What is it?

- A double lumen airway device designed for emergency ventilation of a patient in respiratory arrest when visualization of the airway and endotracheal intubation are not possible.
Definition

- It is a blind insertion device with dual lumens to allow for effective ventilations to be provided regardless of whether esophageal or tracheal placement is accomplished.

Dual lumens

Distal Balloon

Pharyngeal Balloon
Definition

- The pharyngeal balloon fills the space between the tongue and soft palate, eliminating the need for a mask and the associated face mask seal problems.

- The patient can be successfully ventilated regardless if the tube is inserted into the trachea or the esophagus.
Indications

- Respiratory failure in an unconscious patient without an intact gag reflex
- Secondary method of airway management for paramedics when oro-tracheal intubation is not possible
- Primary method of airway management for EMT-B’s
Contraindications

- The patient has an intact gag-reflex
- The patient is less than 5 feet tall or under 16 years old
- The patient has known esophageal disease
- The patient has ingested a caustic substance
- Burns involving the airway
- The patient has an allergy or sensitivity to latex (the pharyngeal balloon contains latex)
Precautions

- Take appropriate Body Substance Isolation (BSI) precautions including facial protection, as expulsion of stomach contents can occur through the #2 tube if the initial placement is in the esophagus.

- **DO NOT** force the tube. If it does not advance easily, redirect it or withdraw and reinsert.

- Attach the fluid deflector elbow to the esophageal tube to deflect stomach contents away from rescuers.
Equipment

- Suction device with FR suction catheter, BVM with oxygen supply
Insertion Procedures

- Place the patient in a supine position

- Provide artificial ventilation via BVM and hyperventilate the patient with 100% oxygen prior to device insertion
Insertion Procedures

- Inflate both balloons prior to insertion to test the integrity of the balloons.

- Should either balloon fail after insertion, maintenance of the patient’s airway cannot be assured.
Insertion Procedures

- Position the patient’s neck in a neutral position.
- Lubricate the tube with sterile, water soluble lubricant.
- Lift the tongue and lower jaw upward to open the oropharynx.
Insertion Procedures

- Insert the Combitube so that it curves in the same direction as the natural curvature of the pharynx.

- If resistance is met, withdraw tube and attempt to reinsert.
Insertion Procedures

- Advance tube until the patient’s teeth are between the two black lines
Insertion Procedures

- Inflate the #1 blue pilot cuff with 100ml of air from the large syringe
Insertion Procedures

- Inflate the #2 white pilot cuff with 15ml of air from the small syringe
Insertion Procedures

- Begin ventilation through the longer blue tube labeled #1. If auscultation of breath sounds is good and gastric inflation is negative, continue.
Insertion Procedures

- If auscultation of breath sounds is absent and gastric inflation is positive, then begin ventilation through the shorter clear tube labeled #2
If the Combitube is placed in the esophagus, the distal balloon will occlude the esophagus.

Ventilations are provided through perforations in the side of the pharyngeal tube.

Stomach contents can be safely expelled via the hole in the end of the tube.
Tracheal Placement

- If placed in the trachea, it functions as an endotracheal tube, with the distal balloon preventing aspiration.

- Ventilations are provided via the hole in the end of the tube.

- Stomach contents can be safely expelled via perforations in the side of the pharyngeal tube.
Verify

- During ventilation observe end-tidal CO$_2$ monitor or pulseoximetry to confirm oxygenation
Caution

- The Sheridan Combitube® and Combitube® packaging provides this cautionary statement: "CAUTION: This product contains natural rubber latex which may cause allergic reactions."

- The manufacturer’s instruction sheet packaged with each tube (Sheridan printing 16623-00) should be read and understood by every user of the device.