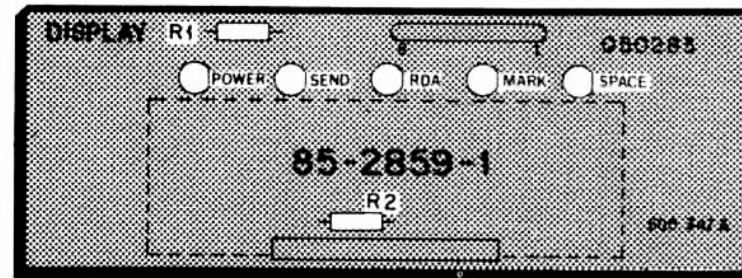
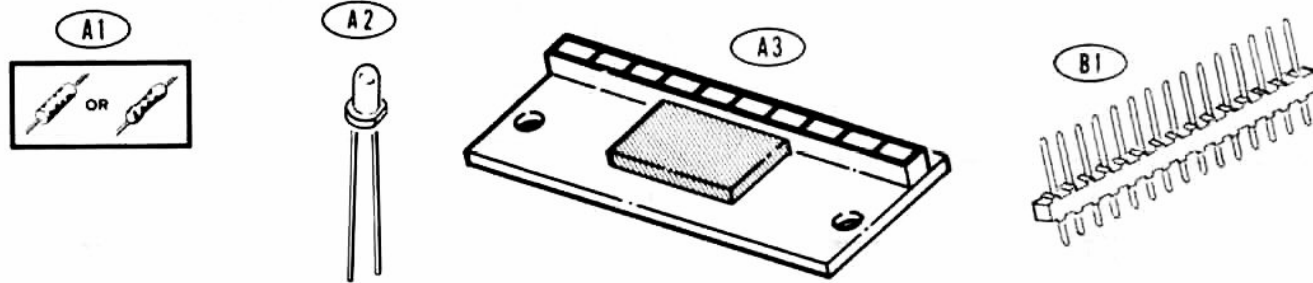


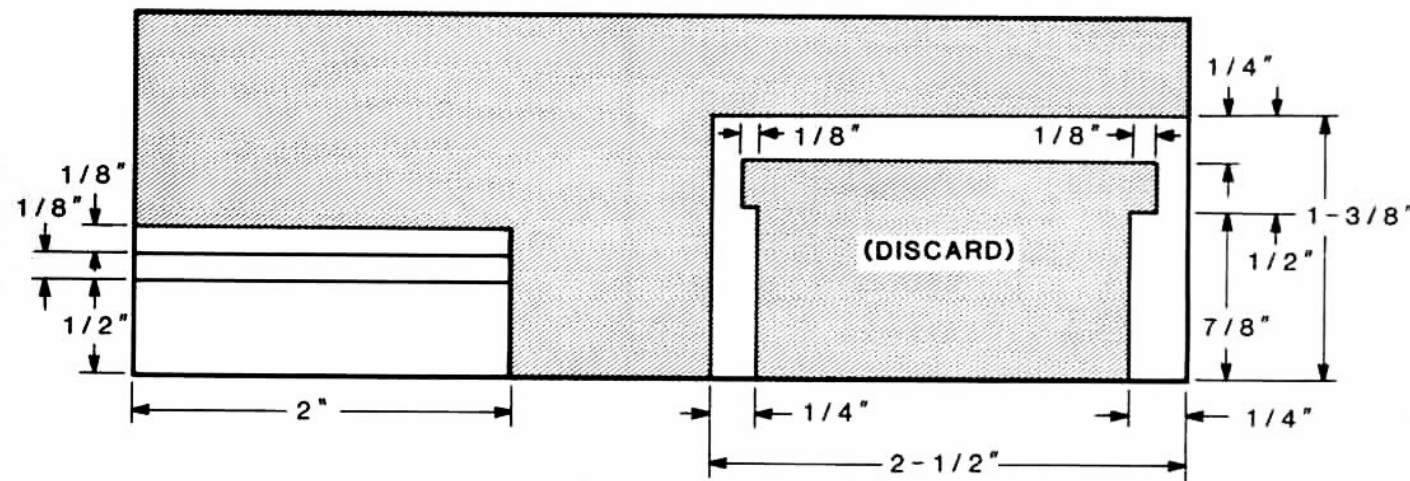
ILLUSTRATION BOOKLET

Part of 595-3100-01

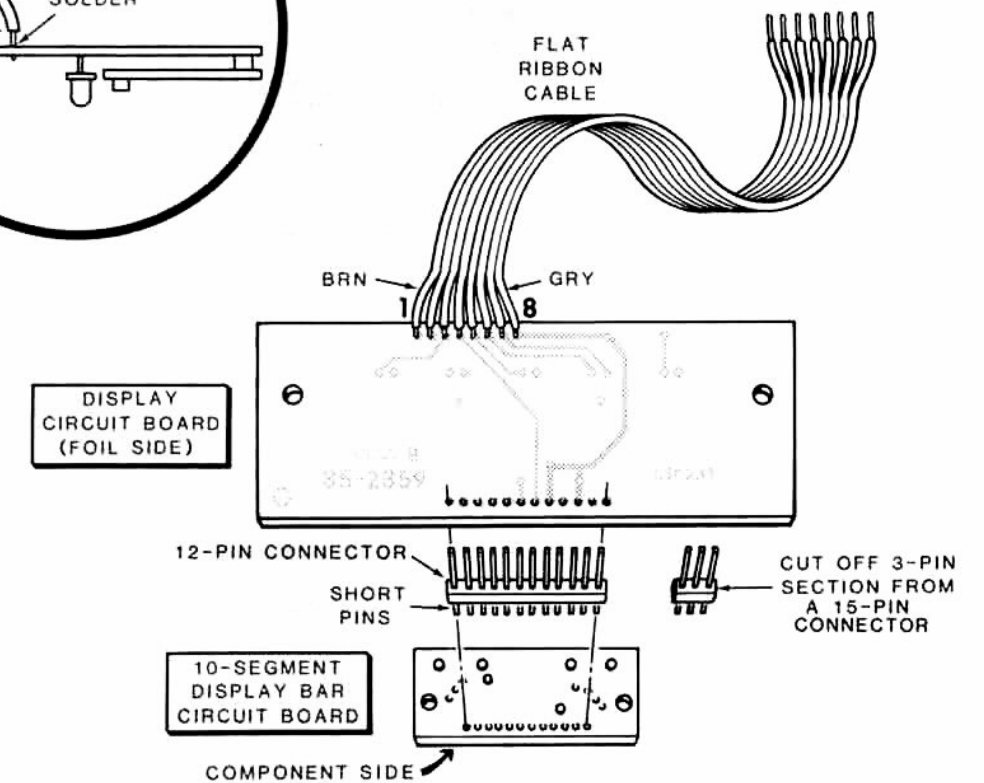
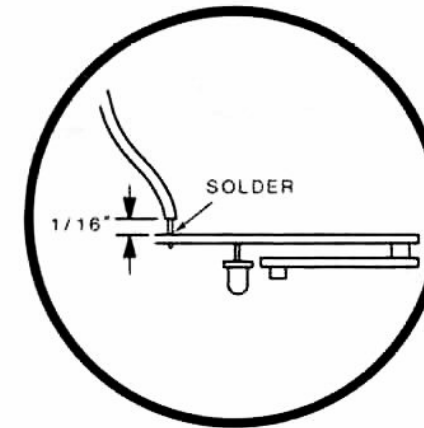
DISPLAY CIRCUIT BOARD PARTS PICTORIAL



PICTORIAL 1-1



Detail 1-2B

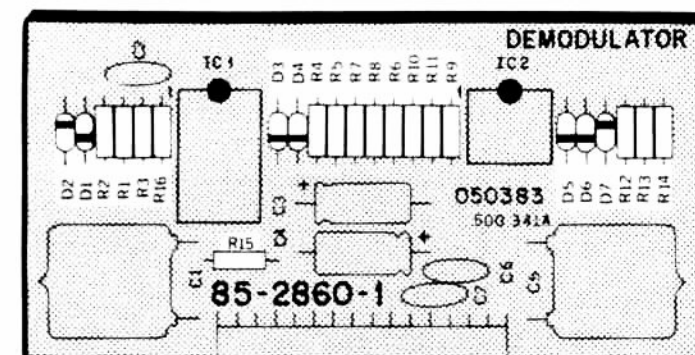
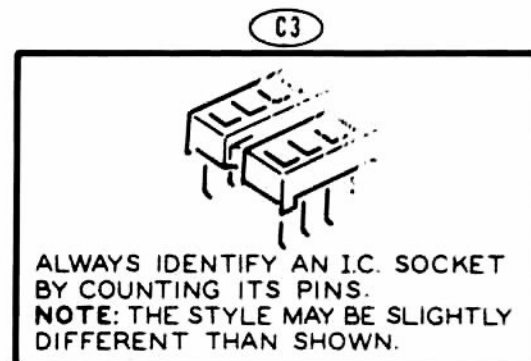
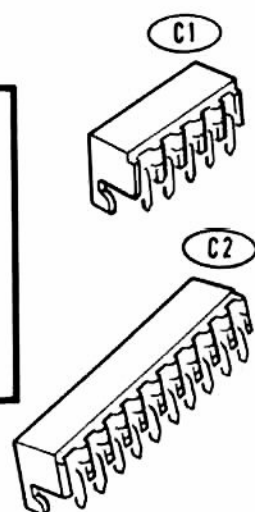
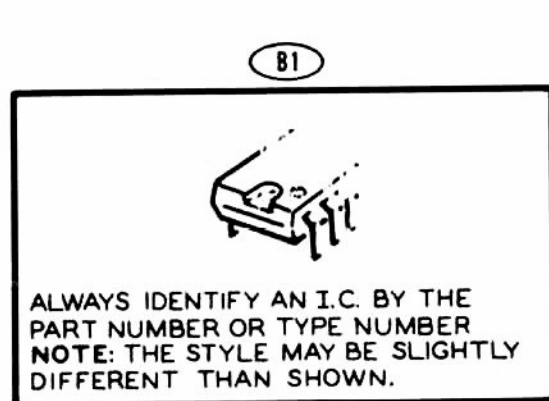
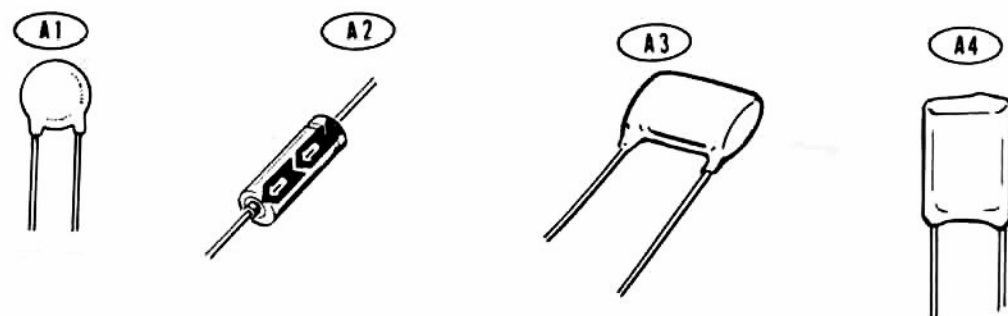


PICTORIAL 1-2

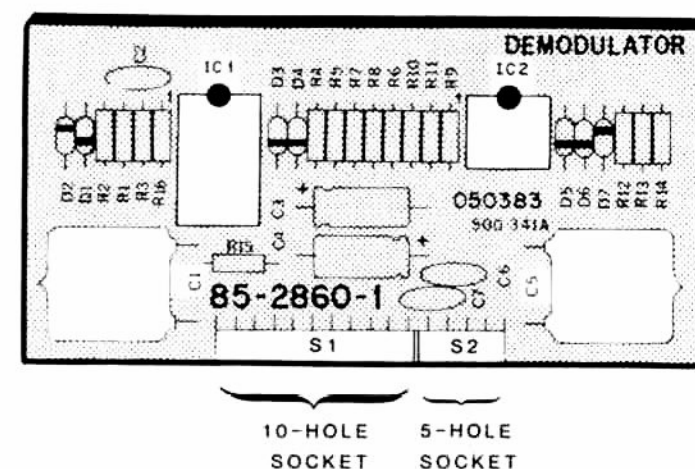
Model HD-3030

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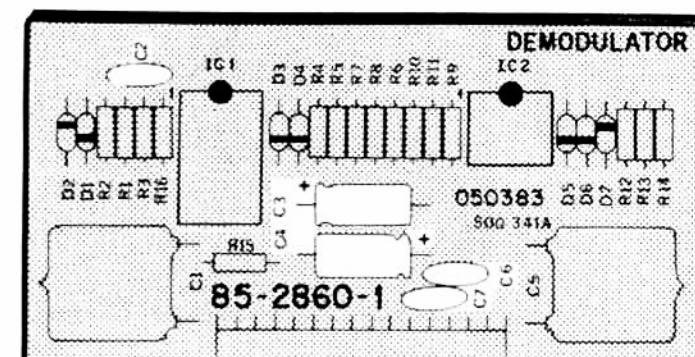
RTTY DEMODULATOR CIRCUIT BOARD PARTS PICTORIAL



PICTORIAL 2-1

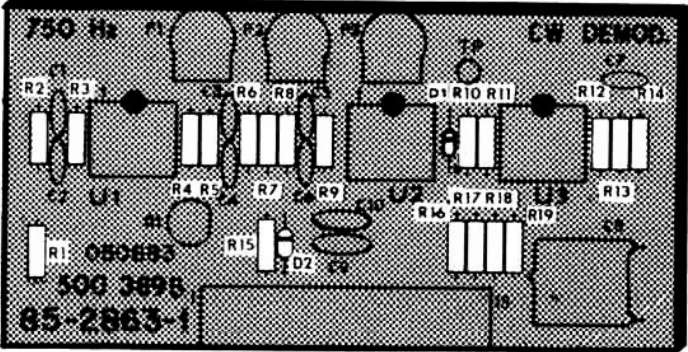
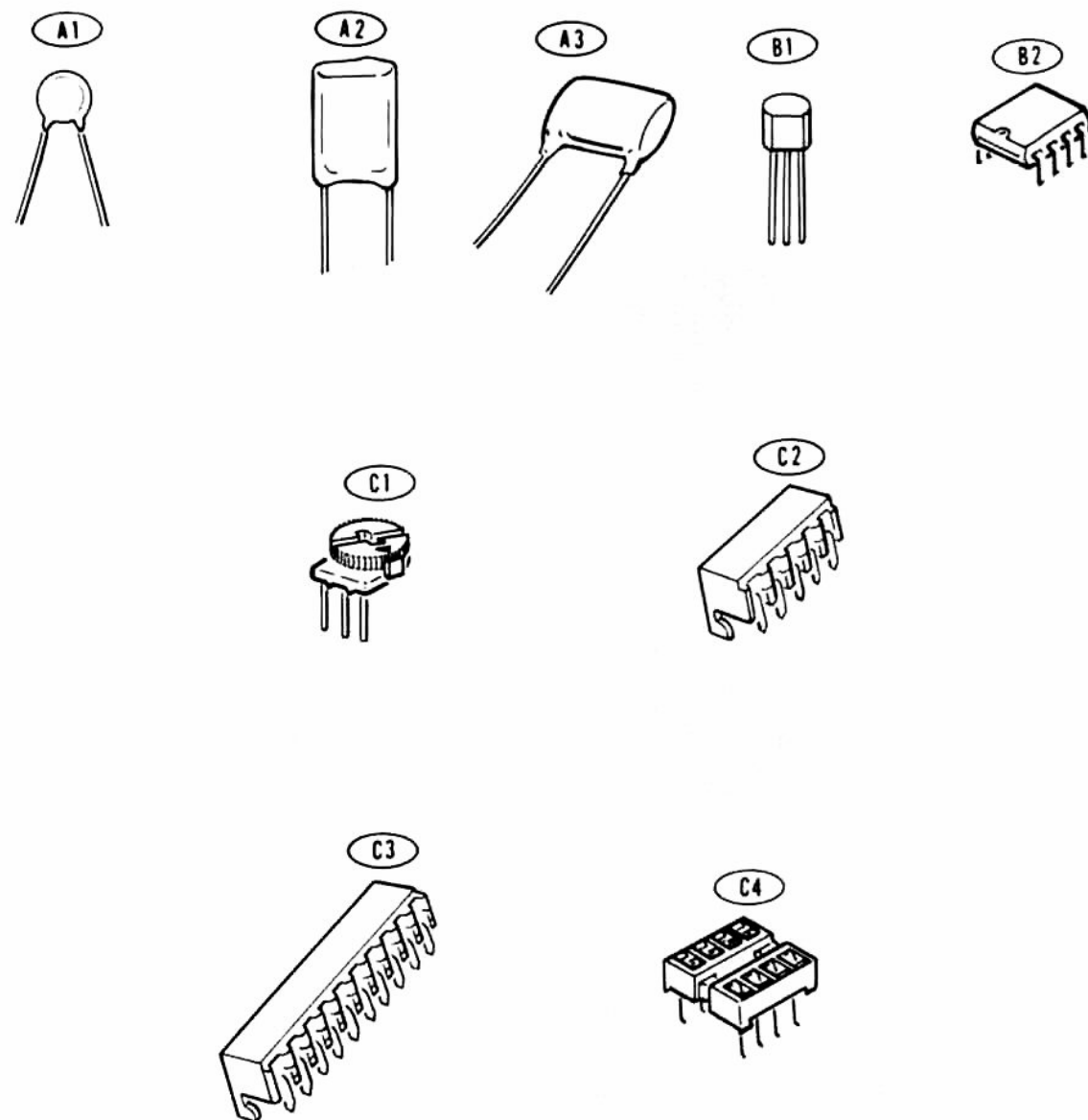


PICTORIAL 2-2

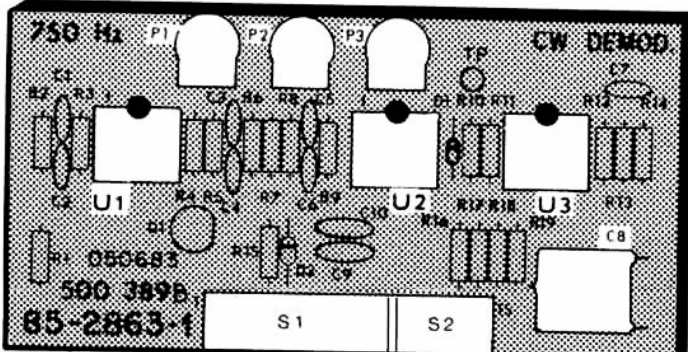


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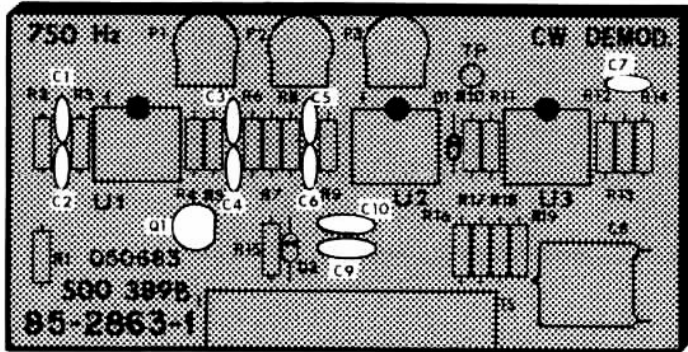
CW DEMODULATOR CIRCUIT BOARD PARTS PICTORIAL



PICTORIAL 3-1

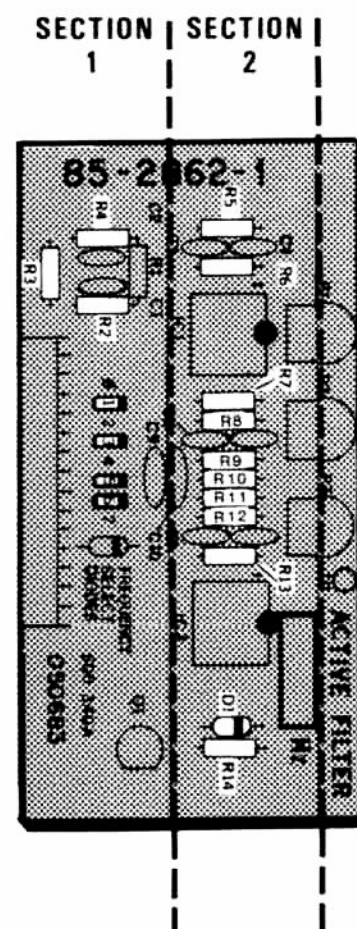
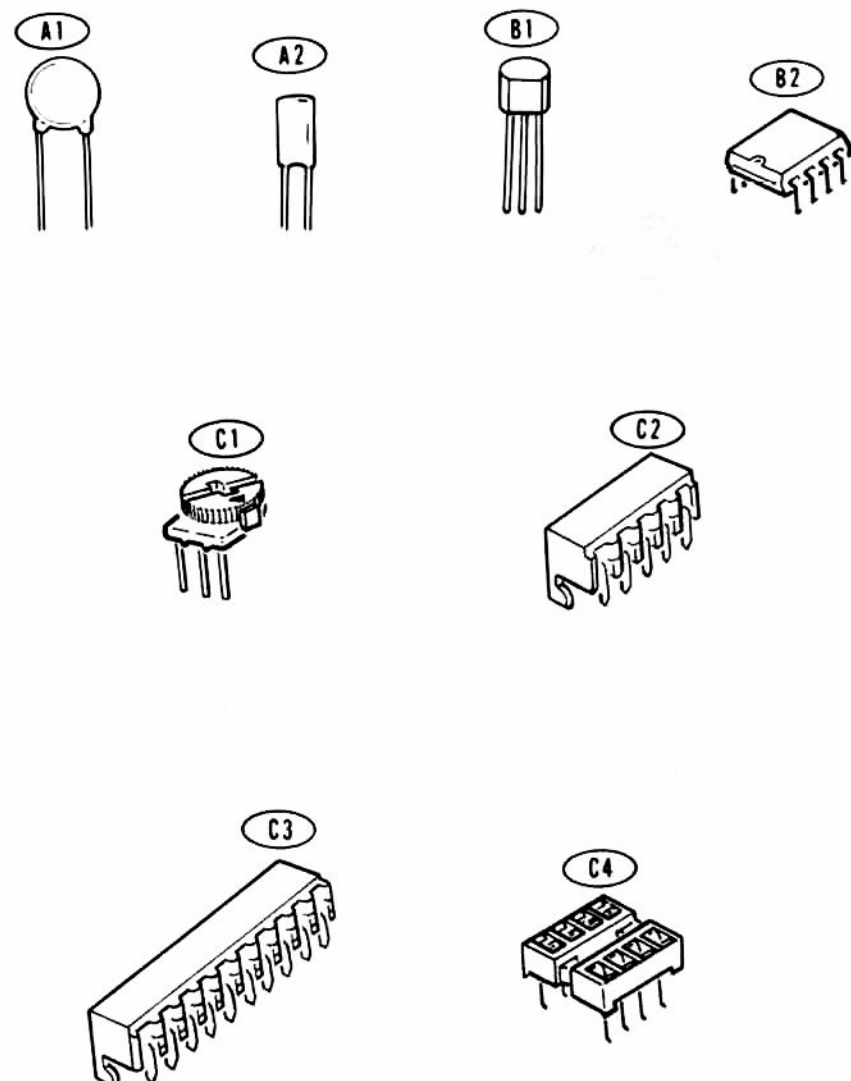


PICTORIAL 3-2

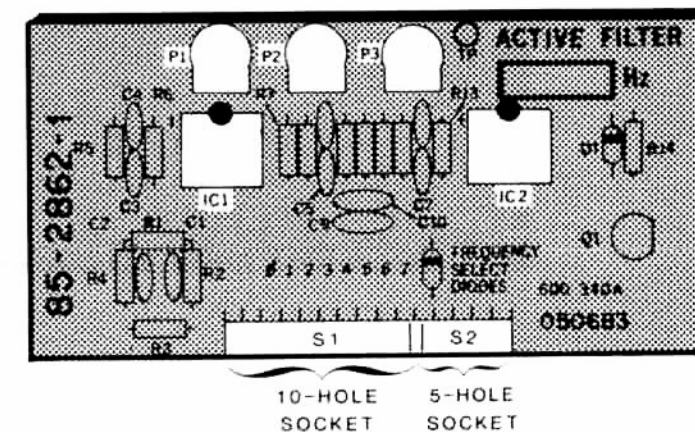


PICTORIAL 3-3

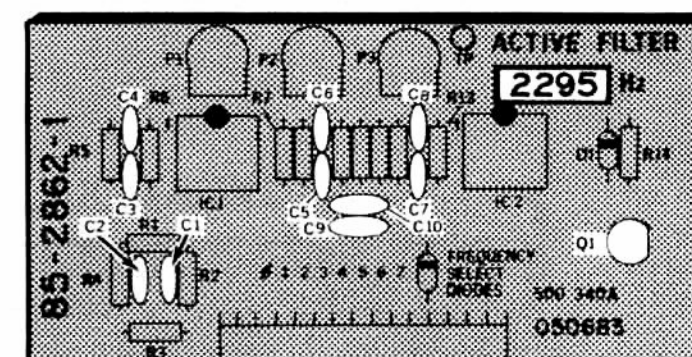
ACTIVE FILTER (2295 Hz) CIRCUIT BOARD PARTS PICTORIAL



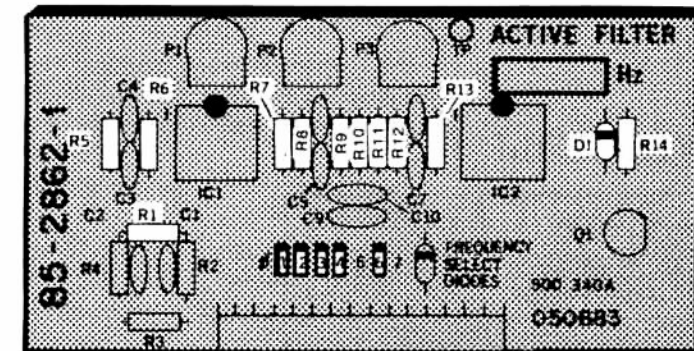
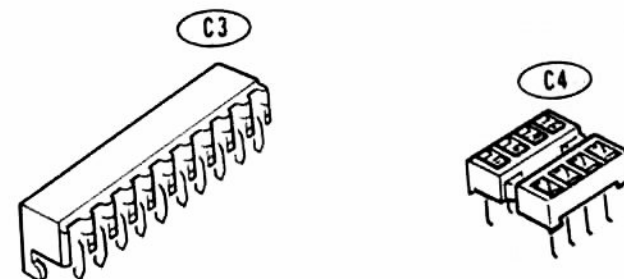
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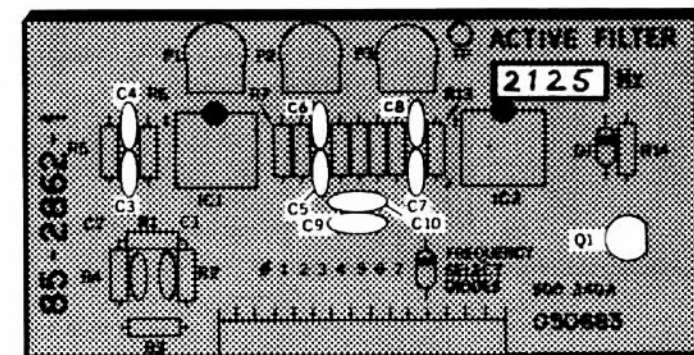
PICTORIAL 4-2



PICTORIAL 4-3

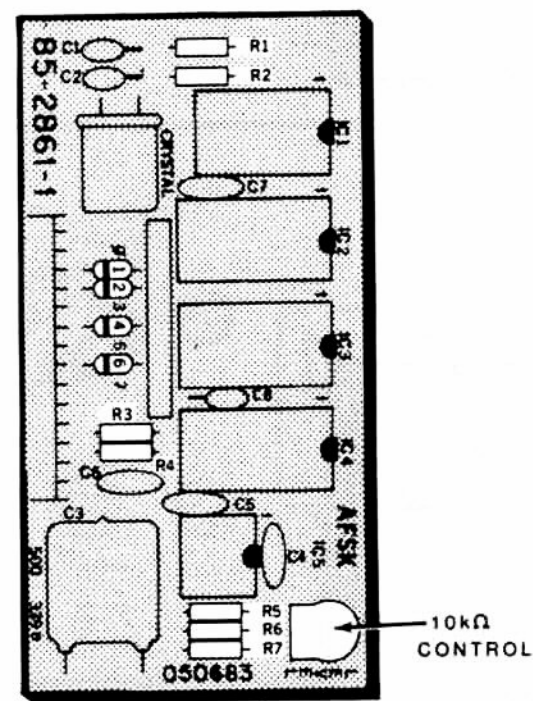
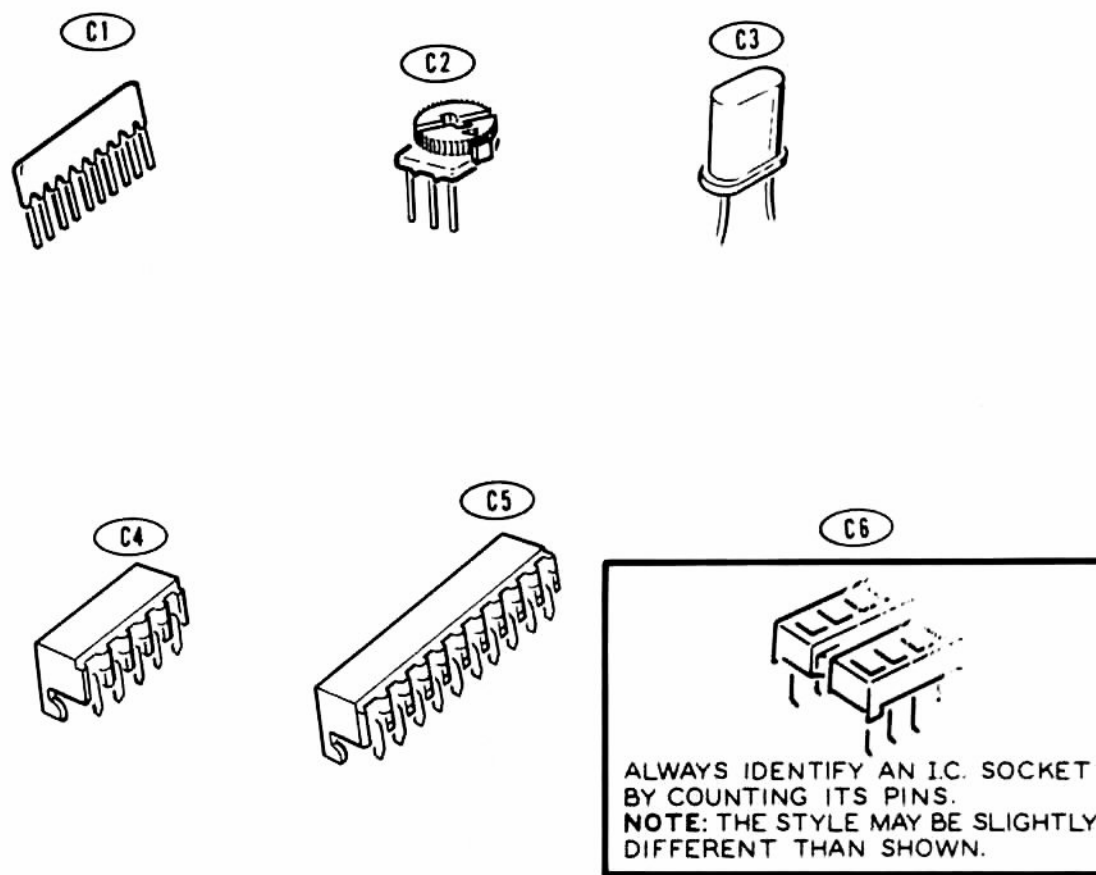
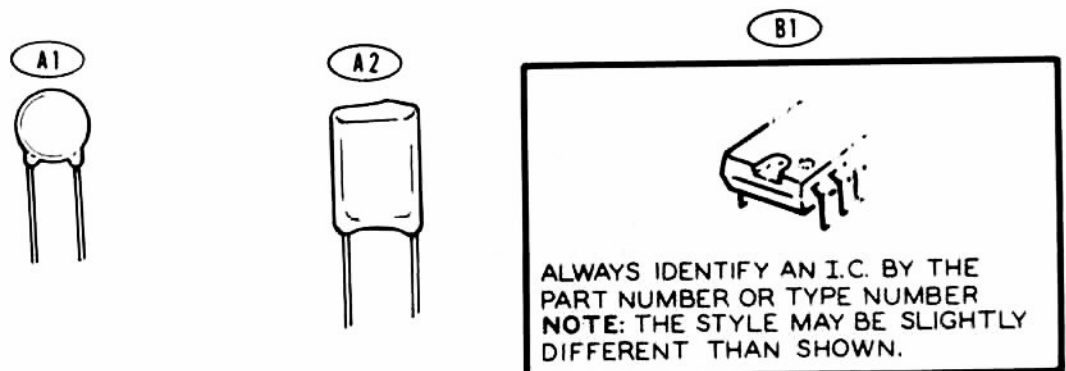


PICTORIAL 5-2

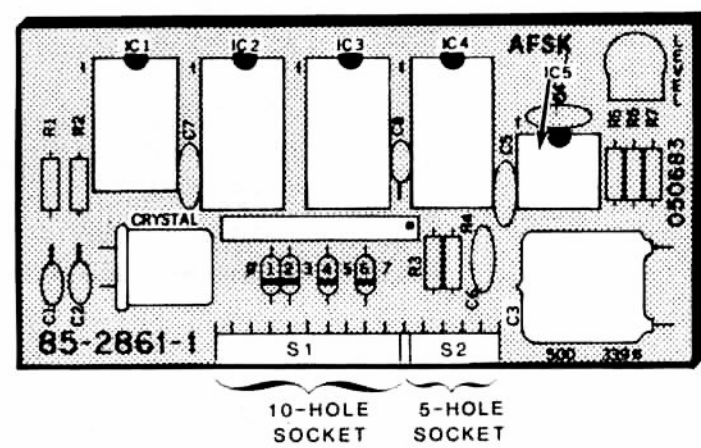


Page 5

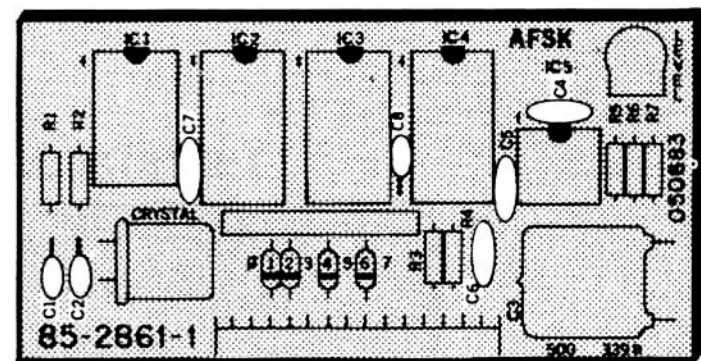
AFSK CIRCUIT BOARD PARTS PICTORIAL



PICTORIAL 6-1

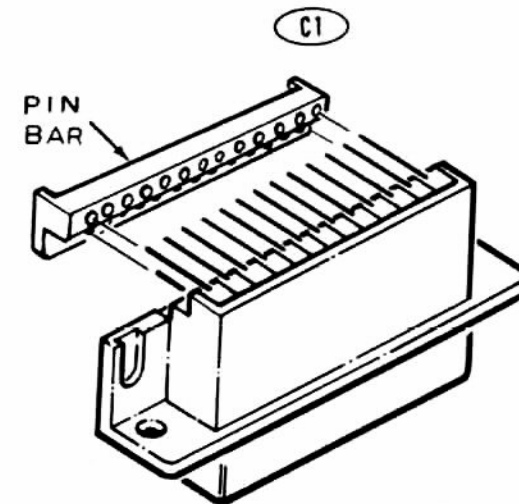
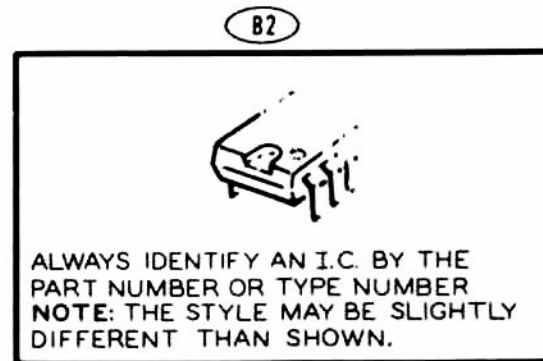


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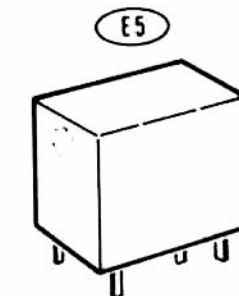
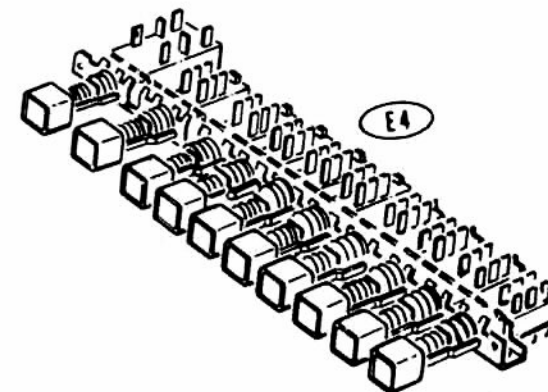
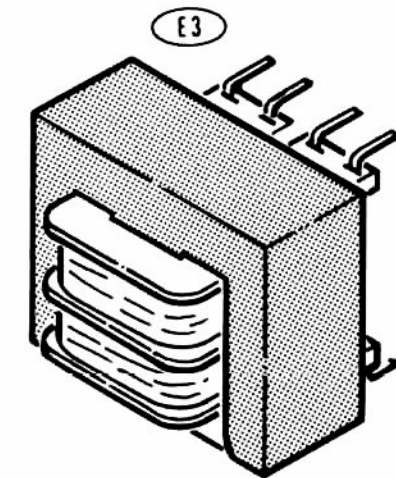
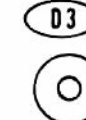
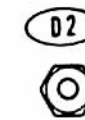
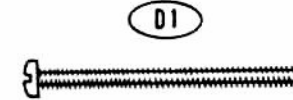
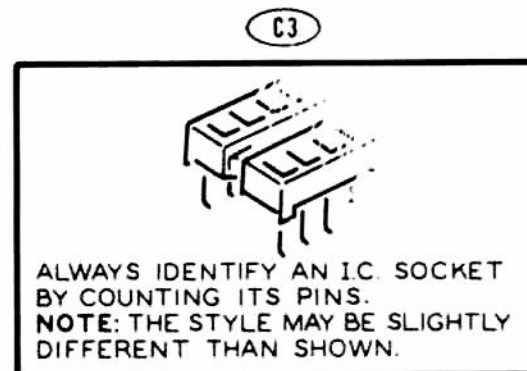
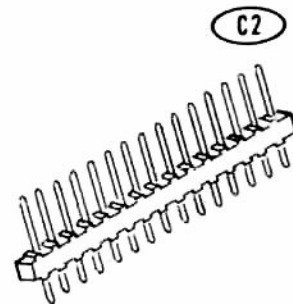


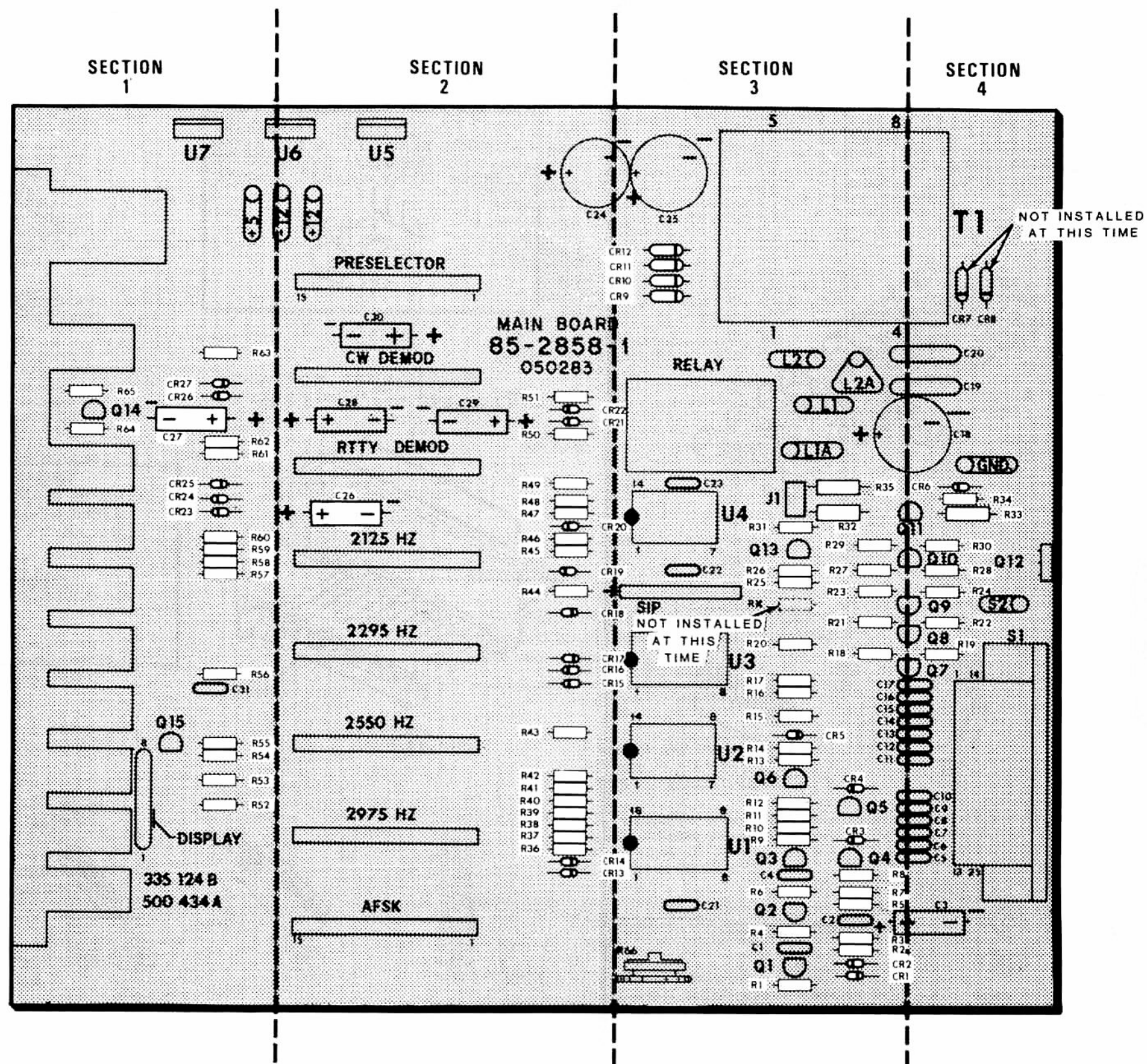
PICTORIAL 6-3

MAIN CIRCUIT BOARD PARTS PICTORIAL

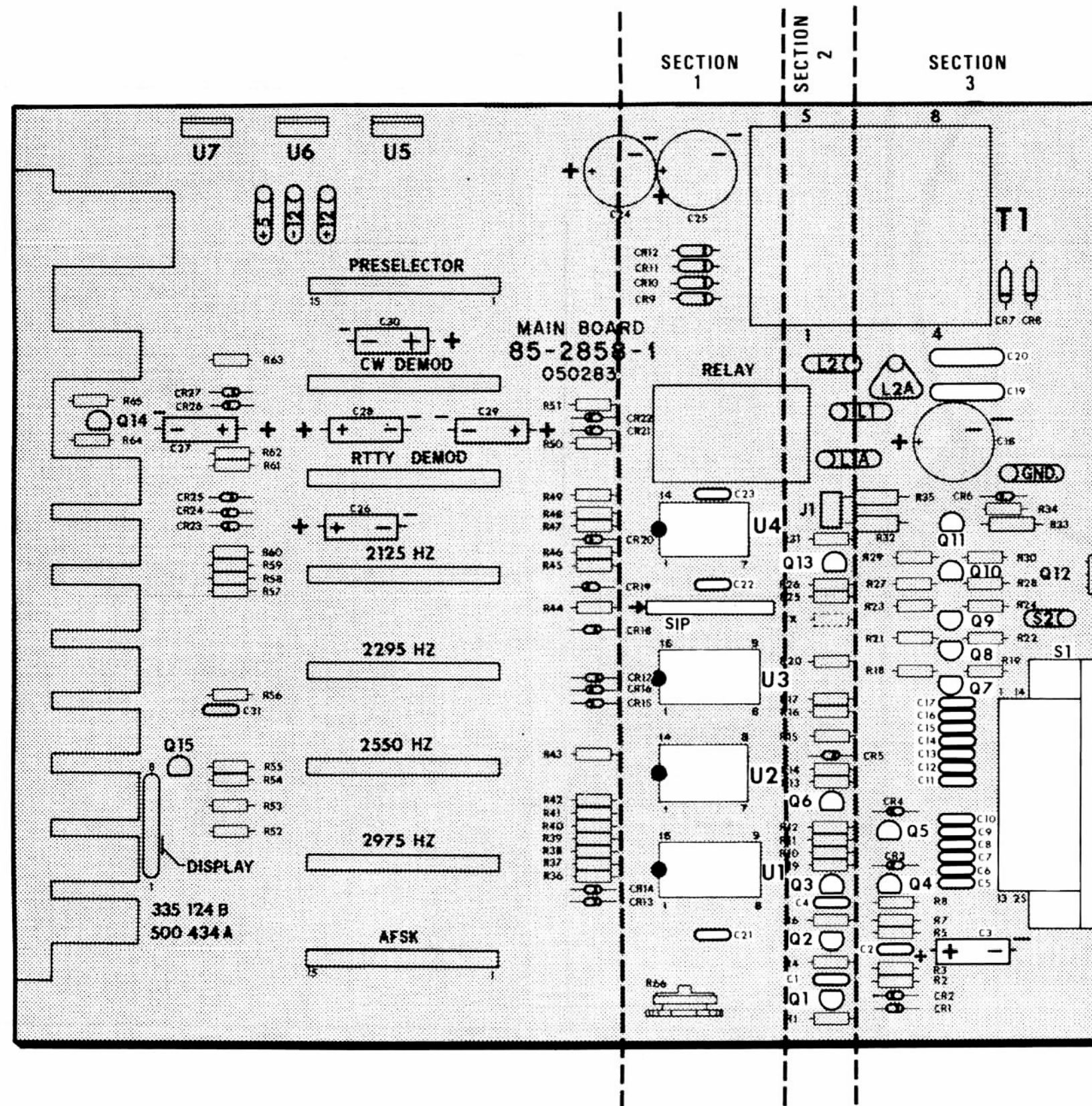


(1 OR 2 PIECE, PIN BAR MAY NOT
COME ON CONNECTOR.)

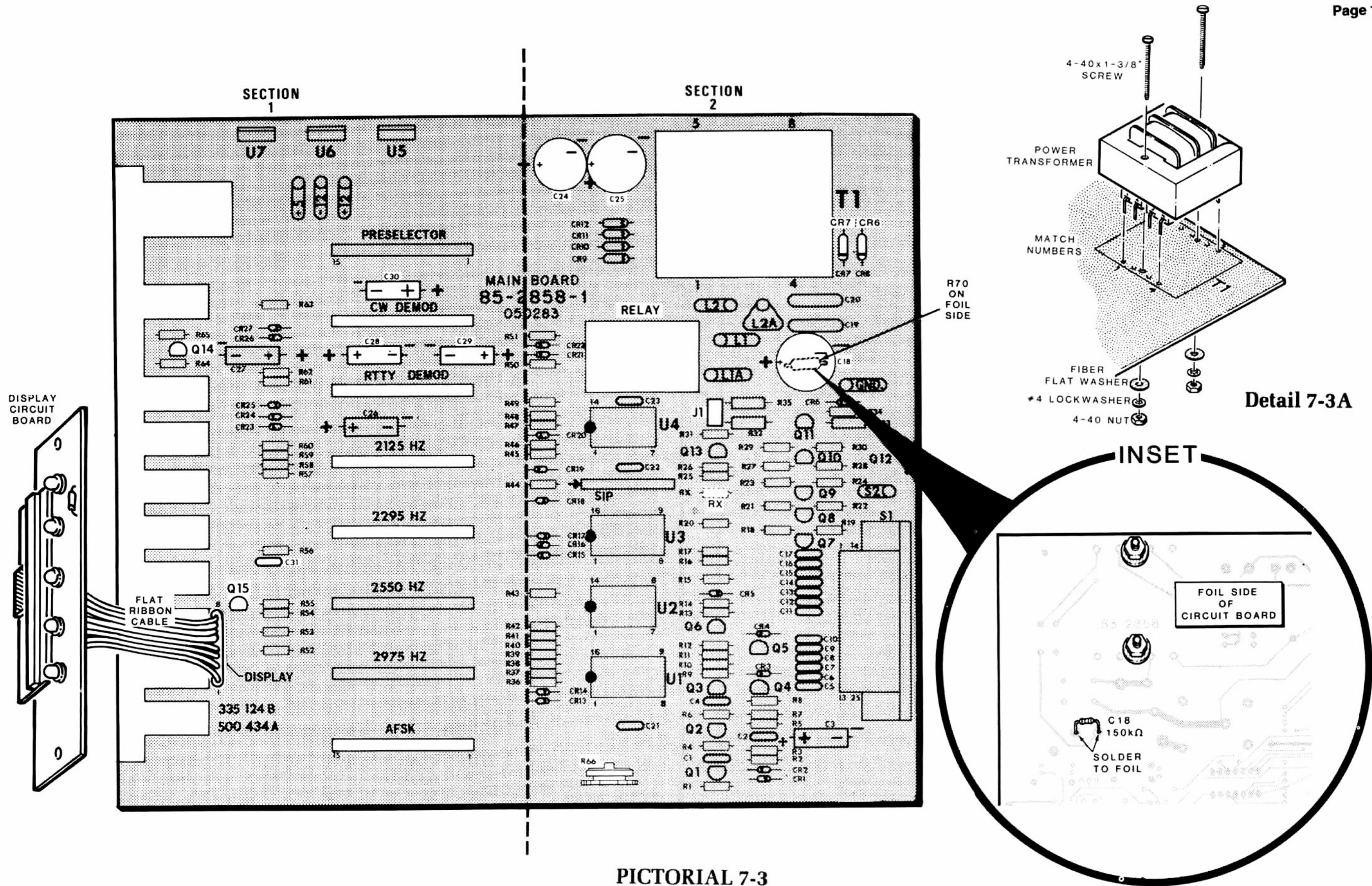




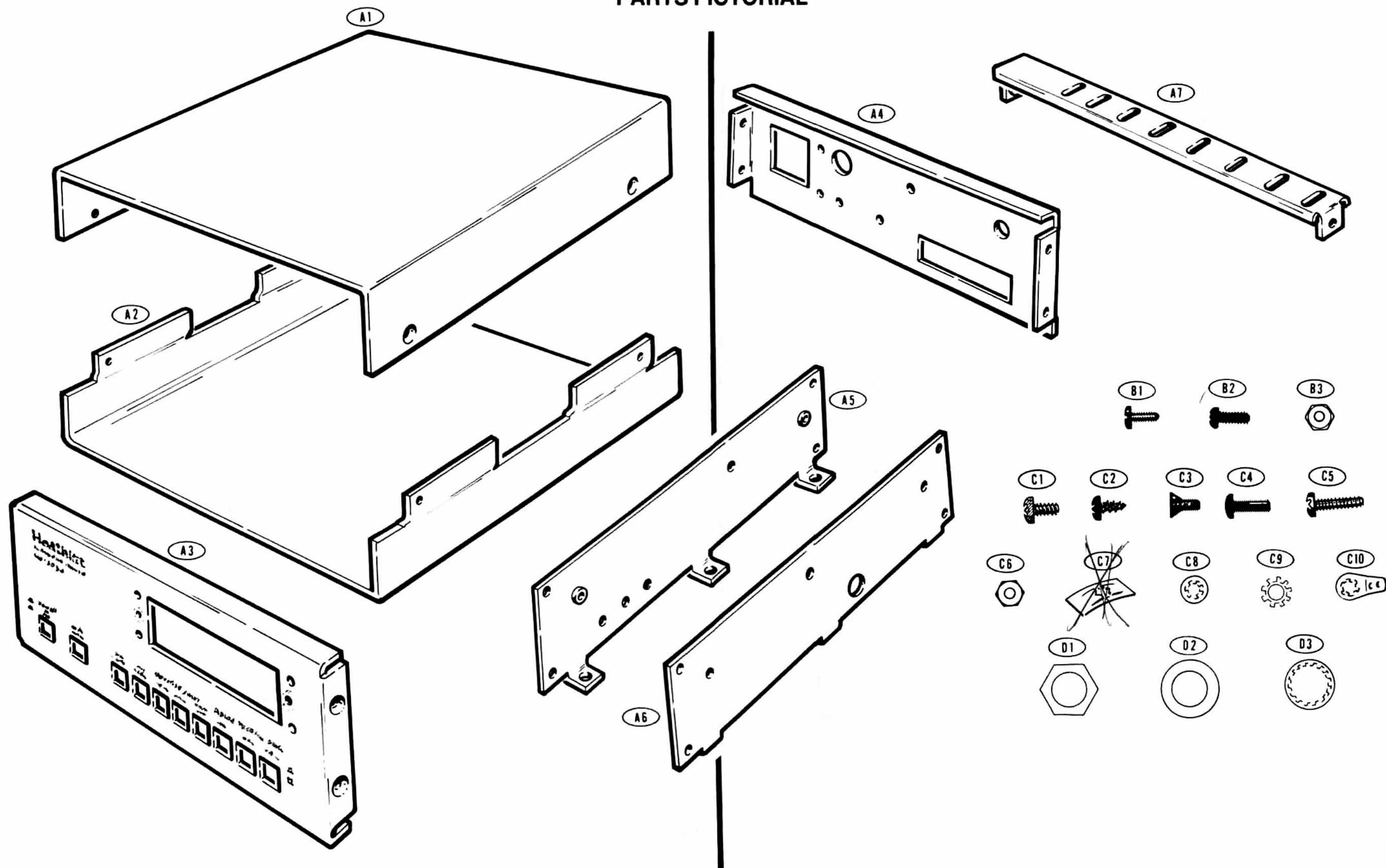
PICTORIAL 7-1



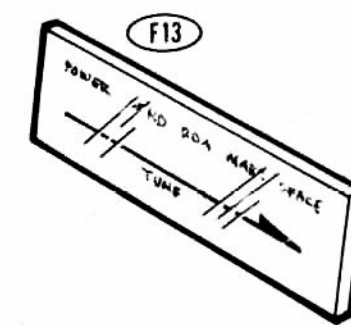
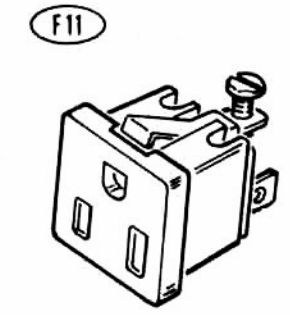
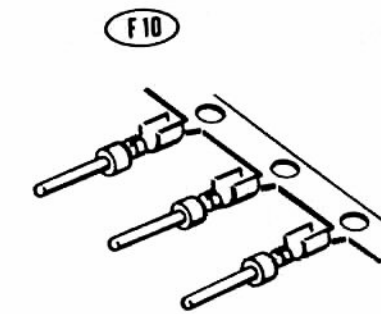
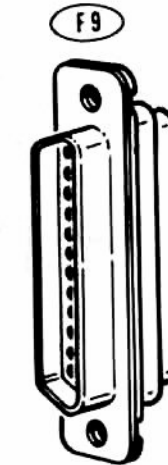
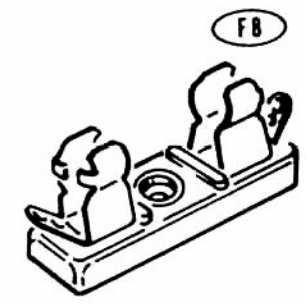
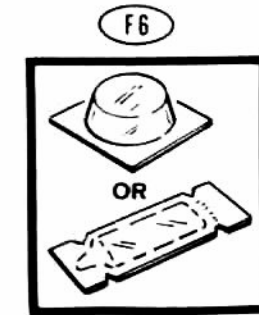
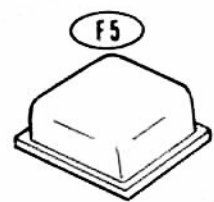
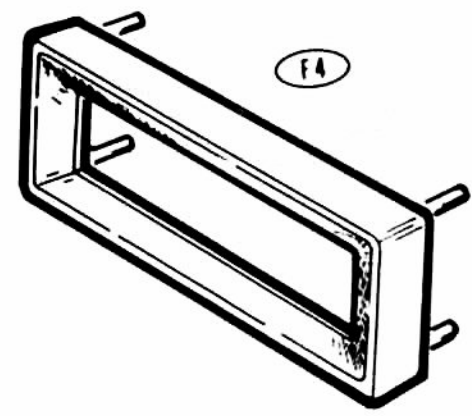
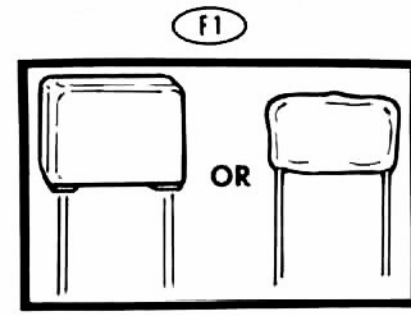
PICTORIAL 7-2

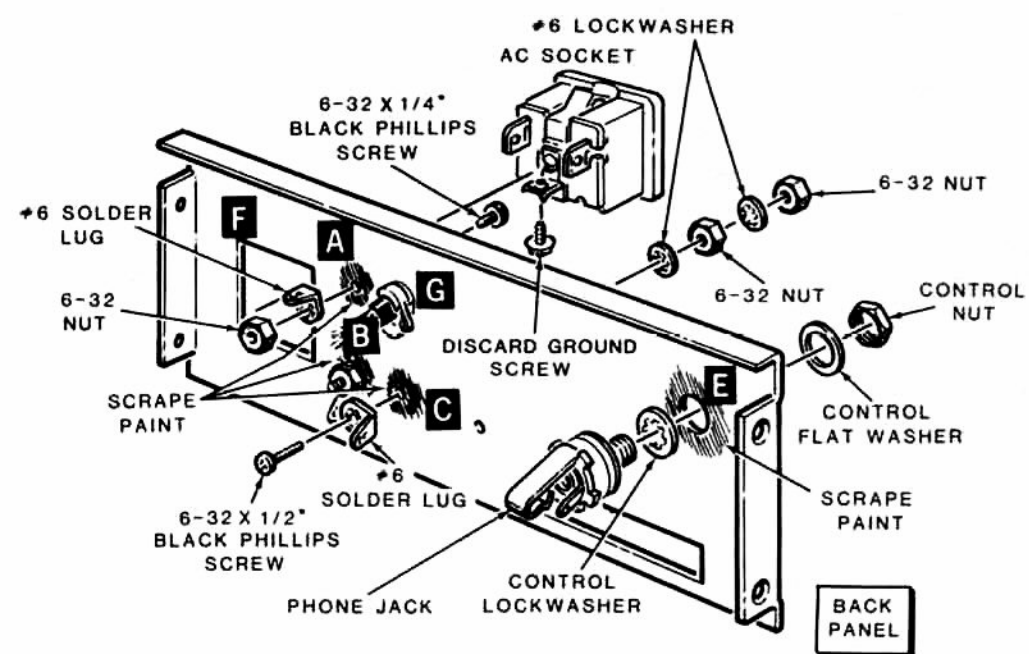


CHASSIS PARTS PICTORIAL

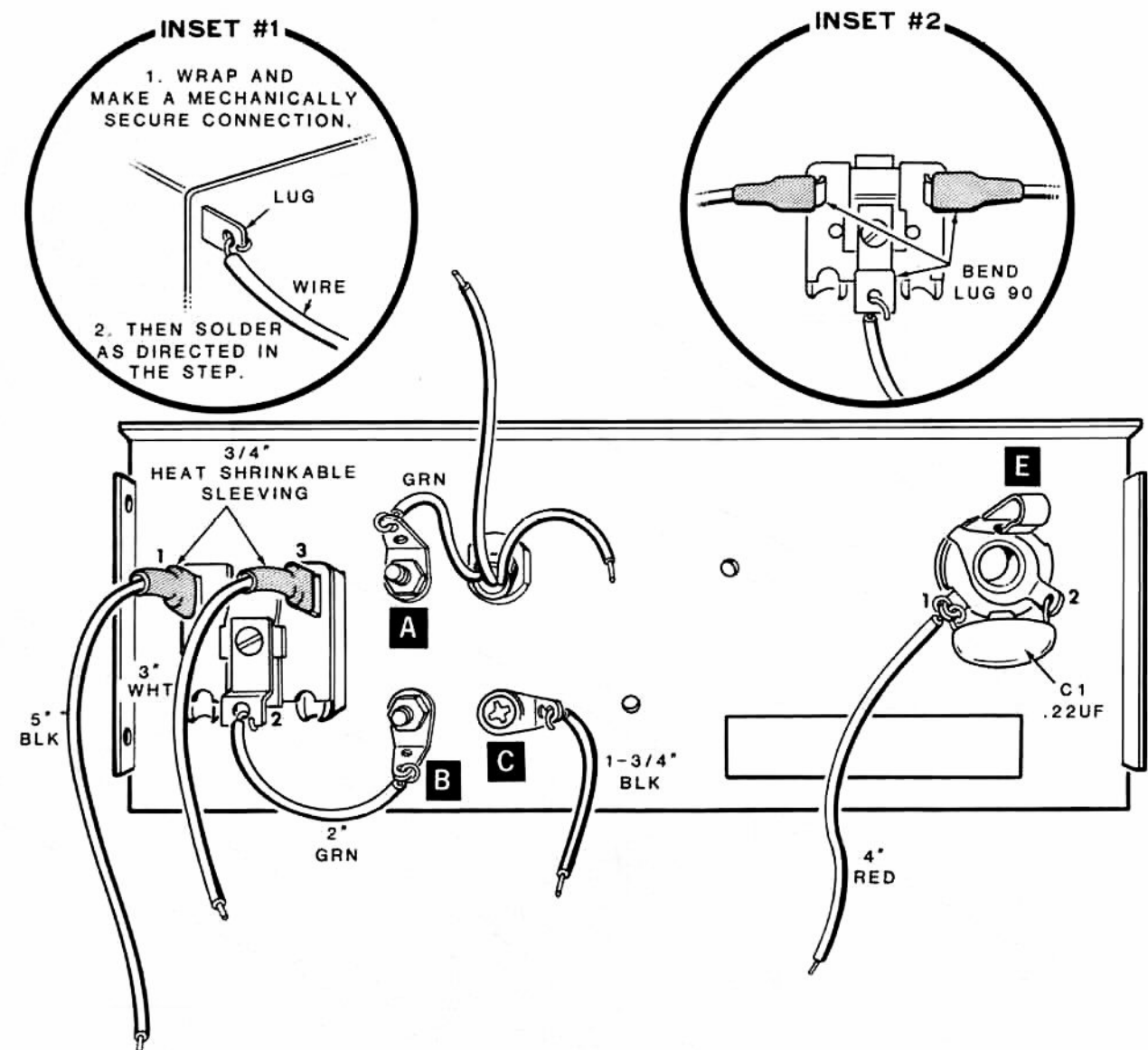


CHASSIS PARTS PICTORIAL (CONT'D)

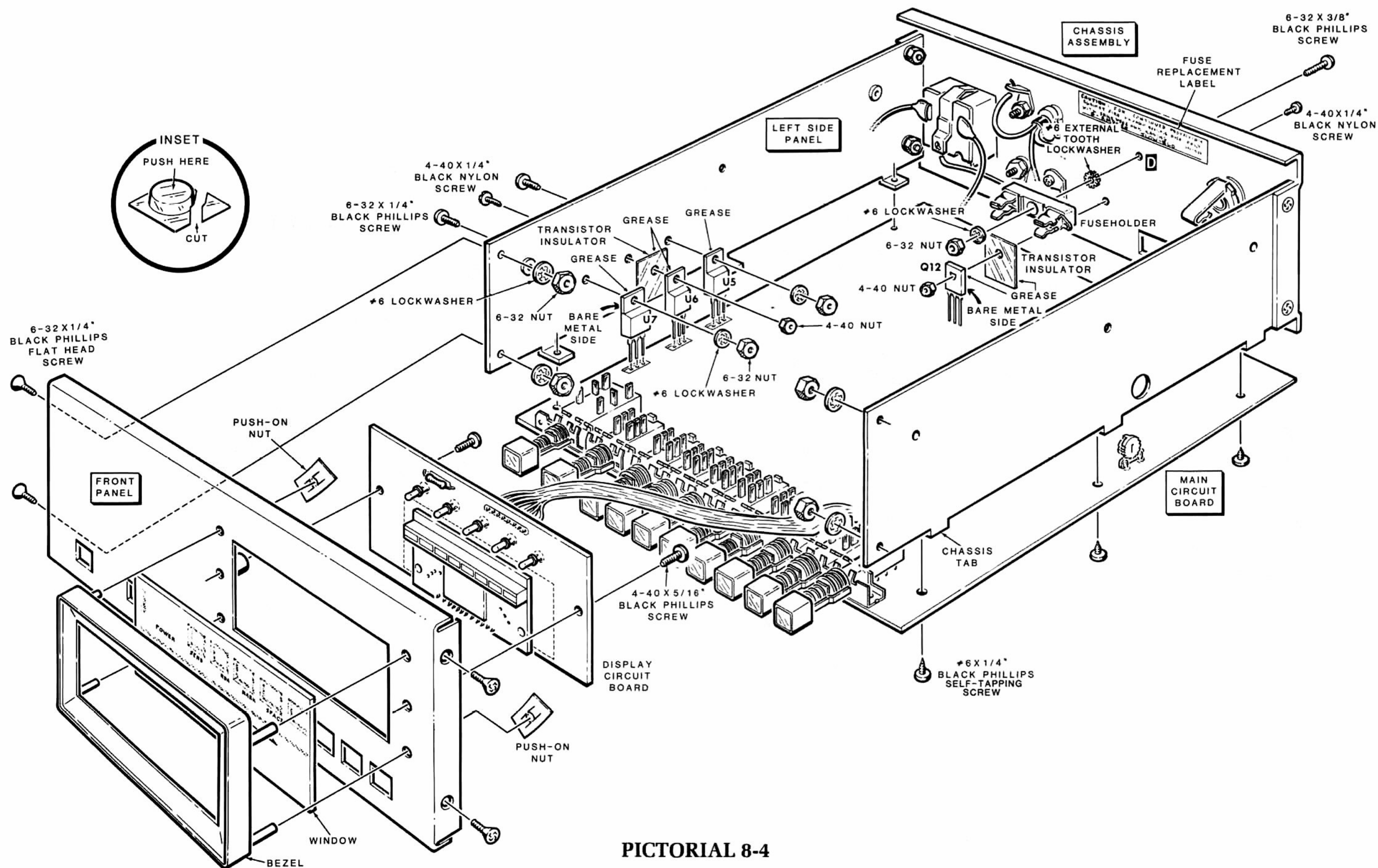


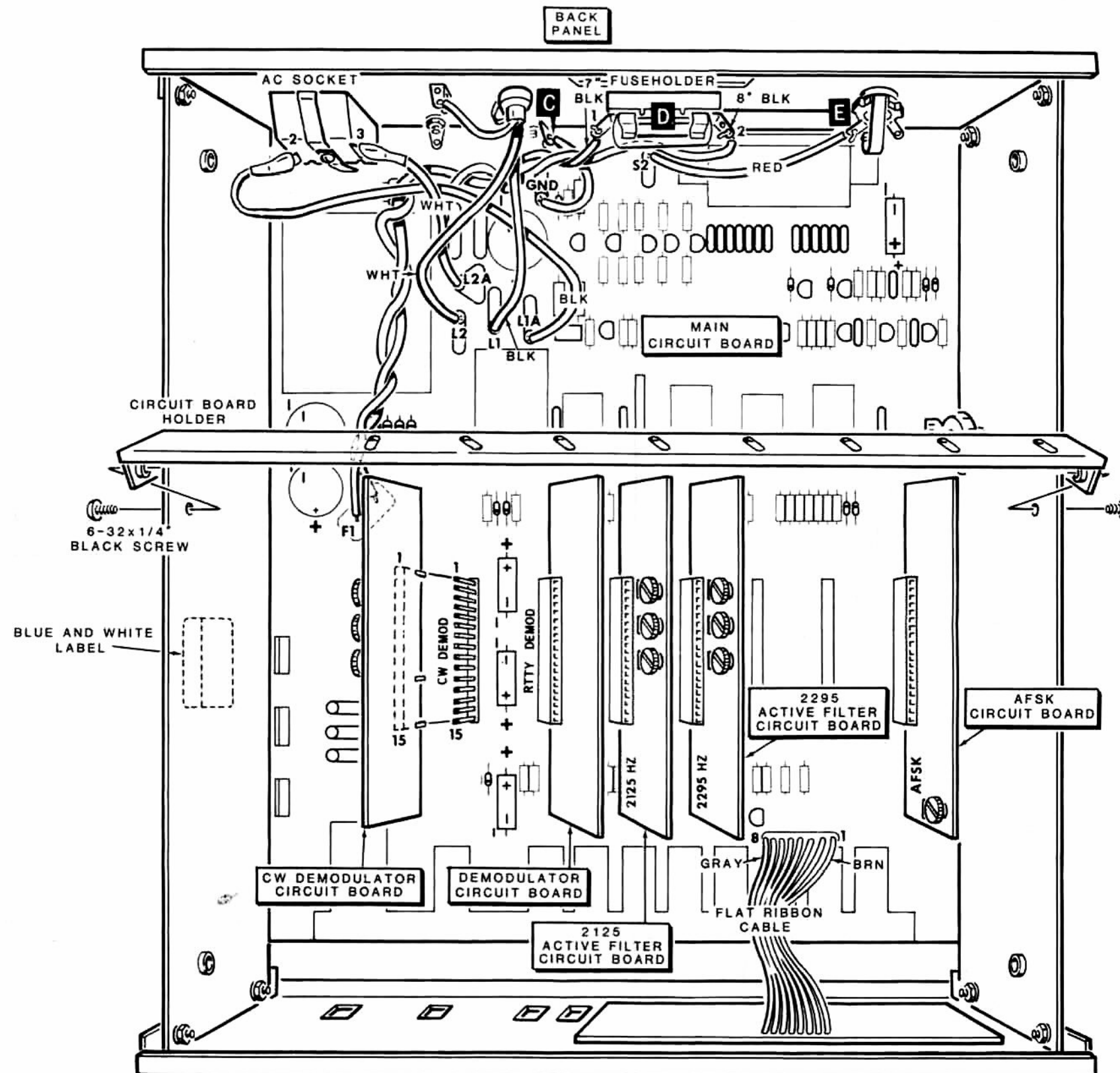


PICTORIAL 8-1

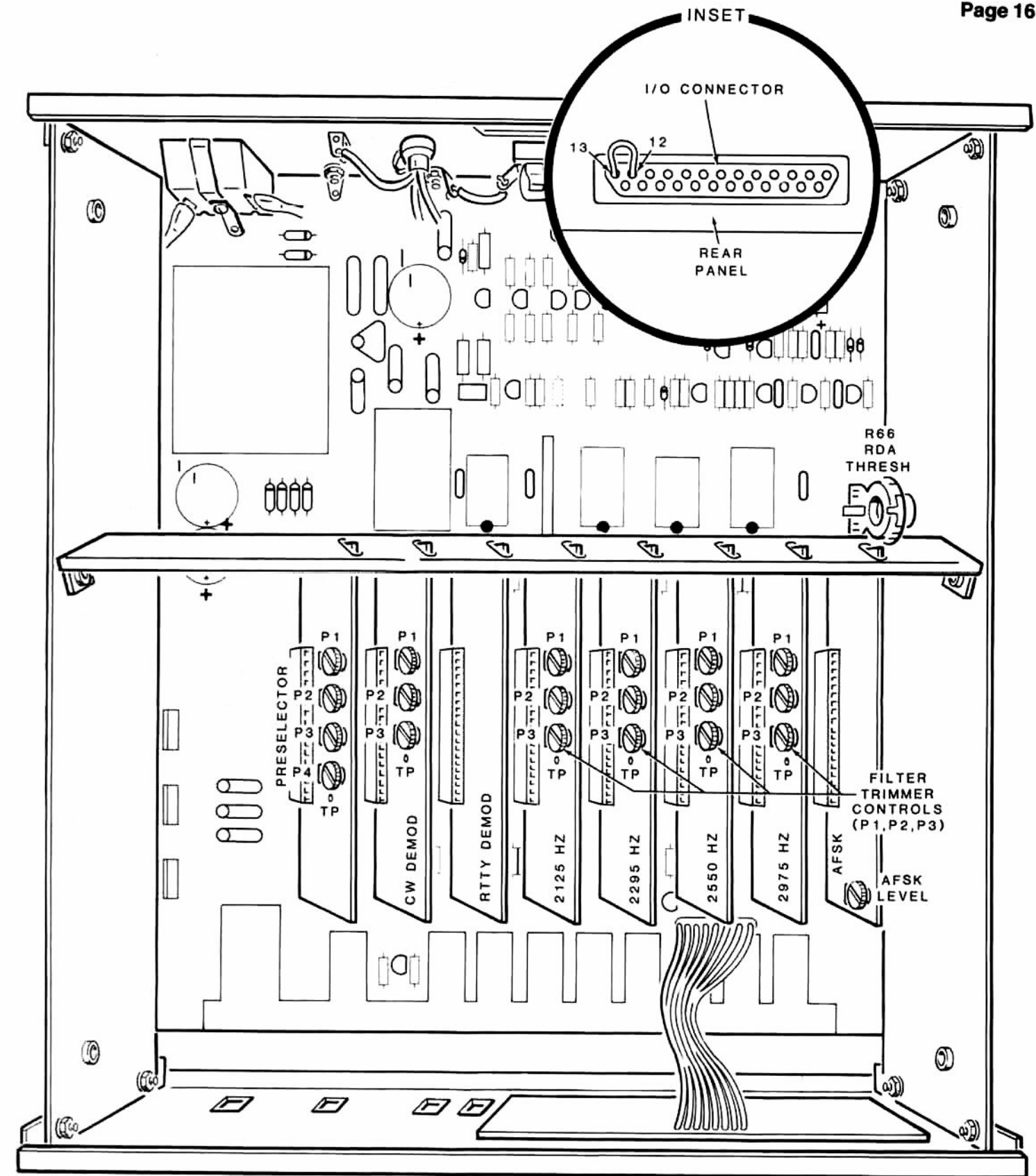
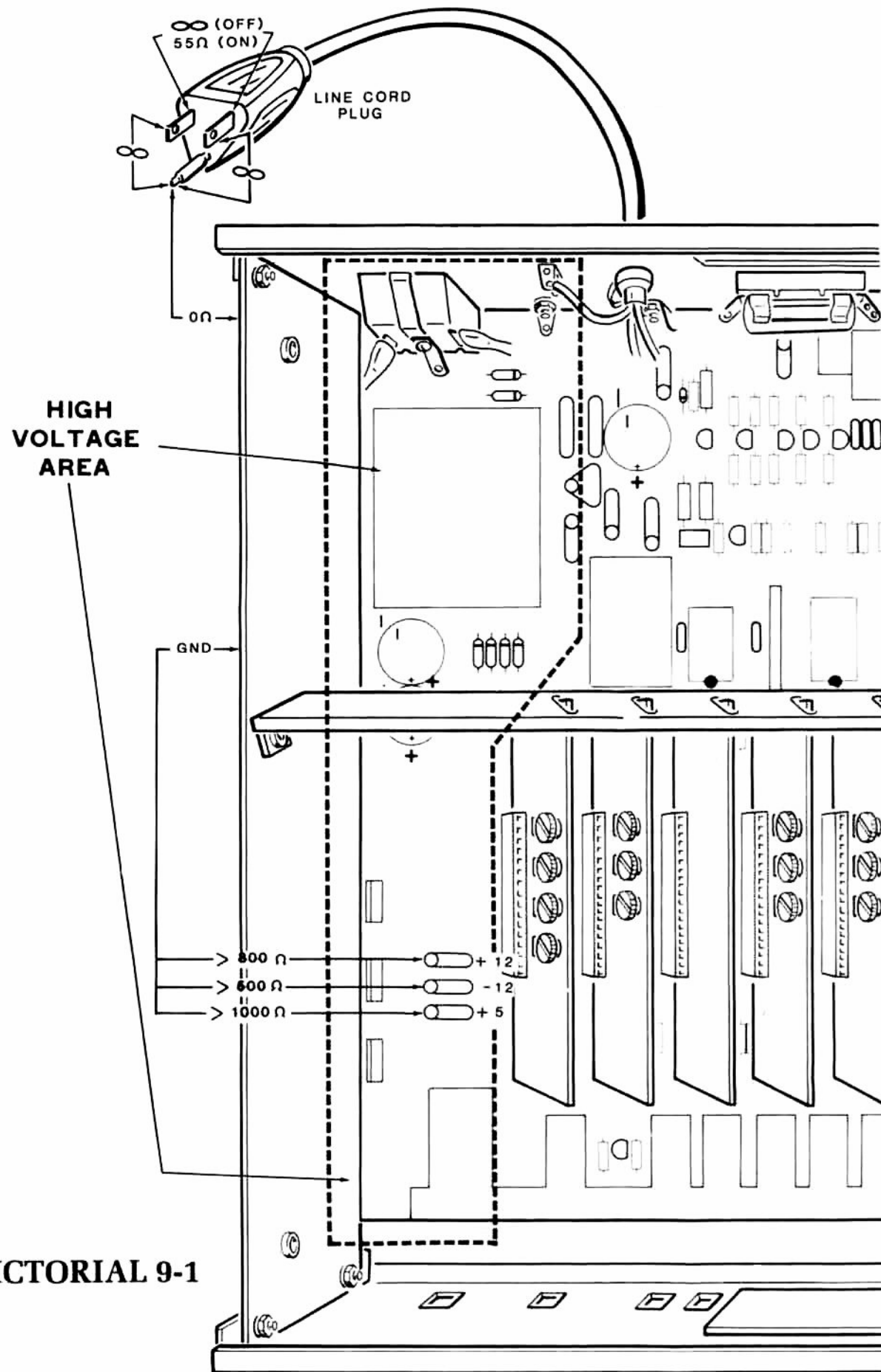


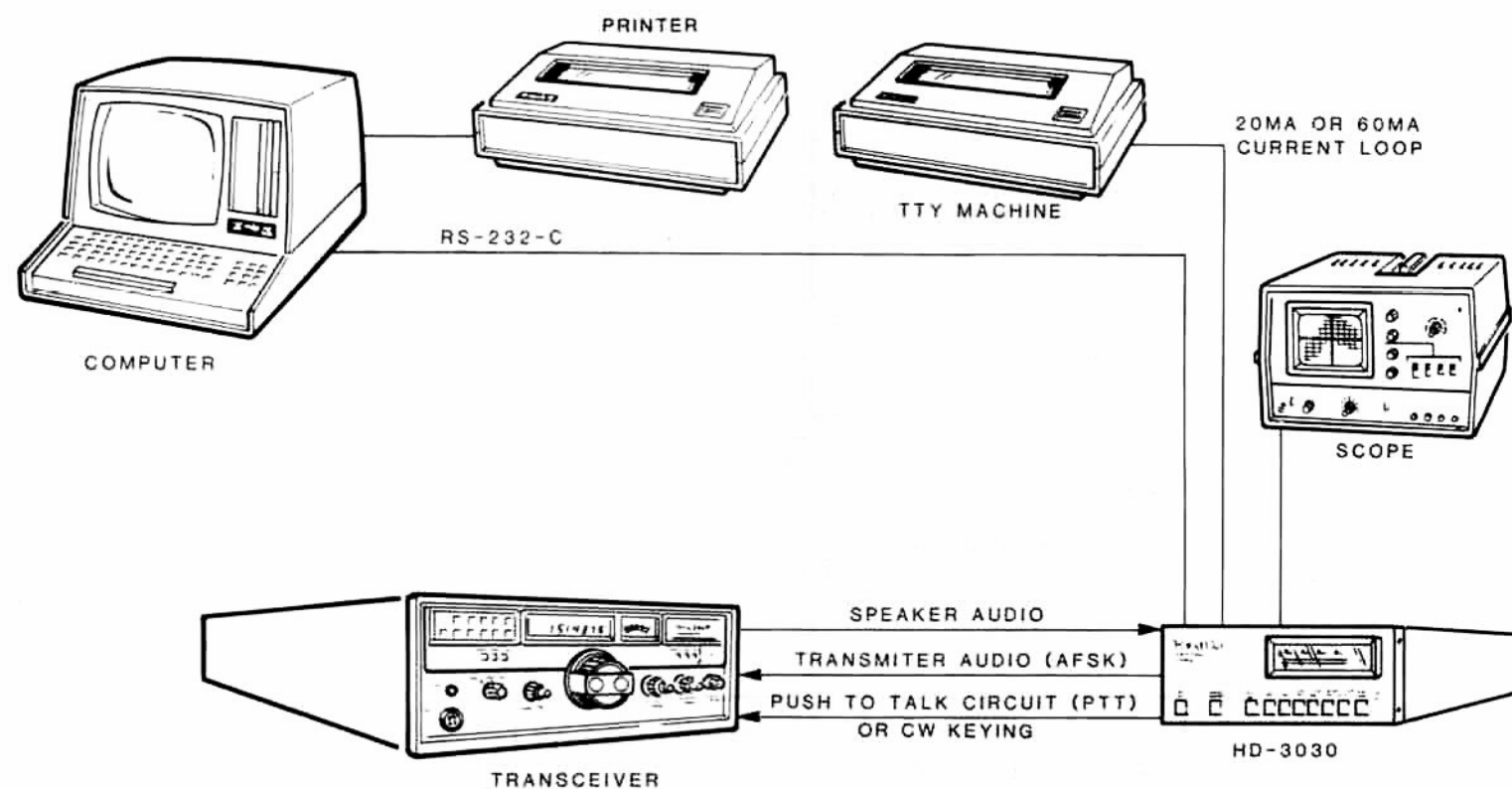
PICTORIAL 8-2





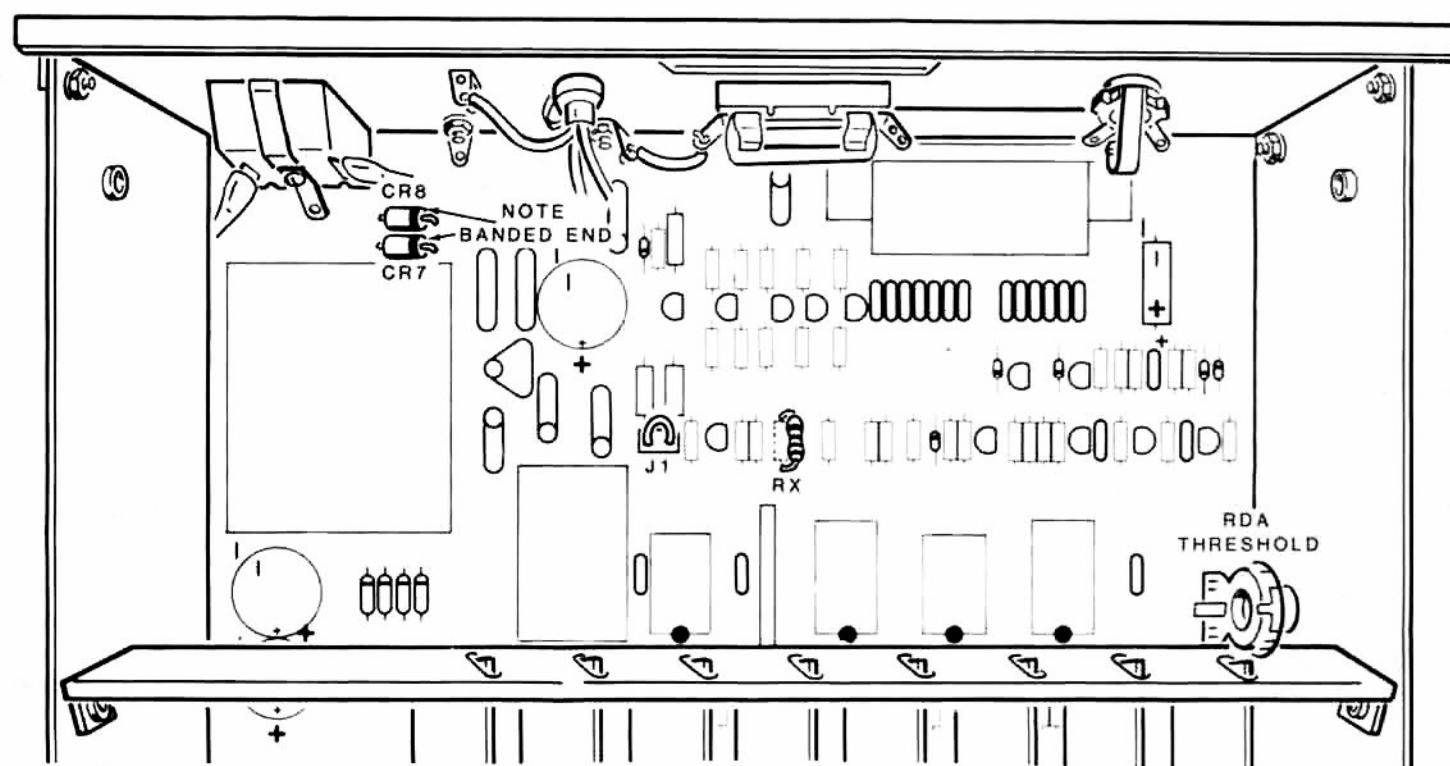
PICTORIAL 8-5



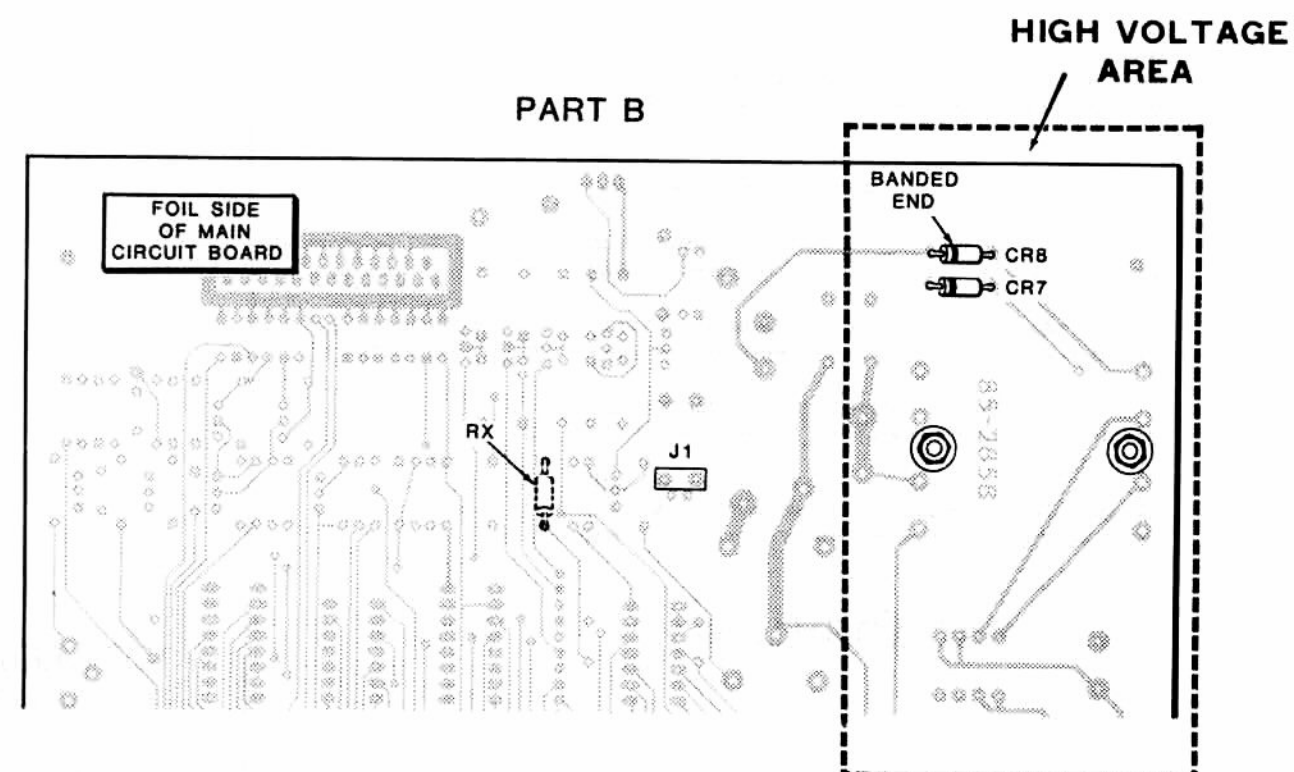


PICTORIAL 11-1

PART A



PART B



PICTORIAL 11-2

SIGNAL DESCRIPTIONS

Inputs:

2	KEY-N	TTL compatible, active in Send only. Requires pull-down to enable AFSK downshift for CW ID.
5	AFSKIN-TTL	TTL compatible, Mark high. Requires pull-down for Space.
6	AFSKIN-RS	RS-232 compatible bipolar input. Mark = -3 V min., Space = +3 V min.
9	SEND-N	TTL compatible. Requires active pull-down to place Interface in Send mode.
25	SEND-P	RS-232 compatible bipolar input. Requires active pull-up to place Interface in Send mode. Transmit = +3 V min.; Receive = -3 V min.
13	RECAUDIO	Receiver audio input. Connects to any source between 4 ohm and 600 ohm impedance, 100 mV minimum level.

Outputs:

3	DMOUT-TTL	TTL compatible demodulator keying output. Mark high.
4	DMOUT-RS	RS-232 compatible bipolar demodulator output. Mark = -6 V min.; Space = +6 V min. into 3000 Ω load.
10	XMIT-P	Positive keying for PTT or CW. 50 mA maximum. Toggled by Send-N or Send-P inputs.
11	XMIT-N	Negative keying for PTT or CW. 50 mA maximum. Toggled by Send-N or Send-P inputs.
7	SCOPE MARK	50 k Ω impedance Mark filter output, phase corrected for accurate "+" display on oscilloscope.
8	SCOPE SPACE	50 k Ω impedance Space filter output, phase corrected for accurate "+" display on oscilloscope.
12	SEDAUDIO	AFSK audio output, adjustable 0 to 2 volts rms, 600 Ω impedance.

INTERCONNECTION CHART

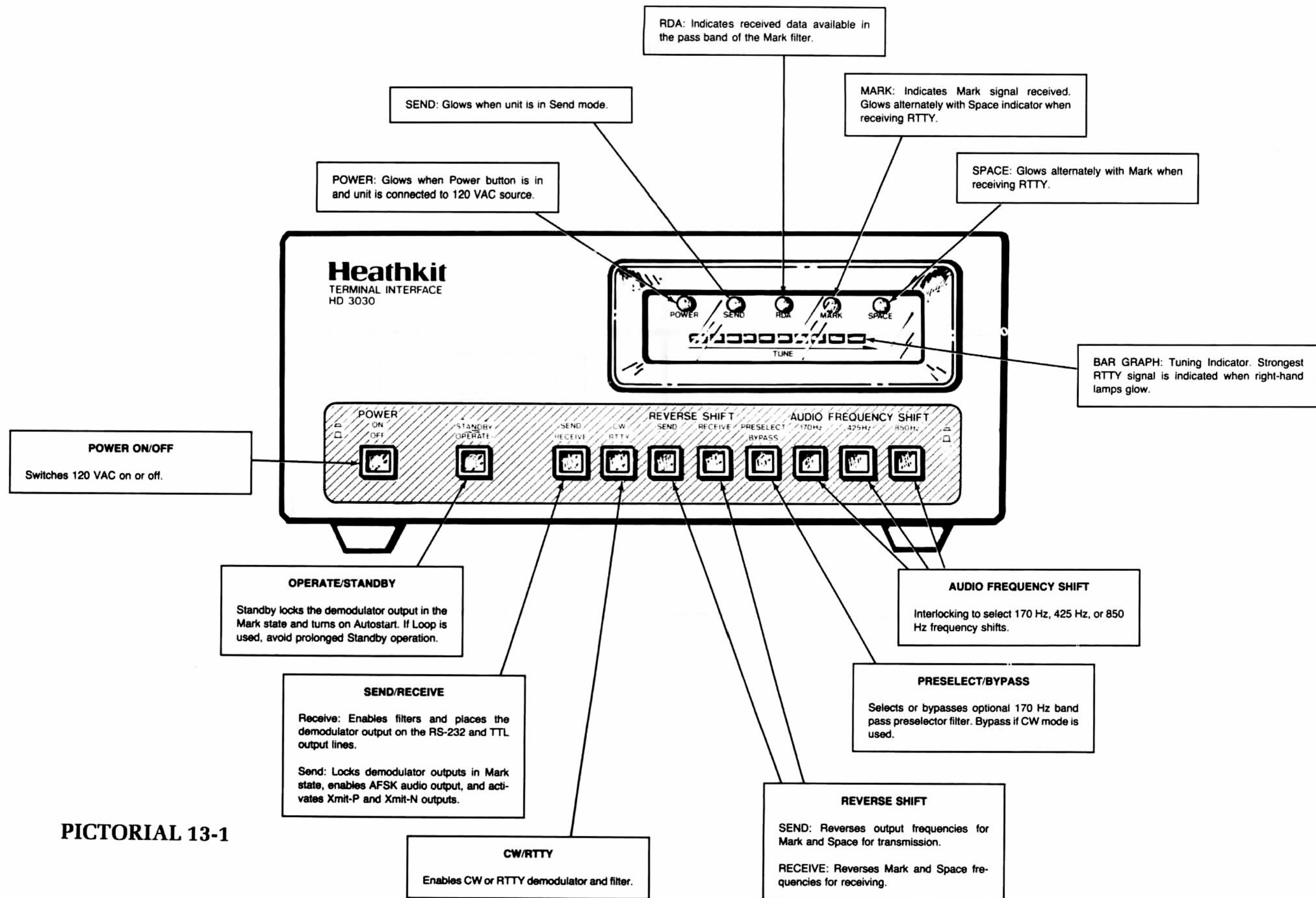
HD-3030 I/O CONNECTOR	COMPUTER CONNECTOR
RDA	1
Key-N	2
DMOUT (TTL)	3
DMOUT (RS232)	4
AFSKIN (TTL)	5
AFSKIN (RS232)	6
SCOPE SPACE	7
SCOPE MARK	8
SEND N	9
XMIT P	10
XMIT N	11
SEND AUDIO	12
RECV AUDIO	13
FSK	14
	15
	16
	17
GROUND	18
	19
	20
	21
	22
No Connection	23
	24
SEND P (RS-232)	25

The documentation supplied with your computer and software should specify which input and output lines are used by your computer.

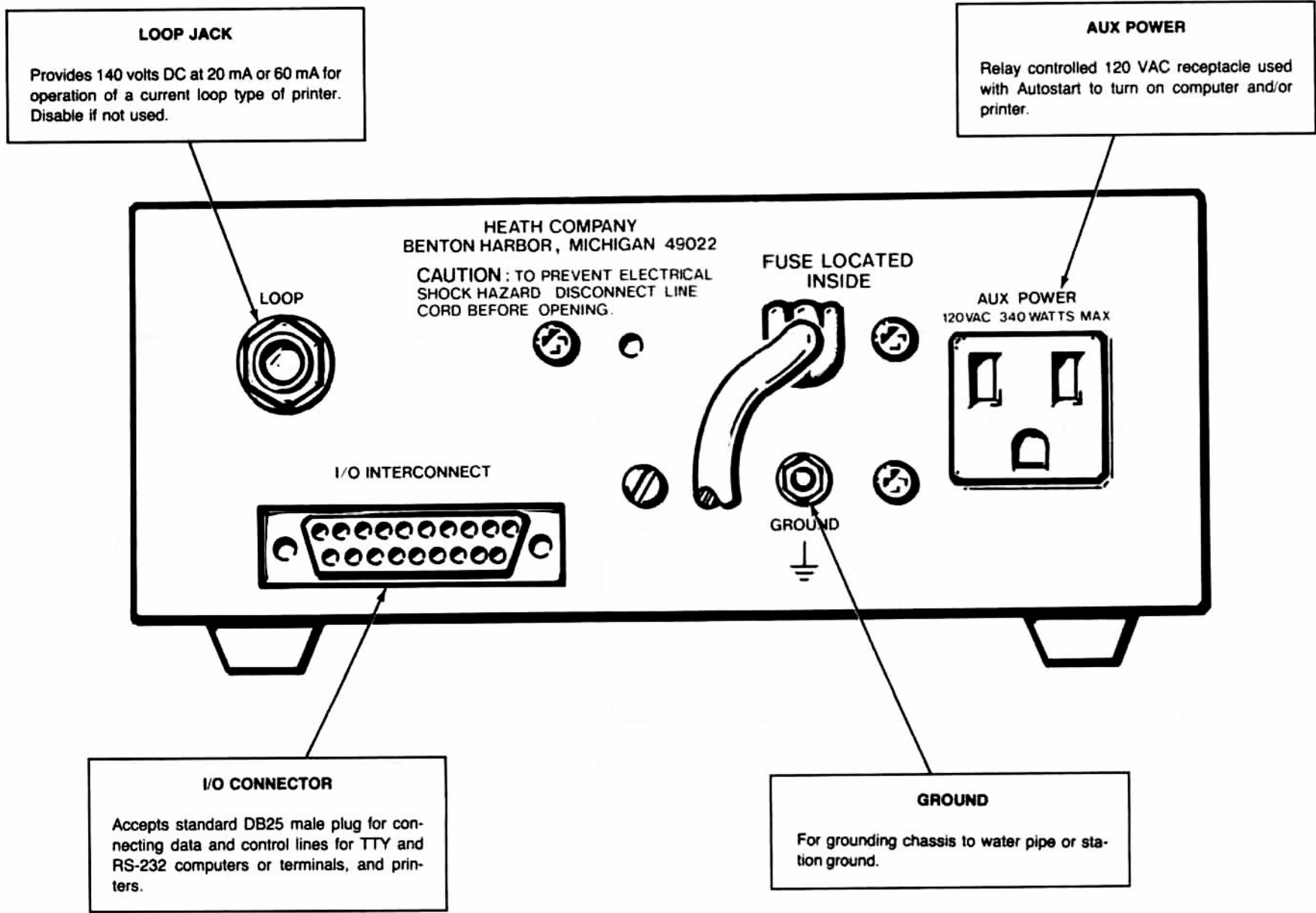
INSTRUCTIONS

1. Refer to your computer/software documentation to determine the input and output signals available or required at your computer connector.
2. Use a lead pencil to mark the signal descriptions next to the computer pin numbers on the chart.
3. Compare the signal descriptions of your computer/software with those of the HD-3030 I/O connector.
4. Draw a pencil line from one pin number to the other to represent the interconnections required.
5. Use shielded cable (such as RG-174U) wherever possible and prepare the required cables.
6. Connect and solder the cable ends to the appropriate pins of your I/O connector plugs, as you drew them on the chart. Label the plugs "HD-3030" and "Computer".
7. Connect the "HD-3030" plug to the I/O connector on the rear of your Terminal Interface, and the "Computer" plug to your computer.

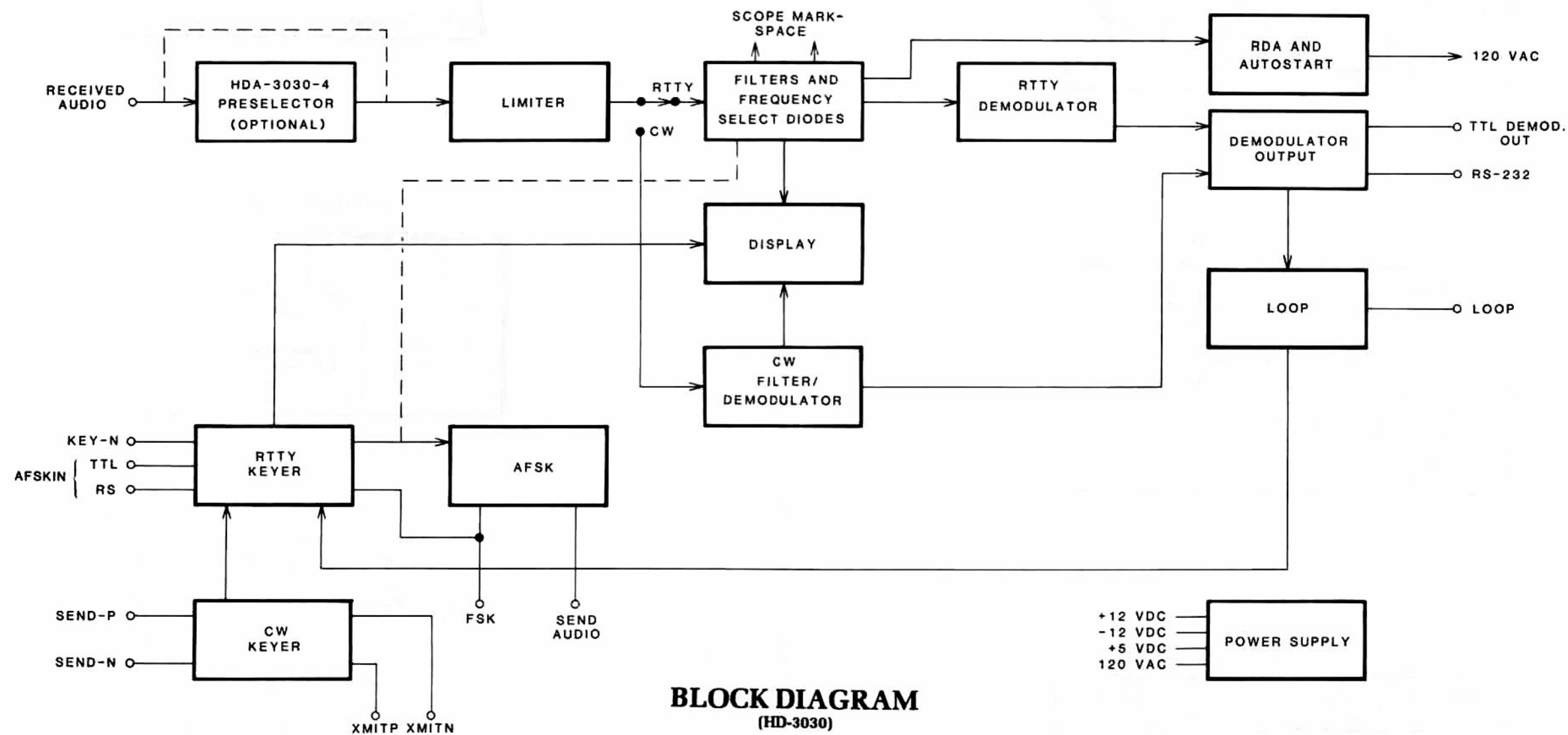
14	FSK	Frequency shift keying bipolar output. Mark = -6 V min.; Space = +6 V Min. into 3000 Ω load.
1	RDA OUTPUT	TTL compatible active pull-down output. Indicates presence of received signal in Receive mode. Locked off during Send.
	LOOP OUTPUT	(Rear panel jack): 100 V, 60 mA or 20 mA current loop output. Internal jumper required for 60 mA.
	AUX POWER	(Rear panel receptacle): 5 ampere relay contact output supplies 120 VAC when triggered by "Autostart".



PICTORIAL 13-1



PICTORIAL 13-2

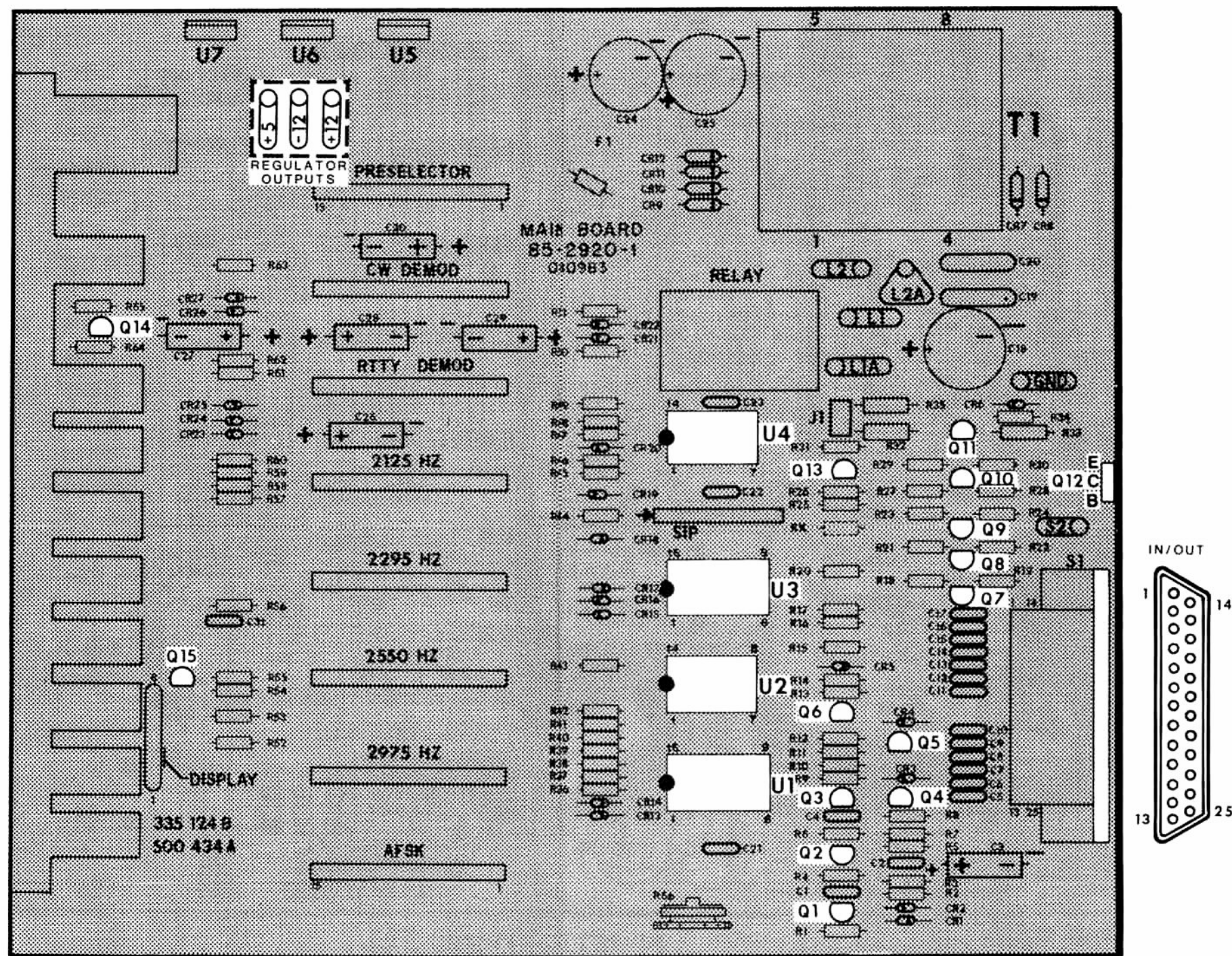


BLOCK DIAGRAM
(HD-3030)

The image shows a complex electronic circuit board layout, likely for a radio receiver or communication system. The board is populated with numerous components, including transistors (Q1-Q15), capacitors (C1-C30), resistors (R1-R66), and integrated circuits (U1-U7). Key functional blocks are labeled, such as the PRESELECTOR, CW DEMOD, RTTY DEMOD, and AFSK sections. The board also features a MAIN BOARD section with a RELAY and a DISPLAY section with a 335 124 B and 500 434 A label. The layout is dense with components and includes various test points and connection points. The board is oriented horizontally, with components arranged in rows and columns. The overall design is typical of a high-performance electronic circuit from the mid-20th century.

Page 23

TEST POINTS FOR VOLTAGE CHART



PICTORIAL 14