

AM/FM STEREO TUNER

TX-8500II

KC, S, HG

Additional

Service Manual

NOTES:

- This leaflet provides the description of the parts applies only to the TX-8500II/KC, S and HG types. For detailed please refer to the service manual of TX-8500II/KU type (p.5~ p.44).
- The specifications for "KC", "S" and "HG" types are same as KU type except for following sections.

Power Requirements:

| | |
|---------------|---|
| KC type | Same as KU type |
| HG type | 220V and 240V (Switchable), 50Hz |
| S type | 110V, 120V, 220V and 240V (Switchable), 50/60Hz |

1. CONTRAST OF MISCELLANEOUS PARTS

P.C. BOARD ASSEMBLIES

| Symbol | Description | Part No. | | | Remarks |
|--------|-----------------------|------------------------------|---------|-----------|---------|
| | | KU, KC types | S type | HG type | |
| | Tuner assembly | AWE-084 | AWE-085 | AWE-069 ✓ | |
| | Power supply assembly | AWR-119 (KU) AWR-135 (KC) | AWR-132 | AWR-133 ✓ | |
| | Switch assembly | ..... | AWX-113 | ..... |  |

TRANSFORMER

| Symbol | Description | Part No. | | | Remarks |
|--------|-------------------|------------------------------|---------|-----------|---------|
| | | KU, KC types | S type | HG type | |
| T1 | Power transformer | ATT-342 (KU) ATT-343 (KC) | ATT-345 | ATT-344 ✓ | |

FUSES

| Symbol | Description | Part No. | | | Remarks |
|--------|------------------------|--------------|---------|---------|---------|
| | | KU, KC types | S type | HG type | |
| FU1 | Fuse 1A (Primary) | AEK-106 | ..... | ..... |  |
| | Fuse 500mA (Primary) | ..... | AEK-107 | ..... |  |
| | Fuse 500mA (Primary) | ..... | ..... | AEK-401 | |
| FU2 | Fuse 500mA (Secondary) | AEK-107 | ..... | ..... |  |
| | Fuse 500mA (Secondary) | ..... | ..... | AEK-401 | |
| FU3 | Fuse 2A (Secondary) | AEK-103 | ..... | AEK-017 | |

SWITCHES

| Symbol | Description | Part No. | | | Remarks |
|--------|---|--------------|---------|-----------|-------------|
| | | KU, KC types | S type | HG type | |
| S5 | Lever switch (POWER) | ASK-124 | ASK-128 | ASK-127 ✓ | |
| S6 | Slide switch (DE-EMPHASIS) | ASH-016 | ASH-017 | ..... |  |
| S7 | Plug in selector (Line voltage selector) | ..... | AKR-031 | ..... | 4 positions |
|  |  | ..... | ..... | AKX-037 ✓ | 2 positions |

CAPACITORS

| Symbol | Description | Part No. | | | Remarks |
|--------|-------------------|--------------|---------|---------|---------|
| | | KU, KC types | S type | HG type | |
| C1 | Ceramic 0.01 250V | ACG-001 (KU) | ACG-001 | ..... |  |
| | Ceramic 0.01 125V | ACG-014 (KC) | | | |

OTHERS

| Symbol | Description | Part No. | | | Remarks |
|--------|--|------------------------------|---------|-----------|---------|
| | | KU, KC types | S type | HG type | |
| | Terminal (ANTENNA) | AKA-002 | AKA-002 | AKA-007 ✓ | |
| | AC socket (OUTLET) | AKP-002 | AKP-002 | ..... |  |
| | AC socket (INLET) | ..... | ..... | AKP-008 ✓ | |
| | AC power cord | ADG-005 | ADG-016 | ..... |  |
| | Packing case | AHD-436 (KU) AHD-437 (KC) | AHD-436 | AHD-438 ✓ | |
| | Vinyl pouch | AHG-023 | AHG-023 | ..... |  |
| | Operating instructions (English) | ARB-204 | ARB-213 | ARB-212 | |
| | Operating instructions (Germany/French) | ..... | ..... | ARD-104 ✓ | |
| | Accessory fuse 1A | ..... | AEK-106 | ..... |  |
| | Accessory fuse 500mA | ..... | AEK-107 | ..... |  |
| | Vinyl pouch | ..... | E11-033 | ..... |  |

2. KC TYPE

2.1 SCHEMATIC DIAGRAM AND MISCELLANEOUS PARTS LIST

Miscellaneous Parts List

NOTE:

- Capacitors: in μF unless otherwise noted p:pF
- Resistors: in Ω , $\frac{1}{4}W$ unless otherwise noted k:k Ω , M:M Ω

SWITCHES

| Symbol | Description | Part No. |
|--------|----------------------------|----------|
| S5 | Lever switch (POWER) | ASK-124 |
| S6 | Slide switch (DE-EMPHASIS) | ASH-016 |

TRANSFORMERS AND COIL

| Symbol | Description | Part No. |
|--------|-------------------|----------|
| T1 | Power transformer | ATT-343 |
| T2 | Bar antenna | ATB-506 |
| T3 | Ferrite balun | T22-025 |
| L1 | RF choke coil | T24-030 |

LAMPS

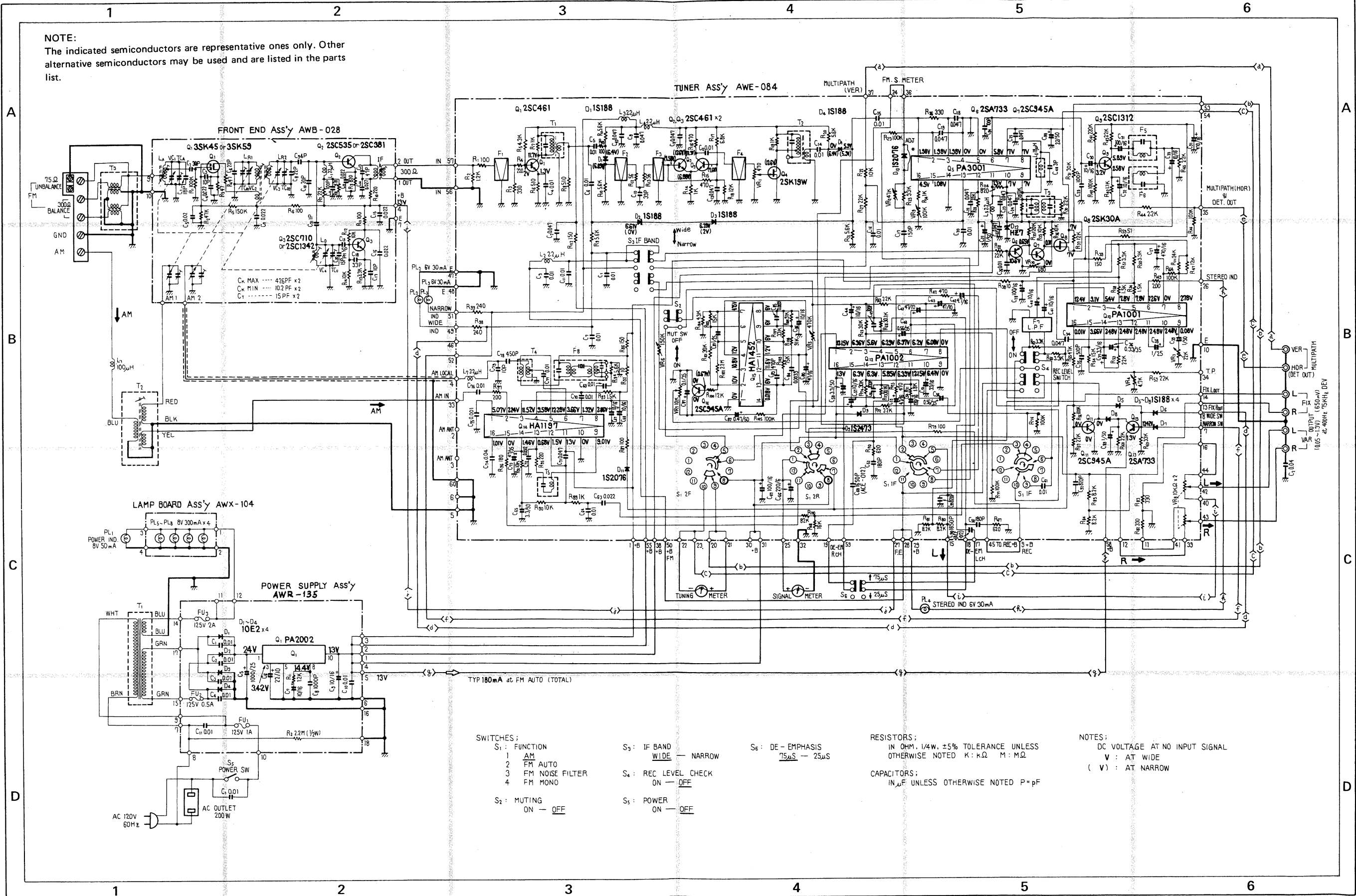
| Symbol | Description | Part No. |
|--------|-----------------------------|----------|
| PL1 | Lamp with wire 8V, 50mA | AEL-072 |
| PL2 | Lamp with wire 6V, 30mA | AEL-080 |
| PL3 | Lamp with wire 6V, 30mA | AEL-079 |
| PL4 | Lamp with wire 6V, 30mA | AEL-079 |
| PL5 | Lamp (Wedge type) 8V, 300mA | AEL-029 |
| PL6 | Lamp (Wedge type) 8V, 300mA | AEL-029 |
| PL7 | Lamp (Wedge type) 8V, 300mA | AEL-029 |
| PL8 | Lamp (Wedge type) 8V, 300mA | AEL-029 |

FUSES

| Symbol | Description | Part No. |
|--------|------------------------|----------|
| FU1 | Fuse 1A (Primary) | AEK-106 |
| FU2 | Fuse 500mA (Secondary) | AEK-107 |
| FU3 | Fuse 2A (Secondary) | AEK-103 |

CAPACITORS

| Symbol | Description | Part No. |
|--------|-------------------|---------------|
| C1 | Ceramic 0.01 125V | ACG-014 |
| C2 | Ceramic 0.04 50V | CKDYF 403Z 50 |



NOTE:
The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.

FRONT END Ass'y AWB-028

TUNER Ass'y AWE-084

C_K MAX 425PF x 2
C_K MIN 102PF x 2
C_T 15PF x 2

LAMP BOARD ASS'Y AWX-104

POWER SUPPLY Ass'y AWR-135

SWITCHES:
S₁: FUNCTION
1 AM
2 FM AUTO
3 FM NOISE FILTER
4 FM MONO
S₂: MUTING
ON - OFF

S₃: IF BAND
WIDE - NARROW
S₄: REC LEVEL CHECK
ON - OFF
S₅: POWER
ON - OFF

S₆: DE - EMPHASIS
75μS - 25μS

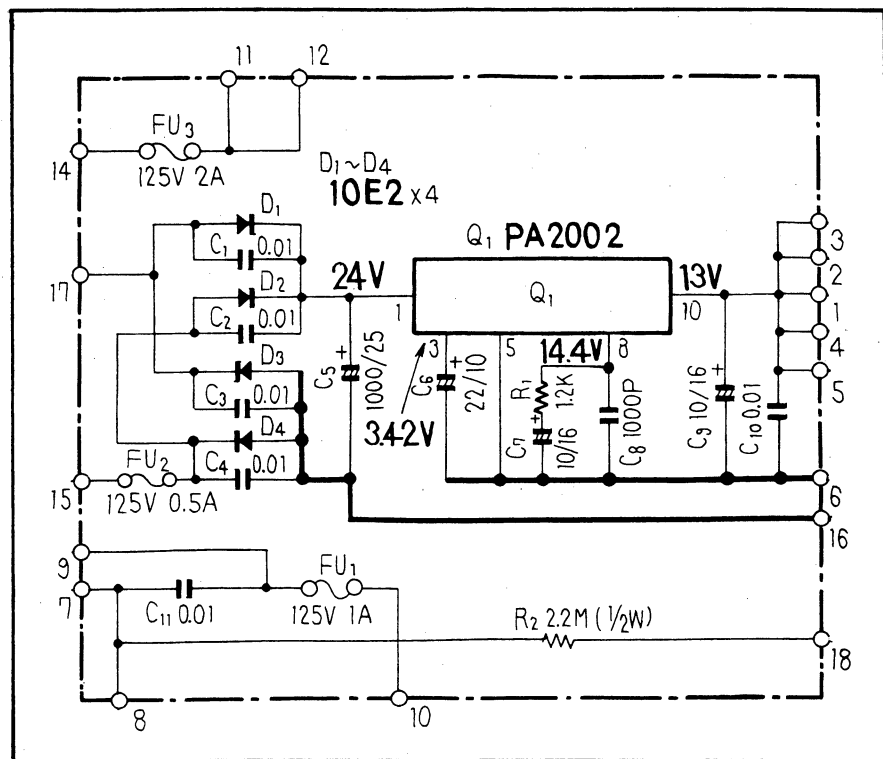
RESISTORS:
IN OHM, 1/4W, ±5% TOLERANCE UNLESS OTHERWISE NOTED K: K.Ω M: M.Ω
CAPACITORS:
IN μF UNLESS OTHERWISE NOTED P=pF

NOTES:
DC VOLTAGE AT NO INPUT SIGNAL
V : AT WIDE
(V) : AT NARROW

TYP 180mA at FM AUTO (TOTAL)

TX-8500II/KC

2.2 POWER SUPPLY ASSEMBLY (AWR-135)



Parts List of Power Supply Assembly (AWR-135)

SEMICONDUCTOR

| Symbol | Description | Part No. |
|--------|-------------|--------------------|
| Q1 | IC | PA 2002 |
| D1 | Diode | 10E2 (SIB01-02) |
| D2 | Diode | 10E2 (SIB01-02) |
| D3 | Diode | 10E2 (SIB01-02) |
| D4 | Diode | 10E2 (SIB01-02) |

RESISTORS

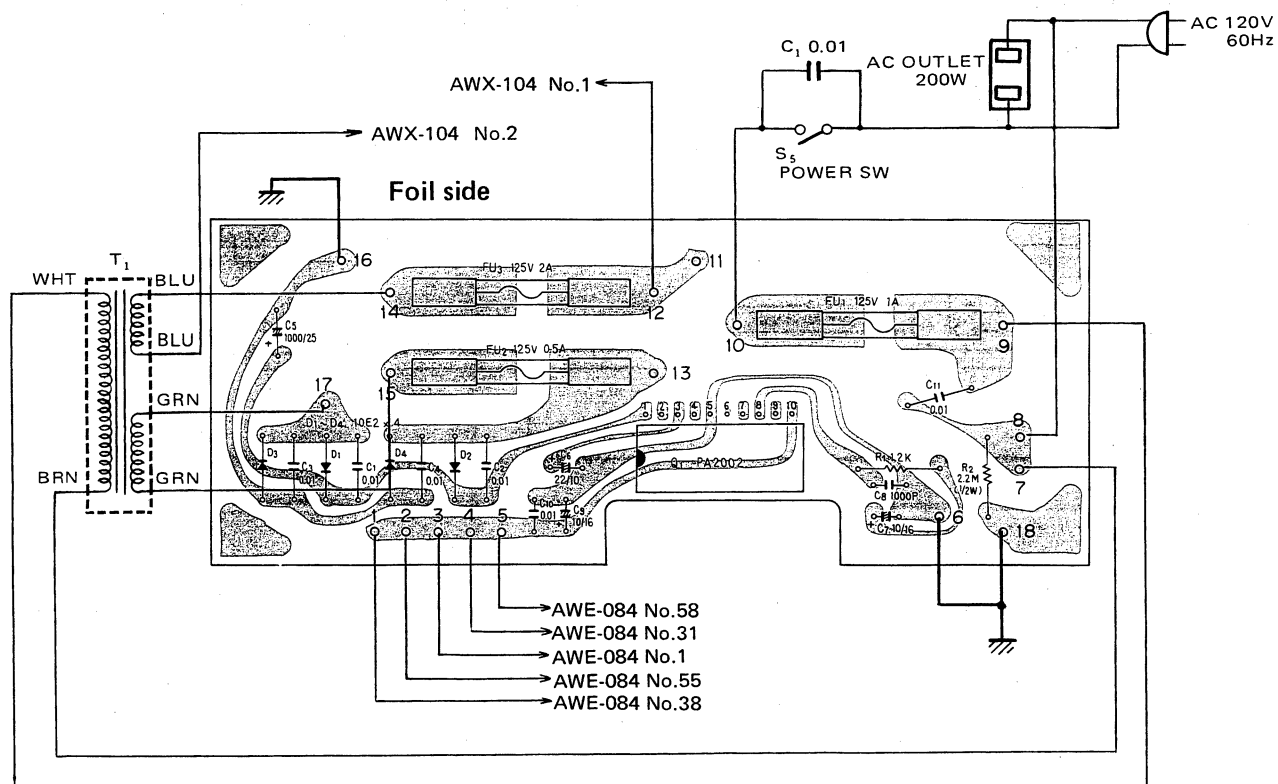
| Symbol | Description | Part No. |
|--------|------------------|------------|
| R1 | Carbon film 1.2k | RD4PS 122J |
| R2 | Carbon film 2.2M | RD4PS 225J |

CAPACITORS

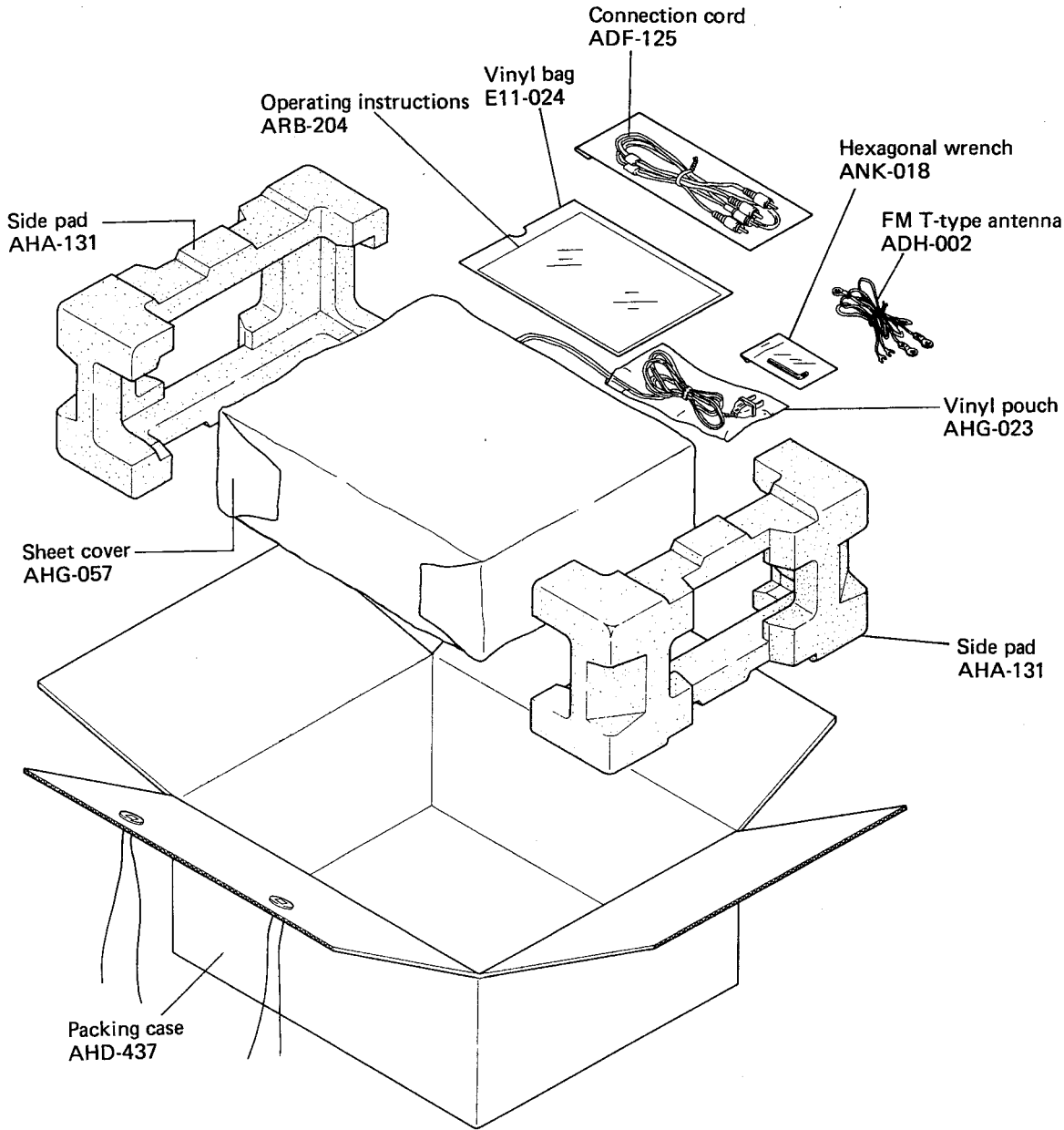
| Symbol | Description | Part No. |
|--------|------------------------|---------------|
| C1 | Ceramic 0.01 150V | ACG-004 |
| C2 | Ceramic 0.01 150V | ACG-004 |
| C3 | Ceramic 0.01 150V | ACG-004 |
| C4 | Ceramic 0.01 150V | ACG-004 |
| C5 | Electrolytic 1,000 25V | CEA 102P 25 |
| C6 | Electrolytic 22 25V | CEA 220P 25 |
| C7 | Electrolytic 10 16V | CEA 100P 16 |
| C8 | Ceramic 0.001 50V | CKDYB 102K 50 |
| C9 | Electrolytic 10 16V | CEA 100P 16 |
| C10 | Ceramic 0.01 50V | CKDYB 103K 50 |
| C11 | Ceramic 0.01 125V | ACG-014 |

OTHERS

| Symbol | Description | Part No. |
|--------|-------------|----------|
| | Fuse clip | AKR-013 |
| | Fuse clip | AKR-030 |



2.3 PACKING



3. HG TYPE

3.1 SCHEMATIC DIAGRAM AND MISCELLANEOUS PARTS LIST

Miscellaneous Parts List

NOTE:

- Capacitors: in μF unless otherwise noted $p:pF$
- Resistors: in Ω , $\frac{1}{4}W$ unless otherwise noted $k:k\Omega$, $M:M\Omega$

SWITCHES

| Symbol | Description | Part No. |
|--------|---|----------|
| S5 | Lever switch (POWER) | ASK-127 |
| S7 | Plug in selector (Line voltage selector) | AKX-037 |

TRANSFORMERS AND COIL

| Symbol | Description | Part No. |
|--------|-------------------|----------|
| T1 | Power transformer | ATT-344 |
| T2 | Bar antenna | ATB-506 |
| T3 | Ferrite balun | T22-025 |
| L1 | RF choke coil | T24-030 |

LAMPS

| Symbol | Description | Part No. |
|--------|-----------------------------|----------|
| PL1 | Lamp with wire 8V, 50mA | AEL-072 |
| PL2 | Lamp with wire 6V, 30mA | AEL-080 |
| PL3 | Lamp with wire 6V, 30mA | AEL-079 |
| PL4 | Lamp with wire 6V, 30mA | AEL-079 |
| PL5 | Lamp (Wedge type) 8V, 300mA | AEL-029 |
| PL6 | Lamp (Wedge type) 8V, 300mA | AEL-029 |
| PL7 | Lamp (Wedge type) 8V, 300mA | AEL-029 |
| PL8 | Lamp (Wedge type) 8V, 300mA | AEL-029 |

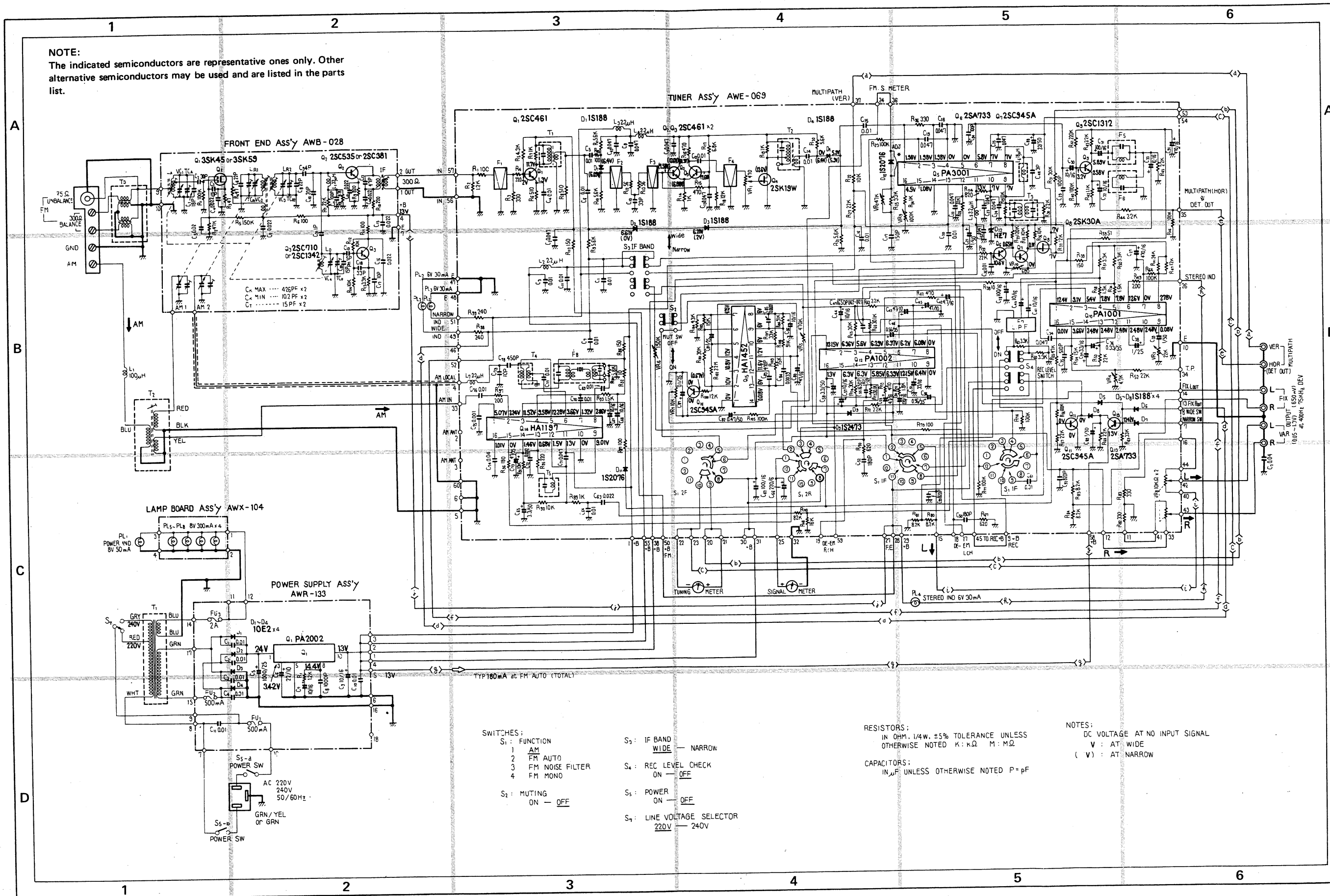
FUSES

| Symbol | Description | Part No. |
|--------|------------------------|----------|
| FU1 | Fuse 500mA (Primary) | AEK-401 |
| FU2 | Fuse 500mA (Secondary) | AEK-401 |
| FU3 | Fuse 2A (Secondary) | AEK-017 |

CAPACITOR

| Symbol | Description | Part No. |
|--------|------------------|---------------|
| C2 | Ceramic 0.04 50V | CKDYF 403Z 50 |

NOTE:
The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.



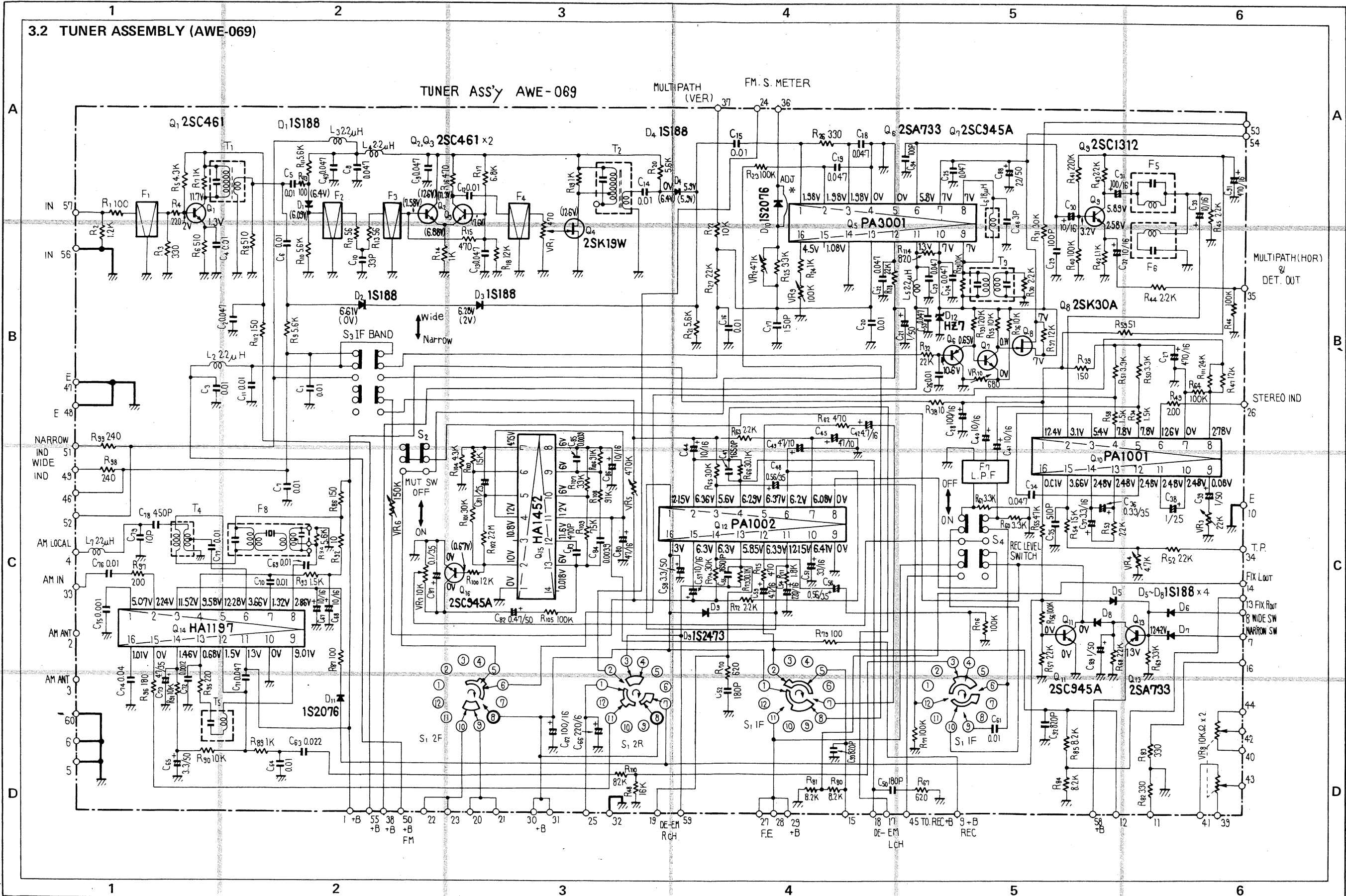
- SWITCHES:**
 S₁: FUNCTION
 1 AM
 2 FM AUTO
 3 FM NOISE FILTER
 4 FM MONO
 S₂: MUTING
 ON — OFF
 S₃: IF BAND
 WIDE — NARROW
 S₄: REC LEVEL CHECK
 ON — OFF
 S₅: POWER
 ON — OFF
 S₇: LINE VOLTAGE SELECTOR
 220V — 240V

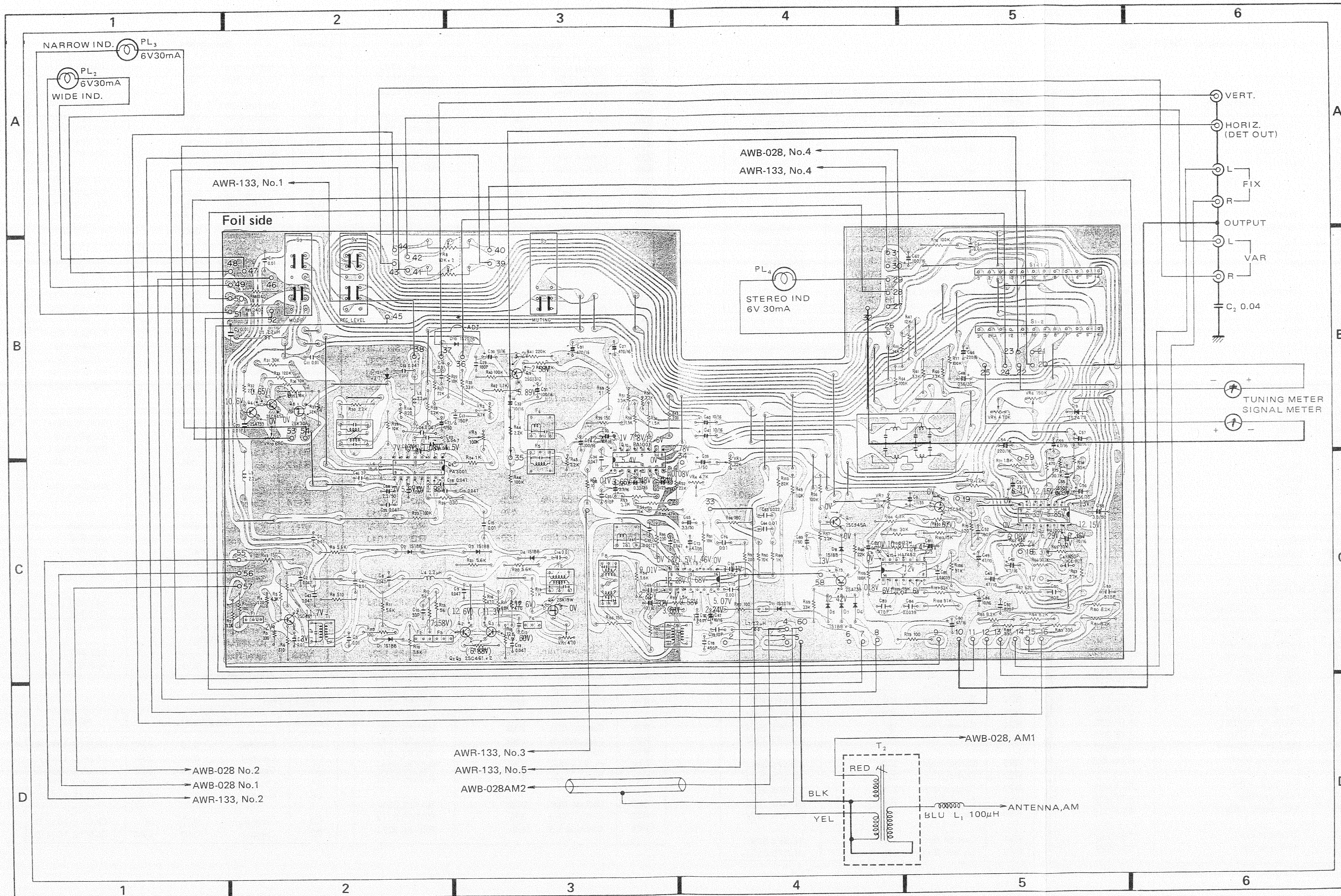
RESISTORS:
 IN OHM. 1/4W. ±5% TOLERANCE UNLESS OTHERWISE NOTED K: kΩ M: MΩ
CAPACITORS:
 IN μF UNLESS OTHERWISE NOTED P=pF

NOTES:
 DC VOLTAGE AT NO INPUT SIGNAL
 V : AT WIDE
 (V) : AT NARROW

TX-8500II/HG

3.2 TUNER ASSEMBLY (AWE-069)





NARROW IND. PL₃
6V30mA
WIDE IND. PL₂
6V30mA

AWR-133, No.1

Foil side

AWB-028, No.4
AWR-133, No.4

PL₄
STEREO IND
6V 30mA

VERT.
HORIZ.
(DET OUT)
L
R
FIX
OUTPUT
L
R
VAR
C₂ 0.04

TUNING METER
SIGNAL METER

AWB-028 No.2
AWB-028 No.1
AWR-133, No.2

AWR-133, No.3
AWR-133, No.5
AWB-028AM2

T₂
RED
BLK
YEL
ANTENNA, AM
BLU L₁ 100µH

TX-8500II / HG

Parts List of Tuner Assembly (AWE-069)

SEMICONDUCTORS

| Symbol | Description | Part No. |
|--------|-------------|---------------------|
| Q1 | Transistor | 2SC461-B |
| Q2 | Transistor | 2SC461-B |
| Q3 | Transistor | 2SC461-B |
| Q4 | FET | 2SK19-W |
| * Q5 | IC | PA3001 (PA3001Y) |
| Q6 | Transistor | 2SA733-Q |
| Q7 | Transistor | 2SC945A-Q |
| Q8 | FET | 2SK30A-Y |
| Q9 | Transistor | 2SC1312-G |
| Q10 | IC | PA1001 |
| Q11 | Transistor | 2SC945A-Q |
| Q12 | IC | PA1002 |
| Q13 | Transistor | 2SA733-Q |
| Q14 | IC | HA1197 |
| Q15 | IC | HA1452W |
| Q16 | Transistor | 2SC945A-Q |
| D1 | Diode | 1S188FM-1 |
| D2 | Diode | 1S188FM-1 |
| D3 | Diode | 1S188FM-1 |
| D4 | Diode | 1S188FM-1 |
| D5 | Diode | 1S188FM-1 |
| D6 | Diode | 1S188FM-1 |
| D7 | Diode | 1S188FM-1 |
| D8 | Diode | 1S188FM-1 |
| D9 | Diode | 1S2473 |
| * D10 | Diode | 1S2076 |
| D11 | Diode | 1S2076 |
| D12 | Zener diode | HZ7-B |

TRANSFORMERS, COILS

| Symbol | Description | Part No. |
|--------|-------------------|----------|
| T1 | FM IF transformer | ATE-023 |
| T2 | FM IF transformer | ATE-024 |
| T3 | FM IF transformer | T73-035 |
| T4 | AM OSC coil | ATB-019 |
| T5 | 455k Hz filter | ATF-013 |
| F1 | FM ceramic filter | ATF-013 |
| F2 | FM ceramic filter | ATF-013 |
| F3 | FM ceramic filter | ATF-013 |
| F4 | FM ceramic filter | ATF-013 |
| F5 | Anti-birdy filter | ATF-023 |
| F6 | Anti-birdy filter | ATF-024 |
| F7 | Low pass filter | ATF-036 |
| F8 | AM ceramic filter | ATF-034 |
| L2 | RF choke coil | T24-028 |
| L3 | RF choke coil | T24-028 |

| Symbol | Description | Part No. |
|--------|---------------|----------|
| L4 | RF choke coil | T24-028 |
| L5 | RF choke coil | T24-028 |
| L6 | RF choke coil | ATH-007 |
| L7 | RF choke coil | T24-028 |

SWITCHES

| Symbol | Description | Part No. |
|--------|--------------------------------|----------|
| S1 | Rotary switch (FUNCTION) | ASD-063 |
| S2 | Lever switch (FM MUTING) | ASK-109 |
| S3 | Lever switch (IF BAND) | ASK-112 |
| S4 | Lever switch (REC LEVEL CHECK) | ASK-112 |

RESISTORS

| Symbol | Description | Part No. |
|--------|------------------|------------|
| R1 | Carbon film 100 | RD%PS 101J |
| R2 | Carbon film 1.2k | RD%PS 122J |
| R3 | Carbon film 330 | RD%PS 331J |
| R4 | Carbon film 220 | RD%PS 221J |
| R5 | Carbon film 4.3k | RD%PS 432J |
| R6 | Carbon film 510 | RD%PS 511J |
| R7 | Carbon film 1k | RD%PS 102J |
| R8 | Carbon film 510 | RD%PS 511J |
| R9 | Carbon film 5.6k | RD%PS 562J |
| R10 | Carbon film 5.6k | RD%PS 562J |
| R11 | Carbon film 5.6k | RD%PS 562J |
| R12 | Carbon film 56 | RD%PS 560J |
| R13 | Carbon film 56 | RD%PS 560J |
| R14 | Carbon film 1k | RD%PS 102J |
| R15 | Carbon film 470 | RD%PS 471J |
| R16 | Carbon film 470 | RD%PS 471J |
| R17 | Carbon film 6.8k | RD%PS 682J |
| R18 | Carbon film 12k | RD%PS 123J |
| R19 | Carbon film 1k | RD%PS 102J |
| R20 | Carbon film 5.6k | RD%PS 562J |
| R21 | Carbon film 5.6k | RD%PS 562J |
| R22 | Carbon film 10k | RD%PS 103J |
| R23 | Carbon film 100k | RD%PS 104J |
| R24 | Carbon film 1k | RD%PS 102J |
| R25 | Carbon film 33k | RD%PS 333J |
| R26 | Carbon film 330 | RD%PS 331J |
| R27 | Carbon film 22k | RD%PS 223J |
| R28 | Carbon film 2.2k | RD%PS 222J |
| R29 | Carbon film 10k | RD%PS 103J |
| R30 | Carbon film 2.2k | RD%PS 222J |
| R31 | Carbon film 30k | RD%PS 303J |
| R32 | Carbon film 22k | RD%PS 223J |

| Symbol | Description | Part No. |
|--------|---------------------------------|---------------------------|
| R33 | Carbon film 120k | RD%PS 124J |
| R34 | Carbon film 1.5k | RD%PS 152J |
| R35 | Carbon film 10k | RD%PS 103J |
| R36 | Carbon film 10k | RD%PS 103J |
| R37 | Carbon film 12k | RD%PS 123J |
| R38 | Carbon film 10 | RD%PS 100J |
| R39 | Carbon film 150 | RD%PS 151J |
| R40 | Carbon film 100k | RD%PS 104J |
| R41 | Carbon film 220k | RD%PS 224J |
| R42 | Carbon film 1.1k | RD%PS 112J |
| R43 | Carbon film 2.2k | RD%PS 222J |
| R44 | Carbon film 2.2k | RD%PS 222J |
| R45 | Carbon film 2.2k | RD%PS 222J |
| R46 | Carbon film 100k | RD%PS 104J |
| R47 | Carbon film 12k | RD%PS 123J |
| R48 | Carbon film 16k | RD%PS 163J |
| R49 | Carbon film 200 | RD%PS 201J |
| R50 | Metal film 3.3k $\frac{1}{2}W$ | RN $\frac{1}{2}$ SQ 3301F |
| R51 | Metal film 3.3k $\frac{1}{2}W$ | RN $\frac{1}{2}$ SQ 3301F |
| R52 | Carbon film 22k | RD%PS 223J |
| R53 | Carbon film 2.2k | RD%PS 222J |
| R54 | Carbon film 15k | RD%PS 153J |
| R55 | Carbon film 47k | RD%PS 473J |
| R56 | Carbon film 100k | RD%PS 104J |
| R57 | Carbon film 22k | RD%PS 223J |
| R58 | Carbon film 1.5k | RD%PS 152J |
| R59 | Carbon film 51 | RD%PS 510J |
| R60 | Carbon film 3.3k | RD%PS 332J |
| R61 | Carbon film 3.3k | RD%PS 332J |
| R62 | Carbon film 470 | RD%PS 471J |
| R63 | Carbon film 2.2k | RD%PS 222J |
| R64 | Carbon film 100k | RD%PS 104J |
| R65 | Carbon film 30k | RD%PS 303J |
| R66 | Metal film 30.1k $\frac{1}{2}W$ | RN $\frac{1}{2}$ SQ 3012F |
| R67 | Carbon film 620 | RD%PS 621J |
| R68 | Carbon film 22k | RD%PS 223J |
| R69 | Carbon film 33k | RD%PS 333J |
| R70 | Carbon film 620 | RD%PS 621J |
| R71 | Carbon film 1.8k | RD%PS 182J |
| R72 | Carbon film 2.2k | RD%PS 222J |
| R73 | Metal film 30.1K $\frac{1}{2}W$ | RN $\frac{1}{2}$ SQ 3012F |
| R74 | Carbon film 30k | RD%PS 303J |
| R75 | Carbon film 470 | RD%PS 471J |
| R76 | Carbon film 100k | RD%PS 104J |
| R77 | Carbon film 100k | RD%PS 104J |
| R79 | Carbon film 100 | RD%PS 101J |
| R80 | Carbon film 8.2k | RD%PS 822J |
| R81 | Carbon film 8.2k | RD%PS 822J |
| R82 | Carbon film 330 | RD%PS 331J |
| R83 | Carbon film 330 | RD%PS 331J |
| R84 | Carbon film 8.2k | RD%PS 822J |

| Symbol | Description | Part No. |
|--------|--------------------------------------|------------|
| R85 | Carbon film 8.2k | RD%PS 822J |
| R86 | Carbon film 150 | RD%PS 151J |
| R87 | Carbon film 100 | RD%PS 101J |
| R89 | Carbon film 1k | RD%PS 102J |
| R90 | Carbon film 10k | RD%PS 103J |
| R91 | Carbon film 10k | RD%PS 103J |
| R92 | Carbon film 10 | RD%PS 100J |
| R93 | Carbon film 1.5k | RD%PS 152J |
| R94 | Carbon film 5.6k | RD%PS 562J |
| R95 | Carbon film 220 | RD%PS 221J |
| R96 | Carbon film 180 | RD%PS 181J |
| R97 | Carbon film 200 | RD%PS 201J |
| R98 | Carbon film 240 | RD%PS 241J |
| R99 | Carbon film 240 | RD%PS 241J |
| R100 | Carbon film 12k | RD%PS 123J |
| R101 | Carbon film 30k | RD%PS 303J |
| R102 | Carbon film 2.2M | RD%PS 225J |
| R103 | Carbon film 15k | RD%PS 153J |
| R104 | Carbon film 4.3k | RD%PS 432J |
| R105 | Carbon film 100k | RD%PS 104J |
| R106 | Carbon film 91k | RD%PS 913J |
| R107 | Carbon film 33k | RD%PS 333J |
| R108 | Carbon film 91k | RD%PS 913J |
| R109 | Carbon film 75k | RD%PS 753J |
| R110 | Carbon film 82k | RD%PS 823J |
| R111 | Carbon film 24k | RD%PS 243J |
| R112 | Carbon film 150 | RD%PS 151J |
| R113 | Carbon film 100 | RD%PS 101J |
| R114 | Carbon film 820 | RD%PS 821J |
| VR1 | Semi-fixed 470 | ACP-006 |
| VR2 | Semi-fixed 47k | C92-048 |
| VR3 | Semi-fixed 22k | ACP-056 |
| VR4 | Semi-fixed 4.7k | C92-051 |
| VR5 | Semi-fixed 470k | ACP-011 |
| VR6 | Semi-fixed 150k | ACP-057 |
| VR7 | Semi-fixed 10k | C92-049 |
| VR8 | Variable resistor 10k (OUTPUT LEVEL) | ACV-178 |
| VR9 | Semi-fixed 100k | C92-047 |
| VR10 | Semi-fixed 680 | ACP-013 |

CAPACITORS

| Symbol | Description | Part No. |
|--------|-------------------|---------------|
| C1 | Ceramic 0.01 50V | CKDYF 103Z 50 |
| C2 | Ceramic 0.047 25V | CKDBC 473Z 25 |
| C3 | Ceramic 0.01 50V | CKDYB 103K 50 |
| C4 | Ceramic 0.01 50V | CKDYB 103K 50 |
| C5 | Ceramic 0.01 50V | CKDYF 103Z 50 |
| C6 | Ceramic 0.01 50V | CKDYF 103Z 50 |
| C7 | Ceramic 0.01 50V | CKDYB 103K 50 |

| Symbol | Description | | | Part No. |
|--------|--------------|-------|-----|---------------|
| C8 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C9 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C10 | Ceramic | 33p | 50V | CCDSL 330K 50 |
| C11 | Ceramic | 0.01 | 50V | CKDYB 103K 50 |
| C12 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C13 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C14 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C15 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C16 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C17 | Ceramic | 150p | 50V | CCDSL 151K 50 |
| C18 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C19 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C20 | Ceramic | 0.01 | 50V | CKDYB 103K 50 |
| C21 | Electrolytic | 1 | 50V | CEA 010P 50 |
| C22 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C23 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C24 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C25 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C26 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C27 | Electrolytic | 470 | 16V | CEA 471P 16 |
| C28 | Electrolytic | 100 | 16V | CEA 101P 16 |
| C29 | Ceramic | 100p | 50V | CCDSL 101K 50 |
| C30 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C31 | Electrolytic | 100 | 16V | CEA 101P 16 |
| C32 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C33 | Electrolytic | 10 | 16V | CEANL 100P 16 |
| C34 | Mylar | 0.047 | 50V | CQMA 473K 50 |
| C35 | Polystyrene | 510p | 50V | CQSH 511J 50 |
| C36 | Electrolytic | 0.33 | 35V | CSZA R33M 35 |
| C37 | Electrolytic | 3.3 | 16V | CSZA 3R3M 16 |
| C38 | Electrolytic | 1 | 25V | CSZA 010M 25 |
| C39 | Electrolytic | 1 | 50V | CEA 010P 50 |
| C40 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C41 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C42 | Electrolytic | 4.7 | 25V | CEANL 4R7P 25 |
| C43 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C44 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C45 | Electrolytic | 47 | 10V | CEA 470P 10 |
| C46 | Ceramic | 3p | 50V | CCDSL 030C 50 |
| C47 | Polystyrene | 1650P | | ACE-012 |
| C48 | Electrolytic | 0.56 | 35V | CSZA R56K 35 |
| C49 | Electrolytic | 47 | 10V | CEA 470P 10 |
| C50 | Ceramic | 180p | 50V | CCDSL 181K 50 |
| C51 | Electrolytic | 33 | 16V | ACH-321 |
| C52 | Ceramic | 180p | 50V | CCDSL 181K 50 |
| C53 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C54 | Electrolytic | 220 | 16V | CEA 221P 16 |
| C55 | Polystyrene | 1650p | | ACE-012 |
| C56 | Electrolytic | 0.56 | 35V | CSZA R56K 35 |
| C57 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C58 | Electrolytic | 3.3 | 50V | CEA 3R3P 50 |

| Symbol | Description | | | Part No. |
|--------|--------------|--------|-----|---------------|
| C59 | Electrolytic | 4.7 | 25V | CEANL 4R7P 25 |
| C60 | ..... |  |  | ..... |
| C61 | Mylar | 0.01 | 50V | CQMA 103J 50 |
| C62 | Electrolytic | 100 | 16V | CEA 101P 16 |
| C63 | Mylar | 0.022 | 50V | CQMA 223J 50 |
| C64 | Mylar | 0.01 | 50V | CQMA 103K 50 |
| C65 | Electrolytic | 3.3 | 50V | CEA 3R3P 50 |
| C66 | Electrolytic | 220 | 6V | CEA 221P 6 |
| C67 | Electrolytic | 10 | 16V | CEA 100P 16 |
| C68 | Electrolytic | 10 | 16V | CEA 100P 16 |
| C69 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C70 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C71 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C72 | Ceramic | 1200p | 50V | CKDYB 122K 50 |
| C73 | Electrolytic | 4.7 | 35V | CEA 4R7P 35 |
| C74 | Ceramic | 0.04 | 50V | CKDYF 403Z 50 |
| C75 | Ceramic | 0.001 | 50V | CKDYB 102K 50 |
| C76 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C77 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C78 | Polystyrene | 450p | 50V | CQSA 451J 50 |
| C79 | Ceramic | 10p | 50V | CCDWK 100F 50 |
| C80 | Electrolytic | 47 | 16V | CEA 470P 16 |
| C81 | Electrolytic | 1 | 25V | CSZA 010M 25 |
| C82 | Electrolytic | 0.47 | 50V | CEA R47P 50 |
| C83 | Ceramic | 470p | 50V | CKDYB 471K 50 |
| C84 | Mylar | 0.0039 | 50V | CQMA 392J 50 |
| C85 | Mylar | 0.0039 | 50V | CQMA 392J 50 |
| C86 | Electrolytic | 10 | 16V | CEA 100P 16 |
| C87 | Electrolytic | 0.1 | 35V | CSZA 0R1M 35 |
| C88 | Electrolytic | 2.2 | 50V | CEA 2R2P 50 |
| C89 | Electrolytic | 1 | 50V | CEA 010P 50 |
| C90 | ..... |  |  | ..... |
| C91 | Electrolytic | 470 | 16V | CEA 471P 16 |
| C92 | Ceramic | 820p | 50V | CKDYB 821K 50 |
| C93 | Ceramic | 820p | 50V | CKDYB 821K 50 |
| C94 | Ceramic | 100p | 50V | CCDSL 101K 50 |

OTHERS

| Symbol | Description | Part No. |
|--------|-------------|----------|
| | Nut | ABN-027 |
| | Nut | ABN-026 |
| | Screw | ABA-078 |
| | Screw 3x6 | ABA-116 |

* The IC used at Q₅ is either PA3001, or PA3001Y, depending on the model. These two ICs are not interchangeable without a minor alteration to the circuitry. When servicing, follow the instructions described below.

Replacing PA3001 with PA3001Y

Disconnect the jumper wire to the D₁₀ section. Then insert a diode (1S2076), but be careful that the direction is correct.

Replacing PA3001Y with PA3001

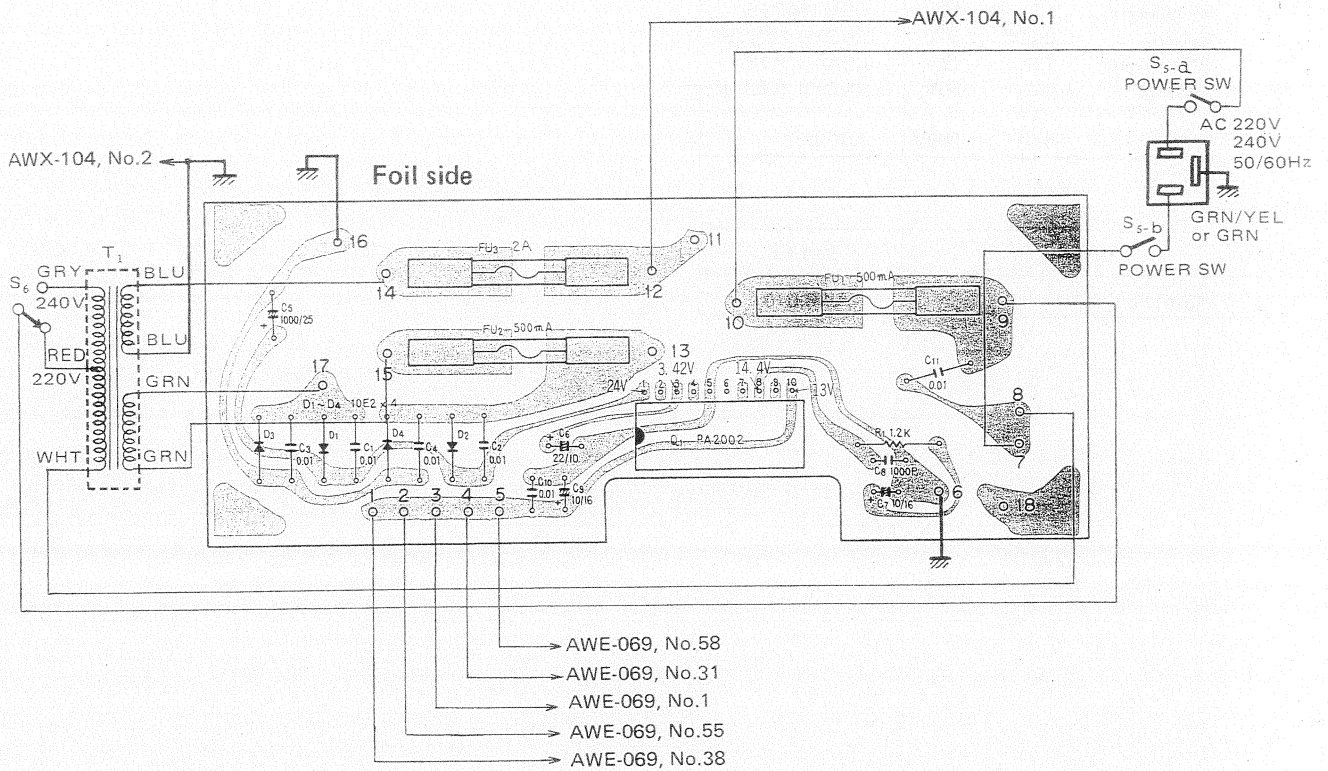
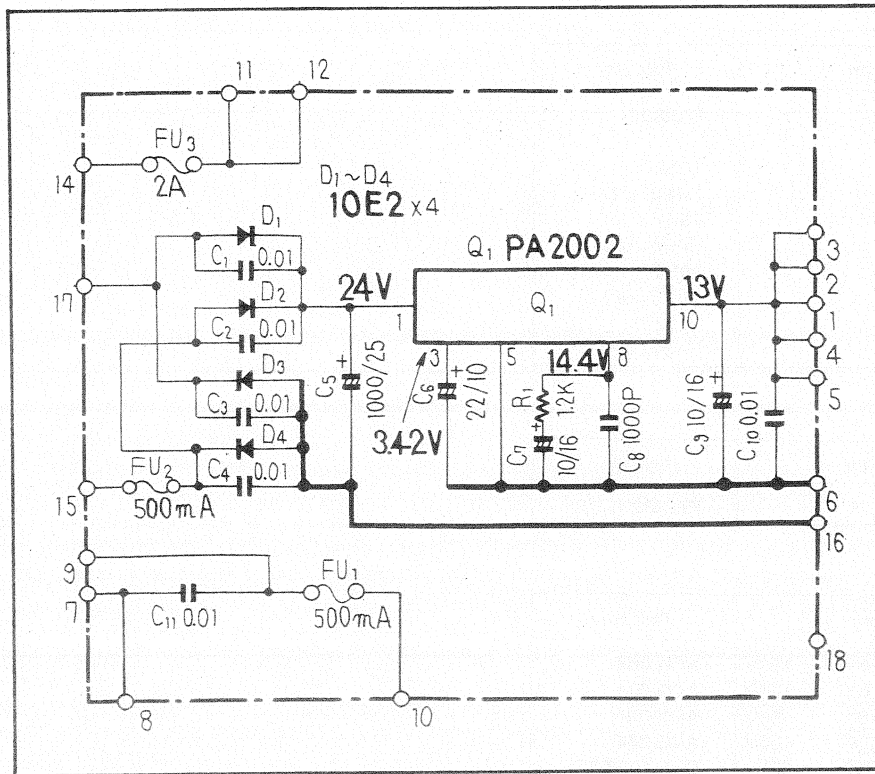
Remove diode D₁₀ (1S2076), and connect the gap with a jumper wire.

How to tell PA3001 and PA3001Y apart

PA3001: the characters (PA3001) on the upper surface of the IC are "white".

PA3001Y: either the characters (PA3001) on the upper surface of the IC are "yellow", or the characters PA3001Y have been printed on.

3.3 POWER SUPPLY ASSEMBLY (AWR-133)



Parts List of Power Supply Assembly (AWR-133)

SEMICONDUCTORS

| Symbol | Description | Part No. |
|--------|-------------|--------------------|
| Q1 | IC | PA2002 |
| D1 | Diode | 10E2 (SIB01-02) |
| D2 | Diode | 10E2 (SIB01-02) |
| D3 | Diode | 10E2 (SIB01-02) |
| D4 | Diode | 10E2 (SIB01-02) |

RESISTOR

| Symbol | Description | Part No. |
|--------|------------------|------------|
| R1 | Carbon film 1.2k | RD4PS 122J |

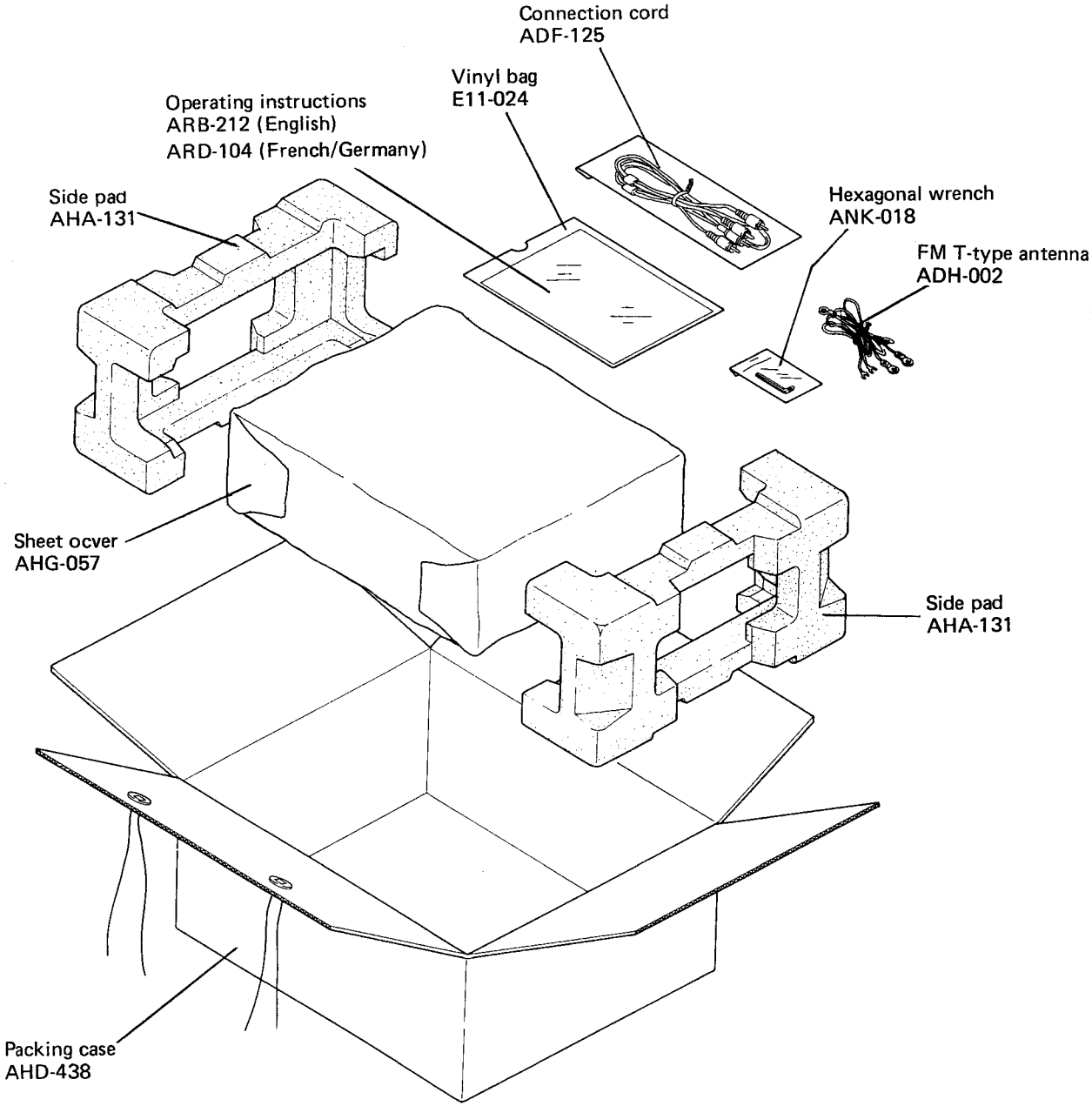
CAPACITORS

| Symbol | Description | Part No. |
|--------|-----------------------|---------------|
| C1 | Ceramic 0.01 150V | ACG-004 |
| C2 | Ceramic 0.01 150V | ACG-004 |
| C3 | Ceramic 0.01 150V | ACG-004 |
| C4 | Ceramic 0.01 150V | ACG-004 |
| C5 | Electrolytic 1000 25V | CEA 102P 25 |
| C6 | Electrolytic 22 10V | CEA 220P 10 |
| C7 | Electrolytic 10 16V | CEA 100P 16 |
| C8 | Ceramic 0.001 50V | CKDYB 102K 50 |
| C9 | Electrolytic 10 16V | CEA 100P 16 |
| C10 | Ceramic 0.01 50V | CKDYB 103K 50 |
| C11 | Ceramic 0.01 250V | ACG-001 |

OTHERS

| Symbol | Description | Part No. |
|--------|-------------|----------|
| | Fuse clip | AKR-010 |

3.4 PACKING



4. S TYPE

4.1 SCHEMATIC DIAGRAM AND MISCELLANEOUS PARTS LIST

Miscellaneous Parts List

NOTE:

- Capacitors: in μF unless otherwise noted p:pF
- Resistors: in Ω , $\frac{1}{4}W$ unless otherwise noted k:k Ω , M:M Ω

SWITCHES

| Symbol | Description | Part No. |
|--------|---|----------|
| S5 | Lever switch (POWER) | ASK-128 |
| S7 | Plug in selector (Line voltage selector) | AKR-031 |

TRANSFORMERS AND COIL

| Symbol | Description | Part No. |
|--------|-------------------|----------|
| T1 | Power transformer | ATT-345 |
| T2 | Bar antenna | ATB-506 |
| T3 | Ferrite balun | T22-025 |
| L1 | RF choke coil | T24-030 |

LAMPS

| Symbol | Description | Part No. |
|--------|-----------------------------|----------|
| PL1 | Lamp with wire 8V, 50mA | AEL-072 |
| PL2 | Lamp with wire 6V, 30mA | AEL-080 |
| PL3 | Lamp with wire 6V, 30mA | AEL-079 |
| PL4 | Lamp with wire 6V, 30mA | AEL-079 |
| PL5 | Lamp (Wedge type) 8V, 300mA | AEL-029 |
| PL6 | Lamp (Wedge type) 8V, 300mA | AEL-029 |
| PL7 | Lamp (Wedge type) 8V, 300mA | AEL-029 |
| PL8 | Lamp (Wedge type) 8V, 300mA | AEL-029 |

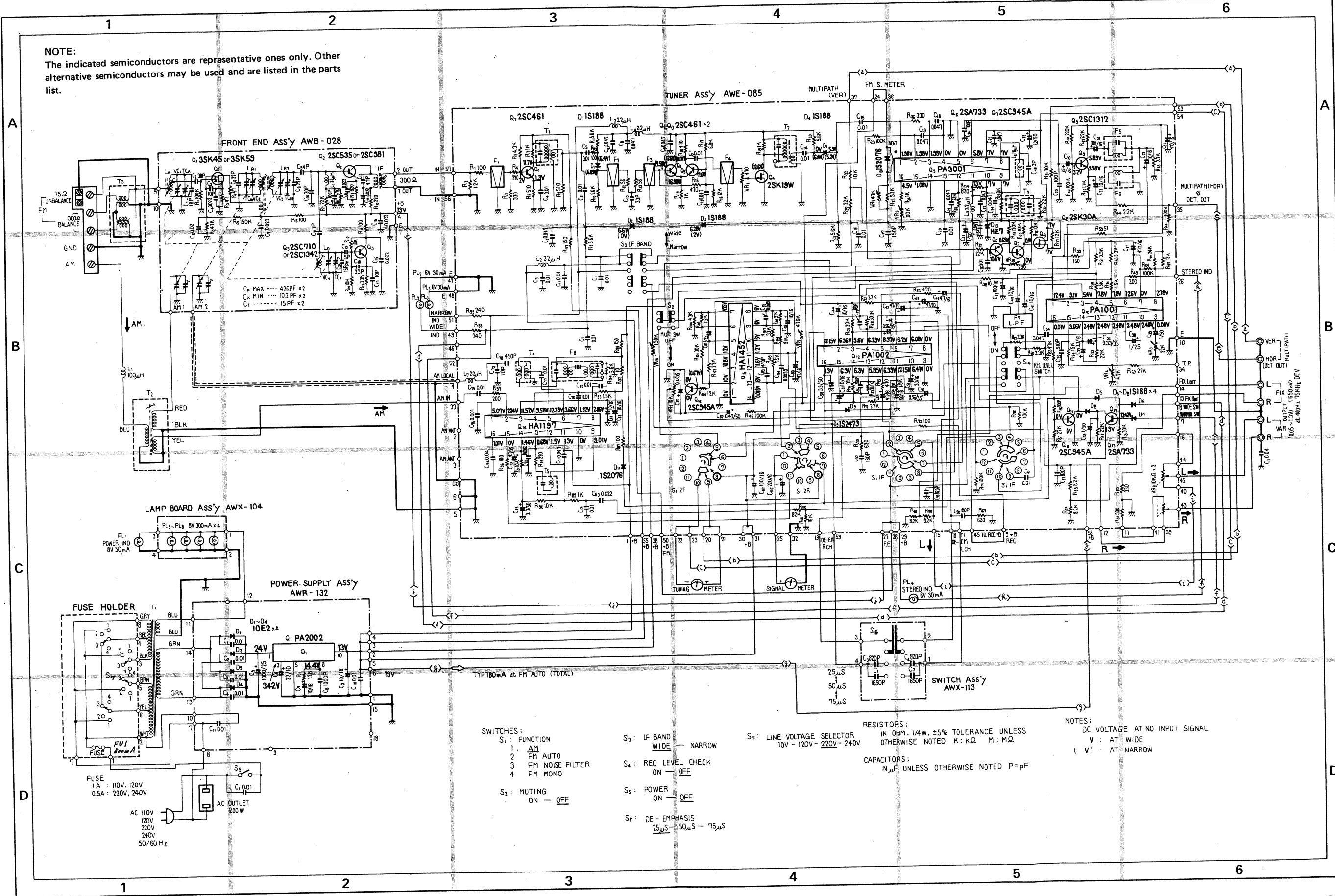
FUSE

| Symbol | Description | Part No. |
|--------|----------------------|----------|
| FU1 | Fuse 500mA (Primary) | AEK-107 |

CAPACITORS

| Symbol | Description | Part No. |
|--------|-------------------|---------------|
| C1 | Ceramic 0.01 250V | ACG-001 |
| C2 | Ceramic 0.04 50V | CKDYF 403Z 50 |

NOTE:
The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.



- SWITCHES:**
- S₁: FUNCTION
 - 1. AM
 - 2. FM AUTO
 - 3. FM NOISE FILTER
 - 4. FM MONO
 - S₂: MUTING
 - ON — OFF
 - S₃: IF BAND
 - WIDE — NARROW
 - S₄: REC LEVEL CHECK
 - ON — OFF
 - S₅: POWER
 - ON — OFF
 - S₆: DE-EMPHASIS
 - 25μS — 50μS — 75μS

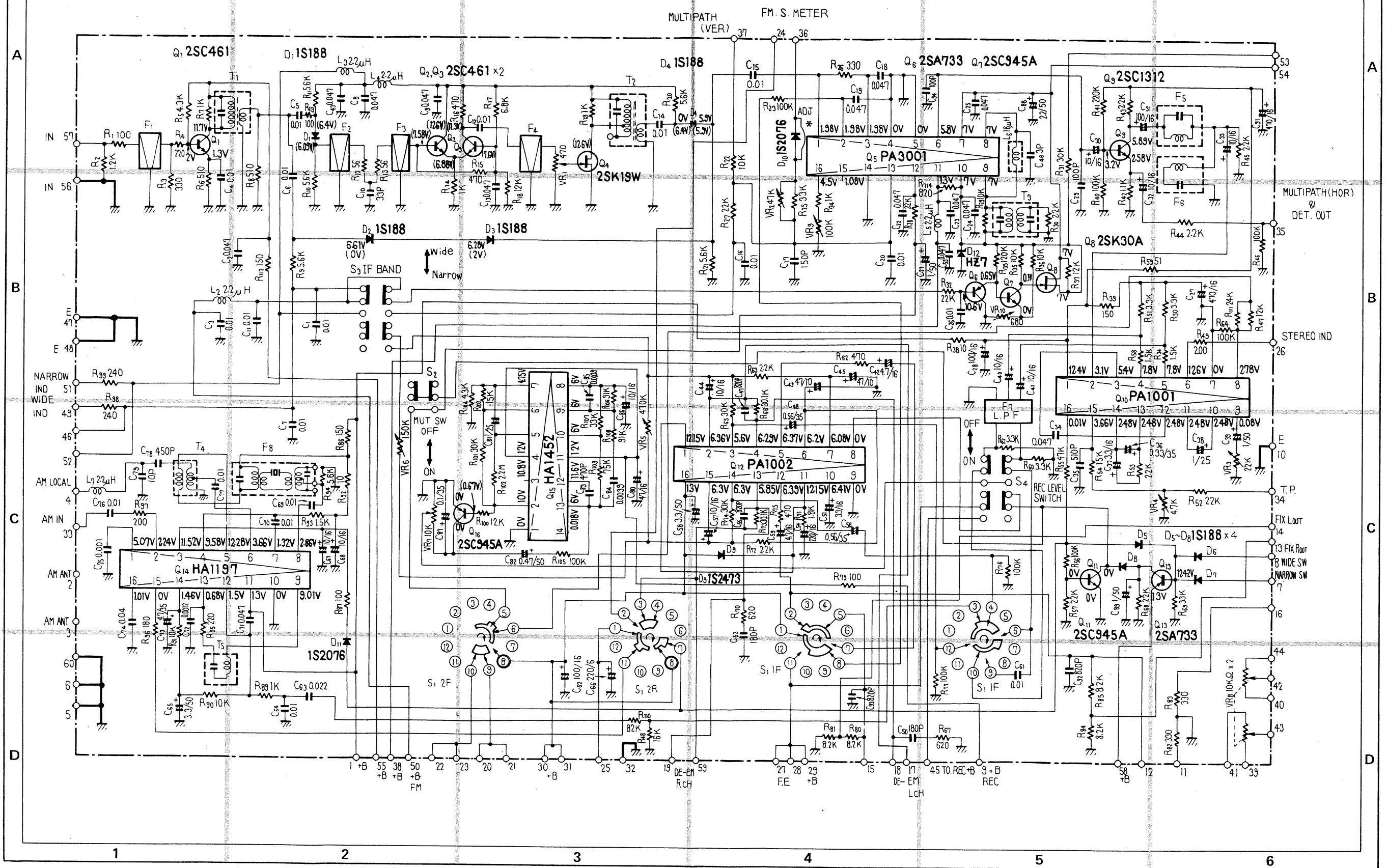
RESISTORS:
IN OHM. 1/4W. ±5% TOLERANCE UNLESS OTHERWISE NOTED K: kΩ M: MΩ

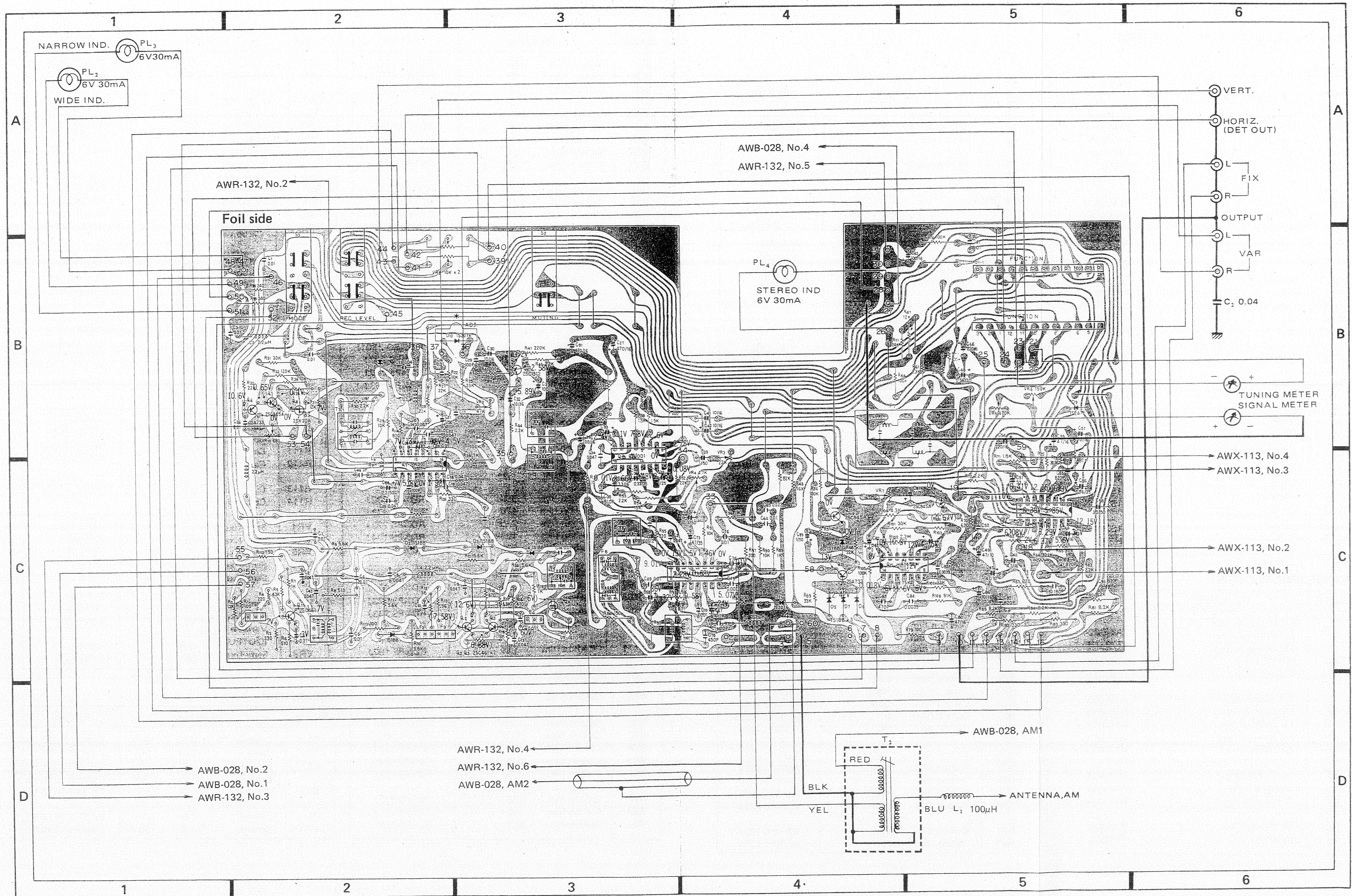
CAPACITORS:
IN μF UNLESS OTHERWISE NOTED P=pF

NOTES:
DC VOLTAGE AT NO INPUT SIGNAL
V : AT WIDE
(V) : AT NARROW

TX-8500II/S

4.2 TUNER ASSEMBLY (AWE-085)





NARROW IND. PL₃
6V 30mA
WIDE IND. PL₂
6V 30mA

AWR-132, No.2

Foil side

AWB-028, No.4
AWR-132, No.5

PL₄
STEREO IND
6V 30mA

VERT.
HORIZ.
(DET OUT)

L
R
FIX
L
R
OUTPUT
VAR
C₂ 0.04

TUNING METER
SIGNAL METER

AWX-113, No.4
AWX-113, No.3

AWX-113, No.2
AWX-113, No.1

AWB-028, No.2
AWB-028, No.1
AWR-132, No.3

AWR-132, No.4
AWR-132, No.6
AWB-028, AM2

AWB-028, AM1
RED
YEL
BLK
ANTENNA, AM
BLU L₁ 100µH

TX-8500II/S

Parts List of Tuner Assembly (AWE-085)

SEMICONDUCTORS

| Symbol | Description | Part No. |
|--------|-------------|---------------------|
| Q1 | Transistor | 2SC461-B |
| Q2 | Transistor | 2SC461-B |
| Q3 | Transistor | 2SC461-B |
| Q4 | FET | 2SK19-W |
| * Q5 | IC | PA3001 (PA3001Y) |
| Q6 | Transistor | 2SA733-Q |
| Q7 | Transistor | 2SC945A-Q |
| Q8 | FET | 2SK30A-Y |
| Q9 | Transistor | 2SC1312-G |
| Q10 | IC | PA1001 |
| Q11 | Transistor | 2SC945A-Q |
| Q12 | IC | PA1002 |
| Q13 | Transistor | 2SA733-Q |
| Q14 | IC | HA1197 |
| Q15 | IC | HA1452W |
| Q16 | Transistor | 2SC945A-Q |
| D1 | Diode | 1S188FM-1 |
| D2 | Diode | 1S188FM-1 |
| D3 | Diode | 1S188FM-1 |
| D4 | Diode | 1S188FM-1 |
| D5 | Diode | 1S188FM-1 |
| D6 | Diode | 1S188FM-1 |
| D7 | Diode | 1S188FM-1 |
| D8 | Diode | 1S188FM-1 |
| D9 | Diode | 1S2473 |
| * D10 | Diode | 1S2076 |
| D11 | Diode | 1S2076 |
| D12 | Zener diode | HZ7-B |

TRANSFORMERS, COILS

| Symbol | Description | Part No. |
|--------|-------------------|----------|
| T1 | FM IF transformer | ATE-023 |
| T2 | FM IF transformer | ATE-024 |
| T3 | FM IF transformer | T73-035 |
| T4 | AM OSC coil | ATB-019 |
| T5 | 455kHz filter | ATF-013 |
| F1 | FM ceramic filter | ATF-013 |
| F2 | FM ceramic filter | ATF-013 |
| F3 | FM ceramic filter | ATF-013 |
| F4 | FM ceramic filter | ATF-013 |
| F5 | Anti-birdy filter | ATF-023 |
| F6 | Anti-birdy filter | ATF-024 |
| F7 | Low pass filter | ATF-036 |
| F8 | AM ceramic filter | ATF-034 |
| L2 | RF choke coil | T24-028 |
| L3 | RF choke coil | T24-028 |

| Symbol | Description | Part No. |
|--------|---------------|----------|
| L4 | RF choke coil | T24-028 |
| L5 | RF choke coil | T24-028 |
| L6 | RF choke coil | ATH-007 |
| L7 | RF choke coil | T24-028 |

SWITCHES

| Symbol | Description | Part No. |
|--------|--------------------------------|----------|
| S1 | Rotary switch (FUNCTION) | ASD-063 |
| S2 | Lever switch (FM MUTING) | ASK-109 |
| S3 | Lever switch (IF BAND) | ASK-112 |
| S4 | Lever switch (REC LEVEL CHECK) | ASK-112 |

RESISTORS

| Symbol | Description | Part No. |
|--------|------------------|------------|
| R1 | Carbon film 100 | RD¼PS 101J |
| R2 | Carbon film 1.2k | RD¼PS 122J |
| R3 | Carbon film 330 | RD¼PS 331J |
| R4 | Carbon film 220 | RD¼PS 221J |
| R5 | Carbon film 4.3k | RD¼PS 432J |
| R6 | Carbon film 510 | RD¼PS 511J |
| R7 | Carbon film 1k | RD¼PS 102J |
| R8 | Carbon film 510 | RD¼PS 511J |
| R9 | Carbon film 5.6k | RD¼PS 562J |
| R10 | Carbon film 5.6k | RD¼PS 562J |
| R11 | Carbon film 5.6k | RD¼PS 562J |
| R12 | Carbon film 56 | RD¼PS 560J |
| R13 | Carbon film 56 | RD¼PS 560J |
| R14 | Carbon film 1k | RD¼PS 102J |
| R15 | Carbon film 470 | RD¼PS 471J |
| R16 | Carbon film 470 | RD¼PS 471J |
| R17 | Carbon film 6.8k | RD¼PS 682J |
| R18 | Carbon film 12k | RD¼PS 123J |
| R19 | Carbon film 1k | RD¼PS 102J |
| R20 | Carbon film 5.6k | RD¼PS 562J |
| R21 | Carbon film 5.6k | RD¼PS 562J |
| R22 | Carbon film 10k | RD¼PS 103J |
| R23 | Carbon film 100k | RD¼PS 104J |
| R24 | Carbon film 1k | RD¼PS 102J |
| R25 | Carbon film 33k | RD¼PS 333J |
| R26 | Carbon film 330 | RD¼PS 331J |
| R27 | Carbon film 22k | RD¼PS 223J |
| R28 | Carbon film 2.2k | RD¼PS 222J |
| R29 | Carbon film 10k | RD¼PS 103J |
| R30 | Carbon film 2.2k | RD¼PS 222J |
| R31 | Carbon film 30k | RD¼PS 303J |
| R32 | Carbon film 22k | RD¼PS 223J |

| Symbol | Description | Part No. |
|--------|---------------------|-------------|
| R33 | Carbon film 120k | RD¼PS 124J |
| R34 | Carbon film 1.5k | RD¼PS 152J |
| R35 | Carbon film 10k | RD¼PS 103J |
| R36 | Carbon film 10k | RD¼PS 103J |
| R37 | Carbon film 12k | RD¼PS 123J |
| R38 | Carbon film 10 | RD¼PS 100J |
| R39 | Carbon film 150 | RD¼PS 151J |
| R40 | Carbon film 100k | RD¼PS 104J |
| R41 | Carbon film 220k | RD¼PS 224J |
| R42 | Carbon film 1.1k | RD¼PS 112J |
| R43 | Carbon film 2.2k | RD¼PS 222J |
| R44 | Carbon film 2.2k | RD¼PS 222J |
| R45 | Carbon film 2.2k | RD¼PS 222J |
| R46 | Carbon film 100k | RD¼PS 104J |
| R47 | Carbon film 12k | RD¼PS 123J |
| R48 | Carbon film 16k | RD¼PS 163J |
| R49 | Carbon film 200 | RD¼PS 201J |
| R50 | Metal film 3.3k ¼W | RN½SQ 3301F |
| R51 | Metal film 3.3k ¼W | RN½SQ 3301F |
| R52 | Carbon film 22k | RD¼PS 223J |
| R53 | Carbon film 2.2k | RD¼PS 222J |
| R54 | Carbon film 15k | RD¼PS 153J |
| R55 | Carbon film 47k | RD¼PS 473J |
| R56 | Carbon film 100k | RD¼PS 104J |
| R57 | Carbon film 22k | RD¼PS 223J |
| R58 | Carbon film 1.5k | RD¼PS 152J |
| R59 | Carbon film 51 | RD¼PS 510J |
| R60 | Carbon film 3.3k | RD¼PS 332J |
| R61 | Carbon film 3.3k | RD¼PS 332J |
| R62 | Carbon film 470 | RD¼PS 471J |
| R63 | Carbon film 2.2k | RD¼PS 222J |
| R64 | Carbon film 100k | RD¼PS 104J |
| R65 | Carbon film 30k | RD¼PS 303J |
| R66 | Metal film 30.1k ¼W | RN½SQ 3012F |
| R67 | Carbon film 620 | RD¼PS 621J |
| R68 | Carbon film 22k | RD¼PS 223J |
| R69 | Carbon film 33k | RD¼PS 333J |
| R70 | Carbon film 620 | RD¼PS 621J |
| R71 | Carbon film 1.8k | RD¼PS 182J |
| R72 | Carbon film 2.2k | RD¼PS 222J |
| R73 | Metal film 30.1k ¼W | RN½SQ 3012F |
| R74 | Carbon film 30k | RD¼PS 303J |
| R75 | Carbon film 470 | RD¼PS 471J |
| R76 | Carbon film 100k | RD¼PS 104J |
| R77 | Carbon film 100k | RD¼PS 104J |
| R79 | Carbon film 100 | RD¼PS 101J |
| R80 | Carbon film 8.2k | RD¼PS 822J |
| R81 | Carbon film 8.2k | RD¼PS 822J |
| R82 | Carbon film 330 | RD¼PS 331J |
| R83 | Carbon film 330 | RD¼PS 331J |
| R84 | Carbon film 8.2k | RD¼PS 822J |

| Symbol | Description | Part No. |
|--------|--------------------------------------|------------|
| R85 | Carbon film 8.2k | RD¼PS 822J |
| R86 | Carbon film 150 | RD¼PS 151J |
| R87 | Carbon film 100 | RD¼PS 101J |
| R89 | Carbon film 1k | RD¼PS 102J |
| R90 | Carbon film 10k | RD¼PS 103J |
| R91 | Carbon film 10k | RD¼PS 103J |
| R92 | Carbon film 10 | RD¼PS 100J |
| R93 | Carbon film 1.5k | RD¼PS 152J |
| R94 | Carbon film 5.6k | RD¼PS 562J |
| R95 | Carbon film 220 | RD¼PS 221J |
| R96 | Carbon film 180 | RD¼PS 181J |
| R97 | Carbon film 200 | RD¼PS 201J |
| R98 | Carbon film 240 | RD¼PS 241J |
| R99 | Carbon film 240 | RD¼PS 241J |
| R100 | Carbon film 12k | RD¼PS 123J |
| R101 | Carbon film 30k | RD¼PS 303J |
| R102 | Carbon film 2.2M | RD¼PS 225J |
| R103 | Carbon film 15k | RD¼PS 153J |
| R104 | Carbon film 4.3k | RD¼PS 432J |
| R105 | Carbon film 100k | RD¼PS 104J |
| R106 | Carbon film 91k | RD¼PS 913J |
| R107 | Carbon film 33k | RD¼PS 333J |
| R108 | Carbon film 91k | RD¼PS 913J |
| R109 | Carbon film 75k | RD¼PS 753J |
| R110 | Carbon film 82k | RD¼PS 823J |
| R111 | Carbon film 24k | RD¼PS 243J |
| R112 | Carbon film 150 | RD¼PS 151J |
| R113 | Carbon film 100 | RD¼PS 101J |
| R114 | Carbon film 820 | RD¼PS 821J |
| VR1 | Semi-fixed 470 | ACP-006 |
| VR2 | Semi-fixed 47k | C92-048 |
| VR3 | Semi-fixed 22k | ACP-056 |
| VR4 | Semi-fixed 4.7k | C92-051 |
| VR5 | Semi-fixed 470k | ACP-011 |
| VR6 | Semi-fixed 150k | ACP-057 |
| VR7 | Semi-fixed 10k | C92-049 |
| VR8 | Variable resistor 10k (OUTPUT LEVEL) | ACV-178 |
| VR9 | Semi-fixed 100k | C92-047 |
| VR10 | Semi-fixed 680 | ACP-013 |

CAPACITORS

| Symbol | Description | Part No. |
|--------|-------------------|---------------|
| C1 | Ceramic 0.01 50V | CKDYF 103Z 50 |
| C2 | Ceramic 0.047 25V | CKDBC 473Z 25 |
| C3 | Ceramic 0.01 50V | CKDYB 103K 50 |
| C4 | Ceramic 0.01 50V | CKDYB 103K 50 |
| C5 | Ceramic 0.01 50V | CKDYF 103Z 50 |
| C6 | Ceramic 0.01 50V | CKDYF 103Z 50 |
| C7 | Ceramic 0.01 50V | CKDYB 103K 50 |

| Symbol | Description | | | Part No. |
|--------|--------------|-------|-----|---------------|
| C8 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C9 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C10 | Ceramic | 33p | 50V | CCDSL 330K 50 |
| C11 | Ceramic | 0.01 | 50V | CKDYB 103K 50 |
| C12 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C13 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C14 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C15 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C16 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C17 | Ceramic | 150p | 50V | CCDSL 151K 50 |
| C18 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C19 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C20 | Ceramic | 0.01 | 50V | CKDYB 103K 50 |
| C21 | Electrolytic | 1 | 50V | CEA 010P 50 |
| C22 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C23 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C24 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C25 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C26 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C27 | Electrolytic | 470 | 16V | CEA 471P 16 |
| C28 | Electrolytic | 100 | 16V | CEA 101P 16 |
| C29 | Ceramic | 100p | 50V | CCDSL 101K 50 |
| C30 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C31 | Electrolytic | 100 | 16V | CEA 101P 16 |
| C32 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C33 | Electrolytic | 10 | 16V | CEANL 100P 16 |
| C34 | Mylar | 0.047 | 50V | CQMA 473K 50 |
| C35 | Polystyrene | 510p | 50V | CQSH 511J 50 |
| C36 | Electrolytic | 0.33 | 35V | CSZA R33M 35 |
| C37 | Electrolytic | 3.3 | 16V | CSZA 3R3M 16 |
| C38 | Electrolytic | 1 | 25V | CSZA 010M 25 |
| C39 | Electrolytic | 1 | 50V | CEA 010P 50 |
| C40 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C41 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C42 | Electrolytic | 4.7 | 25V | CEANL 4R7P 25 |
| C43 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C44 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C45 | Electrolytic | 47 | 10V | CEA 470P 10 |
| C46 | Ceramic | 3p | 50V | CCDSL 030C 50 |
| C47 | Polystyrene | 820p | 50V | CQSA 821G 50 |
| C48 | Electrolytic | 0.56 | 35V | CSZA R56K 35 |
| C49 | Electrolytic | 47 | 10V | CEA 470P 10 |
| C50 | Ceramic | 180p | 50V | CCDSL 181K 50 |
| C51 | Electrolytic | 33 | 16V | ACH-321 |
| C52 | Ceramic | 180p | 50V | CCDSL 181K 50 |
| C53 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C54 | Electrolytic | 220 | 16V | CEA 221P 16 |
| C55 | Polystyrene | 820p | 50V | CQSA 821G 50 |
| C56 | Electrolytic | 0.56 | 35V | CSZA R56K 35 |
| C57 | Electrolytic | 10 | 16V | CSZA 100M 16 |
| C58 | Electrolytic | 3.3 | 50V | CEA 3R3P 50 |

| Symbol | Description | | | Part No. |
|--------|--------------|--------|-----|---------------|
| C59 | Electrolytic | 4.7 | 25V | CEANL 4R7P 25 |
| C60 | ..... |  |  | ..... |
| C61 | Mylar | 0.01 | 50V | CQMA 103J 50 |
| C62 | Electrolytic | 100 | 16V | CEA 101P 16 |
| C63 | Mylar | 0.022 | 50V | CQMA 223J 50 |
| C64 | Mylar | 0.01 | 50V | CQMA 103K 50 |
| C65 | Electrolytic | 3.3 | 50V | CEA 3R3P 50 |
| C66 | Electrolytic | 220 | 6V | CEA 221P 6 |
| C67 | Electrolytic | 10 | 16V | CEA 100P 16 |
| C68 | Electrolytic | 10 | 16V | CEA 100P 16 |
| C69 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C70 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C71 | Ceramic | 0.047 | 25V | CKDBC 473Z 25 |
| C72 | Ceramic | 1200p | 50V | CKDYB 122K 50 |
| C73 | Electrolytic | 4.7 | 35V | CEA 4R7P 35 |
| C74 | Ceramic | 0.04 | 50V | CKDYF 403Z 50 |
| C75 | Ceramic | 0.001 | 50V | CKDYB 102K 50 |
| C76 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C77 | Ceramic | 0.01 | 50V | CKDYF 103Z 50 |
| C78 | Polystyrene | 450p | 50V | CQSA 451J 50 |
| C79 | Ceramic | 10p | 50V | CCDWK 100F 50 |
| C80 | Electrolytic | 47 | 16V | CEA 470P 16 |
| C81 | Electrolytic | 1 | 25V | CSZA 010M 25 |
| C82 | Electrolytic | 0.47 | 50V | CEA R47P 50 |
| C83 | Ceramic | 470p | 50V | CKDYB 471K 50 |
| C84 | Mylar | 0.0039 | 50V | CQMA 392J 50 |
| C85 | Mylar | 0.0039 | 50V | CQMA 392J 50 |
| C86 | Electrolytic | 10 | 16V | CEA 100P 16 |
| C87 | Electrolytic | 0.1 | 35V | CSZA 0R1M 35 |
| C88 | Electrolytic | 2.2 | 50V | CEA 2R2P 50 |
| C89 | Electrolytic | 1 | 50V | CEA 010P 50 |
| C90 | ..... |  |  | ..... |
| C91 | Electrolytic | 470 | 16V | CEA 471P 16 |
| C92 | Ceramic | 820p | 50V | CKDYB 821K 50 |
| C93 | Ceramic | 820p | 50V | CKDYB 821K 50 |
| C94 | Ceramic | 100p | 50V | CCDSL 101K 50 |

OTHERS

| Symbol | Description | Part No. |
|--------|-------------|----------|
| | Nut | ABN-027 |
| | Nut | ABN-026 |
| | Screw | ABA-078 |
| | Screw 3x6 | ABA-116 |

* The IC used at Q₅ is either PA3001, or PA3001Y, depending on the model. These two ICs are not interchangeable without a minor alteration to the circuitry. When servicing, follow the instructions described below.

Replacing PA3001 with PA3001Y

Disconnect the jumper wire to the D₁₀ section. Then insert a diode (1S2076), but be careful that the direction is correct.

Replacing PA3001Y with PA3001

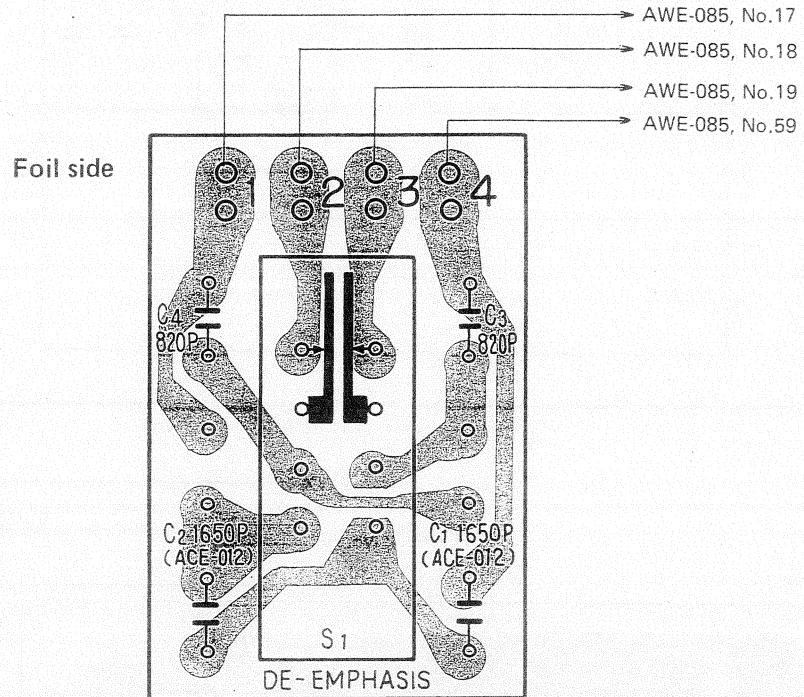
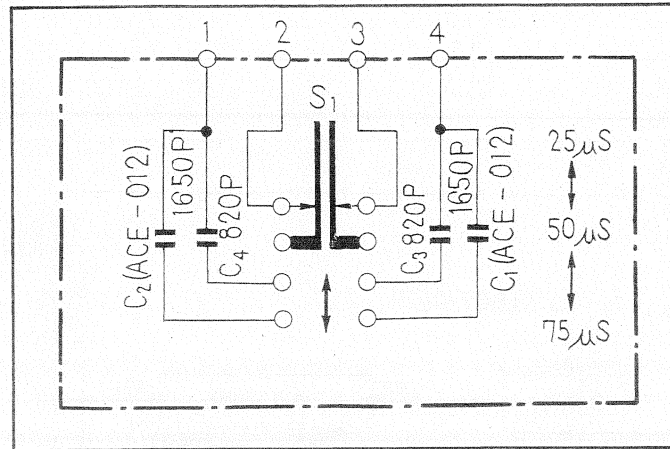
Remove diode D₁₀ (1S2076), and connect the gap with a jumper wire.

How to tell PA3001 and PA3001Y apart

PA3001: the characters (PA3001) on the upper surface of the IC are "white".

PA3001Y: either the characters (PA3001) on the upper surface of the IC are "yellow", or the characters PA3001Y have been printed on.

4.3 SWITCH ASSEMBLY (AWX-113)



Parts List

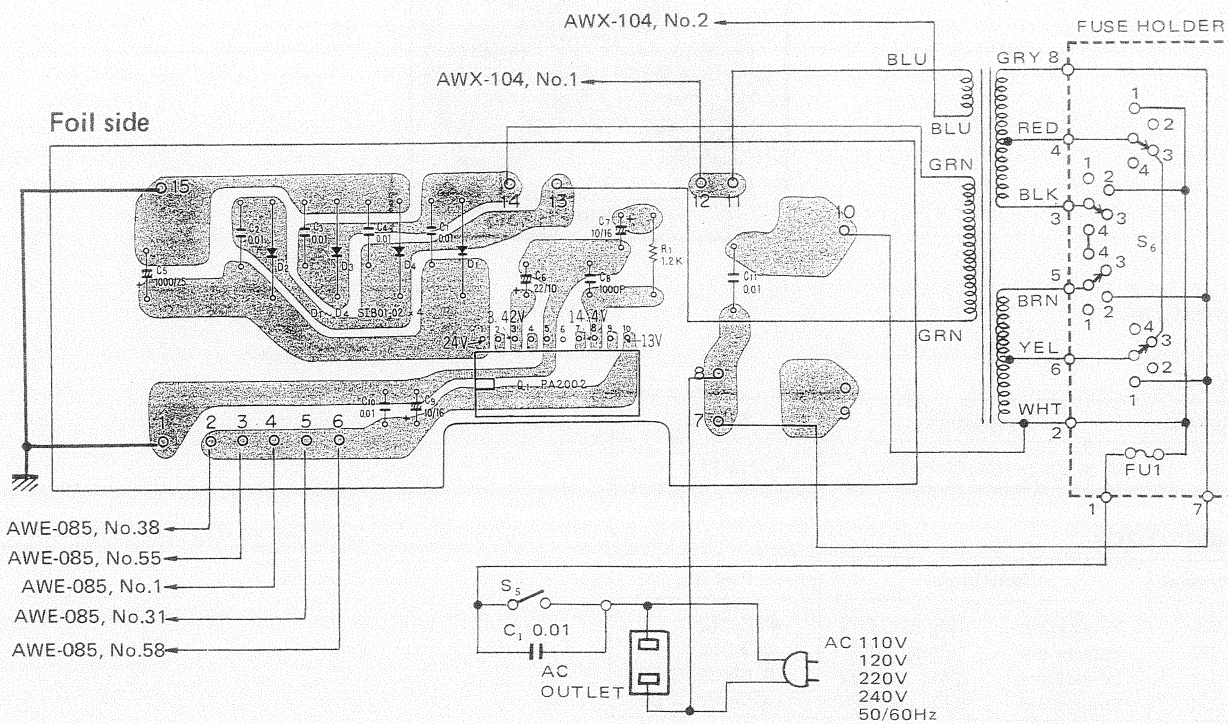
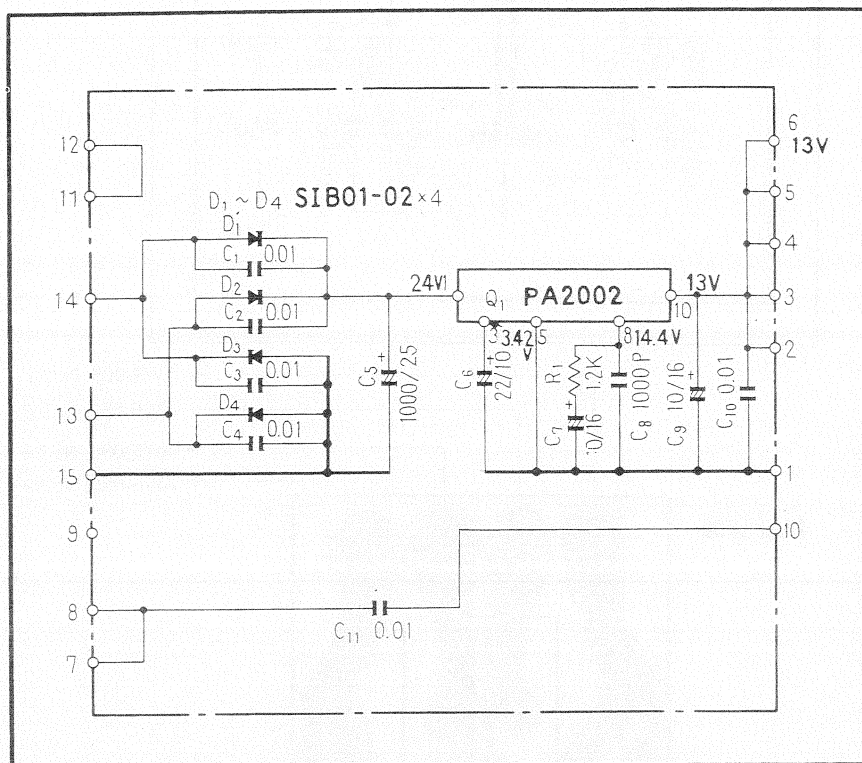
SWITCH

| Symbol | Description | Part No. |
|--------|---------------------------|----------|
| S1 | Side switch (DE-EMPHASIS) | ASH-017 |

CAPACITORS

| Symbol | Description | Part No. |
|--------|-----------------------|--------------|
| C1 | Polystyrene 1650p 50V | ACE-012 |
| C2 | Polystyrene 1650p 50V | ACE-012 |
| C3 | Polystyrene 820p 50V | CQSA 821G 50 |
| C4 | Polystyrene 820p 50V | CQSA 821G 50 |

4.4 POWER SUPPLY ASSEMBLY (AWR-132)



Parts List of Power Supply Assembly (AWR-132)

SEMICONDUCTORS

| Symbol | Description | Part No. |
|--------|-------------|--------------------|
| Q1 | IC | PA2002 |
| D1 | Diode | 10E2 (SIB01-02) |
| D2 | Diode | 10E2 (SIB01-02) |
| D3 | Diode | 10E2 (SIB01-02) |
| D4 | Diode | 10E2 (SIB01-02) |

RESISTOR

| Symbol | Description | Part No. |
|--------|------------------|------------|
| R1 | Carbon film 1.2k | RD¼PS 122J |

CAPACITORS

| Symbol | Description | Part No. |
|--------|-----------------------|---------------|
| C1 | Ceramic 0.01 150V | ACG-004 |
| C2 | Ceramic 0.01 150V | ACG-004 |
| C3 | Ceramic 0.01 150V | ACG-004 |
| C4 | Ceramic 0.01 150V | ACG-004 |
| C5 | Electrolytic 1000 25V | CEA 102P 25 |
| C6 | Electrolytic 22 10V | CEA 220P 10 |
| C7 | Electrolytic 10 16V | CEA 100P 16 |
| C8 | Ceramic 0.001 50V | CKDYB 102K 50 |
| C9 | Electrolytic 10 16V | CEA 100P 16 |
| C10 | Ceramic 0.01 50V | CKDYB 103K 50 |
| C11 | Ceramic 0.01 250V | ACG-001 |

4.5 PACKING

