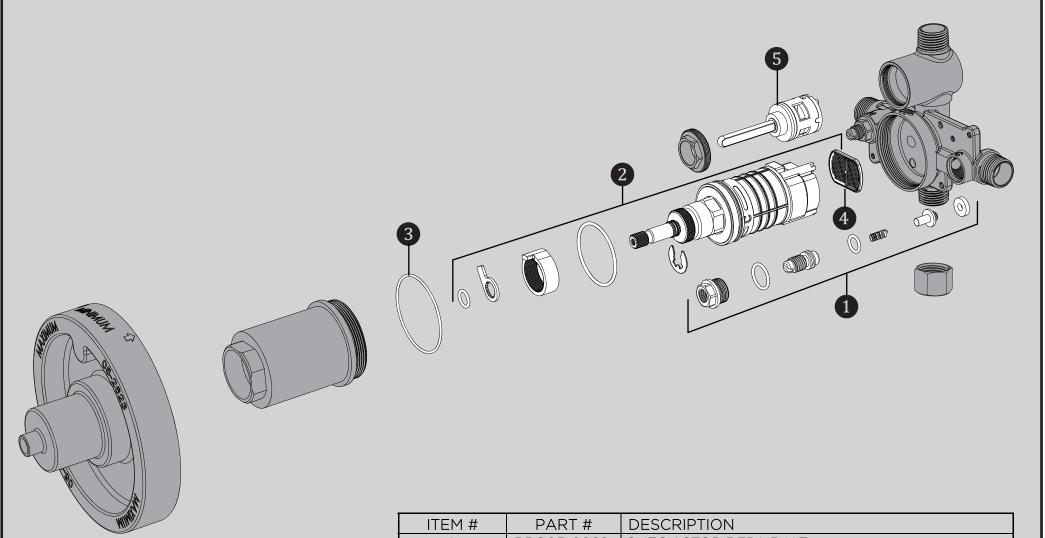
2) CLOSE integral stops by turning the stop spindles clockwise. Unscrew the stop's retaining nut with wrench. Carefully remove the retaining nut w/spindle, spring, and poppet assembly. Clean and/or replace the necessary parts. Reassemble the parts, reversing the above procedure. Repeat procedure on the 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**

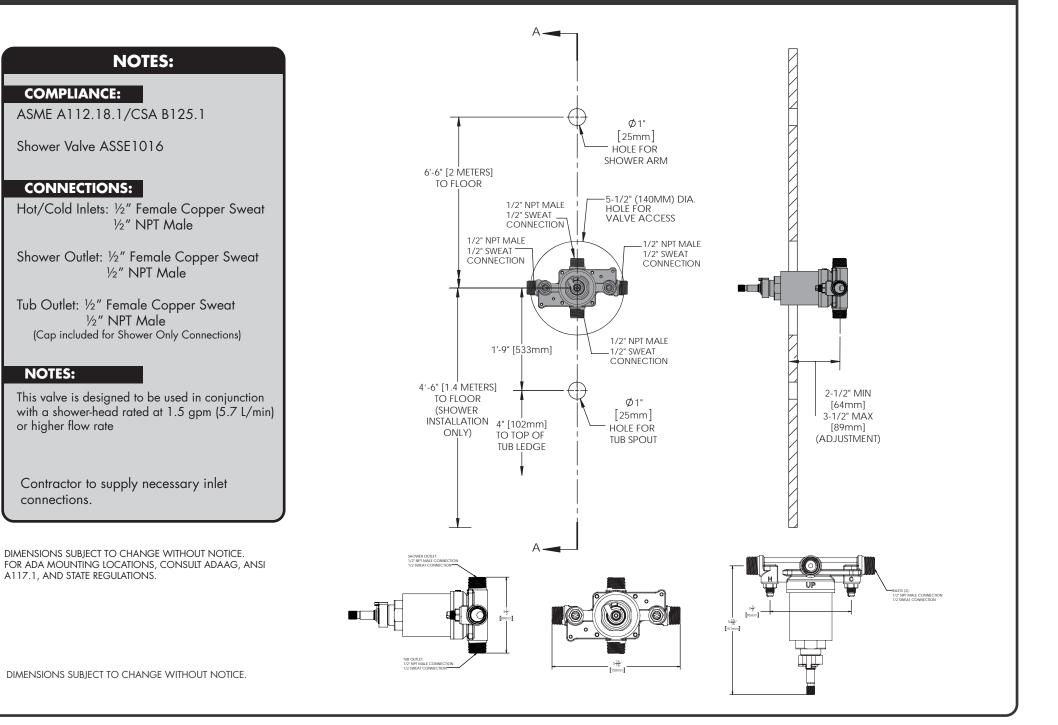
# **SPEAKMAN®**



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

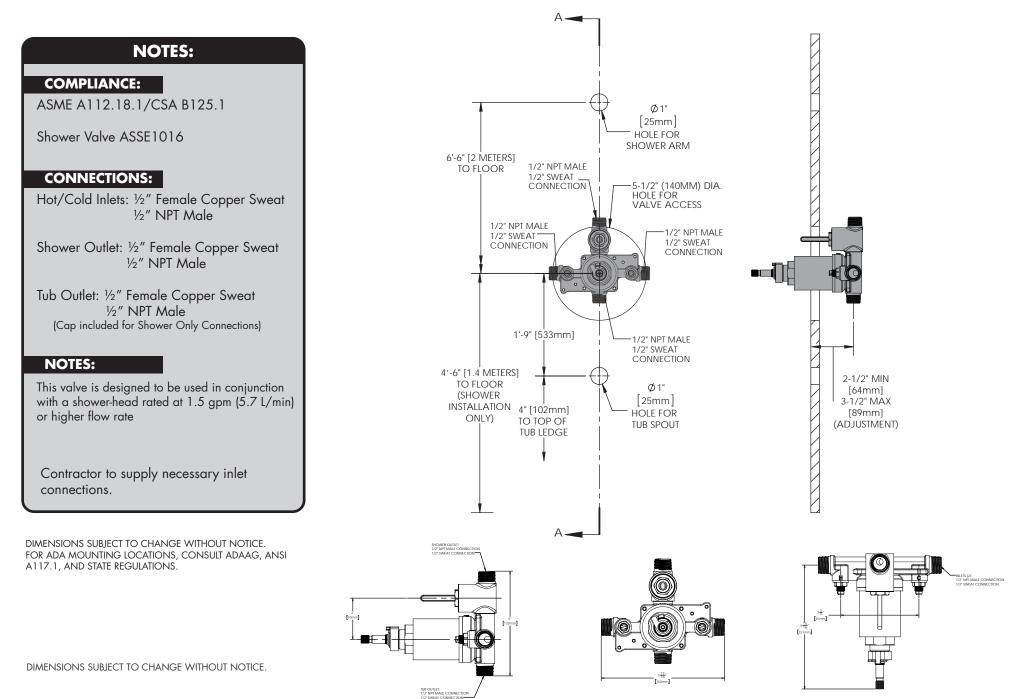
# **CPV-TP ROUGH-IN DIAGRAM**

# **SPEAKMAN**<sup>®</sup>

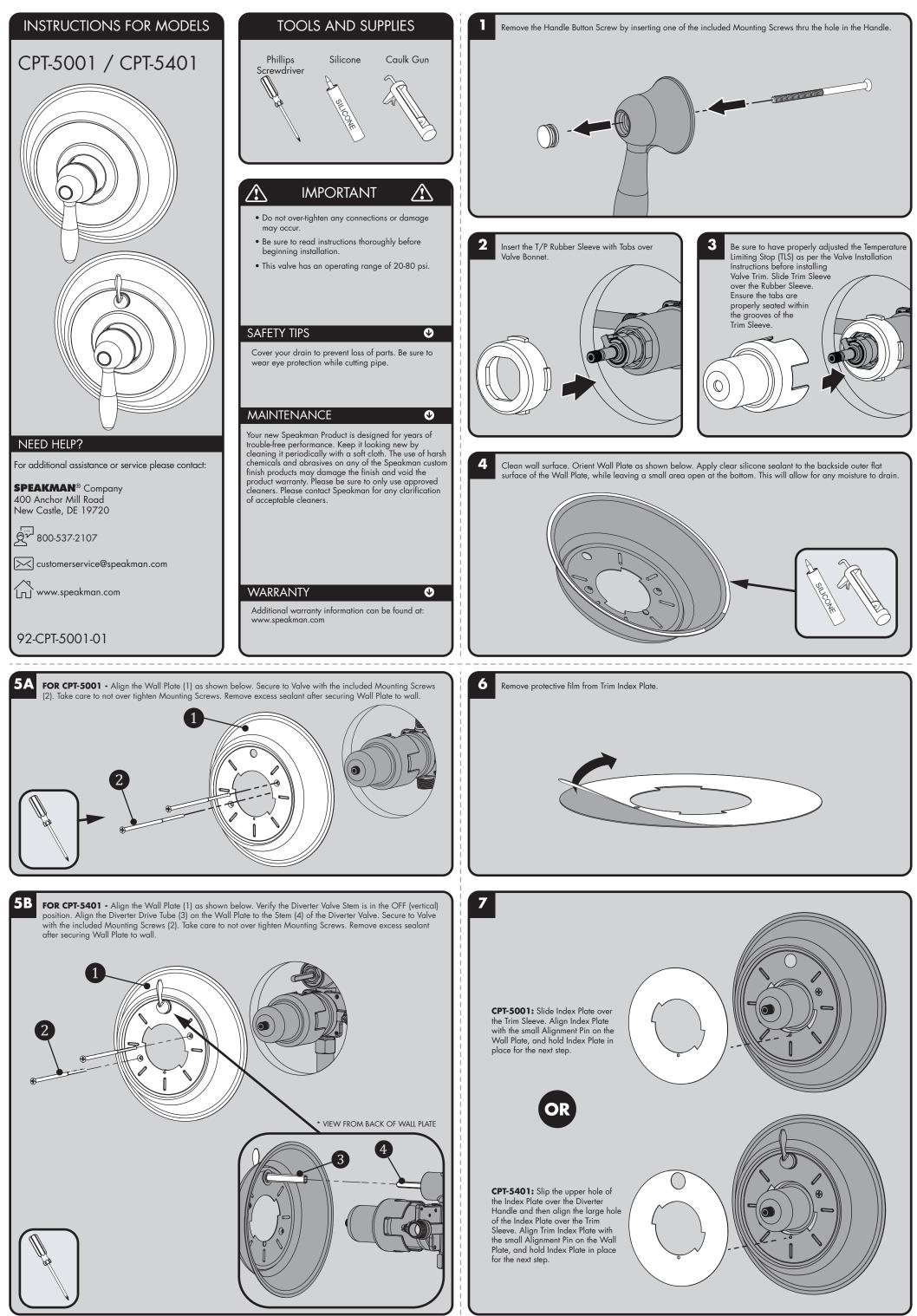


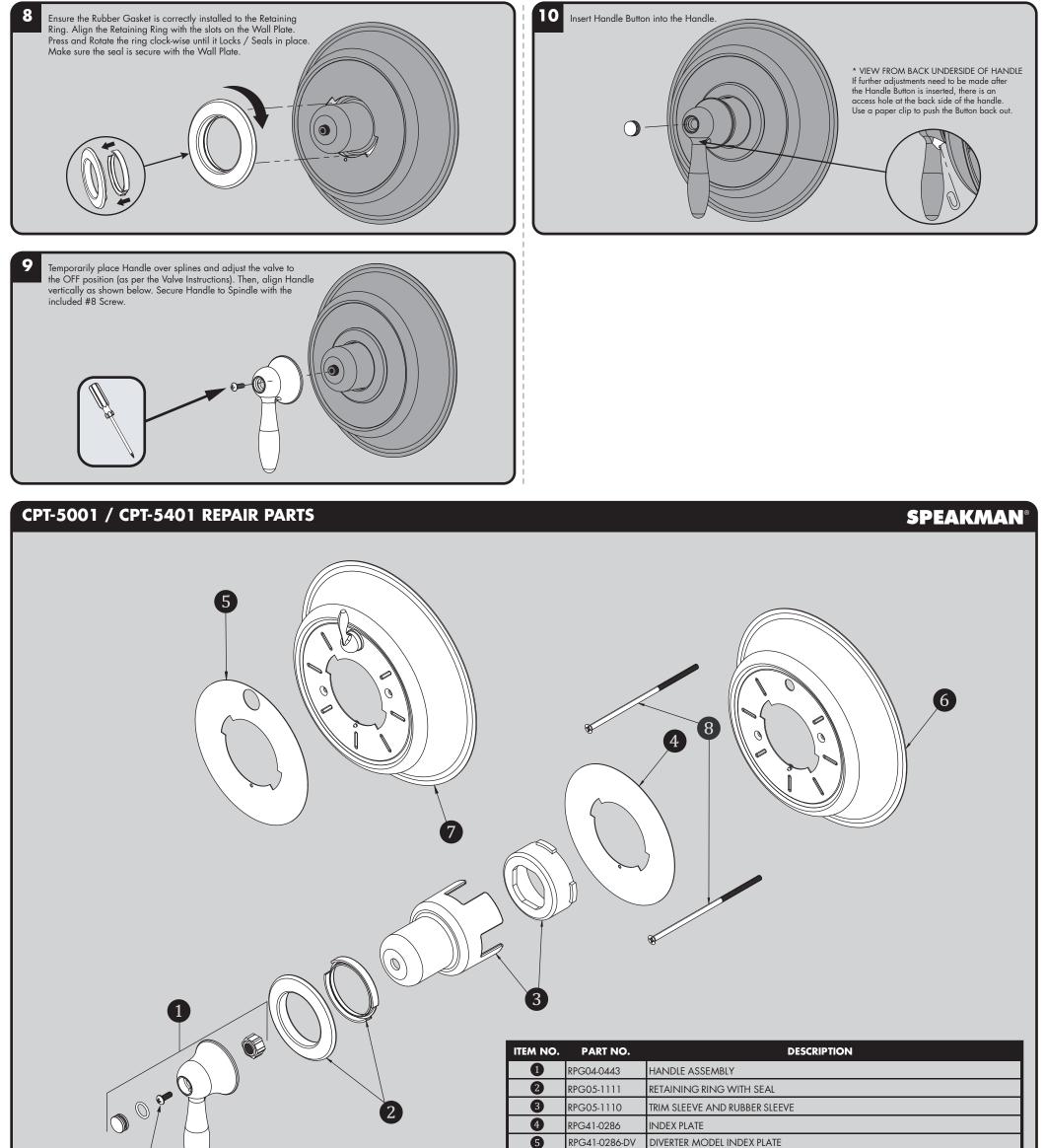
# **CPV-TP-DV ROUGH-IN DIAGRAM**







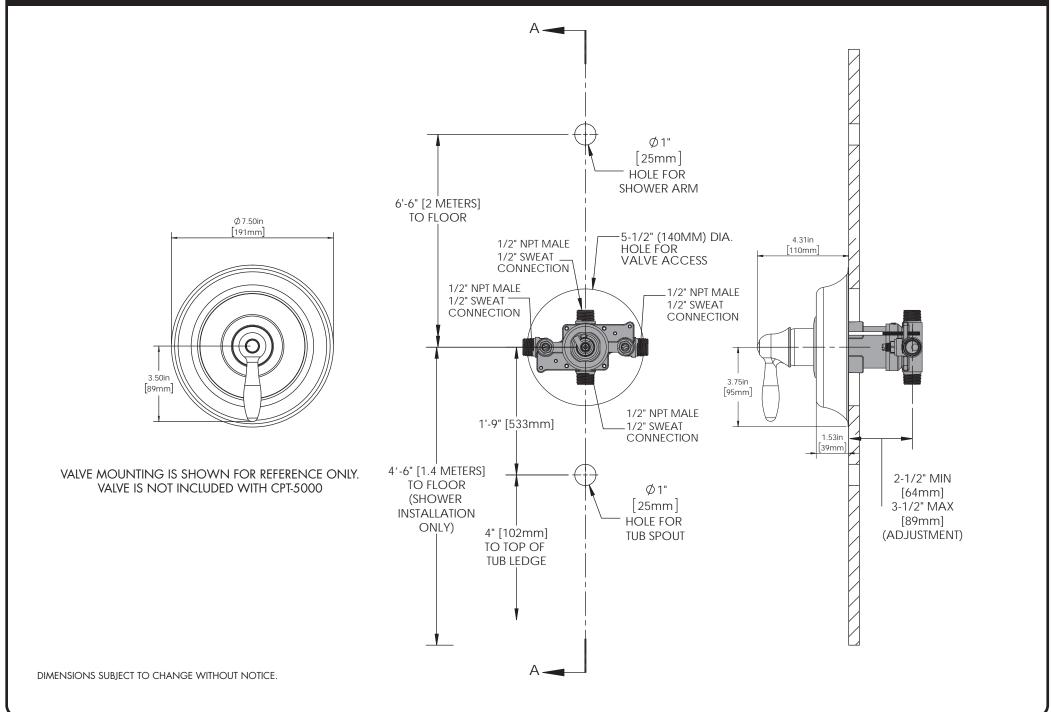




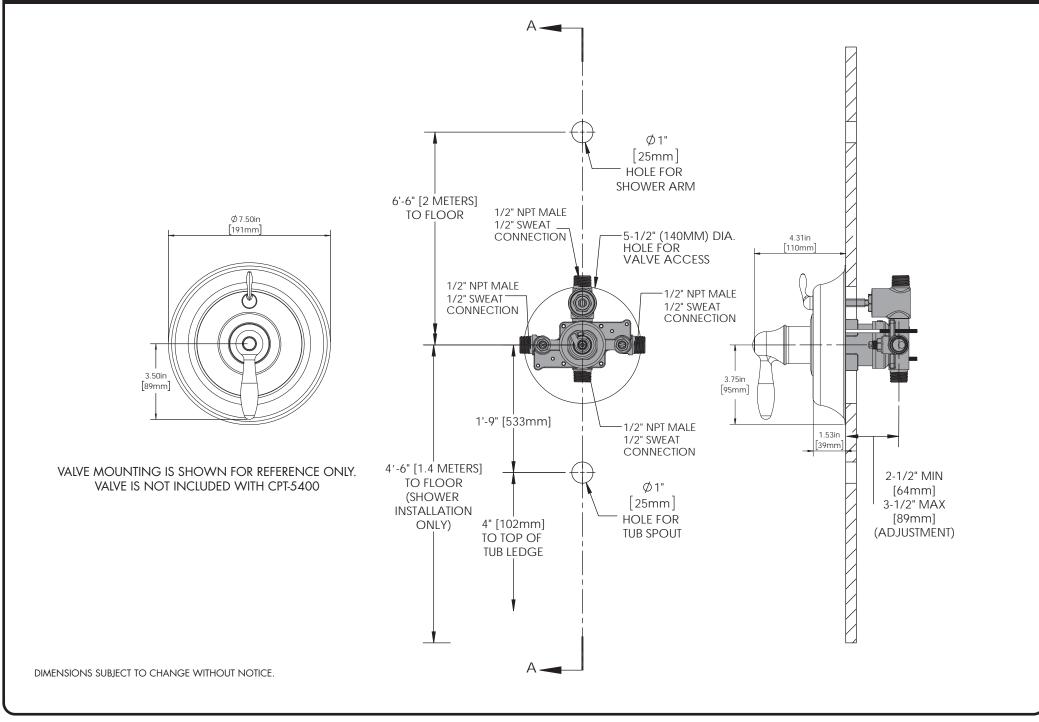
Ð	KF 041-0200-DV	DIVERTER MODEL INDEX FLATE
6	RPG10-0120	WALL PLATE
7	RPG10-0121	WALL PLATE WITH DIVERTER
8	RPG10-0119	MOUNTING HARDWARE (ALL SCREWS)

# CPT-5001 ROUGH-IN DIAGRAM

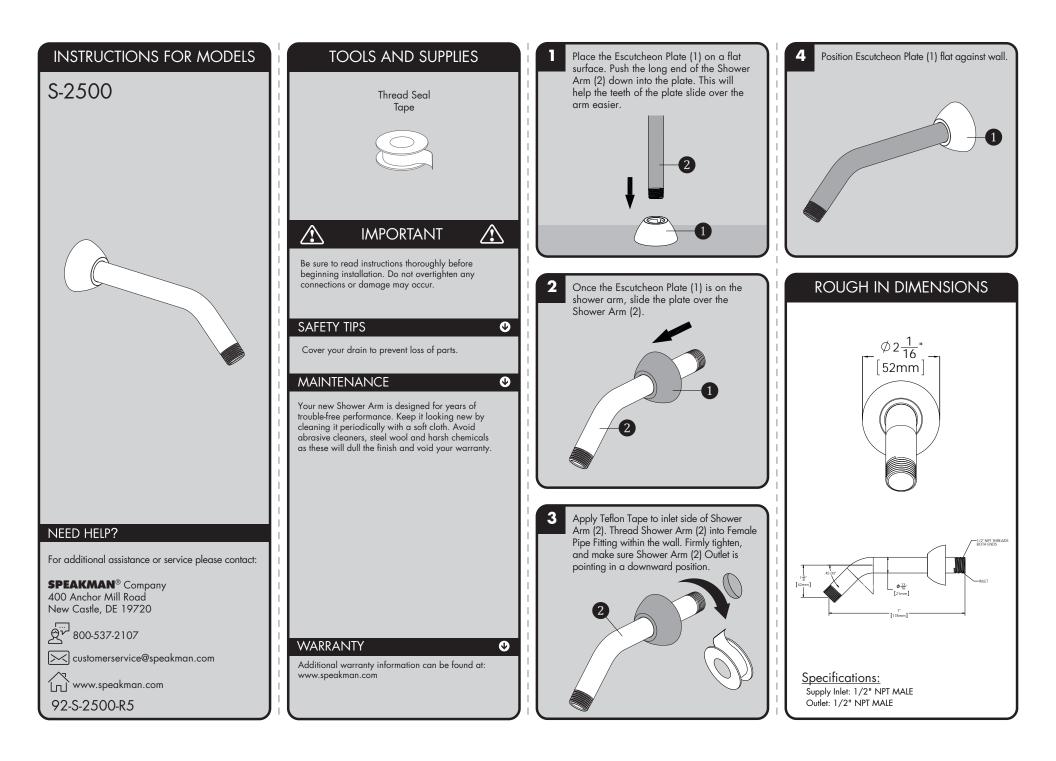
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# **CPT-5401 ROUGH-IN DIAGRAM**



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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) ½" NPT FEMALE (VS-2954) ½" 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

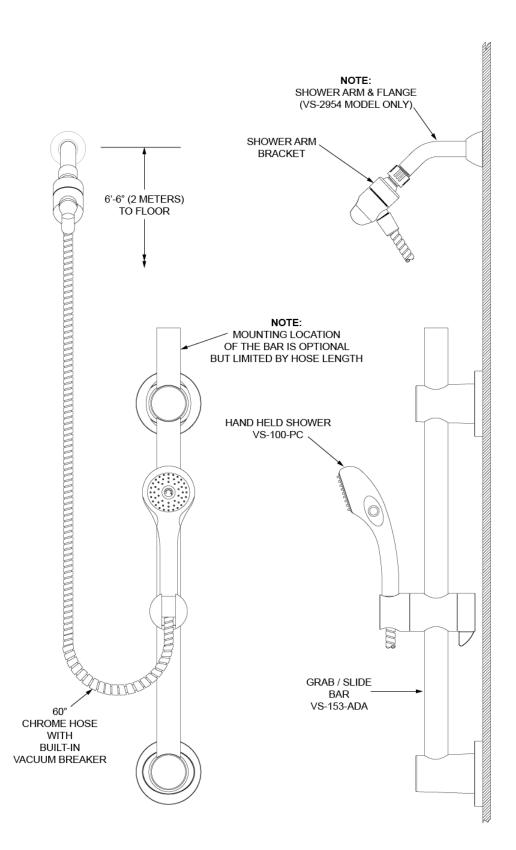
To operate the handheld shower, push the pause button to one side to bring the flow down to a trickle, then simply push it to the other side to turn the flow back on full force.

# 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.

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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

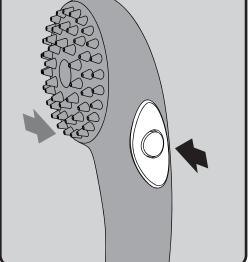
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# **SPEAKMAN<sup>®</sup>**

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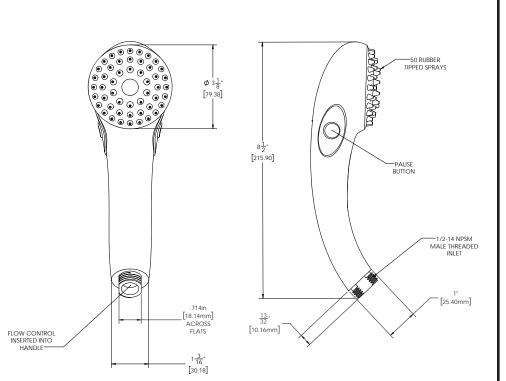
#### INSTRUCTIONS FOR MODELS TOOLS AND SUPPLIES Connect the correct side of your hose 3 (not included) to the water supply. Hand tighten. VS-100-PC Thread Seal Tape VS-100-PC-E2 (included) VS-100-PC-E175 ົ້ວັ້ວັ້ວ ଚଚ IMPORTANT $\wedge$ $\wedge$ 00 ' <sub>D</sub> D ଚ ତ Be sure to read instructions thoroughly before beginning installation. Do not overtighten any 6000 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 • 2 Connect remaining end of Hose to inlet Periodic cleaning using a mild soap and warm water will help keep your Hand Shower's appearance in its of Hand Shower. Hand tighten. If there original condition. are leaks at the hose connections, look For best results, dry immediately with a soft, clean cloth. <u>DO NOT USE</u> harsh and/or abrasive cleaners. into using thicker washers to ensure a tight seal. 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 $\frac{1}{2}$ 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. NEED HELP? For additional assistance or service please contact: **SPEAKMAN®** Company 400 Anchor Mill Road New Castle, DE 19720 <u>عَنَّ</u> 800-537-2107 WARRANTY $\bullet$ customerservice@speakman.com Additional warranty information can be found at: www.speakman.com www.speakman.com ĺпÌ

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.



92-VS-100-PC-04

# ROUGH IN DIMENSIONS



#### VS-100-PC

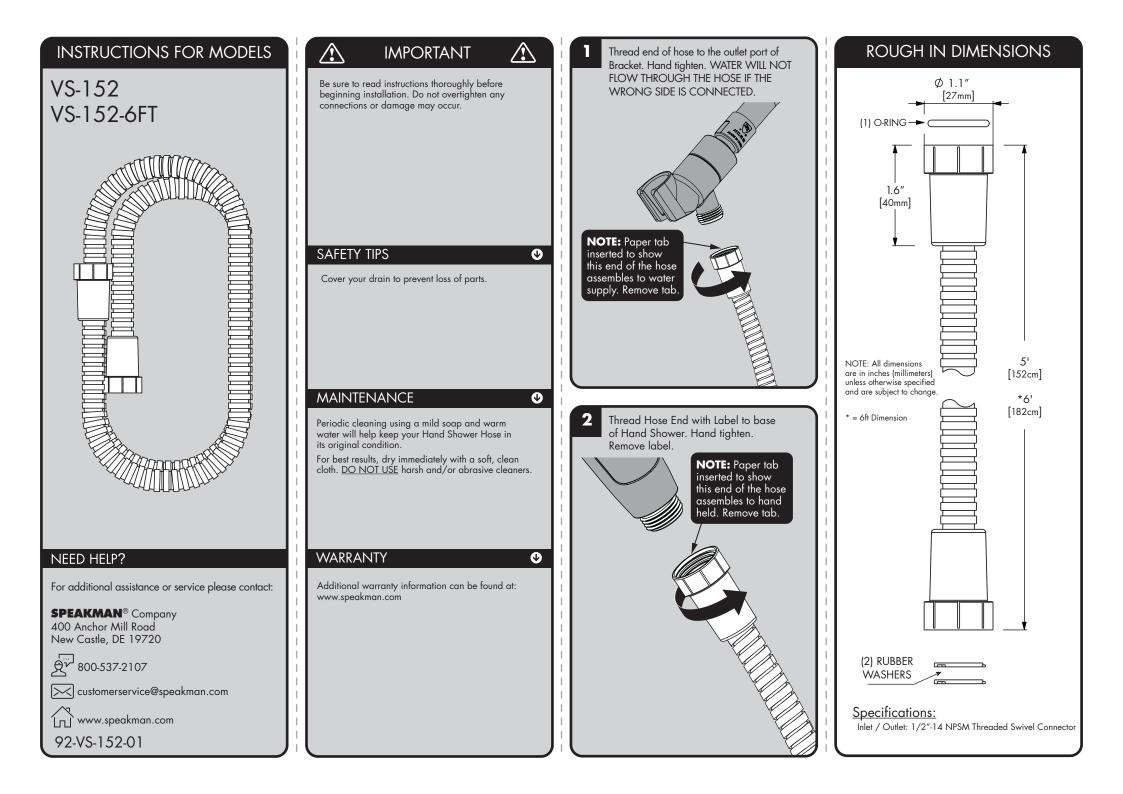
Max. Flow Rate: 2.5 gpm (9.5L/min) Min. Flow Rate: 2.0 gpm (7.6 L/min) @ 45psi FOR USE WITH AUTOMATIC COMPENSATING VALVES RATED AT 7.6 L/MIN (2.0 GPM) OR LESS.

#### 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.



# INSTRUCTIONS FOR MODELS TOOLS AND SUPPLIES Pencil Phillips Drill Bit • Meets the ANSI standard 250 lbs. pull-test for VS-153-ADA -30 -36 Screwdriver No.10/5.5mm grab bars and ADA lever handle for adjusting slide bar. VS-153-30-RT • The VS-153-ADA Slide Bar meets ADA pull force requirements only. It is not intended to replace an Mounting Hardware (included) Drill (( ( @ $\square$ HELPFUL TOOLS & SUPPLIES: Measuring Tile Drill Bit Level Tape x/xx′ 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-153-ADA-02 2 3 4 Position the Upper Mounting Bracket over the Hold the Slide Bar against the wall in the chosen Slide Bar. Ensure the mounting location is within the usable range of the hand shower hose. location. Adjust the Upper Mounting Bracket height location. Using a pencil, mark the Drill Hole positions (x4) for the Upper and Lower Mounting Brackets. Ensure the Slide Bar is level vertically **NOTE:** If using as a Grab Bar, be sure to fasten securely to proper bracing within the wall.

ADA Grab Bar. • Do not over-tighten any connections or damage may occur. • Be sure to read instructions thoroughly before beginning installation. SAFETY TIPS •

**IMPORTANT** 

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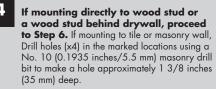
- Cover your drain to prevent loss of parts. Be sure to follow all tool manufacturers safety guidelines.
- Use caution when drilling into walls to avoid electrical and plumbing lines hidden within the wall.

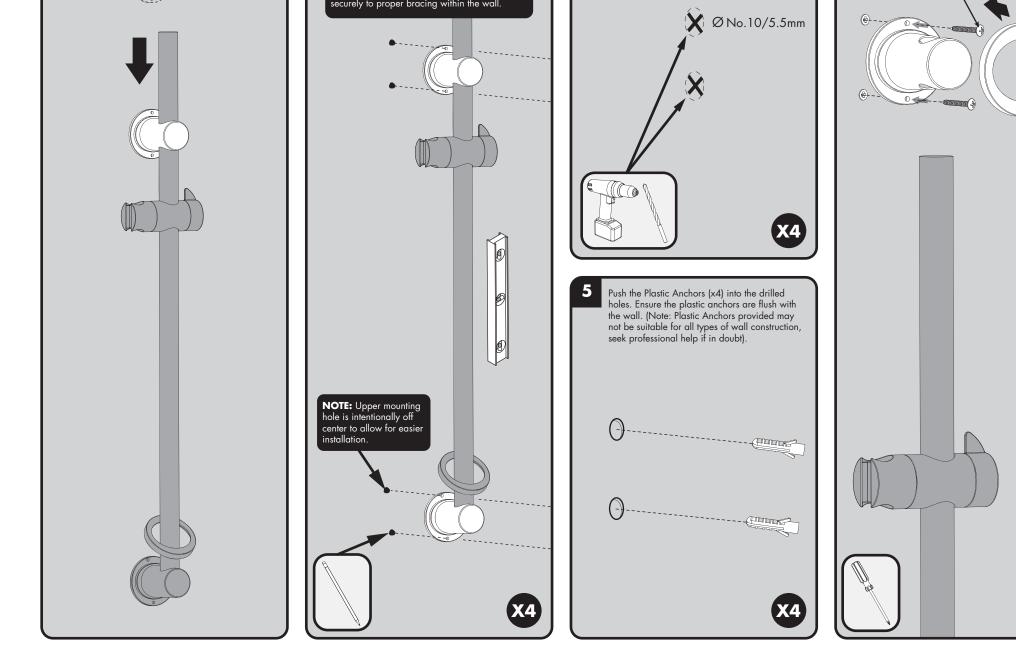
# MAINTENANCE

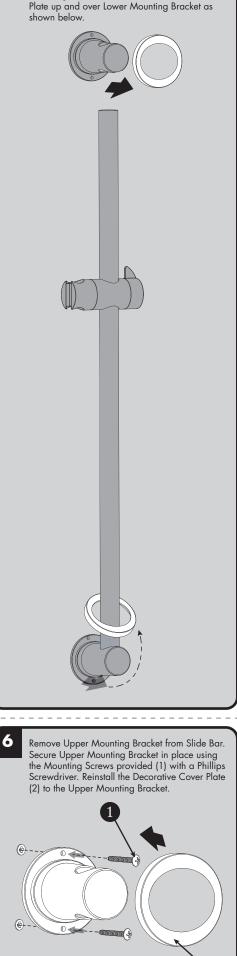
Your new Speakman Product is designed for years of cleaning it periodically with a soft cloth. The use of harsh chemicals and abrasives on any of the Speakman custom finish products may damage the finish and void the product warranty. Please be sure to only use approved cleaners. Please contact Speakman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

# WARRANTY

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

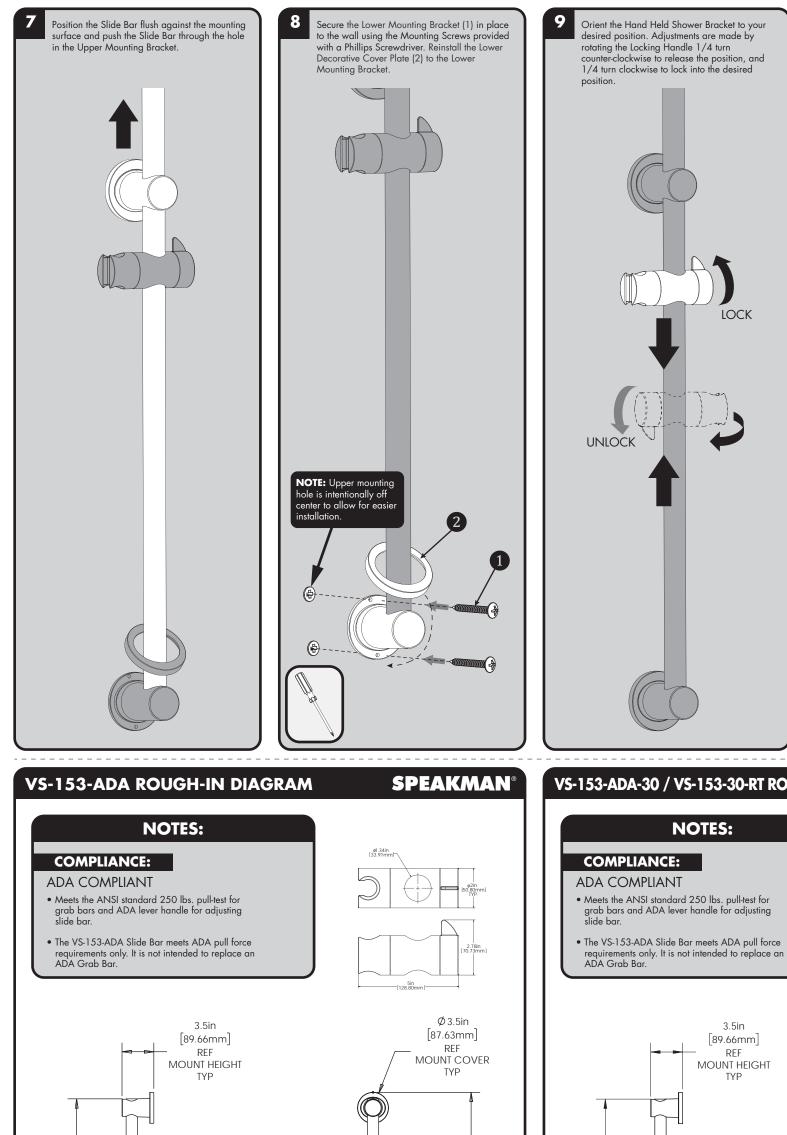


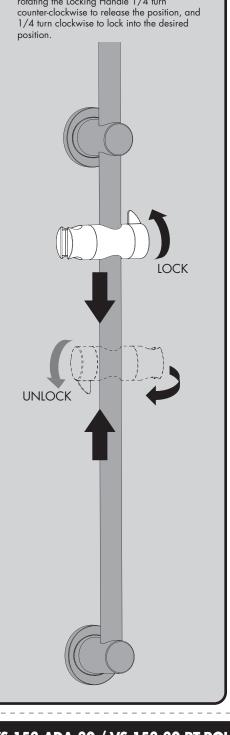




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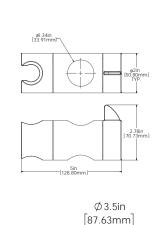
Remove Decorative Cover Plate from Upper Mounting Bracket. Slide Lower Decorative Cover

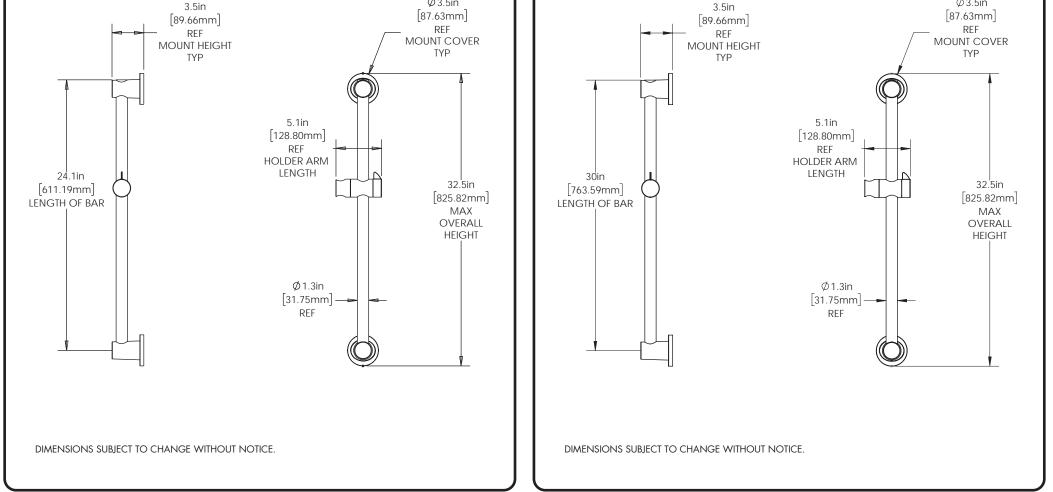


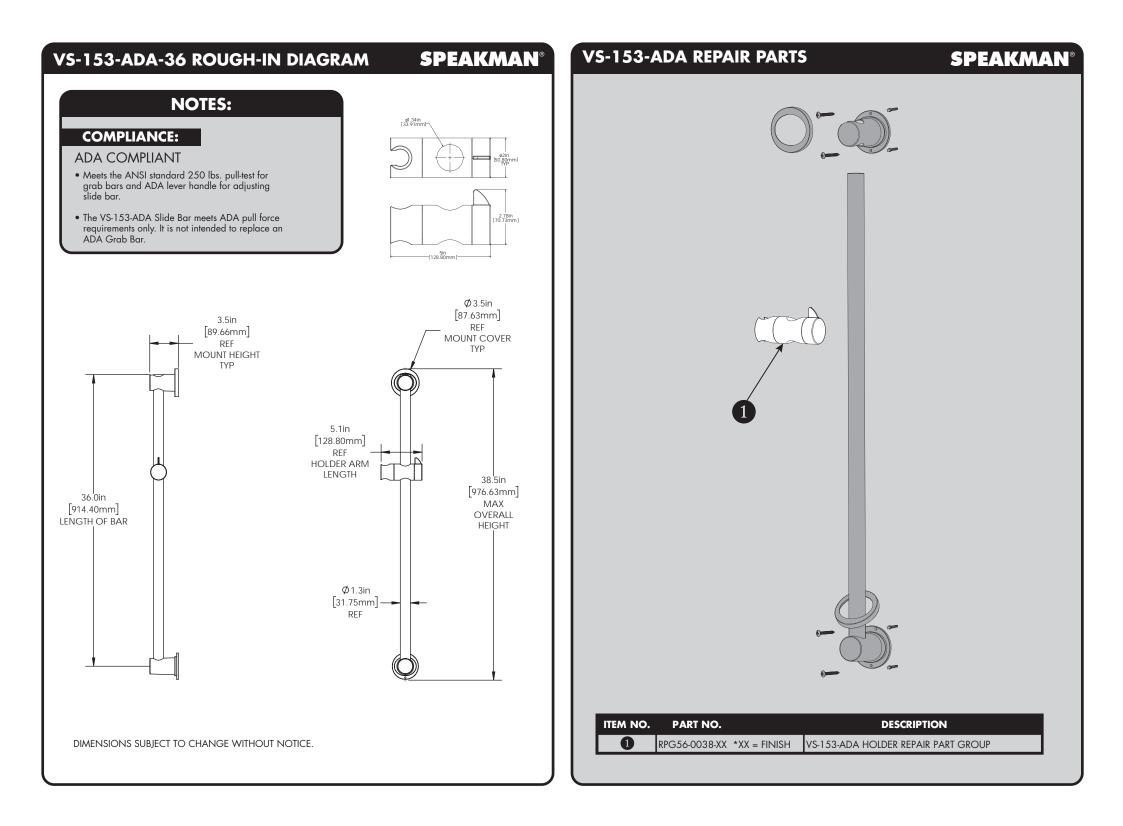


# VS-153-ADA-30 / VS-153-30-RT ROUGH-IN DIAGRAM SPEAKMAN®

- The VS-153-ADA Slide Bar meets ADA pull force







# 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.

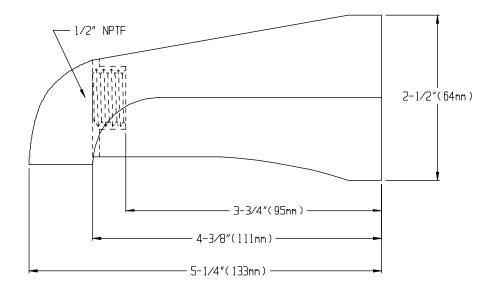
## **INSTALLATION**

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.



### SPEAKMAN COMPANY

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04/00 92-1819