



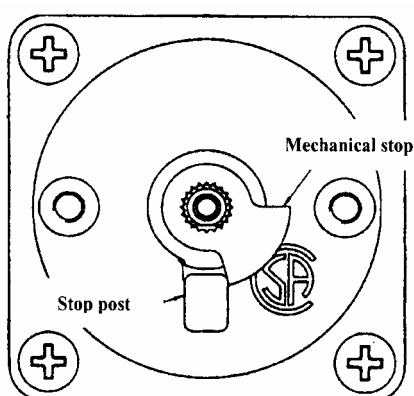
## Trouble shooting guide for leaking shower valves

Every pressure-balance cartridge and valve assembly is leak tested at the factory. Leakage of newly installed valves is likely due to installation problems.

**Warning: Do not try to stop dripping by applying extreme force to closing the valve**

### A. Mechanical stop setting

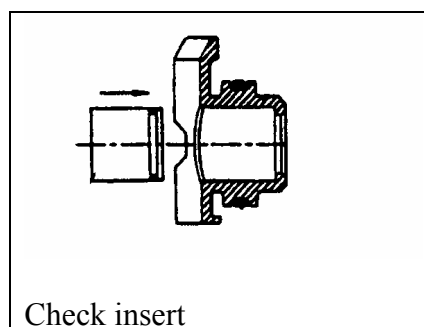
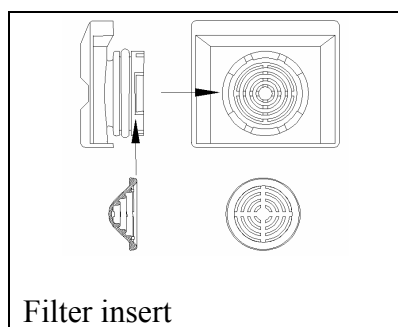
- Mechanical stop could be preventing the cartridge to fully close.
- Remove trim and driver (plastic stem)



- Remove the mechanical stop
- Close the valve by turning the cartridge stem clockwise, using the stem driver
- **Do not use excessive force.**
- If this stops the leakage, install the mechanical stop so it contacts stop post as shown. Reinstall the driver and trim.
- If not, proceed with step "B"

### B. Cartridge and inserts inspection

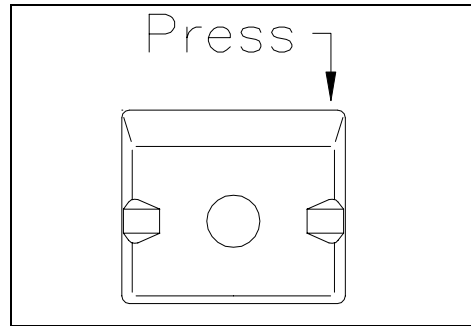
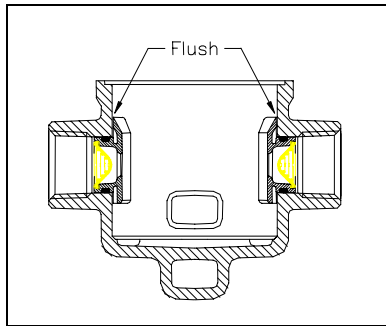
- Close hot and cold water supplies. Remove the valve cover.
- Pull the cartridge straight out. Check if the cartridge has both inlet o-rings in place. If an o-ring is missing replace it. Reinstall the cartridge and retest the valve.
- If the valve still leaks remove the cartridge to inspect the inserts. There are two types of inserts: filter inserts (for T II cartridge) and check inserts (for TII EF cartridge). See drawings below



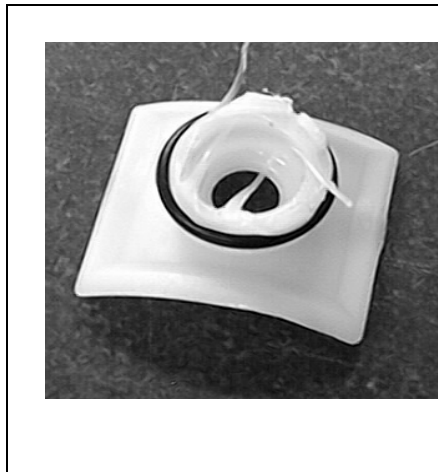
- This instruction applies to both inserts which will be referred simply as inserts
- It is possible to damage the inserts and the o-rings if excessive heat is used when soldering. Only propane – butane gas should be used, do not use Oxygen-Acetylene. If the cartridge and the inserts were removed during soldering or to flush the system it is possible that they could be installed incorrectly resulting in leaks.
- Check if the inserts sit flush against the wall (see detail) If they are not,

this could cause a leakage. Install them as stated in “C” and check for leakage.

- To remove the inserts rotate them by pressing on a corner  
Do not use a sharp object like a screwdriver to remove the inserts, this could score the valve body.



- Look for damaged or pinched o-rings. Also look for signs of heat distortions on inserts and o-rings. If any parts are damaged, contact your dealer for replacement parts.



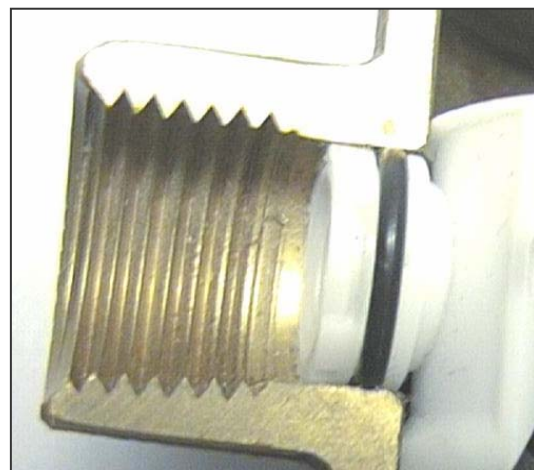
Heat damage

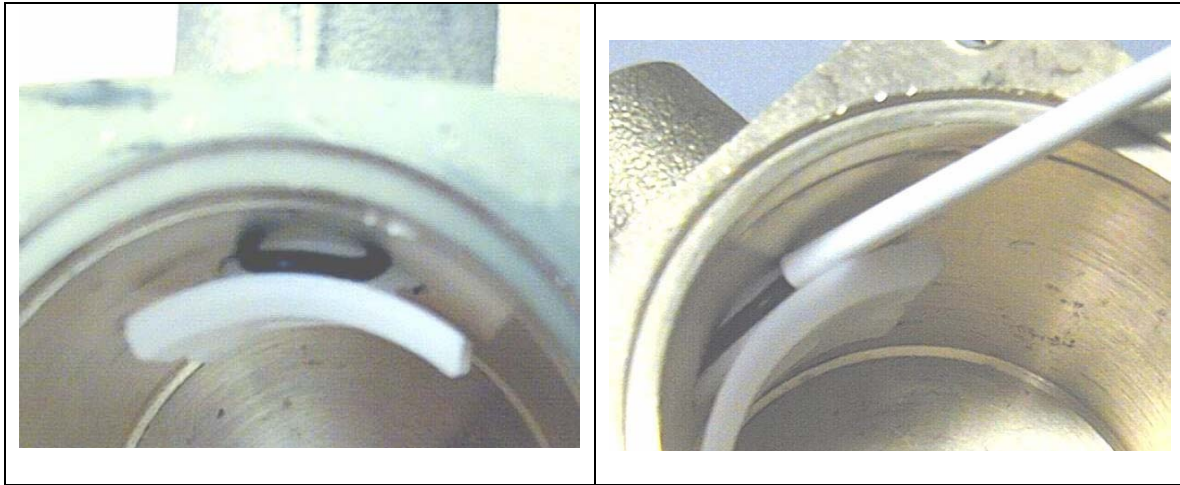


Pinched o-ring

### C. Re-installing of inserts

- The o-ring **must go all the way inside the hole**
- Clean the inlet holes of the valve body of any grit and debris that could prevent proper sealing
- Lubricating the o-rings will make it easier to install the inserts into the valve body. Use a silicone based plumbing grease (do not use Vaseline)
- When placing the inserts into the valve body the angled edge of the insert faces outwards.

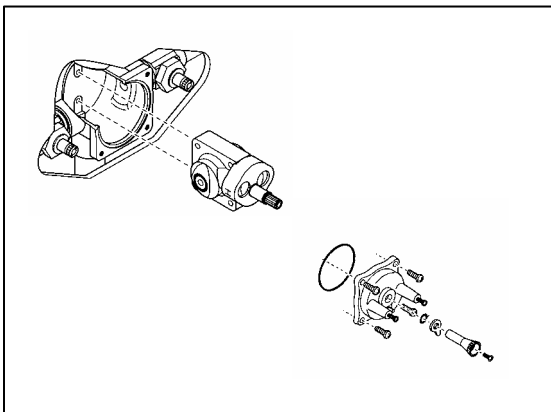




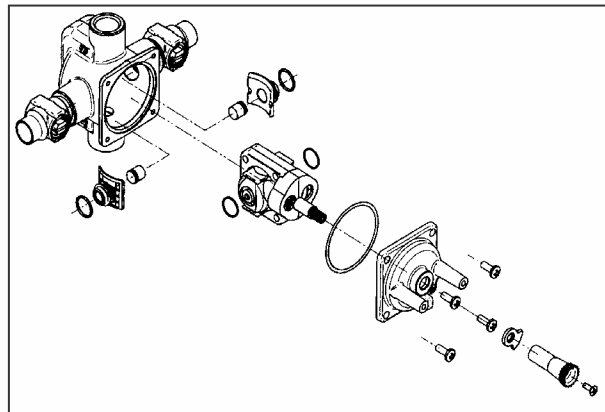
- When installing the inserts it is important that the o-ring remains in its groove to form a proper seal. Press the inserts into place slowly and make sure that o-ring has slid all the way into the inlet holes.
- If you have difficulties installing the insert o-ring properly it may be necessary to prevent the o-ring from coming out of the groove by gently guiding it into the hole.
- Do not score the valve body or damage the o-ring

#### D. Re-installing of cartridges

##### TII CARTRIDGE



##### TII EF CARTRIDGE



- Before inserting cartridge make sure the inlet o-rings are in place.
- The TII cartridge installation requires that the two small pins will fit into the two indentations in the valve body to prevent the cartridge from rotating.
- Check the pins for damage, damaged pins show that the cartridge was not properly installed.
- The T II EF cartridge installation requires that the two wings on the cold and hot inlets of the cartridge to fit over the check inserts to prevent the rotation of the cartridge.
- The cartridges should slide in freely into the valve body. When installed the cartridge should not rotate.

#### E. Re-assembling of the valve

- Before installing the valve cover make sure the cover o-ring is in place
- Tighten the cover screws in a diagonal pattern
- Close the cartridge, turn the water on and check for leaks
- If leaks persists replace cartridge
- Reinstall the mechanical stop as stated in section “A”
- Reinstall the driver and the trim