c. The relationships between the tool offset numbers and the system variables are as shown below:

System Variable	Tool Offset No.
#2001	01
#2002	02
.	.
.	.
.	.
.	.
.	.
.	.
.	.
.	.
.	.
.	.
.	.
.	.
.	.
.	.
#2098	98
#2099	99

System Variable	Work Coordinate System Shift Amount	Spindle
#2500	External work coordinate system correction amount	X
#2501	G54	
.	.	
.	.	
.	.	
#2506	G59	
#2600	External work coordinate system correction amount	Y
#2601	G54	
.	.	
.	.	
.	.	
#2606	G59	
#2700	External work coordinate system correction amount	Z
#2701	G54	
.	.	
.	.	
.	.	
#2706	G59	
#2800	External work coordinate system correction amount	α
#2801	G54	
.	.	
.	.	
.	.	
#2806	G59	

(4) When one of the above system variables is specified to the left-hand of an operational expression, its value can be changed.

Sample Programs

a. #116 = #2016 ;

The contents of tool offset number 16 are substituted for common variable #116.

b. #2506 = #4 ;

The work coordinate system shift amount of G59 X-axis is erased and the contents of local variable #4 are set.

D. Alarm Message Display (#3000)

When a condition to be alarmed occurs in a user macro program, system variable #3000 may be specified to put the machine in the alarm state.

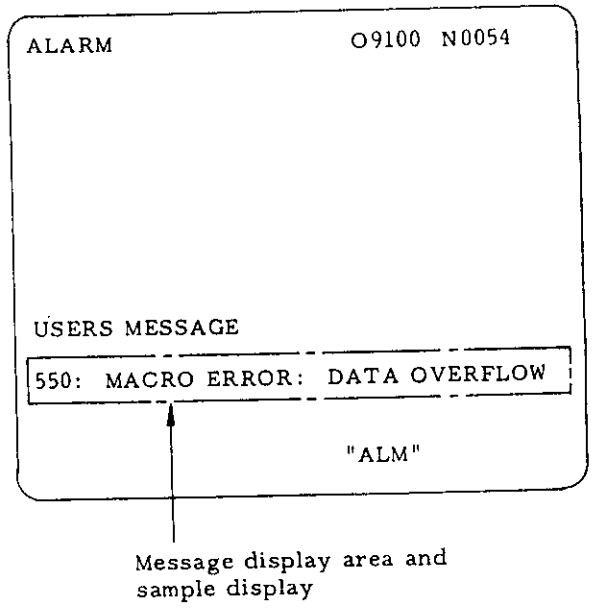
#3000 = n (<alarm meassage>);

Using this command, specify the alarm message (less than 32 characters) enclosed by 3-digit alarm number n and control-in and control-out. The alarm number should be three digits and be the one that is not used by the machine.

When this #3000 command is executed, "ALM" or "A/B" is displayed on the bottom of CRT screen regardless of the mode and function. Its message can be seen by the following operation:

a. Press ALM function key.

The alarm number and message are displayed on the bottom of CRT screen.



Message display area and sample display