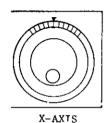
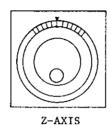
# 6.1.8 HANDLE DIALS FOR SIMULTANEOUS CONTROL OF UP TO THREE AXES<sup>†</sup>

When a manual pulse generator is connected for each axis, the tool can be manually moved along selected three of the four axes  $(X, Y, Z \text{ and } \alpha)$  simultaneously.

- 1. The tool move distance per graduation of the HANDLE dial for the manual pulse generator is determined by the MANUAL PULSE MULTIPLY switch (Table 6.1.7.1). This switch is effective on all the three axes.
- Set the mode select switch to HANDLE, and turn the HANDLE dials for the desired axes in the positive or negative direction.







MANUAL
PULSE MULTIPLY
X100
X10
X10
X10
X100000

Fig. 6.5

### 6.1.9 JOG PUSHBUTTONS

This pushbutton is used to feed the tool manually.

- With any of pushbuttons +X, -X, +Y, -Y, +Z, or -Z  $(+\alpha, -\alpha)^{\dagger}$  held in the RAPID mode, the axis can be moved rapidly until the button is released.
- These pushbuttons move the tool at the speed set by JOG FEEDRATE switch in the JOG mode.
- Each time the pushbutton is depressed in the STEP mode, the tool is moved by the value per step set by MANUAL PULSE MULTIPLY select switch. Maximum feedrate per step is determined by parameter # "6222."

NOTE: JOG pushbuttons work on all axes.

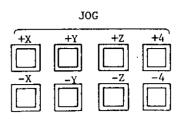


Fig. 6.6

#### 6.1.10 JOG FEEDRATE SWITCH

The JOG FEEDRATE switch is used to select the jog feedrate in the JOG mode. Up to 32 steps of feedrate can be specified. Jog feedrate depends on the machine tool. For definite values, refer to the machine tool builder's manual. See Table 6.1.10. The JOG feedrate can be preset by parameters #6233 to 6264.

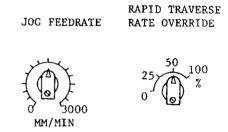


Fig. 6.7

## 6.1.11 RAPID TRAVERSE RATE OVERRIDE SWITCH

This switch is used to adjust the traverse rate by F0, 25, 50 and 100%. 100% Rate is the rapid traverse rate set by parameter #6280 to 6283. The switch is effective both in automatic operation including G00 command and in manual operation (RAPID mode). F0 is set by parameter #6231.

## 6.1.12 FEEDRATE OVERRIDE SWITCH

In the automatic operation mode (TAPE, MEM, MDI), this switch is used to adjust the feedrate by 10% from 0 to 200% of the programmed feedrate specified with an F function at whatever position the switch may be set. Feed during tapping by G74 and G33 follows F command. Where OVER-RIDE CANCEL switch is set on, the tool will be moved at the programmed feedrate by F code regardless of switch setting.