

**The Harman Kardon
Model hk 340**

**AM/FM/Stereo FM
Solid State Receiver**

Technical Manual

harman/kardon

PRECAUTIONS

1. Always disconnect the chassis from power line when soldering. Turning the power switch OFF is not enough. Power line leakage passing through the heating element may destroy the transistors.
2. Never attempt to do any work on the transistor amplifiers without first disconnecting the AC line cord and waiting until the power supply filter capacitors have discharged.
3. Replacement for output and driver transistors, if necessary, must be made from the same beta group as the original type.
4. If one output transistor burns out (open or short) always remove all the output transistors in that channel and check the bias adjustment, the control and other parts in the network with an ohmmeter before inserting a new transistor. All transistors in one channel will be destroyed if the base biasing circuit is open on the emitter end.
5. When mounting a replacement power transistor, be sure that the bottom of the flange, the mica insulators and the surface of the heat sink are free of foreign matter, for they may cause transistor failure.
6. Silicon grease must be applied between the transistor and the mica insulator, and between the mica insulator and the heat sink for better heat conduction.
7. Fuses must be replaced with size and type indicated. Use of other types can expose components to destructive current levels.

ALIGNMENT PROCEDURES

INSTRUMENTS

1. AM Signal Generator modulated with 400 Hz at 30%.
2. AM IF Sweep Generator.
3. Oscilloscope.
4. V. T. V. M.

NOTE

1. Set function selector switch to AM position.
2. Connect signal source to a placed to radiate signals into AM antenna loop stick (L5).

STEP	SIGNAL SOURCE		CONNECT OUTPUT METER TO	DIAL SETTING	ADJUST	ADJUST FOR
	GENERATOR	FREQUENCY				
1	AM IF sweep generator	455 kHz	V. T. V. M. and oscilloscope to R36 (4.7 k ohm)	Near 1600 kHz	T3	Maximum and undistorted pattern on oscilloscope
2					T4	
3	Repeat steps 1 and 2 for best sensitivity.					
4	AM signal generator	600 kHz	V. T. V. M. and oscilloscope to R36 (4.7 k ohm)	600 kHz	L6	Maximum Output
5		1400 kHz		1400 kHz	TC5	
6	Repeat steps 4 and 5 for best dial accuracy.					
7	AM signal generator	600 kHz	V. T. V. M. and oscilloscope to R36 (4.7 k ohm)	600 kHz	L5	Maximum Output
8		1400 kHz		1400 kHz	TC4	
9	Repeat steps 7 and 8 for best sensitivity.					

ALIGNMENT PROCEDURES

FM ALIGNMENT PROCEDURE

INSTRUMENTS

1. FM Signal Generator modulated with 1000 Hz at 100%.
2. Oscilloscope.
3. V. T. V. M.
4. Distortion Meter.

NOTE

1. Set function selector switch to FM position.

STEP	SIGNAL SOURCE			CONNECT OUTPUT METER TO	DIAL SETTING	ADJUST	ADJUST FOR
	GENERATOR	FREQUENCY	STRENGTH				
1				V. T. V. M. and Scope to Tape Out Jack	Near 98 MHz	T1 bottom	Maximum noise Output
2	Mono FM generator	98 MHz	3 μ V	Same as above	98 MHz	Tuning Control	Maximum Audio Output with noise equally distributed top/bottom
3			Distortion Meter to Tape Out Jack	T1 Top		Minimum THD	
4							1000 μ V
5 Repeat steps 1 through 4 until no further improvement is noticed.							
6 Connect FM signal generator to FM antenna terminals.							
7	FM signal generator	90 MHz	3 μ V	V. T. V. M. and oscilloscope to tape out jack	90 MHz	L4	Maximum audio Output
8		106 MHz			106 MHz	TC3	
9 Repeat steps 7 and 8 until no further improvement is noticed.							
10	FM signal generator	90 MHz	3 μ V	V. T. V. M. and oscilloscope to tape out jack	90 MHz	L1, L2	Maximum audio output
11		106 MHz			106 MHz	TC1, TC2	
12 Repeat steps 10 and 11 until no further improvement is noticed.							
13	FM signal generator	98 MHz	28 μ V (29 dB)	V. T. V. M. and oscilloscope to tape out jack	Near 98 MHz	Tuning control	Maximum Tuning Meter indication
14			1 mV (60 dB)	Distortion Meter to tape out jack	Preset point	T2 top	Minimum Distortion
15 Repeat steps 13 and 14 until no further improvement is noticed.							

ALIGNMENT PROCEDURES

TUNING INDICATOR ADJUSTMENT

INSTRUMENT

1. FM Signal Generator modulated with 100 Hz to 100%.
2. Oscilloscope.
3. V. T. V. M.

NOTE

1. Set function selector switch to FM position.
2. Connect signal source to FM antenna terminals.

STEP	SIGNAL SOURCE		CONNECT OUTPUT METER TO	DIAL SETTING	ADJUST	ADJUST FOR
	FREQUENCY	STRENGTH				
1	98 MHz	28 μ V (29 dB)	V. T. V. M. and oscilloscope to tape out jack	Near 98 MHz	Tuning control	Maximum Tuning Meter indication
2		1 mV (60 dB)		Preset point	VR1	To indicate 9 on tuning meter

POWER AMPLIFIER IDLING ADJUSTMENT

INSTRUMENT

1. D. C. V. T. V. M..

NOTE

1. Set function selector switch to AUX position.
2. Set volume control to minimum position.
3. Connect 8 ohm (50W) resistors to left and ground, right and ground speaker terminals.

STEP	CONNECT OUTPUT METER TO	ADJUST	ADJUST FOR
1	D. C. V. T. V. M. across R441 (0.47 ohm)	VR401	18.8 mV $\pm$ 2.35 mV
2	D. C. V. T. V. M. across R442 (0.47 ohm)	VR402	

ALIGNMENT PROCEDURES

STEREO - MONO THRESHOLD ADJUSTMENT

INSTRUMENT

1. FM Stereo Signal Generator.
2. Oscilloscope.
3. V. T. V. M.

NOTE

1. Set function selector switch to FM position.
2. Connect signal source to FM antenna terminals.
3. Set main signal ON and pilot signal (10%) ON of FM stereo signal generator.

STEP	SIGNAL SOURCE		CONNECT OUTPUT METER TO	DIAL SETTING	ADJUST	ADJUST FOR
	FREQUENCY	STRENGTH				
1	98 MHz	28 μ V (29 dB)	V. T. V. M. and oscilloscope to tape out jack	Near 98 MHz	Tuning control	Maximum Tuning Meter indication
2		25 μ V (28 dB)		Preset point	VR2	FM stereo indicator lights
3	Decrease signal strength by 1 dB and confirm that FM stereo indicator goes out.					

MULTIPLEX 19 kHz ADJUSTMENT

INSTRUMENT

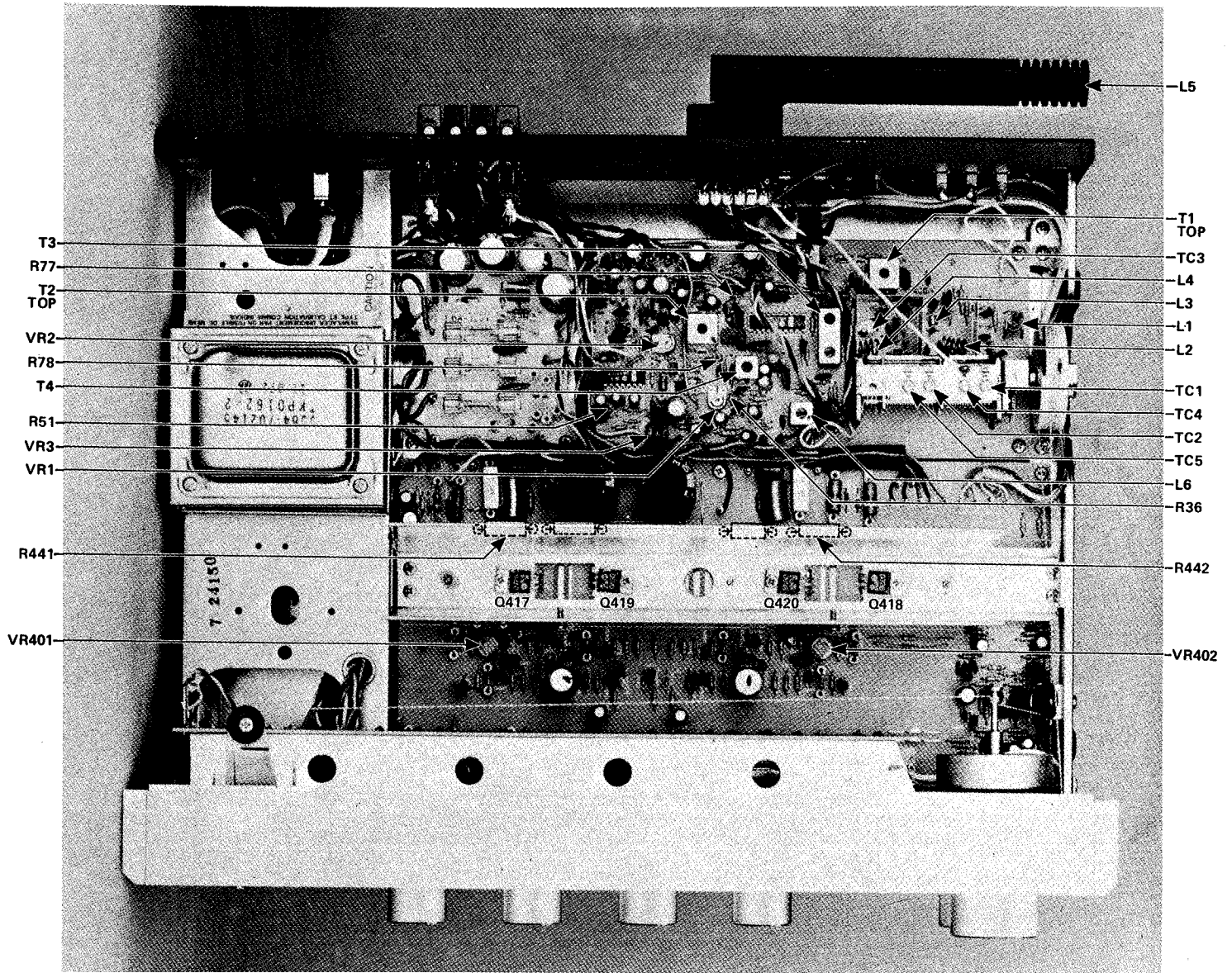
1. FM Signal Generator modulated with 1000 Hz at 100%.
2. Frequency Counter.
3. Oscilloscope.
4. V. T. V. M.

NOTE

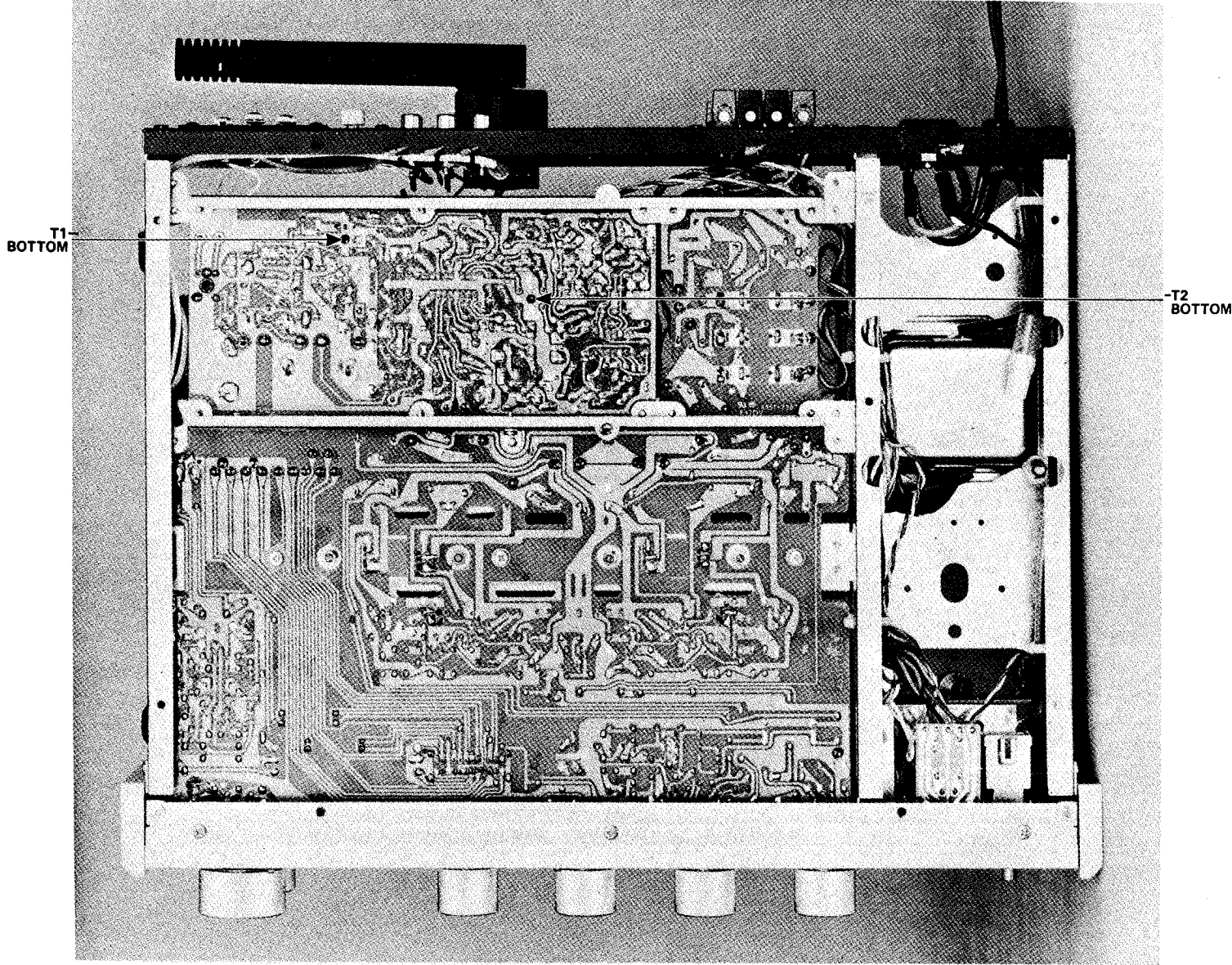
1. Set function selector switch to FM position.
2. Connect signal source to FM antenna terminals.

STEP	SIGNAL SOURCE		CONNECT OUTPUT METER TO	DIAL SETTING	ADJUST	ADJUST FOR
	FREQUENCY	STRENGTH				
1	98 MHz	28 μ V (29 dB)	V. T. V. M. and oscilloscope to tape out jack	Near 98 MHz	Tuning control	Maximum Tuning Meter indication
2	98 MHz (unmodulation)	1 mV (60 dB)	Frequency counter to R51 (100 k ohm)	Preset point	VR3	19 KHz $\pm$ 100 Hz

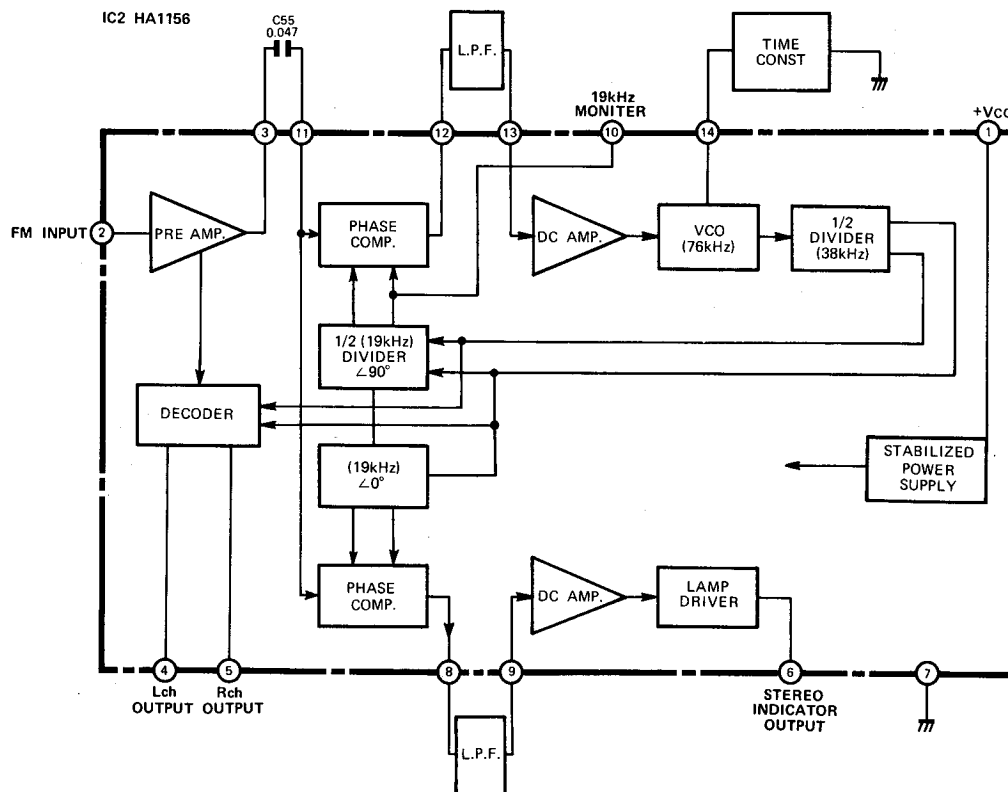
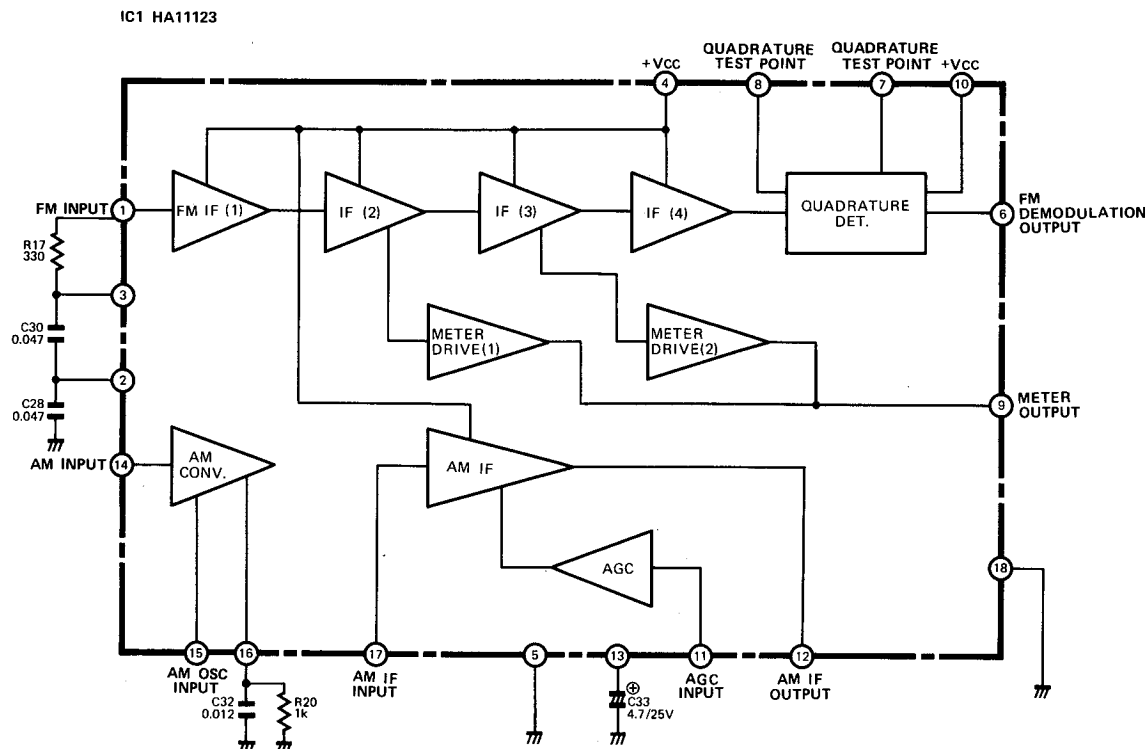
ALIGNMENT POINTS TOP VIEW



ALIGNMENT POINTS
BOTTOM VIEW



IC BLOCK DIAGRAM



SCHEMATIC NOTES AND DIAGRAM

NOTES: Unless otherwise noted.

1. All resistors are 1/4W watt, $\pm 5\%$. Values are in ohms. K = 1000 M = 1000k
2. All capacitance values are in MF. PF = MMF.
3. Function selector switch (SW301) is in FM position.

VOLTAGE CHART

AC120V

No Signal

Chassis Ground

Volume Control at Minimum

Tone Controls at Mechanical Center

+B1 +30V

-B1 -30V

+B2 +20V

-B2 -20V

+B3 +15V

-B3 -15V

B4 +12V

FM POSITION

	BASE	EMITTER	COLLECTOR		IC1	
					FM	AM
Q1	+1.4V	+0.7V	+10.0V			
Q2	+2.6V	+2.0V	+11.0V			
Q3	+3.0V	+2.4V	+10.0V	1.	+4.2V	+4.7V
Q5	+0.7V	+0.1V	+0.1V	2.	+4.2V	+5.2V
Q6, 7	+9.5V	+10.0V	+5.5V	3.	+4.2V	+4.7V
Q8	+0.6V	0V	+0.1V	4.	+7.0V	+7.1V
Q9	+0.1V	0V	+0.05V	5.	0V	0V
Q201, 202	0V	+0.6V	-11.0V	6.	+4.3V	+4.4V
Q203, 204	-11.0V	-12.0V	-0.15V	7.	+4.4V	+4.4V
Q301, 302	0V	-0.6V	+18.0V	8.	+6.2V	+6.3V
Q303, 304	+18.0V	+18.6V	-1.6V	9.	0V	0V
Q401, 402	-0.01V	-0.6V	+28.4V	10.	+7.1V	+7.2V
Q403, 404	-0.03V	-0.6V	+28.4V	11.	+0.5V	+0.75V
Q405, 406	-14.5V	-15.1V	-0.6V	12.	0V	0V
Q407, 408	+28.4V	+29.0V	+1.2V	13.	+5.0V	+4.0V
Q409, 410	-28.4V	-29.0V	-1.1V	14.	+0.7V	+1.3V
Q411, 412	+0.6V	+1.2V	-1.1V	15.	+0.03V	+7.2V
Q413, 414	+1.1V	+0.6V	+29.0V	16.	+0.03V	+0.7V
Q415, 416	-1.1V	-0.6V	-30.0V	17.	+0.8V	+0.8V
Q417, 418	+0.6V	+0.018V	+30.0V	18.	0V	0V
Q419, 420	-0.6V	-0.018V	-30.0V			
Q421	-0.6V	0V	-0.2V			
Q501	+12.6V	+12.0V	+17.5V			

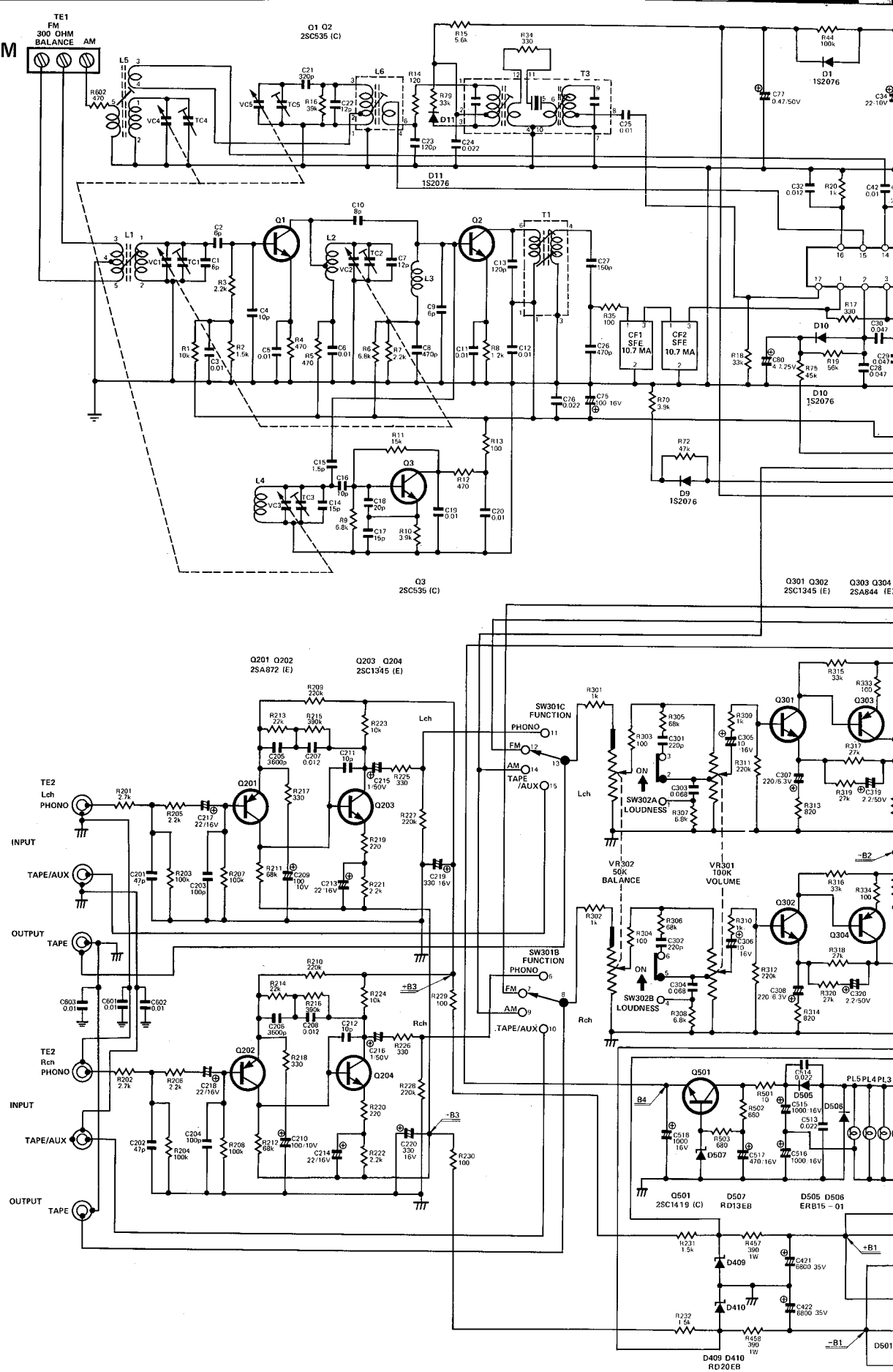
IC2

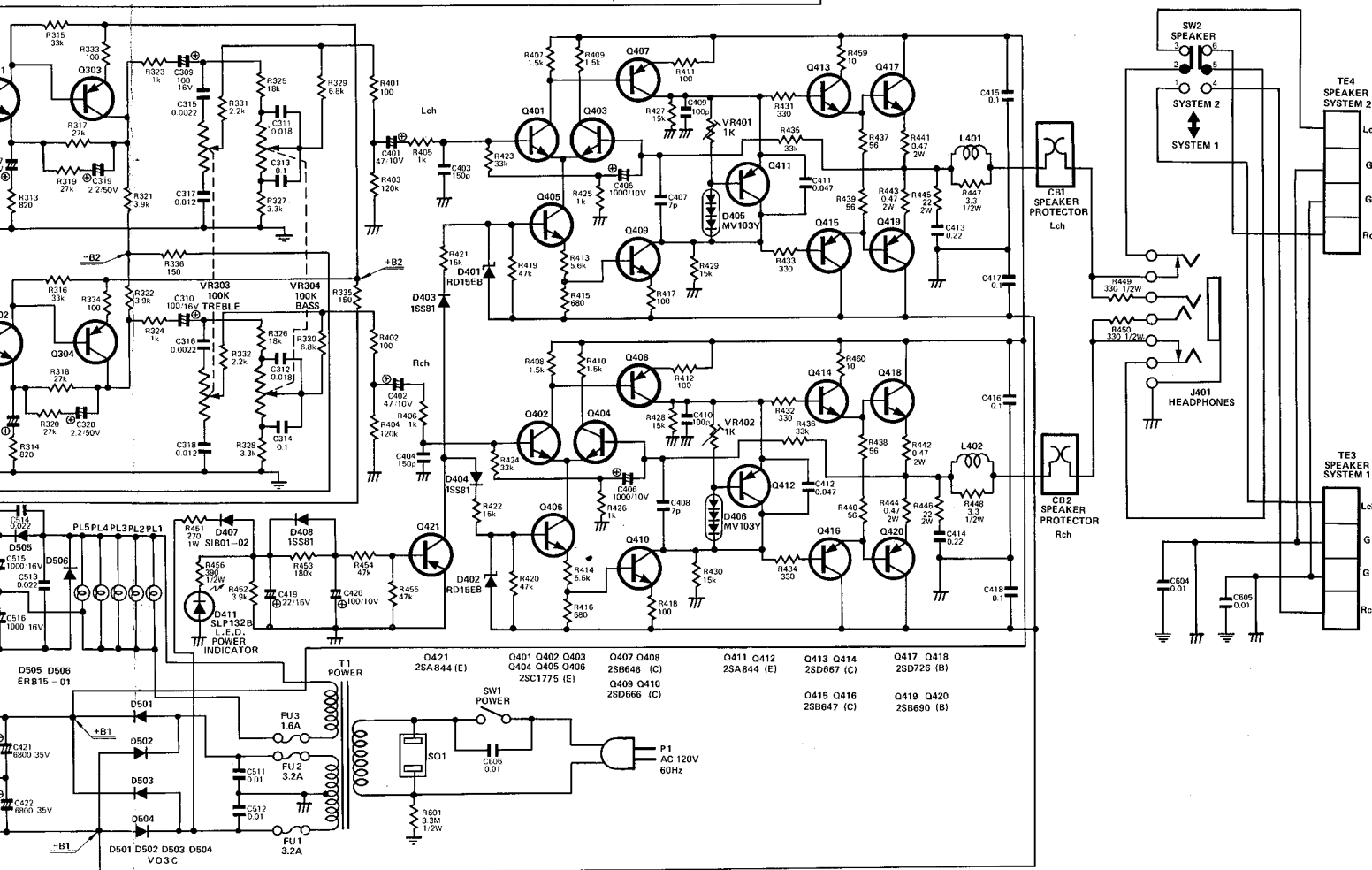
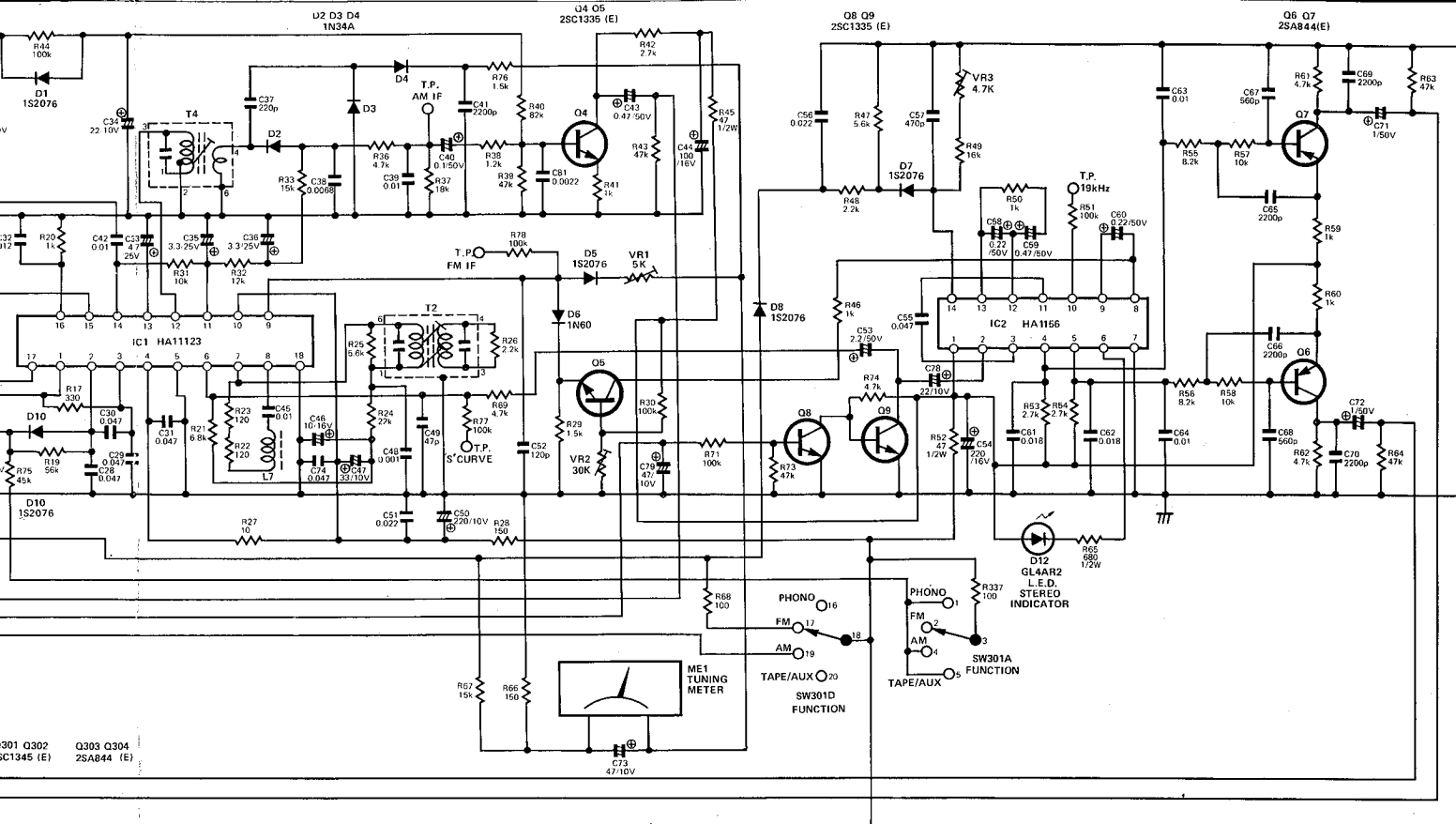
FM

AM POSITION

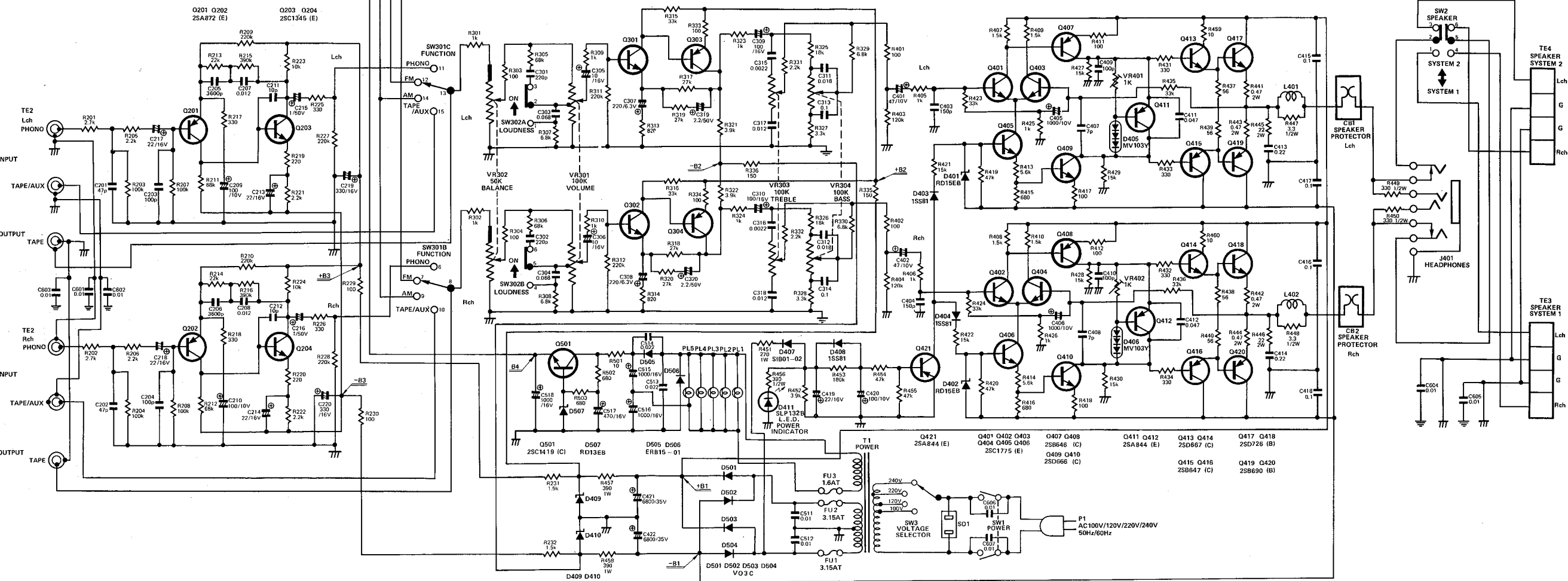
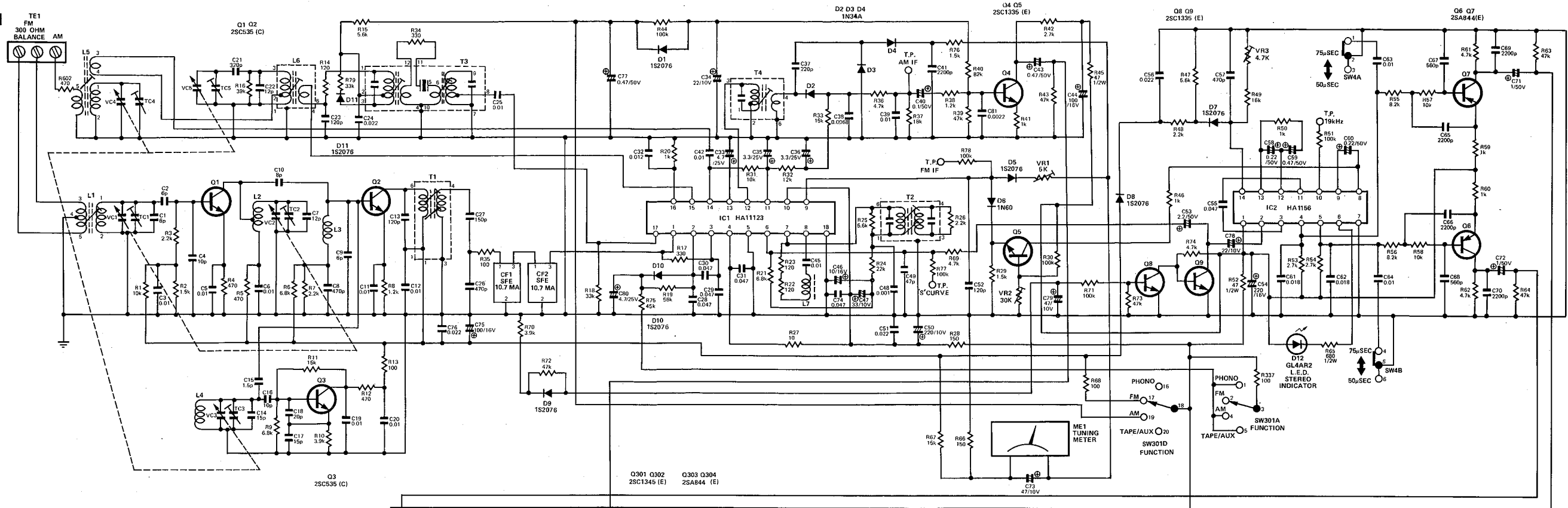
	BASE	EMITTER	COLLECTOR		
Q4	+2.0V	+1.8V	+6.1V	1.	+12.0V
				2.	+2.2V
				3.	+5.2V
				4.	+10.0V
				5.	+10.0V
				6.	+10.0V
				7.	0V
				8.	+0.2V
				9.	+2.0V
				10.	+1.5V
				11.	+2.0V
				12.	+2.2V
				13.	+2.2V
				14.	+3.2V

SCHEMATIC DIAGRAM

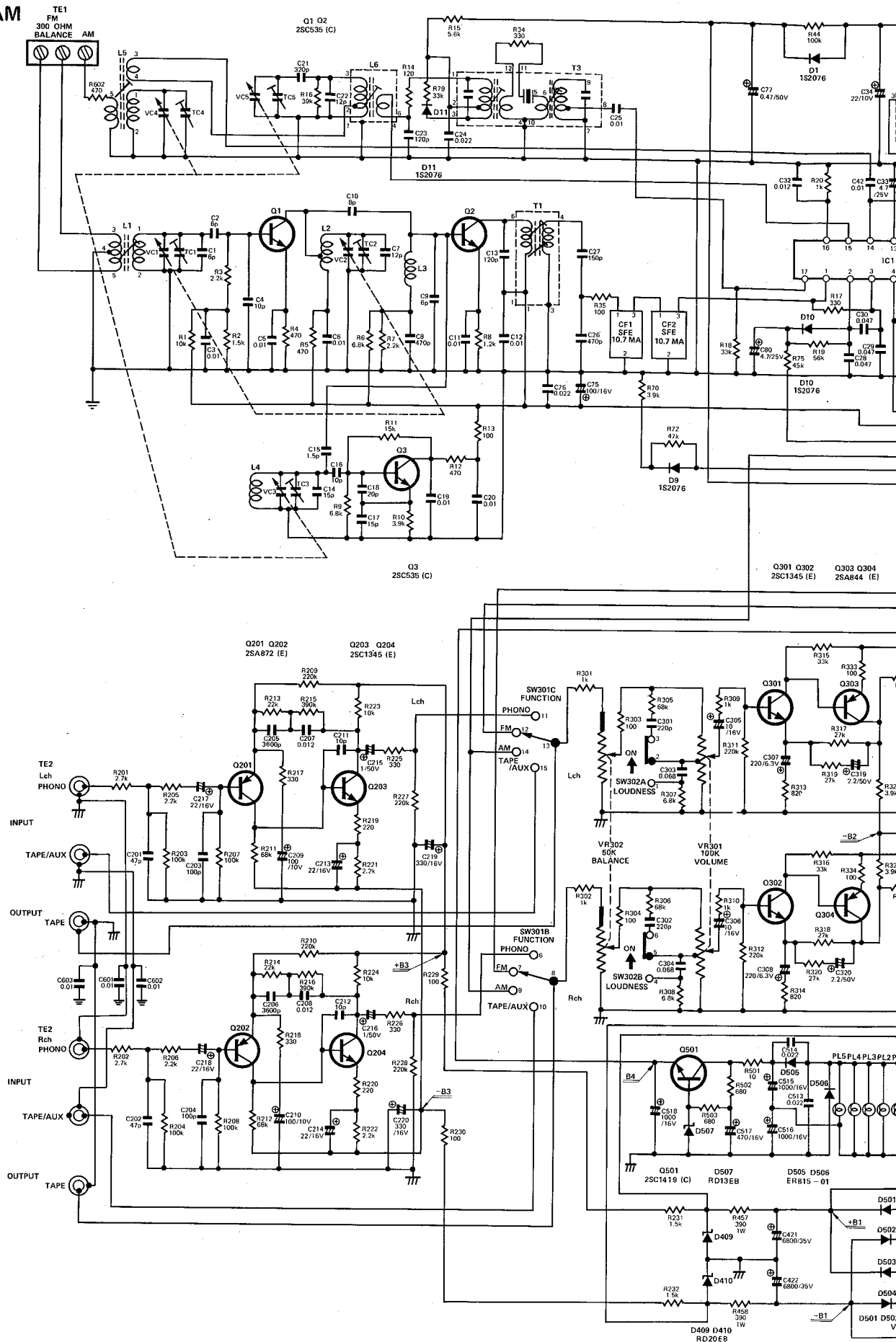


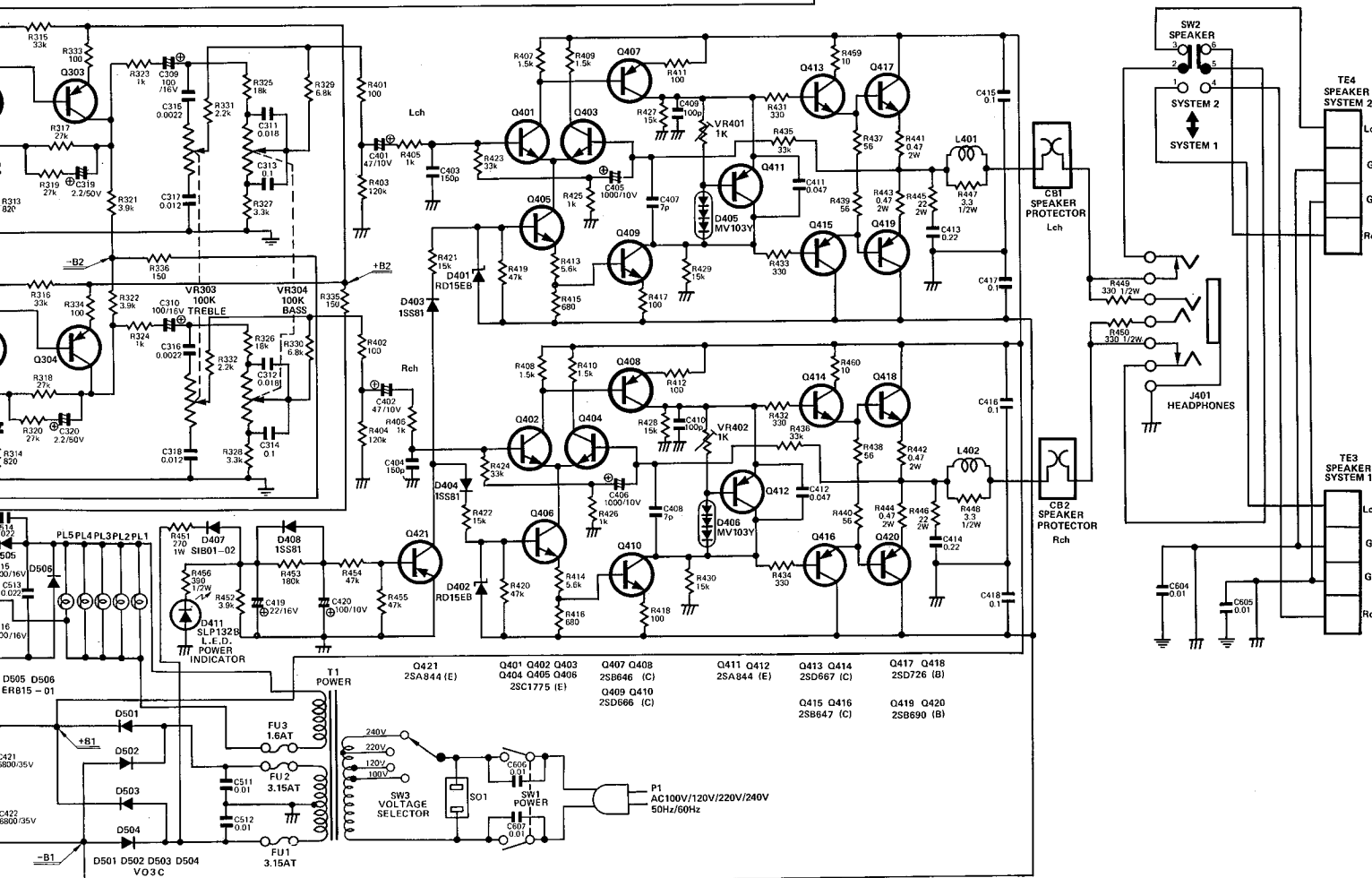
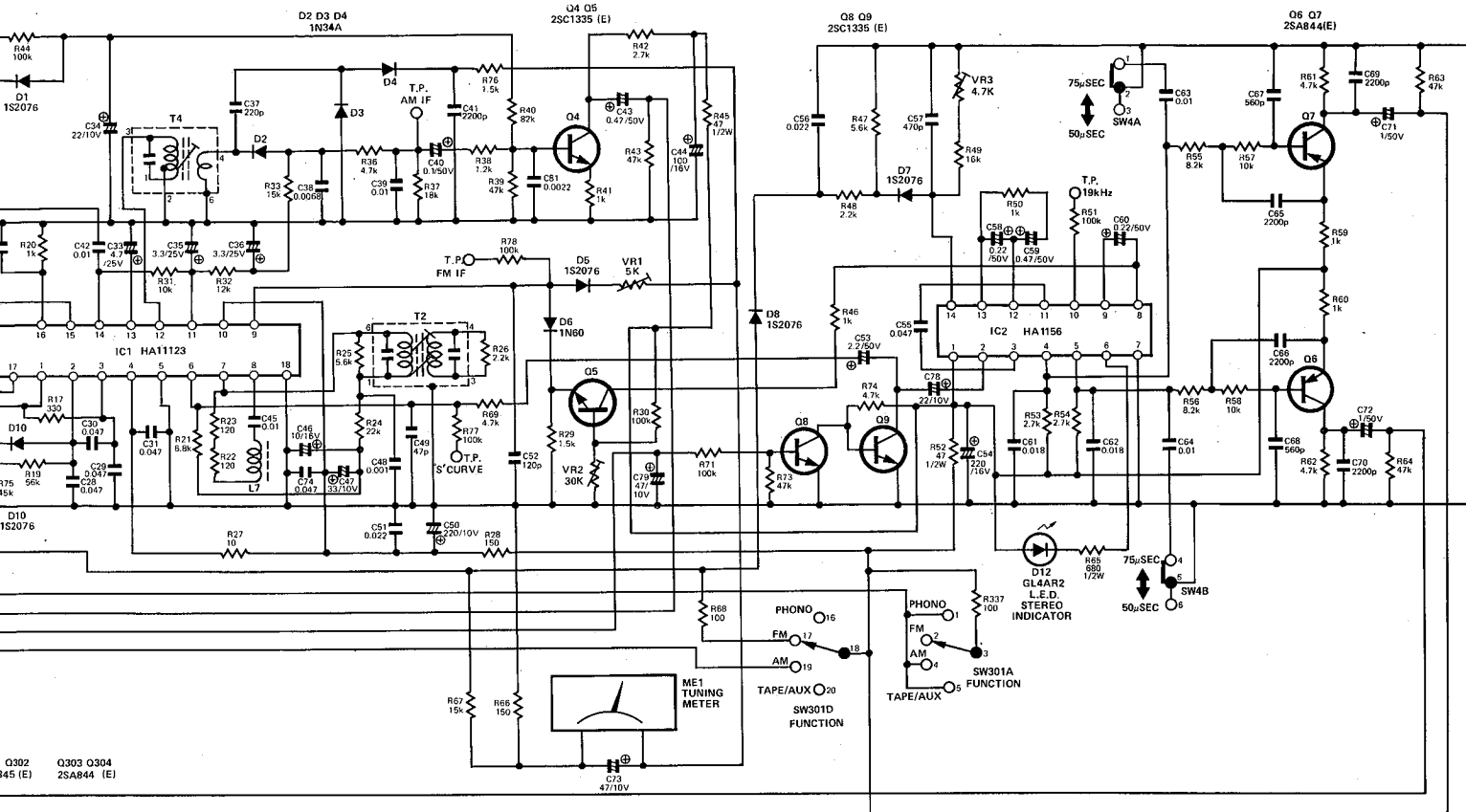


SCHEMATIC DIAGRAM
MULTI VOLTAGE

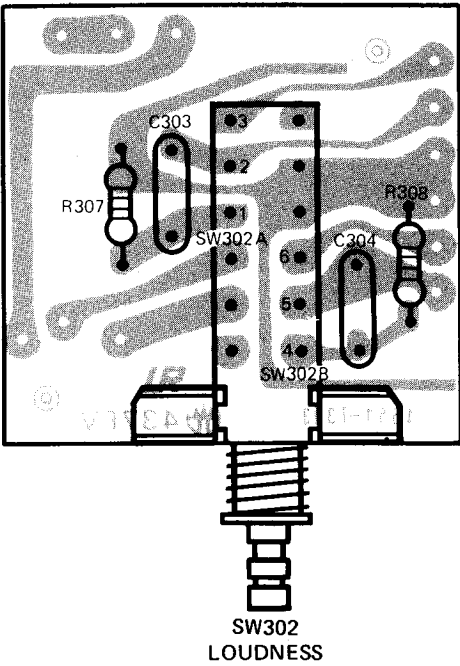


SCHEMATIC DIAGRAM MULTI VOLTAGE





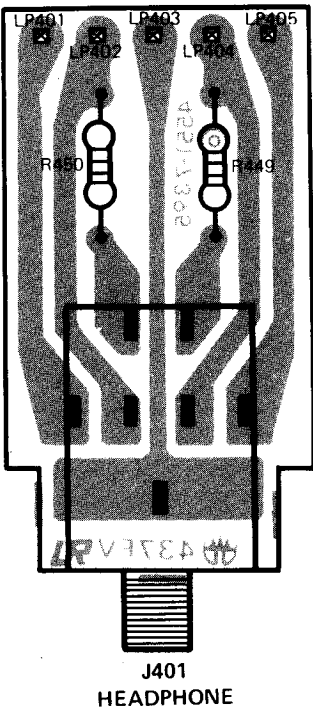
LOUDNESS SWITCH PC BOARD



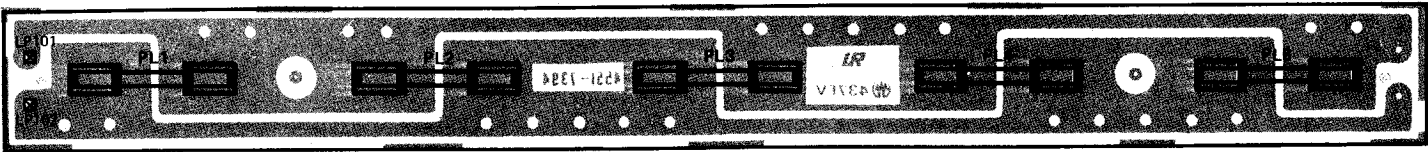
CIRCUIT REF.	H/K PART NO.	DESCRIPTION
SW302	25035964	Push Switch, Loudness

HEADPHONE JACK PC BOARD

CIRCUIT REF.	H/K PART NO.	DESCRIPTION
J401	65435965	Jack, Headphone

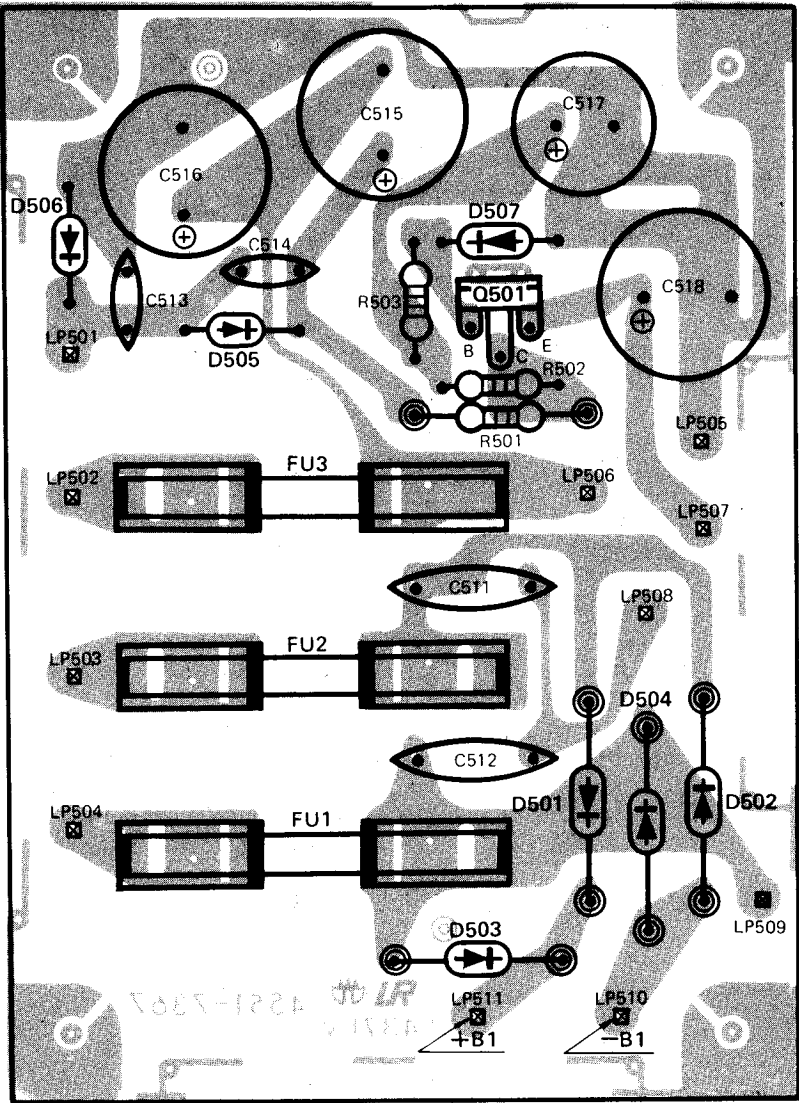


DIAL ILLUMINATOR PC BOARD



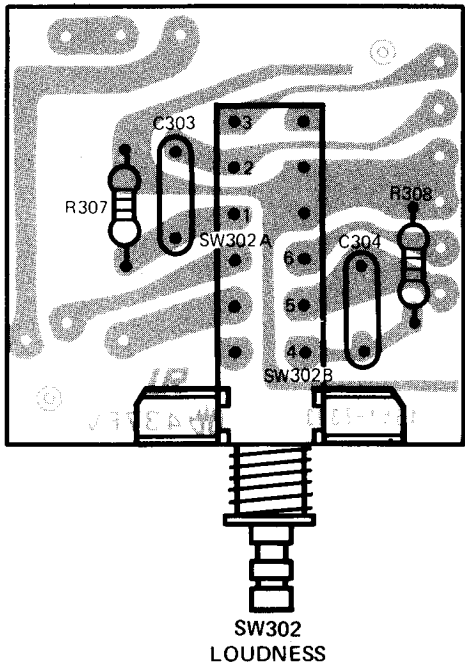
CIRCUIT REF.	H/K PART NO.	DESCRIPTION
PL1, 2, 3, 4, 5	46532169	Lamp, 8V 300mA

RECTIFIER PC BOARD



CIRCUIT REF.	H/K PART NO.	DESCRIPTION
CAPACITORS, ELECTROLYTIC		
C515, 516, 518	31835618	1000MF +50% -10% 16V
C517	31835720	470MF +50% -10% 16V
SEMICONDUCTORS		
Q501	43035961	Transistor, 2SC1419(C) Voltage Regulator
D501, 502, 503, 504	41035665	Diode, V03C
D505, 506	41035729	Diode, ERB15
D507	42032760	Zener Diode, RD13EB 13.2V ± 0.9V -0.8V
MISCELLANEOUS		
FU1, 2	45035962	Fuse, 3.2A 125V
FU3	45035963	Fuse, 1.6A 125V
	66035035	Fuse Holder (X6)

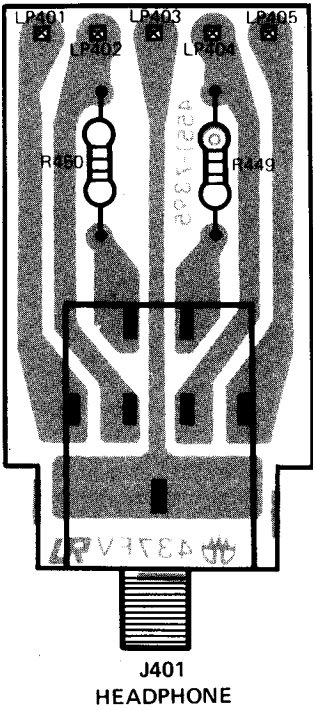
LOUDNESS SWITCH PC BOARD



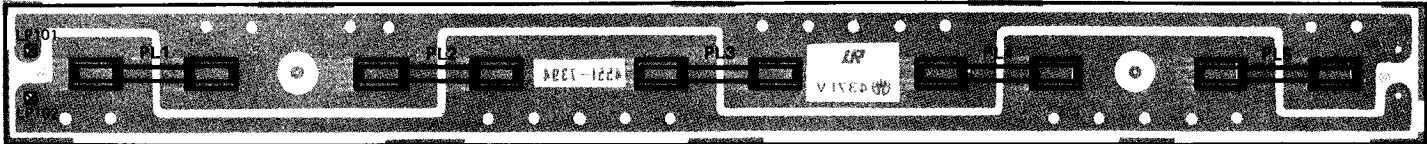
CIRCUIT REF.	H/K PART NO.	DESCRIPTION
SW302	25035964	Push Switch, Loudness

HEADPHONE JACK PC BOARD

CIRCUIT REF.	H/K PART NO.	DESCRIPTION
J401	65435965	Jack, Headphone

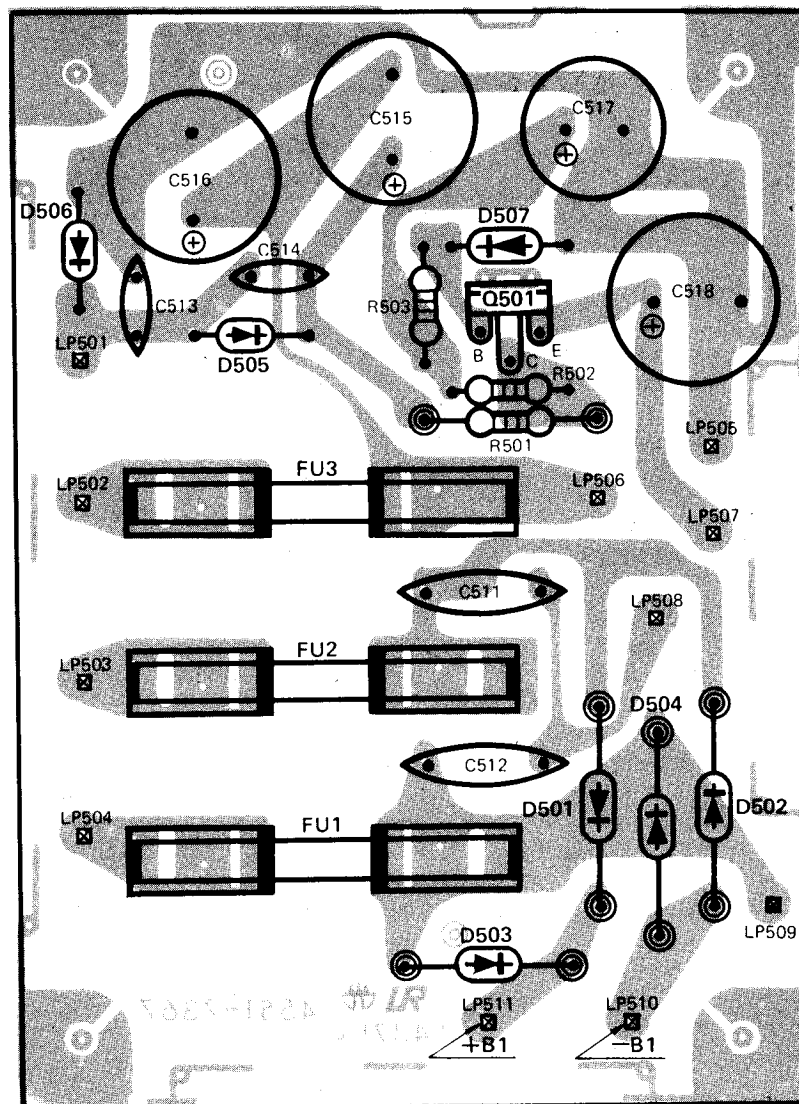


DIAL ILLUMINATOR PC BOARD



CIRCUIT REF.	H/K PART NO.	DESCRIPTION
PL1, 2, 3, 4, 5	46532169	Lamp, 8V 300mA

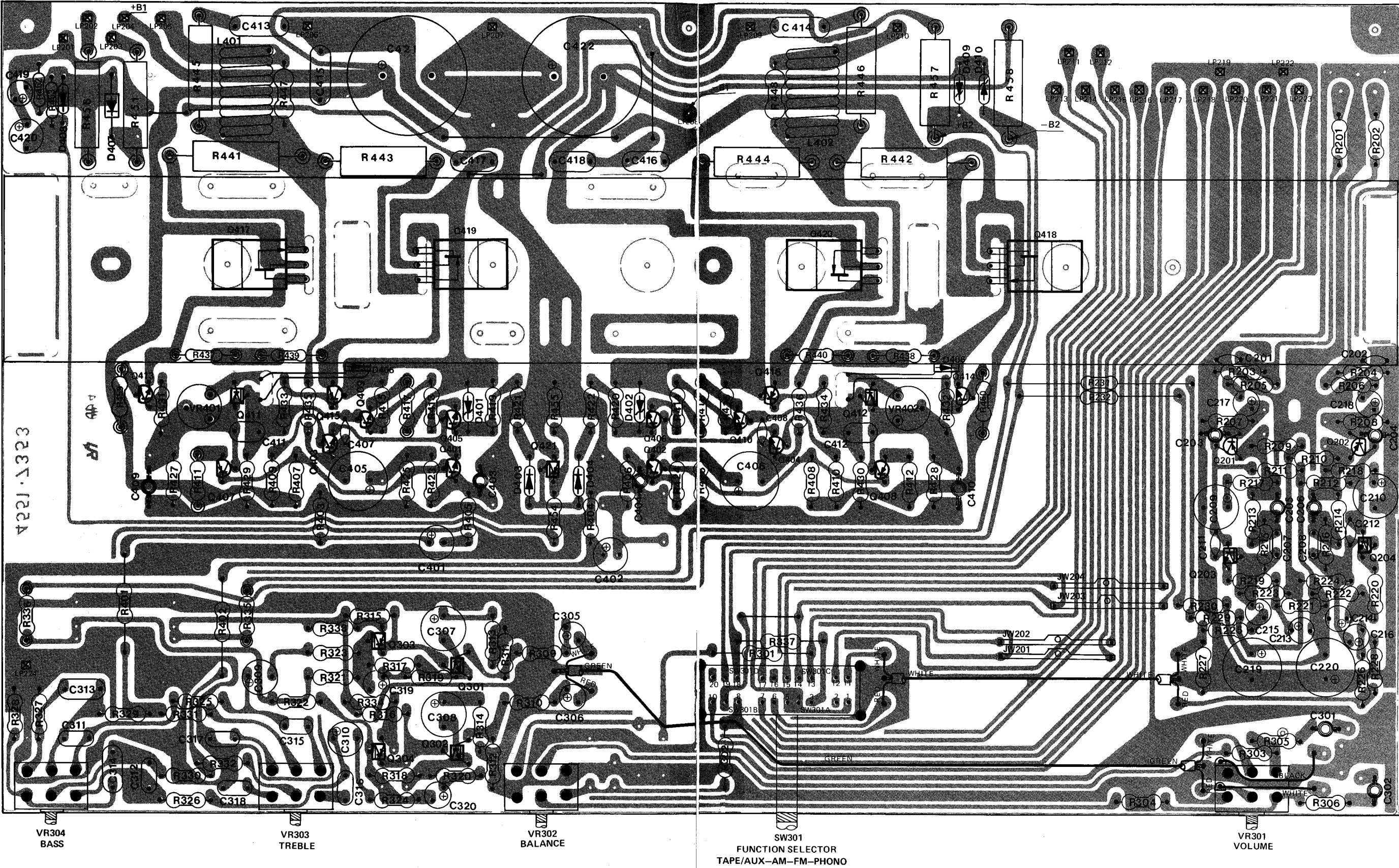
RECTIFIER PC BOARD



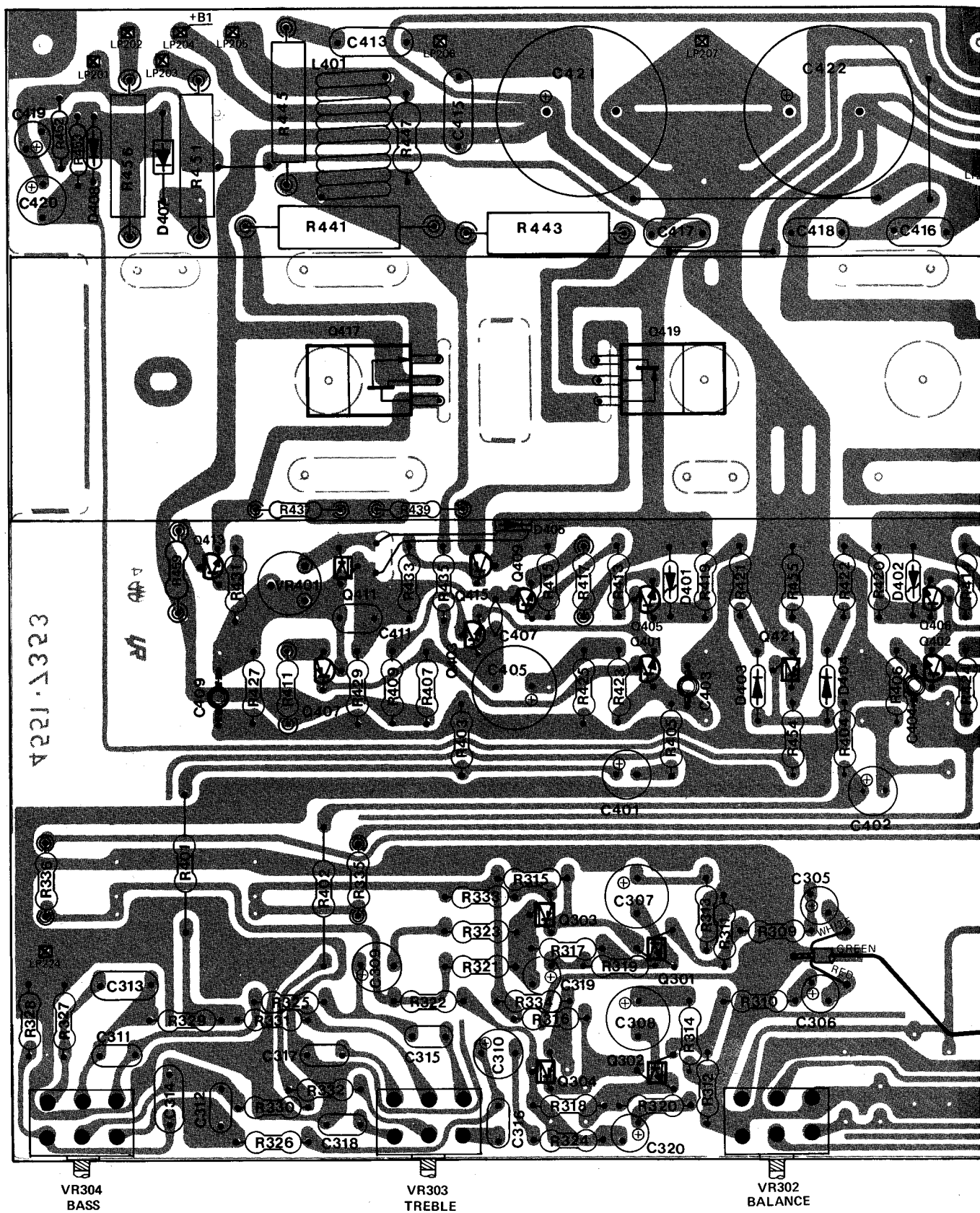
CIRCUIT REF.	H/K PART NO.	DESCRIPTION
CAPACITORS, ELECTROLYTIC		
C515, 516, 518	31835618	1000MF +50% -10% 16V
C517	31835720	470MF +50% -10% 16V
SEMICONDUCTORS		
Q501	43035961	Transistor, 2SC1419(C) Voltage Regulator
D501, 502, 503, 504	41035665	Diode, V03C
D505, 506	41035729	Diode, ERB15
D507	42032760	Zener Diode, RD13EB 13.2V $\pm$ 0.9V -0.8V
MISCELLANEOUS		
FU1, 2	45035962	Fuse, 3.2A 125V
FU3	45035963	Fuse, 1.6A 125V
	66035035	Fuse Holder (X6)

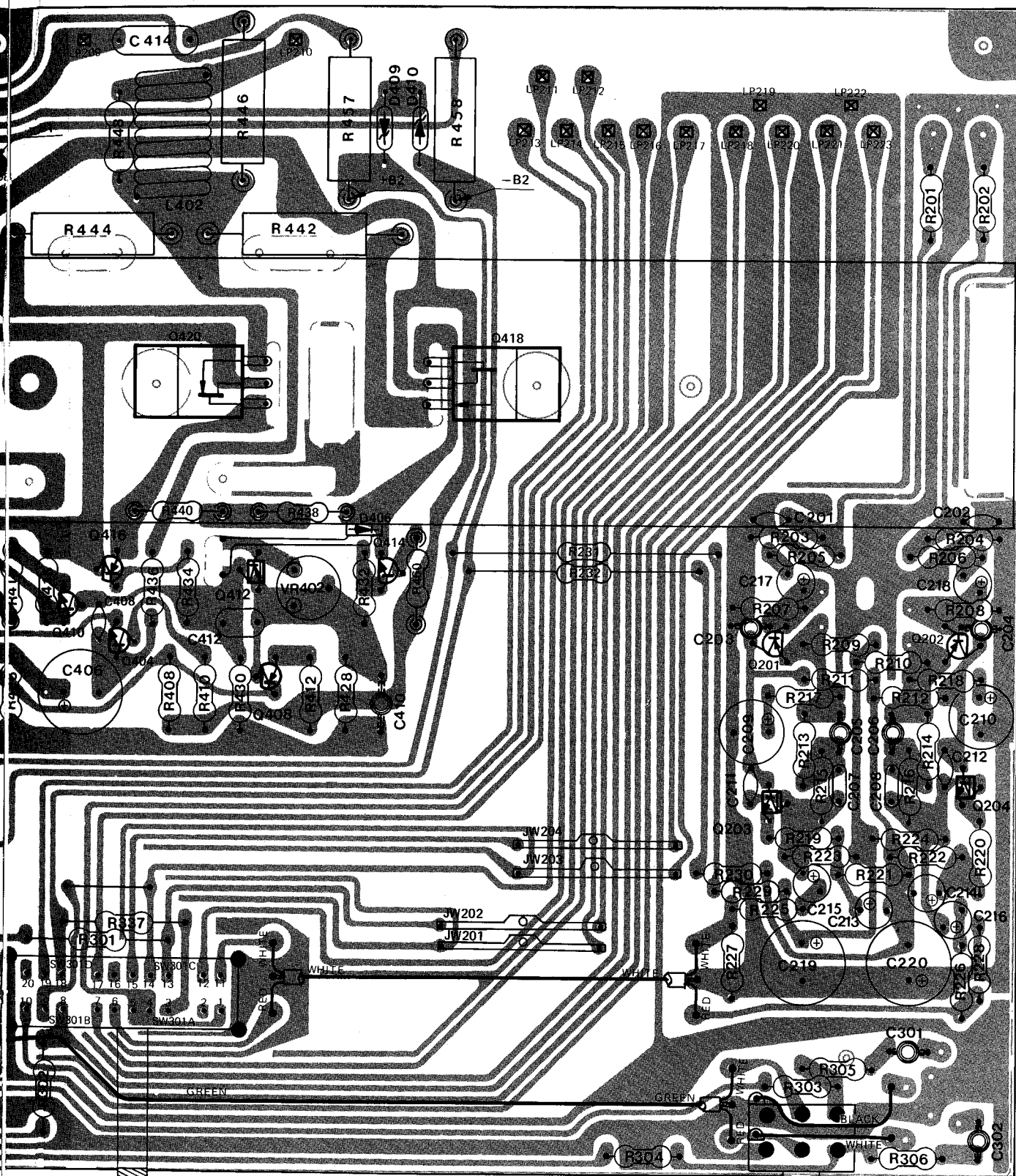
EQUALIZER AMP/MAIN AMP PC BOARD

CIRCUIT REF.	H/K PART NO.	DESCRIPTION
RESISTORS (All resistors 1/4W, $\pm 5\%$ Carbon unless otherwise noted)		
VR301	23535948	Variable Resistor, 100 k ohm, Volume Control
VR302	22035564	Variable Resistor, 50 k ohm, Balance Control
VR303, 304	23535949	Variable Resistor, 100 k ohm, Treble Control, Bass Control
VR401, 402	23535950	Variable Resistor, 1 k ohm
CAPACITORS, ELECTROLYTIC		
C209, 210	31835619	100MF $\pm 50\%$ -10% 10V
C213, C214	31835572	22MF $\pm 50\%$ -10% 16V
C215, 216	31835574	1MF $\pm 75\%$ -10% 50V
C217, 218	31835951	22MF $\pm 20\%$ 16V
C219, 220	31835571	330MF $\pm 50\%$ -10% 16V
C305, 306	31835584	10MF $\pm 20\%$ 16V
C307, 308	31835952	220MF $\pm 50\%$ -10% 6.3V
C309, 310, 420	31835953	100MF $\pm 50\%$ -10% 10V
C319, 320	31835657	2.2MF $\pm 20\%$ 50V
C401, 402	31835662	47MF $\pm 20\%$ 10V
C405, 406	31835954	1000MF $\pm 50\%$ -10%
C419	31835572	22MF $\pm 50\%$ -10% 16V
C421, 422	31835955	6800MF $\pm 30\%$ -10% 35V
SEMICONDUCTORS		
Q201, 202	43032151	Transistor, 2SA872(E) Equalizer Amp.
Q203, 204	43029483	Transistor, 2SC1345(E) Equalizer Amp.
Q301, 302	43029483	Transistor, 2SC1345(E) Pre. Amp.
Q303, 304, 411, 412, 421	43031312	Transistor, 2SA844(E) Pre. Amp., Bias Stabilization, Audio Muting
Q401, 042	43035956	Transistor, 2SC1775(E) Differential Amp., Current Regulator
403, 404		
405, 406		
Q407, 408	43034847A	Transistor, 2SB646(C) Pre. Driver
Q409, 410	43034848A	Transistor, 2SD666(C) Pre. Driver
Q413, 414	43034849A	Transistor, 2SD667(C) Driver
Q415, 416	43034850A	Transistor, 2SB647(C) Driver
Q417, 418	43035957	Transistor, 2SD726(B) Power Amp.
Q419, 420	43035958	Transistor, 2SB690(B) Power Amp.
D401, 402	42032757	Zener Diode, RD15EB 14.7V $\pm 0.9V$
D403, 404, 408	41035628	Switching Diode, 1SS81
D405, 406	38135959	Varistor, MV103Y
D407	41631295	Diode, SIB01
D409, 410	42035659	Zener Diode, RD20EB 20V $\pm 1.2V$
MISCELLANEOUS		
L401, 402	12034851A	Coil, RF Choke
SW301	24035960	Rotary Slide Switch, Function Selector



EQUALIZER AMP/MAIN AMP PC BOARD

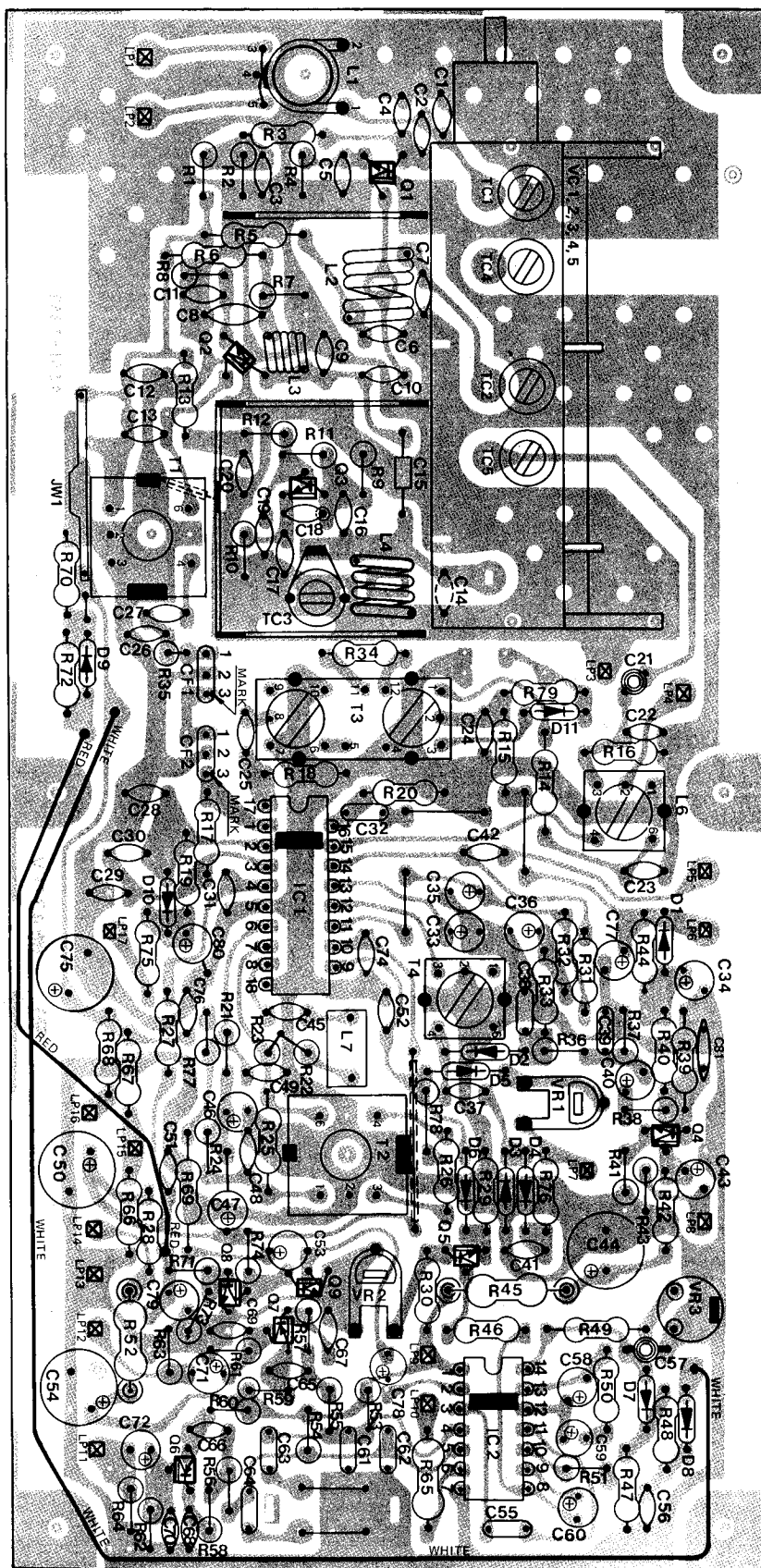




SW301
FUNCTION SELECTOR
TAPE/AUX-AM-FM-PHONO

VR301
VOLUME

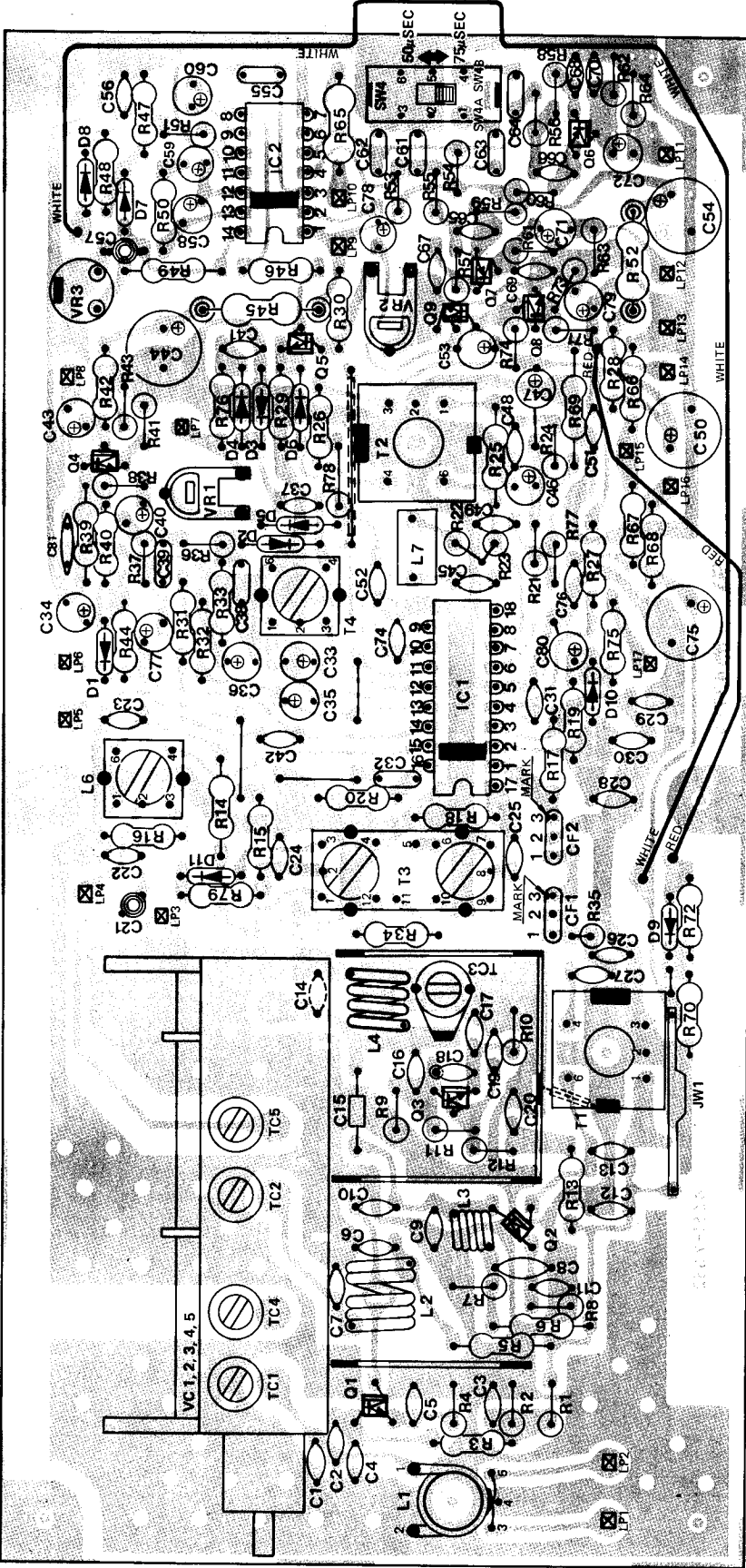
TUNER PC BOARD



TUNER PC BOARD

CIRCUIT REF.	H/K PART NO.	DESCRIPTION
RESISTORS		
VR1	23535937	Variable Resistor, 5 k ohm
VR2	23535938	Variable Resistor, 30 k ohm
VR3	23530554	Variable Resistor, 4.7 k ohm
CAPACITORS, ELECTROLYTIC		
C33	31835576	4.7MF +50% -10% 25V
C34	31835717	22MF +50% -10% 10V
C35, 36	31835578	3.3MF +75% -10% 25V
C40	31835939	0.1MF ±20% 50V
C43	31835940	0.47MF +75% -10% 50V
C44, 75	31835718	100MF +50% -10% 16V
C46	31835573	10MF +50% -10% 16V
C47	31835941	33MD +50% -10% 10V
C50	31835942	220MF +50% -10% 10V
C53	31835657	2.2MF ±20% 50V
C54	31835577	220MF +50% -10% 16V
C58, 60	31835943	0.22MF ±20% 50V
C59	31835580	0.47MF ±20% 50V
C71, 72	31835574	1MF +75% -10% 50V
C77	31835944	0.47MF +75% -10% 50V
C78	31832147	22MF ±20% 10V
C79	31835662	47MF ±20% 10V
C80	31835588	4.7MF ±20% 25V
VC1, 2, 3, 4, 5	00335589	Variable Capacitor (W/Trimmers TC1, 2, 4, 5)
SEMICONDUCTORS		
Q1, 2, 3	43035945	Transistor, 2SC535(C) FM RF Amp. FM Mixer, FM Osc.
Q4, 5, 8, 9	43028536	Transistor, 2SC1335(E) AM Demodulation Signal Amp., Mono/Stereo Switching, FM Audio Muting
Q6, 7	43031312	Transistor, 2SA844(E) MPX Output Amp.
IC1	43134835A	Integrated Circuit, HA1123 FM IF Amp./ FM Det./AM Mixer/AM Osc./AM IF Amp.
IC2	43135946	Integrated Circuit, HA1156 FM Multiplex
D1, 5, 7, 8 9, 10, 11	41030552	Diode, 1S2076
D2, 3, 4	41528591	Diode, 1N34A
D6	41035947	Diode, 1N60
COILS		
L1	12034836A	FM Matching
L2	12034837A	FM RF
L3	12034839A	FM IF Trap
L4	12034838A	FM Osc.
L6	12031316	AM Osc.
L7	12034840A	Phase Sifter
TRANSFORMER		
T1	11034841A	FM IF
T2	11034842A	Quadrature Det.
T4	11035608	AM IF
MISCELLANEOUS		
CF1, 2	12035609	Ceramic Filter, FM IF (10.7MHz)
T3	12034833A	Ceramic Filter Component, AM IF (455kHz)

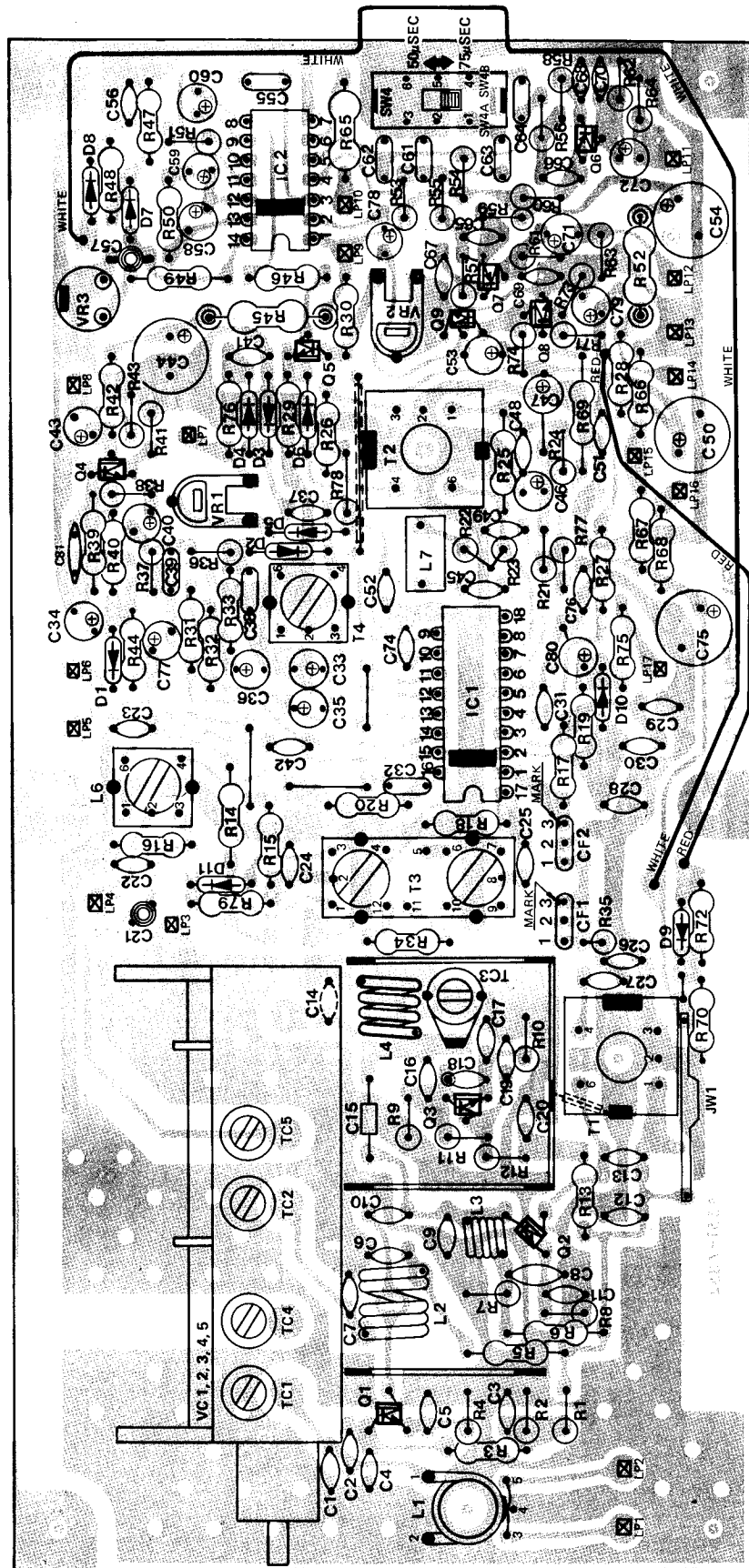
TUNER PC BOARD – MULTI VOLTAGE



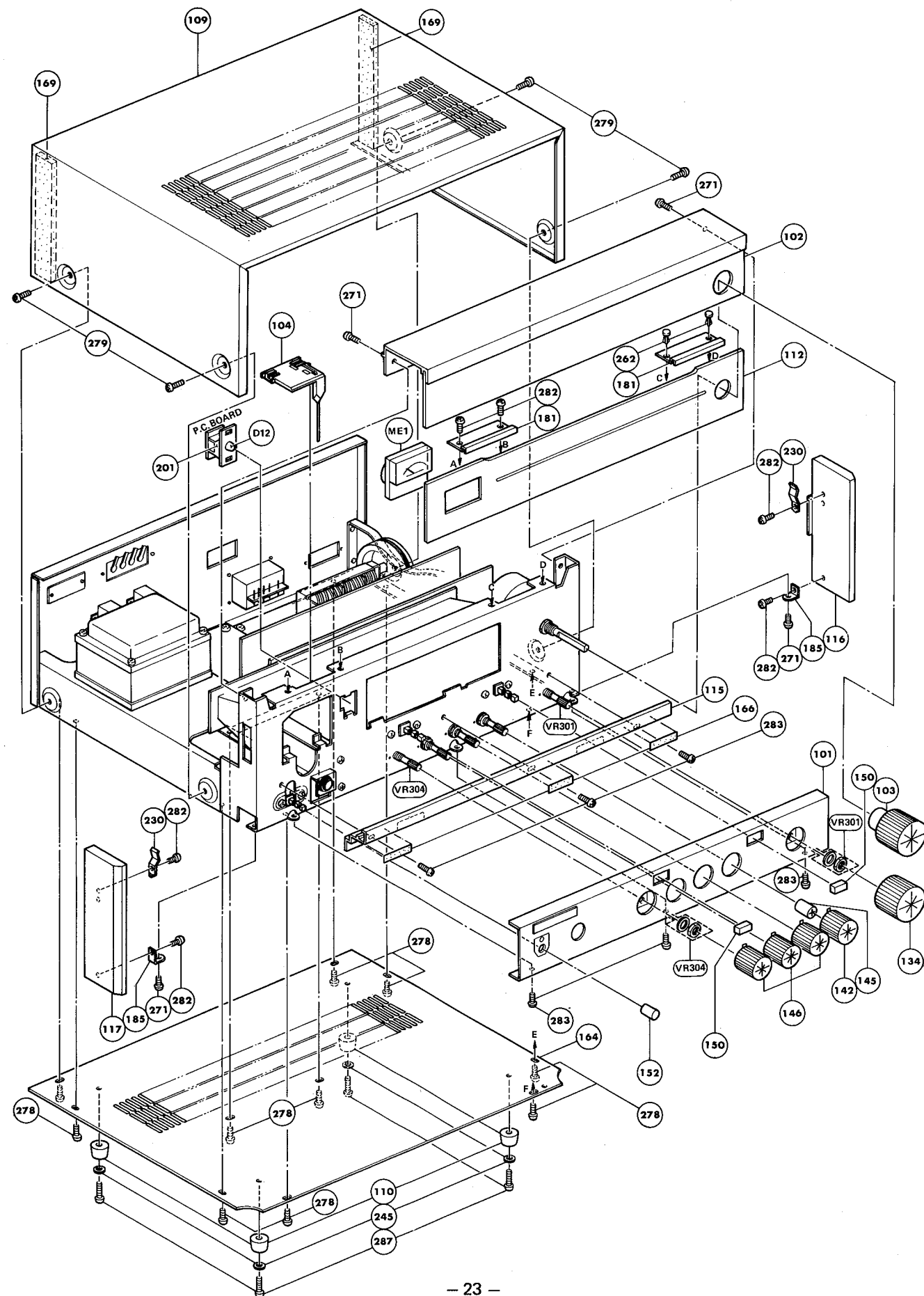
TUNER PC BOARD

CIRCUIT REF.	H/K PART NO.	DESCRIPTION
RESISTORS		
VR1	23535937	Variable Resistor, 5 k ohm
VR2	23535938	Variable Resistor, 30 k ohm
VR3	23530554	Variable Resistor, 4.7 k ohm
CAPACITORS, ELECTROLYTIC		
C33	31835576	4.7MF +50% -10% 25V
C34	31835717	22MF +50% -10% 10V
C35, 36	31835578	3.3MF +75% -10% 25V
C40	31835939	0.1MF ±20% 50V
C43	31835940	0.47MF +75% -10% 50V
C44, 75	31835718	100MF +50% -10% 16V
C46	31835573	10MF +50% -10% 16V
C47	31835941	33MD +50% -10% 10V
C50	31835942	220MF +50% -10% 10V
C53	31835657	2.2MF ±20% 50V
C54	31835577	220MF +50% -10% 16V
C58, 60	31835943	0.22MF ±20% 50V
C59	31835580	0.47MF ±20% 50V
C71, 72	31835574	1MF +75% -10% 50V
C77	31835944	0.47MF +75% -10% 50V
C78	31832147	22MF ±20% 10V
C79	31835662	47MF ±20% 10V
C80	31835588	4.7MF ±20% 25V
VC1, 2, 3, 4, 5	00335589	Variable Capacitor (W/Trimmers TC1, 2, 4, 5)
SEMICONDUCTORS		
Q1, 2, 3	43035945	Transistor, 2SC535(C) FM RF Amp. FM Mixer, FM Osc.
Q4, 5, 8, 9	43028536	Transistor, 2SC1335(E) AM Demodulation Signal Amp., Mono/Stereo Switching, FM Audio Muting
Q6, 7	43031312	Transistor, 2SA844(E) MPX Output Amp.
IC1	43134835A	Integrated Circuit, HA11123 FM IF Amp./ FM Det./AM Mixer/AM Osc./AM IF Amp.
IC2	43135946	Integrated Circuit, HA1156 FM Multiplex
D1, 5, 7, 8 9, 10, 11	41030552	Diode, 1S2076
D2, 3, 4	41528591	Diode, 1N34A
D6	41035947	Diode, 1N60
COILS		
L1	12034836A	FM Matching
L2	12034837A	FM RF
L3	12034839A	FM IF Trap
L4	12034838A	FM Osc.
L6	12031316	AM Osc.
L7	12034840A	Phase Sifter
TRANSFORMER		
T1	11034841A	FM IF
T2	11034842A	Quadrature Det.
T4	11035608	AM IF
MISCELLANEOUS		
CF1, 2	12035609	Ceramic Filter, FM IF (10.7MHz)
T3	12034833A	Ceramic Filter Component, AM IF (455kHz)

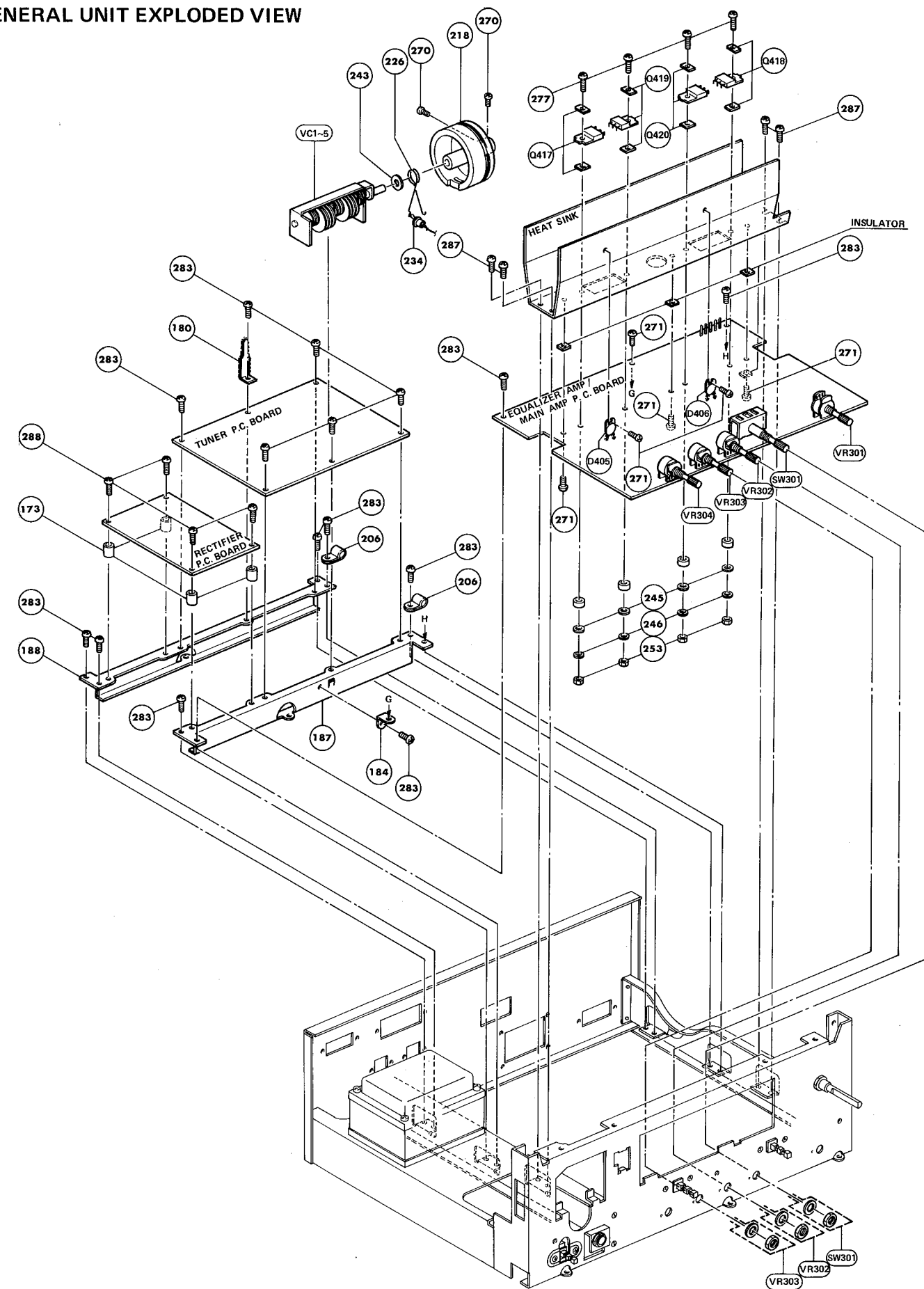
TUNER PC BOARD – MULTI VOLTAGE



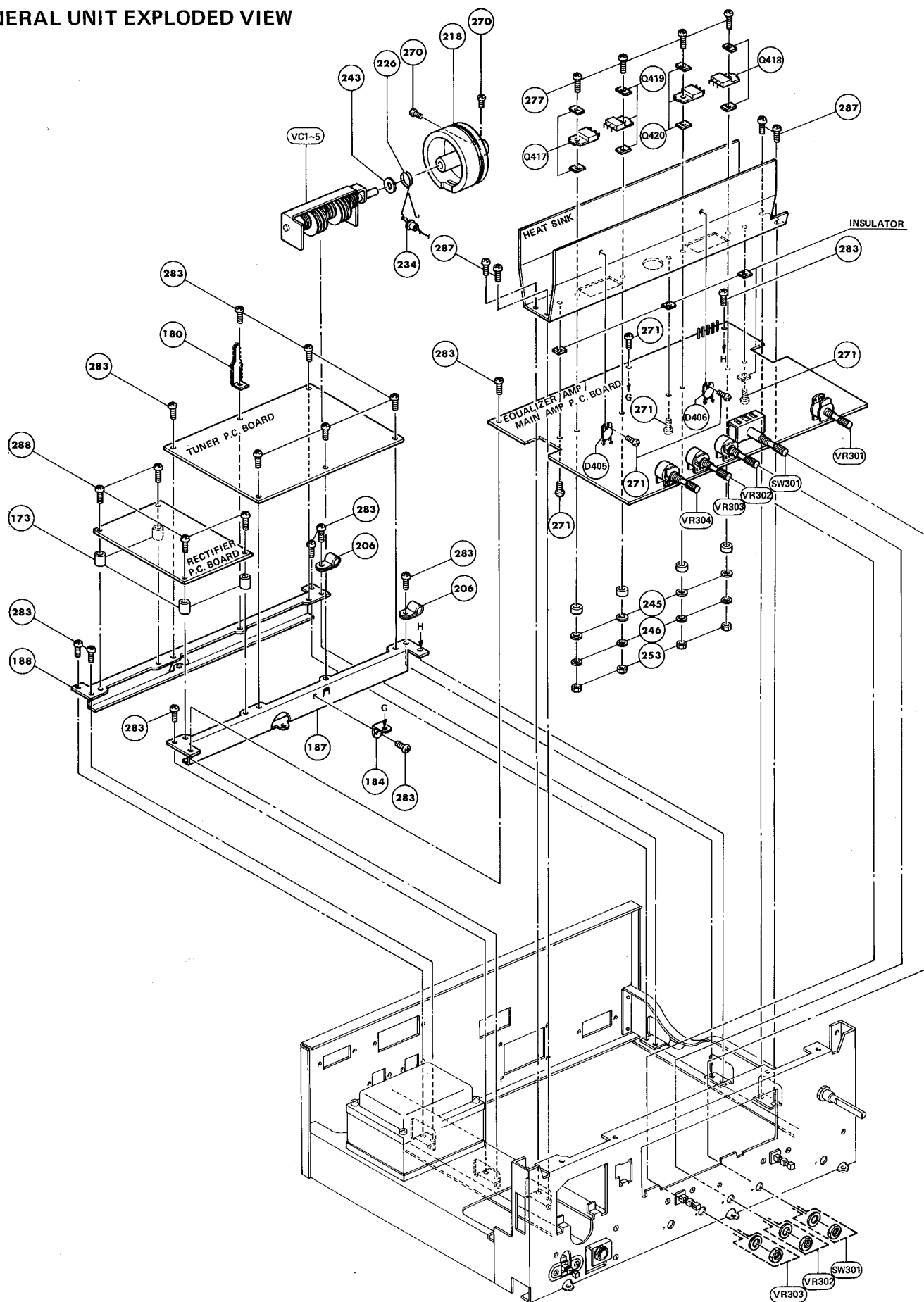
GENERAL UNIT EXPLODED VIEW



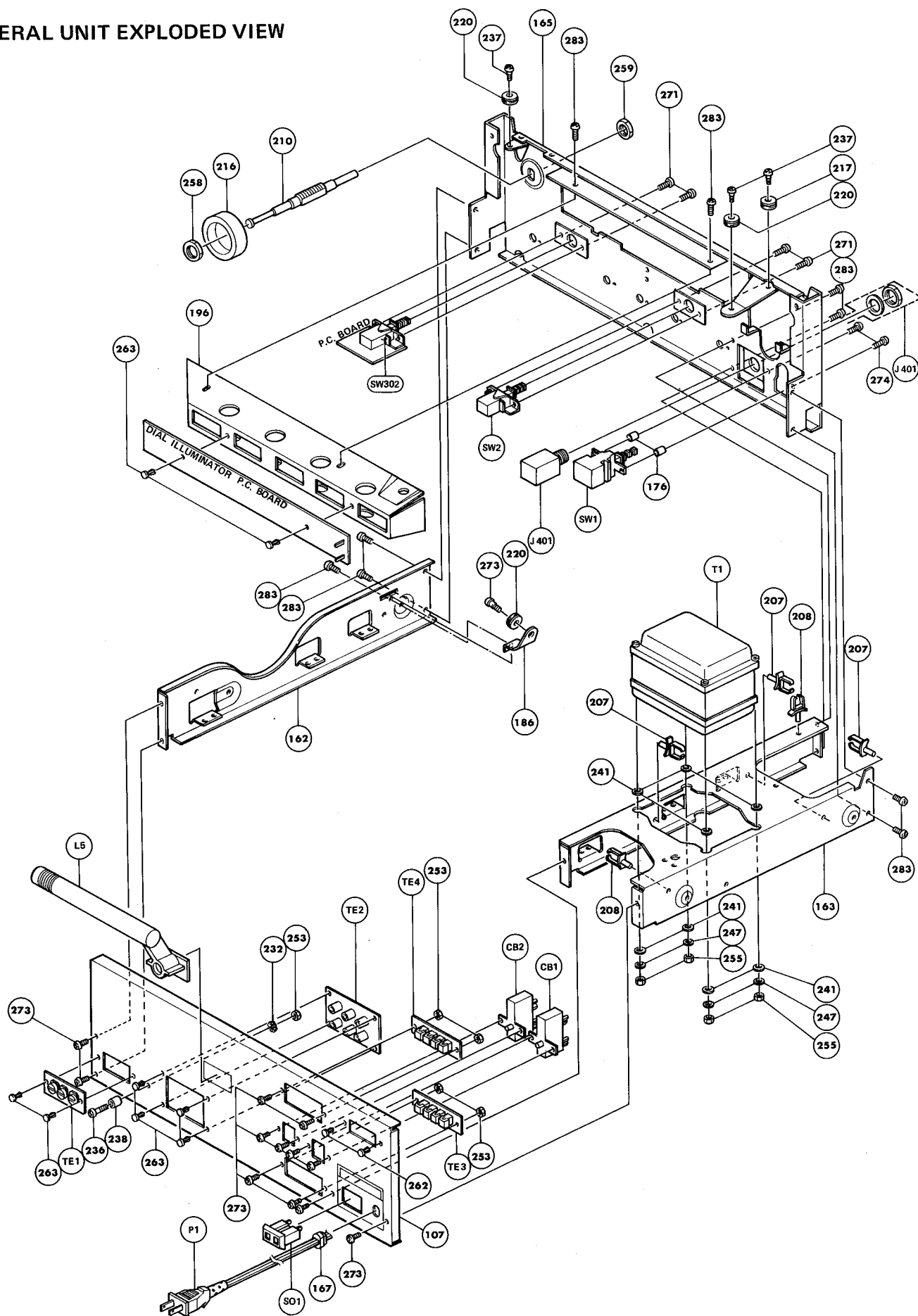
GENERAL UNIT EXPLODED VIEW



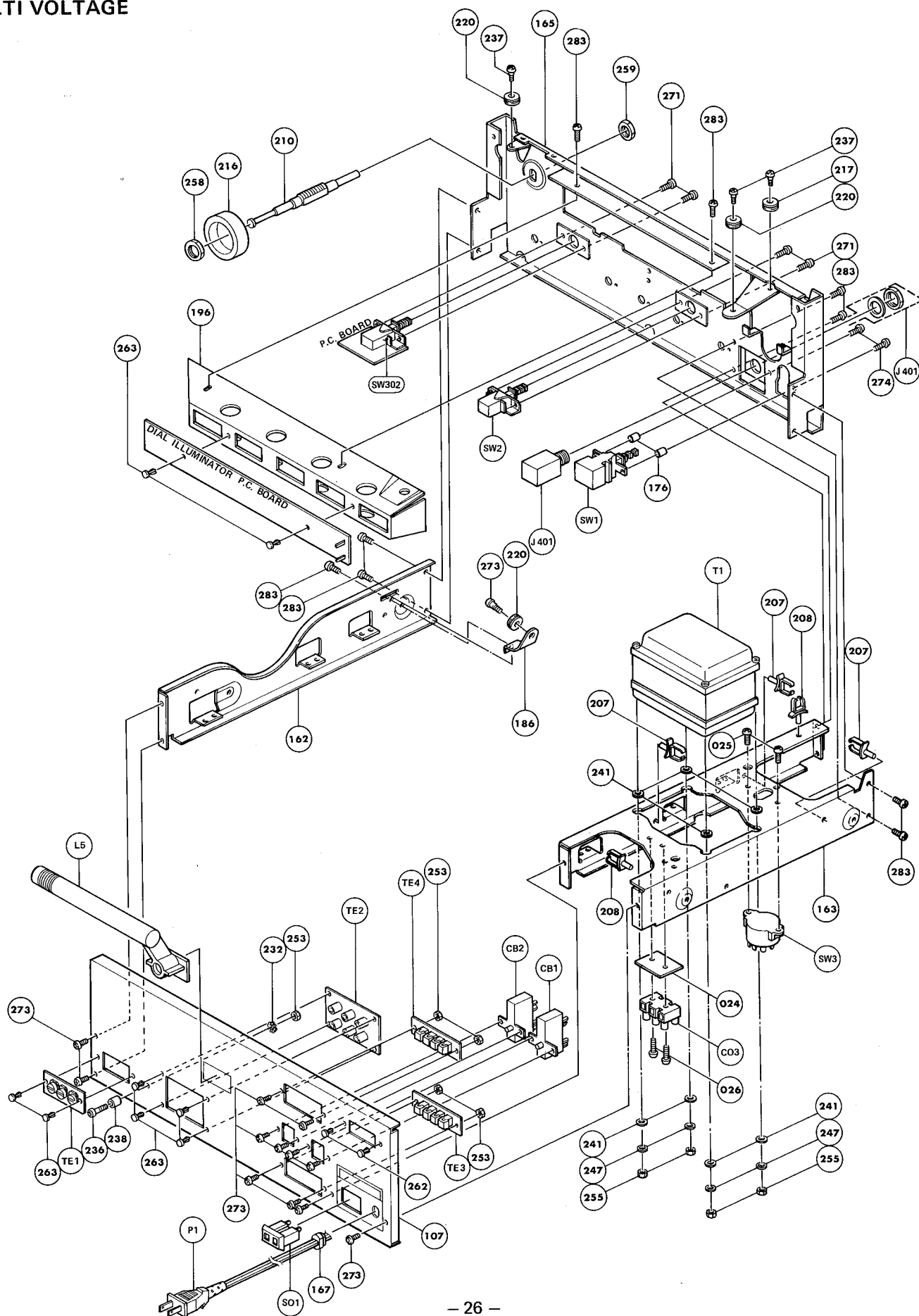
GENERAL UNIT EXPLODED VIEW



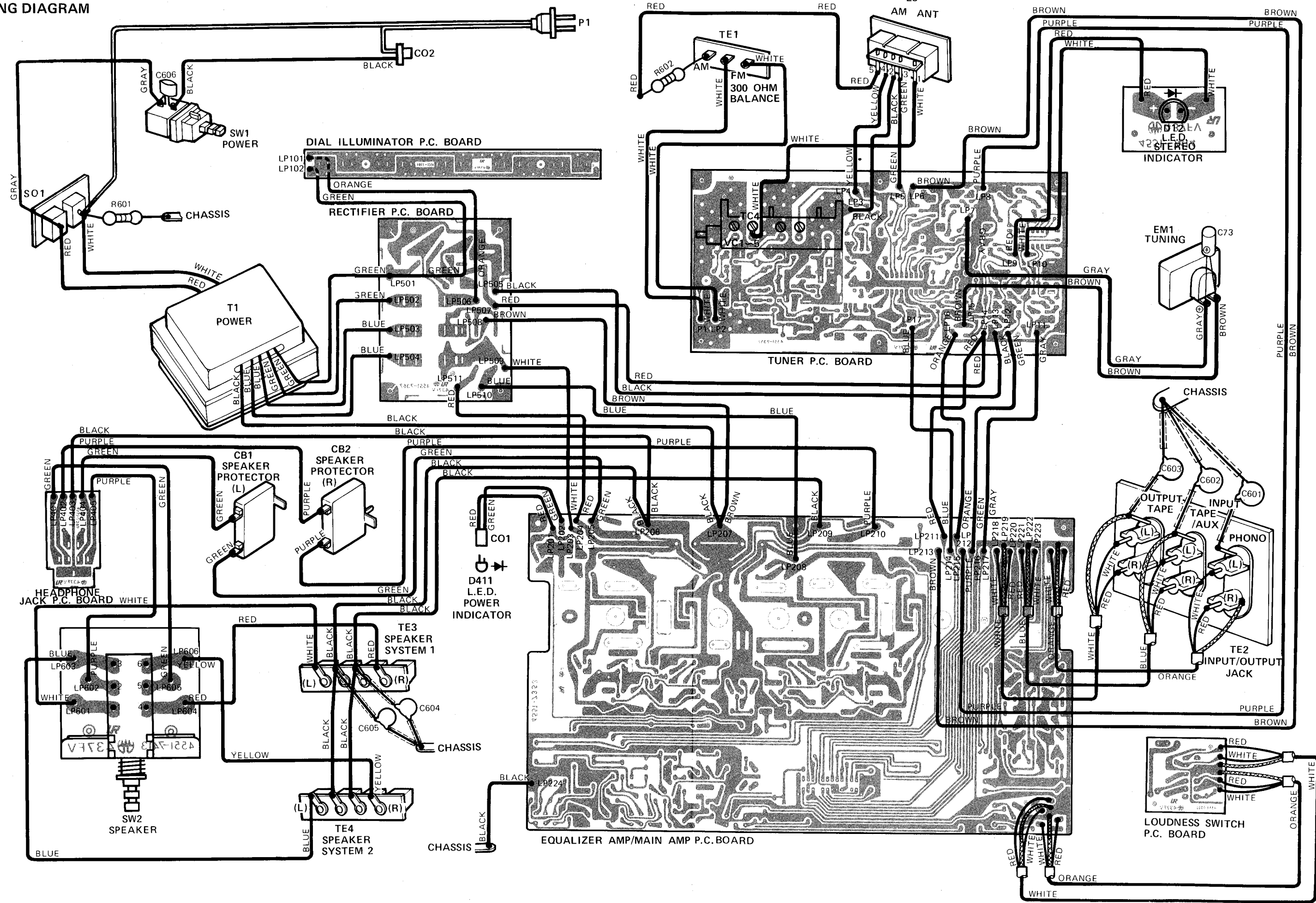
GENERAL UNIT EXPLODED VIEW



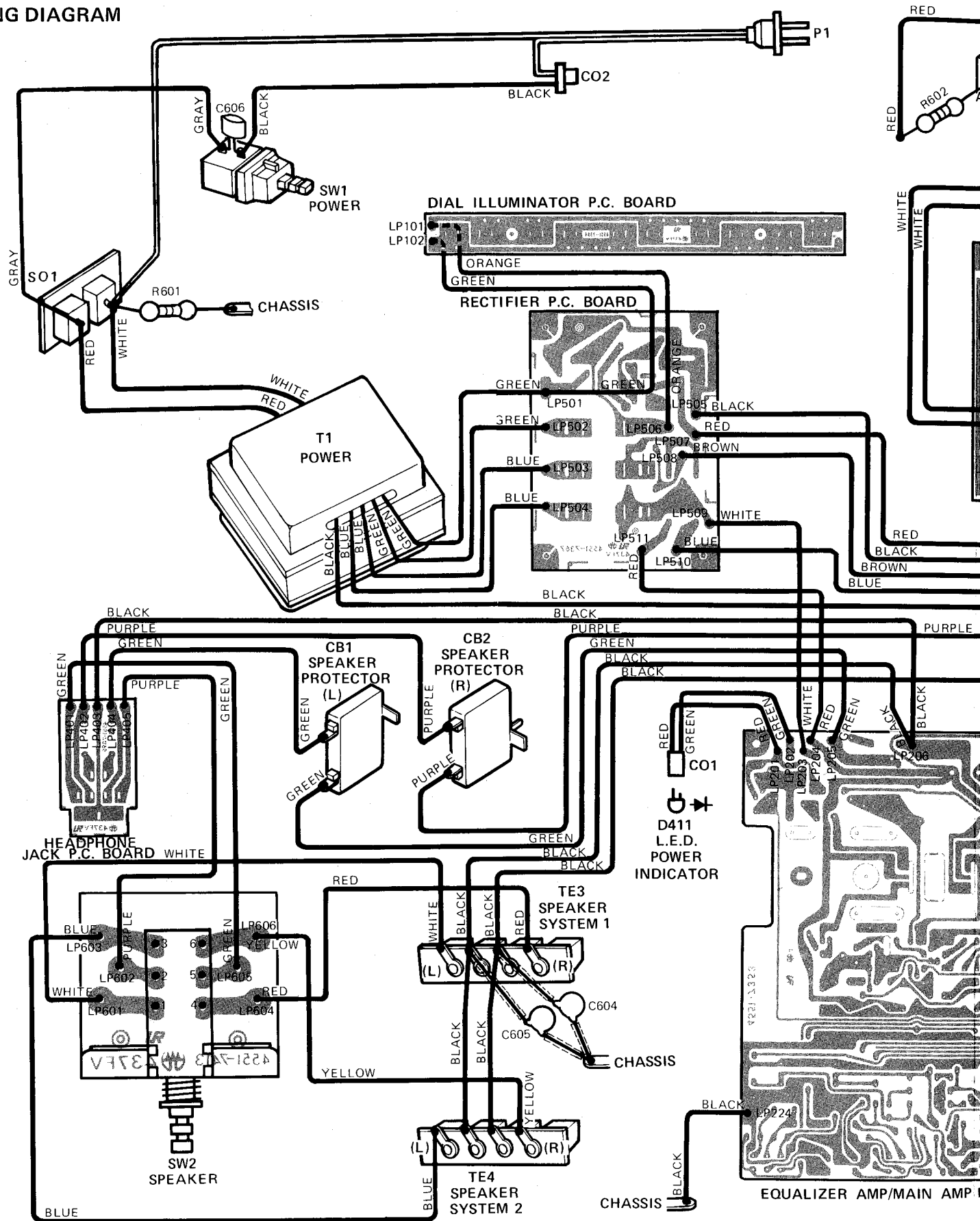
GENERAL UNIT EXPLODED VIEW — MULTI VOLTAGE

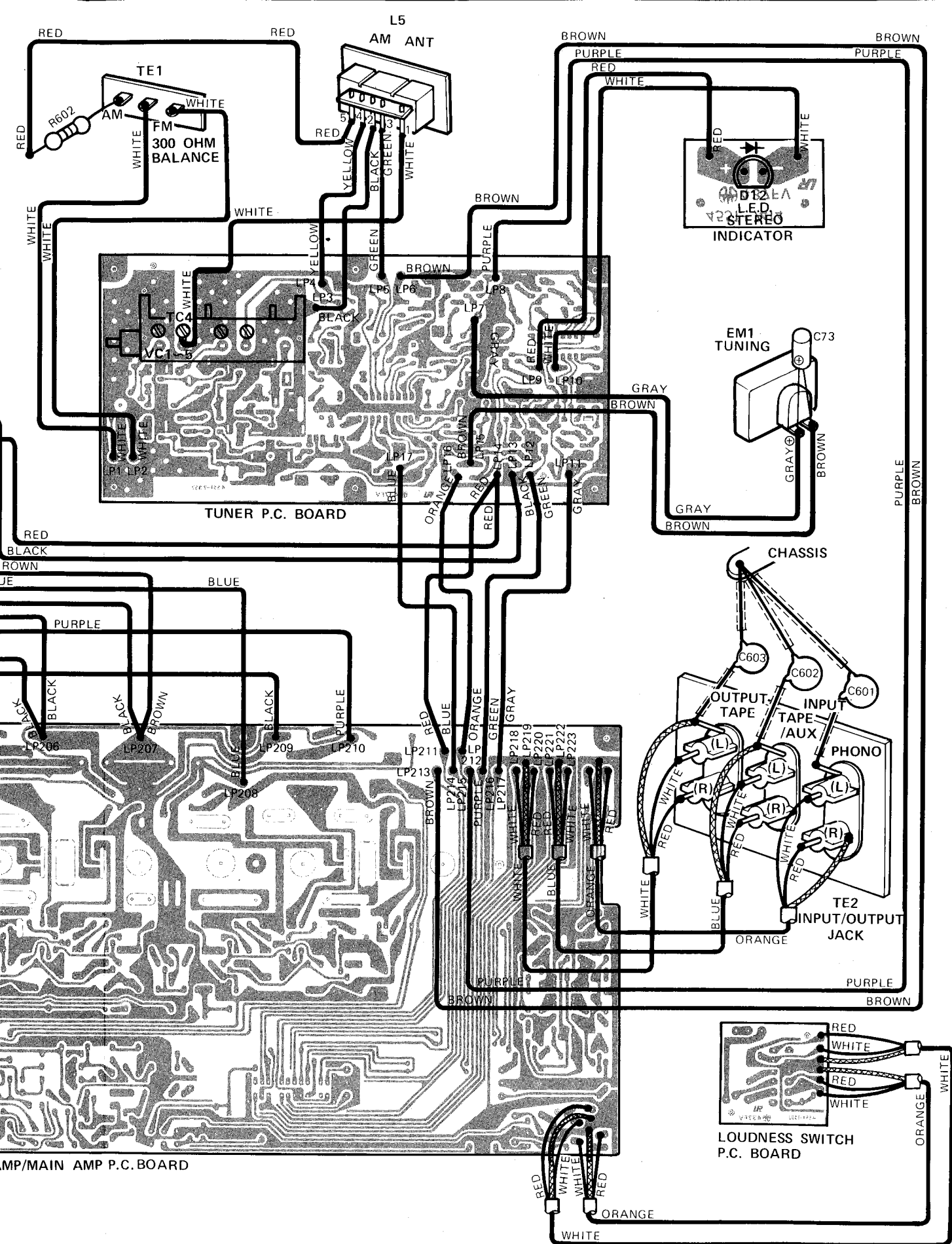


WIRING DIAGRAM

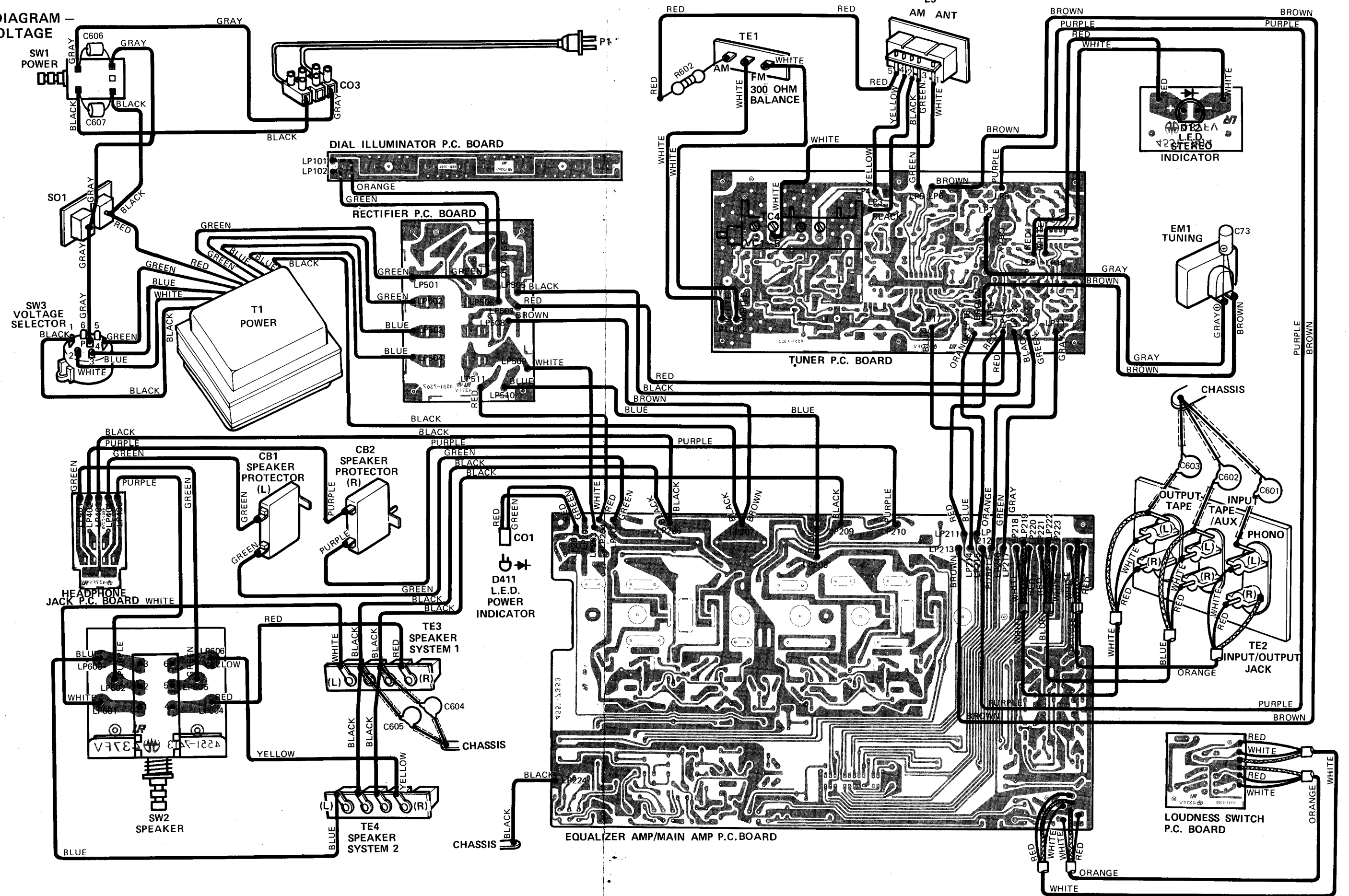


WIRING DIAGRAM

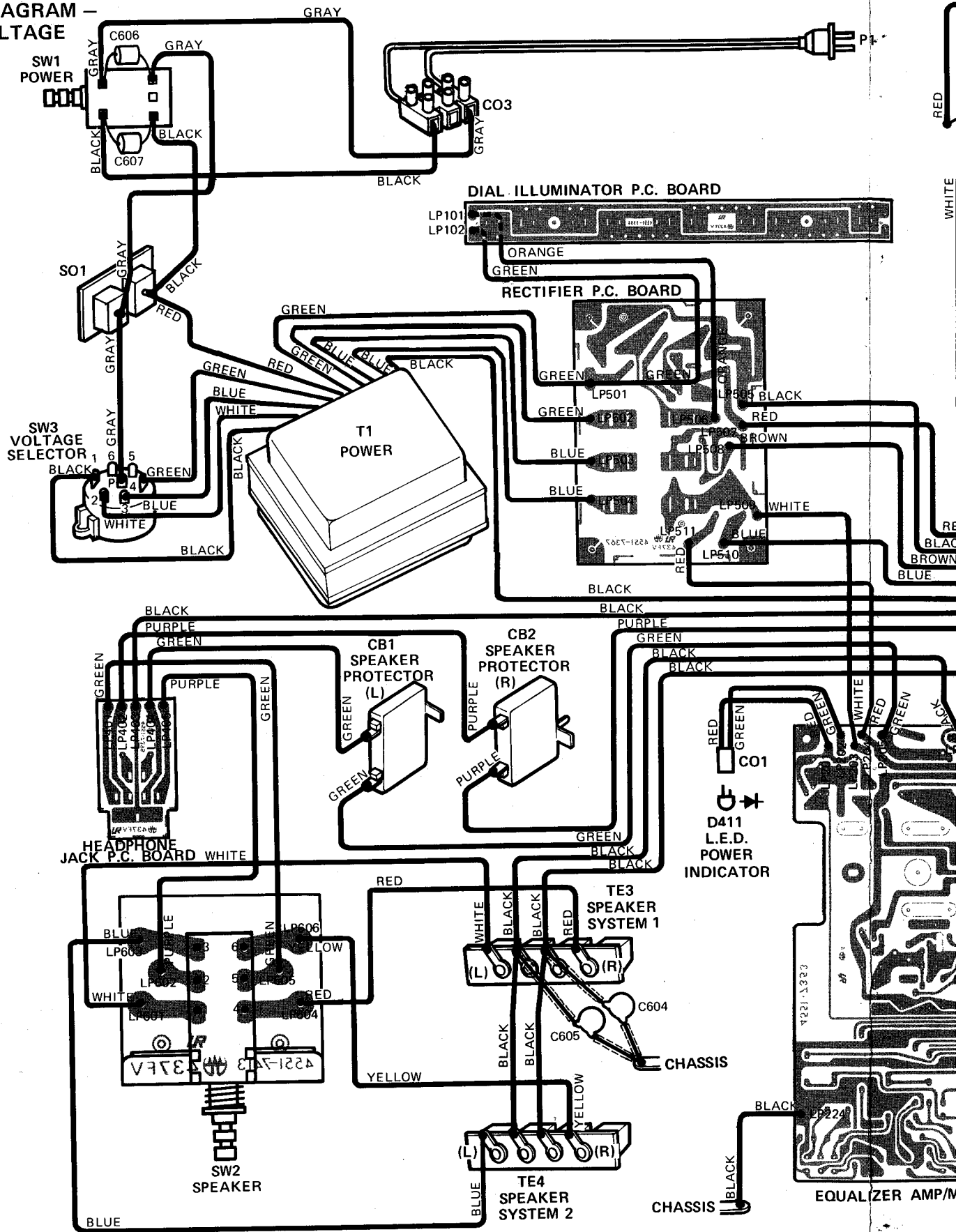


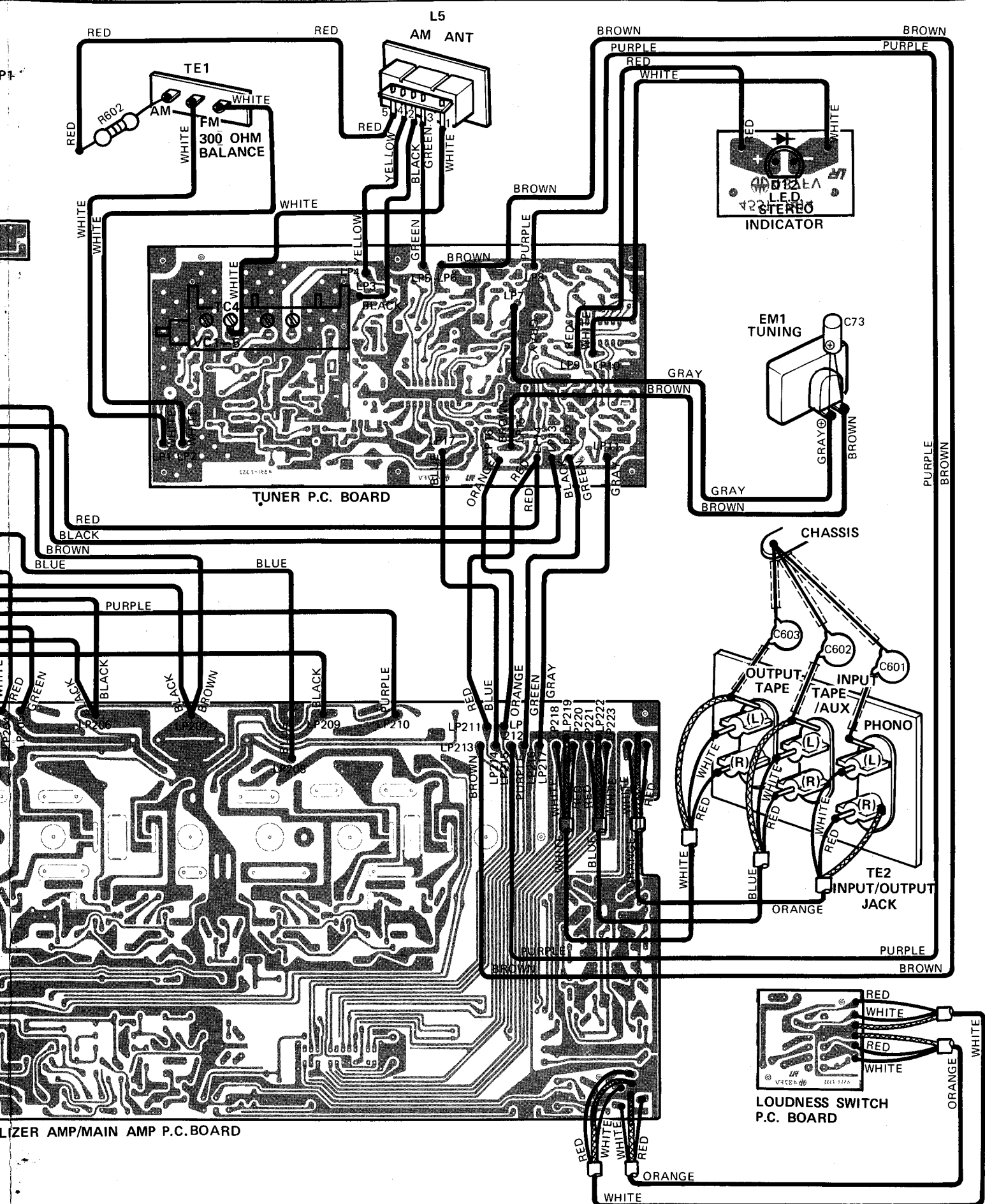


WIRING DIAGRAM — MULTI VOLTAGE



WIRING DIAGRAM — MULTI VOLTAGE

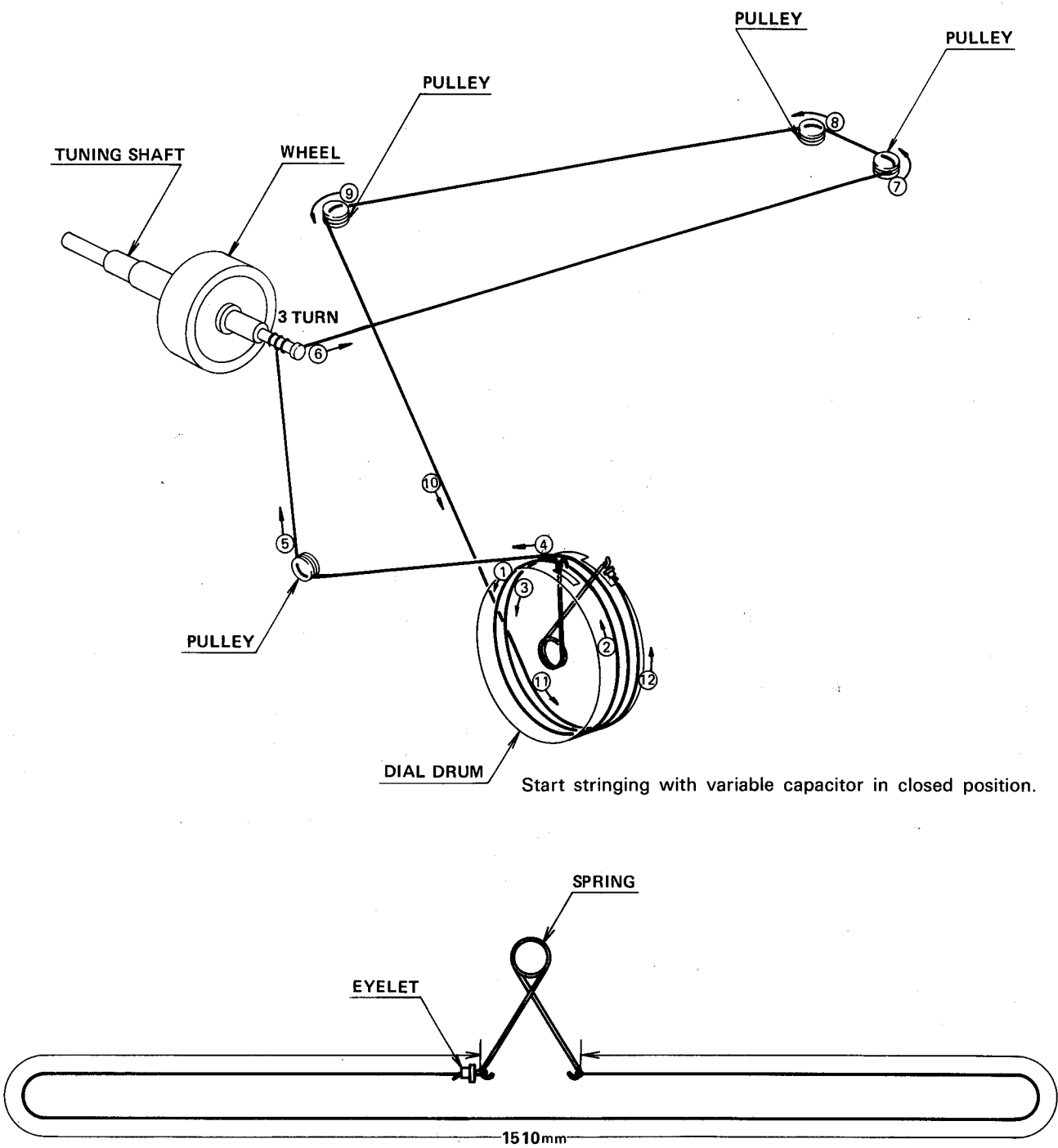




CHASSIS PARTS LIST

CIRCUIT REF.	H/K PART NO.	DESCRIPTION
GENERAL		
101	00235920	Front Panel Assembly
102	00235921	Clear Panel Assembly
103	00235922	Knob Assembly, Tuning
104	00235923	Dial Pointer Assembly
107	00235924	Cabinet Back
109	00235925	Cabinet Top
110	62035544	Feet, Cabinet Bottom (X4)
112	60135927	Dial Panel <i>DIAL SCALE</i>
115	60135928	Bracket, Clear Panel Receiver
116	60135929	Bracket, Front Panel Right
117	60135930	Bracket, Front Panel Left
134	63235550	Knob, Volume
142	63235931	Knob, Function
145	63235932	Knob Base, Function
146	63235551	Knob, Bass/Treble/Balance (X3)
150	63235933	Push Button, Speaker/Loudness (X2)
152	63233663	Push Button, Power
ELECTRICAL MISCELLANEOUS		
T1	10135934	Power Transformer
SW1	25035554	Push Switch, Power
SW2	25035935	Push Switch, Speaker
S01	67435556	External AC Socket, Switched
TE1	65129518	FM/AM External Antenna Terminal
TE2	65434822A	6-Pin Jack, Phono, Tape/Aux. Input, Tape Output
TE3, 4	65434823A	Speaker Output Terminal
CB1, 2	45534825A	Speaker Protector
ME1	12535936	Tuning Meter
L5	20535562	AM Ferrite Bar Antenna
D12	46735561	Light Emitting Diode, GL4AR2 Stereo Indicator
D411	46735566	Light Emitting Diode, SLP132B Power Indicator
C73	31835575	Capacitor, 47MF +50% -10% 10V Electrolytic
MULTI VOLTAGE RECEIVER		
T1	10135966	Power Transformer
SW1	25035635	Push Switch, Power
FU1, 2	45035636	Fuse, 3.15AT 250V
FU3	45035746	Fuse, 1.6AT 250V
	25035926	Fuse Holder (X6)
SW3	24031338	Rotary Switch, Power Source Voltage Selector
SW4	24531335	Slide Switch, Emphasis

DIAL CORD STRINGING



SCHEMATIC DIAGRAM — MODEL hk 340

