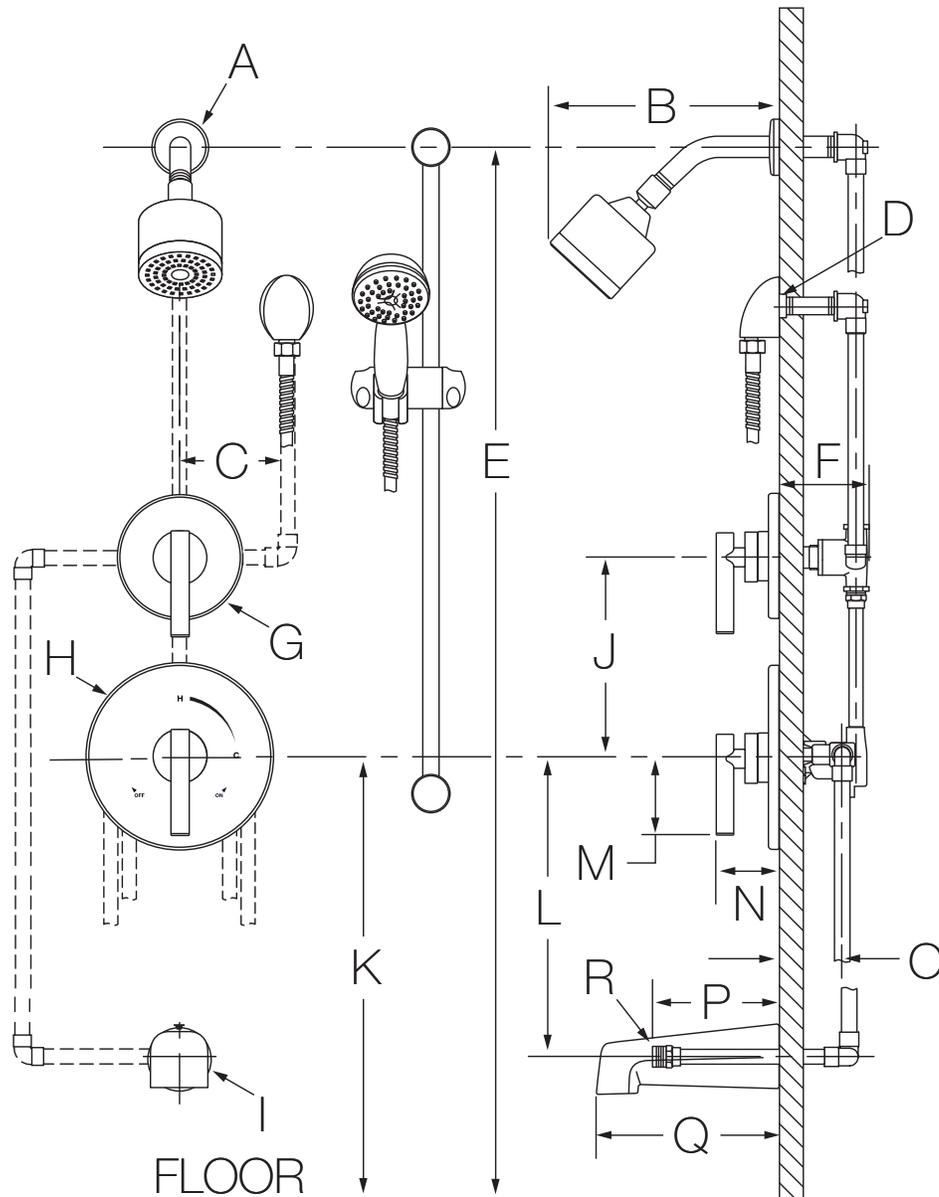




3503-H321-V, 3505-H321-V, 3506-H321-V  
Shower System Series  
**Operation & Maintenance Manual**

Model Numbers	Specification
<ul style="list-style-type: none"> <li><input type="checkbox"/> <b>3503-H321-V</b> <i>Hand Shower System</i></li> <li><input type="checkbox"/> <b>3505-H321-V</b> <i>Shower/Hand Shower System</i></li> <li><input type="checkbox"/> <b>3506-H321-V</b> <i>Tub/Shower/Hand Shower System</i></li> </ul>	<p><b>3503-H321-V</b> Hand shower system powered by the Temptrol® pressure balancing valve. Features adjustable stop screw to limit handle turn, lever handle, wall connection, 30" slide bar, flexible metal hose and 1 mode hand shower with backflow prevention, and standard 2.5 gpm (9.5 L/min) flow restrictor.</p>
<p><b>Options/Modifications</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <b>-1.5</b>  <i>1.5 gpm (5.7 L/min) flow restrictor</i></li> <li><input type="checkbox"/> <b>-2.0</b>  <i>2.0 gpm (7.6 L/min) flow restrictor</i></li> <li><input type="checkbox"/> <b>Delete Suffix B</b> <i>Chrome plastic escutcheon on valve with color graphics/indicators in place of standard brass escutcheon</i></li> <li><input type="checkbox"/> <b>-STN</b> <i>Satin Nickel finish</i></li> <li><input type="checkbox"/> <b>-TRM</b> <i>Trim only, valve not included</i></li> </ul> <p><b>Note:</b> Append appropriate -suffix to model number.</p>	<p><b>3505-H321-V</b> Shower/hand shower system powered by the Temptrol® pressure-balancing valve. Features adjustable stop screw to limit handle turn, separate two function diverter, lever handle, wall connection, 30" slide bar, flexible metal hose and 1 mode hand shower with backflow prevention, 1 mode showerhead and standard 2.5 gpm (9.5 L/min) flow restrictors.</p>
<p><b>Compliance</b></p>	
<p>-ASME A112.18.1/CSA B125.1</p>	
<p><b>Warranty</b></p> <p><b>Limited Lifetime</b> - to the original end purchaser in consumer/residential installations. <b>5 Years</b> - for industrial/commercial installations. Refer to <a href="http://www.symmons.com/warranty">www.symmons.com/warranty</a> for complete warranty information.</p>	<p><b>3506-H321-V</b> Tub/shower/hand shower system powered by the Temptrol® pressure balancing valve. Features adjustable stop screw to limit handle turn, separate three function diverter, lever handle, wall connection, 30" slide bar, flexible metal hose and 1 mode hand shower with backflow prevention, non-diverter tub spout, 1 mode showerhead with standard 2.5 gpm (9.5 L/min) flow restrictors.</p> <p>Components made from metal and nonmetallic materials plated in standard polished chrome finish.</p>

## Dimensions

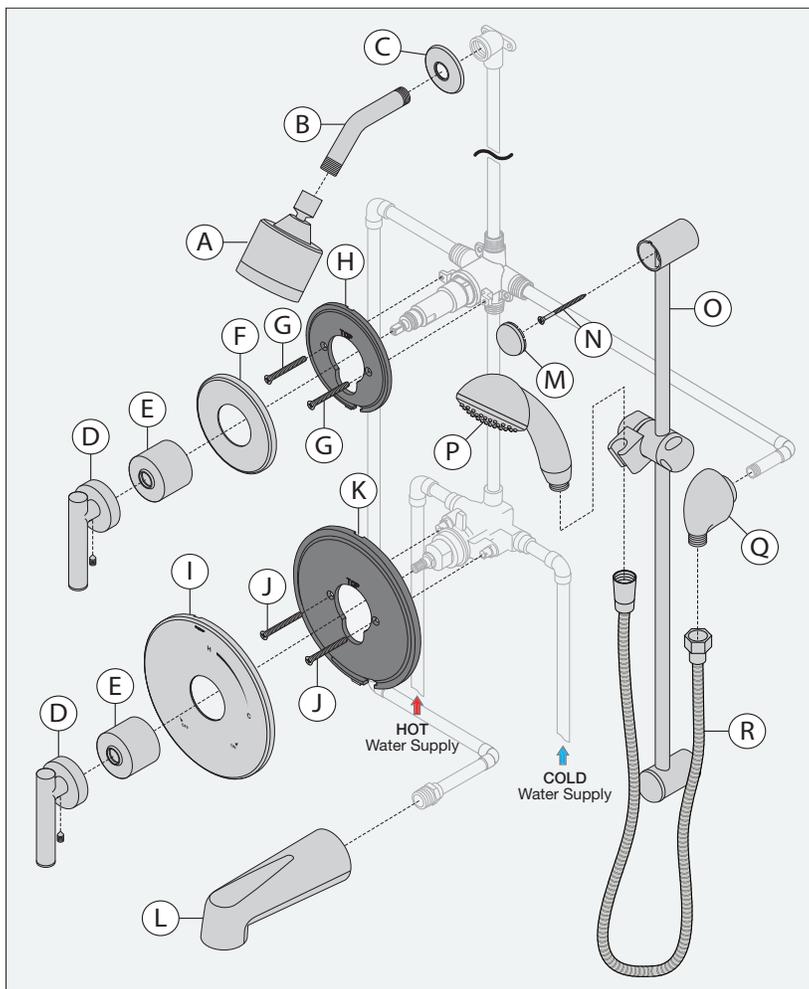


Measurements	
A	Ø 2-1/2", 64 mm
B	6-3/4", 171 mm
C	6", 152 mm
D	Male 1/2-14 NPT thread must be recessed 1/4" (6 mm) from finished wall
E	Ref. 77", 1956 mm
F	4-3/4", 121 mm
G	Ø 5", 127 mm
H	Ø 7-1/2", 191 mm
I	Ø 2-1/2", 64 mm
J	Ref. 10", 254 mm
K	Ref. 32", 813 mm
L	Ref. 12", 305 mm
M	3", 76 mm
N	2-7/8", 73 mm
O	Rough-in 2-3/8" ± 1/2", 60 mm ± 13 mm
P	5-1/4", 133 mm
Q	7", 178 mm

### Notes:

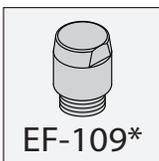
- 1) All dimensions measured from nominal rough-in (see O as reference).
- 2) Dimensions subject to change without notice.

## Parts Breakdown



### Notes:

- 1) Apply a bead of silicone around the perimeter of all shower trim installed flush to the finished wall. Leave opening on bottom of escutcheons for weep hole.
- 2) Apply plumber tape to all threaded connections.



\*Order in-line vacuum breaker (EF-109) for hand shower systems without dual checks.

### Replacement Parts

Item	Description	Part Number
A	Showerhead	352SH
B	Shower Arm	
C	Flange	300S
D	Handle Assembly	T-242A
E	Dome Cover	T-19/20
F	Diverter Escutcheon	
G	Screws	T-416A
H	Mounting Plate	
I	Escutcheon	
J	Screws	RTS-009 (Brass) RTS-010 (Plastic)
K	Mounting Plate	
L	Tub Spout	067
M	Slide Bar	
N	Assembly	RA-009
O		
P	Hand Shower	EF-100
Q	Wall Elbow	EF-105
R	60" Hose	RTS-045

### Notes:

- 1) Append appropriate -suffix for premium finish.
- 2) Append -1.5 or -2.0 to showerhead or hand shower for low flow.

### Tools Required for Installation

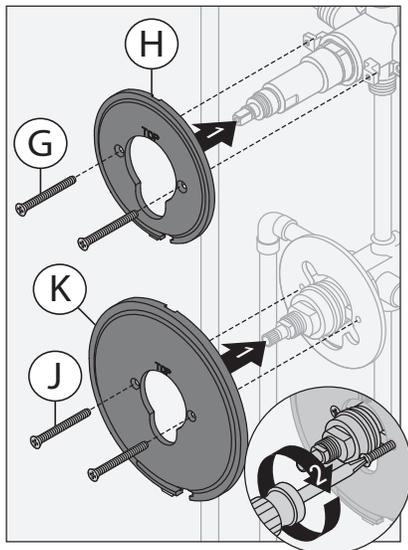
Adjustable wrench	
Allen wrench: Handle (2mm)	
Phillips head screwdriver	
Plumber tape	
Power drill	
Silicone	

## Installation

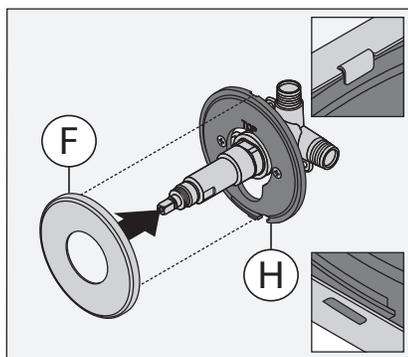
### Note:

For valve body installation, please see valve body installation guides.

- 1) Install small mounting plate (H) to diverter valve (2DIV-BODY or 3DIV-BODY) and large mounting plate (K) to shower valve (46-2-BODY). Secure each with two screws (G) and (J).

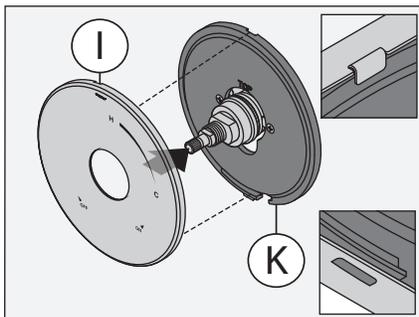


- 2) Attach diverter escutcheon (F) to small mounting plate (H).



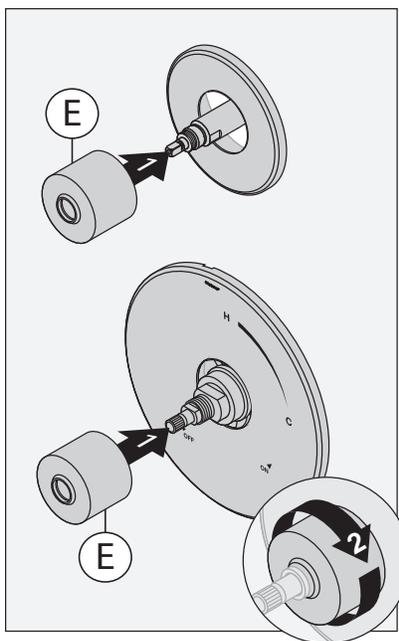
**Note:** Tabs should snap into place.

- 3) Attach shower escutcheon (I) to large mounting plate (K).

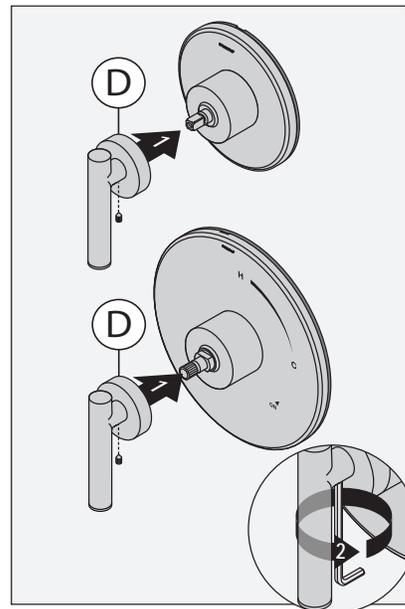


**Note:** Tabs should snap into place.

- 4) Install dome covers (E) to valves by turning clockwise.

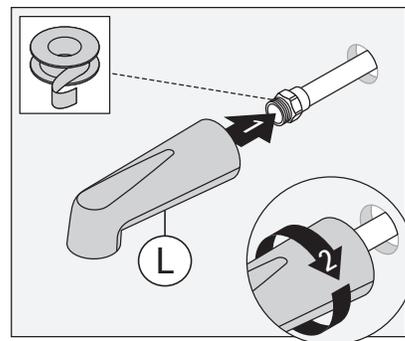


- 5) Install diverter handle (3505 and 3506 only) (D) and shower handle (D) to valves. Secure handles by tightening set screws.



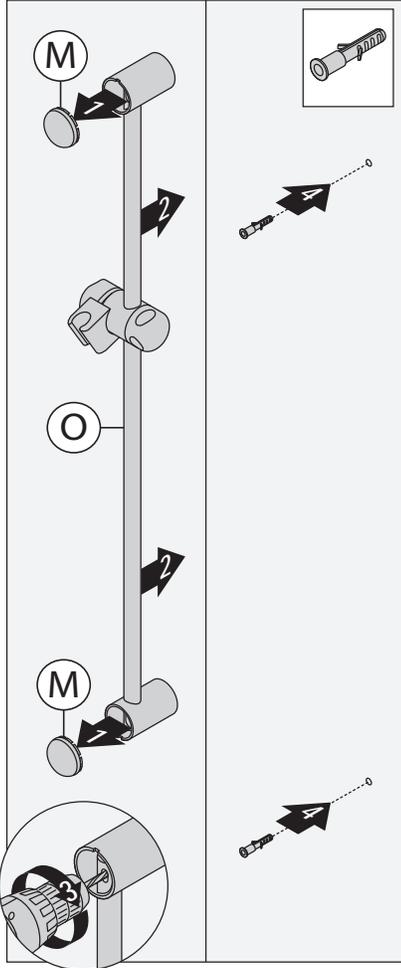
**Note:** Handles should be facing the 6 o'clock position.

- 6) Install tub spout (L) to stub out pipe. Turn clockwise to secure.



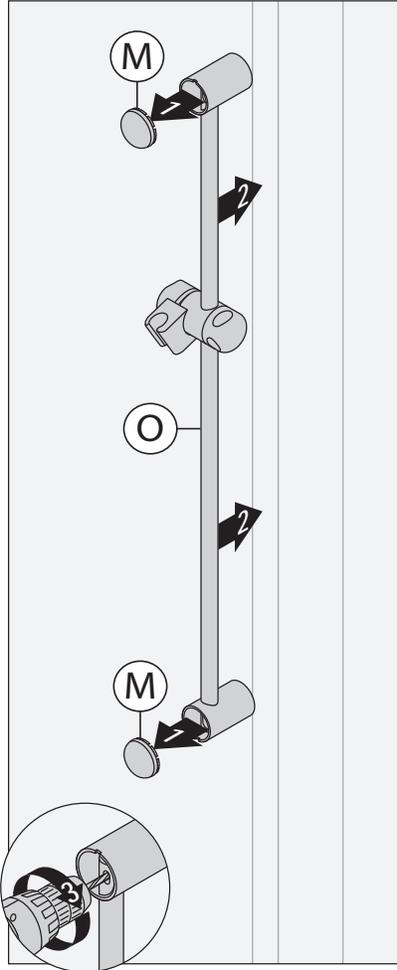
# Installation

7a) **Dry Wall Option:** Remove upper and lower caps (M) from slide bar brackets. Place slide bar (O) into desired position. Using brackets as a guide, carefully drill 3/16" holes into wall. Remove slide bar and install anchors.



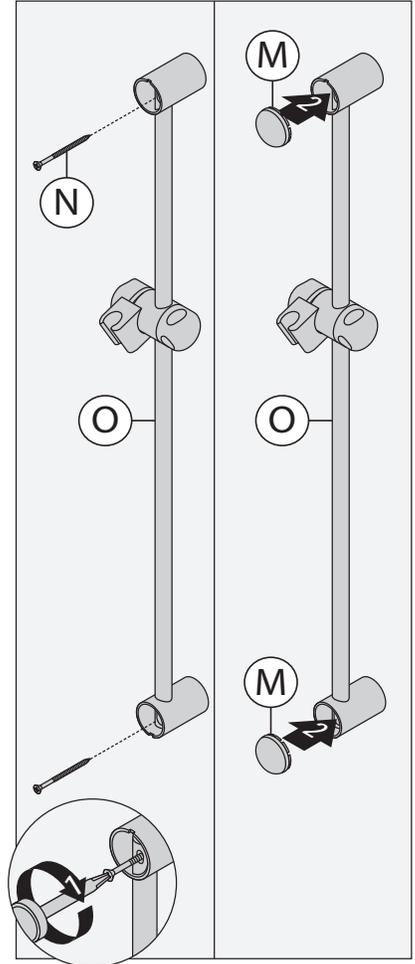
**Notes:** Make sure that slide bar holes and bracket holes are aligned before drilling. Before drilling bottom hole, make sure slide bar is plumb.

7b) **Stud Option:** Remove upper and lower caps (M) from slide bar brackets. Place slide bar (O) into desired position. Using brackets as a guide, carefully drill 1/8" pilot holes into stud.



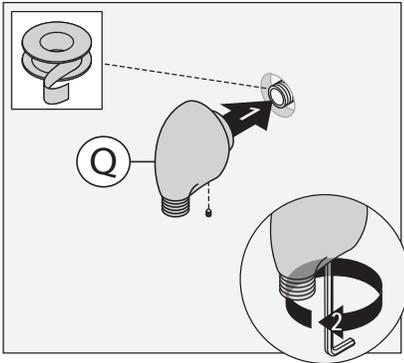
**Notes:** Make sure that slide bar holes and bracket holes are aligned before drilling. Before drilling bottom hole, make sure slide bar is plumb.

8) With slide bar (O) in position, secure to wall using screws (N). Replace upper and lower caps (M) onto slide bar brackets.

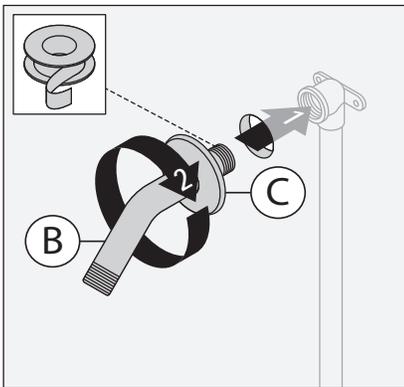


## Installation

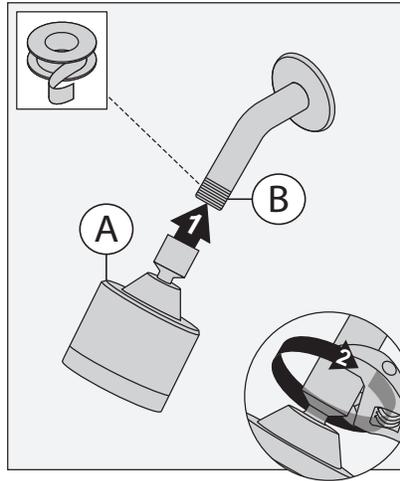
- 9) Install wall elbow (Q) to stub out pipe. Tighten set screw to secure.



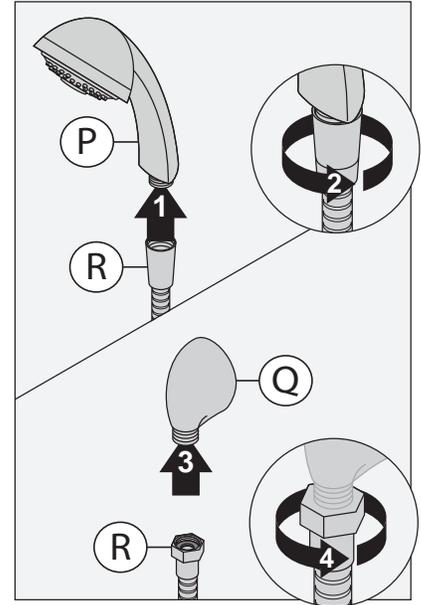
- 10) Attach shower arm (B) and flange (C) to vertical shower pipe turning clockwise to tighten.



- 11) Install showerhead (A) to shower arm (B). Turn clockwise to tighten.

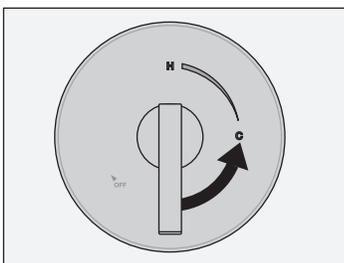


- 12) Attach large end of hand shower hose (R) to hand shower wand (P). Attach small end of hand shower hose (R) to wall elbow (Q). Turn clockwise to tighten.

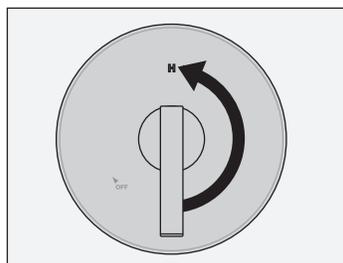


## Operation (Temperature Control)

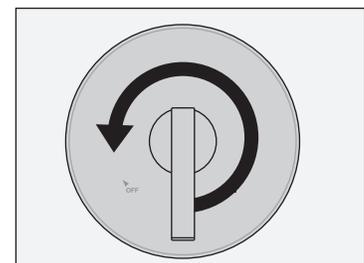
- 1) Turn shower handle counter-clockwise approximately 1/4 turn to put valve in cold position.



- 2) Turn shower handle counter-clockwise approximately 1/2 turn to put valve in warm position.

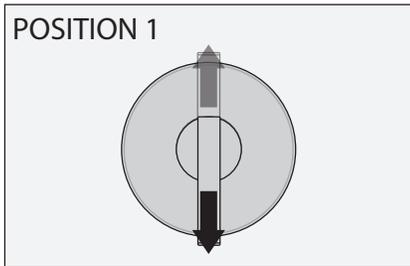


- 3) Turn shower handle counter-clockwise approximately 3/4 turn to put valve in hot position.

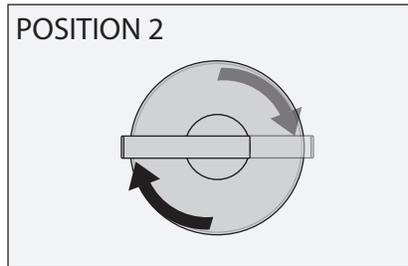


## Operation (Diverter Control: 2DIV-BODY)

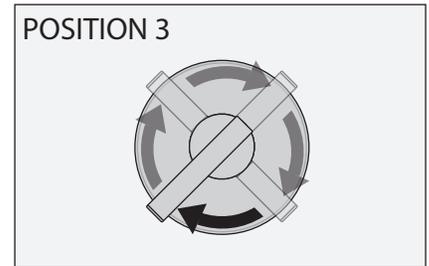
1) Cartridge is factory set to divert to function 1.



2) Turn handle to position 2 to divert to function 2.



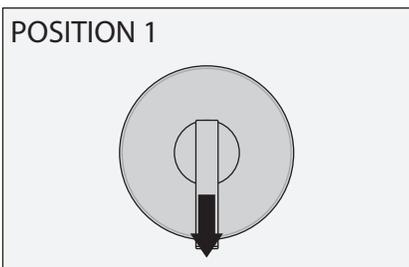
3) Turn handle to position 3 to share functions 1 and 2.



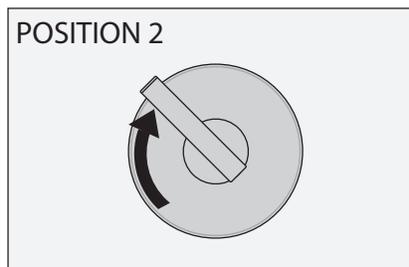
**Note:** Additional handle positions for same output are illustrated.

## Operation (Diverter Control: 3DIV-BODY)

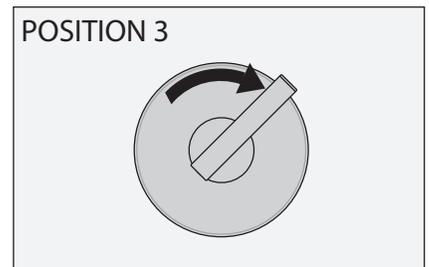
1) Cartridge is factory set to divert to function 1.



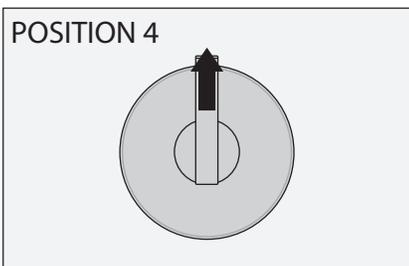
2) Turn handle to position 2 to divert to function 2.



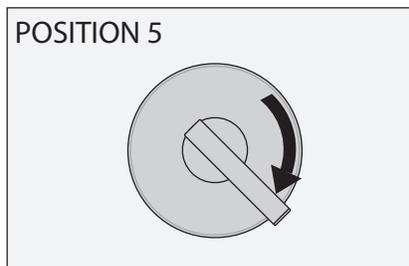
3) Turn handle to position 3 to divert to function 3.



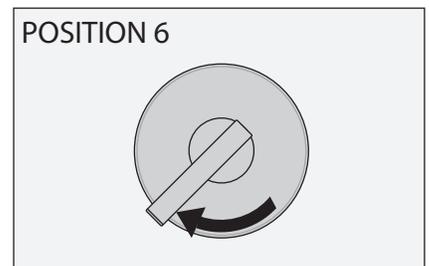
4) Turn handle to position 4 to share functions 2 and 3.



5) Turn handle to position 5 to share functions 1 and 3.



6) Turn handle to position 6 to share functions 1 and 2.



## Troubleshooting Chart

Troubleshooting Chart		
Finish is spotting.	Elements in water supply may cause water staining on finish.	Clean finished trim area with a soft cloth using mild soap and water or a non-abrasive cleaner and then quickly rinse with water.

**⚠ WARNING:** This product can expose you to chemicals including lead, which is known to the state of California to cause cancer, birth defects, or other reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).