

TR-1300

 Set using ISO screws



SPECIFICATIONS

- Circuit System:** 9 transistors (including 1 FET) and 4 diodes superheterodyne, 3 transistors for AUX. circuit
- Frequency Coverage:** MW ; 530 - 1,605 kHz (566 - 187 m)
SW-1; 1.6 - 3.5 MHz (187.5 - 86 m)
SW-2; 3.5 - 7.0 MHz (86 - 43 m)
SW-3; 7.0 - 14.0 MHz (43 - 21 m)
SW-4; 14.0 - 26.1 MHz (21 - 11 m)
- Intermediate Frequency:** 455 kHz
- Antenna System:** MW; built-in ferrite-bar antenna
SW; built-in telescopic antenna
- Power Requirement:** Four "D" size flashlight batteries, 6V in total or house current by 100V, 117V, 220V and 240V.
- Power Output:** 1.2W (harmonic distortion, less than 10%)
1.7W (maximum)
- Current Drain:** 25 mA at zero signal, 500 mA at 1.2W output
- Maximum Sensitivity:** MW ; 14 μ V/m
(at 50 mW output) SW-1; 1.1 μ V
SW-2; 1.0 μ V
SW-3; 1.0 μ V
SW-4; 1.2 μ V
- Selectivity at 1,400 kHz:** 45 dB (SHARP position of SELECT. switch)
35 dB (BROAD position of SELECT. switch)
- Speaker:** 4" x 6" (10 cm x 15 cm), Impedance 8 Ω
- Dimensions:** 10 $\frac{5}{8}$ " (W) x 8 $\frac{3}{4}$ " (H) x 3 $\frac{15}{16}$ " (D)
(270 mm x 222 mm x 100 mm)
- Weight:** 8 lb $\frac{1}{2}$ oz (3.65 kg)

SONY[®]
SERVICE MANUAL

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SECTION 1

BLOCK DIAGRAM, EXTERNAL AND INTERIOR VIEWS

1-1. BLOCK DIAGRAM

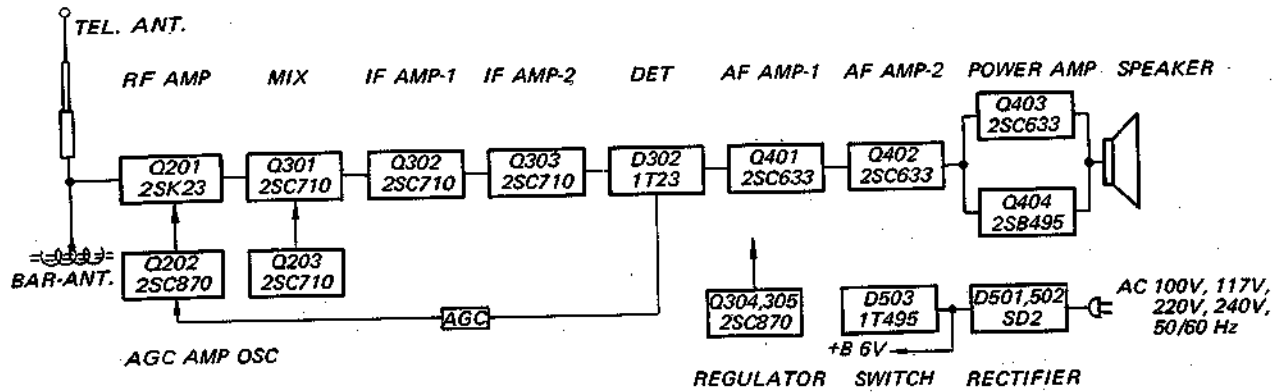


Fig. 1-1

1-2. EXTERNAL VIEW

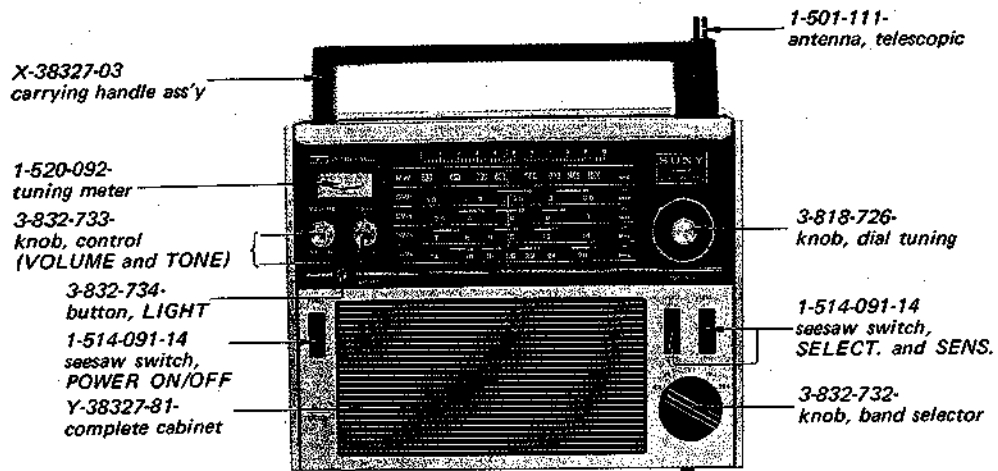


Fig. 1-2

1-3. INTERIOR VIEW

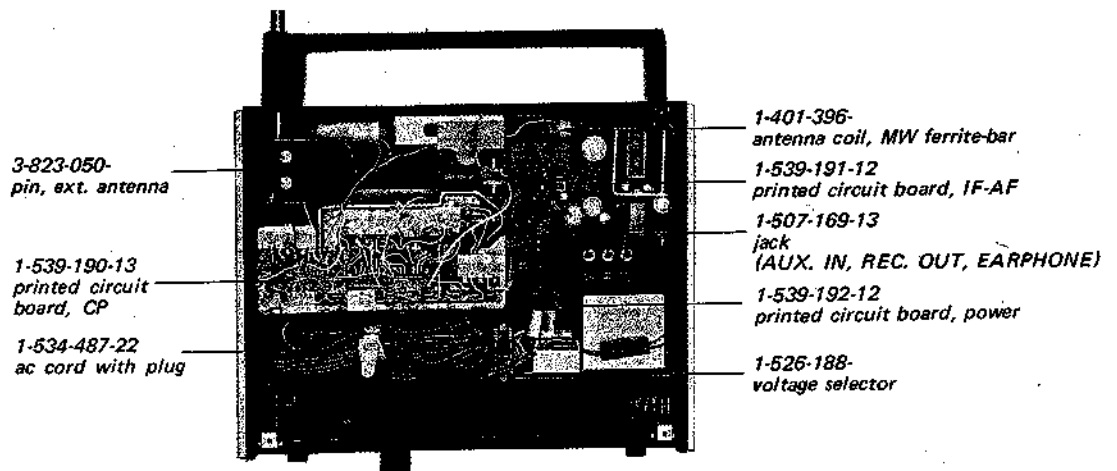


Fig. 1-3

SECTION 2 DISASSEMBLY AND REPLACEMENT

2-1. REAR CABINET REMOVAL

1. Place the set rear-side-up on a padded work surface.
2. Remove the three screws labeled **(A)** in Fig. 2-1.
3. Lift up the bottom side of the rear cabinet.

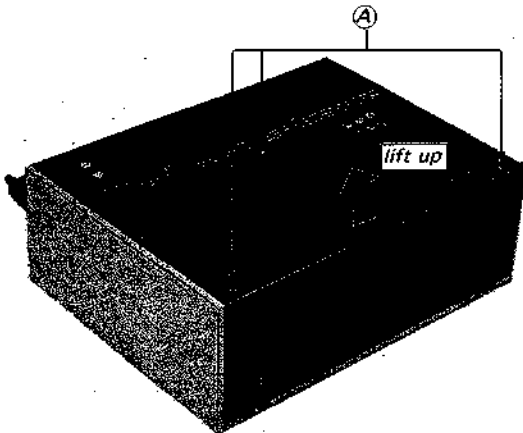


Fig. 2-1 Rear cabinet removal

2-2. CHASSIS REMOVAL

1. Pull out the four knobs, VOLUME, TONE, TUNING and BAND SELECTOR. (See Fig. 2-2.)
2. Remove a screw labeled **(B)** in Fig. 2-2.
3. Pull out the telescopic antenna.
4. Remove the rear cabinet.

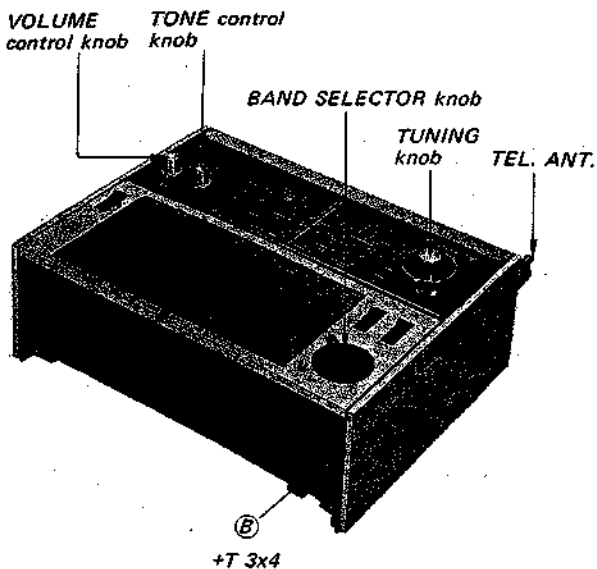


Fig. 2-2 Chassis removal, steps 1 and 2

5. Unsolder the four leads, GRY and RED, in Fig. 2-3.
6. Remove the two screws labeled **(C)** in Fig. 2-3.
7. Lift up the chassis as shown in Fig. 2-4.

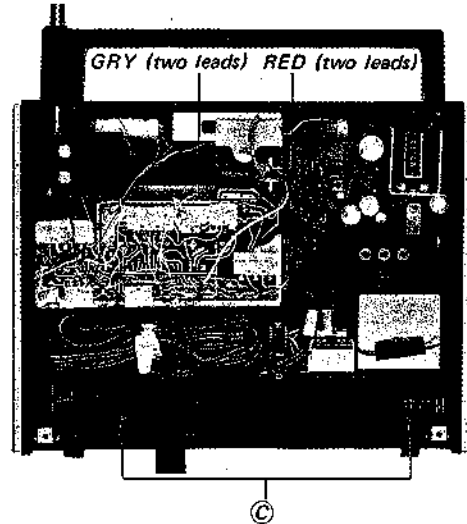


Fig. 2-3 Chassis removal, steps 5 and 6

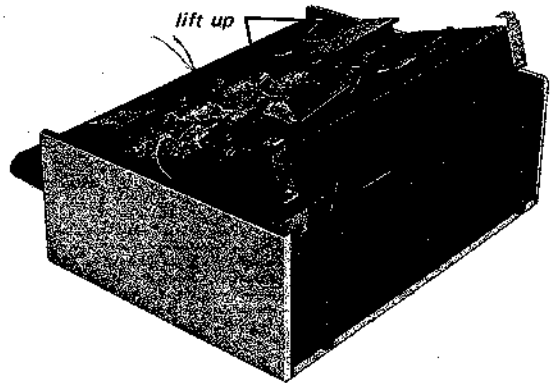


Fig. 2-4 Chassis removal, step 7

2-3. CP CIRCUIT BOARD REMOVAL

1. Remove the rear cabinet.
2. Remove the chassis.
3. Remove the three screws labeled **(D)** in Fig. 2-5.
4. Unsolder the seven leads and two braided wires in Fig. 2-6.
5. Lift up the CP circuit board as shown by the arrow in Fig. 2-5.

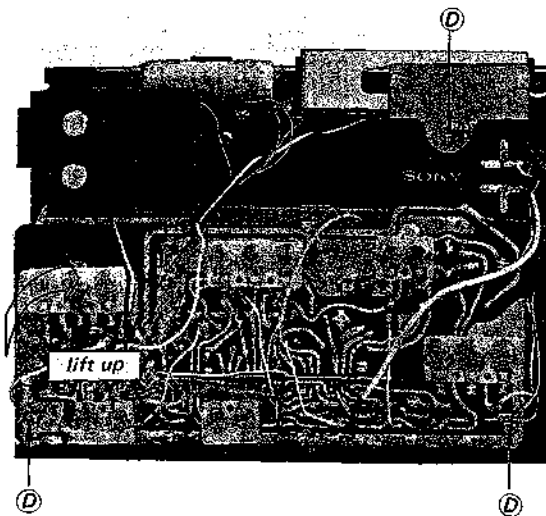


Fig. 2-5 CP circuit board removal, steps 3 and 5

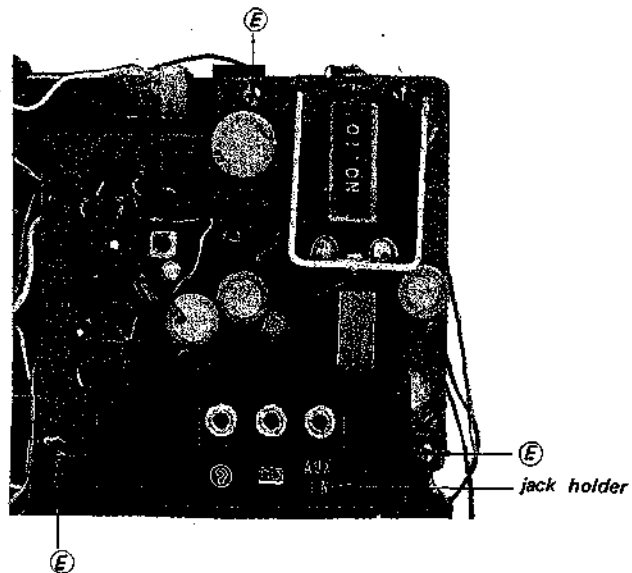


Fig. 2-7 IF-AF circuit board removal, steps 2 and 3

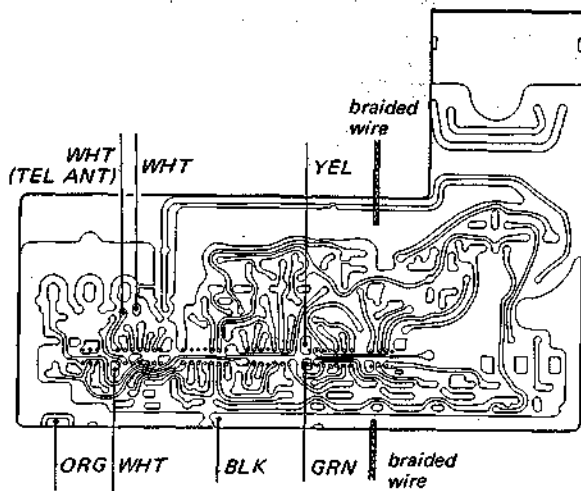


Fig. 2-6 CP circuit board removal, step 4

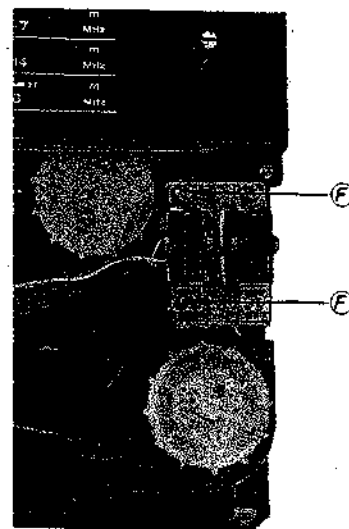


Fig. 2-8 IF-AF circuit board removal, step 4

2-4. IF-AF CIRCUIT BOARD REMOVAL

1. Remove the rear cabinet and the chassis.
2. Pull off the jack holder carefully shown in Fig. 2-7.
3. Remove the three screws labeled (E) in Fig. 2-7.
4. Remove the two screws labeled (F) in Fig. 2-8.
5. Unsolder the two leads which are connected to the tuning meter shown in Fig. 2-9.
6. Pull out the IF-AF circuit board carefully.

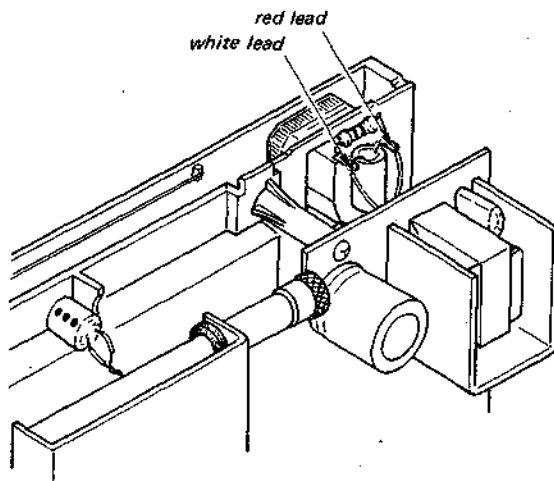


Fig. 2-9 IF-AF circuit board removal, step 5

2-5. POWER CIRCUIT BOARD REMOVAL

1. Remove the rear cabinet and the chassis.
2. Unsolder a black lead and a red lead as shown in Fig. 2-10.
3. Remove the two screws labeled **(G)** in Fig. 2-10.
4. Place the set rear-side-up on a padded work surface.
5. Remove the two screws labeled **(H)** in Fig. 2-11.
6. Pull off the transformer bracket carefully. (See Fig. 2-12).
7. Straighten the bent portion of two tabs with pliers as shown in Fig. 2-12.
8. Pull off the power circuit board.

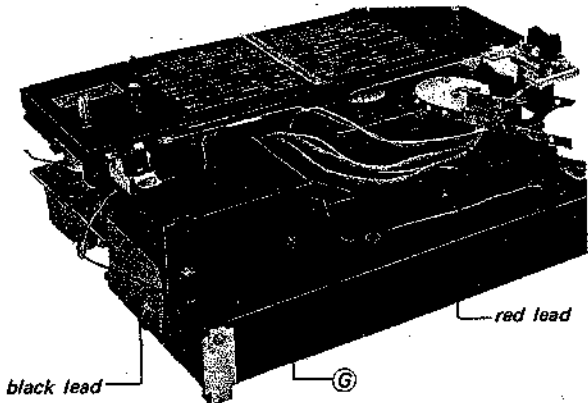


Fig. 2-10 Power circuit board removal, steps 2 and 3

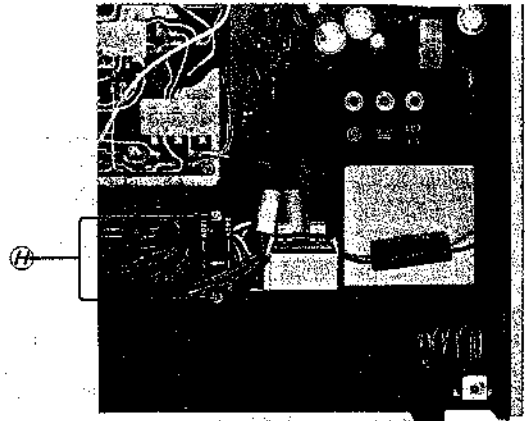


Fig. 2-11 Power circuit board removal, step 5

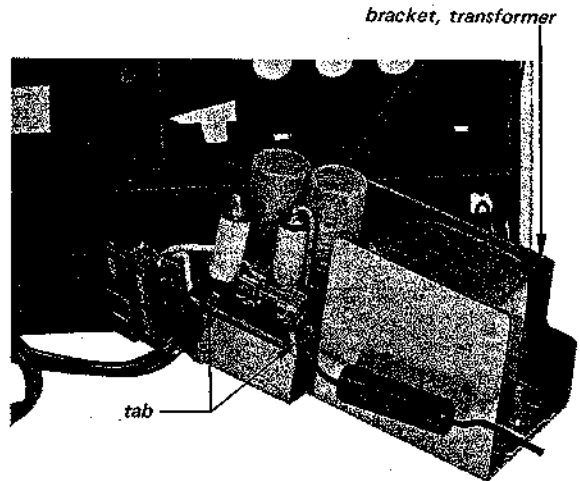
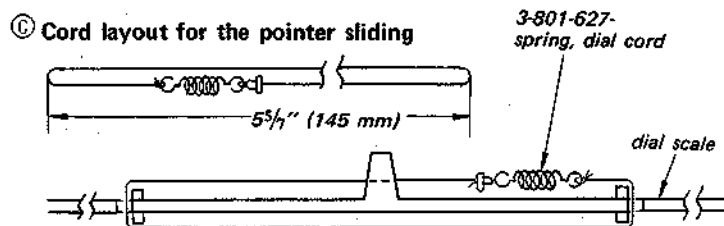
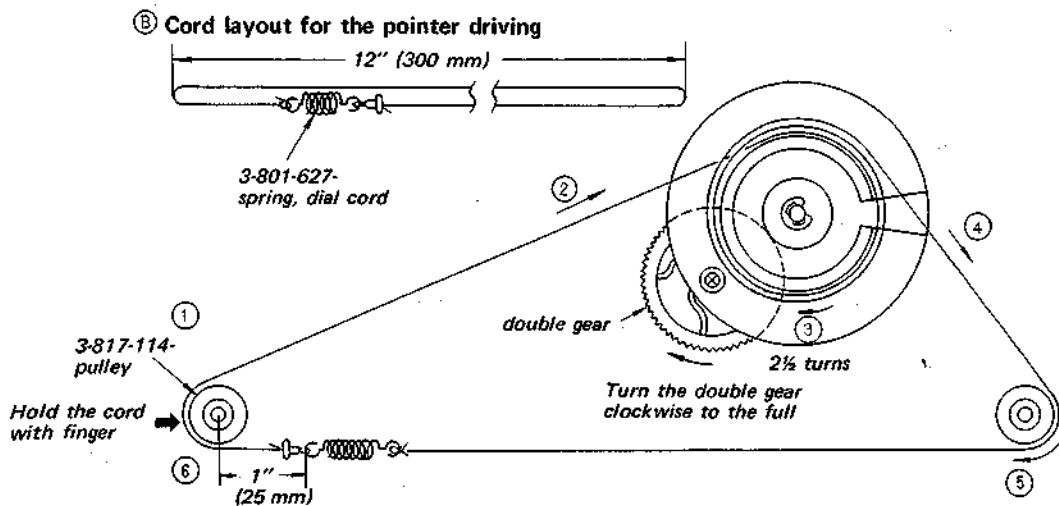
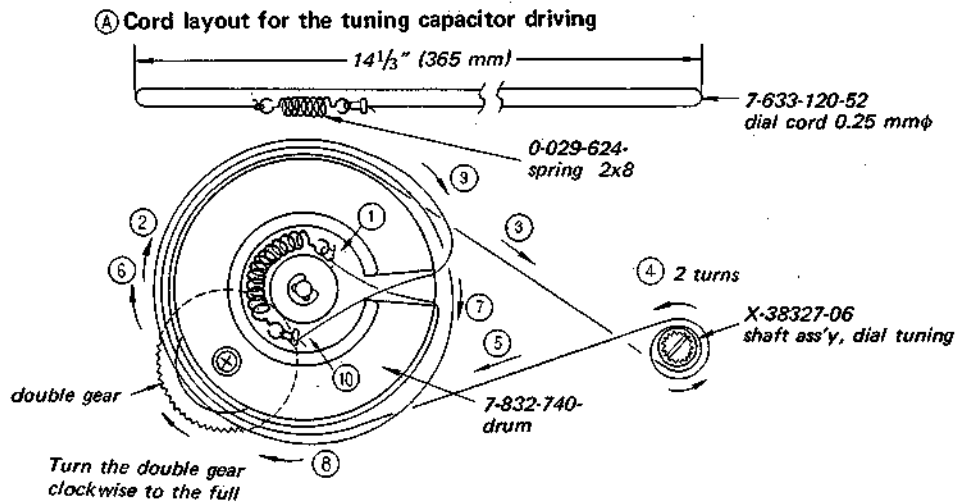


Fig. 2-12 Power circuit board removal, steps 6 and 7

2.6. DIAL CORD STRINGING



SECTION 3 CIRCUIT ADJUSTMENTS

3-1. IF ADJUSTMENTS

| RF Signal Generator Coupling | RF Signal Generator Frequency | VTVM Connection | Adjust | Remarks |
|------------------------------|-------------------------------|---|---------|--|
| loop antenna | 455 kHz (1 kHz 30% a-m) | to earphone jack with 8Ω load resistor in parallel. | IFT-301 | 1. Turn the tuning capacitor to minimum capacitance position.(band selector: MW) 2. Adjust for maximum meter reading. |

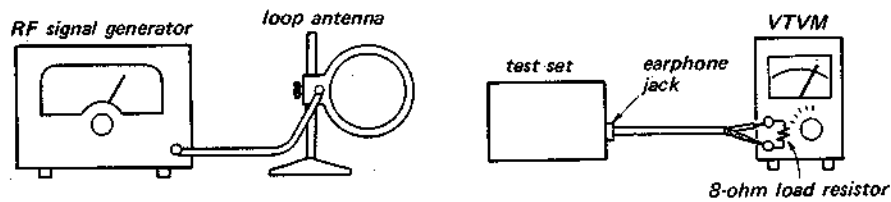


Fig. 3-1 IF adjustment, MW frequency coverage and tracking adjustment setup

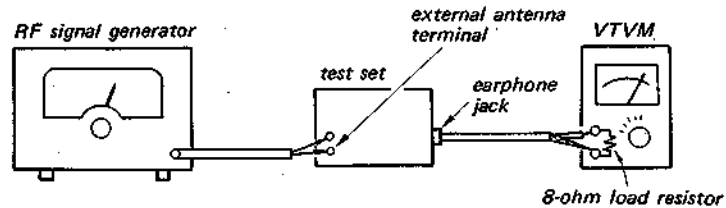


Fig. 3-2 SW frequency coverage and tracking adjustment setup

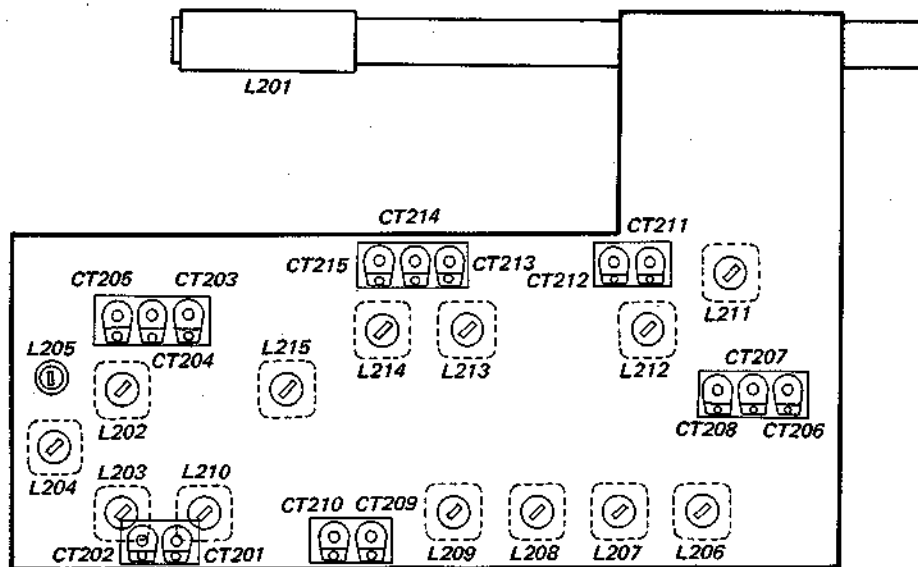


Fig. 3-3 Adjustment parts location (viewed from conductor side of CP circuit board)

3-2. FREQUENCY COVERAGE AND TRACKING ADJUSTMENTS

Receiver Control Settings:

VOLUME control : MAX
 TONE control : HIGH
 SELECT. switch : SHARP
 SENS. switch : DX

Rf Signal Generator Modulation:

1,000 Hz 30% amplitude-modulation

VTVM Connection:

to earphone jack with 8Ω load resistor in parallel

| Adjusting Item | Rf Signal Generator Coupling | Rf Signal Generator Frequency | Receiver Dial Setting | Adjust | Remarks |
|------------------------|--|-------------------------------|--------------------------|---|-----------------------------------|
| MW Frequency Coverage | loop antenna See Fig. 3-1. | 520 kHz | fully left | MW osc coil L211 | Adjust for maximum meter reading. |
| | | 1,680 kHz | fully right | MW osc trimmer CT211 | |
| MW Tracking | - ditto - | 620 kHz | tune to 620 kHz signal | MW ant coil L201, MW rf coil L206 | - ditto - |
| | | 1,400 kHz | tune to 1,400 kHz signal | MW ant trimmer CT201, MW rf trimmer CT206 | |
| SW1 Frequency Coverage | direct connection to the ext. antenna terminal | 1.6 MHz | fully left | SW1 osc coil L212 | - ditto - |
| | | 3.5 MHz | fully right | SW1 osc trimmer CT212 | |
| SW1 Tracking | - ditto - | 1.6 MHz | tune to 1.6 MHz signal | SW1 ant coil L202, SW1 rf coil L207 | - ditto - |
| | | 3.5 MHz | tune to 3.5 MHz signal | SW1 ant trimmer CT202 SW1 rf trimmer CT207 | |
| SW2 Frequency Coverage | - ditto - | 3.5 MHz | fully left | SW2 osc coil L213 | - ditto - |
| | | 7.0 MHz | fully right | SW2 osc trimmer CT213 | |

| Adjusting Item | Rf Signal Generator Coupling | Rf Signal Generator Frequency | Receiver Dial Setting | Adjust | Remarks |
|------------------------|--|-------------------------------|-------------------------|--|-----------------------------------|
| SW2 Tracking | direct connection to the ext. antenna terminal | 3.5 MHz | tune to 3.5 MHz signal | SW2 ant coil L203, SW2 rf coil L208 | Adjust for maximum meter reading. |
| | | 7.0 MHz | tune to 7.0 MHz signal | SW2 ant trimmer CT203, SW2 rf trimmer CT208 | |
| SW3 Frequency Coverage | - ditto - | 7.0 MHz | fully left | SW3 osc coil L214 | - ditto - |
| | | 14.0 MHz | fully right | SW3 osc trimmer CT214 | |
| SW3 Tracking | - ditto - | 7.0 MHz | tune to 7.0 MHz signal | SW3 ant coil L204, SW3 rf coil L209 | - ditto - |
| | | 14.0 MHz | tune to 14.0 MHz signal | SW3 ant trimmer CT204, SW3 rf trimmer CT209 | |
| SW4 Frequency Coverage | - ditto - | 14.0 MHz | fully left | SW4 osc coil L215 | - ditto - |
| | | 26.1 MHz | fully right | SW4 osc trimmer CT215 | |
| SW4 Tracking | - ditto - | 14.0 MHz | tune to 14.0 MHz signal | SW4 ant coil L205, SW4 rf coil L210 | - ditto - |
| | | 26.1 MHz | tune to 26.1 MHz signal | SW4 ant trimmer CT205, SW4 rf trimmer CT210 | |

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SECTION 4

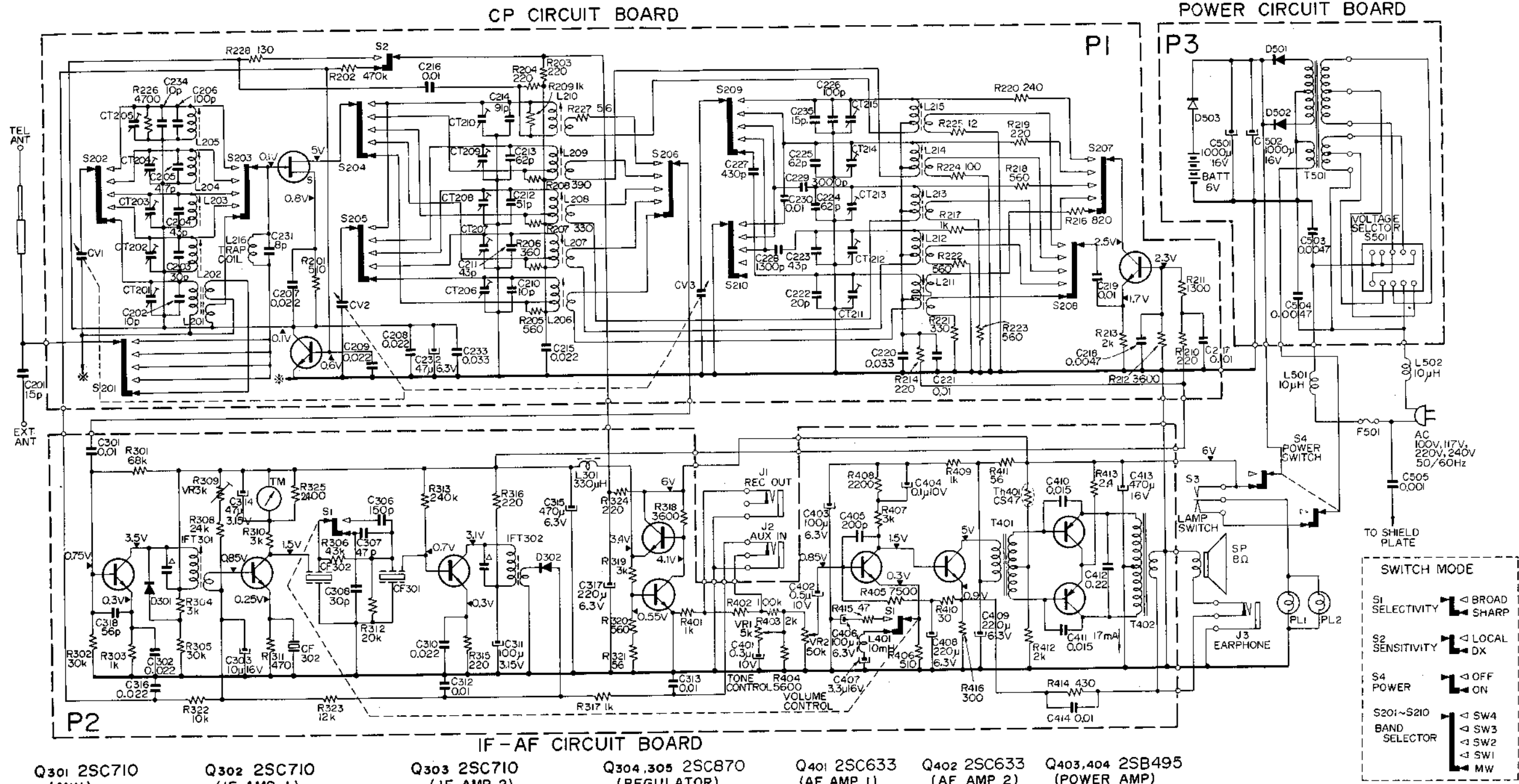
4-1. SCHEMATIC DIAGRAM

SCHEMATIC DIAGRAM AND MOUNTING DIAGRAM

Q201 2SK23
(RF AMP)
Q202 2SC870
(AGC)

Q203 2SC710.
(OSC)

D503 1T495
(SWITCH)
D501,502 CD2
(RECTIFIER)



Q301 2SC710
(MIX)

Q302 2SC710
(IF AMP 1)

Q303 2SC710
(IF AMP 2)

Q304,305 2SC870
(REGULATOR)

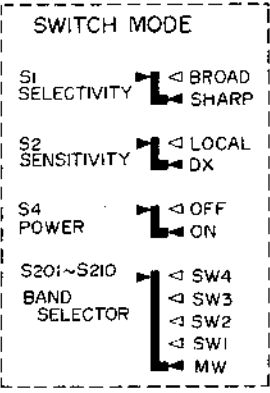
Q401 2SC633
(AF AMP 1)

Q402 2SC633
(AF AMP 2)

Q403,404 2SB495
(POWER AMP)

D301 1T23
(AGC)

D302 1T23
(DET)

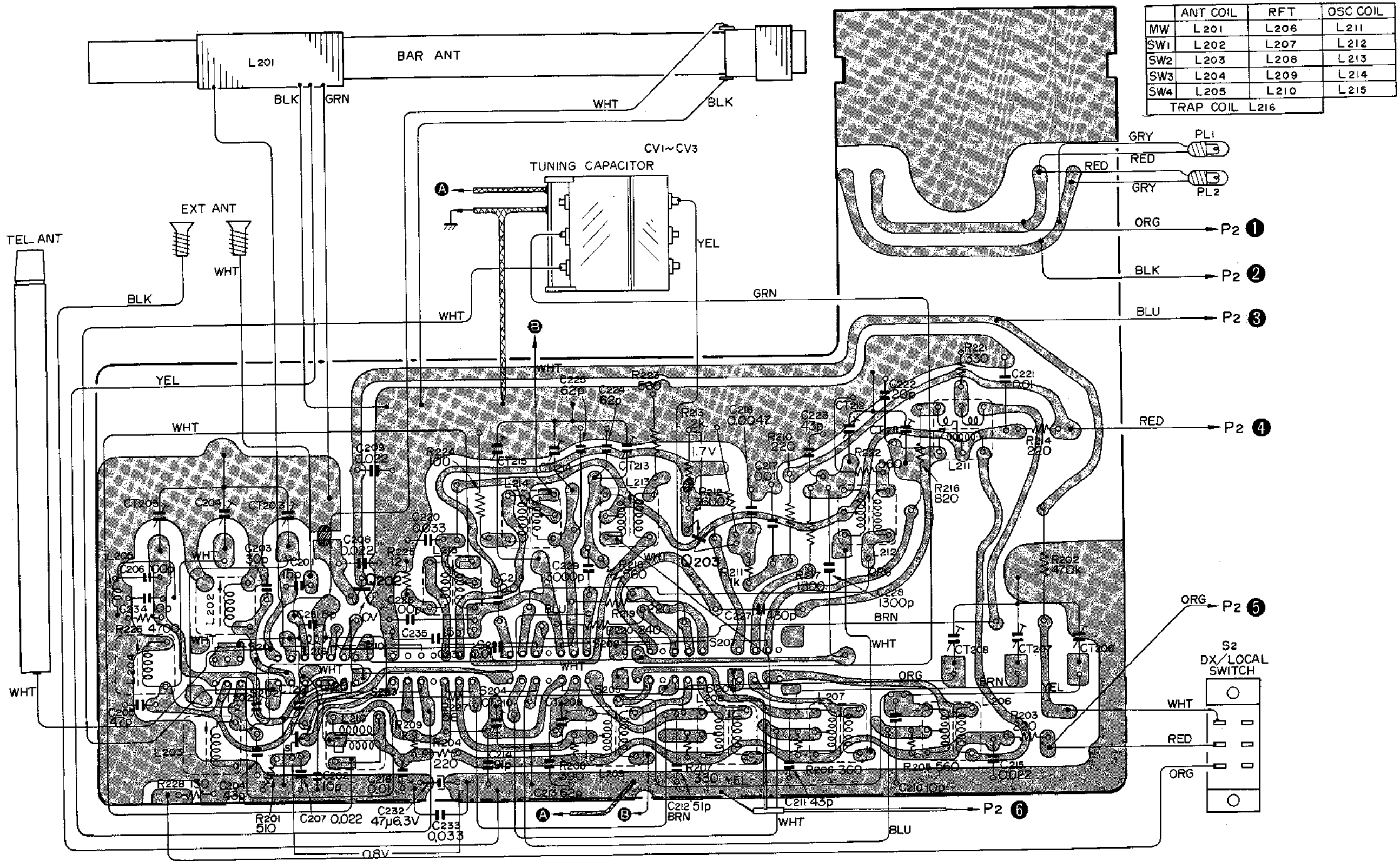


| | | | |
|-----|---------------|----------|---------------|
| MW | L201 ANT COIL | L206 RFT | L211 OSC COIL |
| SW1 | L202 ANT COIL | L207 RFT | L212 OSC COIL |
| SW2 | L203 ANT COIL | L208 RFT | L213 OSC COIL |
| SW3 | L204 ANT COIL | L209 RFT | L214 OSC COIL |
| SW4 | L205 ANT COIL | L210 RFT | L215 OSC COIL |

Note: 1. All resistors and capacitors are in ohm and μ F, unless otherwise indicated.
 2. Capacitor marked with Δ is built in i-f transformer.
 3. Voltage value is measured to ground circuit with a dc voltmeter (20 k Ω /V) and current value is measured with a dc ammeter.
 Voltage and current values are taken with no radio signal received.
 Variations may be noted due to normal production tolerances.

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4-2. CP CIRCUIT BOARD (P1)
MOUNTING DIAGRAM
— Conductor side —

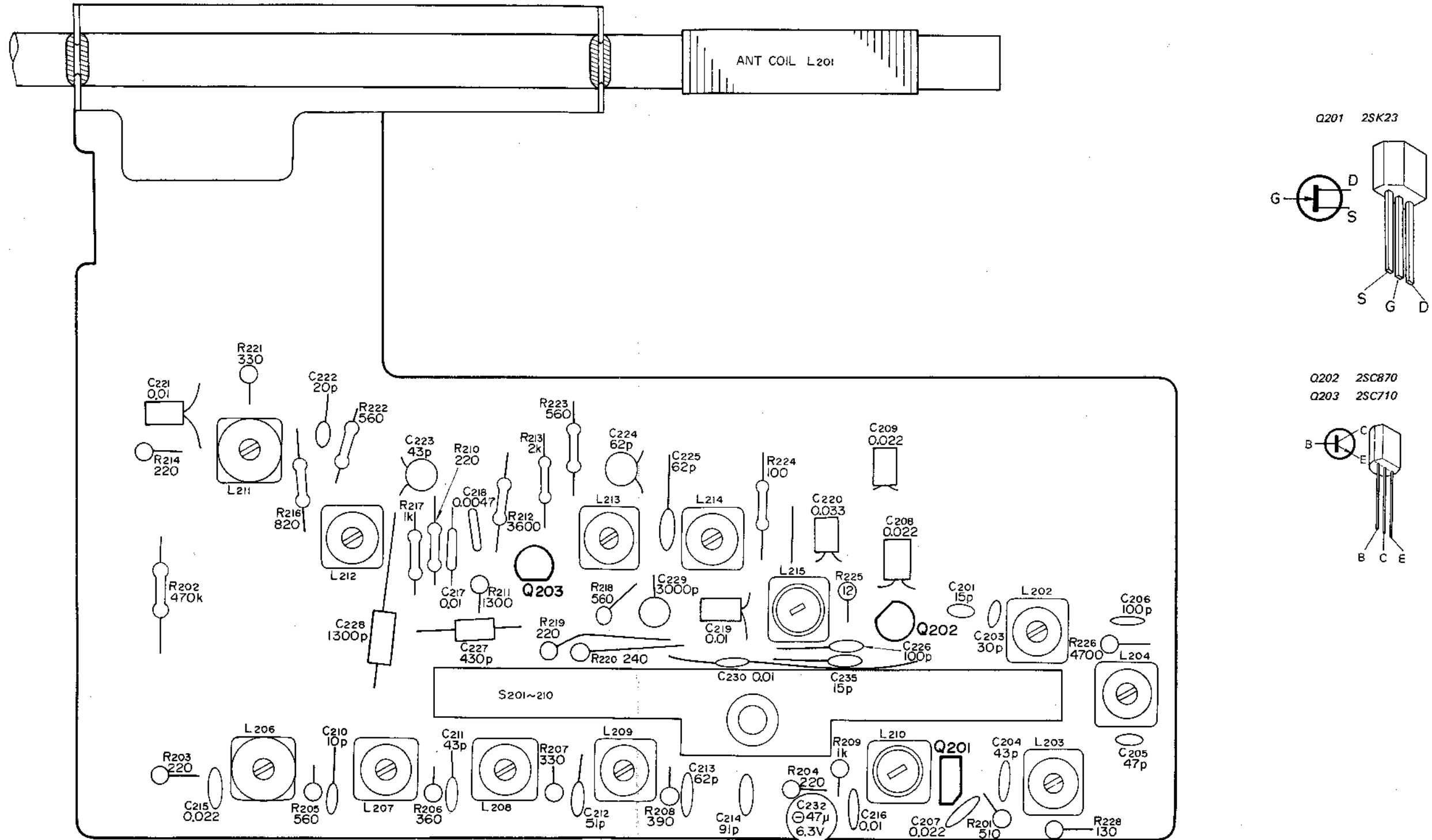


Printed circuit board
Part No. 1-539-190-13

Note: The following components are mounted on the conductor side.
R227, C202, C231, L205, L216, CT201-215.

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4-2. CP CIRCUIT BOARD (P1)
MOUNTING DIAGRAM
— Component side —

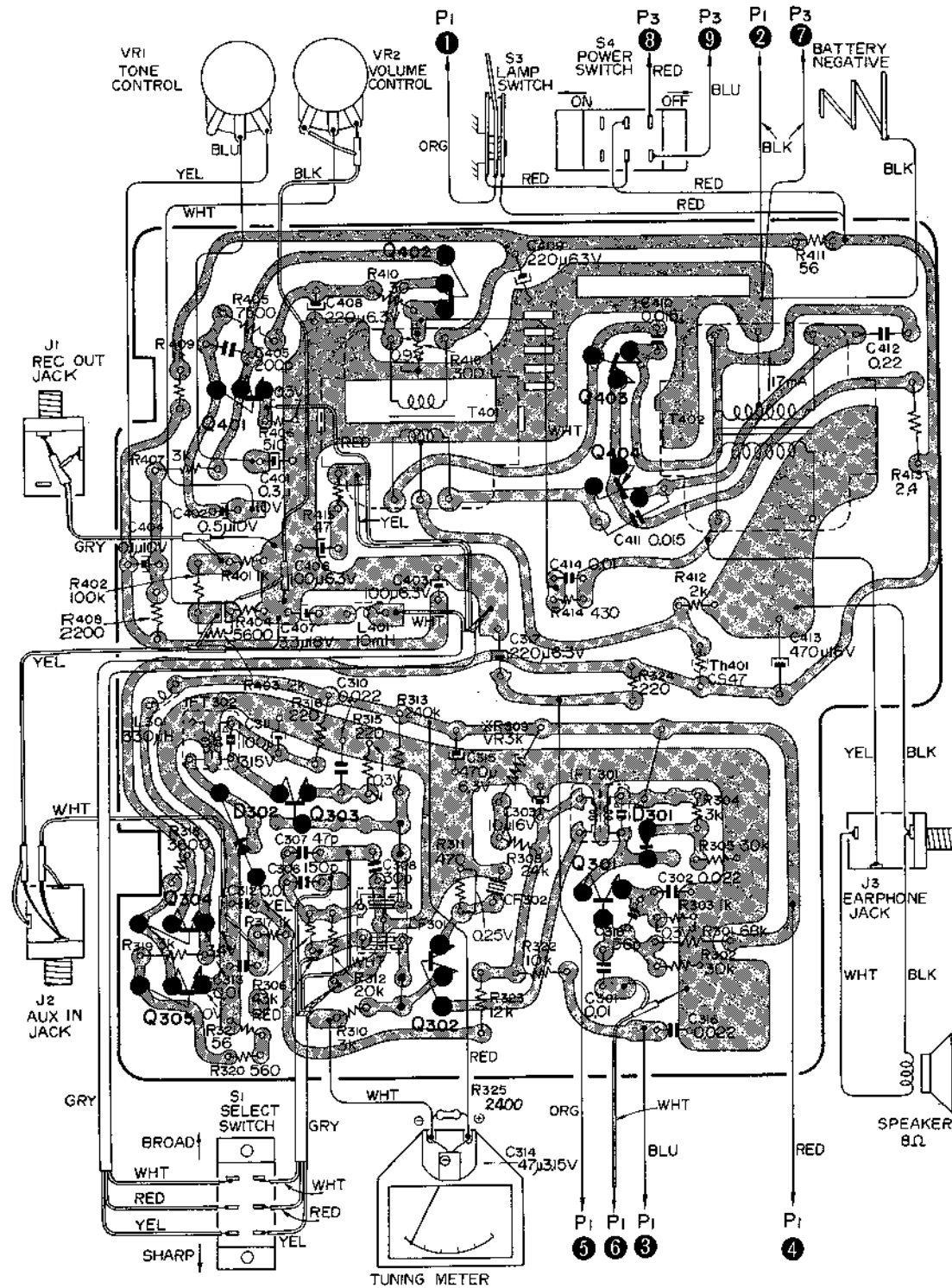


Printed circuit board
Part No. 1-539-190-13

Note: The following components are mounted on the conductor side.
R227, C202, C231, L205, L216, CT201-215.

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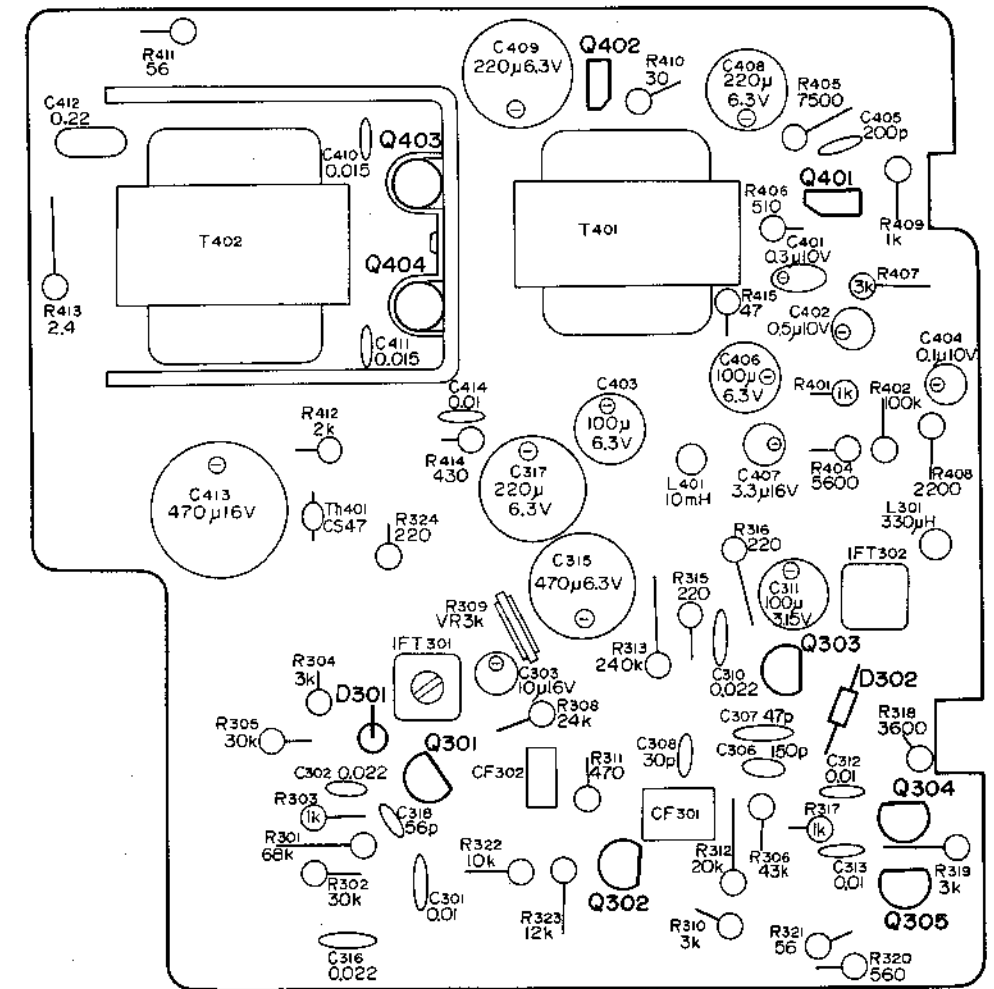
4-3. IF-AF CIRCUIT BOARD (P2)
MOUNTING DIAGRAM
- Conductor side -



Printed circuit board
Part No. 1-539-191-12

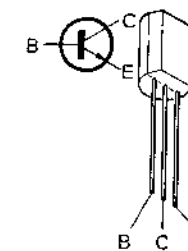
Note: The following components are mounted on the conductor side.
R403, R416

4-3. IF-AF CIRCUIT BOARD (P2)
MOUNTING DIAGRAM
- Component side -

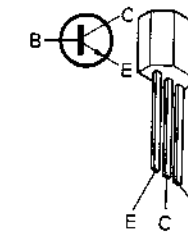


Printed circuit board
Part No. 1-539-191-12

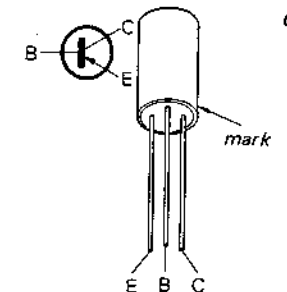
Note: The following components are mounted on the conductor side.
R403, R416



Q301, 302, 303
2SC710
Q304, 305
2SC870

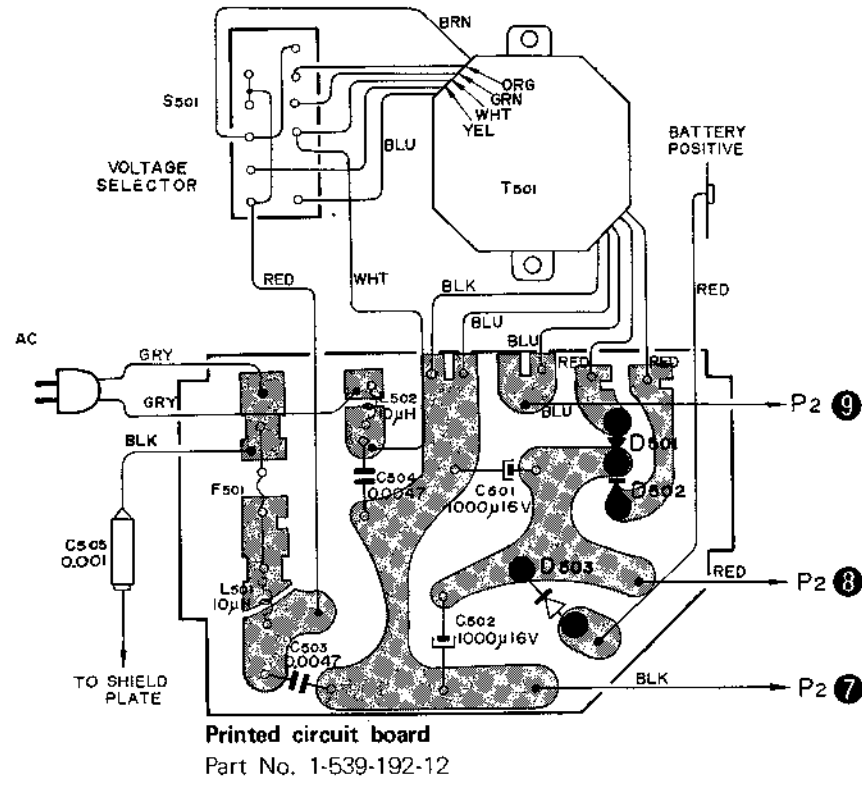


Q401, 402
2SC633

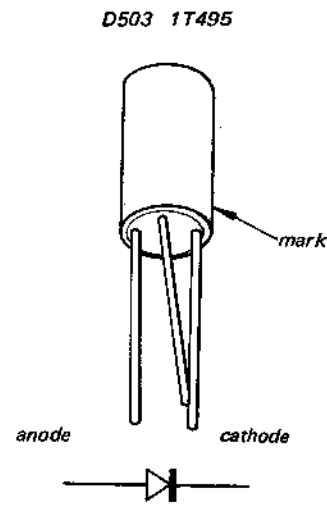
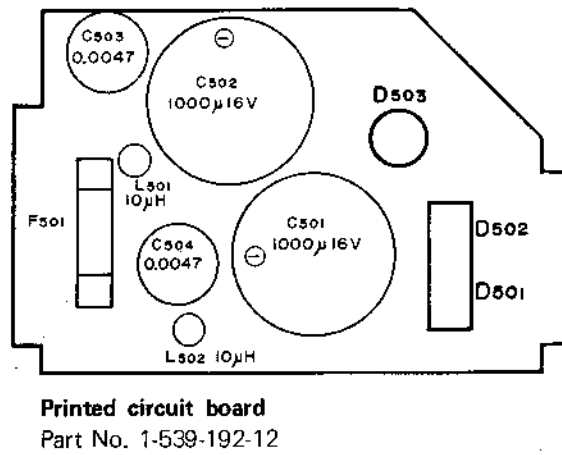


Q403, 404
2SB495

4-4. POWER CIRCUIT BOARD (P3)
MOUNTING DIAGRAM
- Conductor side -

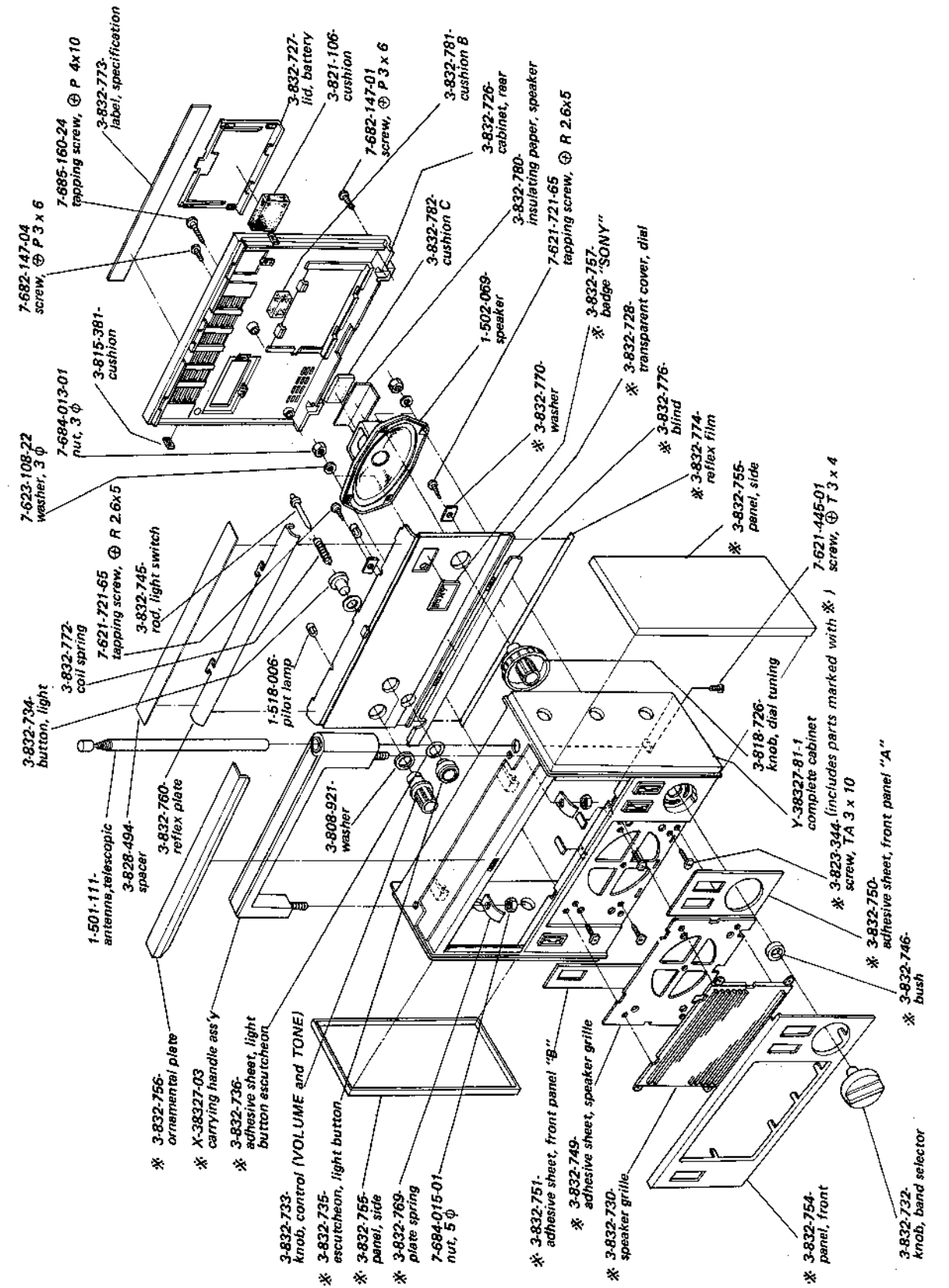


4-4. POWER CIRCUIT BOARD (P3)
- Component side -

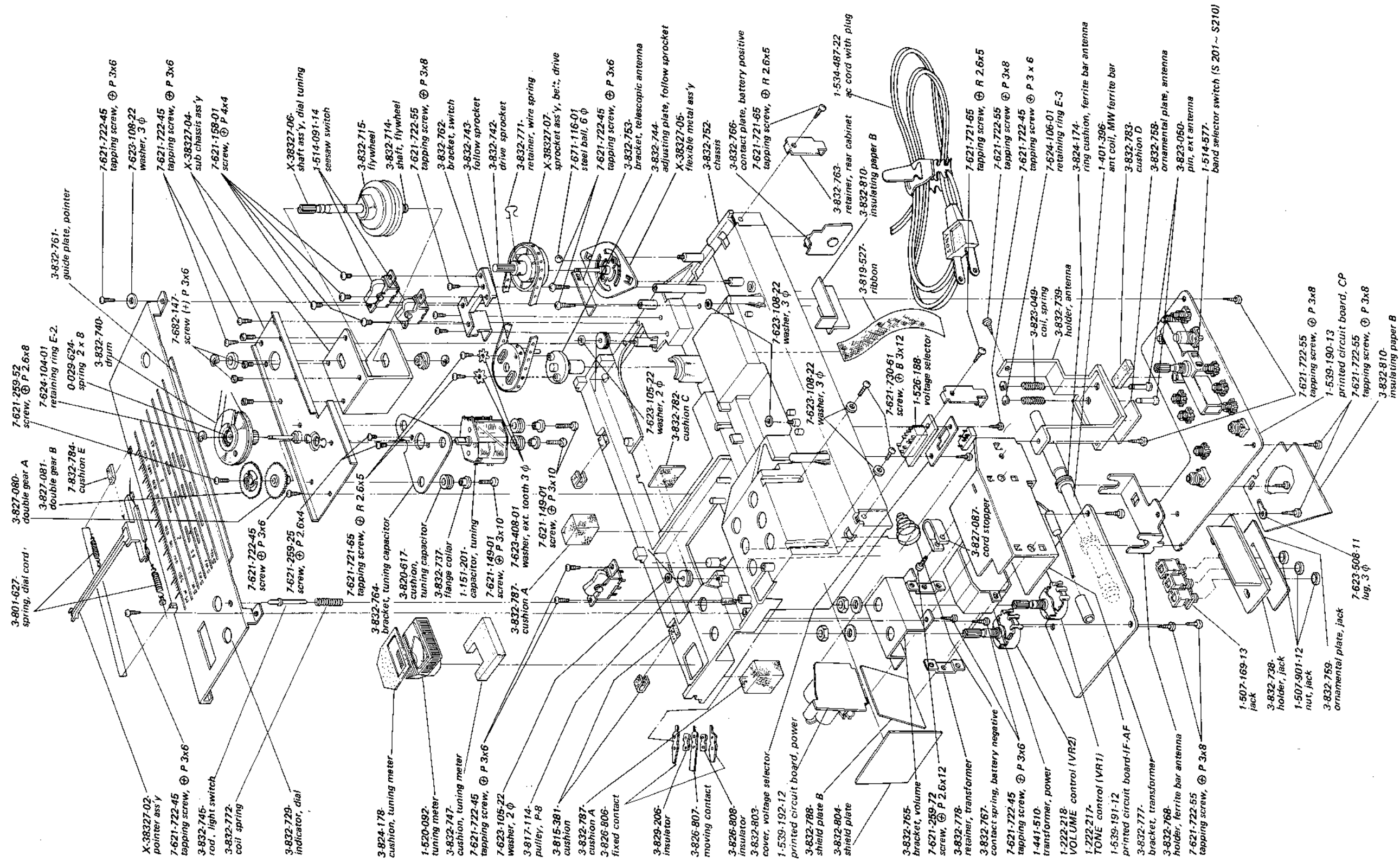


SECTION 5
EXPLODED VIEWS

5-1. EXPLODED VIEW (1)

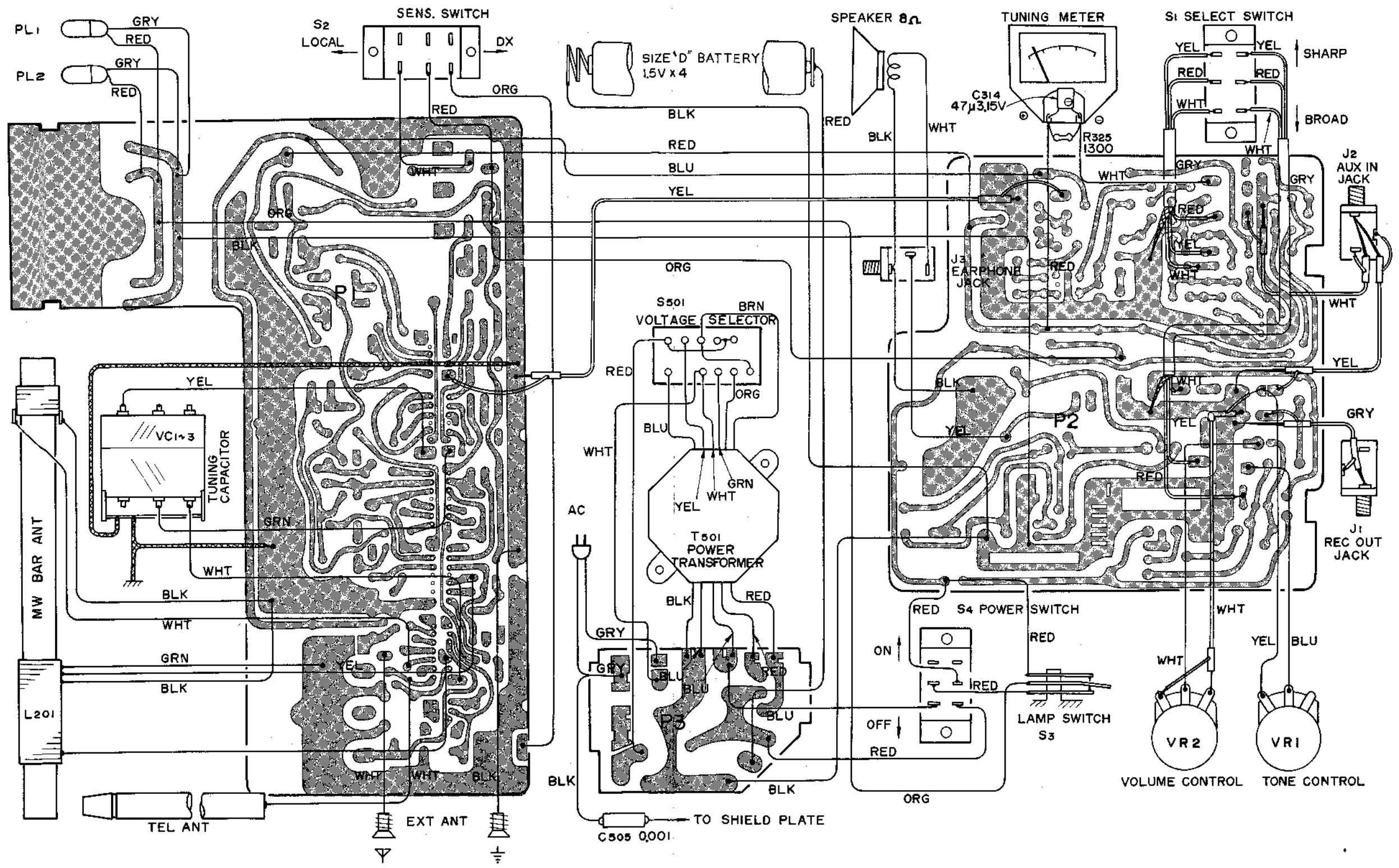


5-2. EXPLODED VIEW (2)

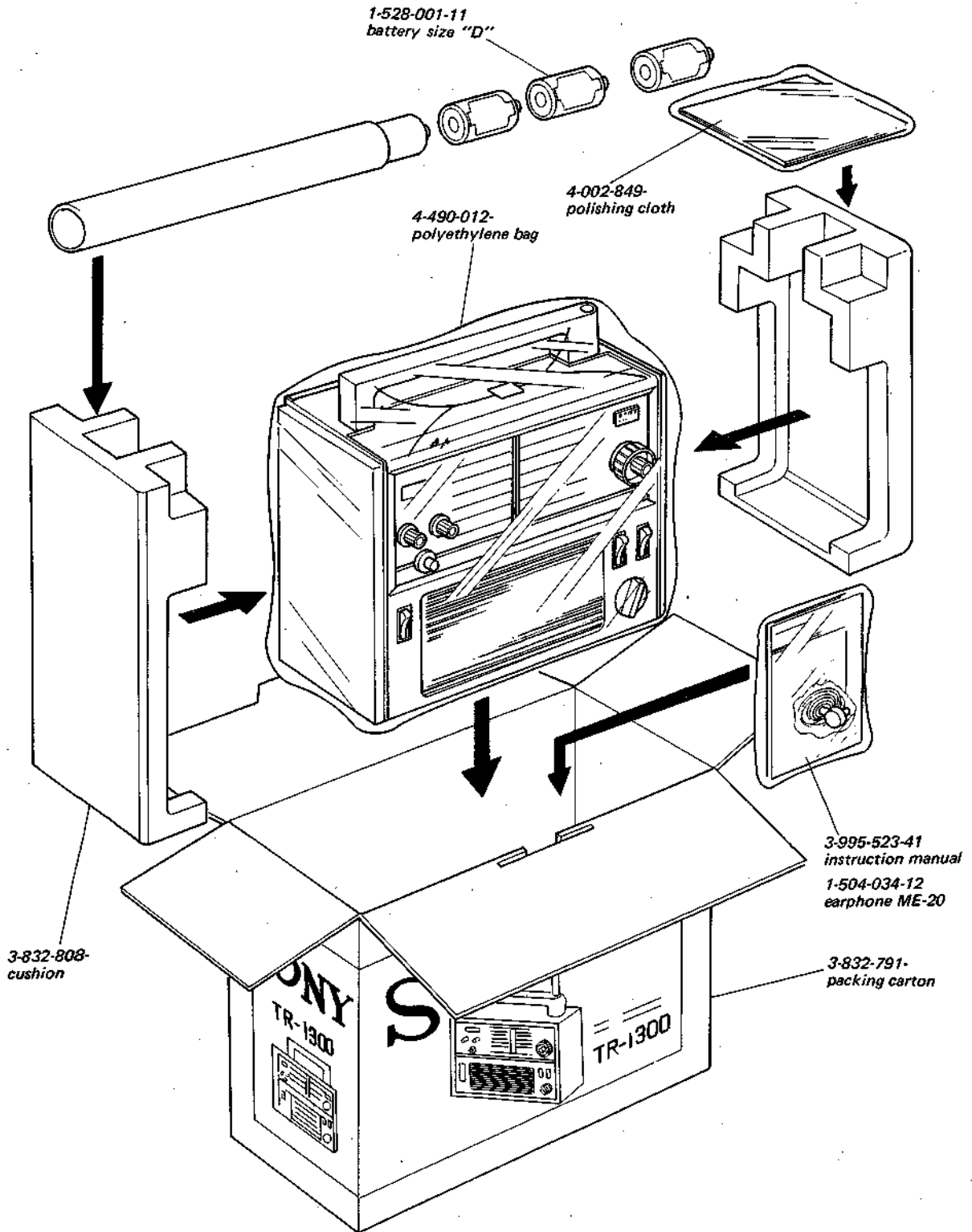


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5-3. WIRING DIAGRAM



5-4. PACKING



**SECTION 6
ELECTRICAL PARTS LIST FOR TR-1300**

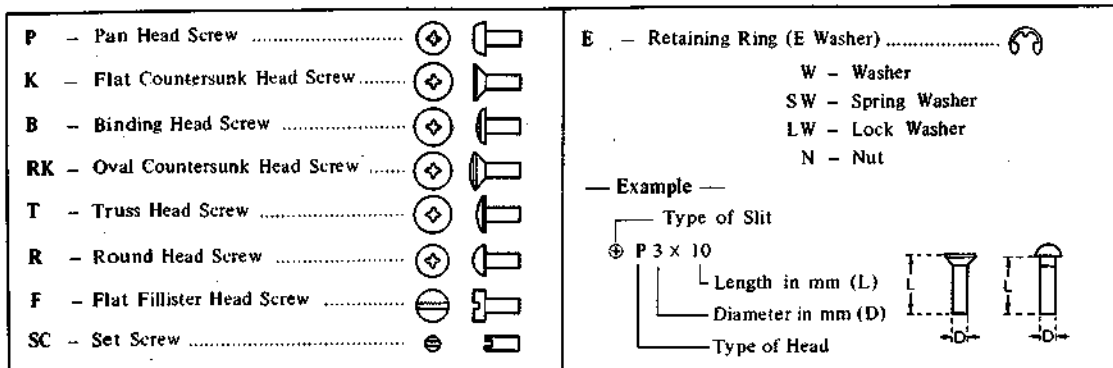
| <i>Symbol No.</i> | <i>Part No.</i> | <i>Description</i> | <i>Symbol No.</i> | <i>Part No.</i> | <i>Description</i> |
|-------------------------------|-----------------|---------------------------|---|-----------------|-----------------------------|
| Semiconductors | | | Miscellaneous | | |
| Q201 | | transistor 2SK23 | TEL. ANT | 1-501-111- | antenna, telescopic |
| Q202 | | " 2SC870 | SP | 1-502-069- | speaker |
| Q203 | | " 2SC710 | F501 | 1-532-128- | fuse |
| Q301 | | " 2SC710 | | 1-533-037- | holder, fuse |
| Q302 | | " 2SC710 | | 1-534-487-22 | ac cord with plug |
| Q303 | | " 2SC710 | J1, 2, 3 | 1-507-169-13 | jack |
| Q304 | | " 2SC870 | | 1-507-901-12 | nut, jack |
| Q305 | | " 2SC870 | S1, 2, 4 | 1-514-091-14 | seasaw switch |
| Q401 | | " 2SC633 | S201-210 | 1-514-577- | slide switch, band selector |
| Q402 | | " 2SC633 | S501 | 1-526-188- | voltage selector |
| Q403 | | " 2SB495 | PL1, 2 | 1-518-006-01 | pilot lamp |
| Q404 | | " 2SB495 | TM | 1-502-092- | tuning meter |
| D301 | | diode 1T23 | Resistors | | |
| D302 | | " 1T23 | Resistors are all carbon, 1/4W ±5%, unless otherwise specified. | | |
| D501, 502 | | " CD2 | VR1 | 1-222-217- | 5kΩ TONE control |
| D503 | | " 1T495 | VR2 | 1-222-218- | 50kΩ VOLUME control |
| Th401 | 8-691-002-11 | thermistor CS47 | R201 | 1-242-666- | 510Ω |
| Coils and Transformers | | | R202 | 1-242-737- | 470kΩ |
| L201 | 1-401-396- | ant. coil, mw ferrite bar | R203 | 1-242-657- | 220Ω |
| L202 | 1-401-397- | " sw1 | R204 | 1-242-657- | 220Ω |
| L203 | 1-401-398- | " sw2 | R205 | 1-242-667- | 560Ω |
| L204 | 1-401-399- | " sw3 | R206 | 1-242-662- | 360Ω |
| L205 | 1-401-400- | " sw4 | R207 | 1-242-661- | 330Ω |
| L206 | 1-425-552- | rf coil, mw | R208 | 1-242-663- | 390Ω |
| L207 | 1-425-553- | " sw1 | R209 | 1-242-673- | 1kΩ |
| L208 | 1-425-554- | " sw2 | R210 | 1-242-657- | 220Ω |
| L209 | 1-425-555- | " sw3 | R211 | 1-242-676- | 1300Ω |
| L210 | 1-425-556- | " sw4 | R212 | 1-242-686- | 3600Ω |
| L211 | 1-405-399- | osc. coil, mw | R213 | 1-242-680- | 2kΩ |
| L212 | 1-405-400- | " sw1 | R214 | 1-242-657- | 220Ω |
| L213 | 1-405-401- | " sw2 | R215 | | - discarded - |
| L214 | 1-405-402- | " sw3 | R216 | 1-242-671- | 820Ω |
| L215 | 1-405-403- | " sw4 | R217 | 1-242-676- | 1300Ω |
| L216 | 1-401-201- | trap coil | R218 | 1-242-667- | 560Ω |
| L301 | 1-407-175- | micro inductor, 330μH | R219 | 1-242-657- | 220Ω |
| L401 | 1-407-206- | " 10mH | R220 | 1-242-658- | 240Ω |
| L501 | 1-407-190- | " 10μH | R221 | 1-242-661- | 330Ω |
| L502 | 1-407-190- | " 10μH | R222 | 1-242-667- | 560Ω |
| IFT301 | 1-403-137- | transformer, i-f | R223 | 1-242-667- | 560Ω |
| IFT302 | 1-403-145- | " i-f | R224 | 1-242-649- | 100Ω |
| CF301 | 1-403-154- | ceramic filter | R225 | 1-242-634- | 24Ω |
| CF302 | 1-403-168- | " | R226 | 1-242-689- | 4700Ω |
| T401 | 1-423-100- | transformer, driver | R227 | 1-242-643- | 56Ω |
| T402 | 1-427-425- | " output | R228 | 1-242-652- | 130Ω |
| T501 | 1-441-510- | " power | | | |

| Symbol No. | Part No. | Description | Symbol No. | Part No. | Description |
|------------|-------------------|---------------------------|------------|--------------|---------------------------|
| R301 | 1-242-717- | 68kΩ | CT203-205, | 1-141-015- | trimmer capacitor, 3 unit |
| R302 | 1-242-708- | 30kΩ | 206-208, | | |
| R303 | 1-242-673- | 1kΩ | 213-215 | | |
| R304 | 1-242-684- | 3kΩ | C201 | 1-101-899- | 15pF ceramic |
| R305 | 1-242-708- | 30kΩ | C202 | 1-101-960- | 10pF " |
| R306 | 1-242-712- | 43kΩ | C203 | 1-101-900- | 30pF " |
| R307 | | - discarded - | C204 | 1-101-879- | 43pF " |
| R308 | 1-242-706- | 24Ω | C205 | 1-101-881- | 47pF " |
| R309 | 1-222-810- | VR 3kΩ | C206 | 1-101-963- | 100pF " |
| R310 | 1-242-684- | 3kΩ | C207 | 1-105-837-12 | 0.022μF mylar |
| R311 | 1-242-665- | 470Ω | C208 | 1-105-837-12 | 0.022μF " |
| R312 | 1-242-704- | 20kΩ | C209 | 1-105-837-12 | 0.022μF " |
| R313 | 1-242-730- | 240kΩ | C210 | 1-101-960- | 10pF ceramic |
| R314 | | - discarded - | C211 | 1-101-879- | 43pF " |
| R315 | 1-242-657- | 220Ω | C212 | 1-101-883- | 51pF " |
| R316 | 1-242-657- | 220Ω | C213 | 1-101-887- | 62pF " |
| R317 | 1-242-673- | 1kΩ | C214 | 1-101-895- | 91pF " |
| R318 | 1-242-686- | 3600Ω | C215 | 1-105-837-12 | 0.022μF mylar |
| R319 | 1-242-684- | 3kΩ | C216 | 1-105-833-12 | 0.01μF " |
| R320 | 1-242-667- | 560Ω | C217 | 1-105-833-12 | 0.01μF " |
| R321 | 1-242-643- | 56Ω | C218 | 1-105-829-12 | 0.0047μF " |
| R322 | 1-242-697- | 10kΩ | C219 | 1-105-833-12 | 0.01μF " |
| R323 | 1-242-699- | 12kΩ | C220 | 1-105-833-12 | 0.01μF " |
| R324 | 1-242-657- | 220Ω | C221 | 1-105-833-12 | 0.01μF " |
| R325 | 1-242-681- | 2400Ω | C222 | 1-101-898- | 20pF ceramic |
| R401 | 1-242-673- | 1kΩ | C223 | 1-101-879- | 43pF " |
| R402 | 1-242-721- | 100kΩ | C224 | 1-101-887- | 62pF " |
| R403 | 1-242-680- | 2kΩ | C225 | 1-101-887- | 62pF " |
| R404 | 1-242-691- | 5600Ω | C226 | 1-101-963- | 100pF " |
| R405 | 1-242-694- | 7500Ω | C227 | 1-103-616- | 430pF " |
| R406 | 1-242-666- | 510Ω | C228 | 1-103-628- | 1300pF " |
| R407 | 1-242-684- | 3kΩ | C229 | 1-103-636- | 3000pF " |
| R408 | 1-242-681- | 2200Ω | C230 | 1-105-833-12 | 0.01μF mylar |
| R409 | 1-242-673- | 1kΩ | C231 | 1-102-810- | 8pF ceramic |
| R410 | 1-242-636- | 30Ω | C232 | 1-121-322- | 47μF 6.3V electrolytic |
| R411 | 1-242-643- | 56Ω | C233 | 1-105-839-12 | 0.033μF mylar |
| R412 | 1-242-680- | 2kΩ | C234 | 1-101-960- | 10pF ceramic |
| R413 | 1-244-810- | 2.4Ω | C235 | 1-101-899- | 15pF " |
| R414 | 1-242-664- | 430Ω | C301 | 1-105-833-12 | 0.01μF mylar |
| R415 | 1-242-641- | 47Ω | C302 | 1-105-837-12 | 0.022μF " |
| R416 | 1-242-660- | 300Ω | C303 | 1-121-347- | 10μF 16V electrolytic |
| | | | C304 | | - discarded - |
| | | | C305 | | - discarded - |
| | | | C306 | 1-107-138- | 150pF mica |
| | | | C307 | 1-101-881- | 47pF ceramic |
| | | | C308 | 1-101-900- | 30pF " |
| | | | C309 | | - discarded - |
| | Capacitors | | | | |
| CV1 -3 | 1-151-201- | tuning capacitor | | | |
| CT201, 202 | 1-141-011- | trimmer capacitor, 2 unit | | | |
| 209, 210 | | | | | |
| 211, 212 | | | | | |

| Symbol No. | Part No. | Description | Symbol No. | Part No. | Description |
|------------|--------------|--------------------------------|------------|--------------|--------------------------------|
| C310 | 1-105-837-12 | 0.022 μ F mylar | C406 | 1-121-291- | 100 μ F 6.3V electrolytic |
| C311 | 1-121-290- | 100 μ F 3.15V electrolytic | C407 | 1-121-344- | 3.3 μ F 16V " |
| C312 | 1-105-833-12 | 0.01 μ F mylar | C408 | 1-121-295- | 220 μ F 6.3V " |
| C313 | 1-105-833-12 | 0.01 μ F " | C409 | 1-121-295- | 220 μ F 6.3V " |
| C314 | 1-121-486- | 47 μ F 3.15V electrolytic | C410 | 1-105-835-12 | 0.015 μ F mylar |
| C315 | 1-121-359- | 470 μ F 6.3V " | C411 | 1-105-835-12 | 0.015 μ F " |
| C316 | 1-105-837-12 | 0.022 μ F mylar | C412 | 1-105-849-12 | 0.22 μ F " |
| C317 | 1-121-295- | 220 μ F 6.3V electrolytic | C413 | 1-121-727- | 470 μ F 16V electrolytic |
| C318 | 1-101-885- | 56pF ceramic | C414 | 1-105-833-12 | 0.01 μ F mylar |
| C401 | 1-127-021- | 0.3 μ F 10V aluminum solid | C501 | 1-121-186- | 1000 μ F 16V electrolytic |
| C402 | 1-127-022- | 0.5 μ F 10V " | C502 | 1-121-186- | 1000 μ F 16V " |
| C403 | 1-121-291- | 100 μ F 6.3V electrolytic | C503 | 1-115-071- | 0.0047 μ F metalized paper |
| C404 | 1-127-019- | 0.1 μ F 10V aluminum solid | C504 | 1-115-071- | 0.0047 μ F " |
| C405 | 1-107-138- | 200pF mica | C505 | 1-115-097- | 0.001 μ F " |

When ordering replacement parts, you should use **PART NUMBER** listed on the **PARTS LISTS** or shown in the **EXPLODED VIEW**. The symbol number should not be used for ordering purposes.

— Hardware Nomenclature —



1431

Complete Spare Parts List for IR-1300

August, 1969

| <u>Part No.</u> | <u>Description</u> | <u>Unit Price</u> |
|---|---------------------------------------|-------------------|
| A. <u>Cabinet and Appearance Items</u> | | |
| Y-38327-81-1 | Complete Cabinet, including ----- | \$5.97 |
| X-38327-01- | Cabinet Ass'y, main ----- | 0.87 |
| X-38327-03- | Carrying Handle Ass'y ----- | 0.37 |
| 3-832-726- | Cabinet, rear ----- | 0.36 |
| 3-832-727- | Lid, battery ----- | 0.11 |
| 3-832-728- | Transparent Cover, dial ----- | 0.43 |
| 3-832-729- | Indicator, dial ----- | 0.28 |
| 3-832-730- | Speaker Grille ----- | 0.94 |
| 3-832-749- | Adhesive Sheet, speaker grille ----- | 0.11 |
| 3-832-750- | Adhesive Sheet, front panel "A" ----- | 0.04 |
| 3-832-751- | Adhesive Sheet, front panel "B" ----- | 0.02 |
| 3-832-754- | Panel, front ----- | 0.59 |
| 3-832-755- | Panel, side ----- | 0.43 |
| 3-832-756- | Ornamental Plate ----- | 0.11 |
| 3-832-757- | Badge, "SONY" ----- | 0.11 |
| 3-832-758- | Ornamental Plate, antenna ----- | 0.03 |
| 3-832-759- | Ornamental Plate, jack ----- | 0.06 |
| 3-832-773- | Label, specification ----- | 0.09 |
| | * * * * | |
| 3-832-732- | Knob, band selector ----- | 0.03 |
| 3-832-733- | Knob, VOLUME and TONE control ----- | 0.10 |
| 3-832-734- | Button, pilot lamp ----- | 0.02 |
| 3-818-726- | Knob, dial tuning ----- | 0.14 |
| B. <u>Mechanical Parts</u> | | |
| X-38327-02- | Pointer Ass'y ----- | 0.11 |
| X-38327-04- | Sub Chassis Ass'y ----- | 0.17 |
| X-38327-05- | Flexible Metal Ass'y ----- | 0.13 |
| X-38327-06- | Shaft Ass'y, dial tuning ----- | 0.45 |

| <u>Part No.</u> | <u>Description</u> | <u>Unit Price</u> |
|-----------------|----------------------------------|-------------------|
| X-38327-07- | Sprocket Ass'y, belt drive | \$0.05 |
| 3-832-735- | Escutcheon, lamp button | 0.01 |
| 3-832-736- | Adhesive Sheet, escutcheon | 0.01 |
| 3-832-737- | Flange Collar | 0.02 |
| 3-832-738- | Holder, jack | 0.04 |
| 3-832-739- | Holder, antenna | 0.05 |
| 3-832-740- | Drum | 0.04 |
| 3-832-742- | Drive Sprocket | 0.08 |
| 3-832-743- | Follow Sprocket | 0.06 |
| 3-832-744- | Adjusting Plate, follow sprocket | 0.05 |
| 3-832-745- | Rod, lamp switch | 0.03 |
| 3-832-746- | Bush | 0.02 |
| 3-832-747- | Cushion, tuning meter | 0.01 |
| 3-832-748- | Spacer, adjusting plate | 0.01 |
| 3-832-752- | Chassis | 0.50 |
| 3-832-753- | Bracket, telescopic antenna | 0.04 |
| 3-832-760- | Reflex Plate | 0.15 |
| 3-832-761- | Guide Plate, pointer | 0.04 |
| 3-832-762- | Bracket, switch | 0.05 |
| 3-832-763- | Bracket, cabinet rear | 0.03 |
| 3-832-764- | Bracket, tuning capacitor | 0.03 |
| 3-832-765- | Bracket, volume | 0.04 |
| 3-832-766- | Contact Plate, battery positive | 0.02 |
| 3-832-767- | Contact Spring, battery negative | 0.03 |
| 3-832-768- | Holder, ferrite bar antenna | 0.06 |
| 3-832-769- | Plate Spring | 0.03 |
| 3-832-770- | Washer | 0.01 |
| 3-832-771- | Retainer, wire spring | 0.02 |
| 3-832-772- | Coil Spring | 0.01 |
| 3-832-774- | Reflex Film | 0.02 |
| 3-832-775- | Heat Sink | 0.06 |
| 3-832-777- | Chassis, transformer | 0.12 |
| 3-832-778- | Retainer | 0.02 |
| 0-029-624- | Spring 2 x 8 | 0.01 |
| 3-450-048- | Clamper, transistor | 0.03 |
| 3-801-627- | Spring, dial cord | 0.01 |
| 3-806-315- | Felt Ring | 0.01 |
| 3-808-921- | Washer | 0.01 |
| 3-817-114- | Pulley | 0.01 |
| 3-819-527- | Ribbon | 0.02 |
| 3-820-617- | Cushion, tuning capacitor | 0.02 |
| 3-821-106- | Cushion, battery lid | 0.02 |

| <u>Part No.</u> | <u>Description</u> | <u>Unit Price</u> |
|-----------------|------------------------------------|-------------------|
| 3-823-344- | Screw, machine TA 3 x 10 ----- | \$0.01 |
| 3-824-174- | Cushion, ferrite bar antenna ----- | 0.02 |
| 3-824-178- | Cushion, tuning meter ----- | 0.02 |
| 3-827-080- | Double Gear "A" ----- | 0.03 |
| 3-827-081- | Double Gear "B" ----- | 0.03 |
| 3-827-087- | Cord Stopper ----- | 0.02 |

C. Electrical Parts

| | | |
|--------------|------------------------------------|------|
| 1-539-190-11 | Printed Circuit Board, CP ----- | 0.52 |
| 1-539-191-11 | Printed Circuit Board, IF-AF ----- | 0.22 |
| 1-539-192-11 | Printed Circuit Board, power ----- | 0.06 |
| 1-526-188- | Voltage Selector ----- | 0.35 |
| 1-532-127- | Fuse ----- | 0.04 |
| 1-533-037- | Holder, fuse ----- | 0.01 |
| 1-534-487- | AC Cord with Plug ----- | 0.27 |
| 1-501-111- | Antenna, telescopic ----- | 1.13 |
| 1-502-069- | Speaker ----- | 0.71 |
| 1-507-169-13 | Jack ----- | 0.05 |
| 1-507-901-12 | Nut, jack ----- | 0.01 |
| 1-514-091- | Seesaw Switch ----- | 0.17 |
| 1-518-006- | Pilot Lamp ----- | 0.08 |
| 1-520-092 | Tuning Meter ----- | 1.04 |

Coil and Transformer

| | | |
|------------|---------------------------------|------|
| 1-401-201- | Trap Coil ----- | 0.03 |
| 1-401-397- | Ant. Coil, SW1 ----- | 0.11 |
| 1-401-398- | Ant. Coil, SW2 ----- | 0.11 |
| 1-401-399- | Ant. Coil, SW3 ----- | 0.11 |
| 1-401-400- | Ant. Coil, SW4 ----- | 0.05 |
| 1-401-396- | Ant. Coil, MW ferrite bar ----- | 0.34 |
| 1-403-137- | Transformer, AM/IF ----- | 0.10 |
| 1-403-145- | Transformer, AM/IF ----- | 0.11 |
| 1-403-154- | Ceramic Filter ----- | 0.10 |
| 1-403-168- | Ceramic Filter ----- | 0.21 |
| 1-405-399- | Osc. Coil, MW ----- | 0.11 |
| 1-405-400- | Osc. Coil, SW1 ----- | 0.11 |
| 1-405-401- | Osc. Coil, SW2 ----- | 0.11 |
| 1-405-402- | Osc. Coil, SW3 ----- | 0.11 |

| <u>Part No.</u> | <u>Description</u> | | <u>Unit Price</u> |
|-----------------|--------------------|------------------|-------------------|
| 1-101-879- | C204, 211, 223 | 43pF $\pm 10\%$ | \$0.02 |
| 1-101-881- | C205 | 47pF $\pm 10\%$ | 0.02 |
| 1-101-883- | C212 | 51pF $\pm 10\%$ | 0.02 |
| 1-101-885- | C307, 318 | 56pF $\pm 10\%$ | 0.02 |
| 1-101-887- | C213, 224, 225 | 62pF $\pm 10\%$ | 0.02 |
| 1-101-895- | C214 | 91pF $\pm 10\%$ | 0.02 |
| 1-101-963- | C206-2, 226-2 | 100pF $\pm 10\%$ | 0.02 |
| 1-102-810- | C231 | 8pF $\pm 1pF$ | 0.02 |

Styrol Capacitor

| | | | |
|------------|------|------------------|------|
| 1-103-616- | C227 | 430pF $\pm 5\%$ | 0.03 |
| 1-103-628- | C228 | 1300pF $\pm 5\%$ | 0.04 |
| 1-103-636- | C229 | 3000pF $\pm 5\%$ | 0.04 |

Mylar Capacitor

| | | | |
|--------------|--|---------------------------|------|
| 1-105-829-12 | C218 | 0.0047 μ F $\pm 20\%$ | 0.02 |
| 1-105-833-12 | C215, 217, 219, 221, 230, 313, 314, 312, 301 | 0.01 μ F $\pm 20\%$ | 0.02 |
| 1-105-835-12 | C410, 411 | 0.015 μ F $\pm 20\%$ | 0.02 |
| 1-105-837-12 | C207, 208, 209, 216, 302, 310 | 0.022 μ F $\pm 20\%$ | 0.03 |
| 1-105-839-12 | C231, 220 | 0.033 μ F $\pm 20\%$ | 0.03 |
| 1-105-849-12 | C412 | 0.22 μ F $\pm 20\%$ | 0.09 |

Electrolytic Capacitor (Mica)

| | | | |
|------------|-----------|------------------|------|
| 1-107-138- | C405, 306 | 200pF $\pm 10\%$ | 0.02 |
|------------|-----------|------------------|------|

Electrolytic Capacitor

| | | | |
|------------|----------------|------------------------------|------|
| 1-121-344- | C407 | 3.3 μ F 25WV +150 -10% | 0.04 |
| 1-121-347- | C303 | 10 μ F 16WV +100 -10% | 0.04 |
| 1-121-322- | C232 | 47 μ F 6.3WV +100 -10% | 0.04 |
| 1-121-290- | C311, 409 | 100 μ F 3.15WV +100 -10% | 0.05 |
| 1-121-291- | C403 | 100 μ F 6.3WV +100 -10% | 0.05 |
| 1-121-295- | C317, 408, 409 | 220 μ F 6.3WV +100 -10% | 0.07 |
| 1-121-359- | C315 | 470 μ F 6.3WV +100 -10% | 0.07 |
| 1-121-727- | C413 | 470 μ F 16WV +100 -10% | 0.12 |
| 1-121-186- | C503, 504 | 1000 μ F 16WV +200 -10% | 0.12 |

| <u>Part No.</u> | <u>Description</u> | <u>Unit Price</u> |
|---------------------------------------|---|-------------------|
| <u>Electrolytic Capacitor (Paper)</u> | | |
| 1-115-071- | C501,502 0.0047 μ F \pm 20% | \$0.09 |
| <u>Electrolytic Capacitor (Alox)</u> | | |
| 1-127-019- | C404 0.1 μ F 10W \pm 20% | 0.05 |
| 1-127-021- | C401 0.3 μ F 10W \pm 20% | 0.05 |
| 1-127-022- | C404 0.5 μ F 10W \pm 20% | 0.06 |
| <u>D. Screw, Nut and Washer</u> | | (per 100) |
| <u>Screw, machine</u> | | |
| 7-621-259-25 | (+) P 2.6 x 4 (for Tuning Capacitor) | 0.14/100 |
| 7-621-259-52 | (+) P 2.6 x 8 (for Double Gear) | 0.26/100 |
| 7-621-259-72 | (+) P 2.6 x 12 (for Cord Stopper) | 0.34/100 |
| 7-621-147-01 | (+) P 3 x 6 (for Tuning Shaft, Telescopic Antenna Holding Bracket) | 0.12/100 |
| 7-621-147-04 | (+) P 3 x 6 (for Rear Cabinet) | 0.50/100 |
| 7-621-149-01 | (+) P 3 x 10 (for Tuning Capacitor, Transformer Chassis) | 0.13/100 |
| 7-621-158-01 | (+) P 4 x 4 (for Switch) | 0.23/100 |
| 7-621-445-01 | (+) T 3 x 4 (for Telescopic Antenna) | 0.14/100 |
| <u>Screw, self-tapping</u> | | |
| 7-621-721-65 | (+) R 2.6 x 5 (for Sprocket Adjusting Shaft, Rear Cabinet Holding Bracket) | 0.30/100 |
| 7-621-722-45 | (+) P 3 x 6 (for Volume Holder, Dial Scale, Sub-chassis, Slide Switch, Switch Holding Plate) | 0.25/100 |
| 7-621-722-55 | (+) P 3 x 8 (for CP Board, IF Board, Telescopic Antenna Holding Bracket) | 0.25/100 |
| 7-621-730-61 | (+) P 3 x 12 (for Chassis) | 0.28/100 |
| 7-685-160-24 | (+) P 4 x 10 (for Rear Cabinet) | 0.27/100 |

7/9 (TR-1300)

(R1-34)

| <u>Part No.</u> | <u>Description</u> | <u>Unit Price</u> |
|-----------------|---|-------------------|
| | <u>Nut</u> | |
| 7-684-013-01 | 3φ (for Speaker) ----- | \$0.28/100 |
| 7-684-015-01 | 5φ (for Carrying Handle) ----- | 0.64/100 |
| | <u>Washer, plain</u> | |
| 7-623-105-22 | 2φ (Large) (for Pulley) ----- | 0.07/100 |
| 7-623-108-22 | 3φ (") (for Speaker, Transformer Chassis) ----- | 0.15/100 |
| | <u>Lug</u> | |
| 7-623-508-11 | 3φ (for Dial Drum) ----- | 0.13/100 |
| | <u>Eyelet</u> | |
| 7-623-611-01 | 1.5 x 3 (for Dial Cord, Pointer Guide) ---- | 0.05/100 |
| | <u>Retaining Ring</u> | |
| 7-624-104-01 | E-2 (for Dial Drum) ----- | 0.35/100 |
| 7-624-106-01 | E-3 (for Ext. Ant. Terminal, Ext. Ground Terminal) ----- | 0.38/100 |
| | <u>Steel Ball</u> | |
| 7-671-116-01 | 6mmφ (for Driving Sprocket) ----- | 0.57/100 |
| | <u>Dial Cord</u> | |
| 7-633-120-52 | 0.25φ 1400mm ----- | 0.02/m |