Overview

This document describes the steps to be used to eliminate the external limit switch cables and circuitry as a cause of intermittent "_ axis position errors" or "_ axis full power w/o motion" errors that occur on one or more axes. It applies to the M15 models up to the M15-6.

Steps:

1. Power-up off the control
2. Remove the control from the mounting arm.
3. Remove the cables and external connections from the back of the control.
4. Remove the four screws along each side and six on the top of the control top cover.
5. Lift up the drive cover from the front by lifting first on the front of the cover and then pulling forward slightly. See Figure 1a.
6. Place the limit switch defeater switches in the ON position. See Figure 1b.
7. Replace the cover and the connections in back, without replacing the screws top cover.
8. Power up the control, release the E-stop and press the red Reset switch if you have one.
9. Run a program until errors happen again or you are satisfied they will not occur.
10. If the errors disappear, there is a fault occurring with the switches (possibly due to vibration) or at some connection point of the limit switch wiring. In this case, refer to the technical bulletin Isolating Limit Switch Failures on an M15. If you are still experiencing errors, the limit switches and wires are not the problem.

Figure 1a Lifting the control top to expose limit switch defeater switches.
Figure 1b (Exploded View) Defeating limit switches.