

## K-9 Safe-Seal Endo Tube Product Instructions

The Safe-Seal Endo Tube is easy to use and extremely safe. It removes the dangers of an inflation cuff tube and provides several advantages. Here are some helpful tips:

1. A stylet is very helpful when inserting the tube. The flexibility of the tube is an extreme advantage, eliminating tracheal trauma by rotation of the patient during anesthesia. The patient can even be rotated without disconnecting the tube from the anesthetic machine. The soft, flexible Blaines will simply rotate, causing no undue pressure on the tracheal mucosa. Removing the stylet is facilitated by keeping the tube and the neck of the patient straight.
2. The tube should be inserted in the normal fashion and stopped while inserting in a forward motion. This allows the Blaines to lean rostrally, thus allowing an "O" ring effect to seal the trachea during inspiration. In this position the Blaines are designed to allow bypass of excess pressure in the lungs, more than 10-30 centimeters of water. If more pressure is desired by the operator for artificial respiration, the tube is simply pulled back 1/2 inch and the Blaines will flip over and allow as much pressure to be applied as the operator deems safe.
3. It should be noted that when a patient is first intubated and is "light" the patient may forcefully cough or expire and sounds of air leakage around the tube may be heard. This is normal and is due to the fact that excess pressure is allowed to bypass the tube. No leakage should occur after the patient is breathing easily.
4. When inserting the tube, lubricating the Blaines with water or lubricating gel may be helpful but is usually not necessary. If a smaller patient is to be intubated and the tube is marginally tight, lubrication is beneficial.
5. The operator should be aware that the body weight of the patient is not the only factor in determining the size of the tube to be used. The Safe-Seal tube will fit a larger range of tracheal sizes than traditional inflation cuff tubes. However, there are breeds of dogs whose tracheas are either larger or smaller than their weight would suggest. Rottweilers for instance have a small trachea for their weight. A 1/2 inch tube will usually fit a large Rottweiler quite comfortably. The simple rule is if the tube seems tight while inserting, use the next smaller tube.
6. Kinking or bending of the tube is possible if extreme right-angle pressure is applied to the tube, similar to standard inflation cuff tubes used today. This is prevented by securing the mouth piece to the snout in the usual fashion, with the flared portion of the mouth piece next to the front teeth. On the smaller tubes, the tip of the tube is more flexible than the shaft. When inserted properly, it is safely inside the trachea and is not subjected to kinking or bending. For this reason, the small 1/4 inch tube should be inserted until the cones portion of the tube, where the shaft meets the smaller tip, is in contact with the opening of the Larynx.

7. To withdraw the Safe-Seal tube, simply detach from the snout and remove. Unlike traditional tubes, it is not necessary to tilt the patient's head and neck downward to prevent aspiration of fluids which may have accumulated proximate to the cuff of the tube. The Safe-Seal tube will "squeegee" the trachea clean.
8. When using a relatively small tube in a very large patient, if air leakage is detected, simply move the tube forward or backward 1/2 inch to reposition the Blaines and the tube should seal. If not, use the next larger tube.