



## **INSTALLATION INSTRUCTIONS FOR 47103-3091 240 VAC MACH 8 CONDENSATE PUMP KIT**

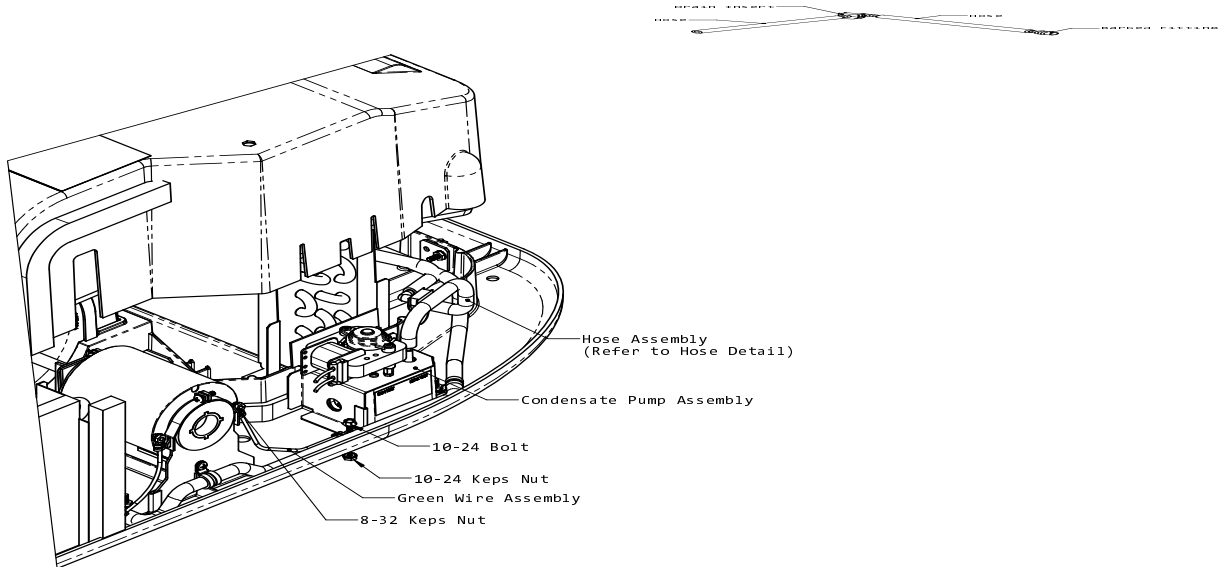
This instruction is to add a condensate pump assembly to a Mach 8 unit which was not factory equipped with a condensate pump assembly.

### **WARNING – ELECTRIC SHOCK HAZARD:**

**Insure that all roof unit electrical power has been turned OFF prior to beginning installation of this condensate pump assembly.**

1. Remove shroud. Shroud will be held with screws through the top. Some models may have smaller stainless steel screws at each side on the shroud and one screw at the front nose. Retain all screws and washers for later re-assembly.
2. Remove the fan blade by removing the mount screw and lifting off the blade. For units with enclosed fan assemblies, remove the lower nuts which support the fan legs and invert the assembly to rest atop the evaporator cover. This will greatly aid in gaining access to the wirebox.
3. Remove the unit wirebox lid. It is retained by a single locknut. Use a 3/8" hex nut driver or socket to remove.
4. Remove the curbside rear wirebox strain relief bushing by squeezing the moveable section inward while exerting outward pressure. Pump wiring will pass through this strain relief. Restore strain relief after wiring the pump.
5. If you intend to pump the condensate to a location on the roof, you will not need to remove the evaporator cover or remove the aluminum tape or install the drain insert. Skip to Item 7.
6. If you intend to connect the condensate hose into the unit return air section and connect to a hose routed through the roof and side wall to deposit the condensate onto the ground, you will now remove the evaporator cover which is held by four (4) locknuts; a 3/8" hex nut driver or deep well socket may be used for this. Figure 1 shows the loosened evaporator cover raised to allow access to the return air section. Some evaporator covers will have a soft start device attached with double-sided tape. Gently pry the soft start device and associated bracket off and set aside to completely remove the evaporator cover. Cut out the aluminum tape found on the vertical wall of the return air section. With the tape removed, you will find a U-shaped depression formed in the short vertical wall. The drain insert (See Figure 1) will fit into the depression to create a continuous flat surface across the short wall. Now you may connect the large 1/2" barbed adaptor to the 1/2" dia. drain hose (provided by installer) which will drain to the ground. Reinstall the evaporator cover and soft start device at this time.
7. At this time, remove and discard the metal bracket if supplied (some models had the bracket installed even though there was no pump assembly installed). Retain the fasteners for later use.
8. If there is no bracket (the most usual case), remove the strain relief clamp, drill a 7/32" dia. hole at the location shown in Figure 1 as 10-24 bolt. TAKE CARE that the drill does not carry through to the roof and create a hole in the roof.
9. You will now need to plug the existing holes in the drain pan which ordinarily drain onto the roof. Thoroughly clean the inside of the pan at the location of the holes to remove any oil or debris. Plug with silicon or other waterproof sealant or epoxy. Allow to cure and insure water tightness by pouring in a cup of water.
10. Install the condensate pump assembly to mount onto the basepan over the strain relief bolt. Reinstall the strain relief with umbilical wires.

11. Insert the kit provided 10-24 bolt downward through the bracket, provided green grounding wire and 7/32" basepan hole previously drilled. Engage the provided 10-24 lock nut from below the basepan. Tighten the bolt with a 5/16" hex driver. The lock nut will snug up to the pan. The added green grounding loose end will connect to the blower motor bolt using the supplied 8-32 keps nut (See Figure 1).
12. Attach the 1/4" dia. drain insert hose onto the pump standpipe. If running user supplied 1/4" inside dia. tubing, you will install it onto the pump standpipe and route to the desired location. Keep in mind that the tube cannot route higher than the unit and the end must be below the pump height. It is permissible to cut an inverted "U" in the polypropylene shroud to allow the passage of the tube through the shroud.
13. The pump wires must be routed to the unit wirebox, through the strain relief and attached to the terminal strip. Inside the wirebox cover is a wiring diagram (See Figure 2) which shows the attachment points.
14. Re-assemble all items and restore power. The condensate pump runs any time the compressor runs.



**FIGURE 1**



**FIGURE 2**