Simplex®

Centennial™ Recorder

Installation, Operating, and Programming Instructions

CEN-21-001 (574-256)
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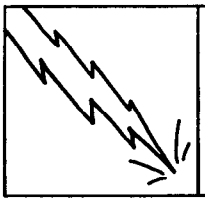
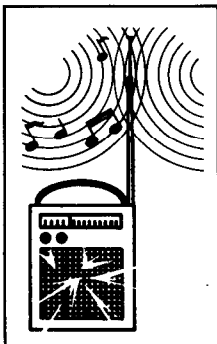


CAUTION

ELECTRICAL HAZARD

Disconnect electrical power when making any internal adjustments or repairs. Installation and servicing should be performed by qualified Simplex Representatives.



WARNING

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

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SECTION 1

HOW TO INSTALL THE CENTENNIAL™ RECORDER

1. Use the case key (found in the shipping packet) to unlock the recorder. Then remove its cover as shown (Figure 1).

2. Remove (but do not discard) screw A (Figure 2). Then lift the chassis from the backplate.

3. Remove and discard the tie wrap from the printhead.

4. Check to see that your time cards fit properly into the recorder.

   - If the cards fit, go to step 5. Otherwise, proceed as follows (Figure 3):

   Note: Although Figure 3 shows the power supply board partly removed, this need not be done. Screws B and C are accessible thru the slot in the power supply board and from under the board.

   A. Obtain a sample of the time cards that will be used.

   B. Loosen screws B and C (but no more than a half a turn).

   C. Using your left hand to move the bottom of guide D and your right hand to reposition the right end of the card receiver, move guide D as required to accommodate the card.

   D. Snug up (but do not overtighten) screws B and C.

5. Install the position indicator label (see page 19).

6. Mount the recorder's backplate (but DO NOT apply power to it).

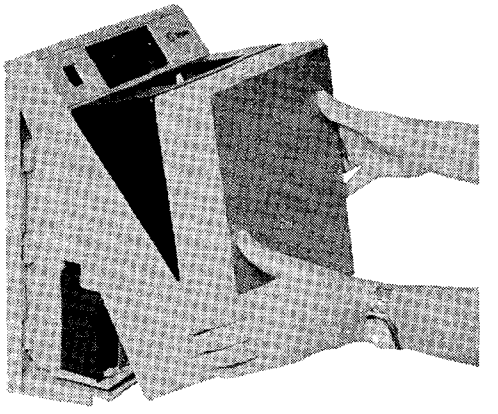


Figure 1

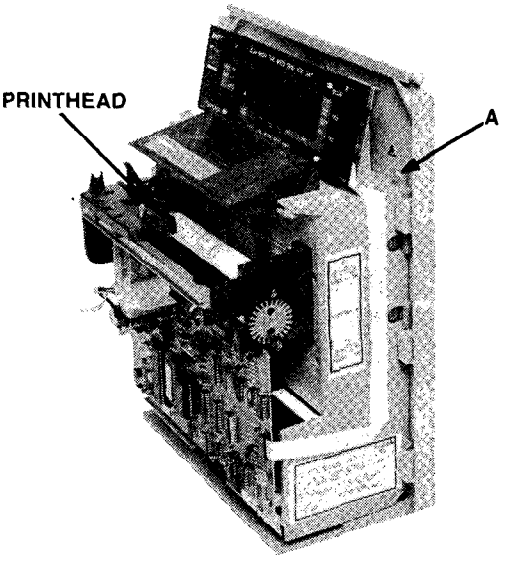


Figure 2

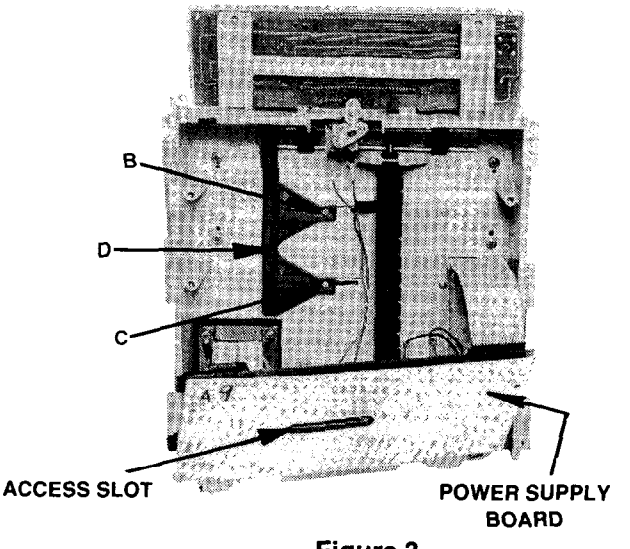


Figure 3

IMPORTANT

Centennial™ Recorders which control signals or form part of a time system must be wired in conformity with all applicable electrical codes.

- If hard wired, the recorder's power wires may not share conduit with signal or master clock option wiring.
- Whether plugged into an outlet or hard wired, the recorder's power wires must go through the ferrite sleeve *twice* (Figure 4).

Note: The "US" knockouts accommodate 1 in. conduit; the "METRIC" knockouts accommodate 25 mm conduit.

- To remove a knockout, hit it sharply with a hammer.

7. (If applicable) Connect the signal wiring to the backplate (see page 18).
8. (If applicable) Connect the master clock wiring to the backplate (see page 19).
9. Hang the chassis on the backplate and secure it in place with screw A (see Figure 2 again).
10. (If applicable) Install the battery option (shipped separately).
    - Battery installation instructions accompany the battery.
11. Apply power to the recorder.
12. Configure and then program the rec· :l· · (Sections 2 and 3).

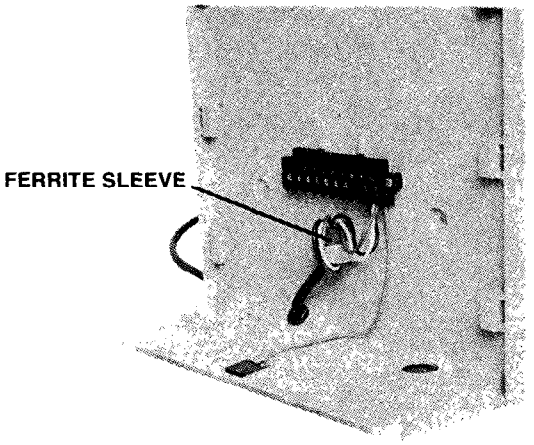


Figure 4

SECTION 2

HOW TO CONFIGURE THE CENTENNIAL™ RECORDER (Figure 5)

Set the configuration switches on switch package SW1. The switches and their functions are:

Switch Name	Function	Position OFF	Position ON
SW1-1	SHIFT key enable	Disabled	Enabled
SW1-2		See Master Clock (page 4)	
SW1-3	Master Clock		
SW1-4			
SW1-5	Operating Mode	Normal	Diagnostics
SW1-6	Timekeeping base	AC	DC
SW1-7	AC line frequency	60 Hz	50 Hz
SW1-8	Card format dimensions	Inches	Centimeters

IMPORTANT: The configuration switches are only "seen" upon power up or following reset. So, **ALWAYS RESET** the recorder by pressing SW2 after changing the position of any configuration switch.

Description of Configuration Switch Functions

SHIFT Key Enable: When switch SW1-1 is in its ON position, the printhead shifts to the next column whenever someone presses the SHIFT key; when SW1-1 is in its OFF position, the SHIFT key is disabled.

Exception: If the printhead is already in its extreme right-hand position, pressing an enabled SHIFT key causes the printhead to shift to its extreme left-hand position (see Note 1 on page 17).

IMPORTANT: The SHIFT key on a recorder programmed for semi-automatic operation (see note 3) **must always** be enabled.

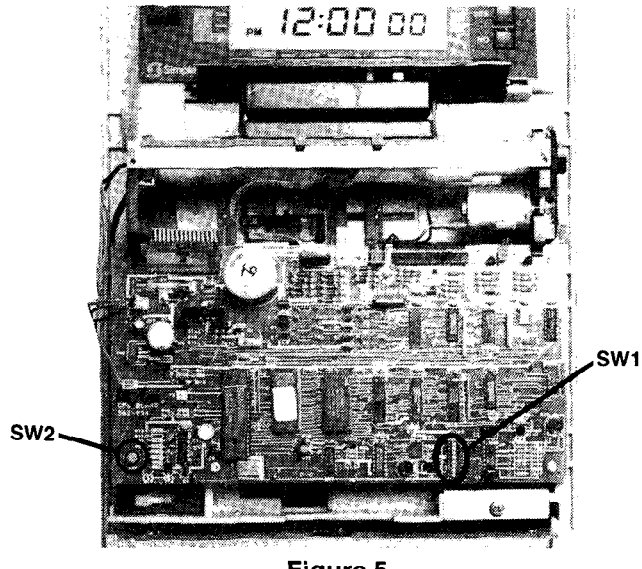


Figure 5

- The printhead of a recorder programmed for semi-automatic operation stays where shifted until shifted again; the printhead of a recorder programmed for automatic operation only stays where shifted for ten seconds or until punched, whichever comes sooner.

Note 1: The SHIFT key on a recorder programmed to print in the vertical format (in different column every day) is never enabled (irrespective of the position of SW1-1).

Note 2: The SHIFT key on a recorder programmed to operate automatically and to print in the horizontal format (on a different line every day) is either enabled or disabled (depending on the position of SW1-1).

Note 3: For semi-automatic operation, (a) program the recorder to print in the horizontal format (see list of print direction codes on page 10) and (b) leave all print shift fields empty (see page 21).

Master Clock (Optional): Allows recorder time to be controlled by a master clock. (Set switches SW1-2, 3 and 4 in accordance with the following chart)

Type of Clock System	Switch number		
	2	3	4
BCD	OFF	OFF	OFF
Extended BCD	ON	OFF	OFF
30 second reverse polarity	OFF	ON	OFF
60 second reserve polarity	ON	ON	OFF
Minute impulse. 58th minute correction	OFF	OFF	ON
Minute impulse. 59th minute correction	ON	OFF	ON
12 hour synchronous	OFF	ON	ON
24 hour synchronous	ON	ON	ON

Operating Mode: Always leave switch SW1-5 in its OFF position.

Timekeeping Base: When switch SW1-6 is in its OFF position, the recorder uses the input AC power's frequency for timekeeping; when SW1-6 is in its ON position, the recorder uses an internal quartz crystal for timekeeping.

- The recorder always uses its internal quartz crystal to track the time during power outages.

AC Line Frequency: When switch SW1-7 is in its OFF position, the recorder keeps correct time if connected to a 60 Hz power source; when SW1-7 is in its ON position, the recorder keeps correct time if connected to a 50 Hz power source.

Card Format Dimensions: When switch SW1-8 is in its OFF position, the dimensions of the time card that will be used must be measured in inches, tenths of inches and hundredths of inches; when SW1-8 is in its ON position, the dimensions of the card that will be used must be measured in tens of centimeters, centimeters, tenths of centimeters and hundredths of centimeters.

SECTION 3
HOW TO PROGRAM THE CENTENNIAL™ RECORDER

GENERAL

Your Centennial™ Recorder includes a keyboard consisting of MODE, YES and NO keys that allow you to set the time and enter programs, and an LCD (liquid crystal display). In addition to showing the time, the display prompts you throughout each programming procedure by asking questions (in the form of blinking information).

If you answer "yes" to a question (press the YES key), the recorder accepts the information as correct and asks another question. If you answer "no" to a question (press the NO key), the recorder rejects the information that had been blinking and provides you with another choice.

The above continues until all questions involved in a program entry have been answered yes — whereupon the display blinks the field's selection arrow.

When you see the selection arrow blinking after programming a field, examine each piece of displayed information to make sure the entire entry is correct. If ***incorrect,*** press YES (to re-enter the field) and then enter the correct information; if ***correct,*** press NO (to access the next field) or MODE (to return the recorder to normal mode [operation]).

- The recorder automatically exits program mode if two minutes pass since YES, NO or MODE was last pressed, or a card was last punched.

Notes

1. Before it can be programmed, the recorder's cover must be removed and its MODE key must be pressed.

2. When you press MODE to either enter or leave the program mode, the recorder's print and card abutment mechanisms immediately reposition themselves.

3. The recorder indicates that a field is accessed for programming by blinking the field's selection arrow (the arrow that points at the field's name).

4. If you press MODE during a program entry, the recorder will reject information previously selected during the program entry, and ask you to start the entry over (blink the field's selection arrow again).

5. The field's selection arrow blinks again at the end of a program entry to indicate that all information entered during the programming sequence is now in recorder memory.

6. Holding NO depressed causes the display to scroll through all possible entries in each programming step.

7. The DST, CARD FORMAT, EDIT and COPY fields all contain subfields.

    - To return the recorder to normal mode following the programming of a subfield, you must press MODE more than once.

FIELD FUNCTIONS AND HOW TO PROGRAM THEM

Programming Instructions

1. Fill out as many of the Centennial™ Program Charts as are needed.

    - See pages 19 and 20 for reproducible copies of these charts.

2. Enter information from the program charts into the recorder.

   - To access a field from normal mode, press MODE. Then press NO until the field's selection arrow blinks.
   - To enter an accessed field, press YES.
   - Press YES to accept blinking information, press NO to reject blinking information.
   - To return to normal mode from program mode, press MODE.

Note: The illustrations below show each field as it appears when the recorder is configured for card dimensions in inches, and is initially powered up (cold started).

12/24 Field Function: Changes display from 12 to 24 hour format (or vice versa).

To Change Display Format

Press the MODE YES NO YES keys in order. Then press NO (to access TIME field) or MODE (to exit program mode)

Note: The recorder both prompts for and shows all time-related program entries in the format it currently displays the time in.

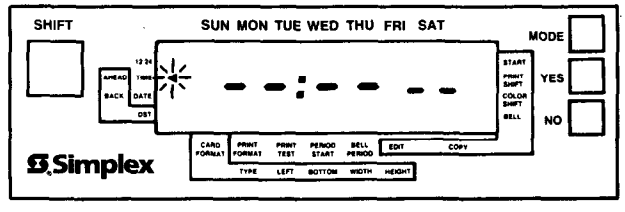
TIME Field Function: Sets the recorder to time.

To Set the Time

Access TIME field

The display digits show HRS:MINS SECS

Prompt blink in the following order:



1. TIME field's selection arrow
2. Hours
3. Minutes
4. Seconds
5. TIME field's selection arrow

Note: The time starts running when YES is pressed to enter the seconds.

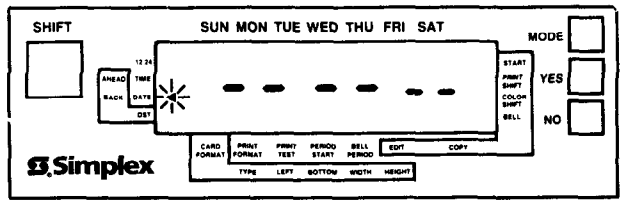
DATE Field Function: Sets the recorder to the current year, month and date of month (DATE).

To Set the Date

Access DATE field

The display digits show YR MO DATE

Prompts blink in the following order:



1. DATE field's selection arrow
2. Year
3. Month
4. Date
5. DATE field's selection arrow

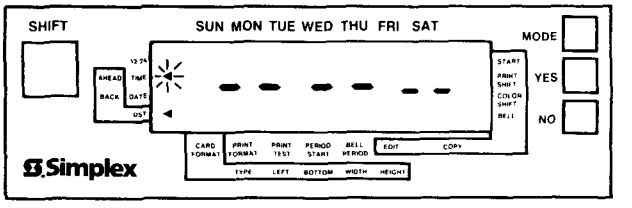
DST Field Function: In conjunction with subfields AHEAD (Spring) and BACK (Autumn), sets the date and time for automatic DST (daylight savings time) changes.

To Program for Automatic DST Changes

Access DST field. Then access DST subfield (AHEAD or BACK)

The display digits show MO DATE HR

Prompts blink in the following order:



1. DST subfield's selection arrow
2. Month DST change is to occur
3. Date DST change is to occur
4. Hour DST change is to occur
5. DST subfield's selection arrow

Note 1: Since daylight saving/standard time dates change yearly, the recorder cancels automatic DST information after using it once.

- Because of this feature, new DST information must be entered yearly.

Note 2: The AHEAD (Spring) DST change causes the recorder to jump ahead one hour at the programmed date and time; the BACK (Autumn) DST change causes the recorder to fall back one hour at the programmed date and time.

CARD FORMAT Field Function:

A. When programmed with a code representing one of the standard-sized time cards (see the "card format code" entries in the "Standard Card List" charts on the next page), the recorder automatically enters accurate information into the CARD FORMAT subfields (the TYPE, LEFT, BOTTOM, WIDTH and HEIGHT fields). This information is then used for properly positioning imprints.

- Following the entry of any standard-sized card format code (codes 1 thru 26), the recorder prevents access to the TYPE, LEFT, BOTTOM, WIDTH and HEIGHT fields.

B. When programmed with the code representing a non-standard card (code 0), access to the TYPE, LEFT, BOTTOM, WIDTH and HEIGHT fields is made available (allowing information in these fields to be edited).

To Program Card Format

Note: If your card's number is missing from the next page:

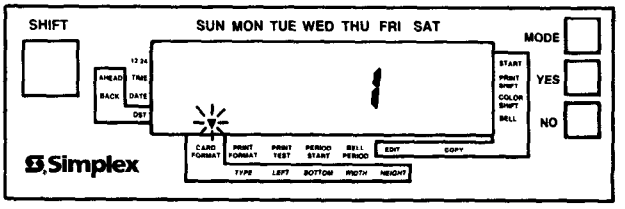
1. Determine your card's measurements (see How to "Measure" Time Cards on page 18).
2. Select from the list the format code of the card that most closely matches your card.
3. Enter the format code into the recorder's format field.
4. Enter "0" in the format field. Then edit the subfield(s) as required.

Access CARD FORMAT field

The display digit shows card format

Prompts blink in the following order:

1. CARD FORMAT field's selection arrow
2. Card format code
3. Either (a) CARD FORMAT field's selection arrow (if standard card format code entered) or (b) TYPE field's selection arrow (if code 0 [non-standard card format] entered)



Note: When programmed with a code representing a standard "one column per day" card, the recorder automatically prints up the card. To make the recorder print down the card:

A. In the CARD FORMAT field, enter the appropriate "standard" card code.

- CARD FORMAT field's selection arrow blinks following entry of standard card code.

B. In CARD FORMAT field, enter 0.

- TYPE field's selection arrow blinks following entry of code 0.

C. Change the TYPE field's second digit to a "1." Then press YES twice.

D. Return the recorder to its normal mode by pressing MODE twice.

List of Standard-Sized Time Cards

Card format code	Card number	Card type	Print direction (see Note 2)	Number of daily print positions (see Note 2)	Left margin	Bottom margin	Print field width	Print field height
					see Note 3			
1	1950-9103	1 side/week	Up the card	22	0.15 in	0.60 in	3.40 in	3.95 in
2	1950-9125	1 side/week	Across the card	6	0.22 in	0.88 in	2.81 in	1.94 in
3	1950-9109 1950-9110	1 side/week	Up the card	22	0.24 in	0.95 in	2.94 in	3.75 in
4	1950-9105 1950-9106 1950-9117	1 side/week	Across the card	6	0.28 in	0.88 in	2.81 in	1.94 in
5	1950-9114	1 side/week	Across the card	6	0.28 in	1.40 in	2.81 in	1.69 in
6	1950-9162	2 sides/month	Across the card	6	0.28 in	0.90 in	2.80 in	3.89 in
7	1950-9107 1950-9108	1 side/week	Up the card	22	0.14 in	0.95 in	2.94 in	3.75 in
8	1950-9160	4 sides/month	Up the card	22	0.22 in	0.60 in	3.38 in	4.08 in
9	1950-9101	1 side/week	Across the card	6	0.22 in	0.56 in	3.38 in	2.06 in
10	1950-9112	1 side/week	Up the card	22	0.30 in	0.88 in	3.28 in	3.88 in
11	1950-9145 1950-9146	1 side/2 weeks	Across the card	6	0.25 in	0.93 in	2.81 in	3.88 in
12	1950-9115	1 side/week	Up the card	22	0.20 in	0.95 in	3.28 in	3.80 in
13	1950-9141	1 side/2 weeks	Across the card	6	0.22 in	0.56 in	3.38 in	4.13 in
14	1950-9143 1950-9144	1 side/2 weeks	Across the card	6	0.28 in	0.90 in	2.81 in	3.88 in
15	1950-9163	4 sides/month	Up the card	22	0.28 in	0.88 in	3.75 in	3.75 in
					see Note 4			
16	1930-2198	1 side/week	Up the card	22	00.72 cm	02.24 cm	10.01 cm	10.65 cm
17	1930-1118	1 side/week	Across the card	6	00.79 cm	02.27 cm	07.14 cm	04.96 cm
18	1930-1119	1 side/2 weeks	Across the card	6	00.72 cm	02.27 cm	07.14 cm	09.91 cm
19	1930-1001	1 side/week	Up the card	22	00.79 cm	02.27 cm	09.81 cm	12.86 cm
20	mv8716	2 sides/month	Up the card	22	00.64 cm	01.96 cm	09.83 cm	10.80 cm
21	01/7343594	2 sides/month	Up the card	22	00.64 cm	01.91 cm	09.50 cm	10.88 cm
22	057/311181	2 sides/month	Across the card	6	00.79 cm	02.19 cm	07.07 cm	09.78 cm
23	31.91.30	1 side/week	Up the card	22	01.22 cm	03.33 cm	08.34 cm	09.40 cm
24	BS265A	1 side/week	Across the card	6	00.69 cm	02.42 cm	07.02 cm	04.81 cm
25		1 side/week	Up the card	4	00.72 cm	05.59 cm	07.98 cm	02.72 cm
26	SO/BG/131/105	1 side/month	Across the card	6	00.77 cm	02.54 cm	07.24 cm	14.00 cm

Note 1: Shaded area of chart represents International Time Cards.

Note 2: The recorder can be programmed to shift print positions up to 31 times a day.

- Programming the recorder to shift print positions more times a day then there are print positions on the card causes the print to wrap around the card (go to the card's "initial print position" more than once during the day). For example, if the recorder's CARD FORMAT field contains a "2" (calls for 1950-9125 time cards) and its print shift program (see page 21) contains 24 print shift times, the print mechanism will return to column 1 four times a day.

Note 3: To convert inches to centimeters, multiply inches by 2.54.

Note 4: To convert centimeters to inches, multiply centimeters by 0.394.

TYPE Field Function: Tells the recorder:

A. The type (TYP) of card it is to print on (see list of card type codes below).

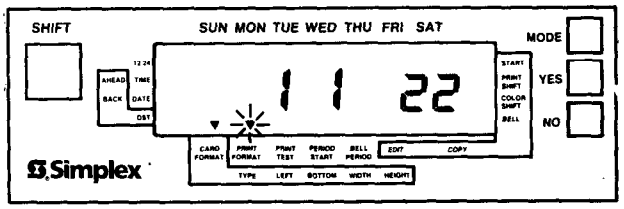
B. The direction (DIR) it is to print on the card (see list of print direction codes below).

C. The number (NMBR) of times a day it is to shift its print position.

To Program Card Type

Access TYPE field by entering "0" in the CARD FORMAT field

The display digits show TYP DIR NMBR



Prompts blink in the following order:

1. TYPE field's selection arrow
2. Card type code
3. Print direction code
4. Number of print shifts
5. TYPE field's selection arrow

List of Card Type Codes

Code	New side frequency	Days/side	Blank line
1	1 side/week	7	none
2	1 side/2 weeks	14	none
3	1 side/month	31	none
4	2 sides/month	15, 13-16	end of 1st side
5	2 sides/month	15, 13-16	start of 1st side
6	4 sides/month	7, 8, 8, 5-8	start of 1st side
7	4 sides/month	7, 8, 8, 5-8	end of 1st side
8	4 sides/month	8, 8, 8, 4-7	end of 4th side
9	5 sides/month	7, 7, 7, 7, 1-3	none
10	1 side/day	1	none
11	2 sides/month	16, 12-15	end of 2nd side
12	4 sides/month	8, 7, 8, 5-8	end of 2nd & 4th side

List of Print Direction Codes

Code	Daily print direction
1	Down the card, one column per day
2	Up the card, one column per day
3	Across the card, one row per day

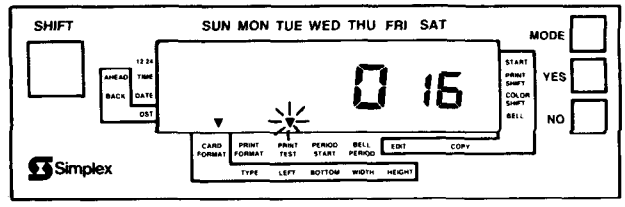
Dimension (LEFT, BOTTOM, WIDTH and HEIGHT) Field Function: Tells the recorder the dimensions of the cards it will be punching in units (UNTS), tenths (TNTHS) and hundredths (HNDRTHS) of inches (if configuration switch SW1-8 is in its OFF position) or in tens, units, tenths and hundredths of centimeters (if SW1-8 is in its ON position).

To Program a Dimension Field

Access desired dimension field

- To access a dimension field, you must first enter a "0" in the CARD FORMAT field.

The display digits show UNTS TNTHS HNDRTHS



Prompts blink in the following order:

1. Field's selection arrow
2. Units of inches
3. Tenths of inches
4. Hundredths of inches
5. Field's selection arrow

Note: If configuration switch SW1-8 is in its ON position, prompts blink in the following order:

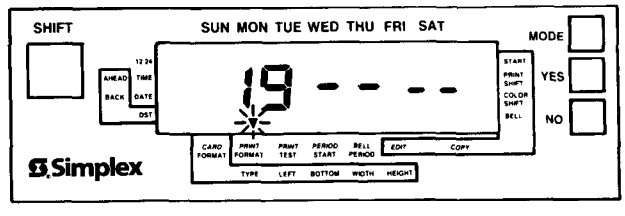
1. Field's selection arrow
2. Tens of centimeters
3. Units of centimeters
4. Tenths of centimeters
5. Hundredths of centimeters
6. Field's selection arrow

PRINT FORMAT Field Function: Tells the recorder the size and format it is to print the time (TT) and date (DD), and what (if any) clock identity symbol (SS) it is to print (see page 12 and 13 for lists of available time, date and clock identity symbol formats).

To Program Print Format

Access PRINT FORMAT field

The display digits show TT DD SS



Prompts blink in the following order:

1. PRINT FORMAT field's selection arrow
2. Time format code
3. Date format code
4. Tens symbol
5. Units symbol
6. PRINT FORMAT field's selection arrow

Note: If the recorder is NOT to print:

Date or day: Enter dashes in lieu of the date code.
Tens symbol: Enter a dash in lieu of the tens symbol.
Neither tens nor units symbol: Enter dashes in lieu of both symbols.

List of Time Print Formats

Format code	Hours 12/24	Hours size	Print A/P size or underline	Fractional hour mins/100ths	size
1	12	large	large	minutes	large
2	12	large	large	tenths	large
3	12	large	large	hundredths	large
4	12	large	medium	minutes	large
5	12	large	medium	tenths	large
6	12	large	medium	hundredths	large
7	12	large	medium	minutes	medium
8	12	large	medium	tenths	medium
9	12	large	medium	hundredths	medium
10	12	large	underline	minutes	medium
11	12	large	underline	tenths	medium
12	12	large	underline	hundredths	medium
13	12	medium	medium	minutes	medium
14	12	medium	medium	tenths	medium
15	12	medium	medium	hundredths	medium
16	12	medium	small	minutes	medium
17	12	medium	small	tenths	medium
18	12	medium	small	hundredths	medium
19	12	medium	small	minutes	small
20	12	medium	small	tenths	small
21	12	medium	small	hundredths	small
22	12	medium	underline	minutes	small
23	12	medium	underline	tenths	small
24	12	medium	underline	hundredths	small
25	12	small	small	minutes	small
26	12	small	small	tenths	small
27	12	small	small	hundredths	small
28	24	large		minutes	large
29	24	large		tenths	large
30	24	large		hundredths	large
31	24	large		minutes	medium
32	24	large		tenths	medium
33	24	large		hundredths	medium
34	24	medium		minutes	medium
35	24	medium		tenths	medium
36	24	medium		hundredths	medium
37	24	medium		minutes	small
38	24	medium		tenths	small
39	24	medium		hundredths	small
40	24	small		minutes	small
41	24	small		tenths	small
42	24	small		hundredths	small

Note 1: Colons separate equal-sized hour and minute characters; periods separate equal-sized hour and 10ths or 100ths of hours characters; nothing separates unequal-sized hour and minutes, 10ths or 100ths of hours characters.

Note 2: If hundredth is chosen for the fractional hours, the recorder prints the time in true hundreds of hours (see Hundredths Chart on page 22).

List of Date Print Formats

- The date format chart contains the following three mnemonics:

ADOW = Alpha day of week (available only in large and medium sizes)
NDOM = Numeric day of month (available in all three sizes)
NDOW = Numeric day of week (available in all three sizes)

Format code	Language	Symbol	Character size
- -			
1		NDOM	same size as hours
2		NDOM	smaller size than hours
3		NDOW	same size as hours
4		NDOW	smaller size than hours
5	English	ADOW	same size as hours
6	English	ADOW	smaller size than hours
7	French	ADOW	same size as hours
8	French	ADOW	smaller size than hours
9	German	ADOW	same size as hours
10	German	ADOW	smaller size than hours
11	Spanish	ADOW	same size as hours
12	Spanish	ADOW	smaller size than hours
13	Portugese	ADOW	same size as hours
14	Portugese	ADOW	smaller size than hours
15	Italian	ADOW	same size as hours
16	Italian	ADOW	smaller size than hours
17	Flemish and Dutch	ADOW	same size as hours
18	Flemish and Dutch	ADOW	smaller size than hours
19	Danish	ADOW	same size as hours
20	Danish	ADOW	smaller size than hours
21	Norwegian	ADOW	same size as hours
22	Norwegian	ADOW	smaller size than hours
23	Swedish	ADOW	same size as hours
24	Swedish	ADOW	smaller size than hours

List of "Clock Identity Symbol" Print Formats

Values entered	Symbol (numbers) printed
- -	None
-1, -2 . . . -9	1, 2 . . . 9
01, 02 . . . 99	01, 02 . . . 99

PERIOD START Field Function: Tells the recorder the dates of which pay periods start.

Note: Feb. 29th is NOT a valid pay period start date.

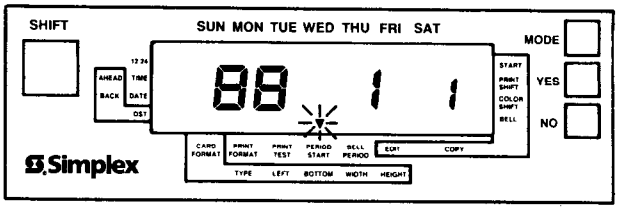
To Set the Pay Period Start Date

Access PERIOD START field

The display digits show YR MO DATE

Prompts blink in the following order:

1. PERIOD START field's selection arrow
2. Year
3. Month
4. Date
5. PERIOD START field's selection arrow



BELL PERIOD Field Function: Tells the recorder the duration in seconds (SECS) that signal are to sound.

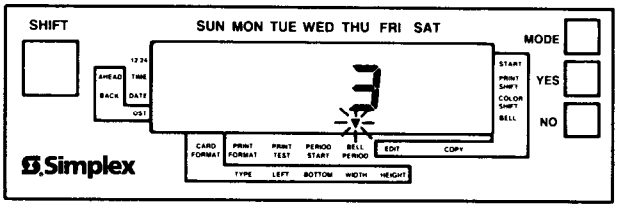
To Set the Bell Period Duration

Access BELL PERIOD field

The display digits show SECS

Prompts blink in the following order:

1. BELL PERIOD field's selection arrow.
2. Bell duration in seconds.
3. BELL PERIOD field's selection arrow.



EDIT Field Function: Allows daily schedules to be entered, checked or changed. The EDIT field includes the following subfields:

- **SUN thru SAT:** Tells the recorder which day's daily schedule is being edited.
- **START:** Tells the recorder when it is to "initialize" its print positioning mechanisms (set its print color to black and position its horizontal and vertical mechanisms to the initial row and column for that day or date).

  Example: If the Period Start Date is a Sunday and the recorder is programmed for card format code 1, at the "start time" on Tuesday the recorder positions its mechanisms to black-print at the bottom of the third column.

- **PRINT SHIFT:** Tells the recorder when it is to place imprints in the card's next row or column.
- **COLOR:** Tells the recorder when it is to toggle its color change mechanism (change imprint color from black to red or vice versa).
- **BELL:** Tells the recorder when it is to sound signals (applies only to recorders that contain the signal option)

Note 1: To access a day (SUN thru SAT) field, you must first enter the EDIT field; to access the START, PRINT SHIFT, COLOR SHIFT or BELL fields, you must first enter a day field.

Note 2: Print shift times, color change times and bell times need not be entered chronologically. The recorder arranges them chronologically when you exit.

To Edit a Daily Schedule Field

Note: Of the various edit fields, only the START, PRINT SHIFT, COLOR SHIFT and BELL field information can be edited. (EDIT and SUN thru SAT field information consists of field selection arrows only).

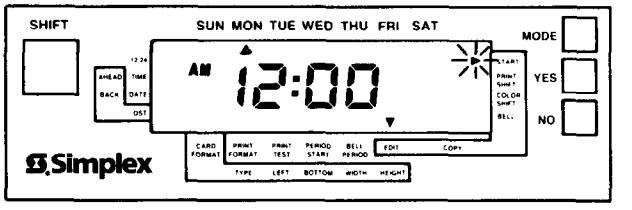
START Field

Access START field

The display digits show HRS:MINS

Prompts blink in the following order:

1. START field's selection arrow
2. Hours
3. Minutes
4. START field's selection arrow



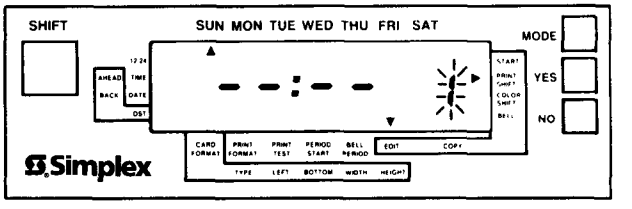
PRINT SHIFT, COLOR SHIFT or BELL Field

Access desired field

The display digits show HRS:MINS NMBR (entry number)

Prompts blink in the following order:

1. Field's selection arrow
2. Entry number
3. Hours
4. Minutes
5. Entry number
6. Field's selection arrow



To Copy All Or Part of a Daily Schedule

1. Access COPY. Then press YES.
2. Select the day of week you want to copy the schedule from. Then press YES.
3. Select the day(s) of the week you want to copy the schedule to. Then press YES.
   - If you want to copy the schedule into the Monday thru Friday schedules, press YES; If you want to copy schedule into other than Monday thru Friday schedules, press NO until the desired day selection arrow blinks and then press YES.
4. Select part(s) of daily schedule you want to copy. Then press YES.
   - If you want to copy the whole schedule, press YES when all four daily schedule field selection arrows blink; if you want to copy only part of the schedule, press NO until the desired selection arrows blink and then press YES.
5. Check all of the blinking information to see that:
   A. The blinking digit truly represents the day you want to copy the schedule from.

(Continued next page)

- "1" represents Sunday, "2" represents Monday, etc.

B. The blinking day selection arrow(s) truly represent the day(s) you want to copy the schedule to.

C. The blinking field selection arrow(s) truly represent those portions of the daily schedule you want to copy.

6. Press YES.

7. Edit the copied-to schedule(s) as required.

IMPORTANT: Inaccuracies may occur when a partial schedule is copied into a complete schedule. So, *always check a copied-to schedule for accuracy after performing a "partial copy."*

SECTION 4

OPERATING INSTRUCTIONS

How to Change the Ribbon (Figure 6)

To Remove:

1. Press the MODE key. Then press NO until the blinking arrow points to PRINT TEST.

2. Press YES. Then press NO until two hyphens appear above the arrow.

   - Two hyphens appear when you press NO to reject the number "22."

3. Press YES.

   - The printhead will immediately move to its extreme left-hand position and stay there.

4. Slide latch A to the left as far as possible.

   - As the latch slides to the left, the card receiver's left end lifts away from the ribbon cassette.

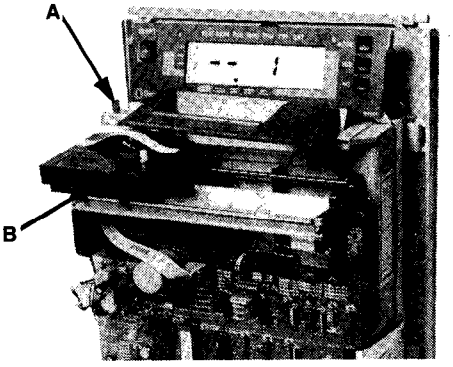


Figure 6

5. Pop both sides of the ribbon cassette straight up. Then remove the cassette from the recorder. (Don't worry about the column indicator. It won't be harmed).

To Install:

1. (Applies only if you are initially installing the ribbon). Perform steps 1 thru 4 above.

2. Turn takeup spool B in the direction of the arrow two full turns. Then slide the nose of the cassette over the printhead.

3. Snap *both* sides of the cassette onto the ribbon shelf. Then slide catch A to the right as far as possible.

4. Press the MODE key twice to return to normal operation.

How to Obtain Time Registrations

Simply insert a time card fully into the card receiver.

Exception: If (a) the recorder prints on a different line every day, (b) its SHIFT key is enabled and (c) the column indicator shows the printhead to be in the wrong column, press the SHIFT key until the column indicator rests in the desired column before inserting a card into the card receiver.

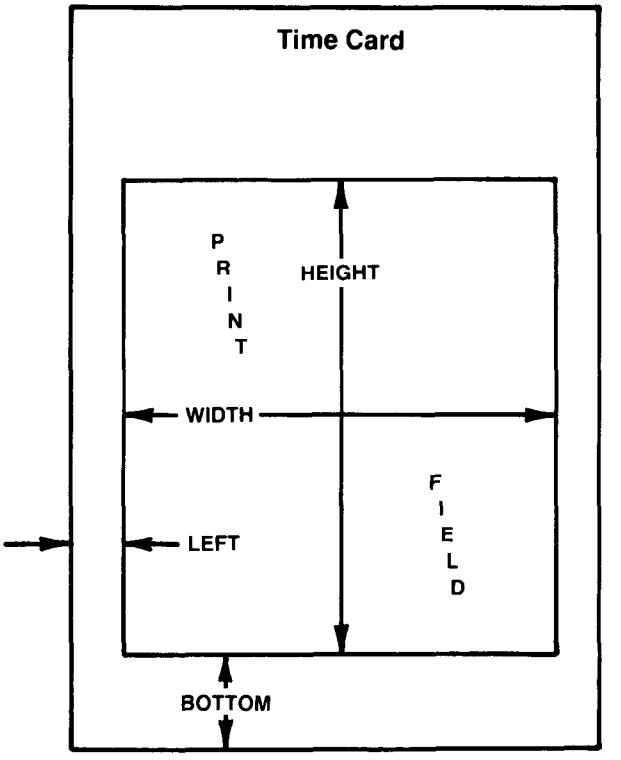
SECTION 5

MISCELLANEOUS

How to "Measure" Time Cards

Use either inch or metric measurements to determine the time card's LEFT, BOTTOM, WIDTH and HEIGHT dimensions.

Note: Inch dimensions consist of units of inches, tenths of inches and hundredths of inches; metric dimensions consist of tens of centimeters, units of centimeters, tenths of centimeters and hundredths of centimeters.



How to "Print Test" the Centennial™

Press MODE. Then press NO until the PRINT TEST arrow blinks.

- The display digits show the row number and column number where a test imprint will be positioned on the called-for time card (see Card Format on page 8).

Prompts blink in the following order:

1. PRINT TEST field's selection arrow
2. Row number (see Note 1 below)
3. Column number
4. PRINT TEST field's selection arrow

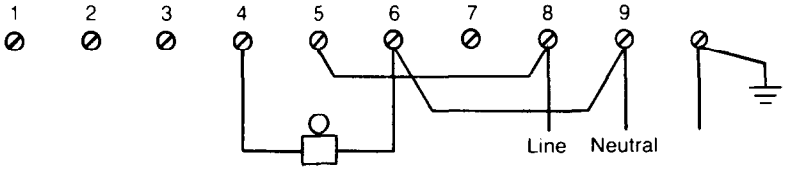
Note 1: The hyphens are not a row number. They are to be entered only during the ribbon replacement procedure (see page 17).

Note 2: When initially checking out the recorder, check to see that it properly positions test imprints on 4 corners of the card's print field (on a 1950-9103 time card, for example: row 1, column 1; row 1, column 7; row 22, column 1 and row 22, column 7.

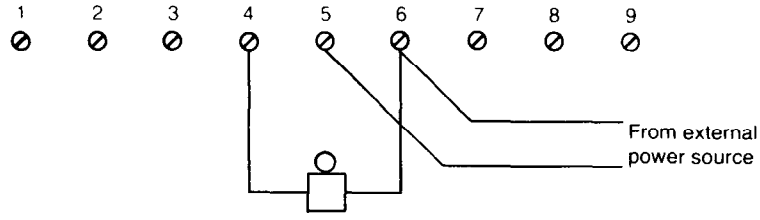
- Row 1 is always the lowest row on the card; column 1 is always 1st (left-most) column on the card.

How to Wire the Recorder for Signal Control

If using line power to sound signals



If using an external power source to sound signals



How to Wire the Recorder for Master Clock Control

Connect clock system wiring to terminals 1 and 2 as follows:

If clock system type is:	Terminal 1	Terminal 2
BCD or Extended BCD	+	–
12 or 24 Hr Sync Wired	AS	CS
58 or 59 Minute Impulse (duplex)	AB	PC
58 or 59 Minute Impulse (3-wire)	B	C
30 or 60 Second Reverse Polarity)	(see note)	

Note: (Applies to 30 or 60 second reverse polarity only). If, after the recorder has been set to time, you find that that it runs 30 or 60 seconds behind or ahead of the master clock:

1. Remove the recorder from its backplate.
2. Reverse the wires on terminals 1 and 2.
3. Set the recorder to time again.

How to Install the Position Indicator Label

1. From the Shipping Packet, remove the clear plastic insert and the sheet containing the 15 printed labels and 5 plain labels.
2. From the sheet, carefully remove the label which has the same number of columns and listed measurements as those of your time card.

   - The listed measurement codes are:

   LM = width of card's left margin
   CW = width of card's columns

   .XX = inches
   (X.X) = metric

3. Fit the label into the card receiver. Then snap the clear plastic insert over the label.

Centennial™ Programming Chart

General Schedule

★ WARNING ★ WARNING ★ WARNING ★

**COMPONENTS WITHIN THE RECORDER MAY MOVE AT ANY TIME!
KEEP YOUR HANDS ABOVE THE CARD
RECEIVER WHEN PROGRAMMING!**

IN THE RECORDER, LEAVE ONE FILLED OUT COPY OF THIS CHART AND AS MANY FILLED OUT COPIES OF THE DAILY SCHEDULE CHART AS ARE NEEDED TO ACCOUNT FOR EVERY DAY OF THE WEEK.

Copies of this chart (Pub No. CEN-41-005) are available from your local Simplex Representative.

Field	Subfield	Entry	Comment
12/24		12 24	Circle desired display format
TIME		HRS:MINS SECS	Enter current time
DATE		YR MO DATE	Enter current date
DST		YES or NO	Push YES key if automatic DST wanted
	AHEAD	[ ] [ ] [ ]	Month, date, hour for Spring change
	BACK	[ ] [ ] [ ]	Month, date, hour for Autumn change
CARD FORMAT		[ ]	Standard card format codes = 1 to 26 Non-standard card format code = 0
	TYPE *	[ ] [ ] [ ]	Box names = [TYP] [DIR] [NMBR] (see page 10)
	LEFT *	[ ] [ ] . [ ] [ ]	If card measurements are in inches, use the last three boxes only.
	BOTTOM *	[ ] [ ] . [ ] [ ]	
	WIDTH *	[ ] [ ] . [ ] [ ]	
	HEIGHT *	[ ] [ ] . [ ] [ ]	
PRINT FORMAT		TT DD SS [ ] [ ] [ ]	TT = Time format (valid codes = 1 to 42) DD = Day format (valid codes = 1 to 24) SS = Clock Identity Symbol (Optional)
PERIOD START		YR MO DATE [ ] [ ] [ ]	Enter start date of current pay period
BELL PERIOD		[ ]	Duration in secs (up to 15) signals are to sound (requires relay option)

* If your Centennial™ Recorder is to print on standard-sized time cards, enter the appropriate code in THE CARD FORMAT box and leave the TYPE, LEFT, BOTTOM, WIDTH and HEIGHT subfields empty.

Exception: If the card format code calls for the recorder to print in the vertical format, but you want the recorder to print to go down (rather than up) the card, enter a "2" in the TYPE field's DIR box.

Centennial™ Programming Chart

Daily Schedule

★ WARNING ★ WARNING ★ WARNING ★

**COMPONENTS WITHIN THE RECORDER MAY MOVE AT ANY TIME!
KEEP YOUR HANDS ABOVE THE CARD
RECEIVER WHEN PROGRAMMING!**

Copies of this chart (Pub. No. CEN-41-006) are available from your local Simplex Representative.

EDIT	S M T W T F S [ ] [ ] [ ] [ ] [ ] [ ] [ ]	Check the day(s) of the week this schedule applies to
START	[ ]:[ ]	Time when recorder "initializes" its print positioning mechanisms (see page 14).

PRINT SHIFT				COLOR SHIFT						BELL (TIMES)					
Print Pos. #	Hr	Min	Entry No.	Hr	Min	Entry No.		Hr	Min	Entry No.		Hr	Min	Entry No.	
2	___	___	1	___	___	1 Red		___	___	33 Red		___	___	1	
3	___	___	2	___	___	2 Blk		___	___	34 Blk		___	___	2	
4	___	___	3	___	___	3 Red		___	___	35 Red		___	___	3	
5	___	___	4	___	___	4 Blk		___	___	36 Blk		___	___	4	
6	___	___	5	___	___	5 Red		___	___	37 Red		___	___	5	
7	___	___	6	___	___	6 Blk		___	___	38 Blk		___	___	6	
8	___	___	7	___	___	7 Red		___	___	39 Red		___	___	7	
9	___	___	8	___	___	8 Blk		___	___	40 Blk		___	___	8	
10	___	___	9	___	___	9 Red		___	___	41 Red		___	___	9	
11	___	___	10	___	___	10 Blk		___	___	42 Blk		___	___	10	
12	___	___	11	___	___	11 Red		___	___	43 Red		___	___	11	
13	___	___	12	___	___	12 Blk		___	___	44 Blk		___	___	12	
14	___	___	13	___	___	13 Red		___	___	45 Red		___	___	13	
15	___	___	14	___	___	14 Blk		___	___	46 Blk		___	___	14	
16	___	___	15	___	___	15 Red		___	___	47 Red		___	___	15	
17	___	___	16	___	___	16 Blk		___	___	48 Blk		___	___	16	
18	___	___	17	___	___	17 Red		___	___	49 Red		___	___	17	
19	___	___	18	___	___	18 Blk		___	___	50 Blk		___	___	18	
20	___	___	19	___	___	19 Red		___	___	51 Red		___	___	19	
21	___	___	20	___	___	20 Blk		___	___	52 Blk		___	___	20	
22	___	___	21	___	___	21 Red		___	___	53 Red		___	___	21	
23	___	___	22	___	___	22 Blk		___	___	54 Blk		___	___	22	
24	___	___	23	___	___	23 Red		___	___	54 Red		___	___	23	
25	___	___	24	___	___	24 Blk		___	___	56 Blk		___	___	24	
26	___	___	25	___	___	25 Red		___	___	57 Red		___	___	25	
27	___	___	26	___	___	26 Blk		___	___	58 Blk		___	___	26	
28	___	___	27	___	___	27 Red		___	___	59 Red		___	___	27	
29	___	___	28	___	___	28 Blk		___	___	60 Blk		___	___	28	
30	___	___	29	___	___	29 Red		___	___	61 Red		___	___	29	
31	___	___	30	___	___	30 Blk		___	___	62 Blk		___	___	30	
				___	___	31 Red		___	___	63 Red		___	___	31	
				___	___	32 Blk		___	___	64 Blk		___	___	32	

MINUTES TO HUNDREDTHS CONVERSION CHART

Displayed Time	Printed Time		Displayed Time	Printed Time	
	Hrs/Mins	Hrs/100ths		Hrs/Mins	Hrs/100ths
Hr:00 00	Hr:00	Hr.00	Hr:30 00	Hr:30	Hr.50
Hr:00 36	Hr:00	Hr.01	Hr:30 36	Hr:30	Hr.51
Hr:01 12	Hr:01	Hr.02	Hr:31 12	Hr:31	Hr.52
Hr:01 48	Hr:01	Hr.03	Hr:31 48	Hr:31	Hr.53
Hr:02 24	Hr:02	Hr.04	Hr:32 24	Hr:32	Hr.54
Hr:03 00	Hr:03	Hr.05	Hr:33 00	Hr:33	Hr.55
Hr:03 36	Hr:03	Hr.06	Hr:33 36	Hr:33	Hr.56
Hr:04 12	Hr:04	Hr.07	Hr:34 12	Hr:34	Hr.57
Hr:04 48	Hr:04	Hr.08	Hr:34 48	Hr:34	Hr.58
Hr:05 24	Hr:05	Hr.09	Hr:35 24	Hr:35	Hr.59
Hr:06 00	Hr:06	Hr.10	Hr:36 00	Hr:36	Hr.60
Hr:06 36	Hr:06	Hr.11	Hr:36 36	Hr:36	Hr.61
Hr:07 12	Hr:07	Hr.12	Hr:37 12	Hr:37	Hr.62
Hr:07 48	Hr:07	Hr.13	Hr:37 48	Hr:37	Hr.63
Hr:08 24	Hr:08	Hr.14	Hr:38 24	Hr:38	Hr.64
Hr:09 00	Hr:09	Hr.15	Hr:39 00	Hr:39	Hr.65
Hr:09 36	Hr:09	Hr.16	Hr:39 36	Hr:39	Hr.66
Hr:10 12	Hr:10	Hr.17	Hr:40 12	Hr:40	Hr.67
Hr:10 48	Hr:10	Hr.18	Hr:40 48	Hr:40	Hr.68
Hr:11 24	Hr:11	Hr.19	Hr:41 24	Hr:41	Hr.69
Hr:12 00	Hr:12	Hr.20	Hr:42 00	Hr:42	Hr.70
Hr:12 36	Hr:12	Hr.21	Hr:42 36	Hr:42	Hr.71
Hr:13 12	Hr:13	Hr.22	Hr:43 12	Hr:43	Hr.72
Hr:13 48	Hr:13	Hr.23	Hr:43 48	Hr:43	Hr.73
Hr:14 24	Hr:14	Hr.24	Hr:44 24	Hr:44	Hr.74
Hr:15 00	Hr:15	Hr.25	Hr:45 00	Hr:45	Hr.75
Hr:15 36	Hr:15	Hr.26	Hr:45 36	Hr:45	Hr.76
Hr:16 12	Hr:16	Hr.27	Hr:46 12	Hr:46	Hr.77
Hr:16 48	Hr:16	Hr.28	Hr:46 48	Hr:46	Hr.78
Hr:17 24	Hr:17	Hr.29	Hr:47 24	Hr:47	Hr.79
Hr:18 00	Hr:18	Hr.30	Hr:48 00	Hr:48	Hr.80
Hr:18 36	Hr:18	Hr.31	Hr:48 36	Hr:48	Hr.81
Hr:19 12	Hr:19	Hr.32	Hr:49 12	Hr:49	Hr.82
Hr:19 48	Hr:19	Hr.33	Hr:49 48	Hr:49	Hr.83
Hr:20 24	Hr:20	Hr.34	Hr:50 24	Hr:50	Hr.84
Hr:21 00	Hr:21	Hr.35	Hr:51 00	Hr:51	Hr.85
Hr:21 36	Hr:21	Hr.36	Hr:51 36	Hr:51	Hr.86
Hr:22 12	Hr:22	Hr.37	Hr:52 12	Hr:52	Hr.87
Hr:22 48	Hr:22	Hr.38	Hr:52 48	Hr:52	Hr.88
Hr:23 24	Hr:23	Hr.39	Hr:53 24	Hr:53	Hr.89
Hr:24 00	Hr:24	Hr.40	Hr:54 00	Hr:54	Hr.90
Hr:24 36	Hr:24	Hr.41	Hr:54 36	Hr:54	Hr.91
Hr:25 12	Hr:25	Hr.42	Hr:55 12	Hr:55	Hr.92
Hr:25 48	Hr:25	Hr.43	Hr:55 48	Hr:55	Hr.93
Hr:26 24	Hr:26	Hr.44	Hr:56 24	Hr:56	Hr.94
Hr:27 00	Hr:27	Hr.45	Hr:57 00	Hr:57	Hr.95
Hr:27 36	Hr:27	Hr.46	Hr:57 36	Hr:57	Hr.96
Hr:28 12	Hr:28	Hr.47	Hr:58 12	Hr:58	Hr.97
Hr:28 48	Hr:28	Hr.48	Hr:58 48	Hr:58	Hr.98
Hr:29 24	Hr:29	Hr.49	Hr:59 24	Hr:59	Hr.99

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