



## SERVICE

1. Shut off water supply to valve.
2. Remove handle plug button (T-33) and handle (T-31).
3. Remove dial [T-29(A,B,C)] and escutcheon (T-27) by removing escutcheon screws (T-28). Remove all remaining trim.
4. Open valve to about warm position and unscrew cap (T-12A). Warning: Failure to do this will damage cap and spindle. Spindle assembly (TA-10) will be removed with cap. Leave packing nut (T-17) in place while unscrewing cap to avoid distortion.
5. Ordinary service to eliminate dripping or not shutting off requires only the replacement of parts supplied in washer and gasket kit (TA-9). Hold spindle with (T3-31) handle while removing hot washer screw and cold washer retainer (remove retainer with channel lock pliers).
6. Inspect top surfaces of hot and cold seats and replace if necessary. Important: When replacing hot and cold seats, always replace both seats. Even if only one seat appears worn, both seats must be replaced. Use part No. (TA-4). After long years of service, if spindle is very loose in cold seat, replace with part no. (TA-4). Use seat removal tool [T-35(A,B)] for removal and replacement of (TA-4). If seats are difficult to remove and tool shifts damaging notches, relocate tool in second position of notches. Tighten both seats to 15 foot pounds of torque.
7. The perforated end of the (TA-10) spindle assembly houses the balancing piston which is the heart of this pressure balancing valve. The piston should be free to move back and forth and should click when the spindle assembly is shaken. If deposits block this action, tap the handle end of the spindle against a solid object to free the piston. Soaking in household vinegar will help free foreign matter. If this does not free piston, replace (TA-10) spindle assembly. **DO NOT TAMPER WITH PERFORATED CYLINDER ON THE SPINDLE ASSEMBLY OR ATTEMPT REMOVAL OF THE PISTON.**
8. Reassemble, reversing above procedure, be sure spindle assembly is drawn close to the cap before screwing cap back into valve. **WARNING: FAILURE TO DO THIS WILL DAMAGE CAP AND SPINDLE.**
9. USE ONLY SYMMONS GENUINE REPAIR PARTS. FAILURE TO DO SO WILL VOID ALL WARRANTIES AND IMPAIR PROPER OPERATION OF YOUR VALVE.

## TROUBLE SHOOTING CHART

Problem	Cause	Solution (Follow service instructions)
Valve will not pass water.	Hot and cold water not turned on.	Turn on both supplies. Valve will not operate unless both HOT and COLD water pressure is turned on.
Valve leaks when shut off.	Hot and cold washers are worn, or foreign matter (solder, chips, etc.) are between washers and seat surfaces	Replace Hot and Cold washers, inspect top surface on hot and cold seats and replace if necessary.
Temperature control handle is turned from cold to hot (or hot back to cold) and volume from spout or head is not constant.	Pressure balancing piston housed in spindle assembly is blocked from free movement by foreign matter.	With valve open half way, remove handle and tap spindle with plastic hammer. If problem not solved, remove spindle assembly completely and tap handle against solid object to free piston. Soaking in household vinegar will help free foreign matter.
Valve delivers sufficient quantity of cold, but little hot, or the reverse of this.	Same as above	Same as above
Temperature varies without moving handle.	Same as above	Same as above
Valve delivery temperature reduces gradually during use; must be turned on to hotter positions to maintain constant temperature.	Overdraw on hot water supply, i.e., running out of hot water.	Reduce maximum flow by using volume control adjustment on valve or shower head. This will allow longer period of use before overdrawing hot water supply.
Valve delivers hot water when initially opened and water turns colder when the handle is rotated in a counter-clockwise direction.	Valve is piped incorrectly, i.e., the hot supply is piped to the cold inlet to the valve and the cold supply is piped to the hot inlet of the valve.	If piping is accessible, correct piping connections to the valve. If piping is not accessible, contact factory to order a reverse seat and tool (T-108 KIT). Older installations may require replacement of the hot seat (T-1) as well
In tub/shower valves, when diverter is set in shower position a trickle of water runs from tub spout.	A design function of this valve is to allow a trickle of water from the tub spout when diverter is set for shower position, This trickle of water is necessary to ensure safe operation in that the valve will be shut off at main handle and NOT with diverter handle.	

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