

TA-F 30

US Model
Canadian Model
AEP Model
UK Model



INTEGRATED STEREO AMPLIFIER

SPECIFICATIONS

GENERAL

Power Requirements: 120V ac, 60Hz (US, Canadian model)
220V ac ~, 50/60Hz (AEP model)
240V ac ~, 50/60Hz (UK model)


Power Consumption: 75W (US model)
120W (Canadian model)
190W (AEP model)
200W (UK model)

AC Outlets: 1 switched, 100W (at max.)
(US, Canadian model) 2 unswitched, total 100W (at max.)

Dimensions: Approx. 430(w) x 80(h) x 295(d) mm
17(w) x 3¹/₄ (h) x 11⁵/₈ (d) inches
including projecting parts and controls

Weight: Approx. 5.8kg (12 lb 13 oz), net
Approx. 6.7kg (14 lb 12 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 SCHEMATIQUES, 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.

— Continued on page 2 —

SONY
SERVICE MANUAL

AMPLIFIER SECTION

Power Output and Total

Harmonic Distortion: With 8Ω loads, both channels driven, from 20 – 20,000Hz; rated 30W per channel minimum RMS power, with no more than 0.05% total harmonic distortion from 250mW to rated output.

Continuous RMS Power

Output: At 1kHz
 (Less than 0.05% THD, both channels driven simultaneously) 30W + 30W (8Ω)
 (AEP, UK model) According to DIN 45500 30W + 30W (8Ω)

Power Bandwidth: 20 – 20,000Hz (AEP, UK model) (IHF)

Harmonic Distortion: Less than 0.05% at rated output
 Less than 0.05% at 10W output

Intermodulation (IM)

Distortion: Less than 0.02% at rated output
 (60Hz:7kHz = 4:1) Less than 0.02% at 1W output

Frequency Response: PHONO RIAA equalization curve ±0.3dB
 TUNER }
 AUX } 5 – 60,000Hz +0 dB
 TAPE } -2 dB

Residual Noise: Less than 100μV (8Ω, Network A)
Damping Factor: 40 (8Ω, 1kHz)

Inputs:

	Sensitivity	Impedance	Maximum Input capability (0.1% distortion, 1kHz)	S/N (weighting network, input level)
PHONO	2.5mV (-50dB)	50kΩ	220mV	80dB (A, 2.5mV)
TUNER AUX TAPE	140mV (-15dB)	50kΩ	-	100dB (A, 140mV)

Outputs:

	Voltage	Impedance
REC OUT	140mV (-15dB)	4.7kΩ
SPEAKER A,B	Accepts speakers of 8 – 16Ω	
HEADPHONES	Accepts low and high impedance headphones	

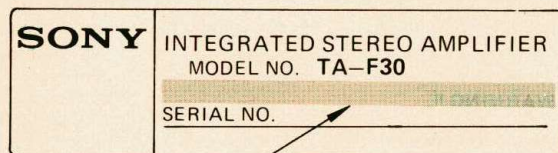
Tone Controls: BASS ±10dB at 70Hz (turnover frequency: 400Hz)
 TREBLE ±10dB at 30kHz (turnover frequency: 3kHz)

Loudness: +8dB at 100Hz, +4dB at 10kHz (att. 30dB)

0 dB = 0.775 V

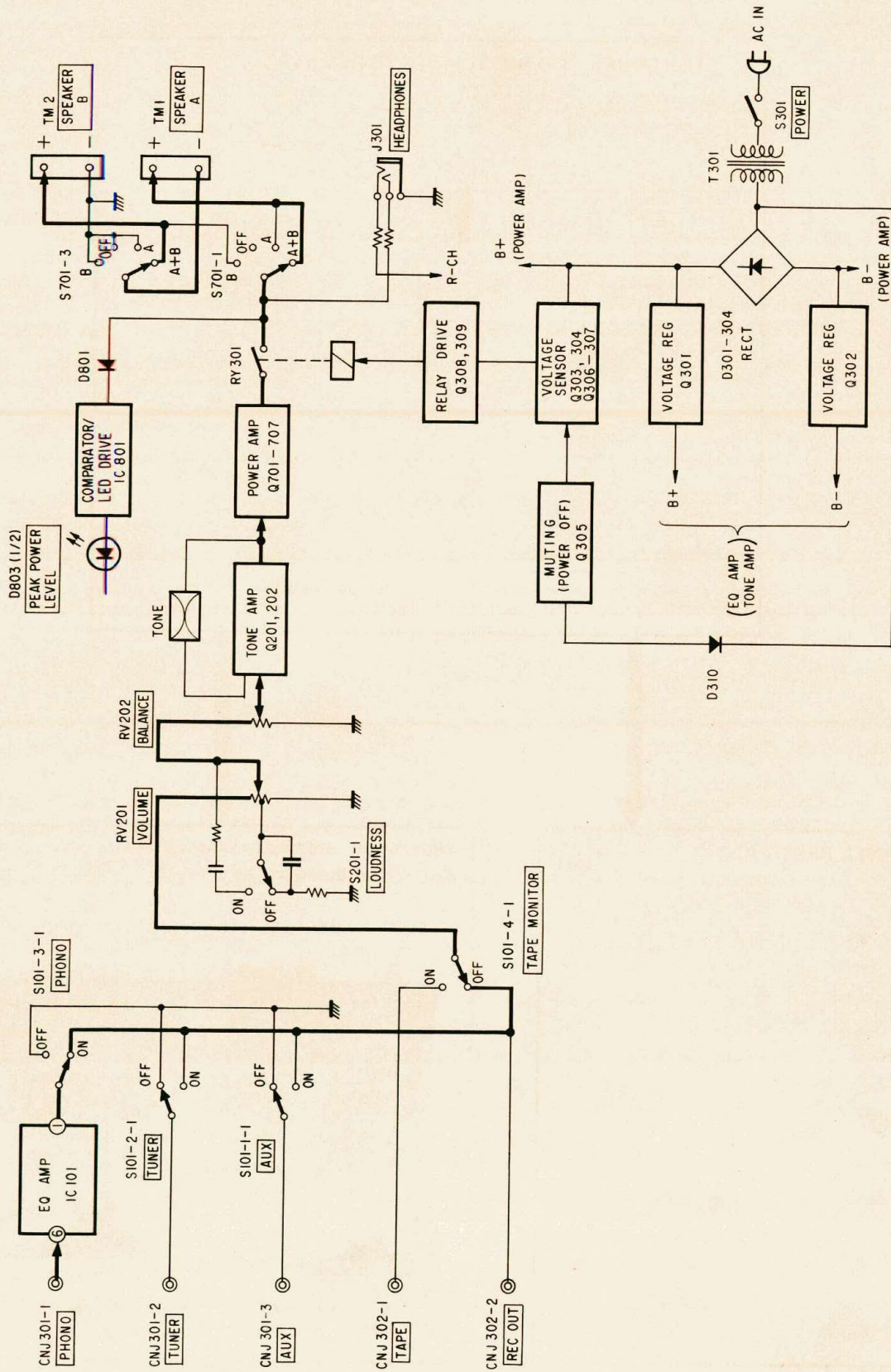
MODEL IDENTIFICATION

– Specification Label –



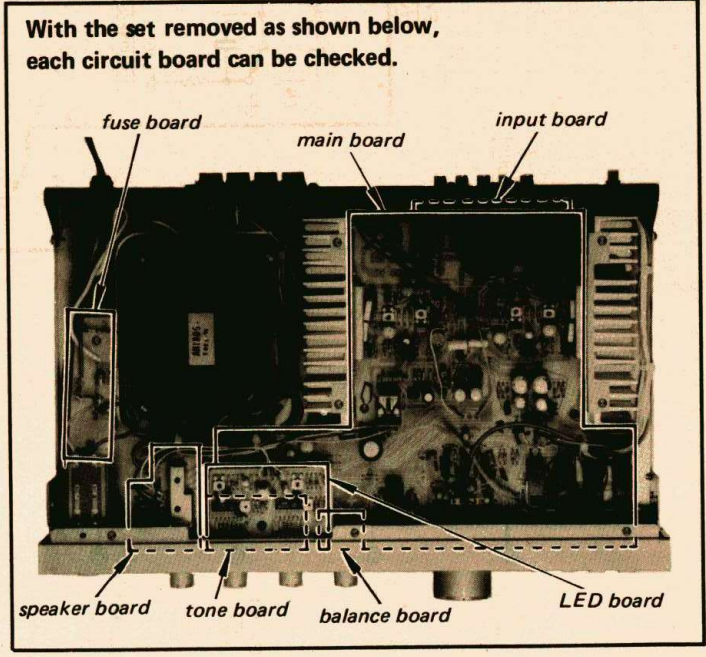
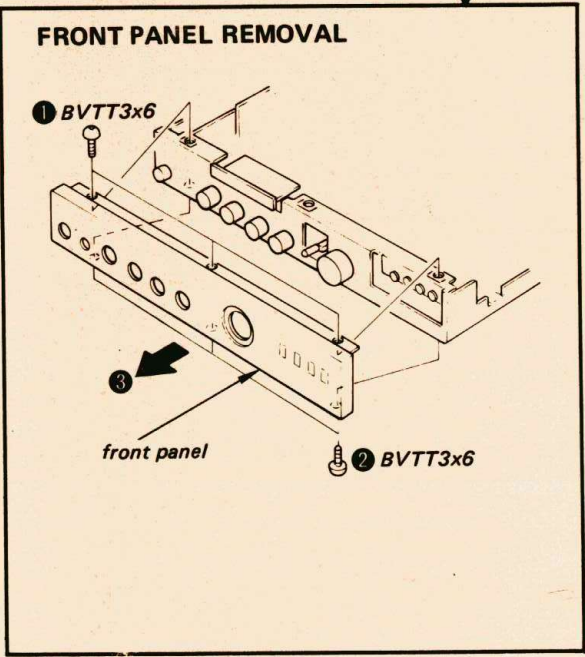
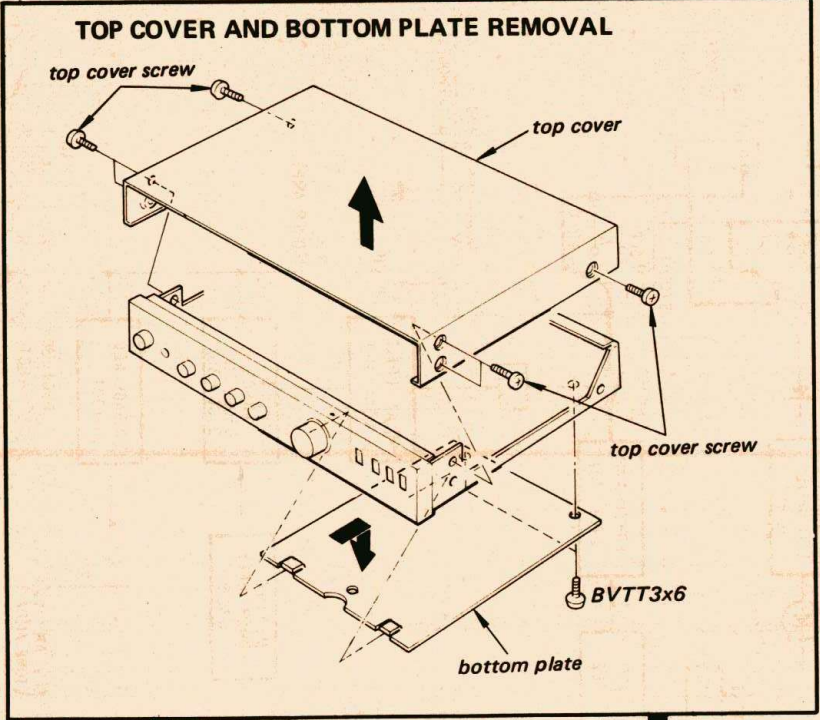
- US model : AC 120V 60Hz 75W
- Canadian model : AC 120V 60Hz 120W
- AEP model : AC 220V ~50/60Hz 190W
- UK model : AC 240V ~50/60Hz 200W

SECTION 1 BLOCK DIAGRAM



SECTION 2 DISASSEMBLY

- Follow the disassembly procedure in the numerical order given.



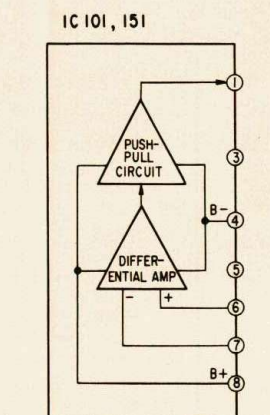
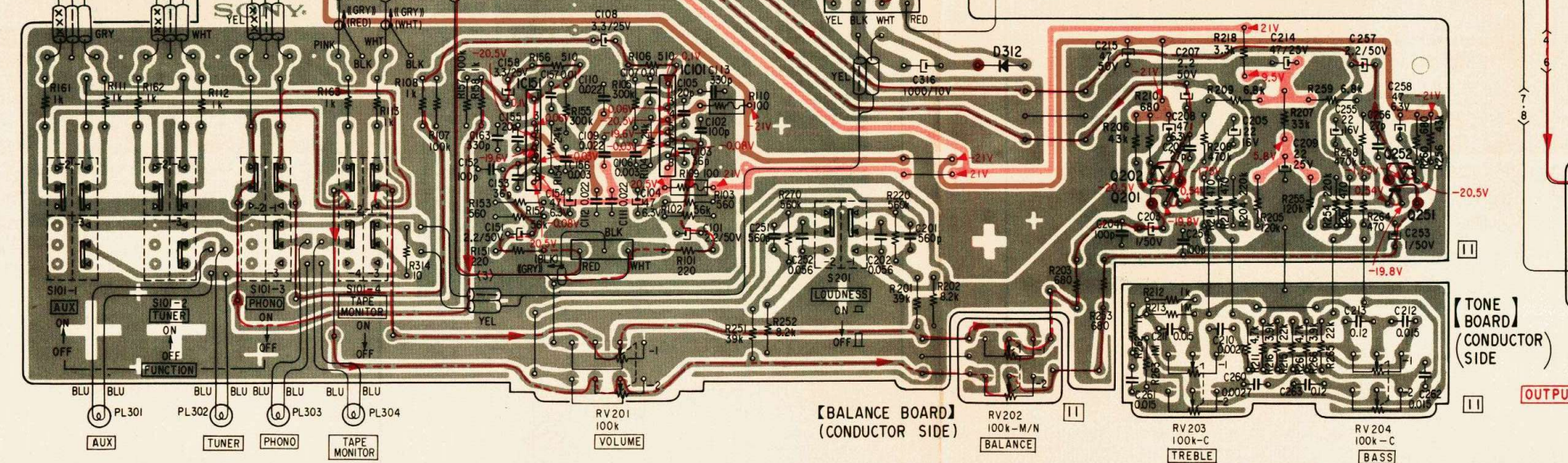
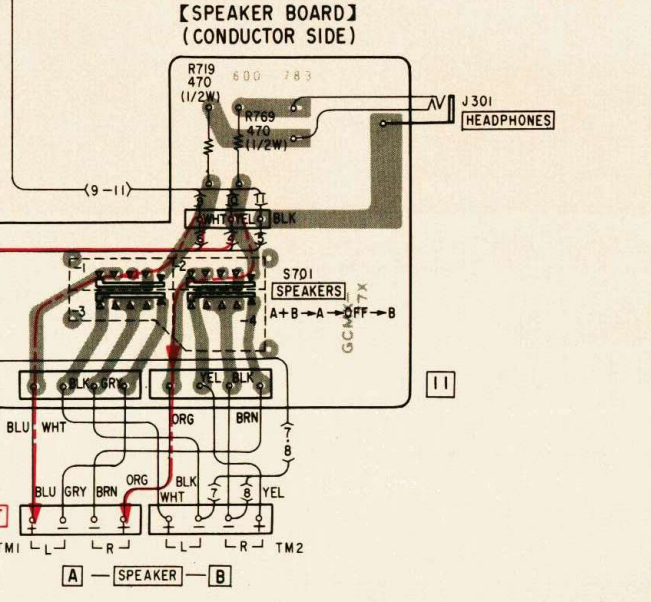
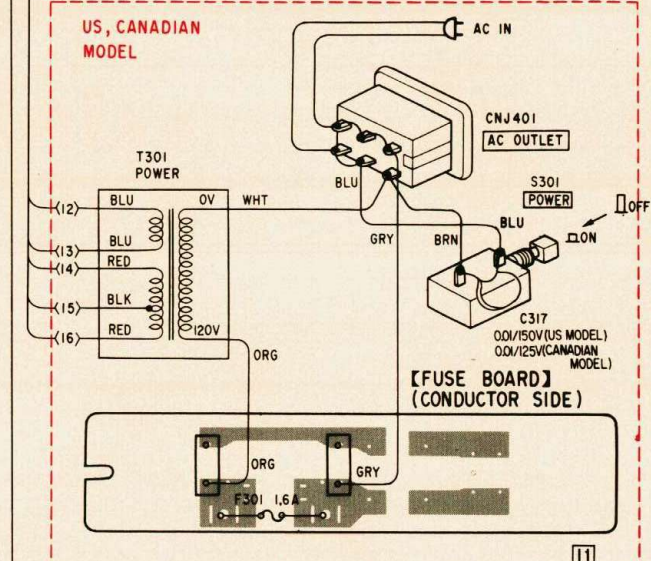
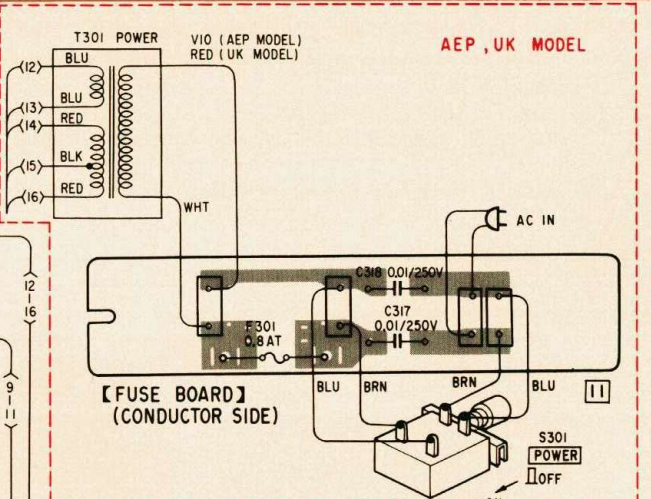
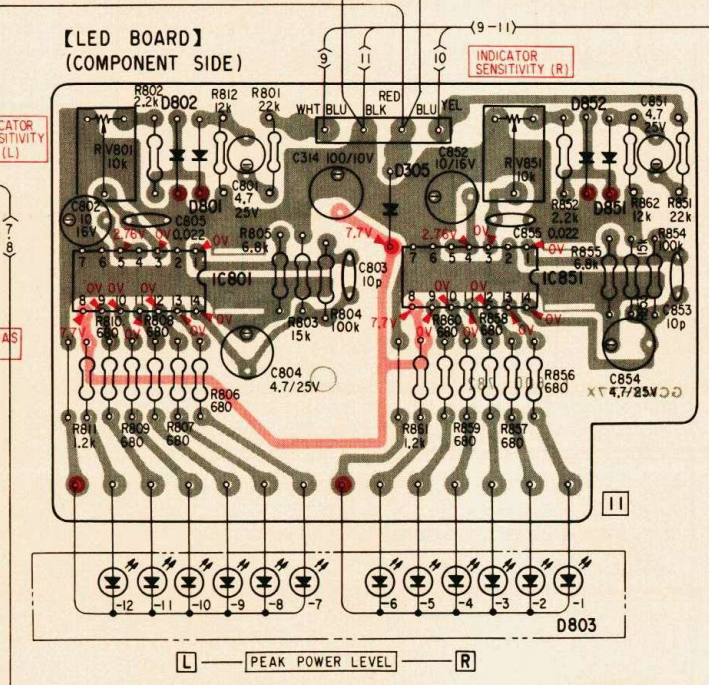
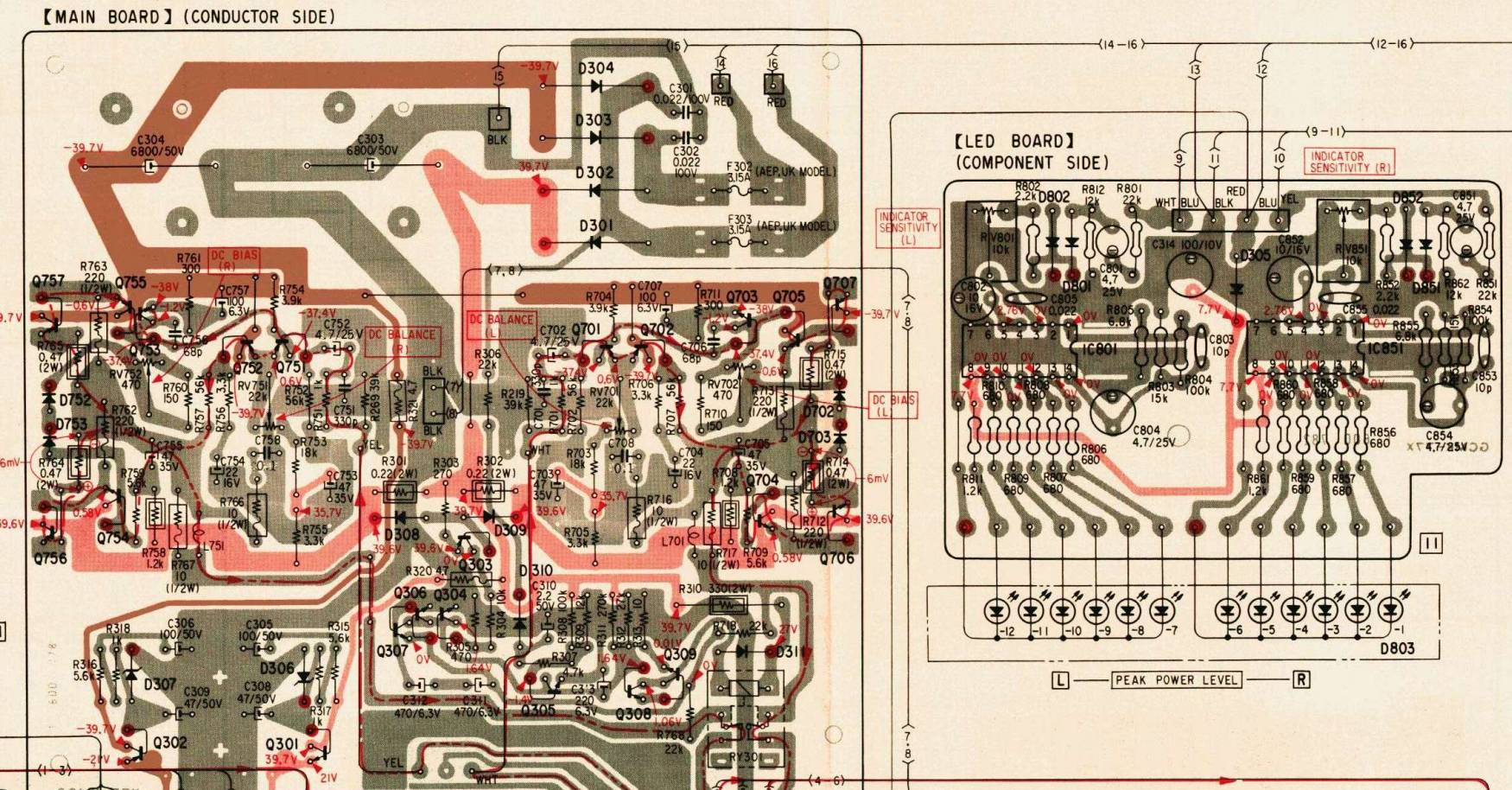
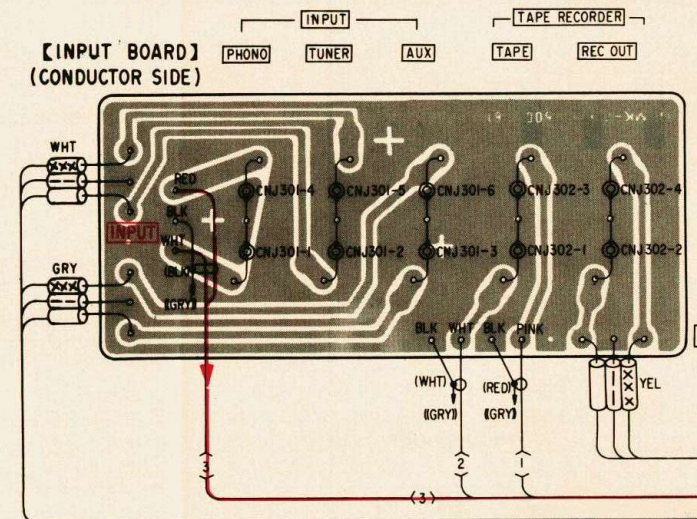
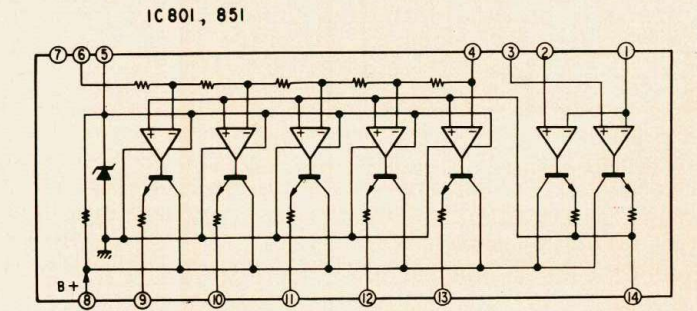
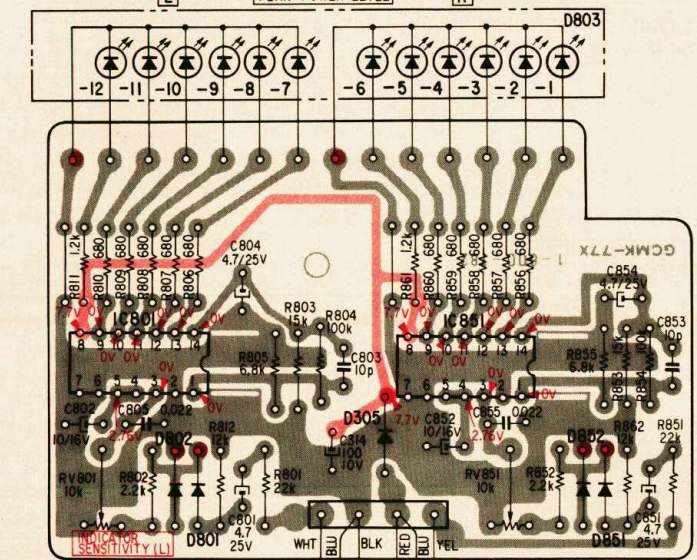
SECTION 4 DIAGRAMS

4-1. MOUNTING DIAGRAM

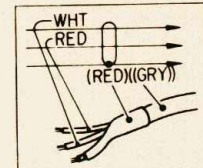
Replacement Semiconductors: See page 7.

IC	IC801	IC851
D	802,801	803 305 852,851

Q	757	755	752	751	301	307,306,304	303	305	701	702	703	705	707	IC801	202	201	IC851	252	251	Q
IC	756	754	302			IC151		IC101	308	309	704	706								IC
D	752	307			306	308	309	310	304,303	302,301	311	702	703	312	802,801	803	305		852,851	D



- Color code of sleeving over the end of the jacket.
- Signal Path
 - : L-CH
 - - - : R-CH
 - : L-CH or R-CH
- B + pattern
- B - pattern



SECTION 3 ADJUSTMENTS

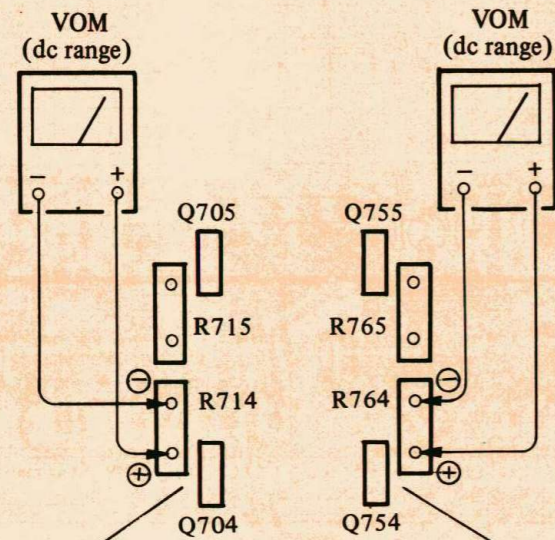
Note:

1. DC bias and DC balance adjustments should be made several minutes later after the POWER switch is turned on (POWER ON).
2. Make DC bias adjustment first.
3. Repeat DC bias and DC balance adjustments two or three times.
4. After replacing the power transistors, DC bias and DC balance adjustments should be made.

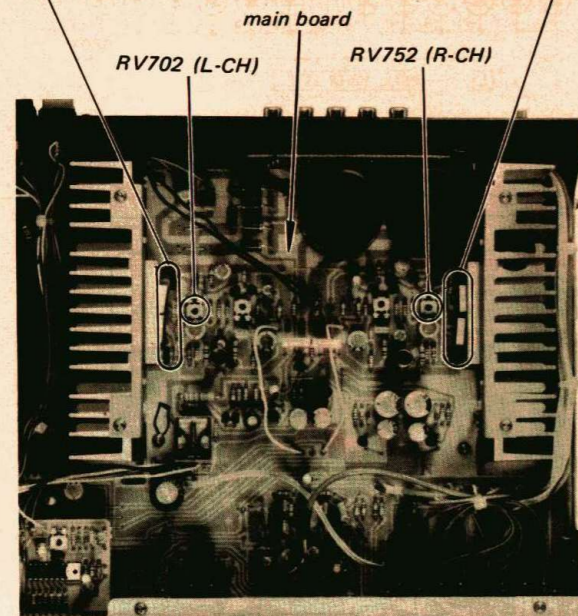
DC Bias Adjustment (With no signal input)

-L-CH-
Adjust RV702 for 6mV dc reading on VOM.

-R-CH-
Adjust RV752 for 6mV dc reading on VOM.



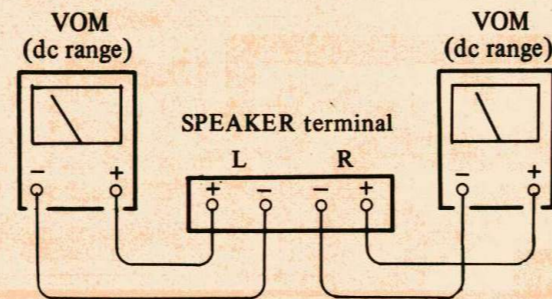
Adjustment Location:



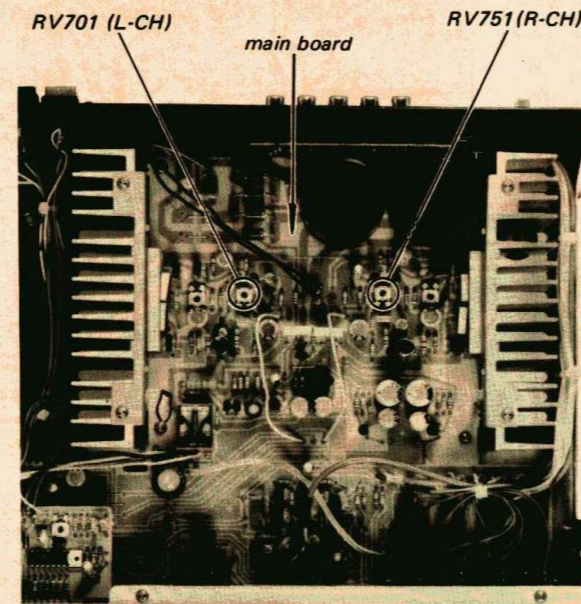
DC Balance Adjustment (With no signal input)

-L-CH-
Adjust RV701 for 0V dc reading on VOM.

-R-CH-
Adjust RV751 for 0V dc reading on VOM.

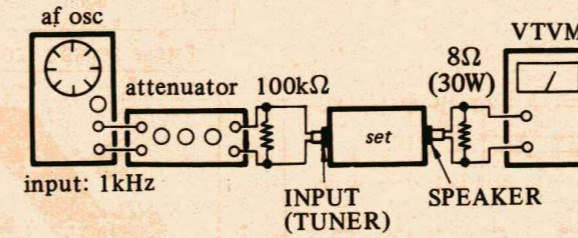


Adjustment Location:

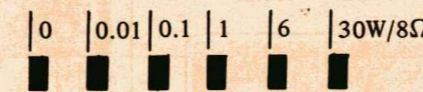


Indicator Sensitivity Adjustment

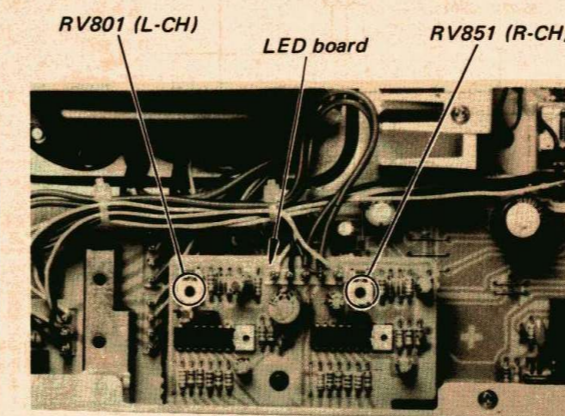
Procedure:



1. Turn the VOLUME control fully clockwise.
2. Adjust the input level of the set for 30W (15.5V) reading on the VTVM.
3. Adjust RV801 (L-CH) and RV851 (R-CH) so that the PEAK POWER LEVEL indicators of 30W and less light.



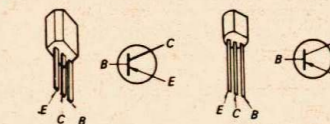
Adjustment Location:



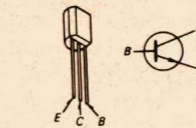
Replacement Semiconductors

For replacement, use semiconductors except in ().

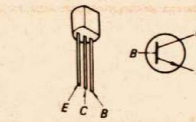
Q201, 251: 2SA1027R (2SA750E)
Q303: 2SA1027R (2SA733P)



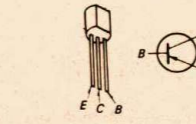
Q202, 252: 2SC1364 (2SC1222E)
Q304-308: 2SC1364 (2SC945P)



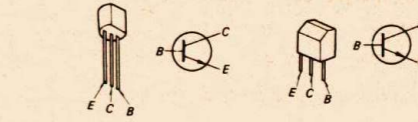
Q301, 309: 2SC1475 (2SC2002L)



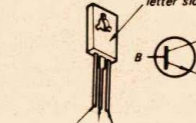
Q302: 2SA684 (2SA953L)
Q701, 751 } 2SA684 (2SA640E)
Q702, 752 }



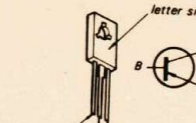
Q703, 753: 2SC1811 (2SC1940L)



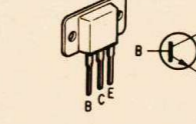
Q704, 754: 2SD414 (2SD414R)



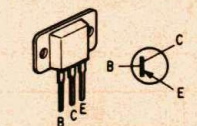
Q705, 755: 2SB548 (2SB548R)



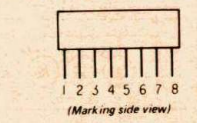
Q706, 756: 2SD586 (2SD586R)



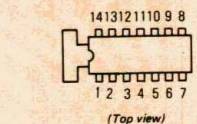
Q707, 757: 2SB616 (2SB616R)



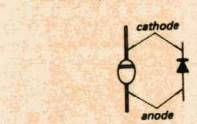
IC101, 151: HA1457



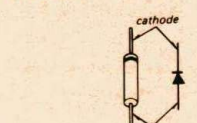
IC801, 851: LB1416



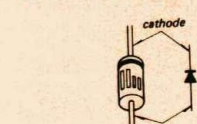
D301-304: U05G (30D2)



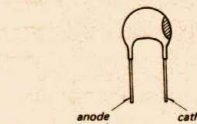
D305, 311 } 10E2 (1N4002)
D312 }
D308, 309: 1S1555 (1SS53)
D310: 1SS54
D801, 851 } 1T22AM (1S188)
D802, 852 }



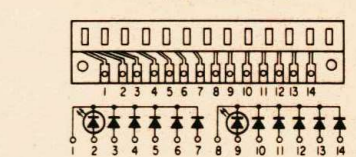
D306, 307: EQB01-22 (RD22EB)



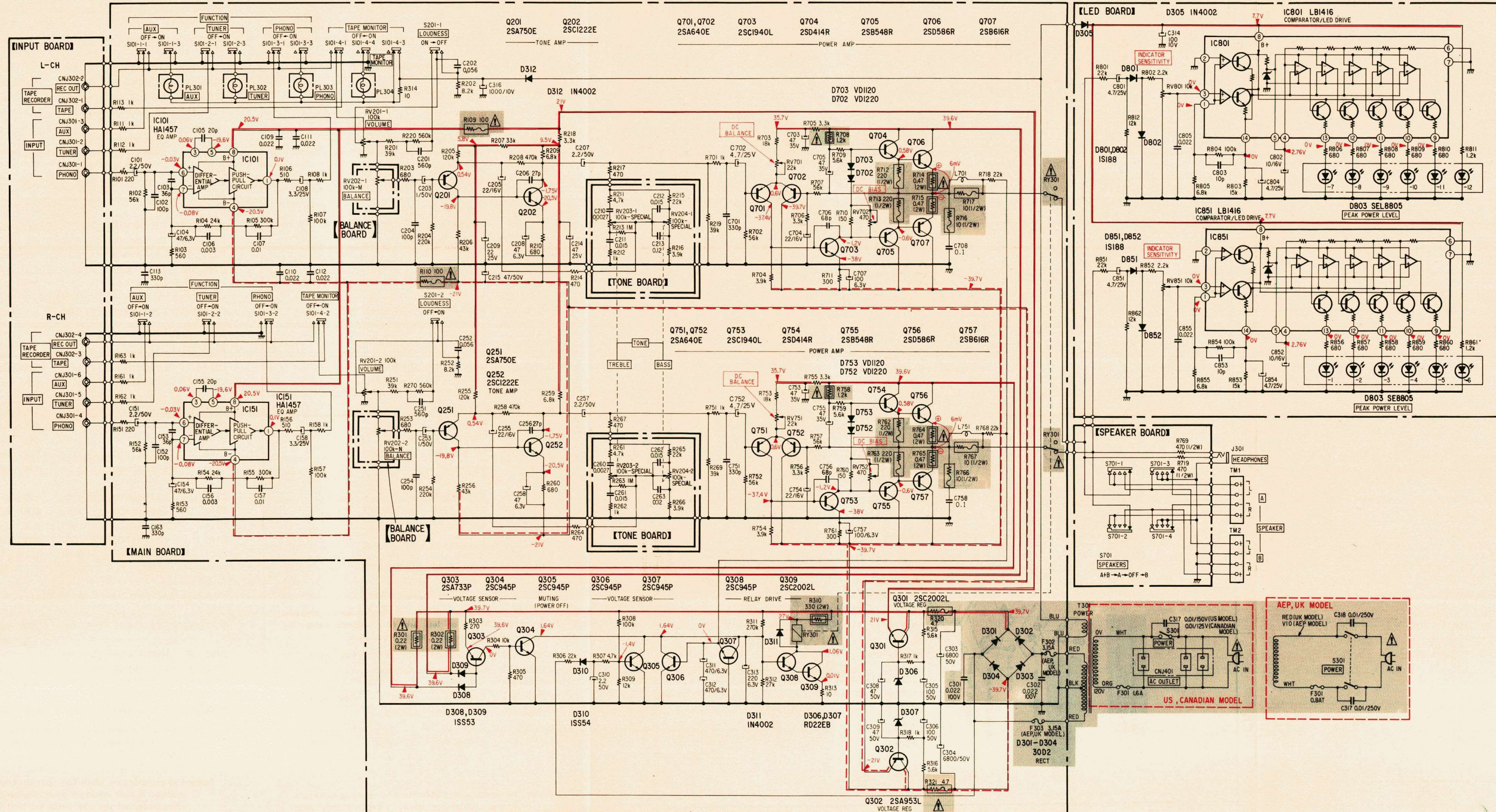
D702, 752: VD1220
D703, 753: VD1120



D803: SEL8805



4-2. SCHEMATIC DIAGRAM



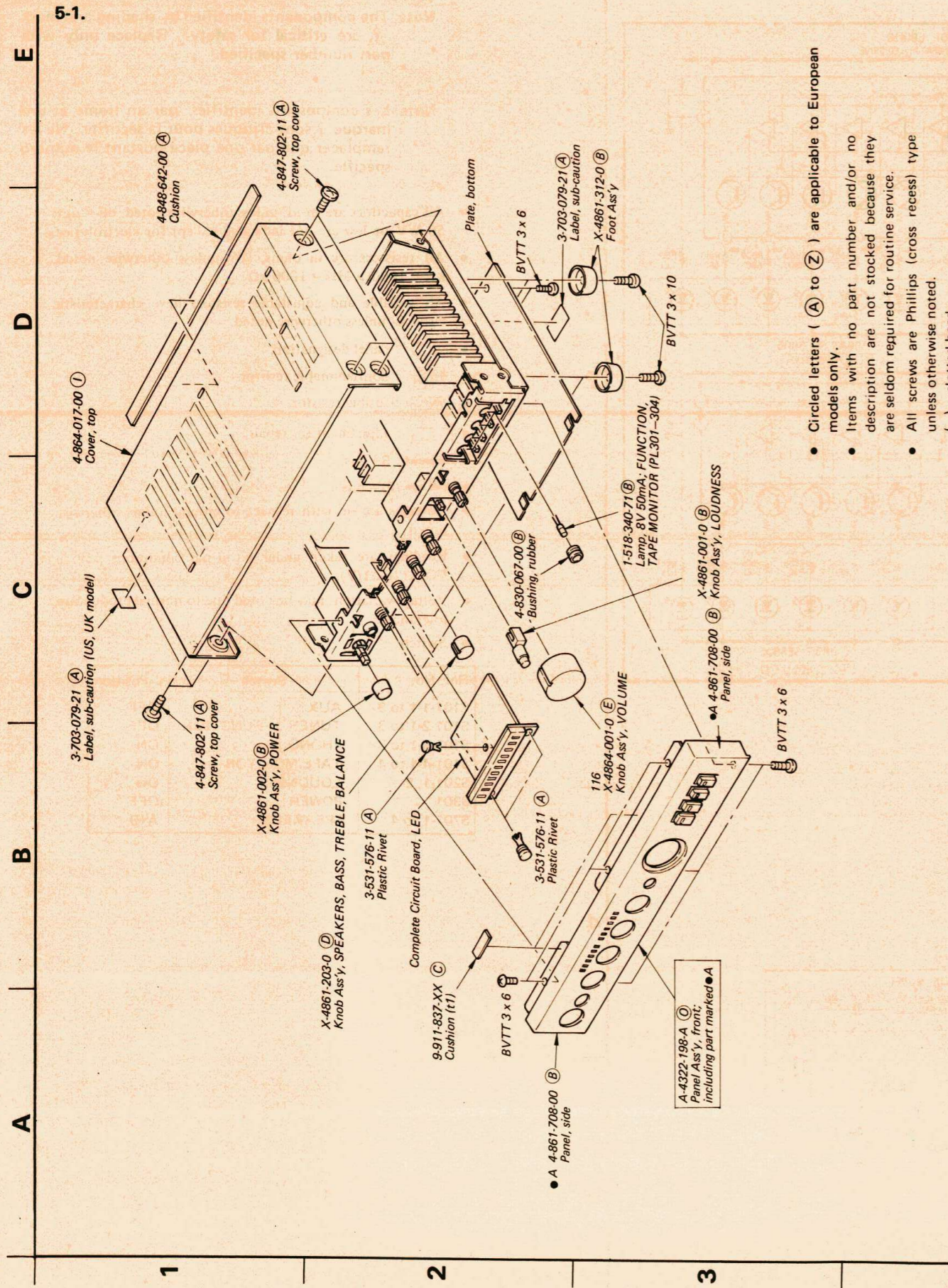
Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

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

- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F}$ 50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms, $\frac{1}{4}\text{W}$ unless otherwise noted. $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000 \text{k}\Omega$
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : panel designation.
- : nonflammable resistor.
- : fusible resistor.
- : adjustment for repair.
- : B+ bus.
- : B- bus.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no signal conditions with a VOM (20k Ω /V).
- Voltage variations may be noted due to normal production tolerances.
- Switch

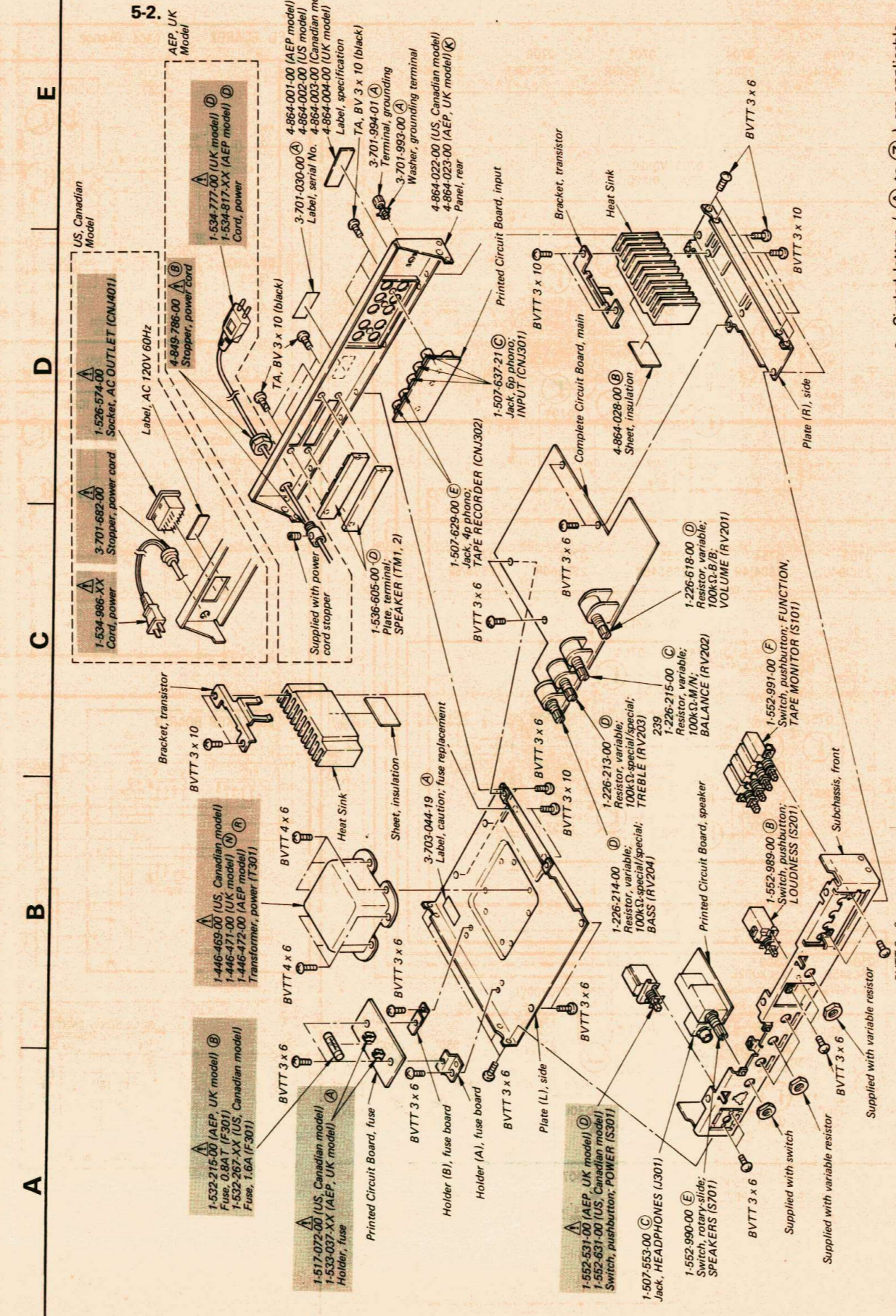
Ref. No.	Switch	Position
S101-1-1 to 3	AUX TUNER PHONO	OFF
S101-2-1 to 3		OFF
S101-3-1 to 3		ON
S101-4-1 to 4	TAPE MONITOR LOUDNESS	ON
S201-1, 2		ON
S301	POWER	OFF
S701-1 to 4	SPEAKERS	A+B
		A
		B
		OFF

SECTION 5
EXPLODED VIEWS



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

SECTION 6
ELECTRICAL PARTS LIST



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

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

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

Ref. No.	Part No.	Description
SEMICONDUCTORS		
Transistors		
⇒ Q201, 251	8-729-612-77	(B) 2SA1027R
⇒ Q202, 252	8-729-663-47	(C) 2SC1364
⇒ Q301	8-760-413-10	(B) 2SC1475
⇒ Q302	8-729-468-43	(C) 2SA684
⇒ Q303	8-729-612-77	(B) 2SA1027R
⇒ Q304-308	8-729-663-47	(C) 2SC1364
⇒ Q309	8-760-413-10	(B) 2SC1475
⇒ Q701, 751	8-729-468-43	(C) 2SA684
⇒ Q702, 752	8-729-468-43	(C) 2SA684
⇒ Q703, 753	8-765-012-20	(C) 2SC1811
⇒ Q704, 754	8-729-141-43	(B) 2SD414
⇒ Q705, 755	8-729-154-83	(B) 2SB548
⇒ Q706, 756	1-800-911-11	2SD586
⇒ Q707, 757	1-800-907-11	2SB616
IC101, 151	8-759-314-57	(C) HA1457
IC801, 851	8-759-814-16	(F) LB1416
⇒ D301-304	8-719-911-55	(B) UOSG
⇒ D305	8-719-200-02	(B) 10E2
⇒ D306, 307	8-719-931-22	(B) EQB01-22
⇒ D308, 309	8-719-815-55	(B) 1S1555
D310	1-800-913-11	1SS54
⇒ D311, 312	8-719-200-02	(B) 10E2
D702, 752	8-719-122-00	(B) VD1220
D703, 753	8-719-112-01	(A) VD1120
⇒ D801, 851	8-719-422-21	(B) 1T22AM
⇒ D802, 852	8-719-422-21	(B) 1T22AM
D803	8-719-388-05	(H) SEL8805
CAPACITORS		
All capacitors are in μF and ceramic unless otherwise noted. 50WV or less are not indicated except for electrolytics. p = μF , elect = electrolytic		
C101, 151	1-121-450-00	(A) 2.2 50V elect
C102, 152	1-102-973-00	(A) 100p
C103, 153	1-102-940-00	(A) 3p
C104, 154	1-123-306-00	(B) 47 6.3V elect
C105, 155	1-102-958-00	(A) 20p
C106, 156	1-108-566-00	(B) 0.003 mylar

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

Ref. No.	Part No.	Description
C107, 157	1-108-579-00	(A) 0.01 mylar
C108, 158	1-121-392-00	(A) 3.3 25V elect
C109, 110	1-108-242-00	(A) 0.022 mylar
C111, 112	1-101-005-00	(A) 0.022
C113, 163	1-102-820-00	(A) 330p
C201, 251	1-102-115-00	(A) 560p
C202, 252	1-108-597-00	(A) 0.056 mylar
C203, 253	1-121-391-00	(A) 1 50V elect
C204, 254	1-102-973-00	(A) 100p
C205, 255	1-121-479-00	(A) 22 16V elect
C206, 256	1-102-961-00	(A) 27p
C207, 257	1-121-450-00	(A) 2.2 50V elect
C208, 258	1-123-306-00	(B) 47 6.3V elect
C209	1-121-480-00	(A) 22 25V elect
C210, 260	1-108-565-00	(B) 0.0027 mylar
C211, 261	1-108-583-00	(A) 0.015 mylar
C212, 262	1-108-583-00	(A) 0.015 mylar
C213, 263	1-108-605-00	(B) 0.12 mylar
C214	1-121-410-00	(B) 47 25V elect
C215	1-121-411-00	(B) 47 50V elect
C301, 302	1-108-381-00	(B) 0.022 100V mylar
C303, 304	1-125-202-00	(F) 6800 50V elect
C305, 306	1-121-417-00	(B) 100 50V elect
C308, 309	1-121-411-00	(B) 47 50V elect
C310	1-121-450-00	(B) 2.2 50V elect
C311, 312	1-121-424-00	(B) 470 6.3V elect
C313	1-121-419-00	(B) 220 6.3V elect
C314	1-123-307-00	(B) 100 10V elect
C316	1-123-311-00	(A) 1000 10V elect
C317	1-161-519-00	0.01 150V (US model)
C317	1-161-518-00	0.01 125V (Canadian model)
C317, 318	1-130-196-00	(D) 0.01 250V polyethylene (AEP, UK model)
C701, 751	1-102-820-00	(A) 330p
C702, 752	1-121-395-00	(A) 4.7 25V elect
C703, 753	1-121-653-00	(B) 47 35V elect
C704, 754	1-121-479-00	(A) 22 16V elect

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

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

• Circled letters (A to Z) are applicable to European models-only.

Ref. No.	Part No.	Description
C705, 755	1-121-653-00 (B) 47	35V elect
C706, 756	1-101-888-00 (A) 68p	
C707, 757	1-121-413-00 (A) 100	6.3V elect
C708, 758	1-108-603-00 (A) 0.1	mylar
C801, 851	1-121-395-00 (A) 4.7	25V elect
C802, 852	1-121-651-00 (A) 10	16V elect
C803, 853	1-102-954-00 (A) 10p	
C804, 854	1-121-395-00 (A) 4.7	25V elect
C805, 855	1-108-242-00 (A) 0.022	mylar

RESISTORS

All resistors are in ohms. Common ¼W carbon resistors are omitted. Refer to the list on the last page for their part numbers. kΩ : 1000 Ω.

R109, 110	⚠1-212-881-00 (A) 100	¼W fusible
R301, 302	⚠1-217-151-00 (B) 0.22	2W wirewound (nonflammable)
R310	⚠1-206-652-00 (A) 330	2W metal-oxide (nonflammable)
R320, 321	⚠1-212-849-00 (A) 4.7	¼W fusible
R708, 758	⚠1-211-940-00 (C) 1.2k	¼W carbon (nonflammable)
R712, 762	⚠1-212-990-00 (A) 220	½W fusible
R713, 763		
R714, 764	⚠1-217-153-00 (A) 0.47	2W metal plate (nonflammable)
R715, 765		
R716, 766	⚠1-212-958-00 (A) 10	½W fusible
R717, 767		
R719, 769	1-244-865-00 (A) 470	½W carbon
RV201	1-226-618-00 (D) 100k-B/B, variable; VOLUME	
RV202	1-226-215-00 (C) 100k-M/N, variable; BALANCE	
RV203	1-226-213-00 (D) 100k-special/special, variable; TREBLE	
RV204	1-226-214-00 (D) 100k-special/special, variable; BASS	
RV701, 751	1-226-237-00 (B) 20k-B, adjustable; dc balance	
RV702, 752	1-226-232-00 (B) 500-B, adjustable; dc bias	
RV801, 851	1-226-236-00 (A) 10k-B, adjustable; indicator sensitivity	

SWITCHES

S101	1-552-991-00 (F) Pushbutton, FUNCTION, TAPE MONITOR
S201	1-552-989-00 (B) Pushbutton, LOUDNESS
S301	⚠1-552-531-00 (D) Pushbutton, POWER (APE, UK model)
S301	⚠1-552-631-00 Pushbutton, POWER (US, Canadian model)

Ref. No.	Part No.	Description
S701	1-552-990-00 (E) Rotary-slide, SPEAKERS	

MISCELLANEOUS

CNJ301	1-507-637-21 (C) Jack, 6p, phono; INPUT
CNJ302	1-507-629-00 (E) Jack, 4p phono; TAPE RECORDER
CNJ401	⚠1-526-574-00 Socket, AC OUTLET (US, Canadian model)
F301	⚠1-532-215-00 (B) Fuse, 0.8AT (AEP, UK model)
F301	⚠1-532-267-XX Fuse, 1.6A (US, Canadian model)
F302, 303	⚠1-532-237-00 (B) Fuse, 3.15A (AEP, UK model)
J301	1-507-553-00 (C) Jack, HEADPHONES
PL301-304	1-518-340-71 (B) Lamp, 8V 50mA; FUNCTION, TAPE MONITOR
RY301	⚠1-515-316-00 (D) Relay
T301	⚠1-446-469-00 Transformer, power (US, Canadian model)
T301	⚠1-446-471-00 (N) Transformer, power (UK model)
T301	⚠1-446-472-00 (R) Transformer, power (AEP model)
TM1, 2	1-536-605-00 (D) Plate, terminal; SPEAKER

⚠1-517-072-00	Holder, fuse (US, Canadian model)
⚠1-533-037-XX (A)	Holder, fuse (AEP, UK model)
⚠1-534-777-00 (D)	Cord, power (UK model)
⚠1-534-817-XX (D)	Cord, power (AEP model)
⚠1-534-986-XX	Cord, power (US, Canadian model)

ACCESSORIES AND PACKING MATERIALS

Part No.	Description
3-701-630-00	(A) Bag, plastic; instruction manual
3-770-944-11	(D) Manual, instruction (AEP, UK model)
3-770-944-21	Manual, instruction (US model)
3-770-944-21	Manual, instruction (Canadian model)
3-794-551-31	
3-794-233-21	Sheet, consumer products (US model)
4-864-024-00	(D) Carton (AEP model)
4-864-025-00	(B) Cushion
4-864-027-00	(D) Carton (US, Canadian, UK model)
4-891-037-00	(B) Bag, plastic; set

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

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

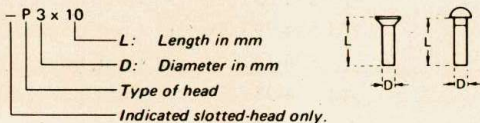
1/4 WATT CARBON RESISTORS [Ⓐ]

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	1-246-476-00	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	1-246-477-00	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	1-246-478-00	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	1-246-479-00	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	1-246-480-00	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	1-246-481-00	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	1-246-482-00	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	1-246-483-00	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	1-246-484-00	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	1-246-485-00	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	1-246-486-00	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	1-246-487-00	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		

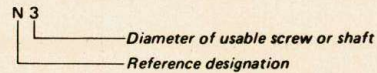
HARDWARE NOMENCLATURE

Screw:



Indicated slotted-head only.
Unless otherwise indicated, it means cross-recessed head (Phillips type).

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	