

## 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.	PWO371566	Schedule Month	June 2018
Work Order Date	01/06/2018	Completed Date	25-06-2018
Clinic Name	Klinik Kesihatan Pesta / Kampung Ken	Clinic Code	JHR015
BE No.	JHNSPA015	Distict	BATU PAHAT
BE Category	SPHYGMOMANOMETERS, ELEC	WO Assigned to	MUHD SHAZRUL
Ownership	<input type="checkbox"/> Existing Equipment	<input type="checkbox"/> Purchase	<input checked="" 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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<b>BE Third Party Calibration / Statutory Certification Details</b>			
Company Name	NA	Cal / Cert Date	NA
Contact Number		Cal / Cert Expiry Date	
<b>Action Taken</b>			
<input checked="" type="checkbox"/> PM / RI job done as per checklist. Unit tested functioning good & ready to use.		Manufacturer :	
<input type="checkbox"/> Corrective Maintenance / <input type="checkbox"/> Breakdown		Modal :	
BE Sticker Availability : <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> NA		Serial No :	
Remarks:			

<b>Schedule Maintenance Execution Details</b>				
SI No	QMS Engineer / Technician Name	Date	Start Time	End Time
	MUHD SHAZRUL	25-06-2018	09:50	10:50

Customer Remarks	
Engineer / Technician Signature Name Date  25/06/2018 QUANTUM MEDICAL SOLUTION MUHAMMAD SHAZRUL BIN MOHD SAMSURI BIOMEDICAL TECHNICIAN	Customer Signature Name Designation Date Seal  Nur Hazirah Necey Abdullah (No. Pendaftaran Penuh: 54451) Jururawat U29 KK Kg. Kenangan, Batu Onn 25/6/18

For Internal Use

First Verification

QMS Circle Incharge

**RAZILA MISKAN**  
 Biomedical Engineer (Circle In-Charge)  
 Quantum Medical Solutions Sdn. Bhd.

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 ▶ PWO 371566 BE NO ▶ JHNSPA 015  
MANUFACTURER ▶ Mindray MODEL ▶ VS - 900  
FREQUENCY ▶ 12 MONTHLY (✓) 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	TEESA 0074	ELECTRICAL SAFETY ANALYZER	3226906	9/10/2018
2	TEESA 0186	PATIENT SIMULATOR	3233028	10/12/2018

## 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.***	(✓)	( )	( )	** ***



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CHECKLIST NO:CL-141-000  
REV.000

WORK ORDER NO ▶

## 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	199	197 - 203	(✓)	( )	( )
		mmHg	150	149	147 - 153	(✓)	( )	( )
		mmHg	100	101	97 - 103	(✓)	( )	( )
2	Pulse rate accuracy	bpm	60	60	58 - 62	(✓)	( )	( )
		bpm	80	80	78 - 82	(✓)	( )	( )
		bpm	120	120	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

NA

☐ CORRECTIVE MAINTENANCE REQUIRED

☒ FUNCTIONING

☐ NOT FUNCTIONING

WORK ORDER NO ▶ NA

NEXT PPM DATE ▶ JUN 19

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

COMPLETED BY: MUHD SHAZRUL

DATE: 25-06-2018



## Test Setup

Operator ID :  
 Calibration Tech : DINA  
 Calibration Date : 9/10/2017  
 Firmware Version : 2.08.01  
 Serial Number : 3226906  
 Date & Time : 06/25/2018 & 10:27  
 JOB Name :

## DUT Information

Equipment Number : JHNSPA015  
 Serial Number :  
 Manufacturer : MINDRAY  
 Model : VS-900  
 Location : KK PESTA  
 Other :

## Template Information

Template Name : JHNSPA015  
 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

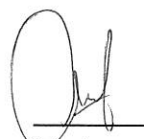
Standard : IEC60601-1-2nd Ed  
 Pause before Power O NO  
 Power OFF delay: 0  
 Test Mode: AUTO  
 Multi PE Test: NO  
 Multi Resstore: WORST/LAST  
 Reverse Polarity: YES  
 Classification: II

## PLC Configuration-Applied part setup

AP Name AP Type AP Num

## ESA615 Test Results

Test Name	Value	High Limits	Low Limits	Status
Insulation Resistance				P
Mains to Non-Earth Accessible Conductive Par	999 MOhn -	-		P
Mains Voltage				P
Live to Neutral	237.1 V -	-		P
Equipment Current	0.0 A -	-		P
Enclosure Leakage Current				P
Normal Condition	0.6 uA-OPI	100 -		P
Open Neutral	0.7 uA-OPI	500 -		P
Open Neutral- Reversed Mains	0.7 uA-OPI	500 -		P
Normal Condition- Reversed Mains	0.6 uA-OPI	100 -		P
Earth Leakage Current				P
Open Neutral	27.1 uA-OI	1000 -		P

  
 Signature

