

Checking Mechanical Pen Alignment at Zero

Procedure

You can mechanically align the pens to the zero position on the chart. Follow the procedure in Table 7-20 to check the mechanical pen alignment at zero.

Table 7-20 Check the Mechanical Pen Alignment

Step	Press	Action/Result
1		Loosen the locking screw in the #1 pen arm. Move #1 pen arm down and loosen the locking screw in the #2 pen arm. ATTENTION If the recorder only has one pen, skip steps 2-5.
2	FUNC	To ensure "INP2" indicator is lit on the front display.
3	DISP and MAN AUTO together	To initiate the self test for pen #2.
4		Wait 20 seconds for pen 2 to initialize. Then, move the pen arm to set pen #2 tip on the zero (0) line of the chart \pm 0.5% (or a half a graduation). Tighten #2 pen arm locking screw.
5	DISP then FUNC	To return to normal operation for pen #2. To toggle to "INP1" on the front display.
6	DISP and MAN AUTO together	To initiate the self test for pen #1.
7		Wait 20 seconds for pen 1 to initialize. Then, move the pen arm to set pen #1 tip on the zero (0) line of the chart \pm 0.5% (or a half a graduation). Tighten #1 pen arm locking screw.
8	DISP	To return to normal operation for pen #1.

Checking the Electrical Pen Alignment at Span and Zero

Introduction

If the pen trace does not track at the correct chart increment with a known input value, you can use the following procedures to adjust the pen travel at zero and span (full scale) to compensate for the effects of humidity on the chart size.

If the recorder has 2 pens, be sure Input1 (INP1) is on the display. If it isn't on display, press **FUNC** key to toggle input for display.

Procedure

Follow the procedure in Table 7-21 to align the pens.

Table 7-21 Electrical Pen Alignment at Span and Zero
























Step	Press	Action/Result
1	SET UP	until you can see: Upper Display ALIN Lower Display PEN
2	FUNC	until you can see: Upper Display (value) (approximately 60 on the upper display) Lower Display PENO Wait until pen stops moving.
	 or 	to set pen #1 tip on zero line of chart $\pm 0.25\%$ (or quarter graduation).
3	FUNC	and you will see: Upper Display (value) (approximately 1200 more than the zero value on the upper display) Lower Display PEN 100 Wait until pen stops moving.
	 or 	to set pen #1 tip on full scale line of chart $\pm 0.25\%$ (or quarter graduation).

Table 7-21 continued on next page

Checking the Electrical Pen Alignment at Span and Zero, Continued

Procedure, continued

Table 7-21 Electrical Pen Alignment at Span and Zero, continued

Step	Press	Action/Result
4		to return to normal operation for pen #1. you will see: Upper Display  Lower Display  If the recorder has 2 pens go to step 5.
5		you will see: Upper Display  Lower Display 
6		until you see: Upper Display  Lower Display 
7		and you will see: Upper Display  Lower Display  wait until pen stops moving.
	 or 	to set pen #2 tip on zero line of chart $\pm 0.25\%$ (or quarter graduation).
8		and you will see: Upper Display  Lower Display  wait until pen stops moving.
	 or 	to set pen #2 tip on full scale line of chart $\pm 0.25\%$ (or quarter graduation).

Checking the Electrical Pen Alignment at Span and Zero, Continued

Procedure, continued

Table 7-21 Electrical Pen Alignment at Span and Zero, continued

Step	Press	Action/Result
9	<div data-bbox="654 415 753 499" style="border: 1px solid black; padding: 2px; text-align: center;">DISP</div>	to return to normal operation for pen #2. You will see: Upper Display <div data-bbox="797 512 943 548" style="border: 1px solid black; padding: 2px; text-align: center;">(value)</div> Lower Display <div data-bbox="797 583 943 619" style="border: 1px solid black; padding: 2px; text-align: center;">INP2</div>