

Form B03

Scheduled Maintenance Work Order



Quantum Medical Solutions sdn bhd
transcending boundaries, transforming life

Format Ref: - QMS/TSD-022 Rev.01

Work Order No.	PWO365227	Schedule Month	June 2018
Work Order Date	01/06/2018	Completed Date	31/7/18
Clinic Name	Klinik Pergigian Di Klinik Kesihatan Sui	Clinic Code	JHR549
BE No.	JHR016023	Distict	LEDANG
BE Category	RADIOGRAPHIC UNITS, DENTAL	WO Assigned to	S. Mathivanan.
Ownership	<input checked="" type="checkbox"/> Existing Equipment	<input type="checkbox"/> Purchase	<input type="checkbox"/> New
BE Condition	<input checked="" type="checkbox"/> Active	<input type="checkbox"/> BER Proposed	
Work Order Type	<input checked="" type="checkbox"/> Preventive Maintenance (PM)	<input type="checkbox"/> Third Party Calibration (TPC)	
	<input type="checkbox"/> Routine Inspection (RI)	<input type="checkbox"/> Statutory Certification (SC)	

Reschedule Date	
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3E Third Party Calibration / Statutory Certification Details

Company Name	-	Cal / Cert Date	-
Contact Number	-	Cal / Cert Expiry Date	-

Action Taken

☒ PM / RT job done as per checklist. Unit tested functioning good & ready to use.

☐ Corrective Maintenance / ☐ Breakdown

BE Sticker Availability: ☒ Yes / ☐ NA

Remarks: ppm done.

Manufacturer: New Life

Model: new life 800-DC

Serial No: Y-0514

Schedule Maintenance Execution Details

SI No	QMS Engineer / Technician Name	Date	Start Time	End Time
1	S. Mathivanan	31/7/18	12pm	1315 pm.
	Rabiah	"	"	"
	/	/	/	/

Customer Remarks

Engineer / Technician Signature

Name

Date

MATHIVANAN SELLAMUTHU

Mathu 1/7/18
QUANTUM MEDICAL SOLUTION
SENIOR BIO MEDICAL ENGINEER

Customer Signature

Name

Designation

Date

Seal

AZLEE YUSOF
JURUTEKNOLOGI PERGIGIAN U29
KLINIK PERGIGIAN: SE MATI

1/7/18

For Internal Use

First Verification

QMS Circle Incharge

MOHD SHAIFUDIN BIN SINIA
Biomedical Engineering
Quantum Medical Solutions
HP: 012-3967638

Final Verification

QMS State Incharge



Quantum Medical Solutions sdn bhd
transforming boundaries, transcending limits

Quantum Medical Solutions Sdn Bhd

BEMS Planned Preventive Maintenance Checklist

Radiographic units, Dental

BE CODE : 13-269

CHECKLIST NO: CL-117
REV.000

PART 1 ASSET DETAILS

WORK ORDER NO ▶ PW0365227

ASSET NO ▶ JH2016023

MANUFACTURER ▶ New Life

MODEL ▶ New Life Best - x - Dc

FREQUENCY ▶ 3 MONTHLY () 6 MONTHLY (✓) 12 MONTHLY ()

PPM HOURS ▶ 1.15 hr.

PART 2 SPECIAL PRECAUTION

If there is evidence of body fluid contamination, submit the device for cleaning and decontamination before inspecting it.

Wear appropriate Personnel Protection Equipment (PPE) during work.

Wear grounded electrostatic wristband when handling PCB or electronic components.

Refer to the safety procedure for additional precautions and guidance as per manufacturer guidelines.

Make sure the test equipment used are duly calibrated.

PART 3 TEST APPARATUS

Tick (✓) where appropriate

NO	ASSET NO	DESCRIPTION	SERIAL NO	CALIBRATION DUE ON
1		ELECTRICAL SAFETY ANALYZER	324694	15/8/18
2		KVP METER	8004288	31/5/19
3		mA METER	NA	NA

PART 4 QUALITATIVE TASKS


Tick (✓) where appropriate

	PASS	FAIL	NA		PASS	FAIL	NA
1 Chassis - verify physical integrity, cleanliness and condition	(✓)	()	()	10 Indicators/ Displays - verify proper illumination and operation	(✓)	()	()
2 Mount/ Fasteners - verify physical integrity	(✓)	()	()	11 Over exposure safety contractor- Verify physical integrity	(✓)	()	()
3 Casters/Brakes - if mounted, verify physical integrity	(✓)	()	()	12 PCB Boards - verify physical integrity	(✓)	()	()
4 Power Cord - verify proper insulation and integrity	(✓)	()	()	13 Exposure switch - Verify operation	(✓)	()	()
5 Strain relief - verify physical integrity at both ends of the line cord	(✓)	()	()	14 Visual Exposure indicator - Verify operation	(✓)	()	()
6 Electronic cabinet	(✓)	()	()	15 Audible exposure signal- Verify operation	(✓)	()	()
7 Circuit Breaker/ Fuse - verify integrity of external circuit breaker and/or rating of external fuse	(✓)	()	()	16 Tube movement - Verify integrity and Operation	(✓)	()	()
8 Fittings/ Connectors - check all fittings/connectors	(✓)	()	()	17 Calibration	()	()	(✓)
9 Controls/ Switches/ Keypad - verify proper operation of controls	(✓)	()	()				

PART 5 PREVENTIVE MAINTENANCE TASKS

Tick (✓) where appropriate

	DONE	NOT DONE	NA	Notes:
1 Cleanliness - Clean Interior and Exterior of the equipment	(✓)	()	()	<p>* For all Parts, NA is defined as NOT APPLICABLE</p> <p>** If you have ticked 'NOT DONE', then justify in Part 8</p> <p>*** Choose Whichever Applicable</p>

 Quantum Medical Solutions Sdn Bhd <small>Responsible for the safety and health of the patient</small>	Quantum Medical Solutions Sdn Bhd BEMS Planned Preventive Maintenance Checklist Radiographic units, Dental BE CODE : 13-269	CHECKLIST NO: CL-117 REV.000
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WORK ORDER NO ▶

PART 6 QUANTITATIVE TASKS

Tick (✓) where appropriate

No	Description	Units / UOM	Set Values	Measured Values	Limit/Tolerance	PASS	FAIL	NA
1	KV 60kV - 7mA - 0.2ms	KV		61kV				
	60kV - 7mA - 0.2ms.			61kV				
	70kV - 7mA - 0.2ms.			70kV				
	70kV - 7mA - 0.2ms			70kV				
2	mA	mA						
	70kV - 7mA - 0.2ms.				498 uA			
	70kV - 7mA - 0.2ms.				498 uA			
	70kV - 7mA - 0.2ms.				498 uA			
3	Time	Sec						
	0.20ms				0.2000 ms			
	0.32ms				0.3240 ms			
	0.40ms.				0.4100 ms.			

PART 7 ELECTRICAL SAFETY TEST

ELECTRICAL SAFETY TEST, (attach report)

(In accordance to IEC 60601)

☒ PASS

☐ FAIL

☐ NA

PART 8 NOTES

NA

☐

CORRECTIVE MAINTENANCE REQUIRED

☒

FUNCTIONING

☐

NOT FUNCTIONING

WORK ORDER NO ▶

NEXT PPM DATE ▶ 12-18

PPM has been performed in accordance to the checklist and the equipment is functioning to the intended purpose.

COMPLETED BY: MATHIVANAN SELLAMUTHU

DATE: 11/7/18
 QUANTUM MEDICAL SOLUTION
 SENIOR BIO MEDICAL ENGINEER

AZLEE YASRI
 JURUTEKNOLOGI PERGIGIAN U29
 KLINIK PERGIGIAN: SC-1111
11/7/18

Date :31/7/2018

Test Setup

Operator ID :
Calibration Tech : NADIA
Calibration Date : 25/8/2018
Firmware Version : 2.08.01
Serial Number : 3246911
Date & Time : 31/07/2018 & 12:00 P.M
JOB Name :

DUT Information

Equipment Number : JHR 016023
Serial Number : Y-D514
Manufacturer : NEW LIFE
Model : NEW LIFE BEST-X-DC
Location : KP SUNGAI MATI
Other :

Template Information

Template Name : 62353-Alt.RADIOGRAPHIC
Pause after Power ON: NO
Power ON delay: 2
Test Speed: NORMAL
Halt on Test Failure: YES
Include Time: YES
Insulation Resistance \ 500V
Multi Enclosure Test : NO

Standard : IEC62353-Direct
Pause before Power O NO
Power OFF delay: 0
Test Mode: AUTO
Multi PE Test: NO
Multi Resstore: WORST/LAST
Reverse Polarity: YES
Classification: I

PLC Configuration-Applied part setup

AP Name AP Type AP Num

ESA615 Test Results

Test Name	Value	High Limits	Low Limits	Status
Protective Earth Resistance	0.24 Ohm	0.3	-	P
Insulation Resistance				P
Mains to Protective Earth	78.3MOhn	-	-	P
Mains Voltage				P
Live to Neutral	240.4 V	-	-	P
Neutral to Earth	4.1 V	-	-	P
Live to Earth	240.9V	-	-	P
Equipment Current	0.4 A	-	-	P
Direct Equipment Leakage				P
Open Earth	0.9 uA	500	-	P
Open Earth- Reversed Mains	0.7 uA	500	-	P

