

5.6 Current Output Calibration

Introduction

Calibrate the recorder so that the output provides the required amount of current over the desired range. The recorder can provide an output current range of from 0 to 20 milliamperes and can be calibrated at 4 mA for 0% of output and 20 mA for 100% of output, or at any other values between 0 and 20 mA.

Equipment needed

You will need a standard shop type milliammeter, with whatever accuracy is required, capable of measuring 0 to 20 milliamps.

Calibrator connections

Refer to Figure 5-6 and wire the recorder according to the procedure given in Table 5-11.

Table 5-11 Set Up Wiring Procedure for Current Proportional Output

Step	Action
1	With the power off, door open, and the chart plate swung out; tag and disconnect field wiring from the terminals on terminal block TB5 on the printed circuit assembly for pen 1 or pen 2 as applicable (see Figure 5-6).
2	Observing polarity, connect a milliammeter's leads to TB5 terminals.
3	Close the chart plate; apply power and allow the recorder to warm up 15 minutes before you calibrate.

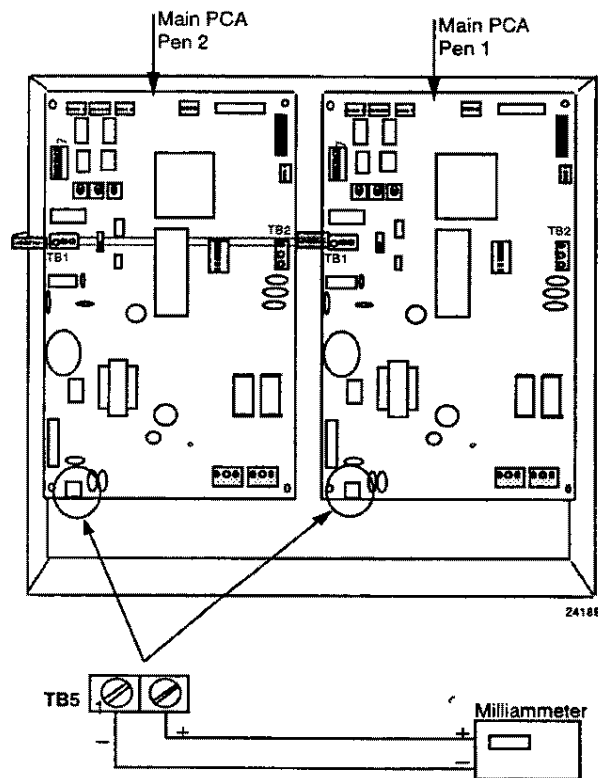


Figure 5-6 Test Equipment Connections for Calibrating Current Output





Procedure

The procedure for calibrating the current proportional output is listed in Table 5-12. Make sure "LOCK" in the Set Up group is set to "NONE."

For display recorders with 2 pens, be sure the correct input is - INP 1 or INP 2 indicator lit.

Press **FUNC** key to change input on display to agree with the control loop output to be calibrated.

Table 5-12 Procedure for Calibrating Current Output

Step	Description	Press	Action/Result
1	Enter Calibration Mode	SET UP until you see	Upper Display CAL Lower Display CURRENT If "CAL" doesn't appear or prompt access is denied, check the "LOCK" configuration.
2	Calibrate 0%	FUNC	You will see: Upper Display <input type="text"/> a value (approx. 365) Lower Display ZERO
		 or 	Until the desired 0% output is read on the milliammeter. Use the values shown below depending on the action of your recorder.
3	Calibrate 100%	FUNC	Stores the 0% value and, you will see: Upper Display <input type="text"/> a value (approx. 1800) Lower Display SPAN
		 or 	Until the desired 100% output is read on the milliammeter. Use the values shown below depending on the action of your recorder.
4	Exit Calibration Mode	FUNC	The recorder stores the span value. Repeat procedure for the other pen. Remove power from recorder and disconnect the milliammeter and connect output wiring.
		DISP or SET UP	To exit the calibration mode.