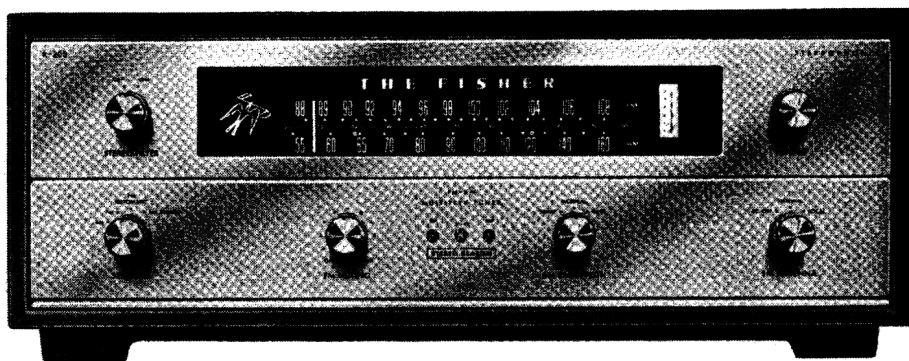


THE FISHER R-200 SERVICE MANUAL



MODEL R-200

FISHER RADIO CORPORATION • NEW YORK



CHASSIS SERIAL NUMBERS
FROM 10001 TO 19999 INCLUSIVE

THE FISHER R-200



ALIGNMENT INSTRUCTIONS

AM

| STEPS | CHASSIS | | | SIGNAL GENERATOR | | | MEASURING INSTRUMENT | ALIGNMENT | |
|-------|--------------|----------|--|--|---------|--------------------|---|-------------------------|--|
| | AM BANDWIDTH | SELECTOR | STATION SELECTOR | COUPLING | FREQ. | MOD. | TYPE CONNECTION | ADJUST | INDICATION |
| 1 | SHARP | AM | Point of no signal and no interference | Audio Gen. with 1V output connected thru 100K resistor to junction of R53 and R54 | 10 KC | None | AC VTVM to Left Main output | — | Minimum output between 9.5 and 10.5 KC |
| 2 | SHARP | AM | Point of no signal and no interference | AM RF Gen. connected thru .01-uf cap. in series with hot lead to V9, Pin 7 | 455 KC | 30% AM at 400 cps. | DC VTVM to the junction of R53 and R54 | Z6, Z4, Z2 top & bottom | Maximum negative voltage |
| 3 | NORMAL | AM | Point of no signal and no interference | AM Sweep Gen. connected thru .01-uf cap. in series with hot lead to V9, Pin 7 | 455 KC | 30 KC sweep | Scope to Left Main output | Z6 bottom | Adjust slightly for symmetrical curve |
| 4 | SHARP | AM | 600 KC | AM Gen. connected thru 220-uuf cap. in series with hot lead to AM antenna terminal | 600 KC | 30% AM at 400 cps. | Scope to Left Main output. DC VTVM to the junction of R53 and R54 | L8, L3, L1 | Check for sine waveform and maximum negative voltage |
| 5 | SHARP | AM | 1400 KC | AM Gen. connected thru 220-uuf cap. in series with hot lead to AM antenna terminal | 1400 KC | 30% AM at 400 cps. | Scope to Left Main output. DC VTVM to the junction of R53 and R54 | C23J, C23G, C23D | Check for sine waveform and maximum negative voltage |

6 Repeat steps 4 and 5 for proper dial calibration and maximum output.

NOTE: For steps 1 to 3 remove Tube V1.

FM

| | | | | | | | | | |
|---|----------------------|----|--|---|---------|-----------------------------------|--|-----------------------------|---|
| 1 | FM Muting switch OFF | FM | Point of no signal and no interference | FM Generator connected to Pin 1 of V5 | 10.7 MC | None | Connect VTVM to TSP 3 | Z7, Z8 top, Z9 bottom & top | Voltage between —15 and —30 volts. See Note 3. |
| 2 | FM Muting switch OFF | FM | Point of no signal and no interference | FM Generator connected to Pin 1 of V5 | 10.7 MC | None | Hot lead of DC VTVM to TSP 4. Ground lead of VTVM to junction of two series-connected 47K resistors wired between TSP 3 and gnd. | Z9 top | Zero reading on zero center scale |
| 3 | FM Muting switch OFF | FM | Point of no signal and no interference | FM Gen. connected to ungrounded tube shield of V2 | 10.7 MC | None | DC VTVM to TSP 2 | Z5, Z3, Z1 top & bottom | With DC voltage between —0.5 and —1 volt, adjust for maximum |
| 4 | FM Muting switch OFF | FM | 90 MC | FM Gen. connected thru two 120-ohm carbon resistors in series with lead to FM antenna terminals | 90 MC | 30% FM (22.5 KC Dev.) at 400 cps. | DC VTVM to TSP 2 and scope to Left Main output | L9, L6, L5, L2 | Check for sine waveform and adjust for maximum negative voltage |
| 5 | FM Muting switch OFF | FM | 106 MC | FM Gen. connected thru two 120-ohm carbon resistors in series with lead to FM antenna terminals | 106 MC | 30% FM (22.5 KC Dev.) at 400 cps. | DC VTVM to TSP 2 and scope to Left Main output | C32, C26, C20 | Check for sine waveform and adjust for maximum negative voltage |

6 Repeat steps 4 and 5 for proper dial calibration and maximum output.

Read These Instructions With Extreme Care Before Attempting Alignment.

CHASSIS: Turn the station selectors completely counter-clockwise, without forcing. Dial pointer should be at zero mark on logging scale. If not, reset the dial pointer. Disconnect the external antennas and the AM antenna link. Swing AM Ferrite Loop antenna rearward to operating position. When using an oscilloscope for alignment, set the output level controls for no overload, as shown by the proper waveform shape. Set FM Antenna switch to NORMAL.

SIGNAL GENERATORS: The signal generator equipment must be able to supply the following: FM RF 22.5 KC deviation at 400 cps; AM RF modulated 30% at 400 cps; AM IF with 30 KC sweep for AM bandwidth adjustment; audio oscillator accurately calibrated for 1 and 10 KC audio output for testing the 10 KC AM whistle filter.

MEASURING INSTRUMENTS: DC VTVM, AC VTVM, and scope for alignment.

ALIGNMENT: Allow the chassis and test instruments to warm up for at least fifteen minutes. Adjust the line voltage for 117 volts AC, 50-60 cycles. Use fully insulated tools; a small screwdriver for all trimming capacitors; a K-tran tool for Z1, Z2, Z3, Z4, Z5 and Z6; a hex tool for Z7, Z8, Z9, L2, L3, L5, L6, L8, L9 and L14.

NOTES:

- 1 — For AM alignment short out C91.
- 2 — For calibrating both the AM and FM-RF, use as low an output voltage as possible from your signal generator.
- 3 — Decrease FM signal generator output while adjusting FM-IF transformers so that DC VTVM shows noted voltage.
- 4 — The center frequency should be kept constant for FM-IF, limiter and ratio detector alignment.
- 5 — If adjustment of muting oscillator is necessary, adjust it for 3 MC with a Grid-dip Meter.

ALIGNMENT INSTRUCTIONS • MULTIPLEX SECTION

| STEPS | GENERATOR | | | INDICATOR | ALIGNMENT | | |
|-------|---|--|-----------------------------------|--|---|---|-------|
| | CONNECTION | AUDIO FREQUENCY | RF MODULATION | TYPE & CONNECTION | ADJUST | INDICATION | NOTES |
| 1 | Audio oscillator connected to lug 1 | 80 KC—1 volt | None | AC VTVM to junction of C210 and R228 | L100 (Use hex alignment tool) | Minimum voltage | |
| 2 | Multiplex generator audio output to lug 1 (See Note 1) | 19 KC (± 5 cps) pilot tone, 100 mv | None | DC VTVM to T.S.P. 101 | Z100 top and bottom (Use hex alignment tool) | Maximum voltage | 1 |
| 3 | Same as Step 2 | 19 KC pilot tone, 50 mv | None | Scope horiz. input to 19 KC output of gen.; vert. input to junction of C216 and R209. External sweep | Z101 (Use K-tran alignment tool) | Stable 2:1 Lissajous pattern. Disregard phase of pattern | 1 |
| 4 | Same as Step 2 | 19 KC | None | Same as Step 3 | Vary generator 19 KC output from 50 to 200 mv | Lissajous pattern should remain stationary over the entire 150 mv range | 1, 2 |
| 5 | Same as Step 2 | 1000 cps on left (A) channel only, 1 volt rms (2.8 P-P) | None | AC VTVM and scope vert. input to channel A output lug. Internal sweep. DC VTVM to T.S.P. 101 | Z100 top (Use hex tool) | Maximum indication on AC VTVM. Clean 1000 cps waveform on scope | 1, 3 |
| 6 | Same as Step 2 | 1000 cps on right (B) channel only, 1 volt rms (2.8 P-P) | None | Same as Step 5 | MPX separation R215 | Minimum reading on AC VTVM should be at least 33 db below reading obtained in Step 5 | 1 |
| 7 | Same as Step 2 | Same as Step 6 | None | Move scope input and AC VTVM to channel B output lug | ----- | Note and record voltage reading on AC VTVM | 1 |
| 8 | Same as Step 2 | 1000 cps on left (A) channel only, 1 volt rms (2.8 P-P) | None | Same as Step 7 | ----- | AC VTVM reading should be at least 33 db below reading observed in Step 7 | 1 |
| 9 | Same as Step 2 | 8000 cps on right (B) channel only, 1 volt rms (2.8 P-P) | None | Same as Step 7 | ----- | AC VTVM reading should be the same as observed in Step 7 | 1 |
| 10 | Same as Step 2 | 8000 cps on left (A) channel only, 1 volt rms (2.8 P-P) | None | Same as Step 7 | ----- | AC VTVM reading should be at least 18 db below reading observed in Step 9 | 1 |
| 11 | Repeat Steps 9 and 10 with scope and AC VTVM connected to channel A output lug, but start with 8000 cps applied to left channel for first reading, then switch to right channel for second reading. | | | | | | |
| 12 | Multiplex generator RF output to 300-ohm antenna terminals | 1000 cps on left (A) channel only | 100% (75 KC Dev.) No pre-emphasis | Move scope input and AC VTVM to channel A output lug | ----- | Note and record voltage reading on AC VTVM | 4 |
| 13 | Same as Step 12 | 1000 cps on right (B) channel only | Same as Step 12 | Same as Step 12 | R215 | Minimum reading on AC VTVM should be at least 33 db below reading observed in Step 12 | 4 |
| 14 | Same as Step 12 | 8000 cps on left (A) channel only | Same as Step 12 | Same as Step 12 | ----- | AC VTVM reading should be 10 db below reading observed in Step 12 | 4 |
| 15 | Same as Step 12 | 8000 cps on right (B) channel only | Same as Step 12 | Same as Step 12 | ----- | AC VTVM reading should be 28 db below reading observed in Step 12 | 4 |

NOTE: The above procedure is based on the use of the FISHER Model 300 Multiplex Generator.

1 — In steps 2 through 11, the audio output of the Multiplex Generator should be connected to lug 1 of the multiplex sub-chassis through a 12,000 ohm, ½-watt, carbon resistor, and a 180 uuf capacitor should be connected between lug 1 and ground. The wiring from the MPX TEST jack on the main chassis to lug 1 must be disconnected during Steps 2 through 11.

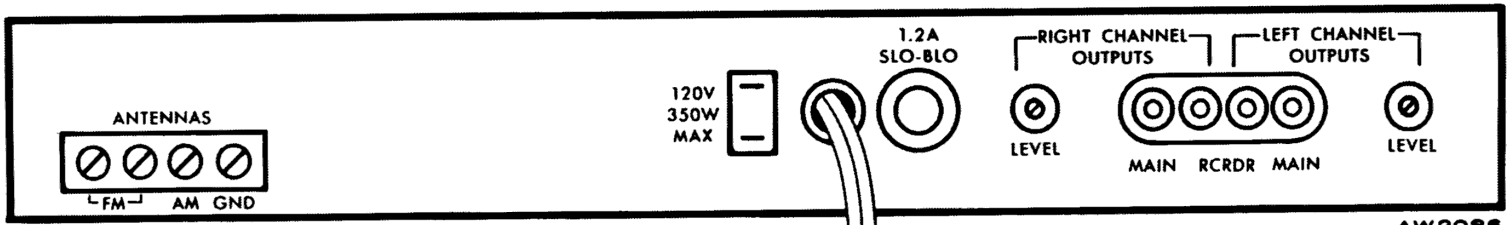
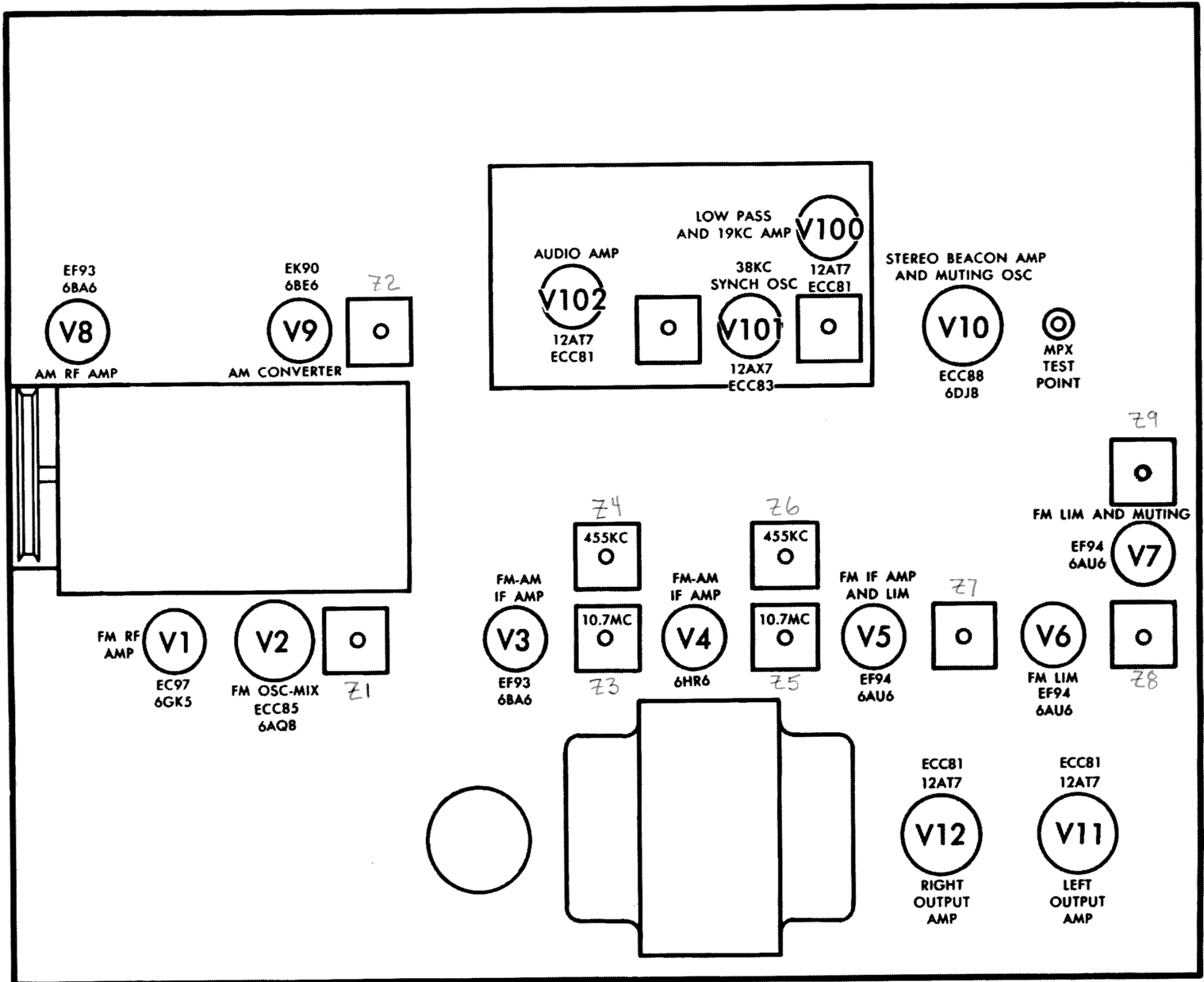
2 — The vertical amplitude of the Lissajous pattern will increase slightly

as the generator output is increased. This is a normal occurrence.

3 — If DC VTVM reading falls below -9 volts when maximum reading is obtained on the AC VTVM, readjust bottom of Z100, then repeat Step 5. Repeat this procedure until maximum AC VTVM reading is obtained with DC VTVM reading greater than -9 volts.

4 — Tune the FISHER to the RF output frequency of the Multiplex Generator.

TUBE LAYOUT



PARTS DESCRIPTION LIST

CAPACITORS

10% tolerance for all fixed capacitors, unless otherwise noted or marked GMV (guaranteed minimum value). All capacitors not marked uf are pf (uuf).

| Symbol | Description | Part No. | Symbol | Description | Part No. |
|----------|---------------------------------|-------------|----------|--------------------------------|-----------|
| C1 | Ceramic, 4, NPO, 1000V | C50070-36 | C64 | Ceramic, 5000, +80 -20%, 500V | C50089-6 |
| C2, 3 | Mylar, .1uf, 250V | C50197-54 | C65 | Ceramic, 100, N1500, 1000V | C50070-6 |
| C4 | Ceramic, 10, NPO, 1000V | C50070-11 | C66, 67, | | |
| C5 | Ceramic, 47, 5%, N750, 1000V | C50070-29 | 68 | Ceramic, 5000, +80 -20%, 500V | C50089-6 |
| C6 | Ceramic, .02uf, +80 -20%, 500V | C50089-4 | C69 | Ceramic, 2700, 1000V | C50072-17 |
| C7, 8 | Ceramic, 5000, 20%, 500V | C50089-1 | C70 | Ceramic, 7, NPO, 1000V | C50070-20 |
| C9, 10 | Ceramic, 390, 1000V | C50072-6 | C71 | Ceramic, 5000, +80 -20%, 500V | C50089-6 |
| C11 | Ceramic, 1000, GMV, 500V | C50089-2 | C72 | Ceramic, Feedthru, 1000, GMV | C592-187 |
| C12 | Ceramic, Feedthru, 1000, GMV | C592-187 | C73 | Ceramic, 5000, +80 -20%, 500V | C50089-6 |
| C13 | Ceramic, .02uf, +80 -20%, 500V | C50089-4 | C74 | Ceramic, .02uf, GMV, 1000V | C50071-6 |
| C14 | Ceramic, Feedthru, 1000, GMV | C592-187 | C75 | Ceramic, 12, NPO, 1000V | C50070-12 |
| C15 | Ceramic, 7±.5, NPO, 500V | CC20CJ070D5 | C76 | Ceramic, .05uf, +80 -20%, 100V | C50073-2 |
| C16 | Electrolytic, 20uf, 250V | C746-145 | C77 | Electrolytic, 2uf, 70V | C721-142 |
| C17, 18 | Ceramic, 39, N1500, 1000V | C50070-17 | C78 | Ceramic, 2700, 1000 | C50072-17 |
| C19 | Ceramic, 1000, GMV, 500V | C50089-2 | C79 | Ceramic, 5000, +80 -20%, 500V | C50089-6 |
| C20 | Ceramic, Trimmer | C662-123 | C80 | Ceramic, .02uf, GMV, 1000V | C50071-6 |
| C21 | Ceramic, 100, GMV, N1500, 1000V | C50070-5 | C81 | Electrolytic, .5uf, 350V | C50283-7 |
| C22 | Ceramic, 56, 5%, N1500, 1000V | C50070-38 | C82, 83, | | |
| C23 | Variable, FM-AM | C965-115 | 84 | Ceramic, 330, 1000V | C50072-1 |
| C24 | Ceramic, 56, 5%, N1500, 1000V | C50070-38 | C85 | Polystyrene, 2500, 5%, 125V | CP50394-9 |
| C25 | Ceramic, .68, 500V | C50077-6N | C86 | Molded, .01uf, 20%, 600V | C2747 |
| C26 | Ceramic, Trimmer | C662-123 | C87 | Electrolytic, 8uf, 50V | C629-138 |
| C27 | Ceramic, 8±.5, NPO, 500V | CC20CJ080D5 | C88 | Mylar, .1uf, 125V | C50435-7 |
| C28 | Ceramic, 68, N750, 500V | CC20UJ680K5 | C89 | Ceramic, .05uf, +80 -20%, 100V | C50073-2 |
| C29 | Ceramic, .02uf, +80 -20%, 500V | C50089-4 | C90 | Ceramic, Feedthru, 1000, GMV | C592-187 |
| C30, 31 | Ceramic, 100, N1500, 1000V | C50070-6 | C91 | Ceramic, .05uf, +80 -20%, 100V | C50073-2 |
| C32 | Ceramic, Trimmer | C662-123 | C92 | Polystyrene, 470, 2.5%, 125V | CP50394-6 |
| C33 | Ceramic, 24, 5%, N150, 1000V | C50070-8 | C93 | Ceramic, 2700, 1000V | C50072-17 |
| C34 | Ceramic, 100, 5%, N1500, 1000V | C50070-19 | C94, 95 | Mylar, .1uf, 125V | C50435-7 |
| C35 | Polystyrene, 470, 2.5%, 125V | CP50394-6 | | | |
| C36 | Ceramic, 8, NPO, 1000V | C50070-14 | | | |
| C37 | Ceramic, 1000, 1000V | C50072-3 | | | |
| C38 | Ceramic, 8±.5, N330, 500V | CC20SJ080D5 | | | |
| C39, 40 | Ceramic, Feedthru, 1000 GMV | C592-187 | | | |
| C41 | Polystyrene, 470, 2.5%, 125V | CP50394-6 | | | |
| C42 | Ceramic, 5000, +80 -20%, 500V | C50089-6 | | | |
| C43 | Ceramic, 2700, 1000V | C50072-17 | | | |
| C44 | Ceramic, 5000, +80 -20%, 500V | C50089-6 | | | |
| C45 | Polystyrene, 470, 2.5%, 125V | CP50394-6 | | | |
| C46 | Ceramic, 560, 1000V | C50072-14 | | | |
| C47 | Ceramic, .02uf, +80 -20% | C50089-4 | | | |
| C48 | Ceramic, 10, 5%, NPO, 1000V | C50070-39 | | | |
| C49 | Ceramic, 5000, +80 -20%, 500V | C50089-6 | | | |
| C50 | Ceramic, 1, 20%, 1000V | C50070-1 | | | |
| C51 | Ceramic, 100, N1500, 1000V | C50070-6 | | | |
| C52 | Polystyrene, 1000, 5%, 125V | CP50394-7 | | | |
| C53 | Ceramic, .05uf, +80 -20%, 100V | C50073-2 | | | |
| C54 | Ceramic, 24, 5%, N150, 1000V | C50070-8 | | | |
| C55 | Ceramic, 5000, +80 -20%, 500V | C50089-6 | | | |
| C56 | Ceramic, 2700, 1000V | C50072-17 | | | |
| C57 | Ceramic, .02uf, GMV, 1000V | C50071-6 | | | |
| C58, 59, | | | | | |
| 60 | Ceramic, 5000, +80 -20%, 500V | C50089-6 | | | |
| C61 | Ceramic, .05uf, +80 -20%, 100V | C50073-2 | | | |
| C62 | Ceramic, 100, N1500, 1000V | C50070-6 | | | |
| C63 | Electrolytic, 4 section: | C670-125B | | | |

RESISTORS AND POTENTIOMETERS

In ohms, 5% tolerance, 1/8 watt, unless otherwise noted. K=Kilohms, M=Megohms.

| Symbol | Description | Part No. |
|---------|--|------------|
| R1 | Composition, 3.3, 10%, 1/2 W | RC20BF3R3K |
| R2 | Composition, 270, 10%, 1/2 W | RC20BF271K |
| R3 | Composition, 2.7K, 10%, 1/2 W | RC20BF272K |
| R4 | Dep. Carbon, 1.5M, 1/3 W | R33DC155J |
| R5, 6 | Dep. Carbon, 100K, 1/3 W | R33DC104J |
| R7 | Composition, 100K, 10%, 1/2 W | RC20BF104K |
| R8 | Composition, 270, 10%, 1/2 W | RC20BF271K |
| R9 | Dep. Carbon, 1.8M, 1/3 W | R33DC185J |
| R10, 11 | Composition, 22M, 10%, 1/2 W | RC20BF226K |
| R12 | Composition, 100, 10%, 1/2 W | RC20BF101K |
| R13 | Dep. Carbon, 47 | R12DC470J |
| R14 | Dep. Carbon, 1.8M, 1/3 W | R33DC185J |
| R15, 16 | Composition, 150K, 10%, 1/2 W | RC20BF154K |
| R17 | Composition, 47K, 10%, 1/2 W | RC20BF473K |
| R18 | Dep. Carbon, 100K | R12DC104J |
| R19 | Dep. Carbon, 100K, 1/3 W | R33DC104J |
| R20 | Composition, 680, 10%, 1/2 W | RC20BF681K |
| R21 | Dep. Carbon, 100K, 1/3 W | R33DC104J |
| R22 | Composition, 680, 10%, 1/2 W | RC20BF681K |
| R23, 24 | Dep. Carbon, 100K, 1/3 W | R33DC104J |
| R25 | Dep. Carbon, 330K | R12DC334J |
| R26 | Composition, 2.2K, 10%, 1/2 W | RC20BF222K |
| R27, 28 | Dep. Carbon, 470K, 1/3 W | R33DC474J |
| R29 | Potentiometer, 500K, Left Output Level | R50103-6 |

PARTS DESCRIPTION LIST

| <p>R30 Dep. Carbon, 560K R31 Dep. Carbon, 22K R32 Dep. Carbon, 470K R33 Dep. Carbon, 27 R34 Dep. Carbon, 3.9M, 1/3 W R35 Composition, 18K, 10%, 1W R36 Dep. Carbon, 2.7K R37 Composition, 1K, 10%, 1/2 W R38 Dep. Carbon, 47K R39 Composition, 1K, 10%, 1/2 W R40 Composition, 3.3K, 10%, 1W R41 Composition, 150, 10%, 1/2 W R42 Composition, 27K, 10%, 1/2 W R43 Dep. Carbon, 47K R44 Composition, 1K, 10%, 1/2 W R45 Composition, 180, 10%, 1/2 W R46 Dep. Carbon, 820K R47 Dep. Carbon, 47K R48 Composition, 27K, 10%, 1/2 W R49 Potentiometer, 500K, Right Output Level R50 Composition, 1K, 10%, 1/2 W R51 Composition, 82K, 10%, 1/2 W R52 Potentiometer, 100K, Muting R53 Dep. Carbon, 47K R54 Dep. Carbon, 27K R55 Dep. Carbon, 1.8K R56 Dep. Carbon, 68K R57 Composition, 68K, 10%, 1/2 W R58 Dep. Carbon, 1M R59 Dep. Carbon, 15K R60 Composition, 1K, 10%, 1/2 W R61 Dep. Carbon, 1M R62 Dep. Carbon, 100K R63 Dep. Carbon, 220K R64 Composition, 2.2K, 10%, 1/2 W R65 Dep. Carbon, 22K R66 Glass, 270, 10%, 3W R67 Dep. Carbon, 120 R68 Composition, 470K, 10%, 1/2 W R69 Glass, 270, 10%, 3W R70 Composition, 56K, 10% R71 Dep. Carbon, 1M R72 Composition, 1K, 10%, 1/2 W R73 Composition, 18K, 10%, 1/2 W R74 Composition, 150, 10%, 1/2 W R75 Dep. Carbon, 1K R76 Dep. Carbon, 82K R77, 78 Composition, 220, 10%, 1/2 W R79 Dep. Carbon, 47K R80 Dep. Carbon, 270K R81 Dep. Carbon, 820K R82 Dep. Carbon, 56K R83 Composition, 47K, 10%, 1/2 W R84 Dep. Carbon, 820K R85 Composition, 1K, 10%, 1/2 W R86, 87 Dep. Carbon, 820K R88 Dep. Carbon, 150K R89 Dep. Carbon, 100K R90 Dep. Carbon, 470K R91 Composition, 1.5K, 5%, 1/2 W R92 Composition, 1K, 5%, 1/2 W R93 Composition, 270, 5%, 1/2 W R94 Dep. Carbon, 47K</p> | <p>R12DC564J R12DC223J R12DC474J R12DC270J R33DC395J RC30BF183K R12DC272J RC20BF102K R12DC473J RC20BF102K RC30BF332K RC20BF151K RC20BF273K R12DC473J RC20BF102K RC20BF181K R12DC824J R12DC473J RC20BF273K R50703-6 RC20BF102K RC20BF823K R50160-106 R12DC473J R12DC273J R12DC182J R12DC683J RC20BF683K R12DC105J R12DC153J RC20BF102K R12DC105J R12DC104J R12DC224J RC20BF222K R12DC223J RPG3W271K R12DC121J RC20BF474K RPG3W271K RC20BF563K R12DC105J RC20BF102K RC20BF183K RC20BF151K R12DC102J R12DC823J RC20BF221K R12DC473J R12DC274J R12DC824J R12DC563J RC20BF473K R12DC824J RC20BF102K R12DC824J R12DC154J R12DC104J R12DC474J RC20BF152J RC20BF102J RC20BF271J R12DC473J</p> | <p>R95 Composition, 820K, 10%, 1/2 W R96 Dep. Carbon, 15K R97 Dep. Carbon, 470K R98 Composition, 330 R99 Dep. Carbon, 1.8M, 1/3 W R100 Dep. Carbon, 1K</p> <p style="text-align: center;">COILS, CHOKES AND TRANSFORMERS</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Symbol</th> <th style="text-align: left;">Description</th> <th style="text-align: left;">Part No.</th> </tr> </thead> <tbody> <tr><td>L1</td><td>AM Loop Antenna</td><td>L990-132</td></tr> <tr><td>L2</td><td>Coil, FM Antenna</td><td>L965-119</td></tr> <tr><td>L3</td><td>Transformer, AM RF</td><td>L50210-35</td></tr> <tr><td>L4</td><td>Choke, 1.5 Microhenry</td><td>L50066-4</td></tr> <tr><td>L5</td><td>Coil, FM RF</td><td>L965-116</td></tr> <tr><td>L6</td><td>Coil, FM Mixer</td><td>L965-117</td></tr> <tr><td>L7</td><td>Choke, 1 Microhenry</td><td>L50066-2</td></tr> <tr><td>L8</td><td>Coil, AM OSC.</td><td>L50210-28</td></tr> <tr><td>L9</td><td>Coil, FM OSC Assembly</td><td>AS965-120</td></tr> <tr><td>L10, 11,</td><td></td><td></td></tr> <tr><td>12</td><td>Choke, 1 Microhenry</td><td>L50066-2</td></tr> <tr><td>L13</td><td>Coil, 10KC Filter</td><td>L644-120</td></tr> <tr><td>L14</td><td>Coil, Muting OSC</td><td>L50210-22</td></tr> <tr><td>L15</td><td>Choke, 3.3 Microhenries</td><td>L50066-8</td></tr> <tr><td>L16</td><td>Choke, 1 Microhenry</td><td>L50066-2</td></tr> <tr><td>L17, 18, 19,</td><td></td><td></td></tr> <tr><td>20, 21, 22,</td><td></td><td></td></tr> <tr><td>23, 24</td><td>Choke, Ferrite Bead</td><td>L592-189</td></tr> <tr><td>T1</td><td>Transformer, Power</td><td>T1016-115</td></tr> <tr><td>Z1</td><td>Transformer, FM I.F.</td><td>ZZ50210-42</td></tr> <tr><td>Z2</td><td>Transformer, AM I.F.</td><td>ZZ50210-38</td></tr> <tr><td>Z3</td><td>Transformer, FM I.F.</td><td>ZZ50210-39</td></tr> <tr><td>Z4</td><td>Transformer, AM I.F.</td><td>ZZ50210-38</td></tr> <tr><td>Z5</td><td>Transformer, FM I.F.</td><td>ZZ50210-2</td></tr> <tr><td>Z6</td><td>Transformer, AM I.F.</td><td>ZZ50210-40</td></tr> <tr><td>Z7, 8</td><td>Coil, FM Limiter</td><td>ZZ50210-6</td></tr> <tr><td>Z9</td><td>Transformer, FM Ratio Detector</td><td>ZZ50210-9</td></tr> </tbody> </table> <p style="text-align: center;">MISCELLANEOUS</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Symbol</th> <th style="text-align: left;">Description</th> <th style="text-align: left;">Part No.</th> </tr> </thead> <tbody> <tr><td>CR1, 2, 3</td><td>Diode, Type 1112</td><td>V-1112</td></tr> <tr><td>CR4</td><td>Selenium Rectifier Bridge</td><td>SR50253-4</td></tr> <tr><td>CR5, 6, 7, 8</td><td>Diode, Type 1112</td><td>V-1112</td></tr> <tr><td>F1</td><td>Fuse, 1.2A; Slo-Blo</td><td>F1016-119</td></tr> <tr><td>11, 2, 3</td><td>Bulb #47</td><td>I50009-1</td></tr> <tr><td>14</td><td>Bulb #470F</td><td>I50009-4</td></tr> <tr><td>15, 6</td><td>Bulb, Dial</td><td>I50082-6</td></tr> <tr><td>M1</td><td>Meter</td><td>M766-137</td></tr> <tr><td>RL1</td><td>Relay</td><td>K50314</td></tr> <tr><td>PC1</td><td>Printed Circuit</td><td>PC50434</td></tr> <tr><td>S1</td><td>Switch, FM Antenna</td><td>S1016-117</td></tr> <tr><td>S2</td><td>Switch, AM Bandwidth</td><td>S1016-118</td></tr> <tr><td>S3</td><td>Switch, Selector</td><td>S1016-116</td></tr> <tr><td>S4</td><td>Switch, Muting</td><td>Part of R52</td></tr> <tr><td>S5</td><td>Switch, Filter</td><td>S1016-113</td></tr> <tr><td>—</td><td>Dress Panel</td><td>AS1016-108</td></tr> <tr><td>—</td><td>FM Dipole</td><td>AS50227-1</td></tr> <tr><td>—</td><td>Tube Shield, 7-Pin</td><td>E3330</td></tr> <tr><td>—</td><td>Tube Shield, 9-Pin</td><td>E3287</td></tr> <tr><td>—</td><td>Knob</td><td>E50325-1</td></tr> <tr><td>—</td><td>Knob, Tuning</td><td>E50325-2</td></tr> <tr><td>—</td><td>Jewel, Red</td><td>I50162-1</td></tr> <tr><td>—</td><td>Jewel, Yellow</td><td>I50162-2</td></tr> <tr><td>—</td><td>Jewel, Green</td><td>I50162-4</td></tr> </tbody> </table> | Symbol | Description | Part No. | L1 | AM Loop Antenna | L990-132 | L2 | Coil, FM Antenna | L965-119 | L3 | Transformer, AM RF | L50210-35 | L4 | Choke, 1.5 Microhenry | L50066-4 | L5 | Coil, FM RF | L965-116 | L6 | Coil, FM Mixer | L965-117 | L7 | Choke, 1 Microhenry | L50066-2 | L8 | Coil, AM OSC. | L50210-28 | L9 | Coil, FM OSC Assembly | AS965-120 | L10, 11, | | | 12 | Choke, 1 Microhenry | L50066-2 | L13 | Coil, 10KC Filter | L644-120 | L14 | Coil, Muting OSC | L50210-22 | L15 | Choke, 3.3 Microhenries | L50066-8 | L16 | Choke, 1 Microhenry | L50066-2 | L17, 18, 19, | | | 20, 21, 22, | | | 23, 24 | Choke, Ferrite Bead | L592-189 | T1 | Transformer, Power | T1016-115 | Z1 | Transformer, FM I.F. | ZZ50210-42 | Z2 | Transformer, AM I.F. | ZZ50210-38 | Z3 | Transformer, FM I.F. | ZZ50210-39 | Z4 | Transformer, AM I.F. | ZZ50210-38 | Z5 | Transformer, FM I.F. | ZZ50210-2 | Z6 | Transformer, AM I.F. | ZZ50210-40 | Z7, 8 | Coil, FM Limiter | ZZ50210-6 | Z9 | Transformer, FM Ratio Detector | ZZ50210-9 | Symbol | Description | Part No. | CR1, 2, 3 | Diode, Type 1112 | V-1112 | CR4 | Selenium Rectifier Bridge | SR50253-4 | CR5, 6, 7, 8 | Diode, Type 1112 | V-1112 | F1 | Fuse, 1.2A; Slo-Blo | F1016-119 | 11, 2, 3 | Bulb #47 | I50009-1 | 14 | Bulb #470F | I50009-4 | 15, 6 | Bulb, Dial | I50082-6 | M1 | Meter | M766-137 | RL1 | Relay | K50314 | PC1 | Printed Circuit | PC50434 | S1 | Switch, FM Antenna | S1016-117 | S2 | Switch, AM Bandwidth | S1016-118 | S3 | Switch, Selector | S1016-116 | S4 | Switch, Muting | Part of R52 | S5 | Switch, Filter | S1016-113 | — | Dress Panel | AS1016-108 | — | FM Dipole | AS50227-1 | — | Tube Shield, 7-Pin | E3330 | — | Tube Shield, 9-Pin | E3287 | — | Knob | E50325-1 | — | Knob, Tuning | E50325-2 | — | Jewel, Red | I50162-1 | — | Jewel, Yellow | I50162-2 | — | Jewel, Green | I50162-4 |
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| Symbol | Description | Part No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L1 | AM Loop Antenna | L990-132 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L2 | Coil, FM Antenna | L965-119 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L3 | Transformer, AM RF | L50210-35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L4 | Choke, 1.5 Microhenry | L50066-4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L5 | Coil, FM RF | L965-116 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L6 | Coil, FM Mixer | L965-117 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L7 | Choke, 1 Microhenry | L50066-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L8 | Coil, AM OSC. | L50210-28 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L9 | Coil, FM OSC Assembly | AS965-120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L10, 11, | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Choke, 1 Microhenry | L50066-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L13 | Coil, 10KC Filter | L644-120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L14 | Coil, Muting OSC | L50210-22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L15 | Choke, 3.3 Microhenries | L50066-8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L16 | Choke, 1 Microhenry | L50066-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| L17, 18, 19, | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20, 21, 22, | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23, 24 | Choke, Ferrite Bead | L592-189 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| T1 | Transformer, Power | T1016-115 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z1 | Transformer, FM I.F. | ZZ50210-42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z2 | Transformer, AM I.F. | ZZ50210-38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z3 | Transformer, FM I.F. | ZZ50210-39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z4 | Transformer, AM I.F. | ZZ50210-38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z5 | Transformer, FM I.F. | ZZ50210-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z6 | Transformer, AM I.F. | ZZ50210-40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z7, 8 | Coil, FM Limiter | ZZ50210-6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Z9 | Transformer, FM Ratio Detector | ZZ50210-9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Symbol | Description | Part No. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CR1, 2, 3 | Diode, Type 1112 | V-1112 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CR4 | Selenium Rectifier Bridge | SR50253-4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CR5, 6, 7, 8 | Diode, Type 1112 | V-1112 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F1 | Fuse, 1.2A; Slo-Blo | F1016-119 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11, 2, 3 | Bulb #47 | I50009-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Bulb #470F | I50009-4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15, 6 | Bulb, Dial | I50082-6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| M1 | Meter | M766-137 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RL1 | Relay | K50314 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC1 | Printed Circuit | PC50434 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S1 | Switch, FM Antenna | S1016-117 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S2 | Switch, AM Bandwidth | S1016-118 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S3 | Switch, Selector | S1016-116 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S4 | Switch, Muting | Part of R52 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| S5 | Switch, Filter | S1016-113 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | Dress Panel | AS1016-108 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | FM Dipole | AS50227-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | Tube Shield, 7-Pin | E3330 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | Tube Shield, 9-Pin | E3287 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | Knob | E50325-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | Knob, Tuning | E50325-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | Jewel, Red | I50162-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | Jewel, Yellow | I50162-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| — | Jewel, Green | I50162-4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

PARTS DESCRIPTION LIST • MULTIPLEX SECTION

CAPACITORS

10 % tolerance for all fixed capacitors, unless otherwise noted or marked GMV (guaranteed minimum value). All capacitors not marked uf are pF (uuf).

| Symbol | Description | Part No. |
|-----------|-----------------------------------|-----------|
| C200 | Ceramic, .01uf, +80 — 20 %, 500V | C50089-7 |
| C201 | Ceramic, 680, 1000V | C50072-2 |
| C203 | Ceramic, 220, 1000V | C50183-3 |
| C204 | Polystyrene, 470, 5 %, 500V | C50394-1 |
| C205 | Ceramic, 82, N1500, 1000V | C50070-7 |
| C206 | Ceramic, .001uf, GMV, 500V | C50089-2 |
| C207 | Ceramic, .005uf, +80 — 20 %, 500V | C50089-6 |
| C208, 209 | Mica, 4700, 5 %, 500V | C50332-5 |
| C210 | Electrolytic, 1uf, 350V | C50283-3 |
| C211, 212 | Ceramic, .001uf, GMV, 500V | C50089-2 |
| C213 | Ceramic, .05uf, +80 — 20 %, 100V | C50073-2 |
| C214 | Mylar, .0047uf, 400V | C50197-25 |
| C215 | Mica, 3900, 5 %, 500V | C50332-6 |
| C216, 217 | Ceramic, .001uf, GMV, 500V | C50089-2 |
| C218 | Ceramic, .02uf, 20 %, 500V | C50089-5 |
| C219 | Ceramic, 330, 1000V | C50072-1 |
| C220 | Ceramic, .02uf, 20 %, 500V | C50089-5 |
| C221, 222 | Mylar, .047uf, 10 %, 250V | C50197-52 |
| C223, 224 | Ceramic, .001uf, 1000V | C50072-3 |
| C225, 226 | Ceramic, 2200, 1000V | C50072-5 |

RESISTORS AND POTENTIOMETERS

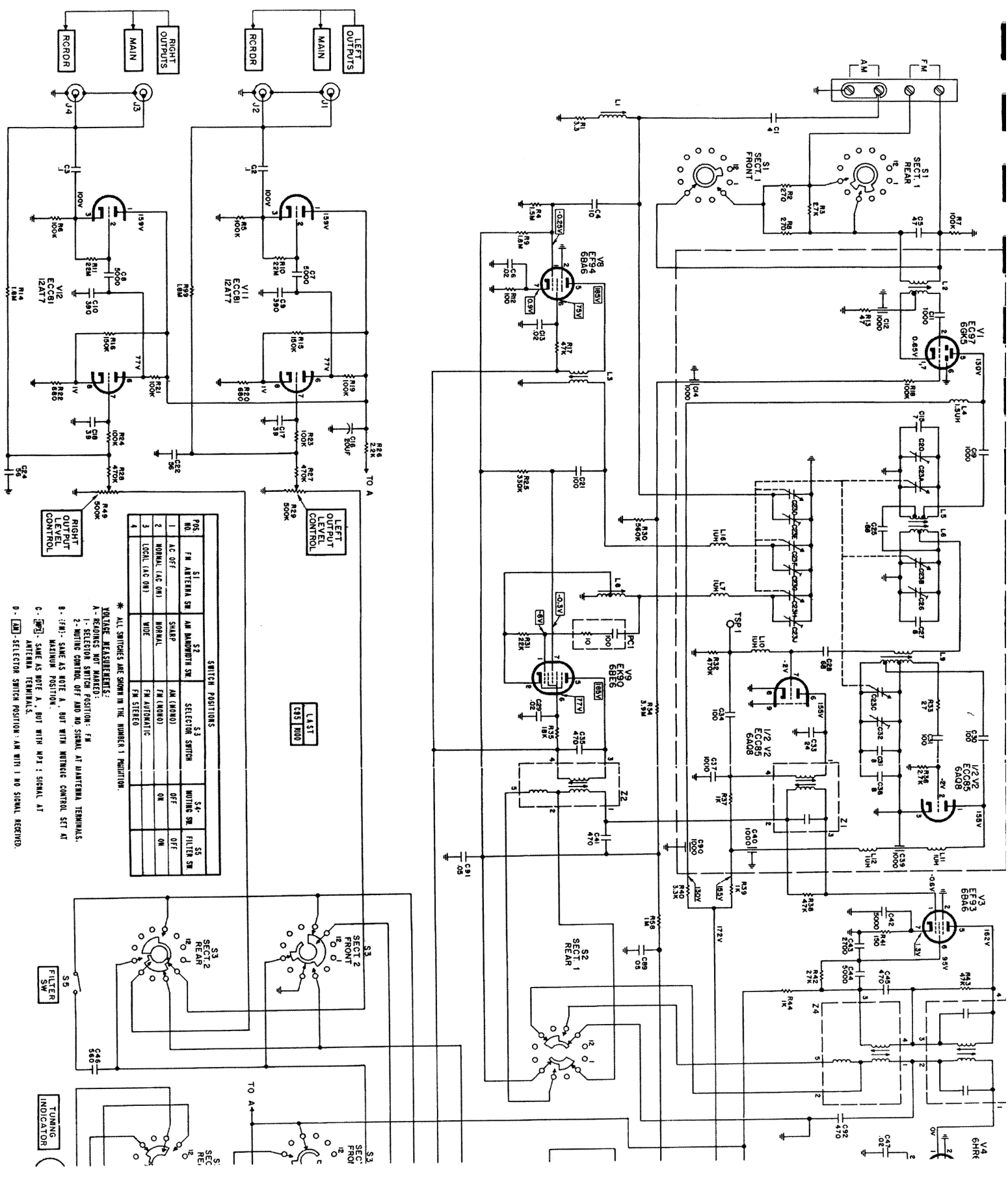
In ohms, 10 % tolerance, 1/2 watt, unless otherwise noted. K=Kilohm, M=Megohm.

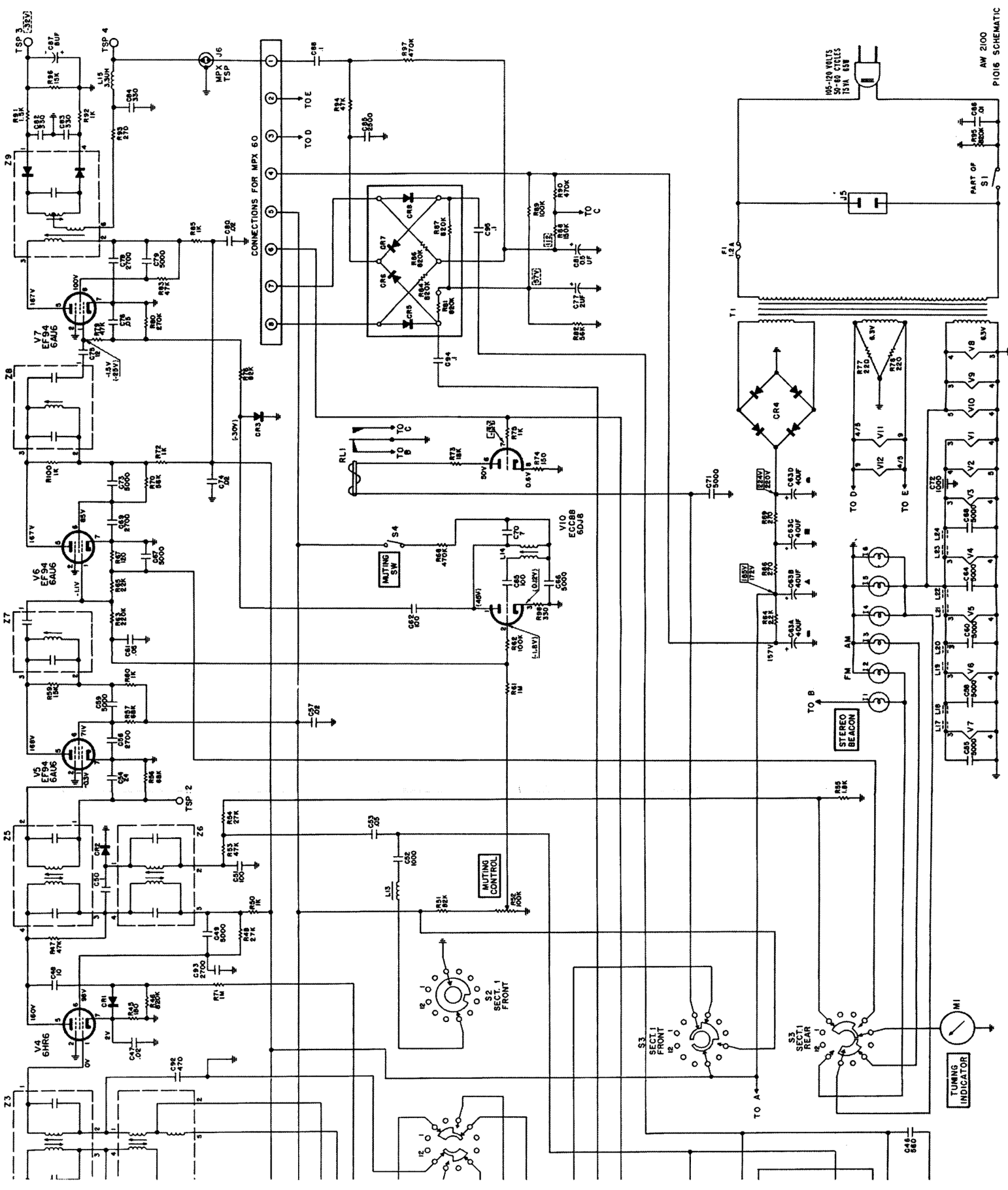
| Symbol | Description | Part No. |
|------------|------------------------------------|------------|
| R200 | Composition, 22M | RC20BF226K |
| R201 | Composition, 4.7K, 5 % | RC20BF472J |
| R202 | Composition, 15K, 5 % | RC20BF153J |
| R203 | Composition, 10M | RC20BF106K |
| R204 | Dep. Carbon, 1M, 5 %, 1/8 W | R12DC105J |
| R205 | Dep. Carbon, 330K, 5 %, 1/3 W | R33DC334J |
| R206 | Dep. Carbon, 1M, 5 %, 1/8 W | R12DC105J |
| R207 | Dep. Carbon, 1.5M, 5 %, 1/3 W | R33DC155J |
| R208 | Dep. Carbon, 22K, 5 %, 1/8 W | R12DC223J |
| R209, 210, | | |
| 211, 212 | Dep. Carbon, 33K, 5 %, 1/8 W | R12DC333J |
| R213, 214 | Dep. Carbon, 100K, 5 %, 1/8 W | R12DC104J |
| R215 | Potentiometer, 50K, MPX-separation | R50150-4 |
| R216 | Composition, 10M | RC20BF106K |
| R217, 218 | Dep. Carbon, 18K, 5 %, 1/3 W | R33DC183J |
| R219, 220 | Dep. Carbon, 15K, 5 %, 1/3 W | R33DC153J |
| R221 | Composition, 10M | RC20BF106K |
| R222, 223, | | |
| 224, 225 | Dep. Carbon, 22K, 5 %, 1/8 W | R12DC223J |
| R226, 227, | | |
| 228, 229, | | |
| 230 | Dep. Carbon, 1M, 5 %, 1/8 W | R12DC105J |

MISCELLANEOUS

| Symbol | Description | Part No. |
|-------------|----------------------|------------|
| CR100, 101, | | |
| 102, 103 | Diode, Type 1112 | V-1112 |
| L100 | Coil, Low Pass | L50210-30 |
| L101 | Coil, 5.25 M.H., 5 % | L50334-1 |
| L102, 103 | Coil, 20 M.H., 5 % | L50334-2 |
| Z100 | Transformer, 19Kc | ZZ50210-34 |
| Z101 | Coil, 38Kc | ZZ50210-33 |

SCHEMATIC DIAGRAM





PI016 SCHEMATIC

SCHEMATIC DIAGRAM • MULTIPLEX SECTION

