5-5　　USER PARAMETER No. 2
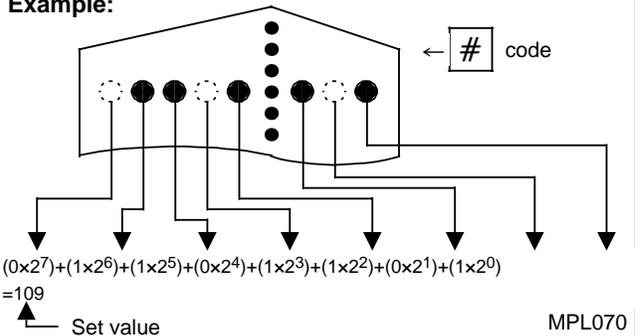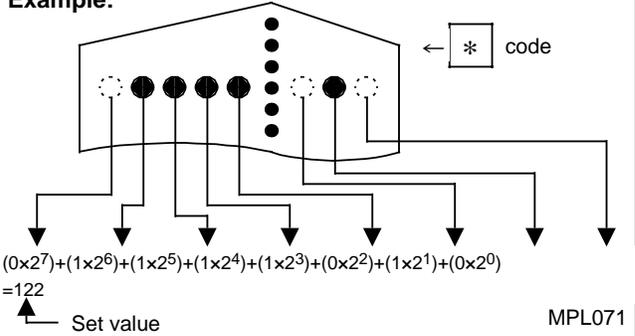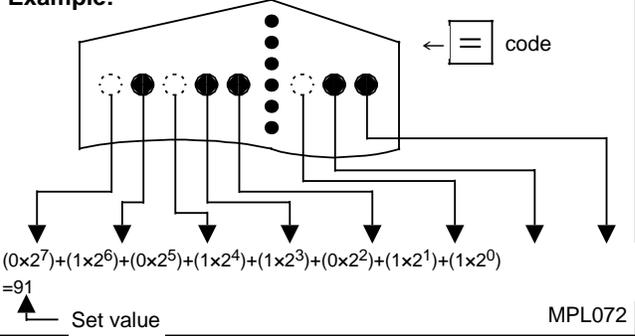
Classification	USER		Display title	USER PARAMETER NO. 2

Address	Name		Program type	Description
	Unit	Setting range	Conditions	
G1	CMT baud rate		M · E	CMT baud rate (Parameter for RS-232C interface initialization)<table><tr><td>Setting</td><td>Baud rate</td></tr><tr><td>0</td><td>19200</td></tr><tr><td>1</td><td>9600</td></tr><tr><td>2</td><td>4800</td></tr><tr><td>3</td><td>2400</td></tr><tr><td>4</td><td>1200</td></tr><tr><td>5</td><td>600</td></tr><tr><td>6</td><td>300</td></tr><tr><td>7</td><td>110</td></tr></table>
	–	0　7	At I/O startup	
G2 G8				Invalid
G9	–		M · E	`7 6 5 4 3 2 1 0` Forced loading of tool data (Common to CMT and DNC) **0:** When loading conditions are not in agreement, forced loading is not performed. **1:** When loading conditions are not in agreement, forced loading is performed. Superscription of program data (Common to CMT and PTP) **0:** When receiving a program of the same work number, an alarm shall be given. **1:** When receiving a program of the same work number, the superscription shall be made. (I/O superscription)
	Bit	Binary eight digits	At I/O startup	
G10	Printer baud rate		M · E	Printer baud rate (Parameter for RS-232C interface initialization)<table><tr><td>Setting</td><td>Baud rate</td></tr><tr><td>0</td><td>19200</td></tr><tr><td>1</td><td>9600</td></tr><tr><td>2</td><td>4800</td></tr><tr><td>3</td><td>2400</td></tr><tr><td>4</td><td>1200</td></tr><tr><td>5</td><td>600</td></tr><tr><td>6</td><td>300</td></tr><tr><td>7</td><td>110</td></tr></table>
	–	0　7	At I/O startup	

Classification	USER			Display title	USER PARAMETER NO. 2

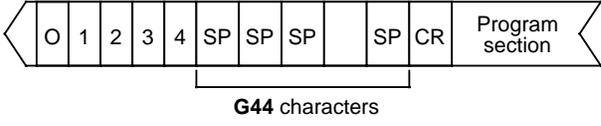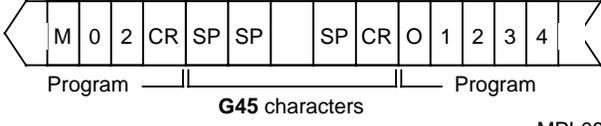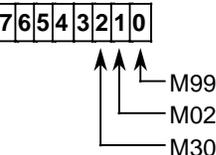| Address	Name		Program type	Description
	Unit	Setting range	Conditions	
G11	Number of printer paper feed lines		M · E	The number of lines through which printer paper is to be fed at the start and end of printing. MPL066
	1 line	0 255	At I/O startup	
G12	Total number of lines per page of printer paper		M · E	The maximum total number of lines per page that can be printed out on printer paper. This parameter becomes valid when printing a program with a length of more than one page. MPL067
	1 line	0 255	At I/O startup	
G13 G18				Invalid
G19	Baud rate for paper tape reader/puncher		E	Baud rate for paper tape reader/puncher (Parameter for RS-232C interface initialization) <table><tr><th>Setting</th><th>Baud rate</th></tr><tr><td>1</td><td>9600</td></tr><tr><td>2</td><td>4800</td></tr><tr><td>3</td><td>2400</td></tr><tr><td>4</td><td>1200</td></tr><tr><td>5</td><td>600</td></tr><tr><td>6</td><td>300</td></tr><tr><td>7</td><td>110</td></tr></table>
	–	0 7	At I/O startup	

For G19, the baud rate table:

Setting	Baud rate
1	9600
2	4800
3	2400
4	1200
5	600
6	300
7	110

Classification	USER			Display title	USER PARAMETER NO. 2

Address	Name		Program type	Description
	Unit	Setting range	Conditions	
G20	Number of stop bits for paper tape reader/puncher		E	Number of stop bits for paper tape reader/puncher (Parameter for RS-232C interface initialization) Setting / No. of stop bits: **1** → 1, **2** → 1.5, **3** → 2
	–	1 3	At I/O startup	
G21	Type of parity for paper tape reader/puncher		E	Type of parity for paper tape reader/puncher (Parameter for RS-232C interface initialization) Setting / Type of parity: **0** → Even, **1** → Odd **Note:** This parameter is valid only when **G22** is **1**.
	–	0, 1	At I/O startup	
G22	Parity check for paper tape reader/puncher		E	Parity check of paper tape reader/puncher (Parameter for RS-232C interface initialization) Setting / Parity check: **0** → Invalid, **1** → Valid **Note:** If this parameter is set to **1** (valid), then select whether even or odd parity is to be set using the **G21** parameter.
	–	0, 1	At I/O startup	
G23	Number of data bits for paper tape reader/puncher		E	Number of data bits for paper tape reader/puncher (Parameter for RS-232C interface initialization) Setting / No. of data bits: **0** → 5, **1** → 6, **2** → 7, **3** → 8
	–	0 3	At I/O startup	
G24	Fixed value		–	
	–	1	–	
G25	Fixed value		–	
	–	0	–	
G26	Fixed value		–	
	–	0	–	
G27	Output of CR during ISO code punching		E	This parameter is used to specify whether or not CR is to be placed in front of LF (separation of blocks) during ISO code punching. **0:** No placement of CR **1:** Placement of CR
	–	0, 1	At I/O startup	

Classification	USER			Display title	USER PARAMETER NO. 2

Address	Name		Program type	Description	
	Unit	Setting range	Conditions		
G28	Fixed value		–		
	–	0	–		
G29	Paper tape reader/puncher Handshaking method		E	This parameter is used to select the method of handshaking to control the state of data transfer between the NC system and tape reader/puncher.	
	–	1　3	At I/O startup	Setting / Description table: **1** Complies with device connection RTS/CTS. **2** No control **3** Complies with control code DC1 through DC4.	
G30	Paper tape reader/puncher DC code parity		E	This parameter is used to specify whether or not a parity bit is to be assigned to the DC code to be output. Setting / Parity / DC3 code **0** No assignment **1** Assignment **Note:** This parameter is valid only when **G29** is **3**.	
	–	0, 1	At I/O startup		
G31	"["code for paper tape reader/puncher for EIA		E	This parameter is used to set a hole-punching pattern for the character code "[" onto a paper tape reader/puncher using EIA. Set an eight-digit binary number in decimal form. **Example:**	
	–	0　255	At I/O startup	$(0{\times}2^7)+(1{\times}2^6)+(0{\times}2^5)+(0{\times}2^4)+(1{\times}2^3)+(1{\times}2^2)+(0{\times}2^1)+(0{\times}2^0)$ $=76$ ← Set value MPL068	
G32	"]"code for paper tape reader/puncher for EIA		E	This parameter is used to set a hole-punching pattern for the character code "]" onto a paper tape reader/puncher using EIA. Set an eight-digit binary number in decimal form. **Example:**	
	–	0　255	At I/O startup	$(0{\times}2^7)+(0{\times}2^6)+(0{\times}2^5)+(0{\times}2^4)+(1{\times}2^3)+(1{\times}2^2)+(0{\times}2^1)+(1{\times}2^0)$ $=13$ ← Set value MPL069	

| Classification | USER | | | Display title | USER PARAMETER NO. 2 |

| Address | Name | | Program type | Description |
	Unit	Setting range	Conditions	
G33	"#"code for paper tape reader/puncher for EIA		E	This parameter is used to set a hole-punching pattern for the character code "#" onto a paper tape reader/puncher using EIA. Set an eight-digit binary number in decimal form. **Example:** $(0\times2^7)+(1\times2^6)+(1\times2^5)+(0\times2^4)+(1\times2^3)+(1\times2^2)+(0\times2^1)+(1\times2^0)$ =109 Set value MPL070
	–	0 255	At I/O startup	
G34	"∗"code for paper tape reader/puncher for EIA		E	This parameter is used to set a hole-punching pattern for the character code "∗" onto a paper tape reader/puncher using EIA. Set an eight-digit binary number in decimal form. **Example:** $(0\times2^7)+(1\times2^6)+(1\times2^5)+(1\times2^4)+(1\times2^3)+(0\times2^2)+(1\times2^1)+(0\times2^0)$ =122 Set value MPL071
	–	0 255	At I/O startup	
G35	"="code for paper tape reader/puncher for EIA		E	This parameter is used to set a hole-punching pattern for the character code "=" onto a paper tape reader/puncher using EIA. Set an eight-digit binary number in decimal form. **Example:** $(0\times2^7)+(1\times2^6)+(0\times2^5)+(1\times2^4)+(1\times2^3)+(0\times2^2)+(1\times2^1)+(1\times2^0)$ =91 Set value MPL072
	–	0 255	At I/O startup	

Classification	USER		Display title	USER PARAMETER NO. 2

Address	Name		Program type	Description
	Unit	Setting range	Conditions	
G36	":"code for paper tape reader/puncher for EIA		E	This parameter is used to set a hole-punching pattern for the character code ":" onto a paper tape reader/puncher using EIA. Set an eight-digit binary number in decimal form. **Example:**
	–	0 255	At I/O startup	$(0\times2^7)+(1\times2^6)+(0\times2^5)+(0\times2^4)+(0\times2^3)+(1\times2^2)+(1\times2^1)+(0\times2^0)$ =70 — Set value MPL073
G37	"("code for paper tape reader/puncher for EIA		E	This parameter is used to set a hole-punching pattern for the character code "(" onto a paper tape reader/puncher using EIA. Set an eight-digit binary number in decimal form. **Example:**
	–	0 255	At I/O startup	$(0\times2^7)+(0\times2^6)+(0\times2^5)+(1\times2^4)+(1\times2^3)+(0\times2^2)+(1\times2^1)+(0\times2^0)$ =26 — Set value MPL074
G38	")"code for paper tape reader/puncher for EIA		E	This parameter is used to set a hole-punching pattern for the character code ")" onto a paper tape reader/puncher using EIA. Set an eight-digit binary number in decimal form. **Example:**
	–	0 255	At I/O startup	$(0\times2^7)+(1\times2^6)+(0\times2^5)+(0\times2^4)+(1\times2^3)+(0\times2^2)+(1\times2^1)+(0\times2^0)$ =74 — Set value MPL075

Classification	USER			Display title	USER PARAMETER NO. 2

Address	Name		Program type	Description
	Unit	Setting range	Conditions	
G39	Rewind code for paper tape reader		E	The paper-tape rewind command code that is output onto a tape reader. This code is output either when M30 is executed in tape run mode or when a paper-tape load or compare operation is performed with parameter **G48** set to **1**. Set an eight-digit binary number in decimal form. **Example:** Bit: 7 6 5 4 3 2 1 0 Code: ○ ○ ○ ● ● ● ● ○ $(0×2^7)+(0×2^6)+(0×2^5)+(1×2^4)+(1×2^3)+(1×2^2)+(1×2^1)+(0×2^0)$ =30 └ Set value MPL076
	–	0 255	At I/O startup	
G40	Feed section DC code output for paper tape puncher		E	Select whether or not DC2 and DC4 codes are to be output to the feed sections which will be generated at the beginning and end of paper tape punching. Feed | EOR | (Significant information) | EOR | Feed DC2 DC4 DC2 DC4 | Setting	Description
---	---
0	Neither DC2 nor DC4 is output.
1	Only DC2 is not output.
2	Only DC4 is not output.
3	Both DC2 and DC4 are output.	 **Note:** This parameter is valid only when **G29** is **2**. MPL077
	–	0 3	At I/O startup	
G41	Number of characters in feed section for paper tape puncher		E	The number of characters in NULL (feed) that are to be punched at the beginning and end of paper tape. **G41** characters **G41** characters Feed | EOR | (Significant information) | EOR | Feed Tape setting position End of punching MPL078
	1 character	0 65535	At I/O startup	
G42	Paper tape reader/puncher reply waiting time		E	The waiting time for replies from the paper tape reader or puncher during paper tape reading or punching. An alarm occurs if this time elapses following the final reply.
	0.1 sec.	0 65535	At I/O startup	
G43	Paper tape puncher EIA/ISO output selection and parity-V check		E	7 6 5 4 3 2 1 0 **0:** Paper tape punching in ISO code **1:** Paper tape punching in EIA code **0:** No parity-V check during paper tape reading **1:** Parity-V check during paper tape reading
	Bit	Binary eight digits	At I/O startup	

Address	Name		Program type	Description
	Unit	Setting range	Conditions	
G44	Number of characters in the space between O-number and program for paper tape puncher		E	The total number of space-characters that are punched out between O-number and program section. O | 1 | 2 | 3 | 4 | SP | SP | SP | | SP | CR | Program section **G44** characters MPL079
	1 character	0 65535	At I/O startup	
G45	Number of characters in the space between programs for paper tape puncher		E	The total number of space-characters that are punched out between programs when more than one program are punched onto paper tape. M | 0 | 2 | CR | SP | SP | | SP | CR | O | 1 | 2 | 3 | 4 Program — **G45** characters — Program MPL080
	1 character	0 65535	At I/O startup	
G46	Program-name tape input/output		M · E	Select whether program name tape input/output is to be made valid or invalid during paper tape reading/punching. **0:** Program name tape input/output is made invalid. **1:** Program name tape input/output is made valid.
	–	0, 1	At I/O startup	
G47	Program end code for paper tape reader O (or:) code		E	This parameter is used to specify whether or not character code O (or:) is to be set as the program end code when paper tape containing more than one program is read. **0:** Code O (or:) is not set as the program end code. **1:** Code O (or:) is set as the program end code.
	–	0, 1	At I/O startup	
G48	Presence/absence of paper tape reader rewind function		E	The parameter that is used to specify whether or not the paper tape reader has a rewind function. If **1** is set (rewind function present), then the code of parameter **G39** will be output onto the reader at the completion of a paper tape load or compare operation. **0:** Rewind function absent **1:** Rewind function present
	–	0, 1	At I/O startup	
G49	All-loading enable or disable of M2 all punched tape		E	The parameter used to select whether all-loading of the paper tape onto which the M2 program has been all-punched is to be enabled or to be disabled. **0:** All-loading disabled **1:** All-loading enabled
	–	0, 1	At I/O start	
G50	Program end code (M) for paper tape reader		E	The parameter that is used to specify whether or not M02, M30 and M99 are to be set as the program end codes for paper tape reading. 7 6 5 4 3 2 1 0 (**0:** Set as program end, **1:** Not set as program end) M99 / M02 / M30
	Bit	Binary eight digits	At I/O start	

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Classification	USER			Display title	USER PARAMETER NO. 2

Address	Name		Program type	Description
	Unit	Setting range	Conditions	
G51	Program end code of MAZATROL program DC control function		M	For paper tape reader/puncher, set a character string output to the program end of MAZATROL program by hexadecimals of ASCII code. For example, when a character string of END is output to the program end: |	G51	G52	G53
---	---	---	---
Character string	E	N	D
Set value	45	4E	44	 (MAZATROL program DC control)
G53	ASCII	Hexadecimal number	At I/O startup	
G54				Invalid
G55	Baud rate for DNC		M · E	Baud rate for DNC. (Parameter for RS-232C interface initialization) 	Setting	Baud rate
---	---
0	19200
1	9600
2	4800
3	2400
4	1200
5	600
6	300
7	110	
	–	0 7	At I/O startup	
G56	Number of stop bits in DNC		M · E	Number of stop bits in DNC. (Parameter for RS-232C interface initialization) 	Setting	No. of stop bits
---	---
1	1
2	1.5
3	2	
	–	1 3	At I/O startup	
G57	Type of parity for DNC		E	Type of parity for DNC. (Parameter for RS-232C interface initialization) 	Setting	Type of parity
---	---
0	Even
1	Odd	 **Note:** This parameter is valid only when **G58** is **1**.
	–	0, 1	At I/O startup	

Classification	USER			Display title	USER PARAMETER NO. 2

Address	Name		Program type	Description
	Unit	Setting range	Conditions	
G58	Parity check of DNC		M · E	Parity check of DNC. (Parameter for RS-232C interface initialization) 	Setting	Parity check	 | **0** | Invalid | | **1** | Valid |
	–	0, 1	At I/O startup	**Note:** If this parameter is set to **1** (valid), then select even or odd parity using the **G57** parameter.
G59	Number of data bits in DNC		M · E	Number of data bits in DNC. (Parameter for RS-232C interface initialization)
	–	0 3	At I/O startup		Setting	No. of data bits	 | **0** | 5 | | **1** | 6 | | **2** | 7 | | **3** | 8 |
G60 **G90**				Invalid
G91	Number of NC transmission retries during DNC file transfer		M · E	This parameter is used to set the number of times that the * code or TEXT is to be repeatedly transmitted to a host system in case that the @ code is not sent from the host system within the waiting time which has been set using the **G99** parameter. An alarm occurs if the transmission operation is repeated up to the number of times set with this parameter.
	Once	0 255	At I/O startup	

MPL081

Classification	USER			Display title	USER PARAMETER NO. 2

Address	Name		Program type	Description	
	Unit	Setting range	Conditions		
G92	Number of NC reception retries during DNC file transfer		**M · E**	This parameter is used to set the number of times that the @ code is to be repeatedly transmitted to a host system in the case that the EOT code or TEXT from the host system is not received within the waiting time which has been set using the **G100** parameter. An alarm occurs if the transmission operation is repeated up to the number of times set with this parameter. MPL082	
	Once	**0 255**	**At I/O startup**		
G93	Number of NC transmission/reception retries during DNC command message transfer		**M · E**	This parameter is used to set the number of times that transmission/reception of command messages is to be repeated in the case that it is not correctly performed. This parameter has almost the same meaning as that of parameters has almost the same meaning as that of parameters **G91** and **G92**, except that command messages are interchanged in the case of **G93** and files are interchanged in the case of **G91** and **G92**.	
	Once	**0 255**	**At I/O startup**		
G94 **G97**				Invalid	
G98	–		**M · E**		
	Bit	**Binary eight digits**	**At I/O startup**		

		Name	Program type	Description
Address				
	Unit	**Setting range**	**Conditions**	
G99	@ waiting time during DNC transmission		M · E	The NC waiting time from transmission of * or TEXT to reception of @ from the host system. **Note:** See the description of parameter **G91**.　　MPL083
	0.1 sec.	0　255	At I/O startup	
G100	* TEXT waiting time during DNC transmission		M · E	The NC waiting time from transmission of @ or reception of EOT to reception of * or TEXT from the host system. **Note:** See the description of parameter **G92**.　　MPL084
	0.1 sec.	0　255	At I/O startup	
G101	EOT waiting time during DNC transmission		M · E	The NC waiting time from transmission of @ to reception of EOT from the host system. **Note:** See the description of parameter **G92**.　　MPL085
	0.1 sec.	0　255	At I/O startup	

Classification	USER			Display title	USER PARAMETER NO. 2

Address	Name		Program type	Description
	Unit	Setting range	Conditions	
G102	NC stop time after reception of !		M · E	The NC stop time from reception of ! from the host system to transmission of *. MPL086 Code * is transmitted to the host system if the time that has been set with **G102** elapses following reception of !.
	0.1 sec.	1 255	At I/O startup	
G103	NC reset time after digital-out		M · E	The time from the moment the NC receives the digital-out command to the moment the NC internally resets this command.
	0.1 sec.	0 255	At I/O startup	
G104	NC stop time from reception		M · E	For NC transmission The NC stop time from reception of @ from the host system to transmission of EOT or TEXT. For NC reception The NC stop time from reception of * or TEXT from the host system to transmission of @. MPL087
	0.01 sec.	0 255	At I/O startup	
G105	DNC command reply message waiting time		M · E	The NC waiting time from transmission of command message EOT to reception of command reply message * from the host system. MPL088
	0.1 sec.	1 255	At I/O startup	

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Classification	USER			Display title	USER PARAMETER NO. 2

Address	Name		Program type	Description
	Unit	Setting range	Conditions	
G106	DNC machine number		M · E	The numbers to be assigned to various machines in order to manage on the host system the tool data, parameters etc. that are specific to the machines being used.
	–	0 255	At I/O startup	
G107	NC transmission stop time of DNC (From reception to transmission)		M · E	The NC stop time from reception of EOT from the host system to transmission of * of the next message. MPL089
	0.01 sec.	0 255	At I/O startup	
G108	NC transmission stop time of DNC (From transmission to transmission)		M · E	The NC stop time from transmission of EOT to the host system to transmission of * of the next message. MPL090
	0.01 sec.	0 255	At I/O startup	