

### What is a Sensor Adjust?

To ensure accurate feeding of labels, the TEC 5 Series printers attempt to detect the start and end of each label by shining a light through the media onto a sensor. Where there is a gap between the labels as they are mounted on the backing, more light is able to shine through and is registered by the printer as an increased voltage on the sensor.

### Why do I need to perform a Sensor Adjust?

Because different materials, or even the same materials from different manufacturing batches, may differ in opacity (the extent to which they permit light to pass through). A sensor adjust operation calibrates the printer to detect the light level (within a certain tolerance) that signifies the inter-label gap for the current media, so a change in media may require recalibration.

### When do I need to perform a Sensor Adjust?

Whenever your printer is stopping with the “PAPER JAM” error without there being any apparent obstruction in the media. This is most likely to occur immediately after loading new media but can occur mid-roll.

### How do I perform a Sensor Adjust?

By following the simple procedure outlined below.

Action	LCD Display
<b>CALIBRATION</b>	
1. Power OFF the printer.	
2. Open the print head, advance the media sufficiently to remove a label from the backing. <i>NB: If your label is shorter than six inches, remove two or more labels to create an area of at least six inches of exposed backing.</i>	
3. Wind back the media so that the leading end of the area of exposed backing created above is just protruding from the front of the printer.	
4. Close the print head.	
5. Press and hold BOTH the [FEED] and [PAUSE] whilst powering ON the printer (then release).	DIAGNOSTICS
6. Press [FEED] repeatedly until ...	SENSOR ADJUST
7. Press [PAUSE] repeatedly until ...	TRANS [?.?V]
8. Press and hold [RESTART] until an asterisk appears to the right of the display.	TRANS [?.?V]*
9. Check the Voltage: Voltage = 0.0V - see Note 1. Voltage < 1.5V - see Note 2. Voltage > 1.5V - continue.	
10. Press [PAUSE] until ...	SENSOR ADJUST
11. Power OFF the printer.	
12. Open the print head, advance the media until approximately half of the first label is protruding from the front of the printer.	
13. Power ON the printer.	ONLINE
14. Send at least two labels to print.	
<b>IF THE LABELS PRINT CORRECTLY (First label only may be out of line) THEN RETURN TO NORMAL OPERATION, ELSE CONTINUE AS FOLLOWS</b>	
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<b>THRESHHOLD SETTING</b>		
15.	Press the [PAUSE] button.	PAUSE
16.	Press and hold the [PAUSE] button for a count of five.	TRANSMISSIVE
17.	Press the [FEED] button (selects the reflective sensor).	REFLECTIVE
18.	Press the [FEED] button (reselects [refreshes] the transmissive sensor).	TRANSMISSIVE
19.	Press and hold the [PAUSE] button: The printer begins feeding labels - keep the [PAUSE] button depressed until at least four or five labels have fed from the printer then release. If the printer does not begin to feed labels, turn the printer off then begin again from step 5.	TRANSMISSIVE
20.	Press the [RESTART] button.	ONLINE
21.	Open the print head and adjust the media to the normal starting position.	
22.	Send at least two labels to print.	
23.	If the labels print correctly you have successfully completed the operation.	
<b><i>IF THE LABELS PRINT CORRECTLY (First label only may be out of line) THEN RETURN TO NORMAL OPERATION, ELSE CONTINUE AS FOLLOWS</i></b>		

**Note 1: Voltage = 0.0V**

The media you are using has a non-Opaque backing (not suitable for use with the transmissive sensor) **OR** the sensor unit has failed.

Did you properly observe steps 2 and 3 to ensure that only exposed backing is under the sensor head?

**NO** Begin again.

**YES** Remove the media completely and repeat steps 5 thru 9 then...

Voltage = 0.0V – the sensor unit has failed, call the Hibiscus helpline to arrange a repair.

Voltage > 0.0V & < 4.0 V – the sensor unit may be failing, contact Hibiscus for advice.

Voltage => 4.0 – the sensor unit is working efficiently, try alternate media.

**Note 2: Voltage < 1.5V**

The media you are using has a backing Opacity which is below the printer threshold for efficient operation **OR** the sensor unit is failing.

Did you properly observe steps 2 and 3 to ensure that only exposed backing is under the sensor head?

**NO** Begin again.

**YES** Remove the media completely and repeat steps 5 thru 9 then...

Voltage < 4.0 V – the sensor unit may be failing, contact Hibiscus for advice.

Voltage => 4.0 – the sensor unit is working efficiently. Complete the sensor adjust operation\*.

*\*But the labels may not feed efficiently with your current media.*

**Note 3: Printer Jam persists**

Are your labels pre-printed with any dark colours, particularly with black text and/or borders.

**YES** Pre-printed dark colours on the label can cause large fluctuations in the transmissive voltage as the label passes under the sensor causing it to trigger prematurely.

**Solution:** Ensure that the printer driver on your PC is set to the PREPRINTED TRANSMISSIVE method.

**NO** The printer may not have correctly set the calibration reading.

**Solution:** Repeat the sensor adjust operation. If the problem continues, consult Hibiscus PLC for further advice.