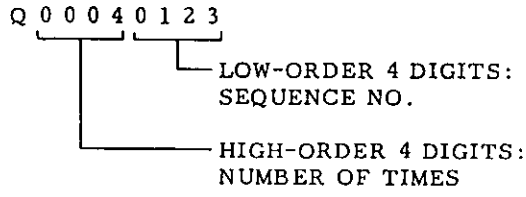

For example, the nth sequence number may be called in a subprogram for which L times of execution was specified. For the sequence number that appears first, the high-order 4 digits may be omitted. In this case, the leading zero of the sequence number may also be omitted.

(7) When the search is completed, the CRT screen automatically displays the program restart information.

(8) Turn off PROGRAM RESTART switch.

(9) Look at the displayed program restart information and specify the M, T, S, or B code required for the restart in MDI mode.

(10) Set the original operation mode (memory or tape mode).

(11) Depress CYCLE START button.

The tool moves to the machining restart position, axis by axis; that is, the 4th axis, X-axis, Y-axis, and Z-axis, in this order. Then, the automatic operation restarts from the head of the block (on which the feed-hold operation was performed) that follows the block of the designated sequence number.

CONSIDERATIONS AND REMARKS

(1) Before depressing CYCLE START button to restart the program execution, check to see if the axis-by-axis tool movement (the 4th axis, X-axis, Y-axis, and Z-axis, in this order) interferes with the work or any part of the machine. If the tool is found interfering, correct the tool position manually.

(2) In both types P and Q, the tool which is moving to the machining restart position axis-by-axis may be single-block-stopped after the completion of the movement for each axis. Even if the incremental shift amount is "0," the single-block stop is performed when SINGLE BLOCK switch is on. When the single-block stop is performed, however, the intervention of MDI operation is not allowed. Manual intervention is possible. But, if a manual intervention is performed on the axis which has already returned, it will not return to the machining restart position again.

(3) During the search operation for program restart, set the switches on the machine control station to the state before commanding program restart. Otherwise, the former position cannot be reached.

(4) When a feed-hold operation was performed during the search operation for program restart, or a reset operation was performed during or after the search operation, perform the operations all over again.

(5) When PROGRAM RESTART switch is on, the operation of CYCLE START button is ignored.

(6) Whether it is before or after machining, each manual operation should be performed with MANUAL ABSOLUTE switch on and MACHINE LOCK switch off.

(7) In any of the following situations, the tool cannot return to the correct position:

a. A manual operation was performed with MANUAL ABSOLUTE switch off.

b. A manual operation was performed with MACHINE LOCK switch on.

c. The search operation for program restart was performed with MACHINE LOCK switch on and then this switch was turned off.

d. A manual intervention was performed during the axis shift to the return position.

(8) In type P, any of the following operations performed in the time between the discontinuation of machining and the search operation for program restart will cause an error:

a. The setting of coordinate system was specified.

ERROR ··· 121 PRTN ERROR (G92)

b. The setting of work coordinate system was specified.

ERROR ··· 122 PRTN ERROR (G54 - G59)

c. The coordinate system was modified by operation ORG key.

ERROR ··· 123 PRTN ERROR (ORG)

In type P, the correct program restart is made possible only for the blocks that follow the one for which the coordinate-system setting was performed last before the discontinuation of machining.

(9) If the designated block is not found, an error will be caused.

ERROR ··· 120 PRTN ERROR (NOT FOUND)