

Atmospheric Type Vacuum Breakers used with Shampoo Bowls for the Hair Salon Industry

Most municipal plumbing codes in the U.S. require the installation of an Atmospheric Type Vacuum Breaker to be installed on Shampoo Bowls in Hair Salons. These devices provide backflow prevention of harsh chemicals used in this industry from entering the potable water supply.

Although there are other types of backflow prevention devices installed on faucets used in kitchens, bathrooms, etc., these normally are not adequate for installation in Hair Salons and Spas, nor are they likely to be in compliance with municipal plumbing codes. The Atmospheric Type Vacuum Breaker is the standard in the Hair Salon Industry and they all share common function and characteristics. Refer to ASME Standard 112.18.3 and ASSE Standard 1001. One undesirable characteristic that can occur are leaks beneath the cap. Listed below are the common causes and solutions.

A. Continuous Leaks from under the Vacuum Breaker Cap

1. The top cap of an Atmospheric Type Vacuum Breaker may be loose. **(See attached photo)**

Solution: Check that the cap is fully hand tightened. Use a glove or cloth to grip the cap when tightening to protect your hands from cuts.

2. The water supply hose and spray hose connections may be incorrectly installed.

Solution: Make sure the water supply and sprayhose connections are installed correctly. The Vacuum Breaker has two arrows molded into the side of the body indicating where to attach these hose connections. The water supply from the faucet should be connected to the side with the arrow pointing upward. The sprayhose or outlet should be connected to the side with the arrow pointing downward. If these connections are reversed, there will be constant leaking when the faucet is turned on. In addition, assemble the Vacuum Breaker/Receiver Cap Assembly before installing on the bowl. Make sure to use Teflon tape on the threads, (do not use pipe sealant) and that the pipes are securely attached to Vacuum Breaker Head. Use vise grip type pliers if necessary to insure a tight connection. **(See attached photo)**

B. Leaking from the pipe connections or hose connections

1. No Teflon tape applied to the threads of the pipe

Solution: Apply Teflon tape to the pipe threads that attach to the Vacuum Breaker. Be sure to apply the tape in the correct direction of rotation or the tape will unravel when the pipe is attached, leaving an incomplete seal.

2. Pipe Compound Sealant was applied to the threads instead of Teflon tape

Solution: Teflon tape must be used for the pipe thread connections to the Vacuum Breaker. Pipe Compound is not adequate for this connection, and leaks may occur.

3. Pipes are not tightened fully into the Vacuum Breaker Head.

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Solution: The pipes must be completely threaded into the Vacuum Breaker Head. Use vise grip type pliers if necessary for a tighter grip on the pipe when threading into the Vacuum Breaker Head.

4. Leaking from the hose connections to the pipe threads

Solution: Make sure the connections are tight. Use a pipe wrench or vise grip type pliers to hold the pipe while tightening the hose fittings. If leaking still occurs, Teflon tape applied to the pipes should seal the connection. Do not use pipe sealant.

5. Leaking from the hose between the brass fitting and aluminum ferrule.

Solution: if leaking is occurring from where the hose and brass fitting join together, the hose may be worn and needs replacement. If the hose is new, return for replacement.

C. Minor dripping or leaking from under the Vacuum Breaker Cap when the faucet is shut off

Cause:

1. When the faucet is shut off, water siphons back through the sprayhose through the underneath edge of the Vacuum Breaker Cap. This is not a defect, but a common function of an Atmospheric Type Vacuum Breaker.

Solution: Drips from the top of the Vacuum Breaker can be reduced or possibly eliminated by insuring that the operator lowers the Head of the Spray hose inside the Shampoo Bowl below the top of the Vacuum Breaker Cap whenever the faucet is shut off. This should prevent any back siphoning and leaking out through the top of the Vacuum Breaker.

Note: This last solution is a procedure that may require operator training to be effective. If your operators are not aware of this procedure and they shut off the water while the Spray hose is raised above the level of the Vacuum Breaker Head, then water dripping will occur.

Removable Cap attaches to the top of the Vacuum Breaker Body. Make sure this Cap is fully hand tightened.

Plastic Seal with Red Silicone Rubber Washer.



Arrows on Vacuum Breaker Body. Up is the inlet for the faucet connection. Down is the outlet for the Sprayhose