AMANO

COMPUTERIZED TIME RECORDER

MJR-8000 SERIES

PROGRAM MANUAL

BEFORE PROGRAMMING

1. Unlock and remove cover case with case opening key.

2. Plug in battery connector (3P, blue and red wires) to CN-2, located at lower right, outside of frame, on the main Printed Circuit Board (JCU-1A). For full power reserve battery, (option: 200 imprints for IN/OUT or 4 hours display during power failure) plug in connector (4P, blue and red wires) to CN-11 on brown colored Printed Circuit Board (JPR-1A), located on right hand-side of frame, under keyboard.

3. Connect the power supply cord to AC 220/240 V outlet. The printer section will move back and forth several times, and display may show an error code 8-80. To reset this error code 8-80, slide the cover case back on and lock it, then put case opening key into function key slot, and turn it to function mode, then press [CL] key.

4. Clear the data which may be in memory area, follow the procedures below:

   Press keys [3] [2] [E] then [6] [4] [E]

5. Now, memory area is clear and ready for programming.

   Press keys [1] [0] [E]

   Then, start programming according to programming manual.

SPECIAL NOTES FOR PROGRAMMING

1. To clear the data.

   a. Calendar and clock data may be changed, but not cleared.

   b. To clear the data in memory, press the following keys:

   [3] [0] [E] then [8] [8] [E] . . . . . all employee's data cleared.

   [3] [1] [E] then [9] [9] [E] . . . . . all program data cleared.

   [3] [2] [E] then [6] [4] [E] . . . . . all employee's and program data cleared.

   c. To clear data on the display:

   – To clear simple key-in errors, before pressing [E] key (before entering to memory area), just press [CL] key.

   – To clear data on display that is in memory, press keys in sequence below:
   When there is only one step parameter within the program address number that needs to be cleared, [0] [E]
   When there are two or three step parameters within the program address number that needs to be cleared, [0] [#] [0] [#] [0] [E]

CLEARS UNWANTED
BELL TIME.

d. To change on the display:

When there is only one step parameter within the program address number:

[New data] [E]

When there are two or three step parameters within the program address number:

[New data] [#] [New data] [#] [New data] [E]

2. When data is cleared or new data is entered, be sure to press [I] key, before turning the function key switch to the "NORMAL" position, in order to enter all new data into main memory.

3. Programming of days (Monday through Sunday) will be in numeric code as follows:

[1] . . . Monday [2] . . . Tuesday [3] . . . Wednesday
[4] . . . Thursday [5] . . . Friday [6] . . . Saturday
[7] . . . Sunday [8] . . . Monday through Friday
[9] . . . Monday through Sunday

4. There are four programming areas in the MJR-8000 series, as follows:

Section 1: Clock and calendar programming area . . . . . [1] [0] [E]
This area covers clock and calendar program.

Section 2: Basic programming area . . . . . [2] [0] [E]
This area covers annual scheduled dates, such as summer time and national holidays.

Section 3: Signal programming area (option) . . . . . [2] [1] [E]
This area covers signal schedules in specified days.

Section 4: Work schedule programming area . . . . . [2] [2] [E]
This area covers all working schedules.

5. Programmed data can be printed out for verification on program check card.
To have the programmed data imprint, press [2] [3] [E].
Then insert program check card.
When the program check card returns, turn it around, and re-insert to continue.

MJR-8000 PROGRAM MANUAL AND CHART

SECTION 1: CLOCK AND CALENDAR PROGRAMMING AREA
TO CALL THE PROGRAM ADDRESS NUMBER – PRESS [1] [0] [E]

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
000 1	1 9 8 6 #	Calendar year (1986)	#
000 2	5 1 8 #	Month day Date (May 18th)	#
000 3	1 5 2 8 E	Hour and Minute (PM 3:28)	E

SECTION 2: BASIC PROGRAMMING AREA
TO CALL THE PROGRAM ADDRESS NUMBER – PRESS [2] [0] [E]

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
001 1	3 2 5 #	Month and Date Summer Time start on. (March 25th)	#
001 2	9 3 0 E	Month and Date Summer Time finish on. (September 30th)	E
002 1	0 E	Machine number-programmable for 0–9. Single machine use, enter 0. More than one machine, enter the first digit of the timecard number assigned to the machine. Timecard Nos: 000–099, enter 0 Timecard Nos: 100–199, enter 1 Timecard Nos: 200–299, enter 2	E
003 1	1 #	Imprint of hours for IN/OUT time. 0 : 0–23 Hours (military time) 1 : 1–12/1–12 AM/PM Hours (Underline for PM Hours)	#
003 2	0 #	Imprint of the processed time. 0 : Regular minute (00–59) 1 : 1/100th of hour (00–98)	#
003 3	0 E	Imprint of day of the week. 0: English days (MO ..... SA, SU) 1: French days (LU ..... SA, DI) 2: German days (MO ..... SA, SO) 3: Spanish days (LU ..... SA, DO) 4: Italian days (LU ..... SA, DO) 5: Day numbers (1 ..... 6, 7)	E

(Continued)

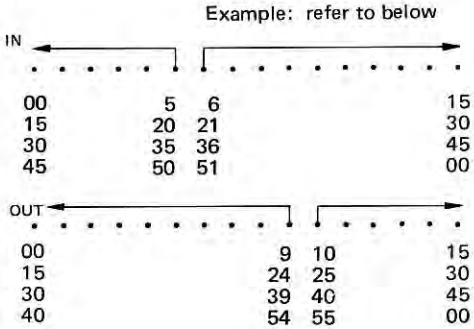
PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
004 1	1 0 1 E	Month and Date for public and National holidays (Jan. 1st)	E
005 1	E		E
006 1	E		E
007 1	E		E
008 1	E		E
009 1	E		E
010 1	E		E
011 1	E		E
012 1	E		E
013 1	E		E
014 1	E		E
015 1	E		E
016 1	E		E
017 1	E		E
018 1	E		E
019 1	E		E

IMPORTANT: Upon completion of Basic Programming Area, be sure to press [I] key to enter the data into main storage.

SECTION 3: SIGNAL PROGRAMMING AREA (OPTION)
TO CALL PROGRAM ADDRESS NUMBER – PRESS [2] [1] [E]

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
020 1	10E	Signal duration-programmable for maximum 15 seconds (Example 10 Sec.). Note: If the signal is not applicable, enter [0].	E
021 1 2	13# 1015E	1st step parameter: to be programmed for applicable days of week in code number. Day code numbers: [1]: Monday [2]: Tuesday [3]: Wednesday [4]: Thursday [5]: Friday [6]: Saturday [7]: Sunday [8]: Monday through Friday [9]: Monday through Sunday 2nd step parameter: to be programmed for signal time in 0–23 hours and minutes. Note: If the signal is applicable for Monday, Wednesday, and Friday, key in as follows: [1] [3] [5] [#], and be sure to check that the display shows the abbreviations of MON, WED, and FRI after pressing the number key. If the signal is applicable for Monday through Friday, enter just [8] [#]. IMPORTANT: Upon completion of Signal programming area, be sure to press [I] key to enter the data into main storage.	# E
022 1 2	8# 1200E		# E
023 1 2			# E
024 1 2			# E
025 1 2			# E
026 1 2			# E
027 1 2			# E
028 1 2			# E
029 1 2			# E
030 1 2			# E
031 1 2			# E
032 1 2			# E
033 1 2			# E
034 1 2			# E

SECTION 4: WORK SCHEDULE PROGRAMMING AREA.
TO CALL PROGRAM ADDRESS NUMBER – PRESS [2] [2] [E]

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
088 1	3 #	1st step parameter: Pay period (monthly payroll) [0] : weekly [1] : bi-weekly [2] : semi-monthly [3] : monthly	#
088 2	31 #	2nd step parameter: Pay ending day or date Weekly/bi-weekly : day No. Semi-monthly : enter 15 or other Monthly : enter 31 or other	#
088 3	7 E	3rd step parameter: Week ending day (sunday) In case of monthly, enter [7]. In case of weekly/bi-weekly, don't enter.	E
089 1	4000 #	1st step parameter: Maximum non-overtime hours per week. Hours exceeding this amount will be sorted as overtime category A.	#
089 2	4800 E	2nd step parameter: Maximum weekly hours for overtime category A. Hours exceeding this amount will be sorted as overtime category B. Example: The hours over 40 hours per week are sorted as overtime category A, and over 48 hours as category B. If overtime category B is not required enter [0] in 2nd step parameter. If no overtime classification is required, enter [0] is both 1st and 2nd step parameters.	E
090	15 #	1st step parameter: Time rounding: rounding unit for both IN/OUT time.	#
090 2	6 #	2nd step parameter: In-time rounding point.	#
090 3	10 E	3nd step parameter: Out-time rounding point. Example: refer to below  	E

(Continued)

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
091 1	125#	1st step parameter: Overtime wage rate: Overtime A (125%)	#
091 2	150#	2nd step parameter: Overtime wage rate: Overtime B (150%) 1st and 2nd parameters: Maximum rate is 250%	#
091 3	0E	3rd step parameter: 0: Without decimal (like BF, YEN, etc.) 1: With decimal (like DM, SF, etc.)	E
092 1	6#	1st and 2nd step parameters: Weekly non-working days, programmable for maximum two days (ex. sat. and sun.)	#
092 2	7#		#
092 3	0E	3rd step parameter: Pay schedule for hours worked on weekly non-working days or National holidays. Refer to chart below:	E
093 1	0#	1st step parameter: Day change time (see note A, page 17) 0: Open mode: day change time automatically 13 hours after last IN-punching, or at actual day-change-time (parameter 2). 1: Fixed mode: accumulation ends at actual day-change-time.	#
093 2	100E	2nd step parameter: Actual day change time.	E
094 1	300#	Automatic break time deduction after net worked hours for SHIFT I.	#
094 2	30E	Example: If net worked hours exceed 3:00 hours, 30 minutes are automatically deducted as a break.	E
095 1	500#		#
095 2	100E	Example: If total worked hours on one day are more than 6:30, a total of 1:30 will be deducted.	E
096 1	900#		#
096 2	45E		E

Data code	Weekly hol.	National hol.
0	OT. cat A	OT. cat B
1	OT. cat A	OT. cat A
2	OT. cat B	OT. cat B
3	Regular	Regular
4	Regular	OT. cat A
5	Regular	OT. cat B

(Continued)

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
097 1	#	Automatic break time deduction after net worked hours for SHIFT II.	#
097 2	E		E
098 1	#		#
098 2	E		E
099 1	#		#
099 2	E		E
100 1	#	Automatic break time deduction after net worked hours for SHIFT III.	#
100 2	E		E
101 1	#		#
101 2	E		E
102 1	#		#
102 2	E		E
103 1	#	Automatic break time deduction after net worked hours for SHIFT IV.	#
103 2	E		E
104 1	#		#
104 2	E		E
105 1	#		#
105 2	E		E
106 1	8 0 0 #	1st step parameter: Maximum non-overtime hours per day. Hours exceeding this amount will be sorted as overtime category A. For SHIFT I.	#
106 2	E	2nd step parameter: Maximum hours for overtime category A. Hours exceeding this amount will be sorted as overtime category B. For SHIFT I.	E

(Continued)

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
107 1	#	Same as 106, for SHIFT II.	#
107 2	E		E
108 1	#	Same as 106, for SHIFT III.	#
108 2	E		E
109 1	#	Same as 106, for SHIFT IV.	#
109 2	E		E
110 1	A #	Work schedule definition for SHIFT I. When programming the addresses 110–117 refer to the explanation of codes below.	#
110 2	X X X X #		#
110 3	Y Y Y Y E	1st step parameter: Code numbers (A) 0: Not applicable 1: First in-punch revision time zone 2: Out-punch revision time zone 3: In-punch revision time zone 4: First in-punch lock out time zone 5: Out-punch lock out time zone 6: In-punch lock out time zone 7: Fixed break time zone (unpaid) 8: Automatic break time allowance zone	E
111 1	#		#
111 2	#		#
111 3	E		E
112 1	#		#
112 2	#	2nd step parameter: Zone starting time (XXXX)	#
112 3	E	3rd step parameter: Zone ending time (YYYY)	E
113 1	#		#
113 2	#		#
113 3	E		E
114 1	#		#
114 2	#		#
114 3	E		E

(Continued)

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
115 1	#		#
115 2	#		#
115 3	E		E
116 1	#		#
116 2	#		#
116 3	E		E
117 1	#		#
117 2	#		#
117 3	E		E
120 1	A #	Work schedule definition for SHIFT II. When programming the addresses 120—127 refer to the explanation of codes below.	#
120 2	X X X X #		#
120 3	Y Y Y Y E	1st step parameter: Code numbers (A) 0: Not applicable 1: First in-punch revision time zone 2: Out-punch revision time zone 3: In-punch revision time zone 4: First in-punch lock out time zone 5: Out-punch lock out time zone 6: In-punch lock out time zone 7: Fixed break time zone (unpaid) 8: Automatic break time allowance zone	E
121 1	#		#
121 2	#		#
121 3	E		E
122 1	#		#
122 2	#	2nd step parameter: Zone starting time (XXXX)	#
122 3	E	3rd step parameter: Zone ending time (YYYY)	E
123 1	#		#
123 2	#		#
123 3	E		E

(Continued)

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
124 1	# # E		# # E
125 1	# # E		# # E
126 1	# # E		# # E
127 1	# # E		# # E
130 1	A #	Work schedule definition for SHIFT III. When programming the addresses 130–137 refer to the explanation of codes below. 1st step parameter: Code numbers (A) 0: Not applicable 1: First in-punch revision time zone 2: Out-punch revision time zone 3: In-punch revision time zone 4: First in-punch lock out time zone 5: Out-punch lock out time zone 6: In-punch lock out time zone 7: Fixed break time zone (unpaid) 8: Automatic break time allowance zone 2nd step parameter: Zone starting time (XXXX) 3rd step parameter: Zone ending time (YYYY)	#
130 2	X X X X #		#
130 3	Y Y Y Y E		E
131 1	#		#
131 2	#		#
131 3	E		E
132 1	#		#
132 2	#		#
132 3	E		E

(Continued)

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
133 1	#		#
133 2	#		#
133 3	E		E
134 1	#		#
134 2	#		#
134 3	E		E
135 1	#		#
135 2	#		#
135 3	E		E
136 1	#		#
136 2	#		#
136 3	E		E
137 1	#		#
137 2	#		#
137 3	E		E
140 1	A #	Work schedule definition for SHIFT IV. When programming the addresses 140–147 refer to the explanation of codes below.	#
140 2	X X X X #	1st step parameter:	#
140 3	Y Y Y Y E	Code numbers (A)	E
141 1	#	0: Not applicable	#
141 2	#	1: First in-punch revision time zone	#
141 3	E	2: Out-punch revision time zone	E
		3: In-punch revision time zone	
		4: First in-punch lock out time zone	
		5: Out-punch lock out time zone	
		6: In-punch lock out time zone	
		7: Fixed break time zone (unpaid)	
		8: Automatic break time allowance zone	

(Continued)

PROGRAM ADDRESS NO.	SAMPLE DATA	PROGRAM CODES AND EXAMPLES	PROGRAM DATA
142 1	#	2nd step parameter: Zone starting time (XXXX)	#
142 2	#	3rd step parameter: Zone ending time (YYYY)	#
142 3	E		E
143 1	#		#
143 2	#		#
143 3	E		E
144 1	#		#
144 2	#		#
144 3	E		E
145 1	#		#
145 2	#		#
145 3	E		E
146 1	#		#
146 2	#		#
146 3	E		E
147 1	#		#
147 2	#		#
147 3	E		E
150 1	1 2 3 4 E	Applicable days for SHIFT I. (Example: Monday through Thursday)	E
151 1	E	Applicable days for SHIFT II.	E
152 1	E	Applicable days for SHIFT III.	E
153 1	E	Applicable days for SHIFT IV.	E

IMPORTANT: Upon completion of Work schedule programming area, be sure to press [I] key to enter the data into main storage.

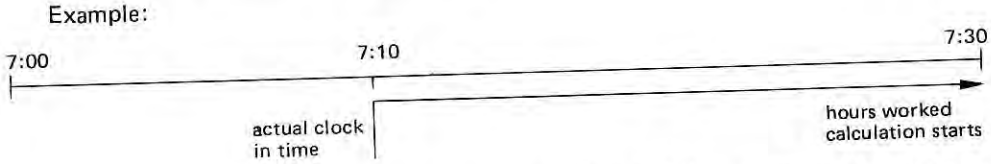
Special memo for programming:

1. Day change time cannot be programmed within a programmed time zone (lock out, revision and break zones.)
2. Beginning and ending time itself are considered as the effective time for that zone.
3. Two time zones of same category can not be overlapped.
4. The feature of lock out time zone will be in effect over the revision time zone.
5. The rounding of IN/OUT times will not be effected in the revision time zone.
6. The first in punch time zone over-riders the feature of fixed break time zone. The break time zone will be effective in IN/OUT revision time zones.

EXPLANATION OF CODE NUMBERS FOR WORK SCHEDULE DEFINITION

Code 1: Time zone for round-off of first in time.

Example:

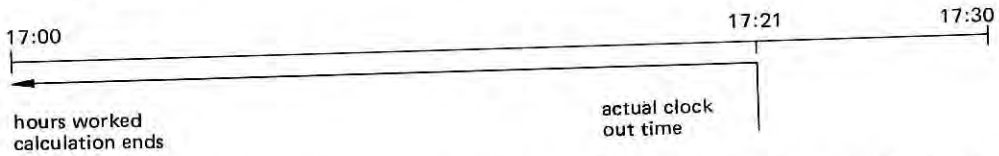


If employee clocks in between the hours of 7:00 and 7:30, calculation of worked hours does not begin until 7:30.

This code can be used to define shift starting time, because it only functions on first clock in time of each day. Subsequent clock in punches entered in code 1 time zones will not be rounded off.

Code 2: Time zone for round-off of out time.

Example:



If employee clocks out between the hours of 17:00 and 17:30 calculation of worked hours ends at 17:00.
This code applies to all clock out punches in code 2 time zones each day.

Code 3: Time zone for round-off of subsequent in time.

It has the same function as code 1, except that it may be used any number of times per day.

Code 4: Time zone for lock-out of first in time.

In this period, all first in punches will be rejected.

Code 5: Time zone for lock-out of out time.

In this period, all out punches will be rejected.

Code 6: Time zone for lock-out of subsequent in time.

In this period, all subsequent in punches will be rejected.

Code 7: Unpaid break time zone.

Deducts fixed period of time from hours worked. Employee need not punch in and out for this break.
If employee works during code 7 time zone, the amount of that zone is deducted regardless of number of hours worked, or starting/ending time of shift.

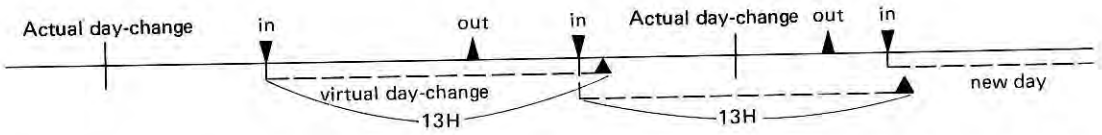
Code 8: Automatic break time allowance zone. (see note B, page 18)

Programming this zone enables the employee the clock in and out when using automatic break time deduction. (see program addresses No. 94 upto 105)
Using this zone will automatically correct the break time he took during the day, as long as the maximum allowed break time (programmed in program addresses No. 94—105) is not exceeded.
When the number of breaks he may take is unlimited, program the code 8 zone from day-change time to day-change time.

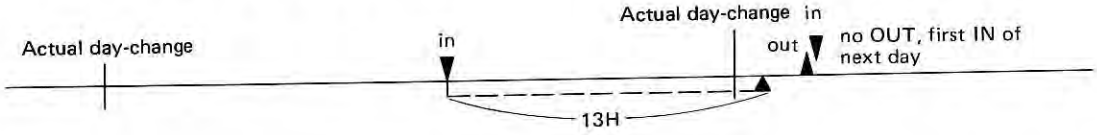
NEW OPEN DAY-CHANGE SYSTEM (European version)

Address 93 1st step parameter: 0

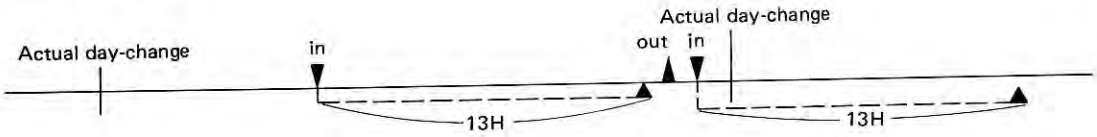
Day-change automatically after 13 hours, but temporarily (VIRTUAL).
Actual day-change programmable in parameter 2 (Program address No. 94).



Every next IN clocking will cancel the previous day-change period and a new virtual period will be made untill past actual day-change time.



Exceeding 13 hours after last IN and exceeding actual day-change time gives IN print instead of OUT print.
To avoid this, program actual day-change at an other time or let the employee punch for break before actual day-change.

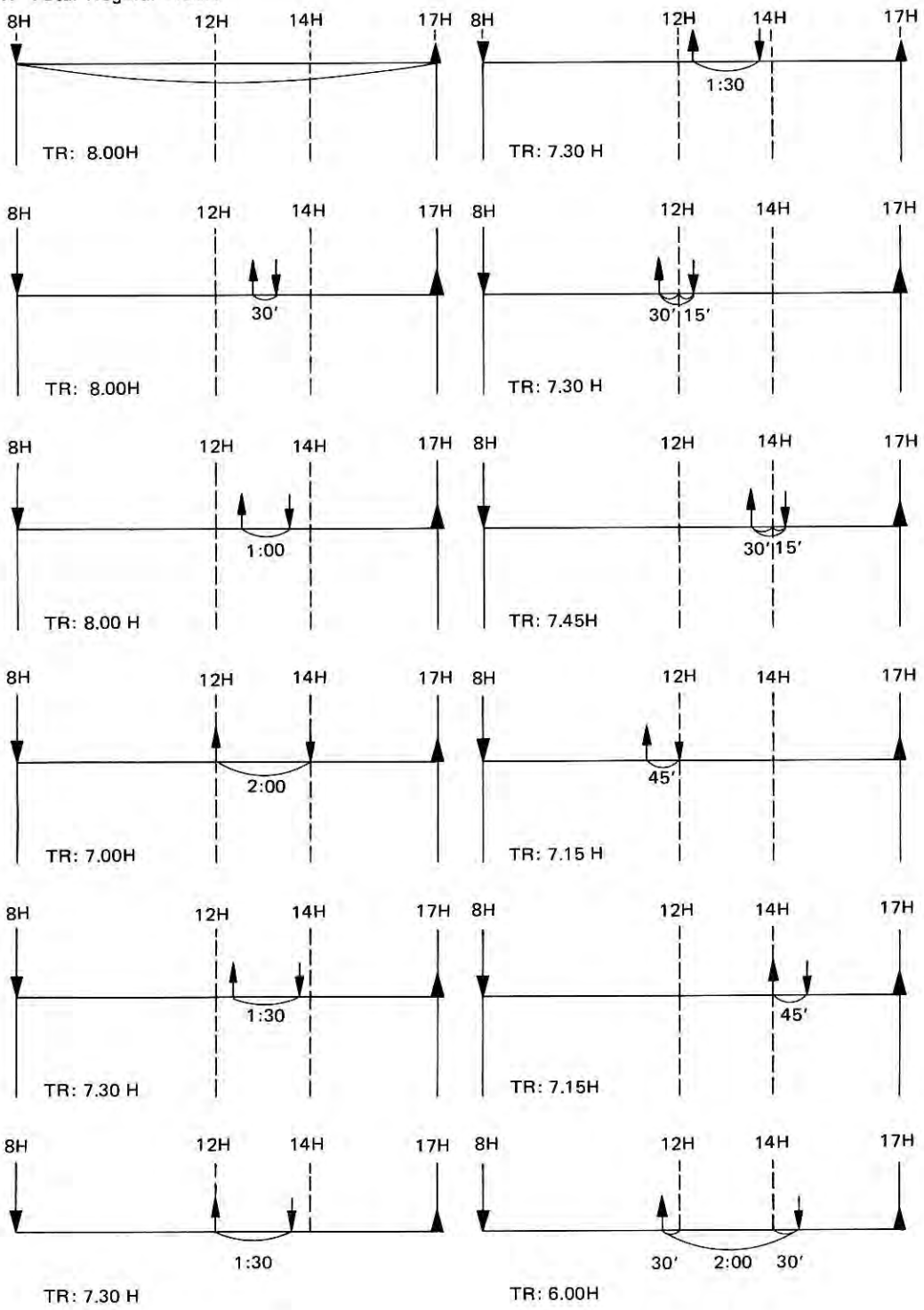


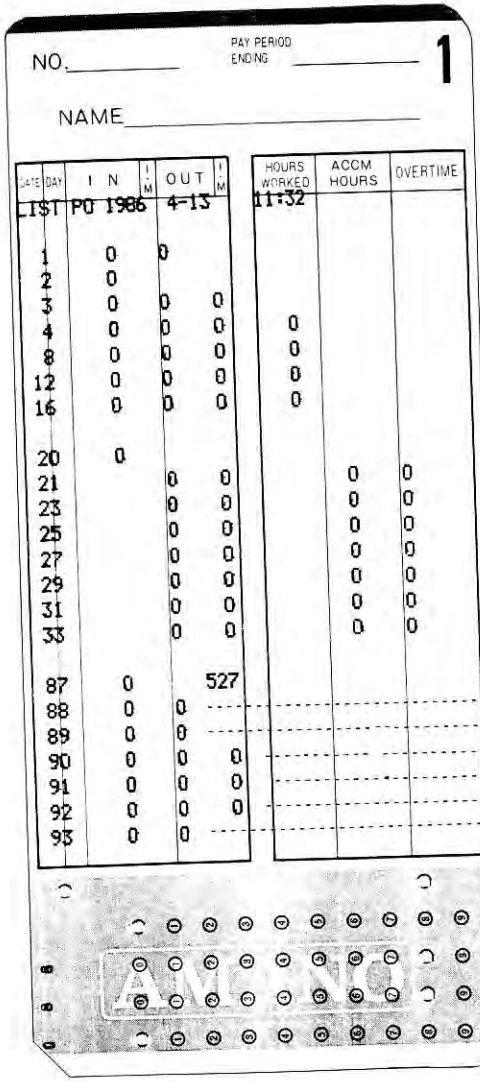
Exceeding 13 hours after last IN and not exceeding actual day-change time still gives the same day when coming back before actual day-change time.

AUTOMATIC BREAK TIME DEDUCTION EXAMPLES

Program: address No. 94–105 6.00–1.00
address No. 110–147 Code 8: 12.00 – 14.00

TR: Total Regular Hours





Previous addresses:

- 100
- 101
- 103
- 104
- 105
- 106

Auto-break deduction: 3 break-sets per shift (I-IV)

O.T. calculation per shift (I-IV)

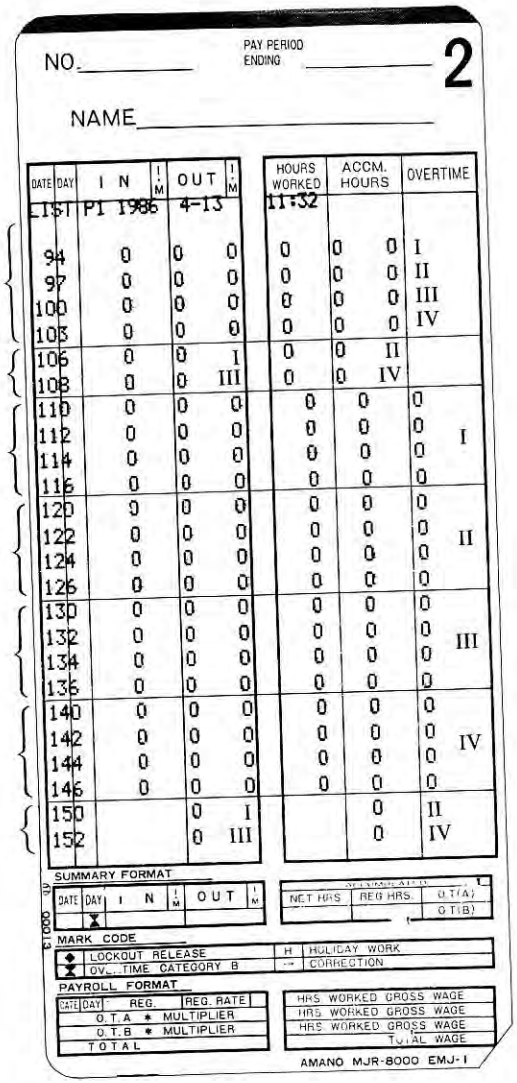
Workschedule for shift I

Workschedule for shift II

Workschedule for shift III

Workschedule for shift IV

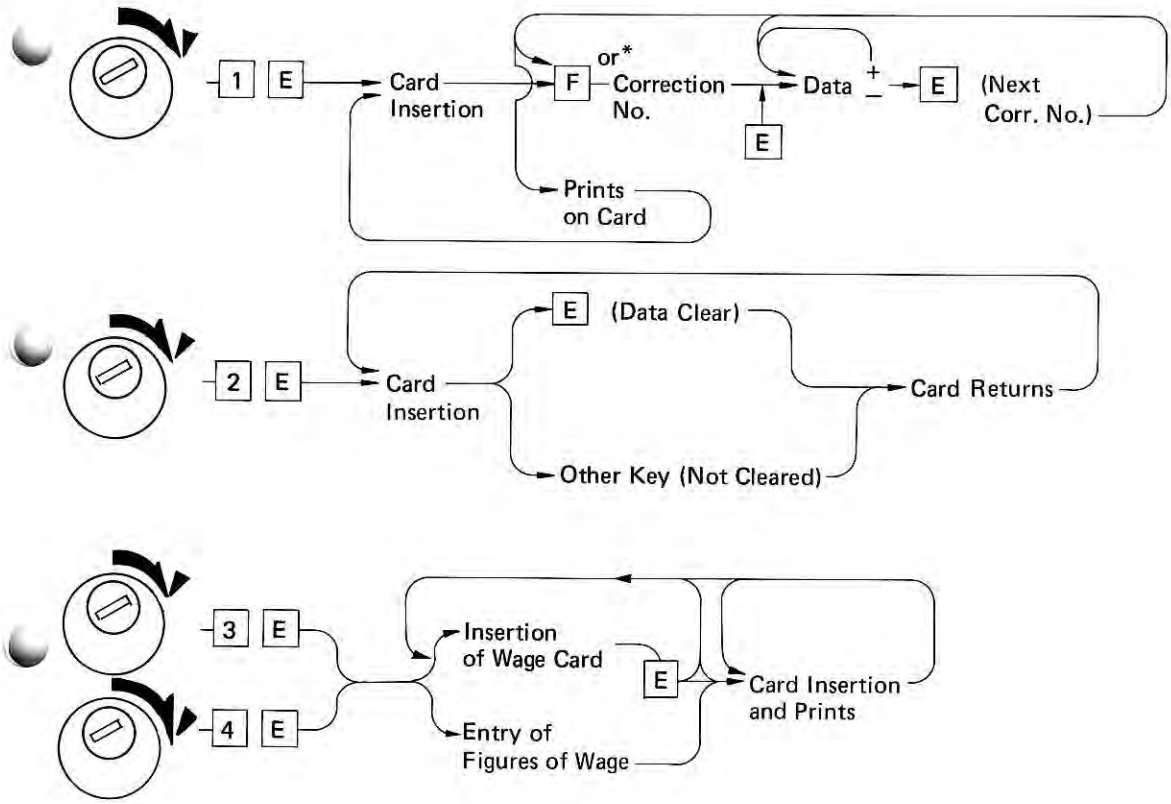
Days applicable per shift (I-IV)



OPERATIONAL INSTRUCTION – a –

Mode of Correction:

1 E	:	Correction of individual accumulation.
2 E	:	Clearance of individual data file.
3 E	:	Wage calculation after pay-period.
4 E	:	Wage calculation within pay-period.



Correction *
No. (See 1 E): 1: Daily Net Hours (It affects to Over-time.)
2: Weekly Net Hours (It affects to Over-time.)
3: Accumulated Regular Hours
4: Over Time A
5: Over Time B

OPERATIONAL INSTRUCTION – b –

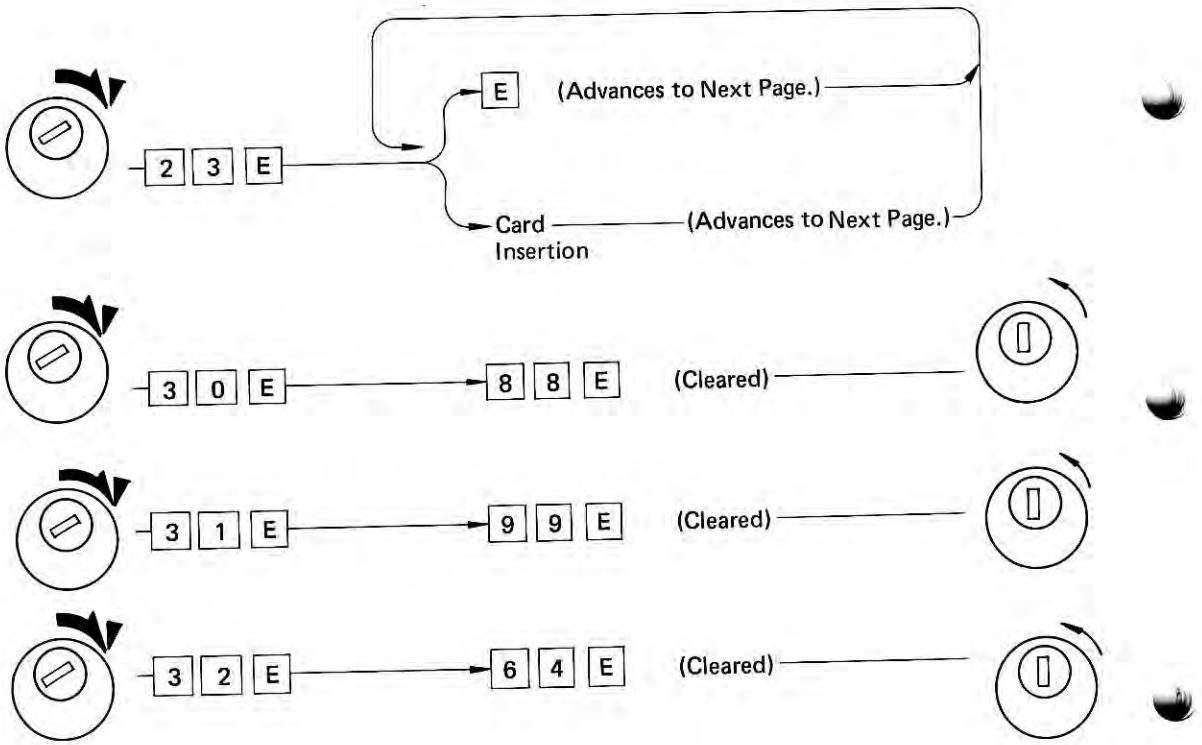
Mode of Correction:

[2] [3] [E] : Prints-out of programmed data.

[3] [0] [E] : Clearance of all individual data.

[3] [1] [E] : Clearance of all programmed data.

[3] [2] [E] : Clearance of all [3] [0] [E] and [3] [1] [E] .



AMANO Corporation
275 MAMEDO-CHO KOHOKU-KU YOKOHAMA JAPAN TEL (045)401-1441 FAX (045)401-0034

TOKAI AMANO CORPORATION
8123 Kiga Hosoe-cho, Inasa-gun, Shizuoka, Japan

AMANO AMERICA MANUFACTURING, INC.
3070 E. Ceèna Court, Anaheim, Calif. 92806. U.S.A.

AMANO AMERICA, INC.
80 Little Falls Road, Fairfield, N. J. 07006, U.S.A.

LOS ANGELES OFFICE
3071 E. Ceena Court, Anaheim, Calif. 92806, U.S.A.

CHICAGO OFFICE
650 Grand Avenue Unit 304 Elmhurst, ILL. 60126, U.S.A.

DALLAS OFFICE
2156 West Northwest, Highway, #314, Dallas, TX, 75220, U.S.A.

ATLANTA OFFICE
1676 Phoenix Parkway College Park, Ga 30349, U.S.A.

SEATTLE OFFICE
219 South West 41st Street, Bldg 10, Unit. G Renton, WA 98055, U.S.A.

TORONTO OFFICE
63 Galaxy Blvd., Unit #8, Rexdale. ONT, M9W 5P 1, Canada

AMANO EUROPE, S.A.
31 Vuurberg, 1920 Diegem, Belgium

C-248300
T72K2.5901

Printed in Japan