RICH-MAR CORPORATION

THERAMINI 2

Preventive Maintenance Procedure

Serial No. _____
Date _____

(1) Power up the unit while depressing the Stop/Clear button, look for the Rich-Mar logo verify software version. 1.03

Quadpolar Function Tests

Using a test load 500 ohm 5 watts to a oscilloscope.
Set up the scope to read 50 uS/division and 20 volts/division.

Set up TMT 1 as Quadpolar, 80-150 Hz, Vector - shallow/normal, Continuous, 10:00.
Start TMT 1. Increase intensity to the maximum.
(1) Verify the peak to peak voltage of channel 1 on your oscilloscope is approximately 70 volts.
(2) Verify the peak to peak voltage of channel 2 is approximately 70 volts.

Monophasic Function Tests

Connect Channel 1 to the oscilloscope. Set the scope to read 50 volts/division.

Set up TMT 2 as Monophasic, 100Hz, 50 - 50 uS, Continuous, 10:00.
Start TMT 2. Increase intensity to the maximum on both channels.
(1) Verify that the peak voltage on Channel 1 is 100 volts.
(2) Verify that the peak voltage on channel 2 is 100 volts.
(3) Change the scope to 1 mS/division. See that the twin pulses repeat every 10 divisions.

BiPhasic Function Tests

Connect channel 1 to the oscilloscope. Set the scope to read 50 Volts/division and 50 uS/division.

Set up TMT 3 as Biphasic, 100 Hz, 200 - 50 uS, surge -10 “ON” and 10 “OFF”, 10:00.
Start TMT 3. Increase the intensity to the maximum.
(1) Verify that the peak to peak voltage on channel 1 and channel 2 is 200.
(2) Verify that the unit is “ON” for 10 seconds and “OFF” for 10 seconds on both channels.

BiPolar Function Tests

Connect channel 1 to the oscilloscope. Set the scope to read 10 V/division and 50 uS/division.

Set up TMT 4 as bipolar, 100 Hz, med/slow, surge - 10 “ON’ and 10 “OFF”, 10:00.
Start TMT 4. Increase intensity to the maximum.
(1) View the wave form on your oscilloscope. The wave form should vector between 60 and 80 V peak to peak at a rate of 10 cycles in 30 seconds on channel 1 and channel 2.
(2) Verify that the output is “ON” for 10 seconds and “OFF” for 10 seconds.

Russian Function Tests

Connect channel 1 to the oscilloscope. Set the scope to read 20 volts/division and 100 uS/division

Set up TMT 5 as Russian. 50 Hz, surge - 15 seconds “ON” and 50 seconds “OFF”, 10:00.
Start TMT 5. Increase intensity to maximum.

(1) View the wave form on your oscilloscope. Verify that it repeats itself every 4 divisions (both channels)
(2) Verify that the peak to peak voltage is 6 divisions on both channels.
(3) Verify that the output is “ON” for 15 seconds and “OFF” for 50 seconds.

Micro Function Tests

Connect channel 1 to the oscilloscope. Set the scope to read 500mV/division and 500 uS/division.
Set up TMT 6 as micro, 500 Hz, Continuous, 10:00.
Start TMT 6. Increase the intensity to the maximum.

(1) Verify that the peak voltage is approximately 2 divisions on both channels.
(2) Verify that the peaks are 4 divisions apart on both channels.
(3) Verify that the output alternates from positive to negative at approximately 2.7 second intervals.

Safety and Appearance Tests

(1) Check the units operation at 108 and 132 line volts AC.
(2) Check the line leakage using a Simpson 229-2 line leakage meter.
    Forward_____ Reflected _____
(3) Verify that the patient lead cord test functions correctly.
(4) Recheck the overall appearance of the unit.
(5) Check encoder pot for proper function when tured screen should move in same direction .
(6) Check panel for proper touch control on all settings.

All checks completed by_____