

No.661T PRINTER

The No. 661 Printer is designed to work with, and is controlled by, the No. 660 Digital Receiver or the No. 667 Printer System for Mini-Modularm.

It produces a printout which permanently records the time, date, account (subscriber) number and type of emergency for all calls received at the central monitoring station.

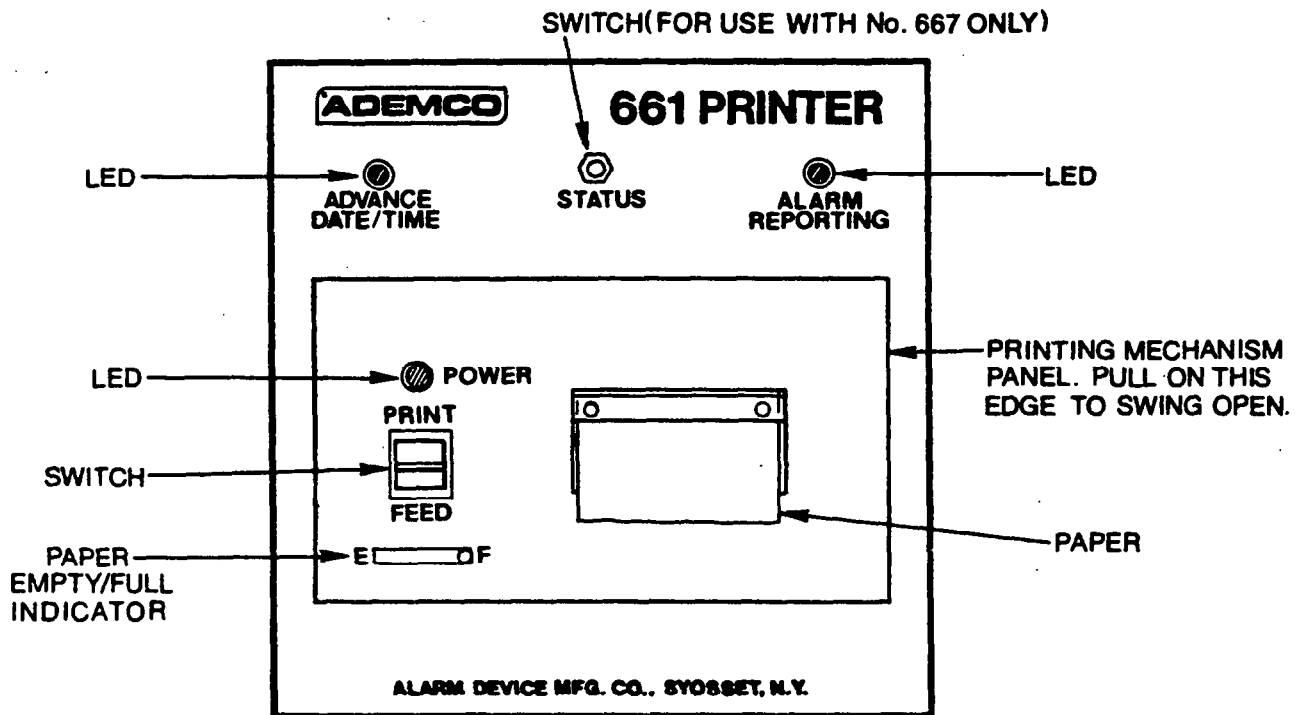


Diagram 1: FRONT PANEL

CONTROLS AND INDICATORS:

Front Panel: See Diagram 1.

1. ADVANCE DATE/TIME LED: Used when setting date and time. Flashes once per second to assist in the advance of date or time settings. Should normally be off.
2. STATUS BUTTON: Used with the No. 667 Printer System for Mini-Modularm to call for a system status report.
3. ALARM REPORTING LED: Indicates printer is "on line" receiving a message.
4. POWER LED: Indicates printer has power applied.
5. PRINT/FEED Switch: When raised momentarily to PRINT, causes a printout of time and date. (Position disabled when ALARM REPORTING LED is lit.) When

lowered to FEED, advances the paper. (Position disabled during message printout.)

6. Paper E-F (Empty/Full) Indicator: Self-explanatory.
7. Paper Feed Opening: Self-explanatory.

Note: Items 4-through 7 are on a "swing-out print mechanism panel" which is hinged at the left. Pull on its right edge to swing open.

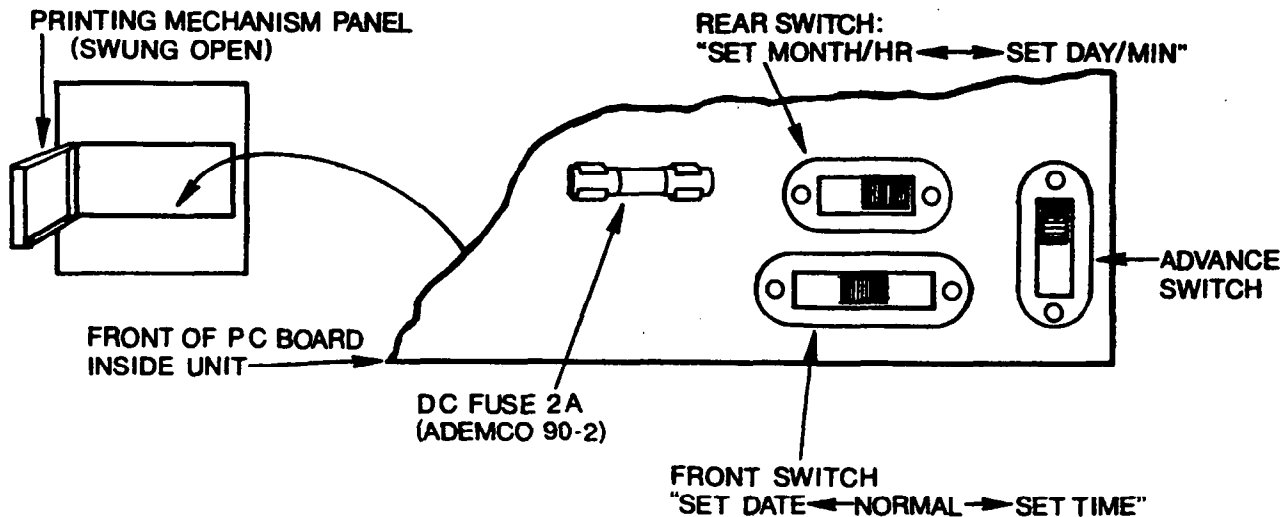


Diagram 2: CALENDAR AND CLOCK SWITCHES

Inside Printer, Near Front (behind swing-out print mechanism opening):

1. SET DATE-NORMAL-SET TIME Switch (Front).
2. SET MONTH/HOUR - SET DAY/MINUTE Switch (Rear).
3. ADVANCE Switch: Spring loaded. Pull forward to advance date or time.

These switches are used in conjunction with each other to set the printer's calendar/clock circuitry. See the INSTALLATION & ADJUSTMENT section and Table A later herein.

4. DC FUSE: 2A (Ademco No. 90-2). Protects the printer's internal circuitry.

Rear Panel: See Diagram 3.

1. AC FUSE, 3/8 AMP, SLO-BLO (Ademco No. 90): For the incoming A.C. line.
2. 12V.DC INPUT 2 Pin Connector: Mates the printer to: a) its own DC power supply (see item 3 below), or b) the No. 665 Power Transfer Unit which may be used to provide standby power for the No. 660 Receiver as well as the printer, or c) to the No. 364-50 Power Supply which may be used with the No. 667 Printer System for Mini-Modularm to power the printer.
3. 12 VOLTS DC OUT 2 PIN Connector: Plugs into item 2 above if external 12V. DC source is not being used.
4. "J1" Fifteen Pin Input Connector: Mates the Printer to the No. 660 Receiver (via a cable supplied with the printer) or to the No. 667 Printer System for Mini-Modularm (via a different cable supplied with the No. 667).

Note: See the OPTIONS Section later herein for the location and description of the switch that permits operation on 220V. AC and jumpers that: a) permit 50 Hz operation and b) add a printer identification prefix digit to the alarm message, when cut.

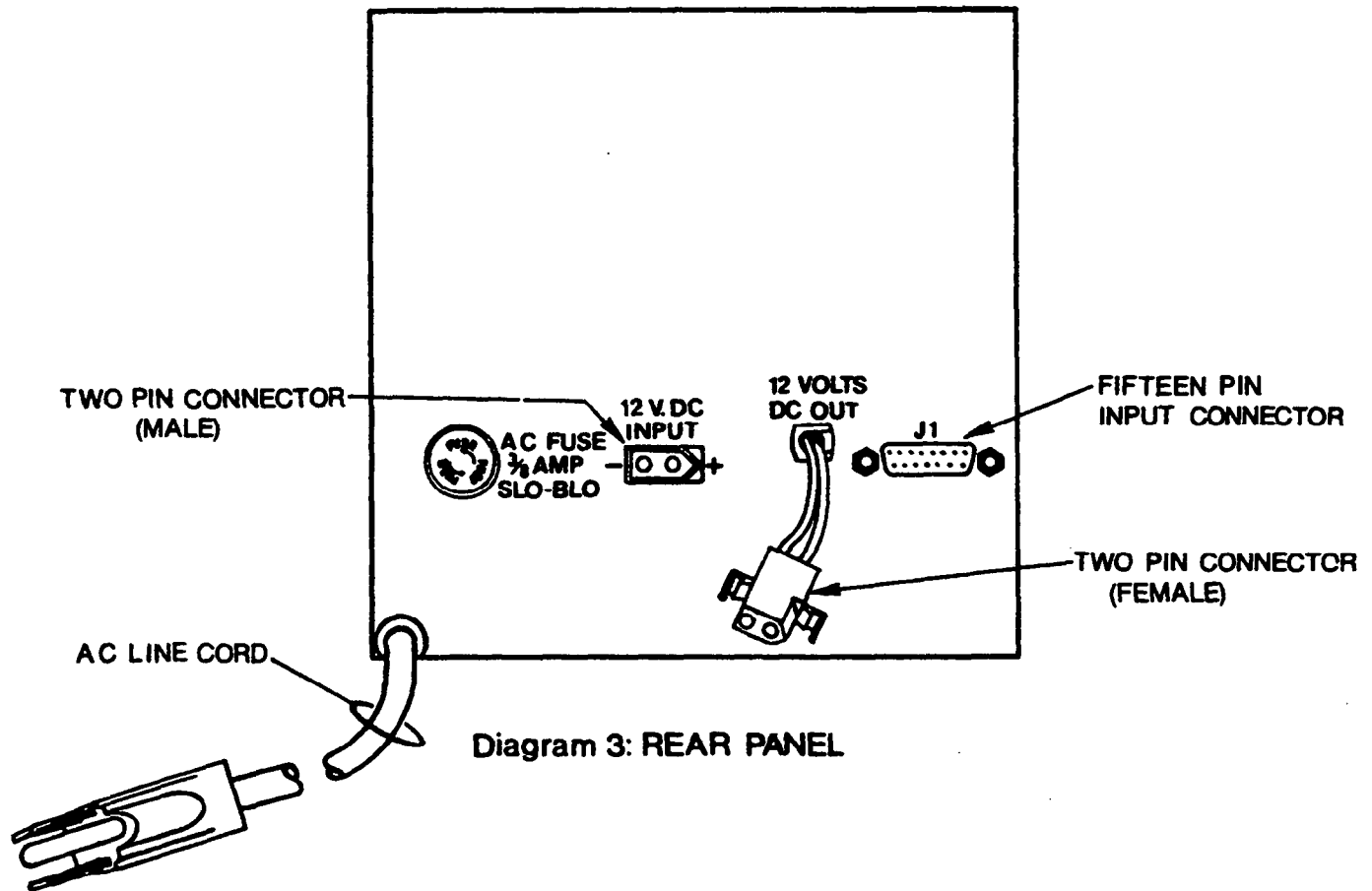


Diagram 3: REAR PANEL

INSTALLATION AND ADJUSTMENT:

Preliminary:

1. Place the printer in the location it will occupy when in use, convenient to a 24 hour 110V. AC outlet. Do not plug-in the printer yet. (Note: Optional 220V. AC and 50 Hz operation is explained later, in the OPTIONS section.)
2. Make connection to the 12V. DC INPUT connector at the rear of the unit.
 - a. If no standby power is to be provided, plug the 12 VOLTS DC OUT CONNECTOR hanging at the rear of the unit into the 12V. DC INPUT connector.
 - b. If a No. 665 Power Transfer Unit is used for standby power to the No. 660 Receiver and No. 661 Printer, connect the No. 665 to the 12V. DC INPUT connector of No. 661, using the two wire female connector supplied with the No. 665. Follow the wiring chart in the No. 665's installation instructions for the distance to be run.

Important: The RED (+) lead of the two wire connector should be extended to No. 665 Terminal 6 and the BLACK (-) lead to Terminal 15 (earlier versions of the printer required different connections to the No. 665).
 - c. If a No. 667 Printer System for Mini-Modularm is being used and a No. 364-50 is to provide power for the printer, connect the No. 661's 12 V. DC INPUT.

connector to the No. 364-50 via the 2 wire connector provided with the No. 667. Wire as indicated in the No. 667's installation instructions.

3. Plug the printer into a 24 hour 110V. AC outlet unless a No. 364-50 Power Supply is used as described in 2c above. In that case, the printer's 110V. power cord should NOT be used (tape ends of the plug as a reminder that it is not to be used).

Time and Date Adjustments:

Use the following procedure to set the printer's internal calendar/clock initially and at any time subsequently that it becomes necessary. The No. 661 uses electronic timekeeping circuitry and the power supply must not be interrupted or resetting will be necessary.

Settings will be made in the following order: MONTH, DAY, HOUR, MINUTE.

1. Check the time and date setting by momentarily raising the PRINT/FEED Switch to the PRINT position.

A printout of all 9's (See Diagram 4) indicates that the power supply was interrupted (or just turned on) and the clock must be reset. A normal type of printout will resume as soon as any of the time or date settings are advanced.

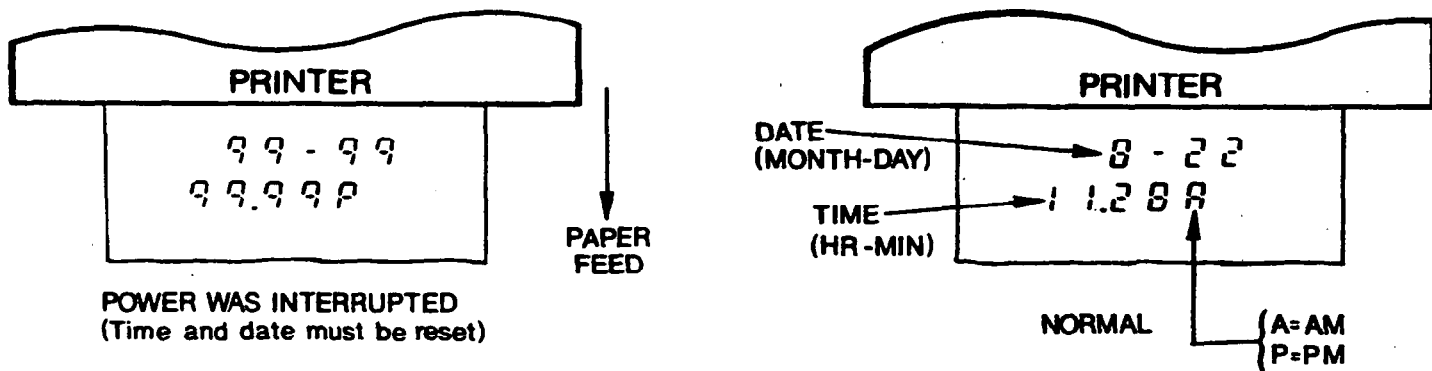


Diagram 4: TIME AND DATE PRINTOUTS

2. Swing open the print mechanism panel at the front of the printer (See Diagrams 1 and 2) and observe the slide switches located behind the panel opening.
3. Slide the FRONT switch to the LEFT (SET DATE) position. The ADVANCE DATE/TIME LED should begin to flash.
4. Slide the REAR switch to the LEFT (SET MONTH/HOUR) position. This sets the unit up for advancing the MONTH setting.
5. Slide the ADVANCE switch toward the FRONT and hold it while counting the flashes of the ADVANCE DATE/TIME LED. Each flash advances the MONTH setting by one. When the desired count is reached, release the ADVANCE switch.
6. Check the MONTH setting by momentarily raising the PRINT switch and observing the printout.
7. Repeat steps 5 and 6 as necessary to obtain the correct MONTH.
8. To set the DAY, slide the REAR switch to the RIGHT (SET DAY/MIN) position (FRONT switch still to LEFT). Repeat steps 5, 6 and 7 for the DAY of the month.
9. To set the HOUR, slide the FRONT switch to the RIGHT (SET TIME) position

and the REAR switch to the LEFT (SET MONTH/HOUR) position. Repeat steps 5, 6 and 7 for the HOUR. Make sure that the AM/PM (A,P) designation is correct on the printout.

10. To set the MINUTE, slide the REAR switch to the RIGHT (SET DAY/MINUTE) position (FRONT switch still to RIGHT). Repeat steps 5, 6 and 7 for the MINUTE.
11. **IMPORTANT!** When the time and date are correct, the FRONT switch must be returned to the CENTER (NORMAL) position for normal date and time operation. The ADVANCE DATE/TIME LED should stop flashing.

Normal calendar advance is disabled while the FRONT switch is in the SET DATE position and the clock is stopped while in the SET TIME position. If the clock is 1 or 2 minutes fast, the SET TIME position may be used to hold the clock until it is correct. Timekeeping will resume from 0 seconds when the switch is returned to the CENTER (NORMAL) position.

Notes: A. A SUMMARY OF THE FOREGOING DATE AND TIME ADJUSTMENT PROCEDURES IS SHOWN IN TABLE A.

- B. IF POWER TO THE PRINTER IS INTERRUPTED, the time and date will have to be reset. As stated earlier, a time and date printout of "all 9's" indicates that power was interrupted (See Diagram 4).
- C. DURING A LEAP YEAR, the calendar must be set manually to February 29th (2-29). It will automatically advance to March 1st (3-01) at midnight.

TABLE A: DATE AND TIME ADJUSTMENT SUMMARY					
Action	FRONT SWITCH			REAR SWITCH	
	SET DATE (left)	NORMAL (center)	SET TIME (right)	SET MONTH/HR. (left)	SET DAY/MIN. (right)
NORMAL		X		either position	
Set MONTH	X			X	
Set DAY	X				X
Set HOUR			X	X	
Set MINUTE			X		X

Instructions: 1. Position FRONT and REAR switches.
2. Check printout.
3. Hold ADVANCE switch forward while counting flashes of ADVANCE DATE/TIME LED.
4. Check printout.

IMPORTANT: When settings are correct, RETURN FRONT SWITCH TO CENTER POSITION.

Completion of Installation:

Connect the appropriate fifteen pin connector cord from the No. 660 or 667 to the rear of the No. 661.

OPERATION:

The setting of the time and date can be checked at any time by momentarily

moving the PRINT/FEED switch (See Diagram 1) to the PRINT position. The paper tape may be advanced for tearing off by moving the switch to FEED.

When an incoming call is received, the ALARM REPORTING LED will light and the time, date and message will be printed out, as shown, for example, in Diagram 5.

Account (subscriber) numbers and alarm codes are programmed in advance by the alarm installing company.

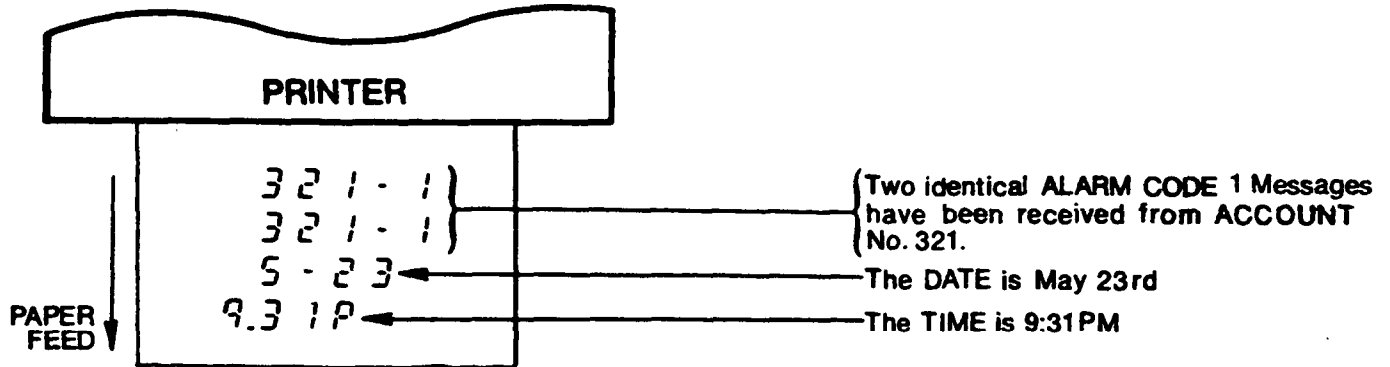


Diagram 5: TYPICAL ALARM PRINTOUT

OPTIONS:

In order to select any of the options described in this section the printer's cover must be removed. See Diagram 6.


110VAC (FACTORY SETTING)

 OPERATING VOLTAGE SWITCH
 220VAC

TABLE B: IDENTIFICATION PREFIX DIGIT JUMPERS

DESIRED PREFIX	JUMPERS TO CUT		
	BROWN	RED	YELLOW
NONE	NONE		
1	X		
2		X	
3	X	X	
4			X
5	X		X
6		X	X
7	X	X	X

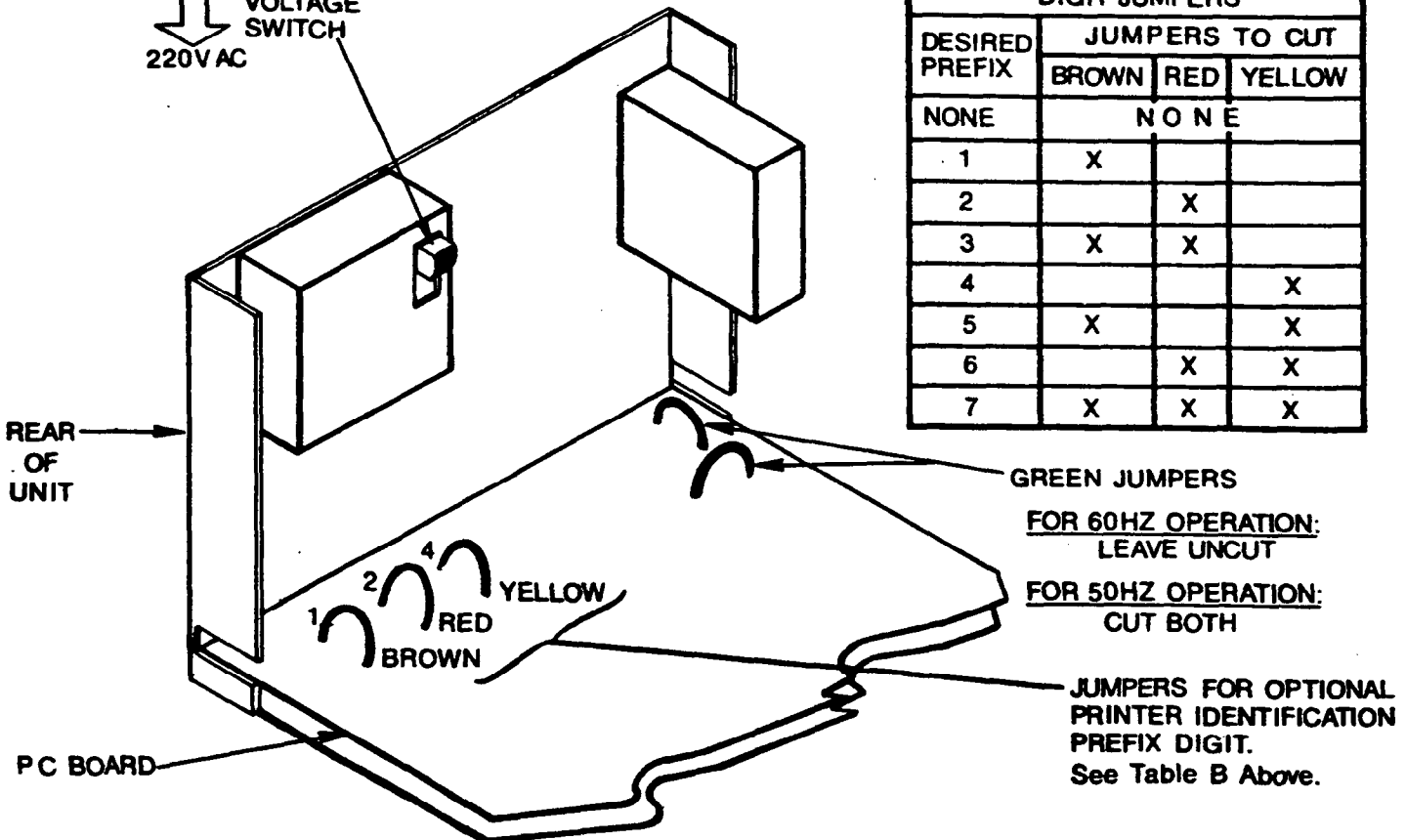


Diagram 6: COVER REMOVED

1. 220V. AC Operation: As shipped, the No. 661 is set for operation from 110V. AC. To operate from a 220V. AC source, slide the 110/220V. switch on the inside of the No. 661's back panel to its DOWN position.
2. 50Hz Operation: As shipped, the No. 661 is set for operation from a 60 Hz supply. If operation from a 50 Hz source is desired, cut both GREEN jumpers located on the PC board as shown in Diagram 6.
3. Printer Identification Prefix Digit: If more than one printer is to be used at a given location, it will be desirable to keep tapes from different printers identifiable. A prefix digit (1 to 7) may be added for this purpose, to the alarm message printout as shown, for example in Diagram 7. The "4" in the alarm message indicates that it was printed by "printer number 4".

To set the prefix digit, proceed as follows:

- a. Remove the No. 661's cover.
- b. Locate the BROWN, RED and YELLOW jumpers at the rear of the main PC board, as shown in Diagram 6, and cut them according to Table B also in Diagram 6.

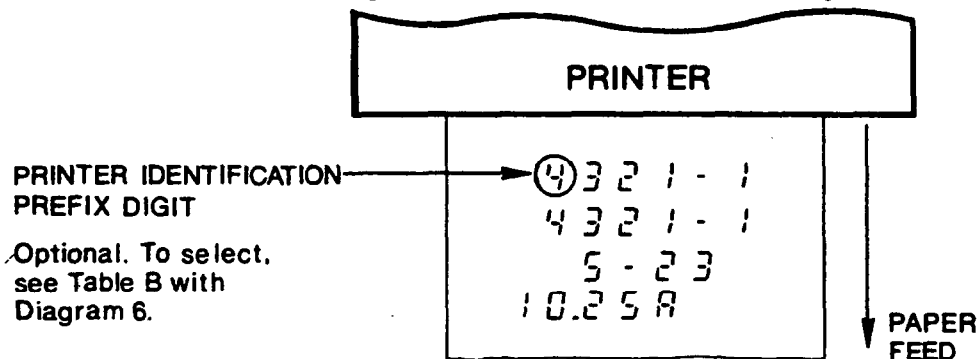


Diagram 7: PRINTOUT WITH OPTIONAL PRINTER IDENTIFICATION PREFIX DIGIT

PAPER LOADING PROCEDURE:

Loading paper does not affect the clock in the printer and it is not necessary to reset it when this is done.

The printer uses Ademco No.666-1 Thermal Paper.

1. Swing open the print mechanism panel (pull on its right edge).
2. Release the pressure lever by moving it to its RELEASE (up) position (See Diagram 8).
3. Remove empty core from mandrel and slip on the new roll of No. 666-1 Paper. Position it so that paper will feed from the top of the roll as shown in Diagram 8.
4. Thread the paper between the print head and driver roller.
5. Energize drive motor via front panel FEED switch so that paper feeds through front opening.
6. Center the paper in the front opening and take up any slack.

7. Lock pressure lever by moving it to its LOCK position and close the printing mechanism panel.

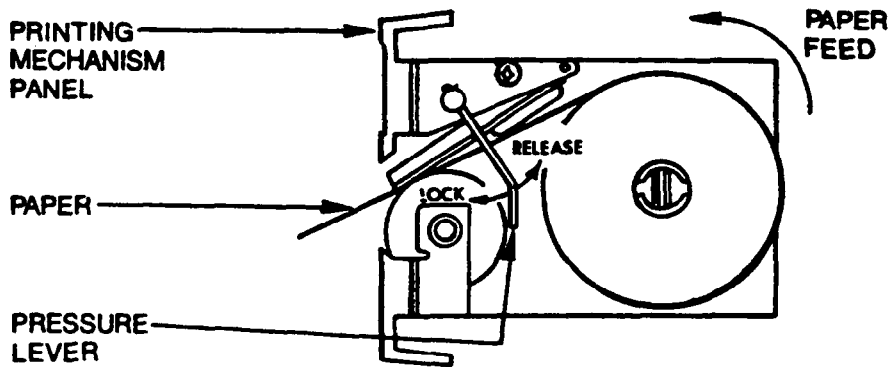


Diagram 8: PAPER LOADING DIAGRAM

Note: When printing with the print mechanism swung out (such as during date or time setting) the paper may move off center in the paper feed opening. This may be corrected, if necessary, by releasing the pressure lever, re-centering the paper and returning the pressure lever to its normal LOCK position.

PRINTHEAD CLEANING:

The printhead should normally be cleaned after use of 25 to 50 rolls of paper. Evidence of cleaning being required is uneven printing density. Generally the most often printed characters are most prone to residue build-up and their printed image will be light and irregular.

The recommended way to clean the head is to use a gauze pad saturated with alcohol.

1. Open the print mechanism panel, release the pressure lever and remove the roll of paper if one is in the printer.
2. With the pressure lever still released, feed an alcohol saturated gauze pad between the head and the roller in the same fashion as loading paper. Repeat several times and then allow time for the alcohol to evaporate completely.
3. Reload paper and commence normal operation.

GENERAL SPECIFICATIONS:

Physical: Width: 6 3/4" (17.1 cm)
 Depth: 13 1/2" (34.3 cm)
 Height: 6 3/4" (17.1 cm)

Electrical: Power (Normal): 110 V. AC, 60 Hz, 1/4A (average)
 Power (Optional): 220 V. AC, 50 or 60 Hz, 1/8A (average)
 12V. DC Current: 50 ma (normal)
 2A (maximum, while printing)

Emergency Standby (Optional): With No. 660 Receiver: A No. 665 Power Transfer Unit with 12 V., 60 AH Wet Cell Battery will provide approximately 1 week standby, depending on the reporting rate.

With No. 667 System: A No. 364-50 Power Supply will provide up to 48 hours standby, depending on reporting rate.

Fuses: AC Input: 3/8 Amp, Slo-Blo (Ademco No. 90).
Located on outside of rear panel.

DC Circuitry: 2 Amp (Ademco No. 90-2). Located inside unit, behind print mechanism opening.

Note: Disconnect all power before attempting to change fuses.

CONNECTING No. 661T (THERMAL) PRINTER TO No. 665

When a No. 665 Power Transfer Unit is to be used to provide standby power for a No. 661 (Thermal) Printer, different printer connections to the No. 665 are required than were used by the previous "ink printing" No. 661. This is to insure that power to the thermal printer's electronic timekeeping circuitry will not be interrupted even momentarily in the event of AC power failure.

Use the following diagram and follow the procedures described in the No. 665's installation instructions. Basically, the only changes in the redrawn diagram are: a) The RED lead of the "2 wire cord with connector" is connected to a different terminal than formerly and b) A telephone company coupler is no longer required.

Note: The information given herein is applicable as well to the No. 673T Digital Receiver/(Thermal) Printer for Rack Mounting.

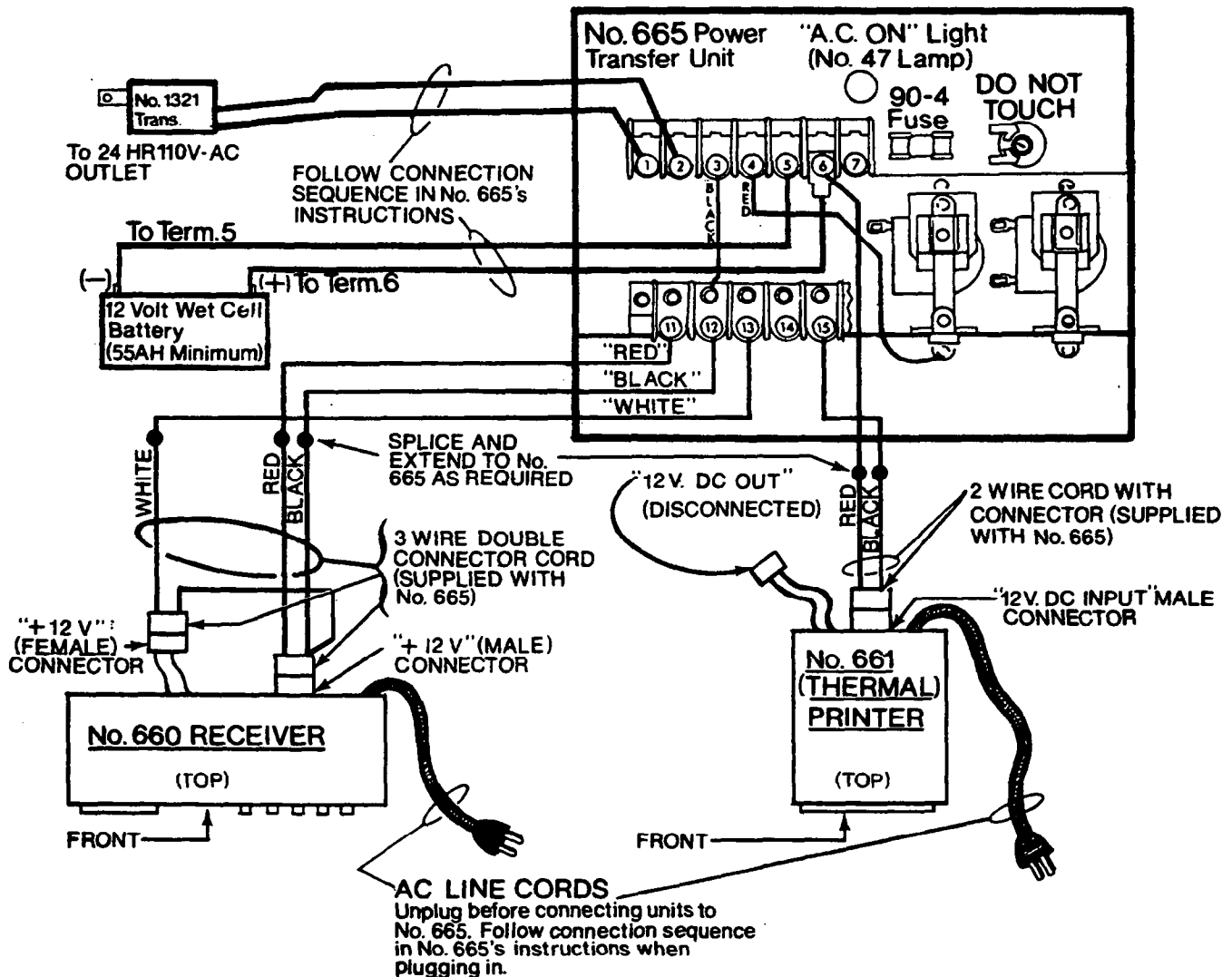


Diagram: CONNECTION OF RECEIVER AND (THERMAL) PRINTER TO No. 665

TROUBLESHOOTING No.661T

TROUBLE: 1. THE DIGITAL CLOCK APPEARS TO LOSE APPROXIMATELY 5 MINUTES PER DAY WHEN THE NO. 665 POWER TRANSFER UNIT IS USED WITH THE PRINTER.

PROBABLE CAUSE

REMEDY

- A. Extended use of the printer without AC power (the built-in oscillator requires AC synchronization to maintain highly accurate time).
- A. Be sure the No. 661T is always plugged into a 24 hour AC outlet.

TROUBLE: 2. THE UNIT APPEARS TO BE INOPERATIVE.

PROBABLE CAUSE

REMEDY

- A. No AC power present at unit (when No. 665 is NOT being used with the printer).
- A. Be sure that printer is plugged into a 24-hour AC outlet.
- B. Blown fuse(s). Check the condition of both fuses (the AC input fuse is located at the rear of the panel. The DC circuitry fuse is located inside unit, behind print mechanism).
- B. Replace AC input fuse with 3/8 amp, Slo-Blo (Ademco No. 90). Replace DC circuitry fuse with 2 ampere (Ademco No. 90-2) fuse.
- C. Loose or disconnected cable attaching printer and digital receiver.
- C. See that both cable ends are securely fitted into both the receiver and the printer.

TROUBLE: 3. UNIT PRINTS MESSAGE FOUR TIMES IN ONE CALL.

PROBABLE CAUSE

REMEDY

- A. The digital communicator in the subscriber's premises may be set for four message shutdown option.
- A. This is a normal option and will result in 4 complete messages being sent automatically.

TROUBLE: 4. THE PRINTING IS UNEVEN IN LETTER DENSITY, IS LIGHT, OR IRREGULAR.

PROBABLE CAUSE

REMEDY

- A. A dirty printhead is causing this to occur (normal cleaning should be performed after use of 25 to 50 rolls of paper).
- A. Follow procedures under PRINTHEAD CLEANING found in the instructions.