One-Way Valve (OWV) IN LINE

Dräger V800/ V600

Do NOT use if:

- New tracheostomy (<48 hours)
- Significant air leak around tracheostomy stoma – concerns re: surgical emphysema
- Airway obstruction
- Significant Tracheostomy bleeding
- Recent head and neck surgery (check with surgeon or SLT)

Note: There may be other contraindications not listed above.

S

Selection of patient

- No recent deterioration in respiratory status?
- Is the FiO_2 and ventilation within target parameters (see weaning plan)?
- Does the patient tolerate cuff deflation?
- Scores A or V on AVPU? If less alert seek MDT/ specialist advice
- Stable cardiovascular status?

P

Prepare your equipment

- 10ml syringe x 2
- Yankeur/Soft suction catheter
- OWV and OWV warning adhesive label
- OWV ventilator connector

E

Eradicate air Ensure cuff deflation

- Aspirate subglottic port *(if patient has one)*
- Slowly DEFLATE THE CUFF, considering need for simultaneous closed suctioning
- Can you feel or hear air flow through the upper airway or can they speak? *(If yes continue)*
- Can you confirm that there is no audible stridor? *(If yes continue)*

A

Assess

- Observe a minimum of 40% leak in VTe versus Vti / minimum of 40% leak in ventilator observations, if present place OWV in-line with connector
- Change **ventilation therapy from Tube to NIV:**

  Start/Standby → NIV/Mask Ventilation Mode → Confirm with Rotary knob→ Start/Standby

  Please note the actual mode of ventilation does not need to be altered just the ventilation therapy
- Turn off Minute Ventilation and Apnoea alarm
- Refer to weaning plan for guidance of ventilation settings and duration

K

Keep an eye

Monitor the patient constantly whilst they have the OWV in line

Reasons to consider removal of one-way valve:

- Respiratory instability: Significant desaturation or tachypnoea, outside of target parameters (as per weaning plan) and/or significant, unresolving increase in work of breathing
- Cardiovascular instability
- Airway concerns: Stridor or inability to manage oral secretions, despite repeated intervention

Once OWV removed, fully inflate cuff, return to Tube Therapy setting & turn Minute Ventilation & Apnoea Alarms back on

One-Way Valve (OWV) IN LINE

Dräger Evita XL

Do NOT use if:

- New tracheostomy (<48 hours)
- Significant air leak around tracheostomy stoma – concerns re: surgical emphysema
- Airway obstruction
- Significant Tracheostomy bleeding
- Recent head and neck surgery (check with surgeon or SLT)

Note: There may be other contraindications not listed above.

S

Selection of patient

- No recent deterioration in respiratory status?
- Is the FiO_2 and ventilation within target parameters (see weaning plan)?
- Does the patient tolerate cuff deflation?
- Scores A or V on AVPU? If less alert seek MDT/ specialist advice
- Stable cardiovascular status?

P

Prepare your equipment

- 10ml syringe x 2
- Yankeur/Soft suction catheter
- OWV and OWV warning adhesive label
- OWV ventilator connector

E

Eradicate air Ensure cuff deflation

- Aspirate subglottic port *(if patient has one)*
- Slowly DEFLATE THE CUFF, considering the need for simultaneous closed suctioning
- Can you feel or hear air flow through the upper airway or can they speak? *(If yes continue)*
- Can you confirm that there is no audible stridor? *(If yes continue)*

A

Assess

- Observe a minimum of 40% leak in VTe versus Vti / minimum of 40% leak in ventilator observations, if present insert OWV in-line with connector
- Change **application mode to NIV:**

  Start/Standby → Standby → Tube/ Mask tab→ Mask (NIV) button → Confirm with rotary knob → Start/Standby → Start
- Turn off Apnoea alarm

  Reduce 'Low MV' alarm parameter: suggested to 0.1 l/min as minimum setting for this ventilator
- Refer to weaning plan for guidance of ventilation settings and duration

K

Keep an eye

- **Monitor the patient constantly whilst they have the OWV in line**
- Reasons to consider removal of one-way valve:
  - Respiratory instability: Significant desaturation or tachypnoea, outside of target parameters (as per weaning plan) and/or significant, unresolving increase in work of breathing
  - Cardiovascular instability
  - Airway concerns: Stridor or inability to manage oral secretions, despite repeated intervention

Once OWV removed, fully inflate cuff, return to Tube mode & turn Apnoea Alarm back on & 'Low MV' parameter back to baseline

One-Way Valve (OWV) IN LINE

Servo-I /U

Do NOT use if:	• New tracheostomy (<48 hours) • Significant air leak around tracheostomy stoma – concerns re: surgical emphysema • Airway obstruction	• Significant Tracheostomy bleeding • Recent head and neck surgery (check with surgeon or SLT)
	Note: There may be other contraindications not listed above.	

S **Selection of patient**	No recent deterioration in respiratory status?
	Is the FiO_2 and ventilation within target parameters (see weaning plan)?
	Does the patient tolerate cuff deflation?
	Scores A or V on AVPU? If less alert seek MDT/ specialist advice
	Stable cardiovascular status?
P **Prepare your equipment**	10ml syringe x 2
	Yankeur/Soft suction catheter
	OWV and OWV warning adhesive label
	OWV ventilator connector
E **Eradicate air Ensure cuff deflation**	Aspirate subglottic port *(if patient has one)*
	Slowly DEFLATE THE CUFF, considering the need for simultaneous closed suctioning
	Can you feel or hear air flow through the upper airway or can they speak? *(If yes continue)*
	Can you confirm that there is no audible stridor? *(If yes continue)*
A **Assess**	Observe a minimum of 40% leak in VTe versus Vti / minimum of 40% leak in ventilator observations, if present insert OWV in-line with connector
	Change **ventilation mode to NIV-PS or NIV-PC as clinically appropriate:** ***Standby → Accept → NIV Ventilation Mode → Accept →Start/ Standby to restart ventilation***
	Reduce 'Low MV' alarm parameter: suggested to 0.5 l/min
	Refer to weaning plan for guidance of ventilation settings and duration
K **Keep an eye**	**Monitor the patient constantly whilst they have the OWV in line**
	Reasons to consider removal of one-way valve: • Respiratory instability: Significant desaturation or tachypnoea, outside of target parameters (as per weaning plan) and/or significant, unresolving increase in work of breathing • Cardiovascular instability • Airway concerns: Stridor or inability to manage oral secretions, despite repeated intervention *Once OWV removed, fully inflate cuff, return to invasive mode setting & return 'Low MV' alarm parameter to baseline*

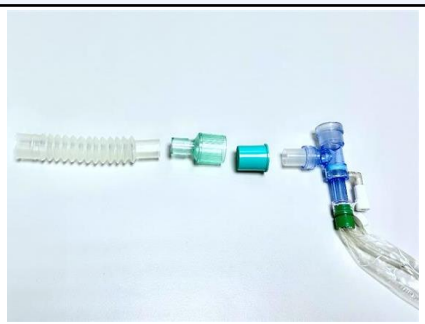
One-Way Valve (OWV) IN LINE

Hamilton C3/ C6/ G5

Do NOT use if:	• New tracheostomy (<48 hours) • Significant air leak around tracheostomy stoma – concerns re: surgical emphysema • Airway obstruction	• Significant Tracheostomy bleeding • Recent head and neck surgery (check with surgeon or SLT)
	Note: There may be other contraindications not listed above.	
S **Selection of patient**	No recent deterioration in respiratory status?	
	Is the FiO_2 and ventilation within target parameters (see weaning plan)?	
	Does the patient tolerate cuff deflation?	
	Scores A or V on AVPU? If less alert seek MDT/ specialist advice	
	Stable cardiovascular status?	
P **Prepare your equipment**	10ml syringe x 2	
	Yankeur/Soft suction catheter	
	OWV and OWV warning adhesive label	
	OWV ventilator connector	
E **Eradicate air Ensure cuff deflation**	Aspirate subglottic port *(if patient has one)*	
	Slowly DEFLATE THE CUFF, considering the need for simultaneous closed suctioning	
	Can you feel or hear air flow through the upper airway, or can they speak? *(If yes continue)*	
	Can you confirm that there is no audible stridor? *(If yes continue)*	
A **Assess**	Observe a minimum of 40% leak in VTe versus Vti / minimum of 40% leak in ventilator observations, if present insert OWV in-line with connector	
	Change **ventilation mode to NIV-ST/ NIV Mode as appropriate:** ***Modes → NIV-ST/ NIV Mode → Ensure PEEP/ PS/ FiO_2 same as baseline→ Confirm***	
	Reduce 'Low MV' alarm parameter: suggested to 0.6 l/min as lowest appropriate setting on these ventilators	
	Refer to weaning plan for guidance of ventilation settings and duration	
K **Keep an eye**	**Monitor the patient constantly whilst they have the OWV in line**	
	Reasons to consider removal of one-way valve: • Respiratory instability: Significant desaturation or tachypnoea, outside of target parameters (as per weaning plan) and/or significant, unresolving increase in work of breathing • Cardiovascular instability • Airway concerns: Stridor or inability to manage oral secretions, despite repeated intervention *Once OWV removed, fully inflate cuff, return to invasive mode setting & return 'Low MV' alarm parameter to baseline*	

One-Way Valve(OWV) IN LINE

Hamilton C1/ T1/MR1 – with 'Speak Valve' function,

Do NOT use if:	• New tracheostomy (<48 hours) • Significant air leak around tracheostomy stoma – concerns re: surgical emphysema • Airway obstruction	• Significant Tracheostomy bleeding • Recent head and neck surgery (check with surgeon or SLT)
	Note: There may be other contraindications not listed above.	
S **Selection of patient**	Is the FiO_2 and ventilation within target parameters (see weaning plan)?	
	Does the patient tolerate cuff deflation?	
	Scores A or V on AVPU? If less alert seek MDT/ specialist advice	
	Stable cardiovascular status?	
P **Prepare your equipment**	10ml syringe x 2	
	Yankeur/Soft suction catheter	
	OWV and OWV warning adhesive label	
	OWV ventilator connector	
	Observe and document average TI *(Found in monitoring page 2)*	
E **Eradicate air Ensure cuff deflation**	Aspirate subglottic port *(if patient has one)*	
	Slowly DEFLATE THE CUFF, considering the need for simultaneous closed suctioning	
	Can you feel or hear air flow through the upper airway, or cant they speak? *(If yes continue)*	
	Can you confirm that there is no audible stridor? *(If yes continue)*	
A **Assess**	Observe a minimum of 40% leak (Found in monitoring tab page 2): if present insert OWV, in-line with the connector	
	Select and apply **SpeakValve ON** (Found in controls and SpeakValve)	
	Controls → Page More → set TI Max 0.2-0.4 seconds longer than average observed TI	
	Refer to weaning plan for guidance of ventilation settings and duration	
	Set High VTI just above observed VTI (note the VTI will be significantly higher than baseline) Set Low pressure alarm to just below observed pressure	
K **Keep an eye**	**Monitor the patient constantly whilst they have the OWV in line**	
	Reasons to consider removal of one-way valve: • Respiratory instability: Significant desaturation or tachypnoea, outside of target parameters (as per weaning plan) and/or significant, unresolving increase in work of breathing • Cardiovascular instability • Airway concerns: Stridor or inability to manage oral secretions, despite repeated intervention Once OWV removed, fully inflate cuff, turn 'Speak Valve Off'	

One-Way Valve (OWV) IN LINE

Hamilton C1/ T1/ MR1 – without 'SpeakValve' Function

Do NOT use if:

- New tracheostomy (<48 hours)
- Significant air leak around tracheostomy stoma – concerns re: surgical emphysema
- Airway obstruction
- Significant Tracheostomy bleeding
- Recent head and neck surgery (check with surgeon or SLT)

Note: There may be other contraindications not listed above.

S

Selection of patient

- Is the FiO_2 and ventilation within target parameters (see weaning plan)?
- Does the patient tolerate cuff deflation?
- Scores A or V on AVPU? If less alert seek MDT/ specialist advice
- Stable cardiovascular status?

P

Prepare your equipment

- 10ml syringe x 2
- Yankeur/Soft suction catheter
- OWV and OWV warning adhesive label
- OWV ventilator connector

E

Eradicate air Ensure cuff deflation

- Aspirate subglottic port *(if patient has one)*
- Slowly DEFLATE THE CUFF, considering the need for simultaneous closed suctioning
- Can you feel or hear air flow through the upper airway, or can they speak? *(If yes continue)*
- Can you confirm that there is no audible stridor? *(If yes continue)*

A

Assess

- Observe a minimum of 40% leak (Found in monitoring tab page 2) if present insert OWV, in-line with the connector
- Change **ventilation mode to NIV or NIV-ST Mode as appropriate:**

  Modes → NIV or NIV-ST Mode → Ensure PEEP/ PS/ FiO_2 same as baseline→ Confirm
- Reduce 'Low MV' alarm parameter: suggested to 0.6 l/min as lowest possible setting on these ventilators
- Refer to weaning plan for guidance of ventilation settings and duration

K

Keep an eye

Monitor the patient constantly whilst they have the OWV in line

Reasons to consider removal of one-way valve:

- Respiratory instability: Significant desaturation or tachypnoea, outside of target parameters (as per weaning plan) and/or significant, unresolving increase in work of breathing
- Cardiovascular instability
- Airway concerns: Stridor or inability to manage oral secretions, despite repeated intervention

Once OWV removed, fully inflate cuff, return to invasive mode setting & return 'Low MV' alarm parameter to baseline

One-Way Valve (OWV) IN LINE NIPPY 3/4/4+

Do NOT use if:

- New tracheostomy (<48 hours)
- Significant air leak around tracheostomy stoma – concerns re: surgical emphysema
- Airway obstruction
- Significant Tracheostomy bleeding
- Recent head and neck surgery (check with surgeon or SLT)

Note: There may be other contraindications not listed above.

S

Selection of patient

- No recent deterioration in respiratory status?
- Is the FiO_2 and ventilation within target parameters (see weaning plan)?
- Does the patient tolerate cuff deflation?
- Scores A or V on AVPU? If less alert seek MDT/ specialist advice
- Stable cardiovascular status?

P

Prepare your equipment

- 10ml syringe x 2
- Yankeur/Soft suction catheter
- OWV and OWV warning adhesive label
- OWV ventilator connector

E

Eradicate air Ensure cuff deflation

- Aspirate subglottic port *(if patient has one)*
- Slowly DEFLATE THE CUFF, considering need for simultaneous closed suctioning
- Can you feel or hear air flow through the upper airway, or can they speak? *(If yes continue)*
- Can you confirm that there is no audible stridor? *(If yes continue)*

A

Assess

- Observe a minimum of 40% leak in VTe versus Vti / minimum of 40% leak in ventilator observations
- Place the OWV in line, with the connector attached to the purple end of the NIPPY circuit
- All alarms should be left as per set for the patient.

  N.B: Ensure that the **Disconnection Alarm** must be turned on
- Refer to weaning plan for guidance of ventilation settings and duration

K

Keep an eye

Monitor the patient constantly whilst they have the OWV in line

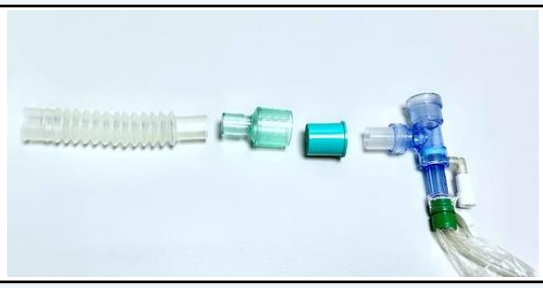
Reasons to consider removal of one-way valve:

- Respiratory instability: Significant desaturation or tachypnoea, outside of target parameters (as per weaning plan) and/or significant, unresolving increase in work of breathing
- Cardiovascular instability
- Airway concerns: Stridor or inability to manage oral secretions, despite repeated intervention

Once OWV removed, fully inflate cuff

One-Way Valve (OWV) IN LINE NKV-330 NIV

Do NOT use if:	• New tracheostomy (<48 hours) • Significant air leak around tracheostomy stoma – concerns re: surgical emphysema • Airway obstruction	• Significant Tracheostomy bleeding • Recent head and neck surgery (check with surgeon or SLT)
	Note: There may be other contraindications not listed above.	

S **Selection of patient**	No recent deterioration in respiratory status?	
	Is the FiO_2 and ventilation within target parameters (see weaning plan)?	
	Does the patient tolerate cuff deflation?	
	Scores A or V on AVPU? If less alert seek MDT/ specialist advice	
	Stable cardiovascular status?	
P **Prepare your equipment**	10ml syringe x 2	
	Yankeur/Soft suction catheter	
	OWV and OWV warning adhesive label	
	OWV ventilator connector	
E **Eradicate air Ensure cuff deflation**	Aspirate subglottic port *(if patient has one)*	
	Slowly DEFLATE THE CUFF, considering need for simultaneous closed suctioning	
	Can you feel or hear air flow through the upper airway, or can they speak? *(If yes continue)*	
	Can you confirm that there is no audible stridor? *(If yes continue)*	
A **Assess**	Place OWV in-line with the connector	
	Change **patient interface:** ***Standby → confirm → menu → circuit config → mask with exhalation port → resume ventilation***	
	Refer to weaning plan for guidance of ventilation settings and duration	
K **Keep an eye**	**Monitor the patient constantly whilst they have the OWV in line**	
	Reasons to consider removal of one-way valve: • Respiratory instability: Significant desaturation or tachypnoea, outside of target parameters (as per weaning plan) and/or significant, unresolving increase in work of breathing • Cardiovascular instability • Airway concerns: Stridor or inability to manage oral secretions, despite repeated intervention *Once OWV removed, fully inflate cuff and change patient interface back to ETT/Trache*	

High Flow Oxygen Therapy with One-Way Valve (OWV)

Do NOT use if:	• New tracheostomy (<48 hours) • Significant air leak around tracheostomy stoma – concerns re: surgical emphysema • Airway obstruction • Significant Tracheostomy bleeding • Recent head and neck surgery (check with surgeon or SLT) *Note: There may be other contraindications not listed above.*
S **Selection of patient**	No recent deterioration in respiratory status?
	Is the FiO_2 and ventilation within target parameters (see weaning plan)?
	Does the patient tolerate cuff deflation?
	Scores A or V on AVPU? If less alert seek MDT/ specialist advice
	Stable cardiovascular status?
P **Prepare your equipment**	10ml syringe x 2
	Yankeur/Soft suction catheter
	OWV and OWV warning adhesive label and OWV connector
	High Flow Oxygen circuit & tracheostomy interface
E **Eradicate air Ensure cuff deflation**	Aspirate subglottic port *(if patient has one)*
	DEFLATE THE CUFF, considering the need for simultaneous tracheal suctioning
	Can you feel or hear air flow through the upper airway, or can they speak? *(If yes continue)*
	Can you confirm that there is no audible stridor? *(If yes continue)*
A **Assess**	If currently ventilated, observe a minimum of 40% leak in VTe versus Vti / minimum of 40% leak in ventilator observations, if present then disconnect from ventilator
	Finger occlude tracheostomy. If tolerated apply OWV to end of trache
	Place on high flow oxygen therapy via tracheostomy interface & OWV connector, observe for changes in work of breathing, respiratory rate/ pattern & SpO_2
	Refer to weaning plan for guidance of duration of OWV use
K **Keep an eye**	**Monitor the patient whilst they have the OWV in situ.** Reasons to consider removal of one-way valve: • Respiratory instability: Significant desaturation or tachypnoea, outside of target parameters (as per weaning plan) and/or significant, unresolving increase in work of breathing • Cardiovascular instability • Airway concerns: Stridor or inability to manage oral secretions, despite repeated intervention Ensure to remove OWV **before** re-inflating the tracheostomy cuff for any reason. Either return to ventilation or high flow oxygen therapy as per plan

Self-Ventilating with One-Way Valve (OWV)

Do NOT use if:	• New tracheostomy (<48 hours) • Significant air leak around tracheostomy stoma – concerns re: surgical emphysema • Airway obstruction • Significant Tracheostomy bleeding • Recent head and neck surgery (check with surgeon or SLT) *Note: There may be other contraindications not listed above.*
S **Selection of patient**	No recent deterioration in respiratory status?
	Is the FiO_2 and ventilation within target parameters (see weaning plan)?
	Does the patient tolerate cuff deflation?
	Scores A or V on AVPU? If less alert seek MDT/ specialist advice
	Stable cardiovascular status?
P **Prepare your equipment**	10ml syringe x 2
	Yankeur/Soft suction catheter
	OWV and OWV warning adhesive label
	Trache mask
	Oxygen tubing (ideally heated & humidified)
E **Eradicate air Ensure cuff deflation**	Aspirate subglottic port *(if patient has one)*
	DEFLATE THE CUFF, considering the need for simultaneous tracheal suctioning
	Can you feel or hear air flow through the upper airway, or can they speak? *(If yes continue)*
	Can you confirm that there is no audible stridor? *(If yes continue)*
A **Assess**	If currently ventilated, observe a minimum of 40% leak in VTe versus Vti / minimum of 40% leak in ventilator observations. Disconnect from ventilator.
	Finger occlude tracheostomy. If tolerated apply OWV to end of trache
	Place on humidified/ heated humidified oxygen via trache mask
	Refer to weaning plan for guidance of duration
K **Keep an eye**	**Monitor the patient whilst they have the OWV in situ.** Reasons to consider removal of one-way valve: • Respiratory instability: Significant desaturation or tachypnoea, outside of target parameters (as per weaning plan) and/or significant, unresolving increase in work of breathing • Cardiovascular instability • Airway concerns: Stridor or inability to manage oral secretions, despite repeated intervention Ensure to remove OWV **before** re-inflating the tracheostomy cuff for any reason