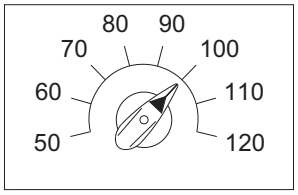
05-02 Solution

Control Switches

All three switches are override switches. In general, override switches are used by the CNC operator to adjust programmed spindle speeds and cutting feedrates, as well as the rapid motion rate (rapid traverse rate), to suit current machining conditions.

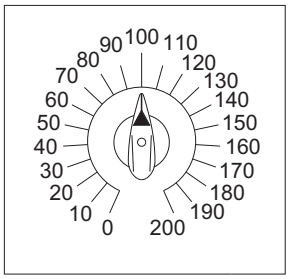


SPINDLE OVERRIDE %

☞ This is a SPINDLE OVERRIDE switch

It is used to increase the programmed spindle speed (r/min) up to 120%, or decrease the programmed spindle speed down to 50%.

In tapping or threading, the spindle override switch is ineffective.

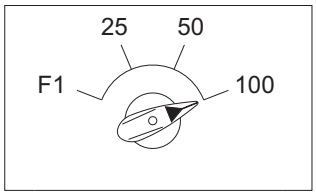


FEEDRATE %

☞ This is a FEEDRATE OVERRIDE switch

It is used to increase the programmed feedrate (ipm, mm/min, ipr, mm/rev) up to 200%, or decrease the programmed feedrate down to 0%. On some controls, there is no 0% but a certain minimum. Also, some controls only support 150% maximum.

In tapping or threading, the feedrate override switch is ineffective.



RAPID OVERRIDE %

☞ This is a RAPID TRAVERSE OVERRIDE switch

It can only be used to ***decrease*** the machine rapid motion rate, which is determined by the CNC machine manufacturer. The F1 setting can be set by parameter, if available. On some controls, there is a minimum preset override, instead of the F1.