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.

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 TII 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