TELEDYNE
ADVANCED POLLUTION INSTRUMENTATION
Everywhereyoulook™

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Service Note

16-008

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T750/T750U ORIENTATION OF THE POWER SUPPLY MODULE FAN

I. PURPOSE:

API has found that the installation orientation of the fan can be optimized to prevent intermittent temperature warning indications. If you have had temperature warning indications on your T750/T750U, the following modification can be used to prevent them. Please note that this modification is at your option and does not affect the instrument safety or warranty.

II. TOOLS:

A) RATCHETING OFFSET NO.2 PHILLIPS POINT

OR

B) NO. 2 PHILLIPS -TIP- SCREWDRIVER &

C) NUTDRIVER, 11/32" X 3-1/8" (9 mm x 100 mm)

D) FLAT HEAD SCREWDRIVER

III. PARTS:

N/A

IV. PROCEDURE:

1. The T750 and T750U have a power supply temperature warning parameter in their design. If the instrument gives a Power Supply Temperature Warning, that means the instrument temperature in was either below 5C or above 58C. The most likely cause is the fan position on the power supply module is not efficiently exhausting the warm air out of the power supply module, triggering a Power Supply Temperature Warning. If you have experience this, you will need to verify the Power Supply Module Fan position.

2. Open the calibrator to identify the Power Supply Module Fan (see figure 1).

3. For optimum cooling, the air from the Power Supply Module Fan should be blowing out. The silver sticker in the center of the fan is a good indicator to see if the fan is positioned optimally (see figure 2). If you do not see the silver sticker and don't feel the air blowing out, the fan can be positioned in a better way.

Using the #2 Ratcheting Screwdriver

4. Turn power to the calibrator off and remove the power cord, all tubes and connectors from the outside of the calibrator. Remove the 4 screws with the ratcheting offset no.2 Phillips in order to reposition the fan.(see figure 2)

Using a nut driver

5. If you do not have a ratcheting offset no.2 Phillips point but do have a nut driver 11/32"X3-1/8" (9 mm x 100 mm) long locate the 4 nuts around the relay card (see figure 3 & 4) and remove them. This will allow enough room to remove the four screws holding the fan in position.

Removing the calibrator from the case

6. If the fan screws are not accessible with your tools the calibrator will have to be removed carefully from its case.

7. To remove from case, first locate and remove the four screws holding the calibrator to the case (see figure 6 & 7.)

8. Inside the calibrator remove the cap with a flathead screwdriver (see figure 8.)

9. It is recommended to have two people involved and have an area free of debris to place the calibrator before removing it from its case.

10. One person is needed to lift the calibrator (35lbs) (16 Kg) out of the case (see figure 9). The other person will have to hold the case down and ensure that the case is no longer protruding the circle in the calibrator (figure 10).

11. If removed from the case it is recommended to have two people re-install the calibrator.

Figure 1 Fan location

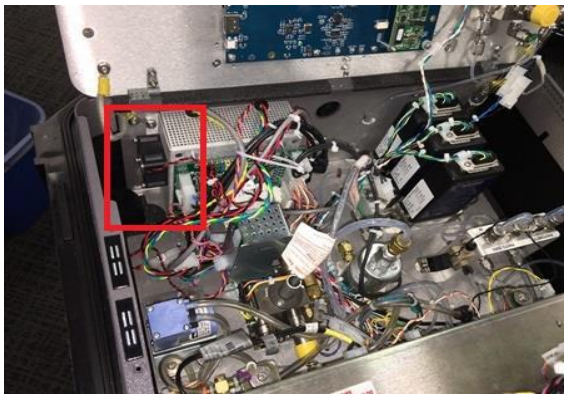
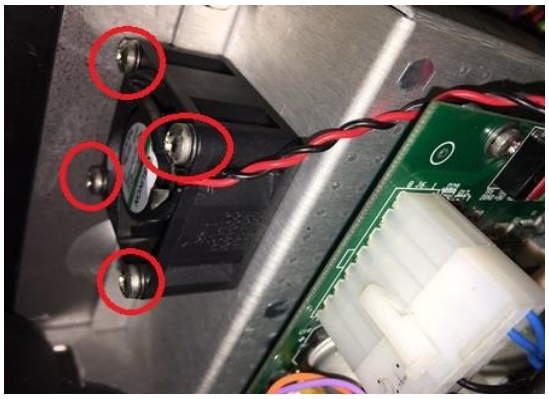


Figure 2 Use ratcheting screwdriver



USING THE NUT DRIVER

Figure 3 Nut Location

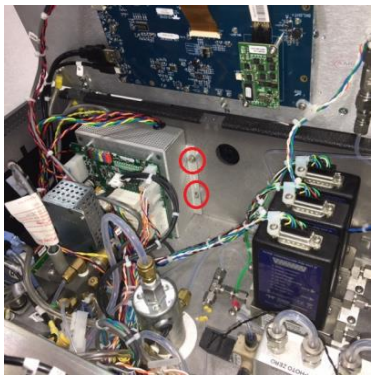


Figure 4 Nut Location

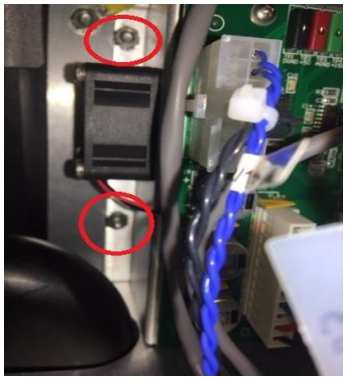
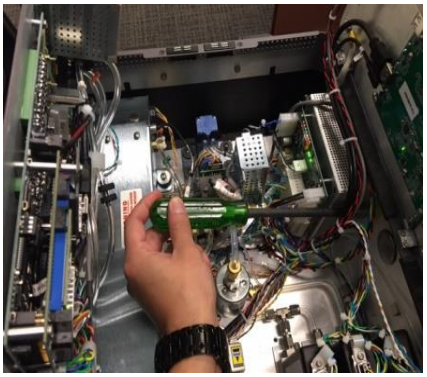


Figure 5 Use Nut Driver



WITHOUT NUTDRIVER OR RATCHETING SCREWDRIVER

Figure 6 Locate screws

Figure 7 Locate screws

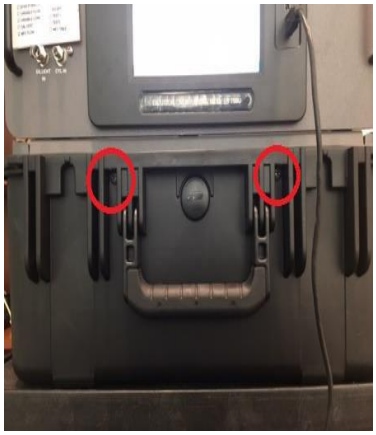


Figure 8 Remove cap

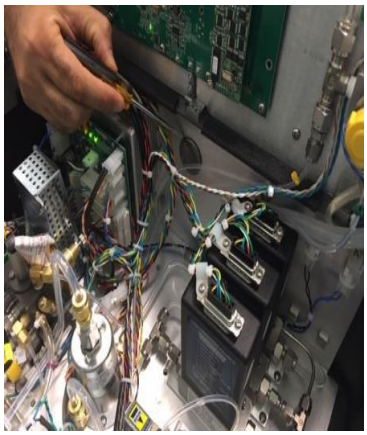


Figure 9 One person to lift

Figure 10 Second person holds case down and makes sure nothing snags