HVAC Air-Trap™

FCN-Series

NEGATIVE PRESSURE

This is a guide to the user of an FCN Series *Air-Trap* during installation, commissioning, operation, or periodic maintenance.

The Benefits of the FCN *Air-Trap* are:

- Eliminates the geyser effect that is caused when the standard P-trap dries out and condensate begins to form
- Requires less than half the height of a p-trap
- Operates dry except when condensate is being produced
- Will not freeze
- No sludge build-up in bottom of trap
- Easily comes apart for cleaning

MADE IN U.S.A.

Negative-Pressure Application

When operating with a negative pressure plenum, install the FCN *Air-Trap* in a horizontal orientation with the "FLOW" arrowhead pointing in the direction of water flow as shown in **Figure 1**. The direction of condensate flow is indicated on the larger of the two tabs that clamp together the two parts of the trap.

Condensate enters the end of the trap with the 3/8" diameter hole and the word "TOP" is molded into the inlet end of the FCN as shown in **Figure 2**.

Figure 1

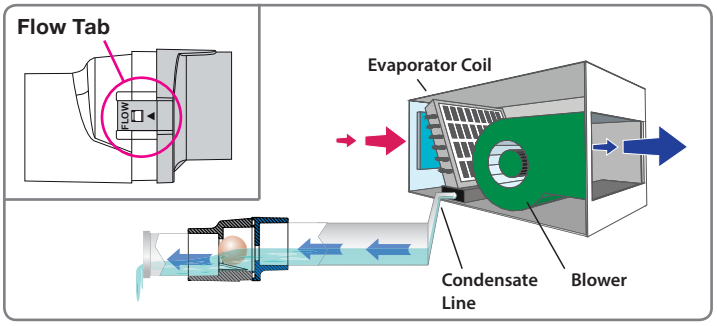
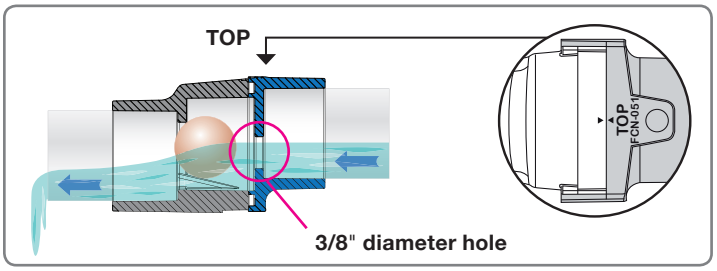


Figure 2



When disassembling the FCN for maintenance, use a small flat head screwdriver and lightly, and slowly, pry the wider tab outward a few thousandth of an inch until the two parts separate. There should be no maintenance required other than cleaning. Reassembling requires that the O-ring be properly placed in the groove and the ball-valve be properly positioned as shown in **Figure 3**.

Figure 3

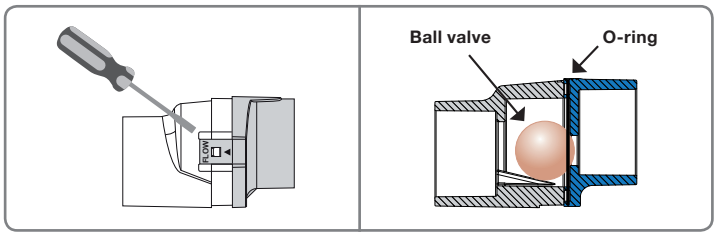


Figure 4

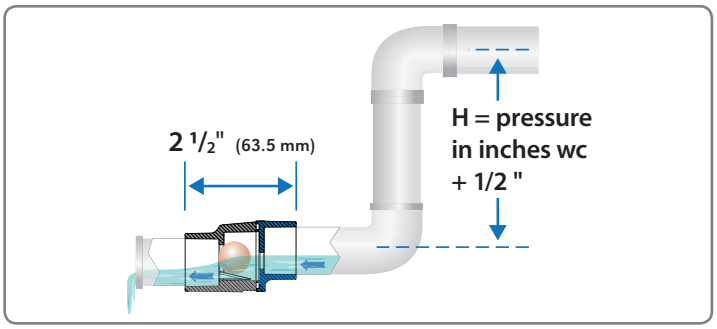
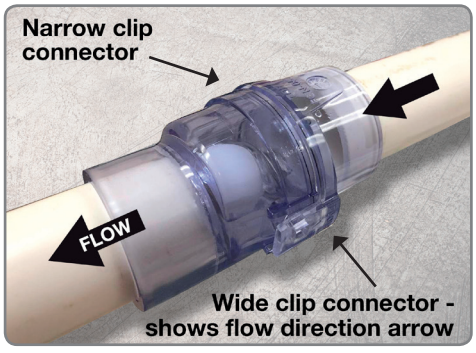


Figure 4. Installation of the FCN for negative pressure showing arrowhead pointing in direction of water flow.

FCN traps are rated at up to 1 GPM of condensate flow at essentially any negative pressure, but H (refer to Fig. 4) increases linearly with pressure.

Figure 5. FCN with integral 3/4" slip connections

There are two clips that connect the two parts of the trap, one clip is wider than the other, so make sure to match wide to wide and narrow to narrow.



- **Standard connection is 3/4" slip. A 3/4" to 1/2" bushing can be used to accommodate a 1/2"- size PVC SCH 40 pipe.**
- **NEVER CONNECT CONDENSATE DRAIN DIRECTLY TO A SANITARY DRAIN LINE.**

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