

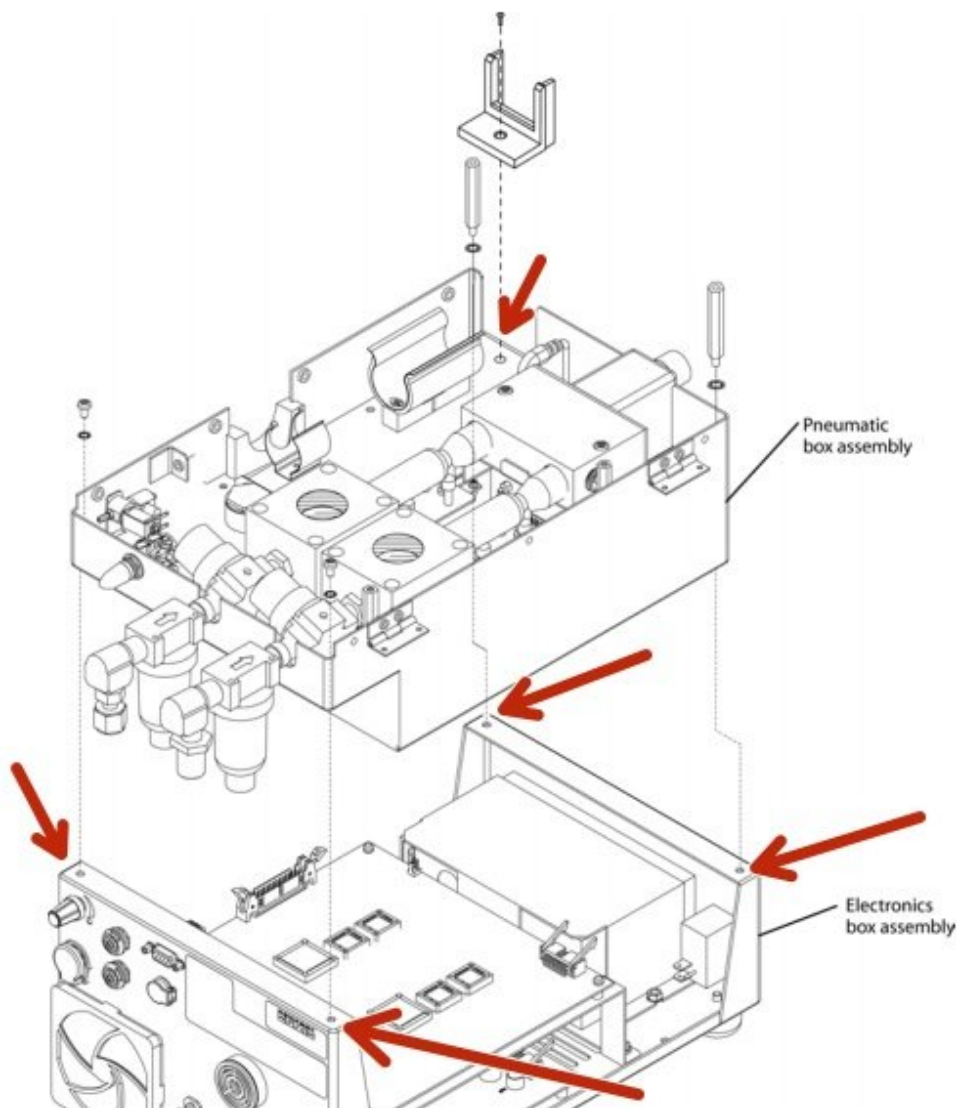


# Newport e500 Pneumatic Box Disassembly

This guide shows you how to disassemble the pneumatic box in the Newport e500 ventilator.

Written By: Jared McMullen

## ***Pneumatic Box Assembly***



---

## INTRODUCTION

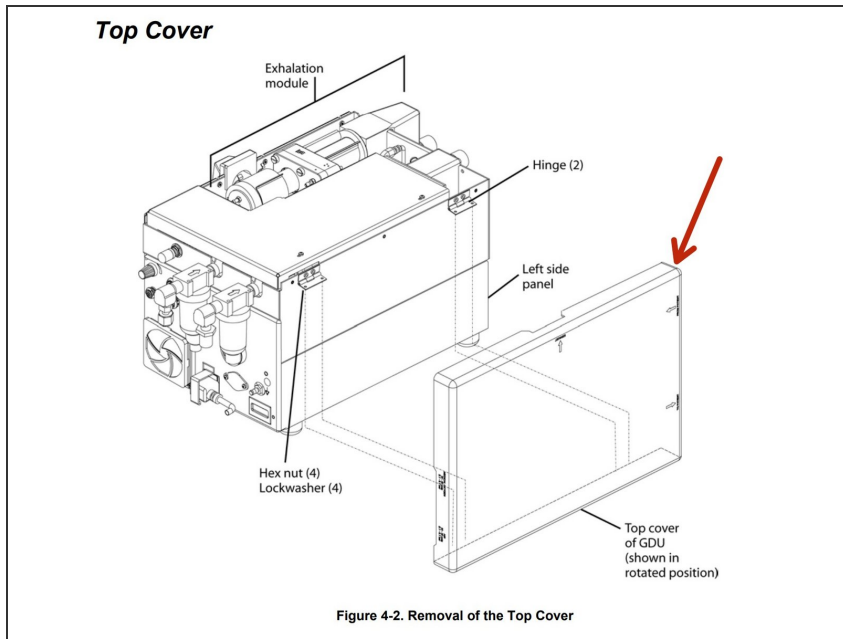
The pneumatic box is a very important removal step and requires the user to be very careful when removing. It is important to note that the guide removal begins on page 44 of the service manual. When reinstalling, the user must read the reinstalling instructions located on page 45 of the service manual.



### TOOLS:

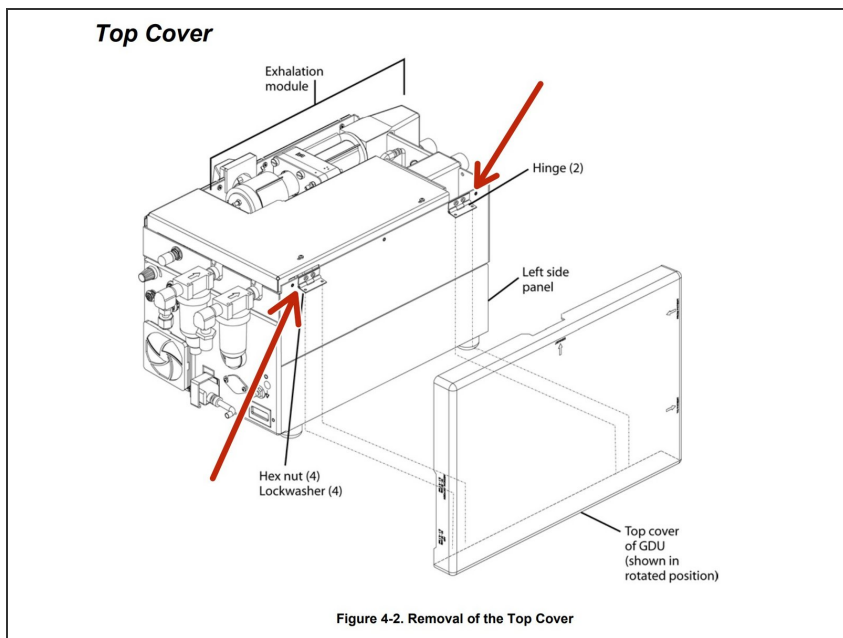
- [Phillips #0 Screwdriver](#) (1)
-

## Step 1 — Newport e500 Top Cover Disassembly



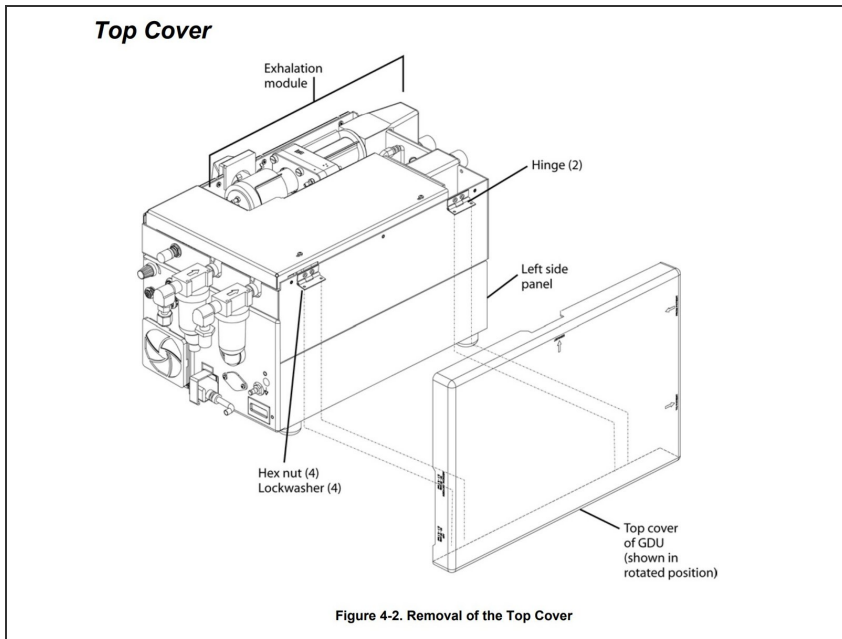
- Place device so that the top cover is facing you.
- Open the top cover.

## Step 2



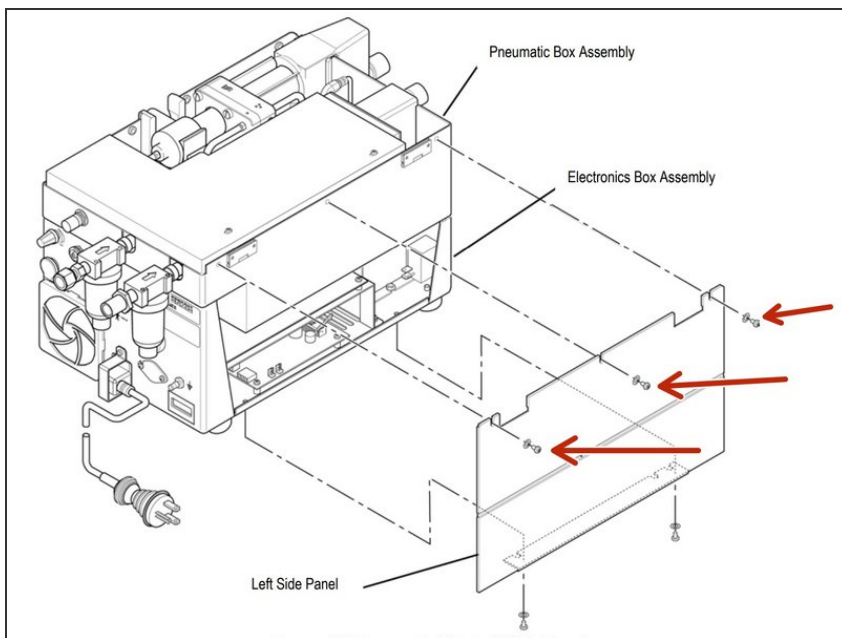
- Remove the four hex nuts and lock washers (two at each hinge) that secure the cover to the hinges on the left side of the pneumatic box.

## Step 3



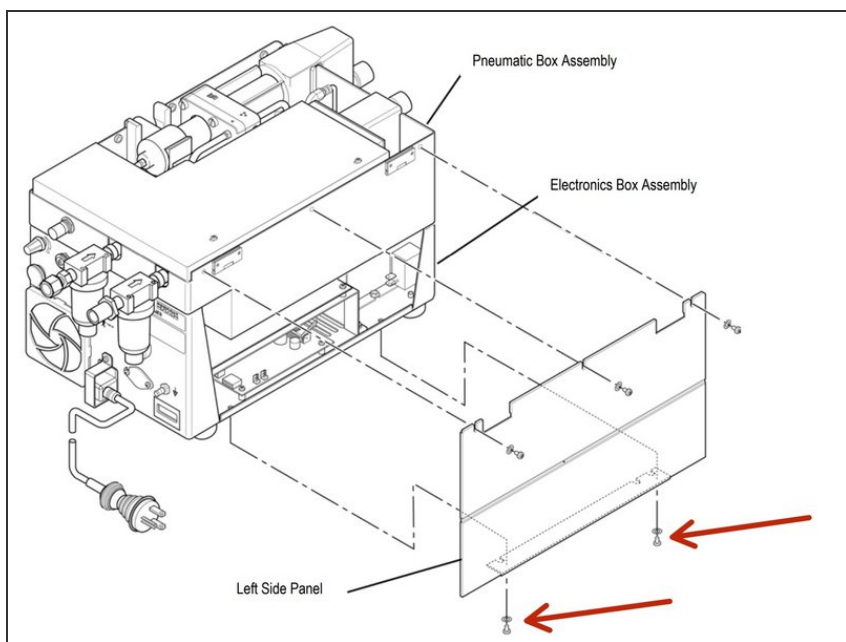
- Remove the cover and set aside. Retain hardware for re-assembly.

## Step 4 — Newport e500 Left Side Panel Disassembly



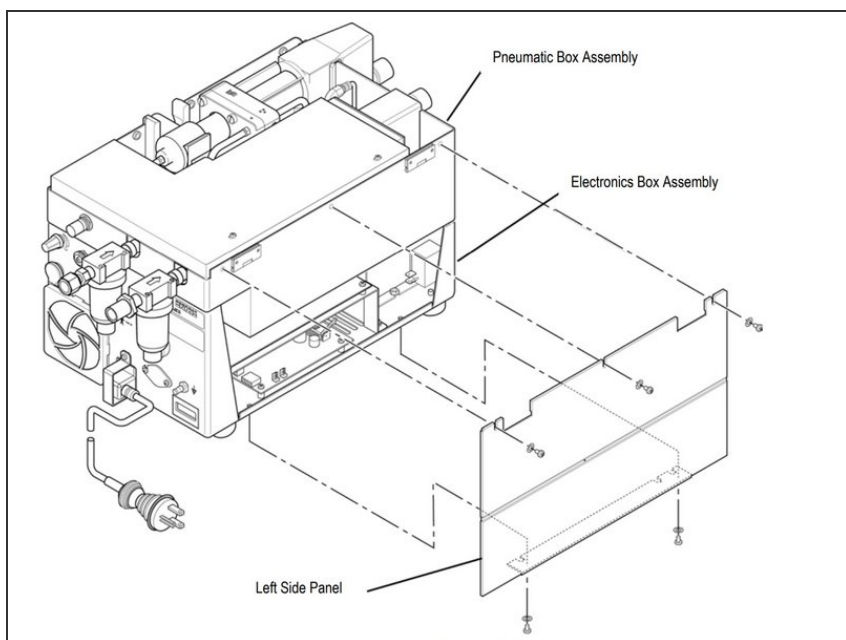
- Carefully place the GDU on its right side with the front of the GDU facing you.
- Remove the three screws and washers at the top edge of the left side panel.

## Step 5



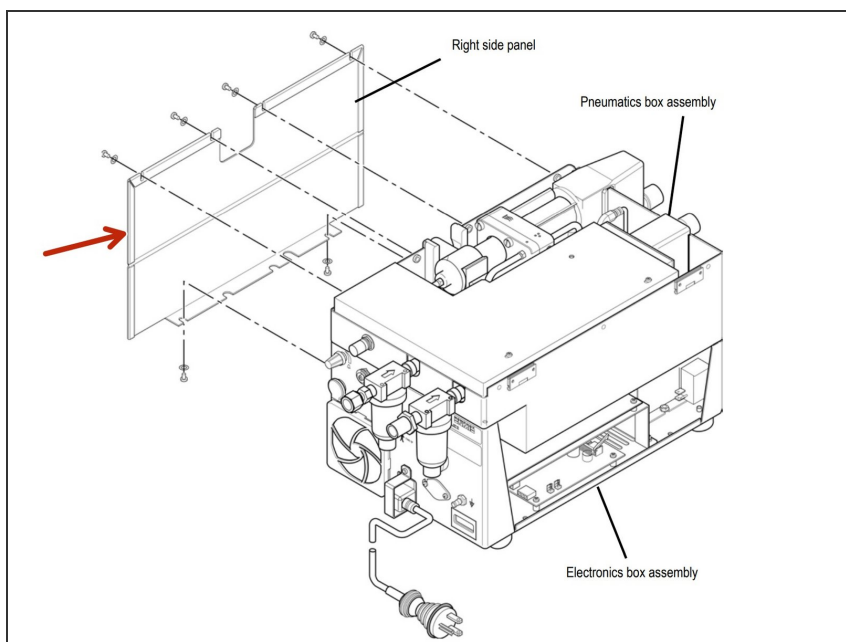
- Remove the two screws and washers from the underside of the left side panel.

## Step 6



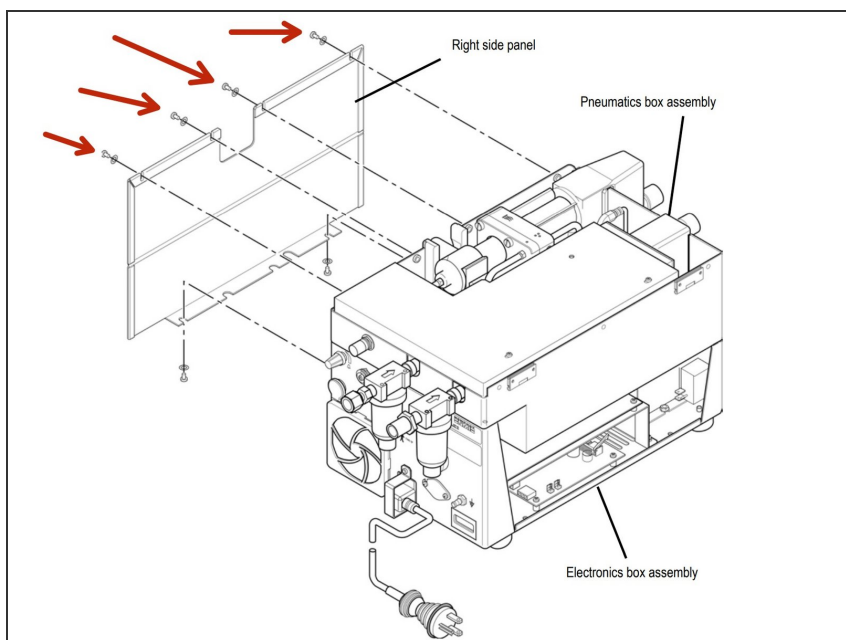
- Remove the left side panel. Retain hardware for re-assembly.

## Step 7 — Newport e500 Right Side Panel Disassembly



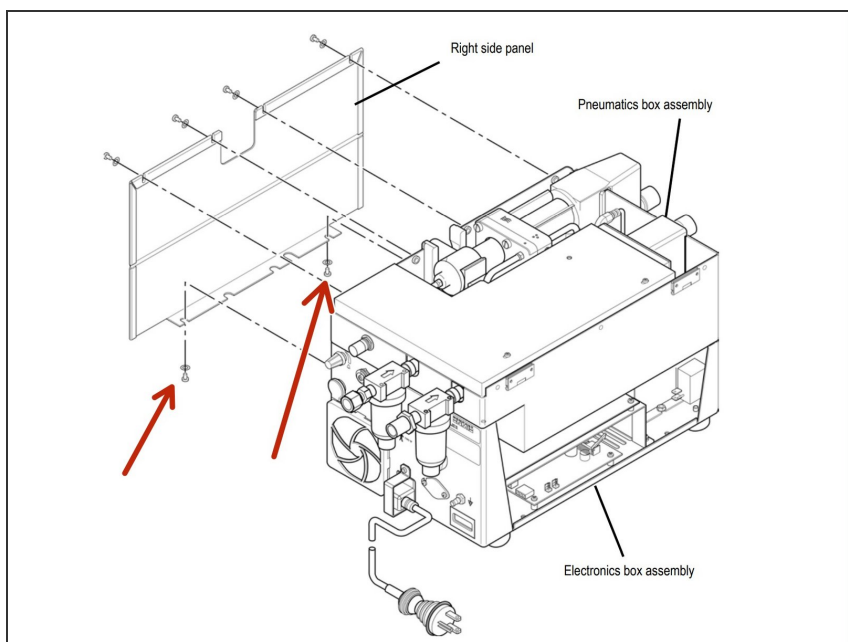
- Carefully place the GDU on its left side.

## Step 8



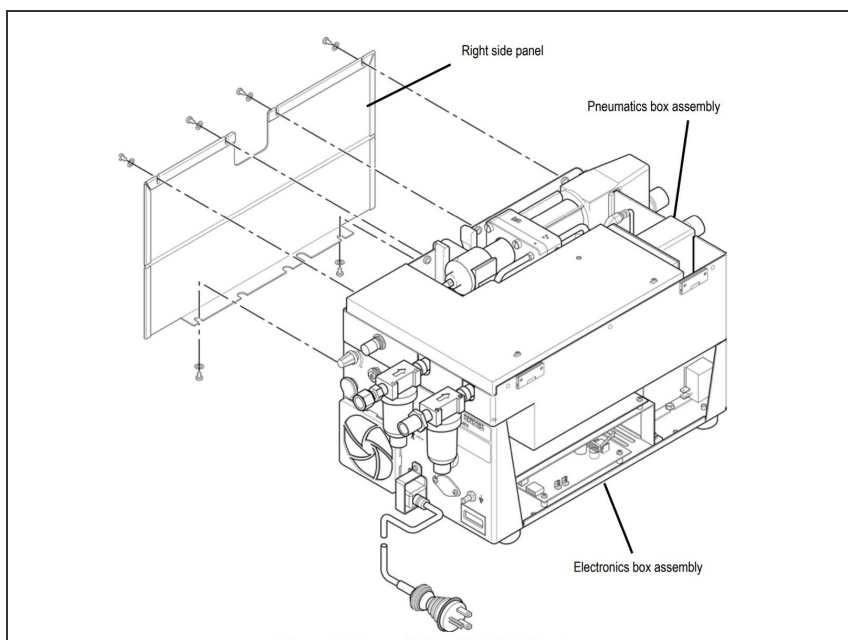
- Remove the four screws and washers at the top edge of the right side panel.

## Step 9



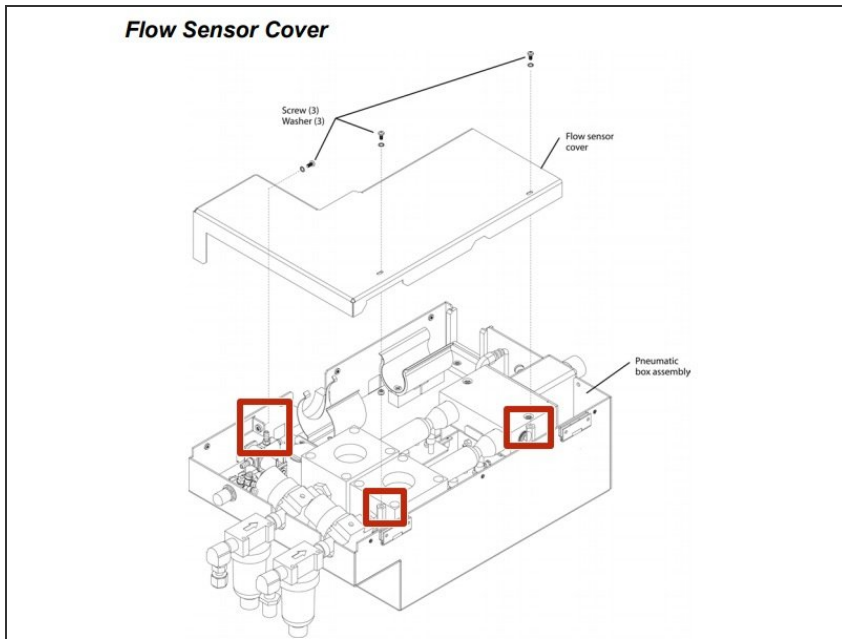
- Remove the two screws and washers from the underside of the right side panel.

## Step 10



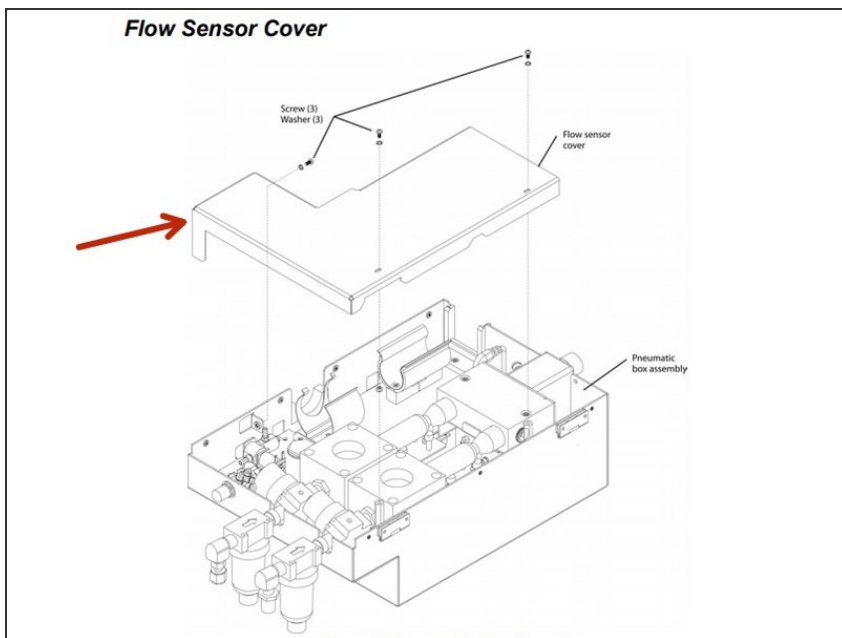
- Remove the right side panel. Retain hardware for re-assembly.

## Step 11 — Newport e500 Flow Sensor Cover Disassembly



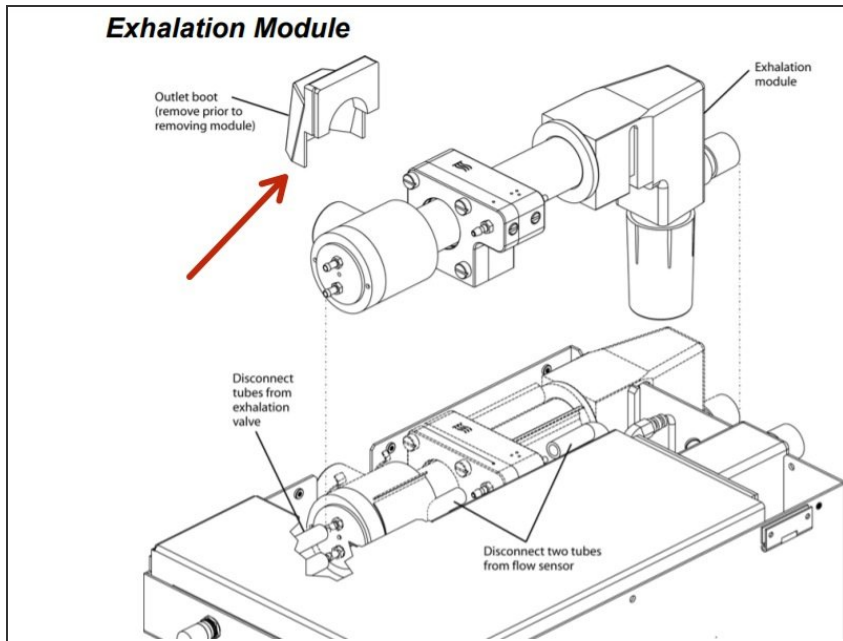
- Remove the three screws and washers that secure the flow sensor cover to the pneumatic box assembly. Retain the hardware for re-assembly.

## Step 12



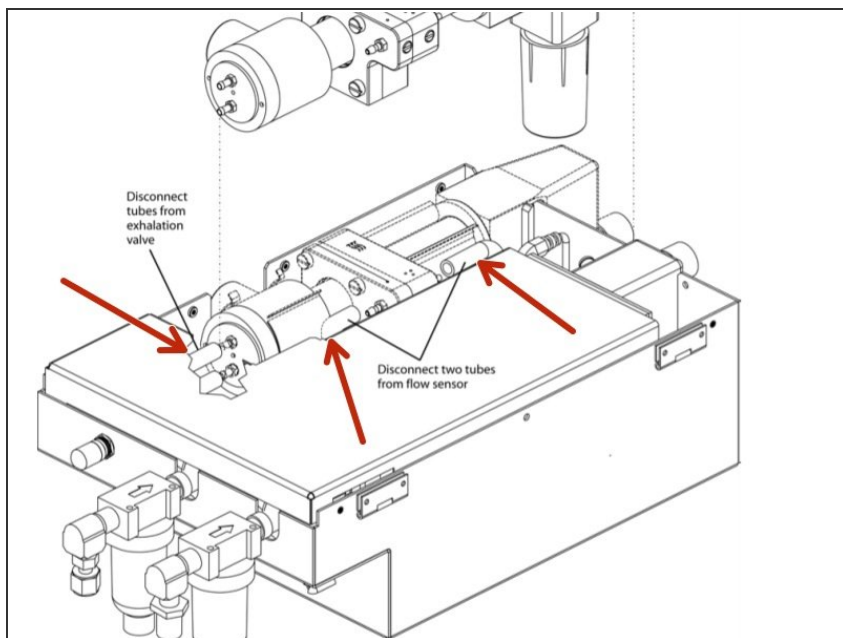
- Remove the flow sensor cover.

## Step 13 — Newport e500 Exhalation Module Disassembly



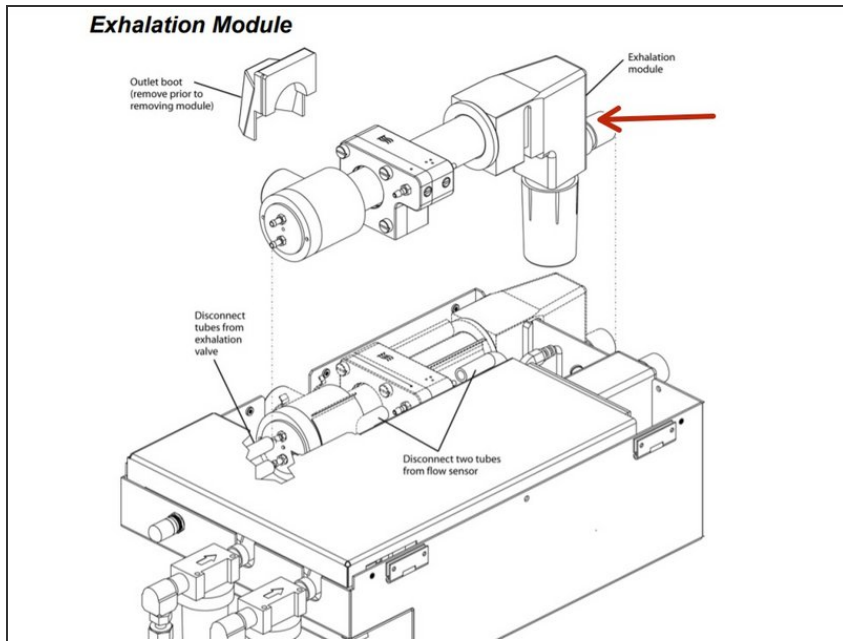
- Pull up and remove the flexible rubber exhalation outlet boot (push fit).

## Step 14



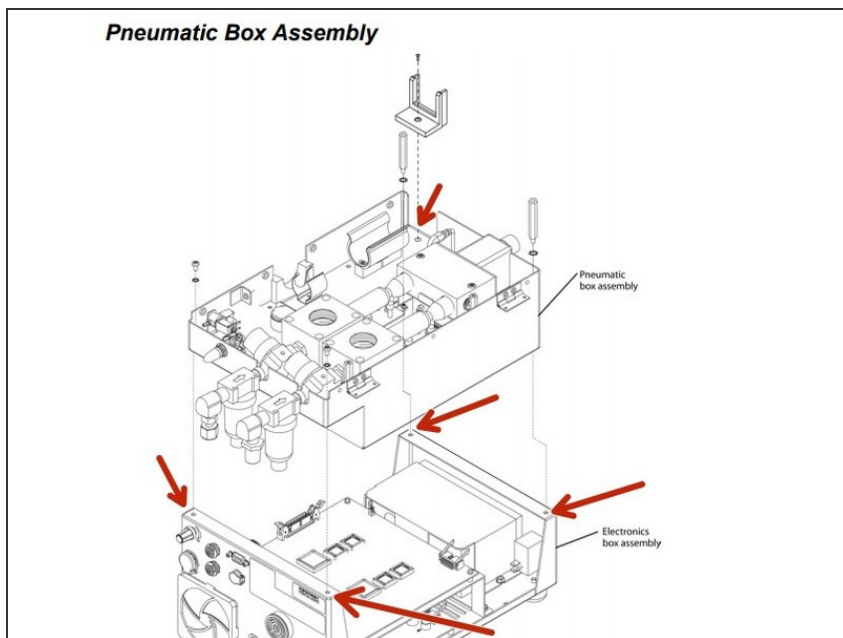
- Disconnect the tubes from both sides of the flow sensor and the two tubes from the exhalation valve.

## Step 15



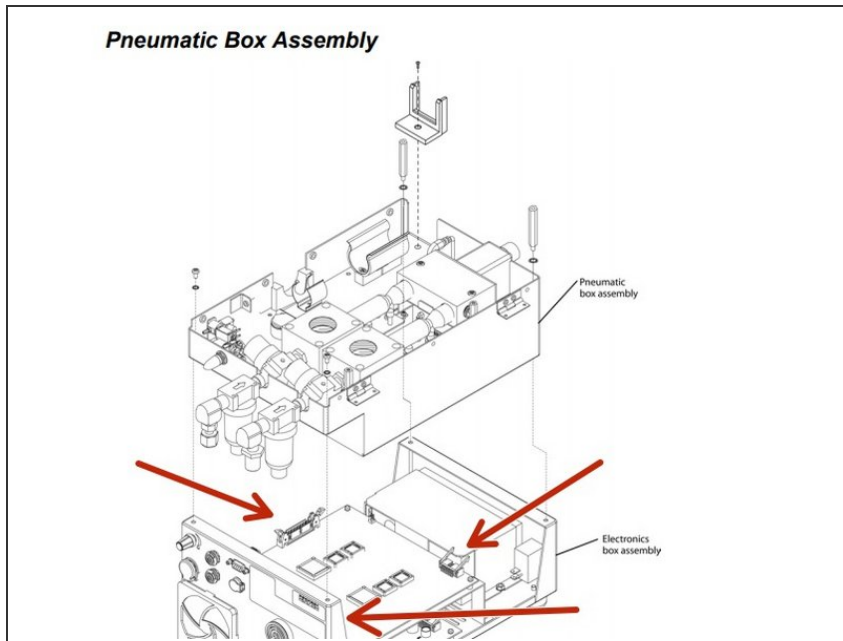
- Pull the exhalation module straight up to remove it from the GDU.

## Step 16 — Newport e500 Pneumatic Box Disassembly



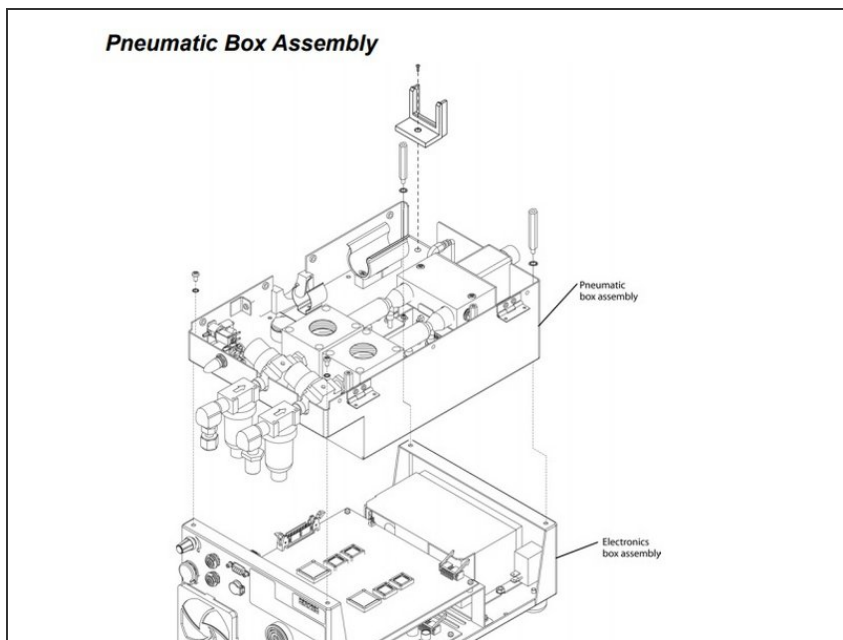
- Remove the two screws and washers (back corners), one screw and washer (exhalation module support bracket), and two standoffs and washers (front corners) that secure the pneumatic (upper) box assembly to the electronic box assembly. Lift the Pneumatics Box and carefully tilt to one side.

## Step 17



- Remove cables from connectors J1, J2, J3, J4, J5, and J6 on the main PCB (4 connectors are not shown due to being blocked by the side panel). Note the position of these connectors for re-assembly.

## Step 18



- If not already detached, remove the heater cables from J5 and J6 on the DC-DC power supply PCB.

To reassemble your device, follow these instructions in reverse order.