9.0 HARDWARE TEST / TROUBLESHOOTING

If trouble should ever arise with the MERLIN GAGE, there are several methods that one can use to find and correct problems. The hardware test is one method. This mode will allow an operator to test the LED's, keypad, AC outputs, printer and serial ports and the probe. To use the MERLIN GAGE'S hardware test mode, follow these easy steps.

9.1**ENTERING TEST:** Turn off gage. Press and hold the "4" key while turning on the MERLIN GAGE. Release after a few seconds. The gage now displays the"HARDWARE TEST" screen.

HARDWARI	E TEST
Stest Pr test rs test ou	inter 232 tPuts
SORT ADJUST PROBE noise P-P temP	
93.3hr batt OK	rtc

9.2 **test printer:** To test the printer output, cable, and printer, move the cursor to this option and press the "ENT" key. Your device will show "AbCd0123456789".

9.3 **test rs232:** To test the RS232 (serial) output, cable, and terminal, move the cursor to this option and press the "ENT" key. Your device will show "AbCd0123456789".

9.4 **test outputs: NOTE: Be sure to disconnect the pitch motor from the pitch rod before preforming this test.** Rotate the SORT knob from limit to limit to select each output. Press the "ENT" key to activate the output. The output will stay activated for as long as you are holding the "ENT" key. Each time an output is activated, the proper LED will light and the name will be visible at the "**SORT=**" display.

9.5 **ZERO CHECK:** While watching the "**ADJUST=**" display, turn the ADJUST knob from limit to limit. The display value should go smoothly from about 0 to about 4095. At some point (if probe is plugged in) you should be able to manually center the "**PROBE=**" display value using the ADJUST knob. At this time, the "**P-P=**" should be between 98 and 102. The "**noise**" value should be very low, 10 or less. A value of 1 or 2 is not uncommon.

"P-P=" value represents the peak to peak drive on the oscillator board. It must function correctly for the probe touch detection to work properly. Touch the probe guard (the outer brass ring on the end of the probe). The "P-P=" should drop below 85. Using the ADJUST knob, set the "PROBE=" value to about 8100, then touch the probe tip. The value should go below -8100, and the "P-P=" should drop below 85.

"**temp=**" should stay 1.65v to 1.70v. This is the running voltage of the probe, and should not change.

9.6 **batt OK**: This represents the internal battery status.

If you get this far, it is probably not your gage. Call Moyer Process & Control at 260/495-2405 or your local Moyer representative for assistance.