

## TB034 (Rev1) - Defeating Limits on an M15-5

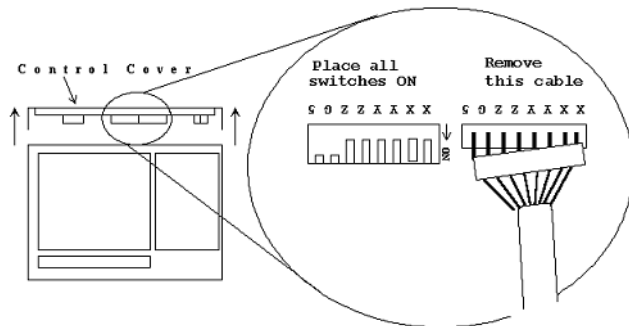
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### Overview

This document describes the steps to be used to eliminate the external limit switch cables and circuitry as a cause of intermittent "410\_ axis position errors" or "411\_ axis full power w/o motion" errors that occur on one or more axes. It applies to the CNC DRO and the M15 models up to the M15-5.

### Steps:

- Power-up the control and perform the homing procedures.
- Engage the E-Stop, which will remove power from the motors.
- Remove the control from the mounting arm
- Remove the four screws along each side and six on the top of the control top cover.
- Lift up the drive cover from the front. See Figure 1a.
- Remove the limit switch cable by pulling down on it. Let it hang there. See Figure 1b.
- Place the limit switch defeater switches in the ON position. Note that there are two switches that are already in the ON position. See Figure 1b.
- Let the top cover rest in place
- Release the E-stop and press the red Reset switch if you have one.
- Run a program until errors happen again or you are satisfied they will not occur.



**Figure 1a Figure 1b**

- 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.

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### Document History

Rev1 Created on **1999-09-07**