

## *trouble shooting tips*

---

### **No. 14 Those bugs bite!**

**Published: December 1998**

One of the summer plagues we face in Canada are a tiny little bug with a big bite we commonly call "No See'ums"! Well these little critters also bite electronics!

They manage to get into pump heads through the tiniest places, unsealed doors or loose panels, through ventilation vents, etc. Once inside the pump head they like to get cozy with warm IC's. These are usually found on Regulator or Power Supply boards, and if there is enough voltage such as in Gilbarco Modular Pumps and to a lesser extent Tokheim Pumps the little fly gets electrocuted and in the process usually causes enough of a short to take out the circuit board.

With a magnifying glass and even sometimes with the naked eye you can find these little fellows on the blown board with their feet up in the air, having committed suicide at the expense of the board.

The only cure to this problem, if you find them on a blown board, is to prevent them getting in. Ensure all openings are sealed. This does present a problem with vents in that they are designed to cool the housing. Most of these vents have a screen or very small openings, but as any of you who have experienced these little fellow know they can get through a window screen. If you put in a finer mesh screen you will restrict air flow.

If the vent opening is less than 3 inch diameter and you have enough room inside the housing, one trick we have learned is to take wire mesh drip coffee filter and glue it in place inside over the vent opening (see figure 1). Because of its cup shape it gives more screen area and even with its very fine mesh screen will allow close to the same air flow and yet prevent these little bugs from getting in. Use this with caution on a dark painted head or one that is in direct hot sunlight, as these certainly do not need any restricted air flow, and there could be some.

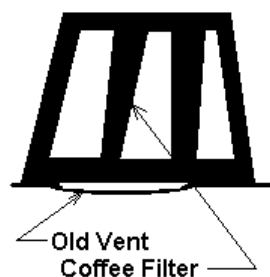


figure 1