



TIME CLOCK WORLD

888 534-5994



ATT 310

USER MANUAL



INTRODUCTION & TIME CARD FORMATS

INTRODUCTION:

Thank you for purchasing an Acroprint Time Totalizer. We are confident this time recorder will give you full satisfaction in calculating employee time on **weekly time cards** or on **job cost cards**, with a 12 or 24-hour time format.

The ATT 310 can handle up to 200 time cards (weekly or job) and can total employee's hours worked. *Remember you must total employee's cards, using the totalizing card, before the new pay period starts.*

The Acroprint ATT 310 offers the accuracy of quartz timekeeping, the convenience of Auto Daylight Savings time adjustments, with auto month, date, year changes and with a built-in battery (*backup*) in case of power failure. (*The unit will maintain time, but not punch.*)

The ATT 310 may be used immediately after installation. However, we recommend reading this manual before you start using your time recorder.

We recommend not using the ATT 310 in places:

- Subject to high humidity and dust.
- Exposed to strong or continuous vibrations.
- Exposed to direct sunlight.
- The temperature range in which all functions of the Time Totalizer will operate correctly is from -5°C to 45°C. Be sure to place your time recorder only in locations where the temperature range is not exceeded and have no sharp fluctuations in temperature.

TIME CARD FORMATS:

The ATT 310 *requires* the use of a special time card with coded stripes on back of cards. This code allows the recorder to "track" and accumulate "time" to the same time card. Acroprint offers three types of time cards for use with the ATT 310. All time cards are boxed in quantities of 1,000. Each box contains 5 packs of 200 cards each. (200 card-maximum capacity). Standard stock cards offered are the **ATT 311, Weekly Attendance Card**; the **ATT 312, Daily Cost Card**; and the **ATT 313, Job Cost Card**. *Caution:* Do not use two cards with the same code (S001 to S200) at the same Time. (Totalizing errors can occur.)

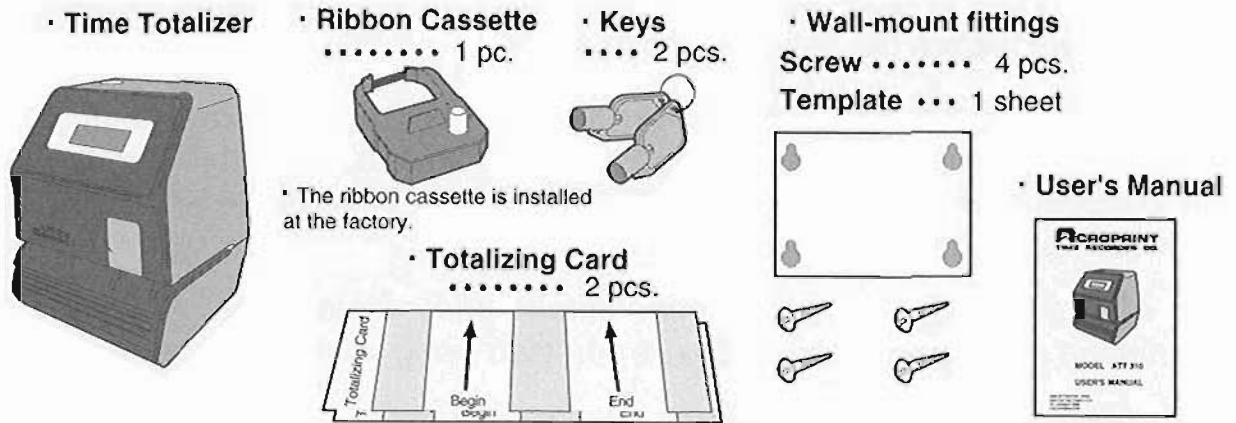
Two **Totalizing Cards** are furnished with the ATT 310. These cards are used to set the ATT 310 in the totalizing mode to total employee cards. Keep these cards in a safe place. The totalizing card is not included with time cards. Additional totalizing cards may be purchased from Acroprint or your Acroprint dealer.

BEFORE USING YOUR TIME TOTALIZER

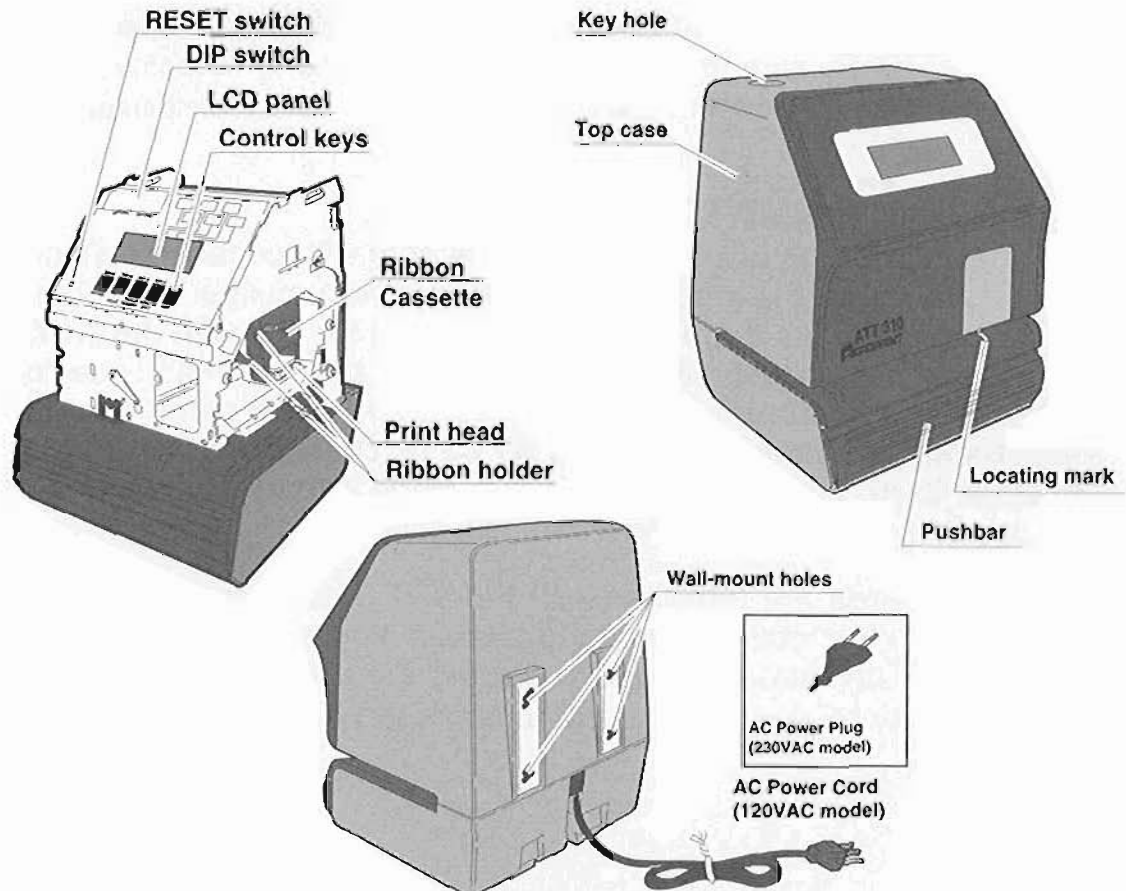
Package Contents

Unpack the Time Totalizer and check its contents to ensure that the time totalizer unit and all accessories shown below are included.

Accessories



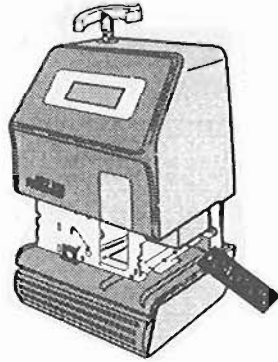
Components



INSTALLATION

The Time Recorder can be placed on a table or mounted on a wall.

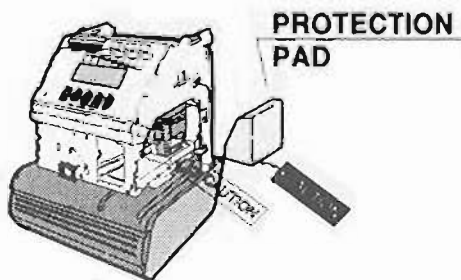
Step 1



Unlock the key and remove the top case.

Step 2

Remove the PROTECTION PAD.

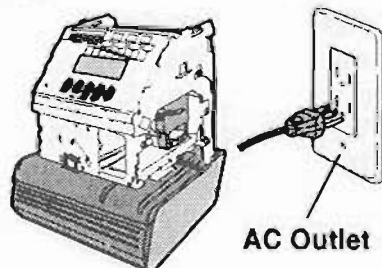


⚠ Remove the PROTECTION PAD before you plug the AC cord into the AC outlet.

Step 3

Plug the AC cord into the AC outlet.

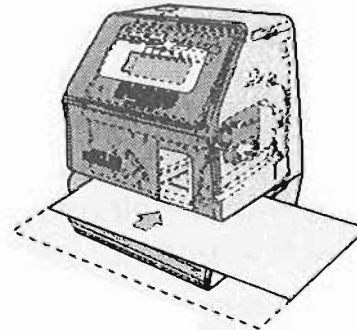
When plugged in the LCD panel indicates the current time. It is now ready to be set and adjusted if necessary.



Step 4

Put on the top case. Insert a time card.

Print example



JAN 31 A 12:00 IN

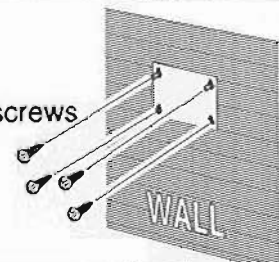
⚠ Time cards are not included.

Step 1

- 1 Select wall area near an AC outlet.
- 2 Measure 48"(122 cm) up from the floor.
- 3 Mount the Time Recorder on wood or a surface that can support weight. Dry wall will not support the unit's weight.

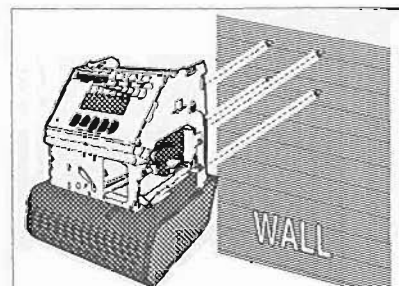
Step 2

Four screws



• Leave screw heads about 1/8" from wall.

Step 3



* Remove the top case and mount unit on screws. Reinstall the top case.

PRINTING

Using the ATT 310 in the Standard Totalizing Mode

in this mode, the first time a card is inserted, the date and time will be printed followed by the word "IN". The second time the card is inserted, the date and time will be printed along with the elapsed time from the first punch.

	Print Example
First	JAN 31 A 8:00 IN
Second	JAN 31 P 6:00 10:00

↑
The elapsed time

If a break time, example: 60 minute lunch, has been set in between the first print time and the second print time, the break time is subtracted from the elapsed time and the results are printed on the card.

The break time ... 60 minutes

	Print Example
First	JAN 31 A 8:00 IN
Second	JAN 31 P 5:00 8:00

Example of elapsed time calculation

$$PM5:00 - AM8:00 - 60 \text{ min.} = 8:00$$

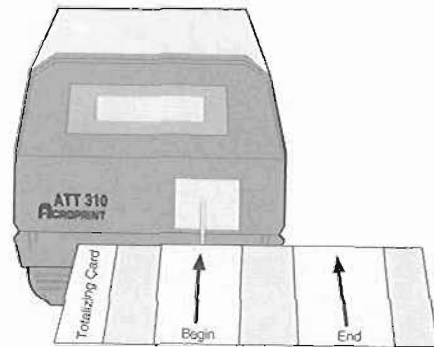
↑
↑
 The break time The elapsed time

⚠ If the total of the elapsed time and the break time are more than 17 hours a day, the elapsed time is not calculated and "IN" is printed on the card at the next punch.

Totaling Completed Time Card

All ATT 311, 312, and 313 time cards **MUST** be totaled in order to "clear" stored times from the memory and to print total time on each time card. If time cards are not totaled, errors will occur on future cards.

To place the ATT 310 in the totalizing mode, insert the Totalizing card and align "Begin" portion of card with the indicator in the front of the time recorder. After a few seconds, two beeps sound and the LCD displays alternating "circles" indicating "totalizing" mode.



IMPORTANT

1. It is important that each employee be assigned a different numbered time card. Totalizing errors can occur when employees are assigned duplicate numbered cards.
2. Remember to total each time card to clear memory in clock. Cards not totaled can cause totalizing errors. It is best to total all cards at one time.

PRINTING & SETTING THE SEQUENCE

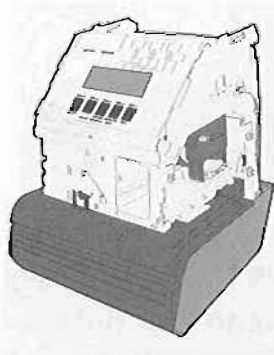
Remove the totalizing card and insert each employee time card into the clock one at a time, aligning each card to print at the bottom. The clock will print the word "Total" and the total time worked. If an error occurs in totalizing a time card, an asterisk (*) will print next to "total" on the time card.

After all cards have been totaled, insert the totalizing card and align "End" portion of the card with the indicator. Two beeps sound. This returns the ATT 310 to the STANDARD TOTALIZING mode for normal use. The LCD display shows the current date and time.

	Print Example	
Correct print	TOTAL	40:00
Incorrect print	TOTAL*	180:30

SETTING SEQUENCE

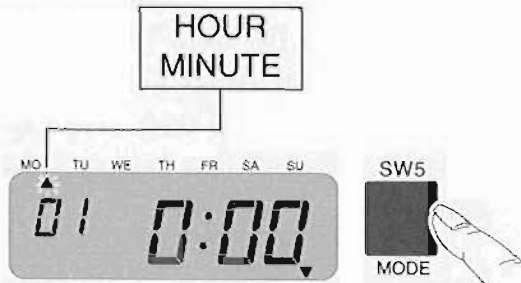
Setting the **TIME, DATE, DAYLIGHT SAVINGS** and **BREAKS** times are accomplished by using the five push button switches located below the digital display. Setting the **PRINT FORMAT** can be accomplished using the DIP switches shown above and to the left of the display. See page 11 for the desired settings. To enter one of the setting modes, remove the case and press the appropriate SW5-SW1 switch below the display. Holding a switch will cause the setting options to advance faster.



SETTING THE TIME

Set the present time in the following sequence.

Step 1



Press the [SW5 : MODE] key until the "HOUR / MINUTE" arrow flashes.

Step 2

Example :
Set to Morning 10:08 AM.



Press the [SW3 : HOUR / MONTH] key until the correct hour appears.

The seconds are automatically reset to 00.

Hold the SW3 key down to automatically advance the hour.

Step 3



Press the [SW2: MINUTE / DAY] key until the correct minute appears.

Hold the SW2 key down to automatically advance the minute.

Step 4



Press the [SW1: SET] key after checking the desired time appears on the LCD.

The seconds are 00. Press [SET] to synchronize time. The unit is now set to correct time.

Step 5



Press the [SW1: SET] key again. The current time and date is displayed. **IMPORTANT:** If you do not complete Step 5, the clock will not print.

SETTING THE DATE

After setting the time, set the date.

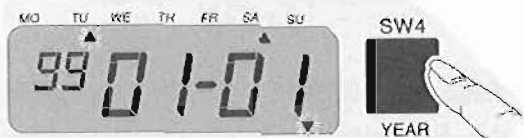
Step 1



Press the [SW5 : MODE] key until the "YEAR/MONTH/DAY" arrow flashes.

Step 2

Example : Set to 8th August, 1999



Press the [SW4 : YEAR] key until the correct year appears.
Hold the SW4 key down to automatically advance the year.

Step 3



Press the [SW3 : HOUR / MONTH] key until the correct month appears.

Step 4



Press the [SW2: MINUTE / DAY] key until the correct day appears.
Hold the SW2 key down to automatically advance the day.

Step 5



Press the [SW1: SET] key after checking the year, month and day on the LCD.

Step 6



Press the [SW1: SET] key again.
The current time and date is displayed. **IMPORTANT:** If you do not complete Step 6, the clock will not print.

SETTING THE STARTING DAYLIGHT SAVINGS TIME

When the daylight savings time is set, the clock will automatically advance one hour on the starting date and, similarly, one hour is automatically subtracted on the ending daylight savings date. This occurs at 2:00 am.

Step 1



Press the [SW5 : MODE] key until the "START DAYLIGHT SAVING" arrow flashes.

Example :

Daylight Savings start date-
April 7, 1999

Step 2



Press the [SW4 : YEAR] key until the correct year appears.
Hold the SW4 key down to automatically advance the year.

Step 3



Press the [SW3 : HOUR / MONTH] key until the correct month appears.

Step 4



Press the [SW2: MINUTE / DAY] key until the correct day appears.
Hold the SW2 key down to automatically advance the day.

Step 5



Press the [SW1: SET] key after checking the year, month and day on the LCD.

Step 6



Press the [SW1: SET] key again.
The current time and date is displayed.

⚠ If you do not use the daylight saving time function, set the month value to 00.

SETTING THE ENDING DAYLIGHT SAVINGS TIME

Step 1



Press the [SW5 : MODE] key until the "END DAYLIGHT SAVING" arrow flashes.

Example :

Daylight Savings end date-
October 31, 1999

Step 2



Press the [SW4 : YEAR] key until the correct year appears.

Hold the SW4 key down to automatically advance the year.

Step 3



Press the [SW3 : HOUR / MONTH] key until the correct month appears.

Step 4



Press the [SW2: MINUTE / DAY] key until the correct day appears.

Hold the SW2 key down to automatically advance the day.

Step 5



Press the [SW1: SET] key after checking the desired year, month and day on the LCD.

Step 6



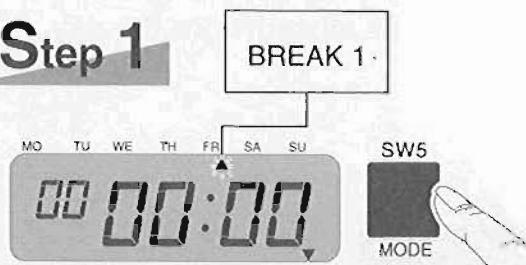
Press the [SW1: SET] key again. The current time and date is displayed.

SETTING THE BREAK TIME

The ATT 310 offers up to three auto deduct break periods. *Caution:*When break periods are used, the time of the break(length) will be subtracted from employee's total elapsed time regardless of the employee's "time on clock." Example:If an employee arrives late and punches in at 11:15 AM, an auto deduct break(30 minutes, 11:30-12:00) would be deducted from the employee's hours regardless if the employee works through the break.

A "punch" will override a break length if the in and out punches exceed the break limit. If the in/out punches are less than the break length, the break length will then override the punches.

Step 1

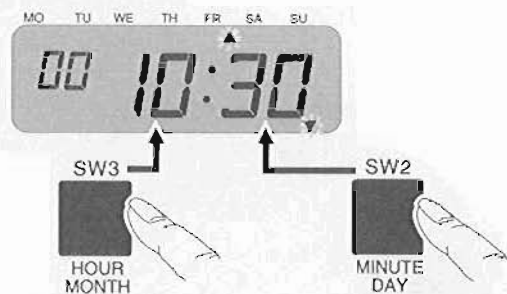


Press the [SW5 : MODE] key until the "BREAK 1" arrow flashes.

Example :

Break starting time 10:30 AM
Break time 30 minutes

Step 3



Press the SW3 and SW2 key until the correct break starting time appears.

Step 2



Press the [SW4 : YEAR] key until the correct break length appears. when the number reaches 99, it returns to 00 and increases again.

Step 4



Press the [SW1: SET] key after checking the break starting time and duration.

Step 5



Press the [SW1: SET] key again.

Setting Break time 2 (or 3)

Press the [SW5: MODE] key until the "BREAK 2(or 3)" arrow flashes.

Steps 2, 3, 4, and 5 are the same as those for setting the break time 1 setting.



If the break time is 0(minutes), the break starting time is not set and 00:00 is displayed.
If the time from the start to the end of the break overlaps with break time 2 and break time 3, all the settings of break times 1, 2, and 3 become invalid and are cleared.

PRINT FORMAT SETTING

DIP SWITCH SETTING

○:OFF ●:ON

Mon:Month

Min:Minute

DOW:Day Of Week

E.time:The elapsed time after "IN" is printed on a card

DIPSW1		DIPSW2		PRINT EXAMPLE	MEANING												
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 A 8:00 IN	Mon, Day, Time, IN
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 P 5:00 9:00	Mon, Day, Time, E.time
○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 JAN A 8:00 IN	
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 JAN P 5:00 9:00	Day, Mon, Time, E.time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	SU 31 A 8:00 IN	DOW, Day, Time, IN
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	SU 31 P 5:00 9:00	DOW, Day, Time, E.time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 SU A 8:00 IN	Day, DOW, Time, IN
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 SU P 5:00 9:00	Day, DOW, Time, E.time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 A 8:00 IN	Day, Time, IN
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 P 5:00 9:00	Day, Time, E.time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	A 8:00 IN	Time, IN
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	P 5:00 9:00	Time, E.time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	'95 JAN 31 A12:00	Year, Mon, Day, Time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 JAN '95 A12:00	Day, Mon, Year, Time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 '95 A12:00	Mon, Day, Year, Num
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 A 8:00	Mon, Day, Time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 JAN A 8:00	Day, Mon, Time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	SU 31 A 8:00	DOW, Day, Time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 SU A 8:00	Day, DOW, Time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 A 8:00	Day, Time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	A 8:00	Time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	A 8:00 00 START	Hour, Min, Sec, START
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	P 8:10 30 12:10 30	Hour, Min, Sec, E.time
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 JAN P 5:23 9:23	Rounding time to 1 min
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 JAN P 5:23 9:24	Rounding time to 6 min
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 JAN P 5:23 9:20	Rounding time to 10 min
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	31 JAN P 5:23 9:30	Rounding time to 15 min
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 A12:40	60 min./Hour
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 A12:67	100 min./Hour
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 A12:65	20 min./Hour
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 A12.6	10 min./Hour
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 1 P 3:00	Zero Disabled
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 01 P03:00	Zero Enabled
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 P 3:00	AM/PM
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 15:00	24 Hours
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 A12:00 IN	English
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	ENE 31 A12:00 ENT	Spanish
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 A12:00 EING	German
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 A12:00 ENTR	French
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	GEN 31 A12:00 ENT	Italian
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	JAN 31 A12:00 ENTR	Portuguese
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	I 31 A12:00 IN	Roman
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	I 31 A12:00 IN	Numeric

1

2

3

4

5

6

7

PRINT SELECTION

1 Time recorder mode _____

The ATT 310 allows for the selection of three types of printing modes. The **STANDARD TOTALIZING** mode totals the elapsed time between an *IN* and the paired *OUT* punch. The *IN* punch indicates the date, time and **IN**. The *OUT* punch will indicate date, time **and** the **ELAPSED** time between the two punches. Various print formats may be selected.

```
JAN 31 A 8:15 IN
JAN 31 P 12:30 4:15
```

Month, Date, A/P Hours, Minutes

```
SU 31 A 8:15 IN
SU 31 P 12:30 4:15
```

Day, Date, A/P Hours, Minutes

All ATT 311, 312, and 313 time cards **MUST** be totaled in order to "clear" stored times from the memory of the ATT 310 Time Totalizer Recorder. If time cards are not totaled, errors will occur on future cards.

2 Time stamp mode _____

The **TIME STAMP MODE**

In this mode, elapsed time between punches does not register or total between punches. *IN* and *OUT* punches register *Month, Date, Day, type of Hours,* and *type of Minutes,* selected, and are printed on the time card. Various formats may be selected.

Most standard, right-hand, time cards may be used in this mode.

```
JAN 31 A 8:15
JAN 31 P 5:30
```

Month, Date, A/P Hours, Minutes

```
SU 31 8:15
SU 31 12:30
```

Day, Date, 24 Hour, 100th of Hours

3 Timer mode _____

The **TIMER MODE** totals the elapsed time between a *START* and the paired *STOP* punch in A/P HOURS, MINUTES, and SECONDS.

The Totalizing Card is not used in this mode as elapsed time of several paired punches will NOT total.

"Day" or "Date" selection is not available in this mode. Remember to punch *OUT* on each card to clear stored "START" punches.

```
A 10:15 23 START
P 12:24 56 2:09 33
```

Month, Date, A/P Hours, Minutes

4 Rounding time _____

There are four time intervals for calculating elapsed time. 1, (minute to minute) 6, 10, and 15 minutes. For total calculations, punches may be rounded forwards or backwards.

Rounding applies to elapsed time totals only, not individual punches. DIP switches 1-8 and 2-1 are used for this selection.

	Elapsed time	Rounded time	Print Example
1min.	2:43	2:43	JAN 1A12:40 2:43
6min.	2:43	2:42	JAN 1A12:40 2:42
10min.	2:43	2:40	JAN 1A12:40 2:40
15min.	2:43	2:45	JAN 1A12:40 2:45

PRINT SELECTION

5 Types of minutes (Portions of Hour)

Minutes are printed in a unit which is obtained by dividing an hour by 60,100,20 or 10. DIP switches 2-2 and 2-3 are used for selection.

Print contents	Print Example
To divide an hour by 60: 0, 1, 2 ...,58, 59, 0, 1, 2,...	JAN 1 A12:40
To divide an hour by 100: 0, 1, 2 ...,98, 99, 0, 1, 2,...	JAN 1 A12.67
To divide an hour by 20: 0, 5, 10 ...,90, 95, 0, 5, 10,...	JAN 1 A12.65
To divide an hour by 10: 0, 1, 2 ...,8, 9, 0, 1, 2,...	JAN 1 A12.6

6 Leading 0

Leading 0 for hours less than 12 may be shown (enabled) or suppressed (disabled) on print.

DIP switch 2-4 : ON → JUN 13 A08:08 IN

MO TU WE TH FR SA SU
 ▲ 13 8:08 AM Print Example

DIP switch 2-4 : OFF → JUN 13 A 8:08 IN

7 Type of an hour

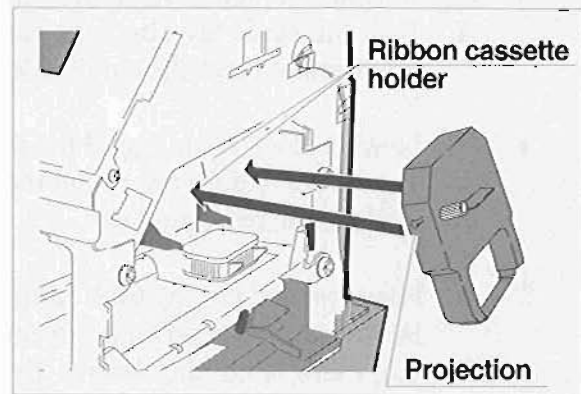
MO TU WE TH FR SA SU
 ▲ 13 18:08 JUN 13 18:08 IN
 DIP switch 2-5 : ON

MO TU WE TH FR SA SU
 ▲ 13 6:08 PM JUN 13 P 6:08 IN
 DIP switch 2-5 : OFF

Time can be displayed on a 12-hour(AM,PM) or a 24-hour basis. DIP switch 2-5 is used for selection. Print changes accordingly.

REPLACING RIBBON CASSETTE

1. Carefully slide the exposed ribbon under the print head.
2. Push cassette with the projection into the ribbon cassette holder until snapped into place.
3. Turn the ribbon feed knob clockwise until the ribbon is taut.
4. Take sample impression.



Troubleshooting

Two In Punches

Check for duplicate numbered cards. Totalizing errors will result if the same number code is used on different cards.

Make sure 2 cards are not inserted at the same time.

Printer moves, but no print

Check to see if ribbon is installed properly.

Check print cable connection.

Giving high totals

Possible card number was not totaled in prior use.

Time loss between in/out totals

Check break settings.

FREQUENTLY ASKED QUESTIONS

1. **Q.** Why do some cards have multiple consecutive "In" punches or "Out" punches ?
A. More than one card with the same card number may have been used during the same pay period. Each card has an identifier number on the back and if two cards with the same number are in use during the same pay period this can occur.
2. **Q.** Why are the totals on some time cards higher than they should be ?
A. Each pack of card contains 200 cards numbered S 001 - S 200. If for any reason a card is not totaled out when finished, this total will be added to that same numbered card the next time that card is put into service. All cards must be totaled when finished.
3. **Q.** Why are the totals on all the cards showing less hours than they should ?
A. If all the cards are short the same amount of time, check to see if a "break" has been programmed into the clock. (Refer to page 10 in users manual).
4. **Q.** I have a clock set to round the time, but the punches are not being rounded. Why ?
A. The ATT 310 does not round the individual "In" and "Out" punches. It only rounds the total for the two punches.
5. **Q.** I have totaled out my time cards, but if I total them again I get the same times. Is something wrong with the clock clearing its totals ?
A. No, there is nothing wrong. Even though a card has been totaled, the clock does not erase the total for that card until that card number is punched again in the normal time keeping mode. (non-totalizing mode).
6. **Q.** Why does the clock just beep when I insert a card ?
A. If you are trying to use the clock in the totalizing mode, you may not be using the right time card. You must use either the ATT 311,312, or 313 time cards that have the black strip bar code on the back. (Refer to page 1 in users manual).
7. **Q.** I do not understand how to total the time cards. Can you explain it ?
A. To total your time cards, insert the arrow on the totalizing labeled "Begin" under the orange print alignment strip just as if you were going to punch a card. The clock will beep twice, and the LCD display will change to 4 flashing squares. Now insert all the cards that you want to total. When done totalizing, insert the arrow on the totalizing card labeled "End" under the alignment strip and the clock will beep twice and the LCD display will change back to the date and time.
8. **Q.** Why isn 't the clock calculating elapsed time ? All I getting is "In" and "Out" punches.
A. The clock has not been properly programmed. Please refer to page 11 of the users manual to properly program your clock to totalize.
9. **Q.** When I total hours and minutes on a calculator I get different totals then on the time card.
A. You can not total minutes on a calculator.

SPECIFICATIONS

MAIN FUNCTION

Calendar	Year up to 2089 (Automatically adjusted to leap year)
Clock accuracy	Monthly accuracy ± 15 seconds (at ordinary temperatures)
Display	Digital LCD with 7 segments Date, Hour, Minute and day of the week indication
Daylight saving time	Auto
DIP switch	16 poles
Memory Backup	3 year memory backup by lithium battery.

PRINT FUNCTION

No. of printable Maximum 15 figures(excluding space)
character:

Hour & minute format	12 or 24-hours format. regular minute, 1/10, 1/100 or 5/100 of a hour. Leading 0
Time recorder mode	The elapsed times are not printed.
Timer mode	Calculating the elapsed time in seconds.

OPTION

Ribbon cassette	Carry-on cassette type fabric ink ribbon Cat. No. 39-0121-000 (Black ink) Cat. No. 39-0121-002 (Red ink)
Operation battery	Cat. No. 58-0108-000 Allows 200 prints during power outages.

OTHER SPECIFICATIONS

Power supply	120 VAC:for USA,Canada 230 VAC:for Europe,Asia
Power consumption	120VAC ●●●● 20VA max.while printing ●●●● 4VA while idling ●●●● 0.2A max.while printing 230VAC ●●●● 20VA max.while printing ●●●● 4VA while idling ●●●● 0.1A max.while printing
Temperature	Operating -5°C - 45°C (23°F - 113°F)
Humidity	Operating 20% - 80%RH (non-condensing)
Dimensions	6 27/32" X6 3/16" X8 3/16" (174mm(W) X 157mm(D) X 208mm(H))
Weight	Approximately 5.5lb.(2.5Kg)

In case of power failure

If the optional operational backup battery has been installed and a power failure occurs, the unit will continue to function for approximately 72 hours provided the battery is fully charged.
(Note! The 72 hours of use will vary based on the number of times the clock prints.)

Low battery indicator

The display on the clock will begin to flash when the capacity of the optional operational backup battery is exceeded. Please refrain from using the clock until AC power has been restored and the battery has had time to recharge. If you continue to use the clock, the printing mechanism will hang up. If this occurs, wait until the AC power is restored. Then press the push bar on the bottom front of the clock.
(See pictorial on page 2 of manual.)

Bescheinigung des Herstellers/Importeurs

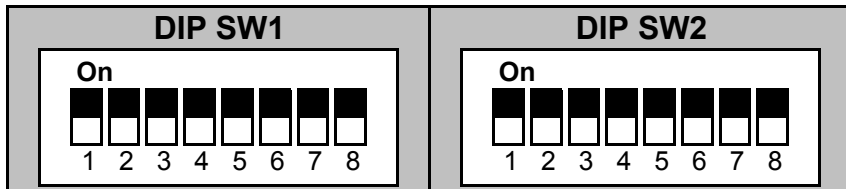
Dies Gerät entspricht den Bedingungen der Niederspannungs-Vorschrift 73/23/EEC und dem EMVG nach 89/336/EEC.

This unit complies with the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC.

Maschinenlärminformationsverordnung 3. GSGV, 18.01.1991: Der arbeitsplatzbezogene Schalldruckpegel beträgt 70 dB(A) oder weniger gemäß ISO 7779.

Die zugehörige Steckdose muß nahe beim Gerät angebracht und leicht zugänglich sein.

Model 310: DIP Switch Settings to Change Print Formats



○:Off ●:On

Com: Comment, Mo: Month, DOW: Day of Week

Num: Sequential Number (see pg 10 of manual)

E-time: Elapsed time after "IN" is printed on card

DIP SW1		DIP SW2		Print Example	Description
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 A 8:00 IN	Mo, Day, Hr, Min, IN
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 P 5:00 9:00	Mo, Day, Hr, Min, E-time
① ● ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 JAN A 8:00 IN	Day, Mo, Hr, Min, IN
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 JAN P 5:00 9:00	Day, Mo, Hr, Min, E-time
① ② ● ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	SU 31 A 8:00 IN	DOW, Day, Hr, Min, IN
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	SU 31 P 5:00 9:00	DOW, Day, Hr, Min, E-time
① ② ● ④ ● ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 SU A 8:00 IN	Day, DOW, Hr, Min, IN
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 SU P 5:00 9:00	Day, DOW, Hr, Min, E-time
① ② ③ ● ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 A 8:00 IN	Day, Hr, Min, IN
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 P 5:00 9:00	Day, Hr, Min, E-time
① ② ③ ● ④ ● ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	A 8:00 IN	Hr, Min, IN
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	P 5:00 9:00	Hr, Min, E-time
● ① ② ③ ④ ● ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	'95 JAN 31 A12:00	Yr, Mo, Day, Hr, Min
● ① ② ③ ④ ⑤ ● ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 JAN '95 A12:00	Day, Mo, Yr, Hr, Min
● ① ② ③ ④ ⑤ ● ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 '95 A12:00	Mo, Day, Yr, Num
● ① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 A 8:00	Mo, Day, Hr, Min
● ① ● ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 JAN A 8:00	Day, Mo, Hr, Min
● ① ② ● ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	SU 31 A 8:00	DOW, Day, Hr, Min
● ① ② ● ④ ● ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 SU A 8:00	Day, DOW, Hr, Min
● ① ② ③ ● ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 A 8:00	Day, Hr, Min
● ① ② ③ ● ④ ● ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	A 8:00	Hr, Min
① ② ③ ④ ⑤ ⑥ ● ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	A 8:00 00 Start	Hr, Min, Sec, Start
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	P 8:10 30 12:10 30	Hr, Min, Sec, E-time
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 JAN P 5:23 9:23	Rounding Time to 1 Min
① ② ③ ④ ⑤ ⑥ ⑦ ● ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 JAN P 5:23 9:24	Rounding Time to 6 Min
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	● ① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 JAN P 5:23 9:20	Rounding Time to 10 Min
① ② ③ ④ ⑤ ⑥ ⑦ ● ⑧	● ① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	31 JAN P 5:23 9:30	Rounding Time to 15 Min
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 A12:40	Hour / 60 Min
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ● ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 A12.67	Hour / 100 Min
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ● ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 A12.65	Hour / 20 Min
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ● ③ ● ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 A12.6	Hour / 10 Min
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 1 P 3.00	Zero Disabled
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ● ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 01 P03.00	Zero Enabled
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 P 3.00	AM / PM
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ● ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 15:00	24 Hours
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 A12:00 IN	English
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ● ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	ENE 31 A12:00 ENT	Spanish
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ● ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 A12:00 EING	German
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ● ⑦ ● ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 A12:00 ENTR	French
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ● ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	GEN 31 A12:00 ENT	Italian
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ● ⑦ ● ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	JAN 31 A12:00 ENTR	Portuguese
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ● ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	I 31 A12:00 IN	Roman
① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ● ⑦ ● ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	① ② ③ ④ ⑤ ⑥ ⑦ ⑧	1 31 A12:00 IN	Numeric

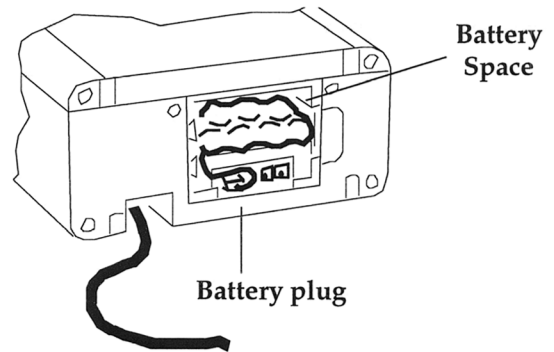
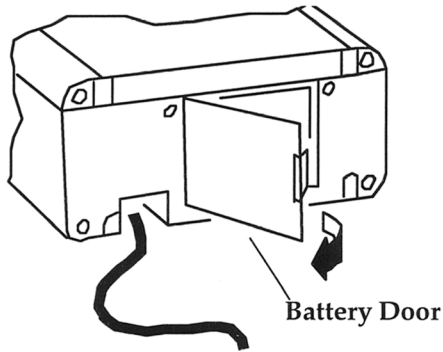
Clock Time (Hour) Must be Set in Military Time(1-24 Hr), Clock Display Will Always Show AM/PM Hrs & Mins Regardless of Print Format Selected

INSTALLING

FULL OPERATION BATTERY (OPTION)

MODEL 420

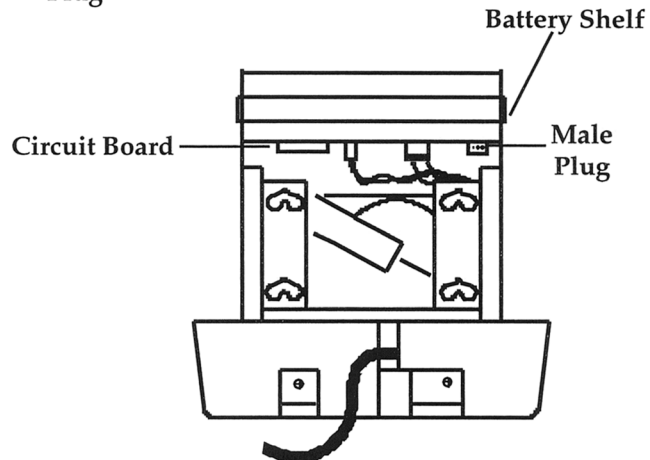
1. Open battery door on the bottom of the case.
2. Connect battery female plug to male plug.
3. Carefully place battery in place provided.
4. Close battery door.



MODEL 175 / MODEL 310

(LEAVE UNIT PLUGGED IN DURING BATTERY PACK INSTALLATION.)

1. Remove top case.
2. Connect battery female plug to male plug.
3. Place battery on battery shelf.
4. Replace top case.



CARD READ SENSOR CALIBRATION INSTRUCTIONS

FOR

MODEL ATT 310

The sensors in the Model ATT 310 will need to be re-calibrated when the following criteria are met.

If unit begins to:

- 1) Misread cards
- 2) Reject cards
- 3) If the card read sensor board is changed
- 4) If the control board is changed or is disconnected from the driver board

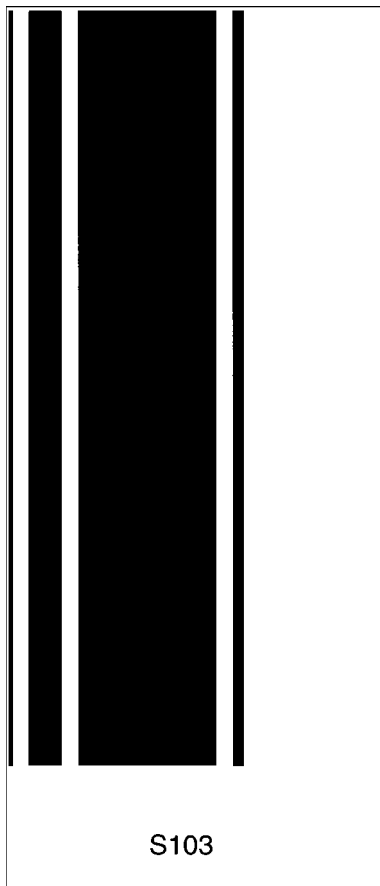
To re-calibrate the sensors if a unit is misreading or rejecting cards and the control board is not to be removed from the unit, please follow the instructions below:

- 1) With the unit plugged in, remove the top case of the clock.
- 2) Push the reset switch (SW6) on the control board. The print head will cycle and the unit will emit a beep and the display will read 12:00.
- 3) Turn on all 8 DPI switches on DIP SW2.
- 4) While holding down switch SW1, push the reset switch (SW6) once.
- 5) As soon as the LCD display comes on, release switch SW1. At this point, the display will show 12:00, but the print head will not cycle and there will not be a beep.
- 6) Take one ATT310 time card, (We recommend card No. S103), and looking at the back, cut off the 1/4" margin at the **TOP** so that the black bar code goes right to the top edge of the card.
- 7) Insert the **TOP EDGE** of the card into the ATT310 so that the large black stripe is facing down and under the black card guide. The ATT310 will beep twice if it reads the stripe correctly. If it does not read it correctly, it will beep once. (This step has calibrated the unit for the black stripe.)
- 8) Next, turn off all 8 switches on DIP SW2 and turn on all 8 switches on DIP SW1.
- 8) Insert the time card so that the blank area on the right edge of the card is facing down and under the black
- 9) card guide. If the unit reads correctly, it will beep twice. If not, it will beep once. (This step calibrates the ATT310 for the blank area of the card) Once the unit has accepted the blank area of the card, **PRESS THE RESET SWITCH ONCE.**

10) Turn off all 8 switches on DIP SW1.

This completes the re-calibration where the control board has not been removed or replaced.

11)



12)

