

JVC

SERVICE MANUAL

MODEL
A-X7

STEREO INTEGRATED AMPLIFIER




No. 2554
DEC. 1980

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Warning:

When replacing the parts marked with , be sure to use the designated parts to ensure safety.

1. Specifications

Overall Specifications

| | |
|--|---|
| Output Power (TUNER, AUX, TAPE → SP. OUT) | : 90 watts per channel min. RMS both channels driven, into 8 ohms from 20 Hz to 20 kHz with no more than 0.003 % total harmonic distortion 93 watts per channel min. RMS (8 ohms 1 kHz 0.0005 % measured by HP-IB Audio Analyze System) |
| Total Harmonic Distortion (TUNER, AUX, TAPE → SP. OUT) | : 0.003 % at rated output, from 20 Hz to 20 kHz, 8 ohms 0.0005 % at rated output 1 kHz, 8 ohms (Measured by HP-IB AUDIO ANALYZER SYSTEM) |
| Intermodulation Distortion (TUNER, AUX, TAPE → SP. OUT) | : 0.002 % at rated output, 8 ohms (60 Hz: 7 kHz = 4 : 1) |
| Power Band Width (TUNER, AUX, TAPE → SP. OUT) | : 5 Hz – 70 kHz (IHF, both channels driven, 8 ohms, 0.02 % THD) |
| Frequency Response (TUNER, AUX, TAPE → SP. OUT) | : DC – 400 kHz $\begin{matrix} +0 \\ -3 \end{matrix}$ dB |
| Damping Factor | : 100 (1 kHz, 8 ohms) |
| Input Sensitivity/Impedance | |
| Phono-1, 2 (MM) | : 2.5 mV/47 k ohms |
| Phono-1, 2 (MC) | : 200 μ V/100 ohms |
| TUNER, AUX, TAPE | : 200 mV/47 k ohms |

Signal-to-Noise Ratio

| | |
|------------------|--|
| Phono-1, 2 (MM) | : 85 dB (IHF, A net, short circuit), 82 dB (new IHF) |
| Phono-1, 2 (MC) | : 69 dB (IHF, A net, short circuit), 75 dB (new IHF) |
| TUNER, AUX, TAPE | : 110 dB (IHF, A net, short circuit), 85 dB (new IHF) |

Tone Controls

| | |
|-----------------|-----------------------|
| BASS | : \pm 8 dB (100 Hz) |
| TREBLE | : \pm 8 dB (10 kHz) |
| Muting | : -20 dB |
| Subsonic Filter | : -6 dB/Oct. (18 Hz) |

Phono Equalizer Section (Phono → REC. OUT)

| | |
|-----------------|--------------------------------|
| Phono Overload | |
| Phono-1, 2 (MM) | : 300 mV at 1 kHz, 0.001 % THD |
| Phono-1, 2 (MC) | : 23 mV at 1 kHz, 0.002 % THD |

RIAA Phono

| | |
|--------------|---------------------------------|
| Equalization | : \pm 0.2 dB (20 Hz – 20 kHz) |
|--------------|---------------------------------|

Total Harmonic Distortion

| | |
|-----------------|---|
| Phono-1, 2 (MM) | : 0.002 % at 10 V output, 20 Hz – 20 kHz |
| Phono-1, 2 (MC) | : 0.005 % at 10 V output, 20 Hz – 20 kHz |

| | |
|-----------------------|-------------------|
| Rec. Output/Impedance | : 200 mV/680 ohms |
|-----------------------|-------------------|

Dimensions

| | |
|--|---|
| | : 5-1/2"(H) x 17-3/4"(W) x 16-3/4"(D) |
| | : (13.9 cm(H) x 45.0 cm(W) x 42.6 cm(D)) |

Weight

| | |
|--|--------------------|
| | : 26.4 lbs (12 kg) |
|--|--------------------|

Power Source and

Power Consumption

: See page 20.

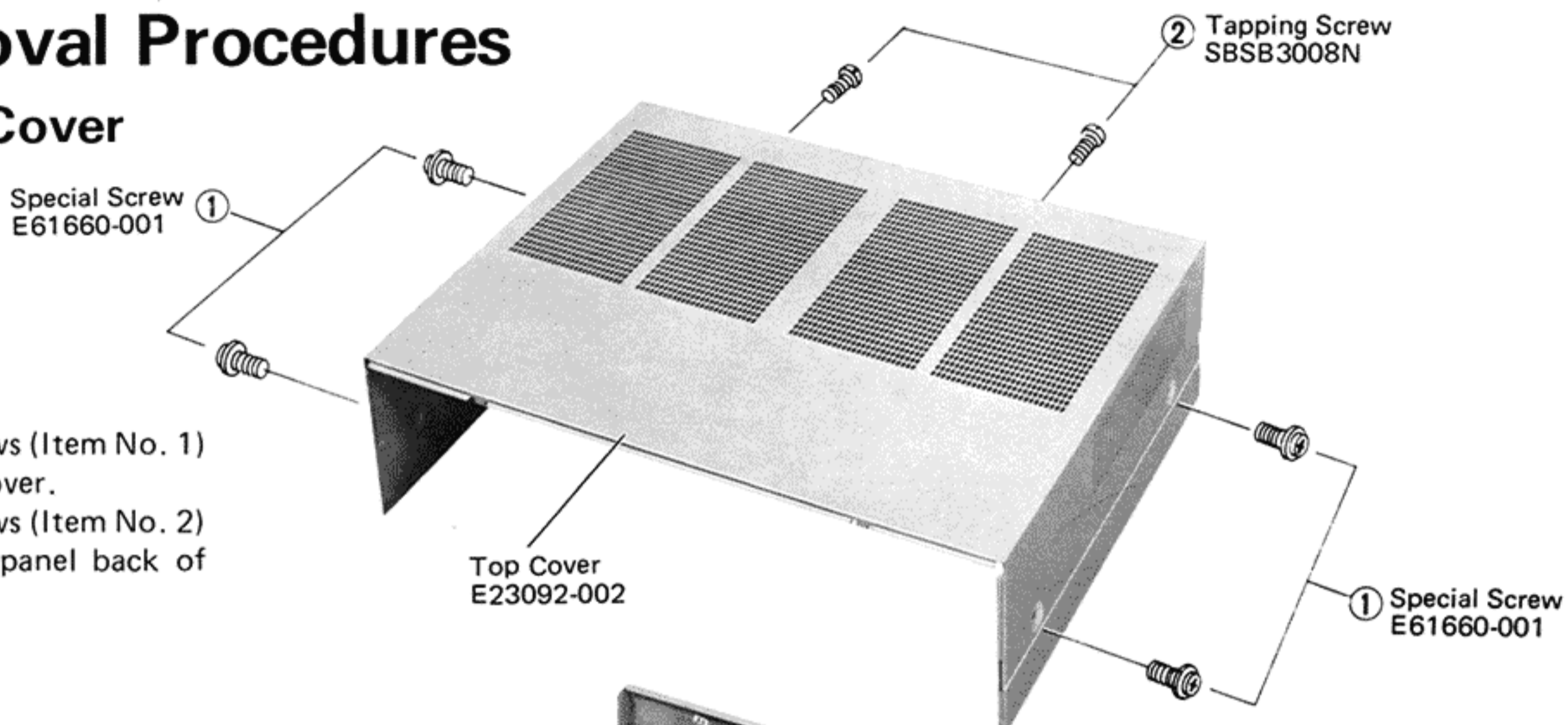
Design and specifications subject to change without notice.

2. Features

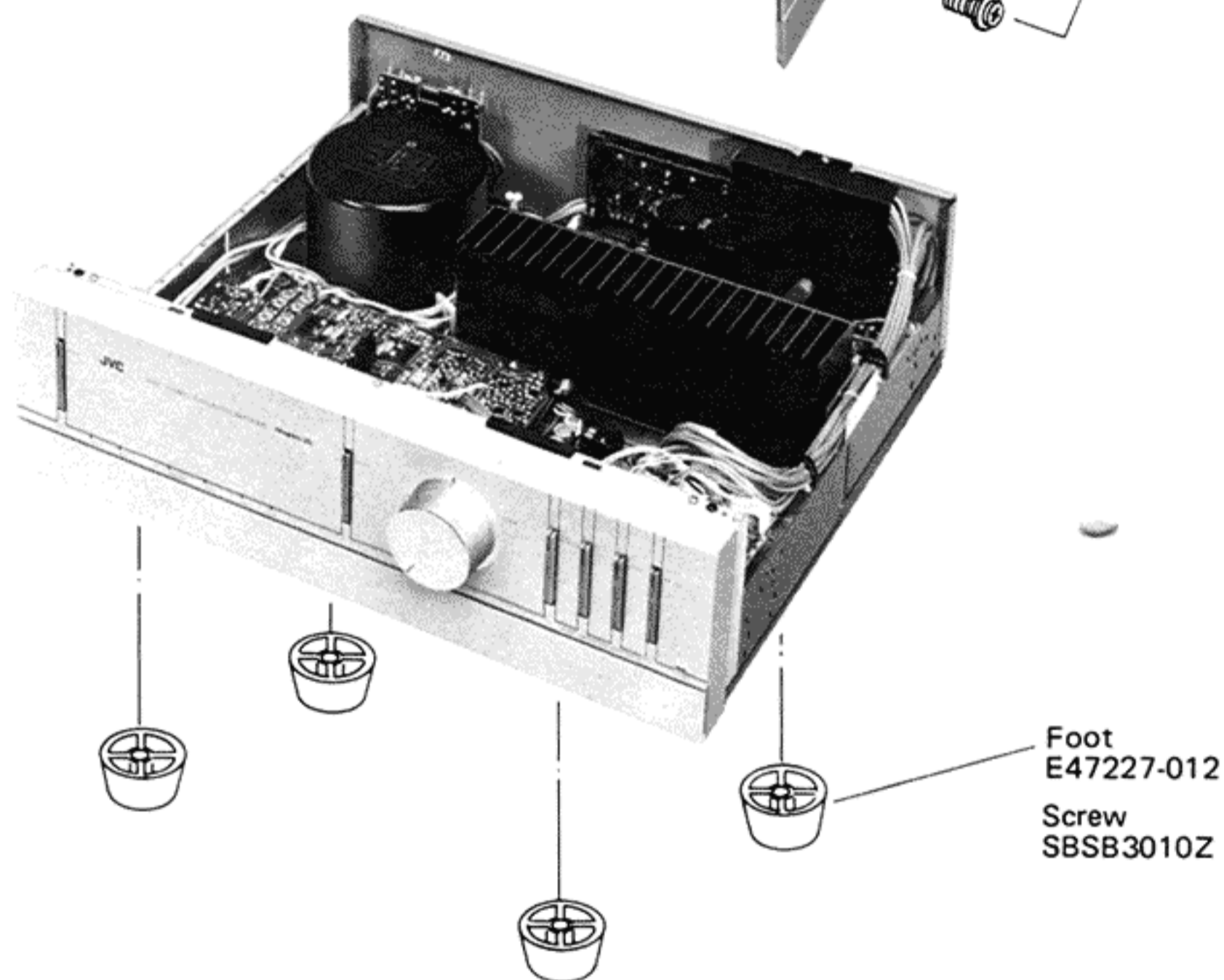
- Pure negative feedback + Super A power amplifier
Class A 90 W + 90 W (20 Hz -- 20 kHz, 0.005 %, 8 Ω both channels)
- DC servo equalization amplifier for both MC and MM cartridges
- 2 amplifier configuration throughout from the phono input to output
- Direct power supply system with emphasis on power
- Extra high operability thanks to the non-clearance volume knobs employed

3. Removal Procedures

3-(1) Top Cover



1. Remove 4 screws (Item No. 1) from the top cover.
2. Remove 2 screws (Item No. 2) from the rear panel back of top cover.



3-(2) Bottom Plate

1. Remove 7 screws (Item No. 3) from the sub bottom plate.

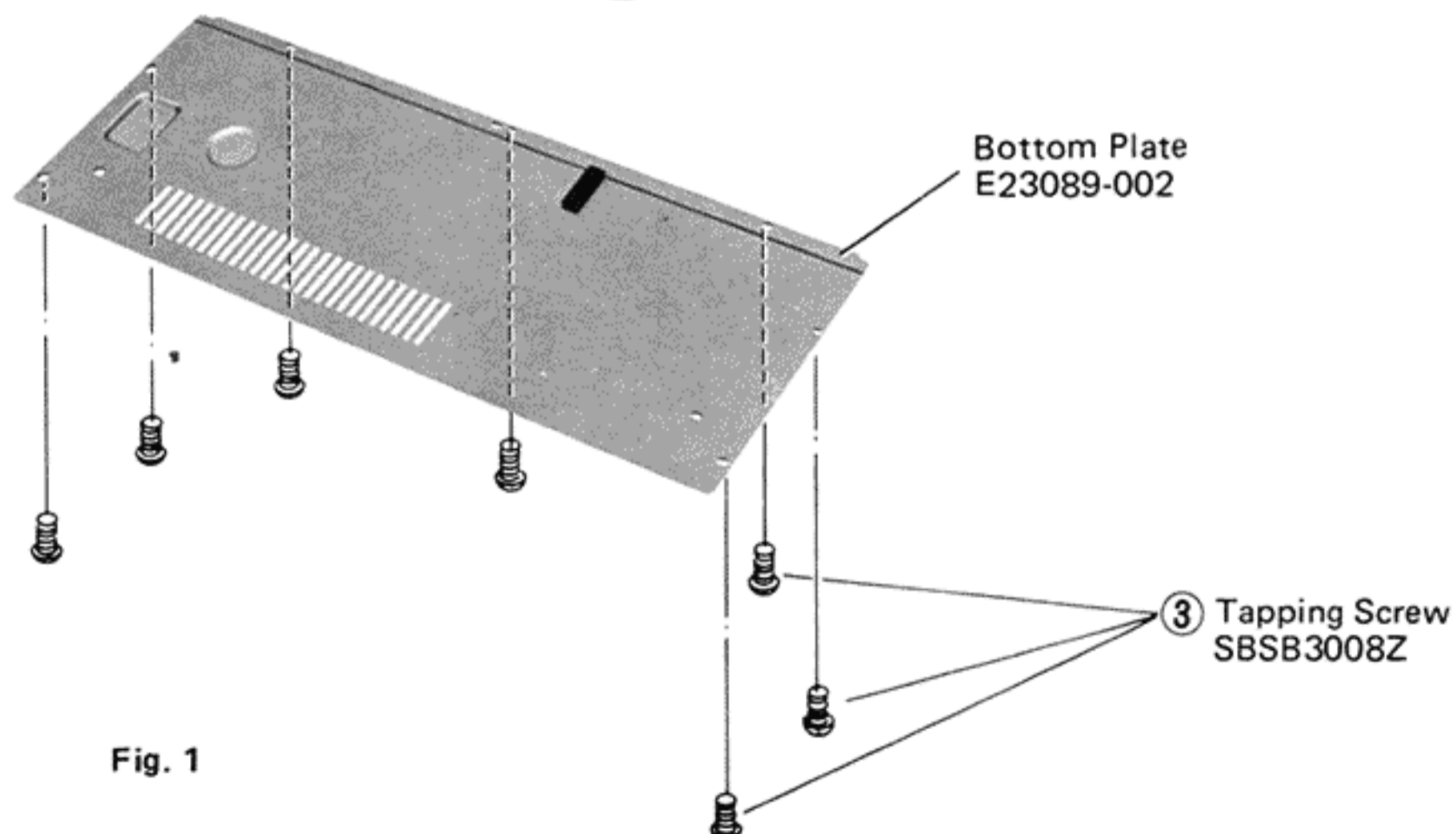


Fig. 1

4. Main Parts Location and Part Numbers

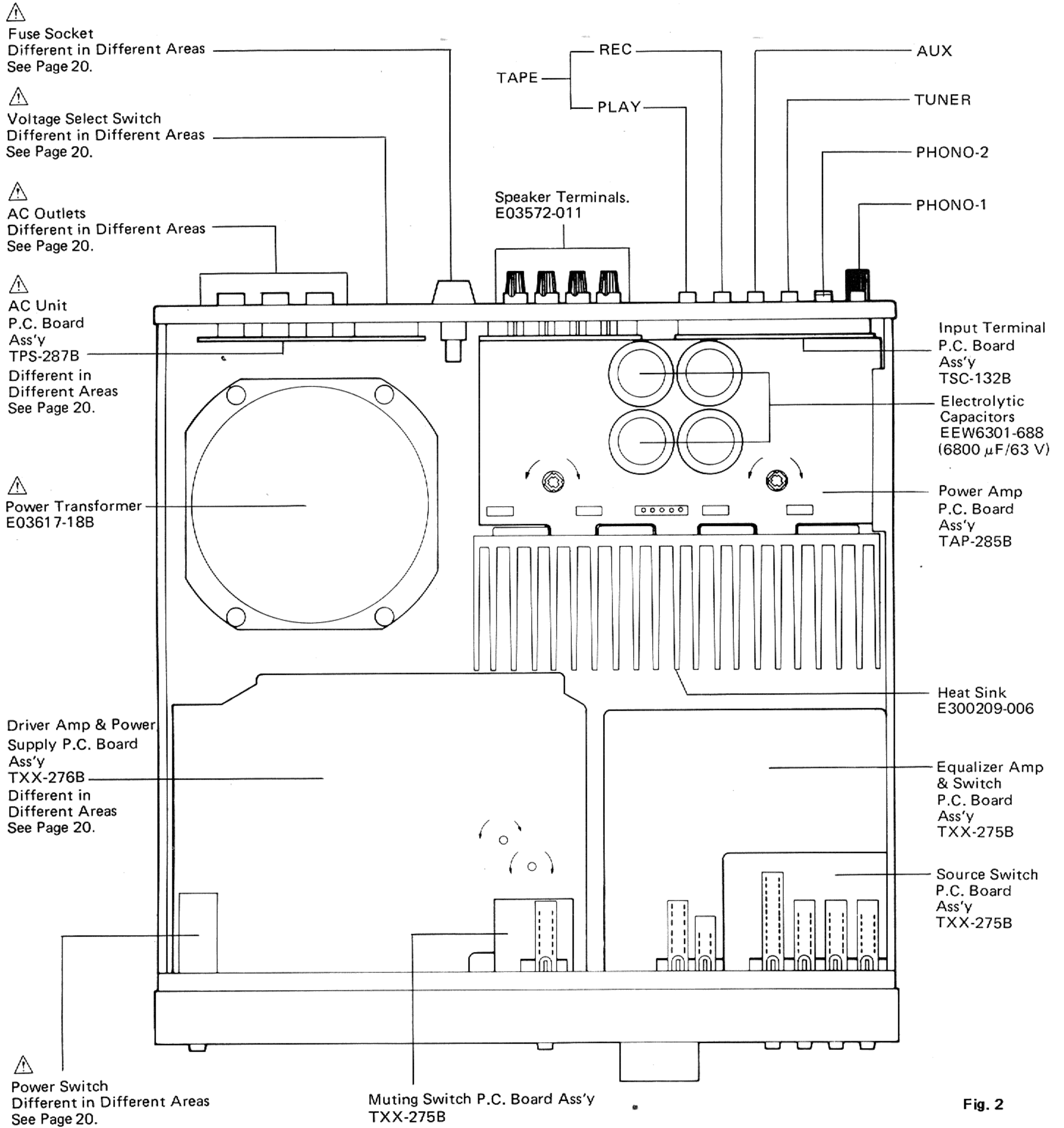


Fig. 2

5. Block Diagram

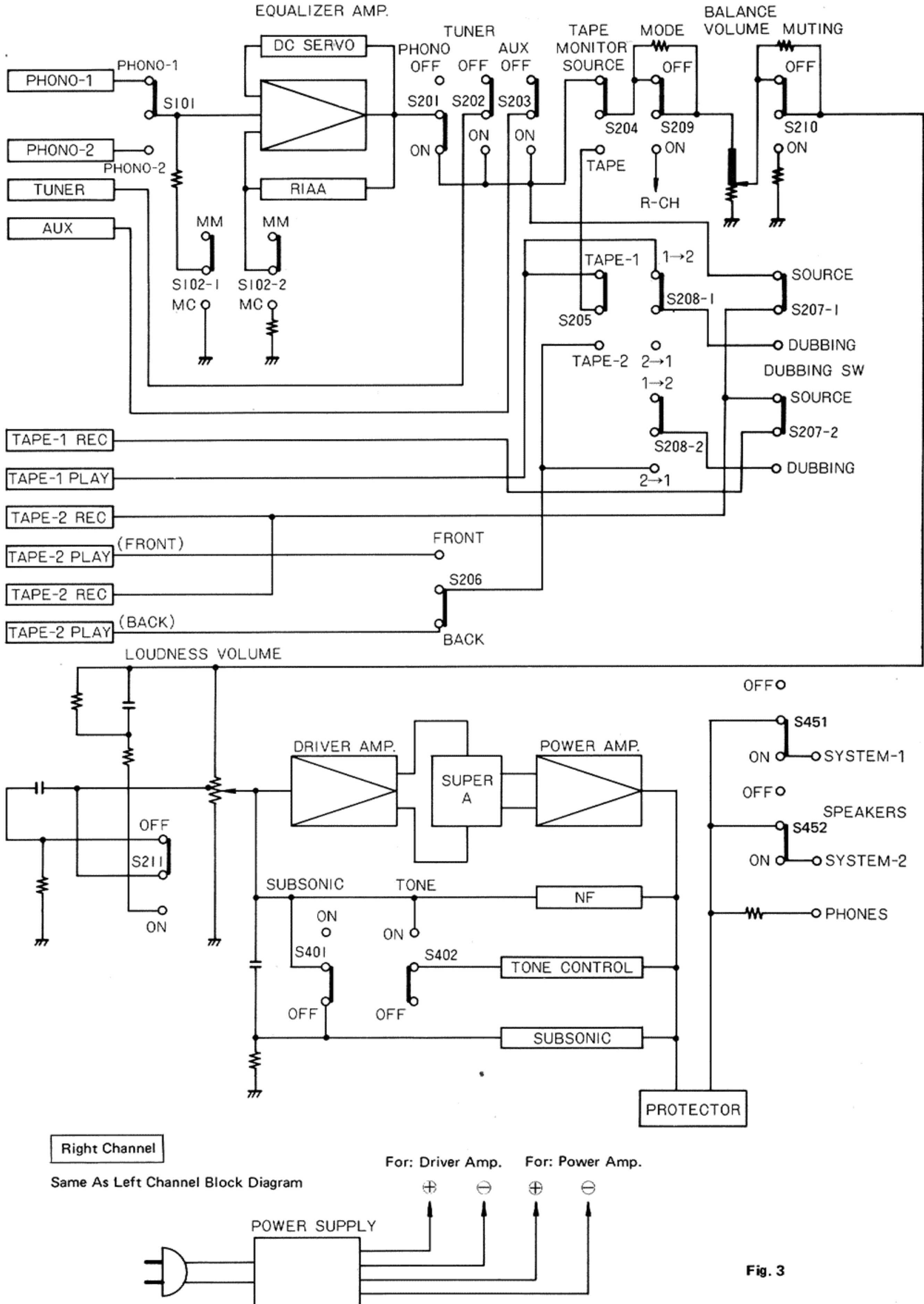
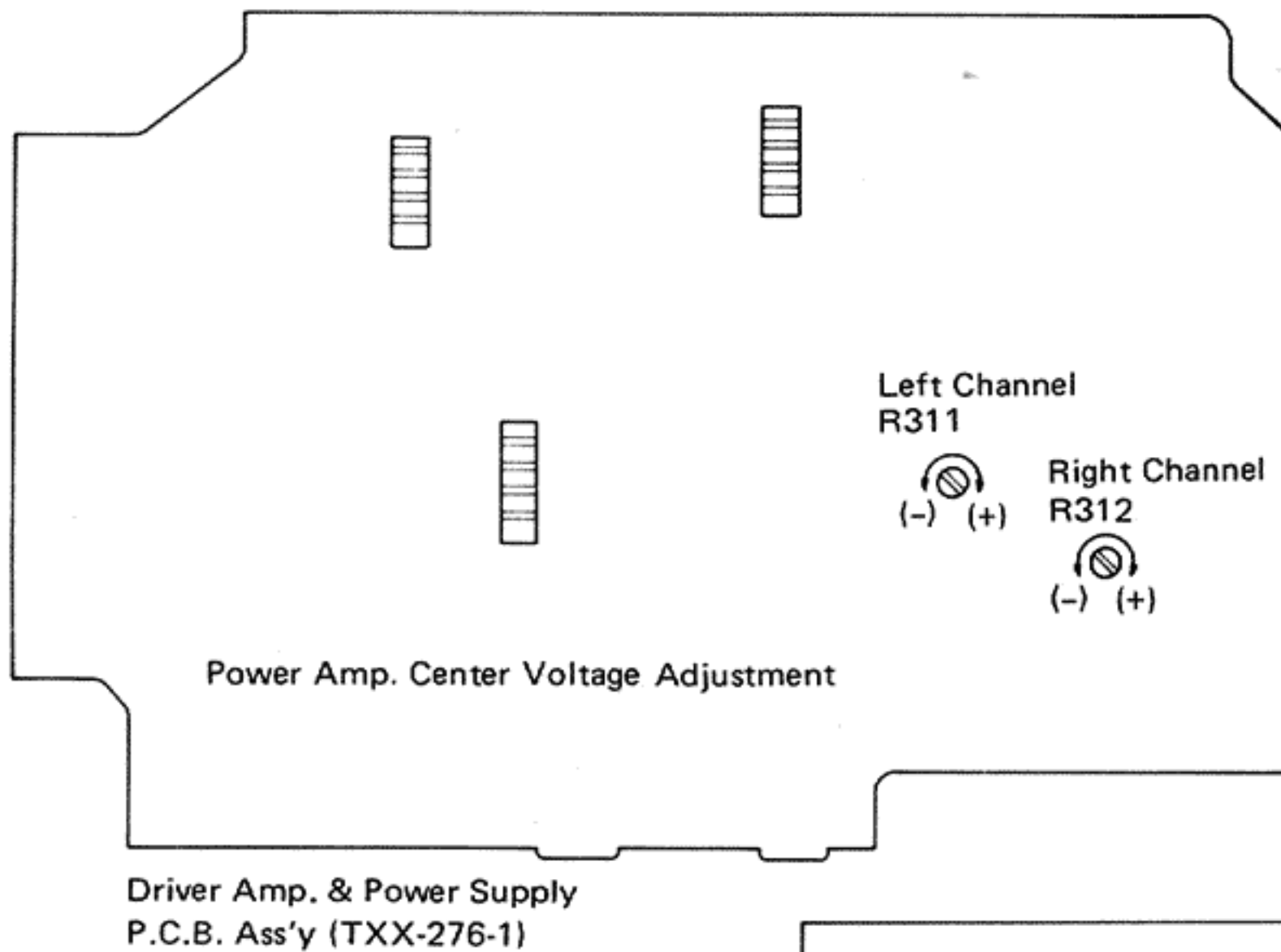


Fig. 3

6. Adjustment Procedures



The letter and number following the symbol number show the location (guide scale) of the part on the schematic.

Fig. 4

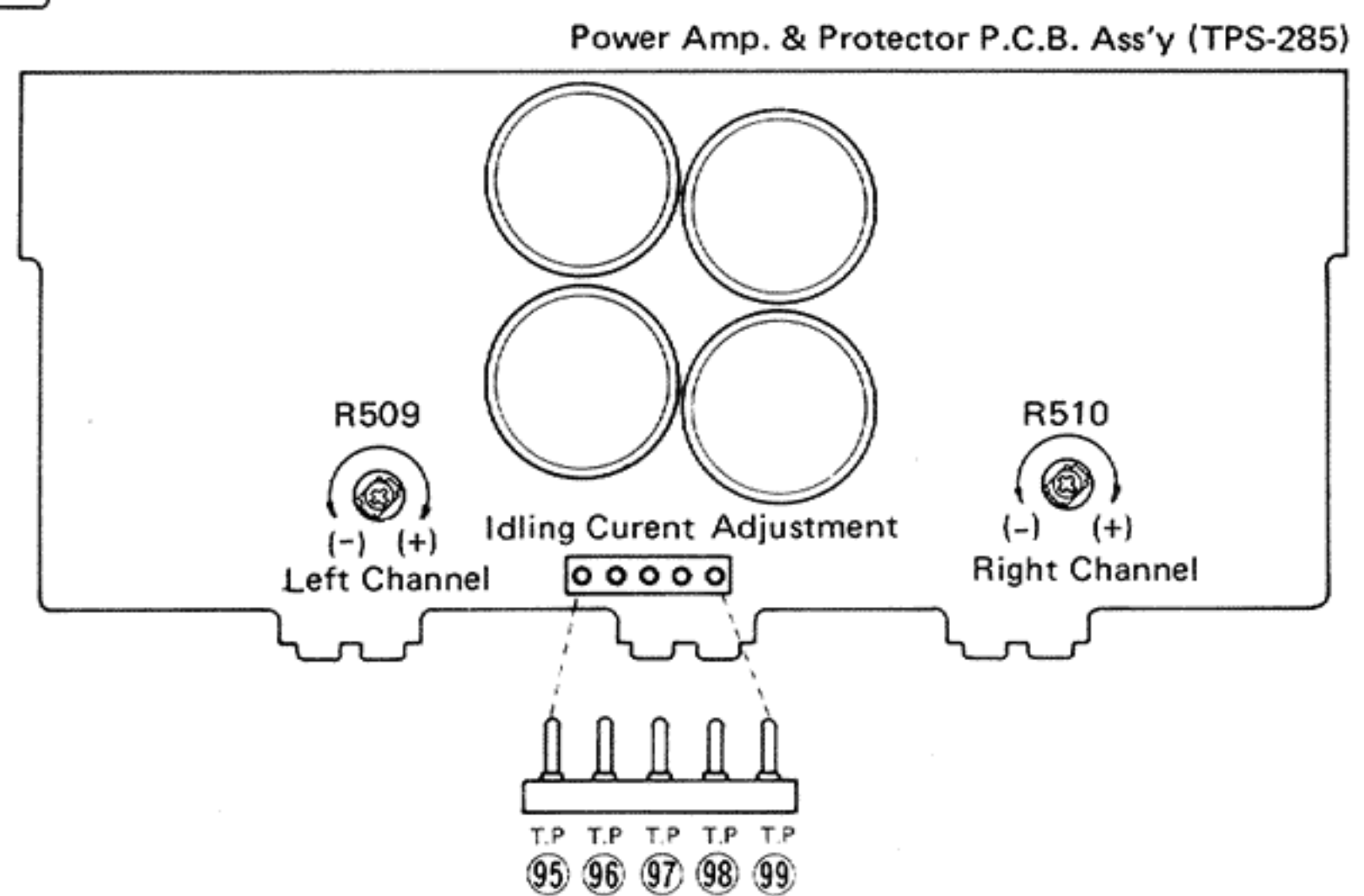


Fig. 5

6-(1) Power Amplifier Center Voltage Adjustment

1. Before turning on the power, set the semi-fixed resistors <R311 (X.0) for L channel and R312 (X.0) for R channel> of the drive amplifier and regulated power voltage circuit boards (TXX-276-1) to the center position.
2. Adjust the semi-fixed resistors (R311 and R312) so that the voltage at the following test points of the power amplifier circuit board (TAP-285) is within a range of ± 10 mV or less 5 minutes after the power is turned on.
L channel: Measure the voltage between test point 95 and test point 97 (ground).
R channel: Measure the voltage between test point 99 and test point 97 (ground).
The measurements can also be performed at the speaker terminals if the relay is operating normally.

6-(2) Idling Current Adjustment

1. Before turning on the power, turn the semi-fixed resistors <R509 (X.0) for L channel and R510 (X.0) for R channel> of the power amplifier circuit board fully counter-clockwise.
2. Adjust the semi-fixed resistors (R509 and R510) so that the voltage at the following test points of the power amplifier circuit board is within a range of 10 mV – 14 mV after the power is turned on.
L channel: Measure the voltage between test point 96 (emitter of X515) and output at the test point 95.
R channel: Measure the voltage between test point 98 (emitter of X516) and output at the test point 99.
3. Readjust resistors R509 and R510 about 5 minutes after the power is turned on (the heat sink temperature must be sufficiently high) so that the voltage at the test points becomes 12 mV.
Confirm that the voltage does not vary when the heat sink temperature increases further.
Note: Be sure to perform the measurement with the probes and cabinet of the measuring equipment separated from the grounding terminals of A-X7 or of other measuring equipment.

7. Exploded Views and Part Numbers

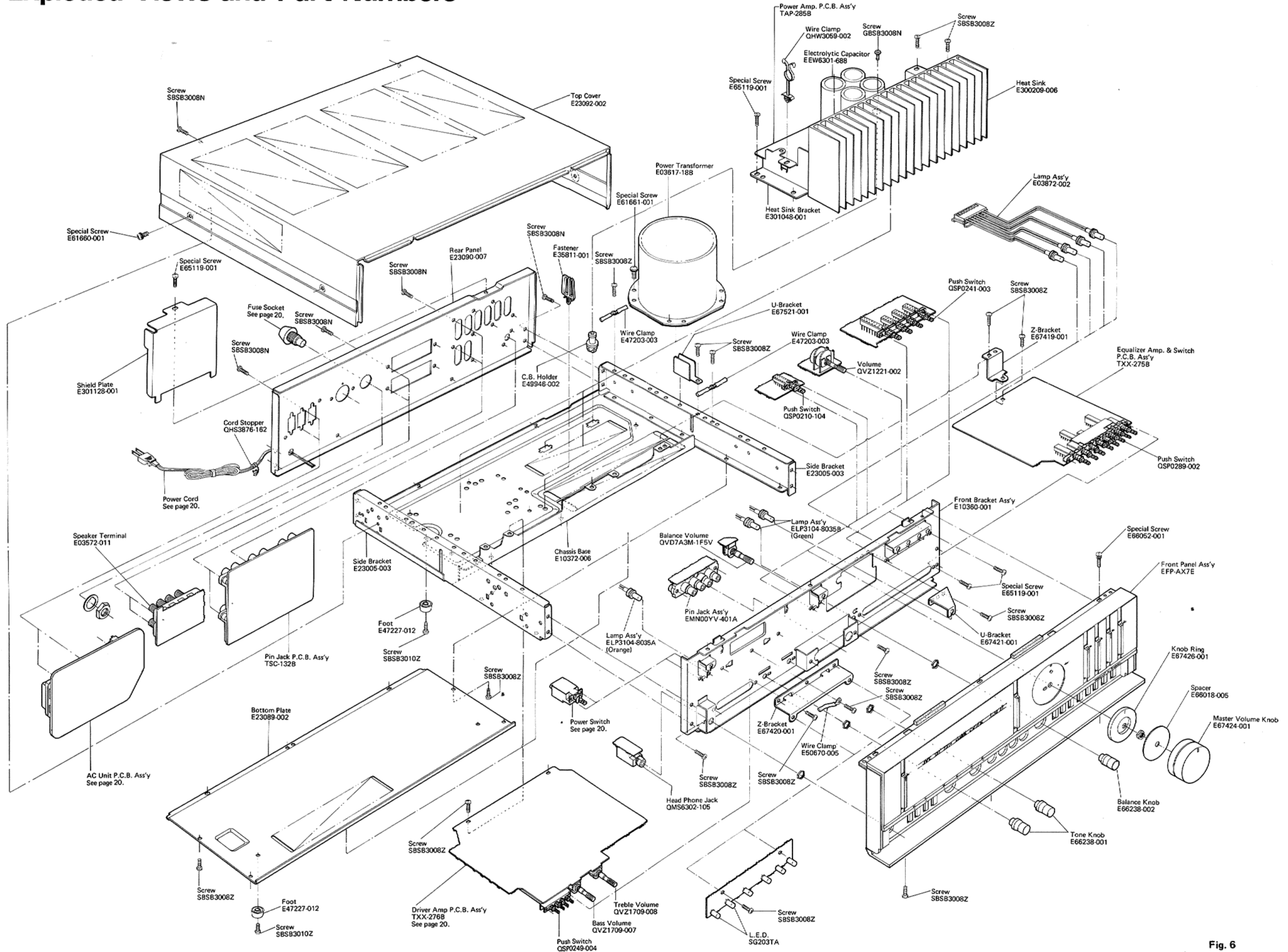


Fig. 6

8. Printed Circuit Board Ass'y and Parts List

Note: (J) . . . U.S.A., (C) . . . Canada, (E) . . . Europe, (B) . . . U.K., (A) . . . Australia, (P) . . . Military, (U) . . . Other countries

8-(1) TXX-275B Equalizer Amp. & Switch P.C. Board Ass'y

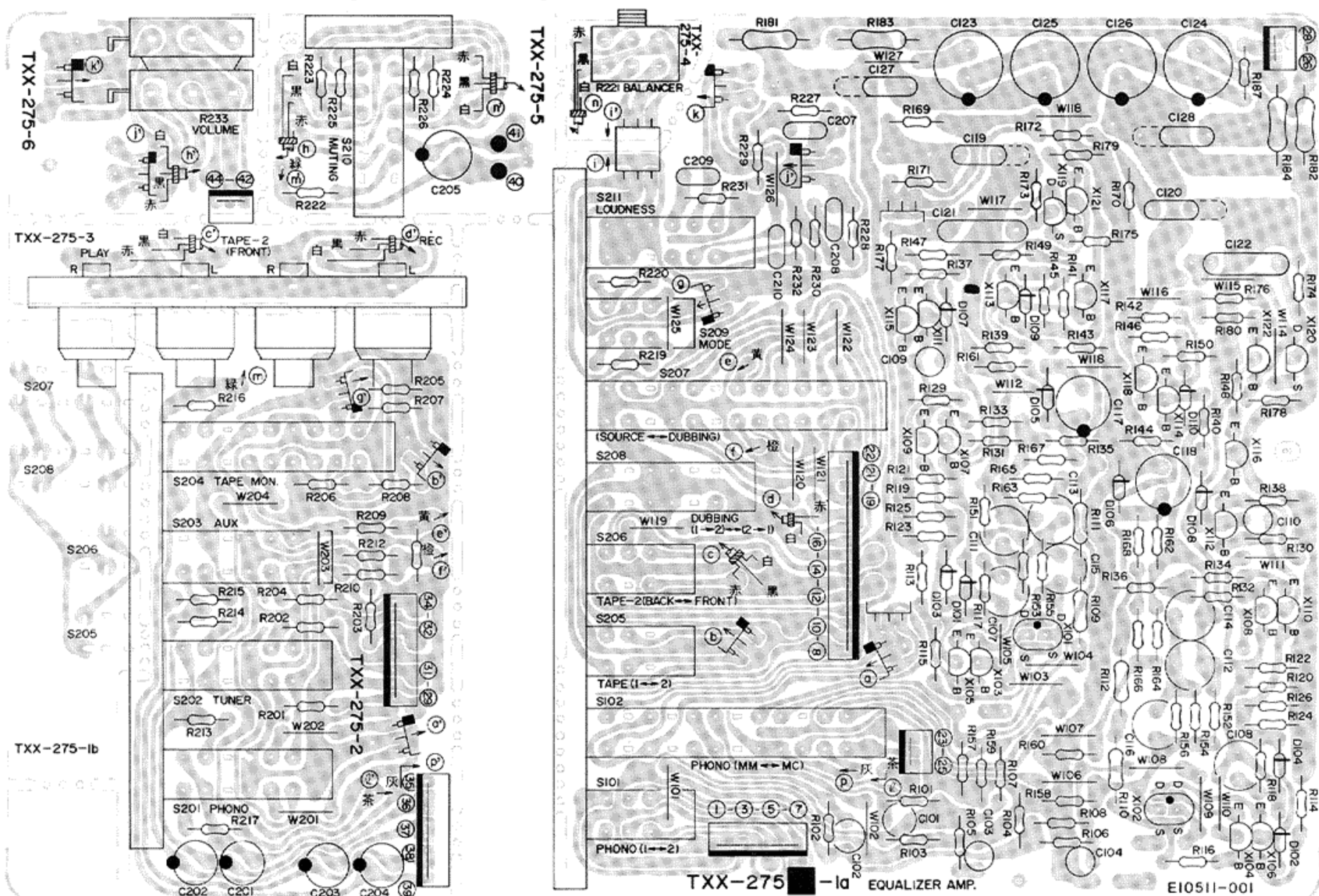
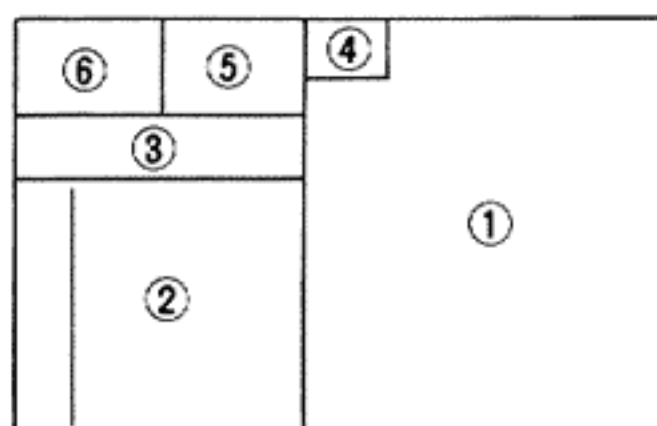


Fig. 7

Locations

- ① TXX-275B-1a Equalizer Amp. & Switch P.C.B. Ass'y
- ② TXX-275-2 Source Switch P.C.B. Ass'y
- ③ TXX-275-3 Front Pin Jack P.C.B. Ass'y
- ④ TXX-275-4 Balance Volume P.C.B. Ass'y
- ⑤ TXX-275-5 Muting Switch P.C.B. Ass'y
- ⑥ TXX-275-6 Master Volume P.C.B. Ass'y



Note:

The specific symbols (赤, 黒, 白, . . . etc.) on a surface of P.C. Board are actually unrelated to the repair service and are significant denotement in order to proper assembly at the factory.

Transistors

| Item No. | Part number | Rating | | Description | Maker |
|----------|----------------|--------|---------|-------------|---------|
| | | PC | ft | | |
| X101 | 2SK146 | 0.6 W | | F.E.T. | Toshiba |
| X102 | 2SK146 | " | | " | " |
| X103 | 2SC2240(BL) | 0.3 W | 100 MHz | Silicon | " |
| X104 | 2SC2240(BL) | " | " | " | " |
| X105 | 2SC2240(BL) | " | " | " | " |
| X106 | 2SC2240(BL) | " | " | " | " |
| X107 | 2SC2240(GR) | " | " | " | " |
| X108 | 2SC2240(GR) | " | " | " | " |
| X109 | 2SC2240(GR) | " | " | " | " |
| X110 | 2SC2240(GR) | " | " | " | " |
| X111 | 2SA1084(E) | 0.4 W | 120 MHz | " | Hitachi |
| X112 | 2SA1084(E) | " | " | " | " |
| X113 | 2SC1775AV(E,F) | 0.2 W | 200 MHz | " | " |
| X114 | 2SC1775AV(E,F) | " | " | " | " |
| X115 | 2SC2546(E) | 0.4 W | 90 MHz | " | " |
| X116 | 2SC2546(E) | " | " | " | " |
| X117 | 2SA1084(E) | " | 120 MHz | " | " |
| X118 | 2SA1084(E) | " | " | " | " |
| X119 | 2SK68A(M) | " | 90 MHz | F.E.T. | NEC |
| X120 | 2SK68A(M) | " | " | " | " |
| X121 | 2SC458(C) | 0.2 W | 230 MHz | Silicon | Hitachi |
| X122 | 2SC458(C) | " | " | " | " |

Diodes

| Item No. | Part Number | Rating | Description |
|----------|-------------|--------|-----------------|
| D111 | EOB01-22Z | | Zener Fuji |
| D101 | 1S2076-31 | | Silicon Hitachi |
| D102 | 1S2076-31 | | " |
| D103 | 1S2076-31 | | " |
| D104 | 1S2076-31 | | " |
| D105 | 1S2076-31 | | " |
| D106 | 1S2076-31 | | " |

Capacitors

| Item No. | Part Number | Rating | | Description |
|----------|--------------|---------|-------|--------------|
| C101 | QFP31HJ-471 | 470 pF | 50 V | Polystyrol |
| C102 | QFP31HJ-471 | " | " | |
| C107 | QFS81HJ-682 | 6800 pF | " | |
| C108 | QFS81HJ-682 | " | " | |
| C109 | QFS82BJ-470 | 47 pF | 125 V | " |
| C110 | QFS82BJ-470 | " | " | " |
| C111 | QFS81HG-822 | 8200 pF | 50 V | " |
| C112 | QFS81HG-822 | " | " | " |
| C113 | QFS81HG-822 | " | " | " |
| C114 | QFS81HG-822 | " | " | " |
| C115 | QFS81HG-472 | 4700 pF | " | " |
| C116 | QFS81HG-472 | " | " | " |
| C117 | QFT51CR-227H | 220 μF | 16 V | Electrolytic |
| C118 | QET51CR-227H | " | " | " |

Capacitors

| Item No. | Part Number | Rating | | Description |
|----------|--------------|---------------|------|--------------|
| C119 | EFZ0080-475 | 4.7 μ F | | Film |
| C120 | EFZ0080-475 | " | | " |
| C121 | QFZ0074-474 | 0.47 μ F | | " |
| C122 | QFZ0074-474 | " | | " |
| C123 | QET51HR-227H | 220 μ F | 50 V | Electrolytic |
| C124 | QET51HR-227H | " | " | " |
| C125 | QET51HR-227H | " | " | " |
| C126 | QET51HR-227H | " | " | " |
| C201 | QET51HR-476 | 47 μ F | " | " |
| C202 | QET51HR-476 | " | " | " |
| C203 | QET51HR-476 | " | " | " |
| C204 | QET51HR-476 | " | " | " |
| C205 | QET51HR-476 | " | " | " |
| C207 | QFP31HJ-331 | 330 pF | " | " |
| C208 | QFP31HJ-331 | " | " | " |
| C209 | QFM81HJ-273 | 0.027 μ F | " | Mylar |
| C210 | QFM81HJ-273 | " | " | " |

Resistors

| Item No. | Part Number | Rating | | Description |
|----------|--------------|----------------|-------|-------------|
| R101 | QRD141J-101S | 100 Ω | 1/4 W | Carbon |
| R102 | QRD141J-101S | " | " | " |
| R103 | QRD141J-473S | 47 k Ω | " | " |
| R104 | QRD141J-473S | " | " | " |
| R107 | QRD141J-5R6S | 5.6 Ω | " | " |
| R108 | QRD141J-5R6S | " | " | " |
| R109 | QRD129J-152 | 1.5 k Ω | 1/2 W | " |
| R110 | QRD129J-152 | " | " | " |
| R111 | QRD129J-152 | " | " | " |
| R112 | QRD129J-152 | " | " | " |
| R113 | QRD141J-823S | 82 k Ω | 1/4 W | " |
| R114 | QRD141J-823S | " | " | " |
| R115 | QRD141J-153S | 15 k Ω | " | " |
| R116 | QRD141J-153S | " | " | " |
| R117 | QRD141J-150S | 15 Ω | " | " |
| R118 | QRD141J-150S | " | " | " |
| R119 | QRD141J-562S | 5.6 k Ω | " | " |
| R120 | QRD141J-562S | " | " | " |
| R121 | QRD141J-622S | 6.2 k Ω | " | " |
| R122 | QRD141J-622S | " | " | " |
| R123 | QRD141J-682S | 6.8 k Ω | " | " |
| R124 | QRD141J-682S | " | " | " |
| R125 | QRD141J-682S | " | " | " |
| R126 | QRD141J-682S | " | " | " |
| R129 | QRD141J-102S | 1 k Ω | " | " |
| R130 | QRD141J-102S | " | " | " |
| R131 | QRD141J-330S | 33 Ω | " | " |
| R132 | QRD141J-330S | " | " | " |
| R133 | QRD141J-330S | " | " | " |
| R134 | QRD141J-330S | " | " | " |
| R135 | QRD141J-822S | 8.2 k Ω | " | " |
| R136 | QRD141J-822S | " | " | " |
| R137 | QRD149J-221S | 220 Ω | " | " |
| R138 | QRD149J-221S | " | " | " |
| R139 | QRD141J-152S | 1.5 k Ω | " | " |
| R140 | QRD141J-152S | " | " | " |
| R141 | QRD141J-102S | 1 k Ω | " | " |
| R142 | QRD141J-102S | " | " | " |
| R143 | QRD141J-123S | 12 k Ω | " | " |
| R144 | QRD141J-123S | " | " | " |
| R145 | QRD141J-331S | 330 Ω | " | " |
| R146 | QRD141J-331S | " | " | " |
| R147 | QRD149J-101S | 100 Ω | " | " |
| R148 | QRD149J-101S | " | " | " |
| R149 | QRD149J-101S | " | " | " |
| R150 | QRD149J-101S | " | " | " |
| R151 | QRD141J-153S | 15 k Ω | " | " |
| R152 | QRD141J-153S | " | " | " |
| R153 | QRD141J-184S | 180 k Ω | " | " |
| R154 | QRD141J-184S | " | " | " |
| R155 | QRD141J-163S | 16 k Ω | " | " |
| R156 | QRD141J-163S | " | " | " |
| R157 | QRD141J-271S | 270 Ω | " | " |
| R158 | QRD141J-271S | " | " | " |
| R159 | QRD141J-220S | 22 Ω | " | " |

Resistors

| Item No. | Part Number | Rating | | Description |
|----------|--------------|----------------|-------|------------------|
| R160 | QRD141J-220S | 22 Ω | 1/4 W | Carbon |
| R161 | QRD141J-103S | 10 k Ω | " | " |
| R162 | QRD141J-103S | " | " | " |
| R163 | QRD141J-275S | 2.7 M Ω | " | " |
| R164 | QRD141J-275S | " | " | " |
| R165 | QRD141J-682S | 6.8 k Ω | " | " |
| R166 | QRD141J-682S | " | " | " |
| R167 | QRD141J-103S | 1 k Ω | " | " |
| R168 | QRD141J-102S | " | " | " |
| R169 | QRD141J-224S | 220 k Ω | " | " |
| R170 | QRD141J-224S | " | " | " |
| R171 | QRD141J-331S | 330 Ω | " | " |
| R172 | QRD141J-331S | " | " | " |
| R173 | QRD141J-475S | 4.7 M Ω | " | " |
| R174 | QRD141J-475S | " | " | " |
| R175 | QRD141J-821S | 820 Ω | " | " |
| R176 | QRD141J-821S | " | " | " |
| R177 | QRD141J-823S | 82 k Ω | " | " |
| R178 | QRD141J-823S | " | " | " |
| R179 | QRD141J-622S | 6.2 k Ω | " | " |
| R180 | QRD141J-622S | " | " | " |
| R181 | QRG016J-561 | 560 Ω | 1 W | Oxide Metal Film |
| R182 | QRG016J-561 | " | " | " |
| R183 | QRG016J-561 | " | " | " |
| R184 | QRG016J-561 | 560 Ω | " | " |
| R187 | QRD141J-5R6S | 5.6 Ω | 1/4 W | Carbon |
| R201 | QRD141J-331S | 330 Ω | " | " |
| R202 | QRD141J-331S | " | " | " |
| R203 | QRD141J-331S | " | " | " |
| R204 | QRD141J-331S | " | " | " |
| R205 | QRD141J-105S | 1 M Ω | " | " |
| R206 | QRD141J-105S | " | " | " |
| R207 | QRD141J-331S | 330 Ω | " | " |
| R208 | QRD141J-331S | " | " | " |
| R209 | QRD141J-331S | " | " | " |
| R210 | QRD141J-331S | " | " | " |
| R211 | QRD141J-105S | 1 M Ω | " | " |
| R212 | QRD141J-105S | " | " | " |
| R213 | QRD141J-560S | 56 Ω | " | " |
| R214 | QRD141J-560S | " | " | " |
| R215 | QRD141J-560S | " | " | " |
| R216 | QRD141J-560S | " | " | " |
| R217 | QRD141J-390S | 39 Ω | " | " |
| R219 | QRD141J-472S | 4.7 k Ω | " | " |
| R220 | QRD141J-472S | " | " | " |
| R221 | QVD7A3M-1F5V | " | " | " |
| R222 | QRD141J-560S | 56 Ω | " | " |
| R223 | QRD141J-823S | 82 k Ω | " | " |
| R224 | QRD141J-823S | " | " | " |
| R225 | QRD141J-103S | 10 k Ω | " | " |
| R226 | QRD141J-103S | " | " | " |
| R227 | QRD141J-105S | 1 M Ω | " | " |
| R228 | QRD141J-105S | " | " | " |
| R229 | QRD141J-333S | 33 k Ω | " | " |
| R230 | QRD141J-333S | " | " | " |
| R231 | QRD141J-203S | 20 k Ω | " | " |
| R232 | QRD141J-203S | " | " | " |
| R233 | QVZ1221-002 | 100 k | 1/2 W | " |

Others

| Item No. | Part Number | Rating | Description |
|----------|--------------|--------|-------------------------|
| S210 | QSP0210-104 | | Push Switch (MUTING) |
| | QSP0241-003 | | " (SOURCE) |
| | QSP0289-002 | | " (TAPE) |
| | QMV5005-003 | | 3P Plug Ass'y (OUT) |
| | QMV5005-007 | | 7P Plug Ass'y (PHONO) |
| | QMV5005-008 | | 8P Plug Ass'y (TU, AUX) |
| | QMV5005-015 | | 15P Plug Ass'y |
| | EMN00YV-401A | | 4P Pin Jack Ass'y |
| | E65654-001 | | Spacer |
| | EWR23C-16NN | | Flat Wire |
| | EWR23C-20NN | | " |
| | EWR33A-10NN | | " |
| | EWR33A-15NN | | " |
| | E10511-001 | | Circuit Board |

8-(2) TXX-276B, C Driver Amp. & Power Supply P.C. Board Ass'y

Note: TXX-276 □ -1 varies according to the areas employed. See note (1) when placing an order.

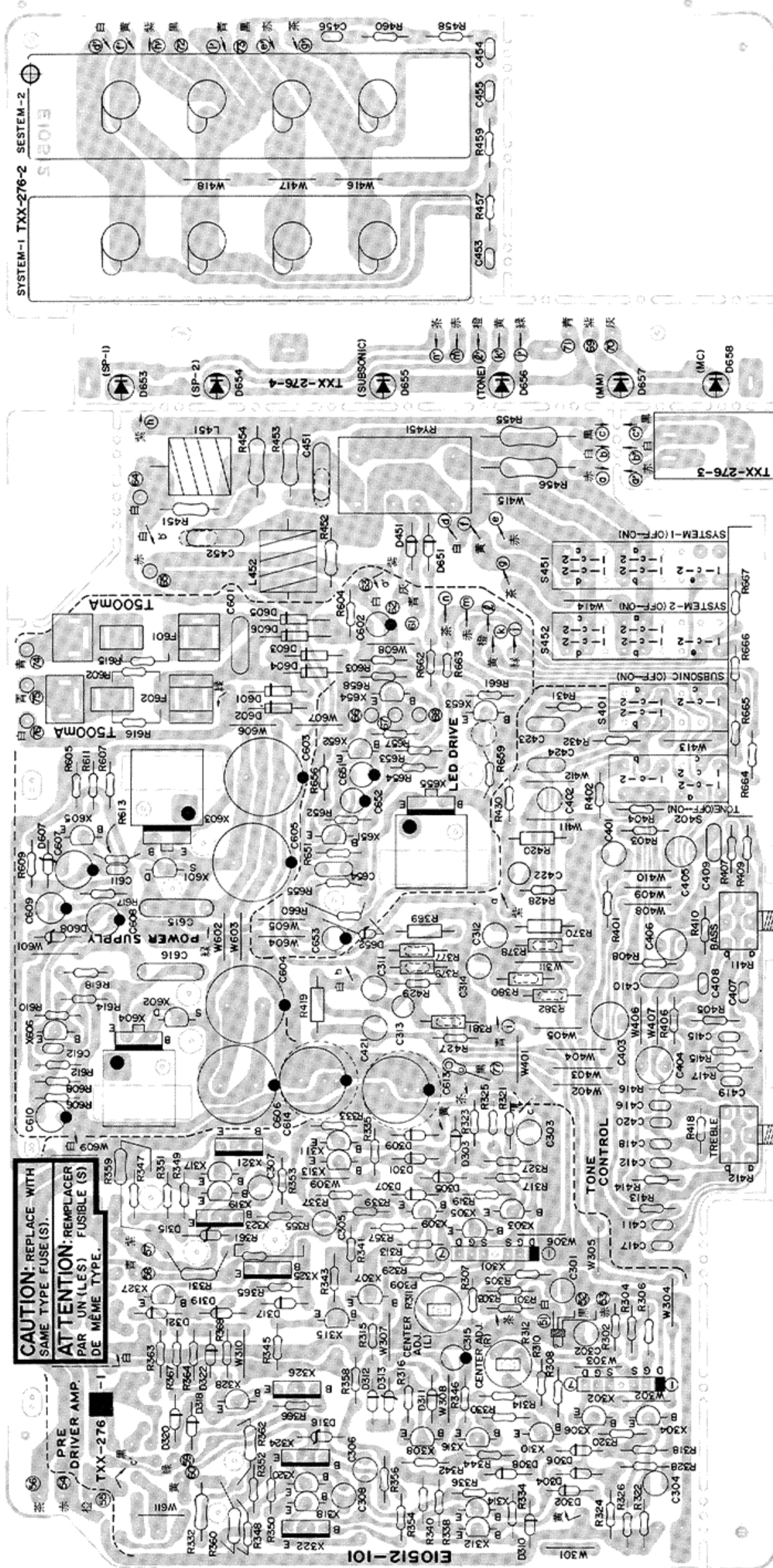


Fig. 8

Transistors

| Item No. | Part Number | Rating | | Description | Maker |
|----------|----------------|--------|---------|-------------|---------|
| | | Pc | fT | | |
| X301 | 2SK150A(GR,BL) | 0.2 W | | F.E.T. | Toshiba |
| X302 | 2SK150A(GR,BL) | " | " | " | " |
| X303 | 2SC1775AV(E,F) | " | 200 MHz | Silicon | Hitachi |
| X304 | 2SC1775AV(E,F) | " | " | " | " |
| X305 | 2SC1775AV(E,F) | " | " | " | " |
| X306 | 2SC1775AV(E,F) | " | " | " | " |
| X307 | 2SC458(C,D) | " | 230 MHz | " | " |
| X308 | 2SC458(C,D) | " | " | " | " |
| X309 | 2SA1029(C,D) | " | 200 MHz | " | " |
| X310 | 2SA1029(C,D) | " | " | " | " |

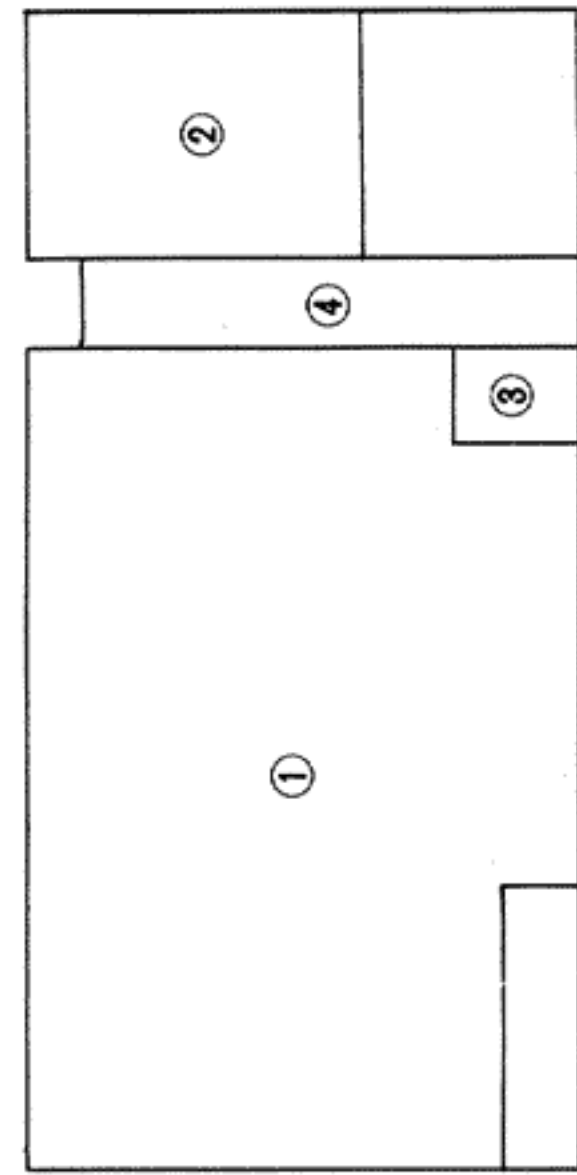
Location

- ① TXX-276 □-1 Drive Amp. & Power Supply P.C.B. Ass'y
- ② TXX-276-2 Speaker Terminal P.C.B. Ass'y
- ③ TXX-276-3 Headphones Jack P.C.B. Ass'y
- ④ TXX-276-4 L.E.D. P.C.B. Ass'y

Note (1):

| Designated Areas | P.C. Board Ass'y |
|------------------|------------------|
| U.S.A. & Canada | TXX-276 [B]-1 |
| All Other Areas | TXX-276 [C]-1 |

Note (2):
The specific symbols (赤, 黒, 白, . . . etc.) on a surface of P.C. board are actually unrelated to the repair service and are significant denotement in order to process the proper assembly at the factory.



Transistors

| Item No. | Part Number | Rating | | Description | |
|----------|--------------|--------|---------|-------------|---------|
| | | Pc | fT | | Maker |
| X311 | 2SC458(D) | 0.2 W | 230 MHz | " | " |
| X312 | 2SC458(D) | " | " | " | " |
| X313 | 2SC458(D) | " | " | " | " |
| X314 | 2SC458(D) | " | " | " | " |
| X315 | 2SC2546(E) | 0.4 W | 90 MHz | " | " |
| X316 | 2SC2546(E) | " | " | " | " |
| X317 | 2SA1029(D) | 0.2 W | 200 MHz | " | " |
| X318 | 2SA1029(D) | " | " | " | " |
| X319 | 2SA1029(D) | " | " | " | " |
| X320 | 2SA1029(D) | " | " | " | " |
| X321 | 2SA899(B,V) | 1 W | 100 MHz | " | Fujitsu |
| X322 | 2SA899(B,V) | " | " | " | " |
| X323 | 2SA899(B,V) | " | " | " | " |
| X324 | 2SA899(B,V) | " | " | " | " |
| X325 | 2SC1904(B,V) | " | " | " | " |
| X326 | 2SC1904(B,V) | " | " | " | " |
| X327 | 2SC458(C,D) | 0.2 W | 230 MHz | " | Hitachi |
| X328 | 2SC458(C,D) | " | " | " | " |
| X601 | 2SK105(H) | 0.25 W | " | F.E.T. | NEC |
| X602 | 2SK105(H) | " | " | " | " |
| X603 | 2SD313V(E) | 30 W | 8 MHz | Silicon | Sanyo |
| X604 | 2SB507V(E) | " | " | " | " |
| X605 | 2SC1775AV(E) | 0.2 W | 200 MHz | " | Hitachi |
| X606 | 2SA872AV(E) | 0.3 W | 120 MHz | " | " |
| X651 | 2SC458(C) | 0.2 W | 230 MHz | " | " |
| X652 | 2SC458(C) | " | " | " | " |
| X653 | 2SC1775AV(E) | " | 200 MHz | " | " |
| X654 | 2SC458(C) | " | 230 MHz | " | " |
| X655 | 2SB507V(E) | 30 W | 8 MHz | " | Sanyo |

Diodes

| Item No. | Part Number | Rating | Description | |
|----------|-------------|--------|-----------------|------------|
| | | | | Maker |
| D301 | 1S2076-31 | | Silicon | Hitachi |
| D302 | 1S2076-31 | | " | " |
| D303 | 1S2076-31 | | " | " |
| D304 | 1S2076-31 | | " | " |
| D305 | 1S2076-31 | | " | " |
| D306 | 1S2076-31 | | " | " |
| D307 | 1S2076-31 | | " | " |
| D308 | 1S2076-31 | | " | " |
| D309 | 1S2076-31 | | " | " |
| D310 | 1S2076-31 | | " | " |
| D311 | 1S2076-31 | | " | " |
| D312 | 1S2076-31 | | " | " |
| D313 | RD6.2EB3 | | Silicon (Zener) | NEC |
| D315 | RD2.7EB2 | | " | " |
| D316 | RD2.7EB2 | | " | " |
| D317 | 1S2076-31 | | Silicon | Hitachi |
| D318 | 1S2076-31 | | " | " |
| D319 | 1S2076-31 | | " | " |
| D320 | 1S2076-31 | | " | " |
| D321 | 1S2076-31 | | " | " |
| D322 | 1S2076-31 | | " | " |
| D451 | 1S2076-31 | | " | " |
| D601 | 10DF2FD | | " | Shindengen |
| D602 | 10DF2FD | | " | " |
| D603 | 10DF2FD | | " | " |
| D604 | 10DF2FD | | " | " |
| D605 | 10DF2FD | | " | " |
| D606 | 10DF2FD | | " | " |
| D607 | RD5.6EB3 | | Silicon (Zener) | NEC |
| D608 | RD5.6EB3 | | " | " |
| D651 | RD6.2EB3 | | " | " |
| D651 | 1S2076-31 | | Silicon | Hitachi |
| D653 | SG203TA | | L.E.D. | NEC |
| D654 | SG203TA | | " | " |
| D655 | SG203TA | | " | " |
| D656 | SG203TA | | " | " |
| D657 | SG203TA | | " | " |
| D658 | SG203TA | | " | " |

Coils

| Item No. | Part Number | Rating | Description |
|----------|-------------|-----------|-------------|
| L451 | E04059-1R0B | 1 μ H | Coil |
| L452 | E04059-1R0B | " | " |

Capacitors

| Item No. | Part Number | Rating | Description |
|----------|--------------|---------------------|--------------|
| C301 | QFS81HJ-150 | 15 pF 50 V | Polystyrol |
| C302 | QFS81HJ-150 | " " | " |
| C303 | QFS81HJ-331 | 330 pF " | " |
| C304 | QFS81HJ-331 | " " | " |
| C305 | QFS81HJ-1R0 | 1 pF " | " |
| C307 | QFS81HJ-1R0 | " " | " |
| C311 | QFS81HJ-220 | 22 pF " | " |
| C312 | QFS81HJ-220 | " " | " |
| C313 | QFS81HJ-330 | 33 pF " | " |
| C314 | QFS81HJ-330 | " " | " |
| C315 | QET51HR-105H | 1 μ F " | Electrolytic |
| C401 | QFS81HJ-470 | 47 pF " | Polystyrol |
| C402 | QFS81HJ-470 | " " | " |
| C403 | QE Z0046-475 | 4.7 μ F " | Electrolytic |
| C404 | QE Z0046-475 | " " | " |
| C405 | QE Z0046-225 | 2.2 μ F " | " |
| C406 | QE Z0046-225 | " " | " |
| C407 | QFM81HJ-183 | 0.018 μ F " | Mylar |
| C408 | QFM81HJ-183 | " " | " |
| C409 | QFM81HJ-184 | 0.18 μ F " | " |
| C410 | QFM81HJ-184 | " " | " |
| C411 | QFP31HJ-332 | 3300 pF " | " |
| C412 | QFP31HJ-332 | " " | " |
| C415 | QFM81HJ-333 | 0.033 μ F " | Mylar |
| C416 | QFM81HJ-333 | " " | " |
| C417 | QFP31HJ-391 | 390 pF " | " |
| C418 | QFP31HJ-391 | " " | " |
| C419 | QFP31HJ-432 | 4300 pF " | " |
| C420 | QFP31HJ-432 | " " | " |
| C421 | QFS81HJ-220 | 22 pF " | Polystyrol |
| C422 | QFS81HJ-220 | " " | " |
| C423 | QFM81HJ-274 | 0.27 μ F " | Mylar |
| C424 | QFM81HJ-274 | " " | " |
| C451 | QFZ0075-473 | 0.047 μ F 400 V | Film |
| C452 | QFZ0075-473 | " " | " |
| C453 | QFM81HJ-103 | 0.01 μ F 50 V | Mylar |
| C454 | QFM81HJ-103 | " " | " |
| C455 | QFM81HJ-103 | " " | " |
| C601 | QFZ0074-104 | 0.1 μ F | Film |
| C602 | QET51HR-105 | 1 μ F 50 V | Electrolytic |
| C603 | QET52AR-227E | 220 μ F 100 V | " |
| C604 | QET52AR-227E | " " | " |
| C605 | QET52AR-227E | " " | " |
| C606 | QET52AR-227E | " " | " |
| C607 | QET51CR-476H | 47 μ F 16 V | " |
| C608 | QET51CR-476H | " " | " |
| C609 | QET51HR-475H | 4.7 μ F 50 V | " |
| C610 | QET51HR-475H | " " | " |
| C611 | QFP31HJ-101 | 100 pF " | " |
| C612 | QFP31HJ-101 | " " | " |
| C613 | QET51JR-477H | 470 μ F 63 V | Electrolytic |
| C614 | QET51JR-227H | 220 μ F " | " |
| C651 | QET51HR-474 | 0.47 μ F 50 V | " |
| C652 | QET51HR-474 | " " | " |
| C653 | QET51HR-225 | 2.2 μ F " | " |
| C654 | QFM81HK-473 | 0.047 μ F " | Mylar |

Resistors

| Item No. | Part Number | Rating | Description |
|----------|--------------|--------------------|-------------|
| R301 | QRD141J-105S | 1 M Ω 1/4 W | Carbon |
| R302 | QRD141J-101S | " " | " |
| R303 | QRD141J-151S | 150 Ω " | " |
| R304 | QRD141J-151S | " " | " |
| R305 | QRD141J-470S | 47 Ω " | " |
| R306 | QRD141J-470S | " " | " |
| R307 | QRD141J-220S | 22 Ω " | " |
| R308 | QRD141J-220S | " " | " |
| R309 | QRD141J-220S | " " | " |
| R310 | QRD141J-220S | " " | " |

Resistors

| Item No. | Part Number | Rating | | Description |
|----------|--------------|--------|-------|-------------|
| R311 | QVP4AOB-101 | 100 Ω | | Variable |
| R312 | QVP4AOB-101 | " | | " |
| R313 | QRD141J-123S | 12 kΩ | 1/4 W | Carbon |
| R314 | QRD141J-123S | " | " | " |
| R315 | QRD141J-242S | 2.4 kΩ | " | " |
| R316 | QRD141J-242S | " | " | " |
| R317 | QRD141J-151S | 150 Ω | " | " |
| R318 | QRD141J-151S | " | " | " |
| R319 | QRD141J-151S | " | " | " |
| R320 | QRD141J-151S | " | " | " |
| R321 | QRD141J-682S | 6.8 kΩ | " | " |
| R322 | QRD141J-682S | " | " | " |
| R323 | QRD141J-682S | " | " | " |
| R324 | QRD141J-682S | " | " | " |
| R325 | QRD141J-563S | 56 kΩ | " | " |
| R326 | QRD141J-563S | " | " | " |
| R327 | QRD141J-331S | 330 Ω | " | " |
| R328 | QRD141J-331S | " | " | " |
| R329 | QRD141J-273S | 27 kΩ | " | " |
| R330 | QRD141J-273S | " | " | " |
| R331 | QRD129J-182 | 1.8 kΩ | 1/2 W | " |
| R333 | QRD141J-681S | 680 Ω | 1/4 W | " |
| R334 | QRD141J-681S | " | " | " |
| R335 | QRD141J-681S | " | " | " |
| R336 | QRD141J-681S | " | " | " |
| R337 | QRD141J-391S | 390 Ω | " | " |
| R338 | QRD141J-391S | " | " | " |
| R339 | QRD141J-391S | " | " | " |
| R340 | QRD141J-391S | " | " | " |
| R341 | QRD141J-392S | 3.9 kΩ | " | " |
| R342 | QRD141J-392S | " | " | " |
| R343 | QRD141J-392S | " | " | " |
| R344 | QRD141J-392S | " | " | " |
| R345 | QRD141J-152S | 1.5 kΩ | " | " |
| R346 | QRD141J-152S | " | " | " |
| R347 | QRD149J-680S | 68 Ω | " | " |
| R348 | QRD149J-680S | " | " | " |
| R349 | QRD141J-5R1S | 5.1 Ω | " | " |
| R350 | QRD141J-5R1S | " | " | " |
| R351 | QRD141J-5R1S | " | " | " |
| R352 | QRD141J-5R1S | 5.1 Ω | 1/4 W | Carbon |
| R353 | QRD141J-151S | 150 Ω | " | " |
| R354 | QRD141J-151S | " | " | " |
| R355 | QRD141J-151S | " | " | " |
| R356 | QRD141J-151S | " | " | " |
| R357 | QRD141J-563S | 56 kΩ | " | " |
| R358 | QRD141J-563S | " | " | " |
| R359 | QRD129J-222 | 2.2 kΩ | 1/2 W | " |
| R360 | QRD129J-222 | " | " | " |
| R361 | QRD129J-182 | 1.8 kΩ | " | " |
| R362 | QRD129J-182 | " | " | " |
| R363 | QRD149J-560S | 56 Ω | 1/4 W | " |
| R364 | QRD149J-560S | " | " | " |
| R365 | QRD141J-151S | 150 Ω | " | " |
| R366 | QRD141J-151S | " | " | " |
| R367 | QRD149J-560S | 56 Ω | " | " |
| R368 | QRD149J-560S | " | " | " |
| R369 | QRD129J-392 | 3.9 kΩ | 1/2 W | " |
| R370 | QRD129J-392 | " | " | " |
| R377 | QRD141J-331S | 330 Ω | 1/4 W | " |
| R378 | QRD141J-331S | " | " | " |
| R379 | ERD121J-472 | 4.7 kΩ | 1/2 W | " |
| R380 | ERD121J-472 | " | " | " |
| R381 | ERD121J-471 | 470 Ω | " | " |
| R382 | ERD121J-471 | " | " | " |
| R401 | QRD141J-684S | 680 kΩ | 1/4 W | " |
| R402 | QRD141J-684S | " | " | " |
| R403 | QRD141J-223S | 22 kΩ | " | " |
| R404 | QRD141J-223S | " | " | " |
| R405 | QRD141J-223S | " | " | " |
| R406 | QRD141J-223S | " | " | " |
| R407 | QRD141J-202S | 2 kΩ | " | " |
| R408 | QRD141J-202S | " | " | " |
| R409 | QRD141J-133S | 13 kΩ | " | " |
| R410 | QRD141J-133S | " | " | " |

Resistors

| Item No. | Part Number | Rating | | Description |
|----------|--------------|--------|-------|-------------|
| R411 | QVZ1709-007 | 50 kΩ | | Variable |
| R412 | QVZ1709-008 | " | | " |
| R413 | QRD141J-432 | 4.3 kΩ | 1/4 W | Carbon |
| R414 | QRD141J-432S | " | " | " |
| R415 | QRD141J-391S | 390 Ω | " | " |
| R416 | QRD141J-391S | " | " | " |
| R417 | QRD141J-183S | 18 kΩ | " | " |
| R418 | QRD141J-183S | " | " | " |
| R419 | QRD129J-392 | 3.9 kΩ | 1/2 W | " |
| R420 | QRD129J-392 | " | " | " |
| R426 | QRD129J-392 | " | " | " |
| R427 | QRD141J-331S | 330 Ω | 1/4 W | " |
| R428 | QRD141J-331S | " | " | " |
| R429 | QRD141J-475S | 4.7 MΩ | " | " |
| R430 | QRD141J-475S | " | " | " |
| R501 | QRD141J-133S | 13 kΩ | 1/4 W | Carbon |
| R502 | QRD141J-133S | " | " | " |
| R503 | QRD141J-133S | " | " | " |
| R504 | QRD141J-133S | " | " | " |
| R505 | QRD141J-302S | 3 kΩ | " | " |
| R506 | QRD141J-302S | " | " | " |
| R507 | QRD141J-332S | 3.3 kΩ | " | " |
| R508 | QRD141J-332S | " | " | " |
| R509 | QVZ3501-221 | 220 Ω | | Variable |
| R510 | QVZ3501-221 | " | | " |
| R511 | SDT35 | 8 pF | | Thermstor |
| R512 | SDT35 | " | | " |
| R513 | QRD141J-431S | 430 Ω | " | Carbon |
| R514 | QRD141J-431S | " | " | " |
| R515 | QRD141J-391S | 390 Ω | " | " |
| R516 | QRD141J-391S | " | " | " |
| R517 | QRZ0052-471 | 470 Ω | | Fusible |
| R518 | QRZ0052-471 | " | | " |
| R519 | QRZ0052-471 | " | | " |
| R520 | QRZ0052-471 | " | | " |
| R521 | QRZ0052-181 | 180 Ω | | " |
| R522 | QRZ0052-181 | " | | " |
| R523 | QRZ0052-181 | " | | " |
| R524 | QRZ0052-181 | " | | " |
| R525 | QRZ0052-821 | 820 Ω | | " |
| R526 | QRZ0052-821 | " | | " |
| R527 | QRD149J-5R6S | 5.6 Ω | 1/4 W | Carbon |
| R528 | QRD149J-5R6S | " | " | " |
| R529 | QRD149J-5R6S | " | " | " |
| R530 | QRD149J-5R6S | " | " | " |
| R531 | QRZ0052-121 | 120 Ω | | Fusible |
| R532 | QRZ0052-121 | " | | " |
| R533 | QRZ0052-100 | 10 Ω | | " |
| R534 | QRZ0052-100 | " | | " |
| R535 | QRZ0052-100 | " | | " |
| R536 | QRZ0052-100 | " | | " |
| R537 | QRM056K-R22S | 0.22 Ω | 5 W | Metal Plate |
| R538 | QRM056K-R22S | " | " | " |
| R539 | QRM056K-R22S | " | " | " |
| R540 | QRM056K-R22S | " | " | " |
| R541 | QRD141J-681S | 680 Ω | 1/4 W | Carbon |
| R542 | QRD141J-681S | " | " | " |
| R543 | QRD141J-681S | " | " | " |
| R544 | QRD141J-681S | " | " | " |
| R545 | QRD141J-471S | 470 Ω | " | " |
| R546 | QRD141J-471S | " | " | " |
| R547 | QRD141J-471S | " | " | " |
| R548 | QRD141J-471S | " | " | " |
| R551 | QRD141J-222S | 2.2 kΩ | " | " |
| R552 | QRD141J-222S | " | " | " |
| R553 | QRD141J-183S | 18 kΩ | " | " |
| R554 | QRD141J-183S | " | " | " |
| R555 | QRD141J-682S | 6.8 kΩ | " | " |
| R556 | QRD141J-333S | 33 kΩ | " | " |
| R557 | QRD141J-103S | 10 kΩ | " | " |
| R558 | QRD141J-332S | 3.3 kΩ | " | " |
| R559 | QRD149J-270S | 27 Ω | " | " |
| R560 | QRD141J-473S | 47 kΩ | " | " |
| R561 | QRD141J-563S | 56 kΩ | " | " |
| R562 | QRD141J-563S | " | " | " |

Resistors

| Item No. | Part Number | Rating | | Description |
|----------|--------------|--------|-------|------------------|
| | | | | |
| R563 | QRD141J-273S | 27 kΩ | 1/4 W | Carbon |
| R564 | QRD141J-273S | " | " | " |
| R565 | QRD141J-273S | " | " | " |
| R566 | QRD141J-273S | " | " | " |
| R567 | QRD141J-124S | 120 kΩ | " | " |
| R568 | QRD141J-334S | 330 kΩ | " | " |
| R569 | QRD141J-683S | 68 kΩ | " | " |
| R570 | QRG027J-122 | 1.2 kΩ | 2 W | Oxide Metal Film |
| R571 | QRD141J-273S | 27 kΩ | 1/4 W | Carbon |
| R573 | QRD141J-101S | 100 Ω | " | " |
| R574 | QRD141J-273S | 27 kΩ | " | " |
| R581 | QRD141J-472S | 4.7 kΩ | " | " |
| R585 | QRD141J-331S | 330 Ω | " | " |
| R587 | QRZ0052-100 | 10 Ω | | Fusible |

Others

| Item No. | Part Number | Rating | Description |
|----------|-------------|--------|------------------------|
| | QMV5005-002 | | 2P Plug Ass'y |
| | QMV5005-003 | | 3P Plug Ass'y |
| | E300209-006 | | Heat sink |
| | E301048-001 | | Heat Sink Bracket |
| | E66683-001 | | Reef Spring |
| | E67548-001 | | Plate (for Transistor) |
| | SBSE3012Z | | Screw (for Transistor) |
| | SBSB3008Z | | Screw |
| | E10513-101 | | Circuit Board |

8-(3) TAP-285B Power Amp. P.C. Board Ass'y

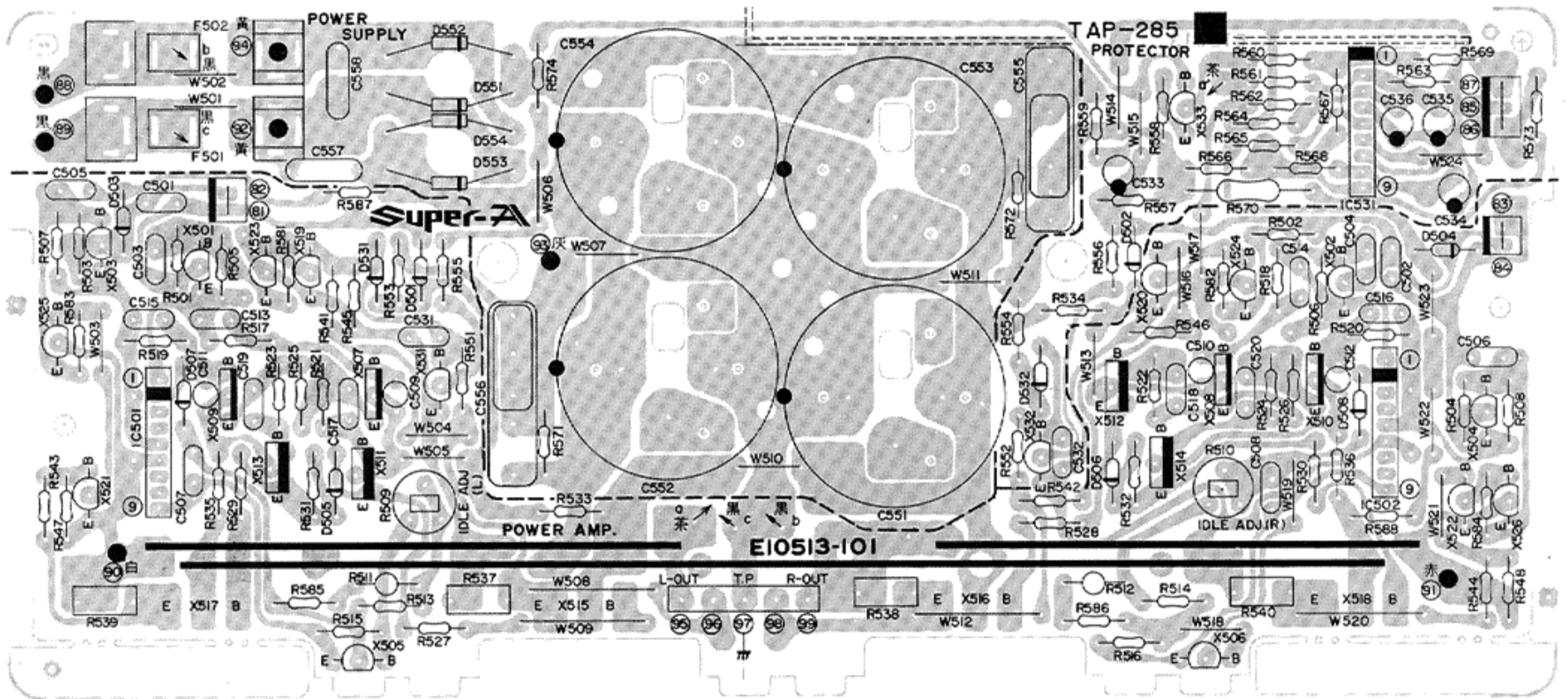


Fig. 9

Note:

The specific symbols (赤, 黒, 白, ... etc.) on a surface of P.C. Board are actually unrelated to the repair service and are significant denotement in order to process the proper assembly at the factory.

Transistors

| Item No. | Part Number | Rating | | Description | |
|----------|--------------|--------|---------|-------------|---------|
| | | Pc | fT | Maker | |
| X501 | 2SC2546(E) | 0.4 W | 90 MHz | Silicon | Hitachi |
| X502 | 2SC2546(E) | " | " | " | " |
| X503 | 2SA1084(E) | " | 120 MHz | " | " |
| X504 | 2SA1084(E) | " | " | " | " |
| X505 | 2SC2546(E) | " | 90 MHz | " | " |
| X506 | 2SC2546(E) | " | " | " | " |
| X507 | 2SC1904(B,V) | 1 W | 130 MHz | " | Fujitsu |
| X508 | 2SC1904(B,V) | " | " | " | " |
| X509 | 2SA899(B,V) | " | 100 MHz | " | " |
| X510 | 2SA899(B,V) | " | " | " | " |

Transistors

| Item No. | Part Number | Rating | | Description | Maker |
|----------|--------------|--------|---------|-------------|---------|
| | | Pc | fT | | |
| X511 | 2SD381(L,M) | 20 W | 45 MHz | " | NEC |
| X512 | 2SD381(L,M) | " | " | " | " |
| X513 | 2SB536(L,M) | " | 40 MHz | " | " |
| X514 | 2SB536(L,M) | " | " | " | " |
| X515 | 2SC2564LB(O) | 150 W | 80 MHz | " | Toshiba |
| X516 | 2SC2565LB(O) | " | " | " | " |
| X517 | 2SA1095LB(O) | " | 60 MHz | " | " |
| X518 | 2SA1095LB(O) | " | " | " | " |
| X519 | 2SC458(C) | 0.2 W | 230 MHz | " | Hitachi |
| X520 | 2SC458(C) | " | " | " | " |
| X521 | 2SA1029(C) | " | 200 MHz | " | " |
| X522 | 2SA1029(C) | " | " | " | " |
| X523 | 2SA1029(C) | " | " | " | " |
| X525 | 2SC458(C) | " | 230 MHz | " | " |
| X531 | 2SC1775AV(E) | " | 200 MHz | " | " |
| X532 | 2SC1775AV(E) | " | " | " | " |
| X533 | 2SA872AV(E) | 0.3 W | 120 MHz | " | " |

Integrated Circuits

| Item No. | Part Number | Rating | | Description | |
|----------|-------------|--------|--|-------------|-----------|
| | | Pc | | | Maker |
| IC501 | VC5022(X,Y) | 0.5 W | | I.C. | Toyodengu |
| IC502 | VC5022(X,Y) | | | " | " |
| IC531 | TA7317P | | | " | Toshiba |
| | | | | " | " |

Diodes

| Item No. | Part Number | Rating | | Description | |
|----------|-------------|--------|--|-------------|------------|
| | | | | | Maker |
| D501 | 1SS81 | | | Silicon | Hitachi |
| D502 | 1SS81 | | | " | " |
| D503 | 1SS81 | | | " | " |
| D504 | 1SS81 | | | " | " |
| D505 | 1S2076-31 | | | " | " |
| D506 | 1S2076-31 | | | " | " |
| D507 | 1S2076-31 | | | " | " |
| D531 | 1S2076-31 | | | " | " |
| D532 | 1S2076-31 | | | " | " |
| D551 | S3V20F | | | " | Shindengen |
| D552 | S3V20F | | | " | " |
| D553 | S3V20F | | | " | " |
| D554 | S3V20F | | | " | " |

Coils & Transformers

| Item No. | Part Number | Rating | Description |
|----------|-------------|--------|-------------|
| | E03798-001 | | BUS BAR (B) |
| | E03798-002 | | " (LEFT) |
| | E03798-003 | | " (RIGHT) |

Capacitors

| Item No. | Part Number | Rating | | Description | |
|----------|-------------|--------------|-------|-------------|--------------|
| | | | | | |
| C501 | QFP31HJ-332 | 3300 pF | 50 V | | |
| C502 | QFP31HJ-332 | " | " | | |
| C503 | QFP31HJ-103 | 0.01 μ F | " | | |
| C504 | QFP31HJ-103 | " | " | | |
| C505 | QFP31HJ-103 | " | " | | |
| C506 | QFP31HJ-103 | " | " | | |
| C507 | QFP31HJ-103 | " | " | | |
| C508 | QFP31HJ-103 | " | " | | |
| C509 | QFS81HJ-150 | 15 pF | | | |
| C510 | QFS81HJ-150 | " | " | | |
| C511 | QFS81HJ-150 | " | " | Polystyrol | |
| C512 | QFS81HJ-150 | " | " | | |
| C513 | QFP31HJ-471 | 470 pF | " | | |
| C515 | QFP31HJ-181 | 180 pF | " | | |
| C517 | QFP31HJ-102 | 1000 pF | " | | |
| C533 | QET51ER-226 | 22 μ F | 25 V | | Electrolytic |
| C534 | QET51CR-226 | " | 16 V | | |
| C535 | QET51AR-476 | 47 μ F | 10 V | | |
| C536 | QET51AR-476 | " | " | | |
| C551 | EEW6301-688 | 6800 μ F | 63 V | | |
| C552 | EEW6301-688 | " | " | Film | |
| C553 | EEW6301-688 | " | " | | |
| C554 | EEW6301-688 | " | " | | |
| C557 | QFZ0074-104 | 0.1 μ F | 250 V | | |
| C558 | QFZ0074-224 | 0.22 μ F | " | | |

Resistors

| Item No. | Part Number | Rating | | Description |
|----------|--------------|----------------|-------|------------------|
| | | | | |
| R431 | QRD141J-105S | 1 M Ω | 1/4 W | Carbon |
| R432 | QRD141J-105S | " | " | |
| R451 | QRD129J-330 | 33 Ω | 1/2 W | |
| R452 | QRD129J-330 | " | " | Fusible |
| R453 | QRH019J-100 | 10 Ω | 1 W | |
| R454 | QRH019J-100 | 10 Ω | " | |
| R454 | QRX017J-100S | " | " | Oxide Metal Film |
| R455 | QRG027J-331 | 330 Ω | 2 W | |
| R456 | QRG027J-331 | " | " | |
| R457 | QRZ0052-100 | " | " | Fusible |
| R458 | QRZ0052-100 | " | " | |
| R459 | QRZ0052-100 | " | " | |
| R460 | QRZ0052-100 | " | " | Carbon |
| R603 | QRD141J-822S | 8.2 k Ω | 1/4 W | |
| R604 | QRD141J-103S | 10 k Ω | " | |
| R605 | QRD141J-563S | 56 k Ω | " | |
| R606 | QRD141J-563S | " | " | |
| R607 | QRD141J-244S | 240 k Ω | " | |
| R608 | QRD141J-244S | " | " | |
| R609 | QRD141J-622S | 6.2 k Ω | " | |
| R610 | QRD141J-622S | " | " | |
| R611 | QRD141J-273S | 27 k Ω | " | |
| R612 | QRD141J-273S | " | " | |
| R613 | QRD141J-102S | 1 k Ω | " | |
| R617 | QRD149J-221S | 220 Ω | 1/4 W | |
| R618 | QRD149J-221S | " | " | |
| R651 | QRD141J-472S | 4.7 k Ω | " | |
| R652 | QRD141J-472S | " | " | |
| R653 | QRD141J-474S | 470 k Ω | " | |
| R654 | QRD141J-474S | " | " | |
| R655 | QRD141J-473S | 47 k Ω | " | |
| R656 | QRD141J-182S | 1.8 k Ω | " | |
| R657 | QRD141J-153S | 15 k Ω | " | |
| R658 | QRD141J-101S | 100 Ω | " | |
| R659 | QRD141J-683S | 68 k Ω | " | |
| R660 | QRD129J-181 | 180 Ω | 1/2 W | |
| R661 | QRD141J-392S | 3.9 k Ω | 1/4 W | |
| R662 | QRD141J-223S | 22 k Ω | 1/4 W | |
| R663 | QRD141J-101S | 100 Ω | " | |
| R664 | QRD141J-390S | 39 Ω | " | |
| R665 | QRD141J-390S | " | " | |
| R666 | QRD141J-390S | " | " | |
| R667 | QRD141J-390S | " | " | |

Others

| Item No. | Part Number | Rating | Description |
|----------|-------------|--------|------------------------------|
| | EWS012-040 | | 2P Socket Wire Assy (OUT. L) |
| | EWS012-041 | | " (OUT. R) |
| | EWS013-043 | | 3P Socket Wire Assy (PROTE.) |
| | EW013-044 | | " (VOL.) |
| | EW013-047 | | " (EQ.) |
| | EWT011-026 | | Terminal Wire Assy |
| | E03572-011 | | Speaker Terminal |
| | QMS6302-105 | | Jack Assy |
| | QSP0249-004 | | Push Switch |
| | E61537-001 | | Heat Sink |
| RY451 | E45524-002 | | Fuse Clip (J.C) |
| | E48965-002 | | " (U.P.E.A.B) |
| | ESK6D24-212 | | RELAY |
| | E10512-101 | | Circuit Board |

8-(4) TSC-132B Pin Jack P.C. Board Ass'y

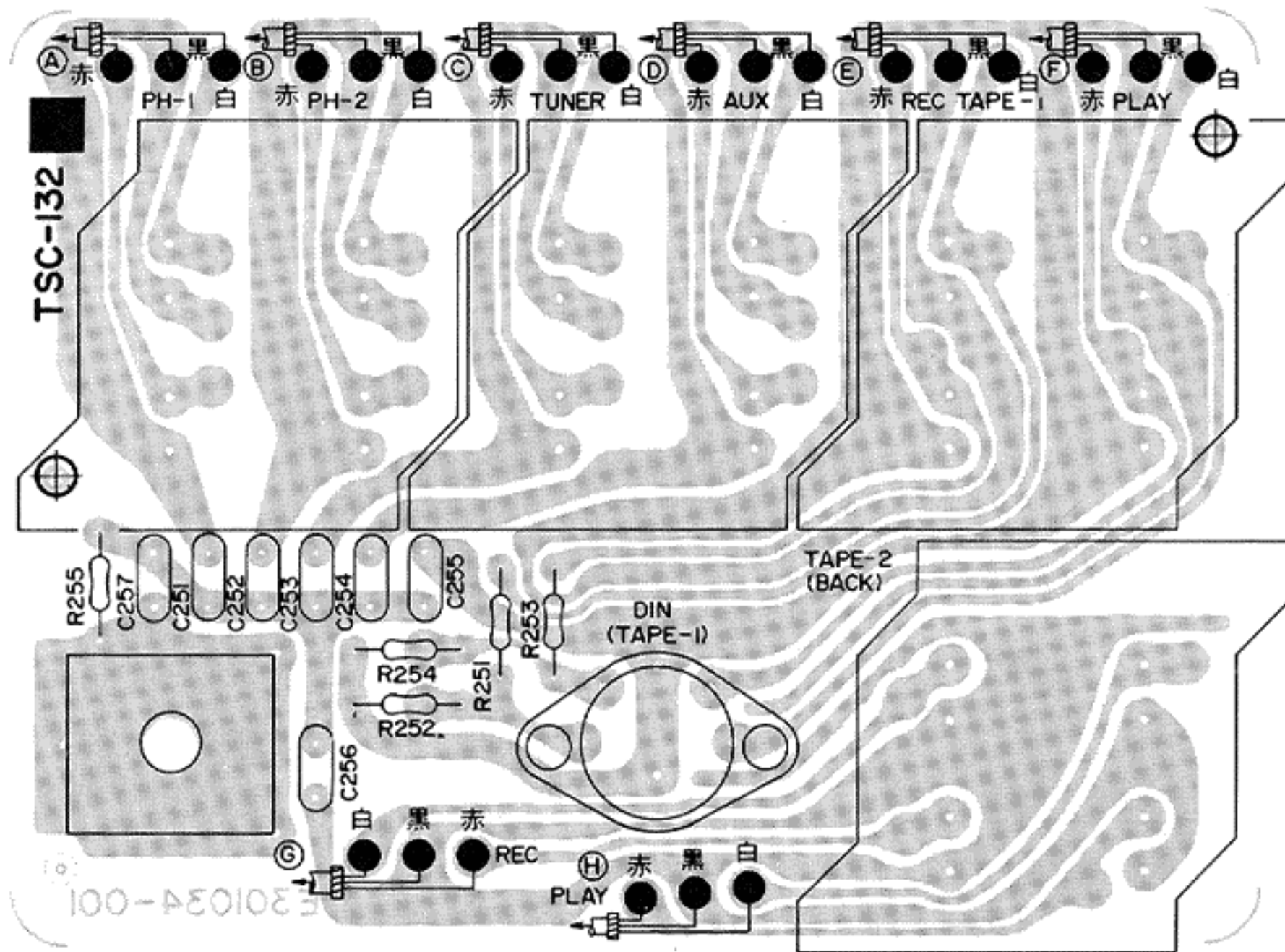


Fig. 10

Capacitors

| Item No. | Part Number | Rating | Description |
|----------|-------------|--------------------|-------------|
| C251 | QFM81HK-223 | 0.022 μ F 50 V | Mylar |
| C252 | QFM81HK-223 | " " | " |
| C253 | QFM81HK-223 | " " | " |
| C254 | QFM81HK-223 | " " | " |
| C255 | QFM81HK-223 | " " | " |
| C256 | QFM81HK-223 | " " | " |
| C257 | QFM81HK-473 | 0.047 μ F | " |

Note:

The specific symbols (赤, 黒, 白, ... etc.) on a surface of P.C. Board are actually unrelated to the repair service and are significant denotement in order to process the proper assembly at the factory.

Resistors

| Item No. | Part Number | Rating | Description |
|----------|---------------|----------------------|-------------|
| R251 | QRD141J-334SY | 330 k Ω 1/4 W | Cabon |
| R252 | QRD141J-334SY | " " | " |
| R253 | QRD141J-104SY | 100 k Ω | " |
| R254 | QRD141J-104SY | " " | " |
| R255 | QRD148J-4R7S | 4.7 Ω | " |

Others

| Item No. | Part Number | Rating | Description |
|----------|-------------|--------|---|
| J103 | EWS01F-001 | | Socket wire (TAPE) |
| | EWS017-019 | | " (PHONO) |
| | EWS018-015 | | " (TU, AUX) |
| J201 | E03591-42D | | 4p Jack Ass'y (TU, AUX, TAPE 1, TAPE 2 PHONO) |
| | E03623-003 | | Socket (DIN) |
| | E03763-001 | | Terminal (GND) |
| | E301034-001 | | Circuit Board |

8-(5) TPS-287C AC Unit P.C. Board Ass'y

[Employed only on (J) & (C) types]

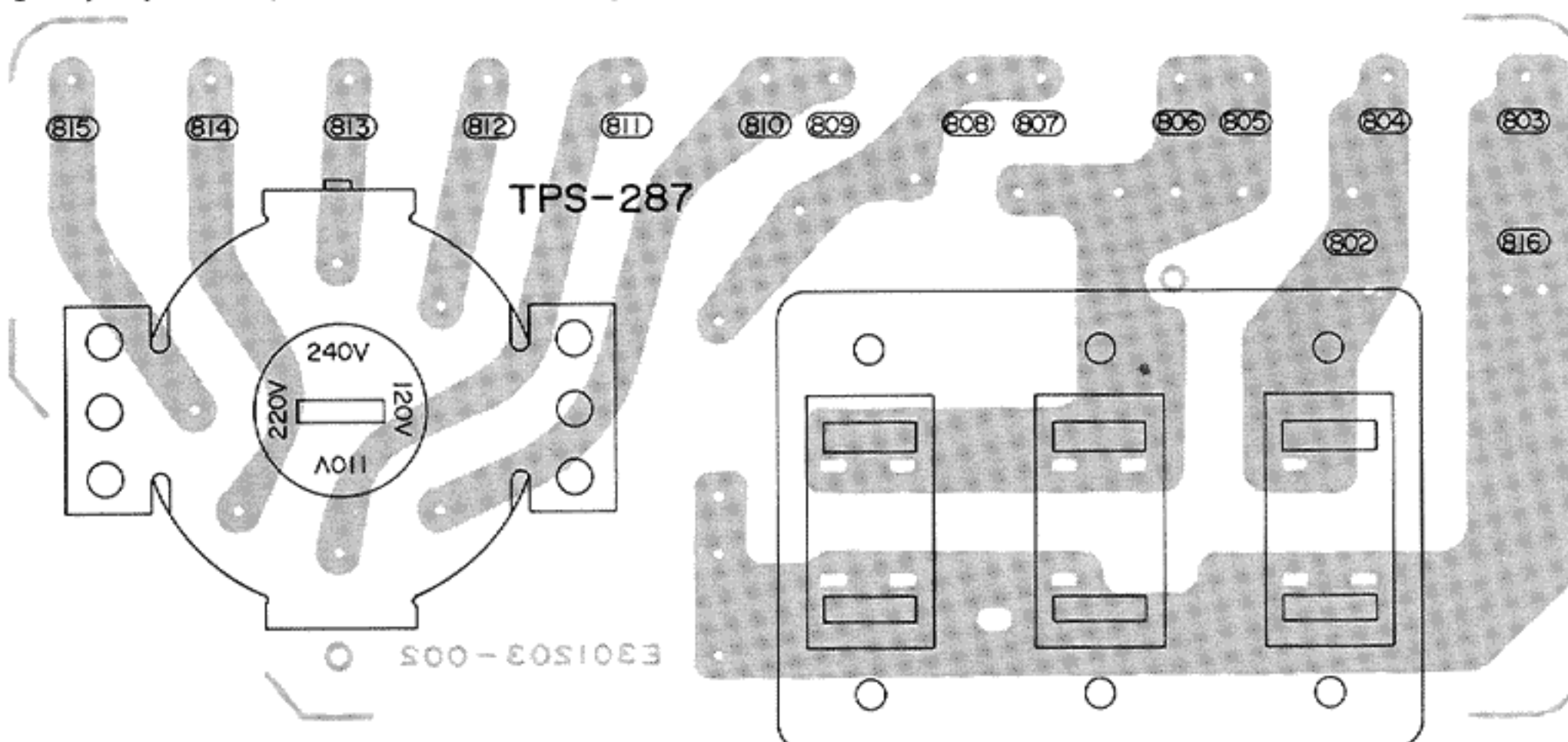


Fig. 11

Capacitor

| Item No. | Part Number | Rating | Description |
|----------|--------------|--------------|-------------|
| C001 | QCZ9014-103A | 0.01 μ F | Ceramic |

Others

| Item No. | Part Number | Rating | Description |
|----------|-------------|--------|------------------|
| | QMC0637-004 | | AC Outlet |
| | QSR0085-001 | | Voltage Selector |
| | E301203-002 | | Circuit Board |

8-(6) TPS-287D AC Unit P.C. Board Ass'y

[Employed only on (P) & (U) types]

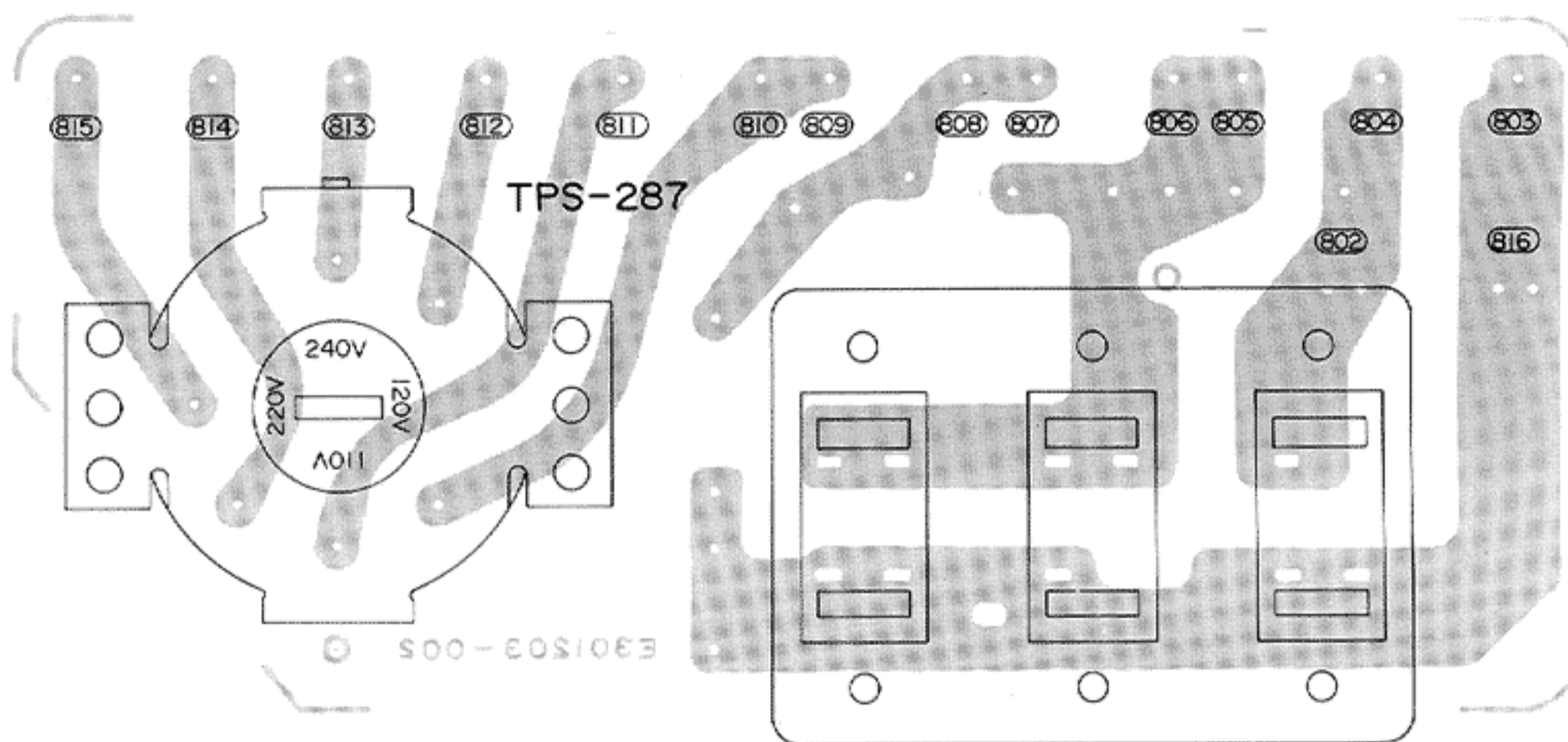


Fig. 12

Capacitor

| Item No. | Part Number | Rating | Description |
|----------|-------------|--------------|-------------|
| C001 | QFZ9010-103 | 0.01 μ F | Film |

Others

| Item No. | Part Number | Rating | Description |
|----------|--|--------|--|
| | QMC0637-004 QSR0085-001U E301203-002 | | AC Outlet Voltage Selector Circuit Board |

8-(7) TPS-287E AC Unit P.C. Board Ass'y

[Employed only on (E), (A) & (B) types]

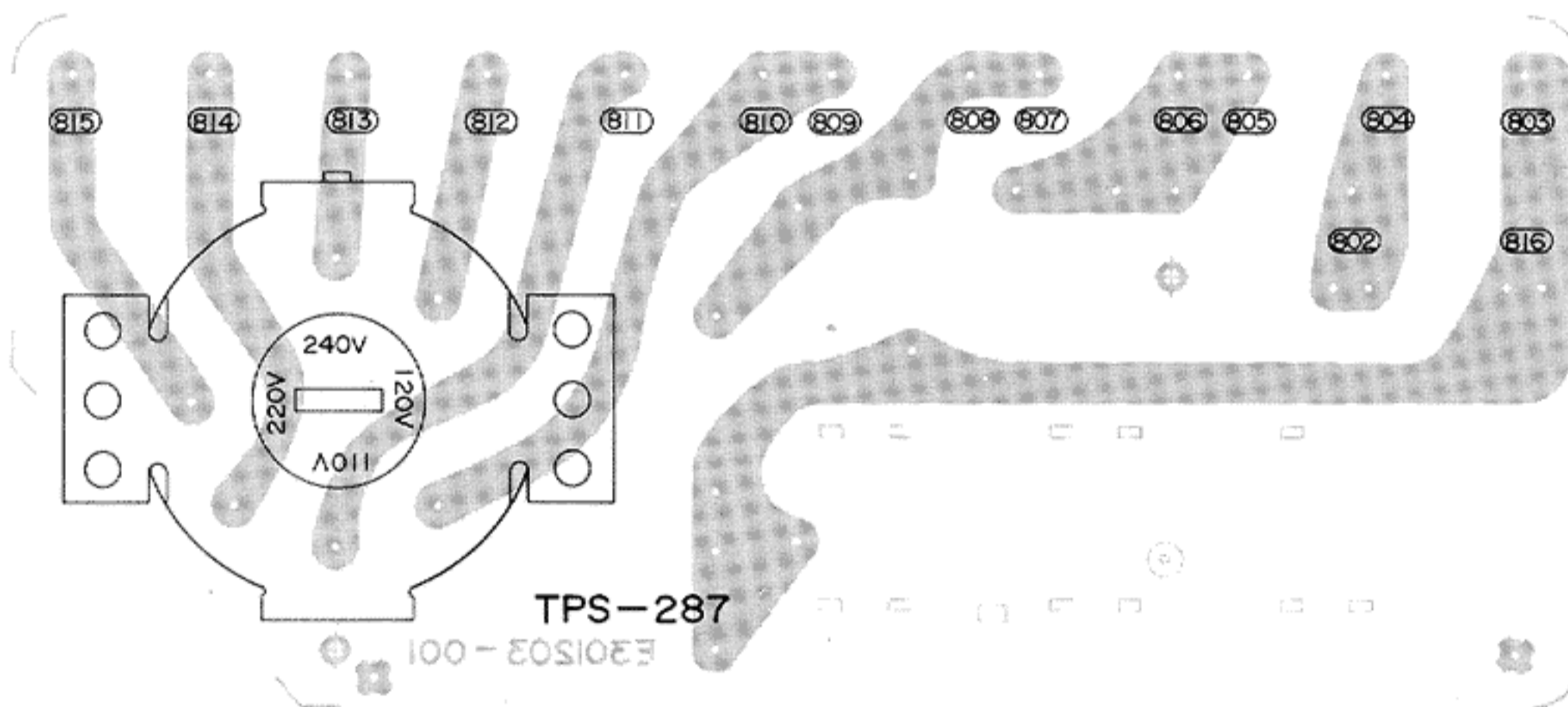


Fig. 13

Capacitor

| Item No. | Part Number | Rating | Description |
|----------|-------------|--------------|-------------|
| C001 | QFZ9010-103 | 0.01 μ F | Film |

Others

| Item No. | Part Number | Rating | Description |
|----------|---|--------|---|
| | E67448-001 QSR0085-001U E301203-001 | | Holder Voltage Selector Circuit Board |

9. Packing Materials and Part Numbers

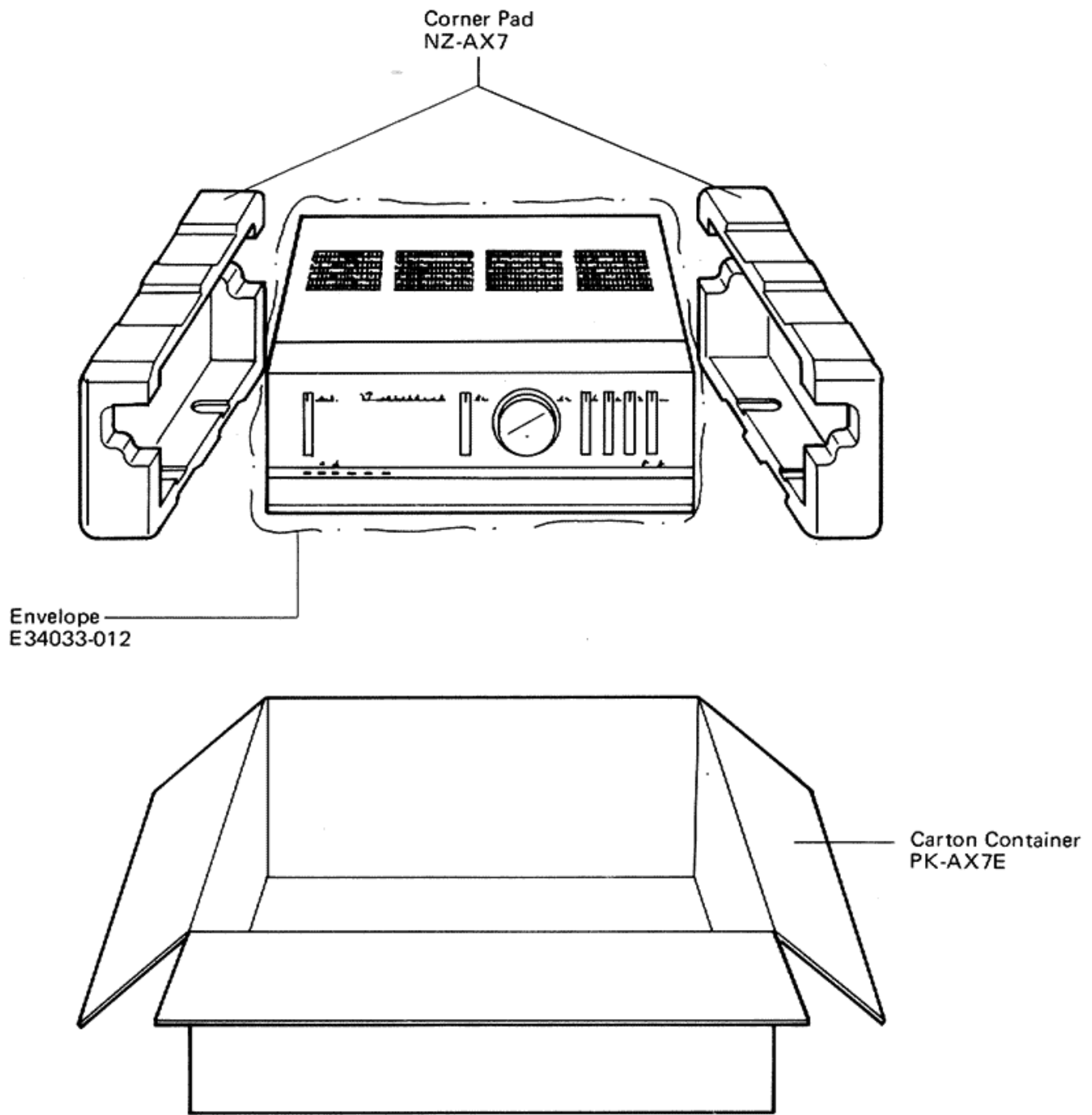


Fig. 14

10. Accessories List

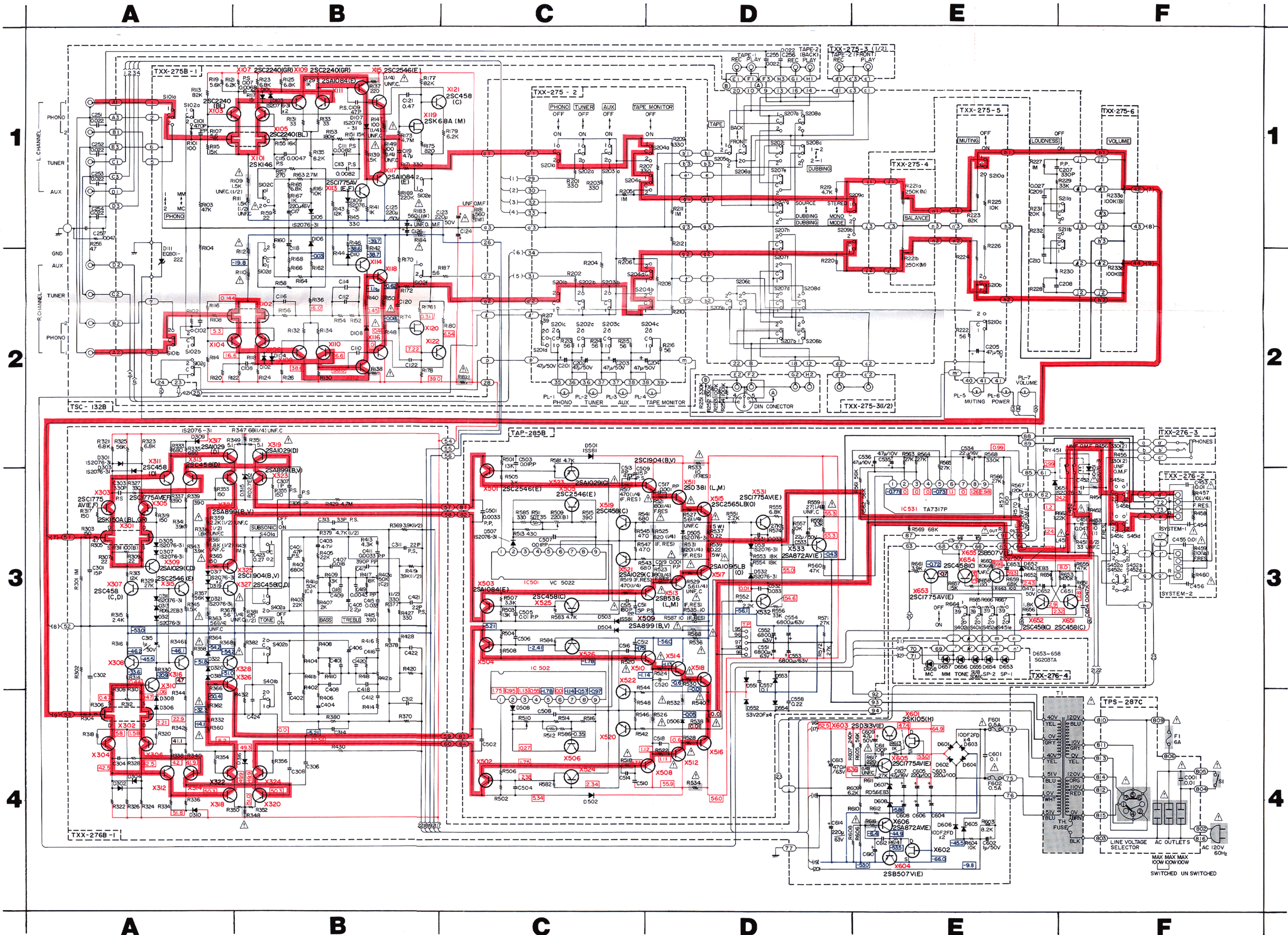
| Item No. | Part Number | Description | Q'ty |
|----------|---|--|------|
| 1 | E30580-899A | Instruction Book | 1 |
| 2 | See below | Warranty Card | 1 |
| 3 | E41202-2 | Envelope for Instruction Book and Warranty Card | 1 |
| 4 | BT20042 | "Do It Better" & Service Procedures (for U.S.A. only) | 1 |
| 5 | BT20044B | JVC Safety Instruction Sheet | 1 |
| 6 | QMF51A2-6R3S or QMF51A2-3R15S (See page 20.) | Fuse (for U.S. Military Market and Others) | 1 |
| 7 | E64208-001 | Envelope for Fuses (for U.S. Military Market and Others) | 1 |
| 8 | E67142-T6R3 (6.3A) or T3R15 (3.15A) | Fuse Label (U.S. Military Market and Others) | 1 |
| 9 | E64216-002 | Caution Tag (with Power Cord for Military Market only) | 1 |

NOTE: ⚠ SAFETY PARTS

Warranty Card

| U.S.A. | Canada | U.S. Military Market | Europe | Australia | U.K. |
|----------|----------|----------------------|--------|-----------|----------|
| BT20032B | BT20025D | BT20032B | — | BT20029B | BT20013C |

11. A-X7 Schematic Diagram










Printed Circuit Board Ass'y Locations

| P.C. Board Ass'y | Description | Page |
|------------------|---|------|
| TXX-275B | Equalizer Amp. & Switch P.C. Board Ass'y | 8 |
| TXX-276B | C Driver Amp. & Power Supply P.C. Board Ass'y | 10 |
| TAP-285B | Power Amp. P.C. Board Ass'y | 13 |
| TSC-132B | Pin Jack P.C. Board Ass'y | 15 |
| TPS-287C | AC Unit P.C. Board Ass'y | 15 |
| TPS-287D | AC Unit P.C. Board Ass'y | 16 |
| TPS-287E | AC Unit P.C. Board Ass'y | 16 |

Notes:

1. Voltage values in are positive.
2. Voltage values in are negative.
3. indicates positive B power supply.
4. indicates negative B power supply.
5. indicates signal path.
6. When replacing the parts in the darkened are () and those marked with Δ , be sure to use the designated parts to ensure safety.
7. Parts in red indicate transistors or ICs.
8. This is the standard circuit diagram. The design and contents are subject to change without notice.

12. Parts List with Specified Numbers for Designated Areas

| Page | Item No. | Description | U.S.A. | Canada | U.S. Military Market & Other Countries | Europe | Australia | U.K. |
|-------|----------|--|-------------|-------------|--|---------------|---------------|---------------|
| 3 | 4 | Power Switch  | QSP1110-309 | QSP1110-309 | QSP1106-001 | QSP1106-001 | QSP1106-001 | QSP1106-001 |
| | | Power Cord  | QMP1200-200 | QMP1200-200 | QMP7600-250 | QMP3900-200 | QMP2560-244 | QMP9017-008 |
| 3 | 4 | Fuse  | QMF61U1-6R0 | QMF61U1-6R0 | QMF51A2-6R3S | QMF51A2-3R15S | QMF51A2-3R15S | QMF51A2-3R15S |
| | | Primary (F1) | | | or | | | |
| | | Secondary (F601, F602) | QMF61U1-R50 | QMF61U1-R50 | QMF51A2-3R15S | | | |
| | | | | | QMF51A2-R50L | QMF51A2-R50L | QMF51A2-R50L | QMF51A2-R50L |
| 3 | 4 | AC outlets  | QMC0637-004 | QMC0637-004 | QMC0637-004 | — | — | — |
| 3 | 4 | Voltage | QSR0085-001 | QSR0085-001 | QSR0085-001U | QSR0085-001U | QSR0085-001U | QSR0085-001U |
| | | Selector Switch  | | | | | | |
| 3 | 4 | Fuse Socket  | QMG0201-003 | QMG0201-003 | QMG0301-003 | QMG0301-003 | QMG0301-003 | QMG0301-003 |
| 15,16 | 8-(5) | AC Unit P.C. Board Ass'y  | TPS-287C | TPS-287C | TPS-287D | TPS-287E | TPS-287E | TPS-287E |
| | | - (6) | | | | | | |
| | | - (7) | | | | | | |
| 10 | 8-(2) | Driver Amp. P.C. Board Ass'y Mask Plate | TXX-276B | TXX-276B | TXX-276C | TXX-276C | TXX-276C | TXX-276C |
| | | | — | — | — | E65494-003 | E65494-003 | E65494-003 |

Note:  SAFETY PARTS

Power Specifications

| Areas | Line Voltage & Frequency | Power Consumption |
|----------------------------|---|-------------------|
| U.S.A. | AC 120 V, 60 Hz | 390 W |
| CANADA | AC 120 V, 60 Hz | 520 VA |
| EUROPE U.K. & AUSTRALIA | AC 110/120/220/240 V~ Selectable, 50 Hz | 545 W |
| OTHER AREAS | AC 110/120/220/240 V~ Selectable, 50/60 Hz | 545 W |

JVC

VICTOR COMPANY OF JAPAN, LIMITED, TOKYO, JAPAN