

GENERAL TROUBLESHOOTING PRINCIPLES

To make troubleshooting as straight forward as possible you should disconnect as many options as possible to be sure that they are not causing the problem. This includes the following:

Step 1: If a PC or SOC is connected to the motor controller, ***disconnect it at the auxiliary port on the motor controller***. This eliminates possibilities of communications or other errors from the computer.

Step 2: Take the digital readout interfaces out of the operational loop using the following procedure:

- > Turn OFF the Servo II motor controller.
- > Turn OFF the digital readout.
- > Turn ON the Servo II motor controller.
- > Run a MCI (machine configuration initialization).

This makes it possible to cross connect axis motors without the DRO interfering.

The troubleshooting process should begin from a power OFF state. This usually eliminates unintentional "finger problems" or transient line noise and provides a baseline from which to repeat the problem.

Step 1: Turn OFF the Servo II motor controller.

Step 2: Wait 10 seconds.

Step 3: Turn ON the Servo II motor controller and determine where the failure occurs. The following is a list of possible failure points in the power-up sequence.

- 1) [SET] status light comes ON but fails to BLINK and no axis status lights come on or blink.
This indicates no communications between the pendant and any axis board.
- 2) [SET] status light BLINKS, but when [SET] key is pressed, no motors move.
This indicates high voltage power is not getting to the motor boards or that all motor board amplifiers are bad.
- 3) [SET] status light BLINKS, but when [SET] key is pressed, some motors initialize but one axis doesn't move, and cannot be selected on the pendant.
This indicates that the system was unable to initialize the motor for that axis. The motor, motor cable, or motor board for the failed axis is bad.
- 4) Motors all initialize but will not move except in RAPID.
This indicates that the [SELECTOR KNOB] is not calibrated correctly. Recalibrate it.
- 5) Motors all initialize but the [MANUAL] status light is BLINKING.
This indicates that the daily working axis travel limits are not set on the axis which is lit. Reset the limits, and press [MANUAL]. If it stops blinking, carefully check or reset your program Start Point and continue. If another axis light comes on, reset that axis limits and press [MANUAL].