



## Eagle Eye Anesthesia

11233 St John's Industrial Parkway S.  
Jacksonville, FL 32246  
800-760-6976  
www.eagleeyeanesthesia.com

### Scavenging Interface Functional Description

The Eagle Eye Scavenging Interface is a pole or wall mounted assembly which allows a high vacuum pressure system to operate as an anesthetic scavenging system. This foolproof design will safely remove or capture anesthetic waste gasses when adjusted correctly but also if adjusted incorrectly, if the vacuum system unknowingly fails or is not turned on (due to operator error).

The scavenging interface has two chambers - the negative relief chamber and the positive relief chamber, a needle valve, a reservoir bag attachment, a scavenging hose attachment and an attachment for connecting a charcoal scavenging canister. The adjustable needle valve regulates the amount of vacuum pressure that goes to the reservoir bag, and the two-chamber design limits any excessive vacuum pressure going to the pop-off valve. One chamber (the negative relief chamber) is designed to allow room air to be drawn into the unit if the vacuum is set too high. This chamber also contains a turret style check valve to keep waste gas from entering the room during normal operation. The second chamber (positive relief chamber) has a floating ball check valve which will relieve any increased pressure from the pop off valve if the vacuum is set too low. This avoids abnormally high pressure in the reservoir bag. In this case, the overflow pressure is routed to the charcoal canister to be safely contained.



Both chambers are visible through the clear check valve cover to assure proper functioning. The unit mounts directly to the pole of the machine by means of a pole bracket, to a wall by means of a wall bracket or by means of custom bracket/adaptor.



## Eagle Eye Anesthesia

11233 St John's Industrial Parkway S.  
Jacksonville, FL 32246  
800-760-6976  
www.eagleeyeanesthesia.com

---

### Set up of the Scavenging Interface

#### **Mounting Location**

**Pole Mounted** – The EEA Scavenging Interface is available with either a 1 ¾" or a 2" pole bracket. This can be clamped to the machine pole by removing the clamping bolts to separate the two halves of the clamp and affixing the clamp around the pole. It should be mounted on the pole to allow the reservoir bag to hang freely and not contact the base or floor.

**Wall Mounted** – The EEA Scavenging Interface is available with a wall mount bracket. This can be mounted on a structurally sound vertical surface using proper wall mounting hardware. It should be mounted in such a location to allow the reservoir bag to hang freely and not contact any objects.

#### **Hose Connections**

The vacuum hose connection is a simple press fit of a plain end hose (1/4" I.D. with no fitting), onto the barb of the vacuum control needle valve.

The scavenging hose from the pop-off valve attaches to the Gas Scavenging Port on the side nozzle of the Scavenging Interface.

#### **Reservoir Bag**

A 3-liter standard breathing bag can be used as the Scavenging reservoir bag. It attaches to the Bag nozzle.

#### **Charcoal Scavenging Canister**

A charcoal scavenging canister **MUST** be attached to the overflow elbow. It is recommended that the canister be weighed prior to first use, note the weight in grams on the canister and re-weigh every few weeks. Once the canister has gained 50 grams from the starting weight, it is considered full and must be replaced.

#### **Operation:**

- The oxygen source to the anesthesia machine should be connected and turned on.
- The vacuum source to the scavenging interface should be connected and turned on.
- Open the vacuum needle valve fully.
- Turn on the oxygen flow meter on the anesthesia machine to your standard flow rate.
- Slowly close the vacuum needle valve until the scavenging interface bag starts to fill.
- Open the vacuum needle valve approximately ½ turn.
- Once the needle valve is set for a specific oxygen flow rate, it should not need to be adjusted, this is usually near the fully closed position.

#### **Note:**

If the needle valve is open too much, although the interface will operate normally, the bag will appear flattened.  
If the needle valve is closed too much, although the interface will operate normally, the bag will appear very full.