

Limit Switch Setup / Replacement.

Equipment.

Basic Tools Only.

Purpose.

To replace and set limit switch, and establish machine hardware limits.

Tolerance.

± 0.010 " (0.25mm).

Method. (Replacement)

The limit switches, are proximity switches, located on each end of the slide, on the right hand side of the X axis, and the top of the Z axis.

1. Mark the approximate position of the old switch.
2. Remove the old limit switch. (Depending on the type of switch used, either the wiring for the switch will have to be chased back to the origin, or there is a plug on the back of the switch).
3. Fit the new switch in a similar position to the old switch, and set the depth of the switch to give 0.030" (0.75mm) clearance on its activating plate.
4. See setup instructions below.

Method. (Setup X axis both limits X+ and X-)

1. Adjust the limit switch to trip at a point 1/16" (1.5mm) from crash position.

Method. (Setup Z axis home limit Z+)

1. Adjust the home (Z+) limit switch to trip at a point when the front face of the spindle is 25/64" (10mm) sub-flush.

Method. (Setup Z axis limit Z-)

1. Move the Z axis to the Z- software limit, and press the emergency stop.
2. Manually move the Z axis 1mm past the software limit. Adjust the Z-limit switch to trip at this point.

Notes.

Note: The status of the limit switches may be tested from PMAC using the following M variables:

X+ M122, X- M121, Z+ M222, Z- M221

Use the PMAC watch window to monitor these.