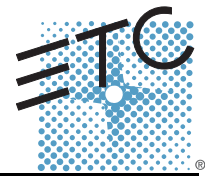


ETC® Service Note

Sensor Fan Replacement Instructions



Overview

This document contains instructions for removing and replacing the fan in a Sensor SR48 Installation rack.

There are two ways to know if the fan has stopped working. First is by visual inspection. Second, if there are overtemp messages at the control processor.

Before you begin work, identify which fan is currently in place, and the replacement required.



Note: *This replacement requires an 11/32 Nut with a minimum shaft length of 4 inches. If you are unable to find a driver with this length, you may be able to modify your driver. The driver below has been modified by shaving the handle so that it could reach.*



Identify fan

On the left is a Comair fan. The Comair fan can be identified by the bare leads attached to the fan assembly.

On the right is the new style fan (ETC Part # B1032).



Comair Fan



New Fan

Difficulty of Repair

Easy

Estimated time to complete

30 to 45 minutes



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Technical Services ■ Rev B ■ Released 2011-11

ETC Service Note

Sensor Fan Replacement Instructions

Tools Needed

- Small Step Stool or Ladder
- #2 Phillips Screwdriver
- 3/8" Socket Wrench
- Wire Stripers With Crimp Capabilities
- Butt Splices (18 – 22 AWG)
- 11/32" Nut Driver or Modified with a 4" or longer shaft
- Rack Fan
 - SR24/48 Fan (fan and harness assembly) - ETC Part # B125
 - SR24/48 Fan (New) - ETC Part # B1032
 - Fan Cable Harness - ETC Part # B127
 - SR12 Fan - ETC Part #B159
 - SR6 Fan - ETC Part # B155

Safety

Please note the following safety warning before use:

- Disconnect power from the racks before all maintenance.



WARNING: *Dimmer racks without an accessible power disconnect device cannot be serviced safely. Before removing dimmer or control modules for service, de-energize main feed to dimmer rack and follow appropriate Lockout/Tagout procedures as described in NFPA Standard 70E. It is important to note that electrical equipment such as dimmer racks can present an arc flash safety hazard if improperly serviced. This is due to available large short circuit currents on the feeders of the equipment. Any work on energized equipment must comply with OSHA Electrical Safe Working Practices.*

Procedure

- Step 1: **Ensure power is turned off to the dimming rack.**
- Step 2: Remove top 4 or 5 dimmer modules.
- Step 3: With your #2 Phillips screwdriver, remove the (2) circled screws.



ETC Service Note

Sensor Fan Replacement Instructions

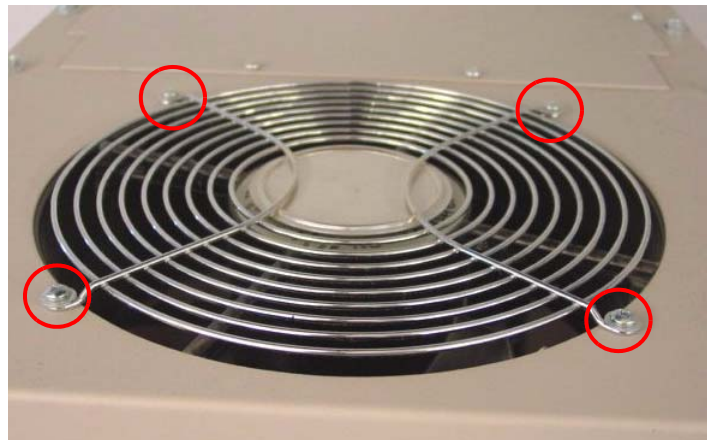
Step 4: With your 3/8" socket wrench, remove the (4) circled bolts.



Step 5: Using your #2 Phillips screwdriver and long or modified 11/32" nut driver, remove the (4) circled screws. Remove the beacon board PCB.



Note: What makes this step difficult is the limited space to work in and not being able to see what you doing. Some of this step will be done by feel. Upon completion of this step, the fan will be free.



Step 6: Remove the fan, by slightly lifting the top lid so that the fan can squeeze by.

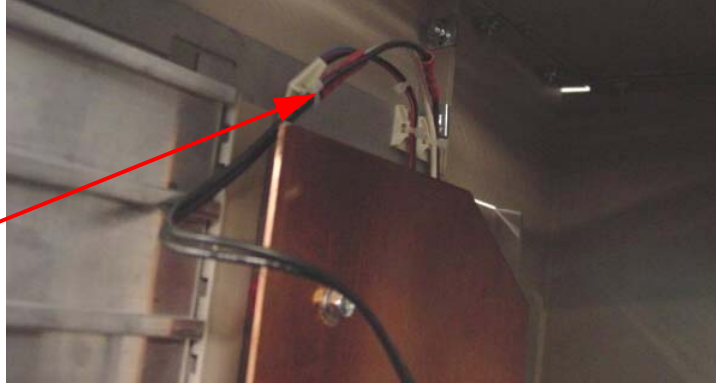


ETC Service Note

Sensor Fan Replacement Instructions

- Step 7: Disconnect the fan, you will need to cut the two wires. Remove and replace the butt splices, as needed.

When replacing a new style fan with a new style fan, you will not need to cut the wire because the new cable harness connects directly to the new fan.



- Step 8: Using your wire strippers, strip the wires on the new fan and where previous butt splices were. Using your 18 – 22 AWG butt splices, make the proper connections. This being a AC fan, you will not need to worry about polarity.
- Step 9: Using the same methods to remove old fan, install new fan. Start the nuts by hand and finish them with your modified nut driver.



Note: When replacing the fan, verify that it is in the correct orientation. The air is designed to blow out of the top the rack, and not into the rack. There are airflow indicators on the fan.

- Step 10: Re-attach beacon board and replace circled bolts with your 3/8" socket wrench.



- Step 11: With your #2 Phillips screwdriver, replace circled screws.



- Step 12: Replace all dimmer modules and the control module.
- Step 13: Apply power to the rack.
- Step 14: Test the unit for desired functionality.

Additional Information

If you have additional questions regarding this procedure, please contact ETC Technical Services.