

8.2 Maintenance Menu

Maintenance menu displays the current Firmware revision code and the Plunger count. This is useful in knowing the life cycle of a Teflon tip style syringe plunger. The count can be reset by using the Left/Right arrow keys. To exit the menu press the Hold/Stop key.

8.3 Diagnostics Menu



CAUTION: *Only trained personnel should operate the Cobra L/S whenever the Diagnostics menu is accessed. Damage to the syringe, sample vials and/or chromatography instrument could be severe if untrained personnel attempt to use this menu without a complete understanding of its purpose!*

This menu will allow the *trained* operator to move the Front/Back, Vertical, Plunger and Right/Left axis. Additionally, the motor movement parameters may be changed. These are the beginning and ending ramping and the final speed settings. **NOTE: If this menu has been accessed, the menu line "Enter To Test", will cause each axis to move until the Stop key is pressed!**

8.3.1 Relay Output Testing

Additional diagnostic information is available for relay testing. These are the GC/Data, Auxiliary and Spare Output relays and the Input signal data. This information is useful for determining if one of the output relays is not working. Relays maybe wired for normally open or normally closed, the closure is for .5 seconds. The default setting is in the N.O. mode.

From the Diagnostics menu, scroll, using the UP/Down arrow keys, to the relay desired for testing, press the enter key. The display will show the selected output, i.e....GC/DATA Start, Enter to test, Stop to exit.

To preform the test be certain the I/O cable is properly connected or a VOM meter is set to the correct position to test the output. Follow the instructions on the display.

8.3.2 Input Signal Test

This screen allows the GC ready signal to be tested. The normal state should be OFF, once an input signal is received, the OFF will toggle to ON. The screen line "Spare 7" is an indicator showing that the spare (these are signal line inputs for future use) signals are floating "high."

8.3.3 Motor Delay



CAUTION: *Only trained service personnel should operate the Cobra L/S whenever this Diagnostics menu is accessed. Damage to the syringe, sample vials and/or chromatography instrument could be severe if untrained personnel attempt to use this menu without a complete understanding of its purpose! This menu is intended for the service technician.*