

Backflow Prevention Overview

VistaCool systems come equipped with a VistaCheck dual check backflow preventer, which is certified by CSA in the USA and Canada for use on water supply lines and protects the public water supply from any possible backflow or backsiphonage conditions. Therefore, RPZs, air gaps and other backflow devices are typically not necessary when connecting VistaCool to autoclaves.

This S7550 air gap kit is necessary in the rare circumstance that a local plumbing inspector may require an air gap. It easily adapts to the system and does not affect the cold water or drain connections.

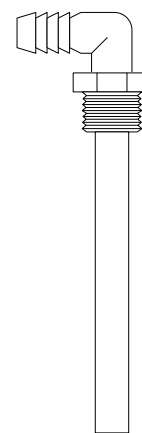
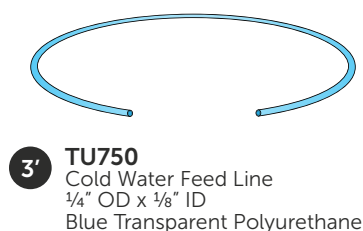
The air gap is a physical, non-mechanical method of backflow protection that requires a hole to be drilled in the countertop or sink rim. It provides a physical separation between the potable water supply line and the non-pressurized VistaCool system. In the event of backflow, the water would be expelled through the drain hole in the air gap and discharged into the sink or countertop if an under-mount sink is used. If there were to be any suction from the potable water supply line, air would be pulled into the city source since the opening of the supply line is above the drain hole.

The air gap used has been certified by the International Association of Plumbing and Mechanical Officials (IAPMO) as compliant with the product's performance standard and the Uniform Plumbing Code (UPC).

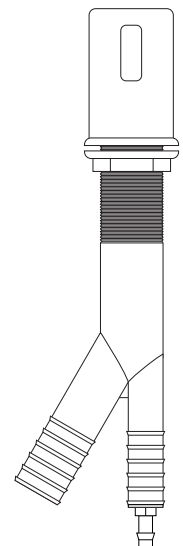
Because the VistaCool system's design contains a separated and sealed coil, there is absolutely no reason to employ additional backflow prevention methods other than the CSA-certified VistaCheck provided with the VistaCool system.

Preparation

Remove all contents from the air gap kit carton to make certain all items needed for installation are present and undamaged.



S7554
Water Inlet Assembly



S7552
Air Gap Assembly

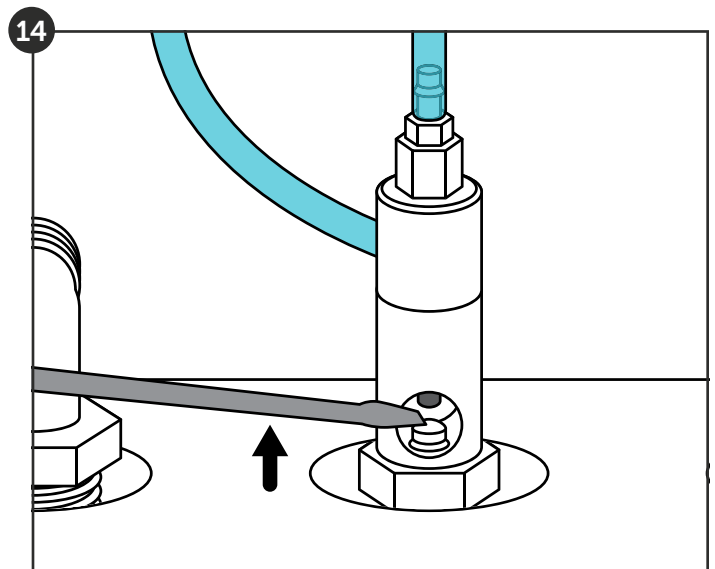
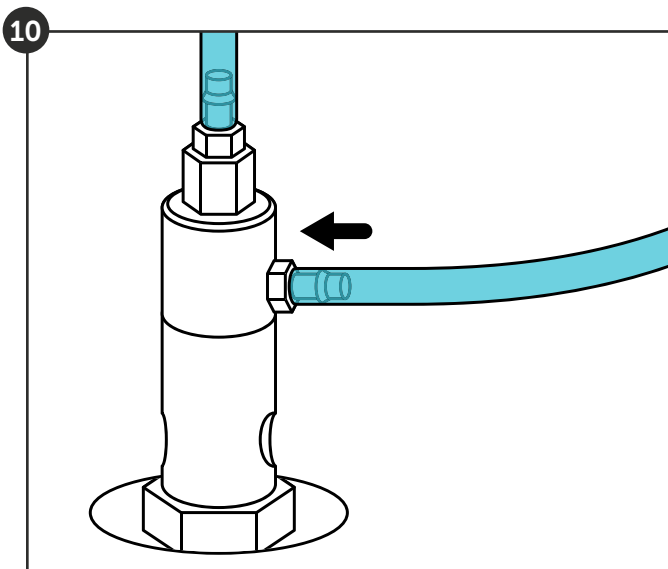
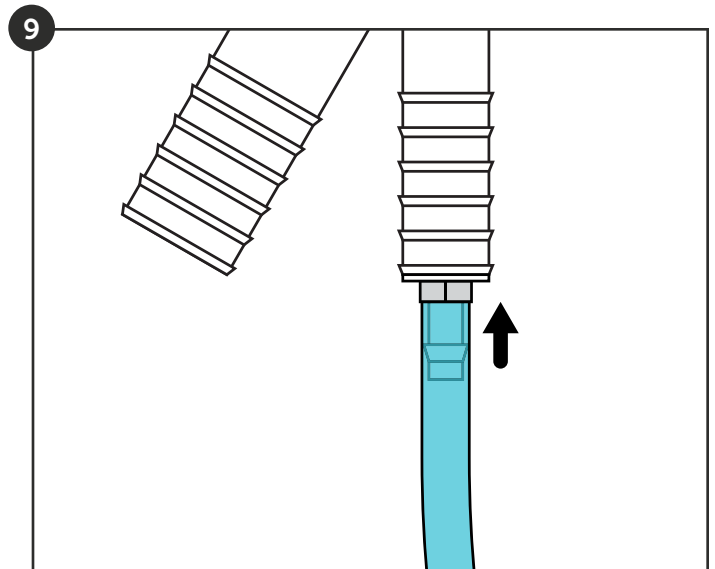
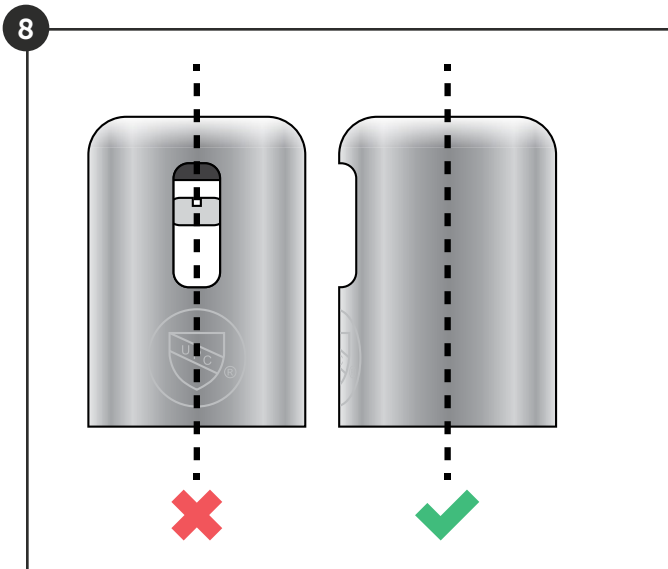
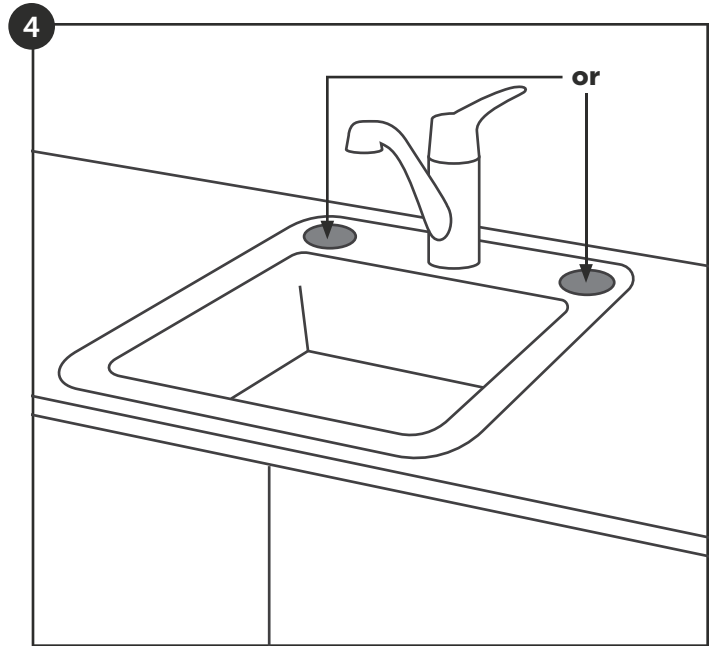
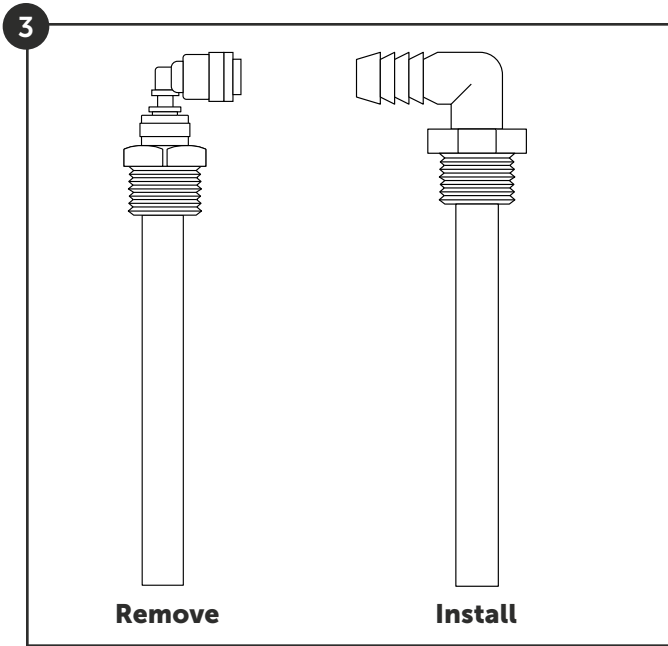
Preparation

Installation of this optional air gap assembly is the same for both V7501 and V7502 VistaCool systems.

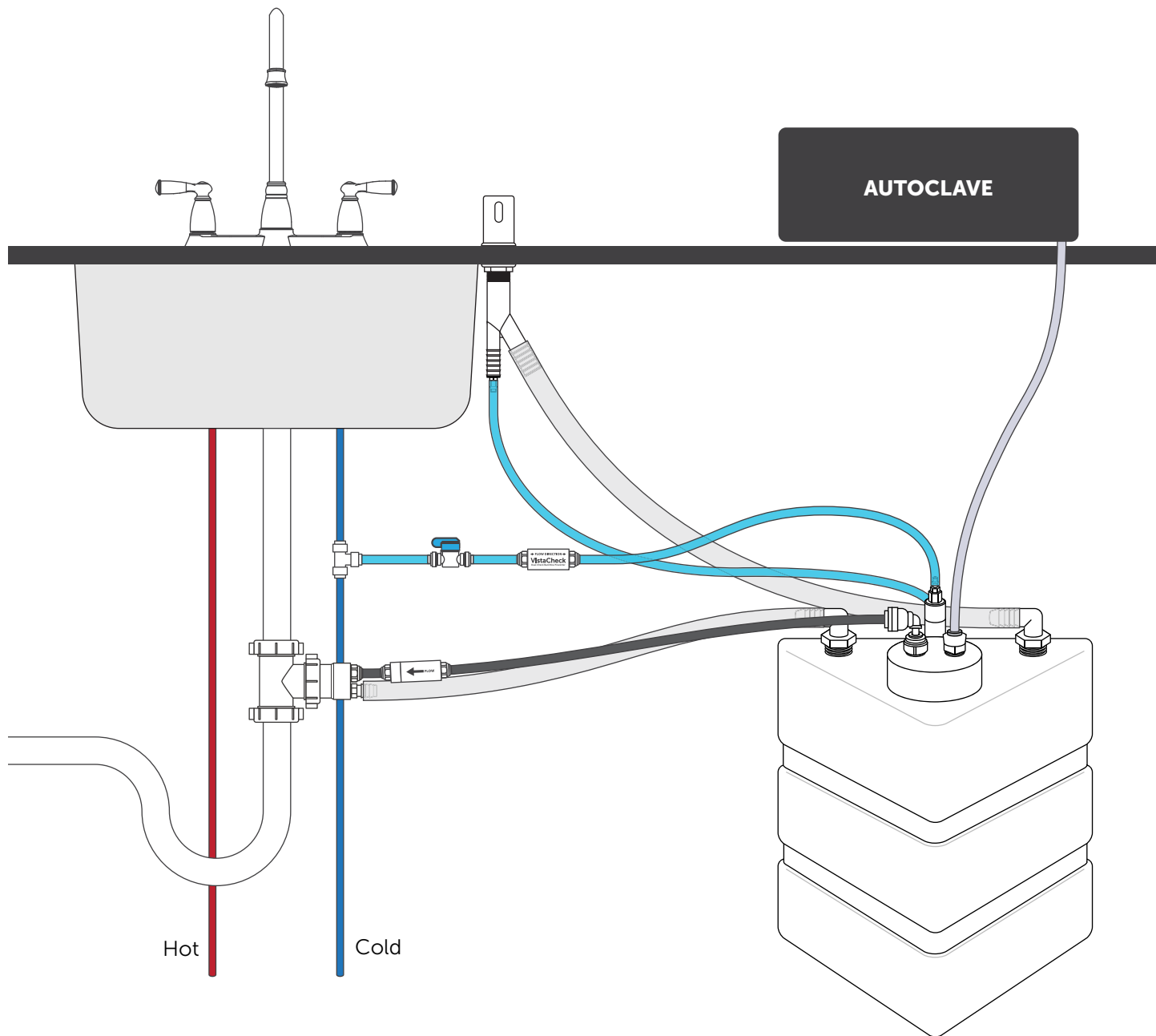
- 1 Turn off the cold water supply to the VistaCool.
 - 2 Remove the 7" length of blue 1/4" tubing that runs between the side of the brass water valve and the white swivel elbow on the coolant inlet assembly.
 - 3 Remove the entire coolant input assembly from the tank and replace it with the included 1/2" NPT x 3/4" hose barb elbow and dip tube assembly (**S7554**).
 - 4 The air gap assembly (**S7552**) is designed to fit into the sprayer hole of standard sinks. If this option is not available, drill a 1-1/4" diameter hole in the lip of the sink. If the sink is an under-mount style, drill the hole as close to the edge as possible. It is important that water from the air gap assembly is able to drain into the sink.
 - 5 On the air gap assembly, pull upwards on the chrome cover to remove the top. Then remove the top threaded nut and washer, leaving the lower threaded nut in place.
 - 6 Insert the air gap assembly into hole from under the counter.
 - 7 Place the washer followed by the top-threaded nut at top of the threads and turn 2 to 3 times (enough to catch a few threads). Then tighten the air gap assembly from underneath the counter using the bottom-threaded nut.
 - 8 Replace the chrome cover making sure the opening does not reveal the overflow outlet.
 - 9 Connect one end of the blue 1/4" tubing to the 1/8" stainless hose barb on the inlet side of the air gap. Make certain the end of the tube fits completely over the barb and touches the hex section of the barb fitting.
 - 10 Cut the blue 1/4" tubing to the proper length and connect the other end to the stainless hose barb on the side of the brass water valve. Make certain the end of the tube fits completely over the barb and touches the hex section of the barb fitting.
 - 11 Connect one end of the clear 1" tubing to the large hose barb on the end of the air gap assembly. Make certain the end of the tube fits completely over the barb. Since there is no water pressure on this tube, there is typically no need to use a stainless hose clamp. However, if there are circumstances where the tube could be pulled off the barb, install a locally-sourced clamp.
 - 12 Cut the clear 1" tubing to the proper length and connect the other end to the 3/4" hose barb elbow just installed on the VistaCool tank. Again, use a locally-sourced hose clamp if believed necessary.
- IMPORTANT:**
Make certain there are no dips or sags in the clear 1" tube, ensuring a continuous downward slope in the line while still allowing the unit to be moved for servicing. This problem would impede the water flow from the output of the air gap to the input of the water coolant fitting.
- 13 Before resupplying the VistaCool with a water supply, make certain the VistaCool tank has been completely filled with **cold** water and all fittings and tubings are in place.
 - 14 Turn the **cold** water supply valve on. Using a small flat-blade screwdriver, push **upward** on the piston of the water valve in the view port. Hold **up** on the valve until you see water running downward through the clear 1" tubing on the outlet of the air gap assembly and down into the tank. When you can see water running out of the clear 3/4" tubing from the coolant overflow line and to the drain, the system is primed and ready for use after checking for leaks anywhere in the system.

NOTE:

Dipping the end of a tube into a cup of hot water for a few moments will soften the end, making for easier installation.



Typical Installation



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