

	RESPIRATORY SERVICES	DATE CREATED: April 2003 DATE REVIEWED/REVISED: March 2017
PROCEDURE	TITLE: <u>CRITICAL CARE</u> – Pilot Line Repair (Respiratory Therapy) NUMBER: B-00-12-12024	RELATED DOCUMENTS: B-00-12-12019

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SITE APPLICABILITY:

ST. PAUL'S HOSPITAL
MOUNT SAINT JOSEPH HOSPITAL

GENERAL INFORMATION:

If the pilot line of an artificial airway is accidentally cut or damaged, or when the inflation port is cracked, the cuff may lose air and deflate, potentially subjecting the patient to:

- Loss of pressure and/or volume for ventilated patients
- Increased risk of aspiration

The Pilot Tube Repair Kit Assembly may be used in these circumstances to **temporarily** repair the pilot line until the artificial airway can be safely exchanged.

EXHIBITS:



INDICATIONS:

Temporary repair of a damaged or leaking artificial airway pilot line. **Pilot Tube Repair Kit** can only be used to repair a damaged **pilot balloon** or **pilot tube**; it **CANNOT** be used to repair a leaking cuff. **The source of the leak should be determined before attempting a repair!**

CAUTIONS:

Cannot be used in any type of MRI.

SPECIAL CONSIDERATIONS:

Exchange of the artificial airway must occur within 24 hours.

REQUIRED SUPPLIES & EQUIPMENT:

- Scissors
- Rubber-tipped Kelly clamp
- Pilot Tube Repair Kit Assembly
- Cuff pressure measuring device

PROCEDURE:

1. Clamp the pilot line proximal to the patient to maintain inflation of the cuff.
2. Secure pilot tube and use scissors to cut below damaged area of pilot tube.
3. Insert Pilot Tube Repair Device's tapered needle in to cut pilot tube. Insert as far as possible – proper function depends on a tight fit. Remove the clamp.
4. With plunger withdrawn, insert 10 mL Syringe into inflation port on Pilot Tube Repair Device. Gradually inflate cuff until air escaping around cuff is no longer audible. Remove Syringe.
5. Verify proper cuff pressure by measuring the cuff pressure as per [B-00-12-12019](#). Use Syringe to add or remove air to obtain a safe cuff pressure.

DOCUMENTATION, COMMUNICATION, EDUCATION:

1. Document and communicate the repair to the Care Team

REFERENCES:

1. Pilot Tube Repair Kit – Usage Instructions. Rev J. Instrumentation Industries.

DEVELOPED BY:

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REVIEWED BY:

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