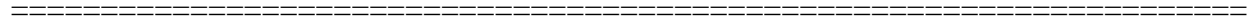


SETUP & TEST PROCEDURE FOR EASYPRINT MLP

CUSTOMER: _____ SALES ORDER #:
 SERIAL NUMBER: _____ TEST DATE:
 MODEL NUMBER: _____ ASSEMBLER:
 JOB NUMBER: _____ TESTER:
 EY5007 S/N : _____



SETUP

Sign-off

- 1) Mount the printer to the test stand _____
- 2) Verify the wires under and on the carrier do not touch the belt, pulleys or other moving parts. _____
- 3) Verify that the carrier travel extends to its' fullest. _____
- 4) Write the print head resistance value on the top edge of the print head.
 Record resistance: _____ ohm.
 Record Print Head Serial Number: _____
- 5) Mount the print head.
- 6) Adjust the angle of the print head to maximum. Set the print head gap using the gap gauge. The gauged feel must be equal at the top and at the bottom of the print head. _____
- 7) Apply pressure not to exceed 0.5 bars to the printer. **Verify there are no air leaks.** _____
- 8) Before turning on the printer (powering up):
 A) Verify the voltage setting of the switch is set for 115v, 60 Hz or 220v, 50 Hz.
 B) Turn the pot P1 on the Stepper Motor Driver Board (EY0009) full CCW.
 C) Insert key to activate the cover switch.
 D) Attach all cables from control box to the MLP. _____
- 9) Turn on the printer and verify that the transformer's secondary voltage is between 30 and 35 Vac. (measured at J1 of the EY0001) _____
- 10) Check the power supply (EY001) voltages.
 A) J6 violet/Black = 45 Vdc +/- 3Vdc. _____
 B) J3 red/black = 5.15Vdc adjust P3 _____
 C) J3 brown/black = 24Vdc adjust P5 _____
- 11) Turn off the AC power switch to the printer. Depress and hold the 3 buttons on the Push button board (EY0004) and turn on the power. The display reads: PRESS GREEN FOR TEST OR YELLOW FOR ZERO ADJUST.

Press the Green button to enter the test mode.

If any of the following tests fail discontinue testing and troubleshoot problem.

- 13) The top line of the display reads: SENSOR 1 = 1 SENSOR 2=0
- A) Start with the carriage in the home position. (SENSOR 1 = 1) will be displayed and LED (CR6) on EY1010 board in the bottom of the printer will be lit. Moving the carriage out of the home position the sensor reading will change to 1= 0, and LED (CR6) on EY1010 board will go out. _____
- B) Pushing the carriage to the end of travel (SENSOR 2 =0) display will change to 2 =1 and LED (CR1) on EY1010 board will be lit. Moving carriage out of the end of travel position causes the sensor reading to change to 2 = 0, and LED (CR1) on EY1010 board will go out. _____ the _____
- 14) Press the yellow button to advance to the next test.
The display reads: RIBBON SW = 0
- A) Depressing the broken ribbon microswitch located on top of carriage in the front, changes the display to (RIBBON SW = 1) and LED (CR3) on EY1010 board will be lit. Releasing the microswitch changes the display to (RIBBON SW = 0) and LED (CR3) on EY1010 board will go out. _____
- 15) Press the yellow button to advance to the next test.
The display reads: AIR PRESSURE SW = 0
- A) Turning down the air pressure to 15 psi & lower will change the display to (AIR PRESSURE SW = 1) and the LED (CR4) on EY1010 board will go out. Turning the air pressure back up the display changes back to (AIR PRESSURE SW = 0) and the LED (CR4) will be lit on the EY1010 board. _____
- 16) Press the yellow button to advance to the next test.
The display reads: HEAD MOVEMENT : OFF
RIBBON CLUTCH : OFF
- A) Pressing the top button (Blue) causes the head solenoid to fire and the display changes to (HEAD MOVEMENT : ON) _____
- B) Pressing the bottom button (Green) causes the pneumatic clutch to fire and the display changes to (RIBBON CLUTCH : ON). _____
- 17) Press the yellow button to advance to the next test.
The display reads: START INPUT = OFF
ENABLE OUTPUT = OFF
- A) Disconnect the gray and red wires from the machine interface cable and the display changes to (START INPUT = ON). _____
Reconnect the red and gray wires.
- B) Pressing the top button causes the display to change to (ENABLE OUTPUT = ON). _____

18) Press the yellow button to advance to the next test.

The display reads: SERVICE DISPLAY : OFF

- A) Pressing the green button changes the display to(SERVICE DISPLAY : ON) _____
 B) Pressing the blue button changes the display to (SERVICE DISPLAY : OFF) _____

19) Press the yellow button to exit test. Check low ribbon switch at this time by lifting up ribbon on unwind until low ribbon LED on control box and LED (CR2) on EY1010 board lights up, push ribbon back down and both LED`S will go out. _____

20) Using the display verify the following:

- A) The first line indicates the type of printer. Change this to the type of printer Being tested by:
- Pressing the FUNCTION KEY, then the STAND by key until SERVICE FUNCTIONS is displayed.
 - Press the START/STOP key, PAPER COUNTER is displayed.
 - Now press the 'C' key, enter the password 2904.
 - Press the 'E' key and use the UP or DOWN arrow keys to select the type of printer being tested.
 - Press the 'E' key to confirm the printer type.
- B) The second line is the version of firmware programmed into the CPU.
- The firmware version and the fpga logic chip on the CPU board are,

Firmware version _____, fpga version _____

21) Adjusting the 24Vdc to the print head:

- A) Press the QTY and 'E' key to place the printer into Printing mode.
 Measure the voltage at J5 on the power supply. Adjust to 24Vdc using P4.

RECORD READING: _____ volts

22) Check the controller keyboard.

- A) Push all buttons on the keypad separately and make sure that you hear a "beep". If a "beep" does not occur check the plug ST7 on the main CPU. _____

23) Set up the CPU parameters as follows using the keypad.

* PRINT PARAMETER

CONTRAST	70%	_____
CYCLE SIZE	1	_____
LABEL OFFSET	0mm	_____
X-DISPLACEMENT	0mm	_____
HEAD DOWN	0/0	_____
HEAD UP	0/0	_____
BRAKE OFF	0/0	_____

BRAKE ON 0/0 _____
 COUNTER OFF _____
 LABEL LENGTH 50 _____
 GAP WIDTH 1 _____

(Return counter setting to off after count test is complete).

* PRINT MODE

RIBBON CONTROL ON _____
 KEYBOARD LAYOUT USA _____ (or customer preferred)
 CODEPAGE SELECTION GEM ENGLISH _____
 PRINTER LANGUAGE ENGLISH _____
 VARIABLE FUNCTION ON _____
 SHIFUPDATE AUTOMATIC _____
 FLIP LABEL? OFF _____

*INTERFACE

COM1 1 _____
 COM2 0 _____
 BAUD 19200 _____
 STOP 1 _____
 BIT 8 _____
 PAR EVEN _____
 C 0 _____

*DATE/TIME

 Day Month Year Day of Week

- Time using 24-hour clock: _____

*PASSWORD

-0000 (NOTE: this password is for customer to enter to limit access).
 Default setting set to 'N' for disabling password. _____

*SERVICE FUNCTION

- Default is: "HOT START OFF" _____

24) Set up the control board parameters as follows:

- A) Push the 3 buttons on back of the control box, starting with the blue, yellow, and then the green. Hold them for 2 seconds, or until the display says Service display on, and release. Use the 3 buttons to setup.

Note: the center button is the select button; the top and bottom buttons are +/-.

MLP PRESET VALUES

a. -MIN. SPEED FORWARD	40 mm/s	_____
b. -MAX. SPEED FORWARD	300 mm/s	_____
c. -SLOPE UP FORWARD	29 mm/s	_____
d. -SLOPE DOWN FORWARD	29 mm/s	_____
e. -MIN. SPEED BACKWARD	35 mm/s	_____
f. -MAX. SPEED BACKWARD	655 mm/s	_____
g. -SLOPE UP BACKWARD	25 mm/s	_____
h. -SLOPE DOWN BACKWARD	25 mm/s	_____
i. -START DELAY	0 mS	_____
j. -HOLD OFF DELAY	0 mS	_____
k. -START SIG:	FRONT EDGE T.	_____
l. -ENABLE ON/ OFF WHILE PRINT	OFF	_____
m. -WEB MOVING SYSTEM :	OFF	_____
n. -SERVICE DISPLAY :	OFF	_____

25)

Checking the external printer enable signal pins # 1 & 2

- A) Break the conection between pin # 1 & 2 (Brown & White)
- B) The display should read Emergency stop.

_____ C) Connect wires again afterwards.

26)

Connect cables from a PC to the printer (SERIAL & PARALLEL)

- A) Send a label from the computer to the printer using the SERIAL PORT.
- B) Verify the printer goes into print mode. The display reads: PRINTING. _____
- C) Press the Start/Stop key then MENU key to return to the main menu.
- D) Send a label from the computer to the printer using the PARALLEL PORT.
- E) Verify the printer goes into print mode. The display reads: PRINTING. _____
- F) Press the Start/Stop key then MENU key to return to the main menu

27) Setting up the carriage travel.

- A) Turn off the power to the printer
- B) Depress and hold the 3 buttons on back of the control box and turn on the power.
- C) The display reads: PRESS GREEN FOR TEST OR YELLOW FOR ZERO ADJUST.
- D) Press the yellow button the carriage will locate each sensor. Once completed, press the stand by key to traverse the carrier.

If the carrier stops before returning home the belt is too tight

*If the carrier resets itself to often the belt is too loose.
If carrier stops during the return belt is too tight.*

28) Test printing

A)

Install a roll of ribbon _____

B) Send the test label from PC to printer _____

C) Print the label and make any necessary adjustments to obtain acceptable print quality. _____

D) Save the print from the PC to the PCMCIA card, using the software. _____

E) Load the saved print from the PCMCIA card to the printer. _____

F) Test print again _____

G) After testing, "format" the memory card to erase test print. _____

H) Follow procedures D thru G for both SERIAL & PARALLEL ports, and both A & B slots in (EY0510)memory card board. _____

I) Resend a label to the printer from the computer and run samples to verify the print quality is stable and the printer is reliable. _____

29)

Final Adjustments

A) Resetting the paper counter

a) Locate the paper counter in the service functions menu.

Press C to reset the counter. The password required for resetting the head counter (HC) and electronic counter

(EC) is 3941, then push enter. _____

B) Attach a copy of the test print below:

=====

30) Reset the max speed to 300mm/sec. _____

31) Set the voltage switch to the appropriate setting for the end user: _____

- include the proper power cord.

115/60hz: USA, 220/50hz: Europe (Note: Transformer wiring)

Signature of tester:_____Date test

completed:_____

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