PREVENTIVE MAINTENANCE PROCEDURE

MONITOR, ECG - HEWLETT PACKARD, MDE, Protocol, Tektronix, AND all other standalone units

For details, refer to Health Devices Inspection and Preventive Maintenance (IPM) procedure

ECG Monitors
Procedure/Checklist 409-0595

Equipment Needed: Electrical Safety Analyzer, Patient Simulator and associated cables

1. Qualitative Tests
   1.1 Chassis - verify physical integrity, cleanliness
   1.4 AC Plug - verify integrity
   1.5 Line Cord - verify proper insulation and integrity
   1.6 Strain Reliefs - verify physical integrity at both ends of line cord
   1.9 Inspect patient cable and leads
   1.10 Fittings/Connectors examine all cable connectors
   1.13 Controls/Switches - verify proper operation
   1.18 Indicators/Displays - verify proper illumination and operation
     - verify trace quality and linearity
     - verify QRS waveform on display
   1.19 1mV Step Response - verify proper operation of TEST/CAL button
   1.22 Labeling - verify presence and placement of all labels, placards, instruction cards, etc.

2. Quantitative Tests
   2.1 Grounding Resistance [< 0.5 ohm]
   2.2 Chassis Leakage [< 300 microamps]
   Lead Leakage [< 10 microamps (G), <50 microamps (NG)]
   Inter-lead Leakage [< 10 microamps (G), <50 microamps (NG)]
   Input Isolation [< 50 microamps]
   2.10 Rate Calibration
     - verify rate accuracy at 60 BPM and 120 BPM
       [+/− 5% or 5 BPM, whichever is greater]
   2.11 Rate Alarm
     - verify visual and audible alarms at 60 BPM 120 BPM
       [+/− 5% or 5 BPM, whichever is greater]
   2.12 Alarm Delay
     - verify high and low alarm delay
       [< 10 sec]
   2.13 Asystole Alarm Delay
     - verify asystole alarm delay
       [< 5 sec]

** Verify that ECG leadwires are of the shielded pin safety type **

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