

5. Applying Flex Tube

- (1) Connect flex tube to swivel connector and the other end of flexible tube to breathing circuit (Fig.9).



Fig.9. The flex tube is connected between a closed suction catheter set and a breathing circuit.

6. Applying Wedge

- (1) Slide the wedge between the Closed Suction Catheter Set and endotracheal tube.
- (2) Remove the Closed Suction Catheter Set.
- (3) Reconnect the breathing system or replace a new Closed Suction Catheter Set.

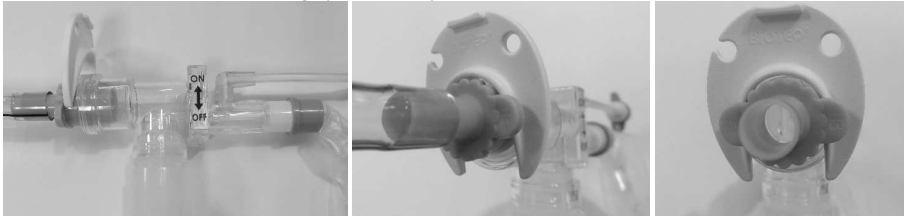

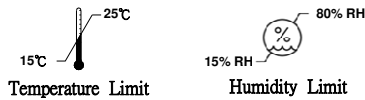


Fig.10. Application of wedge














 The closed suction catheter set is intended for single use. Discard them after use using aseptic techniques for potentially contaminated equipment. The sterility and performance of these devices are guaranteed by the manufacture only if they are intact and prepared as recommended for single use only. The product labelled "for single use only", "disposable" or its equivalent, shall not be reused and should be discarded after their initial use. The reprocessing and reuse of single-use products pose the risk of bacterial growth, contamination, patient injuries and could lead to death. Faulty clean, re-sterilization and tests may allow the transmission of infectious disease between patients; may alter the device's mechanical properties and thus risk product failure. It is the end user's responsibility to read and understand the important warnings and to ensure the single use of medical devices. Do not reuse. The closed suction catheter set is intended to be single patient use only and **MUST** be replaced for each patient.

Storage




CE 2460

Notes

 Catalogue no.	 Batch code	 Use-by date
 using Ethylene Oxide	 Do not re-sterilise	 Do not re-use
 Caution consult accompanying documents	 Consult instruction for use	
 Do not use if package is damaged	 Keep away from sunlight	 Keep dry
 Medical device	 Unique device identifier	

Manufactured by **BIOTEQUE CORPORATION**
5F-6, No. 23, Sec. 1, Chang-An E. Road, Taipei 104, Taiwan
TEL: +886-2-2571-0269 Email:sales@bioteq.com.tw
MADE IN TAIWAN

 MedNet EC-REP GmbH
Borkstrasse 10, 48163 Muenster, Germany

CLOSED SUCTION CATHETER SET

INSTRUCTION FOR USE

Read All Instructions before Using

In order to provide for safety to prevent dangers for patients, this manual instructs the Professional to set up and operate the Closed Suction Catheter Set. If you do not understand this manual, **DO NOT USE** Closed Suction Catheter and contact your Provider.

1. Intended use

BIOTEQ Closed Suction Catheter Sets are exclusively designed to safety remove secretion from the patient's airway while maintaining ventilation and oxygen therapy throughout the suctioning procedure.

Contraindications

- Acute cardiac arrhythmia, which could be exacerbated by hypoxia or vagal stimulation.
- Acute hypotension that could be exacerbated by vagal stimulation.
- Severe hypoxia, which may be worsened by suctioning.
- Acute increase in intracranial pressure, which may be increased further due to cough.
- Pulmonary edema requiring high PEEP, high fractional inspired oxygen concentration and continuous mechanical ventilation.

Complications

- Hypoxia
- Trauma to tracheal tissues
- Haemorrhage (oral/nasal/pulmonary)
- Bradycardia/tachycardia
- Increased cerebral blood flow and intracranial pressure
- Infection
- Airway inflammation
- Discomfort
- Atelectasis

Receiving and Inspection

Remove the Closed Suction Catheter from the packaging and inspect for damage. If there is any damage and compromised packaging, **DO NOT USE** and contact your Provider.

Notes

- (1) E.O. Sterilization.
- (2) Shelf life for 3years.

 **Danger**

- (1) Do not leave the catheter within the airway. Always pull back until the black stripe is visible within the sleeve. Any catheter left extended into the airway will cause increased airway resistance.
- (2) Do not use 54cm (21.3in) catheters on tracheostomy patients. Mucosal damage may result.

 **Warning**

- (1) Only trained or qualified medical personnel under the direct supervision of a licensed physician should operate the Closed Suction Catheter Set.
- (2) Use this Closed Suction Catheter only for its Intended Use as described in this manual.
- (3) Confirm prescribed dose before administering to patient. Monitor on a frequent basis.

 **Caution**

- (1) Do not re-sterile.
- (2) Single patient use only.
- (3) Do not use this Closed Suction Catheter more than 72 hours for code ended with D1, D2, and D7; not more than 24 hours for code without D1, D2, and D7.
- (4) Select the correct size of Closed Suction Catheter. Most experts suggest that the catheter selected should occupy no more than one half of the internal diameter of the artificial airway.

- (5) Operate appropriate regulated vacuum levels.
- (6) Operate appropriate suction technique. Always operate caution and well clinical judgment whatever the ventilator mode is in use.

2. Setup

- (1) Select correct size of Closed Suction Catheter Set.
- (2) Attach connection tube to the suction control valve (Fig1.(a)).

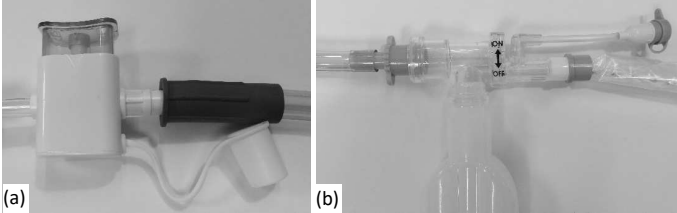


Fig.1. (a)Connected with connection tube (b)Connected with endotracheal tube and breathing circuit

- (3) Depress and hold the suction control valve and simultaneously adjust vacuum regulator to the desired vacuum. Then release the suction control valve to check proper function of suction control valve.
- (4) Attach Closed Suction Catheter Set between ventilation circuit and patient’s airway (Fig.1(b)).

** Additional procedures for Push Block style (Model number ended with D2)

- 1) Make sure the switch locates at ON before suctioning (Fig.2(a))

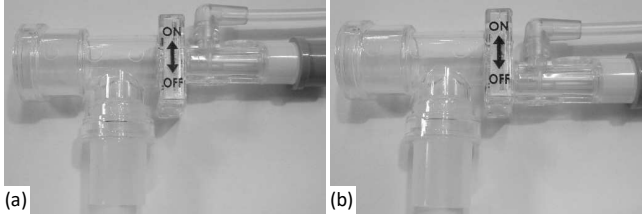


Fig.2. (a) “ON” for suctioning (b)“OFF” for irrigation.

** Additional procedures for Paediatric Y-connector

- 1) Match the endotracheal tube size Y-connector and connect closed suction catheter set to Y-connector.
- 2) Remove the connector of endotracheal tube and attach Y-connector into endotracheal tube (Fig.3).



Fig.3.Completed connection for Y-connector style.

- (5) Attach normal saline to irrigation port (Fig.4).

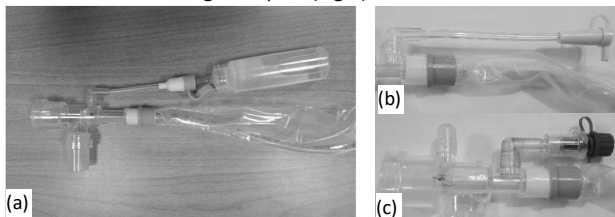


Fig.4. (a)The irrigation solution is connected. (b) and (c) are connected the same way as (a).

3. Suggested Suction Procedure

- (1) Hold the Double Swivel Elbow connector and insert suction tubing into Endotracheal Tube or Tracheostomy Tube a little at a time.
- (2) After inserting catheter to desired depth, depress the suction control valve intermittently to apply suction.
- (3) Withdraw the suction tubing slowly while applying suction intermittent suction
- (4) Inject some distilled water through irrigation port for dilution, if the secretion is thick. Then apply suction.
- (5) Pull catheter out straight and DO NOT kink the suction tubing.
- (6) Upon completion of suctioning, gently withdraw suction tubing until BLACK MARKING on suction tubing is visible within sleeve (Fig.5).



Fig.5.The right position of black mark as the suction tubing is withdrawn.



Fig.6. Attach a day sticker.

- (7) Flush saline tubing as injecting flush saline through irrigation port. Make sure switch locates at “OFF” (Fig.2(b)) for PB style (model code is ended with D2)
- (8) Remove normal saline and closed irrigation port.
- (9) Lock the suction control valve.

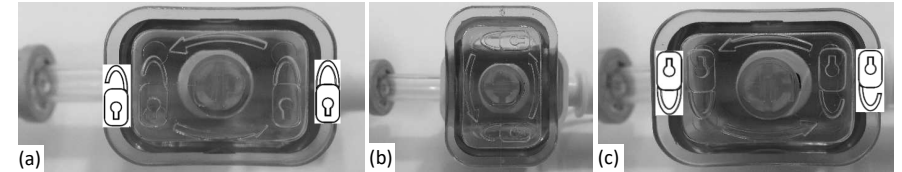


Fig.7. (a)Open for suctioning. (b) and (c) are locked for suctioning.

- (10) Attach a day sticker which indicates the day when the next closed suction catheter set change is due (Fig.6).

4. Applying Metered Dose Inhaler

- (1) Remove the cap of MDI port.
- (2) Connect the tip (Fig.8)
- (3) During the inspiratory lastly, press the canister, remove the canister, and recap the port.



Fig.8. Application of MDI.