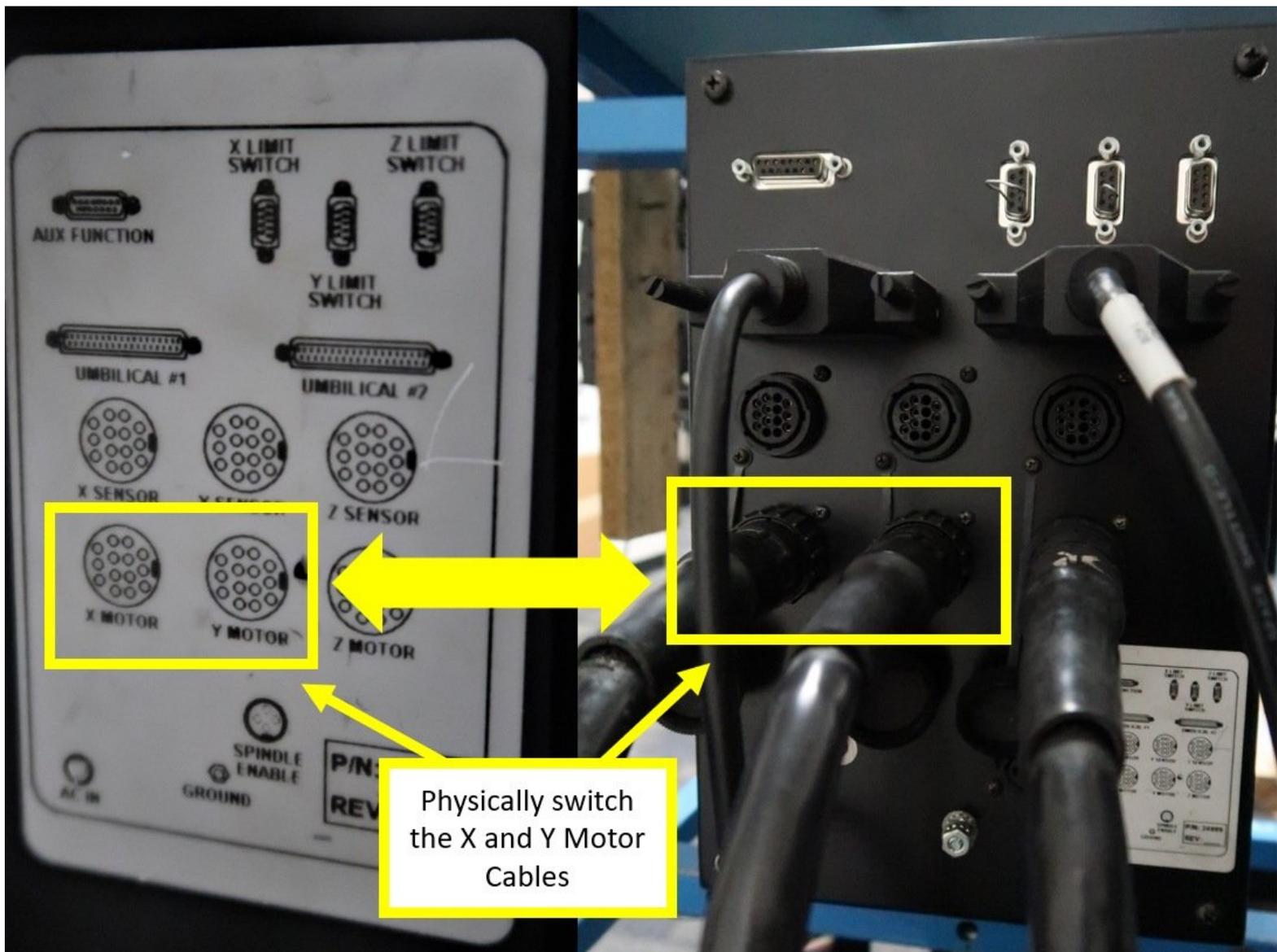




How to Swap Motor Ports on a TRAK K3 with SX Control

This guide details how to physically switch the X and Y motors as a troubleshooting step for fixing run away axis.

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INTRODUCTION

An effective way to troubleshoot a problem with a particular axis on a K3 mill is to swap parts from one axis to another to see if the problem moves. If the problem moves from one axis to another, then that particular component is faulty.

Regarding the issue of Run Away Axis on a K3 mill, swapping motor ports will allow you to verify if the issue is caused by failure within the motors or within the computer module itself.

Step 1 — Check Secondary Feedback Devices



- If the Knee Mill with the Run Away Axis issue contains secondary feedback devices such as the the glass scales and/or TRAK sensors, you must also take them into consideration as possible sources for Run Away Axis.
- Turn off these secondary feedback devices by running Service Codes 304 (which toggles the X sensor or glass scale on/off) and 305 (which toggles Y sensor or glass scale on/off).
- If the Run Away Axis no longer occurs when either the glass scales and/or sensors had been turned off, then these secondary devices are likely the sources of the problem.
- If the Run Away Axis continues to be an issue with these secondary feedback devices off, then proceed with the following step regarding physically switching the X and Y Motor Cables.

⚠ You must turn off the glass scales and/or TRAK sensors prior to switching the X and Y Motor Cables on the Cable Breakout Box!

Step 2 — Physically Switch the X and Y Motors



- Pinpoint the source of the Run Away Axis issue by swapping the problematic motor with a known good motor.
- ⚠ Turn off the power on the control before proceeding with the next steps.**
- For example, if the Run Away Axis issue occurs on the X-Axis, physically switch the X and Y motor cables on the Cable Breakout Box to pinpoint the source of the issue.
 - If the Run Away Axis issue moves to the Y-Axis as a result of the motor cables being switched, then the issue itself may be caused by a bad motor, and the motor must be replaced.
 - If the Run Away Axis issue stays within the X-Axis as a result of the motor cables being switched, then the issue itself may be caused by an error within the computer module, and the computer module itself may need to be replaced.
- i** Rarely do both the X and Y motor/servo systems fail at the same time and in the same way. So, if the problem occurs on both axes, its source is probably somewhere else.