



EZ Manual M-8400RVe

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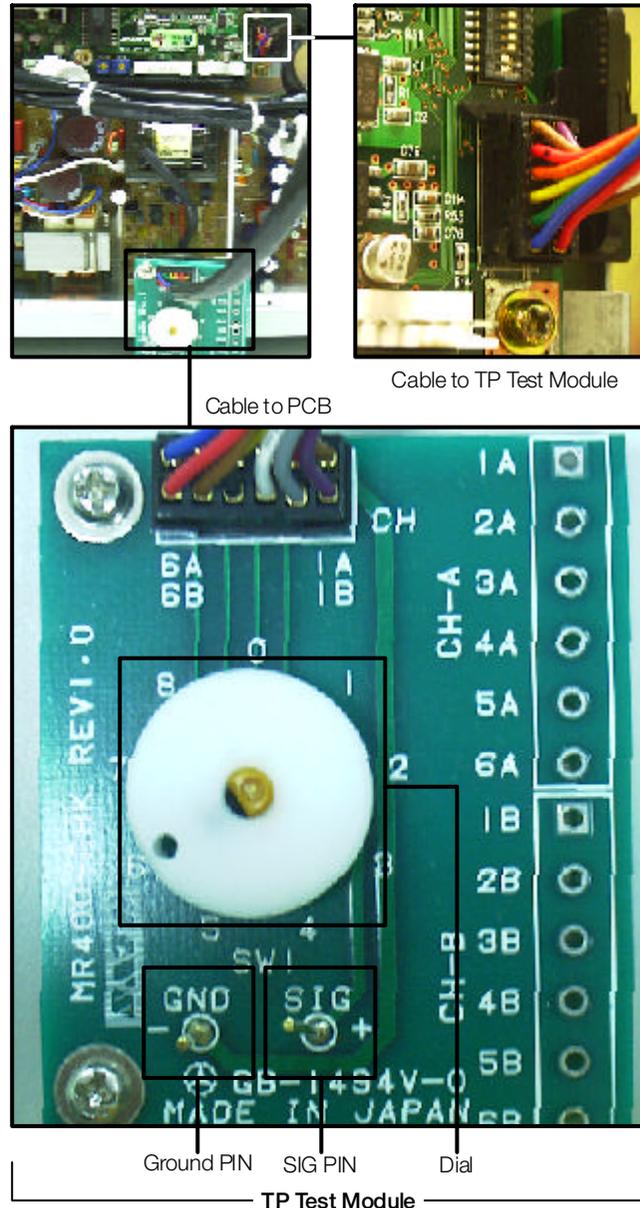
This explains how to check levels of DC power supply, I-mark sensor and gap sensor. Ensure that printer power is off. Remove the LH cover and then perform the following steps.

Additional equipment required

- TP Test Module
- Digital Multimeter

STEPS

- 1 Attach the connector from the TP Test Module to the test port on the MAIN PCB. Note correct positioning of connector. Nibs on the connector are placed down on the PCB in the forward position.
- 2 Attach the ground probe of the Digital Multimeter to the TP Test Module ground pin (GND PIN).
- 3 Attach positive probe of the Multimeter to the + SIG PIN on the TP Test Module terminal.
- 4 Turn printer power on and rotate the dial to a position 0-5 on the TP Test Module by referring to the diagram on the next page. Record the values from the Multimeter.
- 5 Confirm the recorded voltages are within the voltage range. If not, replace parts or adjust sensor level. Refer to Check and Adjustment chart.
- 6 After performing test, put the LH cover back to the printer.



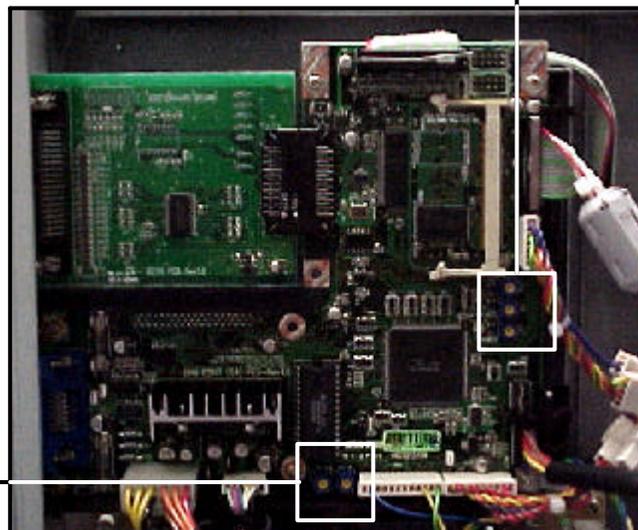
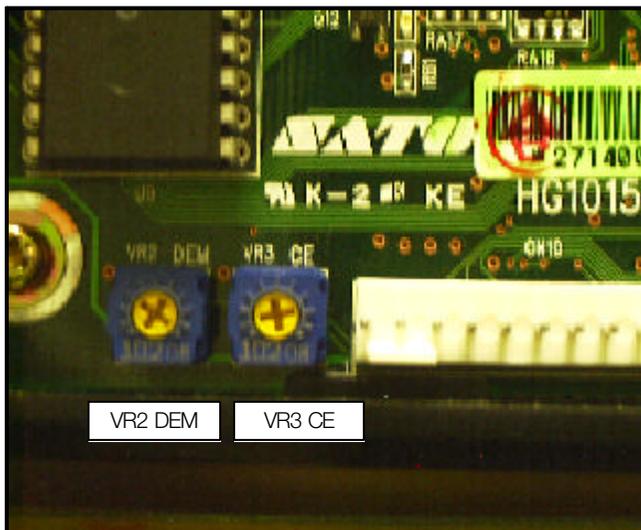
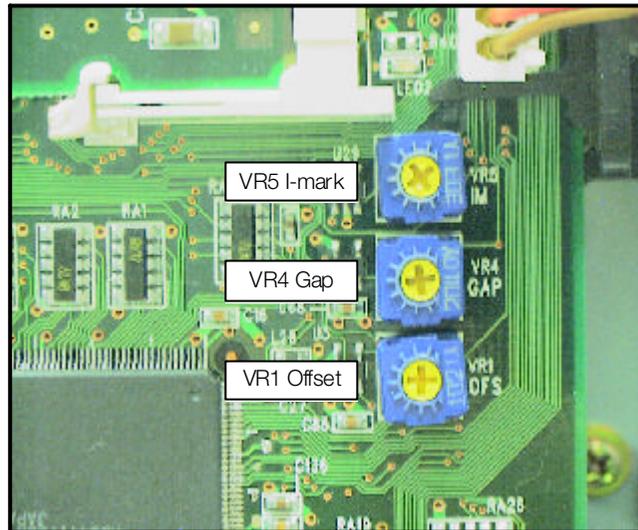
Electric Checks and Adjustments

Electric Checks and Adjustments Chart 1

Dial test point	Comment	Voltage	Voltage Range	Check pin on TP Test Module and Main PCB	Adjustment to VR
0	DC power Supply	+5.0 VDC	+4.8V to +5.2V	CH3A(+5.0V) - CH1A(GND)	N/A
1	DC power Supply	+2.0 VDC	+1.9V to +2.1V	CH4A(+2.0V) - CH1A(GND)	N/A
2	DC power Supply	+3.3 VDC	+3.1V to +3.5V	CH5A(+3.3V) - CH1A(GND)	N/A
3	DC power Supply	+24.0 VDC	+23.5V to +24.5V	CH6A(+24.0V) - CH1A(GND)	N/A
4	I-Mark Sensor Level	Low level (Set the blank area on the sensor) = A		CH1B(+8.4V) - CH1A(GND)	VR5
		High level (Set the I-mark on the sensor) = B			
		High level - Low level = A - B = more than +0.9V			
5	Gap sensor Level	Low level (Set the label backing liner or the centre hole [in case of the centre hole tag] on the sensor) = C		CH2B - CH1A(GND)	VR4
		High level (Set the label or tag on the sensor) = D			
		High level - Low level = C - D = more than +1.0V			

Potentiometers are located on MAIN PCB.

VR1(OFS)	Pitch Offset Adjustment
VR2(DEM)	Dispenser Sensor Level Adjustment
VR3(CE)	Ribbon Sensor Level Adjustment
VR4(GAP)	Gap Sensor Level Adjustment
VR5(IM)	I-Mark Sensor Level Adjustment

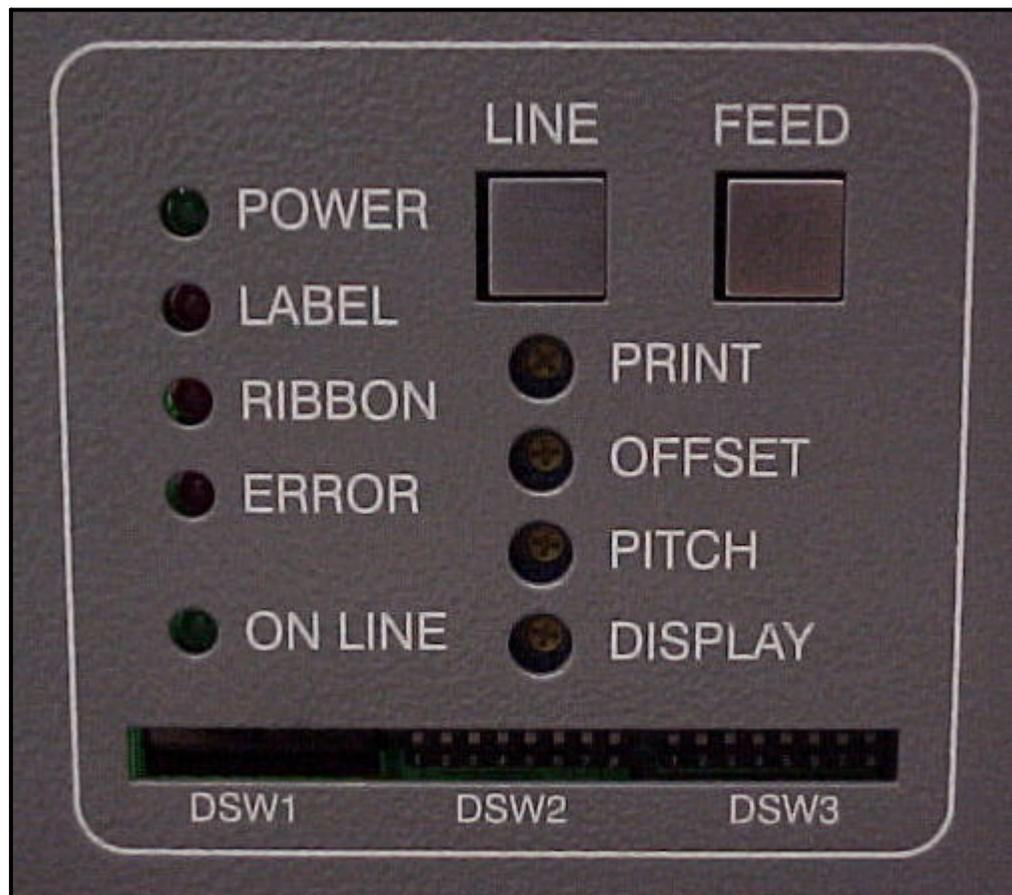


MAIN PCB

Electric Checks and Adjustments Chart 2

Potentiometers are located on FRONT PANEL

PRINT	Adjust Print Darkness
OFFSET	Adjust FEED/BACKFEED
PITCH	Adjust Pitch Offset
DISPLAY	Adjust Display Darkness

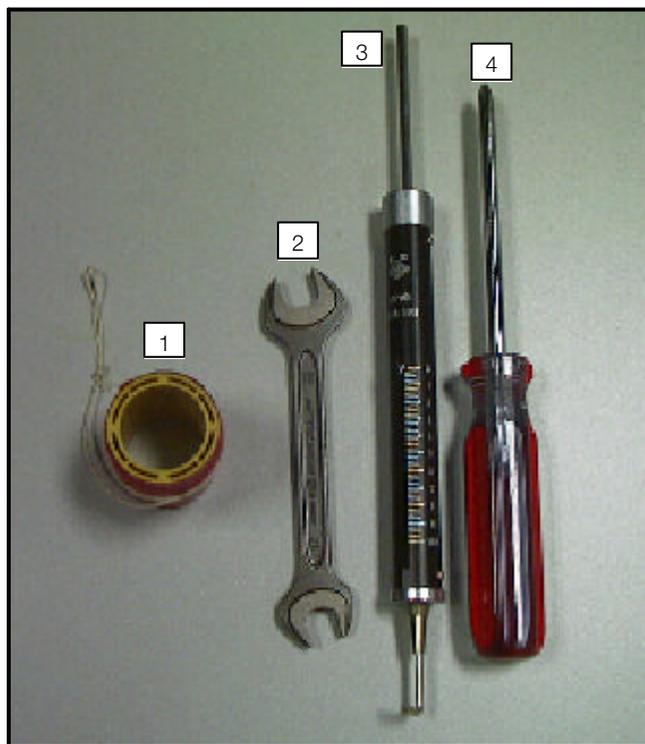


Electric Checks and Adjustments Chart 3

Excessive ribbon and rewind tension will result in variable motion and could be the cause of print quality problems. Ensure the ribbon rewind and unwind tensions are within specifications or adjustment of either clutch is necessary.

Required equipment

- 1 Empty Ribbon Core and String
- 2 12mm Wrench
- 3 1 kg or 2kg Tension Gage
- 4 #2 Pozidrv Screwdriver

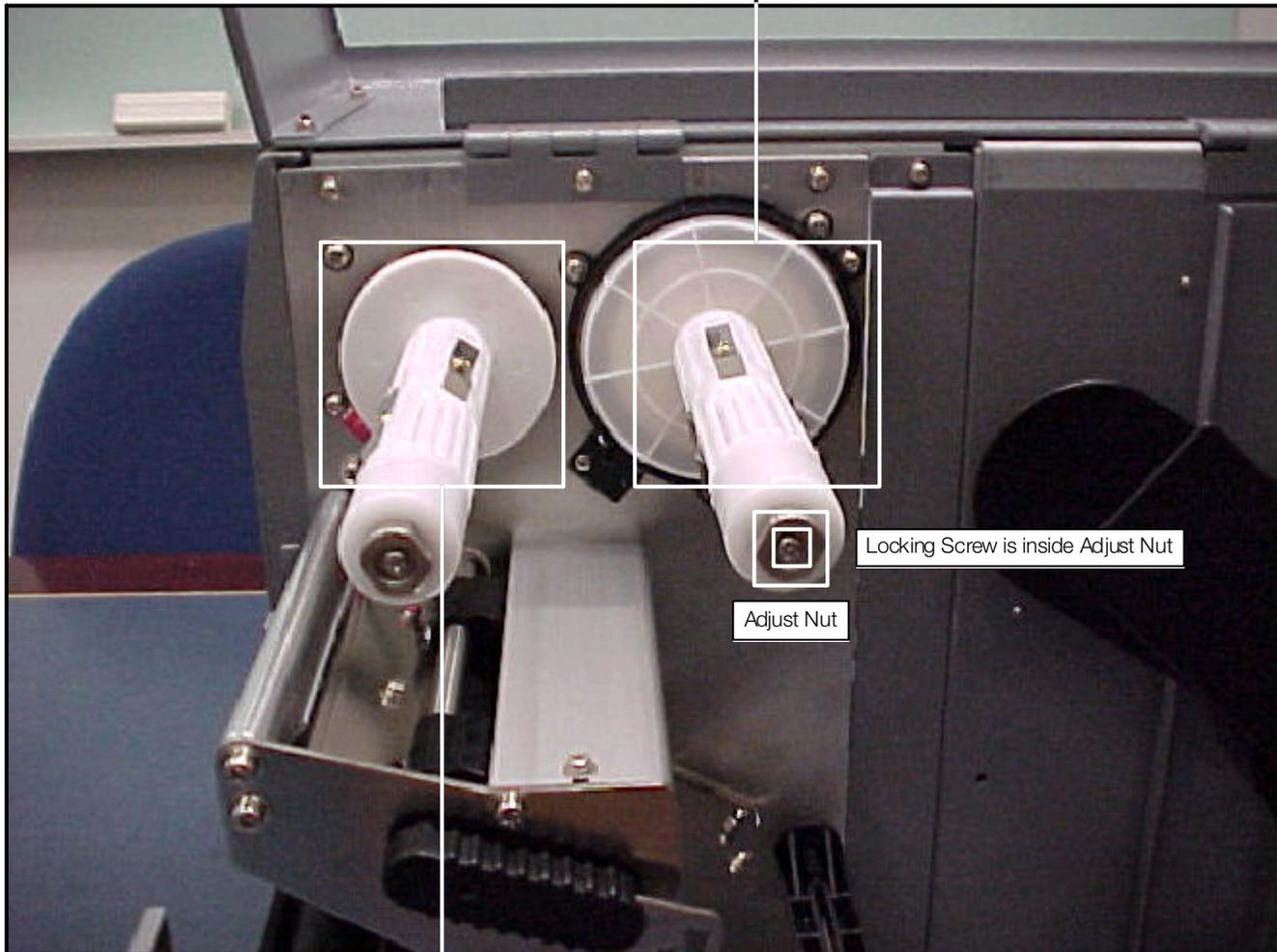


STEPS

- 1 Switch the printer OFF and disconnect the power cable.
- 2 Raise the top access door and open the front access door. Remove the ribbon and label stock if installed.
- 3 Attach string to an empty ribbon core and place on the Ribbon Spindle. Wind the string tightly around the ribbon core in single layer and in clockwise direction. Attach the end of the string to the tension gauge.
- 4 Gradually lift the tension gauge, pulling the string unwind it from the core. Once the spindle starts to move, the gauge should indicate 950 to 1050 grams of tension for ribbon rewind, and 550 to 650 grams of tension for ribbon unwind. Refer to pictures in next page.
- 5 To adjust the clutch, loosen the locking screw and move the adjust nut CW for more tension and CCW for less tension. Tighten the locking screw and repeat steps 3 and 4 until the correct tension is achieved.

Ribbon Clutch Adjustment

Ribbon Unwind Clutch 550g-650g Unwind



Locking Screw is inside Adjust Nut

Adjust Nut

Ribbon Rewind Clutch 950g-1050g Rewind

Ribbon Clutch Adjustment continued

Minor Adjustment

Required equipment

10mm Open End Wrench

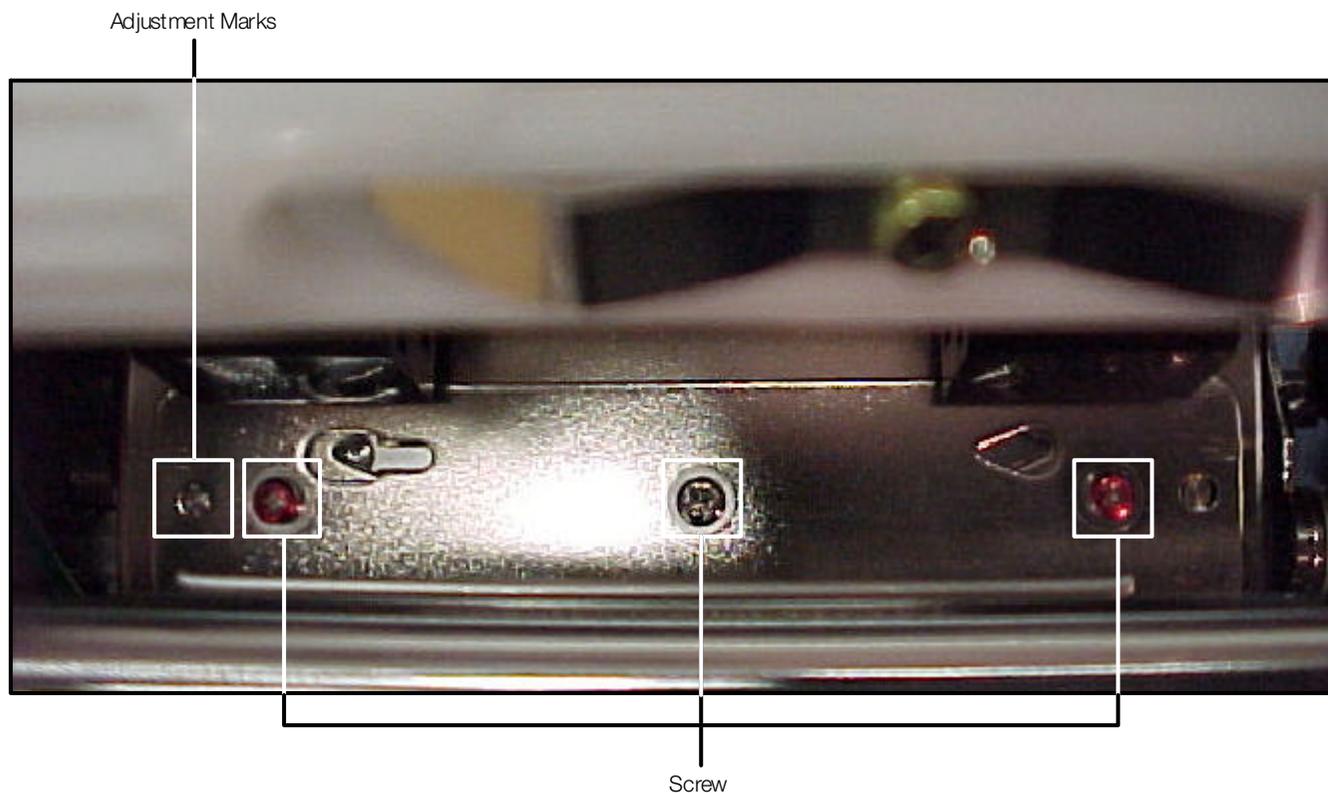
“+”Screw-driver

(JIS No.2 equivalent)

To adjust the print head alignment and consistent quality across label, perform the following steps:

STEPS

- 1 Loosen the screws on the head plate. Print user test pattern. Realign the print head by prying adjust plate forward or backward with flat blade screwdriver. Refer to illustrations and note adjustment marks.
- 2 Tighten the screws.



Print Head Position Alignment

Print Head Balance Adjustment

Major Adjustment

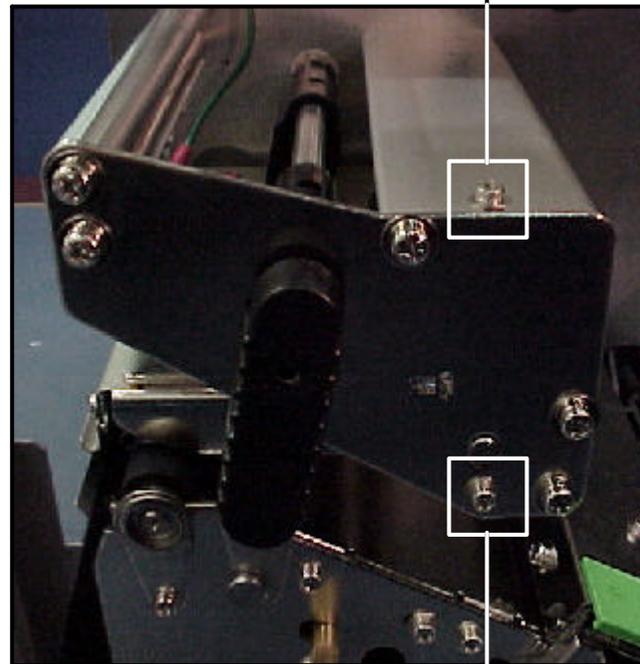
Required equipment

“+”Screw-driver
(JIS No.2 equivalent)

STEPS

- 1 Loosen the set screw.
- 2 Turn the adjust screw to make adjustment.
- 3 If the front side of label is too light, turn the screw in clockwise direction.
- 4 If the front side of label is too dark, turn the screw in counter-clockwise direction.

Turn the adjust screw in clockwise or in counter-clockwise direction depending on the situation



Loosen the set screw