

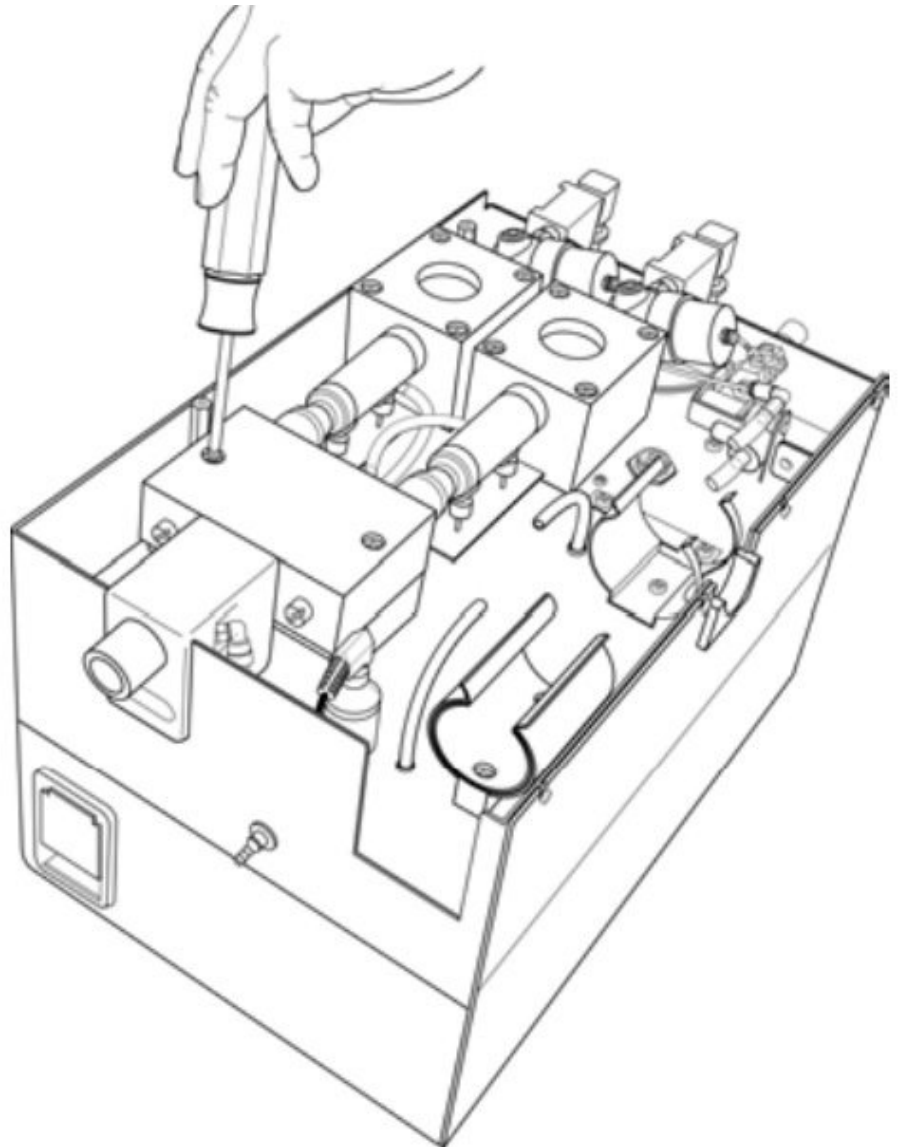


Newport e500 Air and Oxygen Flow Sensors

Disassembly

How to remove the air and oxygen flow sensors in the Newport e500 ventilator.

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INTRODUCTION

If you need to replace the air and oxygen flow sensors on the newport e500 you will need to start with the prerequisites for this operation. You will need a medium and small sized Philips screwdriver and a torque wrench. For more information refer to page 59 of the service manual.

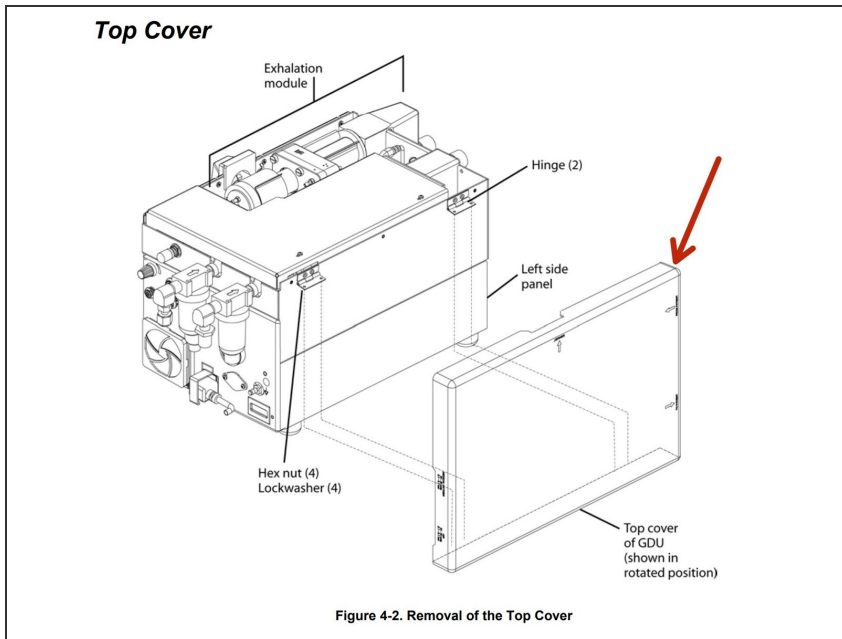
Note: When reinstalling flow sensors, note whether the sensor is labeled for air or oxygen and be sure to install in the appropriate position.



TOOLS:

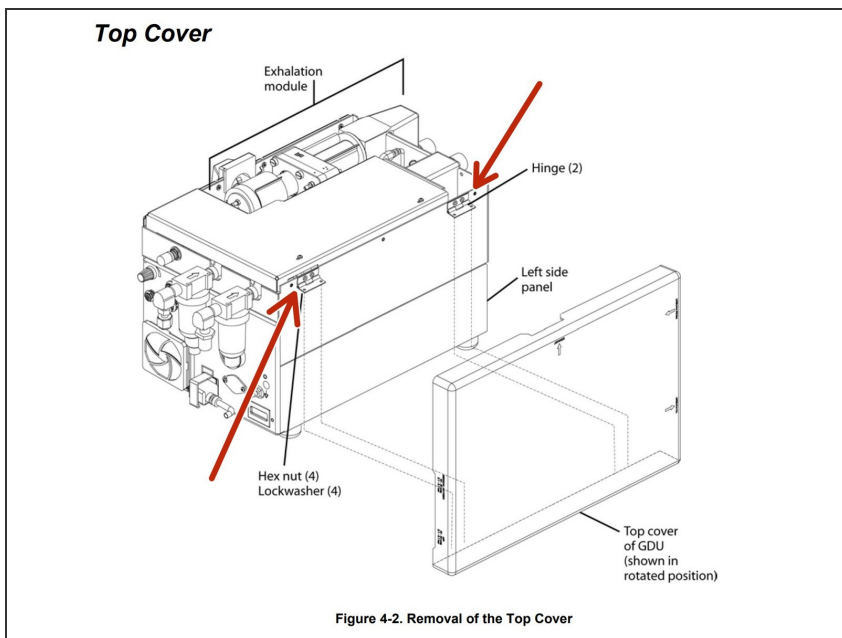
- [Phillips #0 Screwdriver](#) (1)
 - [Torque Wrench](#) (1)
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Step 1 — Newport e500 Top Cover Disassembly



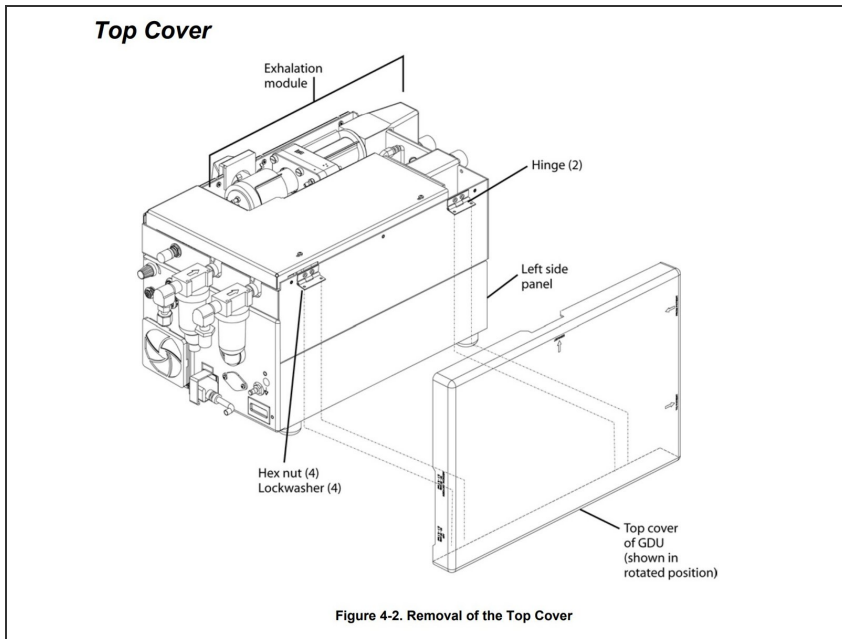
- Place device so that the top cover is facing you.
- Open the top cover.

Step 2



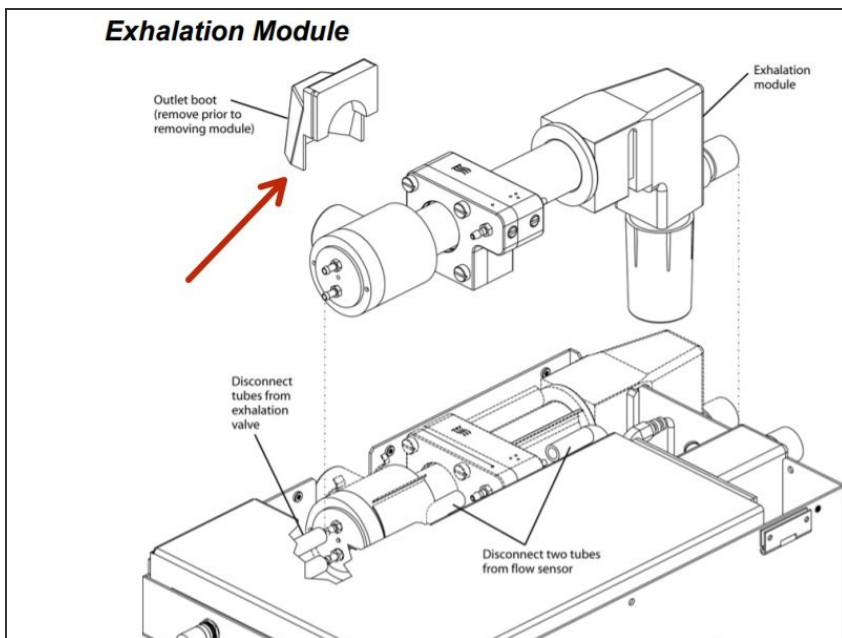
- Remove the four hex nuts and lock washers (two at each hinge) that secure the cover to the hinges on the left side of the pneumatic box.

Step 3



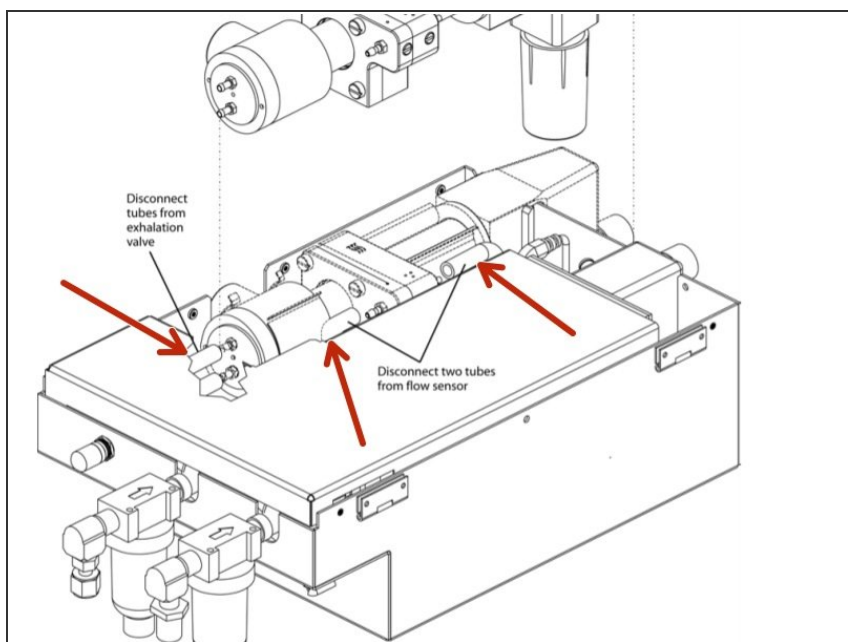
- Remove the cover and set aside. Retain hardware for re-assembly.

Step 4 — Newport e500 Exhalation Module Disassembly



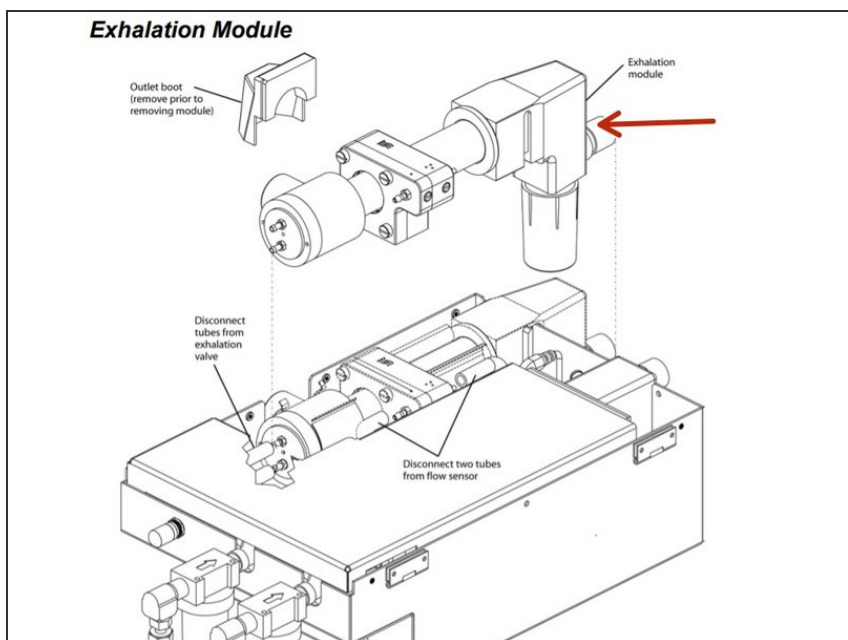
- Pull up and remove the flexible rubber exhalation outlet boot (push fit).

Step 5



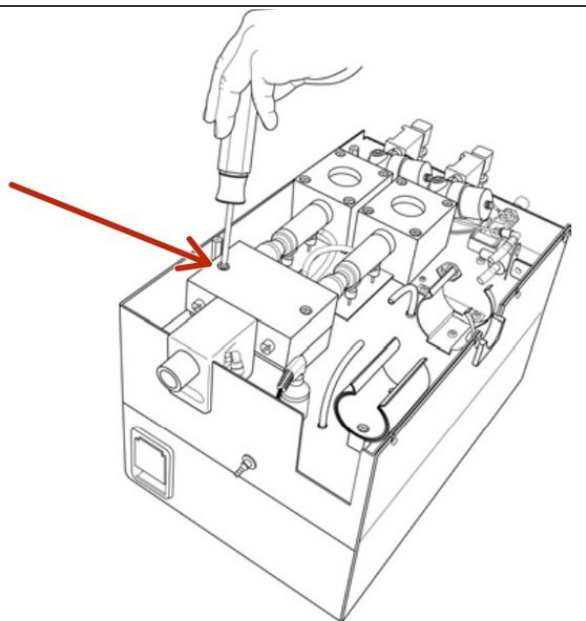
- Disconnect the tubes from both sides of the flow sensor and the two tubes from the exhalation valve.

Step 6



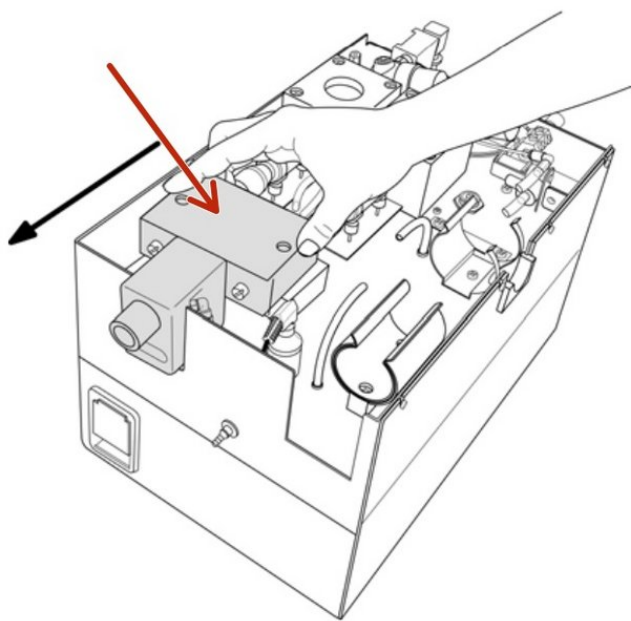
- Pull the exhalation module straight up to remove it from the GDU.

Step 7 — Newport e500 Air and Oxygen Flow Sensors Disassembly



- Remove the 2 screws and washers securing the manifold/mixer assembly

Step 8



- Slide the manifold/mixer assembly forward to disengage the flow sensors

This diagram illustrates the assembly of the servo valve system. It shows two servo valve assemblies, one for air and one for oxygen, being connected to a main PCB. The air servo valve assembly includes a flow sensor (air) and a servo valve cable assembly (2). The oxygen servo valve assembly includes an oxygen servo valve. Both assemblies are secured with Phillips screws (4) and washers (4). A red arrow points to the flow sensor (air) on the air servo valve assembly. A dashed line indicates the removal of a tube from a fitting. The main PCB features connectors J1, J5, J4, and J6, which are connected to the servo valve cable assemblies. The main PCB also includes a valve mounting bracket and a servo valve cable assembly (2).

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- Diagram illustrating the assembly of the servo valve cable assembly (2) to the main PCB.
- Labels and components shown:
- Air servo valve
 - Flow sensor (air)
 - Phillips screw (4)
 - Washer (4)
 - Oxygen servo valve
 - Remove tube from fitting
 - Servo valve cable assembly (2)
 - To J5
 - To J6
 - Valve mounting bracket
 - Main PCB
 - J1 connector
 - J5 connector
 - J4 connector
 - J6 connector

- Page 7 of 7