CAUTION: THIS PRODUCT CONTAINS NATURAL LATEX RUBBER WHICH MAY CAUSE ALLERGIC REACTIONS IN SOME INDIVIDUALS.

Face Mask Information:

1 Extra Small: 0.75" diameter  
2 Small: 1" diameter x .75" deep  
3 Medium: 1.5" diameter x 1.125" deep - 150 to 200 grams  
4 Large: 1.75" diameter x 1.5" deep - 200 to 350 grams  
5 X- Large: 2" diameter x 1.75" deep

Replacement NRB Diaphragm Material: 6" x 36" 12 mil latex sheet

A. 12 mil Latex Diaphragm.  
   a. Each Rodent Face Mask comes with an extra 6 inch X 12 inch sheet of latex diaphragm material to facilitate replacing defective diaphragms. Extra diaphragm material may be purchased separately. (6 inch X 36 inch sheet).  

B. Silicone "O" ring. Each Rodent Face Mask comes with an extra "O" ring.  
C. Insert this end into coaxial non-rebreathing body such as MIP’s Mapleson-D Non-Rebreathing System or Universal Rodent Nosecone Non-Rebreathing System.
**User Instructions**

**Rodent Face Masks**

**Application:**
MIP’s Rodent Face Masks utilize a latex diaphragm to seal around the subject’s muzzle thereby preventing waste gases from entering the environment. The Rodent Face Masks can be used to administer anesthetic gases, oxygen and/or other metabolic gases. The Rodent Face Masks can be used with any species can be safely as long as:

1. The subject's muzzle and/or breathing apparatus can fit within the Rodent Face Mask.
2. The reservoir of fresh gas in the Rodent Face Mask is large enough to meet and/or exceed the tidal volume of the subject.
3. The proper oxygen flow rate is maintained to ensure no buildup of CO₂ in the Rodent Face Mask.

**Use and Operation:**

1. Cut an appropriate sized hole in diaphragm of the Rodent Face Mask.
   a. The diaphragm can be cut appropriately using a pair of delicate sharp/sharp scissors.
   b. It is vital to the proper operation of the NRB System that the diaphragm of the Rodent Face Mask is cut with the proper sized orifice—appropriate for the size of the subject and the position of the subject. The circular hole in the diaphragm needs to be small enough such that the diaphragm forms a tight seal around the subject's muzzle, but large enough so that it is not too tight and occludes the nares preventing proper spontaneous breathing.
      i. Do not cut a cross (×) or an “X” in the diaphragm for the subject's nose because diaphragm will not seal properly around the subject's muzzle and anesthetic gases will escape into work space.

**Replacing the "O" ring and the diaphragm on the nosecone:**

- The silicone "O" ring holds the diaphragm material in place on the Rodent Face Mask.
  - Silicone is more resistant to photo degradation and oxidation than latex. However, when it becomes cracked or broken and will no longer hold the diaphragm material in place and must be changed. An extra "O" ring comes with each kit and can be purchased separately if needed.
- The diaphragm is made of 12 mil thickness latex sheet material. This latex is much thicker, more durable, and more resistant to tearing; and more resistant to oxidation than surgery glove material (2 - 3 mil thickness). **We do not recommend that you replace the diaphragms with surgery glove material.** Surgery gloves are potentially permeable to anesthetic gases allowing the waste gases to escape into the environment.

1. The "O" ring can be removed by rolling it from the groove it rests in. Using your thumb, press down and roll the "O" ring to the front of the nosecone to dislodge it from its groove.
2. Discard defective latex. "O" ring can be reused if not cracked or broken.
3. Install new latex.
   a. Stretch the new diaphragm material over the end of the face mask, holding it in place with the thumb and forefinger of one hand.
   b. Reinstall the "O" ring over the new diaphragm material and allow it to rest in the groove in the face mask.
      i. Make certain that there is no gap around the periphery of the diaphragm where trace anesthetic gases might escape.
   c. Pull the diaphragm material around the edges to smooth out the diaphragm and create a slight tension on the diaphragm.
   d. Using a pair of delicate sharp/sharp scissors, cut off the excess diaphragm material from around the "O" ring. Save the rest of the new diaphragm material for subsequent diaphragm replacements.