Apollo Anesthesia Workstation Daily Pre-Use Check-out Protocol

(Using On-Screen Self-Test)

1. Prepare machine for pre-use check
    a. If the machine is on, turn it off
    b. If gas was flowing overnight, change the CO_2 absorbent
2. Turn machine on
3. Perform manual check-out steps listed on screen
4. Open vaporizer of preferred agent to lowest marked concentration value and start automated check for:
    a. Leak/compliance tests
    b. Electronics tests
    c. Agent analyzer tests
    d. Flow sensor and piston checks
5. Test vaporizers
    a. Test exclusion system – ensure that only one vaporizer can be turned on at a time
    b. If desired, run leak test from 'STANDBY' screen with other vaporizer(s) set to lowest concentration
6. Verify operation of unidirectional valves, APL, and O_2 Flush
    a. * Occlude y-piece
    b. * Close APL and turn off all gas flows
    c. * Use O_2 flush to fill breathing bag and generate positive circuit pressure
    d. Turn on O_2 + other gas flows, check for smooth operation of flowmeter and verify increasing circuit pressure
    e. Slowly open APL valve and verify that pressure decreases smoothly
    f. Test interlink between O_2 & N_2O controls that protect against hypoxic O_2/N_2O mixtures
7. * Prepare machine for use
    a. Set all vaporizers to zero
    b. Turn off all flows and verify APL valve is open
    c. Set up breathing circuit for use
8. * Check for necessary monitoring
    a. Ensure all monitors are in place and functional

Abbreviated Pre-Use Check for Performance Between Anesthesia Cases (assumes machine has not been disturbed, for example by moving to another operating room)

1. Perform steps with a *****
2. Replace patient suction, if necessary
3. Perform leak and compliance test from Standby screen, if necessary

Note: Developed for Apollo software version 3.21
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