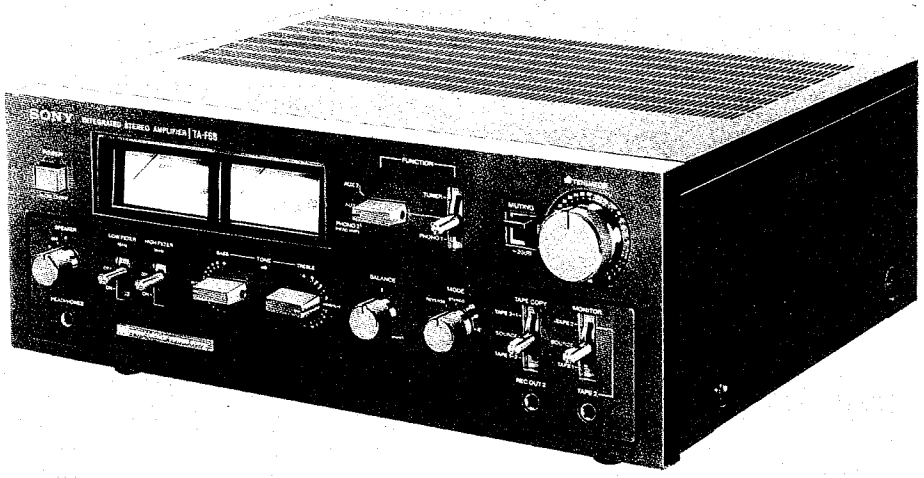
TA-F6B

US Model
Canadian Model
AEP Model
UK Model
E Model



INTEGRATED STEREO AMPLIFIER

SPECIFICATIONS

GENERAL

Power Requirements: 120 V ac, 60 Hz (US, Canadian model)
110 – 120 V and 220 – 240 V ac, adjustable 50/60 Hz (AEP, UK, E model)

Power Consumption: 190 W (US model)
490 VA (Canadian model)
450 W (AEP, E model)
550 W (UK model)

Dimensions: Approx. 430 (w) x 170 (h) x 390 (d) mm
$16^{7}/_{8}$ (w) x $6^{3}/_{4}$ (h) x $15^{3}/_{8}$ (d) inches
including projecting parts and controls

Weight: Approx. 12.5 kg, 27 lb 9 oz (net)
Approx. 14.2 kg, 31 lb 5 oz (in shipping carton)

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND ⚠ MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ !

LES COMPOSANTS IDENTIFIÉS PAR UN TRAMÉ ET UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES, LES VUES EXPLOSÉES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DES SUPPLÉMENTS PUBLIÉS PAR SONY.

POWER AMPLIFIER SECTION

Power Output and Total Harmonic Distortion: With 8 Ω loads, both channels driven, from 20–20,000 Hz; rated 100 W per channel minimum RMS power, with no more than 0.03 % total harmonic distortion from 250 mW to rated output.
(US, Canadian model)

Continuous RMS Power Output: (Less than 0,03 % THD, both channels driven simultaneously)
At 20 Hz–20 kHz
100 W + 100 W (8 Ω)
According to DIN 45500
100 W + 100 W (8 Ω)
(AEP, UK, E model)

Power Bandwidth (IHF): 5 Hz – 35 kHz (50 W output, 0.03 % THD, 8 Ω)
(AEP, UK, E model)

Harmonic Distortion: Less than 0.03 % at rated output
Less than 0.015 % at 1 W/10 W output

Intermodulation (IM) Distortion: (60 Hz : 7 kHz = 4 : 1)
Less than 0.03 % at rated output
Less than 0.008 % at 1 W/10 W output

Frequency Response: DC – 100 kHz $^{+0}_{-1}$ dB

– Continued on page 2 –

SONY®
SERVICE MANUAL

S/N Ratio: Greater than 115 dB, short-circuited input

Residual Noise: Less than 50 μV (8 Ω, network A)

Damping Factor: 50 (8 Ω, 1 kHz)

Inputs: POWER INPUT
Sensitivity 1.3 V (4.5 dB), for rated output
Impedance 50 kΩ

Outputs: SPEAKER terminals A, B
Accept speakers of 4 — 16 Ω
(US, Canadian model)
Accept speakers of 8 — 16 Ω
(AEP, UK, E model)

HEADPHONES jack
Accepts low and high-impedance stereo headphones

PREAMPLIFIER SECTION

Harmonic Distortion: Less than 0.003 %
(TUNER → PRE OUTPUT, 10 V output, 1 kHz)

Intermodulation (IM) Distortion: Less than 0.003 %
(60 Hz : 7 kHz = 4 : 1) (TUNER → PRE OUTPUT, 10 V output)

Frequency Response: PHONO 1, 2 RIAA equalization ±0.2 dB
TUNER, AUX 1, 2, TAPE 1, 2: 2 Hz — 150 kHz $^{+0}_{-1}$ dB

Tone Controls: BASS
±10 dB at 60 Hz
TREBLE
±10 dB at 25 kHz

Filters: LOW
6 dB/octave attenuation below 15 Hz
HIGH
6 dB/octave attenuation above 9 kHz

Residual Noise: —∞ (infinity)

Inputs:

	Sensitivity	Impedance	Phono overload (1 kHz)	S/N (weighting network, input level)
PHONO 1	2.5 mV (—50 dB)	50 kΩ	250 mV	85 dB (A, 2.5 mV)
PHONO 2 (HEAD AMP)	0.08 mV (—80 dB)	100 Ω	8 mV	70 dB (A, 0.08mV)
TUNER AUX 1, 2 TAPE 1, 2	150 mV (—14.5 dB)	50 kΩ	———	105 dB (A, 150 mV)

Outputs:

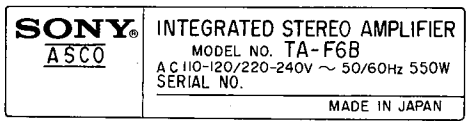
	Voltage	Impedance
REC OUT 1, 2	150 mV (—14.5 dB) (13.5 V at max.)	10 kΩ
PRE OUTPUT	1.3 V (4.5 dB) (10 V at max.)	2.5 kΩ (max.)

0 dB = 0.775 V

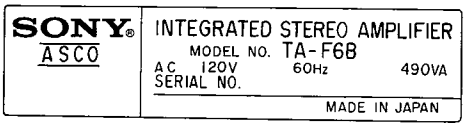
MODEL IDENTIFICATION

Specification Label

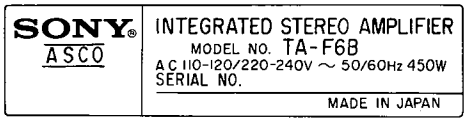
UK model



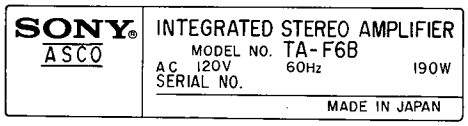
Canadian model



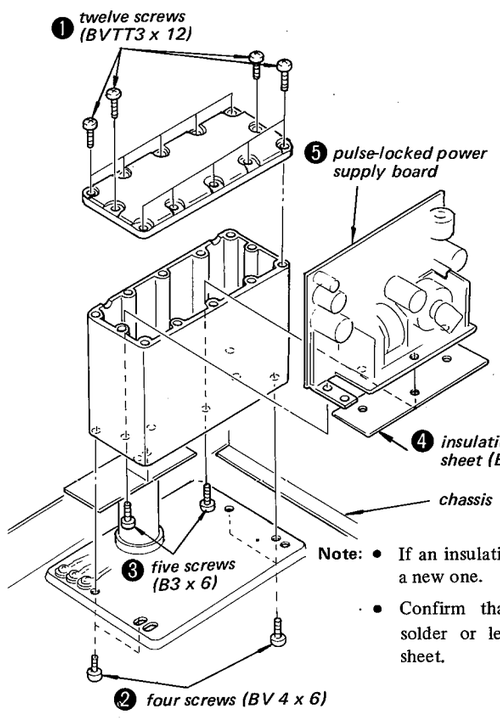
AEP, E model



US model



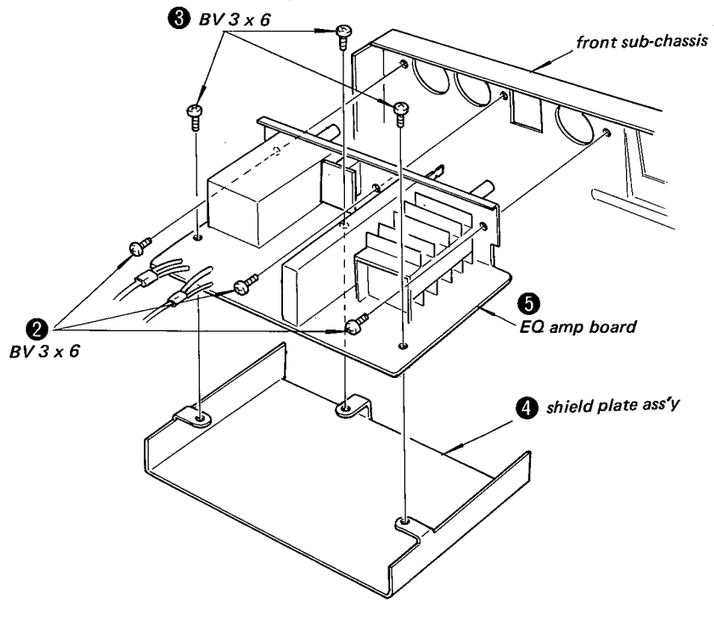
PULSE-LOCKED POWER SUPPLY BOARD REMOVAL



Note:
- If an insulation sheet is defective, change a new one.
- Confirm that there are no scraps of solder or lead wire on any insulation sheet.

EQ AMP BOARD REMOVAL

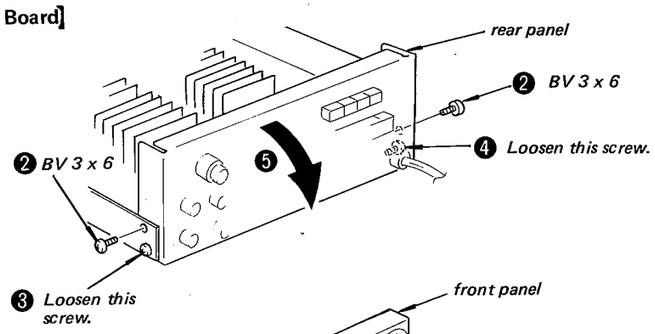
❶ *Pull out the knobs (ATTENUATOR, FUNCTION).*



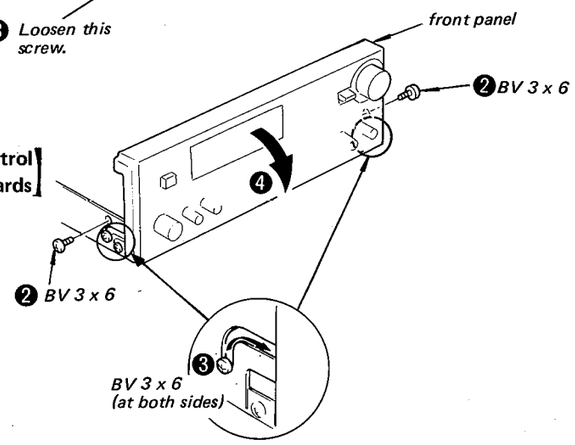
CIRCUIT BOARDS CHECKING AND REPAIRING

❶ *Remove the case (See page 6).*

[Head Amp Board]

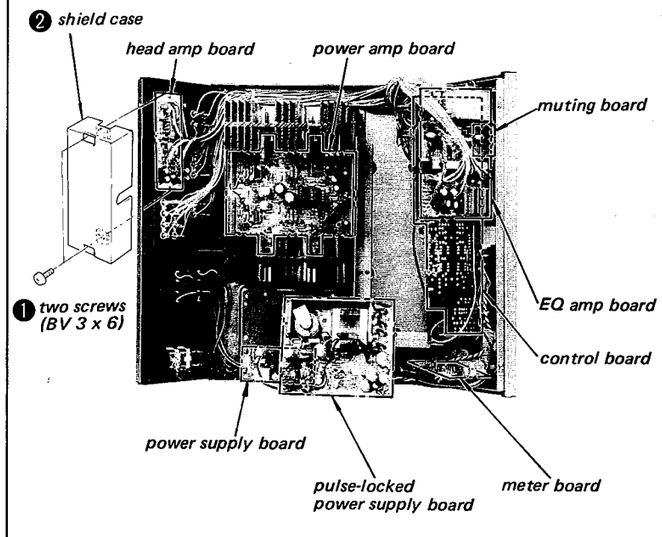


[EQ Amp, Control and Meter Boards]

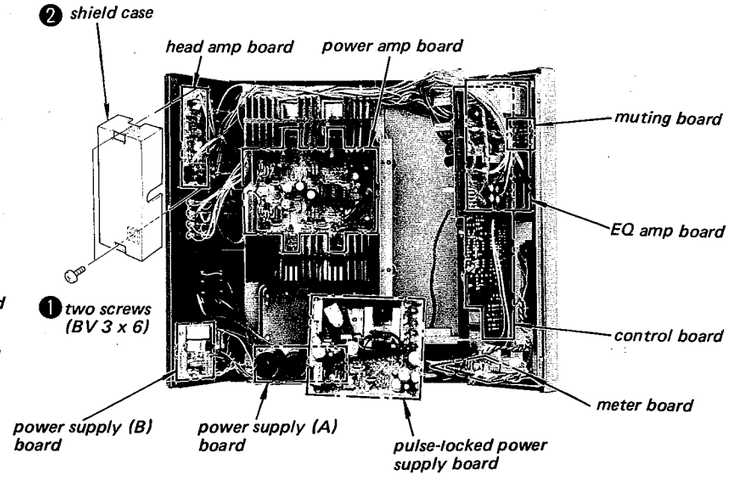


Each circuit board is located as shown below.

(US, Canadian model)



(AEP, UK, E model)

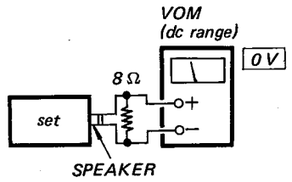


SECTION 3
ADJUSTMENTS

Note: 1. DC BIAS and DC BALANCE adjustments should be performed about several minutes later after the POWER switch (S10) is turned on.
2. Repeat DC BIAS and DC BALANCE adjustments two or three times.
3. After replacing the power transistors, DC BIAS and DC BALANCE adjustments should be performed.

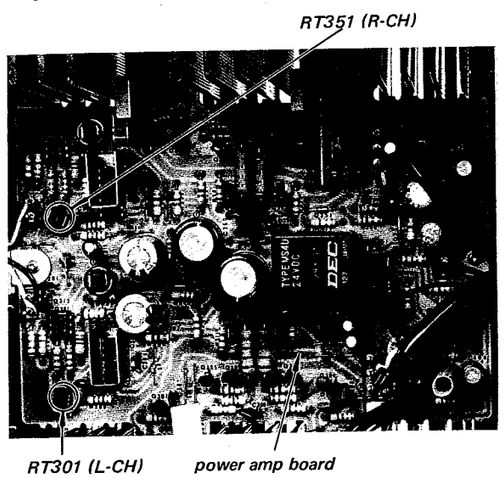
DC Balance Adjustment

Procedure:



Adjust RT301 (L-CH) and RT351 (R-CH) for 0 V reading on the VOM.

Adjustment Location:

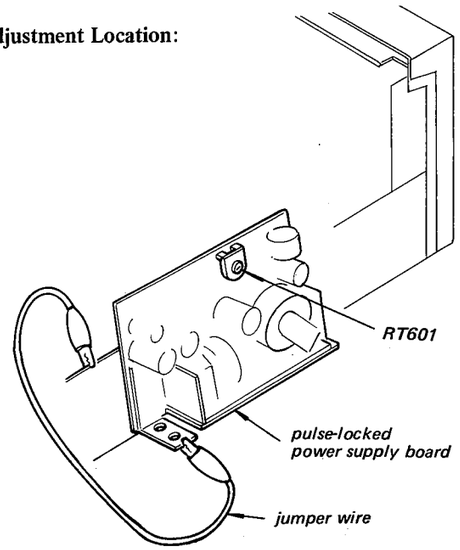


DC Voltage Adjustment

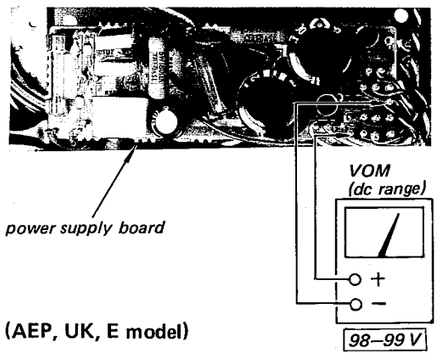
Procedure:

1. Connect a jumper wire.
2. Adjust RT601 for 98–99 V reading on the VOM.

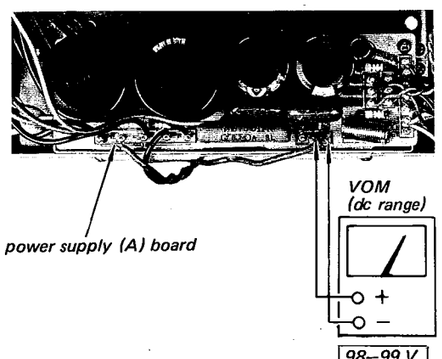
Adjustment Location:



(US, Canadian model)



(AEP, UK, E model)

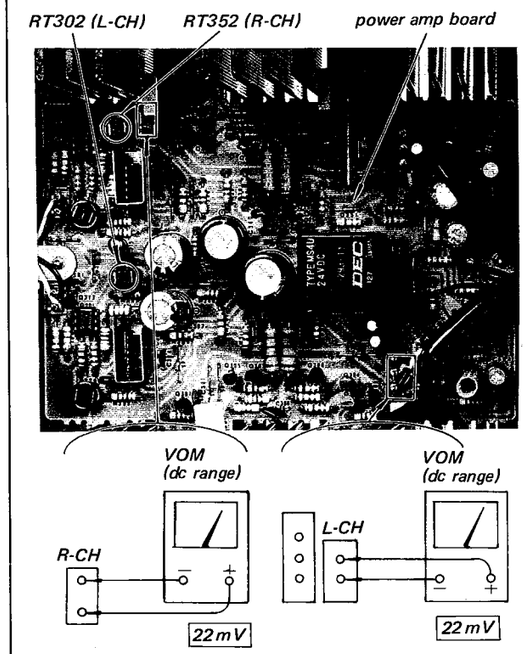


DC Bias Adjustment

Procedure:

Adjust RT302 (L-CH) and RT352 (R-CH) for 22 mV reading with no signal input.

Adjustment Location:

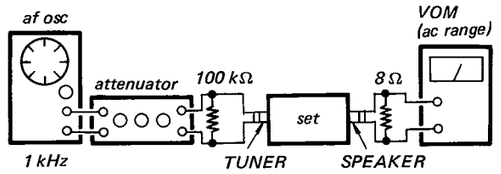


Meter Level Adjustment

Setting:

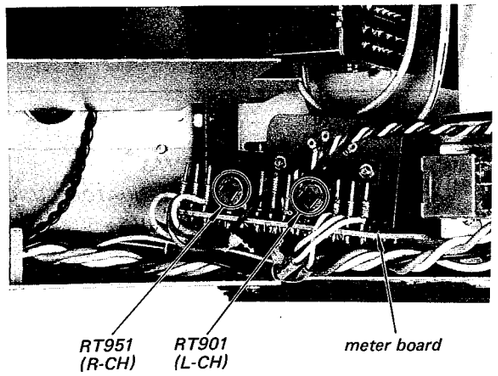
FUNCTION switch: TUNER

Procedure:



1. Turn the VOLUME control fully clockwise.
2. Adjust the TUNER input level for 2.83 V (1 W) reading on the VOM.
3. Adjust RT901 (L-CH) and RT951 (R-CH) so that the power meters indicate 1 W.

Adjustment Location:



SERVICING NOTES

1. REPLACEMENT OF THE TRANSFORMERS IN THE PULSE-LOCKED POWER-SUPPLY CIRCUIT

The lead wire arrangement for each of T601–603 in the inverter circuit are shown in Figs. 1 and 2.

As the repair parts, T603 is formed by an iron core and a coil winding, but T601 and T602 are only iron core. Thus, if the coils are defective, arrange a new transformers as shown in Fig. 1. Note that the lead lengths must be exact. Also wind the coil carefully.

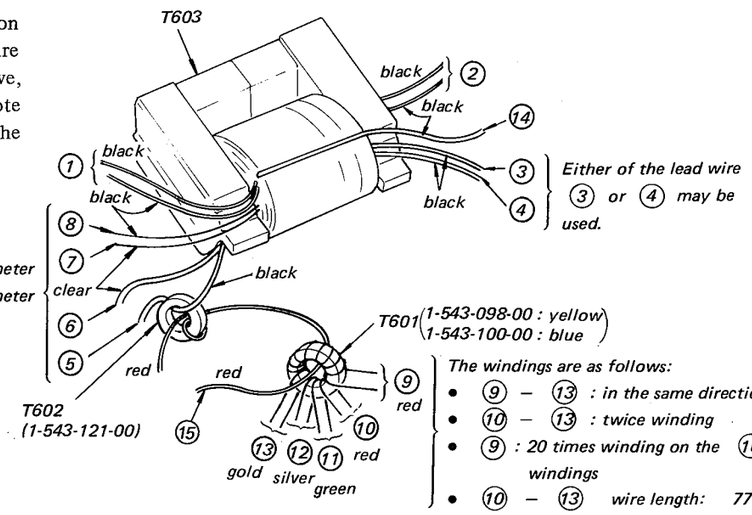


Fig. 1

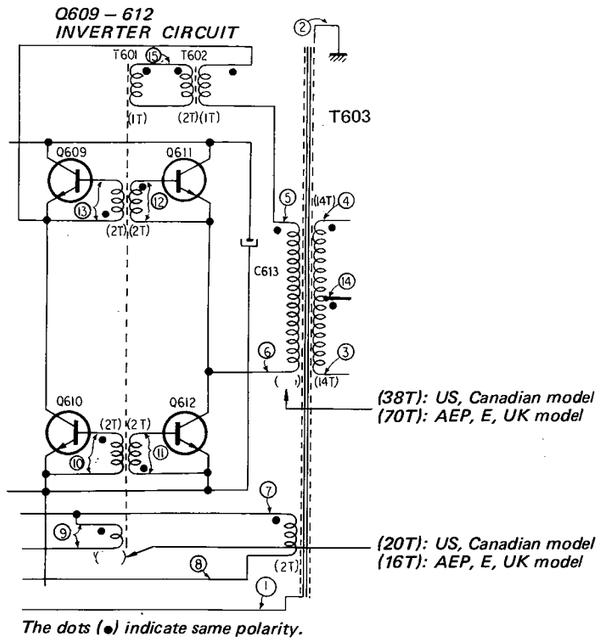
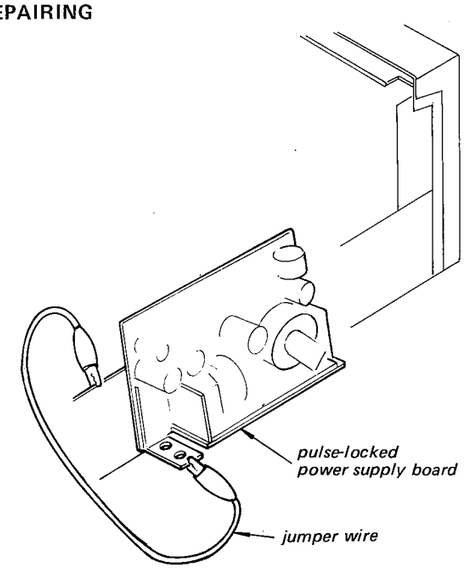


Fig. 2

2. PULSE-LOCKED POWER SUPPLY BOARD REPAIRING

This set has a pulse-locked power-supply circuit which is quite different from a conventional power-supply circuit. The pulse-locked power-supply directly rectifies and smooths the ac input power to produce the higher dc voltages required in the power supply circuit. When servicing this set, note the following.

1) To prevent unwanted radiation due to pulse signals in the pulse-locked power-supply circuit, the pulse-locked power-supply board is shielded by the aluminum diecast box.
2) The negative circuit of the secondary rectifier in the pulse-locked power-supply circuit is grounded by screws in the aluminum diecast box. When checking the pulse-locked power-supply board out of the box, use a jumper wire as shown.



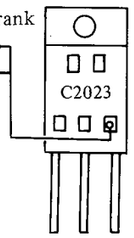
3. INVERTER CIRCUIT TRANSISTOR REPLACEMENT (Q609–612)

1) Be sure that there are no bits of solder and wire ends on the places marked *2 in Fig. 3.
2) Proceed the following items surely when replacing the transistors (Q609–612).
   * Apply thermal compound coat to the positions marked *1 and *2 in Fig. 3 before mounting the transistors.
   * Lay the F-shaped plate flat to ensure uniform contact with all 4 transistors (see Fig. 4).

AEP, UK, E model

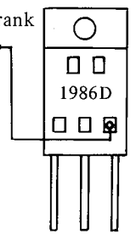
		hFE rank	
Q609–612	8-729-302-31	2SC2023-R	R
	8-729-302-32	2SC2023-O	O

Note: When replacing Q609–Q612 in the pulse-locked power-supply circuit, use those which have the same hFE ranks.



US, Canadian model

		hFE rank	
Q609–612	8-729-308-72	2SC1968D-O	O



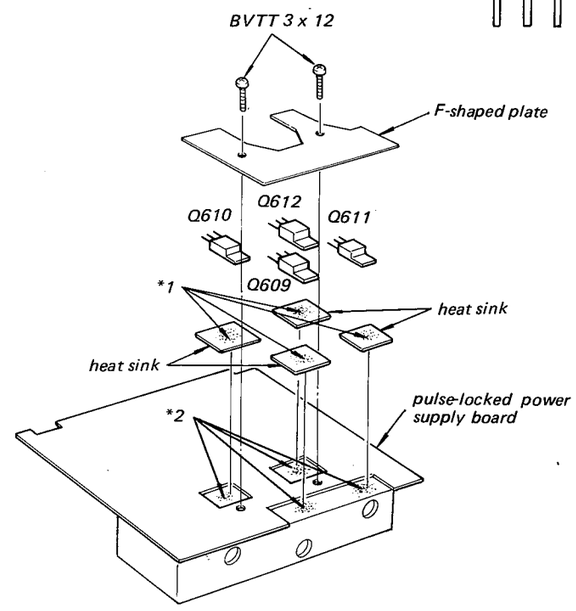


Fig. 3

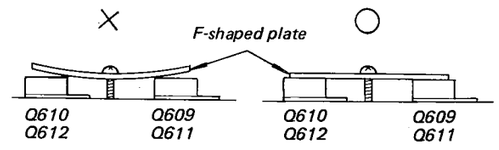
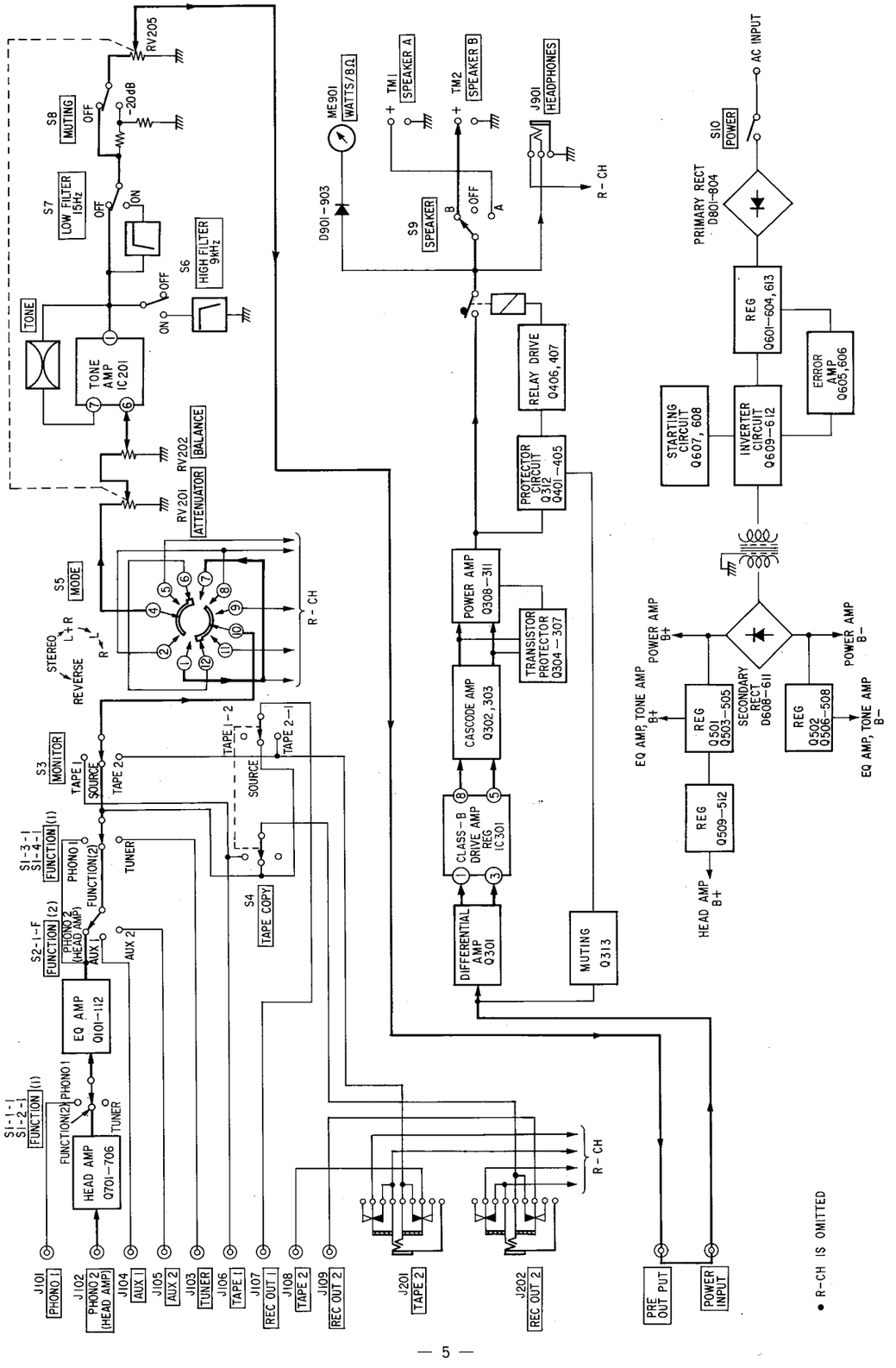


Fig. 4

SECTION 1
BLOCK DIAGRAM

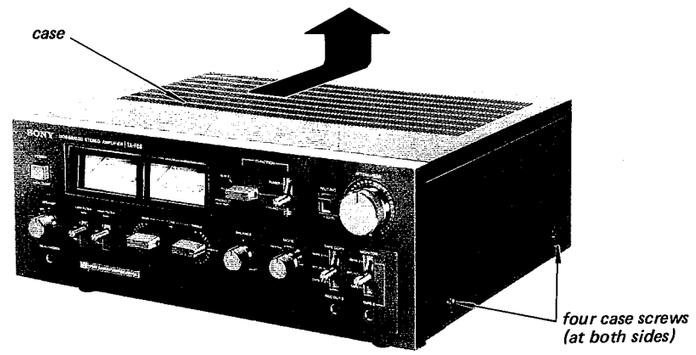


• R-CH IS OMITTED

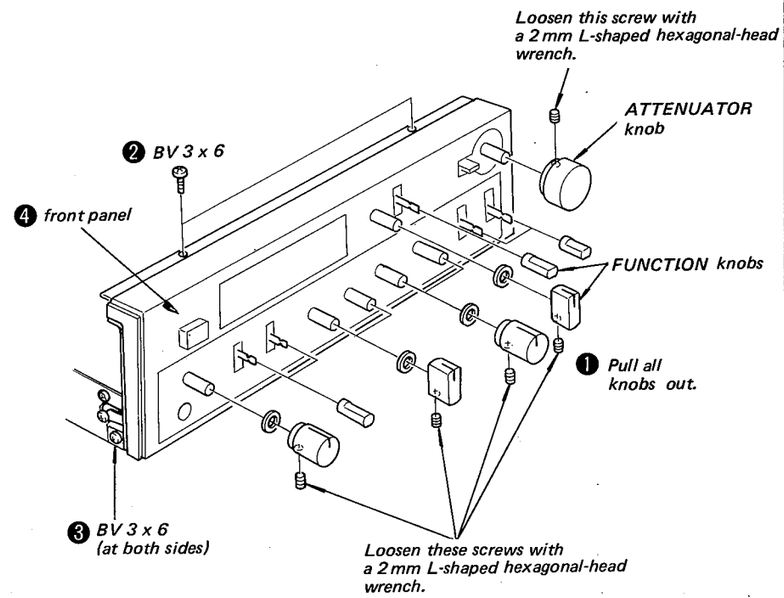
SECTION 2
DISASSEMBLY

- Follow the disassembly procedure in the numerical order given.

CASE REMOVAL



FRONT PANEL REMOVAL

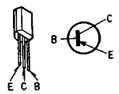


SECTION 4
DIAGRAMS

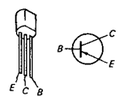
- **Replacement Semiconductors**
  For replacement, use semiconductors except in ( ).

Q101, 151: 2SK97

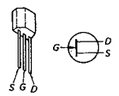
Q102, 103, 106, 108
Q152, 153, 156, 158
Q705, 706, 755, 756 : **2SA872E (2SA872)**



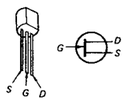
Q111, 161: 2SB647
Q506, 507: 2SA639 (2SA893)



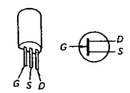
Q104, 154: 2SK23A-840 (blue) (2SK23A)



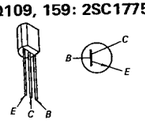
Q105, 155, 509: 2SK30A



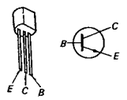
Q107, 112, Q157, 162: 2SK43-4 (2SK43)



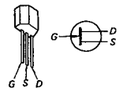
Q109, 159: 2SC1775E (2SC1775)



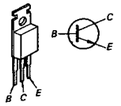
Q110, 160: 2SD667
Q510: 2SC1475 (2SC1670)



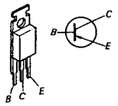
Q501, 502: 2SK42-4 (2SK42)



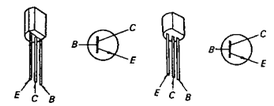
Q503: 2SC1061



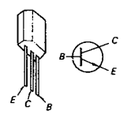
Q508: 2SA671



Q504, 505, Q511, 512: 2SC1775F (2SC1890)

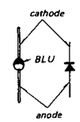


Q701–704, Q751–754: 2SC1637-1 (2SC1637)



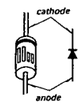
IC201, 251: HA1457

D101, 151: MV12N



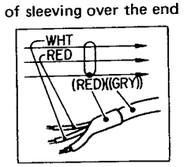
D102, 103, D152, 153, D201, 202, D251, 252: EQB01-26 (EQA01-26R)

D201, 202, D251, 252: EQB01-21 (EQA01-21R)



Note:

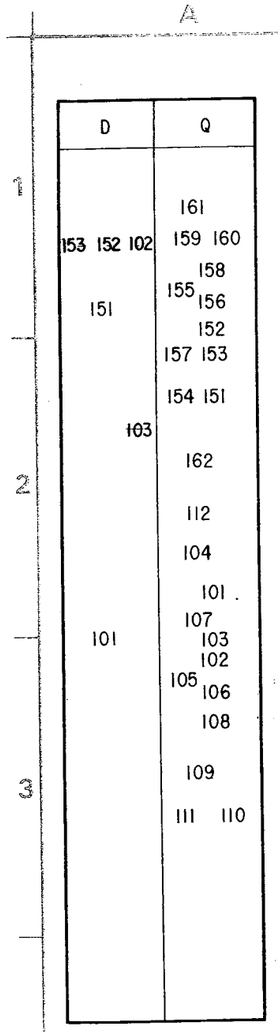
- Color code of sleeving over the end of the jacket.

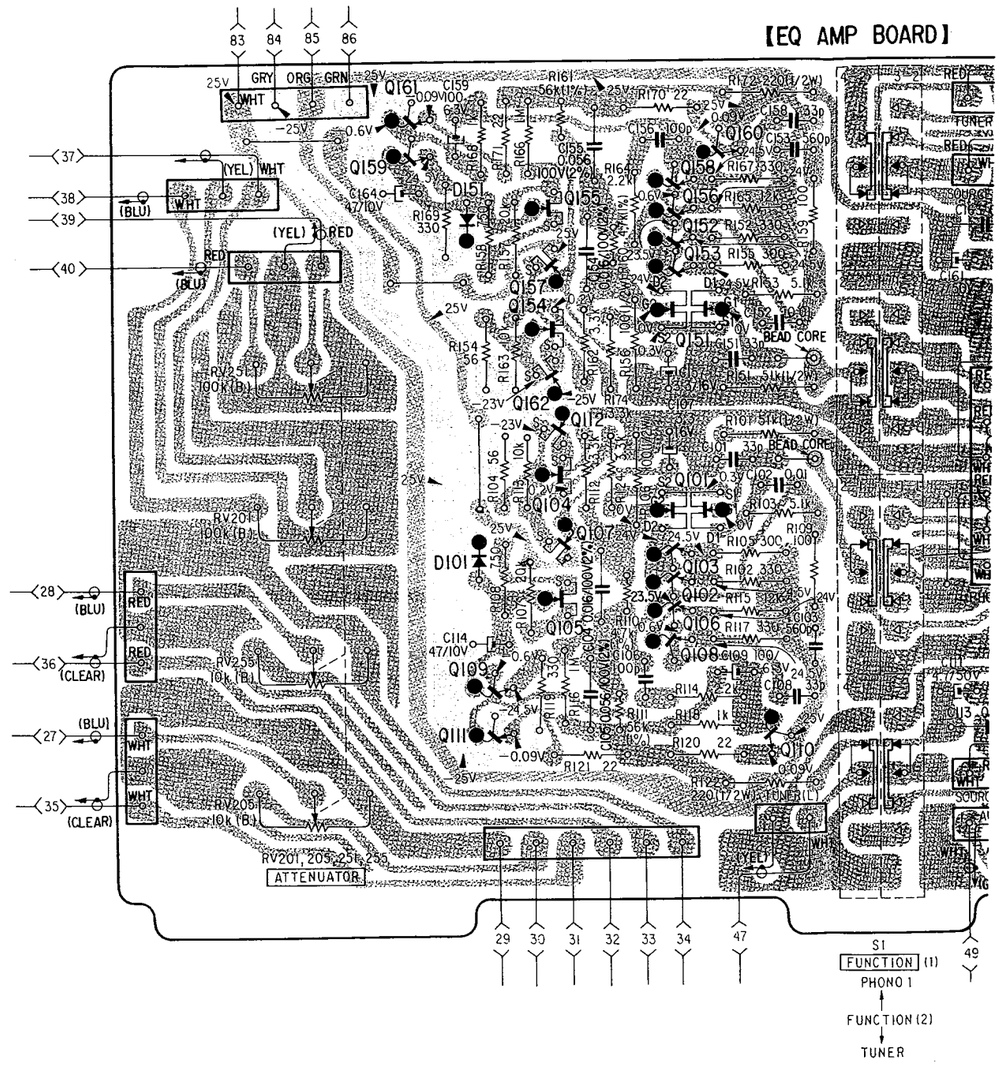


- ○— : parts extracted from the component side.
- : B+ pattern

4-1. EQ AMP BOARD MOUNTING DIAGRAM

– Conductor Side –





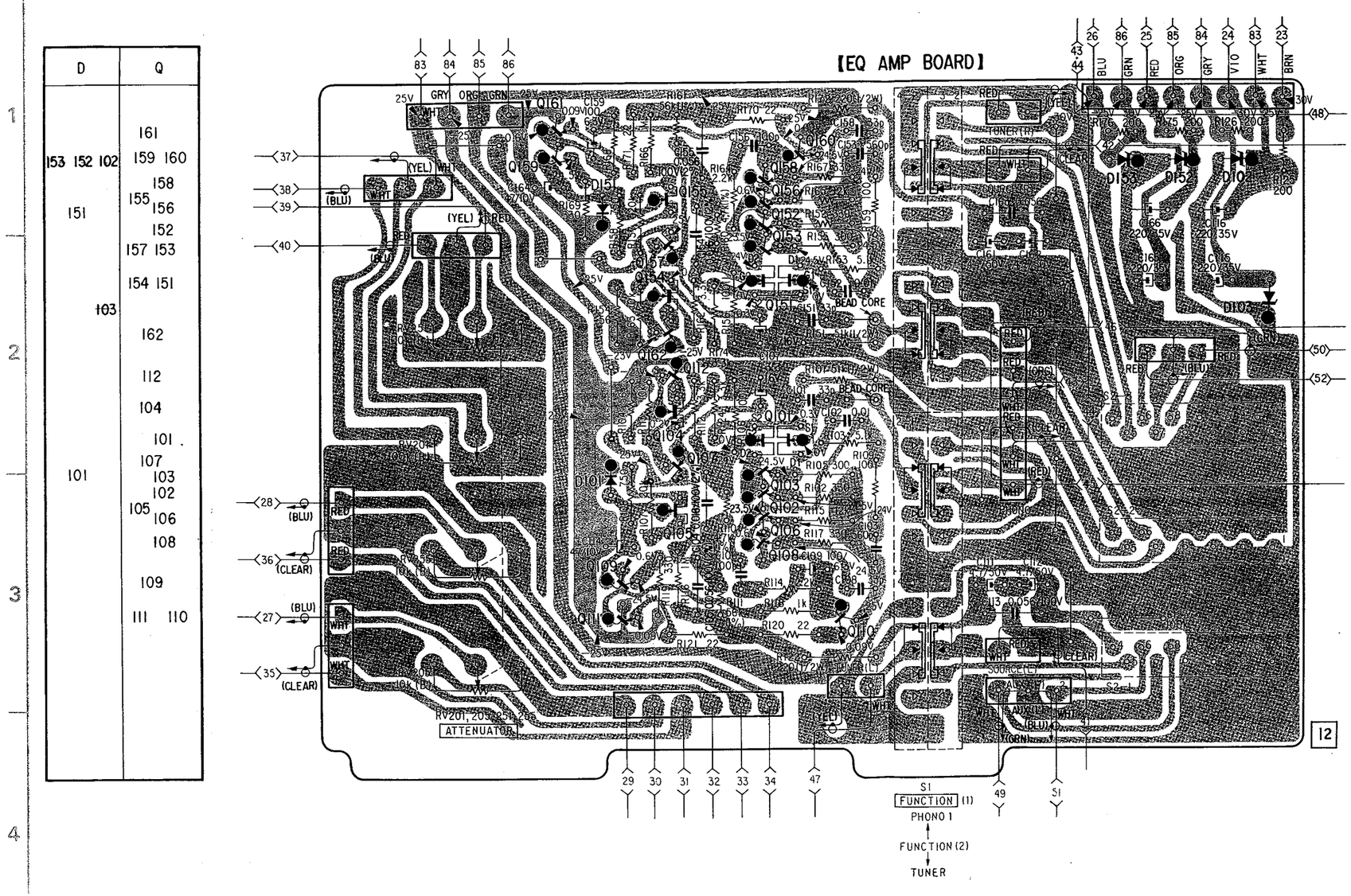
4-1. EQ AMP BOARD MOUNTING DIAGRAM

– Conductor Side –

26R)

21R)

D	Q
	161
153 152 102	159 160
	158
151	155 156
	152
	157 153
	154 151
103	
	162
	112
	104
	101
101	107
	103
	102
	105 106
	108
	109
	111 110



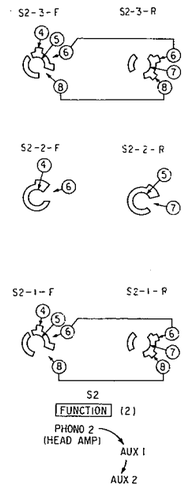
he jacket.

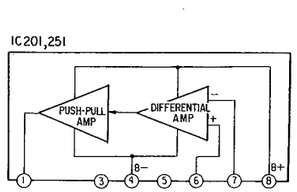
onent side.

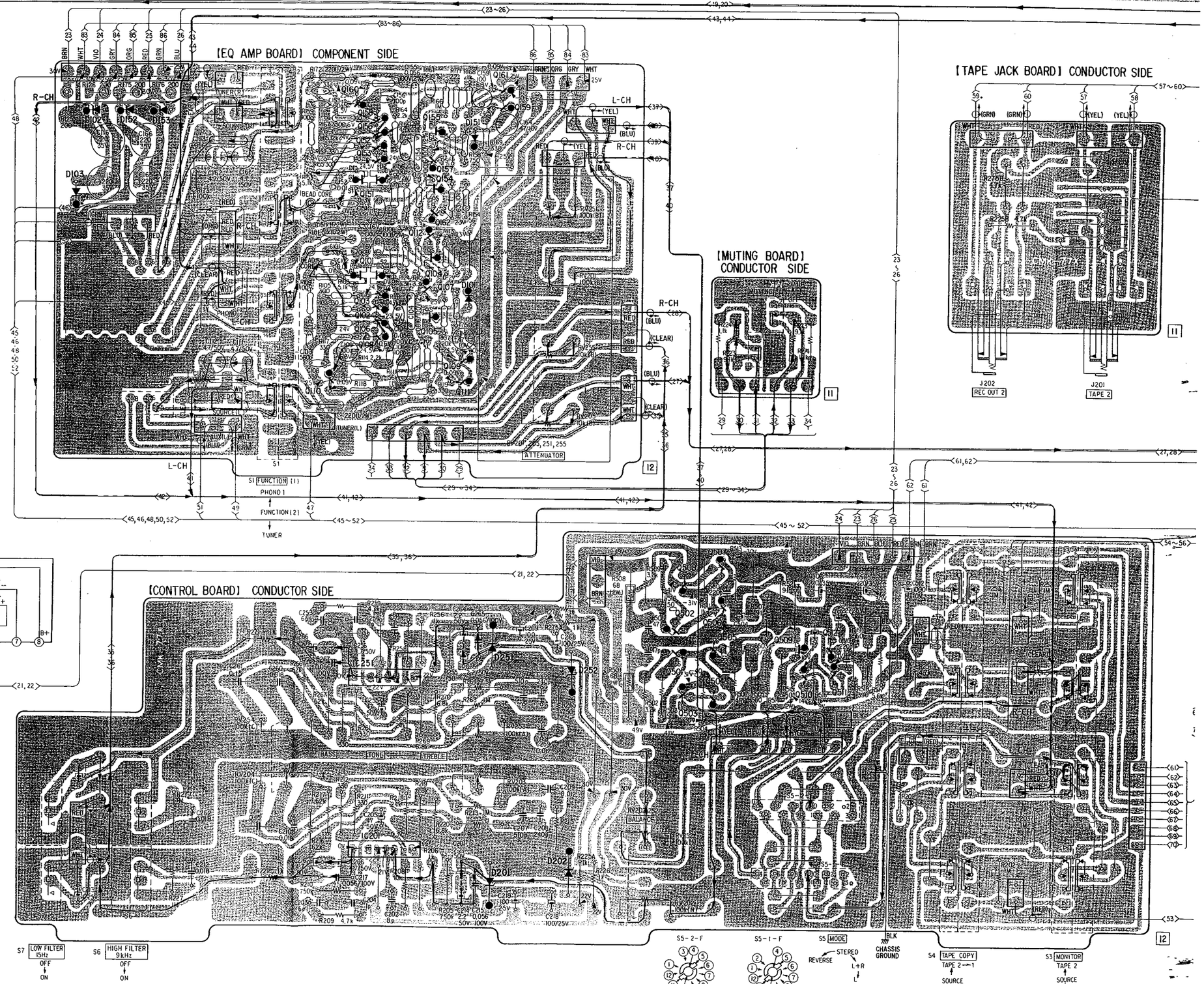
TA-F6B TA-F6B

4-2. PREAMP SECTION MOUNTING DIAGRAM

Q, IC	D
161	
160 159	102
158	152
156 155	153
152	151
153 157	
151 154	
	103
162	
112	
104	
101	
103 107	101
102 105	
106	
108	
109	
110 111	
507	
508	
506	
502	
505 509	
501 512	251
IC251	252
510,511	
503 504	
IC201	
	202
	201







[EQ AMP BOARD] COMPONENT SIDE

[TAPE JACK BOARD] CONDUCTOR SIDE

[MUTING BOARD] CONDUCTOR SIDE

[HEAD AMP BOARD] CONDUCTOR SIDE

Q 756 755 754 753 752 751
706 705 704 703 702 701

L-CH

R-CH

J202 REC OUT 2

J201 TAPE 2

ATTENUATOR

FUNCTION (1) PHONO 1

FUNCTION (2) TUNER

INPUT

PHONO 2 (HEAD AMP)

PHONO 1

REC OUT 2

TAPE 2

REC OUT 1

TAPE 1

POWER INPUT

PRE OUTPUT

AUX 2

AUX 1

TUNER

[L BOARD] CONDUCTOR SIDE

S5-2-F

S5-1-F

S5 MODE — REVERSE — STEREO — L+R — L — R

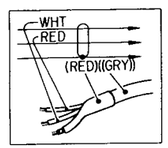
CHASSIS GROUND

S4 TAPE COPY — TAPE 2→1 — SOURCE — TAPE 1→2

S3 MONITOR — TAPE 2 — SOURCE — TAPE 1

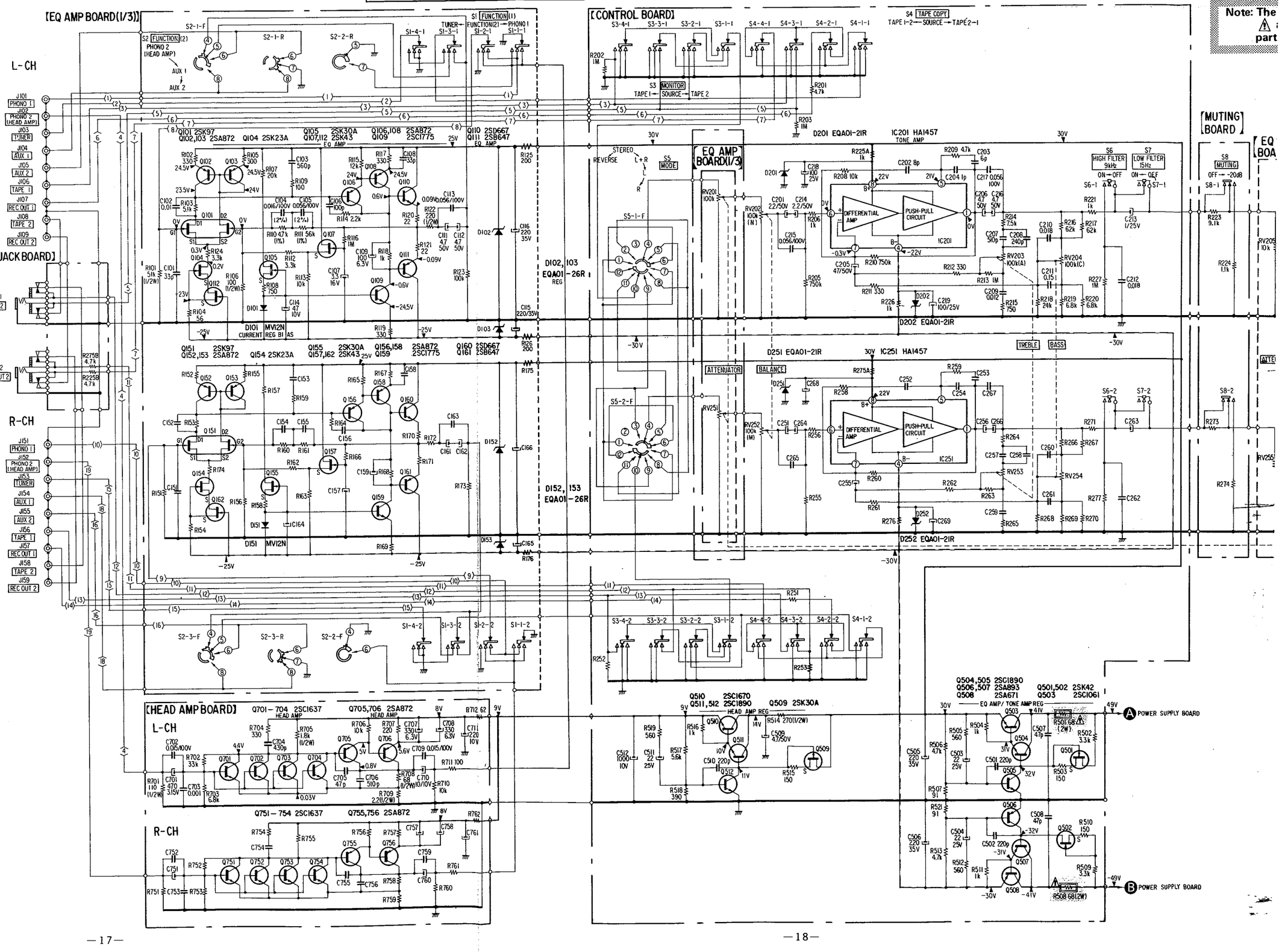
Note:

- Color code of sleeving over the end of the jacket.

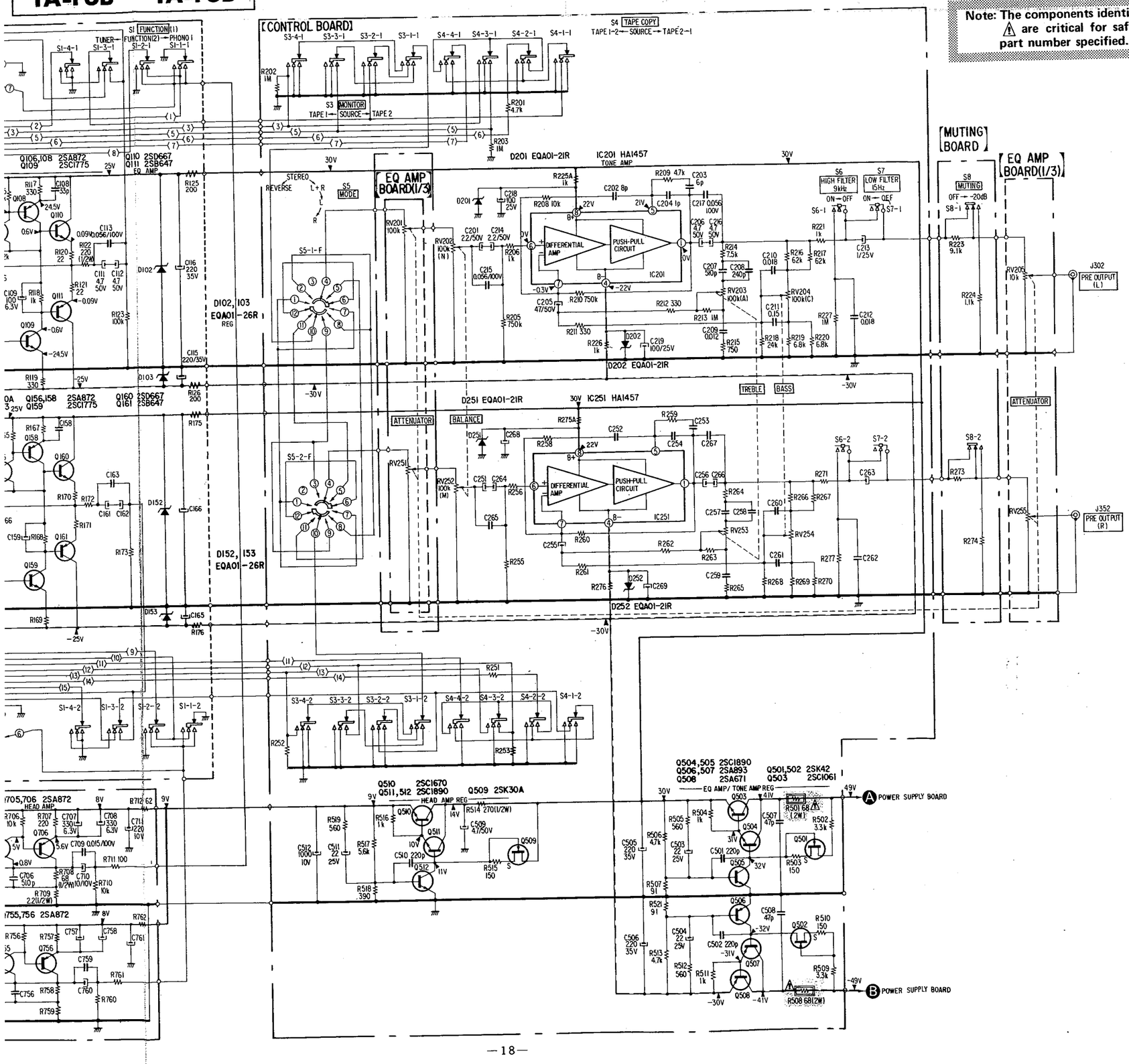


- ○— : parts extracted from the component side.
- ▒▒ : B+ pattern
- ▒▒ : B− pattern
- Signal Path
  - —— L-CH
  - - - - R-CH
  - ——— common

TA-F6B TA-F6B



Note: The ⚠ part



Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

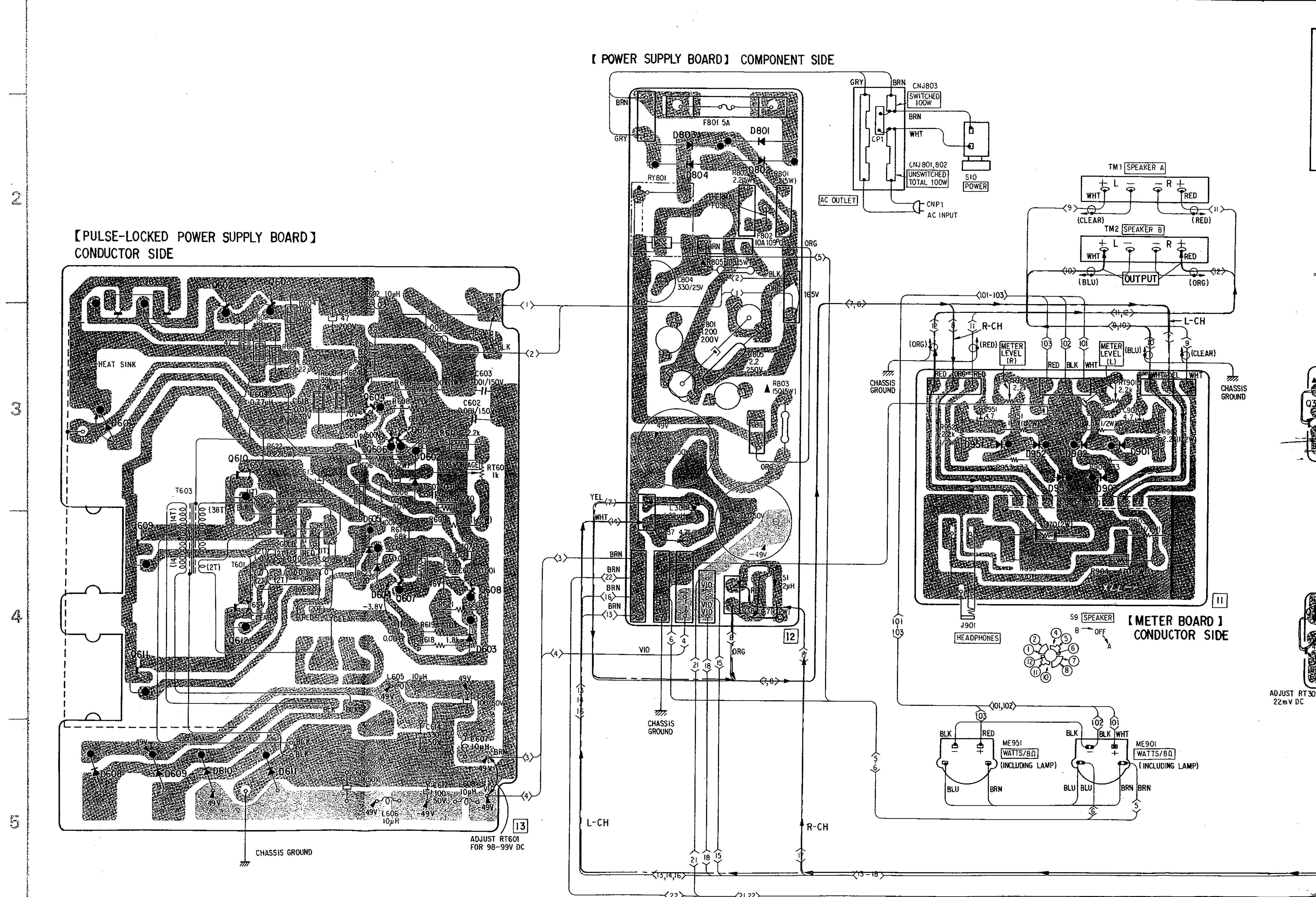
Note:

- Components for right channel have same values as for left channel. Reference numbers are coded from 151, 251 or 751.
- All capacitors are in μF unless otherwise noted. pF = μμF 50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ = 1000 Ω, MΩ = 1000 kΩ
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ▭ : nonflammable resistor
- 1% or 2% indicates component tolerance.
- ▭ : panel designation
- ▬ : B+ bus.
- ▬▬ : B− bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no signal conditions with a VOM (20 kΩ/V).
- Voltage variations may be noted due to normal production tolerances.
- Switch

Ref. No.	Switch	Position
S1-1-1, 2 S1-2-1, 2 S1-3-1, 2 S1-4-1, 2	FUNCTION (1)	FUNCTION (2)
S2-1-F, R S2-2-F, R S2-3-F, R	FUNCTION (2)	PHONO 2 (HEAD AMP)
S3-1-1, 2 S3-2-1, 2 S3-3-1, 2 S3-4-1, 2	MONITOR	SOURCE
S4-1-1, 2 S4-2-1, 2 S4-3-1, 2 S4-4-1, 2	TAPE COPY	SOURCE
S5-1-F, 2-F	MODE	STEREO
S6-1, 2	HIGH FILTER 9 kHz	OFF
S7-1, 2	LOW FILTER 15 Hz	OFF
S8-1, 2	MUTING	OFF

4-4. POWER AMP SECTION MOUNTING DIAGRAM (US, Canadian model)

Q · IC	601, 613, 609, 611, 602, 610, 612, 603, 604, 606, 605, 607, 608, 311, 310
D	601, 608, 609, 610, 611, 605, 604, 602, 603, 803, 804, 801, 802, 951, 952, 953, 902, 903, 901

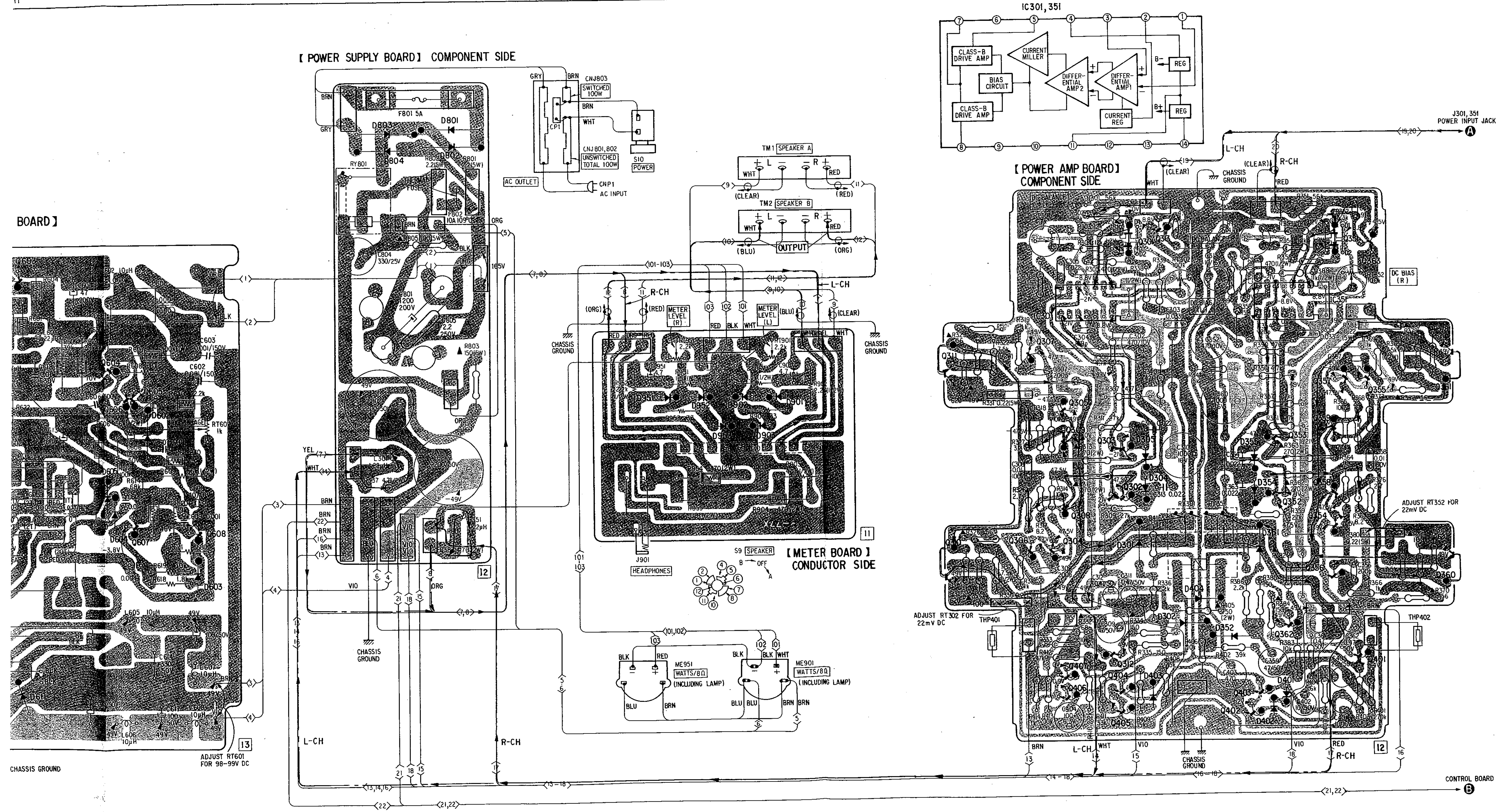


Note:

- Color code of sleeving over the end of the jacket.

- ○— : parts extracted from the component side.
- : B+ pattern
- : B– pattern
- Signal Path
  - L-CH
  - R-CH
  - common
- ▲ : nonflammable resistor.

	B	C	D	E	F	G	H	I	
603, 604 606 605 607, 608						311, 310, 307, 306, 305 309 308 304 407 406, IC301, 312, 303 302 404 405, 301, 313	353, 403 352 IC351, 402, 362	351 359 358 354 356, 357, 363 355 401	361 360 Q IC
605 604, 602, 603		803 804, 801 802	951, 952, 953, 902, 903, 901			305, 301 304, 403, 302, 404	355, 352 354 351, 402 401		D



4-5. POWER AMP SECTION SCHEMATIC DIAGRAM (US, Canadian model)

TA-F6B TA-F6B

[POWER AMP BOARD]

L-CH

Q313 2SC634A MUTING
Q301 2SK58 DIFFERENTIAL AMP
IC301 CX171 CLASS-B DRIVE AMP, REG
Q302 2SD668 Q303 2SB648 CASCODE AMP
Q304,307 2SC634A Q305,306 2SA678 TRANSISTOR PROTECTOR
Q308 2SB647 Q309 2SD667 Q310 2SB655 Q311 2SD675 — POWER AMP —
Q312 2SA678 D301,302 IS1555 IMPEDANCE DETECT
Q401 2SA678 Q402 2SC634A THERMAL DETECT
Q403 2SC634A MUTING
D401 EQA01-07 REG

J301 POWER INPUT(L)
IC 301
REG
DIFFER-ENTIAL AMP 1
DIFFER-ENTIAL AMP 2
CURRENT MILLER
BIAS CIRCUIT
CLASS-B DRIVE AMP
CURRENT REG
DC BALANCE
DC BIAS
D304,305 EQA01-2IR
ADJUST RT302 FOR 22mV DC
REVERSE CURRENT STOP
D402 IS1555

R-CH

Q363 2SC634A
Q351 2SK58
IC351 CX171
Q352 2SD668 Q353 2SB648
Q354,355 2SC634A Q356,357 2SA678
Q358 2SB647 Q359 2SD667 Q360 2SB655 Q361 2SD675
Q362 2SA678 D351,352 IS1555
Q404 2SC634A Q405 2SA678
Q406,407 2SC634A RELAY DRIVE
D404 IS1555 PROTECTOR
D403 MVI2N BIAS

J351 POWER INPUT(R)
IC 351
D354,355 EQA01-2IR

[POWER SUPPLY BOARD (1/4)]

D901,902 IT22 D903 IS1555 METER RECT
D951,952 IT22 D953 IS1555
METER LEVEL
ME901 WATTS/8Ω
ME951 WATTS/8Ω
L351
J901 HEADPHONES
S9 SPEAKER
TM1 SPEAKER A
TM2 SPEAKER B

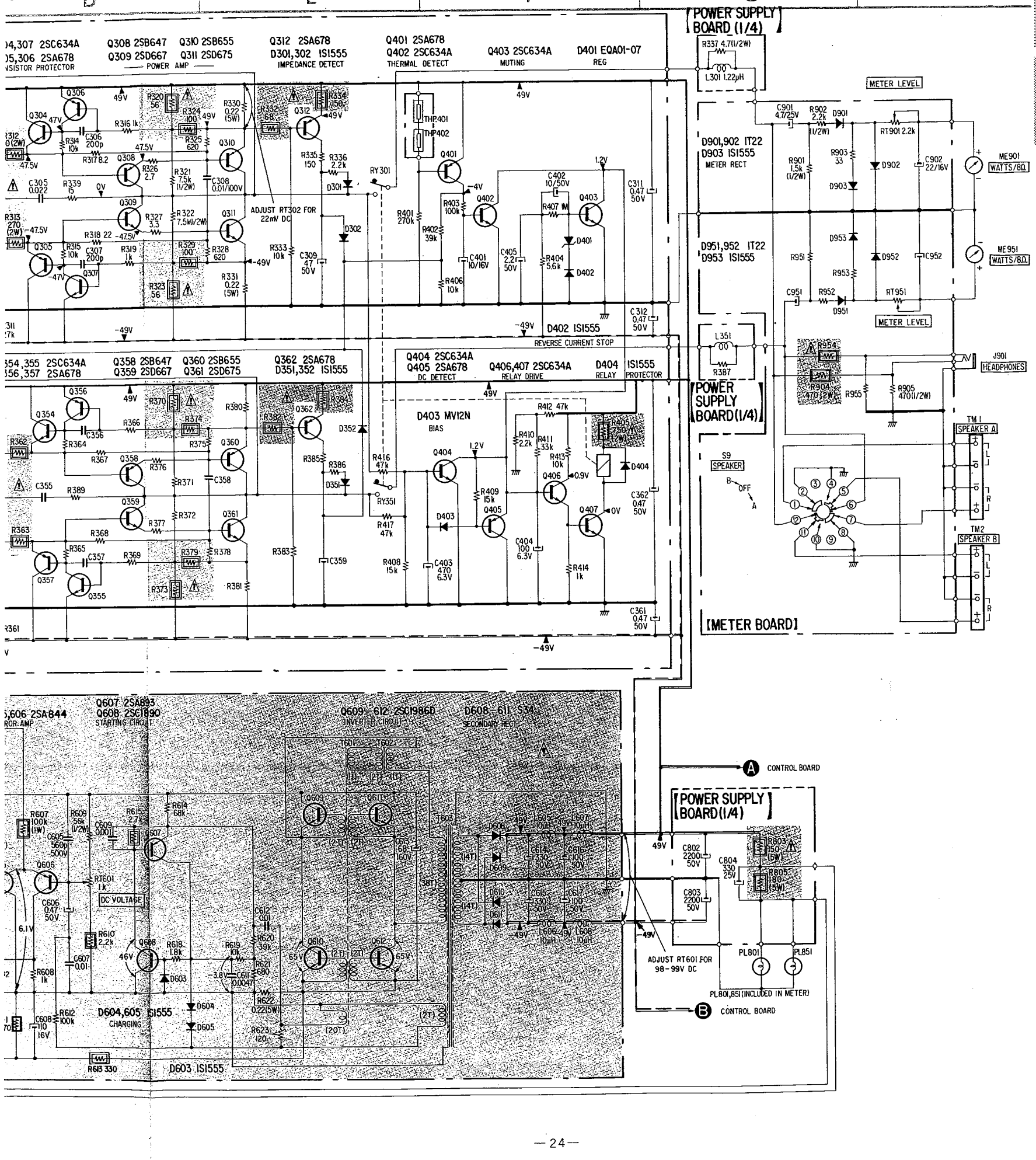
[METER BOARD]

[PULSE-LOCKED POWER SUPPLY BOARD]

Q601,613 2SC1986D Q602 2SC1962 REG
Q603 2SA896 Q604 2SC1811
Q605,606 2SA844 ERROR AMP
Q607 2SA893 Q608 2SC1890 STARTING CIRCUIT
Q609~612 2SC1986D INVERTER CIRCUIT
D608~611 S34 SECONDARY RECT

[POWER SUPPLY BOARD(1/4)]

D801~804 U05E PRIMARY RECT
F801 5A F802 10A 109℃ THERMAL FUSE
S10 POWER
CNP1 AC INPUT
CNJ801 CNJ802 CNJ803
UNSWITCHED TOTAL 100W
SWITCHED 100W
AC OUTLET
D601 S34 TRANSISTOR PROTECTOR
D602 RD5.6E-B REFERENCE VOLTAGE
D603 IS1555
D604,605 IS1555 CHARGING
HEAT SINK
DC VOLTAGE
A CONTROL BOARD
B CONTROL BOARD
ADJUST RT601 FOR 98~99V DC
PL801,851(INCLUDED IN METER)



Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note:

- Compinents for right channel have same values as for left channel. Reference numbers are coded from 351 or 951.
- All capacitors are in μF unless otherwise noted. pF = μμF 50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ = 1000 Ω, MΩ = 1000 kΩ
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ▭ : nonflammable resistor.
- ▭ : panel designation
- ▬ : B+ bus.
- ▭ : adjustment for repair.
- ▬ ▬ : B– bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no signal conditions with a VOM (20 kΩ/V).
- Voltage variations may be noted due to normal production tolerances.

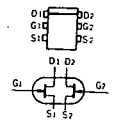
- Switch

Ref. No.	Switch	Position
S9	SPEAKER	B
S10	POWER	OFF

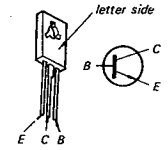
- **Replacement Semiconductors**

For replacement, use semiconductors except in ( ).

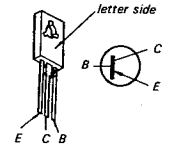
Q301, 351: 2SK58



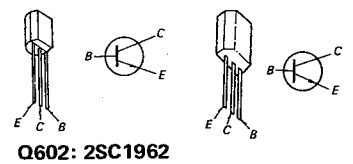
Q302, 352: 2SD668



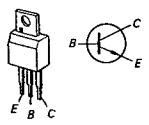
Q303, 353: 2SB648



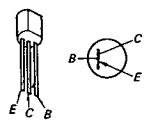
Q304, 307 / Q313, 354 / Q355, 363 / Q402–404 / Q406, 407: 2SC1364 (2SC634A)



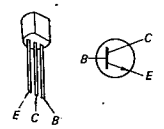
Q602: 2SC1962



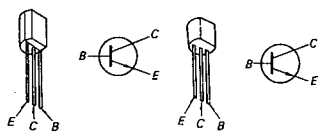
Q603: 2SA896



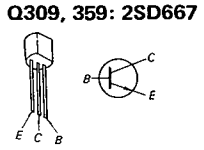
Q604: 2SC1811



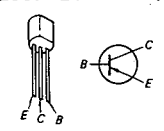
Q608: 2SC1775F (2SC1890)



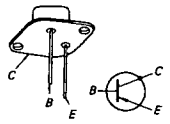
Q309, 359: 2SD667



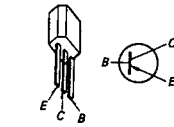
Q308, 358: 2SB647
Q607: 2SA639S (2SA893)



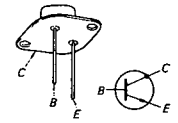
Q310, 360: 2SB655



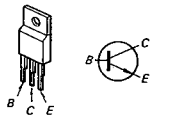
Q305, 306, 312 / Q356, 357, 362 / Q401, 405: 2SA678



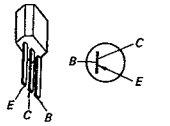
Q311, 361: 2SD675



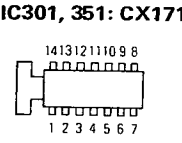
Q601, 613: 2SC1986D-R (2SC1986D)
Q609–612: 2SC1986D-O



Q605, 606: 2SA678 (2SA844)

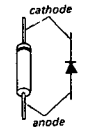


IC301, 351: CX171



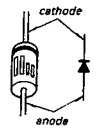
D301, 302, 351, 352 / D402, 404, 603–605 / D903, 953: 1S1555

D602 : RD5.6E (RD5.6E-B)
D901, 902, D951, 952: 1T22AM (1T22)

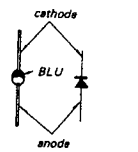


D304, 305, D354, 355: EQB01-21 (EQA01-21R)

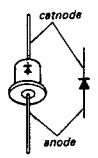
D401: EQB01-07 (EQA01-07)



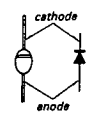
D403: MV12N



D601, 608–611: S34

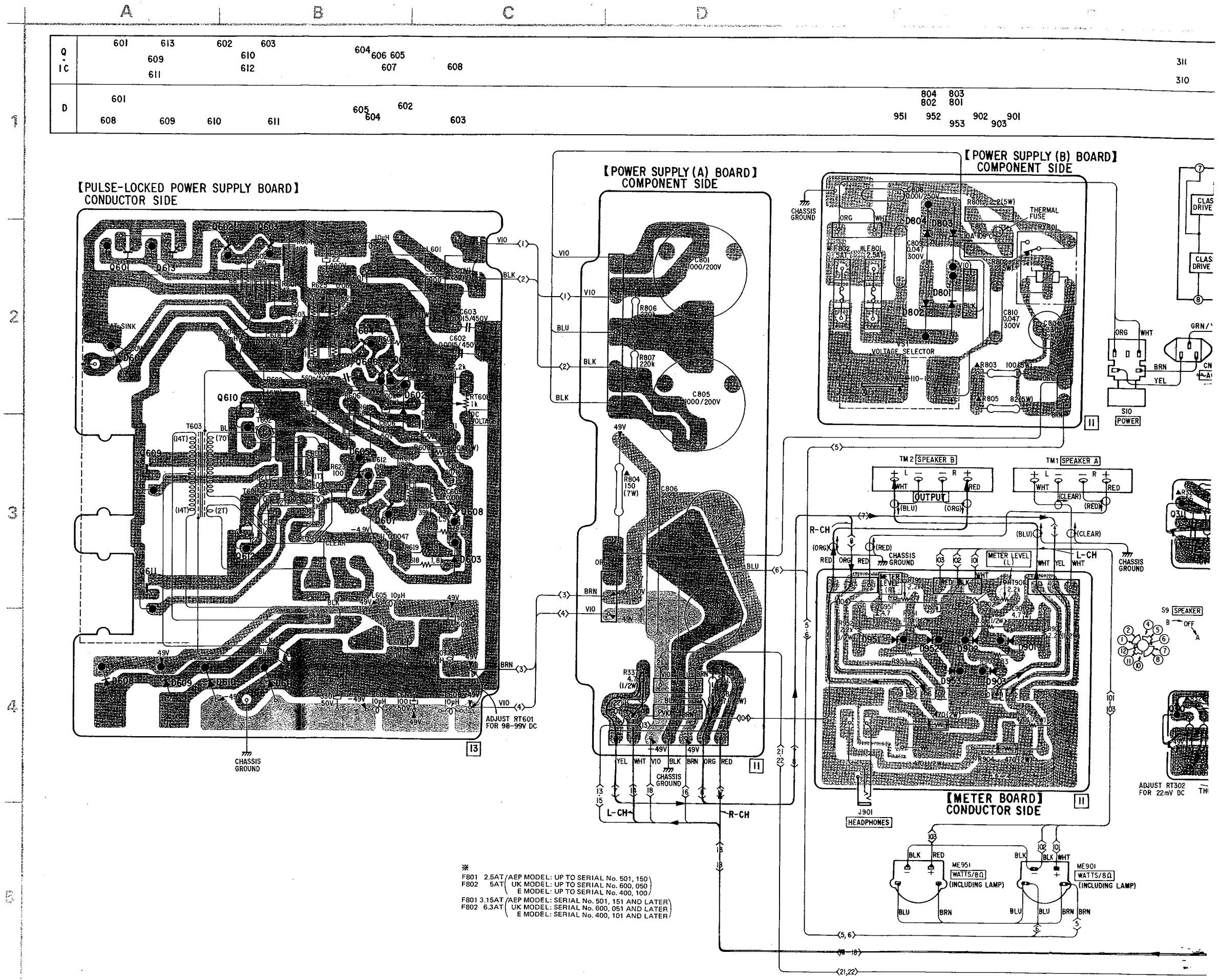


D801–804: U05G (U05E)



TA-F6B TA-F6B

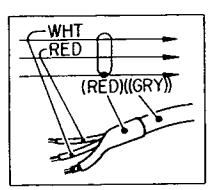
4-6. POWER AMP SECTION MOUNTING DIAGRAM (AEP, UK, E model)



※
F801 2.5AT (AEP MODEL: UP TO SERIAL No. 501, 150)
F802 5AT (UK MODEL: UP TO SERIAL No. 600, 050)
(E MODEL: UP TO SERIAL No. 400, 100)
F801 3.15AT (AEP MODEL: SERIAL No. 501, 151 AND LATER)
F802 6.3AT (UK MODEL: SERIAL No. 600, 051 AND LATER)
(E MODEL: SERIAL No. 400, 101 AND LATER)

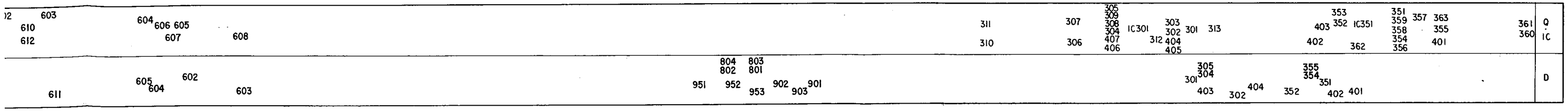
Note:

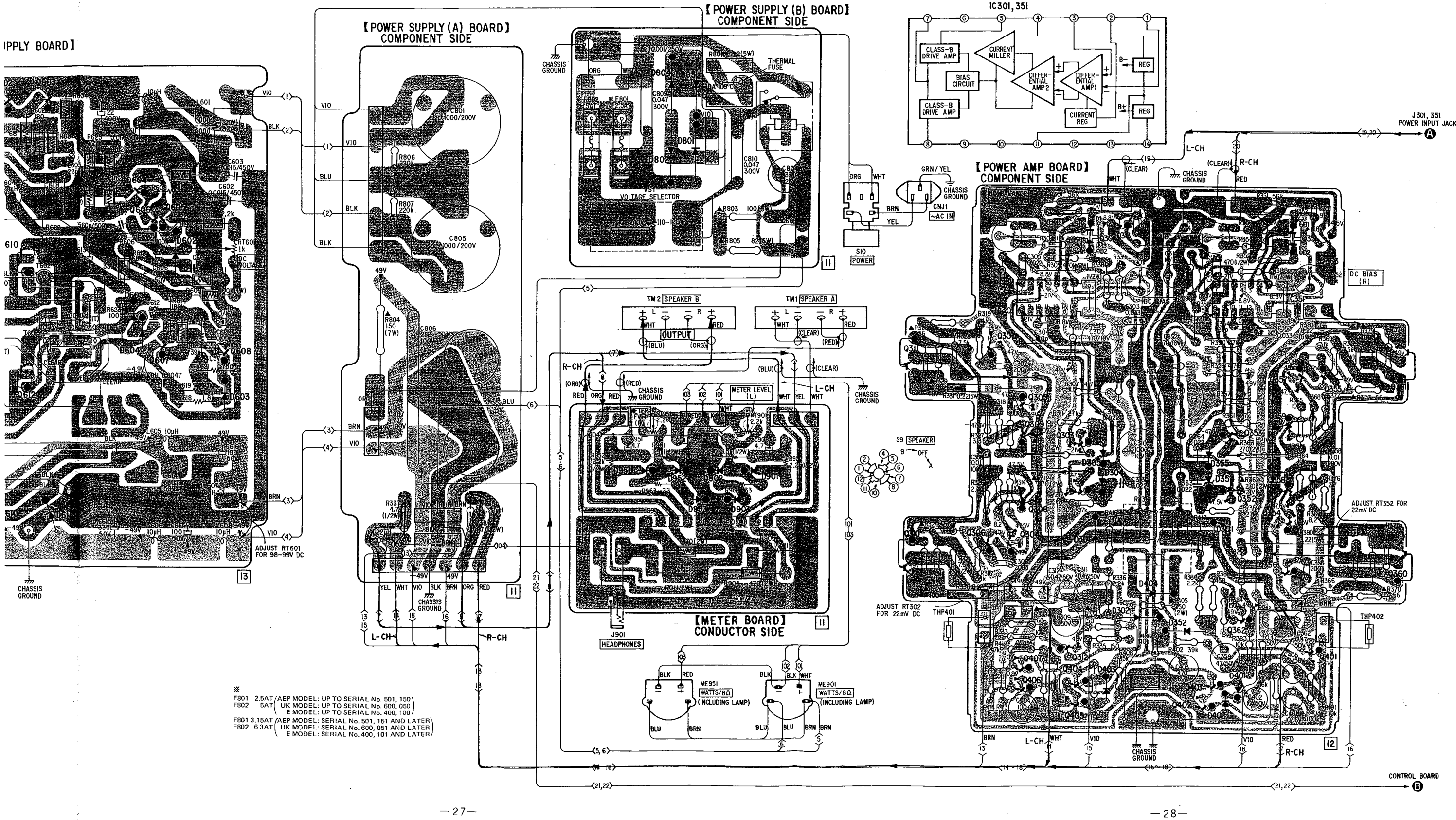
- Color code of sleeving over the end of the jacket.



- ○— : parts extracted from the component side.
- ▨ : B+ pattern
- ▩ : B− pattern
- Signal Path
  - ——— L-CH
  - — — — R-CH
  - ——— common
- ▲ : nonflammable resistor.

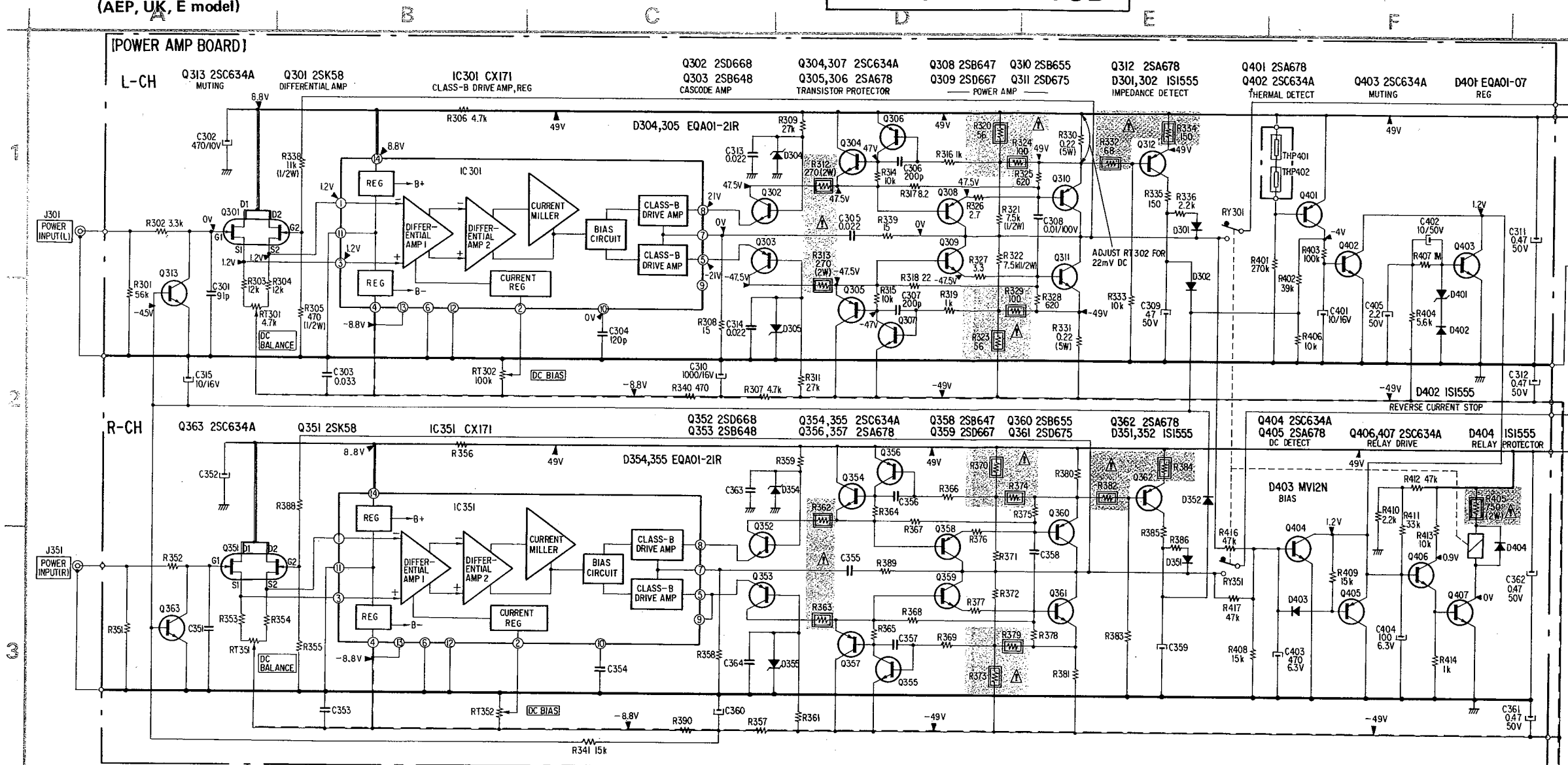
B C D E F G H I





※
F801 2.5AT (AEP MODEL: UP TO SERIAL No. 501, 150)
F802 5AT (UK MODEL: UP TO SERIAL No. 600, 050)
(E MODEL: UP TO SERIAL No. 400, 100)
F801 3.15AT (AEP MODEL: SERIAL No. 501, 151 AND LATER)
F802 6.3AT (UK MODEL: SERIAL No. 600, 051 AND LATER)
(E MODEL: SERIAL No. 400, 101 AND LATER)

4-7. POWER AMP SECTION SCHEMATIC DIAGRAM (AEP, UK, E model)

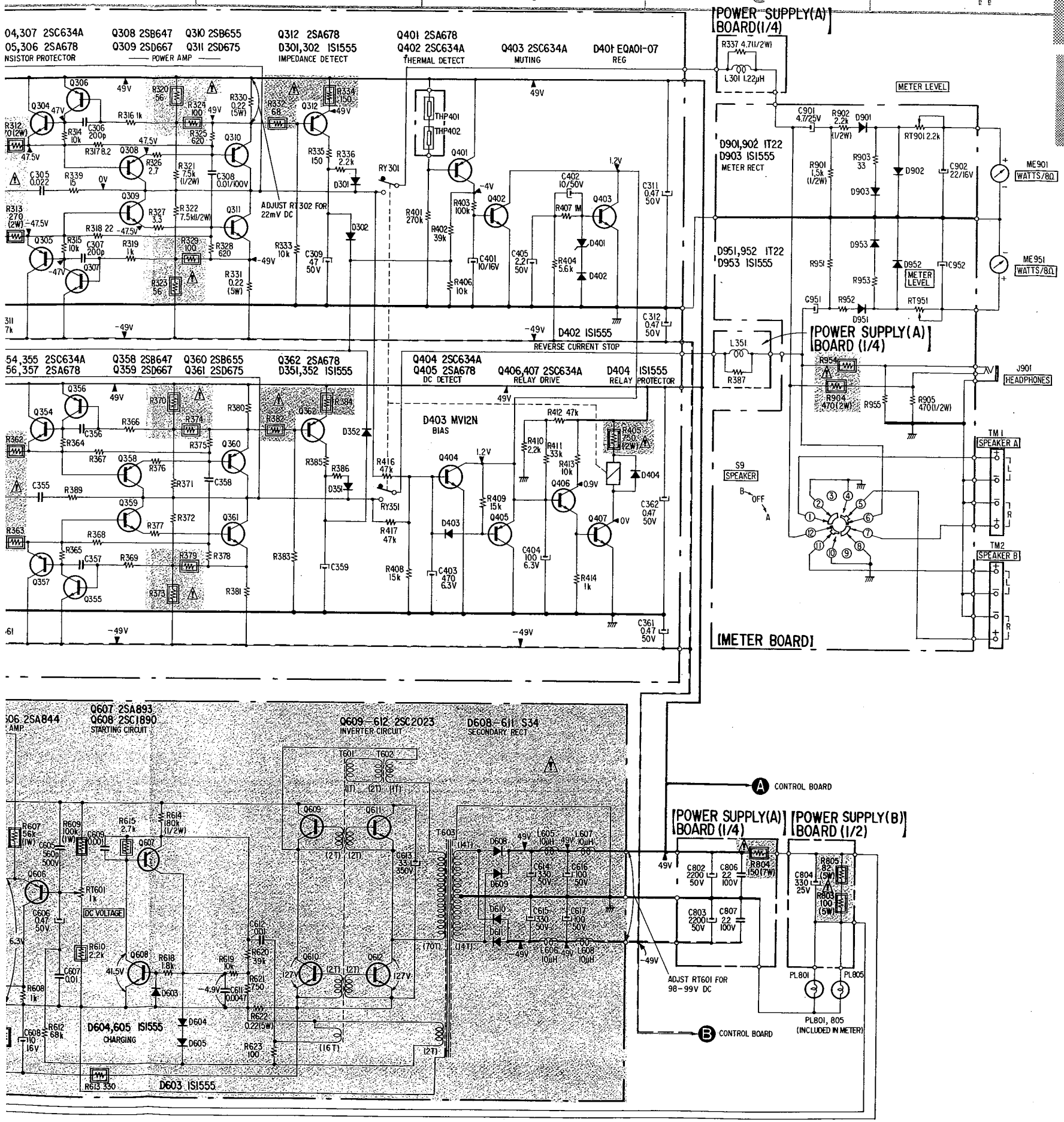


Note: The cc
⚠ are
part nu

Note: Les co
marqu
rempla
spécifi

Note:
- Componen channel. F
- All capaci 50 WV or l
- All resisto kΩ = 1000
- All variab curve B, u
- ⏚ : di ch
- ▭ : nc
- ▭ : pa
- ▬ : B+
- ▭ : ad
- ▬ ▬ : B-
- Voltages a noted.
- Readings VOM (20 ( ) : 12 < > : 24
- Voltage var tolerances.
- Switch

Ref. No
S9
S10-1, 2
VS1



Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

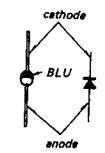
Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note:

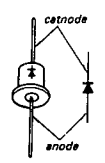
- Compinents for right channel have same values as for left channel. Reference numbers are coded from 351 or 951.
- All capacitors are in μF unless otherwise noted. pF = μμF 50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ = 1000 Ω, MΩ = 1000 kΩ
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⏚ : direct connection to points marked ⏚ on the chassis.
- ▭ : nonflammable resistor.
- ▭ : panel designation
- ▬ : B+ bus.
- ▭ : adjustment for repair.
- ▬ ▬ : B– bus.
- Voltages are dc with respect to ground unless noted.
- Readings are taken under no signal conditions with a VOM (20 kΩ/V).
  ( ) : 120 V AC input
  < > : 240 V AC input
- Voltage variations may be noted due to normal production tolerances.
- Switch

Ref. No.	Switch	Position
S9	SPEAKER	B
S10-1, 2	POWER	OFF
VS1	VOLTAGE SELECTOR	220–240 V

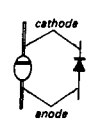
D403: MV12N



D601, 608–611: S34



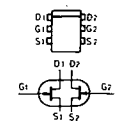
D801–804: U05G (U05E)



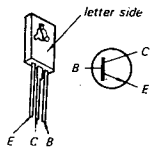
- **Replacement Semiconductors**

For replacement, use semiconductors except in ( ).

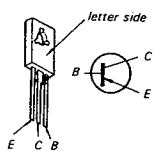
Q301, 351: 2SK58



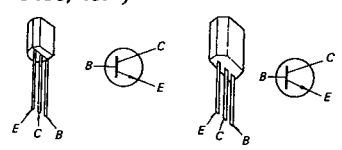
Q302, 352: 2SD668



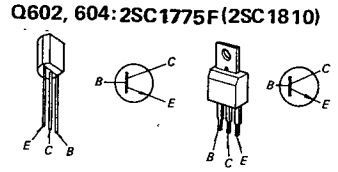
Q303, 353: 2SB648



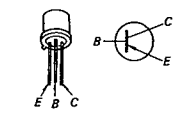
Q304, 307 / Q313, 354 / Q355, 363 / Q402–404 / Q406, 407: 2SC1364 (2SC634A)



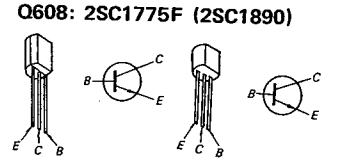
Q602, 604: 2SC1775F (2SC1810)



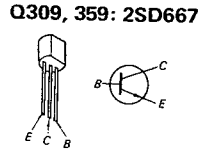
Q603: 2SA911



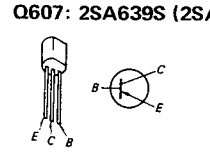
Q608: 2SC1775F (2SC1890)



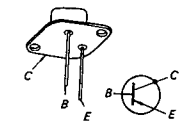
Q309, 359: 2SD667



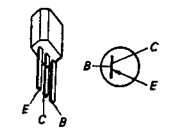
Q308, 358: 2SB647
Q607: 2SA639S (2SA893)



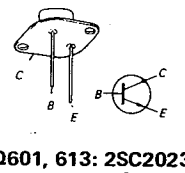
Q310, 360: 2SB655



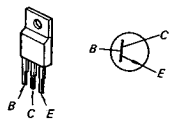
Q305, 306, 312 / Q356, 357, 362 / Q401, 405: 2SA678



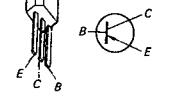
Q311, 361: 2SD675



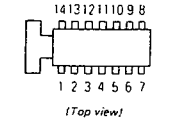
Q601, 613: 2SC2023-R
Q609–612: 2SC2023-R / 2SC2023-O (2SC2023)



Q605, 606: 2SA678 (2SA844)



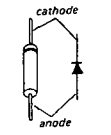
IC301, 351: CX171



D301, 302, 351, 352
D402, 404, 603–605
D903, 953: 1S1555

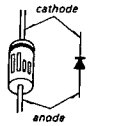
D602: RD5.6E (RD5.6E-B)

D901, 902
D951, 952: 1T22AM (1T22)

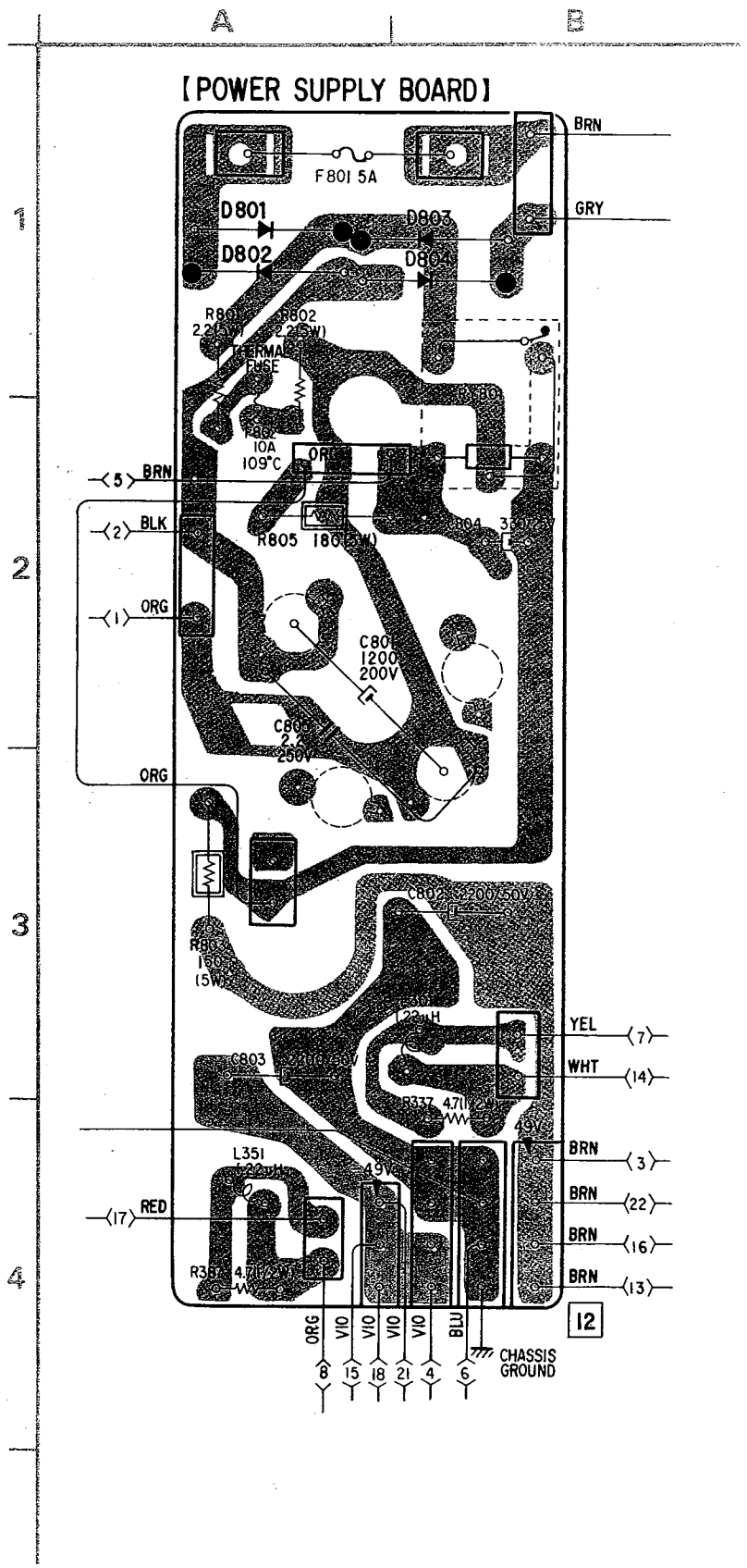


D304, 305
D354, 355: EQB01-21 (EQA01-21R)

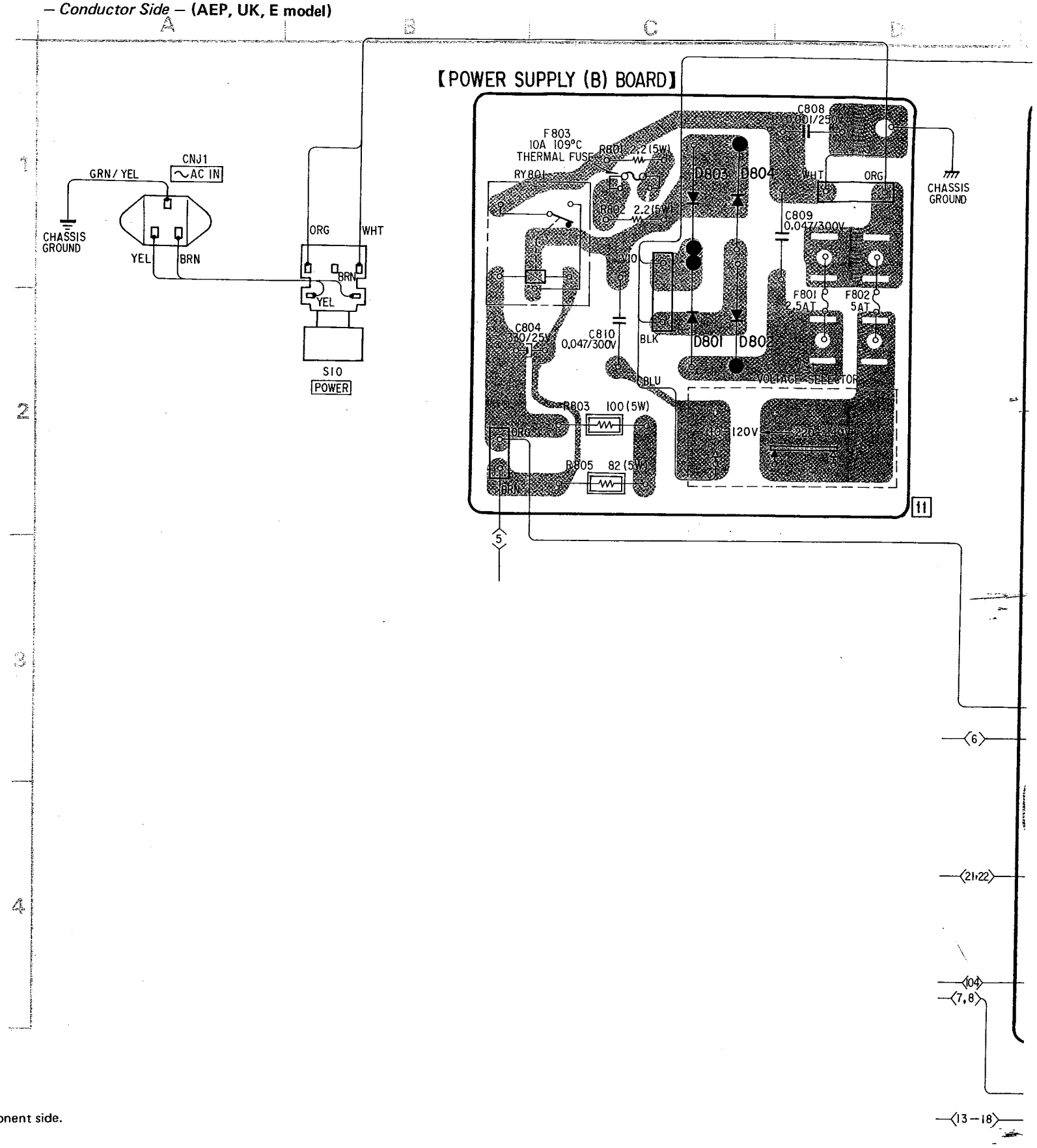
D401: EQB01-07 (EQA01-07)



4-8. POWER SUPPLY BOARD MOUNTING DIAGRAM
– Conductor Side – **(US, Canadian model)**



4-9. POWER SUPPLY BOARD MOUNTING DIAGRAM
– Conductor Side – **(AEP, UK, E model)**

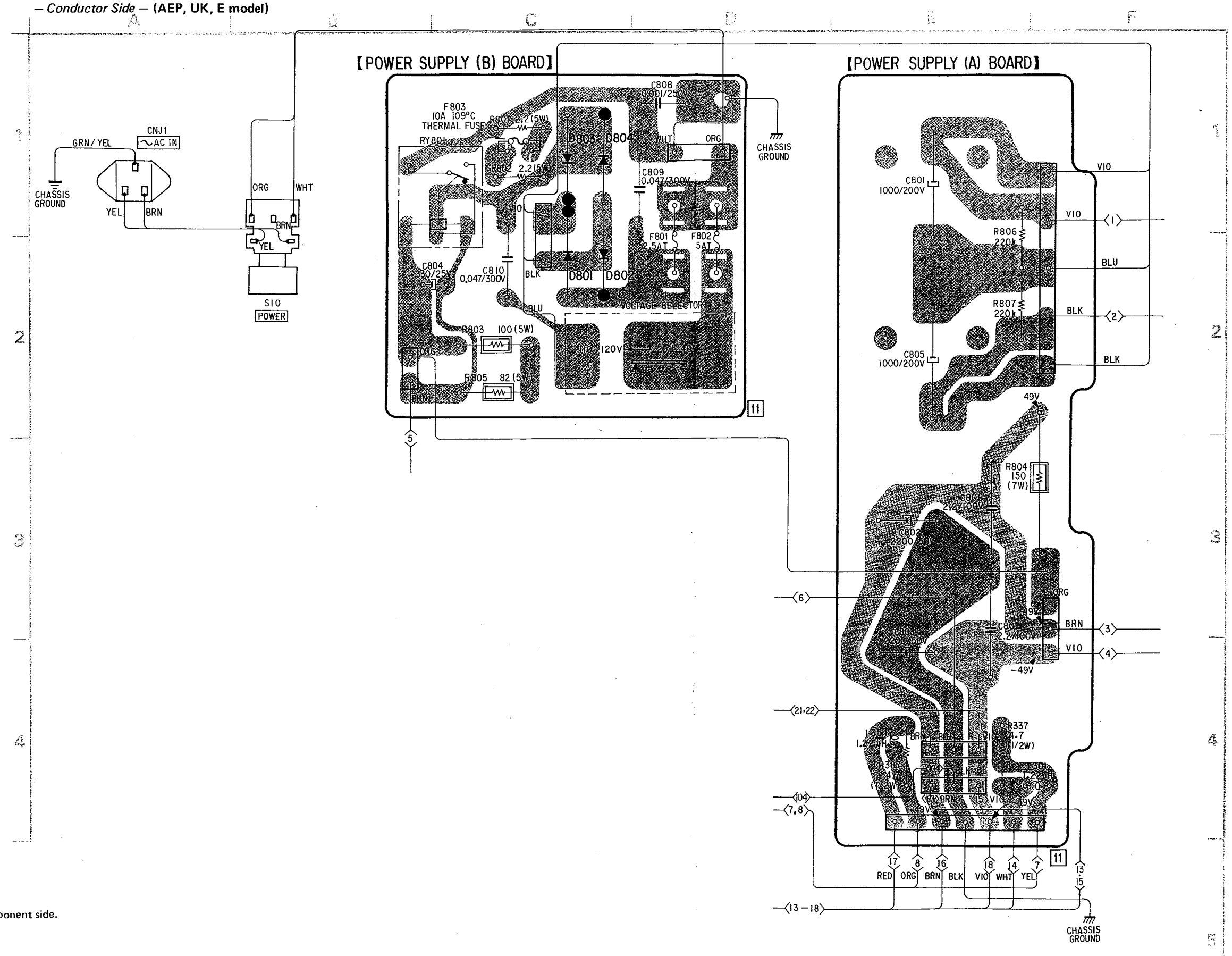


Note:

- ○— : parts extracted from the component side.
- ▨ : B+ pattern
- ▩ : B– pattern
- ⏚ : direct connection to points marked ⏚ on the chassis.

4-9. POWER SUPPLY BOARD MOUNTING DIAGRAM

– Conductor Side – **(AEP, UK, E model)**



ote:

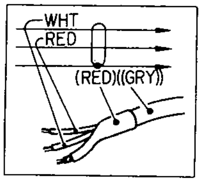
- ○— : parts extracted from the component side.
- : B+ pattern
- : B– pattern
- : direct connection to points marked ⏚ on the chassis.

4-10. POWER AMP BOARD MOUNTING DIAGRAM

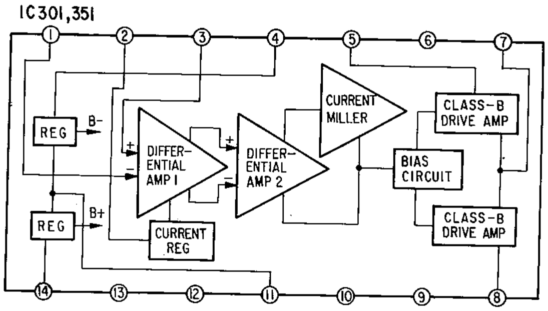
– Conductor Side –

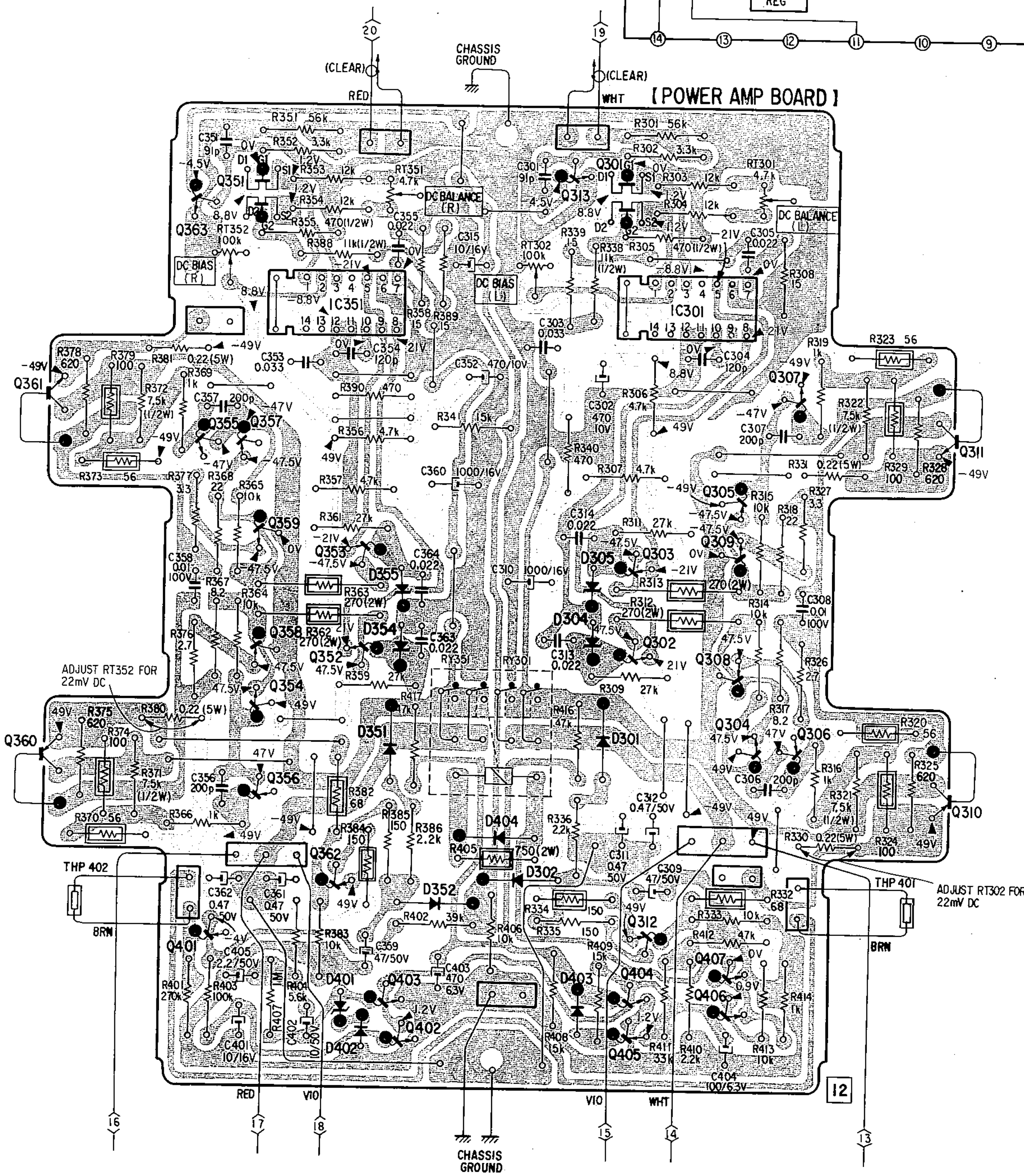
Note:

- Color code of sleeving over the end of the jacket.



- ○— : parts extracted from the component side.
- : B+ pattern

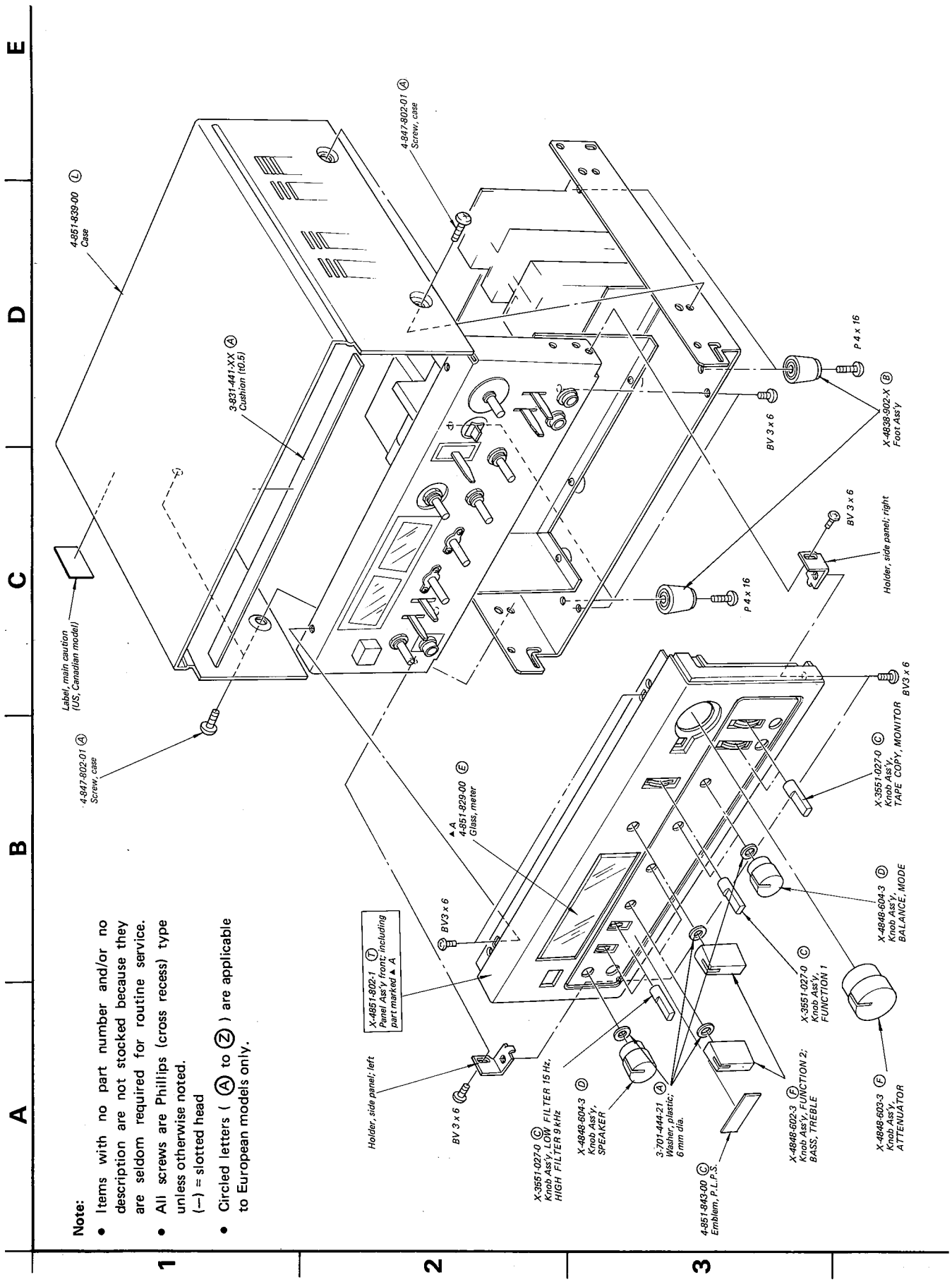




Q, IC	361 360 363 355 401 351 357 359 358 354 356 IC351 353 352 362 403 402 313 301 303 302 404 405 312 IC301 305 309 308 407 406 304 307 306 311 310	Q, IC
D	401 402 351 355 354 352 404 302 305 304 403 301	D

SECTION 5
EXPLODED VIEWS

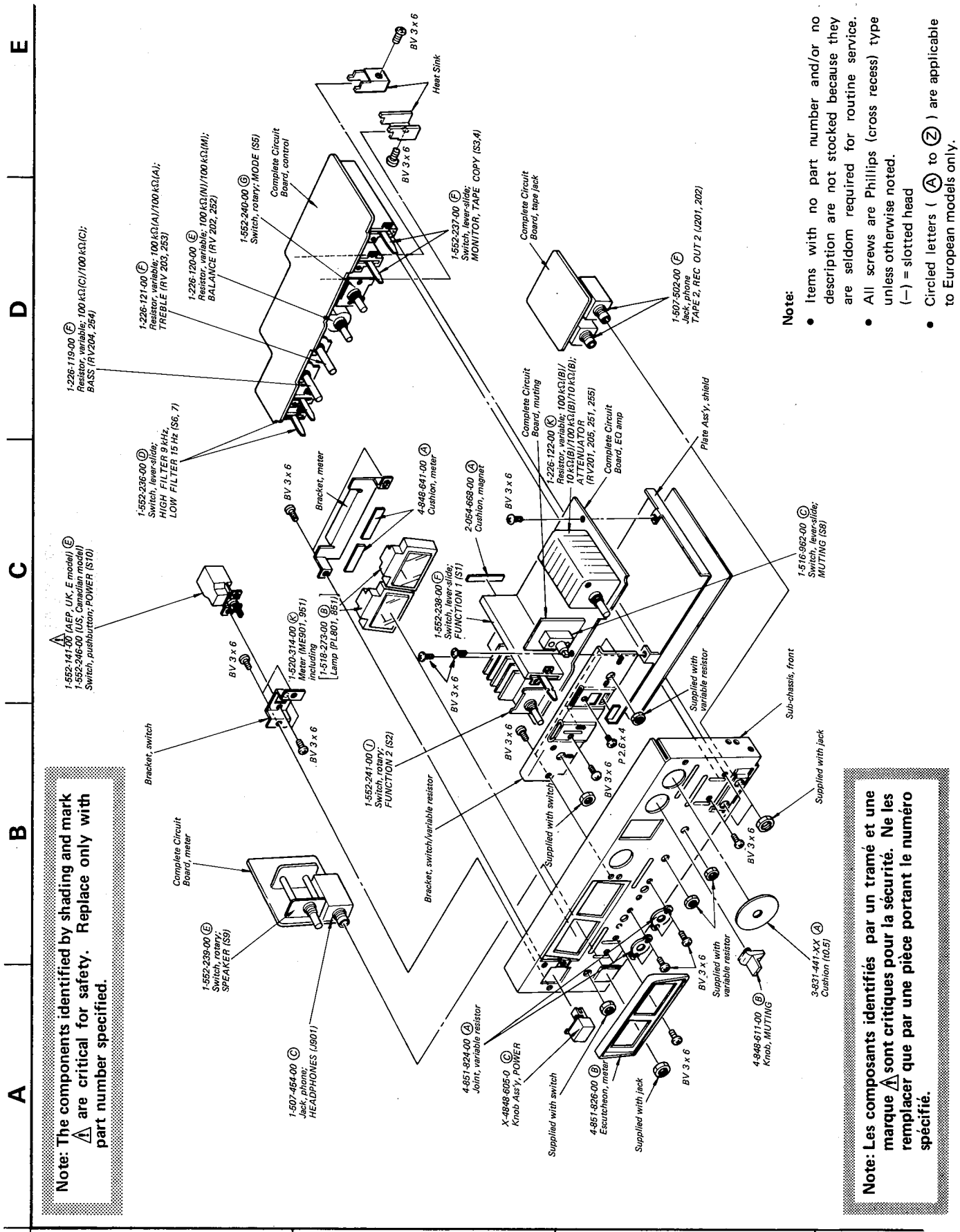
5-1.



Note:

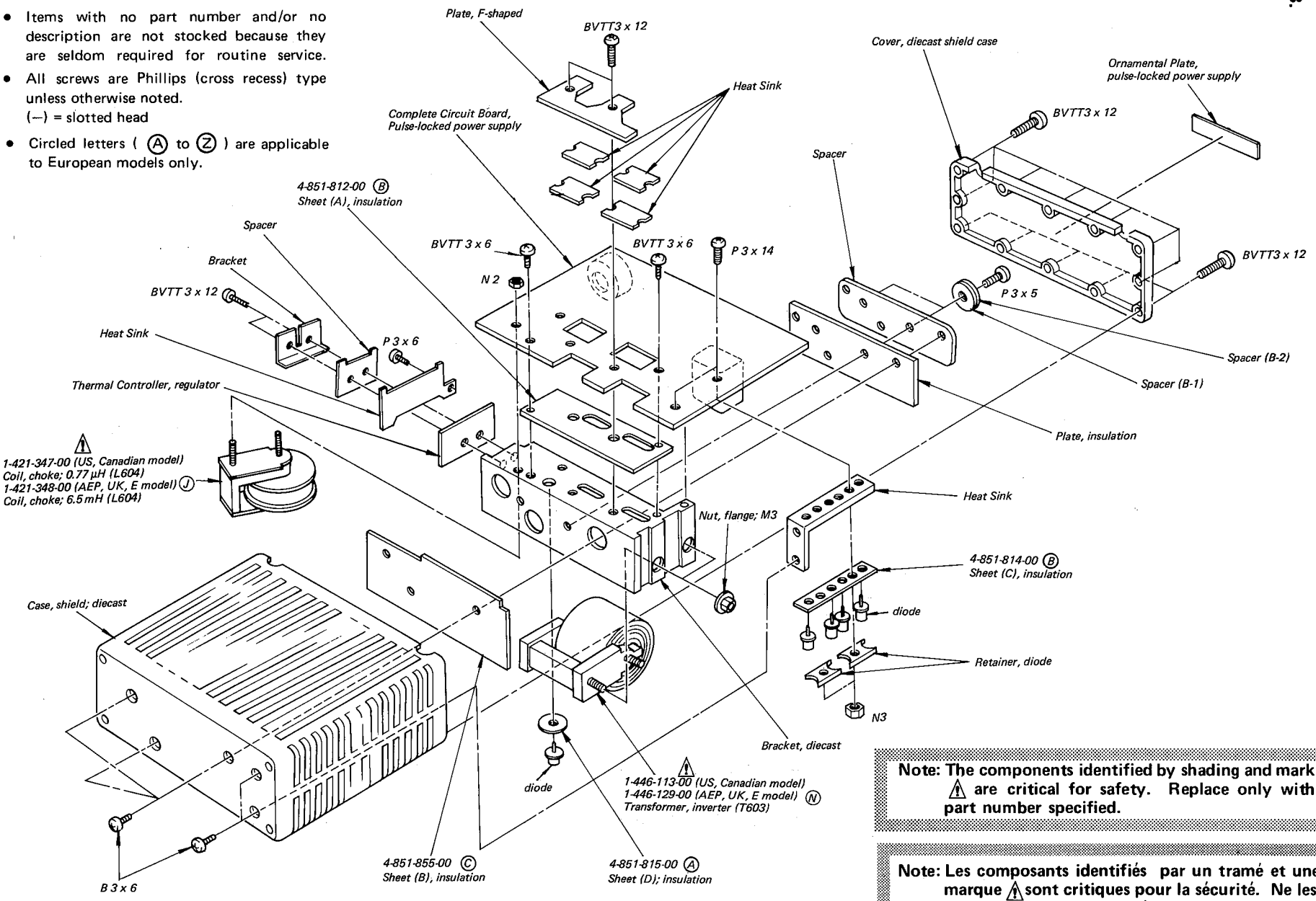
- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (—) = slotted head
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

5-2.


A
B
C
D
E
1
2
3
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.
Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
1-552-141-00 (AEP, UK, E model) (E)
1-552-246-00 (US, Canadian model)
Switch, pushbutton; POWER (S10)
1-226-119-00 (F)
Resistor, variable; 100 kΩ(C)/100 kΩ(C); BASS (RV204, 254)
1-226-121-00 (F)
Resistor, variable; 100 kΩ(A)/100 kΩ(A); TREBLE (RV 203, 253)
1-226-120-00 (E)
Resistor, variable; 100 kΩ(N)/100 kΩ(M); BALANCE (RV 202, 252)
1-552-240-00 (G)
Switch, rotary; MODE (S5)
Complete Circuit Board, control
1-552-236-00 (D)
Switch, lever-slide; HIGH FILTER 9 kHz, LOW FILTER 15 Hz (S6, 7)
1-552-237-00 (F)
Switch, lever-slide; MONITOR, TAPE COPY (S3,4)
Heat Sink
BV 3 x 6
Bracket, meter
4-848-641-00 (A)
Cushion, meter
2-054-668-00 (A)
Cushion, magnet
Complete Circuit Board, tape jack
1-507-502-00 (F)
Jack, phone
TAPE 2, REC OUT 2 (J201, 202)
Complete Circuit Board, muting
1-226-122-00 (K)
Resistor, variable; 100 kΩ(B)/10 kΩ(B)/100 kΩ(B); ATTENUATOR (RV201, 205, 251, 255)
Complete Circuit Board, EQ amp
Plate Ass'y, shield
1-520-314-00 (K)
Meter (ME901, 951) including
1-518-273-00 (B)
Lamp (PL801, 851)
1-552-238-00 (F)
Switch, lever-slide; FUNCTION 1 (S1)
1-516-962-00 (C)
Switch, lever-slide; MUTING (S8)
Bracket, switch
1-552-241-00 (I)
Switch, rotary; FUNCTION 2 (S2)
Bracket, switch/variable resistor
Supplied with switch
Supplied with variable resistor
Sub-chassis, front
P 2.6 x 4
Supplied with jack
Complete Circuit Board, meter
1-552-239-00 (E)
Switch, rotary; SPEAKER (S9)
1-507-464-00 (C)
Jack, phone; HEADPHONES (J901)
4-851-924-00 (A)
Joint, variable resistor
X-4848-605-0 (C)
Knob Ass'y, POWER
4-851-926-00 (B)
Escutcheon, meter
4-848-611-00 (B)
Knob, MUTING
3-831-441-XX (A)
Cushion (t0.5)
Note:
• Items with no part number and/or no description are not stocked because they are seldom required for routine service.
• All screws are Phillips (cross recess) type unless otherwise noted.
(–) = slotted head
• Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Note:

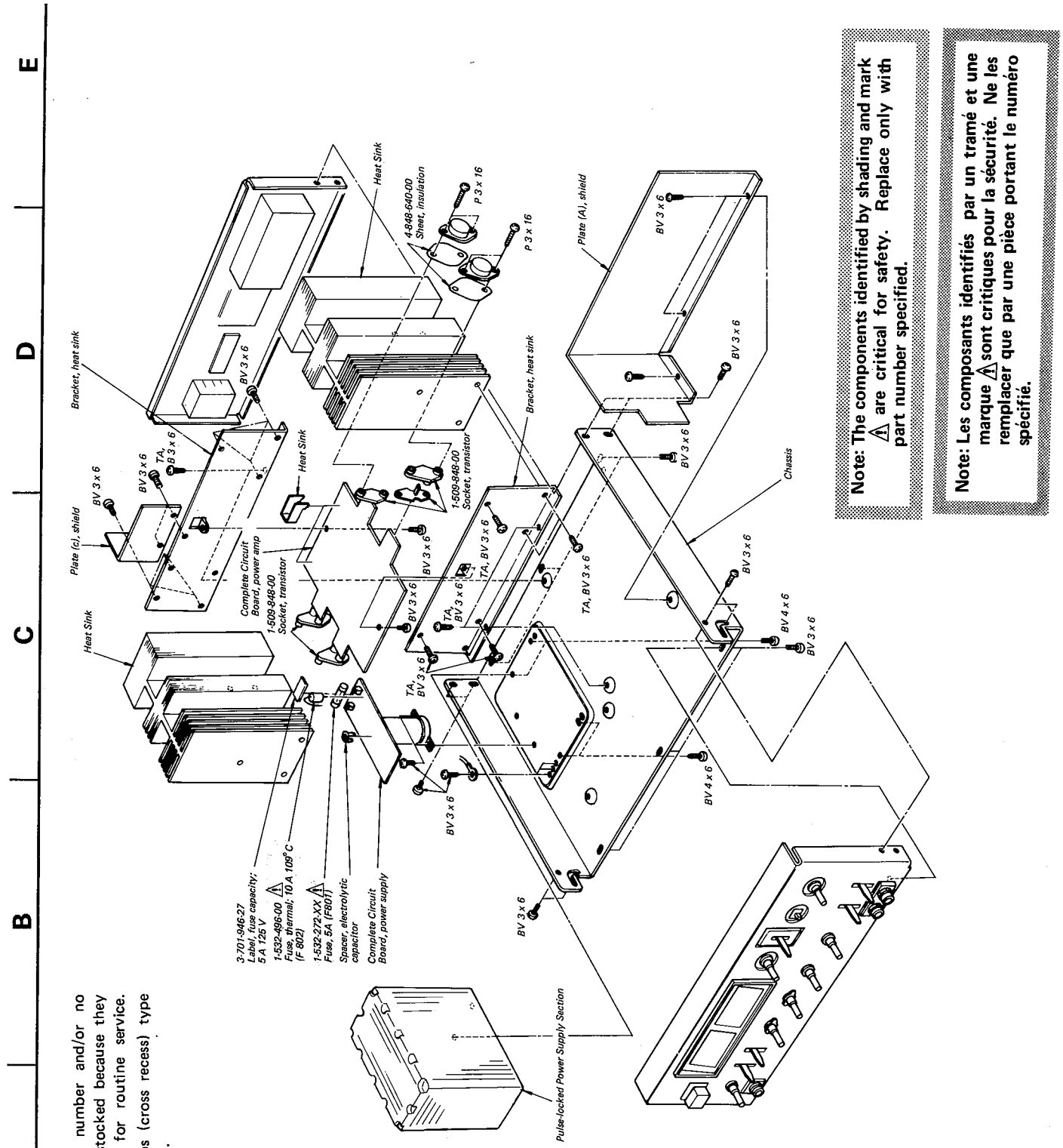
- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.



Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5-4. (US, Canadian model)



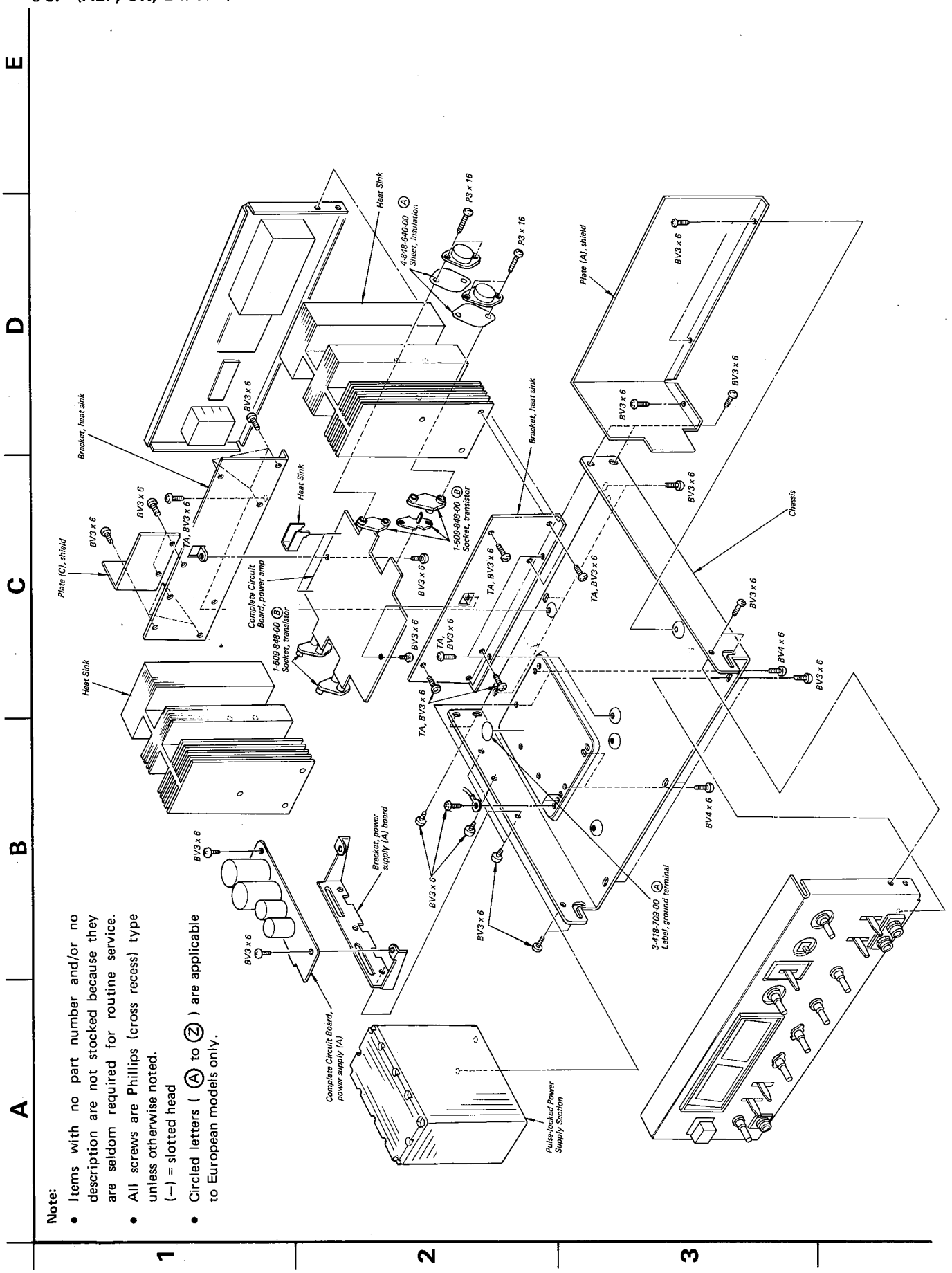
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (–) = slotted head

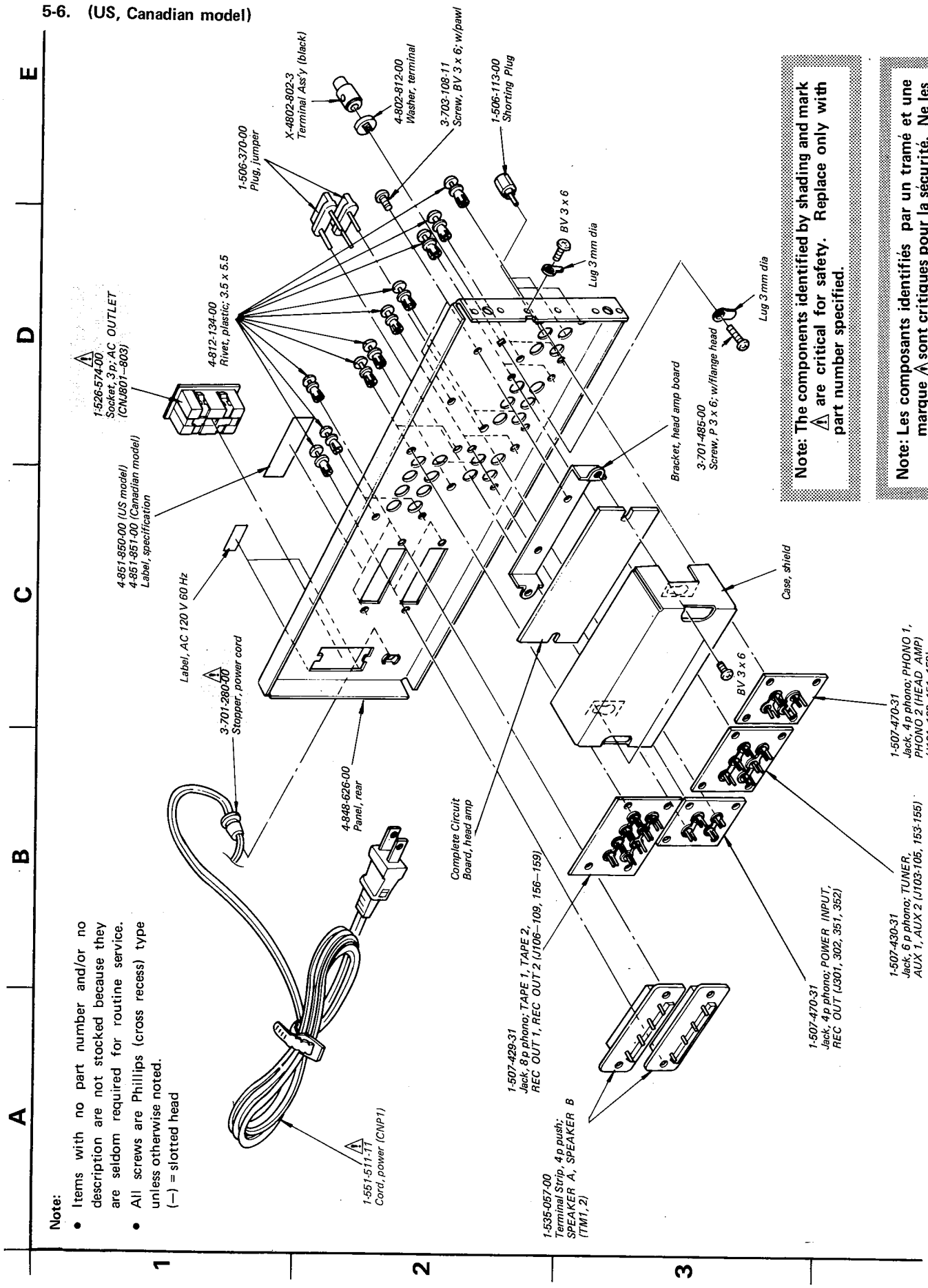
5-5. (AEP, UK, E model)



Note:

- Items with no part number and/or no description are not stocked because they are seldom required for routine service.
- All screws are Phillips (cross recess) type unless otherwise noted.
  (—) = slotted head
- Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

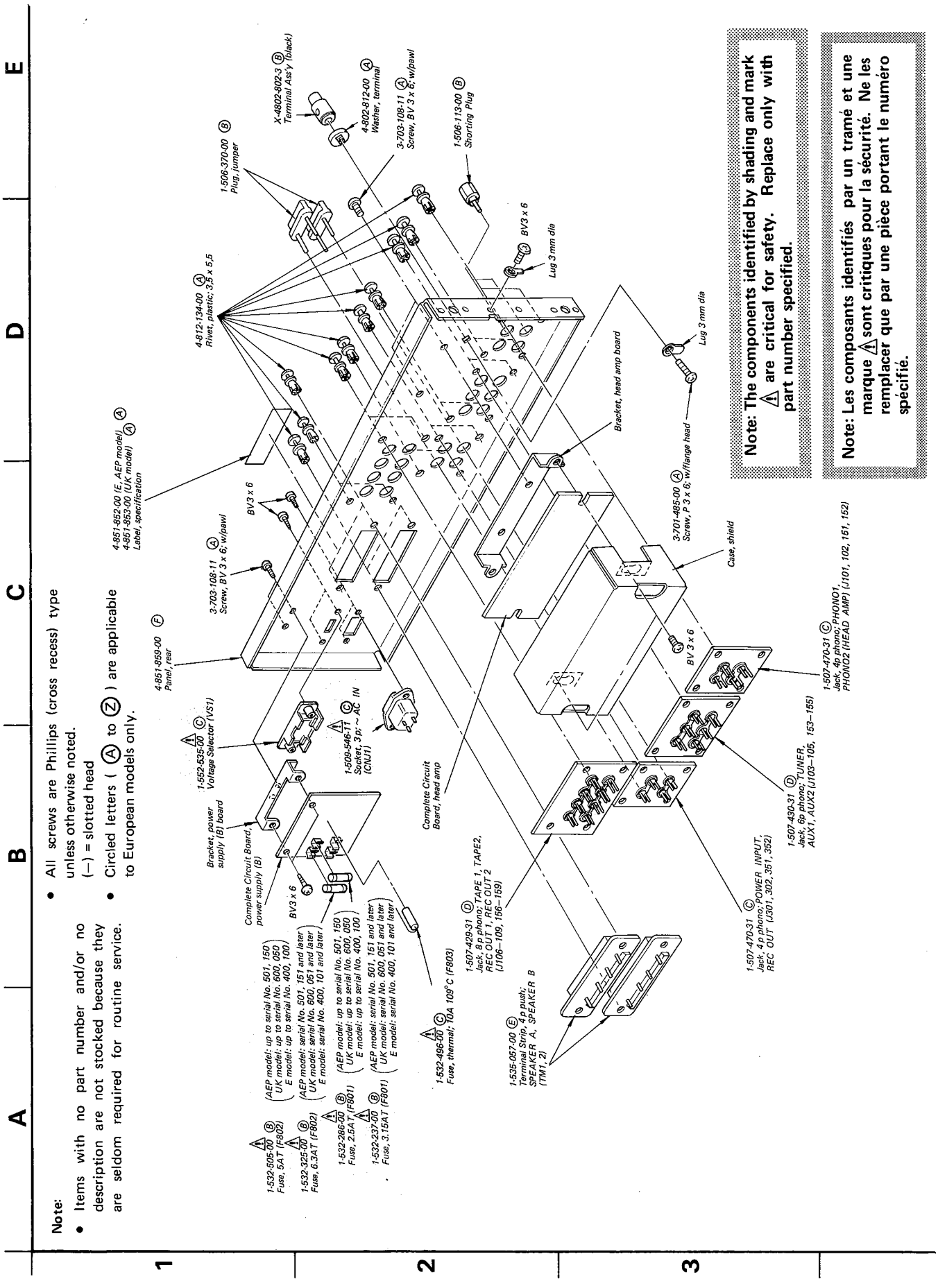
5-6. (US, Canadian model)



Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5-7. (AEP, UK, E model)



Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Ref. No.	Part No.	Description		
C313, 363 C314, 364	1-101-924-00	Ⓐ 0.022		
C315	1-121-651-00	Ⓐ 10	16 V	elect
C401	1-121-651-00	Ⓐ 10	16 V	elect
C402	1-121-738-00	Ⓐ 10	50 V	elect
C403	1-121-424-00	Ⓑ 470	6.3 V	elect
C404	1-121-413-00	Ⓐ 100	6.3 V	elect
C405	1-121-450-00	Ⓐ 2.2	50 V	elect
C501, 502	1-102-978-00	Ⓐ 220 p		
C503, 504	1-121-480-00	Ⓐ 22	25 V	elect
C505, 506	1-121-261-00	Ⓑ 220	35 V	elect
C507, 508	1-101-880-00	Ⓐ 47 p		
C509	1-121-396-00	Ⓐ 4.7	50 V	elect
C510	1-102-978-00	Ⓐ 220 p		
C511	1-121-480-00	Ⓐ 22	25 V	elect
C512	1-121-736-00	Ⓑ 1000	10 V	elect
C601	⚠1-130-141-00	Ⓐ 0.01	630 V	polyethylene
C602, 603	⚠1-102-070-00	0.001	150 V	(US, Canadian model)
C602, 603	⚠1-115-149-00	Ⓒ 0.0015	450 V	paper (AEP, UK, E model)
C604	⚠1-123-401-00	47	200 V	elect (US, Canadian model)
C604	⚠1-123-402-00	Ⓒ 22	400 V	elect (AEP, UK, E model)
C605	⚠1-161-438-00	Ⓐ 560 p	500 V	
C606	⚠1-121-726-00	Ⓐ 0.47	50 V	elect
C607	⚠1-108-239-00	Ⓐ 0.01		mylar
C608	⚠1-121-651-00	Ⓐ 10	16 V	elect
C609	⚠1-108-227-00	Ⓐ 0.01		mylar
C611	⚠1-108-234-00	Ⓐ 0.0047		mylar
C612	⚠1-108-239-00	Ⓐ 0.01		mylar
C613	⚠1-123-277-00	68	160 V	elect (US, Canadian model)
C613	⚠1-123-280-00	Ⓒ 33	350 V	elect (AEP, UK, E model)
C614, 615	⚠1-121-656-00	Ⓑ 330	50 V	elect
C616, 617	⚠1-121-417-00	Ⓑ 100	50 V	elect
C618	⚠1-130-141-00	Ⓐ 0.01	630 V	polyethylene
C701, 751	1-131-429-00	Ⓕ 470	3.15 V	tantalum
C702, 752	1-130-127-00	Ⓑ 0.015	100 V	polyethylene
C703, 753	1-102-074-00	Ⓐ 0.001		
C704, 754	1-102-823-00	Ⓐ 430 p		
C705, 755	1-101-880-00	Ⓐ 47 p		
C706, 756	1-101-059-00	Ⓐ 510 p		
C707, 757 C708, 758	1-121-751-00	Ⓑ 330	6.3 V	elect
C709, 759	1-130-127-00	Ⓑ 0.015	100 V	polyethylene
C710, 760	1-131-377-00	Ⓑ 10	10 V	tantalum
C711, 761	1-121-420-00	Ⓑ 220	10 V	elect
C801	⚠1-125-180-00	1200	200 V	elect (US, Canadian model)
C801	⚠1-125-179-00	Ⓘ 1000	200 V	elect (AEP, UK, E model)
C802, 803	1-123-256-00	Ⓓ 2200	50 V	elect
C804	1-121-654-00	Ⓑ 230	25 V	elect
C805	⚠1-130-090-00	2.2	250 V	polyethylene (US, Canadian model)
C805	⚠1-125-179-00	Ⓘ 1000	200 V	elect (AEP, UK, E model)
C806, 807	1-130-084-00	Ⓓ 2.2	100 V	polyethylene (AEP, UK, E model)
C808	⚠1-102-222-00	Ⓑ 1000 p	250 V	(AEP, UK, E model)
C809, 810	⚠1-108-749-00	Ⓑ 0.047	300 V	mylar (AEP, UK, E model)
C901, 951	1-121-395-00	Ⓐ 4.7	25 V	elect
C902, 952	1-121-479-00	Ⓐ 22	16 V	elect

RESISTORS

All resistors are in ohms. Common ¼ W carbon resistors are omitted. Refer to the list on page 49 for their part numbers. All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
kΩ : 1000 Ω

R101, 151	1-244-914-00	Ⓐ 51 k	½ W	carbon
R106, 156	1-244-849-00	Ⓐ 100	½ W	carbon
R110, 160	1-214-148-00	Ⓐ 4.7 k	¼ W	metal oxide 1 %
R111, 161	1-214-174-00	Ⓐ 56 k	¼ W	metal oxide 1 %
R122, 172	1-244-857-00	Ⓐ 220	½ W	carbon

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Ref. No.	Part No.		Description		
R305, 355	1-244-865-00	Ⓐ	470	½W	carbon
R312, 362 R313, 363	⚠1-206-650-00	Ⓐ	270	2W	metal oxide (nonflammable)
R320, 370	⚠1-211-516-00	Ⓑ	56	¼W	carbon (nonflammable)
R321, 371 R322, 372	1-244-894-00	Ⓐ	7.5 k	½W	carbon
R323, 373	⚠1-211-516-00	Ⓑ	56	¼W	carbon (nonflammable)
R324, 374 R329, 379	⚠1-211-522-00	Ⓒ	100	¼W	carbon (nonflammable)
R330, 380 R331, 381	1-217-156-00	Ⓐ	0.22	5W	wirewound
R332, 382	⚠1-211-518-00	Ⓒ	68	¼W	carbon (nonflammable)
R334, 384	⚠1-211-526-00	Ⓒ	150	¼W	carbon (nonflammable)
R337, 387	1-244-817-00	Ⓐ	4.7	½W	carbon
R405	⚠1-206-661-00	Ⓐ	750	2W	metal oxide (nonflammable)
R501, 508	⚠1-206-483-00	Ⓐ	68	2W	metal oxide (nonflammable)
R514	1-244-859-00	Ⓐ	270	½W	carbon
R601	⚠1-211-490-00		4.7	¼W	carbon (nonflammable) (US, Canadian model)
R601	⚠1-211-514-00	Ⓐ	47	¼W	carbon (nonflammable) (AEP, UK, E model)
R602	⚠1-211-498-00		10	¼W	carbon (nonflammable) (US, Canadian model)
R602	⚠1-211-528-00	Ⓐ	180	¼W	carbon (nonflammable) (AEP, UK, E model)
R603	⚠1-211-514-00		47	¼W	carbon (nonflammable) (US, Canadian model)
R603	⚠1-211-518-00	Ⓒ	68	¼W	carbon (nonflammable) (AEP, UK, E model)
R604	⚠1-211-528-00		180	¼W	carbon (nonflammable) (US, Canadian model)
R604	⚠1-211-522-00	Ⓒ	100	¼W	carbon (nonflammable) (AEP, UK, E model)
R605	⚠1-214-596-00		39 k	2W	metal oxide (nonflammable) (US, Canadian model)
R605	⚠1-206-698-00	Ⓐ	27 k	2W	metal oxide (nonflammable) (AEP, UK, E model)
R606	⚠1-244-915-00		56 k	½W	carbon (US, Canadian model)
R606	⚠1-214-595-00	Ⓐ	100 k	1W	metal oxide (nonflammable) (AEP, UK E model)
R607	⚠1-214-598-00	Ⓐ	56 k	1W	metal oxide (nonflammable)
R608	⚠1-246-473-00	Ⓐ	1 k	¼W	carbon
R609	⚠1-244-915-00		56 k	½W	carbon (US, Canadian model)
R609	⚠1-214-595-00	Ⓐ	100 k	1W	metal oxide (nonflammable) (AEP, UK, E model)
R610	⚠1-211-945-00	Ⓐ	2.2 k	¼W	carbon (nonflammable)
R611	⚠1-211-532-00	Ⓒ	270	¼W	carbon (nonflammable)
R612	⚠1-246-521-00		100 k	¼W	carbon (US, Canadian model)
R612	⚠1-246-519-00	Ⓐ	68 k	¼W	carbon (AEP, UK, E model)
R613	⚠1-211-534-00	Ⓒ	330	¼W	carbon (nonflammable)
R614	⚠1-246-519-00		68 k	¼W	carbon (US, Canadian model)
R614	⚠1-244-927-00	Ⓐ	180 k	½W	carbon (AEP, UK, E model)
R615	⚠1-211-553-00	Ⓐ	2.7 k	¼W	carbon (nonflammable)
R618	⚠1-246-479-00	Ⓐ	1.8 k	¼W	carbon
R619	⚠1-246-497-00	Ⓐ	10 k	¼W	carbon

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 6

ELECTRICAL PARTS LIST

Note: Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Ref. No.	*Part No.*	*Description*
		SEMICONDUCTORS
		Transistors
Q101, 151	8-765-342-10 Ⓔ	2SK97
⇒Q102, 152 ⇒Q103, 153	8-729-387-28 Ⓑ	2SA872E
⇒Q104, 154	8-722-384-01 Ⓒ	2SK23A-840 (blue)
Q105, 155	8-729-203-04 Ⓑ	2SK30A
⇒Q106, 156	8-729-387-28 Ⓑ	2SA872E
⇒Q107, 157	8-723-304-00 Ⓑ	2SK43-4
⇒Q108, 158	8-729-387-28 Ⓑ	2SA872E
⇒Q109, 159	8-729-377-58 Ⓑ	2SC1775E
Q110, 160	8-729-366-71 Ⓑ	2SD667
Q111, 161	8-729-364-71 Ⓑ	2SB647
⇒Q112, 162	8-723-304-00 Ⓑ	2SK43-4
Q301, 351	8-761-510-06 Ⓕ	2SK58
Q302, 352	8-729-366-81 Ⓒ	2SD668
Q303, 353	8-729-364-81 Ⓒ	2SB648
⇒Q304, 354	8-729-663-47 Ⓑ	2SC1364
Q305	8-727-788-00 Ⓑ	2SA678
⇒Q 355	8-729-663-47 Ⓑ	2SC1364
Q306, 356	8-727-788-00 Ⓑ	2SA678
⇒Q307	8-729-663-47 Ⓑ	2SC1364
Q 357	8-727-788-00 Ⓑ	2SA678
Q308, 358	8-729-364-71 Ⓑ	2SB647
Q309, 359	8-729-366-71 Ⓑ	2SD667
Q310, 360	8-729-365-53 Ⓘ	2SB655
Q311, 361	8-729-367-53 Ⓖ	2SD675
Q312, 362	8-727-788-00 Ⓑ	2SA678
⇒Q313, 363	8-729-663-47 Ⓑ	2SC1364
Q401	8-727-788-00 Ⓑ	2SA678
⇒Q402–404	8-729-663-47 Ⓑ	2SC1364
Q405	8-727-788-00 Ⓑ	2SA678
⇒Q406, 407	8-729-663-47 Ⓑ	2SC1364
⇒Q501, 502	8-727-314-00 Ⓒ	2SK42-4
Q503	8-729-316-12 Ⓒ	2SC1061
⇒Q504, 505	8-729-377-59 Ⓑ	2SC1775F
⇒Q506, 507	8-729-163-93 Ⓑ	2SA639S
Q508	8-729-317-12 Ⓒ	2SA671
Q509	8-729-203-04 Ⓑ	2SK30A
⇒Q510	8-760-413-10 Ⓑ	2SC1475
⇒Q511, 512	8-729-377-59 Ⓑ	2SC1775F
⇒Q601	⚠8-729-308-71	2SC1986D-R (US, Canadian model)
⇒Q601	⚠8-729-302-31 Ⓓ	2SC2023-R (AEP, UK, E model)
Q602	⚠8-765-170-01	2SC1962 (US, Canadian model)
⇒Q602	⚠8-729-377-59 Ⓑ	2SC1775F (AEP, UK, E model)
Q603	⚠8-765-082-20	2SA896 (US, Canadian model)
Q603	⚠8-765-141-00 Ⓗ	2SA911 (AEP, UK, E model)
Q604	⚠8-765-012-20	2SC1811 (US, Canadian model)
⇒Q604	⚠8-729-377-59 Ⓑ	2SC1775F (AEP, UK, E model)
⇒Q605, 606	⚠8-727-788-00 Ⓑ	2SA678
⇒Q607	⚠8-729-163-93 Ⓑ	2SA639S
⇒Q608	⚠8-729-377-59 Ⓑ	2SC1775F
⇒Q609–612	⚠8-729-308-72	2SC1986D-O (US, Canadian model)
⇒Q609–612	⚠8-729-302-31 Ⓓ 8-729-302-32 Ⓓ	2SC2023-R 2SC2023-O (AEP, UK, E model)
⇒Q613	⚠8-729-308-71	2SC1986D-R (US, Canadian model)
⇒Q613	⚠8-729-302-31 Ⓓ	2SC2023-R (AEP, UK, E model)
⇒Q701, 751 ⇒Q704, 754	8-761-710-00 Ⓑ	2SC1637-1
⇒Q705, 755 ⇒Q706, 756	8-729-387-28 Ⓑ	2SA872E
		ICs
IC201, 251	8-759-314-57 Ⓒ	HA1457
IC301, 351	8-751-710-00 Ⓖ	CX171
		Diodes
D101, 151	8-719-912-00 Ⓑ	MV12N
⇒D102, 152 ⇒D103, 153	8-719-931-26 Ⓑ	EQB01-26
⇒D201, 251 ⇒D202, 252	8-719-931-21 Ⓑ	EQB01-21
D301, 351 D302, 352	8-719-815-55 Ⓐ	1S1555
⇒D304, 354 ⇒D305, 355	8-719-931-21 Ⓑ	EQB01-21
⇒D401	8-719-931-07 Ⓑ	EQB01-07
D402	8-719-815-55 Ⓐ	1S1555
D403	8-719-912-00 Ⓑ	MV12N
D404	8-719-815-55 Ⓐ	1S1555

⇒: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: Circled letters (Ⓐ to Ⓩ) are applicable to European models only.

Ref. No.	Part No.	Description
D601	⚠8-719-303-41	Ⓒ S34
⇒D602	⚠8-719-156-08	Ⓑ RD5.6E
D603–605	⚠8-719-815-55	Ⓐ 1S1555
D608–611	⚠8-719-303-41	Ⓒ S34
⇒D801–804	⚠8-719-811-55	Ⓒ U05G
⇒D901, 951 ⇒D902, 952	8-719-422-21	Ⓐ 1T22AM
D903, 953	8-719-815-55	Ⓐ 1S1555

MISCELLANEOUS

THP401, 402	1-800-427-00	Ⓑ Thermistor, positive

COILS

L301, 351	1-420-838-00	Ⓑ 1.22 μH
L601	⚠1-421-349-00	Ⓖ Line Filter (AEP, UK, E model)
L601	⚠1-421-259-00	Line Filter (US, Canadian model)
L602	⚠1-421-329-00	Ⓑ Choke, 10 μH
L603	⚠1-407-161-XX	Ⓐ Microinductor, 22 μH
L604	⚠1-421-347-00	Choke, 0.77 μH (US, Canadian model)
L604	⚠1-421-348-00	Ⓙ Choke, 6.5 mH (AEP, UK, E model)
L605–608	⚠1-421-329-00	Ⓑ Choke, 10 μH

TRANSFORMERS

T601	⚠1-543-098-00	Ⓑ Core (yellow)
T601	⚠1-543-100-00	Ⓑ Core (blue)
T602	⚠1-543-121-00	Ⓑ Core
T603	⚠1-446-113-00	Inverter (US, Canadian model)
T603	⚠1-446-129-00	Ⓝ Inverter (AEP, UK, E model)

CAPACITORS

All capacitors are in μF and ceramic unless otherwise noted.
50 WV or less are not indicated except for electrolytics.
p : μμF, elect : electrolytic

C101, 151	1-102-963-00	Ⓐ 33 p		
C102, 152	1-102-129-00	Ⓐ 0.01		
C103, 153	1-102-115-00	Ⓐ 560 p		
C104, 154	1-130-125-00	Ⓑ 0.016	100 V	polyethylene
C105, 155	1-130-126-00	Ⓑ 0.056	100 V	polyethylene
C106, 156	1-102-973-00	Ⓐ 100 p		
C107, 157	1-131-417-00	Ⓑ 3.3	16 V	tantalum
C108, 158	1-102-963-00	Ⓐ 33 p		
C109, 159	1-121-413-00	Ⓐ 100	6.3 V	elect
C111, 161 C112, 162	1-121-396-00	Ⓐ 4.7	50 V	elect
C113, 163	1-130-133-00	Ⓑ 0.056	100 V	polyethylene
C114, 164	1-121-352-00	Ⓐ 47	10 V	elect
C115, 165 C116, 166	1-121-261-00	Ⓑ 220	35 V	elect
C201, 251	1-121-450-00	Ⓐ 2.2	50 V	elect
C202, 252	1-102-945-00	Ⓐ 8 p		
C203, 253	1-102-808-00	Ⓐ 6 p		
C204, 254	1-102-934-00	Ⓐ 1 p		
C205, 255	1-121-411-00	Ⓐ 47	50 V	elect
C206, 256	1-121-396-00	Ⓐ 4.7	50 V	elect
C207, 257	1-101-059-00	Ⓐ 510 p		
C208, 258	1-102-979-00	Ⓐ 240 p		
C209, 259	1-108-581-00	Ⓐ 0.012		mylar
C210, 260	1-108-585-00	Ⓐ 0.018		mylar
C211, 261	1-108-607-00	Ⓑ 0.15		mylar
C212, 262	1-108-585-00	Ⓐ 0.018		mylar
C213, 263	1-131-347-00	Ⓑ 1	25 V	tantalum
C214, 264	1-121-450-00	Ⓐ 2.2	50 V	elect
C215, 265	1-130-133-00	Ⓑ 0.056	100 V	polyethylene
C216, 266	1-121-396-00	Ⓐ 4.7	50 V	elect
C217, 267	1-130-133-00	Ⓑ 0.056	100 V	polyethylene
C218, 268 C219, 269	1-121-416-00	Ⓑ 100	25 V	elect
C301, 351	1-102-972-00	Ⓐ 91 p		
C302, 352	1-121-425-00	Ⓑ 470	10 V	elect
C303, 353	1-108-591-00	Ⓐ 0.033		mylar
C304, 354	1-102-816-00	Ⓐ 120 p		
C305, 355	1-108-587-00	Ⓐ 0.022		mylar
C306, 356 C307, 357	1-102-977-00	Ⓐ 200 p		
C308, 358	1-108-377-00	Ⓐ 0.01	100 V	mylar
C309, 359	1-121-411-00	Ⓐ 47	50 V	elect
C310, 360	1-121-245-00	Ⓑ 1000	16 V	elect
C311, 361 C312, 362	1-121-726-00	Ⓐ 0.47	50 V	elect

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.		Description	
R620	⚠1-246-511-00	(A) 39 k	¼ W	carbon
R621	⚠1-246-469-00	680	¼ W	carbon (US, Canadian model)
R621	⚠1-246-470-00	(A) 750	¼ W	carbon (AEP, UK, E model)
R622	⚠1-217-156-00	(A) 0.22	5 W	wirewound
R623	⚠1-246-451-00	120	¼ W	carbon (US, Canadian model)
R623	⚠1-246-449-00	(A) 100	¼ W	carbon (AEP, UK, E model)
R624	⚠1-214-596-00	39 k	2 W	metal oxide (nonflammable) (US, Canadian model)
R624–626	⚠1-206-698-00	(A) 27 k	2 W	metal oxide (nonflammable) (AEP, UK, E model)
R701, 751	1-244-850-00	(A) 110	½ W	carbon
R705, 755	1-244-879-00	(A) 1.8 k	½ W	carbon
R708, 758	1-244-845-00	(A) 68	½ W	carbon
R709, 759	1-244-809-00	(A) 2.2	½ W	carbon
R801, 802	⚠1-217-570-00	(B) 2.2	5 W	metal oxide
R803	⚠1-217-312-00	150	5 W	wirewound (nonflammable) (US, Canadian model)
R803	⚠1-217-310-00	(B) 100	5 W	wirewound (nonflammable) (AEP, UK, E model)
R804	⚠1-217-347-00	(B) 150	7 W	wirewound (nonflammable) (AEP, UK, E model)
R805	⚠1-217-313-00	180	5 W	wirewound (nonflammable) (US, Canadian model)
R805	⚠1-217-309-00	(B) 82	5 W	wirewound (nonflammable) (AEP, UK, E model)
R901, 951	1-244-877-00	(A) 1.5 k	½ W	carbon
R902, 952	1-244-881-00	(A) 2.2 k	½ W	carbon
R904, 954	⚠1-207-640-00	(B) 470	2 W	wirewound (nonflammable)
R905, 955	1-244-865-00	(A) 470	½ W	carbon

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Circled letters ((A) to (Z)) are applicable to European models only.

Ref. No.	Part No.		Description
RT301, 351	1-224-251-XX	(C)	4.7 k, adjustable; dc balance
RT302, 352	1-224-255-XX	(C)	100 k, adjustable; dc bias
RT601	⚠1-224-642-XX	(B)	1 k, adjustable; dc voltage
RT901, 951	1-224-489-00	(B)	2.2 k, adjustable; meter level calibration
RV201, 251 RV205, 255	1-226-122-00	(K)	100 k/100 k/10 k/10 k, variable; ATTENUATOR
RV202, 252	1-226-120-00	(E)	100 k (N)/100 k (M), variable; BALANCE
RV203, 253	1-226-121-00	(F)	100 k (A)/100 k (A), variable; TREBLE
RV204, 254	1-226-119-00	(F)	100 k (C)/100 k (C), variable; BASS

SWITCHES

S1	1-552-238-00	(F)	Lever-slide; FUNCTION (1)
S2	1-552-241-00	(I)	Rotary, FUNCTION (2)
S3, 4	1-552-237-00	(F)	Lever-slide, MONITOR, TAPE COPY
S5	1-552-240-00	(G)	Rotary, MODE
S6, 7	1-552-236-00	(D)	Lever-slide, HIGH FILTER 9 kHz, LOW FILTER 15 HZ
S8	1-516-962-00	(C)	Lever-slide; MUTING
S9	1-552-239-00	(E)	Rotary, SPEAKER
S10	⚠1-552-141-00	(E)	Pushbutton, POWER (AEP, UK, E model)
S10	⚠1-552-246-00		Pushbutton, POWER (US, Canadian model)
VS1	⚠1-552-535-00	(C)	Voltage Selector (AEP, UK, E model)

JACKS

J101, 151 J102, 152	1-507-470-31	(C)	4 p Phono, PHONO1, PHONO 2 (HEAD AMP)
J103, 153 J105, 155	1-507-430-31	(D)	6 p Phono, TUNER, AUX 1, AUX 2
J106, 156 J109, 159	1-507-429-31	(D)	8 p Phono, TAPE 1, TAPE 2, REC OUT 1, REC OUT 2
J201, 202	1-507-502-00	(F)	Phone, TAPE 2, REC OUT 2
J301, 351 J302, 352	1-507-470-31	(C)	4 p Phono, POWER INPUT, PRE OUTPUT
J901	1-507-454-00	(C)	Phone, HEADPHONES

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.		Description
CNJ1	⚠1-509-546-11	(C)	Socket, 3 p; ~ AC IN (AEP, UK, E model)
CNJ801 –803	⚠1-526-574-00		Socket, 3 p; AC OUTLET (US, Canadian model)
CNP1	⚠1-551-511-11		Cord, power (US, Canadian model)
CP1	⚠1-231-326-11		Encapsulated Component (US model)
CP1	⚠1-231-341-00		Encapsulated Component (Canadian model)
F801	⚠1-532-272-XX		Fuse, 5A (US, Canadian model)
F801	⚠1-532-286-00	(B)	Fuse, 2.5AT (AEP model: up to serial No. 501, 150 / UK model: up to serial No. 600, 050 / E model: up to serial No. 400, 100)
F801	⚠1-532-237-00	(B)	Fuse, 3,15AT (AEP model: serial No. 501, 151 and later / UK model: serial No. 600, 051 and later / E model: serial No. 400, 101 and later)
F802	⚠1-532-496-00		Fuse, thermal; 10A 109°C (US, Canadian model)
F802	⚠1-532-505-00	(B)	Fuse, 5AT (AEP model: up to serial No. 501, 150 / UK model: up to serial No. 600, 050 / E model: up to serial No. 400, 100)
F802	⚠1-532-325-00	(B)	Fuse, 6.3AT (AEP model: serial No. 501, 151 and later / UK model: serial No. 600, 051 and later / E model: serial No. 400, 101 and later)
F803	⚠1-532-496-00	(C)	Fuse, thermal; 10A 109°C (AEP, UK, E model)

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: Circled letters ((A) to (Z)) are applicable to European models only.

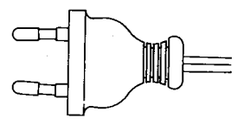
Ref. No.	Part No.		Description
ME901, 951	1-520-314-00	(K)	Meter, including PL801, 851
PL801, 851	1-518-273-00	(B)	Lamp, meter; included in ME901, 951
RY301, 351	1-515-257-00	(H)	Relay
RY801	⚠1-515-278-00	(F)	Relay
TM1, 2	1-535-057-00	(E)	Terminal Strip, 4 p push; SPEAKER A, SPEAKER B
	1-506-370-00	(B)	Plug, jumper
	1-509-848-00	(B)	Socket, transistor
	1-543-060-00	(E)	Core, bead

ACCESSORIES AND PACKING MATERIALS

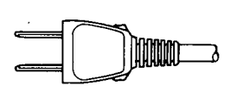
Part No.		Description
1-506-113-00	(B)	Shorting Plug
⚠1-534-754-00		Cord, power; parallel-blade plug (E model)
⚠1-534-819-00	(G)	Cord, power (UK model)
⚠1-551-216-00		Cord, power; euro-plug (E model)
3-701-020-00	(A)	Bag, check sheet
3-701-622-00	(A)	Bag, plastic (Canadian, UK model)
3-770-247-11	(E)	Manual, instruction (AEP, UK, E model)
3-770-247-21		Manual, instruction (US, Canadian model)
3-794-233-21		Sheet, consumer products (US model)
4-848-648-00	(B)	Bag, protection
4-851-860-00	(F)	Carton
4-851-861-00	(B)	Cushion

— Power Cord —

euro-plug



parallel-blade plug



1/4 WATT CARBON RESISTORS Ⓐ

Note: Circled letter Ⓐ is applicable to European models only.

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-576-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-577-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-578-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-579-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-580-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-581-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-582-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-583-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-584-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-585-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-586-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-587-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

HARDWARE NOMENCLATURE

Screw:

Nut, Washer, Retaining ring:

Reference Designation	Shape	Description	Remarks
SCREWS			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		braizer-head screw	

Reference Designation	Shape	Description	Remarks
SELF-TAPPING SCREWS			
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
SET SCREWS			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
NUT			
N		nut	
WASHERS			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
RETAINING RINGS			
E		retaining ring	
G		grip-type retaining ring	

9-958-431-11

Sony Corporation

78J0574-1
Printed in Japan