

NOTE: FOR SERVICE DATA, TAPE UNIT
 701505-1, SEE SAMS MHF-52.

MODEL	CHASSIS	TAPE UNIT	RECORD CHANGER
1P9283 ✓	R284-03		W525-02
1R1800 ✓	R284-01		
1V9062 ✓	R284-04	701054-1 ✓	
1V9071 ✓	R284-02	701454-2	
1V9074	R284-02	701454-2	W525-02-00
1V9081	R284-02	701454-2	
7P9283	R284-03		W525-02
7R1800	R284-01		
7V9062	R284-04	701505-1	
7V9071	R284-02	701454-2	
7V9074	R284-02	701454-2	W525-03-00

AM ALIGNMENT

1. Loosely couple Signal Generator to AM Antenna.
2. Connect AM AC voltmeter across speaker terminals.
3. Set Signal Generator at 455 KHz and tune radio until tuning capacitor is fully open.
4. Adjust L11A, B, L12, and L13 for maximum reading.
5. Adjust generator and radio to 1600 KHz.
6. Adjust CT4 for maximum reading.
7. Adjust Generator and radio to 540 KHz.
8. Adjust L10 for maximum reading.
9. Repeat Steps 5 thru 8 for maximum meter reading.
10. Adjust generator and radio to 1400 KHz.
11. Adjust CT3 for maximum reading.

FM IF ALIGNMENT

1. Tune radio to a point of non-interference.
2. Apply a 10.7 MHz signal, with a 250 KHz sweep through Figure 1, or equivalent circuit to Test Point (B).
3. Connect an oscilloscope through a 10K resistor to the junction of C115 and R118 (Test Point C).
4. Detune L8 Secondary Coil fully clockwise.
5. Adjust L8 primary, L7, L6, L4B and L4A for maximum sweep response at 10.7 MHz.
6. Adjust L8 secondary for best S-curve response with 10.7 MHz marker at crossover.

Note: Maximum amplitude may not coincide with best symmetry and marker location, but symmetry and marker location are more important than amplitude.

FM RF ALIGNMENT

1. Connect an RF signal generator to the FM Antenna terminals.
 2. Connect a VTVM to the junction of C115 and R118 (Test Point C).
 3. Adjust generator and radio to 108 MHz and adjust CT5 for maximum reading
 4. Adjust generator and radio to 88 MHz and adjust L5 for maximum reading.
 5. Repeat Steps 3 and 4 for maximum VTVM reading and tracking.
 6. Adjust generator and radio to 106 MHz and adjust CT1 and CT2 for maximum reading.
- Note: Keep signal generator at a low level to avoid overloading. If signal is too high the VTVM will show no change when peaking.

FM MULTIPLEX ALIGNMENT

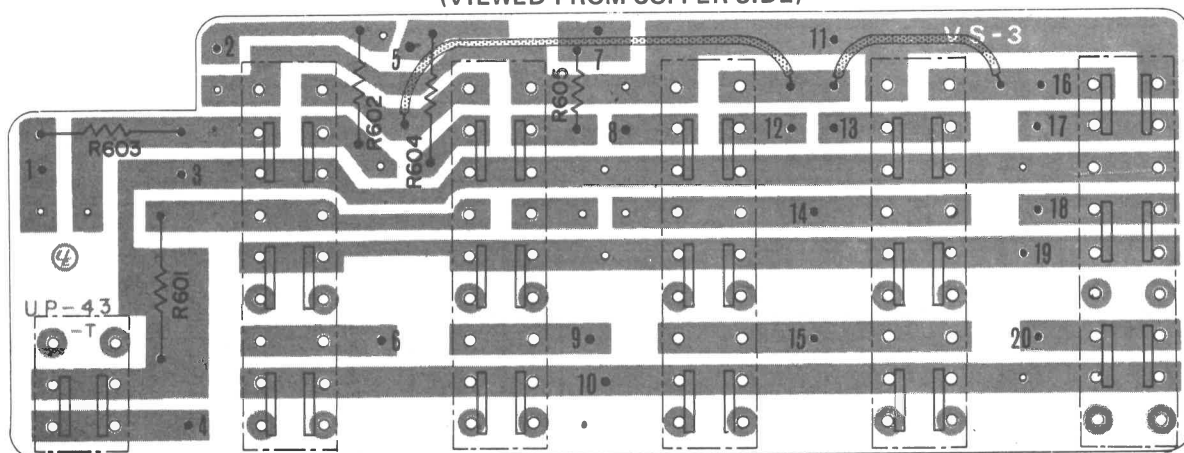
1. Connect a Multiplex Generator to the FM Antenna terminals.
 2. Connect an AC voltmeter across the right channel speaker terminals.
 3. Tune receiver to generator output frequency. Adjust generator for an input of 1 millivolt at 1 KHz stereo signal. Modulate left channel 30%.
 4. Adjust L15, 16, 17 and SVR101 for minimum deflection on meter.
 5. Disconnect AC meter from right channel and connect across the left channel terminals.
 6. Repeat Step 3, but switch generator from left to right channel and maintain same modulation.
 7. Adjust L15, 16, 17 and SVR101 for minimum deflection on meter.
- Note: Repeat above steps until a close balance is achieved.

POWER AMPLIFIER BIAS ADJUST

1. Adjust Left and Right Volume Slide controls to minimum.
 2. Connect a VTVM between the base of Q209 and ground.
 3. Adjust Bias Control (SVR201) for a positive 11.5 VDC.
 4. Connect a VTVM between the base of Q210 and ground.
 5. Adjust Bias Control (SVR202) for a positive 11.5 VDC.
- Note: The power amplifier is a complementary symmetry type amplifier. The Bias Adjust Control, adjusts the bias voltage for the pair of output transistors.

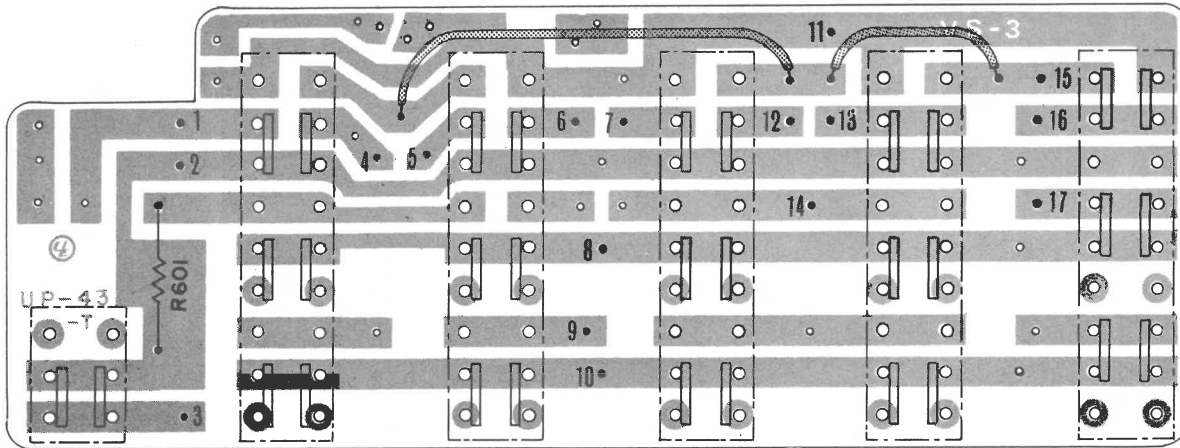
SWITCH ASSEMBLY (R284-01-03)

(VIEWED FROM COPPER SIDE)

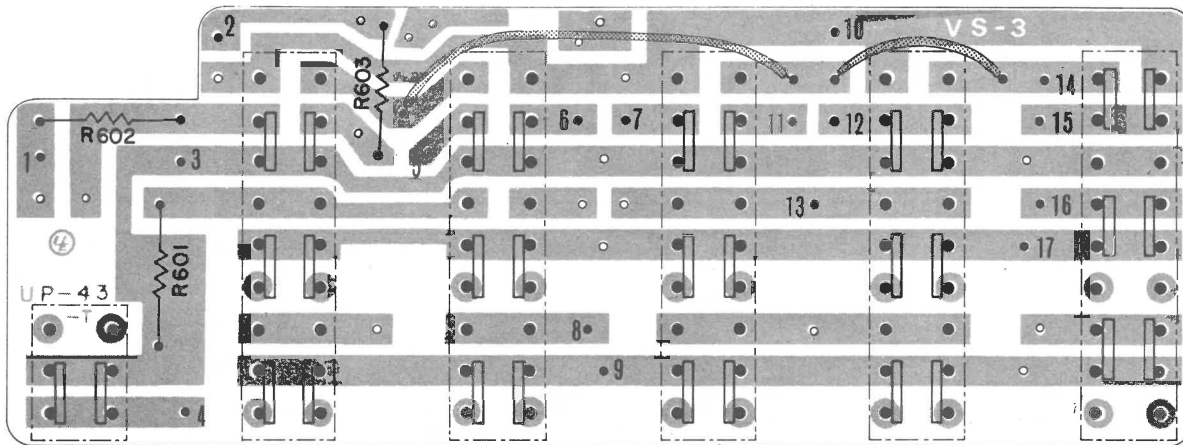


Magnavox Chassis R284

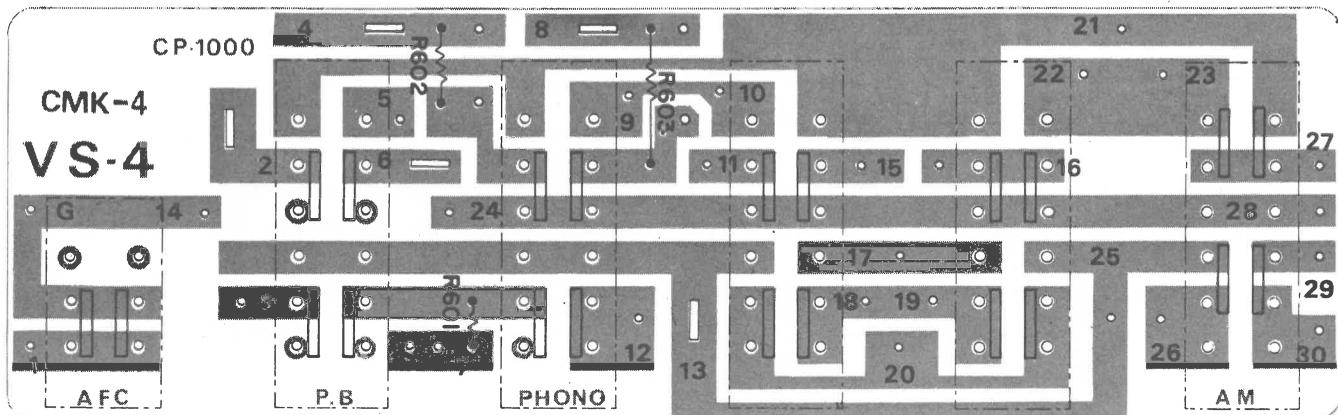
FUNCTION SWITCH ASSEMBLY (R284-03) (MODEL 1V9074)
(VIEWED FROM COPPER SIDE)



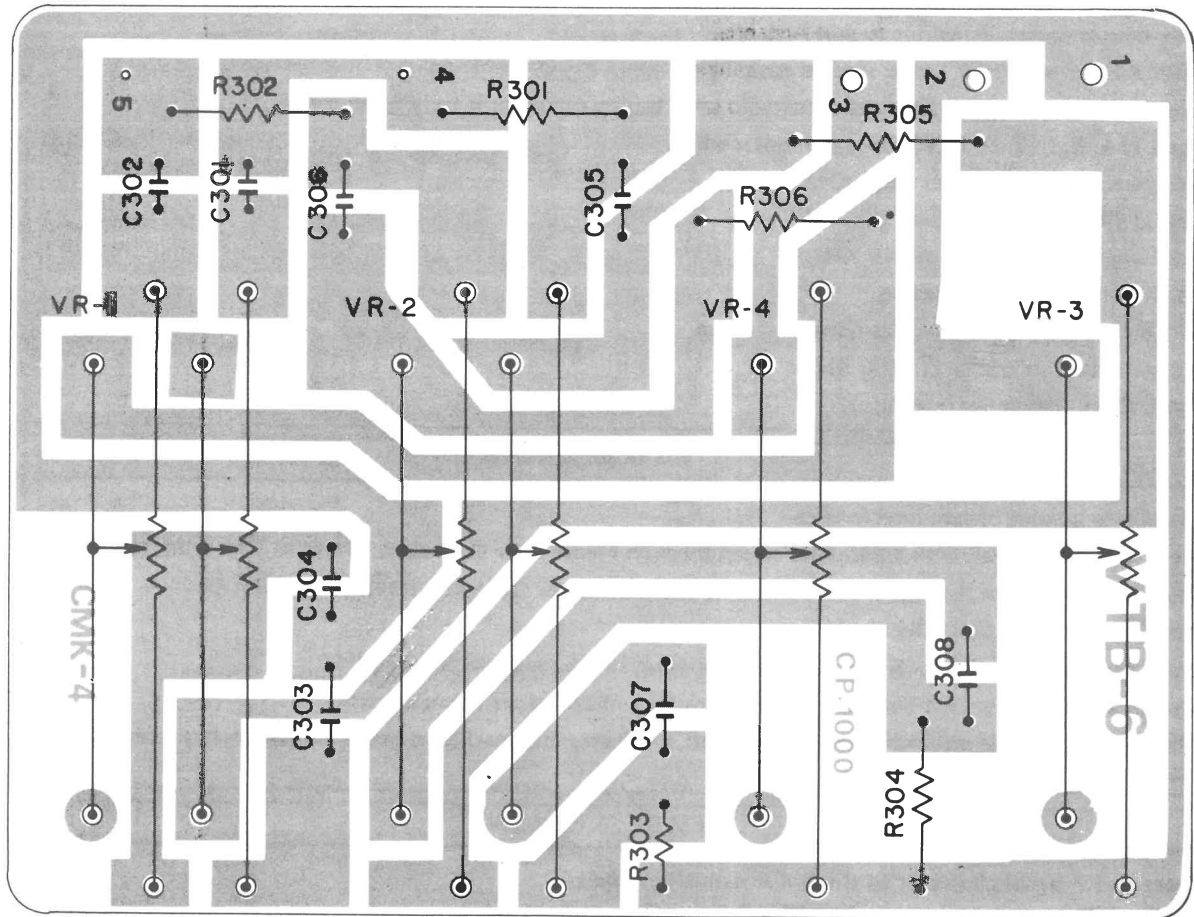
FUNCTION SWITCH ASSEMBLY (R284-02) (MODELS 1V9071-1V9081)
(VIEWED FROM COPPER SIDE)



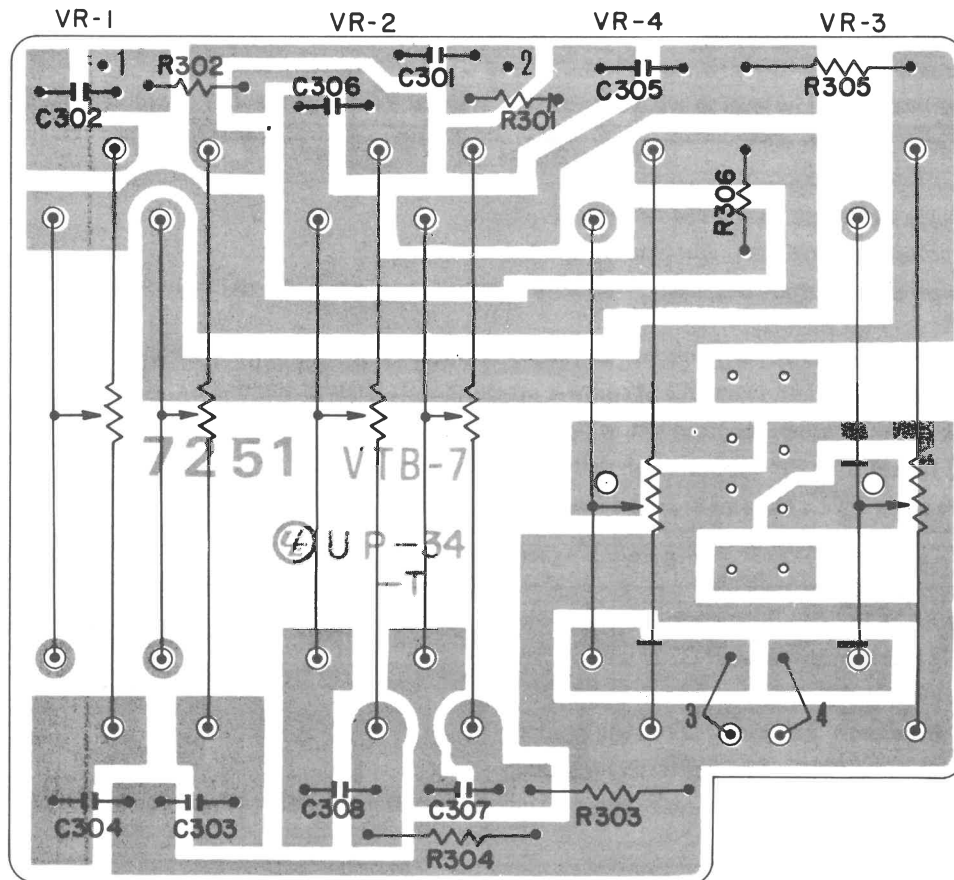
FUNCTION SWITCH ASSEMBLY (R284-04) (MODEL 1V9062)
(VIEWED FROM COPPER SIDE)



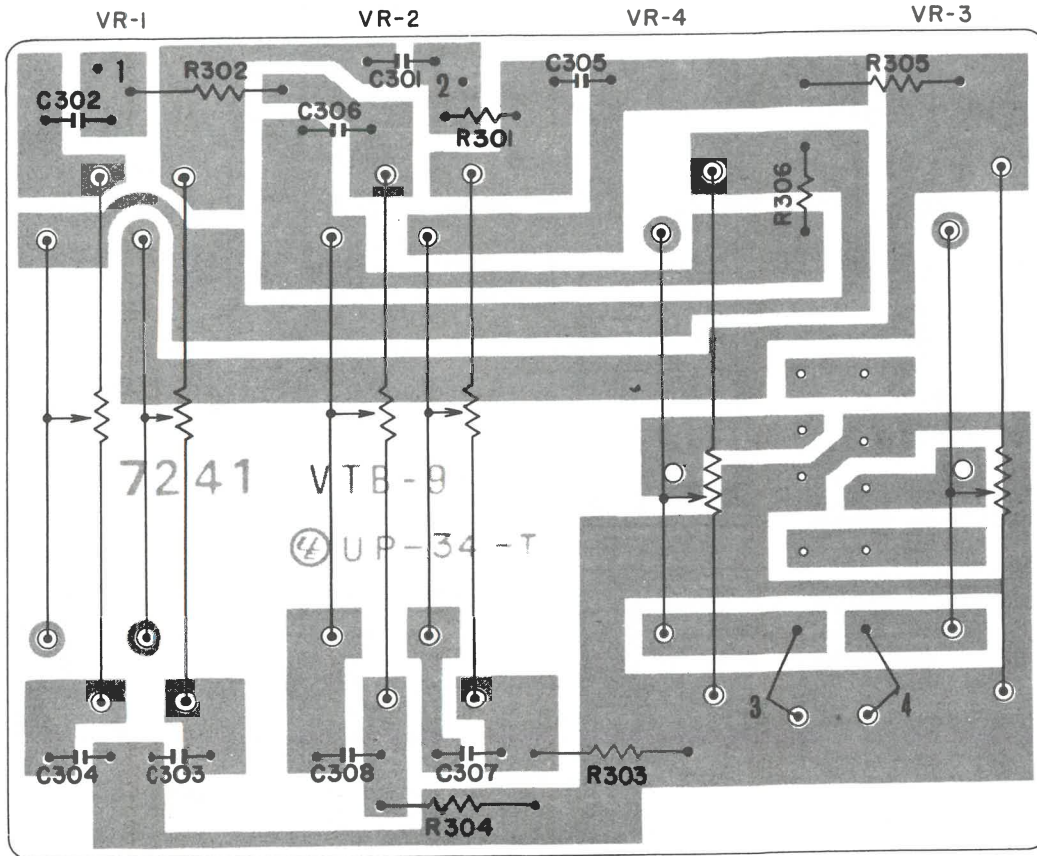
VOLUME CONTROL BOARD ASSEMBLY (MODEL 1V9062) (R284-04)



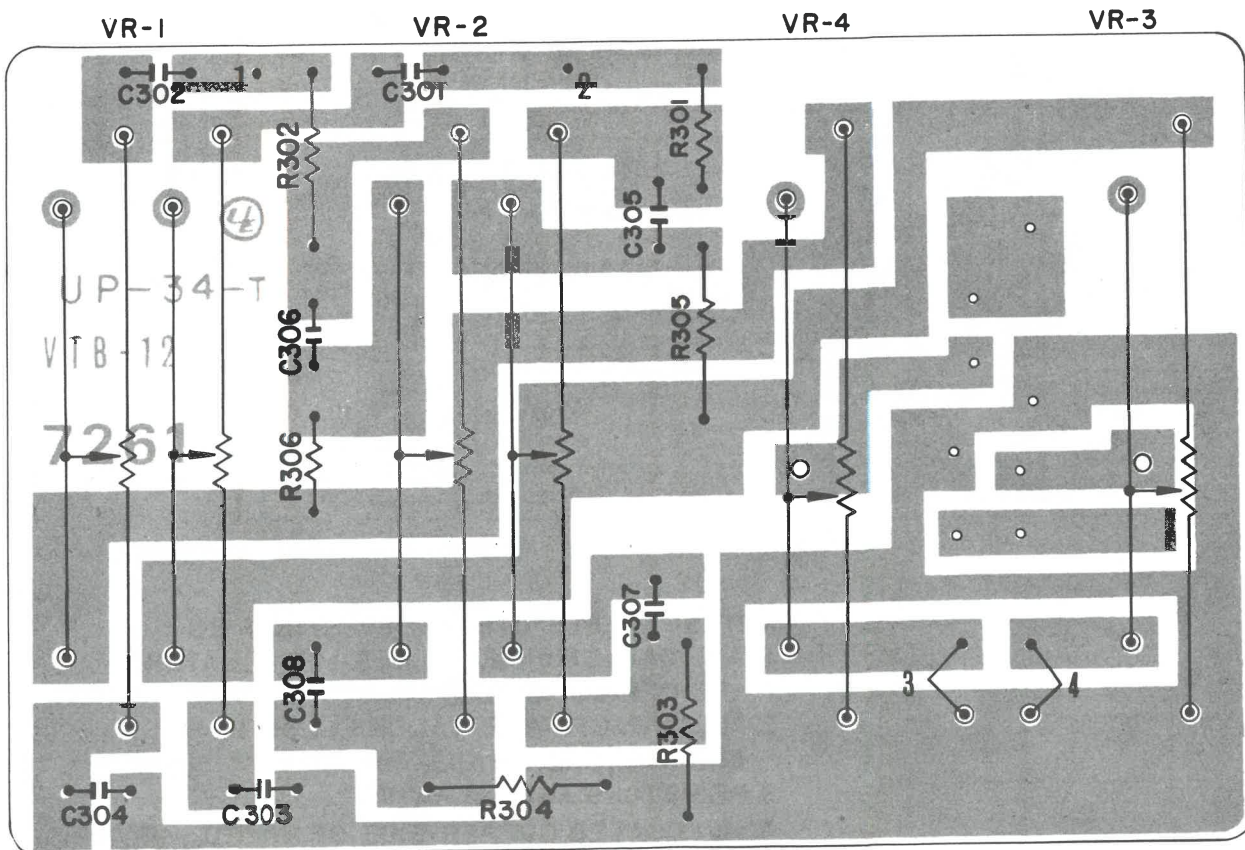
VOLUME CONTROL BOARD ASSEMBLY (MODELS 1V9071-1V9081) (R284-02)



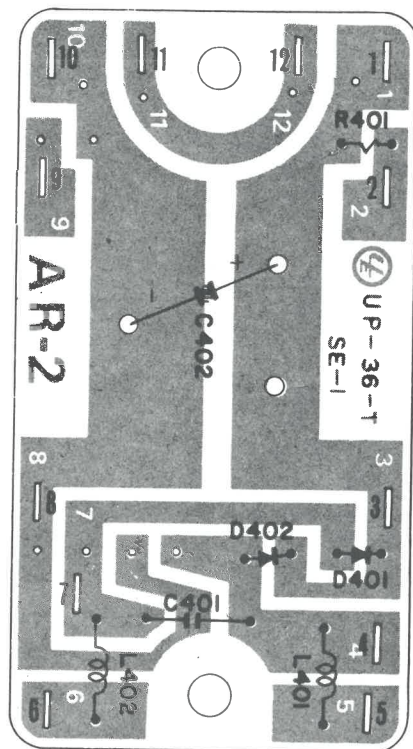
VOLUME CONTROL BOARD ASSEMBLY (MODEL 1R1800) (R284-01)



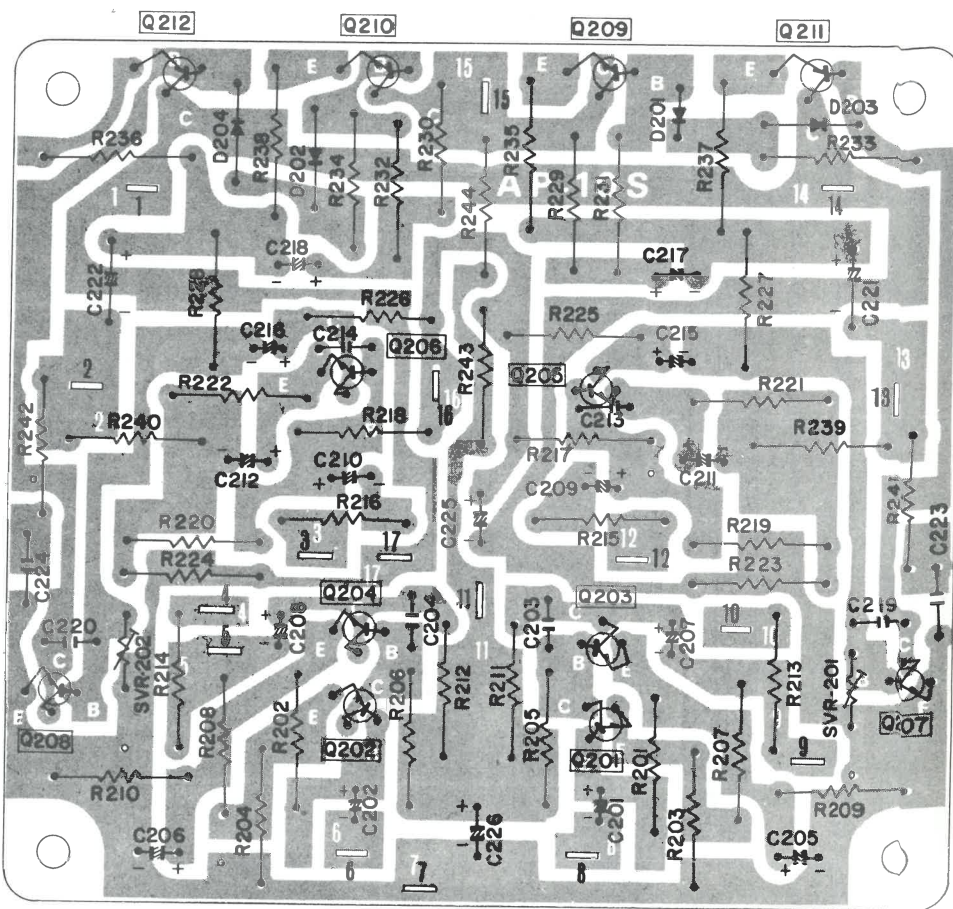
VOLUME CONTROL BOARD ASSEMBLY (MODEL 1P9283 -1V9074) (R284-03)



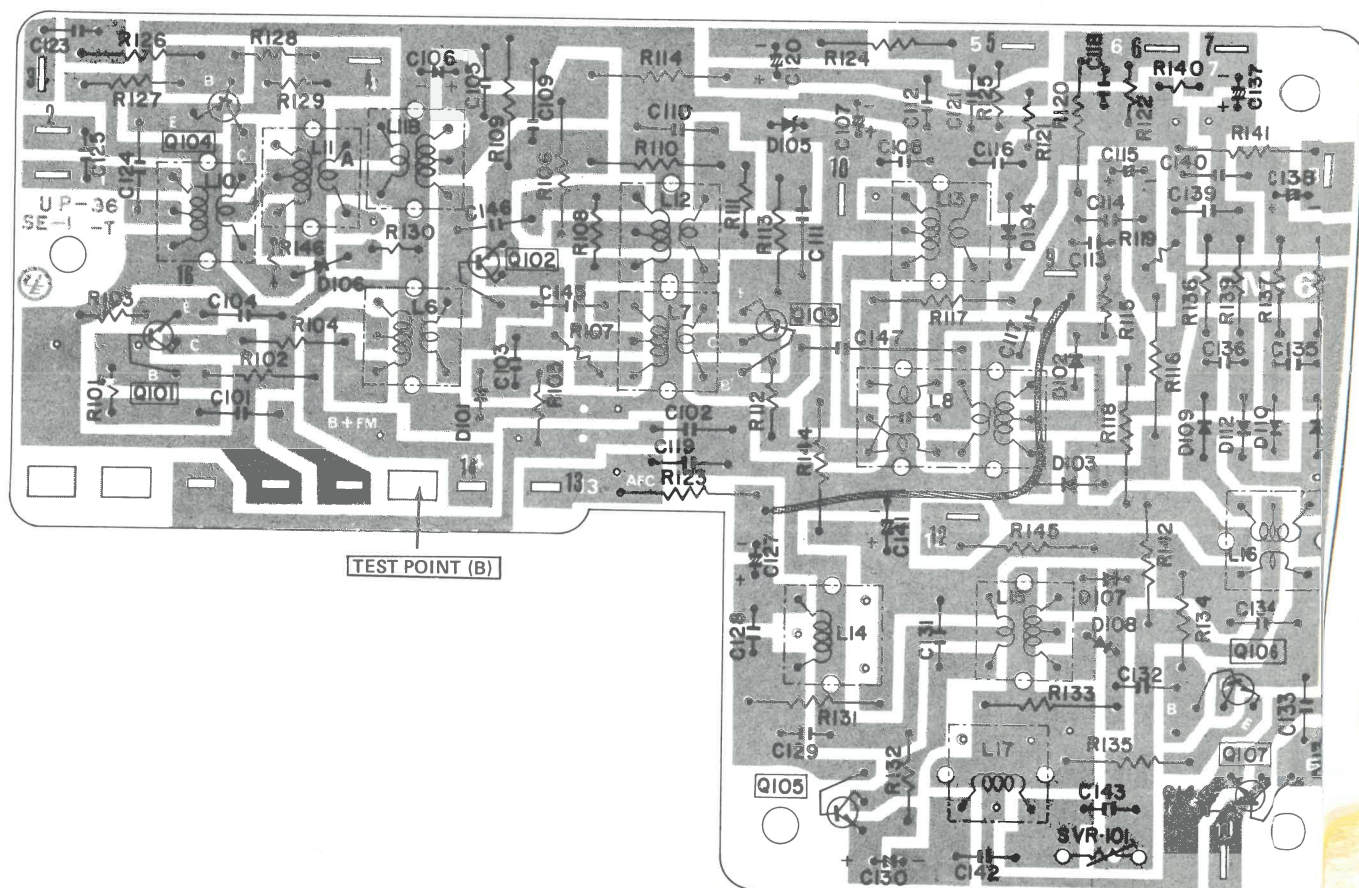
R284-01-02-03 POWER SUPPLY BOARD (COPPER SIDE VIEW)



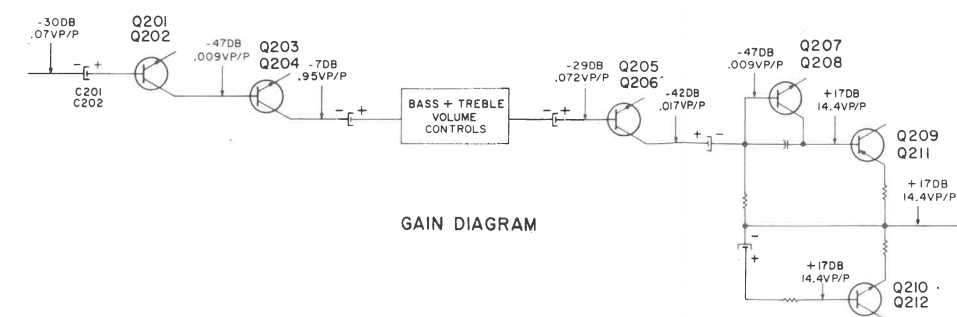
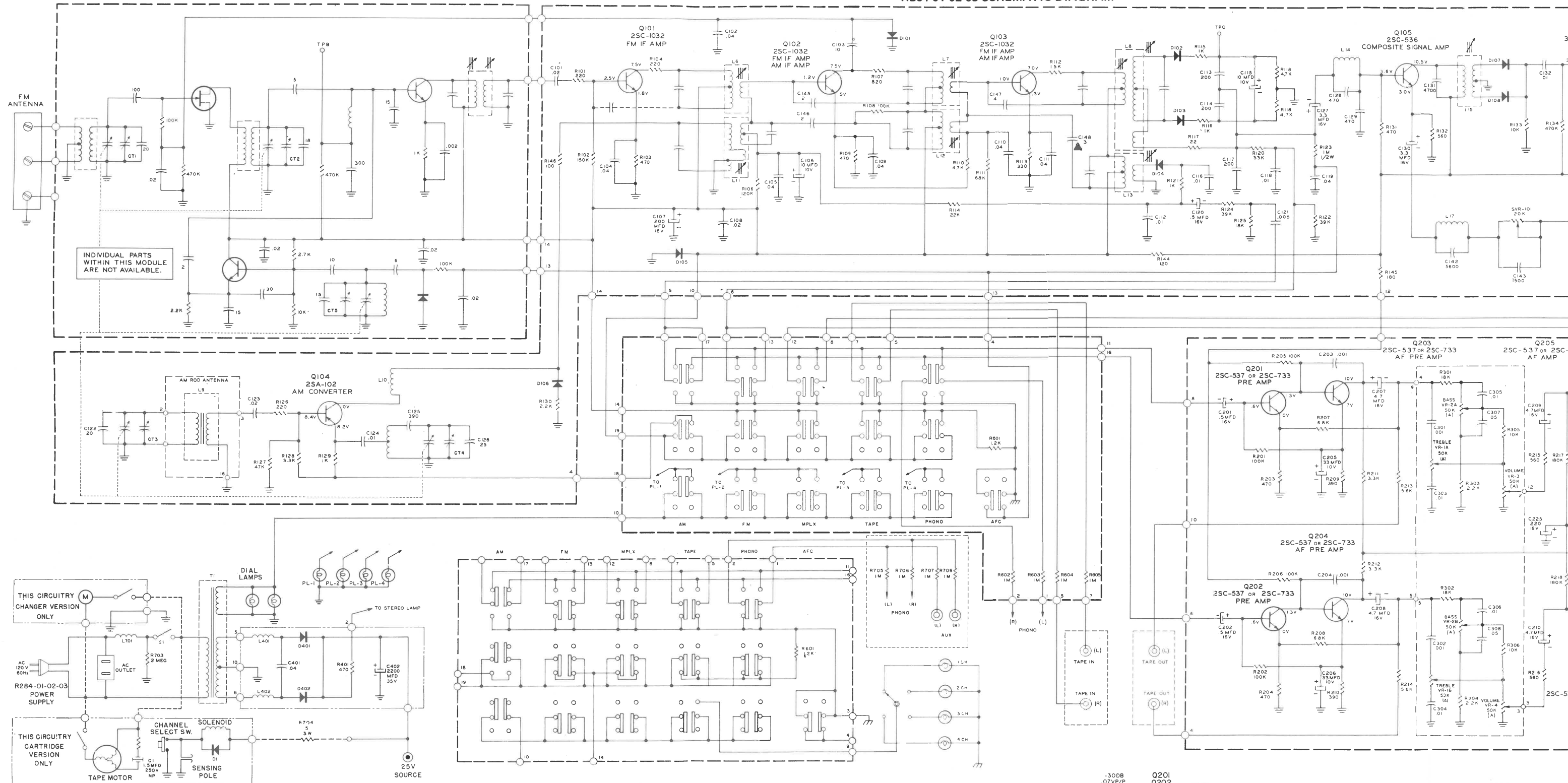
AF AMPLIFIER BOARD (VIEWED FROM COPPER SIDE)



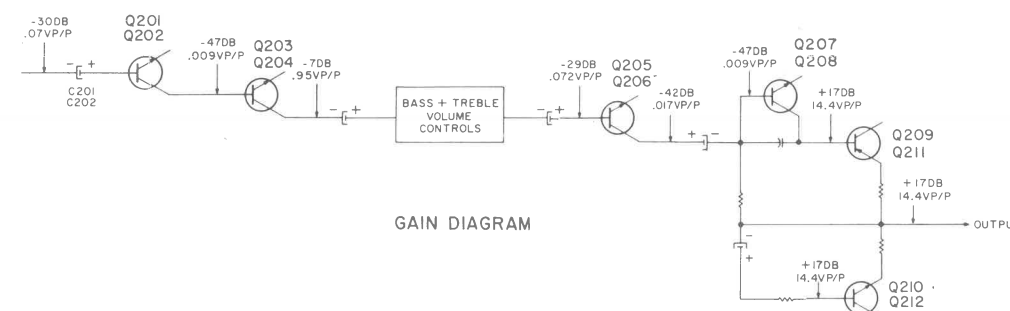
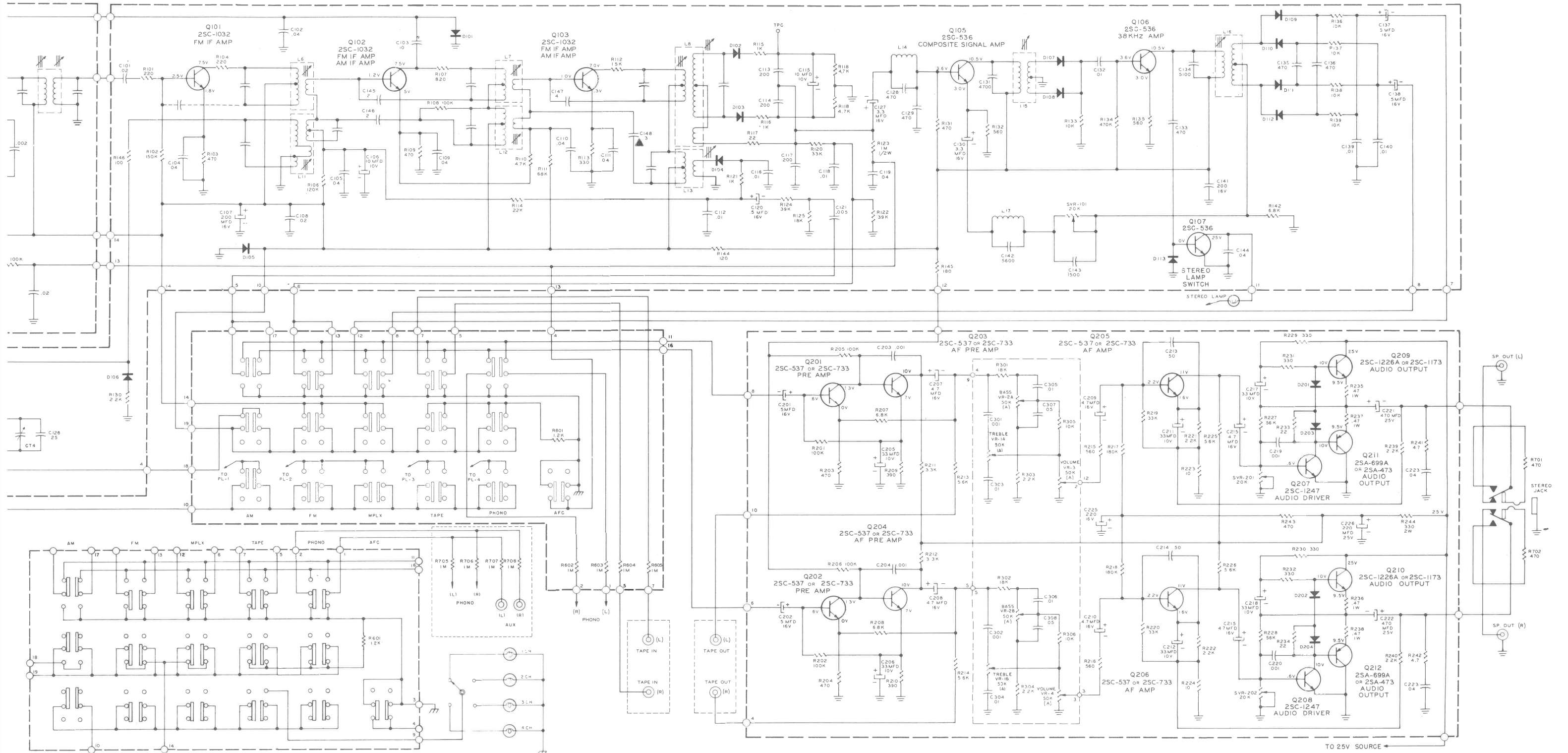
TUNER-IF BOARD (VIEWED FROM COPPER SIDE)



R284-01-02-03 SCHEMATIC DIAGRAM



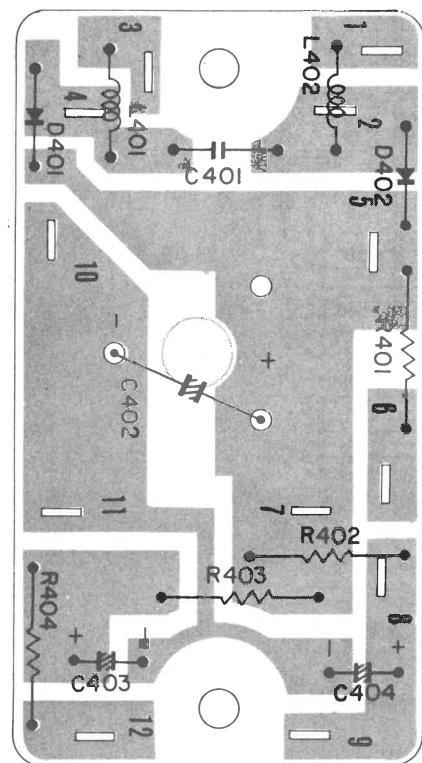
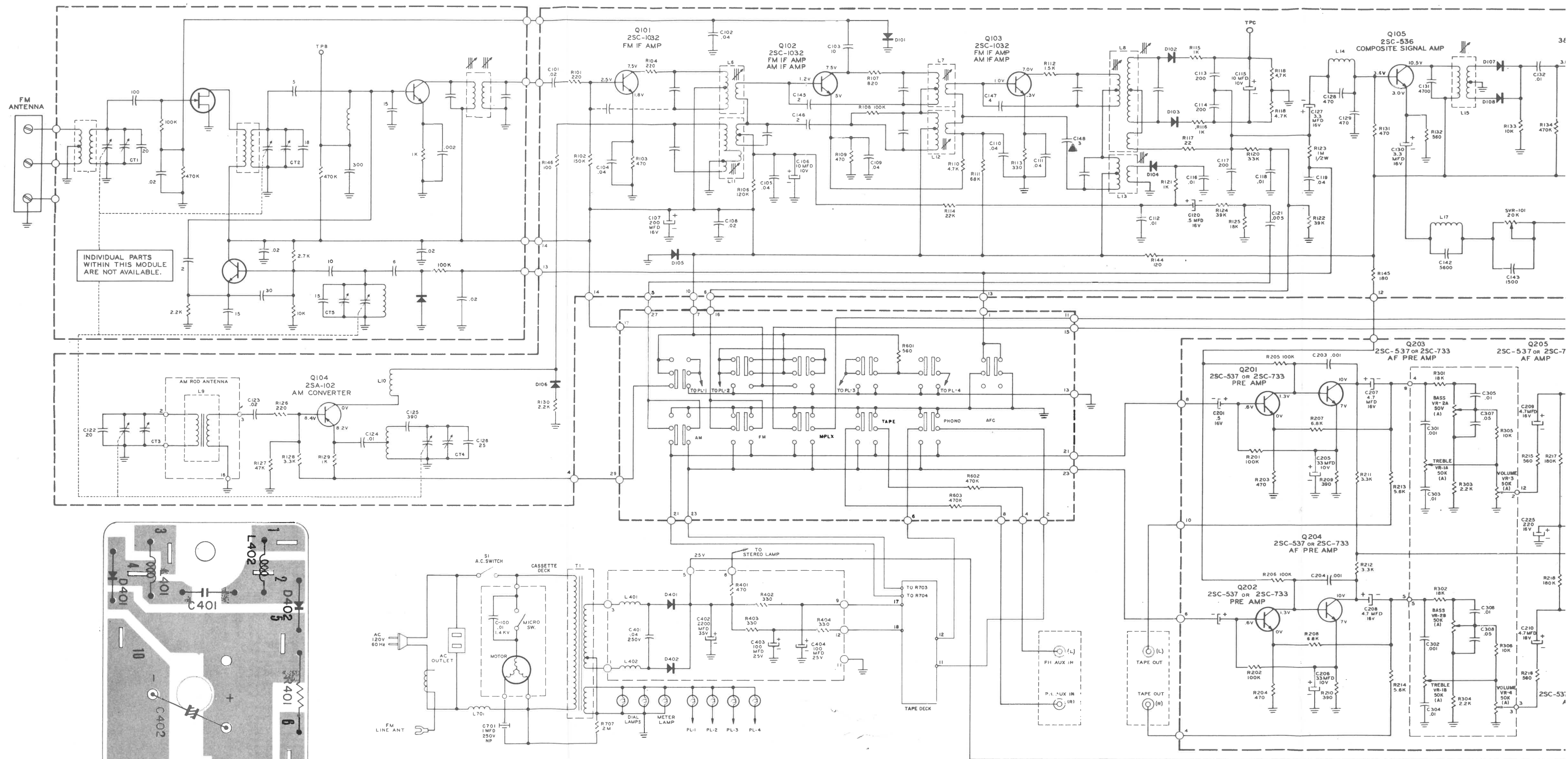
R284-01-02-03 SCHEMATIC DIAGRAM



- NOTES: UNLESS OTHERWISE SPECIFIED
1. ALL CAPACITANCE VALUES 100 OR GREATER ARE IN PICO FARADS.
 2. ALL CAPACITANCE VALUES LESS THAN 1 ARE IN MICRO FARADS.
 3. RESISTORS ARE 1/4 WATT.
 4. ▲ LOCATED COPPER SIDE OF BOARD.

Magnavox Chassis R284

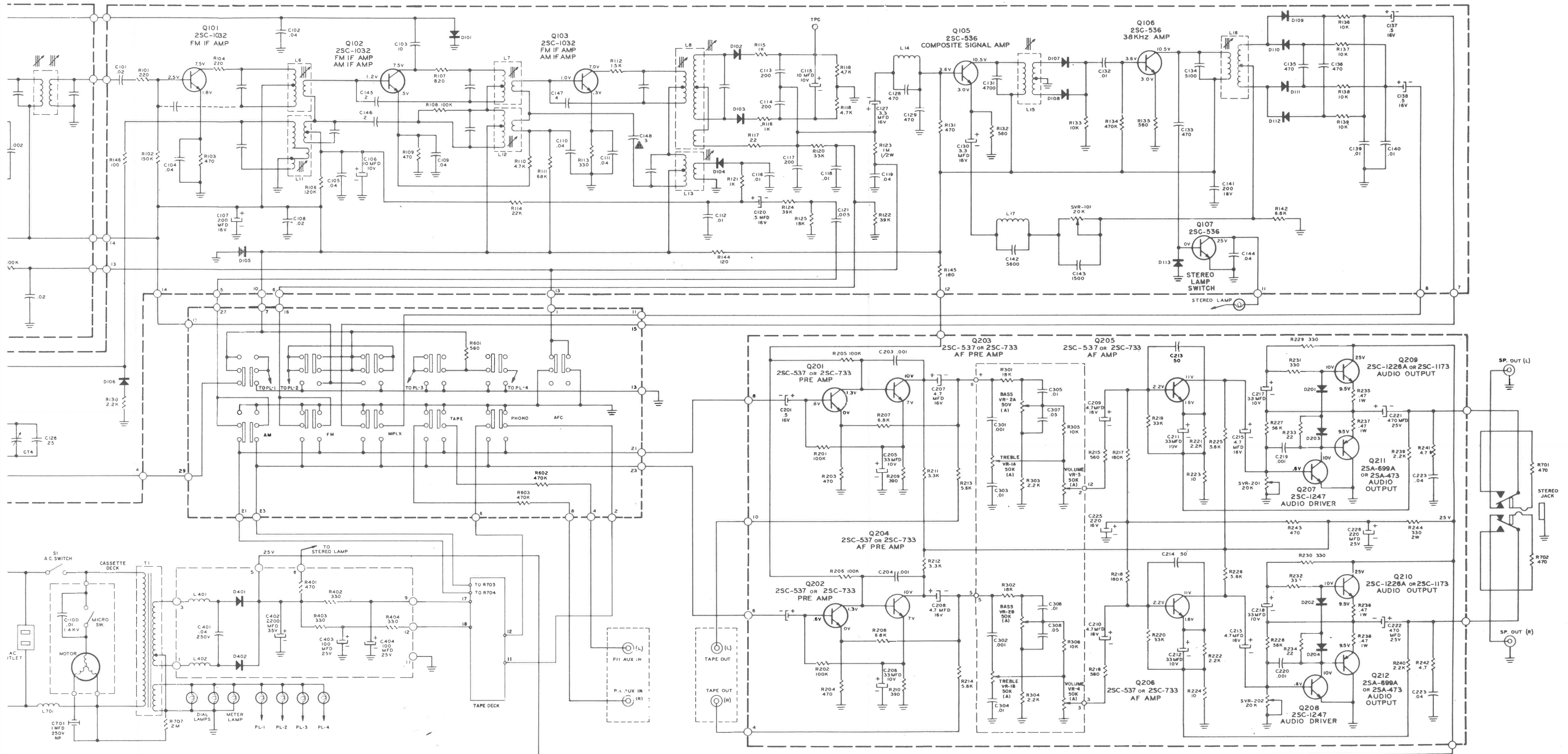
R284-04 SCHEMATIC DIAGRAM



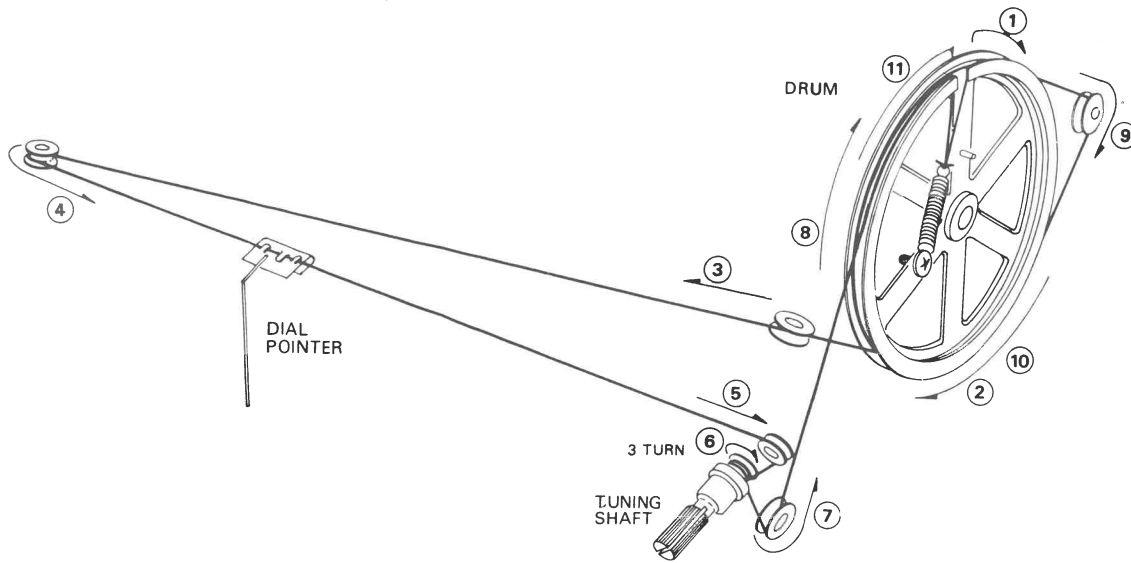
R284-04 POWER SUPPLY BOARD
(COPPER SIDE VIEW)

Magnavox Chassis R284

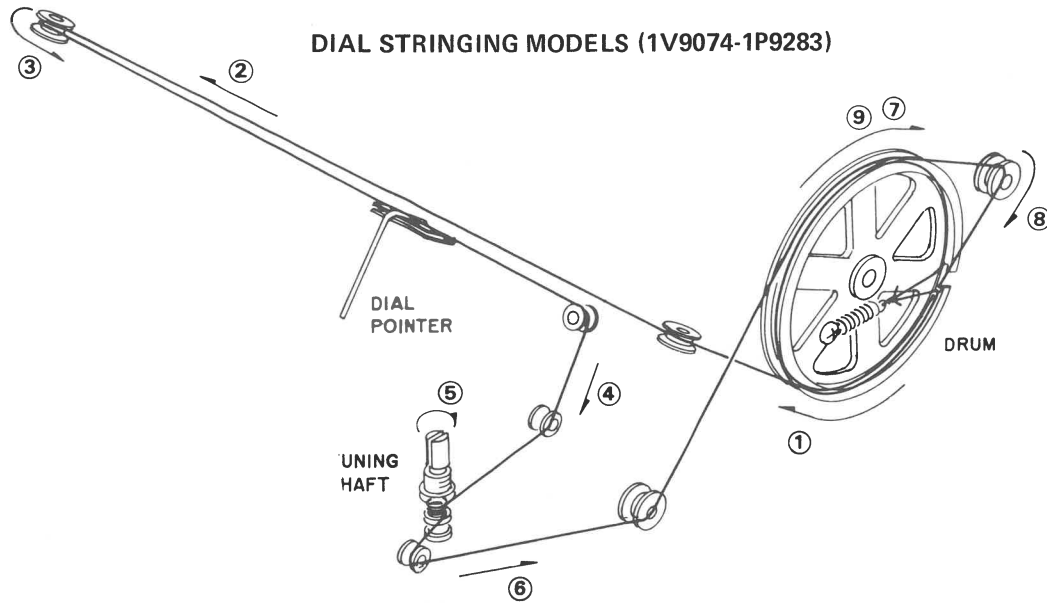
R284-04 SCHEMATIC DIAGRAM



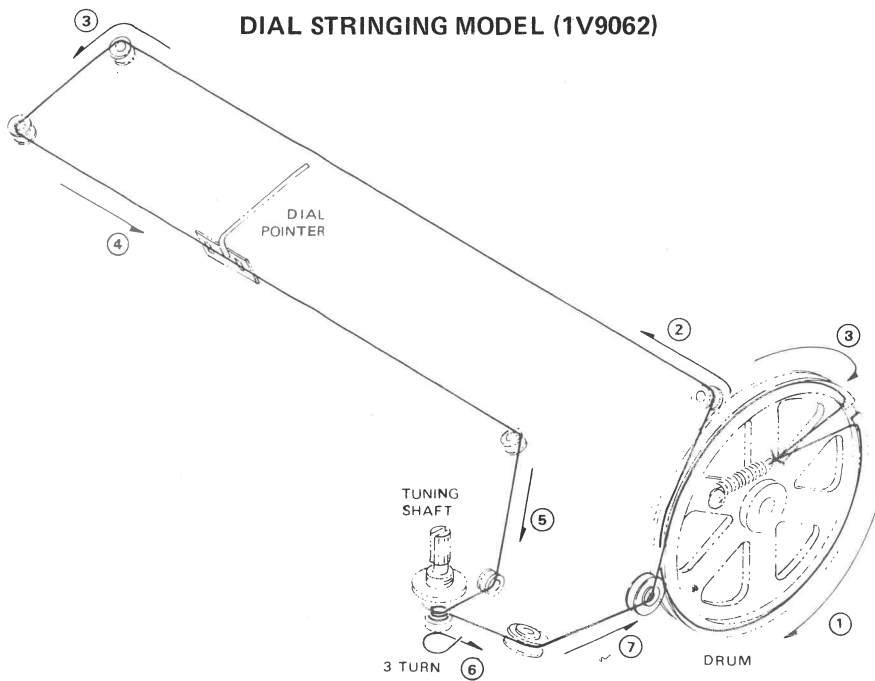
DIAL STRINGING MODELS (1R1800-1V9071-1V9081)



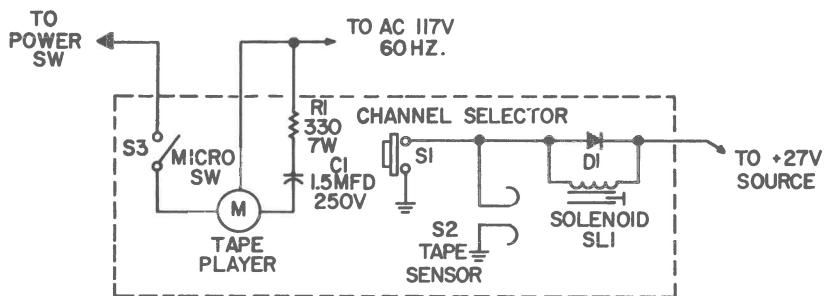
DIAL STRINGING MODELS (1V9074-1P9283)



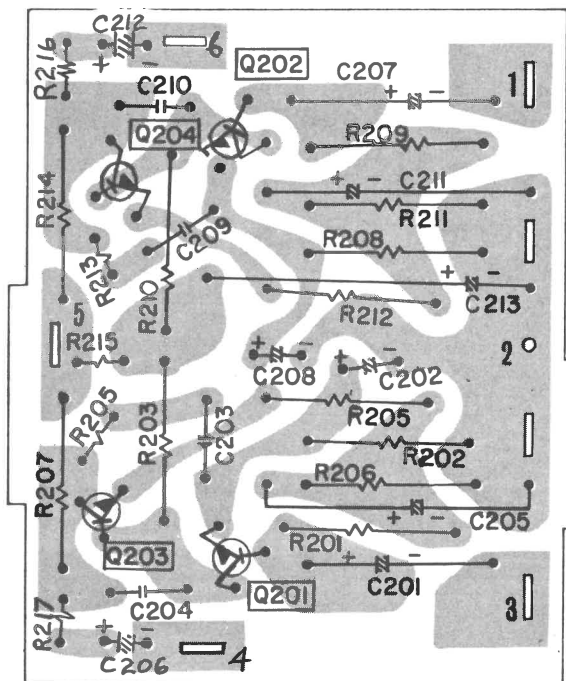
DIAL STRINGING MODEL (1V9062)

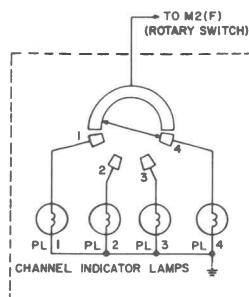
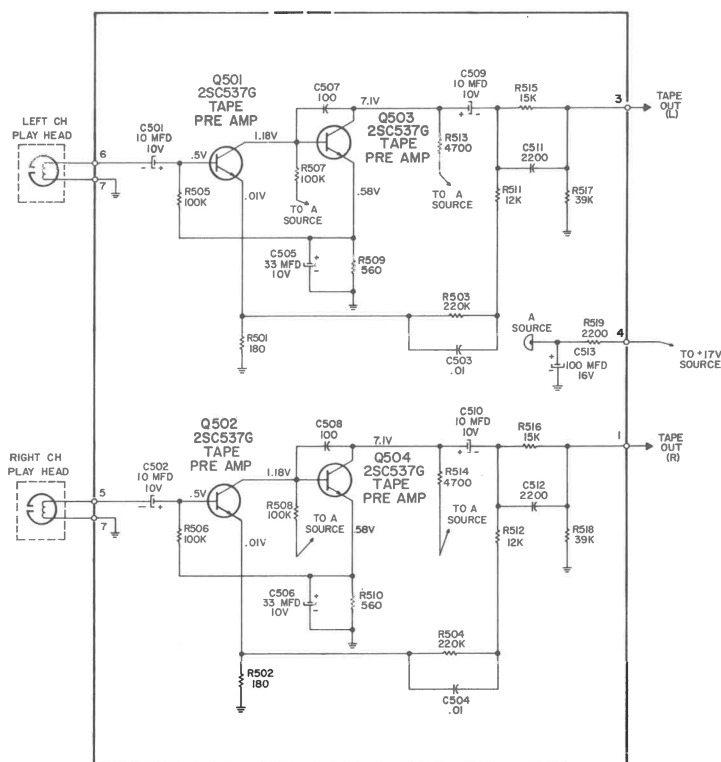


701454-1 & 701454-3 SCHEMATIC DIAGRAM



**701454-1 & 701454-3 PRE-AMPLIFIER BOARD
(VIEWED FROM BOTTOM)**

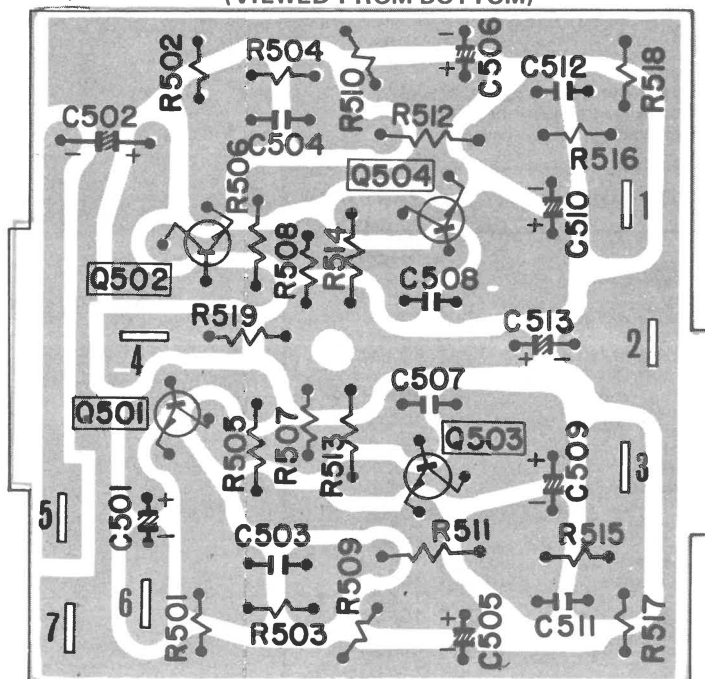




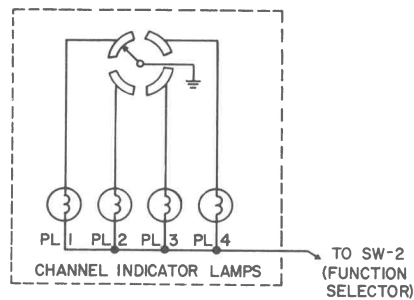
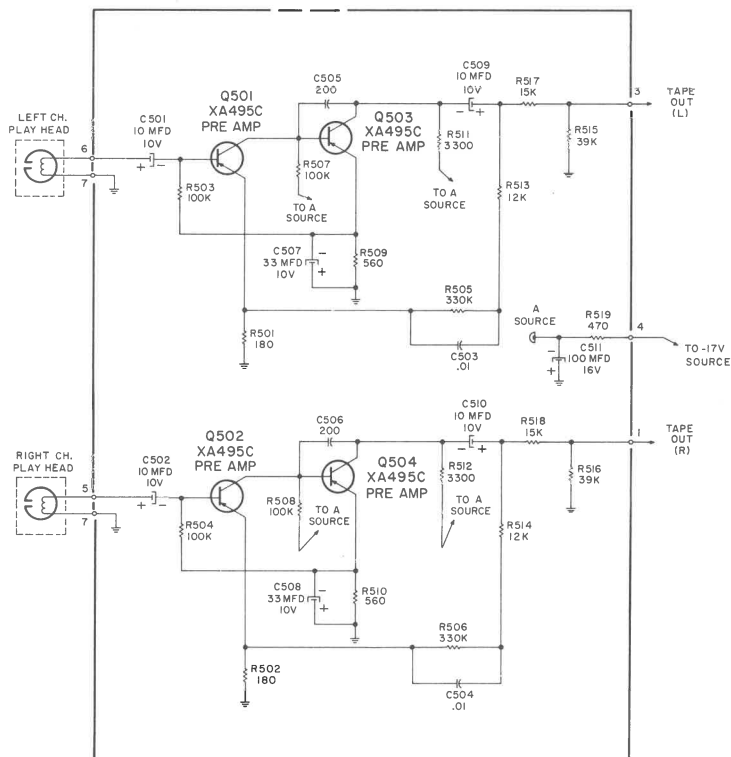
NOTES:

UNLESS OTHERWISE SPECIFIED:

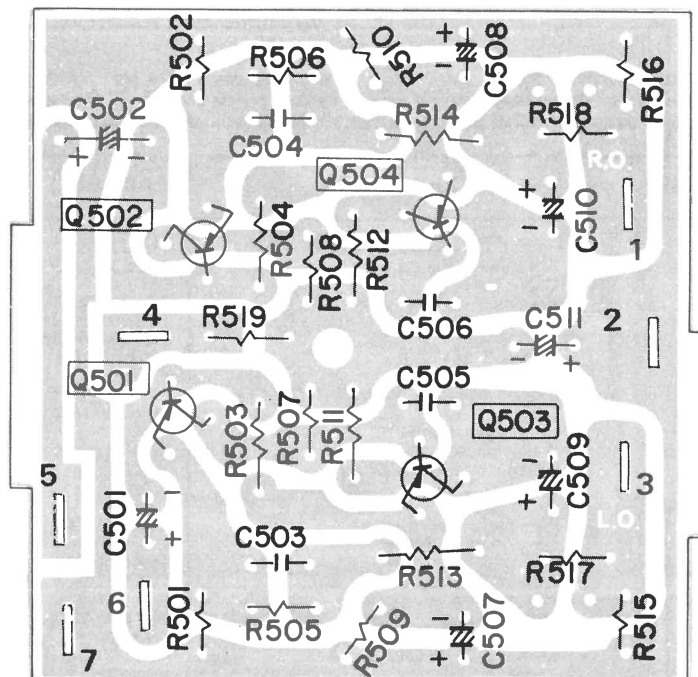
1. ALL CAPACITANCE VALUES 1 OR GREATER ARE IN PICO FARADS.
2. ALL CAPACITANCE VALUES LESS THAN ARE IN MICROFARADS.
3. RESISTORS ARE 1/4 WATT, 10%.
4. ALL VOLTAGES TAKEN WITH NO SIGNAL APPLIED.
5. VOLTAGES POSITIVE WITH RESPECT TO CHASSIS GROUND.
6. ALL CAPACITORS ARE 10%, 50V.

701454-2 PRE-AMPLIFIER BOARD
(VIEWED FROM BOTTOM)

701454-4 SCHEMATIC DIAGRAM



701454-4 PRE-AMPLIFIER BOARD (VIEWED FROM BOTTOM)



SEMICONDUCTORS

ITEM PART NO./TYPE

D101	53K001-2
D102	53K001-5
D103	53K001-5
D104	53K001-2
D105	53K001-13
D106	53K001-2
D107	53K001-5
D108	53K001-5
D109	53K001-5
D110	53K001-5
D111	53K001-5
D112	53K001-5
D113	53K001-2
D201	53K001-10
D202	53K001-10
D203	53K001-10
D204	53K001-10
D401	53K001-9
D402	53K001-9
Q101	2SC1032G
Q102	2SC1032G
Q103	2SC1032G
Q104	2SA102
Q106	2SC536
Q107	2SC536G
Q201	2SC537
Q202	2SC537
Q203	2SC537
Q204	2SC537
Q205	2SC537
Q206	2SC537
Q207	2SC1247
Q208	2SC1247
Q209	2SC1226A
Q210	2SC1226A
Q211	2SA699A
Q212	2SA699A

(TAPE UNIT 701454)

D1	53K001-6 (5,7)
	53K001-7 (6,8)
Q201	2SC536
Q202	2SC536
Q203	2SC536
Q204	2SC536
Q501	2SC537G (6)
	XZ495C (8)
Q502	2SC537G (6)
	XZ495C (8)
Q503	2SC537G (6)
	XZ495C (8)
Q502	2SC537G (6)
	XZ495C (8)

ELECTROLYTIC/VARIABLE CAPS

ITEM	PART NO.	VALUE	
(RADIO)			
C106	27X109-1110	10 uF	10 V
C107	27X109-2215	220 uF	16 V
C115	27X016-1110	10 uF	10 V
C120	27X016-4781	.47 uF	16 V
C127	27X109-3050	3.3 uF	16 V
C130	27X109-3050	3.3 uF	16 V
C137	27X016-4781	.47 uF	16 V
C138	27X016-4781	.47 uF	16 V
C141	27X109-2215	220 uF	16 V
C149	27X016-4781	.47 uF	16 V
C201	27X016-4781	.47 uF	16 V
C202	27X016-4781	.47 uF	16 V
C205	27X109-3110	33 uF	10 V
C206	27X109-3110	33 uF	10 V
C207	27X109-5015	4.7 uF	16 V
C208	27X109-5015	4.7 uF	16 V
C209	27X109-5015	4.7 uF	16 V
C210	27X109-5015	4.7 uF	16 V
C211	27X109-5015	4.7 uF	16 V
C212	27X109-3110	33 uF	10 V
C215	27X109-5015	4.7 uF	16 V

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C216	27X109-5015	4.7 uF	16 V
C217	27X109-3110	33 uF	10 V
C218	27X109-3110	33 uF	10 V
C221	27X109-5225	470 uF	25 V
C222	27X109-5225	470 uF	25 V
C225	27X109-2215	220 uF	16 V
C226	27X109-2225	220 uF	25 V
C402	27X035-2221	220 uF	35 V

(TAPE UNIT 701454)

C201	27X109-1115	10 uF	16 V
C202	27X016-4781	.47 uF	16 V
C205	27X109-1115	10 uF	16 V
C206	27X109-5050	4.7 uF	25 V
C207	27X109-1115	10 uF	16 V
C208	27X016-4781	.47 uF	16 V
C211	27X109-1115	10 uF	16 V
C212	27X109-5050	4.7 uF	25 V
C213	27X109-1222	100 uF	16 V
C501	27X109-1110	10 uF	10 V
C502	27X109-1110	10 uF	10 V
C507	27X109-3110	33 uF	10 V
C508	27X109-3110	33 uF	10 V
C509	27X109-1110	10 uF	10 V
C510	27X109-1110	10 uF	10 V
C511	27X109-1215	100 uF	16 V

CONTROLS/SPECIAL RESISTORS

ITEM PART NO. DESCRIPTION

(RADIO)

R236	23K001-2	.5 ohm	10%	3 W WW
R237	23K001-2	.5 ohm	10%	3 W WW
R238	23K001-2	.5 ohm	10%	3 W WW
R239	23K001-2	.5 ohm	10%	3 W WW
SVR101	22K001-15	20 K Null		
SVR201	22K001-4	20 K Bias		
SVR202	22K001-4	20 K Bias		
VR1	22K001-12	50 K Dual Treble		
VR2	22K001-13	50 K Dual Bass		
VR3	22K001-14	50 K Volume		
VR4	22K001-14	50 K Volume		

(TAPE UNIT 701454)

R1	24K001-2	330 ohm	10%	7 W
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COILS/TRANSFORMERS

ITEM PART NO.

(RADIO)

L6	36K001-8
L7	36K001-8
L8	36K001-10
L9	36K001-1
L10	36K001-21
L11A	36K001-19
L11B	36K001-20
L12	36K001-13
L13	36K001-14
L14	36K001-15
L15	36K001-16
L16	36K001-17
L17	36K001-18
L401	36K001-2
L402	36K001-2
L701	36K001-2
T1	30K001-1 (1,2,3)
	30K001-2 (4)
	30K001-2 (7-prefix models)

MISCELLANEOUS

ITEM	NAME	PART NO.
(RADIO;COMMON)		
M1	Module, Tuner	26K001-3
SW1	Switch, Power	16K001-10 (1,3)
	Switch, Power	16K001-7 (2,4)
SW2	Switch, Function	70K001-13 (1)
	Switch, Function	70K001-17 (2)
	Switch, Function	70K001-23 (4)
	Switch, Function (Model 1P9283)	70K001-13
	Switch, Function (Model 1V9074)	70K001-14

(MODELS 1P9283 & 7P9283)

Pickup, Phono	560367-1
Speaker, 6-1/2" 8 ohm	58K001-1
Stylus, Phono	560312-2

(MODELS 1V9062 & 7V9062)

Speaker, 6-1/2" 8 ohm	58K001-1
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(MODELS 1V9071, 1V9074, 7V9071 & 7V9074)

Pickup, Phono	560367-1
Speaker, 6-1/2" 8 ohm	58K001-3
Stylus, Phono	560312-2

(MODEL 1V9081)

Speaker, 8"	58K001-2
Speaker, 3-1/2"	58K001-3

(TAPE UNIT 701454)

S1	Switch, Channel Selector	16K001-2
S2	Switch, Tape Sensor	16K001-6
S3	Switch, Motor	16K001-3
SL1	Solenoid	32K001-2 (5)
	Belt, Tape Drive	K7145 (6,7,8)
		64K001-7 (5)
		64K001-15 (6,7,8)
		32K001-1 (5)
		32K001-4 (6,7)
		32K001-25 (8)

CABINET PARTS

NAME	PART NO.
(MODELS 1P9283 & 7P9283)	
Cover, Dust	14K001-19
Plate, Function Indicator	14K002-9
Plate, Tuning Control	15K001-14
Plate, Audio Control	15K001-15
Knob, Audio Control	14K002-7
Knob, Tuning	14K002-11
Button, Function	14K002-10
(MODELS 1R1800 & 7R1800)	

Bezel, Front Control	K1129
Knob, Audio Control	14K002-7
Knob, Tuning	15K002-11
Button, Function	14K002-10

(MODELS 1V9062 & 7V9062)

Bezel, Front Control	K1152
Plate, Audio Control	15K001-26
Plate, Power/Function	15K001-27
Knob, Power	14K001-17
Knob, Audio Control	14K002-7
Knob, Tuning	14K002-11
Button, Function	14K002-10

(MODELS 1V9071 & 7V9074)

Bezel, Control	K1130
Plate, Control	14K002-15
Plate, Function	15K001-72
Knob, Audio Control	14K001-7
Knob, Tuning	14K002-11
Knob, Power	14K001-17

(MODELS 1V9074 & 7V9074)

Bezel, Control	K1141
Plate, Function	15K001-21
Plate, Volume/Tone	15X001-20
Knob, Audio Control	14K002-7
Knob, Tuning	14K002-11
Knob, Channel Select	16K01-11

(MODEL 1V9081)

Bezel, Control	K1130
Plate, Audio Control	14K002-15
Plate, Function	15K001-72
Knob, Audio Control	14K001-7
Knob, Tuning	14K002-11
Knob, Power	14K001-17

- (1) Chassis R284-01
- (2) Chassis R284-02
- (3) Chassis R284-03
- (4) Chassis R284-04
- (5) Tape Unit 701454-1
- (6) Tape Unit 701454-2
- (7) Tape Unit 701454-3
- (8) Tape Unit 701454-4