6.1.23 M-FUNCTION LOCK SWITCH (AUXILIARY FUNCTION LOCK)

· When the M-FUNCTION LOCK switch is on, it ignores the M, S, T, and B† commands. To check the tape data, the operation by the switch is used in combination with MACHINE LOCK function.

AUXILIARY
FUNCTION
LOCK

OFF

Fig. 6.13

· The following M codes are executed even if the switch is set on.

  · M00, M01, M02, M30
    Both its decoded signals and its BCD codes are sent out to the machine.
  · M90 to M99
    BCD code is not sent out.

· Turning on the M-FUNCTION LOCK switch during automatic operation becomes effective on the block after the next block of the current block.

6.1.24 MANUAL ABSOLUTE SWITCH

· When MANUAL ABSOLUTE SWITCH is on.

When automatic operation is restarted after interrupted by manual operation, the tool performs the rest of the command in the interrupted block from the end point of manual operation. The tool moves in parallel with the path specified by the program.

When the command of the next block is G00 or G01, the tool moves automatically to the target coordinate specified by the program. Then the operation is performed according to block of data.

When the command of the next block is G02 or G03 (circular interpolation), the interpolation is performed in parallel with programmed command. The tool automatically returns to the target coordinate when G00 or G01 is commanded after the circular interpolation.
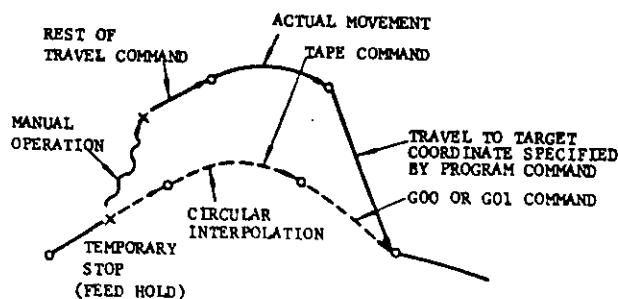

Fig. 6.14

· When MANUAL ABSOLUTE switch is off.

After the automatic operation is interrupted by manual operation, the coordinate system is shifted, and the tool performs the rest of the travel commands in parallel with programmed moves.
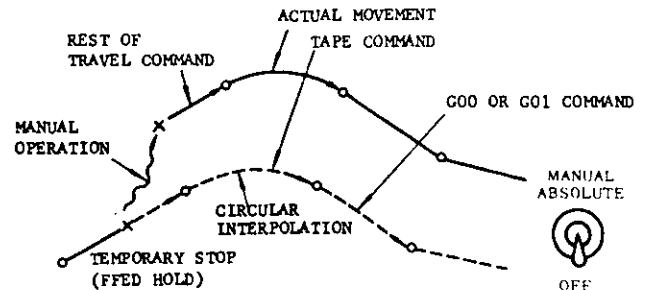

Fig. 6.15 Tool Movement with
MANUAL ABSOLUTE Switch Off

The parallel shift is reset by executing Reference Zero Return manually, automatically by G28, or operating the RESET key. The command value is forced to change to the current position. Thus the shift value is reset.

6.1.25 MIRROR IMAGE AXIS SELECTOR SWITCH

MIRROR IMAGE AXIS switch selects the axis whose motion is reversed for programmed operations.

To select the mirror image axis with this switch as well as setting function, set the data of setting # "6000$_{D0-D3}$" to 0.

Turn on the MIRROR IMAGE AXIS switch of the axis to which Mirror Image function is assigned. The motion of the selected mirror image axis is set up at M95 command is given until M94 is commanded. For details, see 2.8.5.

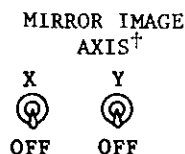NOTE: During the M95 (Mirror Image ON) mode, never operate the MIRROR IMAGE AXIS switch.

MIRROR IMAGE
AXIS†

X   Y

OFF   OFF

Fig. 6.16