

Form B03

Scheduled Maintenance Work Order



Quantum Medical Solutions sdn bhd
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Format Ref: - QMS/TSD-022 Rev.01

Work Order No.	PWO365798	Schedule Month	July 2018
Work Order Date	01/07/2018	Completed Date	10/7/2018
Clinic Name	Klinik Kesihatan Sungai Rengit	Clinic Code	JHR047
BE No.	JHR008616	Distict	KOTA TINGGI
BE Category	Sphygmomanometers, Electronic, /	WO Assigned to	KTA BME3
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	N/A
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BE Third Party Calibration / Statutory Certification Details			
Company Name	MA	Cal / Cert Date	N/A
Contact Number	N/A	Cal / Cert Expiry Date	N/A
Action Taken <input checked="" type="checkbox"/> PM / RI job done as per checklist. Unit tested functioning good & ready to use. Manufacturer: Welch Allyn <input type="checkbox"/> Corrective Maintenance / <input type="checkbox"/> Breakdown Model: N/A BE Sticker Availability: <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> NA Serial No: N/A Remarks:			

Schedule Maintenance Execution Details				
SI No	QMS Engineer / Technician Name	Date	Start Time	End Time
N/A	SAFWAN	10/7/18	1600	1630

Customer Remarks	N/A
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Engineer / Technician Signature Name: MUHAMMAD SAFWAN BIN ROSLAN Date: 10/7/18 Biomedical Technician Quantum Medical Solution Sdn. Bhd	Customer Signature Name: NORHASMIA BINTI BAHRUN Designation: Jururawat Kesihatan U29 Date: 10/7/18 Seal: KK Sungai Rengit
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For Internal Use

MUHD RAMADHAN MUHAMMAD
Biomedical Engineer
Technical Service Department
Quantum Medical Solutions Sdn. Bhd.
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Final Verification
QMS State Incharge



KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist
Sphygmomanometers, Electronic, Automatic
BE CODE 16-173

CHECKLIST NO: CL-141-000
REV.000

PART 1 ASSET DETAILS

WORK ORDER NO ▶ PW0365798
MANUFACTURER ▶ Welch Allyn
FREQUENCY ▶ 12 MONTHLY (✓)
BE NO ▶ JHR008616
MODEL ▶ ALP
PPM HOURS ▶ 1.00

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	TEESP 0010	ELECTRICAL SAFETY ANALYZER	3218071	24/8/18
2	TEEM 0186	PATIENT SIMULATOR	3239028	12/10/18

PART 4 QUALITATIVE TASKS

Tick (✓) where appropriate

	PASS	FAIL	NA		PASS	FAIL	NA
1 Chassis - Verify physical integrity, cleanliness and condition.	(✓)	()	()	8 Indicators/Displays - Verify proper illumination and operation.	(✓)	()	()
2 Mount/Fasteners - Verify physical integrity.	(✓)	()	()	9 Hose & Cuff - Verify physical integrity and cleanliness.	(✓)	()	()
3 Power Cord - Verify proper insulation and integrity.	(✓)	()	()				
4 Strain Relief - Verify physical integrity at both ends of line cord.	(✓)	()	()				
5 Circuit Breaker/Fuse - Verify integrity of external circuit breaker and/or rating of external fuse.	(✓)	()	()				
6 Fittings/Connectors - Check all fittings/connectors.	(✓)	()	()				
7 Controls/Switches/Keypad - Verify proper operation of controls.	(✓)	()	()				

PART 5 PREVENTIVE MAINTENANCE TASKS

Tick (✓) where appropriate

	DONE	NOT DONE **	NA	Notes:
1 Clean exterior/interior of the equipment.	(✓)	()	()	* For all Parts, NA is defined as NOT APPLICABLE If you have ticked 'NOT DONE', then justify in Part 8 Choose Whichever Applicable
2 Battery - Check/Replace if necessary.***	(✓)	()	()	** ***



KEMENTERIAN KESIHATAN MALAYSIA

MEET Planned Preventive Maintenance Checklist
Sphygmomanometers, Electronic, Automatic
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WORK ORDER NO

PWO 365798

PART 6 QUANTITATIVE TASKS

Tick (✓) where appropriate

No	Description	Units / UOM	Set Values	Measured Values	Limit/Tolerance	PASS	FAIL	NA
1	Blood pressure accuracy	mmHg	200	198	197 - 203	(/)	()	()
		mmHg	150	151	147 - 153	(/)	()	()
		mmHg	100	100	97 - 103	(/)	()	()
2	Pulse rate accuracy	bpm	60	61	58 - 62	(/)	()	()
		bpm	80	80	78 - 82	(/)	()	()
		bpm	120	122	118 - 122	(/)	()	()

PART 7 ELECTRICAL SAFETY TEST

ELECTRICAL SAFETY TEST, (attach report)

Tick (✓) where appropriate

Standard use:

☒ IEC 60601

☐ IEC 61010

☐ IEC 62353

Result:

☒ PASS

☐ FAIL

☐ NA

PART 8 NOTES

☐ CORRECTIVE MAINTENANCE REQUIRED

☒ FUNCTIONING

☐ NOT FUNCTIONING

WORK ORDER NO

MD

NEXT PPM DATE

July 2018

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

COMPLETED BY:

MOHAMAD SABRYAN BIN ROSLAN
Biomedical Technician
Quantum Medical Solution Sdn. Bhd

DATE: 10/7/18

Test Setup

Operator ID :
 Calibration Tech : MOHANA
 Calibration Date : 24/08/2018
 Firmware Version : 2.08.01
 Serial Number : 3218071
 Date & Time : 10/07/2018 & 04:00pm
 JOB Name :

DUT Information

Equipment Number : JHR008616
 Serial Number :
 Manufacturer :
 Model :
 Location : KK SUNGAI RENGIT
 Other :

Template Information

Template Name : SPHYGMOMANOMETERS
 Pause after Power ON: NO
 Power ON delay: 2
 Test Speed: NORMAL
 Halt on Test Failure: YES
 Include Time: YES
 Insulation Resistance Voltage: 500V
 Multi Enclosure Test : NO

Standard : IEC60601-1-2nd Ed
 Pause before Power OFF: 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	0.361 Ohm	0.2 -		F
Insulation Resistance				P
Mains to Protective Earth	49.0 MOhm	-		P
Mains to Non-Earth Accessible Conductive Part	999 MOhm	-		P
Mains Voltage				P
Live to Neutral	259.5 V	-		P
Neutral to Earth	5.4 V	-		P
Live to Earth	254.0 V	-		P
Equipment Current	0.0 A	-		P
Earth Leakage Current				P
Normal Condition	50.6 uA-Op	500 -		P
Open Neutral	58.9 uA-Op	1000 -		P
Open Neutral- Reversed Mains	27.4 uA-Op	1000 -		P
Normal Condition- Reversed Mains	15.4 uA-Op	500 -		P
Enclosure Leakage Current				P
Normal Condition	0.6 uA-Op	100 -		P
Open Earth	1.1 uA-Op	500 -		P
Open Neutral	0.7 uA-Op	500 -		P
Open Neutral- Reversed Mains	0.7 uA-Op	500 -		P
Normal Condition- Reversed Mains	0.6 uA-Op	100 -		P
Open Earth- Reversed Mains	0.7 uA-Op	500 -		P


 Signature