**King LT-D Specs**

The KING LT-D consists of a curved tube with ventilation apertures located between two inflatable cuffs. Both cuffs are inflated using a single valve / pilot balloon. The distal cuff is designed to seal the esophagus, while the proximal cuff is intended to seal the oropharynx. Attached to the proximal end of the tube is a 15 mm connector for attachment to a standard breathing circuit or resuscitation bag.

1. **Single Valve/ Pilot Balloon:** Inflates both cuffs
2. **cm Depth Markings**
3. **Orientation / X-ray Line**
4. **Proximal Cuff:** Stabilizes tube and seals the Oropharynx
5. **Bi-lateral Eyes:** Additional eyelets to supplement ventilation
6. **Distal Cuff:** Blocks entry of esophagus. Reduces the possibility of gastric insufflation
7. **Two Ventilation Outlets:** In front of the larynx for efficient ventilation and allows passage of fiberoptic bronchoscope or tube exchange catheter.

**King LTS-D Specs**

The KING LTS-D consists of a curved double-lumen tube with separate pathways for ventilation and access to the stomach. The ventilation lumen ends between the two inflatable cuffs with a variety of openings intended to align with the laryngeal inlet. Attached to the proximal end of the ventilation lumen is a 15 mm connector for attachment to a standard breathing circuit or resuscitation bag.

1. **Single Valve/ Pilot Balloon:** Inflates both cuffs
2. **Proximal opening of Gastric Access Lumen:** Allows passage of 18 Fr gastric tube after removal of gastric diverter
3. **cm Depth Markings**
4. **Proximal Cuff:** Stabilizes tube and seals the Oropharynx
5. **Bi-lateral Eyes:** Additional eyelets to supplement ventilation
6. **Distal Cuff:** Blocks entry of esophagus. Reduces the possibility of gastric insufflation
7. **Distal Opening of Gastric Lumen**
8. **Ventilatory Openings:** In front of the larynx for efficient ventilation and allows passage of fiberoptic bronchoscope or tube exchange catheter.
9. **Orientation / X-ray Line**

**Instructions For Use**

The KING LT-D or KING LTS-D (AIRWAY DEVICE) is a single use device intended for airway management.

The KING LT-D or KING LTS-D (AIRWAY DEVICE) is provided non-sterile.

**INDICATIONS FOR USE**

The AIRWAY DEVICE is indicated for airway management by providing a patent airway to allow patient ventilation.

**CONTRAINDICATIONS**

The following contraindications are applicable for routine use of the AIRWAY DEVICE:

- Responsive patients with an intact gag reflex.
- Patients with known esophageal disease.
- Patients who have ingested caustic substances.
- The AIRWAY DEVICE is not proven to protect the airway from the effects of regurgitation and aspiration.

During transition to spontaneous ventilation, airway manipulations or other methods may be needed to maintain airway patency.

**Kit also Includes:**

- **A. Gastric Tube** Includes Blue Pigtail and 5-1 adapter
- **B. Sterile Lubricant**
- **C. 60cc Syringe**
- **D. Gastric Diverter**

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**Warnings/Precautions**

- High airway pressures may divert gas to the atmosphere.
- Intubation of the trachea cannot be ruled out as a potential complication of the insertion of the AIRWAY DEVICE.
- After placement, perform standard checks for breath sounds and utilize an appropriate carbon dioxide monitor as required by protocol.
- Lubricate only the posterior surface of the AIRWAY DEVICE to avoid blockage of the ventilation apertures or aspiration of the lubricant.
- The AIRWAY DEVICE is not intended for re-use.

**Airway Device Insertion Instructions**

1. Using the information provided, choose the correct AIRWAY DEVICE size, based on patient height.
2. Test cuff inflation system by injecting the maximum recommended volume of air into the cuffs (refer to Sizing Information chart). Remove all air from cuffs prior to insertion.
3. Apply a water-based lubricant to the beveled distal tip and posterior aspect of the tube, taking care to avoid introduction of lubricant in or near the ventilator openings.
4. Have a spare AIRWAY DEVICE ready and prepared for immediate use.
5. Pre-oxygenate.
6. Ensure gag reflex is not intact.
7. Position the head. The ideal head position for insertion of the AIRWAY DEVICE is the "snifing position". However, the angle and shortness of the tube also allows it to be inserted with the head in a neutral position.
8. Hold the AIRWAY DEVICE at the connector with dominant hand.

**USER TIPS**

- As the AIRWAY DEVICE is withdrawn, the initial ventilation opening exposed to or aligned with the laryngeal inlet is the proximal opening. Since the proximal opening is closest to and is partially surrounded by the proximal cuff, airway obstruction is less likely, especially when spontaneous ventilation is employed.
- Withdrawing the AIRWAY DEVICE with the balloons inflated results in a retraction of tissue away from the laryngeal inlet, thereby encouraging a patent airway.
- When the patient is allowed to breathe spontaneously, airway obstruction can occur even though no obstruction was detected during assisted or positive pressure ventilation. During spontaneous ventilation, the epiglottis or other tissue can be drawn into the ventilation opening, resulting in obstruction.
- Advancing the AIRWAY DEVICE 1-2 cm or initial deeper placement (see item #3 above) normally eliminates this obstruction.
- Ensure that the cuff volume necessary to seal the airway should be adjusted to 60 cm H2O. If a cuff pressure gauge is not available, inflate cuffs with the minimum volume necessary to seal the airway at the peak ventilatory pressure employed (just seal volume). Note that nitrous oxide is known to diffuse into cuffs and increase pressure, accordingly, if using nitrous oxide, cuff pressures should be maintained periodically to ensure patency.
- If applicable, maintain appropriate depth of anesthesia. In general, the depth of anesthesia needed is a little more than that required for insertion of a Guedel type airway. It is recommended that the less experienced user choose a slightly deeper level of sedation.
- If using the KING LTS-D DO NOT COVER THE PROXIMAL OPENING OF THE GASTRIC ACCESS LUMEN OF THE KING LTS-D.

**Removal of the Airway Device**

1. Once it is in the correct position, the AIRWAY DEVICE is well tolerated until the return of protective reflexes.
2. AIRWAY DEVICE removal should always be carried out in an area where suction equipment and the ability for rapid intubations are present.
3. For AIRWAY DEVICE removal, it is important that both cuffs are completely deflated.

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**Table:**

<table>
<thead>
<tr>
<th>Size</th>
<th>Patient Criteria</th>
<th>Connector Color</th>
<th>Inflation Vol. L-D</th>
<th>Inflation Vol. LTS-D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 - 5 ft (122 - 152cm)</td>
<td>Yellow</td>
<td>40 - 60 ml</td>
<td>40 - 55ml</td>
</tr>
<tr>
<td>4</td>
<td>5 - 6 ft (155 - 180cm)</td>
<td>Red</td>
<td>60 - 80 ml</td>
<td>50 - 70 ml</td>
</tr>
<tr>
<td>5</td>
<td>greater than 6 ft (&gt;180cm)</td>
<td>Purple</td>
<td>70 - 90 ml</td>
<td>60 - 80 ml</td>
</tr>
</tbody>
</table>

**Proximal Cuff**

- Inflates at the tongue. Isolates the laryngopharynx from the oropharynx and nasopharynx.

**Distal Cuff**

- Inflates at the esophagus. Isolates the esophagus from theopharynx.

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**NOTICE**

- **Intubation of the trachea cannot be ruled out as a potential complication of the insertion of the AIRWAY DEVICE.**
- **High airway pressures may divert gas to the atmosphere.**
- **After placement, perform standard checks for breath sounds and utilize an appropriate carbon dioxide monitor as required by protocol.**
- **Lubricate only the posterior surface of the AIRWAY DEVICE to avoid blockage of the ventilation apertures or aspiration of the lubricant.**
- The AIRWAY DEVICE is not intended for re-use.