

6.2.5 PLAYBACK FUNCTION†

The current axis position during movement can be stored as command value in the part program. This function is permitted in the PLAYBACK mode when PLAYBACK switch is turned on in manual operation mode.

To turn on PLAYBACK mode, activate the PLAYBACK switch on the machine control station or set #6000 D5 at "1." Procedure for storing program in the PLAYBACK mode is as follows.

- (1) Set the control in the manual operation mode (RAPID, JOG, STEP, or HANDLE).
- (2) Turn on the PLAYBACK switch.
- (3) Depress the PROG key of function keys. The CRT screen shows the contents of part program number 0 plus 4 digits and the current value at the bottom.
- (4) Register the new program number after address O. To register 01234, for example, key-in 0, 1, 2, 3, 4 and depress the WR key. The numbers are displayed as they are keyed-in. See Fig.

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PROG(PLAYBACK)      O0001 N0010
O0001;
N0001  G92 X140 Y100 Z30;
N0002  G00 S1200 T0202 M03;
N0003  G41;
N0004  X0 Z500;
N0005  G01 Z0 F20;
N0006  X2000;
N0007  Z-2000;
N0008  Y2000;
N0009  X3000 Y4000;
POS    X1234, 567 Y2345, 678
(UNIV) Z-2345, 789
                                LSK   RDY
  
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Fig. 6.29

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PROG(PLAYBACK)      O1234 N0010
O1234;
                                LSK   RDY

G00X1234, 567
  
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EDIT BUFFER REGISTER

Fig. 6.30

(5) Move the axis to the position which will be written as command.

(6) Depress the address key for the axis whose position is written.

(7) Depress the WR key.

The displayed current value is the command value of the selected address. Key-in the numerical data before depressing the WR key, and the total amount of keyed-in value plus current value will be the new command value.

NOTE: The current value in POSITION (UNIVERSAL) is displayed by depressing the PROG key in the PLAYBACK mode. It is the same display as that shown in POSITION(UNIVERSAL) by depressing the POS key.

(8) Write-in the value, except for axis, by a block of data in the same way as writing in the EDIT mode. (See 4.6 EDIT.)

(9) Depress the EOB key.

(10) Depress the WSRT key. A block of data is stored in the part program.

(11) Repeat steps (5) through (10) until the desired data is written.

(12) Key-in M02; or M30; at the end of the part program.

NOTES:

1. The part program stored in the PLAYBACK operation can be edited in both PLAYBACK and EDIT modes. Position data stored in the PLAYBACK operation can be edited (deletion, insertion, alteration).
2. The current value in POSITION(UNIVERSAL) can be written-in using the WR key.
3. Part programs made by PLAYBACK operation and the ones made by writing operation are the same. Maximum capacity of part program is the total of both programs.
4. When the parameter #6006 D5 (ten times the input) is "1," data written through the keyboard will be multiplied by ten.

Ex. At the current position X1.000, keying-in X, 1, 0, and depressing the WR key will store the value X1.1000.
5. MDI operation cannot be intervened during compensation C in the PLAYBACK mode. If the Cycle Start pushbutton is depressed in the PLAYBACK mode, message "PLAYBACK LOCK," will be displayed. With PLAYBACK switch turned off, MDI operation can function.