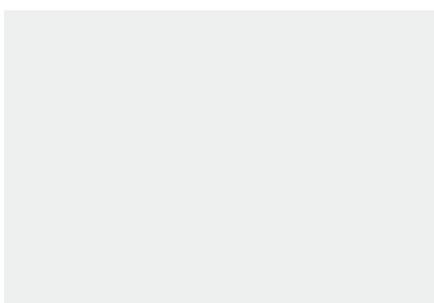
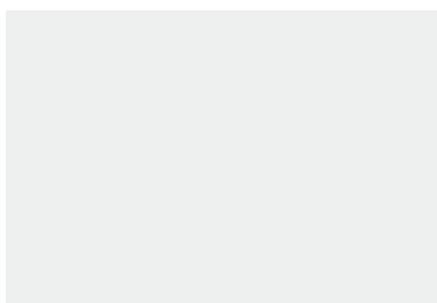
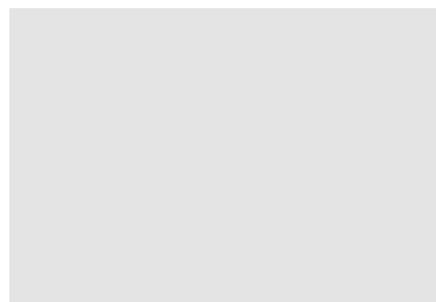
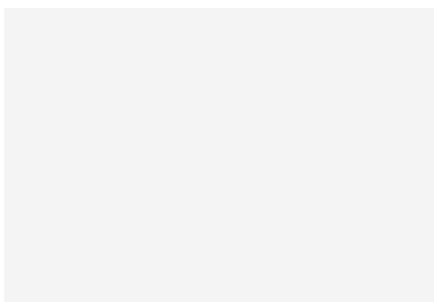
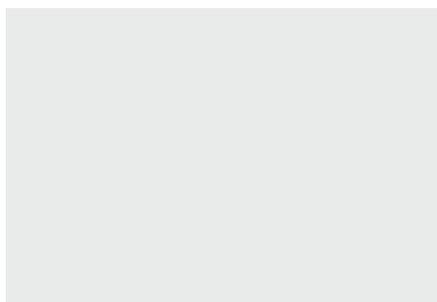




# LMA Protector™

## Instructions for use

English version



**CAUTION: Federal (USA) law restricts this device to sale by or on the order of a physician.**

**WARNING:** LMA Protector™ is supplied sterile for single use only which shall be discarded after use and must not be re-used. Re-use may cause cross infection and reduce product reliability and functionality.

Re-processing of LMA Protector™ intended for single use only may result in degraded performance or loss of functionality. Re-use of single use only products may result in exposure to viral, bacterial, fungal, or prionic pathogens. LMA Protector™ is terminally sterilised by Ethylene Oxide gas. Validated cleaning and sterilisation methods and instructions for reprocessing to original specifications are not available for this product. LMA Protector™ is not designed to be cleaned, disinfected, or re-sterilised.

## DEVICE DESCRIPTION

LMA Protector™ is a sterile, single use, supraglottic airway management device for use only by medical professionals trained in airway management.

It provides access to, and functional separation of, the respiratory and digestive tracts. The anatomically shaped airway tube is elliptical in cross section and ends distally at the laryngeal mask. The inflatable cuff is designed to conform to the contours of the hypopharynx, with the bowl and the mask facing the laryngeal opening.

LMA Protector™ contains two drainage channels which emerge as separate ports proximally. The drainage channels continue distally and enter a chamber located behind the cuff bowl. The chamber narrows distally into the orifice located at the end of the cuff which communicates distally with the upper oesophageal sphincter. A suction tube may be attached to the male suction port, offering removal of gastric fluid through the upper oesophageal sphincter. Alternatively, a well lubricated gastric tube may be passed through the female drainage port to the stomach, offering easy access for evacuation of gastric contents. The drainage channel through the female drainage port may be used as a monitor of correct positioning of the device following insertion, and then for continuous monitoring of mask displacement during use.

LMA Protector™ provides easy insertion without the need for digital or introducer tool guidance. It has enough flexibility to permit the device to remain in place if the patient's head is

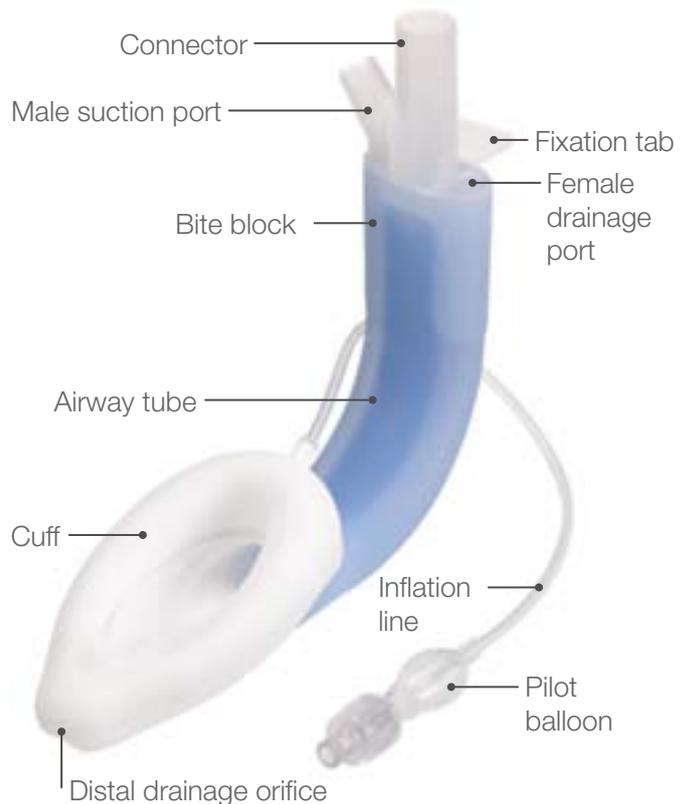
moved in any direction. A built-in bite block reduces the potential for damage to, or obstruction of the airway tube in the event of biting.

The device's fixation system prevents proximal displacement. If correctly used it enhances the seal of the distal end around the upper oesophageal sphincter, isolating the respiratory tract from the digestive tract, thus reducing the risk of aspiration of gastric contents.

Attached to the mask is a cuff inflation line terminating in a pilot balloon and one-way check valve for mask inflation and deflation.

LMA Protector™ is not made with natural rubber latex and phthalates.

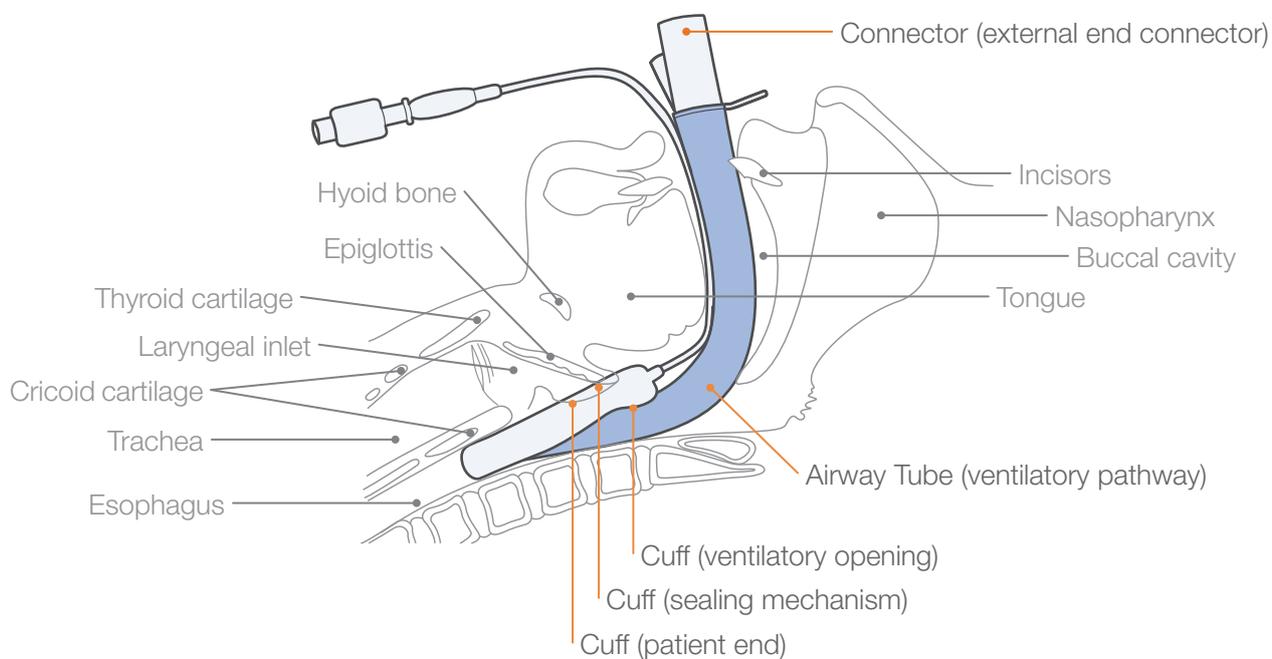
**Figure 1: LMA Protector™ components**



**Table 1: Specification for LMA Protector™**

	Size		
	3	4	5
Airway connector	15 mm male (ISO 5356-1)		
Inflation valve	Luer cone (ISO 594-1)		
Internal volume of ventilatory pathway	18 ml	22 ml	23 ml
Internal volume of drainage pathway	31 ml	41 ml	42 ml
Nominal length of the Internal ventilatory pathway	16 cm	18 cm	20 cm
Nominal length of the Internal drainage pathway	18 cm	21 cm	23 cm
Pressure drop	<0.8 cm H <sub>2</sub> O at 60 l/min	<0.5 cm H <sub>2</sub> O at 60 l/min	<0.5 cm H <sub>2</sub> O at 60 l/min
Cuff pressure maximum	60 cm H <sub>2</sub> O	60 cm H <sub>2</sub> O	60 cm H <sub>2</sub> O
Min. interdental gap	28 mm	32 mm	32 mm

**Correct position of the LMA Protector™ in relation to anatomical landmarks**



## INDICATION FOR USE

LMA Protector™ is indicated for use in achieving, and maintaining control of, the patient's airway during routine anaesthetic procedures, in fasted patients, using either spontaneous or positive pressure ventilation.

It is also indicated for use as the rescue airway device in CPR procedures, in which LMA ProSeal™, LMA Classic™ or the LMA Unique™ have traditionally been used. LMA Protector™ is also indicated as a "rescue airway device" in known, or unexpected difficult airway situations. LMA Protector™ may be used to establish an immediate, clear airway during resuscitation in the profoundly unconscious patient with absent glossopharyngeal and laryngeal reflexes who may need artificial ventilation

It may also be used to secure an immediate airway when tracheal intubation is precluded due to lack of available expertise or equipment, or when attempts at tracheal intubation have failed.

## CONTRAINDICATIONS

LMA Protector™ must not be used in the case of the following:

- Patients who have had radiotherapy to the neck involving the hypopharynx as there is risk of trauma and/or a potential failure to seal effectively.
- Patients with inadequate mouth opening to permit insertion.
- Patients presenting for emergency surgery who are at risk of massive reflux due to such conditions as acute intestinal obstruction or ileus, or patients who have been injured shortly after ingesting a substantial meal (but see above under Indications for Use).
- Patients requiring head or neck surgery where the surgeon will be unable to gain adequate access due to the presence of the device.
- Patients undergoing CPR who are responsive with an intact gag reflex.
- Patients who have ingested caustic substances.

## WARNINGS

- In spite of encouraging case reports for 2nd Generation LMA devices, it is not currently known whether LMA Protector™ always affords protection from aspiration, even when correctly fixed in place.
- The presence of a gastric tube does not rule out the possibility of aspiration if the device is not correctly located and fixed in place.

- LMA Protector™ may be ineffective for use in patients with decreased pulmonary compliance due to fixed obstructive airway disease because airway positive pressure requirement may exceed seal pressure.
- Do not attempt to pass a gastric tube into the stomach via the drainage channel in the presence of known, or suspected, oesophageal pathology.
- There is a theoretical risk of causing oedema or haematoma if suction is applied directly to the end of the drainage channel.
- The benefits of establishing ventilation with LMA Protector™ must be weighed against the potential risk of aspiration in some situations including; symptomatic or untreated gastro-oesophageal reflux; pregnancy over 14 weeks; multiple or massive injury; conditions associated with delayed gastric emptying, such as the use of opiate medication in patients with acute injury or peritoneal infectious or inflammatory processes.
- A water-soluble lubricant, such as K-Y® Jelly, should be used. Do not use silicone-based lubricants as they degrade device components. Lubricants containing Lidocaine are not recommended for use. Lidocaine can delay the return of the patient's protective reflexes after removal of the device; may possibly provoke an allergic reaction, or may affect the surrounding organs, including the vocal cords.
- LMA Protector™ may be flammable in the presence of lasers and electrocautery equipment.

## CAUTIONS

- Do not immerse or soak the device in liquid prior to use.
- Only use the device with the recommended manoeuvres described in the instructions for use.
- Do not use LMA Protector™ if the device is damaged or the unit packaging is damaged or opened.
- When applying lubricant, avoid blockage of the airway aperture.
- To avoid trauma, excessive force should not be used at any time during insertion of LMA Protector™, or during insertion of a gastric tube through the drainage channel.
- Never overinflate the cuff after insertion. An appropriate intra-cuff pressure is 60 cm H<sub>2</sub>O. This pressure should not be exceeded. Excessive intra-cuff pressure can result in incorrect positioning which may cause pharyngo-laryngeal morbidity, including sore throat, dysphagia and nerve injury.

- If airway problems persist or ventilation is inadequate, LMA Protector™ should be removed and an airway established by some other means.
- Careful handling is essential. LMA Protector™ is made of medical-grade silicone, which can be torn or perforated. Avoid contact with sharp or pointed objects at all times. Do not insert the device unless the cuff is fully deflated as described in the instructions for insertion.
- Surgical gloves should be worn during preparation and insertion to minimize contamination of the airway.
- Store the device in a dark, cool environment, avoiding direct sunlight and extremes of temperature.
- Once used, the device should be subject to a handling and elimination process for bio-hazard products in accordance with local and national regulations.
- Only use a syringe with a standard luer taper tip for inflation and deflation of the cuff.
- Nitrous oxide diffuses into the cuff causing a rise in pressure. Diffusion rate and resulting peak pressure may vary with the initial volume of air injected into the cuff, the type of gases used to inflate the cuff, and the percentage of nitrous oxide in the inhaled mixture.

## ADVERSE EVENTS

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There are reported adverse reactions associated with the use of laryngeal mask airways and endotracheal tubes. Standard textbooks and published literature should be consulted for specific information.

## SIZE SELECTION

For normal adults, use the size 4 device as a first choice. After inserting, fixing the device in place, and then inflating to the recommended pressure, there should be a minimum of a 1 cm gap between the fixation tab and the patient's upper lip.

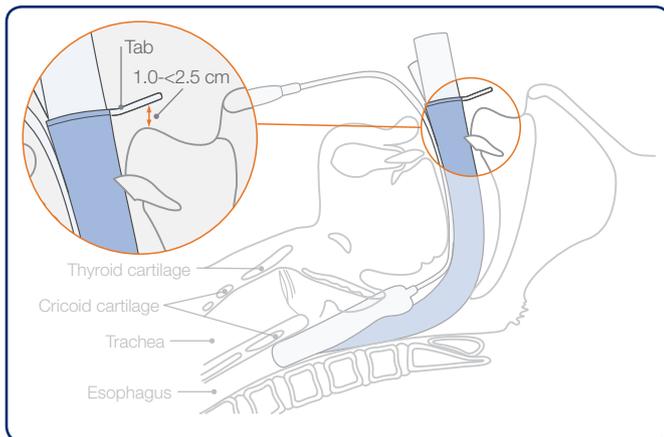


Figure 2: LMA Protector™ sizing

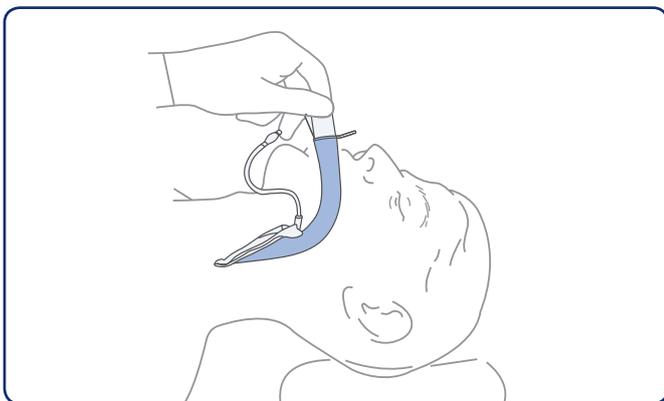


Figure 3: LMA Protector™ sizing (method 2)

For adult patients who are either smaller or larger than normal, it is often possible to obtain a good result using the size 4 device. In either case, the cuff should be inflated with sufficient air to abolish a leak with positive pressure ventilation but which does not exceed a cuff pressure of 60 cm H<sub>2</sub>O. In smaller patients this pressure is achieved with a relatively small volume of air, while larger patients will require larger volumes. However, when in doubt, an approximate estimate of suitable sizing can be made by holding each device against the side of the patient's face in the position corresponding to that shown in Figure 3.

## PRE-USE PERFORMANCE TESTS

The following inspections and tests must be conducted before LMA Protector™ is used. The performance tests should be conducted in an area, and in a manner consistent with accepted medical practice, that will minimise contamination of the device before insertion.

**Warning:** Do not use the device should it fail any one of the following inspections or tests.

- Examine the surface of LMA Protector™ for damage, including cuts, tears, scratches or kinks.
- Examine the interior of the airway tube to ensure it is free from blockages or loose particles. Any particles present in the channels should be removed. Do not use the airway if a blockage or particle cannot be removed.
- Deflate the cuff completely. Once deflated, check the cuff for spontaneous inflation. Do not use the device if the cuff spontaneously inflates.

## DEFLATING THE DEVICE PRIOR TO INSERTION

1. After firmly connecting a syringe of at least 50 ml to the inflation port, hold the syringe and LMA Protector™ exactly as shown in Figure 4. Move the connected syringe away from the device until the inflation line is slightly stretched as shown. Compress the distal end of the device between the index finger and thumb while withdrawing air until a vacuum has been obtained.
2. While deflating, hold the device so that the distal end is curled slightly anteriorly as shown in Figure 4.

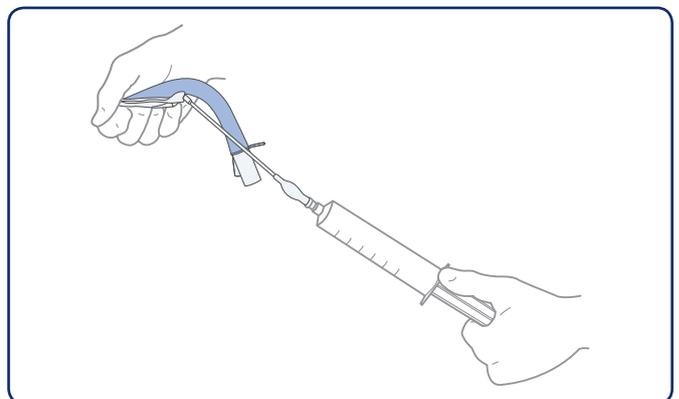
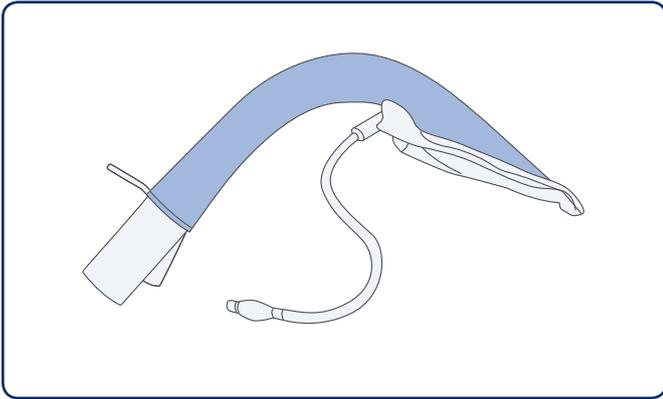


Figure 4: LMA Protector™ deflation

3. Deflate the device until the tension in the syringe indicates a vacuum has been created in the mask.
4. Keep the syringe under tension whilst rapidly disconnecting it from the inflation port. This will ensure that the mask remains correctly deflated, as shown in Figure 5.



**Figure 5:** After achieving wedge shape cuff during deflation, disconnect the syringe from the inflation line

## INSERTION

1. Lubricate the posterior surface of the mask and airway tube just prior to insertion.
2. Stand behind or beside the patient's head.
3. Place the head in the neutral, or slight "sniffing" position (sniffing position = extension of the head and flexion of the neck).
4. Hold the device exactly as shown in Figure 6.
5. Press the distal tip against the inner aspect of the upper teeth or gums.
6. Slide inwards using a slightly diagonal approach (direct the tip away from the mid-line).
7. Continue to slide inwards rotating the hand in a circular motion so that the device follows the curvature behind the tongue.
8. Resistance should be felt when the distal end of the device meets the upper oesophageal sphincter. The device is now fully inserted.

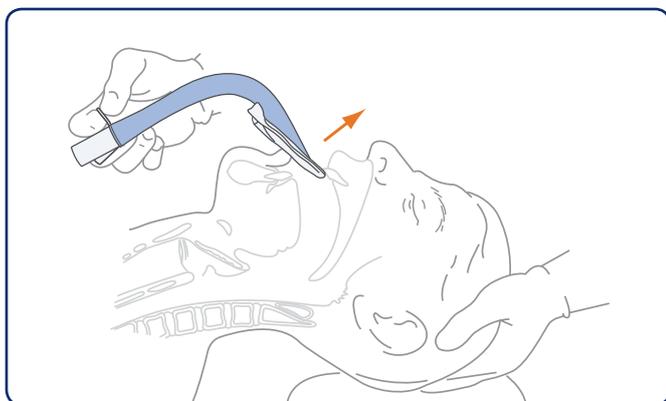


Figure 6: Press the tip of the mask against the hard palate

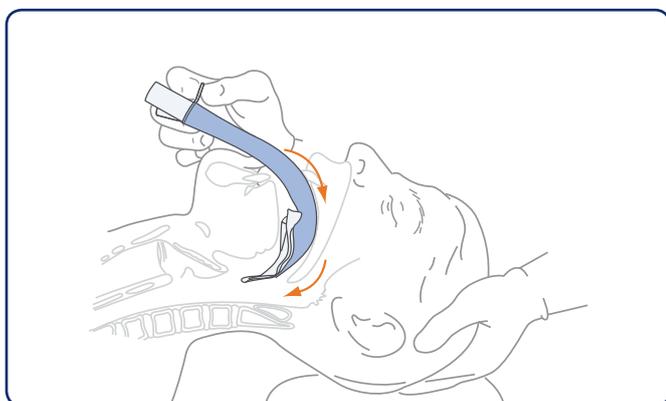


Figure 8: Swing the device inward with a circular motion, pressing against the contours of the hard and the soft palate

## INSERTION ADVICE

An inadequate depth of anaesthesia may result in coughing and breath-holding during insertion. If this occurs, anaesthesia should be deepened immediately with inhalational or intravenous agents, and manual ventilation should be instituted.

If the patient's mouth cannot be opened sufficiently to be able to insert the mask, first ensure that he or she is adequately anaesthetised, then ask an assistant to pull the jaw downward. This manoeuvre makes it easier to see into the mouth in order to verify the position of the mask. However, do not maintain downward jaw traction once the mask has passed beyond the teeth.

The cuff must press the tube against the palate throughout the insertion manoeuvre, otherwise the tip may fold on itself or impact on an irregularity or swelling in the posterior pharynx (e.g. hypertrophied tonsils). If the cuff fails to flatten or begins to curl over as it is advanced, it is necessary to withdraw the mask and reinsert it. In case of tonsillar obstruction, a diagonal shift of the mask is often successful.

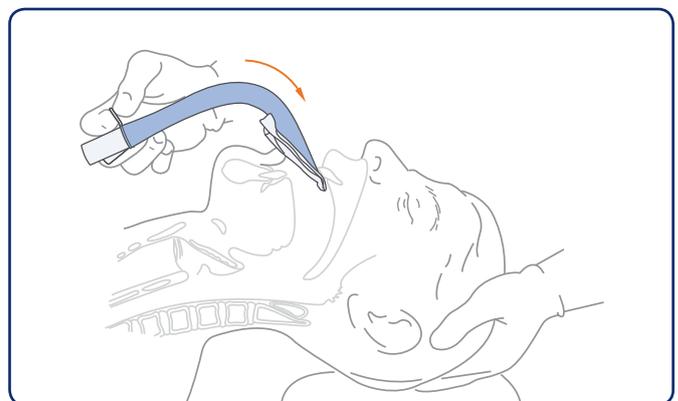


Figure 7: Press the cuff further into the mouth, maintaining pressure against the palate

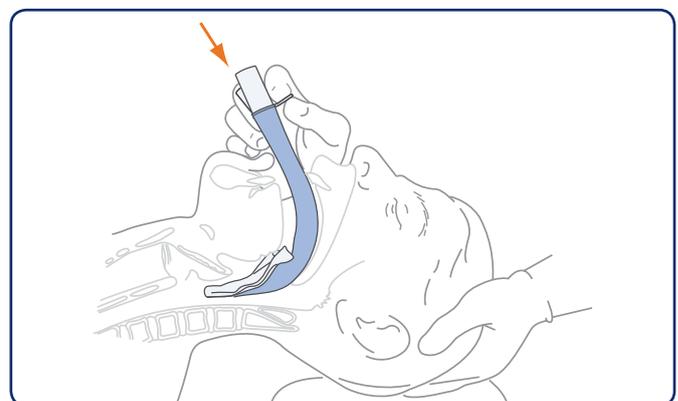


Figure 9: Advance the device into the hypopharynx until resistance is felt

## FIXATION

Secure LMA Protector™ to the patient's face using adhesive tape as follows:

- Use a piece of adhesive tape 30-40 cm long, holding it horizontally by both ends.
- Press the adhesive tape transversely across the fixation tab, continuing to press downwards so that the ends of the tape adhere to the patient's cheeks, and the device itself is gently pressed inwards by the tape.
- Do not rotate the tape around the proximal end of the device.
- Do not use a Guedel airway as the device has an integral bite block.

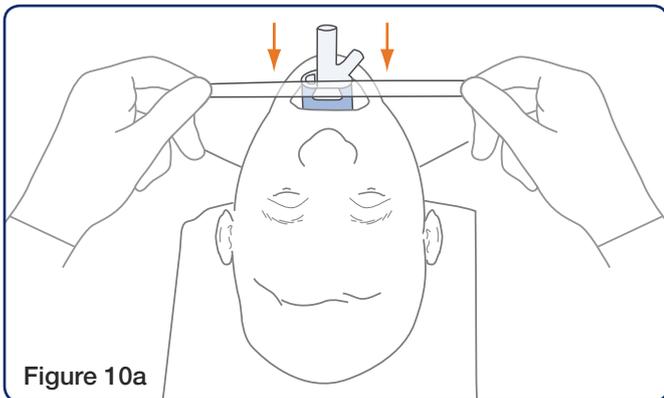


Figure 10a

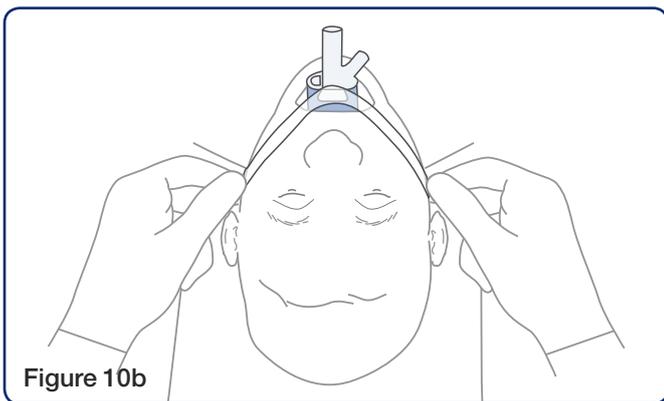


Figure 10b

**Figure 10:** Fix the device in place using adhesive tape. Stretch the adhesive tape as shown (See Figure 10a) to ensure that the middle of the tape is pressed vertically downwards over the tab (Figure 10b).

## INFLATION

The cuff should be inflated with sufficient air to prevent a leak with positive pressure ventilation, but it must not exceed either a pressure of 60 cm H<sub>2</sub>O or the specific device cuff volume maxima. If no manometer is available, inflate with just enough air to achieve a seal sufficient to permit ventilation without leaks.

**Table 2:** LMA Protector™ selection guide

Airway Size	Patient Weight	Max. Size OG Tube	Max. Size ETT	Maximum Intra-Cuff Pressure
3	30-50 kg	16 Fr	6.5	60 cm H <sub>2</sub> O
4	50-70 kg	18 Fr	7.5	60 cm H <sub>2</sub> O
5	70-100 kg	18 Fr	7.5	60 cm H <sub>2</sub> O

## CORRECT POSITION

Correct placement should produce a leak-free seal against the glottis with the mask tip at the upper oesophageal sphincter. The integral bite block should lie between the teeth.

To discover whether the mask has been positioned correctly, place a small bolus (1-2ml) of suitably viscous, water-soluble lubricant in the proximal end of the male suction port and cover the female drainage port with a thumb. In a properly placed mask, there should be a slight up-down meniscus movement of the lubricant following the application and release of gentle pressure in the suprasternal notch. Such a movement indicates that the distal end of the drainage channel is correctly placed so that it seals around the upper oesophageal sphincter (the 'suprasternal notch test'). A similar movement may also be seen when gentle manual positive pressure is applied to the airway through the device.

## GASTRIC DRAINAGE

The drainage channels facilitate the channeling of fluids and gases emerging from the stomach. To facilitate gastric drainage, a gastric tube may be passed through the female drainage port into the stomach at any time during the anaesthetic procedure. Refer to Table 2 for maximum gastric tube sizes. The gastric tube should be well lubricated and inserted slowly and carefully. Suction should not be performed until the gastric tube has reached the stomach. It should not be applied directly to the end of the drainage channel as this may cause the drainage channel to collapse, which may, theoretically, cause injury to the upper oesophageal sphincter.

## ANAESTHESIA MAINTENANCE

LMA Protector™ is well tolerated in spontaneously breathing patients when used with volatile agents or intravenous anaesthesia, provided anaesthesia is adequate to match the level of surgical stimulus, and the cuff is not over-inflated.

During Positive Pressure Ventilation when using LMA Protector™, tidal volumes should not exceed 8 ml/kg, and peak inspiratory pressures should be kept below the maximum airway seal pressure.

If leaks occur during PPV, this may be due to: light anaesthesia causing a degree of glottic closure; severe reduction in lung compliance related to the procedure or patient factors; or displacement, or migration, of the cuff by head turning or traction in an inadequately fixed mask.

## USE OF THE DRAINAGE CHANNEL

**Warning:** Do not attempt to pass a gastric tube through the LMA Protector™ drainage channel if there is gas leaking through the latter, or if there is known, or suspected, oesophageal pathology or damage.

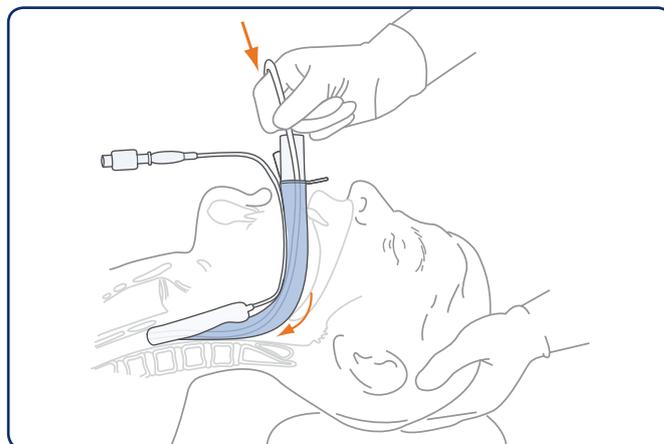
If it is clinically indicated to pass a gastric tube into the stomach, suction should not be performed until the tube has reached the stomach.

**Warning:** Suction should not be applied directly to the end of the drainage channel, as this may cause it to collapse. This could cause injury to the upper oesophageal sphincter.

The primary function of the drainage channel is to provide a separate conduit from and to the alimentary tract. It may direct gases or liquids from the patient and may also serve as a guide for blind insertion of an orogastric tube at any time during the anaesthetic. Refer to Table 2 for maximum gastric tube sizes.

**WARNING:** Orogastric tubes which have been stiffened by refrigeration must not be used. Always ensure that the tube is at, or above, room temperature.

Upon insertion (Figure 11), some resistance is often detected when the tip of the catheter is pressed gently against the upper sphincter. Do not use excessive force. If a tube of appropriate size fails to pass, this may be because the mask is kinked or wrongly positioned. In these cases, the mask should be removed and reinserted. Clinical judgement should



**Figure 11:** Passage of an oro-gastric tube through the LMA Protector™ into the upper oesophageal sphincter

be used in deciding when the orogastric tube should be removed.

**Warning:** To avoid trauma, force should not be used at any time during insertion of a gastric tube through the LMA Protector™ drainage channel.

## ADVICE AFTER INSERTION

### Inadequate level of anaesthesia

The most common problem following insertion is failure to maintain an adequate level of anaesthesia. To overcome this, administer an additional bolus of induction agent and/or increase the concentration of volatile agent, while gently assisting ventilation.

### Poor airway seal/Air leak

Should signs of a poor airway seal or air leak occur at the beginning of, or during, a case, one or more of the following measures may be taken:

- Verify that the depth of anaesthesia is adequate and deepen it if necessary.
- Check cuff pressures at the start of, and periodically during, a case, especially if using nitrous oxide.
- Ensure intra-cuff pressures are not >60 cm H<sub>2</sub>O. Reduce intra-cuff pressure, if necessary, while maintaining an adequate seal.
- If the mask is seated too high in the pharynx, then press in further to confirm contact with the upper oesophageal sphincter.

- Ensure proper fixation by applying palatal pressure while taping the device in place.
- Always confirm cuff integrity prior to placement.

### Incorrect positioning of an airway product

In general, incorrect positioning of an airway product can be assessed in two ways: by capnography, or by observation of changes in tidal volume, e.g., a reduced, expired tidal volume. If incorrect positioning is suspected, check whether there is a smooth, oval neck swelling extending below the thyroid cartilage. If absent, it may indicate anterior misplacement of the mask tip into the laryngeal inlet, particularly if there is an unusually prolonged expiratory phase. If the position of the device is incorrect, the device may be removed and reinserted once anaesthetic depth is adequate for reinsertion.

Migration/rotation of the LMA Protector™ during use may occur due to over-inflation of the cuff, a herniated cuff and/or accidental displacement. Check cuff pressure at the start and periodically during a case, verify cuff integrity prior to use and ensure proper fixation. If the device pops out of the mouth during insertion, the mask may be incorrectly positioned due to the distal tip being folded backward in the pharynx. In such a case, remove and reinsert.

## RECOVERY

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Removal should only be carried out by appropriately trained and equipped personnel. LMA Protector™ will usually be removed in the operating theatre, although its low invasivity makes it a good device to maintain the airway during recovery in the Post Anaesthetic Care Unit (PACU). Because recovery involves an increase in pharyngeal tone, it makes sense to reduce the volume of air in the cuff before sending the patient to the PACU, however, the cuff must never be fully deflated at this point.

Fully deflate the cuff and simultaneously remove the device ONLY when the patient can open their mouth on command. If the cuff is FULLY deflated before the return of effective swallowing and cough reflexes, secretions in the upper pharynx may enter the larynx, provoking coughing or laryngeal spasm.

Patient monitoring should continue throughout the recovery stage. Where appropriate, oxygen may be continuously administered through the anaesthetic circuit or via a T-piece attached to the proximal end of the airway device.

## USE WITH MAGNETIC RESONANCE IMAGING (MRI)

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LMA Protector™ with Metallic Spring is MR Conditional.

Non-clinical testing demonstrated that this product is MR Conditional. A patient with this device can be scanned safely, immediately after placement under the following conditions:

- Before the patient enters the MRI system room, the airway must be fixed properly in place with adhesive tape, cloth tape or other appropriate means to prevent movement or dislodgement.
- Static magnetic field of 3-Tesla or less
- Maximum spatial gradient magnetic field of 18,000-Gauss/cm or less
- Maximum MR system reported, whole body averaged specific absorption rate (SAR) of 4-W/kg (First Level Controlled Mode of operation for the MR system) for 15 minutes of scanning (per pulse sequence)

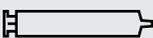
### MRI-Related Heating

Under the scan conditions defined above, the LMA Protector™ is expected to produce a maximum temperature rise of 2.3°C after 15 minutes of continuous scanning.

### Artifact Information

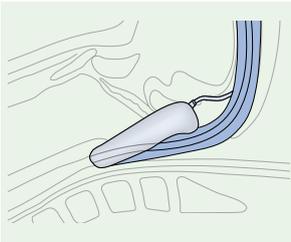
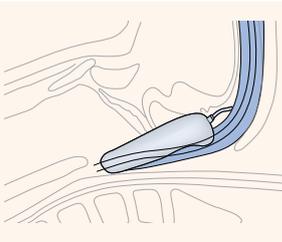
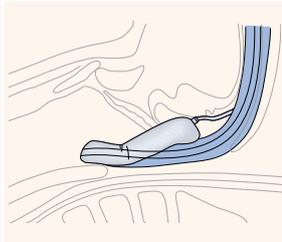
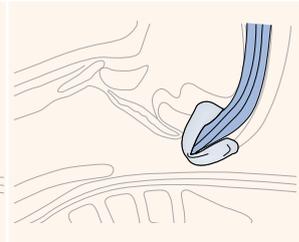
The maximum artifact size as seen on a gradient echo pulse sequence and a 3-Tesla MR system extends approximately 25 mm relative to the size and shape of the LMA Protector™ with Metallic Spring.

## SYMBOLS DEFINITION

	Manufacturer		Product Code
	Consult IFU on this website: <a href="http://www.LMACO.com">www.LMACO.com</a>		Lot Number
	Air inflation volume		CE Mark
	Patient weight		MR Conditional
	Read Instruction before use		Do not Re-use
	Not made with natural rubber latex		Do not Re-sterilise
	Fragile, handle with care		This product not made with phthalates
	Keep away from sunlight		Sterilised by Ethylene Oxide
	Keep dry		Use By
	This way up		Do not use if package is damaged

## STEPS TO FACILITATE CORRECT MASK POSITION

- After insertion, inflate the cuff to no more than 60 cm H<sub>2</sub>O intracuff pressure.
- Connect to anesthesia circuit and check for leaks from the drain channels and airway tube.
- Verify position of bite block.
- Place a small bolus of lubricant gel on the proximal end of the male suction port, cover the female drainage port with a thumb and gently squeeze the bag to assess movement.
- If necessary, pass an orogastric tube to the end of the mask tip to verify the drain channel is patent.
- Once correctly positioned, apply palatal pressure to the airway tube while taping in place.

	Correct placement	Incorrect placement		
				
	<b>Tip behind arytenoid and cricoid cartilages</b>	<b>Tip too high in the pharynx</b>	<b>Tip in the laryngeal vestibule</b>	<b>Tip folded backwards</b>
Gas leak from drain ports:	No	Yes	Yes	No
Bite block:	Approximately midway between teeth	Too high	Approximately midway between teeth	Too high
Lubricant test:	Slight meniscus movement	May have movement depending on position	Marked up/down movement Ejection of lubricant or spontaneous bubble formation	No meniscus movement
Additional verification:	Passing OG tube to mask tip demonstrates that drain channel is patent	Pressing it further eliminates leak	Pressing in further increases obstruction	Difficulty passing OG tube indicates occluded drain channel

## ADVICE AFTER LMA PROTECTOR™ INSERTION

Problems after insertion	Possible cause(s)	Possible solution(s)
<b>Poor airway seal/air leak (audible air leak, poor ventilation)</b>	Mask seated too high in pharynx	Advance mask in further and re-secure airway tubes with tape
	Inadequate anaesthesia	Deepen anaesthesia
	Poor fixation	Ensure palatal pressure and proper fixation
	Overinflation of cuff	Check cuff pressure at start and periodically during case, especially if using nitrous oxide to ensure not >60 cm H <sub>2</sub> O (adjust if necessary)
	Herniation of cuff	Confirm cuff integrity prior to use
<b>Gas leakage up to drain tube with or without PPV</b>	Mask seated too high in pharynx	Advance mask in further and re-secure airway tubes with tape
	Incorrect placement in laryngeal vestibule	Remove and reinsert
	Open upper esophageal sphincter	Monitor
<b>Airway obstruction (difficult ventilation, phonation, stridor)</b>	Incorrect placement in laryngeal vestibule	Remove and reinsert
	Distal tip of mask pressing on glottis inlet with mechanical closure of vocal cords	<ul style="list-style-type: none"> <li>– Ensure adequate anaesthesia and correct cuff inflation pressures,</li> <li>– Place patient's head/neck in sniffing position</li> <li>– Try PPV or add PEEP</li> </ul>
	Folding of cuff walls medially	<ul style="list-style-type: none"> <li>– Consider insertion of one size smaller LMA Protector™</li> <li>– Ensure correct cuff inflation pressures</li> </ul>
<b>Gastric insufflation</b>	Distal tip of mask folded backward	Remove and reinsert or digitally sweep behind the tip
	Mask seated too high in pharynx	Advance mask in further and re-secure airway tubes with tape
<b>Migration/Rotation/ Mask popping out of mouth</b>	Overinflation of cuff	Check cuff pressure at start and periodically during case, especially if using nitrous oxide to ensure not >60 cm H <sub>2</sub> O
	Herniation of cuff	Confirm cuff integrity prior to use
	Accidental displacement	Ensure proper fixation
	Distal tip of mask folded backward	Remove and reinsert or digitally sweep behind the tip
	Poor fixation	Ensure palatal pressure and proper fixation
<b>Resistance to OG tube insertion</b>	Insufficient lubrication	Add lubricant and re-attempt passing OG tube
	Distal tip of mask folded backward	Remove and reinsert or digitally sweep behind the tip
	Mask seated too high in pharynx	Advance mask in further and re-secure airway tubes with tape
	Incorrect placement in laryngeal vestibule	Remove and reinsert
	Gross overinflation of cuff	Check off pressure at start and periodically during case, especially if using nitrous oxide to ensure not >60 cm H <sub>2</sub> O

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