Assessment & Placement GUIDE

Passy Muir®

Millions of Voices, ONE VALVE™

Passy Muir®

Quick Tips for Application of the Passy Muir® Valve

All Passy Muir® Valves

Have the patented closed position “no-leak” design, which means the valve is always closed until the patient inhales. This allows the patient to create positive airway pressure and restores the patient to a normal closed respiratory system. The valve opens easily with less than normal inspiratory pressure and closes automatically at the end of the inspiratory cycle without air leak, and without patient expiratory effort.

Passy Muir Valves can be used interchangeably on or off the ventilator for pediatrics and adults. The closed position design also allows ventilator dependent patients to speak uninterrupted without having to wait for the ventilator to cycle, and without being limited to a few words at a time due to loss of air through the tracheostomy tube.

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Clinical Complications
of a Tracheostomy Tube with an Inflated Cuff

Complications of an Inflated Cuff

- An inflated cuff can cause necrosis and trauma to the tracheal wall
- Laryngeal anchoring may interfere with epiglottis closure and airway protection during swallow
- Reduced airflow to upper airway:
  - Reduces sensation
  - Affects vocal fold closure
  - Reduces smell and taste
  - Results in loss of voice
- Reduced subglottic pressure affects:
  - Swallow
  - Cough
  - Physiologic PEEP
  - Valsalva maneuver

Inhalation

Exhalation

Clinical Benefits
of the Passy Muir® Valve

Clinical Benefits

- Restores communication
- Improves swallowing and may reduce aspiration
- Restores natural positive airway pressure
- Facilitates secretion management
- Improves oxygenation
- Expedites ventilator weaning and decannulation
- Facilitates infection control
- Improves smell, taste and sensation

Inhalation

Exhalation

Quick Tips for Assessment & Placement

Proper airway assessment, patient education, appropriate therapy and a multidisciplinary team approach are keys to successful Passy Muir® Valve application.

Patient Selection

- Awake and alert
- Medically stable
- Able to tolerate cuff deflation
- Manageable secretions
- Patent upper airway

Airway Assessment

- Achieve full cuff deflation
- Occlude tube with gloved finger on exhalation
- Ask patient to voice or cough

Passy Muir® Valve Placement

- Fits on universal 15mm tracheostomy tube hub
- Apply with quarter turn clockwise
- Monitor vital signs and work of breathing
- Increase wearing time as tolerated
- May use with humidity (non-medicated heated aerosol)
- Remove valve for medicated aerosol treatment

Note: please affix Pilot Balloon Warning Label

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Quick Tips for Assessment & Placement

Factors which may affect upper airway patency

- Trach tube size or type
- Upper airway obstruction
- Incomplete cuff deflation
- Edema
- Foam-filled cuff (absolute contraindication)

Assessment and treatment of common issues

Inadequate exhalation or breath stacking

- Check for complete cuff deflation
- Suction trach tube and/or oropharynx
- Reposition patient and/or trach tube
- Retrain for normal breathing patterns
- Assess need for downsizing trach tube
- Consider direct visual assessment for airway obstruction

Coughing

- Allow patient time to move secretions
- Suction patient if needed
- For persistent or dry cough remove valve and reassess

Anxiety and Depression

- Use oral exhalation exercises
- Solicit family involvement
- Educate and use relaxation techniques
- Consult recreational and psychological therapies

Weak voice

- Glottic closure exercises
- Diaphragmatic breathing exercises

Pediatric Airway Differences

Anatomical Differences

Compared to the adult airway, an infant's airway passages are smaller, and even tiny amounts of tissue edema or obstruction can create a critical loss of airway. Airway assessment of the pediatric patient is critical, considering:

- The soft palate is larger
- The larynx is 2-3 cervical vertebrae higher
- The child's airway has a larger proportion of soft tissue and has less cartilaginous support
- An infant's airway is more prone to spasm and collapse

Clinical Benefits
of Passy Muir® Valves
for Infants and Children

Pediatric Benefits

- Can be used as early as one to two weeks of age
- Supports normal speech and language development
- Facilitates child and caregiver interactions through vocalization
- Facilitates life activities and socialization
- Eliminates finger occlusion and chin drop for voicing
- Reduces secretions and suctioning
- Improves swallowing and may reduce aspiration

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Pediatric Therapy Techniques

Techniques

- PLAY! PLAY! PLAY!
- Build trust and rapport with child
- Give play names to valves and other respiratory equipment
- Use tracheostomized dolls or stuffed animals with valves
- Provide verbal praise and rewards

Activities to encourage oral exhalation

- Bubbles
- Whistles
- Horns
- Kazoos
- Pinwheels
- Straws
- Cotton balls

Activities to encourage voicing and speech

- Making vehicle or animal noises
- Singing
- Humming
- Imitation

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Toby Tracheapuppet™

A therapist's best friend and a child's best companion

Featuring a pediatric tracheostomy tube and Passy Muir® Valve for demonstration and education, the Toby Tracheapuppet™ plush therapy puppet is ideal for interaction with young patients, facilitating vocalization and therapeutic play.

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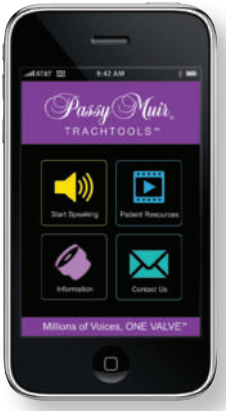
TRACHTOOLS™
Speech & Resources App

TRACHTOOLS™

Speech & Resources App



- User-friendly app for iPhone, iPad and Android
- Pre-recorded responses and phrases enable communication at a touch of a button
- User-defined male or female voice
- Easy to use features and navigation
- Links to useful resources for both patient and clinician
- Patient videos
- Child voice option

Available for **FREE** download
at the App Store, Google Play or
www.passy-muir.com/app

www.passy-muir.com

Accessories & Connections GUIDE

Passy Muir®

Millions of Voices, ONE VALVE™

David A. Muir

Passy Muir® Valve Inventor

Invented by a patient, for patients

Diagnosed with muscular dystrophy at age five, David gradually weakened and became a quadriplegic. At age twenty-three while studying biochemical engineering, he suffered respiratory arrest and became ventilator dependent. It was during those three agonizing months while on a ventilator and being unable to speak, that David came up with the idea for his speaking valve. In the years since, David's valve has restored the voices of millions of people and helped to improve their quality of life.

David A. Muir
Inventor of the
Passy Muir® Valve

Passy Muir®

Millions of Voices, ONE VALVE™

Accessories & Connections Guide
for the Passy Muir® Valves

All Passy Muir® Valves

- Have the patented closed position “no leak” design
- Are designed to fit the universal 15mm hub of tracheostomy tubes including neonatal and pediatric tubes
- Can be used interchangeably by all tracheostomy patients, pediatric and adult, non-ventilator and ventilator, with the exception of the PMV® 2020

Passy Muir®

Millions of Voices, ONE VALVE™

Tracheostomy & Ventilator Swallowing & Speaking Valves

Passy Muir® Valves

PMV® 007 (Aqua Color™)
Designed for ventilator application with disposable tubing

PMV® 2001
(Purple Color™)
Low profile design with lower resistance, recommended for inpatient use

PMV® 005 (white)

PMV® 2000 (clear)
Low profile design with lower resistance, recommended for outpatient use

www.passy-muir.com

Passy Muir® Valve Accessories

Passy Muir® Valve Oxygen Adapter PMA® 2000

The PMA® 2000 Oxygen Adapter snaps onto the PMV® 2000 and PMV® 2001 and allows for easy delivery of low flow supplemental oxygen and humidity.

PMV® 2001 with PMA® 2000

PMV® 2001
(Purple Color™)

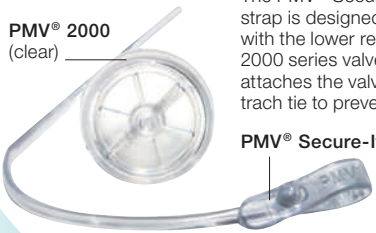
PMA® 2000

PMV® Secure-It®

PMV® 2000
(clear)

The PMV® Secure-It® strap is designed for use with the lower resistance 2000 series valves and attaches the valve to the trach tie to prevent loss.

PMV® Secure-It®



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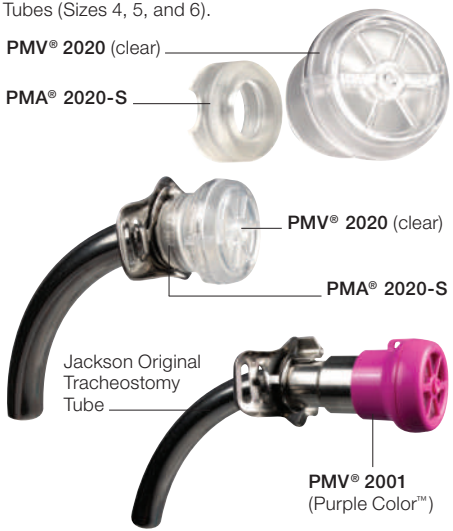
Passy Muir® Valves for Metal Tubes

PMV® 2020 (clear)

The PMV® 2020 (clear) with the PMA® 2020-S adapter are for use with metal Jackson Improved Tracheostomy Tubes (Sizes 4, 5, and 6).



The Jackson Original Tracheostomy Tube with Permanent 15 mm Adapter can accommodate all Passy Muir® Valves except the PMV® 2020.

www.passy-muir.com

Ventilator Adapters

Passy Muir Adapter
Part # PMV-AD1522
15mm x 22mm Adapter
www.passy-muir.com
800-634-5397

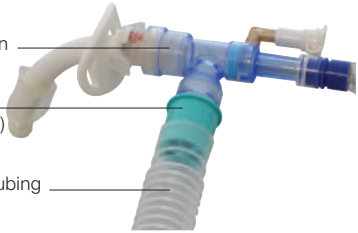
Passy Muir Adapter
Part # PMV-AD22
22mm Silicone Adapter
www.passy-muir.com
800-634-5397

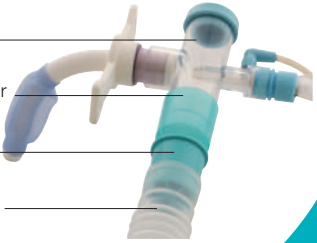
AirLife® Omni-Flex™
Adapter

Dual-Axis
Swivel Adapter

www.passy-muir.com

Ventilator Connections





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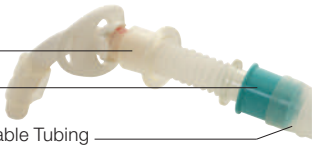
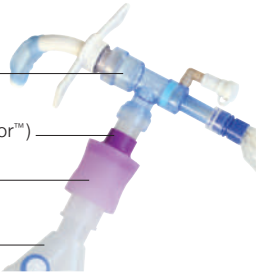
Ventilator Connections



Omni-Flex™

PMV® 007
(Aqua Color™)

Standard Disposable Tubing



In-line Suction
Catheter

PMV® 2001 (Purple Color™)

PMV-AD22
22mm Silicone Adapter

Circuit Wye

T-piece In-line
Suction Catheter

PMV-AD1522
Step Down Adapter

PMV® 2001 (Purple Color™)

PMV-AD22
22mm Silicone Adapter

Circuit Wye

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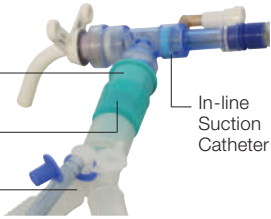
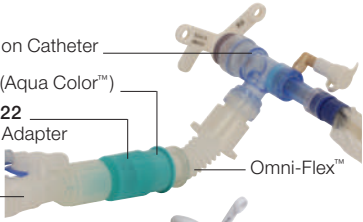
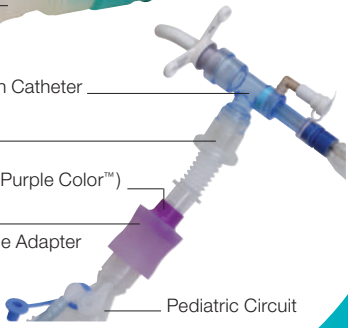
Pediatric Ventilator Connections







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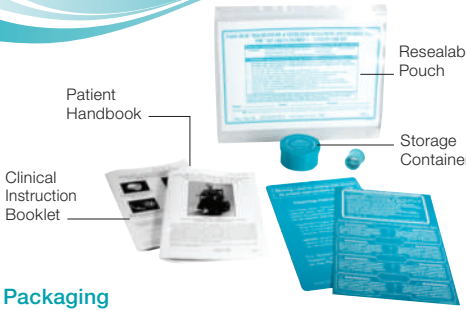
Care & Cleaning
of the Passy Muir® Valves



Packaging

Each Passy Muir® Valve comes packaged in a color-coded PMV® Patient Care Kit designed to facilitate proper use and maintenance of the valve and to ensure patients and clinicians have complete product information and instructions.

Daily Cleaning Procedures

1. Swish valve in pure soap and warm water.
2. Rinse valve thoroughly in warm running water.
3. Allow valve to air dry thoroughly before placing it in storage container.
4. DO NOT use hot water, peroxide, bleach, vinegar, alcohol, brushes, or cotton swabs to clean valve.

Education & Clinical Support

Webinars

- Live Special Events Webinars
- Self-Study Webinars
- Free Continuing Education
- Free Clinical Resources

Live Presentations

Educational Presentations

- Facility Locations
- State and National Conferences
- Society Meetings
- Seminars
- Colleges and Universities

Email Us

Email your questions to:

info@passymuir.com

Call Us

1 800 634 5397

Speech and Respiratory Clinical Specialists are available to answer your questions