

# SUYOG DIAGNOSTICS PVT. LTD.

## INSTALLATION / SERVICE REPORT

DATE : 02-06-2020

PLACE : BAMangalore

NAME OF THE INSTITUTE : AJ Hospital

ADDRESS : Mangalore  
Kannataka

DOCTOR : Prithika [ Jr Biomedical Engineer ]

EQUIPMENT : Semi - Automated <sup>Coagulation</sup> ESR Analyser.

MODEL : ACL ELITE

SERIAL NO. : 15081819

PART REPLACE FROM THE INSTITUTE : -

PART REPLACE FROM THE STOCK OF COMPANY : -

ENGINEER'S COMMENTS : Preventive Maintenance and Calibration  
is performed. Qc also passed. Samples also  
running good. Machine is working good.

DOCTOR'S COMMENTS : \_\_\_\_\_

(MURUGAN. S)

S. Murugan  
02/06/20

SIGNATURE OF THE ENGINEER

Prithika

SIGNATURE OF THE DOCTOR



Diagnostic Solutions for Life

PM Checklist for ACL Elite Pro



Date: 02-06-2020

ACCOUNT NAME & Address AJ Hospital, Mangalou.

Serial No. 15081819 SW V 03.01.04

Component	Done	Not Done	Comments
Clean the instrument surface	✓		ok
Clean the rinse/waste port	✓		ok
Clean /Replace the fan filter	✓		ok
Replace /Clean Tubing	✓		ok
Replace /Clean Drain Tube	✓		ok
Clean /Replace the Probe	✓		ok
Align the probes	✓		ok
Temperature Check	✓		Peltier 1: 12.6 Rotor Holder: 38.6 Peltier 2: - Rotor Stack: 36.4
Check liquid Flow (Priming)	✓		ok
Clean the OPTICS	✓		ok
Adjust Optics	✓		Offset Coag: 12mV Gain Coag: 26mVdc Offset Chrom: 10mV Gain Chrom: 8.69vdc
Curve Adjustment	✓		Coag 1200 RPM: 470 Coag 600RPM: 800 Chrom1200RPM: 470 Chrom600RPM: 800
Check Fiber Adjustment	✓		ok
Liquid Sensor Test	✓		Ref Value: 5.001
Auto sampler test	✓		ok
Module Positioning Check	✓		ok
Check Peltier Cooling	✓		ok
Check output of UPS	✓		Voltage: 230V
Check Ground Voltage	✓		Voltage: 1V
Check Room Temperature	✓		Temperature: 21.8°C
Check Air circulation around the machine	✓		ok

Customer Name: AJ Hospital.

Engineer Name: MURUGAN S

Signature [Signature]

Signature [Signature]

Instrumentation Laboratory India Pvt. Limited  
1471-1476, Aggarwal Millenium Tower-II  
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New Delhi-110034 Tel. 49029550.551  
Fax. 49029567

Suyog Diagnostics Pvt. Ltd  
F-315, Lado Sarai (Near Qutab Minar)  
M. B. Road, New Delhi - 110 030, India  
Tel: + 91 11 29521347, + 91 11 29521438  
Fax: + 91 11 29521438

CALIBRATION CERTIFICATE

This is to certify that ACL- Elite Pro Coagulation Analyzer Serial Number :- 15081819 installed at AJ Hospital, Mangalore has been calibrated for :- 02-06-2020

a) Dilutor Volume Check – Sample, Reagent

Dilutor Volume	Correction Number	Result (pass)	Corrective Actions Applied
Sample Check	4 ml	Pass	-
Reagent	4 ml	Pass	-

b) Adjustment – Sample and Reagent

Needle Adjustment	Result (pass)	Corrective Actions Applied
Sample	Pass	-
Reagent	Pass	-

c) Module Temperatures. Verify each module displayed temperature under Diagnostics

Module	Temperature Range	Displayed Temperature	Corrective Actions Applied
Rotor Holder	38.0 to 39.0 C	38.6	-
Peltier #1	10.0 to 16.0 C	12.6	-
Peltier #2 (ElitePro)	10.0 to 16.0 C	-	-
Rotor Transport	34.0 to 40.0 C	36.8	-
Rotor Stack	34.0 to 40.0 C	36.4	-

d) Module Coagulimetric and Chromogenic. Verify Optic electronics

Module	Specified Voltage Range	Displayed Voltage	Corrective Actions Applied
Coag Offset	0 – 15mv	12 mv	-
Coag Gain	2.3V – 2.9Vdc	2.6Vdc	-
Chrom Offset	0 – 15mv	10mv	-
Chrom Gain	8.65 – 8.75Vdc	8.69Vdc	-

e) Curve Adjustment. Verify curve delay for Coag and Chrom channels.

Channel	Curve Delay 1200 RPM	Curve Delay 600 RPM	Corrective Actions Applied
Coag	470	800	-
Chrom	470	800	-

f) Needles Liquid Sensing. Verify Sample and Reagent needle liquid level sensing.

Needle	Liquid Position	Volume and Vial	Voltage Spec	Measured Voltage	Corrective Actions Applied
Sample	Tray position	150ul in 500ul cup	4.1 +/- 0.2 V	4.1	-
Reagent	Reagent position R1	1.5ml in 4ml bottle	4.2 +/- 0.2 V	4.2	-

On dated 02-06-2020

Quality control values found well within the range.

**Level:- Normal Control**

Date	Parameter	Result	Range
02-06-2020	PT	11.25	(9.7-12.7)
02-06-2020	APTT	28.65	(23.9-31.9)

Next calibration of the above mentioned analyzer is due on dated 01-12-2020

We further declare the performance of the Analyzer satisfactory.

For Instrumentation Laboratory India (P) Ltd.,  
(MURUKAN.S)

*S. Nayak*  
(Name and Designation of the Engineer)

Mobile No.: 8098025556

*Handwritten signature*