

Preventive Maintenance Form-IH1000

Customer Name: _____

Date: ____ / ____ / ____

Instrument s/n: _____

Next Maintenance: ____ / ____

Last Update: 20.03.2018

| Comment | Value: | Checked/ Done: | Remarks |
|--|--------|-------------------|---------------------|
| 1. External checks | | | |
| 1.1 General cleaning | | | |
| 1.2 Monitor (cables and touch) | | | |
| 1.3 UPS and battery connector | | | |
| 1.4 Front lower doors (balance & strength) | | | |
| 2. Software & Computer | | | |
| 2.1 Operation system | | | Windows version: |
| 2.2 Software version IH-1000 | | | Version: |
| 2.3 Software version IH-Com | | | Version: |
| 2.4 Calibration files backup (15 files) on D:\ drive | | | |
| 2.5 Hard disk available space on Master (Min 100GB) | | | Free space: ____ GB |
| 2.6 Hard disk available space on Automate (Min 100GB) | | | Free space: ____ GB |
| 3. Centrifuges Module | | | |
| 3.1 Trapdoor cleaning & Lubrication (3 centrifuges) | | | |
| 3.2 Holders cleaning & check (3 centrifuges) | | | |
| 3.3 Bowls & seal cleaning & check (3 centrifuges) | | | |
| 3.4 Belt tension (3 centrifuges On Clasic Ver only) | | | |
| 3.5 Left centrifuge speed (1008 rpm $\pm 0.5\%$) | | | מס' מד אב: |
| 3.6 Middle centrifuge speed (1008 rpm $\pm 0.5\%$) | | | |
| 3.7 Right centrifuge speed (1008 rpm $\pm 0.5\%$) | | | |
| 4. Incubators Module (RT, 37°C, S.R) | | | |
| 4.1 Cleaning (RT, 37°C, S.R) | | | |
| 4.2 Card levers check (37°C) | | | |
| 4.3 Verify 37°C in position 1 (38 $\pm 1^\circ\text{C}$) | | | מס' מד אב: |
| 4.4 Verify 37°C in position 14 (38 $\pm 1^\circ\text{C}$) | | | |
| 4.5 Verify 37°C in position 28 (38 $\pm 1^\circ\text{C}$) | | | |

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| 5. Transport assembly | | | |
| 5.1 Clean & check tightening of laser barcode | | | |
| 5.2 Clean& check tightening of ID Cards presence | | | |
| 5.3 ID Cards presence sensor calibration (72+3mm) | | | |
| 5.4 Clean & check tightening of grippers of presence sensor card. | | | |
| 5.5 Clean the XYZ optical rulers | | | |
| 5.6 Visual check of the flat cable, clean & lubricate In all axis (X,Y,Z) | | | |
| 5.7 Visual check of the cable inside the gripper | | | |
| 5.8 Visual check of the belts (X,Y,Z) | | | |
| 5.9 Cards transport (48 cards in all the models) | | | |
| 6. Identification station | | | |
| 6.1 Clean and check tightening of background screen. | | | |
| 6.2 Clean and check tightening of rack type sensor. | | | |
| 6.3 Clean and check tightening of rack presence sensor | | | |
| 6.4 Clean and check the home sensor | | | |
| 6.5 Check USB camera (picture) | | | |
| 6.6 Open upper panel and check the cables | | | |
| 7. Reading Module | | | |
| 7.1 Check card transport shuttle and spring | | | |
| 7.2 Clean lighting diffuser | | | |
| 7.3 Clean and calibrate USB camera if necessary | | | |
| 8. Piercing Module | | | |
| 8.1 Clean ID card piercing array | | | |
| 8.2 Clean antistatic system4kv | | | |
| 8.3 Clean optical sensor | | | |
| 8.4 Replace balancing cards | | | |
| 9. Hydraulic | | | |
| 9.1 Needles check in the right & left side (Clean inside and outside and calibrate) | | | |
| 9.2 Diluent piercing check in the right& left side (Clean, check and calibrate if necessary) | | | |

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| 9. Hydraulic | | | |
| 9.3 Clean the XYZ optical rulers | | | |
| 9.4 Replace Hose for Peristaltic pump Cartridge Part number 2800854 | | | |
| 9.4 Visual check of the flat cable, clean & lubricate | | | |
| 9.5 Visual check of the belts (X,Y,Z) | | | |
| 9.6 Washing (long)- 4 times | | | |
| 9.7 Clean the washing station left | | | |
| 9.8 Clean the washing station right | | | |
| 10. Racks for sample, diluents and reagents | | | |
| 10.1 Samples racks check | | | |
| 10.2 Diluents racks check | | | |
| 10.3 Reagents racks check | | | |
| 11. Functional checking's | | | |
| 11.1 Real batch (QC or real Batch) | | | |

| Parts replaced: | | |
|-----------------|--------------|-----------|
| Serial number: | Description: | Quantity: |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Comments:

Service Engineer Name:

Service Engineer signature: