



AirSim Manual

Version 3.2

tru
corp

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Introduction

Designed and produced by TruCorp, the AirSim range brings highly realistic and fully functional airway training systems to the market.

The main and most important component of the AirSim range is the unique AirSim airway. This is a faithful reproduction of the human airway anatomy and as such is invaluable as a training aid to facilitate the learning and development of airway management skills for all health professionals.

The innovated development and manufacture approach used makes the AirSim airway unique. The main features of the AirSim Airway which makes it unique include;

- The airway is moulded from a master which was created from data collected from a CT scan of a person.
- The one piece mould together with the sophisticated dipping procedure during manufacture makes possible much of the realism offered.
- Integrated one piece and seamless construction for real life functionality.

Introducing the AirSim product range

AirSim Standard



The AirSim Standard is uniquely constructed to allow realistic feedback during airway management procedures and provides true, anatomically correct and visually accurate internal features.

The neck construction allows the head to be moved and secured in a number of positions. This ranges from the standard “sniffing” position to more difficult scenarios.

The AirSim Standard also features an inflatable tongue with real-life size and texture. There is also an option to include “breakout” teeth to simulate the effects of bad practice in laryngoscopy.

Contents

Included in the black carry case are the following items

- 1 x AirSim Standard airway management manikin
- 1 x Blue Lung Bag
- 1 x Plastic Lung bag to airway connector
- 1 x Foam Block (for securing the head in a neutral position during storage)

AirSim Multi



The AirSim Multi contains the key features of the AirSim Standard with the addition of a nasal passage and a chin.

The AirSim Multi facilitates training on nasal procedures as well as bag and mask ventilation techniques.

The nasal passage has been developed in a manner similar to the main airway. This gives the same anatomical realism and functionality; important landmarks such as the turbinates are clearly defined. In addition the material used offers the same tactile feedback which is delivered with the main airway itself.

Contents

Included in the black carry case are the following items

- 1 x AirSim Multi airway management manikin
- 1 x Blue Lung Bag
- 1 x Plastic Lung bag to airway connector
- 1 x Foam Block (for securing the head in a neutral position during storage)

AirSim Bronchi



The AirSim Bronchi is the latest product addition to the AirSim family, providing anatomically correct detail down to the fourth generation bronchi.

The AirSim Bronchi provides exceptional detail in both internal and external features; made possible through a combination of cutting edge moulding technology and carefully handcrafted processes.

Contents

Included in the black carry case are the following items

- 1 x AirSim Bronchi airway management manikin
- 1 x Foam Block (for securing the head in a neutral position during storage)

AirSim Advance



The AirSim Advance is the newest addition to the AirSim family. The advance model still maintains the features of the AirSim Multi unit, however for added realism a head and neck skin has been added. It is lightweight and portability, and maintains the unique features such as the AirSim airway and nasal passage.

Contents

Included in the black carry case are the following items

- 1 x AirSim Advance Airway Management Manikin
- 1 x Blue Lung Bag
- 1 x Plastic Lung bag to airway connector

AirSim Junior



The AirSim Junior is the latest addition to the AirSim Family. Uniquely constructed to allow realistic feedback during airway management procedures and provides true, anatomically correct and visually accurate internal features.

AirSim Junior has a realistic anatomy that enables basic and advanced paediatric airway management. The AirSim Junior facilitates training in the use of bag/mask ventilation, supraglottic airway insertion and both naso and orotracheal intubation. In addition it can be used with all current video laryngoscopes.

Presented in a lightweight but sturdy frame, AirSim Junior comes shipped with its own lungs to demonstrate correct tube placement and is neatly packaged with its own lightweight case for easy transportation.

Contents

Included in the black carry case are the following items;

- 1 x AirSim Junior airway management manikin
- 2 x Blue Lung Bags

PLEASE NOTE THAT MOUTH TO MOUTH RESUSCITATION TRAINING IS NOT RECOMMENDED ON THIS MODEL AS THE AIRWAY AND LUNGS ARE NOT DISPOSABLE OR REPLACEABLE.

Quick Set Up Guide For AirSim Std, Multi and Bronchi

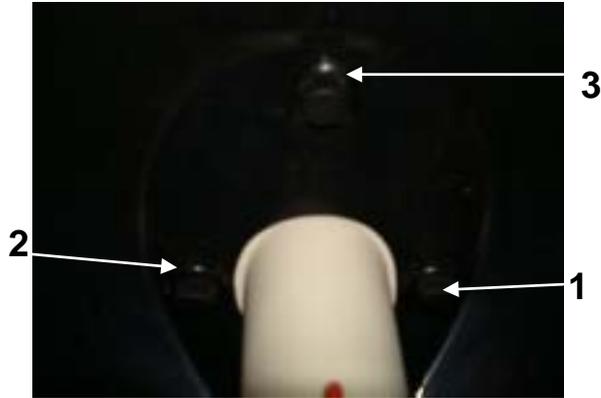
1. Remove AirSim unit from the black carrier case, with blue bag and plastic connector (if appropriate).
2. Connect one end of the plastic connector to the open section of the left Bronchi on AirSim airway (if appropriate)
3. Connect the other end of the plastic connector to the blue lung bag (if appropriate)
4. Ensure that the tongue is inflated with approx 20ml of air. This will create normal lingual tension. Increasing the amount of air will create a more difficult airway management scenario.
5. The neck can be adjusted and locked using the 'Wing nut' tensioner. Using this neck lock system, the head can be accurately placed in the 'sniffing the morning air' position. This is achieved when the head is moved so that the red marks on the fixed neck joint are in alignment. For more difficult airway management scenarios the head can be fixed in a more forward position.
6. Using a water soluble lubricant ensure that the internal airway is well lubricated including the tongue, hard palate, back of the mouth and epiglottis. If appropriate ensure that the nasal passage is lubricated.
7. Ensure that all airway devices are prepared to the manufactures recommendations and instructions. Before insertion of the device generous amounts of lubricant should be used to cover the surfaces in contact with the AirSim airway.
8. Please ensure that the AirSim airway is cleaned after use. Please use warm water of a dilute (8-10% w/w) Sodium Bicarbonate solution until all visible foreign matter and residue is removed.
9. Please replace the AirSim unit back into the carrier case and store in clean, dry conditions away from heat and light; avoid contact with metals, solvents, oils or greases and strong detergents.

Quick Set Up Guide For AirSim Advance

1. Remove AirSim advance from the black carrier case, with blue bag and plastic connector.
2. Connect one end of the plastic connector to the open section of the left Bronchi on AirSim airway.
3. Connect the other end of the plastic connector to the blue lung bag.
4. Ensure that the tongue is inflated with approx 20ml of air. This will create normal lingual tension. Increasing the amount of air will create a more difficult airway management scenario.
5. Using a water soluble lubricant ensure that the internal airway and Nasal passage are well lubricated.
6. Ensure that all airway devices are prepared to the manufactures recommendations and instructions. Before insertion of the device generous amounts of lubricant should be used to cover the surfaces in contact with the AirSim airway.
7. Please ensure that the AirSim airway is cleaned after use. Please use warm water of a dilute (8-10% w/w) Sodium Bicarbonate solution until all visible foreign matter and residue is removed.
8. The head and neck skin of the AirSim Advance is made from durable and very elastic polyurethane material. It can be cleaned using a lightly soaped, damp cloth. Please do not use and detergents or cleaning agents on the skin material.
9. Please replace the AirSim Advance unit back into the carrier case and store in clean, dry conditions away from heat and light; avoid contact with metals, solvents, oils or greases and strong detergents.

Removing the AirSim Advance head from base

The head can be detached from the base by removing the 3 bolts from the underside of the base as shown below.



The head can be reattached to the base by attaching screws in positions 1 & 2 before attaching 3.

Quick Set Up Guide For AirSim Junior

1. Remove AirSim Junior from the black carrier case, with blue lung bag
2. Connect both ends of the lung bags to the open sections of the bronchi
3. Using a water soluble lubricant ensure that the internal airway and Nasal passage are well lubricated.
4. Ensure that all airway devices are prepared to the manufactures recommendations and instructions. Before insertion of the device generous amounts of lubricant should be used to cover the surfaces in contact with the AirSim airway.
5. Please ensure that the AirSim Junior airway is cleaned after use. Please use warm water of a dilute (8-10% w/w) Sodium Bicarbonate solution until all visible foreign matter and residue is removed.
6. The head and neck skin of the AirSim Junior is made from durable and very elastic polyurethane material. It can be cleaned using a lightly soaped, damp cloth. Please do not use and detergents or cleaning agents on the skin material.
7. Please replace the AirSim Junior unit back into the carrier case and store in clean, dry conditions away from heat and light; avoid contact with metals, solvents, oils or greases and strong detergents

Airway Management

The AirSim Standard

The AirSim Standard is ideal for training in the use of:

- Laryngeal Masks
- Full range of supraglottic devices
- Laryngoscopes
- Tracheal Tubes
- Fiberoptic Laryngoscopes
- Needle Cricothyroidotomy Systems

TruCorp recommend the following equipment sizes for optimal performance:

- 8.0-9.0 mm ID for oral intubation
- Size 3 and 4 for LMA laryngeal masks
(similar respective sizes for other supraglottic devices)

The AirSim Multi

The AirSim Multi can be used in the training of all the procedures facilitated by the AirSim Standard with the addition of:

- Naso-tracheal intubation
- Awake fiberoptic examination
- Bag & mask ventilation techniques.

TruCorp recommend the following equipment sizes for optimal performance:

- 7.0-7.5 mm ID for nasal intubation
- 8.0-9.0 mm ID for oral intubation
- Size 3 and 4 for LMA laryngeal masks
(similar respective sizes for other supraglottic devices)

The AirSim Bronchi

The AirSim Bronchi unit will provide a solution to your training needs in:

- Diagnostic bronchoscopy.
- Lung isolation techniques using left and right endobronchial tubes and bronchial blockers.
- Lung suctioning techniques.
- For clinicians and industrial clients, the AirSim Bronchi is a leading choice for demonstration of items such as:
- Fibreoptic bronchoscopic equipment.
- Single and double lumen tubes and bronchial blockers.
- Specialised bronchial stents.

The AirSim Bronchi can also be used in a similar manner to the AirSim Multi and can cover an extensive range of training requirements.

Trucorp recommend the following equipment sizes for optimal performance:

- 7.0-7.5 mm ID for nasal intubation
- 8.0-9.0 mm ID for oral intubation
- Size 3 and 4 for LMA laryngeal masks
(similar respective sizes for other supraglottic devices)
- Size 35F - 37F for endobronchial tubes.

The AirSim Advance

The AirSim Advance can be used in the training of all the procedures facilitated by the AirSim multi, which includes;

- Naso-tracheal intubation
- Awake fibreoptic examination
- Bag & mask ventilation techniques.

TruCorp recommend the following equipment sizes for optimal performance:

- 7.0-7.5 mm ID for nasal intubation
- 8.0-9.0 mm ID for oral intubation
- Size 3 and 4 for LMA laryngeal masks
(similar respective sizes for other supraglottic devices)

The AirSim Junior

The AirSim Junior can be used in the training of all the procedures facilitated by infant airway management, which includes;

- Naso–tracheal intubation
- Positive pressure ventilation.
- Bag & mask ventilation techniques.
- Endotracheal intubations.

TruCorp recommend the following equipment sizes for optimal performance:

- Size 3.5-4 tracheal tubes
- Size 3 and 4 for LMA laryngeal masks
(similar respective sizes for other supraglottic devices)
- Size 1 for video laryngoscopes

Needle Access

The AirSim product range can be readily used for training in Needle cricothyroidotomy.

For needle cricothyroidotomy we supply the airway with a pinhole that has been precut in the correct anatomical area. The material which the airway is constructed from has unique properties in that when dilated from pinhole size it accommodates the size of the dilation tool and thus gives an airtight seal around the instrument whether this is a needle or a dilator.

The pin hole is positioned in the correct anatomical area and is covered with a specialized and replaceable tape. The trainee has to identify the pinhole by palpation and then insert the needle and/or the dilators. When the needle or dilators are removed the material reverts to its original size. We also supply spare sealing tape for further use.

Please note that the use of a scalpel or any sharp blade prior to performing cricothyroidotomy is NOT required. Doing so may damage the airway material in the area of the preformed pinhole and will invalidate the warranty

Care and maintenance

Cleaning and Storage

Store in clean, dry conditions away from heat and direct sunlight; avoid contact with metals, solvents, oils or greases and strong detergents.

Thoroughly wash the AirSim airway in warm water, using a dilute (8-10% w/w) sodium bicarbonate solution until all visible foreign matter is removed.

Mild detergents or enzymatic cleaning agents may be used on the airway in accordance with the manufacturer's instructions and at the proper dilution. The detergent must not contain skin or mucous membrane irritants.

Clean the device using a small soft bristle brush (approximately ½ inch or 12.5mm in diameter). Gently insert the brush through the airway, taking care not to damage the material. Extra care must be taken when cleaning around the vocal cords.

Thoroughly rinse the airway in warm flowing tap water to remove cleaning residues. Carefully inspect the device to ensure that all visible foreign matter has been removed.

The head and neck skin of the AirSim Advance is made from durable and very elastic polyurethane material. It can be cleaned using a lightly soaped, damp cloth. Please do not use and detergents or cleaning agents on the skin material.

Please **DO NOT USE** any of the following when cleaning the AirSim product range

- Germicides, disinfectants, or chemical agents such as glutaraldehyde (e.g. Cidex®),
- Ethylene oxide, phenol-based cleaners or iodine-containing cleaners

Such substances are absorbed by the AirSim materials, resulting in exposure of the user to unnecessary risk and possible deterioration of the device.

Do not use a device that has been exposed to any of these substances.

NB. IT IS IMPORTANT THAT GENEROUS AMOUNTS OF A WATER SOLUBLE LUBRICANT ARE USED DURING AIRWAY AND DEVICE INTERVENTIONS.

Warranty

TruCorp warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of 1 year from the date of purchase. The TruCorp warranty adds an additional one (1) grace period to the normal product warranty to cover handling and shipping time.

This ensures that our customers receive maximum coverage on each product. If the unit should malfunction it must be returned to the factory for evaluation. Upon examination by TruCorp, if the unit is found to be defective it will be repaired or replaced at no charge. However this warranty is VOID, if the unit shows evidence of having been tampered with or shows evidence of having been damaged by excessive heat, the use of sharp instruments, misapplication, misuse or other operating conditions outside of TruCorp's control. Components which wear or are damaged by misuse are not warranted.

Before returning any devices please contact the TruCorp Service Department. To avoid delays please ensure the following information is available

1. Returnee's name, address and phone number.
2. Model and serial numbers
3. Repair instructions

Please direct all warranty and repair requests/inquires to

TruCorp Ltd

Customer Service Department
The Mount Business Park
2 Woodstock Link
Belfast, BT6 8DD
Northern Ireland

Tel: +44 (0)28 9073 7281

Fax: +44 (0)28 9073 7282

Email: info@trucorp.co.uk

Every precaution for accuracy has been taken in the preparation of this manual, however, TruCorp neither assumes responsibility for any omissions or errors that may appear nor assumes liability for any damages that result from the use of the product in accordance with the information contained in the manual.