

blacklinesafety

EXO 8

Installing the Gas Expansion Module

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WARNINGS

WARNING: The gas expansion module is only waterproof, dustproof, and protected from falls up to 1 meter when properly installed in EXO 8 and EXO 8 Gamma. When uninstalled, liquids, loose dirt and debris, sharp tools, and falls can damage the module. When removing or servicing the gas expansion module, confirm that you are in a hazard-free environment.

1 OVERVIEW

You can install the gas expansion module in EXO 8 and EXO 8 Gamma devices using the Gas Expansion Module kit. The gas expansion module is pumped and when installed in an EXO 8 with the diffusion configuration, it will convert the device to the pumped configuration.

You will need:

- EXO 8 or EXO 8 Gamma
- 2.5mm hex screwdriver
- Gas Expansion Module Kit

Before you begin:

- Place EXO in a dry, safe, and non-hazardous environment.
- Disconnect any external charging source, such as the trickle charger or solar panel.

2 GAS EXPANSION MODULE KIT

2.1 WHAT'S IN THE BOX

The Gas Expansion Module (EX8-GEM-aa) comes with:



Pump cartridge cover
1x



Pump gas chamber
1x



M4 screws 18 mm
4x



Gas expansion module
1x



Inlet filter
4x

3 REMOVING EXO COMPONENTS

To install the gas expansion module in EXO 8 or EXO 8 Gamma, you must remove the currently installed diffusion or pump components.

Do not discard your EXO components. Device components can be re-installed in EXO as your area monitoring requirements change.

3.1 UNINSTALLING THE PUMP OR DIFFUSION MODULE

When converting EXO, you will need to remove the pump or diffusion module to install the gas expansion module.

Pump Module



Diffusion Module



To uninstall the module:

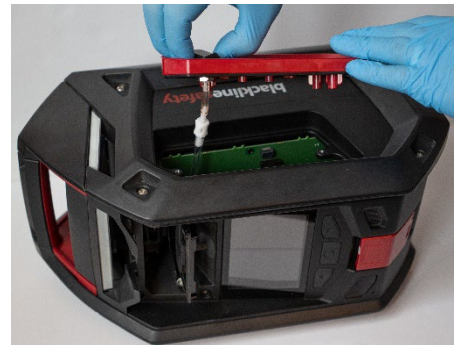
1. Power off EXO.
2. Place EXO on its side with the pump or diffusion module facing upwards.



3. Remove the screws from the module and set them aside.



4. Carefully lift the module, then use your fingers to detach the module's quick connect from EXO.



5. Remove the module and set it aside.



3.2 UNINSTALLING THE DIFFUSION COVER AND CHAMBER

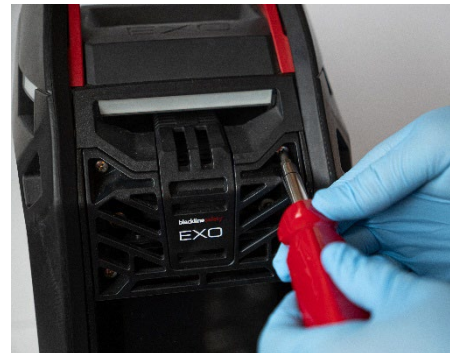
When converting EXO from the diffusion configuration, you will also need to remove the diffusion cartridge cover, the cartridge, and diffusion chamber.



To uninstall the EXO Diffusion components:

1. Power off EXO.
2. Use a Phillips screwdriver to remove the diffusion cartridge cover, then set the cover aside.

NOTE: The captive screws should stay attached to the diffusion cartridge cover for storage.



3. Remove the device's gas sensor cartridge by pulling it out of its slot in the diffusion chamber, then set it aside.



4. Remove the screws and washers from each side of the diffusion chamber.



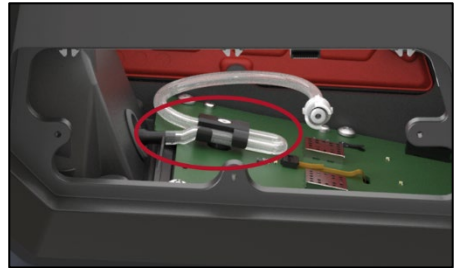
5. Slide the chamber out from its slot, then use your fingers to carefully detach the diffusion chamber coupling from EXO's inlet tubing. Set the diffusion chamber aside.

The inline fitting may stay attached to the diffusion chamber coupling. If this happens, remove the fitting from the diffusion chamber coupling and reconnect it to the internal tubing.



NOTE: You may need to gently unclip or adjust the tubing by sliding it through the tube clamp to shorten the loop and allow for the movement of the diffusion gas chamber.

CAUTION: During any adjustment of the inlet tubing and clamp, take care not to dislodge the display ribbon cable connector. If you dislodge the connector, gently reconnect it before proceeding.



4 INSTALLING THE GAS EXPANSION MODULE

Once you have removed the installed pump or diffusion components, you can install the gas expansion module.



4.1 INSTALLING THE PUMP GAS CHAMBER

If you removed diffusion components from your EXO device, you need to install the pump gas chamber before installing the gas expansion module.

To install the pump gas chamber:

1. Place EXO on its side with the module opening facing upwards.
2. Attach the pump gas chamber coupling to EXO's inlet tubing.
3. Carefully push the inlet tubing back into EXO's interior.



4. Slide the pump gas chamber into the slot and secure the chamber using two screws and washers, ensuring they are snug but not over-tight.



5. Stand EXO upright.
6. Insert a multi-gas pump cartridge by sliding it into its slot in the pump gas chamber.



7. Place the pump cartridge cover on EXO, ensuring that you properly orient the cover over the front enclosure.



8. Tighten the pump cartridge cover screws, ensuring they are snug but not over-tight.



4.2 INSTALLING THE GAS EXPANSION MODULE

To install the Gas Expansion Module:

1. Place EXO on its side with the module opening facing upwards.
2. Check inside the module opening to see if the inlet tubing is crimped. Ensure the clip is correctly attached and, if necessary, gently adjust the inlet tubing by sliding it through the tube clamp to elongate the loop.

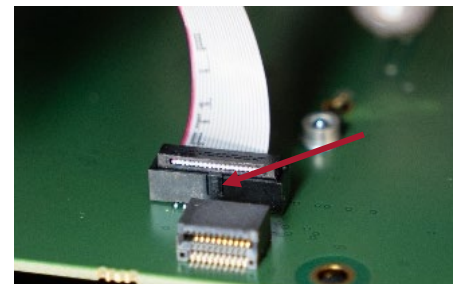
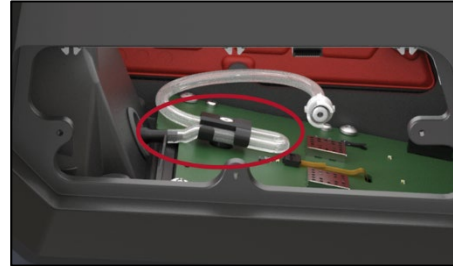
NOTE: During any adjustment of the inlet tubing and clamp, take care not to dislodge the display ribbon cable connector. If you dislodge the connector, gently reconnect it before proceeding.

3. Insert the gas expansion module's ribbon cable into the connector on EXO's board.

The ribbon cable connector should face towards the outside of EXO and the key on the ribbon cable connector should align with the corresponding slot in EXO's board.

Ensure the ribbon cable is not pinched between EXO's frame and the gas expansion module.

4. Attach the gas expansion module to EXO using the inlet tubing quick-connect.



5. Lower the gas expansion module into the opening until it is flush with EXO's frame. Ensure that the inlet tubing remains tucked under EXO's internal frame.

CAUTION: The gas expansion module is designed to lie flush with the opening. Make sure the inlet tubing is not pinched between the module and EXO's frame. DO NOT force or otherwise use undue pressure when lowering the module into place.



6. Using a screwdriver, secure the gas expansion module to EXO using the screws provided, ensuring they are snug but not over-tight. The recommended torque level is 6-8in.lbs (0.7-0.9 N.m).



5 SUPPORT

5.1 LEARN MORE

Visit support.blacklinesafety.com to find support and training materials for EXO 8.

5.2 TECHNICAL SUPPORT

Contact our Technical Support team for assistance.

North America (24 hours)

Toll Free: 1-877-869-7212 | support@blacklinesafety.com

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