

## 9. SERVICE INSTRUCTIONS

### 9.1 Removing Flow Control Spindle

Reference parts breakdown (see FIGURE 10.1). See trim manual for trim removal instructions.

1. Shut off water supply to valve. Turn TA-10 flow control spindle to open position using trim handle.
2. Remove trim handle and dome cover.
3. Remove escutcheon plate by first removing escutcheon screws.
4. Unscrew both T-12A cap assembly and flow control spindle together.

### 9.2 Hot/Cold Seat Repair Kit

Service requires TA-4 hot and cold seat kit and T35C removal tool kit.

1. Remove flow control spindle (see STEP 9.1).
2. Remove both seats with removal tools, turning counterclockwise.
3. Replace both seats even if only one appears worn.
4. Install and tighten both seats to 15 foot pounds of torque, turning clockwise.

### 9.3 Flow Control Spindle Washer Repair Kit

Service requires TA-9 washer repair kit.

1. Remove flow control spindle (see STEP 9.1).
2. Remove cold washer by holding flow control spindle using trim handle and unscrew cold washer retainer using channel lock pliers, turning counterclockwise.
3. Remove hot washer by removing hot washer screw.

### 9.4 Checking Water Pressure Balancing Piston

The perforated end of the flow control spindle houses the water pressure-balancing piston.

1. Remove flow control spindle (see STEP 9.1).
2. Shake flow control spindle and listen for clicking noise. Piston should be free to slide back and forth the full length of its travel.
3. If piston appears restricted then do the following: a) tap the handle, or the stem end of flow control spindle, against a solid object to free the piston, or b) try soaking in household vinegar and repeat tapping handle or stem of flow control spindle.
4. If unable to free piston, replace flow control spindle.

### 9.5 Valve Reassembly

Reassemble valve, reversing the procedure in STEP 9.1. Be sure flow control spindle is drawn close to the cap before screwing cap assembly back into valve.

### 9.6 Removing VersaFlex™ Diverter Control Cartridge

Reference parts breakdown (see FIGURE 10.1). Service requires 5/16 inch hex wrench.

1. Remove RTS125 retaining nut with 5/16 inch hex wrench.
2. Insert hook end of removal tool (provided in RTS124 diverter cartridge kit) into key hole opening of diverter cartridge. Pull removal tool to remove diverter cartridge from valve body. Tool allows removal of cartridge at deepest allowable rough-in.  
**NOTE:** Do not damage back surface of valve body with tool if removing rear seal of cartridge.
3. Verify all bore surfaces are clean and free of debris. If necessary, clean bore surfaces with a nylon or soft bristle brush only (**DO NOT** use stainless steel, brass or abrasive brushes).
4. Inspect cartridge for debris. Cartridge cannot be serviced and must be replaced if necessary.

### 9.7 VersaFlex™ Diverter Control Cartridge Reassembly

Reference parts breakdown (see FIGURE 10.1).

Service requires 5/16 inch hex wrench.

1. Ensure o-ring seal on cartridge is greased before inserting into valve body.
2. Orient cartridge as shown in FIGURE 10.1. Insert cartridge into valve body.
3. Install RTS125 retaining nut with 5/16 inch hex key.  
**IMPORTANT:** RTS125 must be secured tightly to prevent leak-by between functions.