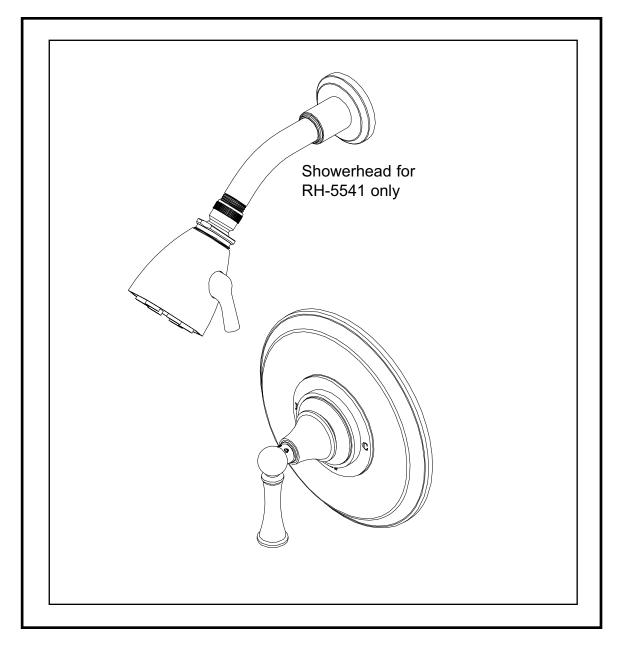


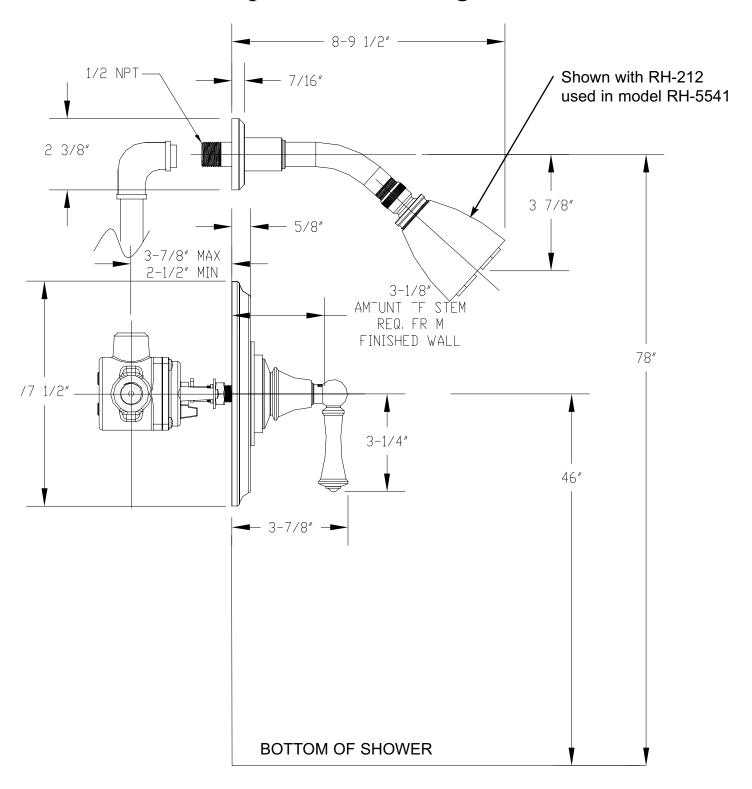
# INSTALLATION INSTRUCTIONS



**MODEL: CHATHAM** 

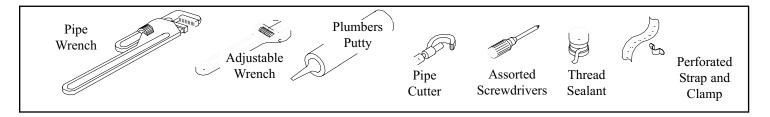
RH-5540 RH-5541

# Restoration Hardware Balance Pressure Shower Set Specification Diagram



All Threaded Connections are 1/2" NPT Dimensions are in Inches and Approximation of a Typical Installation

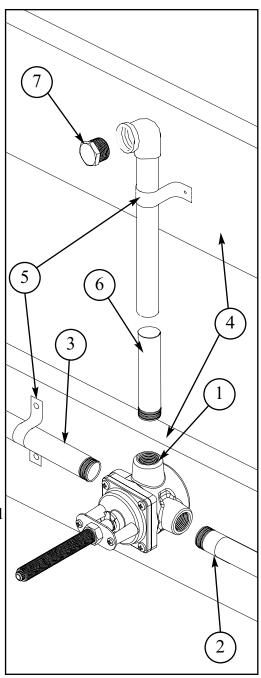
## Common tools needed:



## **Installation Instructions**

# We Recommend Installation by a Licensed Plumbing Professional Valve Assembly

- Position VALVE (1) with the "S" in the up position
- The VALVES (1) 1/2" NPT inlets are colored blue for COLD SUP-PLY (2) and red for HOT SUPPLY (3).
- Apply thread sealant to the supply fittings and firmly tighten into VALVE (1) inlets. Under normal soldering conditions the removal of inlet filter/seat and mixing cartridge is not necessary; however, if brazing and / or induction heating is used removal is required. Whenever possible, it is best to perform all solder/brazing operations on piping prior to attachment to VALVE (1).
- VALVE (1) and / or SUPPLY (2,3) must be secured to CROSS BRACE (4) using PERFORATED STRAP (5) or equivalent.
- Position VALVE (1) to finished wall as mentioned on specification diagram.
- Apply thread sealant to SHOWER RISER (6) and attach to VALVE (1) outlet port marked "S".
- Secure SHOWER RISER (6) to CROSS MEMBER (4) using PER-FORATED STRAP (5) or equivalent.
- Apply PLUG (7) for test. Turn on both water supplies to valve and check for leaks. Note: Water pressure *must* be applied to both hot and cold inlet ports for proper valve operation.
- After inspection turn off water supply.

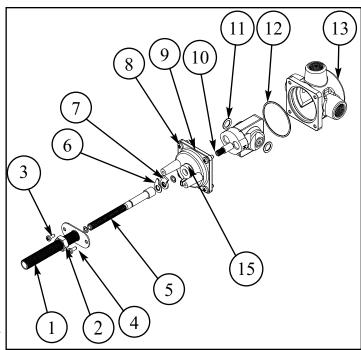


# 2. Setting The Temperature Limit Stop

- Remove the all-thread NIPPLE (1) and RETAIN-ING SCREWS (2) RETAINING PLATE (4) and STEM (5) from the valve COVER (9).
- Remove the LIMIT STOP (6) see figure 2. Do not remove the MECHANICAL STOP (7). (If for any reason the MECHANICAL STOP (7) is removed refer to *Cartridge Removal and Replace* section below.)
- From the CLOSED position, rotate the CAR-TRIDGE STEM (10) counter-clockwise until the desired temperature is achieved.
- Place the LIMIT STOP (6) on the CARTRIDGE STEM (10) against the STOP BLOCK (15) located on COVER (9). Rotate the CARTRIDGE STEM (10) several times to make sure the stop is at the desired temperature setting.
- Replace the STEM (5), RETAINING PLATE (4) and RETAINING SCREWS (3) and all-thread NIP-PLE (1) onto valve COVER (9). (NOTE: For stem

to be fully seated into cartridge, all-thread nipple and locking nut must be tightly secured against retaining plate.)

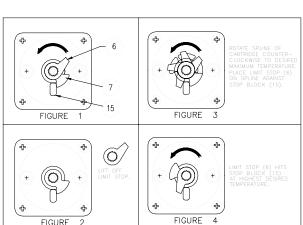
Proceed to the VALVE TRIM INSTALLATION.



# 2a. Cartridge Removal And Replacement

 Remove the all-thread NIPPLE (1), RETAINING SCREWS (3), RETAINING PLATE (4) and STEM (5) from the valve COVER (9).

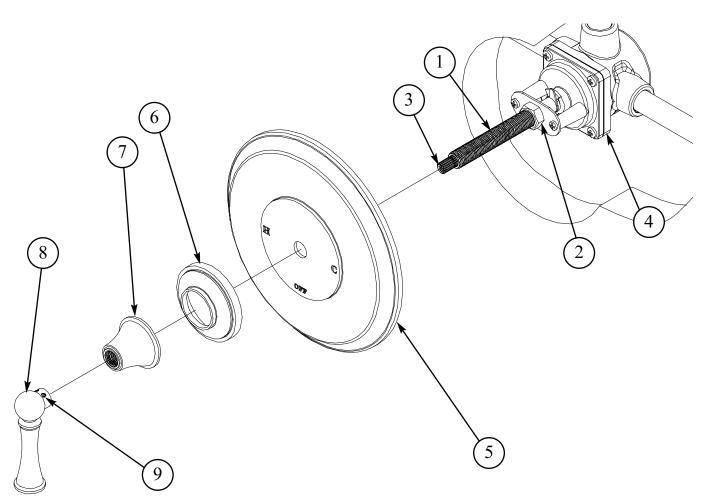
- Remove the LIMIT STOP (6) and MECHANICAL STOP
   (7)
- Remove the COVER SCREWS (8), COVER (9) and cover O-RING (10).
- Carefully slide the CARTRIDGE (10) out of valve BODY (13). (If filter removal is necessary refer to *Cleaning the Filter* described in Trouble Shooting Section.)
- Replace CARTRIDGE (10) ensuring that the cartridge's O-RINGS (11) are in place and lubricated with plumbers (non-petroleum) grease. The "H" and "C" on the side of the CARTRIDGE (10) indicates the cartridges proper orientation to the appropriate inlet supply line.
- Once the CARTRIDGE (10) is installed, it is very important to confirm that the cartridges rear posts are correctly locked into the BODY (13) mating hole.
- Replace the cover O-RING (12), COVER (9) and tighten COVER SCREWS (8) firmly into place.
- To set the MECHANICAL STOP (7) rotate clockwise the CARTRIDGE STEM (10) until it stops. Warning: <u>Do not forcefully rotate stem closed.</u>
- Place the MECHANICAL STOP (7) onto CARTRIDGE STEM (10) as shown in figure 1.
- Replace LIMIT STOP (6) as described above in **Setting the Temperature Limit Stop.**



## 3. Valve Trim Installation

(Perform these steps after finished wall has been completed)

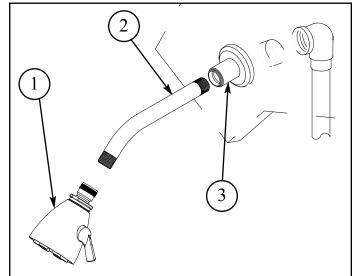
- The STEM (3) must be trimmed to 3-1/8" from finished wall. Remove STEM (3) by loosening NUT (2) and removing NIPPLE (1), NUT (2) and STEM (3). Trim STEM (3) to previously mentioned dimension.
- The NIPPLE (1) must be trimmed to 2-5/8" from finished wall or 1/2" less than STEM (3).
- ◆ Fasten STEM (3) and NIPPLE (1) onto VALVE (4). Use NUT (2) to lock NIPPLE (1) into place. Rotate STEM (3) to ensure there is no binding. If binding, loosen NIPPLE (1) until STEM (3) moves freely and does not wobble.
- Align cover PLATE (5) and slide onto valve NIPPLE (1).
- Place ESCUTCHEON (6) and BONNET (7) onto NIPPLE (1) and firmly tighten BONNET (7) in place to secure trim onto VALVE (4).
- Secure HANDLE (8) into place by tightening SETSCREW (9).
   Note: Allow minimal space between HANDLE (8) and BONNET (7).



# 4. Showerhead Installation

For RH-5541, available in catalog and on web only. (Balanced pressure shower with Speakman Ultra Showerhead kit.)

- Slide SHOWER ARM (2) through the FLANGE (3).
- Apply thread sealant to both ends of ARM (2) and thread into fitting inside finished wall.
- Turn on water supply, check for leaks and make any final adjustments required.
- Open valve and flush shower line of debris.
- Slide FLANGE (3) against wall.
- Attach SHOWERHEAD (1) to end of ARM (2).



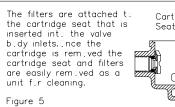
# 5. Test Installed Shower Set

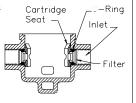
- Turn on the shower valve by rotating the handle counter-clockwise.
- Water mixing temperature to handle rotation is as follows:
- 0 to 1/4 = cold 1/4 to 1/2 = warm
- 1/2 to 3/4 = hot

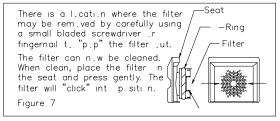
# **6.** Trouble Shooting

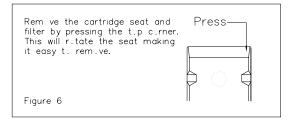
MALFUNCTION	CAUSE	REMEDY
Opening immediately to hot water.	Hat and cald water supplies have been connected in reverse.	Rotate cartridge. (See Page 4, Item no.2a)
Water drips after shutting .ff the valve.	Residual water in valve and piping. Inc.rrect setting of the mechanical stop against the stop black causing a partially opened cartridge.	All w approximately 3—3 minutes to drain.  Reset the mechanical st.p. (See Page 4, Item no. 2a)
	—ring seal on the inlet of the cart— ridge is faulty or seat assembly is damaged.	Check the C-ring & seat f.r cuts r overheating damage during installation. Replace if necessary.
Water insufficiently h.t.	Adjustable handle p.siti.n st.p inc.rrectly set.	Refer to the instruction on "Setting Temperature Limit St.p."
Valve bidy too deep into wall.	The measured rough in or finished wall surface is incorrect.	Reset the valve.
No or low flow of hot or cold water.	Either the h.t.r c.ld side is n.t fully pressurized	Verify that all service stops for both the hot and cold are fully open and pressurized.
	Debris caught inside the inlet of cartridge.	Remove the cartridge (See Page 4). If debris is Lidged in the inlet check valve, the white poppet will be stuck in the upen (d.wn) position. The debris can be removed with a straightened paper clip or fine wire. Gently insert the wire and move it in a circular motion to dislodge any debris.
	Debris caught inside filter or inlet ports.	Remove cartridge and follow Figures 5 thru 8 below.

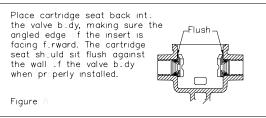
#### \* WARNING: At no time try to stop dripping by applying extreme force or overtightening the handle.











## Care and Cleaning

The lustrous finish on your Restoration Hardware Bathware fixture should be treated with care. Improper handling or cleaning can damage the surface of any metal finish. Use a soft cloth to wipe clean. Avoid harsh abrasive cleaner. Water contains lime and other mineral deposits that will be left on the surface after the water has evaporated. You can prevent these deposits from forming by always wiping the fixture dry immediately after use.

### Technical Support and Customer Service

For technical support in the installation of your Restoration Hardware Bathware fixture, please call 1-866-417-5207 weekdays between the hours of 7:00am and 4:00pm PST.

For other questions regarding your order, to order additional components of the Restoration Hardware Bathware Collection, to order replacement parts, or to address warranty issues, please contact Restoration Hardware Customer Service at 1-877-747-4671.

## **BALANCE-PRESSURE**

SHOWER SYSTEMS

## BALANCE-PRESSURE VALVES FEATURES & BENEFITS

- Solid brass components.
- Balance-Pressure feature ensures a constant temperature despite changes in water pressure.
- Five gallons/minute flow rate, sufficient to operate one water outlet at a time.
- Includes all attendant trim to coordinate with select bath fittings collections.

#### Other Components (sold separately):

- Multi-Port Diverter Valve & Trim Set
- Directs water to flow to one of up to three water outlets.
- Does not support more than one outlet running at a time.

#### SHOWER ONLY

#### PARTS REQUIRED

- BP shower valve & trim set
- Showerhead, flange & arm



#### **TUB & SHOWER ONLY**

#### PARTS REQUIRED

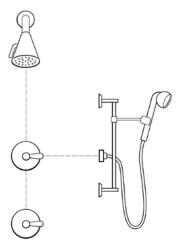
- BP tub & shower valve & trim set
- Showerhead, flange & arm



## SHOWER & HANDHELD SHOWER

#### PARTS REQUIRED

- BP shower valve & trim set
- Showerhead, flange & arm
- Handheld shower
- Multi-Port Diverter Valve & Trim set



## TUB & SHOWER WITH HANDHELD SHOWER

#### PARTS REQUIRED

- BP tub & shower valve & trim set
- Showerhead, flange & arm
- Handheld shower
- Multi-Port Diverter Valve & Trim set

