SPEAKMAN SHOWER VALVES

What are the different types of shower valves?

(-P)

PRESSURE BALANCED

CPV-P-IS

Water is nearly constant in temperature despite pressure fluctuations in either the hot or cold supply lines via pressure balance piston.

(-T)

THERMOSTATIC
(Not yet available)

Blends hot water with cold water to ensure constant and safe temperatures, preventing scalding via thermostatic shuttle element.

(-TP) GEN 1

THERMOSTATIC/ PRESSURE BALANCED

CPV-5000

Combines both pressure balance and thermostatic technologies to provide superior tepid water management and scalding protection.

(-TP) GEN 2

THERMOSTATIC/ PRESSURE BALANCED

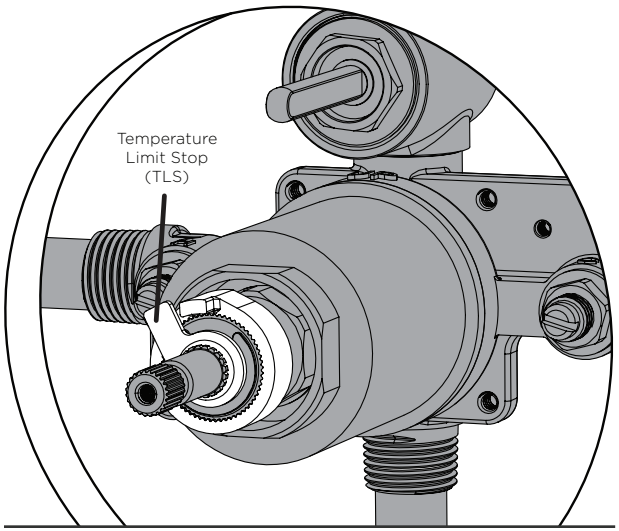
CPV-TP

Combines both pressure balance and thermostatic technologies to provide superior tepid water management and scalding protection.

What is the standard for shower valves in the USA?

2012 IPC SHOWER VALVE TEMPERATURE REQUIREMENT:

424.3 Individual shower valves. Individual shower and tub-shower combination valves shall be balanced-pressure, thermostatic or combination balanced-pressure/thermostatic valves that conform to the requirements of ASSE 1016 or ASME A112.18.1/CSA B125.1 and shall be installed at the point of use. ...valves required by this section shall be equipped with a means to limit the maximum setting of the valve to 120°F (49°C), which shall be field adjusted in accordance with the manufacturer's instructions. In-line thermostatic valves shall not be utilized for compliance with this section.



What are the pros and cons of each style of valve?

	PROS	CONS
PRESSURE BALANCED	• Nearly constant temperatures • Durable brass body • Diverter option available • Integral stops • Cold water failure (shut down) reduces flow to 0.5 gpm or less	• Does not prevent scalding • Sweat only connections • Only rated to work with shower heads down to 2.0 GPM
THERMOSTATIC	• Prevents scalding • Durable brass body • Temperature limit stop (TLS) • Integral stops	• Valves are susceptible to debris within the supply lines
THERMOSTATIC/ PRESSURE BALANCED Generation 1 & 2	• Prevents scalding • Durable brass body • Pressure balance piston backup • Temperature limit stop (TLS) • Integral stops • Retrofit to pressure balance valve body • Rated to work with shower heads from 2.5 gpm to 1.5 gpm • Adjustable temperature limit stop • Cold water failure (shut down) reduces flow to 0.5 gpm or less	• Valves are susceptible to debris within the supply lines

(-P) PRESSURE BALANCED | CPV-P, CPV-P-IS, CPV-P-DV, CPV-3000-IS, CPV-3400

Features

- ASME A112.18.1/CSA B125.1 AND ASSE 1016 certified
- Built-in check valves in cartridge
- Temperature limit stop allows installer to set maximum water temperature
- Integral stop allows user to shut water off at valve
- 5 year limited warranty

BENEFITS

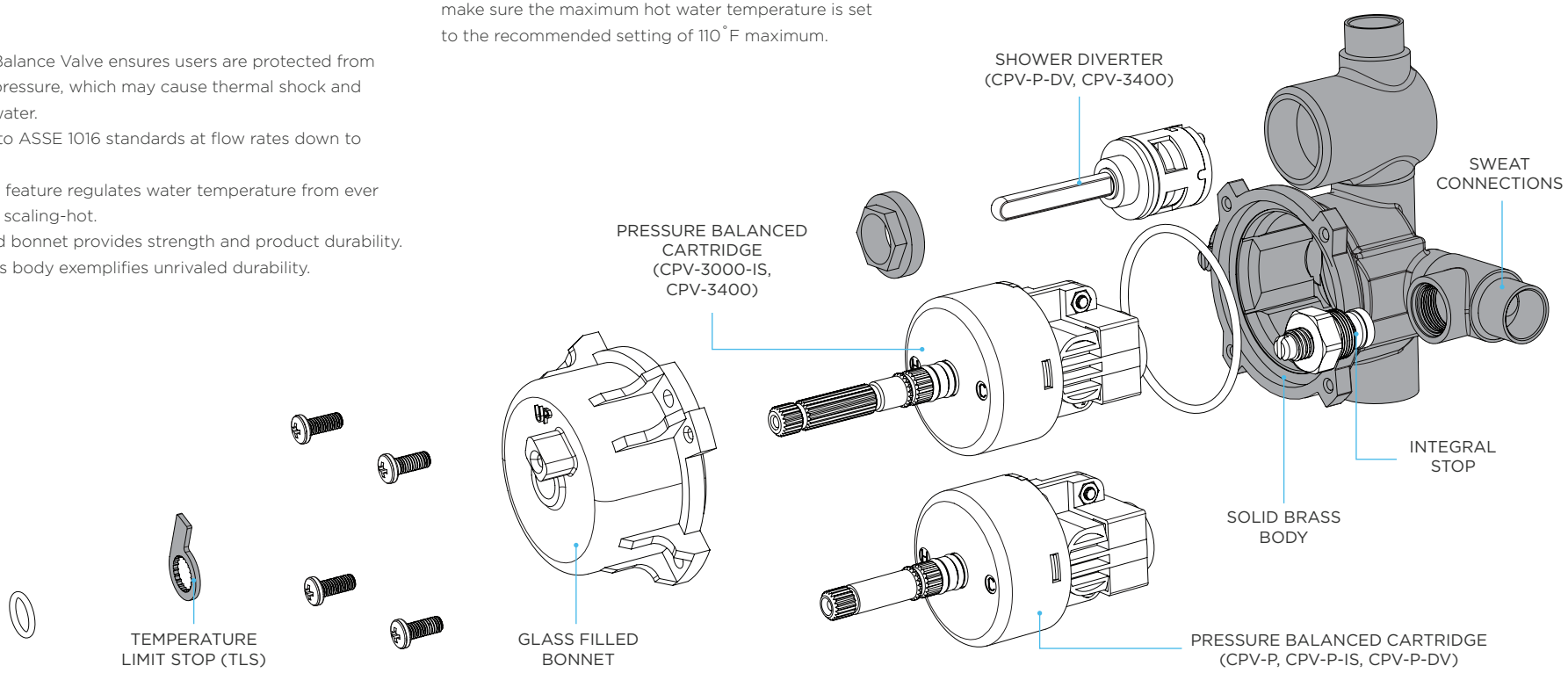
- Pressure Balance Valve ensures users are protected from spikes in pressure, which may cause thermal shock and scalding water.
- Performs to ASSE 1016 standards at flow rates down to 2.0 gpm.
- Anti-scald feature regulates water temperature from ever becoming scaling-hot.
- Glass-filled bonnet provides strength and product durability.
- Solid-brass body exemplifies unrivaled durability.

PISTON TECHNOLOGY

Piston style pressure balancing element. The stainless steel piston is always submerged in water, preventing calcification.

TLS FACTORY SETTING

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.



For use with trim models:

CPV-P-IS							CPV-P-DV							CPV-3000-IS	CPV-3400
CPT-1000-P	CPT-6000-P	CPT-7000-P	CPT-8000-P	CPT-10000-P	CPT-11000-P	CPT-24000	CPT-1400-P	CPT-6400-P	CPT-7400-P	CPT-8400-P	CPT-10400-P	CPT-11400-P	CPT-24400-DV	CPT-3000	CPT-3400

THERMOSTATIC/PRESSURE BALANCED | CPV-5000, CPV-5400

Features

- ASME A112.18.1/CSA B125.1 AND ASSE 1016 certified
- Temperature limit stop allows installer to set maximum water temperature
- Integral spring check stops allows user to shut water off at valve
- 5 year limited warranty

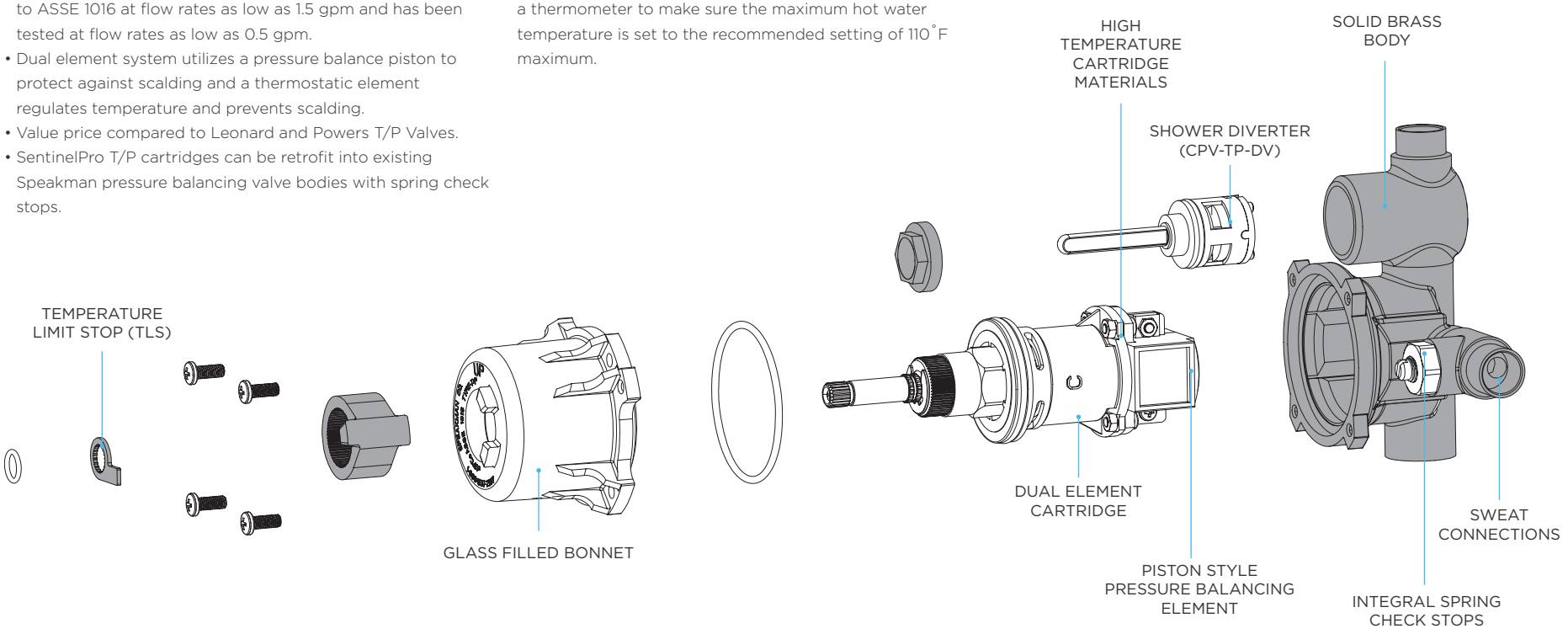
BENEFITS

- Ideal valve for use with low flow shower heads; performs to ASSE 1016 at flow rates as low as 1.5 gpm and has been tested at flow rates as low as 0.5 gpm.
- Dual element system utilizes a pressure balance piston to protect against scalding and a thermostatic element regulates temperature and prevents scalding.
- Value price compared to Leonard and Powers T/P Valves.
- SentinelPro T/P cartridges can be retrofit into existing Speakman pressure balancing valve bodies with spring check stops.

DUAL ELEMENT

Stainless steel balancing piston & wax filled thermostatic element. The Balance Pressure Element provides protection from pressure variances between hot and cold supplies, while the Thermostatic Element provide protection from scalding.

TLS FACTORY SETTINGS hot water temperature setting adjustment (Temperature Limit Stop (TLS)) of the valve has been factory set at 110 F. 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.



For use with trim models:

CPV-5000			CPV-5000
			
CPT-5000	CPT-1000-TP	CPT-1300-TP	CPT-5400

THERMOSTATIC/PRESSURE BALANCED | CPV-TP, CPV-TP-DV

Features

- ASME A112.18.1/CSA B125.1 AND ASSE 1016 certified
- Built-in check valves in cartridge
- Temperature limit stop allows installer to set maximum water temperature
- Integral spring check stops allows user to shut water off at valve
- 5 year limited warranty

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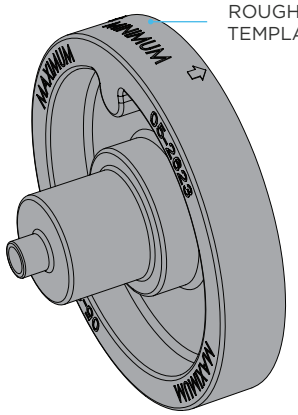
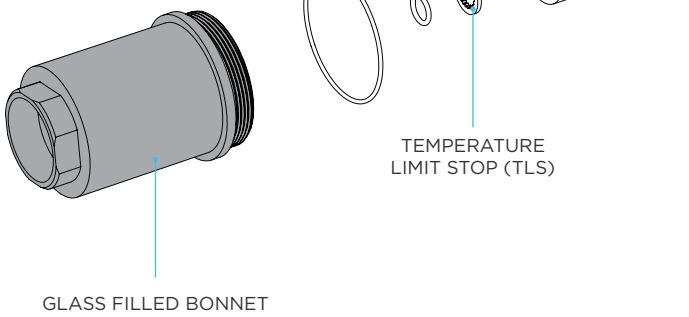
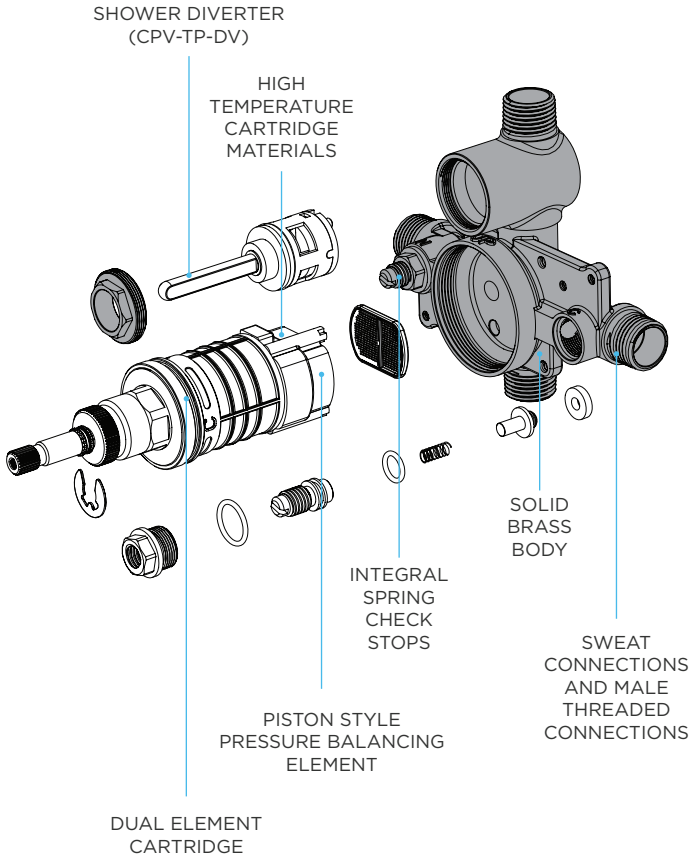






For use with trim models:

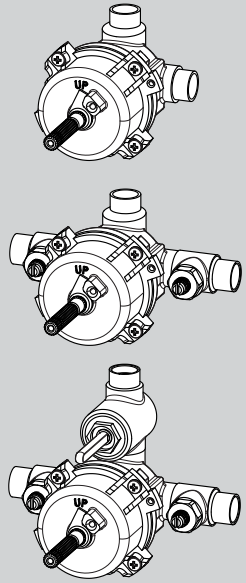
CPV-TP	CPV-TP-DV	CPV-TP	
			
CPT-5000	CPT-5400	CPT-1000-TP	CPT-1300-TP

(-P) PRESSURE BALANCED VALVE INSTALLATION

How to install

INSTRUCTIONS FOR MODELS

CPV-P-IS
CPV-P-DV
CPV-3000
CPV-3000-IS
CPV-3400



NEED HELP?

For additional assistance or service please contact:

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

800-537-2107

customerservice@speakmancompany.com

www.speakmancompany.com

92-CPV-P-R2

TOOLS AND SUPPLIES

HELPFUL TOOLS & SUPPLIES:

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.
- 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 2.0 gpm (7.5 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.

SAFETY TIPS

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

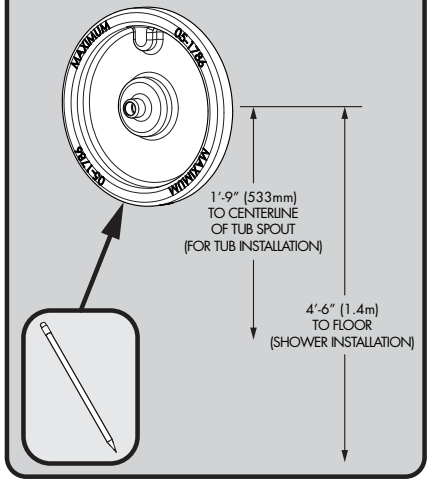
MAINTENANCE

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.

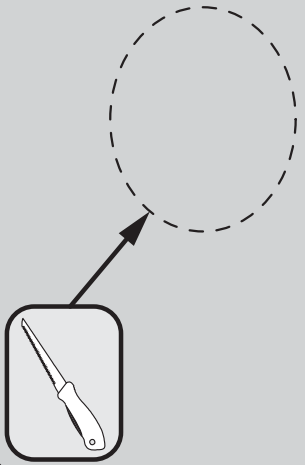
WARRANTY

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

1 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.



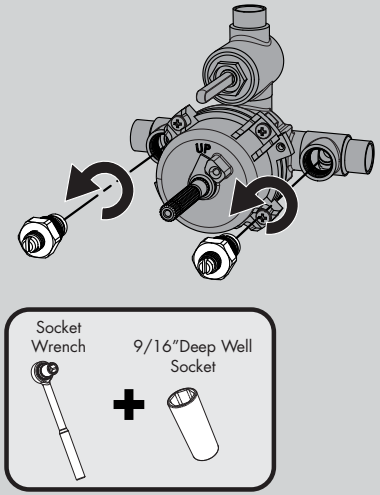
2 Using a keyhole saw or similar tool, cut along traced line and remove this section of wall.



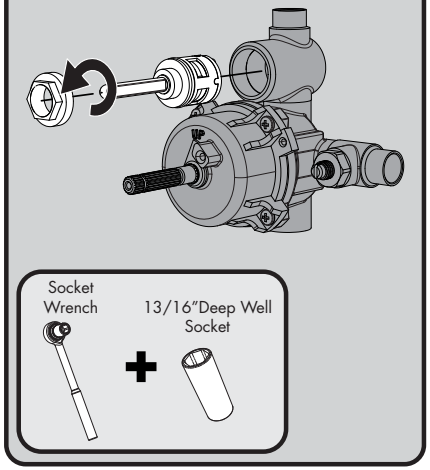
(-P) PRESSURE BALANCED VALVE INSTALLATION

How to install

3 If your model of shower valve has Integral Stops, unthread and remove them using a socket wrench equipped with a 9/16" deep well socket.

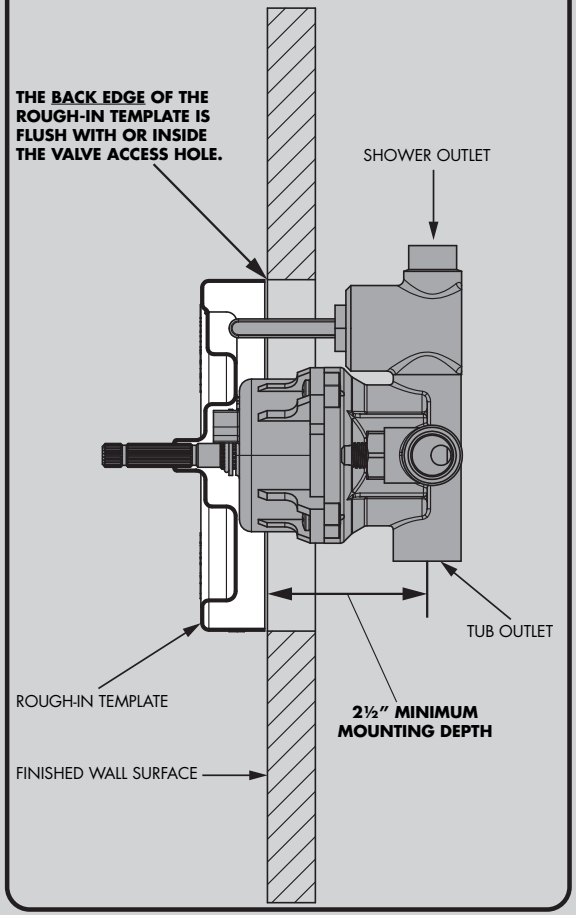


4 If your Shower Valve is equipped with an integral diverter, remove the Diverter Nut using a socket wrench and a 13/16" deep well socket. Remove Diverter Cartridge to prevent damage during soldering.

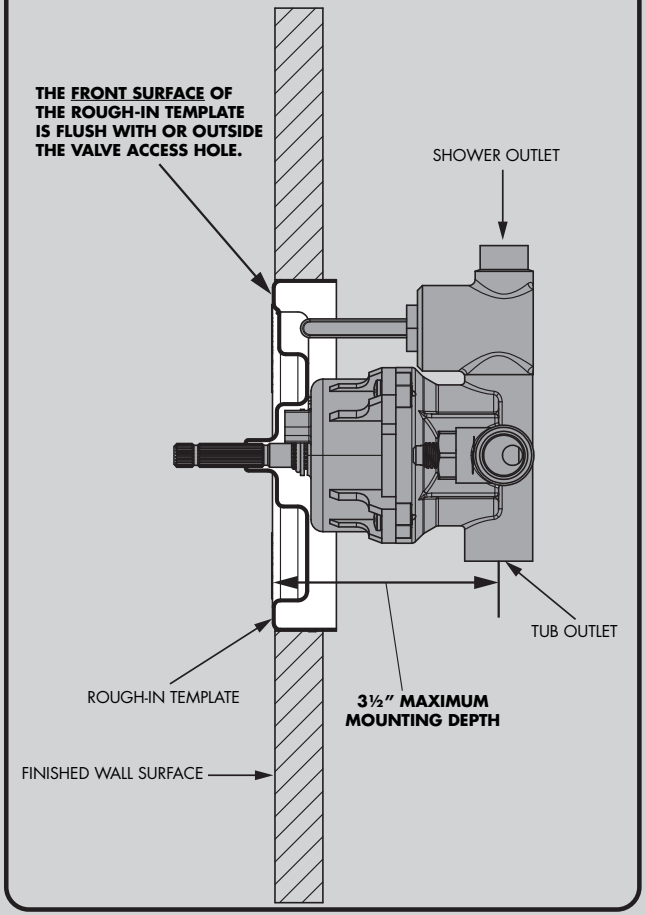


5 Install the Rough-In Template over the Shower Valve being sure the Rough-In Template sits flush against Shower Valve Bonnet. Following the rough-in dimensions for your model of valve (located ot the end of this manual) as well as the markings on the supplied rough-in template, install valve at proper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

MINIMUM MOUNTING DEPTH



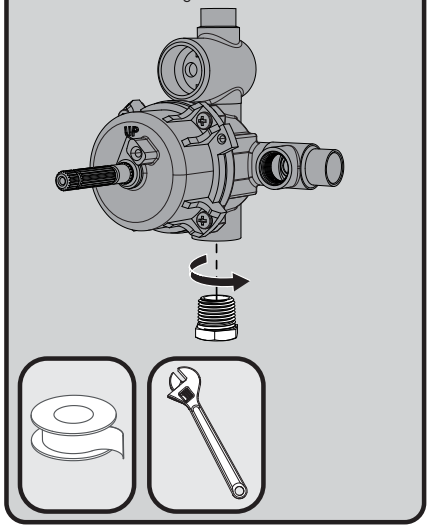
MAXIMUM MOUNTING DEPTH



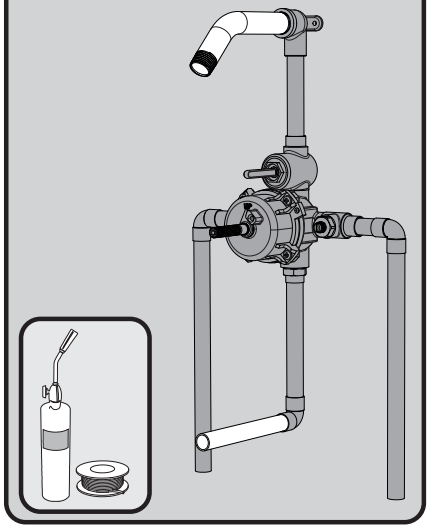
(-P) PRESSURE BALANCED VALVE INSTALLATION

How to install

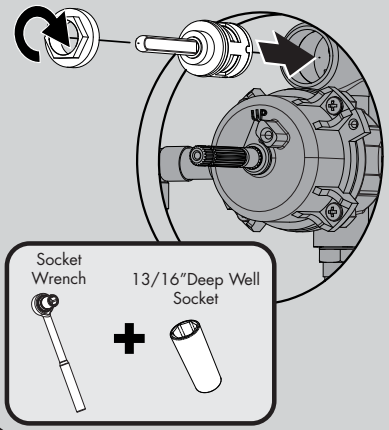
6 If your installation is for a shower only, apply thread seal tape to the included ½" Pipe Plug and install into the lower port of the shower valve. Wrench tighten.



8 Make piping connections for all accessories. Take care to protect surrounding area when soldering. Secure piping to surrounding structure.



10 If your Shower Valve is equipped with an integral diverter, reinstall the Diverter Cartridge taking care to align mounting posts of cartridge with the corresponding holes in the valve body. Install Diverter Nut and tighten with a Ratchet Wrench and 13/16" Socket. Take care to not over-tighten connections.



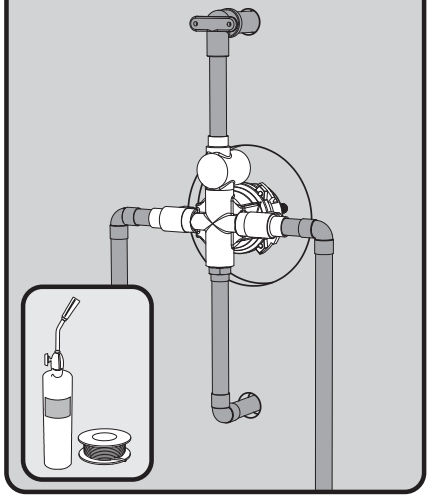
11 Your Shower Valve has the ability to be mounted back-to-back with another Valve in a shared space. This means the hot and cold inlets may be reversed. Please see the following steps to adapt your valve for back-to-back mounting or reversed inlet supplies.

If you are performing a **Standard Installation**, please proceed to **Step 14**

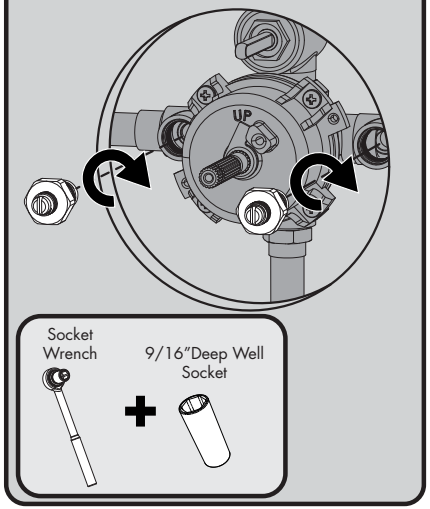
OR

If you are performing a **Back to Back Installation**, or have reversed inlet supplies, please proceed to **Step 12**

7 Ensure Valve is positioned plumb and level. Remove Rough-In Template from Valve. Plumb and solder all joints and fittings. Take care to protect surrounding area when soldering. Secure piping to surrounding structure.

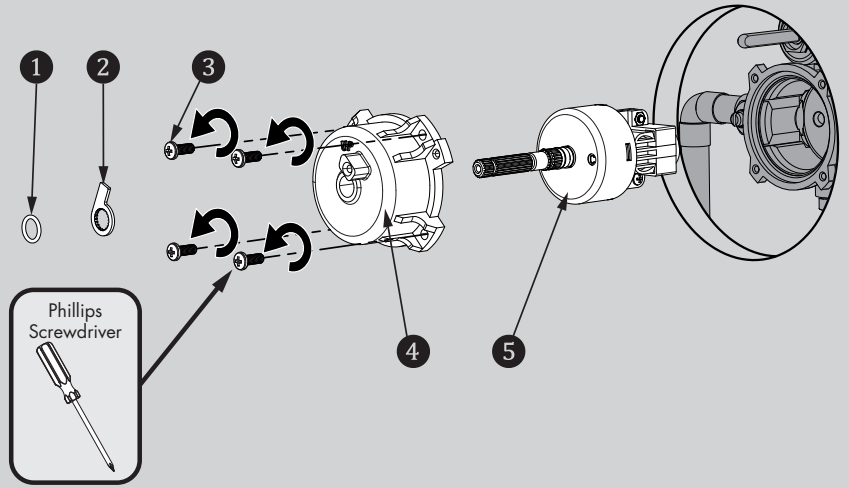


9 If your model of shower valve has Integral Stops, reinstall them using a socket wrench equipped with a 9/16" deep well socket or crescent wrench.



12 **BACK-TO BACK INSTALLATION**

To adapt your shower valve for back to back installation, remove spindle O-ring ❶, TLS plate ❷, and four (4) Bonnet Screws ❸. Then remove Bonnet ❹ and Cartridge Assembly ❺ from valve body.

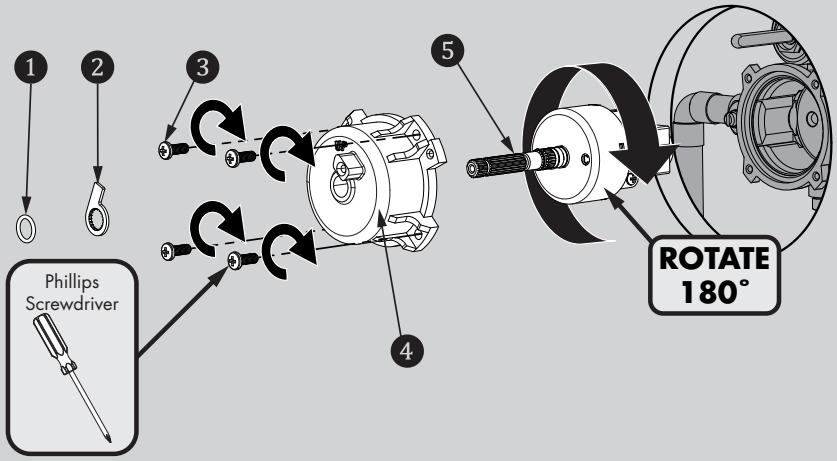


(-P) PRESSURE BALANCED VALVE INSTALLATION

How to install

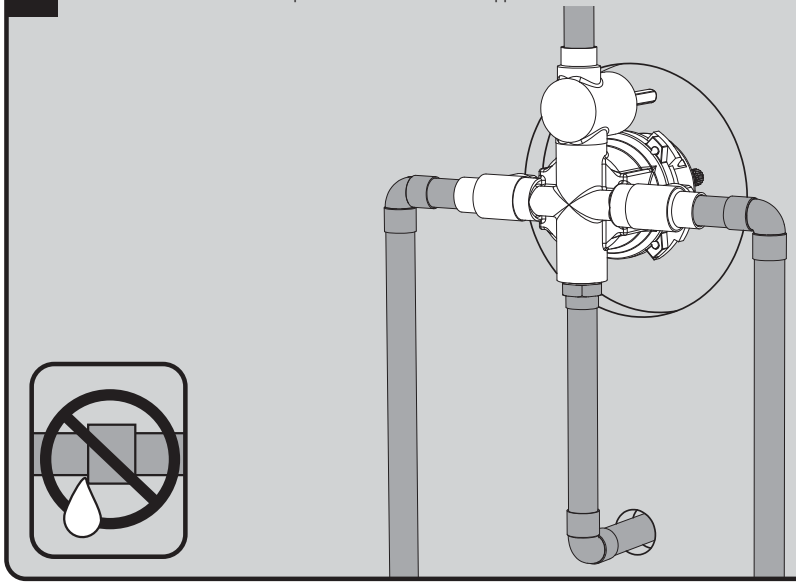
13 BACK TO BACK INSTALLATION

Rotate Valve Cartridge 5 180° and reinstall into Valve Body. The "H" marking on the blue Valve Cartridge cover should now be on the right hand side. Reinstall Bonnet 4 and four (4) Bonnet Screws 3, making sure the Large Bonnet O-Ring is in place within the Valve Body. Reinstall TL S Plate 2 and Spindle O-Ring 1.



14

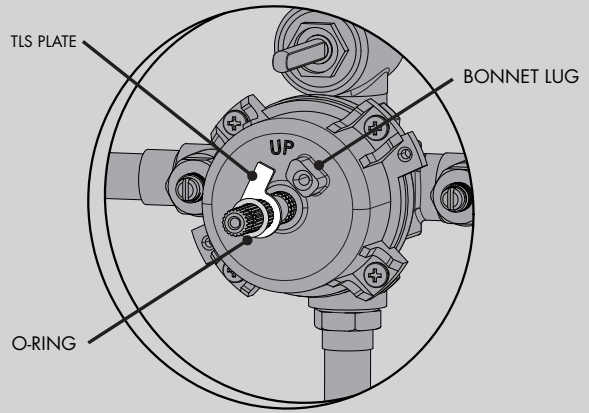
Ensure the Valve is in the "OFF" position. Turn "ON" water supplies and check all connections for leaks.



15 TEMPERATURE LIMIT ADJUSTMENT

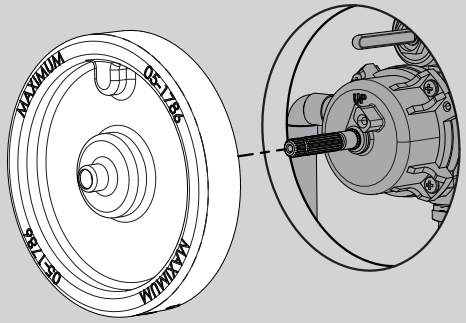
To limit the maximum hot water temperature the valve delivers, adjust the valve's temperature limit stop (TLS) plate.

- 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 on the valve bonnet 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.

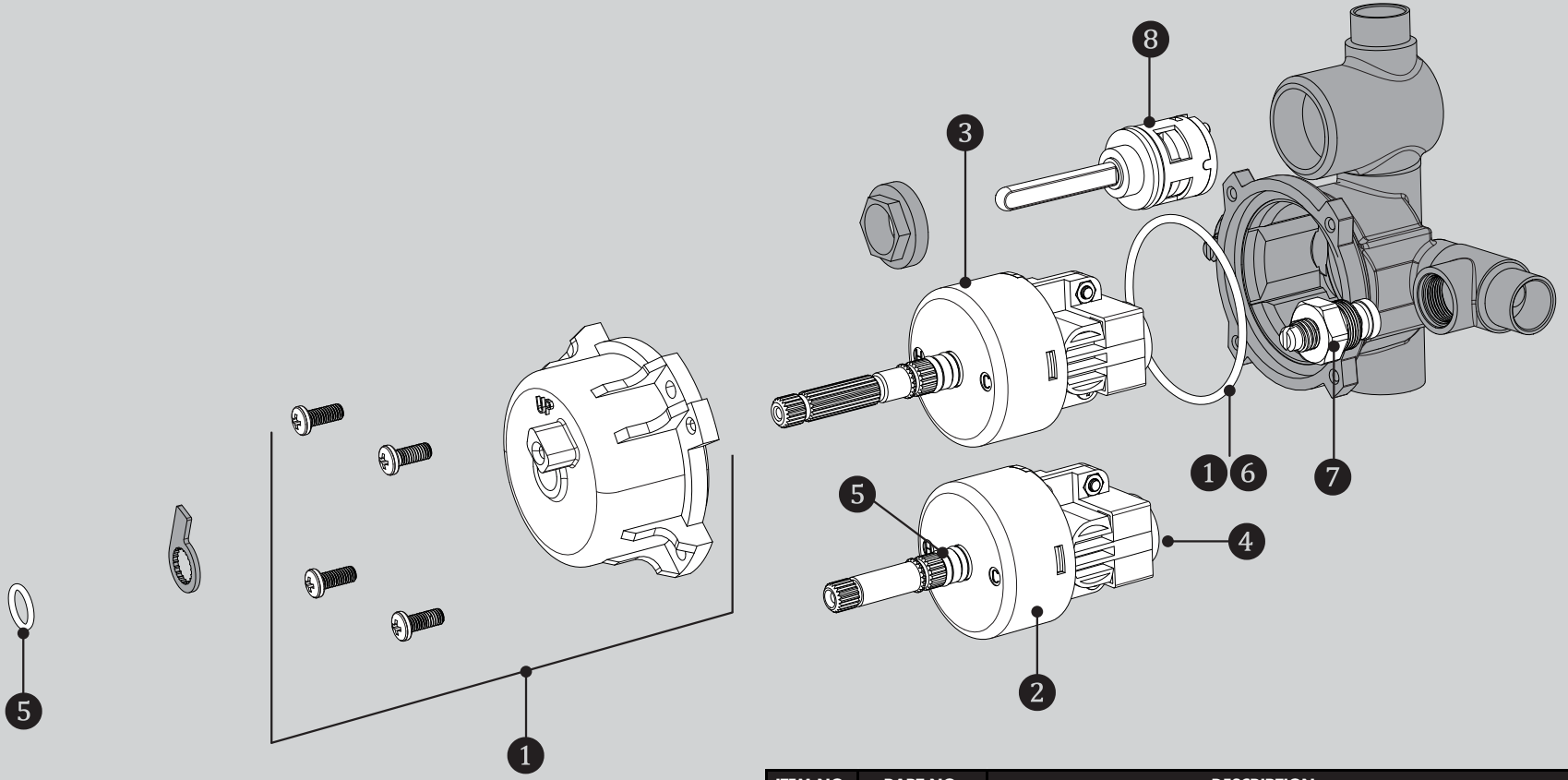


PRESSURE BALANCED VALVE

Repair Parts Diagram

CPV-P-IS / CPV-P-DV / CPV-3000 / CPV-3000-IS / CPV-3400 REPAIR PARTS

SPEAKMAN®

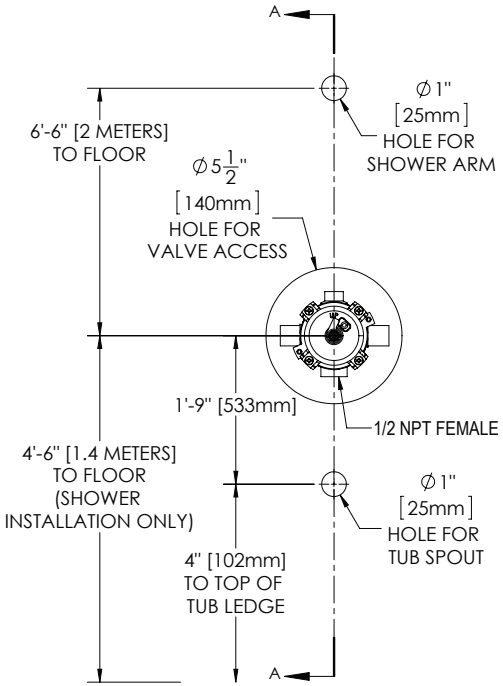


ITEM NO.	PART NO.	DESCRIPTION
1	RPG05-0718	4 SCREWS, BONNET, AND BONNET O-RING
2	RPG05-0884	REPLACEMENT CARTRIDGE FOR MODELS CPV-P-IS, CPV-P-DV
3	RPG05-0843	REPLACEMENT CARTRIDGE FOR MODELS CPV-3000, CPV-3000-IS, CPV-3400
4	RPG49-0005	CARTRIDGE LOWER QUAD RINGS
5	RPG49-0076	SPINDLE O-RINGS
6	RPG49-0126	LARGE BONNET O-RING
7	RPG05-0876	INTEGRAL STOP REPAIR KIT
8	RPG05-0897	REPLACEMENT DIVERTER CARTRIDGE

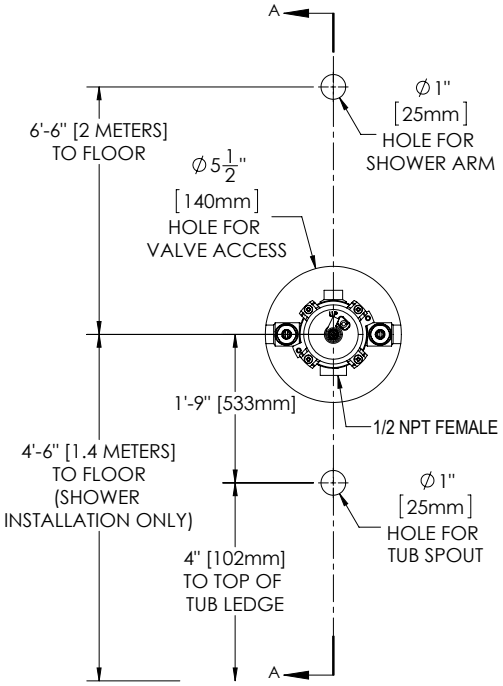
(-P) PRESSURE BALANCED VALVE INSTALLATION

Rough-in Diagrams

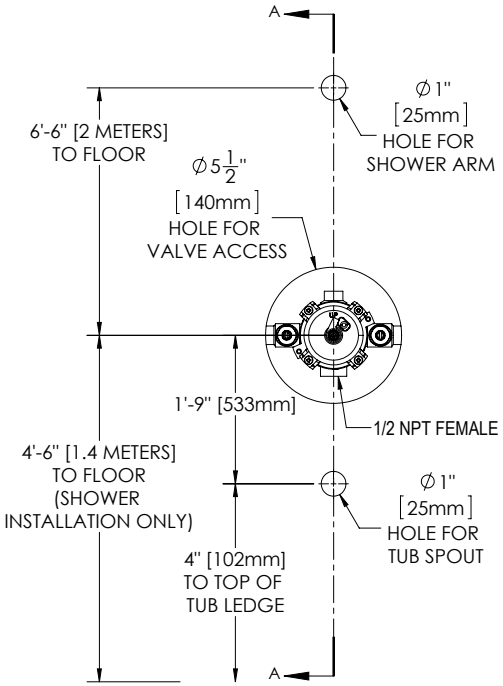
CPV-P

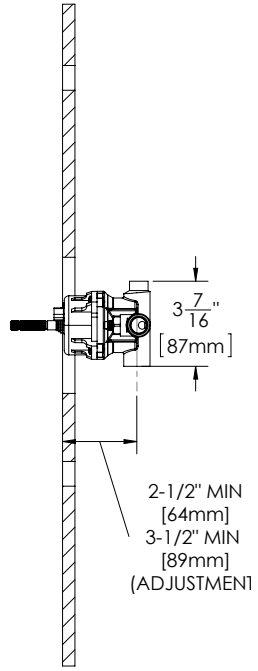


CPV-P-IS



CPV-3000-IS

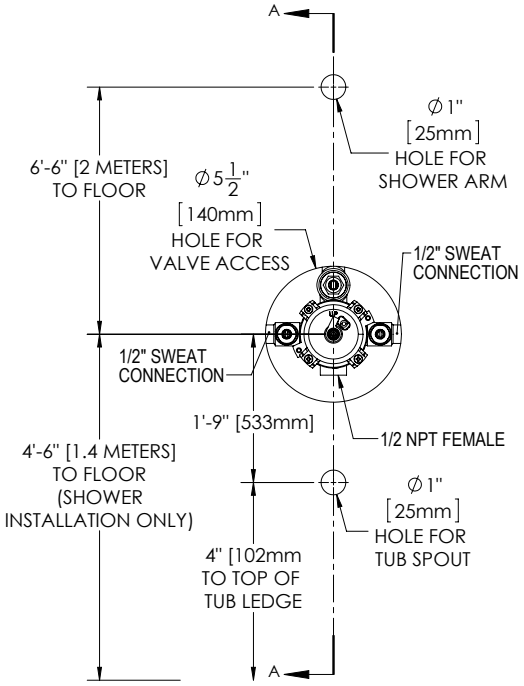




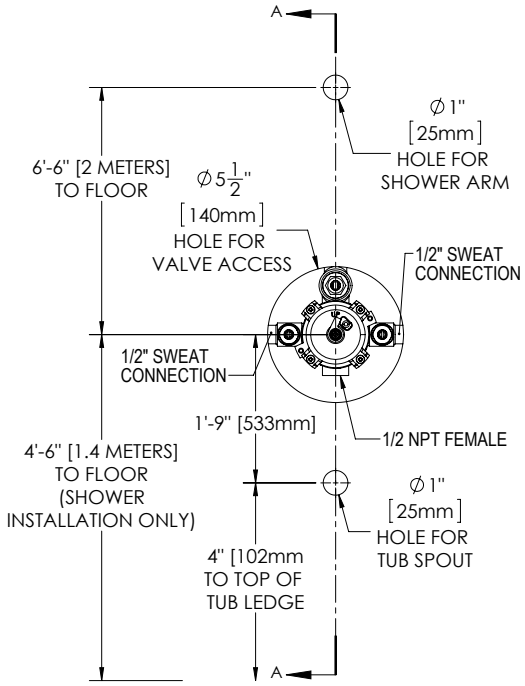
(-P) PRESSURE BALANCE VALVE INSTALLATION

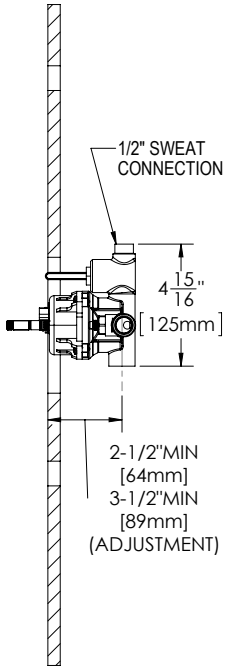
Rough-in Diagram (Diverter Models)

CPV-P-DV



CPV-3400





Pressure Balanced Service Instructions:

MAINTENANCE INSTRUCTIONS

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 Valve Cartridge Quad Rings 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.

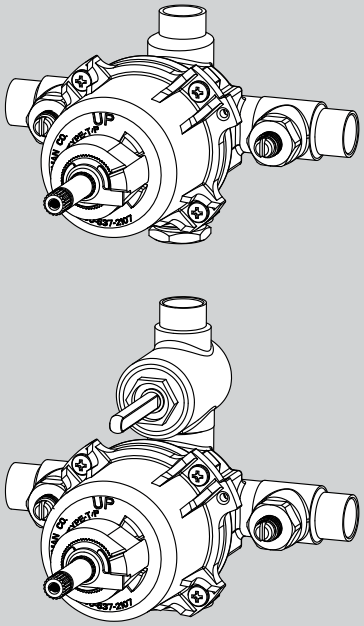
(-TP)
GEN 1

THERMOSTATIC/PRESSURE BALANCED VALVE INSTALLATION

How to install

INSTRUCTIONS FOR MODELS

CPV-5000
CPV-5400



NEED HELP?

For additional assistance or service please contact:

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

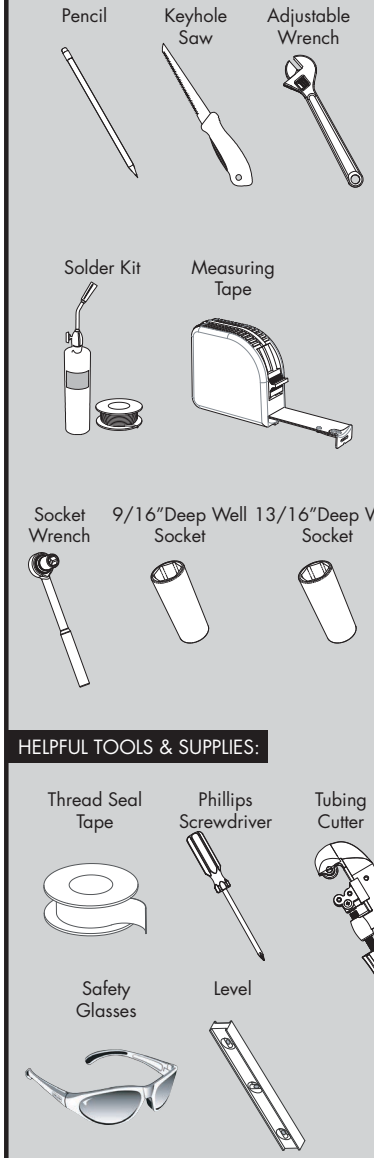
800-537-2107

customerservice@speakman.com

www.speakman.com

92-CPV-5000-R1

TOOLS AND SUPPLIES



HELPFUL TOOLS & SUPPLIES:

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.
- 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 Vavle Cartridge Quad Rings 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

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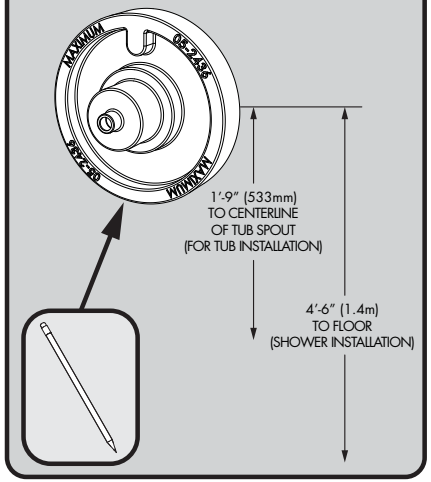
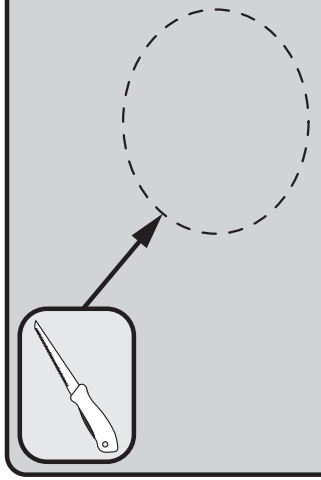
1

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.



2

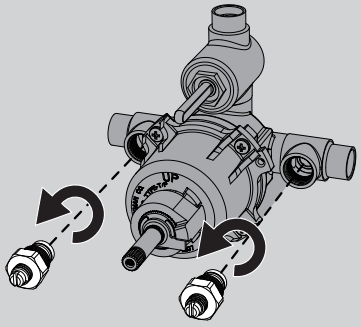
Using a keyhole saw or similar tool, cut along traced line and remove this section of wall.

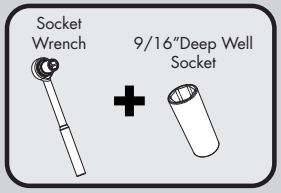


THERMOSTATIC/PRESSURE BALANCED VALVE INSTALLATION

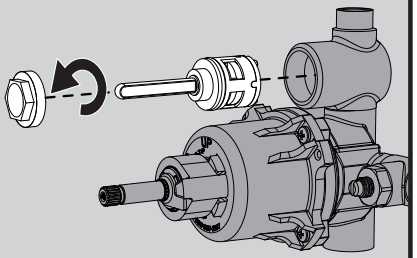
How to install

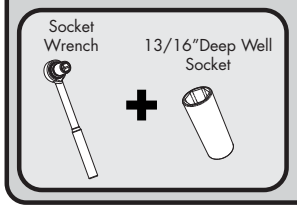
3 Unthread and remove the Integral Stops using a socket wrench equipped with a 9/16" deep well socket.





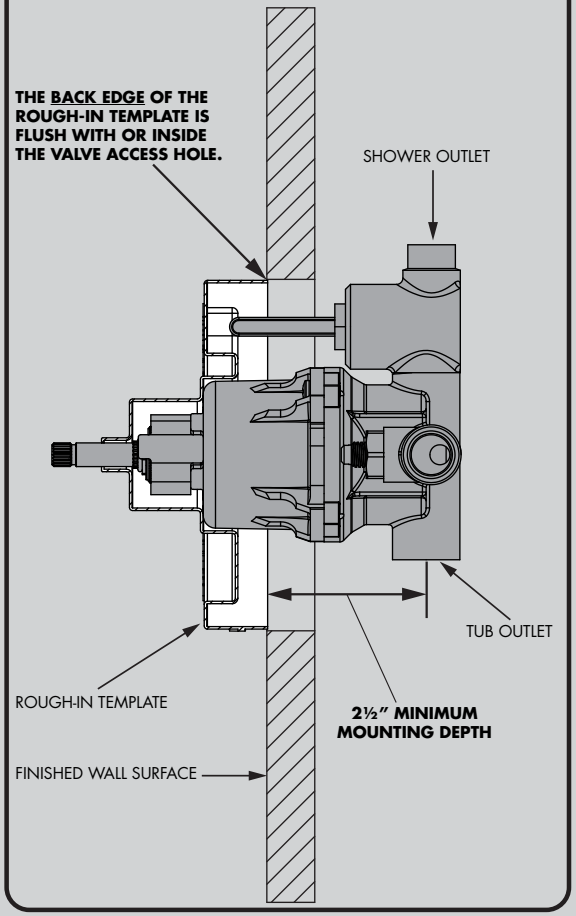
4 If your Shower Valve is equipped with an integral diverter, remove the Diverter Nut using a socket wrench and a 13/16" deep well socket. Remove Diverter Cartridge to prevent damage during soldering.



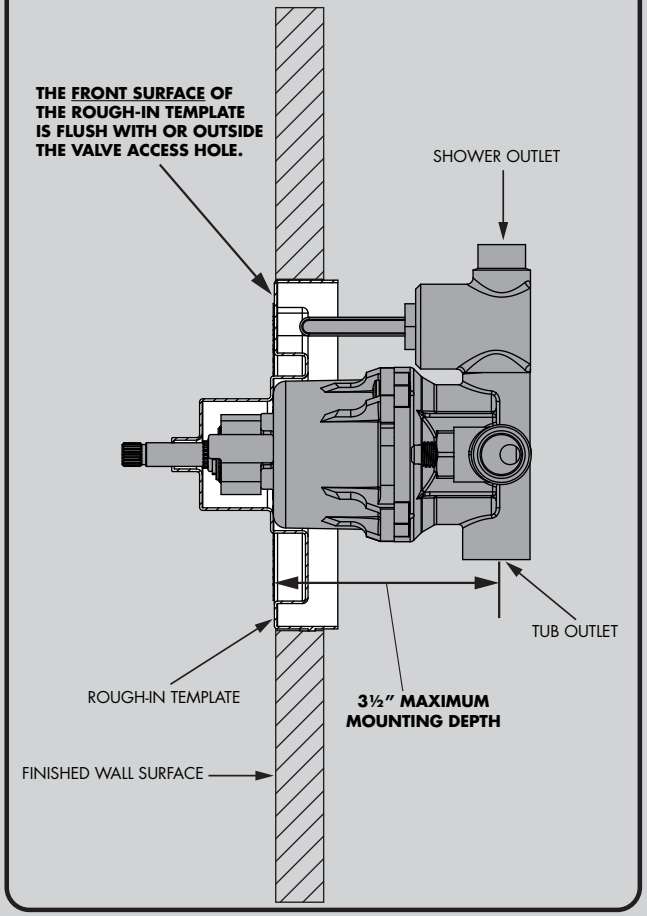


5 Install the Rough-In Template over the Shower Valve being sure the Rough-In Template sits flush against Shower Valve Bonnet. Following the rough-in dimensions for your model of valve (located ot the end of this manual) as well as the markings on the supplied rough-in template, install valve at proper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

MINIMUM MOUNTING DEPTH



MAXIMUM MOUNTING DEPTH

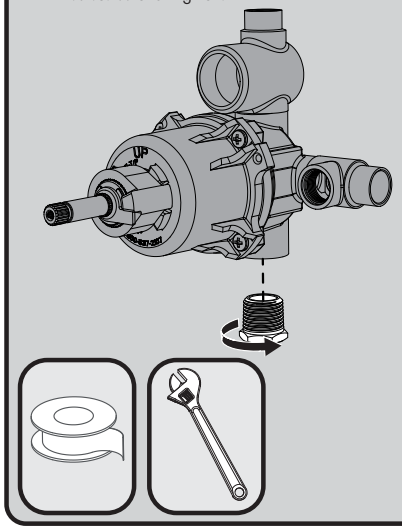


(-TP)
GEN 1

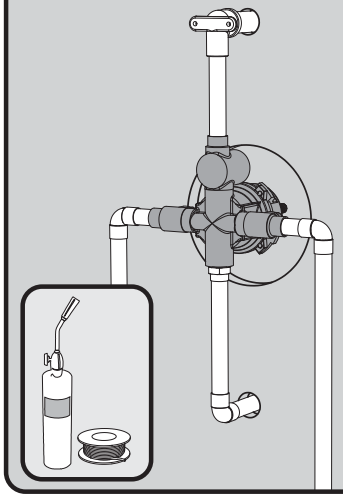
THERMOSTATIC/PRESSURE BALANCED VALVE INSTALLATION

How to install

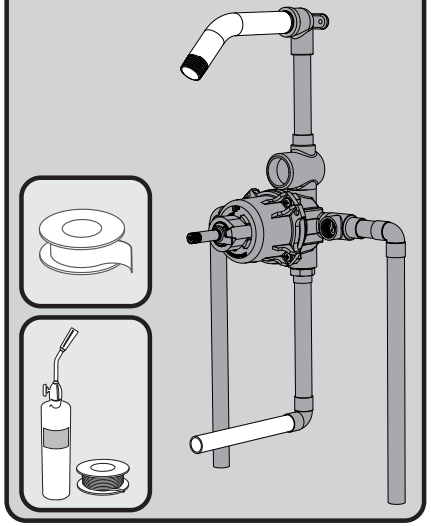
6 If your installation is for a shower only, apply thread seal tape to the included ½" Pipe Plug and install into the lower port of the shower valve. Wrench tighten.



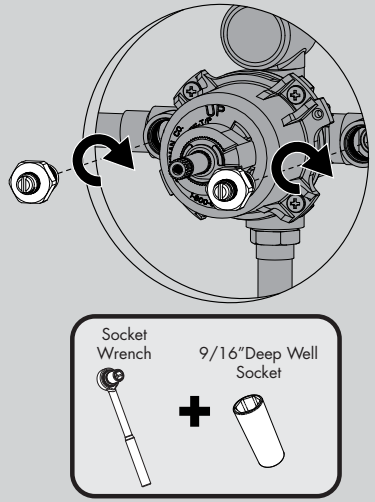
7 Ensure Valve is positioned plumb and level. Remove Rough-In Template from Valve. Plumb and solder all joints and fittings. Take care to protect surrounding area when soldering. Secure piping to surrounding structure.



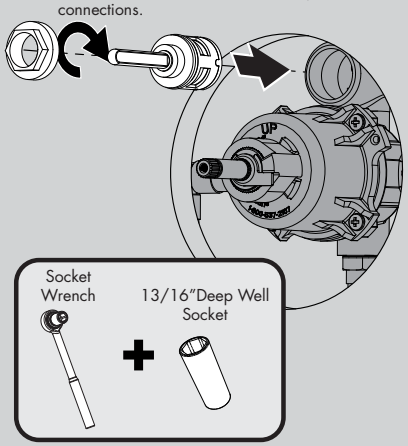
8 Make piping connections for all accessories. Take care to protect surrounding area when soldering. Secure piping to surrounding structure.



9 Reinstall the Integral Stops using a Socket Wrench equipped with a 9/16" Deep Well Socket or Crescent Wrench.



10 If your Shower Valve is equipped with an integral diverter, reinstall the Diverter Cartridge taking care to align mounting posts of cartridge with the corresponding holes in the valve body. Install Diverter Nut and tighten with a Socket Wrench and 13/16" Deep Well Socket. Take care to not over-tighten connections.



11 Your Shower Valve has the ability to be mounted back-to-back with another Valve in a shared space. This means the hot and cold inlets may be reversed. Please see the following steps to adapt your valve for back-to-back mounting or reversed inlet supplies.

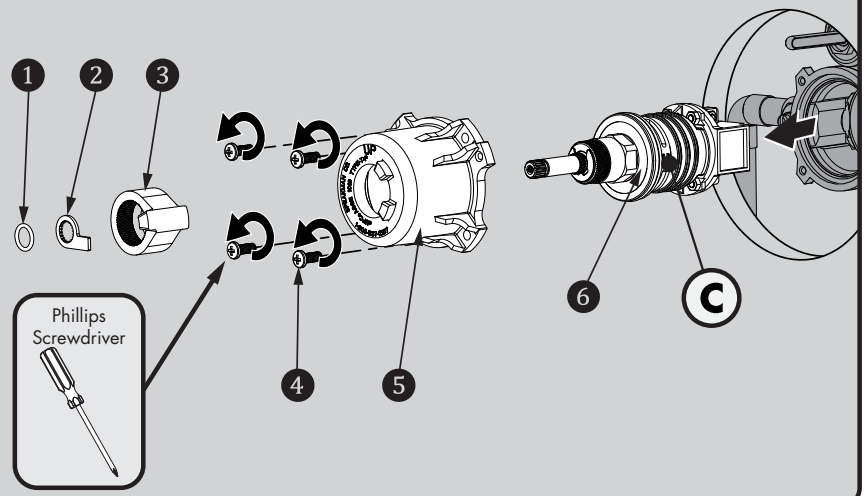
If you are performing a **Standard Installation**, please proceed to **Step 14**

OR

If you are performing a **Back to Back Installation**, or have reversed inlet supplies, please proceed to **Step 12**

12 BACK-TO BACK INSTALLATION STEP 1

To adapt your shower valve for back to back installation, remove spindle O-ring ❶, TLS plate ❷, TLS Stop Ring ❸, and four (4) Bonnet Screws ❹. Then remove Bonnet ❺, and Cartridge Assembly ❻ from valve body.

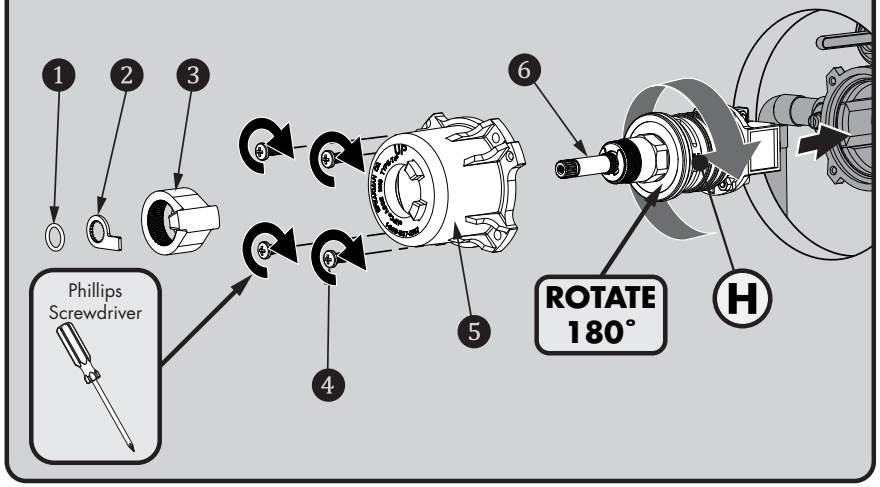


THERMOSTATIC/PRESSURE BALANCED VALVE INSTALLATION

How to install

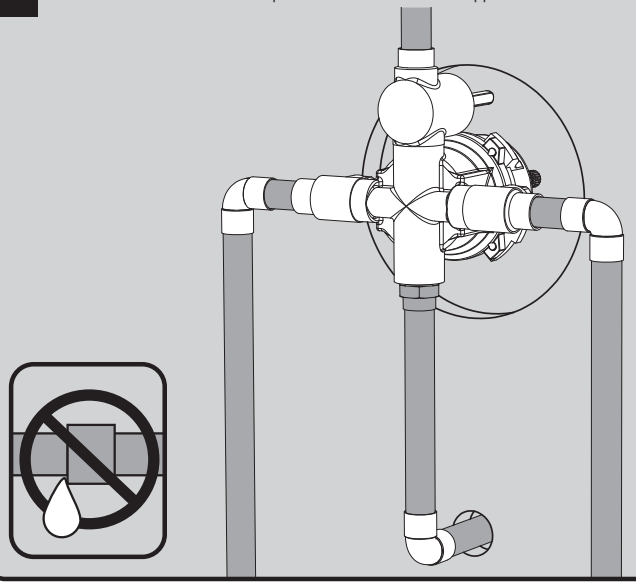
13 BACK TO BACK INSTALLATION STEP 2

Rotate Valve Cartridge ❻ 180° and reinstall into Valve Body. The "H" marking on Valve Cartridge cover should now be on the right hand side. Reinstall Bonnet ❺ and four (4) Bonnet Screws ❹, making sure the Large Bonnet O-Ring is in place within the Valve Body. Reinstall TL S Stop Ring ❸, TLS Plate ❷, and Spindle O-Ring ❶.



14

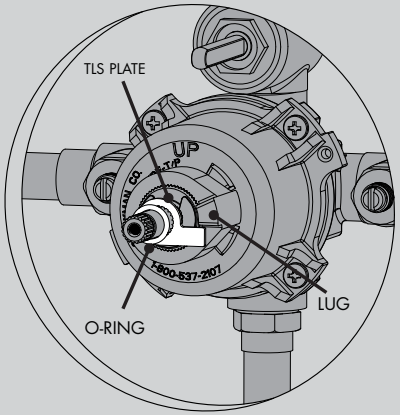
Ensure the Valve is in the "OFF" position. Turn "ON" water supplies and check all connections for leaks.



15 TEMPERATURE LIMIT ADJUSTMENT

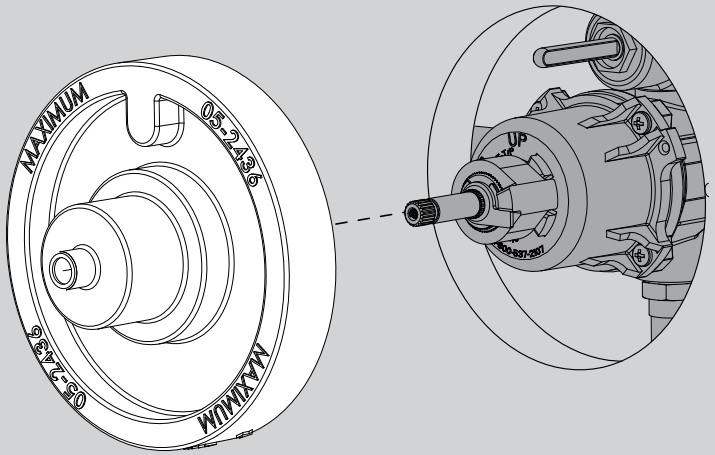
The maximum hot water temperature setting adjustment (Temperature Limit Stop (TLS)) of the valve has been factory set at 110° F. Important- Check each valve installation with a thermometer to make sure the maximum hot water temperature is set to the recommended setting of 110° F maximum. To lower the 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 counter clockwise to the maximum desired hot water temperature.
- Position the TLS plate so it contacts the lug on the valve bonnet and therefore restricts the counter-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 clockwise to the "Off" position.



16

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

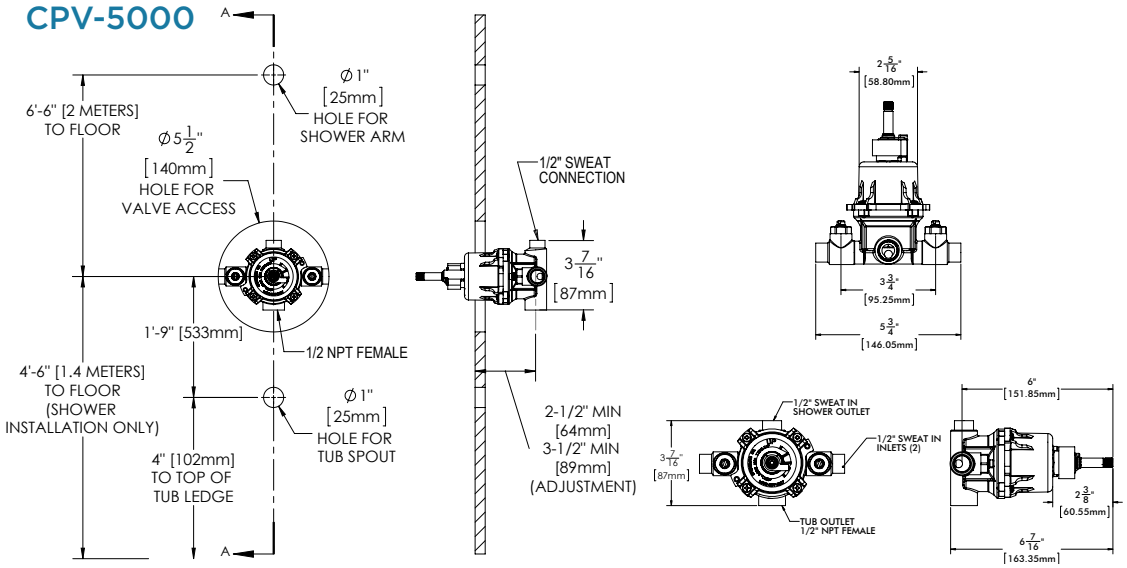


(-TP) GEN 1

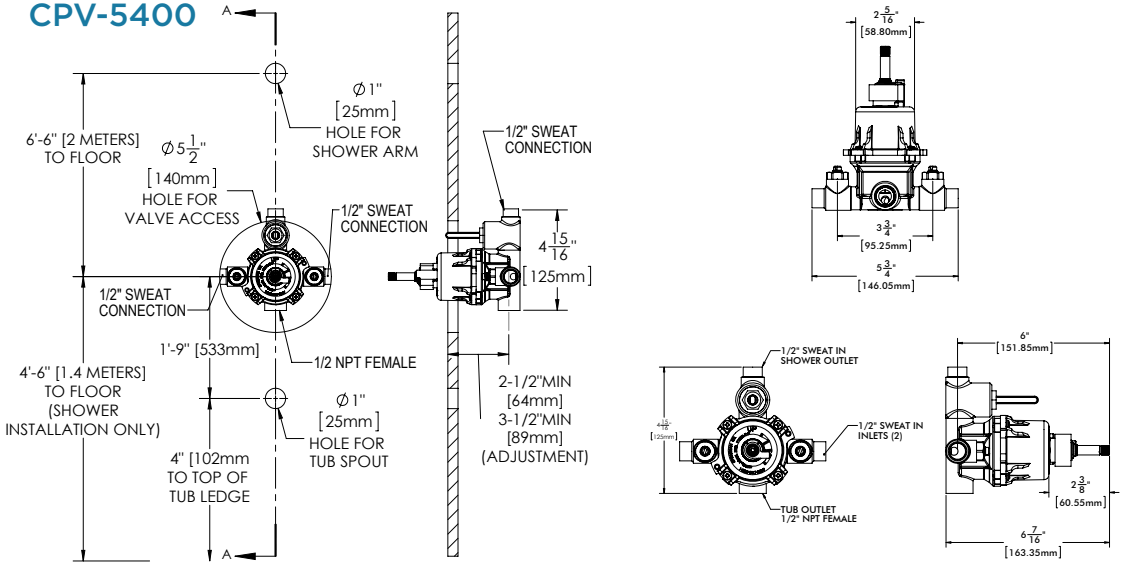
THERMOSTATIC/PRESSURE BALANCED VALVE INSTALLATION

Rough-in

CPV-5000



CPV-5400



CPV-5000/CPV-5400 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 handle index button & handle. Remove index retaining ring & index. Remove wall plate screws (2) & wall plate. Remove the trim sleeve.
2. With the valve in the OFF position, remove the retaining O-ring and TLS plate from the valve spindle. Remove the TLS ring from the valve cartridge. Remove the (4) valve bonnet screws and carefully remove the bonnet. 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 rubber quad rings (2) are installed in the bottom of the cartridge and not in the valve body. Inspect Quad Rings with Integral Screens to verify they are debris free. If debris is present, remove Quad Rings and clean Screen material.
4. Replace the necessary parts with new parts. When replacing the T/P cartridge, make sure that the rubber quad-rings (2) are properly installed in the recesses on the bottom of the cartridge. These quad-rings seal over the hot & cold inlet holes inside the body. When replacing the cartridge, refer to Figure #12 for proper positioning of cartridge in the valve body.
5. Make sure the large bonnet O-ring seal is installed and seated properly in the valve body. Reassemble the valve bonnet, making sure the "UP" on the bonnet is in the up position. Tighten the (4) bonnet screws. Reassemble the TLS ring onto the cartridge, so that the ring's lower lug (with hole) is positioned between the bonnet lugs (2). 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 trim parts, reversing the above procedure.

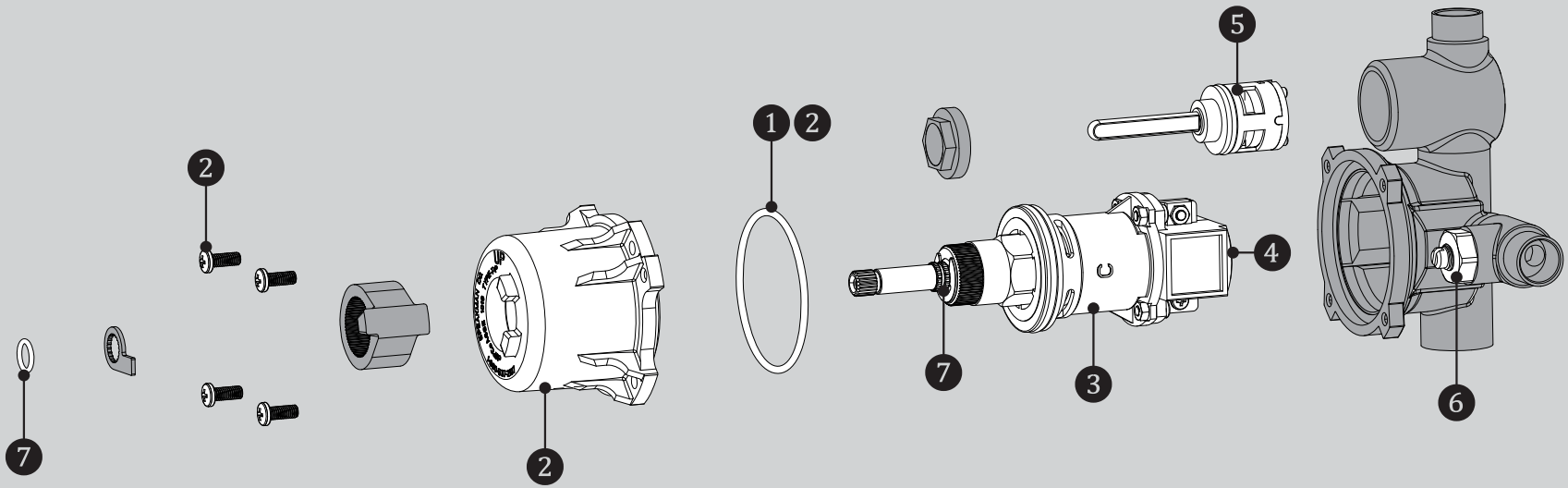
SPRING CHECK STOP PARTS REMOVAL

1. Shut off hot and cold water supply valves to the integral stops of the valve. Remove handle index button & handle. Remove index retaining ring & index. Remove wall plate screws (2) & wall plate.
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, reversing the above procedure.

THERMOSTATIC/PRESSURE BALANCED VALVE

Repair Parts Diagram

CPV-5000 / CPV-5400 REPAIR PARTS SPEAKMAN®



ITEM #	PART #	DESCRIPTION
1	RPG49-0126	BONNET O-RING
2	RPG05-0868	BONNET, SCREWS (4), & O-RING REPAIR GROUP
3	RPG05-0860	T/P REPAIR CARTRIDGE (COMPLETE w/SPINDLE)
4	RPG49-0006	LOWER QUAD RINGS WITH INTEGRAL SCREENS (2) FOR T/P CARTRIDGE
5	RPG05-0897	VOLUME CONTROL/DIVERTER CERAMIC REPAIR CARTRIDGE
6	RPG05-0862	CHECK STOP REPAIR GROUP (REPAIRS BOTH STOPS)
7	RPG49-0076	SPINDLE O-RINGS

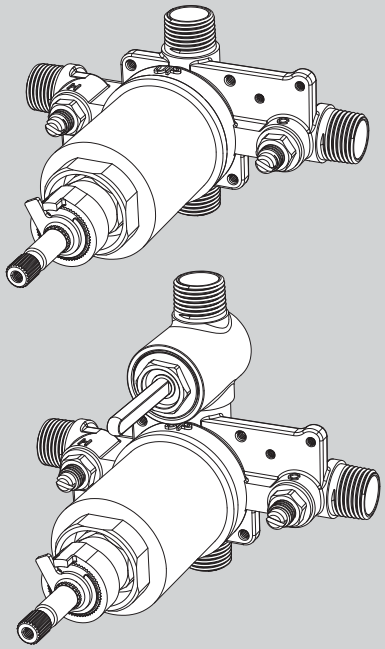
(-TP)
GEN 2

THERMOSTATIC/PRESSURE BALANCED VALVE INSTALLATION

How to install

INSTRUCTIONS FOR MODELS

CPV-TP
CPV-TP-DV



NEED HELP?

For additional assistance or service please contact:

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

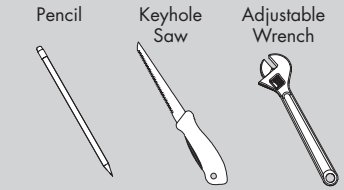
800-537-2107

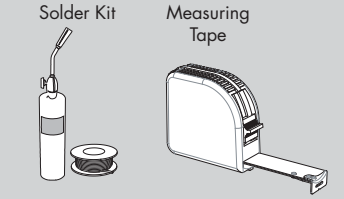
customerservice@speakman.com

www.speakman.com

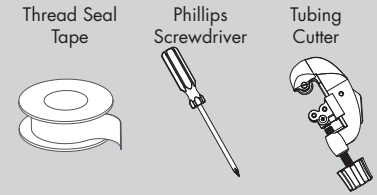
92-CPV-TP-01

TOOLS AND SUPPLIES





HELPFUL TOOLS & SUPPLIES:



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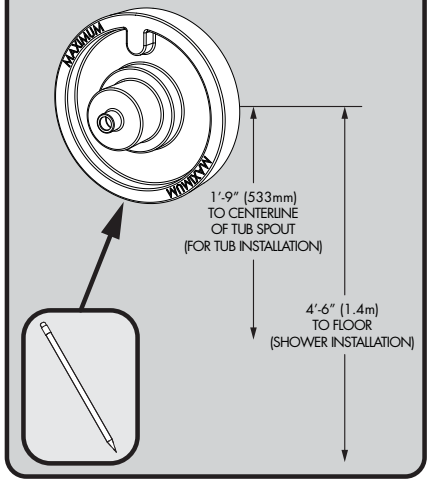

2

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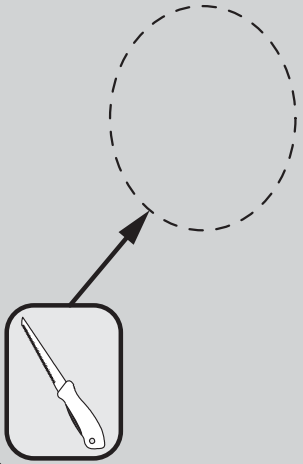

THERMOSTATIC/PRESSURE BALANCED VALVE INSTALLATION

How to install

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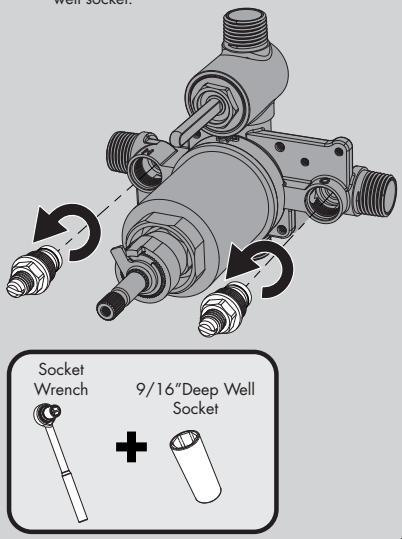

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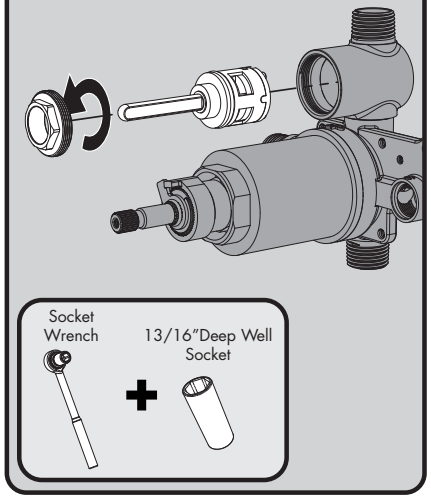

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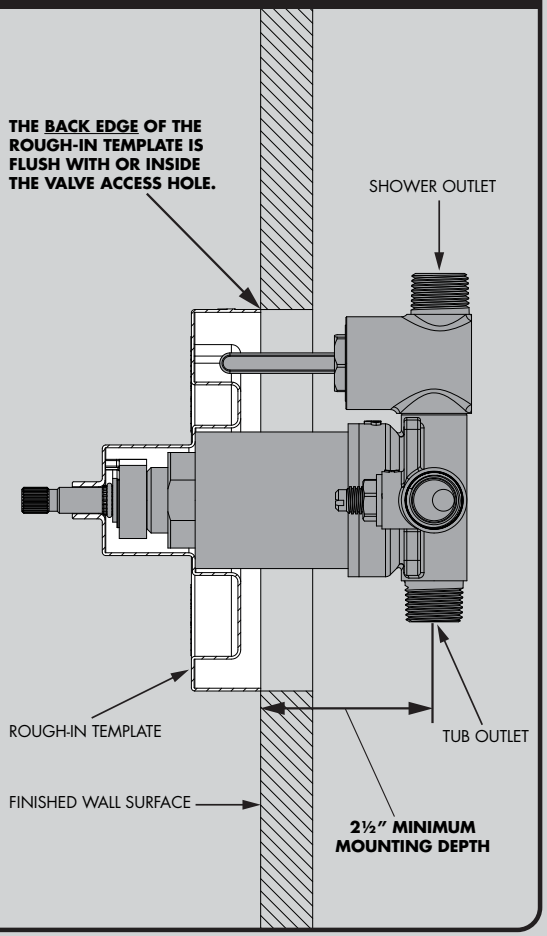
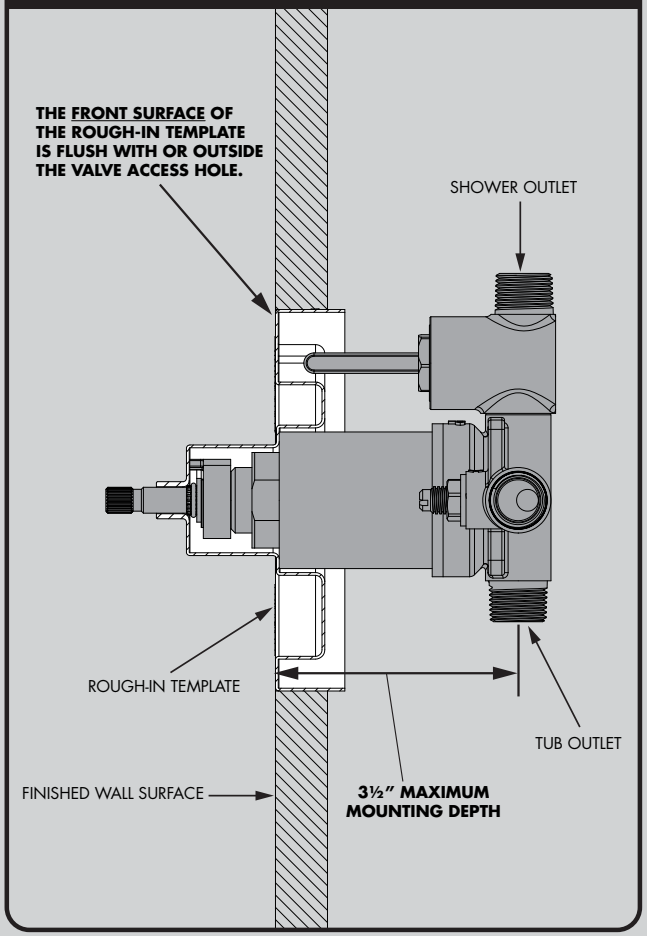
MINIMUM MOUNTING DEPTH



MAXIMUM MOUNTING DEPTH



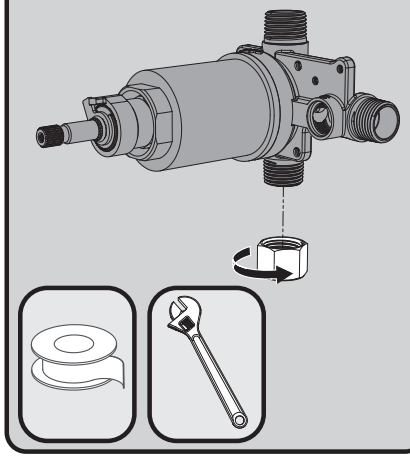
(-TP)
GEN 2

THERMOSTATIC/PRESSURE BALANCED VALVE INSTALLATION

How to install

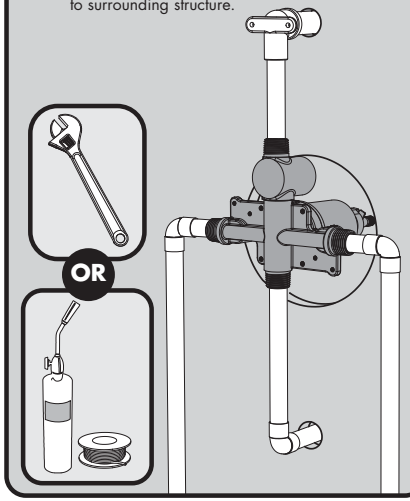
6 CPV-TP ONLY

If your installation is for a shower only, apply thread seal tape to the lower outlet port and install the included cap. Wrench tighten.



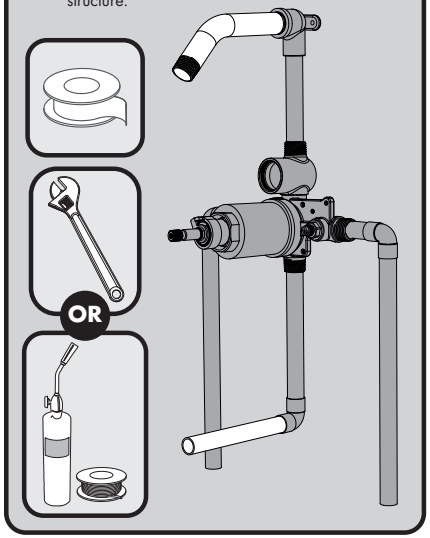
7

Ensure Valve is positioned plumb and level. Remove Rough-In Template from Valve. Make threaded connections or plumb and solder all joints and fittings. Take care to protect surrounding area when soldering. Secure piping to surrounding structure.



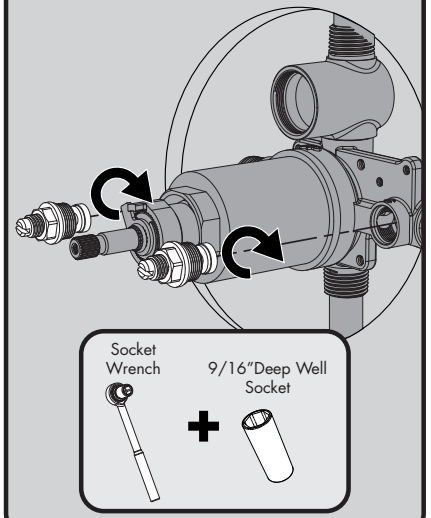
8

Make piping connections for all accessories. Take care to protect surrounding area when soldering. Secure piping to surrounding structure.



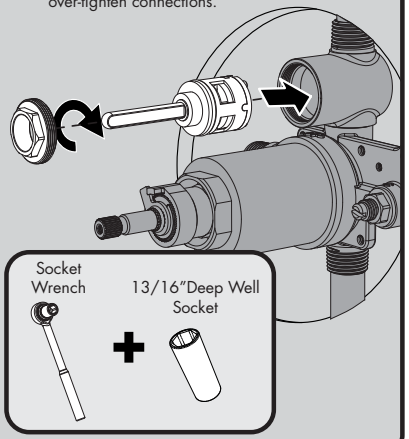
9

Reinstall the Integral Stops using a Socket Wrench equipped with a 9/16" Deep Well Socket or Crescent Wrench.



10

If your Shower Valve is equipped with an integral diverter, reinstall the Diverter Cartridge taking care to align mounting posts of cartridge with the corresponding holes in the diverter valve body. Install Diverter Nut and tighten with a Socket Wrench and 13/16" Deep Well Socket. Take care to not over-tighten connections.



11

Your Shower Valve has the ability to be mounted back-to-back with another Valve in a shared space. This means the hot and cold inlets may be reversed. Please see the following steps to adapt your valve for back-to-back mounting or reversed inlet supplies.

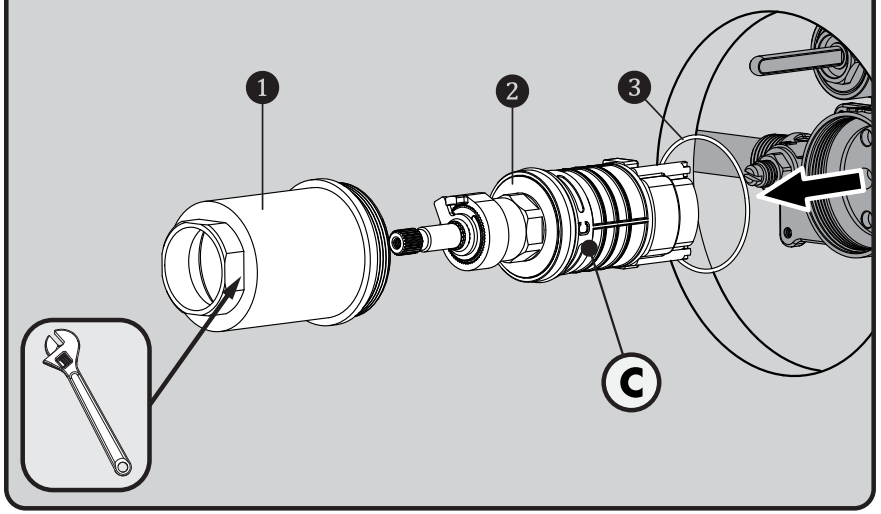
If you are performing a **Standard Installation**, please proceed to **Step 14**

OR

If you are performing a **Back to Back Installation**, or have reversed inlet supplies, please proceed to **Step 12**

12 BACK-TO BACK INSTALLATION STEP 1

To adapt your shower valve for back to back installation, use an adjustable wrench to unthread and remove the Bonnet ❶. Then remove Cartridge Assembly ❷, and Bonnet O-Ring ❸ from valve body.

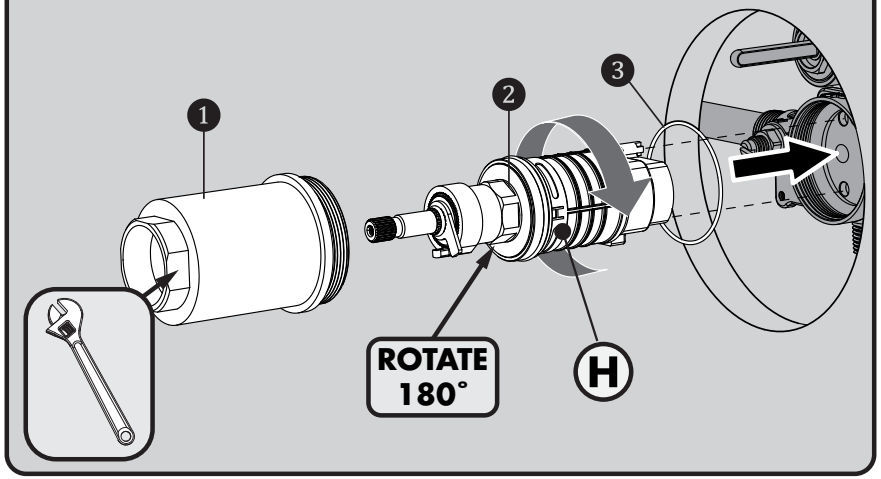


THERMOSTATIC/PRESSURE BALANCED VALVE INSTALLATION

How to install

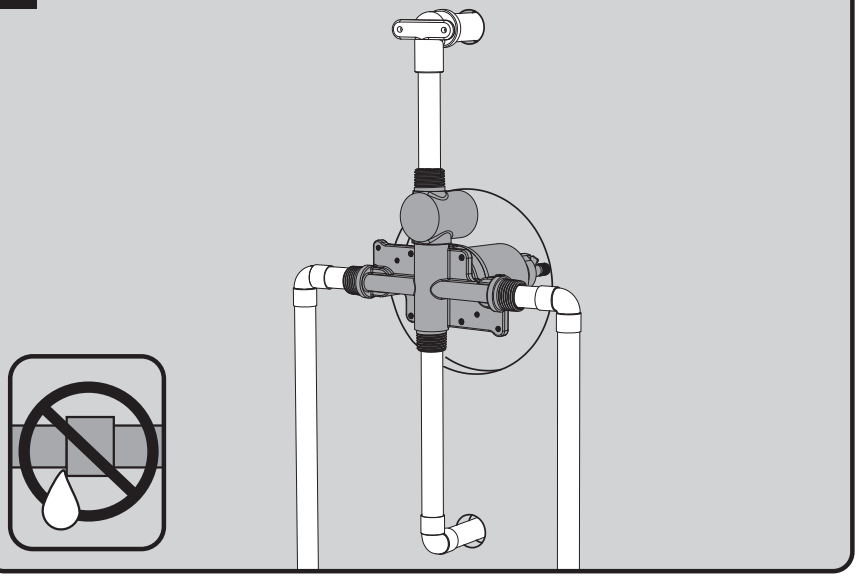
13 BACK TO BACK INSTALLATION STEP 2

Rotate Valve Cartridge ❷180° and reinstall into Valve Body taking care to properly align the mounting posts of the Cartridge with the corresponding holes within the Valve. The "H" marking on Valve Cartridge cover should now be on the right hand side. Reinstall Bonnet ❶ , making sure the Large Bonnet O-Ring ❸ is in place within the Valve Body.



14

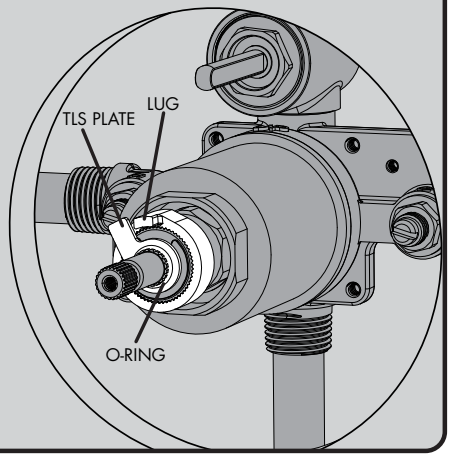
Ensure the Valve is in the "OFF" position. Turn "ON" water supplies and check all connections for leaks.



15 TEMPERATURE LIMIT ADJUSTMENT

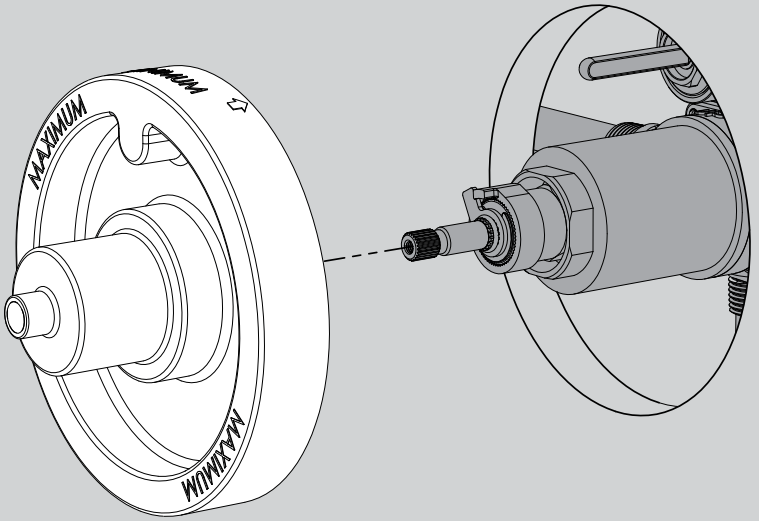
The maximum hot water temperature setting adjustment (Temperature Limit Stop (TLS)) of the valve has been factory set at 110° F. Important- Check each valve installation with a thermometer to make sure the maximum hot water temperature is set to the recommended setting of 110° F maximum. To lower the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



16

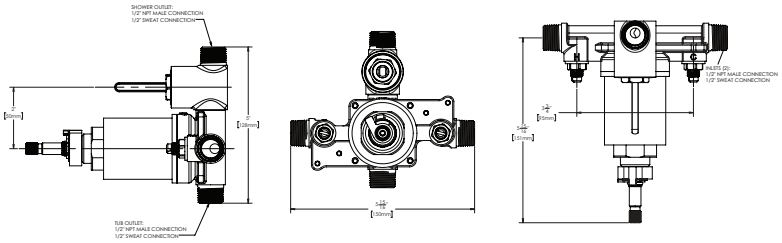
Reinstall Rough-In Template over Valve to protect it during final wall preparation.



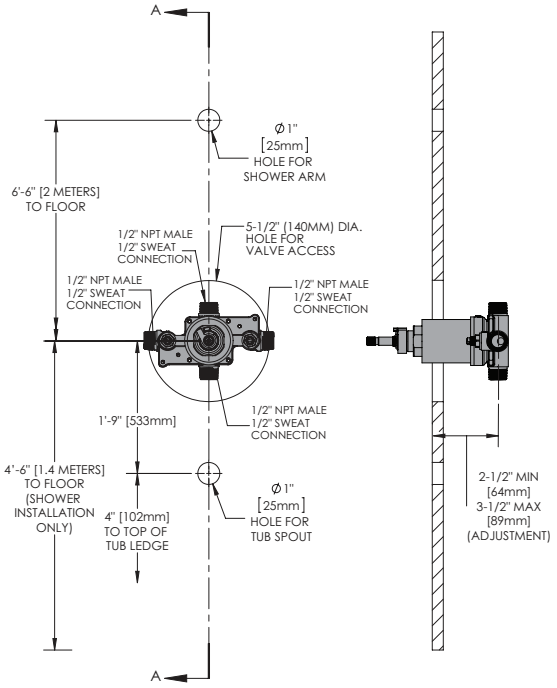
(-TP)
GEN 2

THERMOSTATIC/PRESSURE BALANCED VALVE INSTALLATION

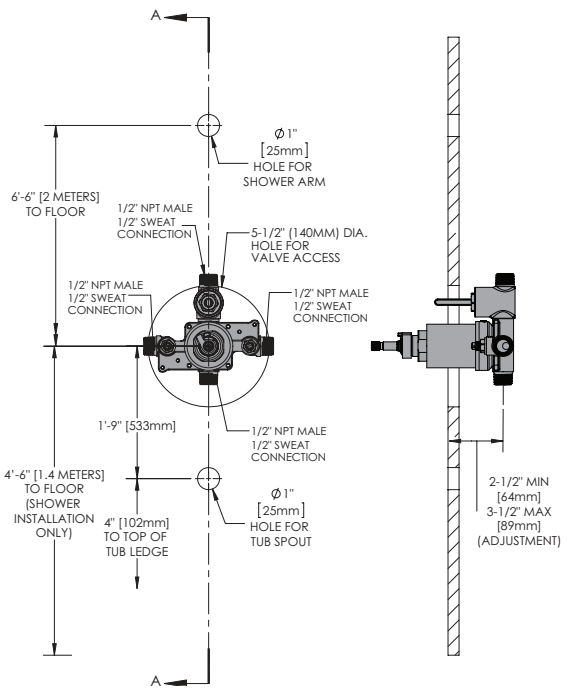
Rough-in

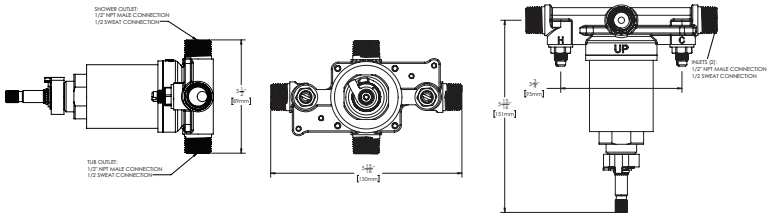


CPV-TP



CPV-TP-DV





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.

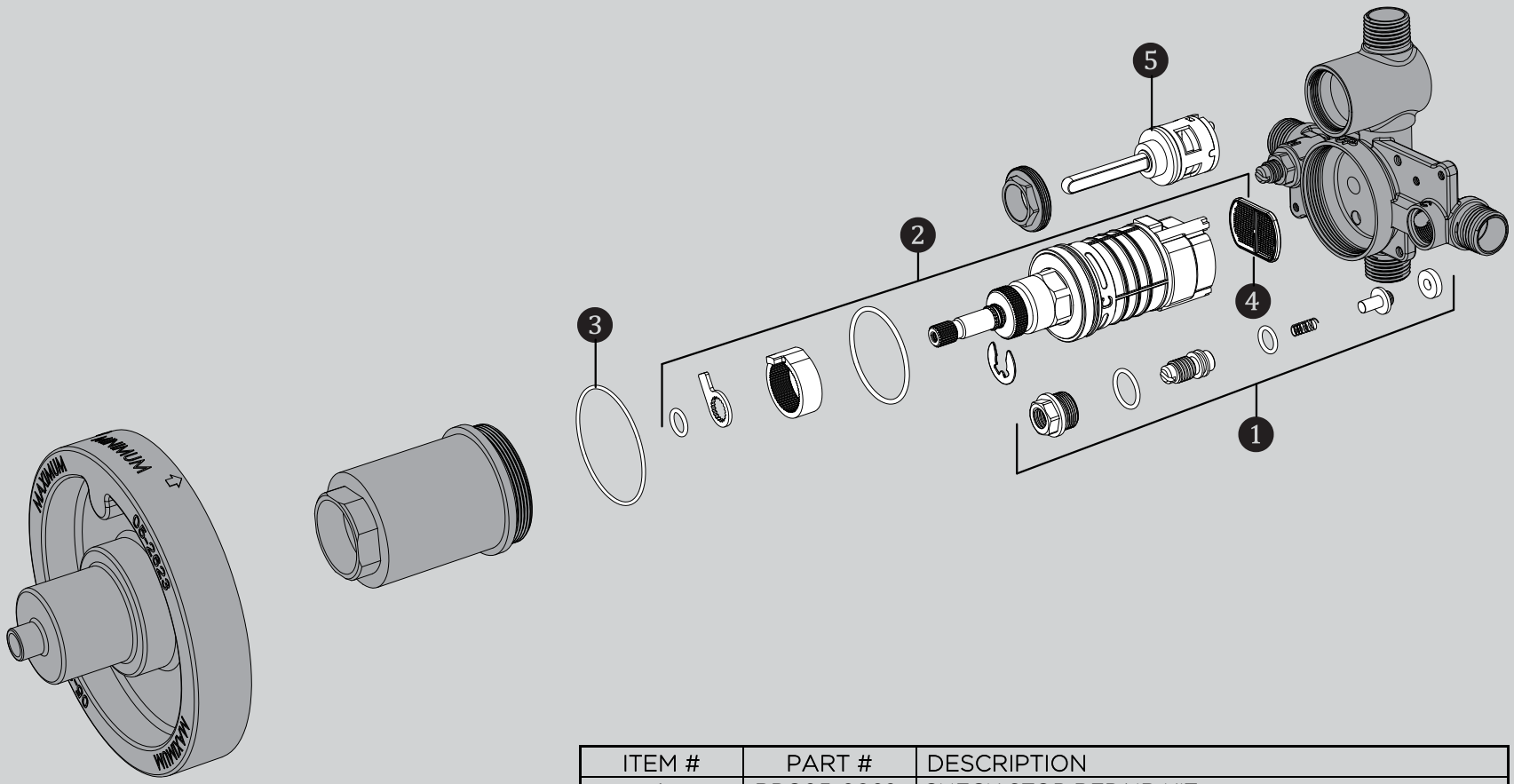
SPRING CHECK STOP PARTS REMOVAL

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.

(-TP) GEN 2 THERMOSTATIC/PRESSURE BALANCED VALVE REPAIR PARTS

Repair Parts Diagram

CPV-TP / CPV-TP-DV REPAIR PARTS SPEAKMAN®

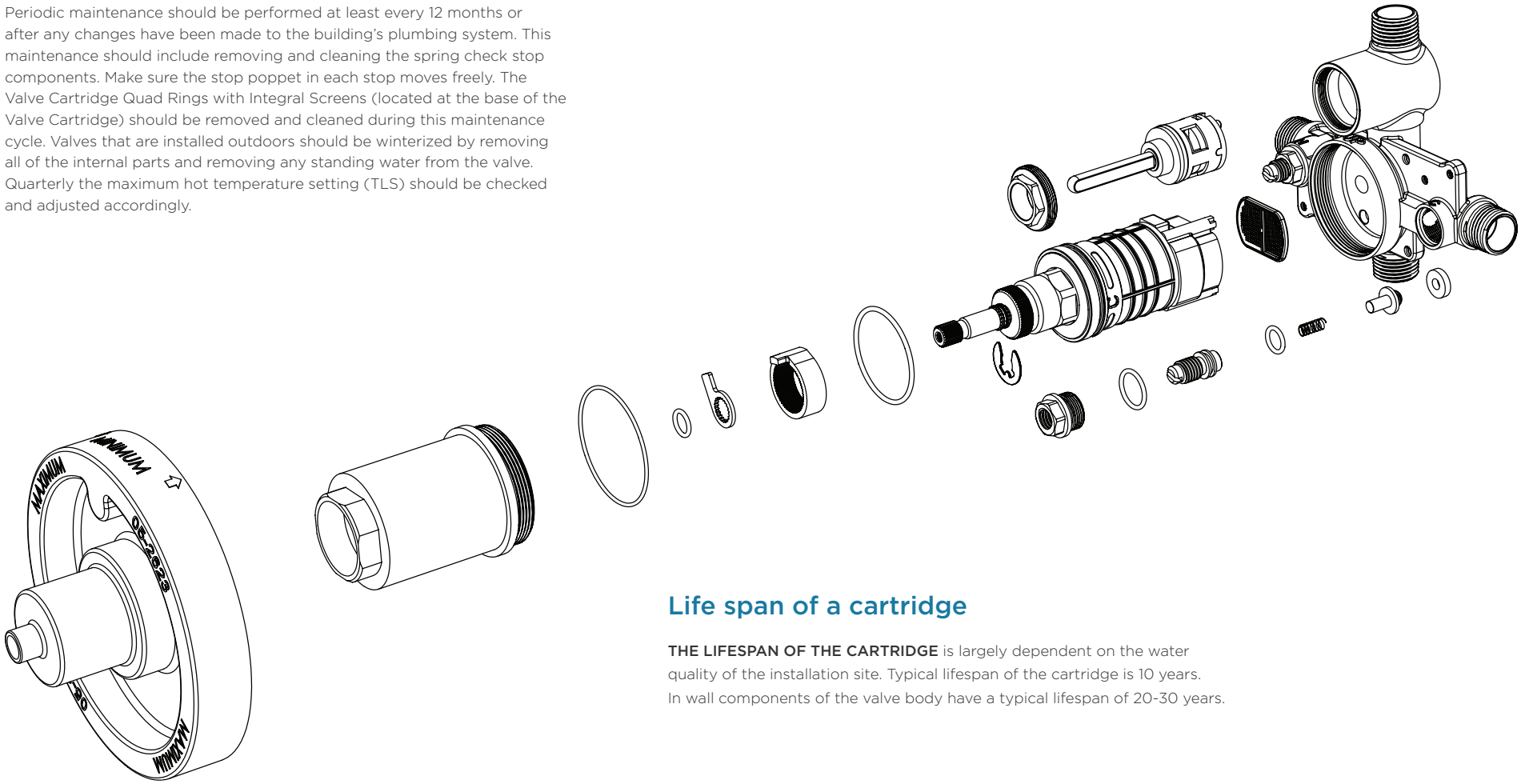


ITEM #	PART #	DESCRIPTION
1	RPG05-0862	CHECK STOP REPAIR KIT
2	RPG05-1109	T/P CARTRIDGE
3	RPG49-0012	BONNET O-RING
4	RPG49-0011	LOWER CARTRIDGE SEAL
5	RPG05-0897	VOLUME CONTROL/DIVERTER CERAMIC REPAIR CARTRIDGE

KEYS FOR BEST VALVE PERFORMANCE

Maintenance

THERMOSTATIC / PRESSURE BALANCED VALVE MAINTENANCE:
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 Valve Cartridge Quad Rings 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.



Life span of a cartridge

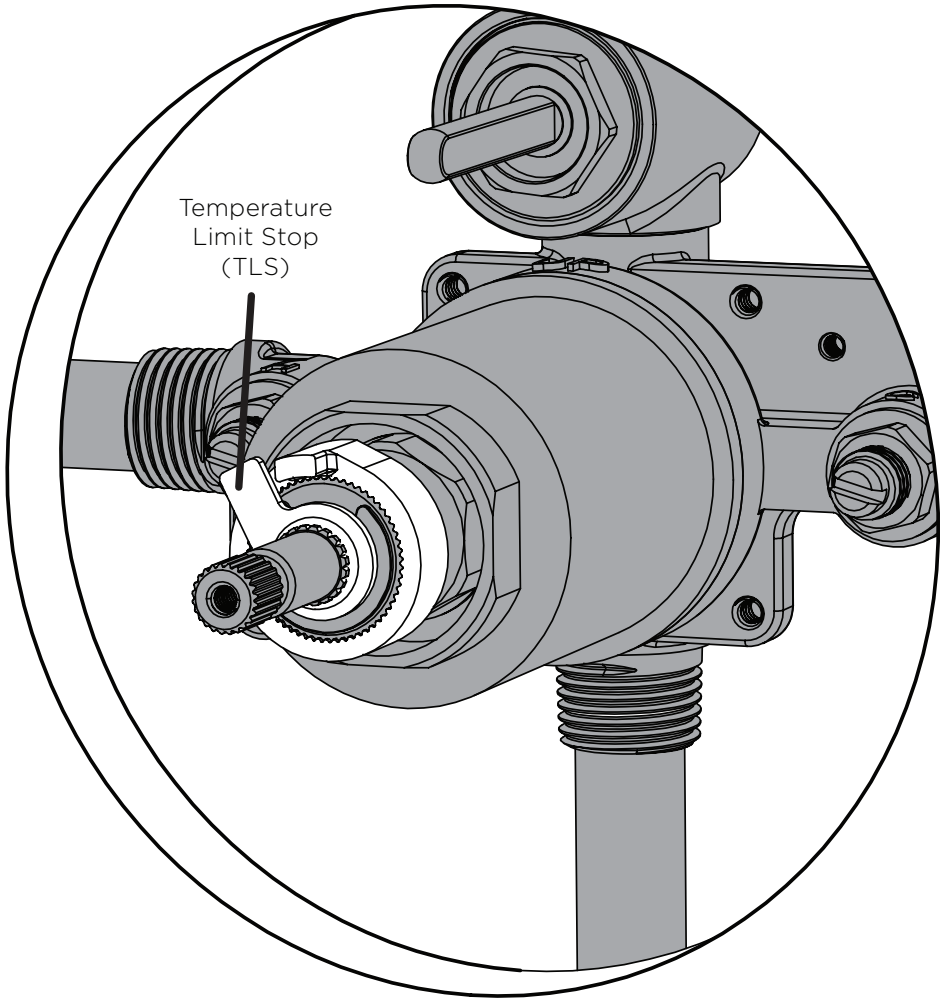
THE LIFESPAN OF THE CARTRIDGE is largely dependent on the water quality of the installation site. Typical lifespan of the cartridge is 10 years. In wall components of the valve body have a typical lifespan of 20-30 years.

TEMPERATURE LIMIT ADJUSTMENT

Temperature limit adjustment

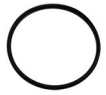
THE MAXIMUM HOT WATER TEMPERATURE SETTING ADJUSTMENT (Temperature Limit Stop (TLS)) of the valve has been factory set at 110° F. Important- Check each valve installation with a thermometer to make sure the maximum hot water temperature is set to the recommended setting of 110° F maximum as site conditions will vary. 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.



REPAIR PARTS

Repair parts for current valves

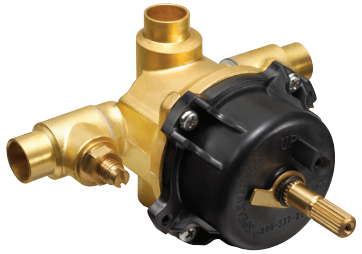
Image	Part	Description
	RPG05-0862	(T/P) Check stop repair kit
	RPG05-0718	(P) 4 screws, bonnet, and bonnet o-ring
	RPG05-0884	(P) Replacement cartridge for models CPV-P-IS, CPV-P-DV
	RPG05-0843	(P) Replacement cartridge for models CPV-3000, CPV-3000-IS, CPV-3400
	RPG05-1109	T/P Cartridge
	RPG49-0005	(P) Cartridge lower quad rings
	RPG49-0076	(P) Spindle o-rings
	RPG49-0126	(P) Large bonnet o-ring
	RPG05-0876	(P) Integral stop repair kit
	RPG05-0897	(P) Replacement diverter cartridge

Replacement parts for older valves

Image	Part	Description
	G05-0218-MO	Sentinel valve block assembly (S-1725, S-1735 (Model 57), S-1735 (Model 60), S-1735 (Model 172), S-1735)
	G05-0265-MO	Sentinel valve block assembly with volume control (S-1825, S-1835 (Model 182), S-1835)
	G99-0072-MO	Colortemp cartridge (S-8761, S-8771, S-8561, S-8571, S-8590, S-8890)
	RPG03-0257	Sentinel spindle repair group (S-1725, S-1735 (Model 57), S-1735 (Model 60), S-1735 (Model 172), S-1735, S-1825, S-1835 (Model 182), S-1835)
	RPG05-0528	Piston and cap repair sentinel (S-1725, S-1735 (Model 57), S-1735 (Model 60), S-1735 (Model 172), S-1735, S-1825, S-1835 (Model 182), S-1835)
	RPG07-0004	Sentinel piston cap and washer kit
	RPG15-0063	Sentinel yoke and plunger repair assembly (S-1725, S-1735 (Model 57), S-1735 (Model 60), S-1735 (Model 172), S-1735, S-1825, S-1835 (Model 182), S-1835)
	RPG45-0011	Sentinel washer kit

VALVE IDENTIFICATION

How to identify your valve easily



(-P)

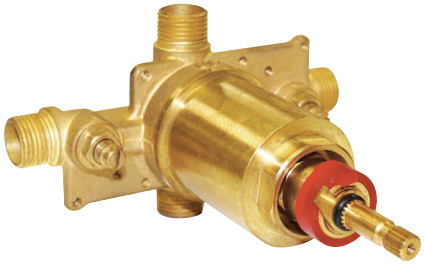
PRESSURE BALANCED

- Short bonnet
- Marked by “TYPE-P”
- IS marked by visible nuts on both sides

(-TP) GEN 1

THERMOSTATIC/ PRESSURE BALANCED

- Taller bonnet
- White TLS at end
- Marked by “T/P”
- IS marked by visible nuts on both sides



(-TP) GEN 2

THERMOSTATIC/ PRESSURE BALANCED

- Taller brass bonnet
- Marked by “T/P”
- IS marked by visible nuts on both sides

For additional assistance or service please contact:

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