



Symmons

TEMPTROL® 2000

Single Handle Pressure-Balancing Mixing Valve for Shower or Tub/Shower Application

INSTALLATION, OPERATION & SERVICE INSTRUCTIONS



UPC®

Symmons valves and shower heads comply to all known standards, codes and specifications: CSA B-125, ANSI A112.18.1M, ASSE 1016, EPA '92 etc.

Symmons shower heads are equipped with a 2.5 GPM (9.5 L/min) water and energy saving flow restrictor.

LIMITED LIFETIME GUARANTEE

Symmons warrants to the original consumer purchaser that any TEMPTROL® Series, Allura™, or SYMMETRIX® product will be free of defects in material and workmanship during normal domestic use for the life of your home. All other purchasers including industrial, commercial or business use are warranted for a period of 5 years from the date of purchase.

At our option, we will either have you send the defective part or product prepaid to us for inspection, or we may elect to send you the replacement part or product without investigation. A replacement for any defective part will be supplied FREE OF CHARGE for installation by the purchaser. Defect or damage caused by the use of replacement parts other than Symmons Genuine Replacement Parts will void this warranty.

Symmons further warrants that any TEMPTROL Series, Allura, or SYMMETRIX product will be leak free and drip free during normal domestic use for the life of your home. If the product should develop a leak or drip, Symmons will provide FREE OF CHARGE the parts necessary to return it to good working condition.

Proof of purchase (original sales receipt) and a copy of the warranty registration card from the original consumer purchaser must accompany all warranty claims. This warranty is applicable only to Symmons TEMPTROL Series, Allura, or SYMMETRIX products purchased after July 1, 1998 and shall be effective from the date of purchase as shown on the purchaser's receipt.

Damage to the chrome and/or other decorative finishes on Symmons products may be a result of improper handling or abusive treatment. Finishes should only be cleaned with a soft, damp cloth or sponge. Use of polish, abrasive cleaners, solvents, or acid cleaners will damage the finish and void this warranty.

This warranty excludes product damage due to installation error, product abuse, or product misuse whether performed by a contractor, service company or yourself. There are no other express warranties on this product and ALL WARRANTIES OF MERCHANTABILITY AND OTHER IMPLIED WARRANTIES ARE LIMITED IN ACCORDANCE WITH APPLICABLE LAW. SYMMONS INDUSTRIES, INC., EXPRESSLY DISCLAIMS CONTINGENT LIABILITY AND CONSEQUENTIAL DAMAGE OF EVERY KIND. Since some states do not allow limitations on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, the above limitation or exclusion may not be applicable. This warranty gives specific legal rights. Other rights may vary from state to state.

To obtain warranty service, write to Symmons Industries, Inc., 31 Brooks Drive, Braintree, MA 02184-3804 or call our Customer Service Department at 1-800-SYMMONS. If writing to us, please include proof of purchase, the model number of the product with a brief description of the problem, your name, address and phone number.

IMPORTANT: After completion of installation step 4, follow these instructions to set the Temptrol 2000 Limit Stop Screw. This valve is equipped with a limit stop screw to be used to limit valve handle from being turned to excessively hot water discharge temperatures. To adjust, remove dome cover, open valve to maximum desired temperature and turn in limit stop screw until it seats.

WARNING: FAILURE TO ADJUST THE LIMIT STOP SCREW PROPERLY MAY RESULT IN SERIOUS SCALDING.

WARNING: THIS SHOWER SYSTEM MAY NOT PROTECT THE USER FROM SCALDING WHEN THERE IS A FAILURE OF OTHER TEMPERATURE CONTROLLING DEVICES ELSEWHERE IN THE PLUMBING SYSTEM.



For ADA compliance (Americans with Disabilities Act) consult ADAAG or your state regulations for proper product choice and mounting locations.

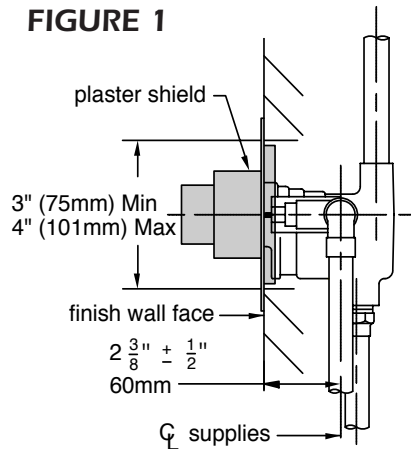
PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. SAVE THIS MANUAL FOR FUTURE REFERENCE.

INSTALLATION OF: SHOWER SYSTEMS AND TUB/SHOWER SYSTEMS

Tools required for installation of this product are: Phillips screw driver, tubing cutter, teflon tape, soldering equipment, adjustable wrench and channel-lock pliers.

1. Install piping and fittings with valve body as shown in Figure 2 or 3.
IMPORTANT: Valve rough-in is 2-3/8" +/- 1/2" from CENTERLINE OF SUPPLIES TO FACE OF FINISH WALL.
Install so that line indicated on rough-in plaster shield on valve is flush with finish wall as shown in Figure 1.

FIGURE 1



Tub/Shower System (Figure 2) Model A

Pipe shower head from outlet marked “S” and to tub spout from outlet marked “T”. **DO NOT SUBSTITUTE OTHER OUTLET ACCESSORIES FOR THE TUB SPOUT (such as HOSE AND SPRAY, SHOWER HEAD, BODYSPRAY, LEDGE SPOUTS, ETC.)**

The diverter-mechanism in this valve is so designed that it cannot be subject to any back pressure, other than is imposed by the spout supplied with this package. Install HOT on left and COLD on right according to valve markings.

Shower System (Figure 3) Model B

Pipe to shower head from outlet marked "S". DO NOT REMOVE PLUG FROM OUTLET MARKED "T". Install HOT on left and COLD on right according to valve markings.

Tub or Shower System (Figure 2A) Model C

The valve in this system has a built-in choke for use with a diverter spout. Follow the instructions above.

FIGURE 2
Model A: Tub/Shower System

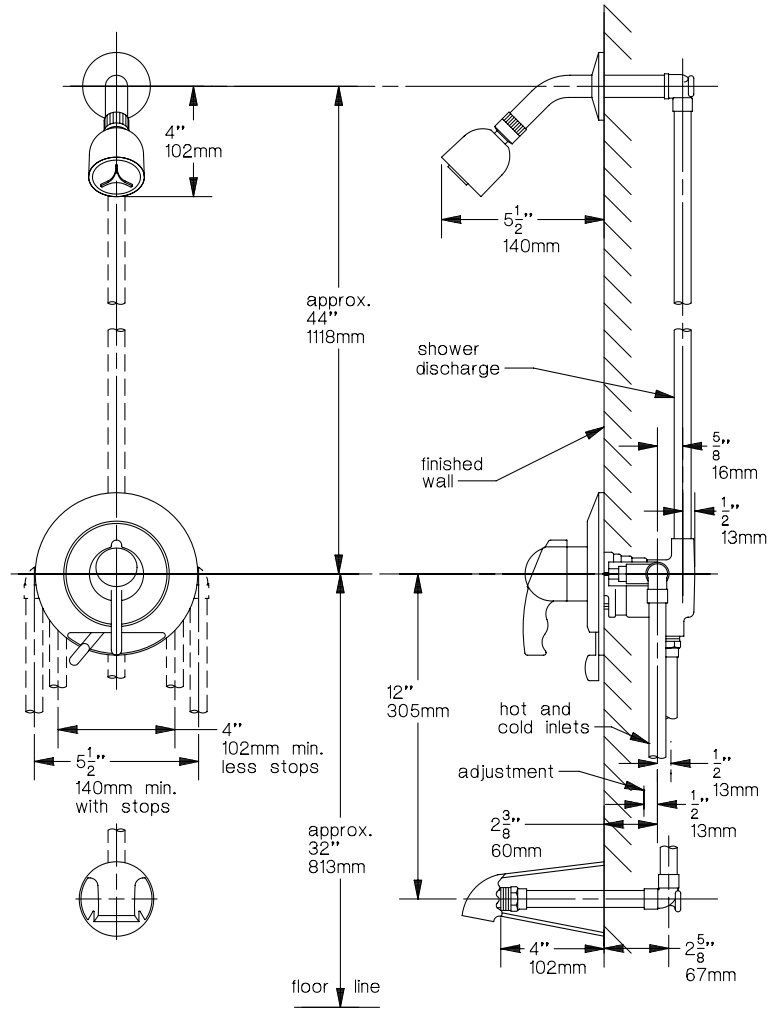
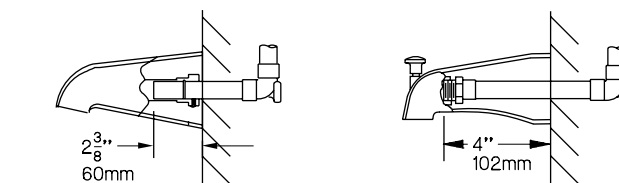
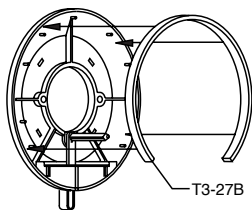


FIGURE 2A
Model C: Diverter spout installation

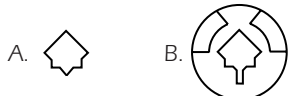


2. When finishing tile wall REMOVE (pull off; don't turn) ENTIRE PROTECTIVE ROUGH-IN SHIELD and FILL AREA AROUND VALVE BODY WITH GROUT OR PLASTER.
3. TURN ON HOT AND COLD SUPPLIES, valve will not operate unless both hot and cold water are turned on.
4. Unscrew dome cover (T-19/20) and tighten packing nut (T-17) for positive frictional resistance to handle turn throughout adjustment cycle and at shut-off position. Check valve cap, packing nut, diverter spindle o-ring and all valve, pipe and fitting connections for leaks.
5. SET LIMIT STOP SCREW AS DIRECTED AFTER "IMPORTANT" IN BOLD TYPE ON PAGE ONE. Reattach dome cover back onto packing nut.
6. Peel from backing and firmly press diverter volume dial/emblem (T-143, T-144) into position on clean, dry escutcheon (T3-27D) and assemble diverter volume control lever (T3-30), shaft (T-154), and clip (T-153) into escutcheon as shown in Figure 9.

FIGURE 4



7. Mount gasget (T3-27B) onto back of escutcheon with opening at bottom as shown in Figure 4. The use of this gasket should not preclude sealing valve body in wall as directed in installation step 2.
8. ALLOW VALVE TO RUN IN WARM POSITION FOR A FEW MINUTES TO TOTALLY FLUSH SYSTEM. IF SYSTEM IS QUITE DIRTY, REMOVE VALVE SPINDLE OR STOP SPINDLES (IF SO EQUIPPED) TO INSURE PROPER FLUSHING. See service instructions.
8. Install escutcheon on valve making sure diverter/volume shaft (A) aligns with mating key slot in top of diverter/volume spindle (B) (Models A and B only).



Push assembled escutcheon against wall and secure to valve with two escutcheon screws (T3-28). Snap in dial/emblem assembly (T3-29). Mount temperature control handle on valve spindle spline as shown in figure 9. Install shower arm, flange and shower head. See Figures 2 and 3.

9. Do not install positive shut-off devices on the outlet of this valve or devices that do not allow the valve to flow at least 1 GPM at 50 psi inlet pressure. EXCEPTION: If a self-closing or slow-closing valve is installed on the outlet, the supplies of the valve must be equipped with checks to eliminate hot to cold by-pass in the event the valve's handle is not turned to off after use. Contact your factory representative or Symmons directly for information on available checks.

FIBERGLASS WALL INSTALLATION

When installing Temptrol® 2000 in fiberglass or panel walls and it is desired to sandwich wall between valve body and escutcheon, cut hole in wall as shown in Figure 5 and mount valve with FG-1 wall mounting flange from rear. Note: It is always recommended to secure valve piping to rough construction and not depend on fiberglass wall for valve mounting security. On panel walls over 1" thick, install in conventional manner.

FIGURE 3
Model B: Shower System

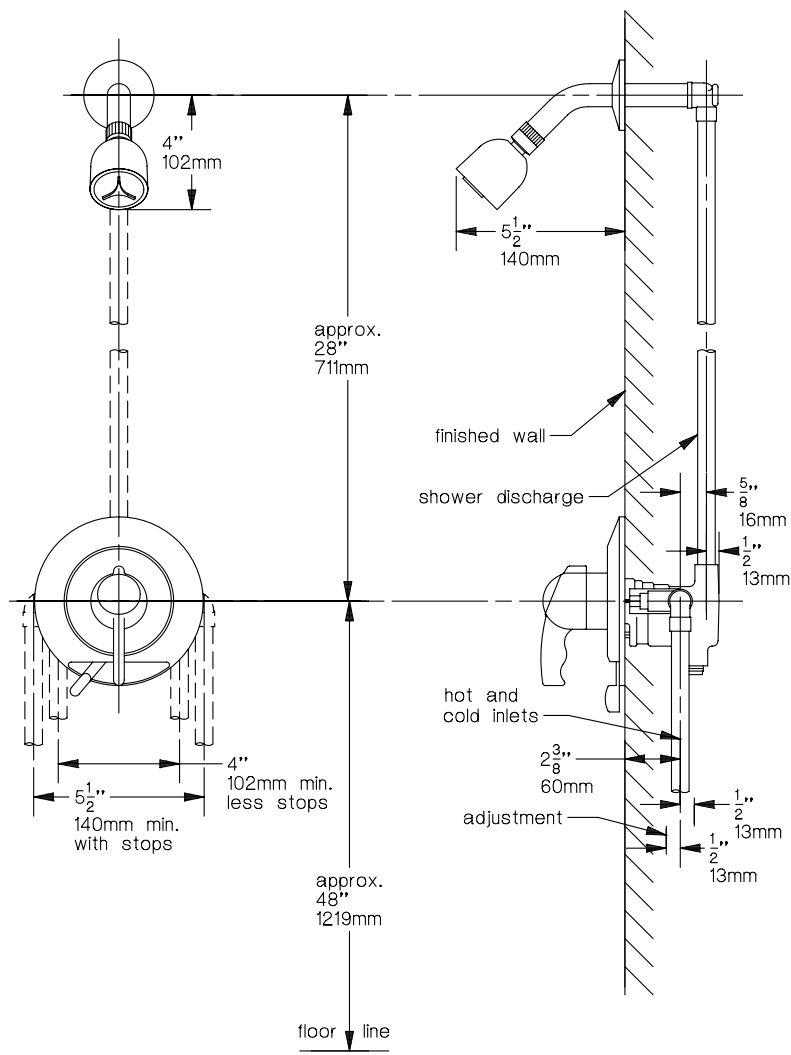
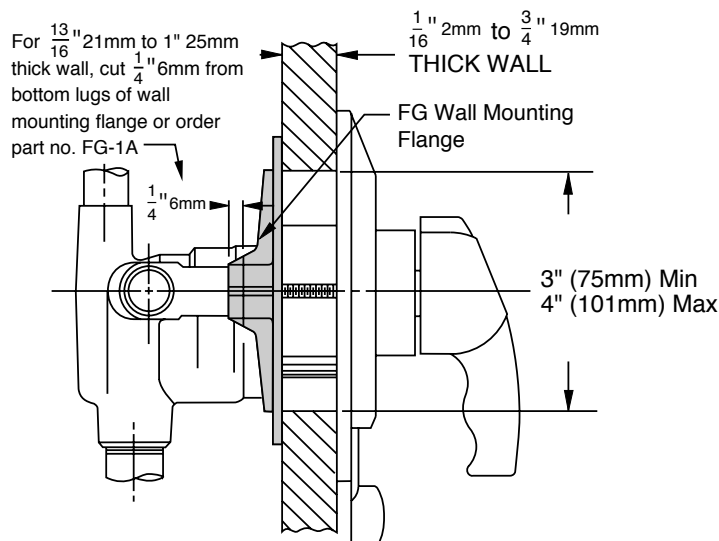


FIGURE 5



BACK TO BACK INSTALLATION

To simplify piping on back to back installations use one standard valve (hot on left, cold on right) and one with reverse coring (hot on right, cold on left) as shown in Figure 6 and 7. Order reverse core valve **by adding the suffix REV-X** after the plate number. (e.g. S-25-2-REV-X Temptrol® 2000 tub and shower unit with reverse coring.)

FIGURE 6

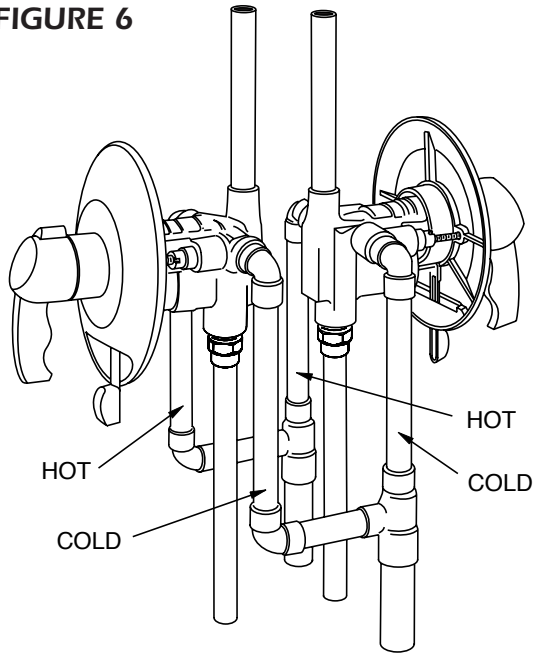
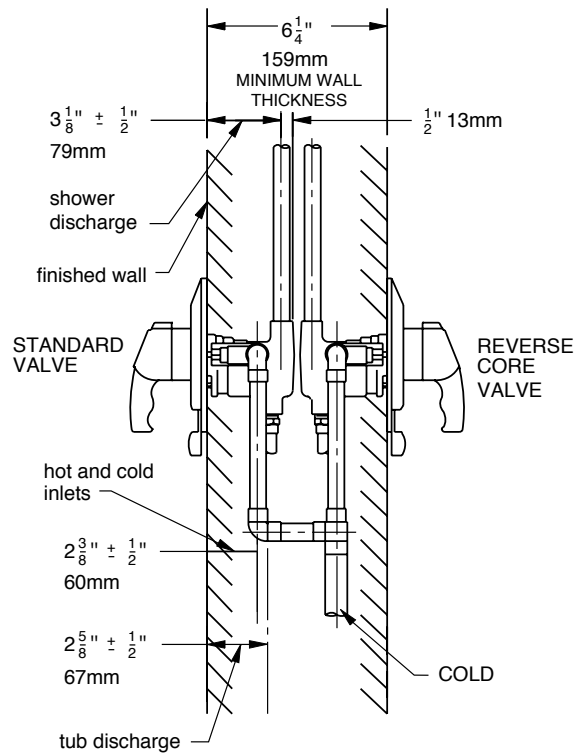


FIGURE 7
Back to Back Installation



OPERATION OF VALVE

The main handle of the Temptrol 2000 valve is for control of temperature only. From the OFF position, the handle is turned counter-clockwise through a minimum cold position, through a warm and hot position for a maximum turn of approximately one revolution. This allows for infinite temperature adjustments to suit the requirements of any user.

Model A (tub and shower) is equipped with a combination diverter and volume control. The small lever handle below the temperature control handle can be moved to the left for tub flow and to the right for shower flow. For volume reduction in either tub or shower position turn lever handle slowly toward the center or vertical position, and obtain any desired volume flow.

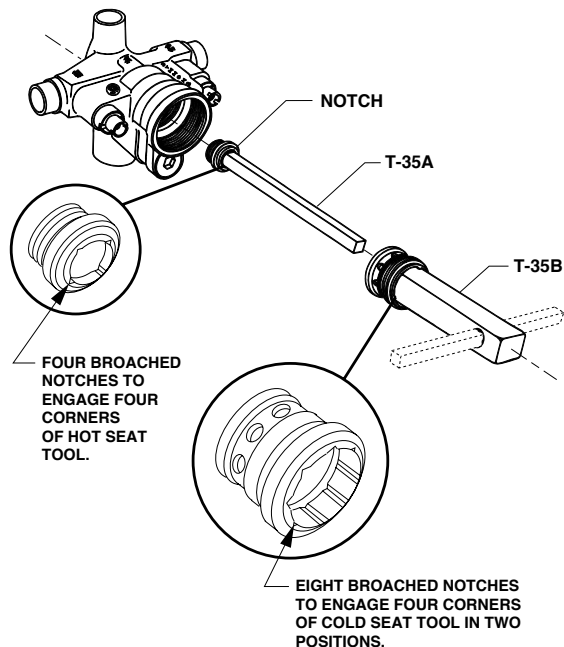
Model B (shower only) is equipped with a built-in volume control. The small lever handle below the temperature control handle can be moved from left to right to obtain any desired degree of water volume.

Model C (tub or shower) does not have the added feature of volume control built into the valve.

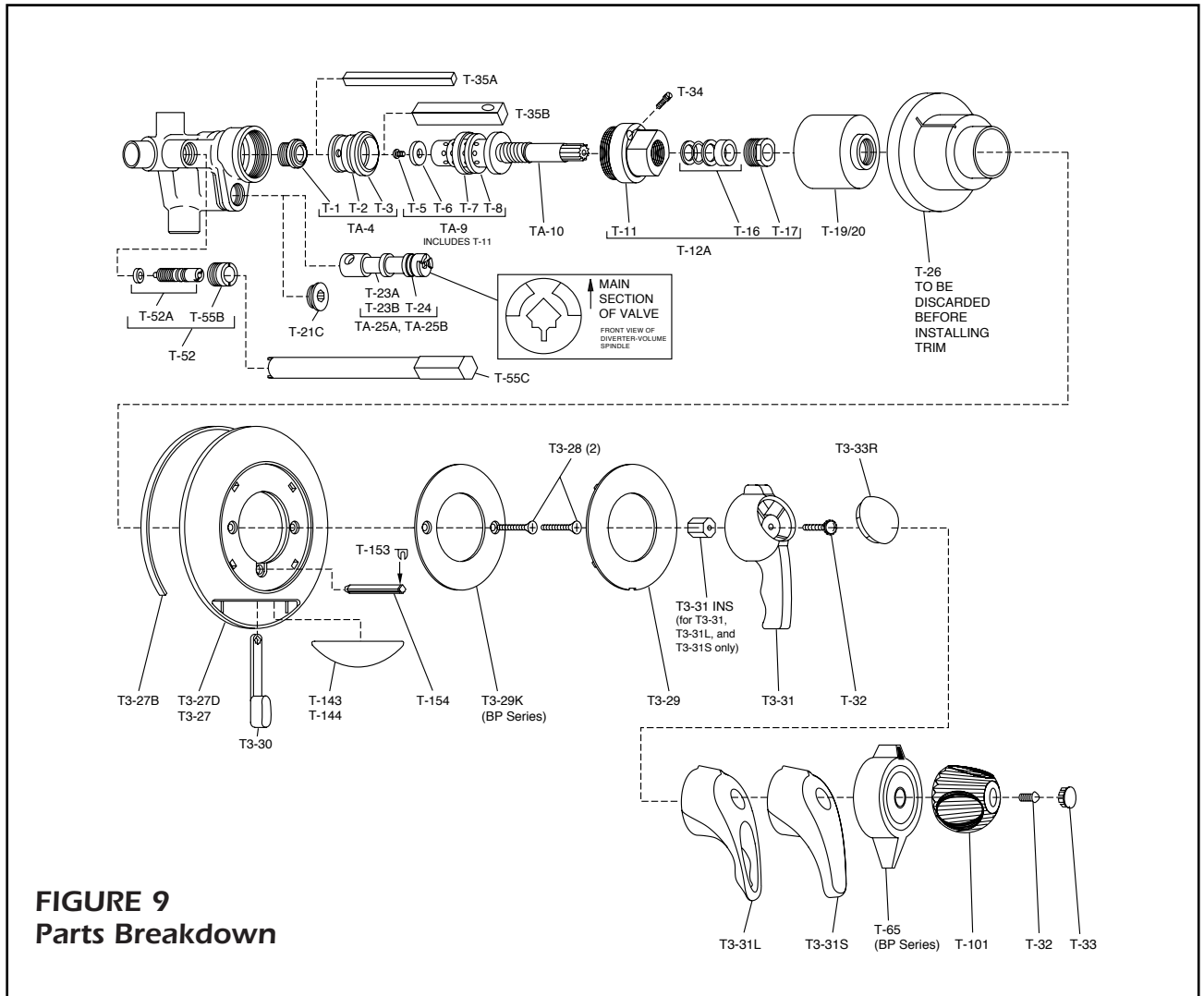
CARE AND CLEANING

The lustrous finish on your Temptrol 2000 valve should be treated with care. It can be readily damaged by improper handling or abusive treatment. To clean the finish wipe gently with a soft damp cloth and blot dry with a soft towel. Use only a mild soap solution if required. **DO NOT USE ABRASIVE CLEANERS. USE OF POLISH, ABRASIVE CLEANERS, SOLVENTS OR ACID CLEANERS WILL DAMAGE THE FINISH AND VOID THE SYMMONS WARRANTY.**

FIGURE 8
Seat Removal Tools



INDIVIDUAL PARTS		INDIVIDUAL PARTS		COMPOSITE PARTS	
T-1	Hot renewable seat	T-55B	Stop plaster shield	TA-9	Hot washer screw (T-5) Hot washer (T-6) Cold washer retainer (T-7) Cold washer (T-8) Cap gasket (T-11)
T-2	Cold seat O-ring	T-55C	Stop plaster shield removal tool	TA-10	Spindle assembly
T-3	Cold renewable seat	T-143	Tub/shower dial/emblem	TA-25A	Diverter/volume spindle (T-23A)
T-5	Hot washer screw	T-144	Shower dial/emblem		O-ring (T-24) for Model A tub/shower valve (beige or gray)
T-6	Hot washer	T-153	Diverter shaft clip	TA-25B	Volume spindle (T-23B) O-ring (T-24) for Model B shower valve (black)
T-7	Cold washer retainer	T-154	Diverter shaft	T3-31	Temperature control handle: Insert (T3-31 INS) Handle screw (T-32) Plug button (T3-33R)
T-8	Cold washer	T3-27	Escutcheon (Model C)	T3-31L	Loop style lever handle: Insert (T3-31 INS) Handle screw (T-32) Plug button (T-33)
TA-10	Flow control spindle	T3-27B	Escutcheon gasket	T3-31S	Solid style lever handle: Insert (T3-31 INS) Handle screw (T-32) Plug button (T-33)
T-11	Cap gasket	T3-27D	Escutcheon (Model A and B)		
T-12A	Cap assembly	T3-28	Escutcheon screw		
T-16	Packing, O-ring and washer	T3-29	Dial/emblem assembly		
T-17	Packing nut	T3-30	Diverter and/or volume handle		
T-19/20	Dome cover and lock nut	COMPOSITE PARTS			
T-21C	Diverter retainer	T3-31 INS	Handle insert		
T-23A	Diverter spindle (Model A) (beige or gray)	T-52	Stop spindle assembly/ escutcheon screw retainer (T-52A)		
T-23B	Diverter spindle (Model B) (black)	T-101	Stop plaster shield (T-55B) Acrylic handle: Handle screw (T-32) Plug button (T-33)		
T-24	Spindle O-ring	TA-4	Hot seat (T-1) Cold seat (T-3) Cold seat O-ring (T-2)		
T-26	Plaster shield				
T-32	Handle screw with lock washer				
T-33	Plug button				
T-34	Limit stop with O-ring				
T-35A	Hot seat removal tool				
T-35B	Cold seat removal tool				
T-52A	Stop spindle assembly/ escutcheon screw retainer				



SERVICE

1. Shut off water supply to valve.
2. Remove handle plug button and handle (see figure 9).
3. Remove dial (T3-29) by prying up from the slot located at 6 o'clock and then pry up around the clock until dial is loose. Remove escutcheon [T3-27(D)] by removing escutcheon screws (T3-28). 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 (T3-31S) 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 end 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; handle 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.
In Model A valve, 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.	
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.

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ZV-335 3 HOLE

