

REALISTIC[®]

Service Manual

31-2074

STA-77A
AM/FM STEREO RECEIVER
Catalog Number : 31-2074



CUSTOM MANUFACTURED FOR RADIO SHACK  A DIVISION OF TANDY CORPORATION

CONTENTS

(1) ELECTRICAL PERFORMANCE SPECIFICATIONS	3 - 4
(2) DISASSEMBLY INSTRUCTIONS	5
(3) BLOCK DIAGRAM	6
(4) ALIGNMENT INSTRUCTIONS	7 - 11
(5) TROUBLE SHOOTING	12 - 14
(6) DIAL STRINGING DIAGRAM	15
(7) IC & TRANSISTOR LEAD IDENTIFICATION	15
(8) FM FRONT END P.C.B. (TOP & BOTTOM)	16
(9) AM/FM IF & MPX P.C.B. (TOP & BOTTOM)	17
(10) PRE AMP P.C.B. (TOP & BOTTOM)	18
(11) TONE AMP P.C.B. (TOP & BOTTOM)	19
(12) MAIN AMP P.C.B. (TOP & BOTTOM)	20
(13) POWER SUPPLY P.C.B. (TOP & BOTTOM)	21
(14) JACK P.C.B. (TOP & BOTTOM)	21
(15) FUSE P.C.B. (TOP) *(Use for C.S.A. Models only)	22
(16) ELECTRICAL PARTS LIST	22 - 32
(17) EXPLODED VIEW PARTS LIST	32 - 34
(18) IC INTERNAL DIAGRAM	35
(19) SCHEMATIC DIAGRAM	36 - 37
(20) EXPLODED VIEW	38 - 39

1. ELECTRICAL PERFORMANCE SPECIFICATIONS

AM Band	UNIT	NOMINAL	LIMIT
Coverage	(kHz)	510-1650	520-1620
IF	(kHz)	455	.....
Sensitivity for S/N 20 dB			
at 600 kHz	(μ V/m)	200	500
at 1000 kHz	(μ V/m)	200	500
at 1400 kHz	(μ V/m)	200	500
Terminal Sensitivity	(μ V)	10	.....
S/N Ratio at 5 mV/m at 1000 kHz	(dB)	45	40
ACA at S/N 6 dB Sens. at 1000 kHz \pm 10 kHz	(dB)	32	22
AGC Figure of Merit	(dB)	50	42
AGC Distortion at 1000 kHz	(%)	4	8
IF Rejection at 600 kHz	(dB)	34	28
Image Rejection at 1400 kHz	(dB)	40	34
Band-width at 6 dB down	(kHz)	6.5	5-9
Band-width at 40 dB down	(kHz)	25	35
Distortion, 30%, 400 Hz, 5mV/m	(%)	1	3
Tape Output, 30%, 400 Hz, 1mV/m	(mV)	250	200
Fidelity, 5mV/M Input	(Hz)	30-2500	.....
Whistle modulation of 2nd & 3rd harmonic			
at 1, 5, 10 and 100 mV/m	(%)	8	10
Calibration accuracy at 600 kHz	(kHz)	.....	\pm25
at 1400 kHz	(kHz)	.....	\pm50
Spurious response at 1000 kHz referred to 20 dB S/N input	(dB)	60	40

Overload: with a radiated signal of 1V/m the signal shall be tunable without undue distortion or breakup.

The oscillator shall not drift more than 10 kHz starting at 25 degrees C and through a range up to 50 degrees C.

The set shall operate in satisfactory manner through a temperature range from 0 degree C through plus 45 degrees C.

FM Band	UNIT	NOMINAL	LIMIT
Coverage (U.S.A. & Canadian models)	(MHz)	86.5-109	88-108
(European & Australian models)	(MHz)	87.5-109	87.4 \pm 0.2-108
IF	(MHz)	10.7	.....
IHF Sensitivity at 90 MHz	(μ V)	1.9	3.8
at 98 MHz	(μ V)	1.9	3.8
at 106 MHz	(μ V)	1.9	3.8
FM 3 dB Limiting at 98 MHz	(μ V)	1.8	3.5
IF Rejection Ratio at 90 MHz	(dB)	80	70
Image Rejection Ratio at 106 MHz	(dB)	50	45
Spurious Response	(dB)	70	65
Bandwidth at 10% THD	(kHz)	350	300
Capture Ratio	(dB)	2	5
ACA \pm 400 kHz at 100 μ V	(dB)	55	45
FM S/N Input 1 mV	(dB)	65	55
Audio THD 400 Hz, 75 kHz dev.	(%)	0.5	0.8
Calibration accuracy at 90 MHz	(kHz)	.....	\pm350
at 106 MHz	(kHz)	.....	\pm350
AFC Holding Range	(kHz)	450	350
Temperature Range for Satisfactory Operation	(degrees C)	.....	0-45
AM Suppression FM 400 Hz, 22.5 kHz dev.	(dB)	46	40
AM 1000 Hz, 30 % Mod.			
Maximum Signal Handling Capacity	(mV)	200	100
Tape out Level 1mV, 75 kHz dev.	(mV)	900	750
Muting sensitivity	(μ V)	10	20

Frequency Response must meet the 75 μ sec de-emphasis spec. for U.S.A. and Canadian models, and 50 μ sec de-emphasis spec. for European and Australian models. All sets must meet requirements of the FCC.

FM MPX	UNIT	NOMINAL	LIMIT
Stereo Indicator Sens.	(μ V)	10	20
Stereo Separation at 1 mV	(dB)	31	25
100 Hz	(dB)	35	28
1 kHz	(dB)	26	20
10 kHz	(%)	0.6	1.5
Stereo Distortion at 1 mV, 1 kHz	(dB)	50	44
38 kHz Rejection	(dB)	50	44
SCA Rejection	(dB)	50	44

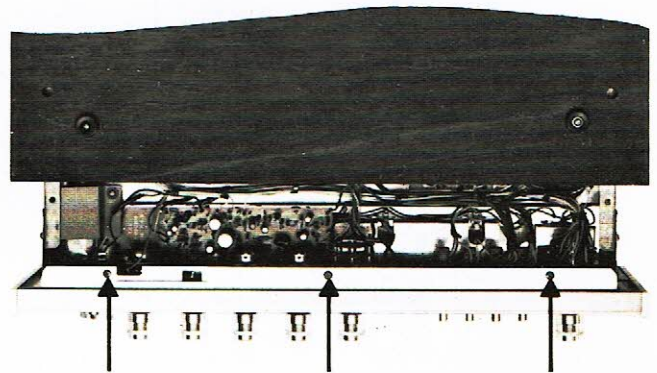
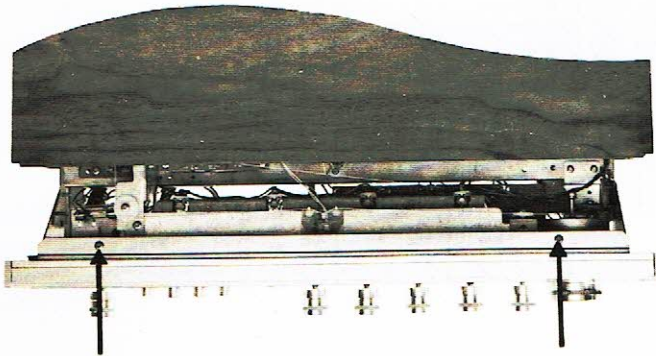
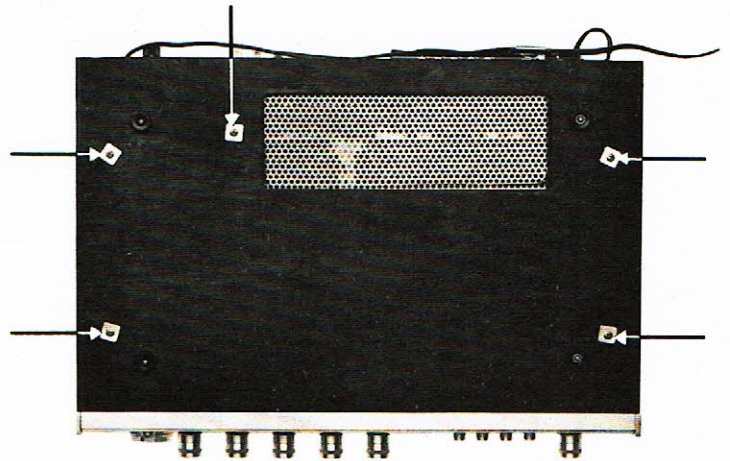
AUDIO SECTION

Input Impedance			
Phono Mag.	(K ohm)	50	.....
AUX 1	(K ohm)	100	.....
AUX 2	(K ohm)	100	.....
Output Power THD 0.8%, 8 ohms			
Both Channel Driven, 20-20 kHz (RMS Power)	(W)	20	18
Sensitivity for 18 W Rated Power			
Phono Mag.	(mV)	2.2	3.5
AUX 1, 2	(mV)	120	200
Tape In	(mV)	120	200
Frequency Response at AUX 1 (1 W \pm 2 dB)	(Hz)	15-25K	20-20K
Harmonic Distortion (5 watts, 1 kHz)	(%)	0.1	0.3
Bass Action at 100 Hz	(dB)	\pm 10	\pm 12
Treble Action at 10 kHz	(dB)	\pm 10	\pm 12
Hum & Noise at Minimum Volume	(mV)	1.5	3
Hum & Noise, with Max. Volume and Tone at Max			
Treble at AUX 1	(mV)	25	50
at AUX 2	(mV)	25	50
Signal-to-Noise Ratio			
Phono Mag. 5 mV Input (Input Short)	(dB)	60	55
AUX 1 200 mV Input	(dB)	70	60
AUX 2 200 mV Input	(dB)	70	60
Cross-Talk at 1kHz AUX 1	(dB)	60	45
Bass Loudness Compensation at 100 Hz re -30 dB	(dB)	+9	+ 9 \pm 2
Treble Loudness Compensation at 10 kHz re -30 dB	(dB)	+4	+ 4 \pm 2
Balance Control Symmetry	(dB)	0	3
Tape Out Level			
Phono Mag, at 5 mV, 1 kHz	(mV)	250	200
AUX 1 at 200 mV, 1 kHz	(mV)	250	200
AUX 2 at 200 mV, 1 kHz	(mV)	250	200
Tape Out Level (DIN Connector)			
AM 5 mV/M Input, 30% Mod.	(mV)	25	25 \pm 3
FM 1mV Input, 22.5 kHz Dev.	(mV)	25	25 \pm 3
AUX 1, 2 200 mV Input	(mV)	25	25 \pm 3
Phono Mag. Eq. Response			
at 100 Hz	(dB)	+13	+13 \pm 2
at 10 kHz	(dB)	-13	-13 \pm 2

NOTE: **Nominal Specs** represent the design specs: all units should be able to approximate these — Some will exceed and some may drop slightly below these specs. **Limit Specs** represent the absolute worst condition which still might be considered acceptable; in no case should a unit perform to less than within any Limit Spec.

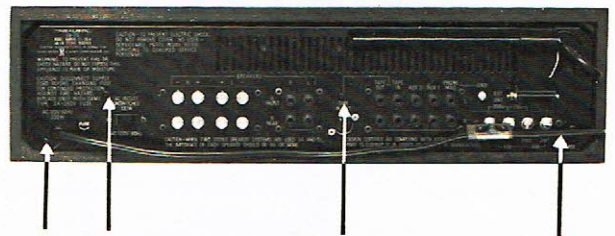
2. DISASSEMBLY INSTRUCTIONS

- 1) To remove chassis from wooden cabinet. Turn the cabinet upside down and remove the five Pan head screws from the cabinet bottom.

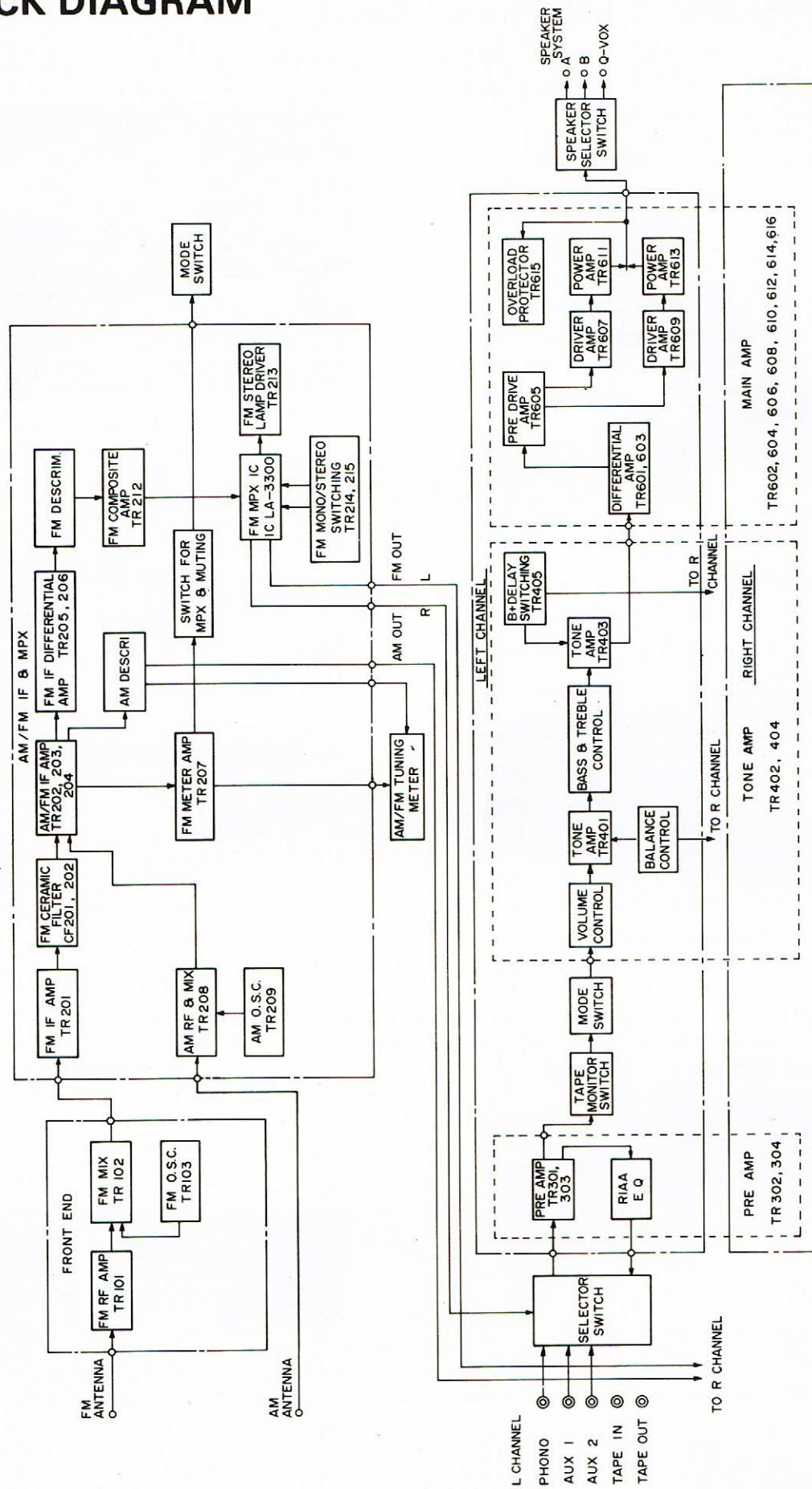


- 2) Removal of front panel (Aluminum panel).
 - a) Remove the chassis from wooden cabinet as described above.
 - b) Pull out the main chassis.
 - c) Remove the two Pan head screws from the top and the three Pan head screws from the bottom of the front panel.
 - d) Remove knobs and pull off panel.

- 3) To remove rear panel from chassis. Remove the four Pan head screws from the rear panel.



3. BLOCK DIAGRAM



4. ALIGNMENT INSTRUCTIONS

MAIN AMPLIFIER AND RESET CIRCUIT ADJUSTMENT/CHECK

- NOTE**
- Maintain line voltage at 120 volts. (UL, C.S.A.) (Use 220/240 V AC For European & 240 V AC for Australian Models.)
 - Set SELECTOR Switch to AUX-1.
 - Set MODE Switch to STEREO.
 - See P.C.B. illustrations for alignment points/adjustments.

MAIN AMPLIFIER

STEP	ADJUSTMENT	EQUIPMENT	CONNECTION	AUDIO FREQ.	LEVEL	ADJUSTMENT
1	Check Balance by measuring DC voltage across OUTPUT TERMINAL of L and R channel.	DC Volt Meter	See Fig. 1	No signal	DC voltage should be less than 30 mV.	
2	Idling current adjustment	DC Volt Meter	See Fig. 2	No signal	Adjust voltage across Emittter resistors R 635 and R 636 to 10 mV. (8 Ω Load)	VR 601 VR 602

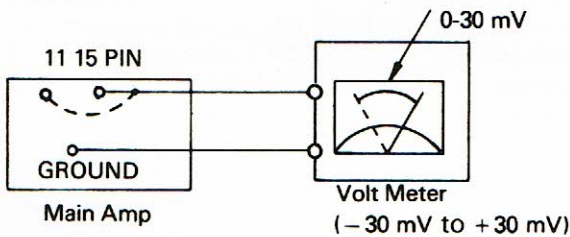


Figure 1

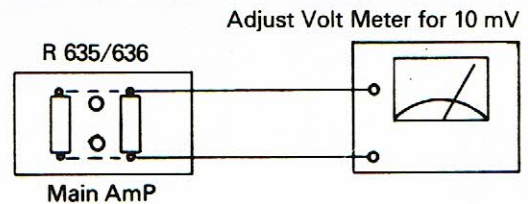


Figure 2

STEP	ADJUSTMENT	EQUIPMENT	CONNECTION	AUDIO FREQ.	SETTING	LEVEL
1		Audio Osc. V.T.V.M. Oscilloscope	Fig. 3	1000 Hz	VOLUME: Max. BASS, TREBLE, BALANCE: center	Adjust input to AUX 1 to get output level of about 3 Volts (8 ohm load).
2	Check if reset circuit is functioning.	Audio Osc. V.T.V.M. Oscilloscope	Fig. 4	1000 Hz	Same as above	Short-circuit output. There should be no output after short is removed.

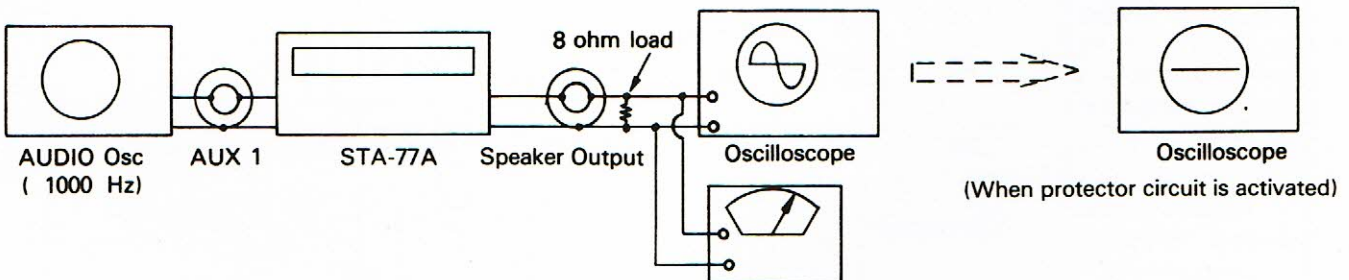


Figure 3

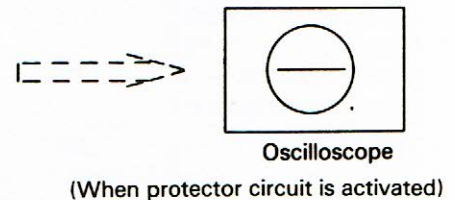
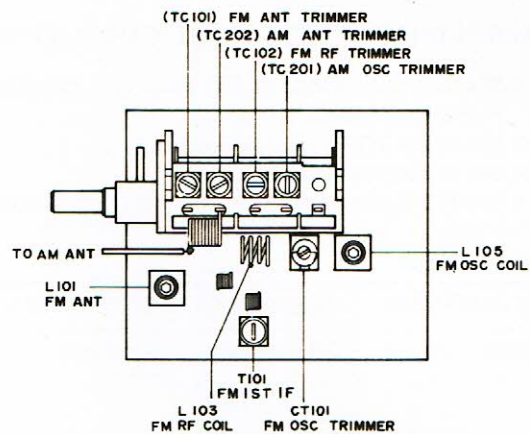


Figure 4

EQUIPMENT REQUIRED

1. AM Signal Generator
2. AC Voltmeter
3. Oscilloscope

TUNER FRONT END COIL & TRIMMER LOCATIONS



AM IF & RF ALIGNMENT

- NOTES:**
- Signal generator output should be no higher than necessary to obtain an output reading.
 - Maintain line voltage at 120 volts. (UL, C.S.A.) (Use 220/240V AC For European & 240V AC for Australian Models.)
 - Set SELECTOR Switch to AM.
 - See P.C.B. illustrations for alignment points/adjustments.

STEP	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUSTMENT	REMARKS
1	Connect standard loop ANTENNA to Signal Generator and radiate signal into the AM Ferrite antenna. See Fig. 5.	455 kHz (400 Hz, 30% MOD)	Point of non-interference (near 600 kHz)	AC Voltmeter to TAPE OUT JACK	T 204 T 202 T 207 (both sections)	Adjust for maximum reading.
2	Same as above	600 kHz (400 Hz, 30% MOD)	600 kHz	Same as above	T 208 (OSC Coil) L 702 (AM ANT Coil)	Adjust for maximum reading.
3	Same as above	1400 kHz (400 Hz, 30% MOD)	1400 kHz	Same as above	TC 201 (OSC Trimmer) TC 202 (ANT Trimmer)	Adjust for maximum reading.
4	Repeat steps 2 and 3 until no further change is noticed.					
5	Same as step 1	1000 kHz (400 Hz, 30% MOD) Output level to 100 mV/m	1000 kHz Tune to Signal	AM Strength Meter	VR 202	Adjust so the Meter Pointer on Receiver is between 80% and 90% on the Meter.

AM ALIGNMENT SET-UP

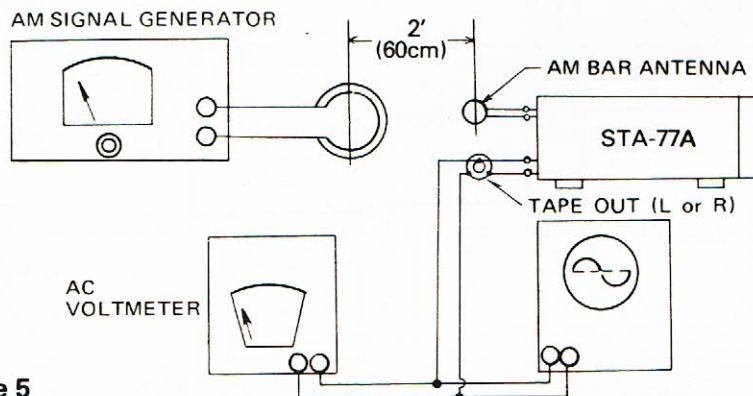


Figure 5

FM ALIGNMENT SET-UP

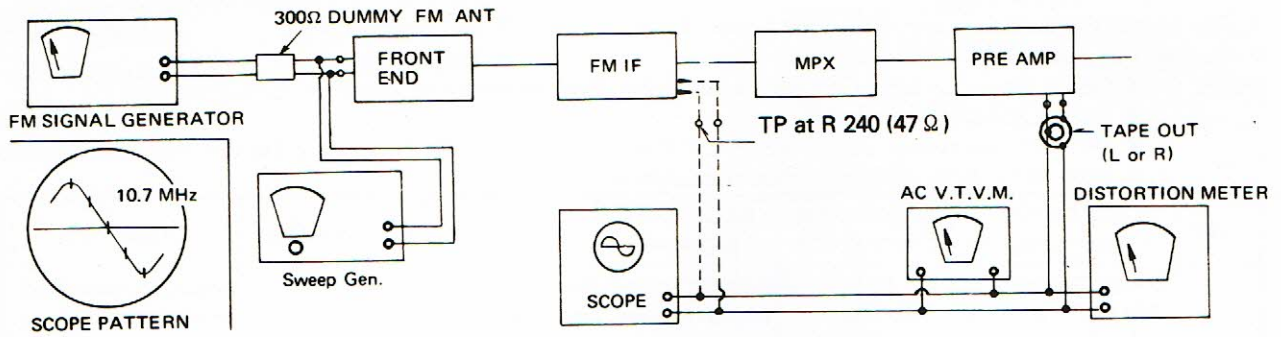


Figure 6

Figure 7

FM STEREO ALIGNMENT

Equipment Required

1. Stereo Modulator Connect Stereo Modulator to EXT. Mod. terminal FM signal generator.
Modulation Level of 19 kHz Pilot Signal8 – 10 %
2. FM Signal Generator .. Output Level ... 1 mV
Frequency Approximately 98 MHz.
Deviation 75 kHz 100 % modulation of composite signal.
3. Audio Generator
4. AC Voltmeter
5. Oscilloscope
6. Distortion Meter
7. Frequency Counter

Note: See P.C.B. illustration for alignment/test points.

Preliminaries

Set SELECTOR switch to FM STEREO, MUTE switch to "OFF" and Level control to max.

MULTIPLEX & SEPARATION ALIGNMENT

STEP	SIGNAL GENERATOR COUPLING	STEREO MODULATION	INDICATOR	ADJUSTMENT	REMARKS
1	Connect to FM Antenna terminal thru FM dummy antenna(300 Ω).	Mono. 1 kHz (1000 Hz, No Mod) Input 1 mV	Counter connected to TP at Pin 12 of IC	VR 205	Adjust for 19 kHz ± 50 Hz on Counter. Refer to Fig. 8.
2	Same as above	Composite MPX Signal 1 kHz on Left channel ONLY	AC Voltmeter connected for TAPE OUT jack of Right channel	VR 204 (Separation)	Adjust for minimum reading. Refer to Fig. 9.
3	Same as above	Composite MPX Signal 1 kHz on Right channel ONLY	AC Voltmeter connected for TAPE OUT jack of Left channel	Same as above	Same as above
4	Repeat STEPs 2 and 3 until AC Voltmeter reading is at least -33 dB re same channel output (i.e. 33 dB separation)				
5	Same as step 1	Composite Signal 1 kHz	AC Voltmeter connected to TAPE OUT jack		With 10 μV antenna input signal, stereo indicator lamp should come on.

FM STEREO ALIGNMENT SET-UP

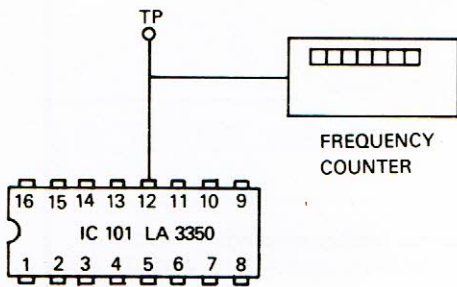


Figure 8

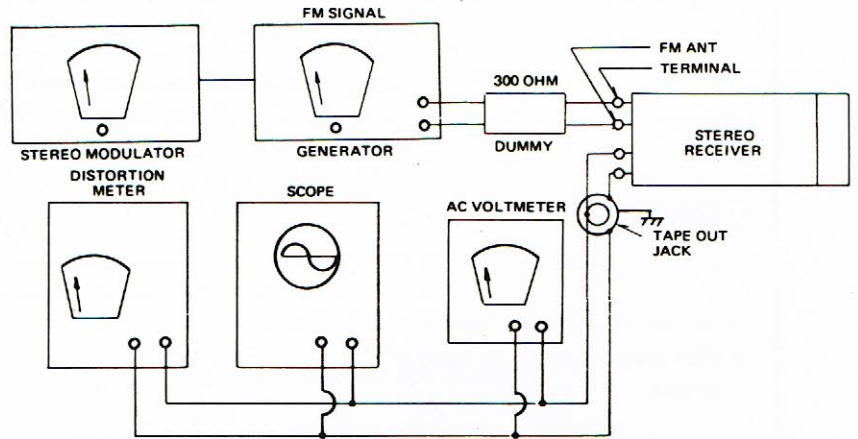


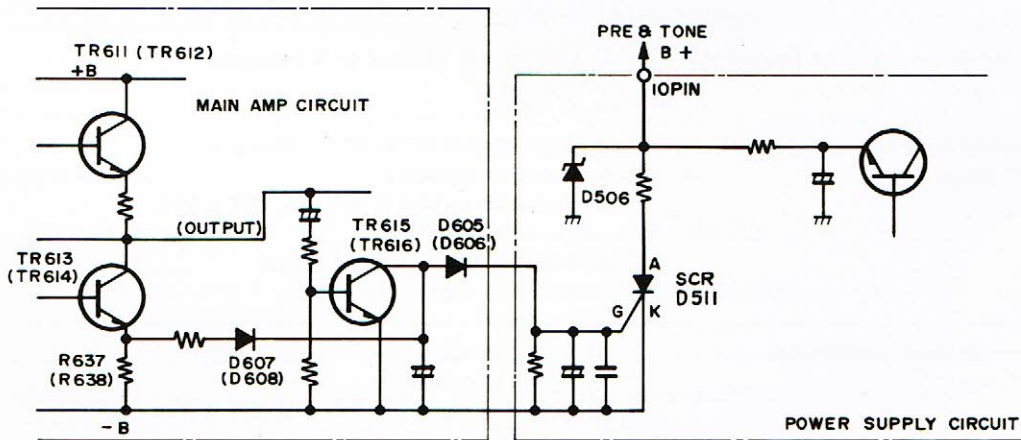
Figure 9

BRIEF DESCRIPTION OF PROTECTIVE CIRCUIT

If speaker terminals are shorted, or Load impedance of one channel (Left or Right) is lower than 4 ohms, excessively high current flows from Emitter to Collector of TR613 (or TR614) and a high voltage appears across R637 (or R638).

This high voltage goes to Gate of SCR D511 after being rectified by D607 (or D608). When the voltage between Cathode and Gate increases to about 0.7 V, SCR D511 will be turned on. Voltage at Pin No. 10 on Power Supply Board goes to -1V to 0V (B + for Pre Amp and Tone), PRE Amp and TONE circuits will stop functioning and thus protect MAIN Amp.

If this should occur, the amplifier will automatically shut down and output will drop to zero. Turn the receiver off to reset the protective circuit. When the problem is corrected, turn the receiver on again.



5. TROUBLESHOOTING

Symptom	Cause/Remedy
1) No output.	1) Faulty AC power cord. *Replace the cord. 2) Defective power switch. *Replace the switch. 3) Broken wire in the power transformer. *Replace the transformer.
2) Pilot lamp does not light.	1) Broken lamp. *Replace the lamp. 2) Open in the power transformer tertiary winding. *Replace the transformer.
3) Pilot lamp lights but no speaker output.	1) Defective capacitor C 701 or 702. *Replace the defective capacitor. 2) Defective diode D 507, 508, 509 or 510. *Replace the defective diode. 3) Defect in the power transformer secondary winding. *Replace the power transformer.
4) Blows fuse.	1) Defective diode D 507-510 in the rectifier circuit. *Replace the defective diode. 2) Short-circuit in the rectifier circuit. *Remove the short. 3) Short-circuit in power transistor Circuitry TR 611-614. *Repair circuit and/or Replace the defective transistor.
5-1) No output one channel with VOLUME at maximum and BALANCE at center, when a test signal is applied to the terminal of non-operating channel of the BALANCE control R 433.	1) Defective transistor TR 401-405 or TR 601-614 . *Replace the defective transistor. 2) Defective resistor or capacitor of TONE or MAIN AMP circuit. *Replace the defective parts.
5-2) No output when a test signal is applied to the input terminals.	1) Defective transistor, resistor or capacitor of PRE AMP circuit. *Replace the defective part(s). 2) Defective MONO/STEREO or TAPE MONITOR switch. *Replace or repair the switch. 3) Defective Selector switch. *Replace the Selector switch.
6) Speaker works normally but headphone does not work.	1) Defective R 703(left) or R 704(right) . *Change it.
7) All the inputs work normally except "AUX-1" input.	1) Poor contact in "AUX-1" input jack . *Repair or replace it. 2) Defective resistor R 301, 302, 303 or 304. *Replace it. 3) Poor contact in selector switch . *Repair or replace the switch.
8) All the inputs work normally except "AUX-2" input.	1) Poor contact in "AUX-2" input jack . *Repair or replace it. 2) Defective resistor R 305, 306, 334 or 335. *Replace it. 3) Poor contact in selector switch. *Repair or replace the switch.

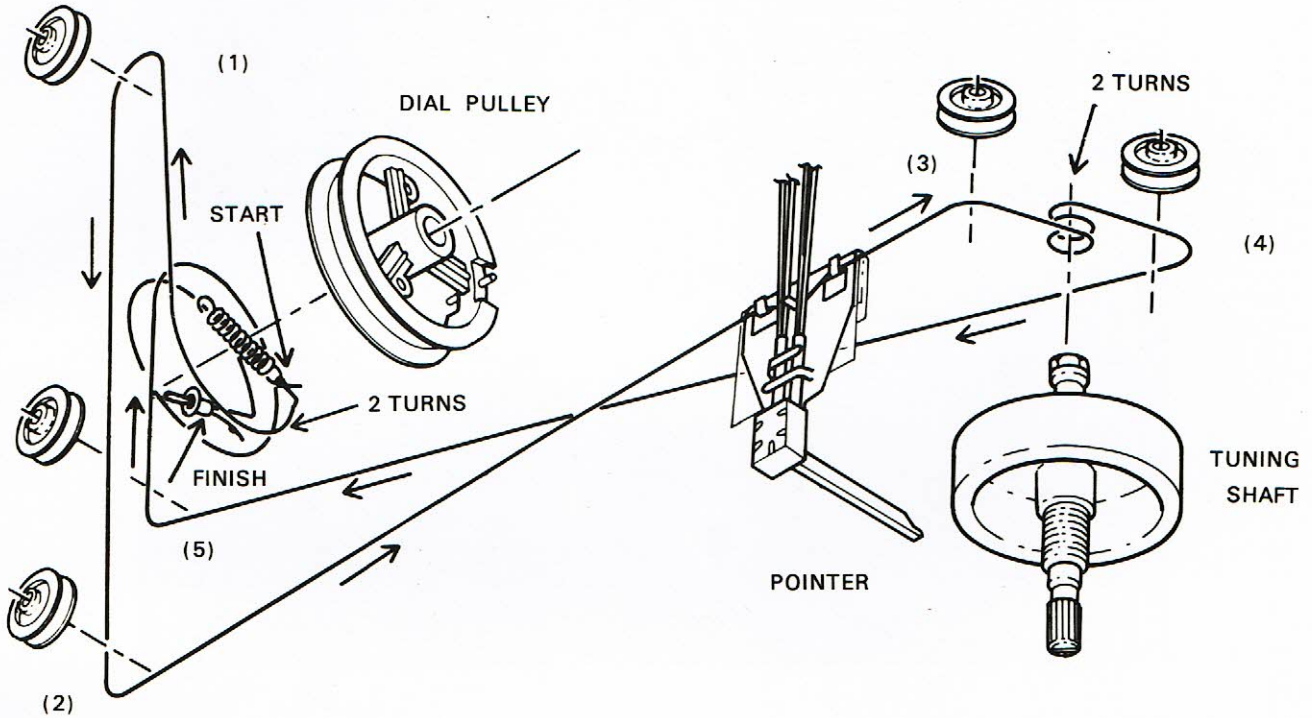
Symptom	Cause/Remedy
9) "PHONO" input not operative.	1) Poor contact in "PHONO" input jack . *Repair or replace it. 2) Faulty selector switch . *Repair or replace the switch.
10) "TAPE OUT" inoperative.	1) Poor contact in "TAPE OUT" output jack . *Repair or replace the jack.
11) No AM or FM. (TUNER + B voltage is not 11 - 12V)	1) Broken tertiary winding in the power transformer . *Replace the transformer. 2) Defective diode D 503, 504 or D 505 . *Change the defective diode. 3) Faulty capacitor C 504, 506, 507 or C 508 . *Change it. 4) Defective resistor R 508 or 509 . *Replace the resistor. 5) Zener diode D 503 defective . *Replace the diode. 6) Short circuit in TUNER + B circuit . *Repair the short. 7) Poor contact in selector switch . *Repair or replace it.
12) No FM.	1) Poor contact in selector switch . *Repair or replace it. 2) Defective resistor or capacitor of FM FRONT-END circuit . *Replace the defective part(s). 3) Transistor, diode, IFT, resistor or capacitor of FM IF. board defective . *Replace the defective part. 4) Front End defective . *Repair or replace it. 5) Faulty FM Antenna lead-in/circuitry . *Repair or replace the Antenna lead-in/circuitry.
13) No AM.	1) Poor contact in selector switch . *Repair or replace switch. 2) Transistor, diode, IFT, resistor or capacitor of AM IF defective . *Replace the defective part. 3) Bar-Antenna coil defective . *Repair or replace it.
14) No MPX separation.	1) Improper adjustment . *Readjust it. 2) IC of MPX board defective . *Replace the IC . 3) VR 204, 205 (variable resistor) defective . *Replace it.
15) No stereo light.	1) Broken ST. indicator lamp . *Replace the lamp. 2) Defective IC of MPX board . *Change the defective IC .

Symptom	Cause/Remedy
16) FM STEREO does not works.	1) Defective IC (LA3350). *Replace it. 2) Defective VR 204 or 205. *Replace it. 3) Defective Transistor, Diode, Capacitor or Resistor of FM MPX circuit. *Replace the defective parts. 4) Defective Pilot lamp PL 6. *Replace it.
17) "LOUDNESS" has no effect.	1) Defective "LOUDNESS" switch . *Replace the switch. 2) Defective C401, C402, C403, C404, R401 or R407 . *Replace the defective part.
18) "BASS" has no effect.	1) R431, R432 (100K ohm control) defective . *Replace it. 2) Defective R419, R420, R417, R418, R421, R422, C415, C416, C417 or C418 of Tone Control Board . *Replace the defective part.
19) "TREBLE" has no effect.	1) Faulty R429 or R430 (100K ohm control) . *Replace it. 2) Defective C411, C412, C413, C414, R415 or R416 of Tone Control Board . *Replace the defective part.
20) "TAPE IN" inoperative.	1) Poor contact in "TAPE IN" input jack. *Repair or replace it. 2) Faulty "TAPE MONITOR" switch. *Repair or replace the faulty switch.
21) Overload protector circuit does not work.	1) Defective S.C.R. D 511. *Replace the defective S.C.R. 2) Defective resistor R 502-504 or R 641-646 . *Replace the defective resistor. 3) Defective capacitor C 617-620 510 or 516 . *Replace the defective capacitor. 4) Defective diode D 605-608 or 506 . *Replace the defective diode. 5) Defective transistor TR 615 or 616 . *Replace the defective transistor.

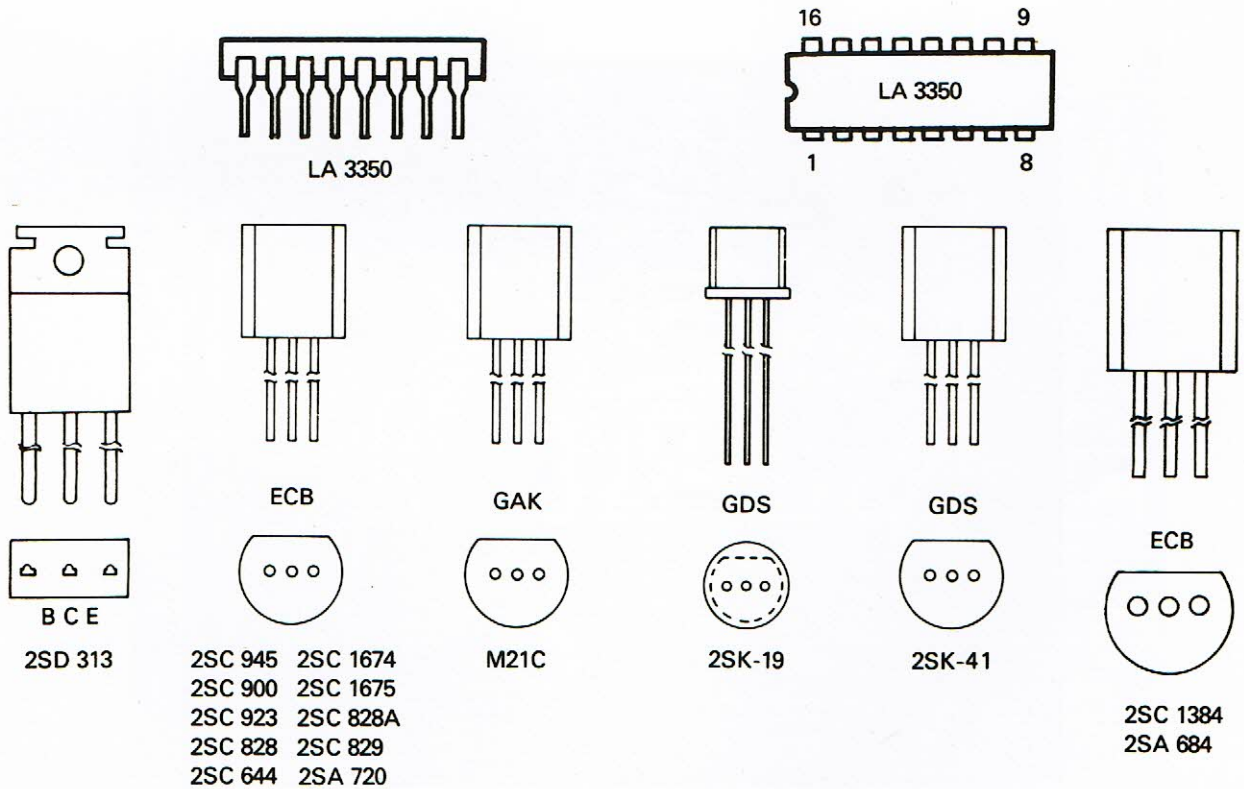
6. DIAL STRINGING DIAGRAM

* START WITH CAPACITOR SET AT MINIMUM,
PLATES FULLY MESHED.

* Pointer Position: HIGH END
* Start: Spring
* Finish: Hook

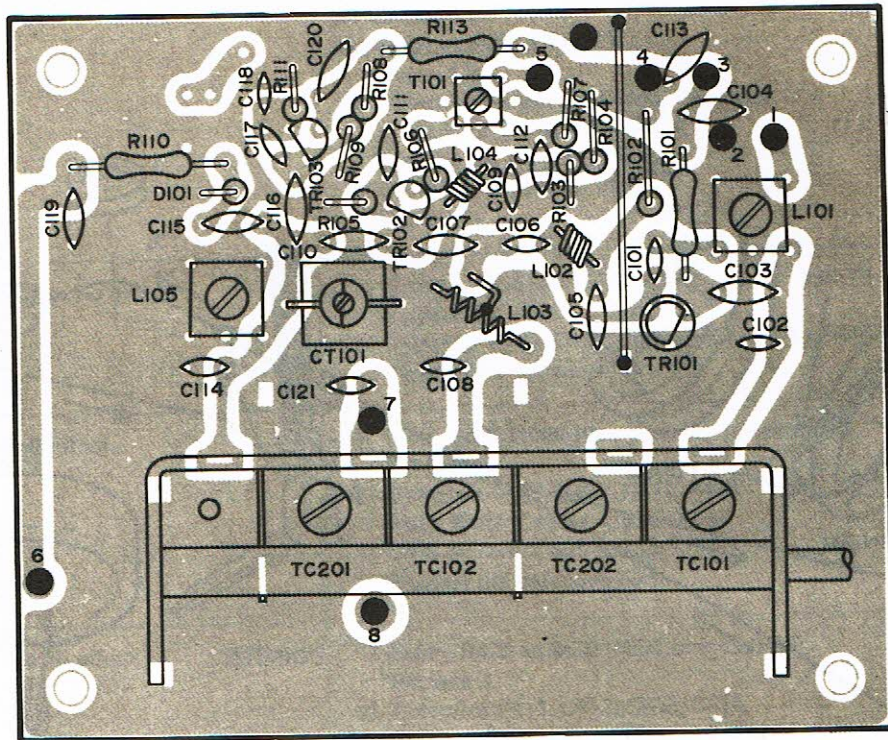


7. IC & TRANSISTOR LEAD IDENTIFICATION

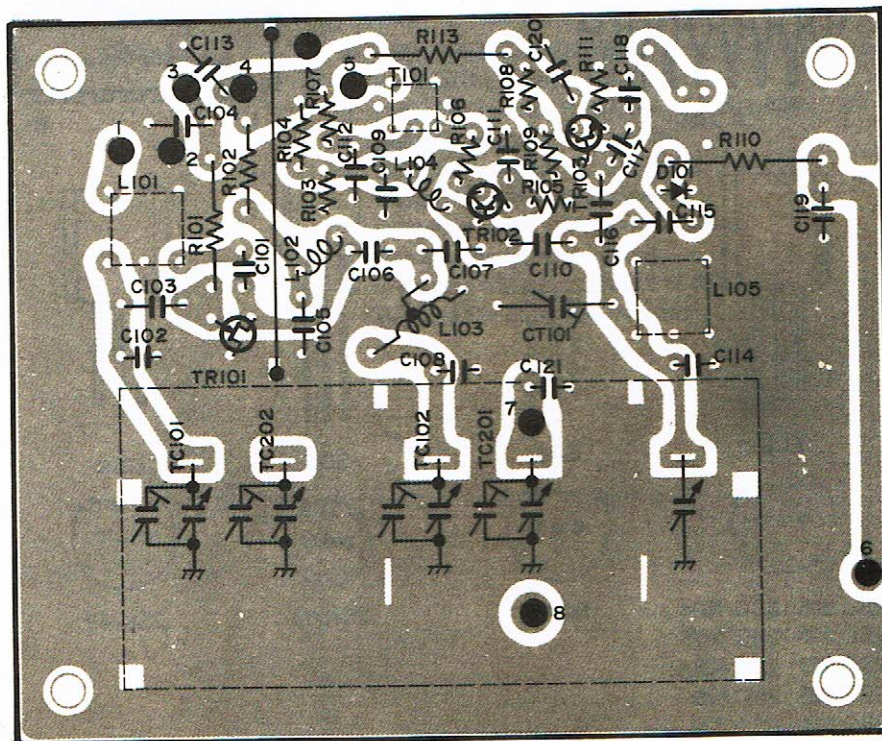


8. FM FRONT END P.C.B.

TOP VIEW

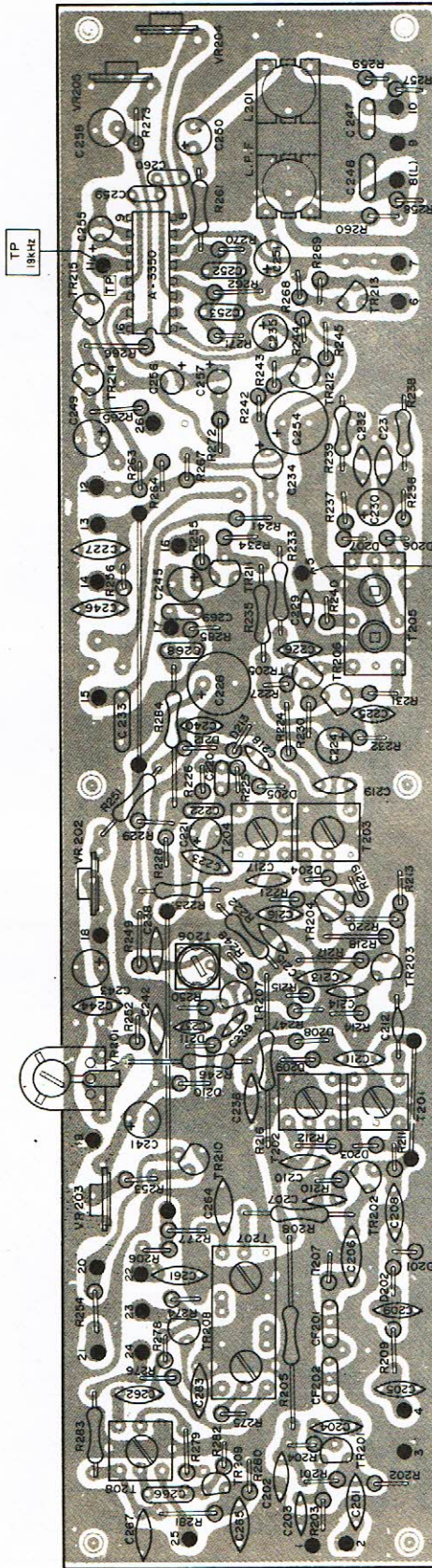


BOTTOM VIEW

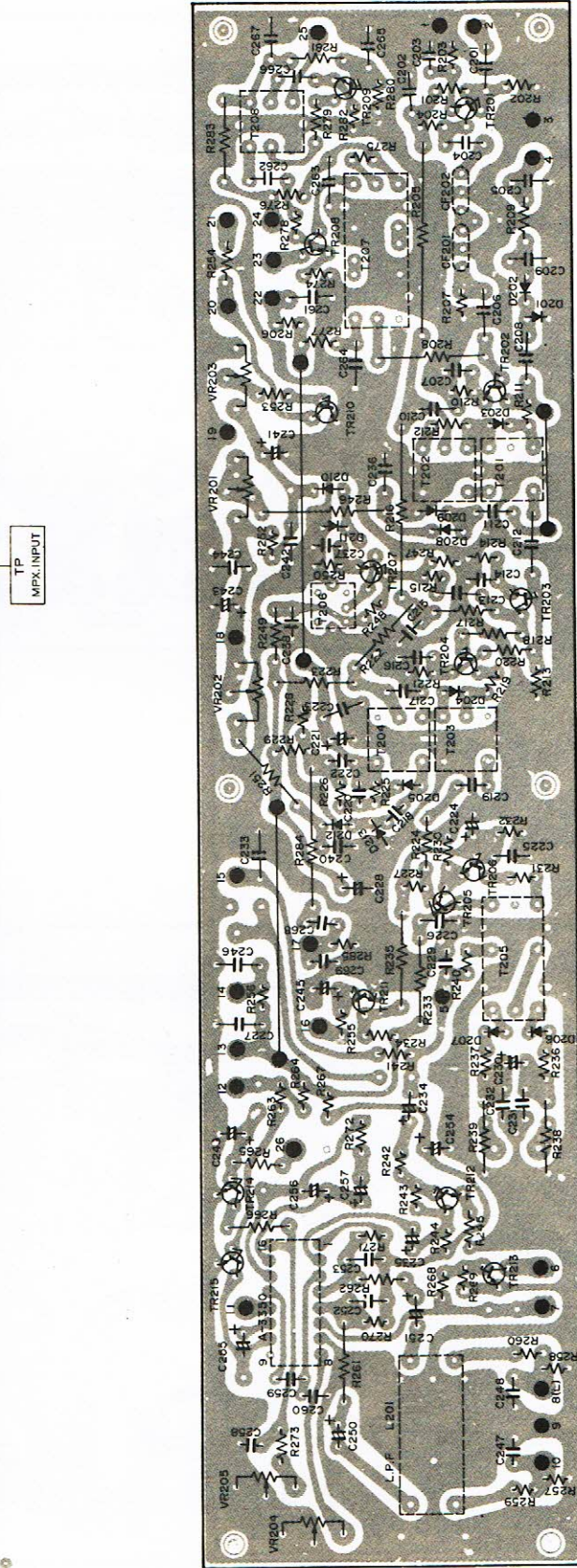


9. AM/FM IF & MPX P.C.B.

TOP VIEW

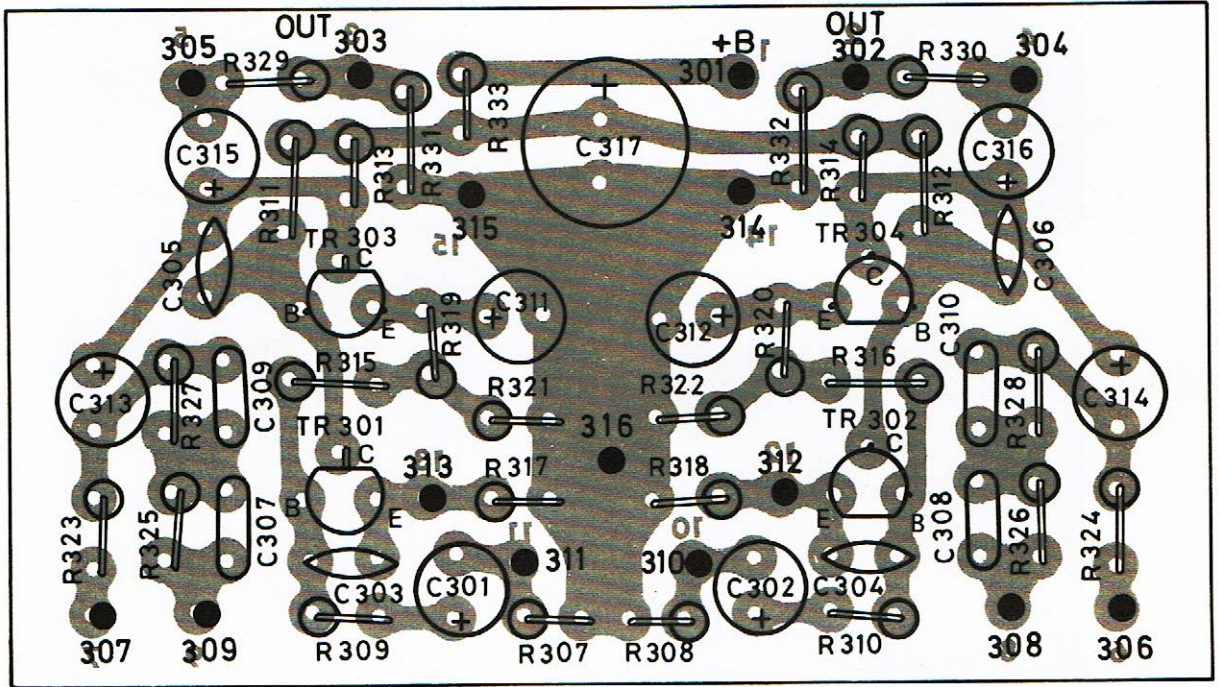


BOTTOM VIEW

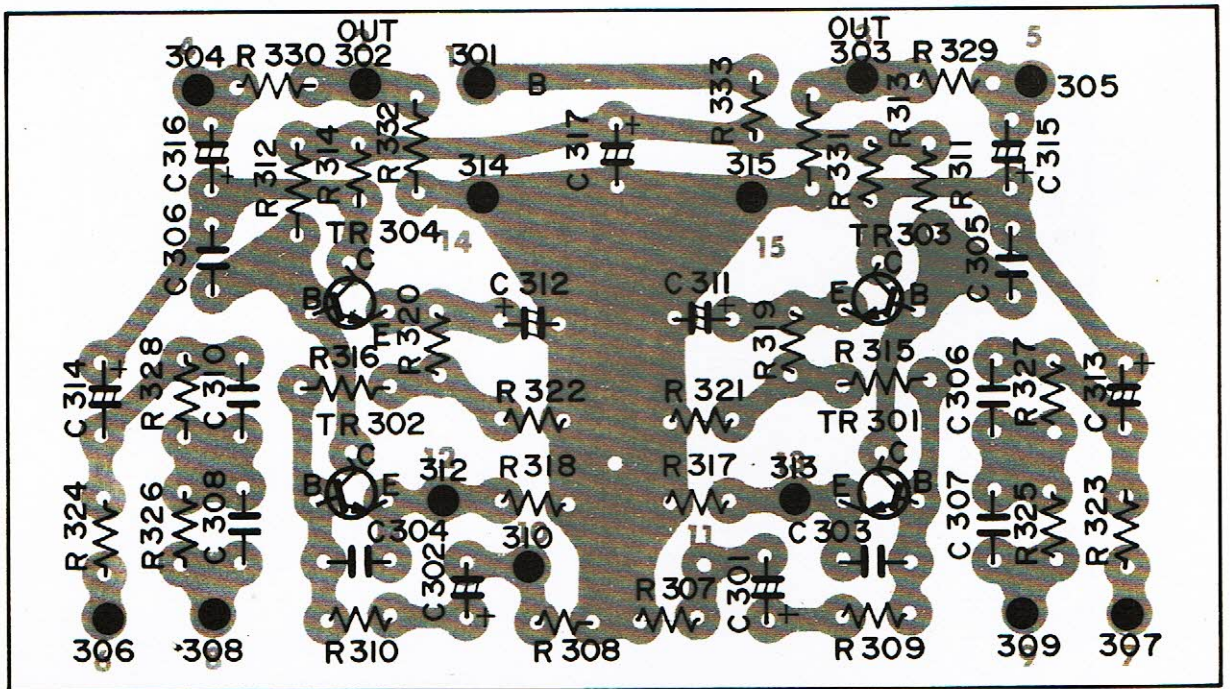


10. PRE AMP P.C.B.

TOP VIEW

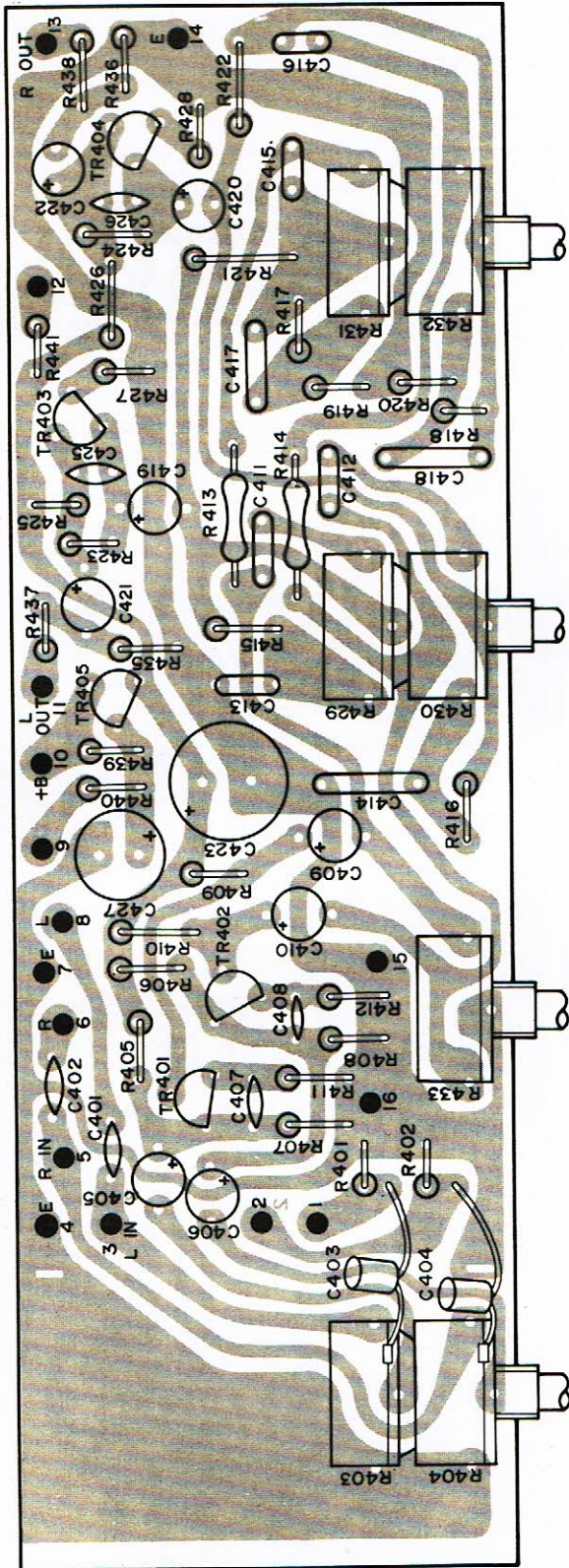


BOTTOM VIEW

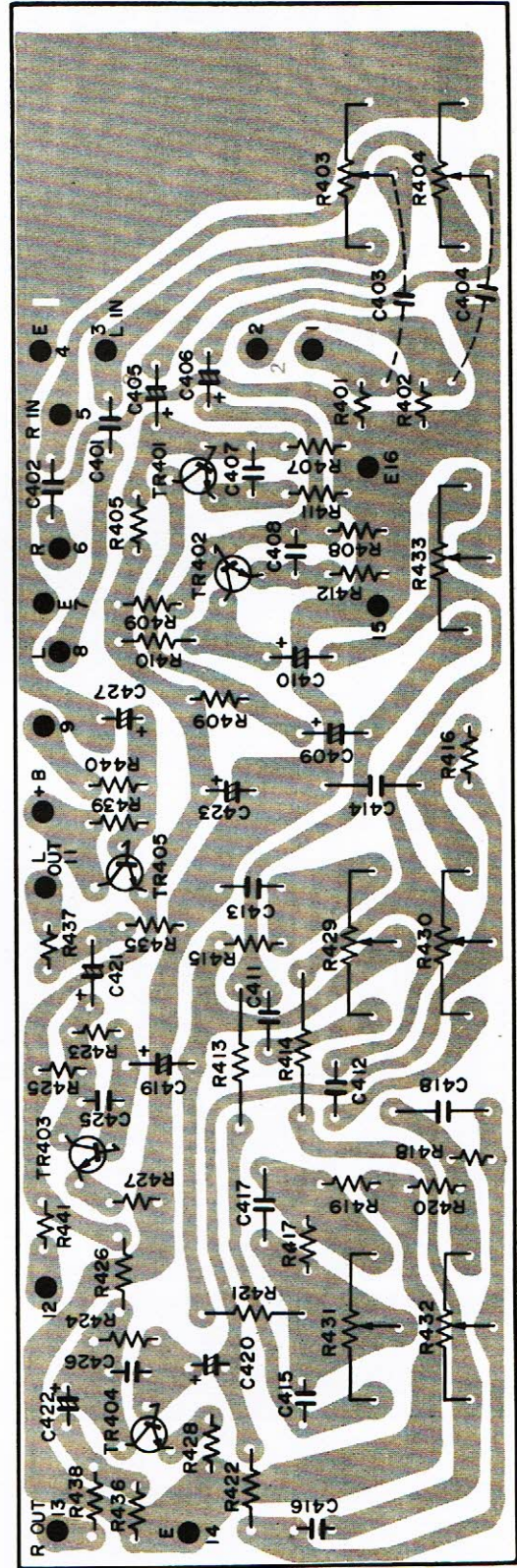


11. TONE AMP P.C.B.

TOP VIEW

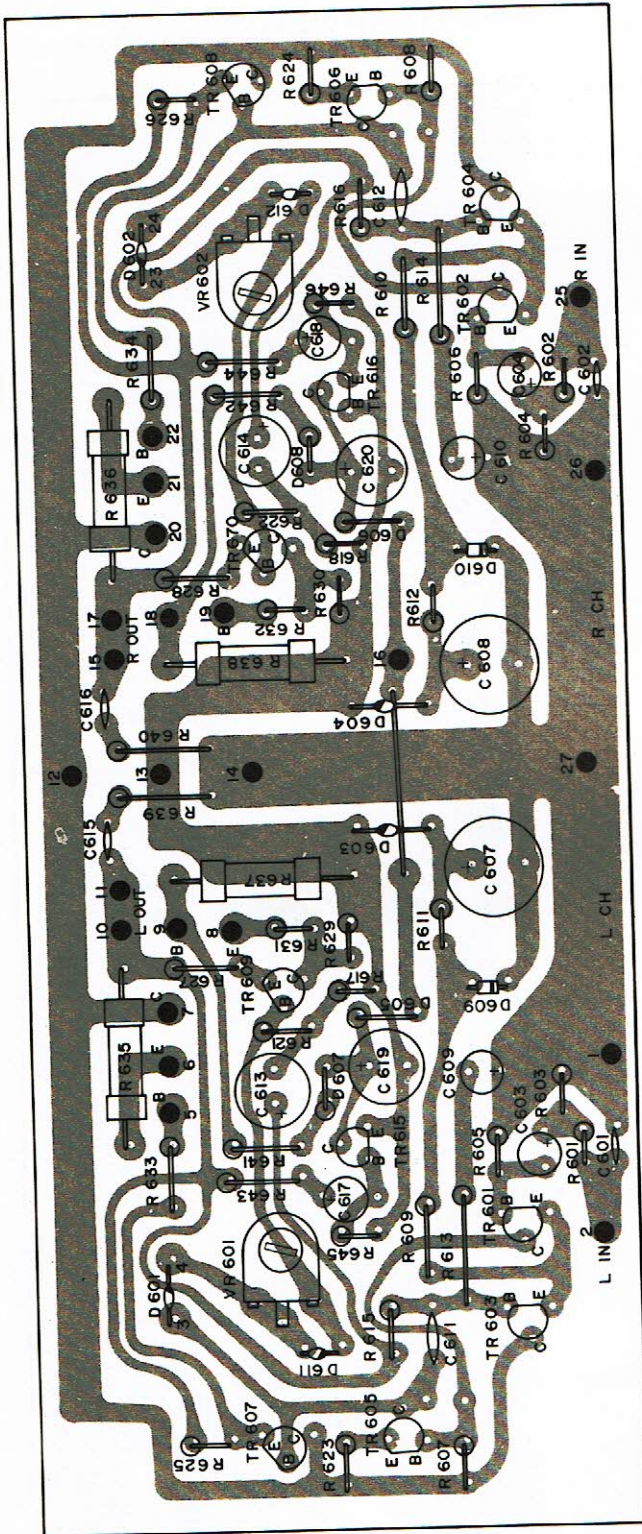


BOTTOM VIEW

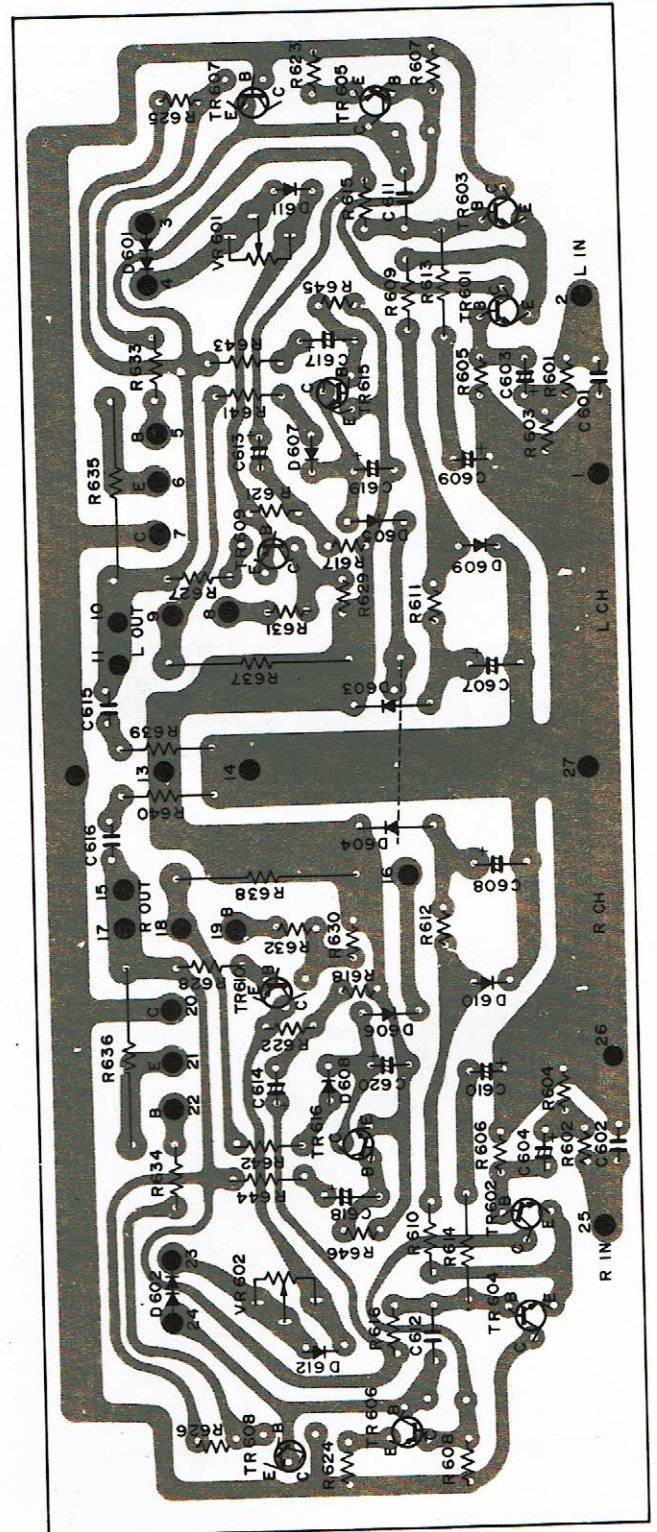


12. MAIN AMP P.C.B.

TOP VIEW

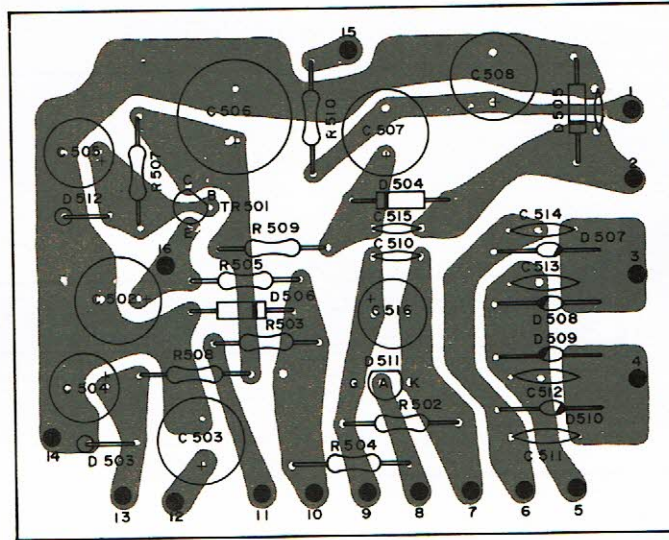


BOTTOM VIEW

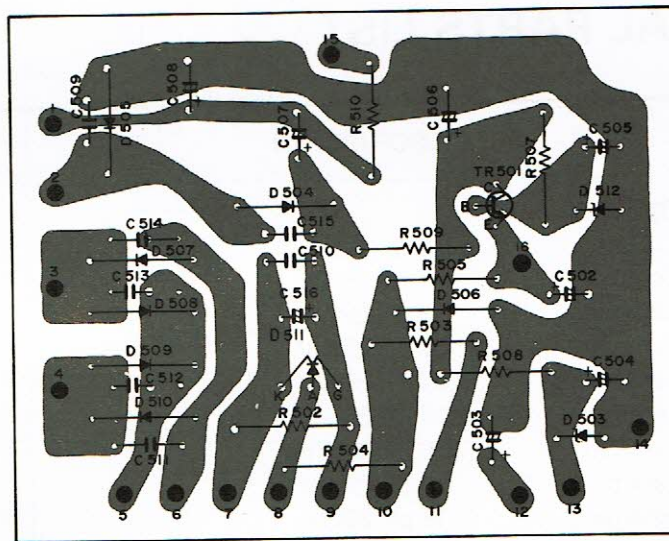


13. POWER SUPPLY P.C.B.

TOP VIEW

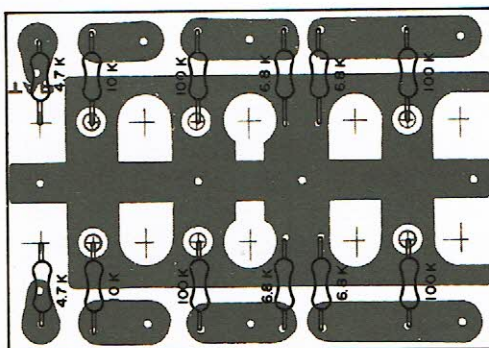


BOTTOM VIEW

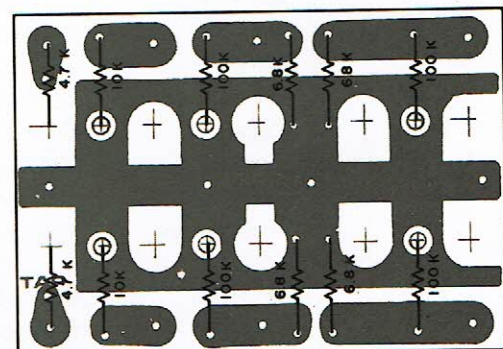


14. JACK P.C.B.

TOP VIEW

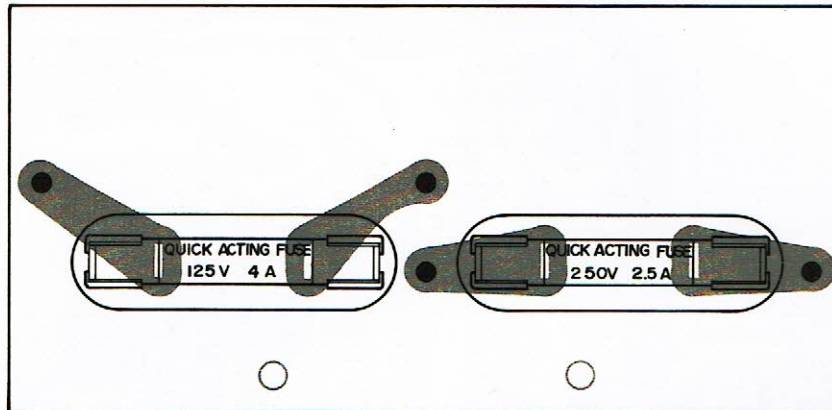


BOTTOM VIEW



15. FUSE P.C.B. (For CSA models only)

TOP VIEW



16. ELECTRICAL PARTS LIST

REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
CAPACITORS			
C 101	Ceramic 1 pF 25WV		
C 102	Ceramic 18 pF 25WV		
C 103	Ceramic 30 pF 25WV		
C 104	Ceramic 0.01 μ F 25WV		
C 105	Ceramic 0.01 μ F 25WV		
C 106	Ceramic 30 pF 25WV		
C 107	Ceramic 10 pF 25WV		
C 108	Ceramic 18 pF 25WV		
C 109	Ceramic 150 pF 25WV		
C 110	Ceramic 1 pF 25WV (NPO)		
C 111	Ceramic 0.01 μ F 25WV		
C 112	Ceramic 0.01 μ F 25WV		
C 113	Ceramic 0.01 μ F 25WV		
C 114	Ceramic 18 pF 25WV (N330)		
C 115	Ceramic 4 pF 25WV (NPO)		
C 116	Ceramic 7 pF 25WV (NPO)		
C 117	Ceramic 15 pF 25WV (NPO)		
C 118	Ceramic 10 pF 25WV (NPO)		
C 119	Ceramic 0.02 μ F 25WV		
C 120	Ceramic 0.0047 μ F 25WV (YP)		
C 121	Ceramic 10 pF 25WV (NPO)		
C 122	Polystyrene 340 pF 50WV		
C 201	Ceramic 0.01 μ F 25WV		
C 202	Ceramic 0.02 μ F 25WV		

REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
C 203	Ceramic 0.02 μ F 25WV		
C 204	Ceramic 0.01 μ F 25WV		
C 205	Ceramic 0.02 μ F 25WV		
C 206	Ceramic 0.01 μ F 25WV		
C 207	Ceramic 0.02 μ F 25WV		
C 208	Ceramic 10 pF 25WV		
C 209	Ceramic 0.02 μ F 25WV		
C 210	Ceramic 0.02 μ F 25WV		
C 211	Ceramic 10 pF 25WV		
C 212	Ceramic 0.01 μ F 25WV		
C 213	Ceramic 100 pF 25WV		
C 214	Ceramic 0.02 μ F 25WV		
C 215	Ceramic 0.02 μ F 25WV		
C 216	Ceramic 0.02 μ F 25WV		
C 217	Ceramic 0.02 μ F 25WV		
C 218	Ceramic 200 pF 25WV		
C 219	Ceramic 0.01 μ F 25WV		
C 220	Mylar 0.015 μ F 50WV		
C 221	Electrolytic 4.7 μ F/25V		
C 222	Mylar 0.015 μ F 50WV		
C 223	Ceramic 0.04 μ F 25WV		
C 224	Electrolytic 10 μ F/10V		
C 225	Ceramic 0.02 μ F 25WV		
C 226	Ceramic 0.02 μ F 25WV		
C 227	Ceramic 0.04 μ F 25WV		
C 228	Electrolytic 100 μ F/16V		
C 229	Ceramic 150 pF 25WV		
C 230	Electrolytic 10 μ F/10V		
C 231	Ceramic 200 pF 25WV		
C 232	Ceramic 200 pF 25WV		
C 233	Mylar 0.1 μ F 50WV		
C 234	Electrolytic 3.3 μ F/25V		
C 235	Electrolytic 10 μ F/10V		
C 236	Ceramic 0.02 μ F 25WV		
C 237	Ceramic 0.02 μ F 25WV		
C 238	Ceramic 0.02 μ F 25WV		
C 239	Ceramic 100 pF 25WV		
C 240	Ceramic 0.02 μ F 25WV		
C 241	Electrolytic 1 μ F/50V		
C 242	Ceramic 0.02 μ F 25WV		
C 243	Electrolytic 47 μ F/10V		
C 244	Ceramic 0.02 μ F 25WV		
C 245	Electrolytic 1 μ F/50V		
C 246	Ceramic 0.04 μ F 25WV		
C 247	Mylar 0.0047 μ F 50WV		
C 248	Mylar 0.0047 μ F 50WV		
C 249	Electrolytic 1 μ F/50V		
C 250	Electrolytic 0.47 μ F/50V		
C 251	Electrolytic 0.47 μ F/50V		

REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
C 252	Mylar 0.033 μ F 50WV		(0.027 μ F for Australian models only)
C 253	Mylar 0.033 μ F 50WV		(0.027 μ F for Australian models only)
C 254	Electrolytic 100 μ F/16V		
C 255	Aluminium 0.1 μ F/25V		
C 256	Aluminium 0.22 μ F/25V		
C 257	Aluminium 0.47 μ F/25V		
C 258	Polystyrene 1500 pF 50WV		
C 259	Mylar 0.047 μ F 50WV		
C 260	Polystyrene 680 pF 50WV		
C 261	Ceramic 0.04 μ F 25WV		
C 262	Ceramic 0.04 μ F 25WV		
C 263	Ceramic 0.04 μ F 25WV		
C 264	Ceramic 0.04 μ F 25WV		
C 265	Ceramic 0.04 μ F 25WV		
C 266	Mylar 0.022 μ F 50WV		
C 267	Ceramic 0.04 μ F 25WV		
C 268	Mylar 0.047 μ F 50WV		
C 269	Mylar 0.022 μ F 50WV		
C 301/302	Tantalum 2.2 μ F/10V		
C 303/304	Ceramic 100 pF 50WV		
C 305/306	Ceramic 100 pF 50WV		
C 307/308	Mylar 0.0033 μ F 50WV		
C 309/310	Mylar 0.012 μ F 50WV		
C 311/312	Electrolytic 47 μ F/10V		
C 313/314	Electrolytic 4.7 μ F/25V		
C 315/316	Tantalum 1 μ F/25V		
C 317	Electrolytic 220 μ F/25V		
C 318	Ceramic 0.02 μ F 50WV		
C 401/402	Polystyrene 390 pF 50WV		
C 403/404	Mylar 0.068 μ F 50WV		
C 405/406	Electrolytic 3.3 μ F/25V		
C 407/408	Ceramic 470 pF 25WV		
C 409/410	Electrolytic 3.3 μ F/25V		
C 411/412	Mylar 0.001 μ F 50WV		
C 413/414	Mylar 0.015 μ F 50WV		
C 415/416	Mylar 0.012 μ F 50WV		
C 417/418	Mylar 0.15 μ F 50WV		
C 419/420	Electrolytic 3.3 μ F/25V		
C 421/422	Electrolytic 1 μ F/50V		
C 423	Electrolytic 220 μ F/25V		
C 424	Not used		
C 425/426	Ceramic 25 pF 25WV		
C 427	Electrolytic 100 μ F/25V		
C 428	Ceramic 0.02 μ F 25WV		
C 501	Not used		
C 502	Electrolytic 220 μ F/25V		

REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
C 503	Electrolytic 470 μ F/16V		
C 504	Electrolytic 220 μ F/16V		
C 505	Electrolytic 470 μ F/25V		
C 506	Electrolytic 470 μ F/35V		
C 507/508	Electrolytic 1000 μ F/16V		
C 509	Ceramic 0.01 μ F 50WV		
C 510	Ceramic 0.04 μ F 50WV		
C 511/512	Ceramic 0.047 μ F 100WV		
C 513/514	Ceramic 0.047 μ F 100WV		
C 515	Ceramic 0.01 μ F 50WV		
C 516	Electrolytic 220 μ F/25V		
C 601/602	Ceramic 470 pF 50WV (YP or YY)		
C 603/604	Electrolytic 1 μ F/50V		
C 605/606	Not used		
C 607/608	Electrolytic 220 μ F/35V		
C 609/610	Electrolytic 47 μ F/10V		
C 611/612	Ceramic 5 pF 50WV		
C 613/614	Electrolytic 100 μ F/25V		
C 615/616	Mylar 0.022 μ F 50WV		
C 617/618	Electrolytic 0.47 μ F/50V		
C 619/620	Electrolytic 220 μ F/25V		
C 621/622	Ceramic 33 pF 50WV		
C 701/702	Electrolytic 4700 μ F/35V (Block Capacitor)		P-220020
C 703	Ceramic 0.04 μ F 50WV		
C 704	*Across Line 0.01 μ F AC 150V, DC 1.4KV (Ceramic) (Use for UL models only)		
	**Across Line 0.01 μ F AC 150V, DC 1.4KV CP-3 type (Ceramic) (Use for C.S.A models only)		
C 705/706	***Linepass 0.01 μ F 250V AC (Use for European & Australian models)		P-220022
CERAMIC FILTERS			
CF 201/202	FM Ceramic Filter SFE-10.7 MA-8	CA-7536	P-140030
COILS & TRANSFORMERS			
L 101	FM ANT Coil	CA-3594	P-110050
L 102	FM TRAP Coil	CB-2171	P-360003
L 103	FM RF Coil	CA-3371	P-340033
L 104	FM TRAP Coil	CB-2171	P-360003
L 105	FM OSC Coil	CA-4720	P-120043
AM ANT	AM ANT Coil		P-110057
L 701	Filter Coil for Q-VOX(0.5 mH)	CA-3596	P-370008
L 702	AM Choke Coil		P-360023
T 101	FM IFT (7F-007)	CA-7265	P-140007

REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
T 201	FM IFT (10F-011)	CA-7254	P-140011
T 202	AM IFT (OA-005)	CA-7112	P-130005
T 203	FM IFT (10F-011)	CA-7254	P-140011
T 204	AM IFT (OA-022)	CA-7537	P-130022
T 205	FM IFT (10F-014)	CA-7286	P-140014
T 206	FM IFT (7F-007)	CA-7265	P-140007
T 207	AM IFT (455KHz Ceramic Filter)	C-0575	P-130023
T 208	AM OSC Coil (OC-058)	CA-4721	P-120058
	Balun Coil (75 Ohm:300 Ohm)	CA-2942	P-110012
PT-1	*Power Transformer PRIM: 120V, 60Hz SECOND: \pm 23V, 2A 12V, 1A (Use for UL, CSA Models only)	TA-0520	P-100380
	**Power Transformer PRIM: 240V, 50Hz SECOND: \pm 23V, 2A 12V, 1A (Use for Australian models only)		P-100396
DIODES			
D 101	Varicap Diode 1S2687		
D 201/202	Ge Diode 1N-60P		
D 203/204	Si Diode WG-713		
D 205	Ge Diode 1N-60P		
D 206/207	Ge Diode 1S-188 FM-(S)		
D 208/209	Ge Diode 1N-60P		
D 210/211	Ge Diode 1N-60P		
D 212/213	Si Diode WG-713		
D 214	Si Diode WG-713		
D 501/502	Not used		
D 503	Zener Diode WZ-130		
D 504/505	Si Diode SR-1K-2 or 10D-1		
D 506	Si Diode SR-1K-2 or 10D-1		
D 507/508	Si Diode 3DZ61, 1S-2762 or 1S-2764		
D 509/510	Si Diode 3DZ61, 1S-2762 or 1S-2764		
D 512	Zener Diode WZ-240		
D 601/602	Varistor MV-13		
D 603/604	Si Diode KB-162C 5		
D 605/606	Ge Diode 1N-60P		
D 607/608	Ge Diode 1N-60P		
D 609/610	Zener Diode WZ-130		
D 611/612	Varistor VD-1121		

REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
FUSES			
	*Fuse 250V, 3A (Quick Acting) (Use for UL, C.S.A models only)	HF-1097	P-250038
	*Fuse 250V, 2.5A (Quick Acting with Lead) (use for UL models only)	HF-1095	P-250043
	**Fuse 125V, 4A (Quick Acting) (Use for C.S.A models only)		P-250041
	**Fuse 250V, 2.5A (Quick Acting) (Use for C.S.A models only)		P-250008
	***Fuse 250V, 1.5A (Quick Acting) (Use for European & Australian models only)		P-250027
INTEGRATED CIRCUIT			
IC 201	IC(MPX P.L.L) LA-3350		
LOW-PASS FILTER			
L 201	Low-pass Filter Coil (19 kHz)		P-510006
METER			
	AM/FM Tuning Meter Ass'y (200 μ A)	M-0272	P-230043
PILOT LAMPS			
PL1-5	Lamp(Fuse Type) 12V, 150 mA	L-0529	P-240038 or P-240056
RESISTORS			
UZ = Radial Type J = \pm 5%			
PZ = Axial Type K = \pm 10%			
R 101	Carbon ¼ W PZ	100K ohm K	
R 102	Carbon ¼ W UZ	330 ohm K	
R 103	Carbon ¼ W UZ	5.6K ohm K	
R 104	Carbon ¼ W UZ	33K ohm K	
R 105	Carbon ¼ W UZ	1.5K ohm K	
R 106	Carbon ¼ W UZ	220 ohm K	
R 107	Carbon ¼ W UZ	330 ohm K	
R 108	Carbon ¼ W UZ	22K ohm K	
R 109	Carbon ¼ W UZ	10K ohm K	
R 110	Carbon ¼ W UZ	100K ohm K	
R 111	Carbon ¼ W UZ	3.3K ohm K	
R 112	Not used		
R 113	Carbon ¼ W PZ	330 ohm K	
R 201	Carbon ¼ W UZ	33K ohm K	
R 202	Carbon ¼ W UZ	10K ohm K	
R 203	Carbon ¼ W UZ	1K ohm K	

REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
R 204	Carbon ¼W UZ 330 ohm K		
R 205	Carbon ¼W PZ 100 ohm K		
R 206	Carbon ¼W UZ 68K ohm K		
R 207	Carbon ¼W UZ 330 ohm K		
R 208	Carbon ¼W PZ 3.3K ohm K		
R 209	Carbon ¼W UZ 10K ohm K		
R 210	Carbon ¼W UZ 680 ohm K		
R 211	Carbon ¼W UZ 1K ohm K		
R 212	Carbon ¼W UZ 33K ohm K		
R 213	Carbon ¼W UZ 68K ohm K		
R 214	Carbon ¼W UZ 1K ohm K		
R 215	Carbon ¼W UZ 100 ohm K		
R 216	Carbon ¼W PZ 100 ohm K		
R 217	Carbon ¼W UZ 3.3K ohm K		
R 218	Carbon ¼W UZ 100 ohm K		
R 219	Carbon ¼W UZ 1K ohm K		
R 220	Carbon ¼W UZ 33K ohm K		
R 221	Carbon ¼W UZ 2.2K ohm K		
R 222	Carbon ¼W PZ 100 ohm K		
R 223	Carbon ¼W PZ 47 ohm K		
R 224	Carbon ¼W UZ 100 ohm K		
R 225	Carbon ¼W UZ 6.8K ohm K		
R 226	Carbon ¼W UZ 4.7K ohm K		
R 227	Carbon ¼W UZ 1.5K ohm K		
R 228	Carbon ¼W UZ 18K ohm K		
R 229	Carbon ¼W UZ 82K ohm K		
R 230	Carbon ¼W UZ 680 ohm K		
R 231	Carbon ¼W UZ 1K ohm K		
R 232	Carbon ¼W UZ 4.7K ohm K		
R 233	Carbon ¼W PZ 330 ohm K		
R 234	Carbon ¼W UZ 10K ohm K		
R 235	Carbon ¼W PZ 3.3K ohm K		
R 236	Carbon ¼W UZ 470 ohm K		
R 237	Carbon ¼W UZ 470 ohm K		
R 238	Carbon ¼W PZ 10K ohm K		
R 239	Carbon ¼W PZ 10K ohm K		
R 240	Carbon ¼W UZ 47 ohm K		
R 241	Carbon ¼W UZ 470K ohm K		
R 242	Carbon ¼W UZ 1K ohm K		
R 243	Carbon ¼W UZ 1M ohm K		
R 244	Carbon ¼W UZ 4.7K ohm K		
R 245	Carbon ¼W UZ 3.3K ohm K		
R 246	Carbon ¼W PZ 1K ohm K		
R 247	Carbon ¼W UZ 5.6K ohm K		
R 248	Carbon ¼W UZ 22K ohm K		
R 249	Carbon ¼W UZ 2.7K ohm K		
R 250	Carbon ¼W UZ 470 ohm K		
R 251	Carbon ¼W PZ 2.2K ohm K		
R 252	Carbon ¼W UZ 100K ohm K		

REF. NO.	DESCRIPTION			RS PART NO.	MFD. PART NO.
R 253	Carbon	¼ W UZ	10K ohm K		
R 254	Carbon	¼ W UZ	10K ohm K		
R 255	Carbon	¼ W UZ	4.7K ohm K		
R 256	Carbon	¼ W UZ	47 ohm K		
R 257	Carbon	¼ W UZ	3.9K ohm K		
R 258	Carbon	¼ W UZ	3.9K ohm K		
R 259	Carbon	¼ W UZ	12K ohm K		
R 260	Carbon	¼ W UZ	12K ohm K		
R 261	Carbon	¼ W PZ	1K ohm K		
R 262	Carbon	¼ W UZ	1K ohm K		
R 263	Carbon	¼ W UZ	4.7K ohm K		
R 264	Carbon	¼ W UZ	10K ohm K		
R 265	Carbon	¼ W UZ	27K ohm K		
R 266	Carbon	¼ W UZ	100 ohm K		
R 267	Carbon	¼ W UZ	150 ohm K		
R 268	Carbon	¼ W UZ	3.3K ohm K		
R 269	Carbon	¼ W UZ	3.3K ohm K		
R 270	Carbon	¼ W UZ	3.3K ohm K		
R 271	Carbon	¼ W UZ	3.3K ohm K		
R 272	Carbon	¼ W UZ	1K ohm K		
R 273	Carbon	¼ W UZ	8.2K ohm K		
R 274	Carbon	¼ W UZ	1.8K ohm K		
R 275	Carbon	¼ W UZ	27K ohm K		
R 276	Carbon	¼ W UZ	4.7K ohm K		
R 277	Carbon	¼ W UZ	4.7K ohm K		
R 278	Carbon	¼ W UZ	220 ohm K		
R 279	Carbon	¼ W UZ	1.5K ohm K		
R 280	Carbon	¼ W UZ	10K ohm K		
R 281	Carbon	¼ W UZ	15K ohm K		
R 282	Carbon	¼ W UZ	2.2K ohm K		
R 283	Carbon	¼ W PZ	4.7K ohm K		
R 284	Carbon	¼ W PZ	27K ohm K		
R 285	Carbon	¼ W UZ	2.2K ohm K		
R 301/302	Carbon	¼ W PZ	100K ohm J		
R 303/304	Carbon	¼ W PZ	6.8K ohm J		
R 305/306	Carbon	¼ W PZ	100K ohm J		
R 307/308	Carbon	¼ W UZ	100K ohm J		
R 309/310	Carbon	¼ W UZ	2.2K ohm J		
R 311/312	Carbon	¼ W UZ	220K ohm J		
R 313/314	Carbon	¼ W UZ	8.2K ohm J		
R 315/316	Carbon	¼ W Uz	100K ohm J		
R 317/318	Carbon	¼ W UZ	390 ohm J		
R 319/320	Carbon	¼ W UZ	330 ohm J		
R 321/322	Carbon	¼ W UZ	390 ohm J		
R 323/324	Carbon	¼ W UZ	8.2K ohm J		
R 325/326	Carbon	¼ W UZ	22K ohm J		
R 327/328	Carbon	¼ W UZ	220K ohm J		
R 329/330	Carbon	¼ W UZ	10K ohm J		

REF. NO.	DESCRIPTION			RS PART NO.	MFD. PART NO.
R 331/332	Carbon	¼ W UZ	220K ohm J		
R 333	Carbon	¼ W UZ	470 ohm J		
R 334/335	Carbon	¼ W PZ	6.8K ohm J		
R 336/337	Carbon	¼ W PZ	10K ohm J		
R 338/339	Carbon	¼ W PZ	4.7K ohm J		
R 401/402	Carbon	¼ W UZ	6.8K ohm J		
R 405/406	Carbon	¼ W UZ	680K ohm J		
R 407/408	Carbon	¼ W UZ	100K ohm J		
R 409/410	Carbon	¼ W UZ	6.8K ohm J		
R 411/412	Carbon	¼ W UZ	1K ohm J		
R 413/414	Carbon	¼ W PZ	22K ohm J		
R 415/416	Carbon	¼ W UZ	18K ohm J		
R 417/418	Carbon	¼ W UZ	15K ohm J		
R 419/420	Carbon	¼ W UZ	2.2K ohm J		
R 421/422	Carbon	¼ W UZ	5.6K ohm J		
R 423/424	Carbon	¼ W UZ	1.2M ohm J		
R 425/426	Carbon	¼ W UZ	6.8K ohm J		
R 427/428	Carbon	¼ W UZ	560 ohm J		
R 434	Not used				
R 435/436	Carbon	¼ W UZ	100K ohm J		
R 437/438	Carbon	¼ W UZ	1K ohm J		
R 439	Carbon	¼ W UZ	47K ohm J		
R 440	Carbon	¼ W UZ	1K ohm J		
R 501	Not used				
R 502	Carbon	½ W PZ	680 ohm K		
R 503	Not used				
R 504	Metal Oxide	2W	560 ohm J		
R 505	Metal Oxide	1W	560 ohm J		
R 506	Not used				
R 507	Carbon	½ W PZ	680 ohm K		
R 508	Metal Oxide	3W	270 ohm J		
R 509	Metal Oxide	1W	22 ohm J		
R 510	Metal Oxide	1W	150 ohm J		
R 601/602	Carbon	¼ W UZ	1K ohm J		
R 603/604	Carbon	¼ W UZ	220K ohm J		
R 605/606	Carbon	¼ W UZ	33K ohm J		
R 607/608	Carbon	¼ W UZ	2.2K ohm J		
R 609/610	Carbon	¼ W UZ	15K ohm J		
R 611/612	Carbon	¼ W UZ	5.6K ohm J		
R 613/614	Carbon	¼ W UZ	1K ohm J		
R 615/616	Carbon	¼ W UZ	33K ohm J		
R 617/618	Carbon	¼ W UZ	1.8K ohm J		
R 619/620	Not used				
R 621/622	Carbon	¼ W UZ	2.7K ohm J		
R 623/624	Carbon	¼ W UZ	56 ohm J		
R 625/626	Metal Oxide	1W	100 ohm J		
R 627/628	Metal Oxide	1W	22 ohm J		
R 629/630	Metal Oxide	1W	100 ohm J		
R 631/632	Metal Oxide	1W	4.7 ohm J		

REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
R 633/634	Metal Oxide 1W 4.7 ohm J		
R 635/636	*Low-ohm Metal Oxide 2W 0.5 ohm J		
R 637/638	(Use for UL, Australian & European models only) **Fuse Resistor 1W 0.5 ohm J (Use for C.S.A models only)		
R 639/640	Metal Oxide 1W 12 ohm J		
R 641/642	Carbon ¼W UZ 470 ohm J		
R 643/644	Carbon ¼W UZ 47K ohm J		
R 645/646	Carbon ¼W UZ 1.8K ohm J		
R 701	Carbon ½W PZ 2.2M ohm K (Use for UL & C.S.A models Only)		
R 702	Not used		
R 703/704	Carbon ½W PZ 680 ohm J		
R 705/706	Not used		
R 707/708	Carbon ¼W PZ 82K ohm J		
R 709/710	Carbon ¼W PZ 10K ohm J		
S.C.R.			
D 511	Silicon Controlled Rectifier M21C, 2SF657 or CR-02AM-1		
SWITCHES			
Ps-1 — Ps-2	*Power Switch(TV-4) (Use for UL & C.S.A model only) **Power Switch(4A 250V) (Use for European & Australian models only)	S-7047	P-180044 P-180153
Ss-1 — Ss-7	Rotary Switch(3-7-5)	S-1196	P-180165
Sp-1 — Sp-6	Speaker Selector Switch (3-6-5)	S-1197	P-180166
Spp-1—Spp-4	Push Switch (Push-push)	S-7132	P-180065
TRANSISTORS			
TR 101	F.E.T 2SK 19(GR) or 2SK 41(F)		
TR 102/103	2SC 1674(L, K)		
TR 201/202	2SC 1675(L, K)		
TR 203/204	2SC 1675(L, K)		
TR 205/206	2SC 1675(L, K)		
TR 207	2SC 1675(L, K)		
TR 208/209	2SC 829(C)		
TR 210/211	2SC 945(P)		
TR 212/213	2SC 945(P)		
TR 214/215	2SC 945(P)		
TR 301/302	2SC 900(E, U), 2SC 644(R, S) or 2SC 1571(H)		
TR 303/304	2SC 900(E, U), 2SC 644(R, S) or 2SC 1571(H)		
TR 401/402	2SC 923(E, U), 2SC 828(R, S) or 2SC 1571(H)		
TR 403/404	2SC 900(E, U), 2SC 644(R, S) or 2SC 1571(H)		
TR 405	2SC 900(U)		
TR 501	2SC 1384(Q, R)		
TR 601/602	2SC 828A(S, T)		
TR 603/604	2SC 828A(S, T)		

REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
TR 605/606	2SA 720 (R, S)		
TR 607/608	2SC 1384 (R, S)		
TR 609/610	2SA 684 (R, S)		
TR 611/612	2SD 313 (D, E)		
TR 613/614	2SD 313 (D, E)		
TR 615/616	2SC 923 (U), 2SC 828 (T) or 2SC1571 (H)		
VARIABLE CAPACITORS			
VC 101/105 (with TC 101, 102, 201, 202)	Variable Capacitor FM: 3 gang. AM: 2 gang.		P-150019
CT 101	Trimmer Capacitor 1PX -10		P-160007
VARIABLE RESISTORS			
VR 201	Trimmer Resistor 100K B		
VR 202	Trimmer Resistor 20K B		
VR 203	Trimmer Resistor 20K B		
VR 204	Trimmer Resistor 1K B		
VR 205	Trimmer Resistor 5K B		
R 403/404	Potentiometer 100K B x 2, VOLUME	P-1589	P-170180
R 429/430	Potentiometer 100K A x 2, TREBLE		P-170221
R 431/432	Potentiometer 100K A x 2, BASS		P-170221
R 433	Potentiometer 100K W, BALANCE	P-1590	P-170181
VR 601/602	Trimmer Resistor 200 B	P-6300	

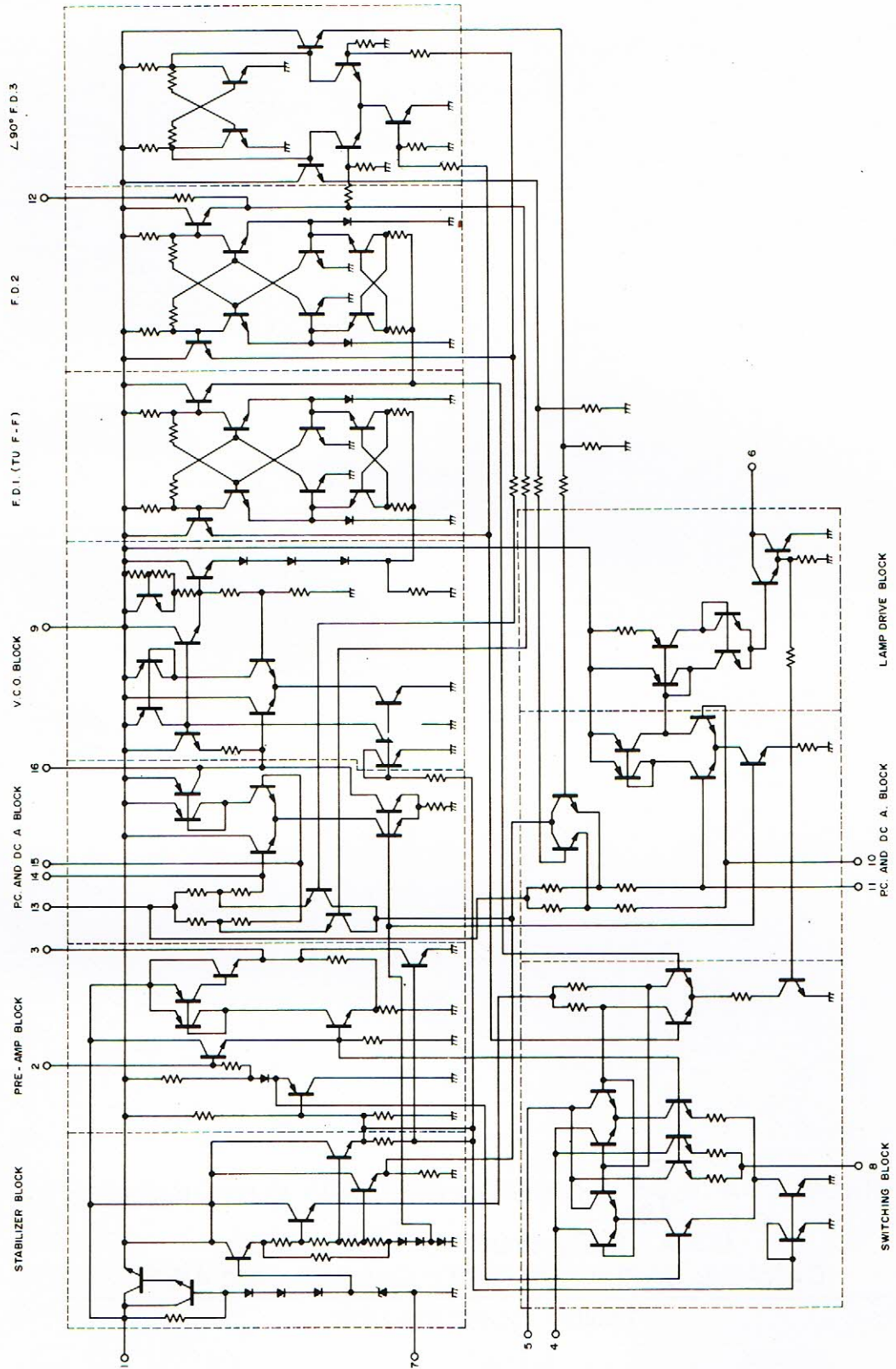
17. EXPLODED VIEW PARTS LIST

REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
1	Front Chassis Ass'y		P-400116
2	Headphone Bracket		P-410658
3	Headphone Jack	J-0444	P-190011
4	Sub-Pulley		P-610162
5	Dial Scale	G-0264	P-640125
6	Dial Holder		P-610348
7	Tuning Shaft	D-3195	P-420215
8	Lamp Cover		P-410659
9	Reflector		P-410569
10	Lamp (Fuse type)	L-0529	P-240038
11	Lamp Holder		P-260012
12	Meter Holder		P-410836
13	Meter Ass'y	M-0298	P-230043
14	Pointer Ass'y	D-1160	P-450048
15	Wire Stay (D)		P-450032
16	Rotary Switch	S-1196	P-180165

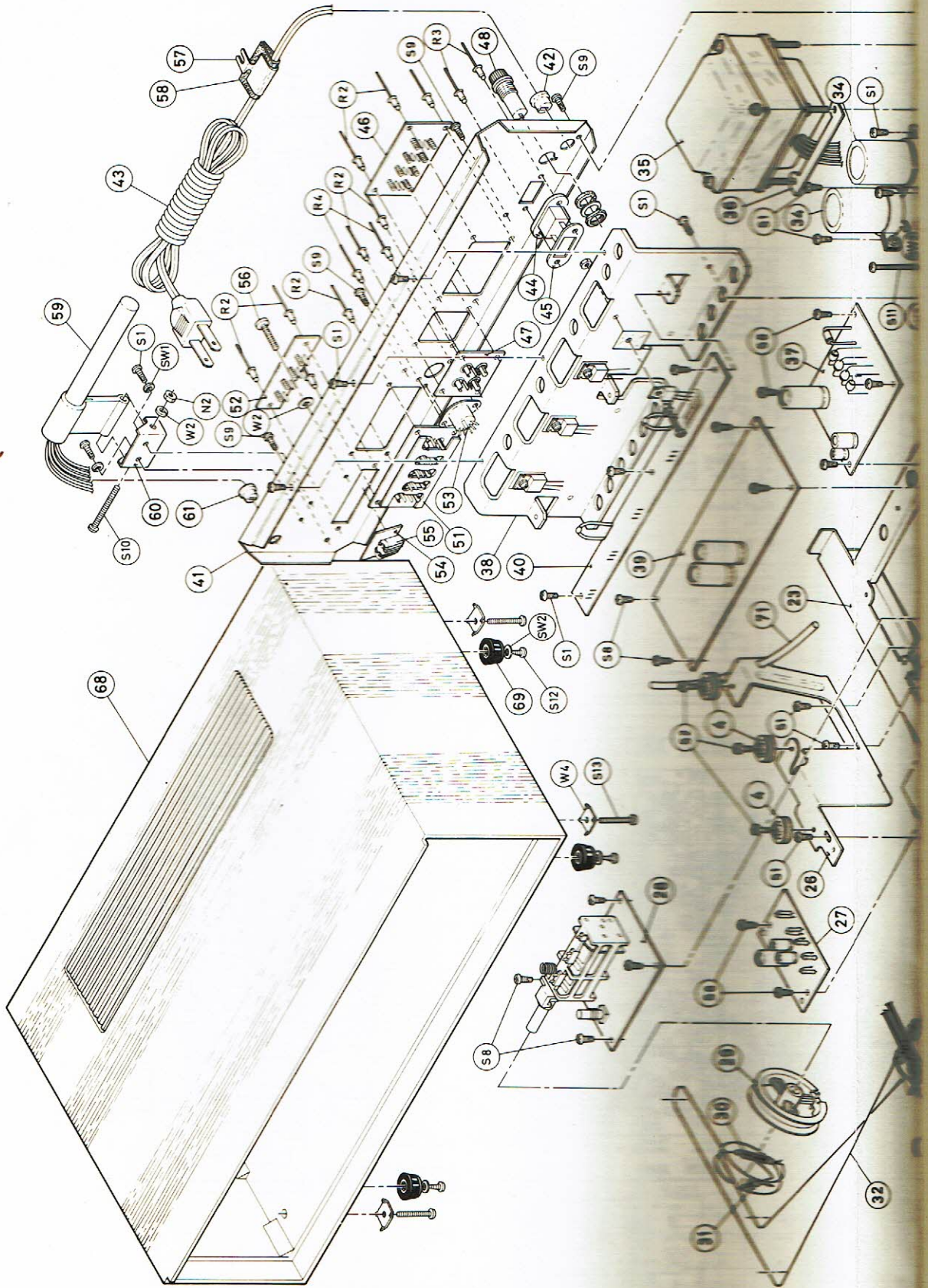
REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
17	Push Switch	S-7132	P-180065
18	Speaker Selector Switch	S-1197	P-180166
19	*Power Switch (Use for UL & C.S.A. models)	S-7047	P-180044
	**Power Switch (Use for Australian models)		P-180153
20	Light Shield Sheet (Use for C.S.A. models only)		P-820258
21	Switch Spacer		P-420200
22	*Insulator Board for Power Switch (Use for UL & C.S.A. models)		P-480112
23	Main Chassis		P-400093
24	Sub-Pulley Bracket (B2)		P-410595
25	Sub-Pulley Bracket (D)		P-410219
26	Sub-Pulley Bracket		P-410665
27	PRE AMP Assembled P.C.B.	X-7183	U-14055
28	FM FRONT END Assembled P.C.B.	C-4568	U-11016
29	Dial Pulley		P-610239
30	Dial Spring		P-440014
31	Hook		
32	Dial String		
33	AM/FM IF & MPX Assembled P.C.B.	X-7181	U-12028
34	Electrolytic Capacitor (Lug type) 4700 μ F/35V		P-220020
35	*Power Transformer (Use for UL & C.S.A. models)		P-100380
	**Power Transformer (Use for Australian models only)		P-100396
36	Power Transformer Bracket		P-410697
37	POWER SUPPLY Assembled P.C.B.	X-7186	U-17036
38	Heat Sink		P-410661
39	MAIN AMP Assembled P.C.B.	X-7185	U-16047
40	Power Transistor P.C.B.		P-200096
41	*Back Panel (Use for UL models only)		P-700169
	**Back Panel (Use for C.S.A. models only)		P-700170
	***Back Panel (Use for Australian models only)		P-700171
42	*Cord Stopper (Use for UL & C.S.A. models only)		P-480010
	**Cord Stopper (Use for Australian models only)		P-480037
43	*AC Cord (Use for UL & C.S.A. models)	W-1000	P-310001
	**AC Cord (Use for Australian models only)		P-310041
44	AC Outlet	J-6347	P-190060
45	AC Outlet Bracket		P-410236 or P-410753
46	3-Pin Screw Terminal	J-4455	P-320086
47	RCA type 4-Pin Terminal		P-190041
48	Fuse Holder		P-260007
49	*Fuse 250V, 2.5A (Use for UL models only)		P-250043
50	*Lug Terminal (Use for UL models only)		
51	Jack Assembled P.C.B.	J-0701	U-23044
52	Antenna Terminal		P-320085
53	5-Pin DIN Connector	J-0747	P-190036
54	Balun Coil P.C.B.		P-200244
55	Balun Coil	CA-2942	P-110012
56	Ground Terminal	J-4454	P-420225
57	*Linecord Antenna Bracket (Use for UL & C.S.A. models)		P-410029


REF. NO.	DESCRIPTION	RS PART NO.	MFD. PART NO.
58	*Linecord Antenna Insulator (Use for UL & C.S.A. models only)		P-480005
59	AM Bar Antenna		P-110057
60	Antenna Holder		P-410856
61	Antenna Cord Stopper		P-480010
62	Filter Coil for Q-VOX		P-370008
63	Front Panel Ass'y	Z-2798	P-700167
64	Knob Scratch Shield Sheet		P-480068
65	Tuning Knob (166)	K-2191	P-650166
66	Control Knob (190)	K-2194	P-650190
67	Push Knob (191)	K-2195	P-650191
68	Cabinet Ass'y	Z-2504	P-620045
69	Foot		P-610361
70	TONE CONTROL Assembled P.C.B.	X-4965	U-14045
71	Tube Holder		
S 1	Tapping Screw 3 x 8 PT-2		
S 2	Shaft for Sub-Pulley 3 x 9 x 3		
S 3	Tapping Screw 3 x 8 PT-2 (Black Painted)		
S 4	Screw with Lock Washer Ass'y 3 x 6 P		
S 5	Screw with Lock Washer Ass'y 3 x 4 P		
S 6	Tapping Screw with Tooth Washer 3 x 8 PT-2		
S 7	Tapping Screw 3 x 16 PT-2		
S 8	Bind Tapping Screw 3 x 8 BT-2		
S 9	Bind Tapping Screw 3 x 8 BT-2 (Black Painted)		
S10	Screw 4 x 40 P		
S11	Screw 3 x 25 P		
S12	Wood Screw 3.1 x 13		
S13	Screw 4 x 20 P		
SW1	Spring Washer 4 SW		
SW2	Spring Washer 3 SW		
W 1	Fiber Washer 3 W		
W 2	Washer 4 W		
W 3	Fiber Washer 0.8 x 10 ϕ x 3.5 ϕ		
W 4	Square Washer		
N 1	Nut 4 N		
N 2	Nut 3 N		
R 1	Nylon Rivet 3 ϕ x 5.5		
R 2	Rivet YB-429 3.2 ϕ x 7.37		
R 3	Rivet YB-340 2.4 ϕ x 10		
R 4	Rivet YB-423 3.2 ϕ x 5.84		

18. IC INTERNAL DIAGRAM (LA-3350)



20. EXPLODED VIEW



RADIO SHACK  A DIVISION OF TANDY CORPORATION
U.S.A.: FORT WORTH, TEXAS 76102
CANADA: BARRIE, ONTARIO, CANADA L4M 4W5

TANDY CORPORATION

AUSTRALIA	BELGIUM	U. K.
280-316 VICTORIA ROAD RYDALMERE, N.S.W. 2116	PARC INDUSTRIEL DE NANINNE 5140 NANINNE	BILSTON ROAD WEDNESBURY, STAFFS WS10 7JN