



## 7 Tips for Managing Breathing Circuits on the Newport HT50<sup>®</sup> Ventilator

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- 1. Select the right disposable circuit:** When using disposable breathing circuits, Newport Medical recommends using the Newport HT50<sup>®</sup>, disposable "J" circuit for everyone ventilated with the HT50 Ventilator (p/n BCD43811P or p/n BCD40801P + Cardinal RT114). Only use disposable breathing circuits that are listed on "Newport HT50 Ventilator – Disposable Breathing Circuits that Perform Acceptably" (Doc # HT50DispCirList). Never use the white topped or crystal clear topped exhalation valves found on some Airlife Circuits.
- 2. Position the Proximal Line Properly:**
  - When using a heated (water reservoir) humidifier, put a tee adapter on the dry side-inlet port of the humidifier and connect the patient end of the proximal pressure sensing line to that tee. If you are using the Newport blue reusable exhalation valve (HT6000039), you will need to plug the proximal port on the valve when you do this.
  - When using an HME instead of a heated humidifier, especially in volume control with no PEEP, connect the proximal pressure line between the ventilator user and HME to improve the detection of a disconnect situation - even when the HME has increased resistance due to secretions.
- 3. Never use 15 mm ID tubing for any part of the breathing circuit between the ventilator and exhalation valve.** Breathing circuit tubing should always be 22 mm ID. When ventilating small patients, make sure to minimize the deadspace in tubing/connectors from the exhalation valve to the user for a single limb circuit and from the wye connector to the user for a "J" circuit (Newport "J" Circuit p/n BCD43811P).
- 4. A tidal volume reading in the message window of 20, 20, 20, repeatedly, indicates early cycling off of pressure control and/or pressure support breaths.** This often results in a Low Minute Volume Alarm and back up ventilation. Early cycling off is typically caused by circuit tubing that is too narrow (use 22 mm, not 15 mm) or circuit tubing that is too short (make it longer between the ventilator and the humidifier).
- 5. Always do an Circuit Check/Exhalation Valve Calibration** when you install a new circuit/exhalation valve. It is essential as a leak check and a check for flaws in disposable breathing circuit components. Skipping the Circuit Check/Exhalation Valve Calibration may result in irregular ventilator operation.
- 6. Never ventilate without a Proximal Inline Filter installed.**
- 7. Use the Newport blue reusable HT50<sup>®</sup> exhalation valve for single limb circuit applications only.** Never move it to the end of a "J" or two limb circuit.

**Contact your Newport Representative for more details.**





# Newport HT50<sup>®</sup> Ventilator - Disposable Breathing Circuits that Perform Acceptably

Best Choice 	Manufacturer & P/N	Description	Suggested Use	Order From
<b>Non-Heated Circuits</b>				
	Newport p/n BCD43811P "J" Circuit <i>(10/Case)</i>	<ul style="list-style-type: none"> <li>• 6 ft/ 1.8 m J circuit with water trap and 2 temperature probe ports</li> <li>• Proximal and exhalation valve lines</li> <li>• ~2 ft/ 0.6 m humidifier tubing with extra pressure tee for dry pressure monitoring</li> </ul>	Adult & pediatric use with HME or humidifier	Newport
	Allegiance/Airlife <sup>™</sup> p/n 10855-855 "J" Circuit <i>(20/Case)</i>	<ul style="list-style-type: none"> <li>• 8 ft/ 2.4 m J circuit, <u>no</u> water trap and 2 temperature probe ports</li> <li>• Proximal and exhalation valve lines</li> <li>• ~2 ft/ 0.6 m humidifier tubing with extra pressure tee for dry pressure monitoring</li> </ul>	Adult & pediatric use with HME or humidifier  Add water trap for use with humidifier	Newport or Allegiance
	Hudson RCI p/n 1696 Single Limb Circuit <i>(15/Case)</i>	<ul style="list-style-type: none"> <li>• 6.5 ft/ 1.9 m single limb circuit, <u>no</u> water trap, 1 temperature probe port</li> <li>• Proximal and exhalation valve lines (must cut both to size)</li> <li>• ~1.5 ft/ 0.5 m humidifier tubing (pressure tee moves for dry pressure monitoring)</li> <li>• <b>(MUST reduce deadspace for pediatric use)</b></li> </ul>	Adult use with HME or humidifier  Add water trap for use with humidifier	Hudson RCI
	Allegiance/Airlife <sup>™</sup> p/n 003762 Single Limb Circuit <i>(15/Case)</i>	<ul style="list-style-type: none"> <li>• 6 ft/ 1.8 m single limb circuit, <u>no</u> water trap</li> <li>• Proximal and exhalation valve lines</li> <li>• ~2 ft/ 0.6 m humidifier tubing</li> <li>• <b>(MUST reduce deadspace for pediatric use)</b></li> </ul>	Adult use with HME (it has no water trap and no temp ports)	Newport or Allegiance
	Allegiance/Airlife <sup>™</sup> p/n 003764 Single Limb Circuit <i>(15/Case)</i>	<ul style="list-style-type: none"> <li>• 6 ft/ 1.8 m single limb circuit, <u>no</u> water trap</li> <li>• Proximal and exhalation valve (must cut to size) lines</li> <li>• ~2 ft/ 0.6 m humidifier tubing</li> <li>• <b>(MUST reduce deadspace for pediatric use)</b></li> </ul>	Adult use with HME, (it has no water trap and no temp ports)	Allegiance
	Allegiance/Airlife <sup>™</sup> p/n 10862-701 Single Limb Circuit <i>(20/Case)</i>	<ul style="list-style-type: none"> <li>• 8 ft/ 2.4 m single limb circuit, <u>no</u> water trap, 2 temperature probe ports</li> <li>• Proximal and exhalation valve lines</li> <li>• ~ 2 ft/ 0.6 m humidifier tubing (pressure tee moves for dry pressure monitoring)</li> <li>• <b>(Small pediatric use only)</b></li> </ul>	Small pediatric use with HME or humidifier  Add water trap for use with humidifier	Newport or Allegiance



## Best Choice Heated Wire Circuit

You need two components to make one complete circuit:

- ✓ Step 1: Order the BCD40801P Abbreviated J Circuit
- ✓ Step 2: Order the heated inspiratory limb that matches your humidifier and length requirement

	<p>Newport p/n BCD40801P</p> <p><i>Abbreviated "J" Circuit</i> (Partial circuit, NO inspiratory limb) (20/Case)</p>	<ul style="list-style-type: none"> <li>• Similar to p/n BCD43811P but without inspiratory limb, 1 temperature probe port</li> <li>• Proximal and exhalation valve lines</li> <li>• ~ 2 ft/ 0.6 m humidifier tubing with extra pressure tee for dry pressure monitoring</li> <li>• <i>Use with a separate heated inspiratory limb (choose one from the 3 listed below)</i></li> </ul>	<p>Adult &amp; pediatric use</p> <p>Newport</p>
	<p>Fisher &amp; Paykel™ p/n RT114 (RT103)</p> <p>RT-style Heated Inspiratory Limb Only (10/Case)</p>	<ul style="list-style-type: none"> <li>• 5 ft/ 1.5 m <b>heated</b> wire inspiratory limb with 2 temperature probe ports</li> <li>• ~2 ft/ 0.6 m humidifier tubing (discard this for HT50 application)</li> <li>• <i>Use with p/n BCD40801P</i></li> </ul>	<p>Adult &amp; pediatric use</p> <p>For Fisher &amp; Paykel MR850: use Heater Wire Adapter 900MR806</p> <p>For Fisher &amp; Paykel HC500, MR700 and MR730: use Heater Wire Adapter 900MR901</p> <p>Newport or Allegiance or other Fisher &amp; Paykel Distributor</p>
	<p>Allegiance/Airlife™ p/n 1006-H05</p> <p>Isothermal-style Heated Inspiratory Limb Only (20/Case)</p>	<ul style="list-style-type: none"> <li>• 6 ft/ 1.8 m <b>heated</b> wire inspiratory limb with 2 temperature probe ports</li> <li>• <i>Use with p/n BCD40801P</i></li> </ul>	<p>Adult &amp; pediatric use</p> <p>For Fisher &amp; Paykel HC500 or MR730 humidifier: use Heater Wire Adapter 900MR559</p> <p>Newport or Allegiance</p>
	<p>Allegiance/Airlife™ p/n 4681-504</p> <p>Isothermal-style Heated Inspiratory Limb Only (20/Case)</p>	<ul style="list-style-type: none"> <li>• 8 ft/ 2.4 m <b>heated</b> wire inspiratory limb with 2 temperature probe ports</li> <li>• <i>Use with p/n BCD40801P</i></li> </ul>	<p>Adult &amp; pediatric use</p> <p>For Fisher &amp; Paykel HC500 or MR730 humidifier: use Heater Wire Adapter 900MR559</p> <p>Allegiance</p>

### Other Heated-Wire Circuits

	<p>Allegiance/Airlife™ p/n 10856-H08</p> <p>Isothermal-style "J" Circuit (20/Case)</p>	<ul style="list-style-type: none"> <li>• 8 ft/ 2.4 m <b>heated</b> wire J Circuit with 2 temperature probe ports</li> <li>• Proximal and exhalation valve lines</li> <li>• ~ 2 ft/ 0.6 m humidifier tubing with extra pressure tee for dry pressure monitoring</li> </ul>	<p>Adult &amp; pediatric use</p> <p>For Fisher &amp; Paykel MR730 or HC500 humidifier: use Heater Wire Adapter 900MR559</p> <p>Newport or Allegiance</p>
	<p>Allegiance/Airlife™ p/n 10653-H08*</p> <p>Isothermal-style Single Limb Circuit (20/Case)</p>	<ul style="list-style-type: none"> <li>• 6 ft/ 1.8 m <b>heated</b> wire single limb circuit with 2 temperature probe ports</li> <li>• Pressure tee moves for dry pressure monitoring</li> <li>• Proximal and exhalation valve lines</li> <li>• ~ 2 ft/ 0.6 m humidifier tubing</li> <li>• (* Requires modification for pediatric use)</li> </ul>	<p>Adult use</p> <p>For Fisher &amp; Paykel MR730 or HC500 humidifier: use Heater Wire Adapter 900MR559</p> <p>Allegiance</p>

If you have any questions or need additional information, please contact Newport Medical Customer Service at 1.800.451.3111 ext 282 or email: [customers@ventilators.com](mailto:customers@ventilators.com).

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