The Melker Cricothyrotomy kit

The Melker Emergency Cricothyroidotomy catheter set is designed to establish a temporary emergency airway when tracheal intubation is impossible or contraindicated, and facemask, or Laryngeal Mask Airway ventilation is likewise unsuccessful or contraindicated. The technique provides rapid access to the airway using the Seldinger method via the cricothyroid membrane. Contraindications to the use of the Melker Emergency Cricothyroidotomy catheter set include: inability to identify the cricothyroid membrane, Children under 8 years of age unless the landmarks of the cricothyroid membrane are clearly definable, burn or infection at the incision site, and Direct trauma obscuring the landmarks. The Melker Emergency Cricothyroidotomy catheter set consists of a radiopaque, polyvinylchloride airway catheter, a curved dilator with a tapered end and a handle designed to fit within the Airway catheter, Amplatz extra stiff wire guide of 0.97mm diameter with a single flexible end, a number 15 scalpel, a 6 cc Syringe, a number 18 gage stainless steel introducer needle, and a number 18 gage Teflon catheter introducer needle. The Catheter set is available in 6mm, 4mm and 3.5mm internal diameter sizes. Before using the Melker emergency cricothyrotomy set, the cricothyroid membrane is palpated, the next is extended (if not contraindicated), and the skin is prepared with an aseptic solution. Once identified the area around the membrane should be prepared with an aseptic solution. If appropriate, a local anesthetic can be injected into the skin over the membrane. While stabilizing the thyroid cartilage, a 2 cm vertical incision is made through the skin over the membrane using the scalpel blade. The supplied 6cc syringe is used with either the number 18 gage stainless steel introducer needle, or the number 18 gage Teflon catheter introducer needle to perform a percutaneous puncture at 45 degrees to the skin in the saggital plane, in a caudad direction. Verification of proper placement is made with the aspiration of air. Once the trachea has been entered, the syringe is removed. The wire guide is advanced into the catheter, flexible end first. Once the wire is within the trachea, the catheter or needle is removed. The tapered end of the dilator is advanced into the circuit connector end of the airway catheter until the handle of the dilator stops against the circuit connector. The dilator/airway catheter assembly is advanced over the wire until the stiff end of the wire emerges from the dilator handle. The dilator/airway catheter assembly is advanced over the wire, and into the trachea. Once the dilator/airway catheter assembly is within the trachea, the dilator and wire are removed simultaneously leaving the airway catheter in place. Many clinicians experience difficulty with the removal of the dilator from the catheter. This is due to the snug fit of these devices, and is to be expected. A warning label to this effect can be found on the set package. A breathing circuit (such as an Ambu bag or anesthesia circuit) is attached to the airway catheter connector, and ventilation begun. When possible the Airway catheter should be fixed into place using tracheostomy tape or other technique.