Aestiva Pre-Use Check

Every day - before the first patient

Inspect the system. Look for damage, necessary drugs and equipment, correct breathing circuit setup, and hazardous conditions.

Turn on the system.

Set the ventilator controls to decrease alarms.

Do the pipeline and cylinder tests. Look for sufficient pressures and no high pressure leaks (cylinders).

Do the flow control tests:
- Minimum flows: O₂ 25-75 ml/min, all other gases no flow.
- Link system: Increase N₂O flow to drive up O₂ flow. Decrease O₂ flow to drive down N₂O flow. The O₂ flow is ≥ nominal 25%
- O₂ supply failure alarm. Alarm operates when O₂ pressure is decreased below set limit. Air flow continues. All other gases stop.

Do the vaporizer back pressure tests:
- Set the O₂ flow to 6 L/min.
- Turn On one vaporizer at a time.
- Make sure that the O₂ flow stays above 5 L/min.

Do a low-pressure leak test.

Do the alarm tests:
- Make sure all monitors operate correctly.
- Make sure the O₂ sensor operates correctly. It shows approx. 21% O₂ in room air and 100% O₂ after two min in pure O₂.
- Make sure these ventilator alarms operate correctly: high and low O₂; low minute volume; high airway pressure; apnea and low airway pressure; sustained airway pressure.

Every time a different clinician uses the system

Do a low-pressure leak test.

Before every patient

Look for damage, necessary drugs and equipment, correct breathing circuit setup, and hazardous conditions.
Check vaporizer installation:
• Make sure the top of each vaporizer is horizontal (not on crooked).
• Make sure each vaporizer is locked and cannot be removed.
• Make sure the alarms and indicators operate correctly (Tec 6 vaporizer).
• Make sure you cannot turn on more than one vaporizer at the same time.

Do the breathing system tests:
• Make sure the one way valves and auxiliary equipment (humidifier, etc.) operate correctly.
• With a circle breathing-circuit module, push the drain button for ≥10 sec to remove condensate.
• Ventilator circuit leak test.
• Bag/Manuel circuit leak test
• Bag/Manual circuit APL valve test.
• Circuit leak test
Set the appropriate controls and alarm limits for the case.

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