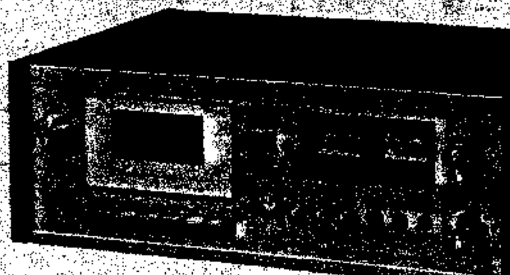
TC-204SD

675

E Model
UK Model
AEP Model

E Model



AEP and UK Model

STEREO CASSETTE DECK

SPECIFICATIONS

Power requirements: 100, 110, 120, 127, 220 or 240 V ac, 50/60 Hz (E and AEP Model)
240 V ac, 50 Hz (UK Model)

Power consumption: 8 W

Recording system: 4-track 2-channel stereo

Tape speed: 4.8 cm/s (1-7/8 ips)

Fast forward and rewind time: Approx. 90 seconds (by C-60)

Record Bias frequency: 105 kHz

Signal to noise ratio: DOLBY NR OFF
With Ferri-Chrome Cassette
59 dB at peak level (NAB)
50 dB (DIN)
With chromium dioxide cassette
55 dB at peak level (NAB)
With regular cassette
53 dB at peak level (NAB)
DOLBY NR ON
Improved 5 dB at 1 kHz, 10 dB above 5 kHz

Total harmonic distortion: 1.7 %

Frequency response: DOLBY NR OFF
With Ferri-Chrome Cassette and chromium dioxide cassette
20-16,000 Hz (NAB)
40-15,000 Hz ±3 dB (NAB)
40-15,000 Hz (DIN)
With regular cassette
20-14,000 Hz (NAB)
40-12,000 Hz (DIN)

Wow and flutter: 0.09 % (RMS, weighted NAB)
±0.2 % (DIN)

Inputs: MIC (phone jacks) 2
sensitivity −72 dB (0.2 mV)
for low-impedance microphone
LINE IN (stereo binaural jack) 1
(phono jacks) 2
sensitivity −22 dB (0.06 V)
input impedance 100 kΩ

Outputs: LINE OUT (phono jacks) 2
output level 0 dB (0.775 V)
at load impedance 100 kΩ
with LINE OUT level control at "10"
suitable load impedance more than 10 kΩ
HEADPHONES 1
suitable load impedance 8 Ω

Record/playback connector: Input impedance less than 10 kΩ
Output impedance less than 10 kΩ

Dimensions: Approx. 430(w) x 160(h) x 325(d) mm
16 7/8 (w) x 6 1/4 (h) x 12 3/4 (d) inches

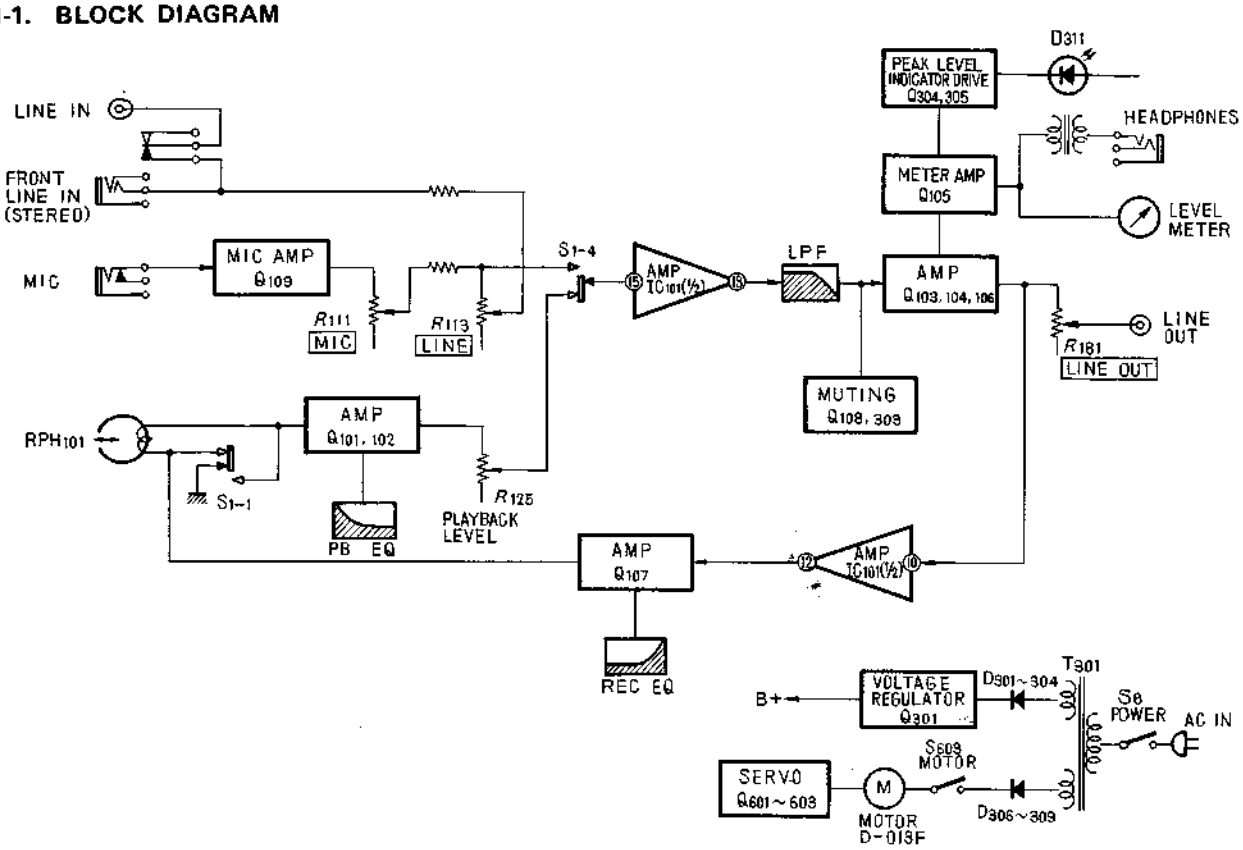
Weight: Approx. 8 kg (17 lb 10 oz)

SONY

SERVICE MANUAL

SECTION 1
OUTLINE

1-1. BLOCK DIAGRAM



1-2. NOTES ON THE MOLDED CHASSIS

The TC-204SD uses a molded chassis. The following notes should be taken in serving the set.

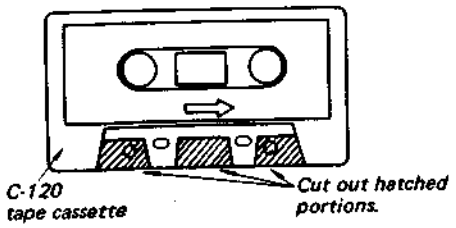
1) Use the Diamond Oil No. 440 or equivalent.
2) Use the SONY Grease No. SG-101 or equivalent.
3) Do not tighten PTPWH washer-head self-tapping screws excessively. Use larger-size (larger diameter) screws when the screw holes of the molded chassis becomes loose.
4) The spring which winds round the capstan-shaft bearing should contact between the reel-table frame and the pinch roller for the chassis-grounding purpose.

SECTION 2
ADJUSTMENT

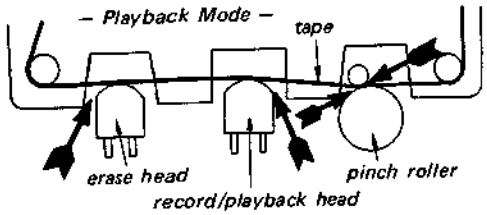
2-1. MECHANICAL ADJUSTMENTS

Head Height Adjustment

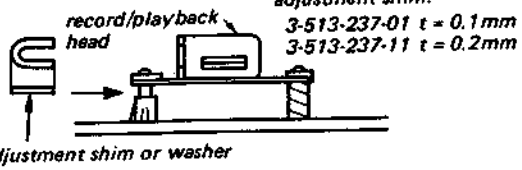
1. Make an adjustment cassette as shown below.



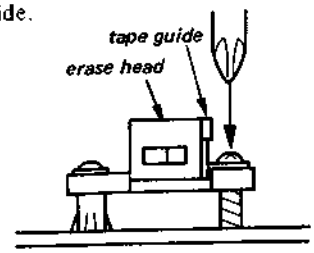
2. Viewing from the top, tape curl and tape bends should not exist at the arrowed portions.



3. When a tape curl exists at the record/playback head, adjust the head height by using adjustment shim or washer.



4. When a tape curl exists at the erase head, adjust the head height by adjusting the screw at the tape guide side.



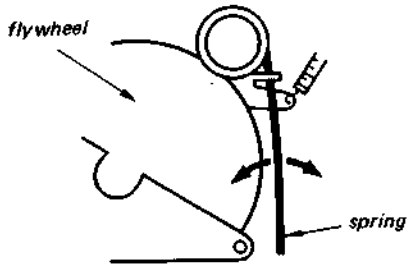
5. After the adjustment, fix the adjusted screw.

Fast Forward and Rewind Torque Adjustment

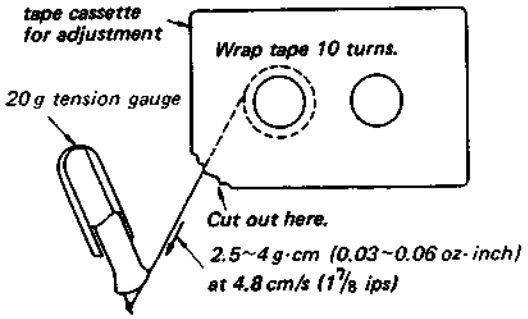
Specification:

Fast Forward and Rewind: 55–95 g·cm
(0.77–1.32 oz·inch)

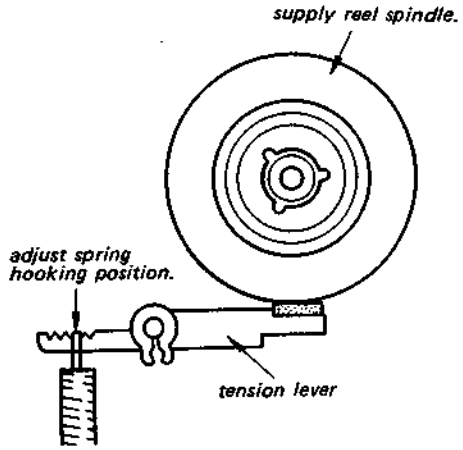
If necessary, bend the spring as shown below.



Back Tension Torque Adjustment
– Playback and PAUSE modes –



Unplug power cord and adjust spring hooking position to obtain the specified value.



2-2. ELECTRICAL ADJUSTMENTS AND MEASUREMENTS

PRECAUTION

1. Clean the following parts with an alcohol moistened swab:
   * record/playback head
   * erase head
   * capstans
   * pinch rollers
   * rubber belts
   * idlers
2. Demagnetize record/playback head with a head demagnetizer.
3. Do not use magnetized screwdriver for adjustments.
4. After the adjustments, apply a small amount of a locking compound to the parts adjusted.
5. The adjustments should be performed in the order arranged in this service manual.
6. The adjustments and the measurements should be performed for both L-CH and R-CH with rated power supply voltage unless otherwise specified.
7. The record and playback level adjustments should be carefully performed.
8. Tapes required:
   1) blank tapes (completely erased with bulk eraser)
      SONY CS-10 (HF)
      CS-20 (CrO_2) with two extra holes
      CS-30 (Fe-Cr)
   2) test tapes
      SONY P-4-A81S (6.3 kHz, -10 dB)
      P-4-A82 (10 kHz, -10 dB)
      P-4-L81 (333 Hz, 0 dB)
      WS-48 (3 kHz, 0 dB)
9. The switches and the controls should be set as follows unless otherwise specified.

DOLBY NR switch:	OFF
LIMITER switch:	OFF
LINE control:	MIN
MIC control:	MIN
TAPE SELECT switch:	NORMAL
LINE OUT control:	MAX

10. Standard record:
    Supply the specified input signal level to the input jack and set the MIC or LINE control to obtain the specified output signal level. Set the LINE control to MIN when MIC input is used or set MIC control to MIN when LINE IN is used.

Normal Input Level

	MIC	LINE IN
source impedance	300 Ω	10 kΩ
input level	−60 dB (0.77 mV)	−10 dB (0.25 V)

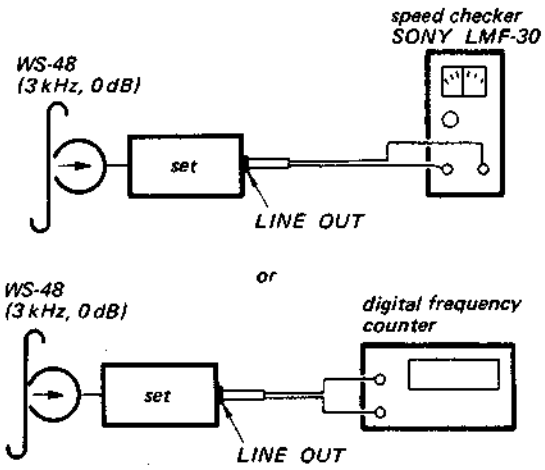
Normal Output Level

	LINE OUT
load impedance	100 kΩ
output level	0 dB (0.775 V)

1. Tape Speed Adjustment

Procedure:

Mode: Playback



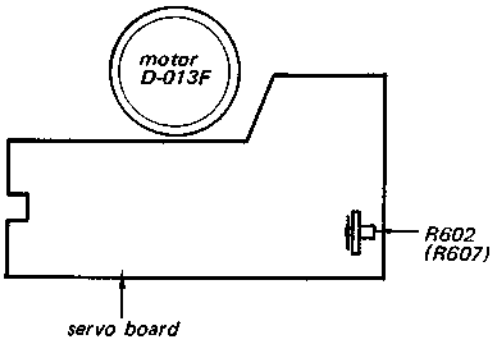
Adjust R602 (R607) to obtain specified value.

Specification:

speed checker	digital frequency counter
−1 ~ +1 %	2,970 ~ 3,030 Hz

Frequency difference between beginning and end of tape should be within ± 1 % (30 Hz).

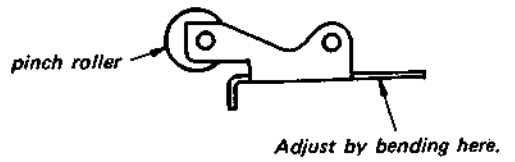
Adjustment Location:



R607: Serial No. 17651 and later (E Model)
Serial No. 15651 and later (AEP Model)
Serial No. 17151 and later (UK Model)

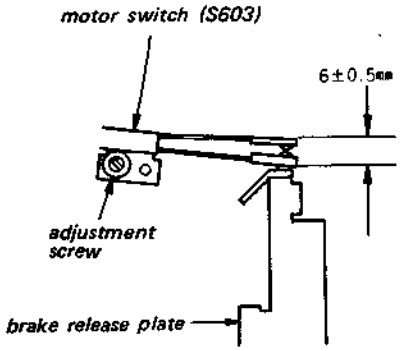
PAUSE Timing Adjustment
– Stop Mode –

1. The take-up reel and the pinch roller should stop at the same time. If necessary, bend the spring as shown below.



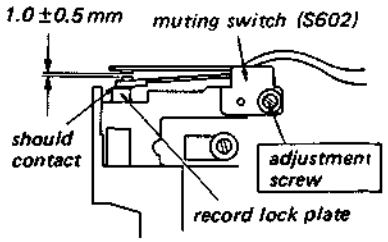
Motor Switch (S603) Position Adjustment
– Stop Mode –

1. Loosen the adjustment screw and adjust the switch position so that the switch leafs becomes 6 ± 0.5 mm ($13/32$") as show below.
2. After the adjustment, secure the screw with a suitable looking compound.



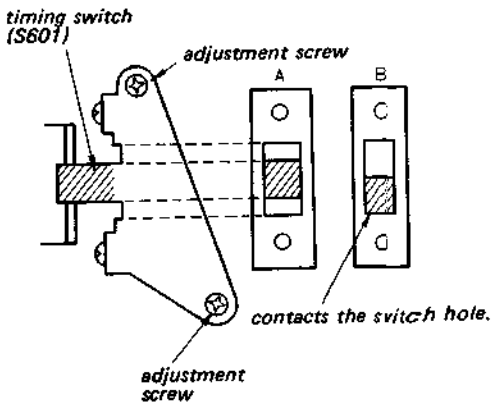
Muting Switch (S602) Position Adjustment
– Stop Mode –

1. Loosen the adjustment screw and adjust the switch position so that the gap of the switch contacts becomes 1.0 ± 0.5 mm.



Timing Switch (S601) Position Adjustment
– Stop Mode –

1. Loosen the adjustment screws and adjust the position of the timing switch circuit board so that the muting lever just contacts the switch hole and the switch starts to move.
2. After the adjustment, secure the screws with a locking compound.

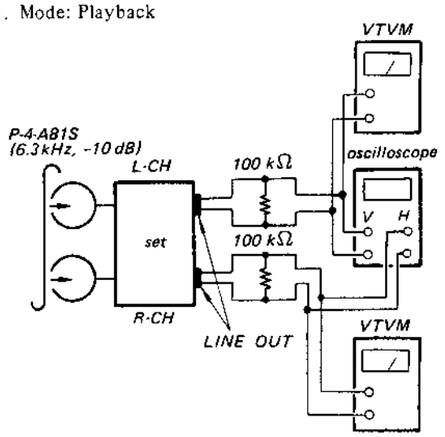


MEMO

2. Record/playback Head Azimuth Adjustment

Procedure:

1. Mode: Playback

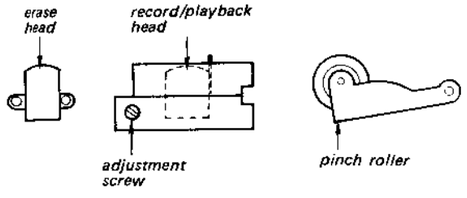


2.

Adjust	Oscilloscope patterns
azimuth adjustment screw to obtain the in-phase pattern around the highest VTVM readings.	[Allowance] in-phase (L) (R) ~ 90° out-of-phase (L) (R) Level drop should be within 0.5 dB.

3. Assure that LINE OUT level difference does not change when the mode is changed from playback to stop several times.

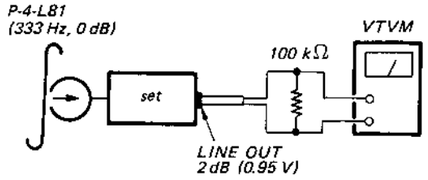
4. After adjustment, apply locking compound to the screw.



3. Playback Level Adjustment

Procedure:

1. Mode: Playback



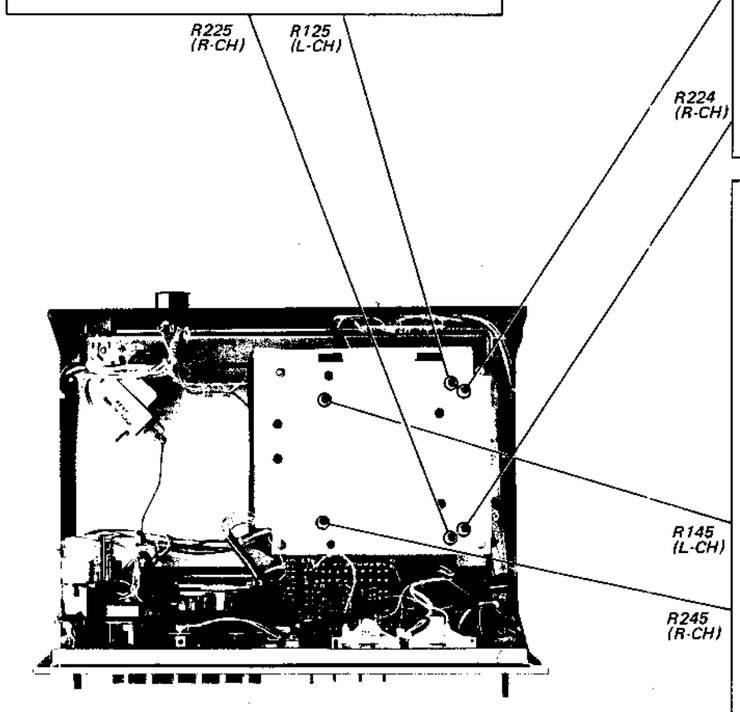
Adjust R125 (L-CH) and R225 (R-CH) to obtain 2 dB (0.95 V) VTVM reading.

2. Assure that the LINE OUT level does not change when the mode is changed from playback to stop several.times.

Specification:

LINE OUT level: 1.5 ~ 2.5 dB (0.92 ~ 1.05 V)

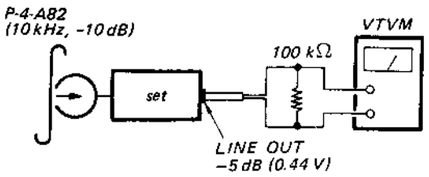
Level difference between channels: less than 1 dB



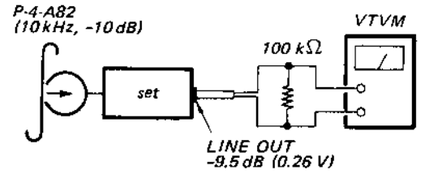
4. Playback Equalizer Adjustment

Procedure:

1. Mode: Playback
TAPE SELECT switch: NORMAL



2. Mode: Playback
TAPE SELECT switch: CrO₂ or Fe-Cr



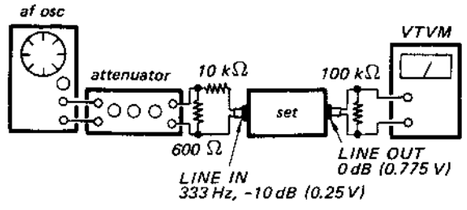
Adjust R124 (L-CH) and R224 (R-CH) to obtain the LINE OUT voltage 2.5–6.5 dB lower than that obtained in step 1 above.

Note: If R124 and R224 are moved too much, repeat the playback level adjustment on page 7.

5. VU Meter Calibration

Procedure:

1. Mode: Standard record (See page 6.)



2. Adjust R145 (L-CH) and R245 (R-CH) to make OVU indication.

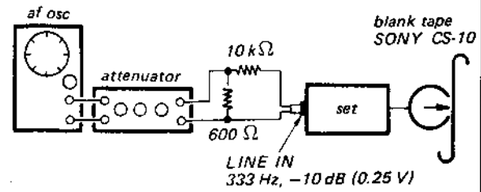
Specification:

VU meter	VTVM reading
0 dB	-0.5 ~ 0.5 dB

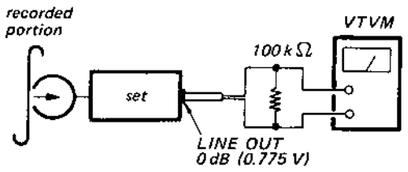
6. Record Level Adjustment

Procedure:

1. Mode: Standard record (See page 6 .)



2. Mode: Playback

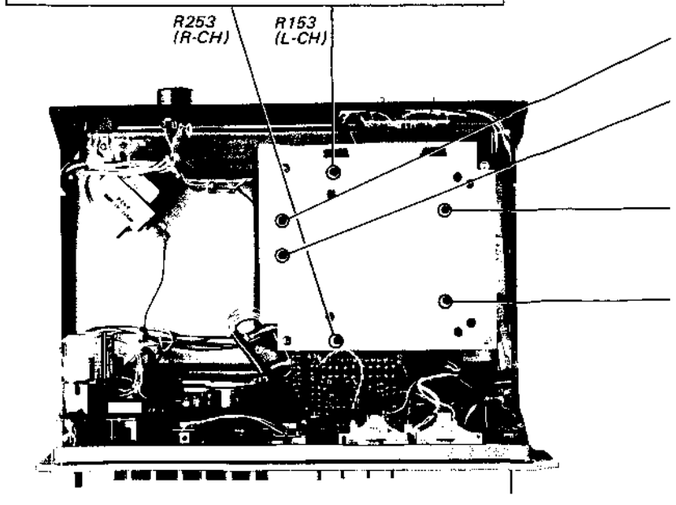


Adjust R153 (L-CH) and R253 (R-CH) to obtain 0 dB (0.775 V) VTVM reading.

3. Change the blank tape to CS-20 and CS-30, and perform the same record and playback procedure. Measure LINE OUT level.

Specification:

SONY tape	LINE OUT level
CS-10	-0.5 ~ +0.5 dB (0.74 ~ 0.84 V)
CS-20	
CS-30	

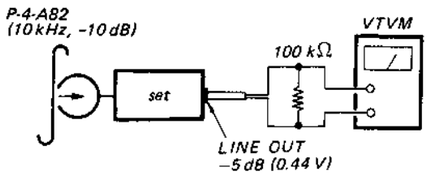


TC-204SD

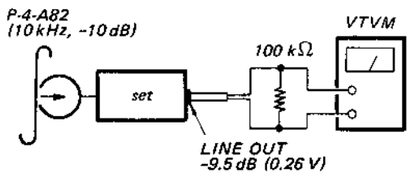
4. Playback Equalizer Adjustment

Procedure:

1. Mode: Playback
   TAPE SELECT switch: NORMAL



2. Mode: Playback
   TAPE SELECT switch: CrO_2 or Fe-Cr



R124 (L-CH)

R224 (R-CH)

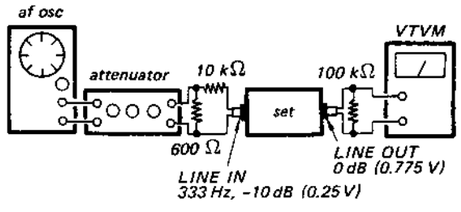
Adjust R124 (L-CH) and R224 (R-CH) to obtain the LINE OUT voltage 2.5–6.5 dB lower than that obtained in step 1 above.

Note: If R124 and R224 are moved too much, repeat the playback level adjustment on page 7.

5. VU Meter Calibration

Procedure:

1. Mode: Standard record (See page 6.)



R145 (L-CH)

R245 (R-CH)

2. Adjust R145 (L-CH) and R245 (R-CH) to make OVU indication.

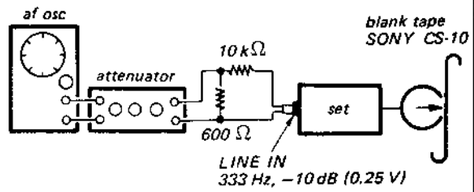
Specification:

VU meter	VTVM reading
0 dB	-0.5 ~ 0.5 dB

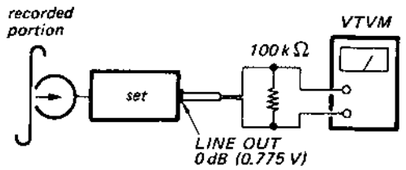
6. Record Level Adjustment

Procedure:

1. Mode: Standard record (See page 6 .)



2. Mode: Playback



Adjust R153 (L-CH) and R253 (R-CH) to obtain 0 dB (0.775 V) VTVM reading.

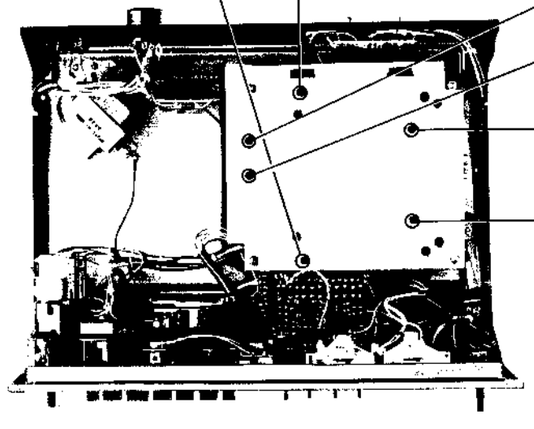
3. Change the blank tape to CS-20 and CS-30, and perform the same record and playback procedure. Measure LINE OUT level.

Specification:

SONY tape	LINE OUT level
CS-10	-0.5 ~ +0.5 dB (0.74 ~ 0.84 V)
CS-20	
CS-30	

R253 (R-CH)

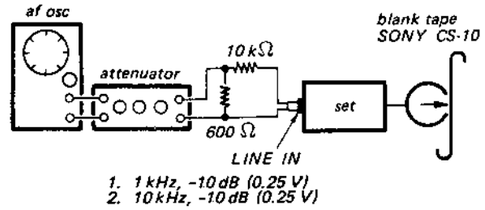
R153 (L-CH)



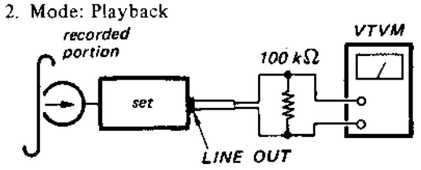
7. Record Bias Adjustment

Procedure:

1. Mode: Standard record (See page 6 .)



2. Mode: Playback



Adjust C154 (L-CH) and C254 (R-CH) to obtain 10 kHz-signal level 0.5 dB lower than that of 1 kHz.

Note: When 10 kHz output level is too low, turn the trimmer capacitor counter-clockwise.

Specification: 10 kHz signal level is 0 dB ± 1 dB lower than that of 1 kHz signal.

C154 (L-CH)

C254 (R-CH)

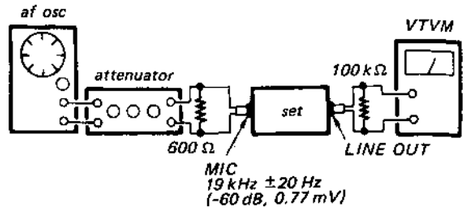
L105 (L-CH)

L205 (R-CH)

8. 19 kHz Filter Adjustment

Procedure:

1. Mode: Standard record (See page 6 .)



Adjust L105 (L-CH) and L205 (R-CH) for minimum VTVM reading.

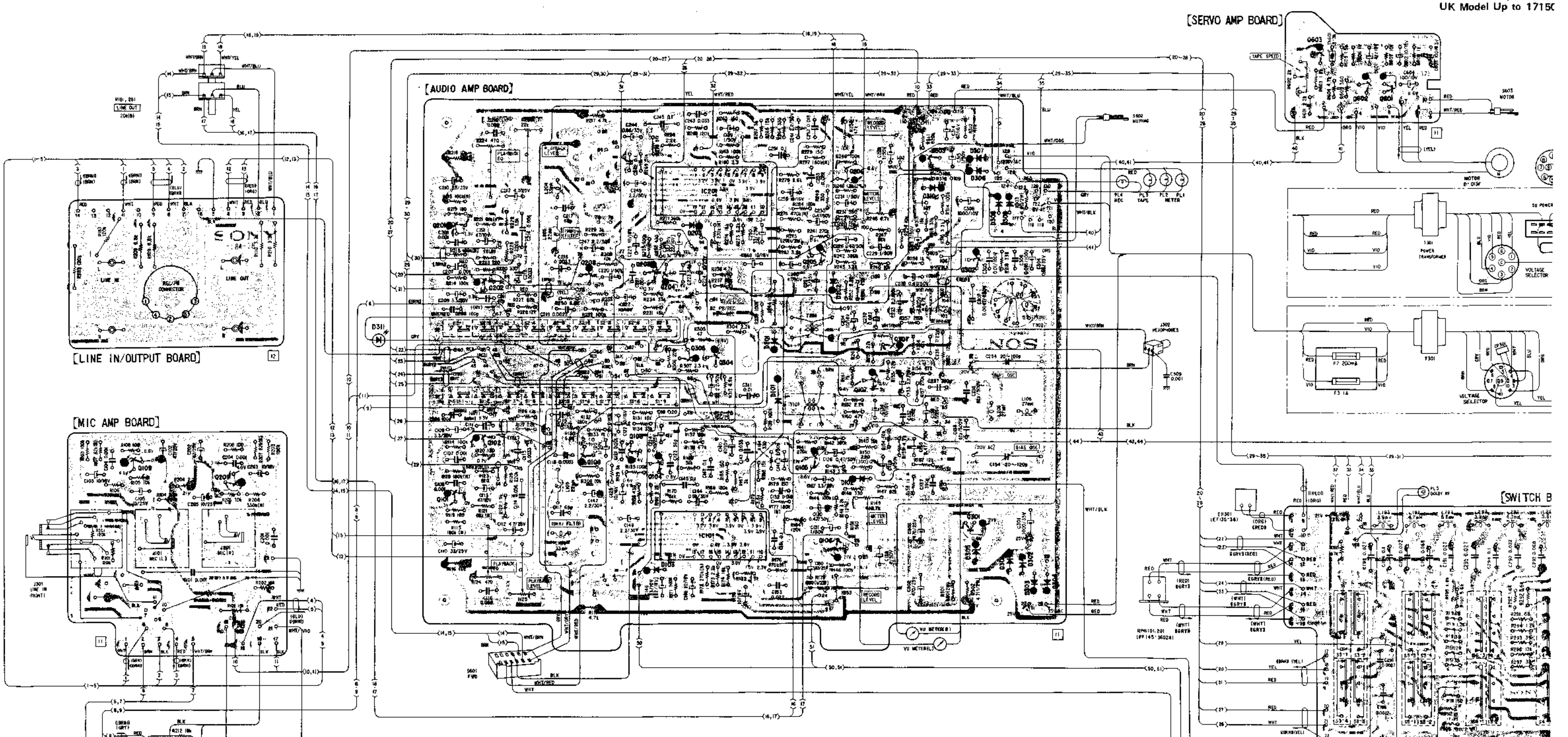
SECTION 3
DIAGRAMS

3-1. MOUNTING DIAGRAM

– Conductor Side –

Note:
B + pattern

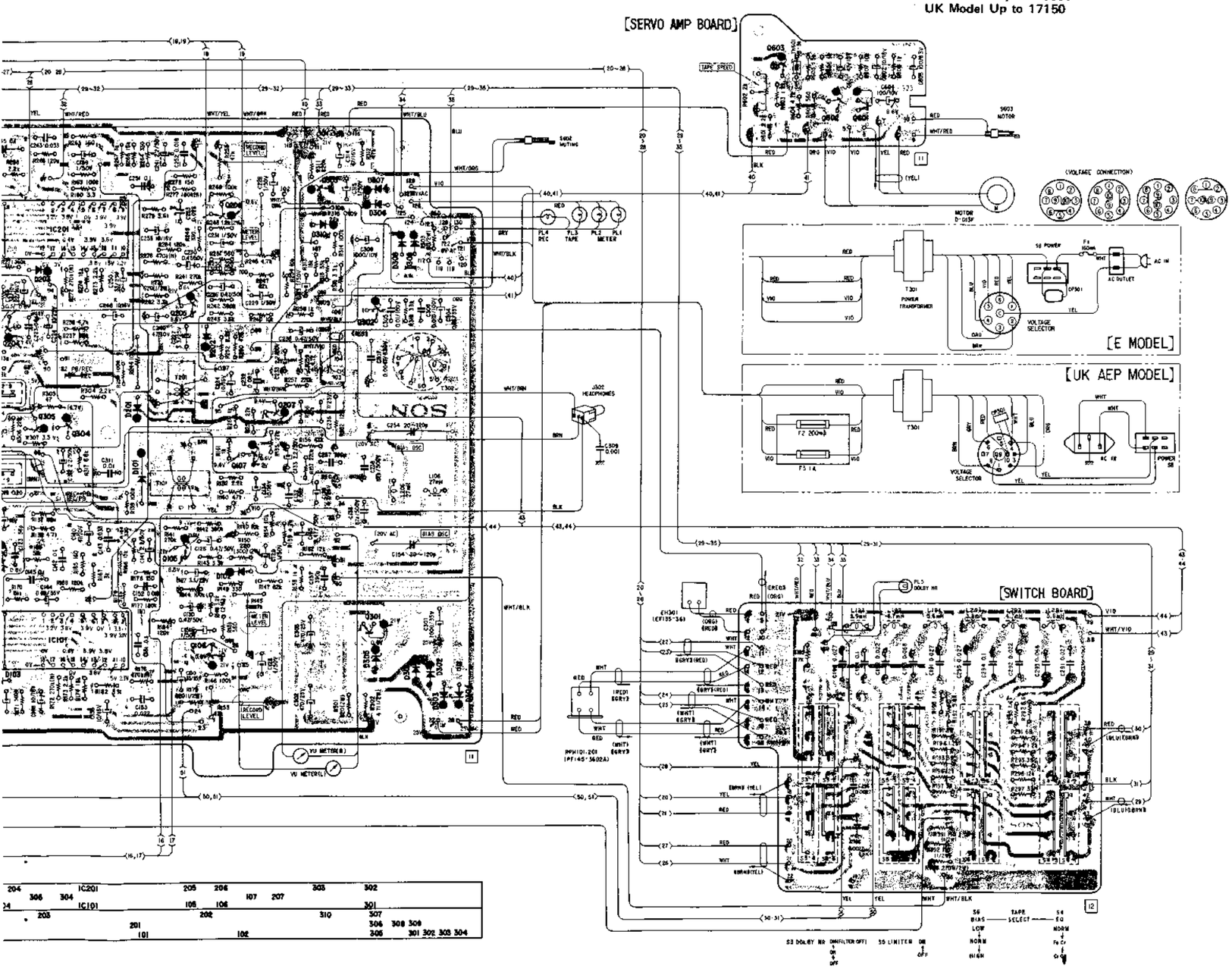
Note:
Serial No.
E Model Up to 17650
AEP Model Up to 1565
UK Model Up to 1715C



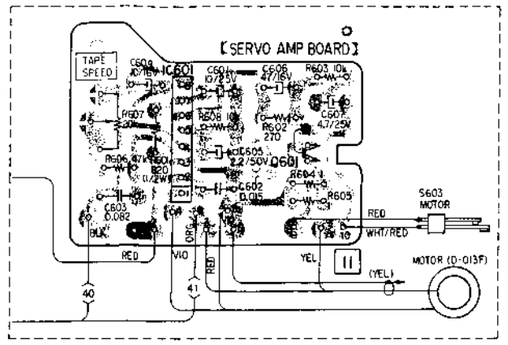
Q	201 202 208 203 204 305 304 IC201 205 206 107 207 303 302
IC	101 102 108 103 104 IC101 105 106 301
D	311 203 201 202 310 307 306 308 309 103 101 102 305 301 302 303 304

Note:
B+ pattern

Note:
Serial No.
E Model Up to 17650
AEP Model Up to 15650
UK Model Up to 17150



Note:
Serial No.
E Model 17651 and later
AEP Model 15651 and later
UK Model 17151 and later

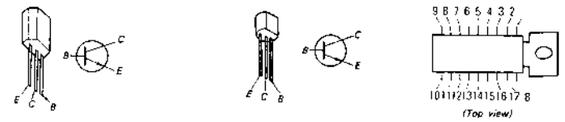


Q102, 202
Q103, 203 } 2SC632A

Q303~305
Q110~112
Q210~212
Q104~108
Q204~208 } 2SC634A

Q302: 2SC1384

IC101, 201: CX-064



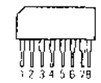
Q101, 201
Q109, 209 } 2SC1362

Q601, 602: 2SC1363

Q301: 2SC1760

Q601
Q603 } 2SC1761

IC601: CX-065



CX-065A

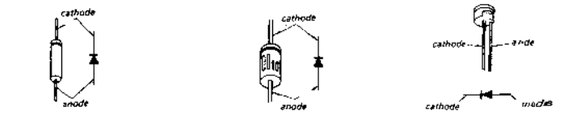
D101, 201
D103, 203
D310, 312, 313 } 1T40

D301~304
D306~309 } SIB01-02

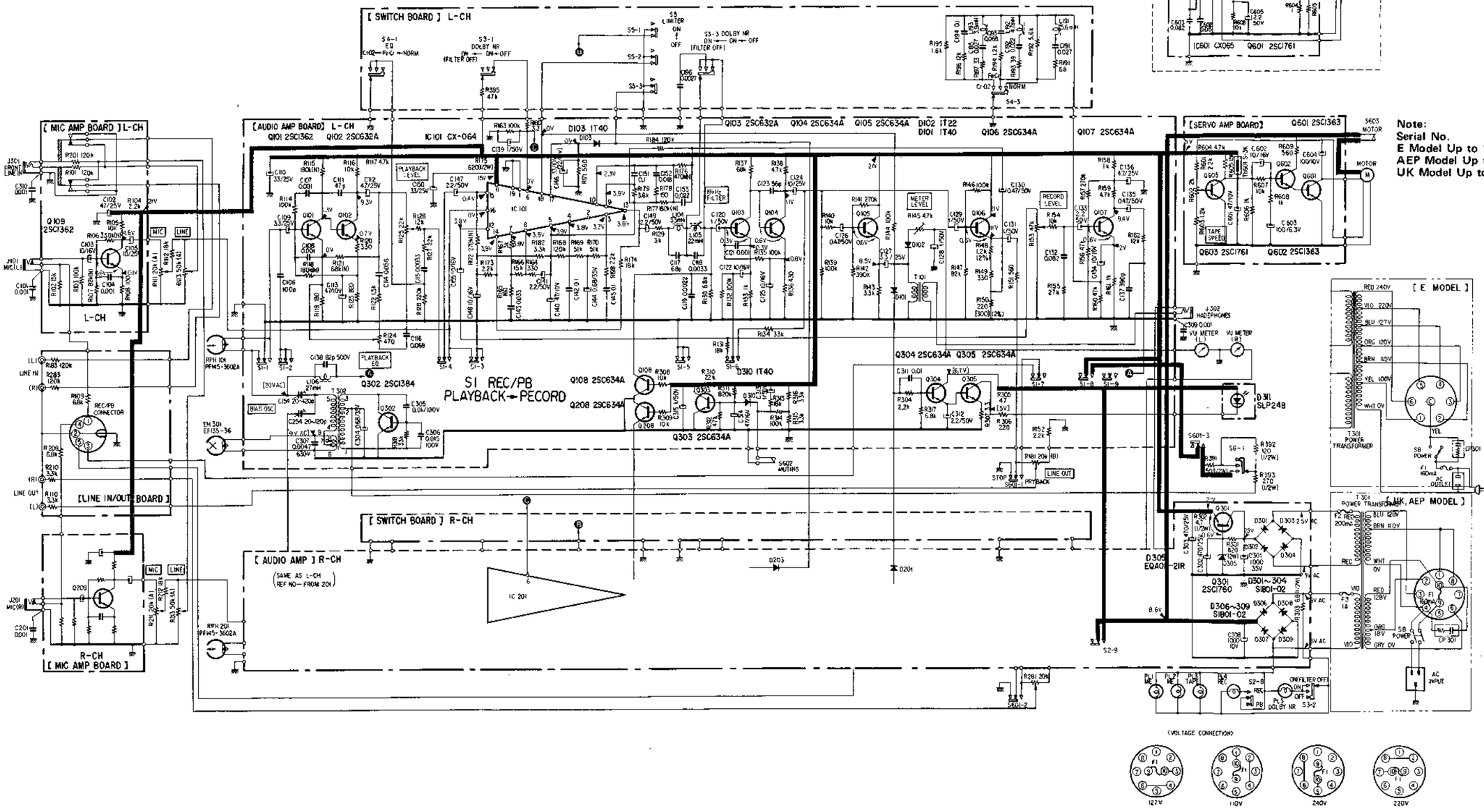
D102, 202: 1T22

D305: EQA01-02R

D311: SLP14B



3-2. SCHEMATIC DIAGRAM



Note:
Serial No.
E Model 17651 and later
AEP Model 15651 and later
UK Model 17151 and later

Note:
Serial No.
E Model Up to 17650
AEP Model Up to 15650
UK Model Up to 17150

Note:

- All capacitors are in μF unless otherwise noted. 50 or less working volts are omitted except for electrolytic type. p = μμF
- All resistors are in Ω, ¼ W, unless otherwise noted. k = 1,000 M = 1,000 k

  { Rooo / ook / (2%) } = { Rooo / ookΩ / (±2%) }

- (N) indicates a low-noise resistor.
- ▬▬ indicates B+ circuit.
- Voltages are DC with respect to ground unless otherwise noted. Readings are taken under no-signal conditions with a VOM (20 kΩ/V). Readings in [ ] are in record mode.
- Voltage variations may be noted due to normal production tolerances.
- AC voltage readings on bias oscillator circuit are taken with a VTVM.

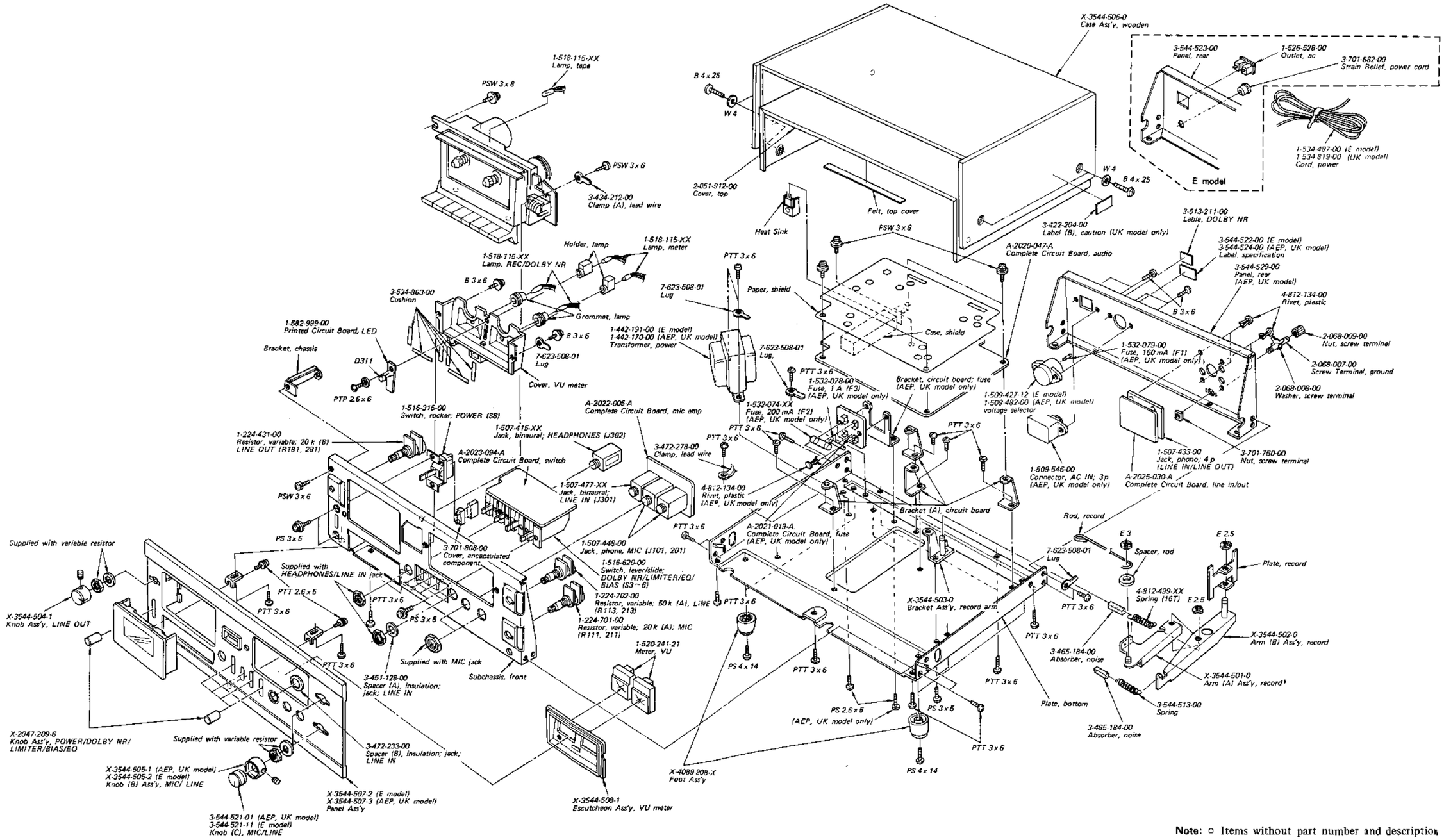
- Switch Mode

Ref. No.	Switch	Position	Ref. No.	Switch	Position
S1-1~9	※ REC/PB (L-CH)	PB	S6-1	TAPE SELECT BIAS	LOW
S2-1~9	※ REC/PB (R-CH)	PB	S601	TIMING	STOP
S3-1~4	DOLBY NR	OFF	S602	MUTING	OFF
S4-1~4	TAPE SELECT EQ	NOR	S603	MOTOR	OFF
S5-1~3	LIMITER	OFF	S8	POWER	OFF

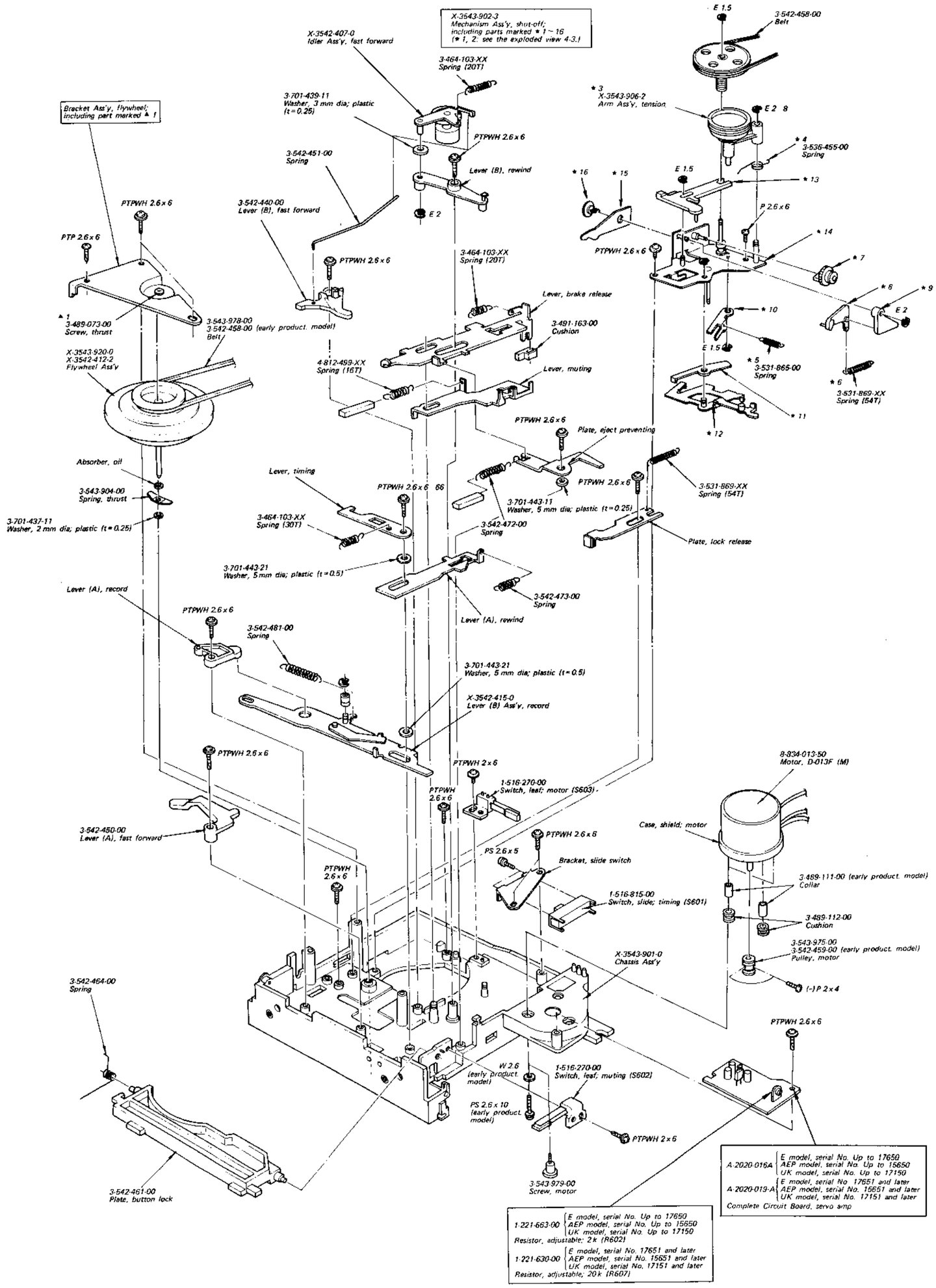
※ REC: record
PB: playback

SECTION 4
EXPLODED VIEWS

4-1.



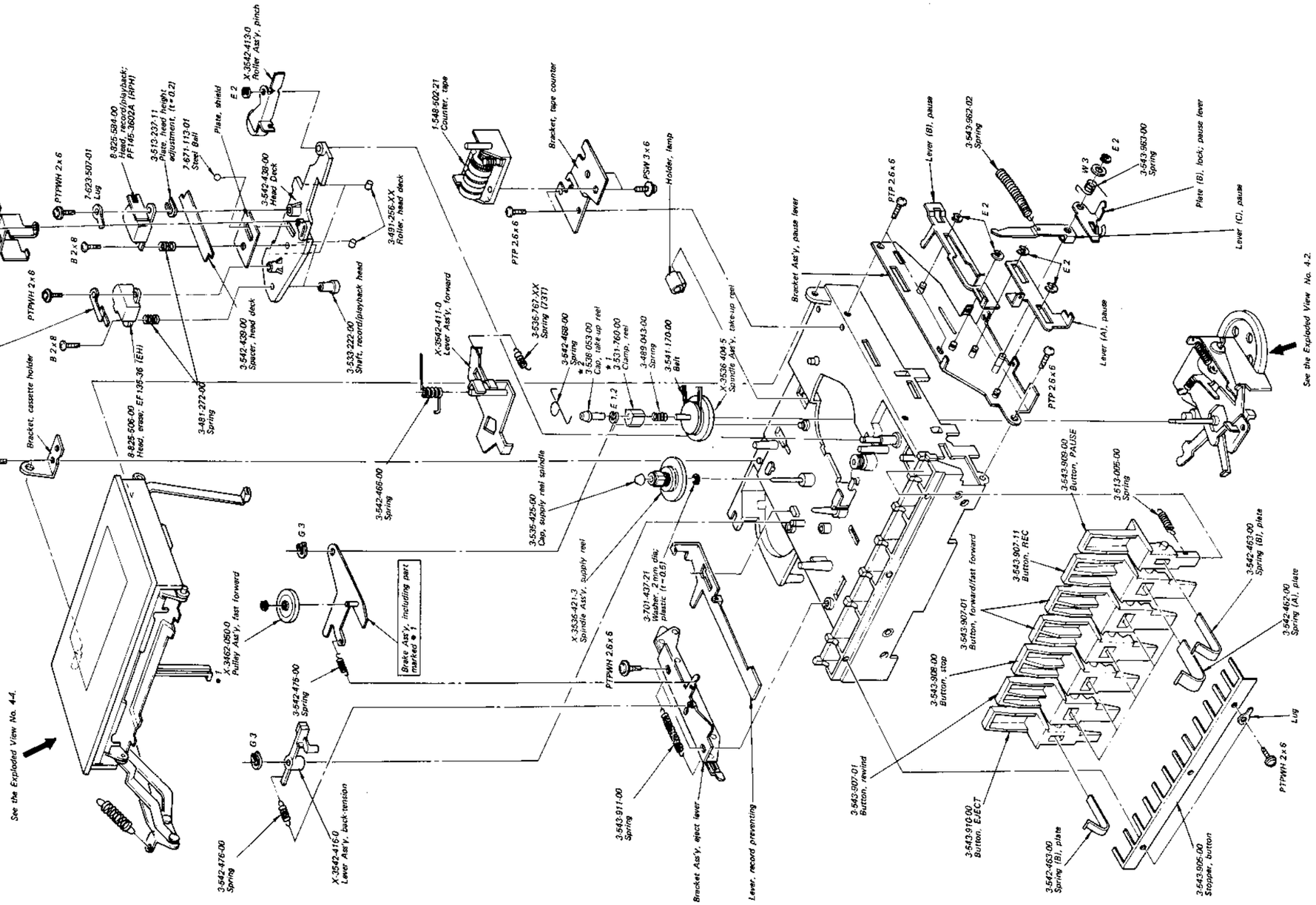
Note: ○ Items without part number and description are not available.
○ All screws are Phillips (cross recess) type unless otherwise noted.
(-) = slotted head
○ (□□T) shows the number of coils in spring.



Note: ○ Items without part number and description are not available.

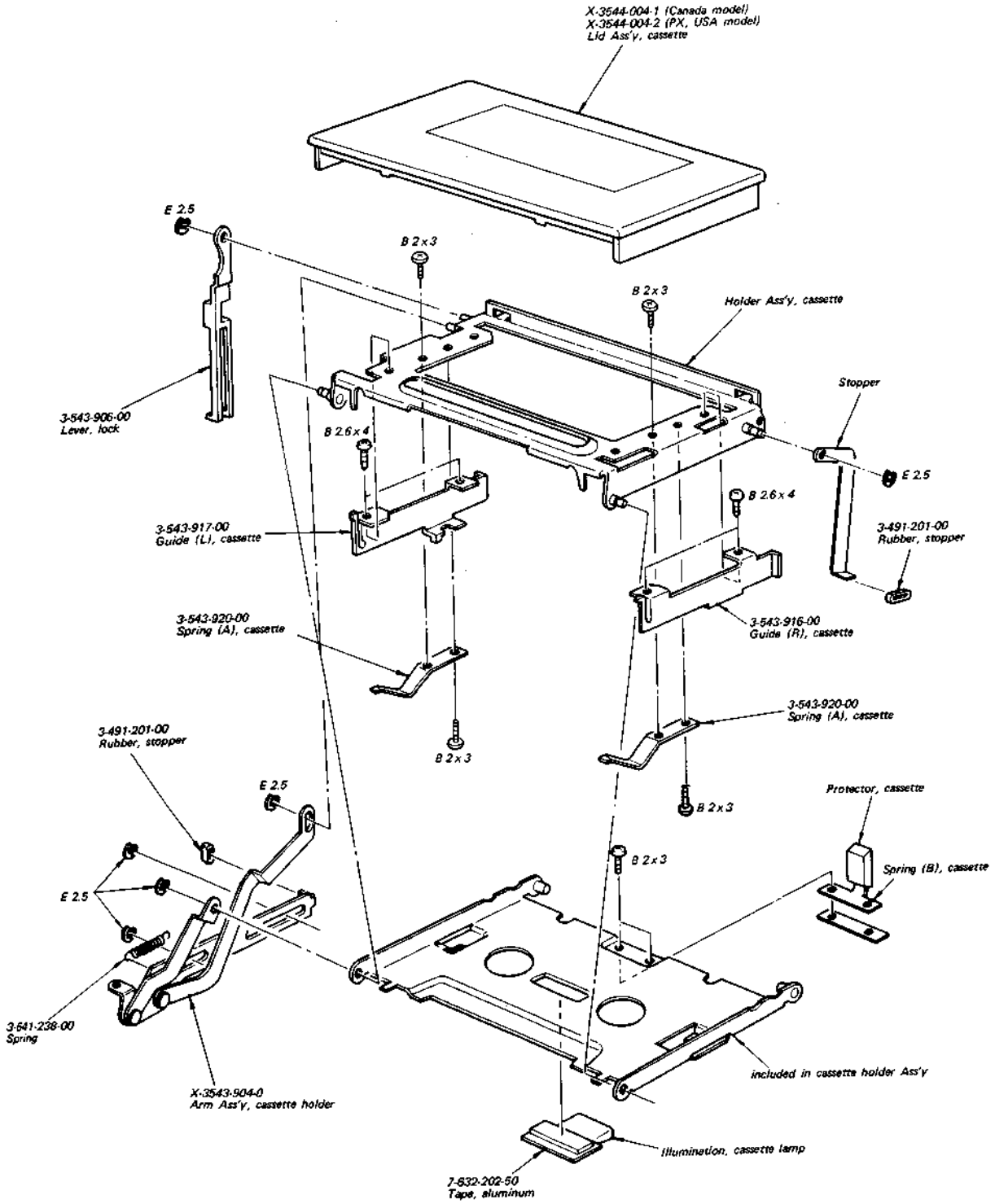
○ All screws are Phillips (cross recess) type unless otherwise noted.
(-) = slotted head

○ (□□T) shows the number of coils in spring.



Note: ○ Items without part number and description are not available.
○* All screws are Phillips (cross recess) type unless otherwise noted.
(–) = slotted head

4-4.



Note: o Items without part number and description are not available.
o All screws are Phillips (cross recess) type unless otherwise noted.
(-) = slotted head

SECTION 5
ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description
	COMPLETE CIRCUIT BOARDS	
	A-2021-019-A	fuse (AEP, UK model)
	A-2020-047-A	audio
	A-2022-005-A	mic amp
	A-2023-094-A	switch
	A-2025-030-A	line in/out
	servo amp:	See page 24.
	SEMICONDUCTORS	
	Transistor	
Q101,201		2SC1362
Q102,202 Q103,203		2SC632A
Q104~108 Q204~208		2SC634A
Q109,209		2SC1362
Q301		2SC1760
Q302		2SC1384
Q303~305		2SC634A
Q601,602		2SC1363
Q603		2SC1761
IC101,201		Integrated Circuit CX-064
	Diode	
D101,201		1T40
D102,202		1T22
D103,203		1T40
D301~304		SIB01-02
D305		EQA01-21R
D306~309		SIB01-02
D310		1T40
D311		SLP24B
Th601	1-800-200-11	Thermistor, S-3K

Ref. No.	Part No.	Description
	COILS	
L104,204	1-407-212-XX	33 mH microinductor
L105,205	1-407-240-00	22 mH, variable inductor
L106,206	1-407-211-XX	27 mH, microinductor
L191,291	1-407-203-XX	5.6 mH microinductor
L192,292	1-407-202-XX	4.7 mH microinductor
L193,293	1-407-201-XX	3.9 mH microinductor
	TRANSFORMERS	
T101,201	1-427-284-00	output
T301	1-442-170-00	power (AEP, UK Model)
	1-442-191-00	power (E Model)
T302	1-433-132-14	Bias osc

CAPACITORS

All capacitors are in μF unless otherwise indicated. 50 or less working volts are omitted except for electrolytic type. (elect = electrolytic, p = μμF)

C101,201	1-101-455-11	0.001		cermic
C102,202	1-121-410-11	47	25 V	elect
C103,203	1-121-651-11	10	16 V	elect
C104,204	1-102-074-11	0.001		cermic
C105,205	1-121-398-11	10	25 V	elect
C106,206	1-102-106-11	100 p		cermic
C107,207 C108,208	1-102-074-11	0.001		cermic
C109,209	1-121-913-11	3.3	25 V	elect
C110,210	1-121-404-11	33	25 V	elect
C111,211	1-107-123-11	47 p		silvered mica
C112,212	1-121-395-11	4.7	25 V	elect
C113,213	1-121-927-11	47	10 V	elect
C114,214	1-108-813-12	0.056		mylar
C115,215	1-108-798-12	0.0033		mylar
C116,216	1-108-814-12	0.068		mylar
C117,217	1-107-127-11	68 p		silvered mica
C118,218	1-129-794-11	0.0033	100 V	plastic

Ref. No.	Part No.			Description
C119,219	1-108-829-12	0.0022		mylar
C120,220	1-121-391-11	1	50 V	elect
C121,221	1-102-074-11	0.001		cermic
C122,222	1-121-651-11	10	16 V	elect
C123,223	1-107-125-11	56 p		silvered mica
C124,224	1-121-398-11	10	25 V	elect
C125,225	1-121-651-11	10	16 V	elect
C126,226	1-121-726-11	0.47	50 V	elect
C127,227	1-121-392-11	3.3	25 V	elect
C128,228 C129,229	1-121-391-11	1	50 V	elect
C130,230	1-121-726-11	0.47	50 V	elect
C131,231	1-121-391-11	1	50 V	elect
C132,232	1-105-684-12	0.082		mylar
C133,233	1-121-450-11	2.2	50 V	elect
C134,234	1-121-651-11	10	16 V	elect
C135,235	1-121-726-11	0.47	50 V	elect
C136,236	1-121-395-11	4.7	25 V	elect
C137,237	1-102-113-11	390 p		cermic
C138,238	1-107-037-11	82 p	500 V	silvered mica
C139,239	1-121-391-11	1	50 V	elect
C140,240	1-121-352-11	47	10 V	elect
C141,241	1-121-986-11	2.2	50 V	elect
C142,242	1-108-816-12	0.1		mylar
C143,243	1-108-810-12	0.033		mylar
C144,244	1-131-214-11	0.68	35 V	solid tantalum
C145,245	1-108-816-12	0.1		mylar
C146,246	1-121-479-11	22	16 V	elect (E Model)
	1-121-402-11	33	10 V	elect (AEP, UK Model)
C147,247	1-121-450-11	2.2	50 V	elect
C148,248	1-121-651-11	10	16 V	elect
C149,249	1-121-450-11	2.2	50 V	elect
C150,250	1-121-404-11	33	25 V	elect
C151,251	1-108-816-12	0.1		mylar
C152,252	1-108-807-12	0.018		mylar
C153,253	1-108-808-12	0.022		mylar
C154,254	1-141-069-XX	20~120 p		trimmer
C155,255	1-121-651-11	10	16 V	elect
C191,291	1-108-809-12	0.027		mylar
C192,292	1-108-808-12	0.022		mylar

Ref. No.	Part No.			Description
C193,293	1-105-523-12	0.068		mylar
C194,294	1-105-525-12	0.1		mylar
C195,295	1-108-809-12	0.027		mylar
C196,296	1-105-666-12	0.0027		mylar
C301	1-121-388-11	1000	35 V	elect
C302,303	1-121-733-11	470	25 V	elect
C304	1-131-214-11	0.68	35 V	solid tantalum
C305	1-108-626-12	0.01	100 V	mylar
C306	1-108-628-12	0.015	100 V	mylar
C307	1-129-710-11	0.0047	630 V	plastic
C308	1-121-736-11	1000	10 V	elect
C309,310	1-101-455-11	0.001		cermic
C311	1-108-837-12	0.01		mylar
C312	1-121-450-11	2.2	50 V	elect
C313	1-121-391-11	1	50 V	elect
C314	1-121-970-11	47	16 V	elect
C315	1-121-391-11	1	50 V	elect
C601	1-121-352-11	47	10 V	elect
C602	1-121-651-11	10	16 V	elect
C603	1-121-413-11	100	6.3 V	elect
C604	1-121-414-11	100	10 V	elect

RESISTORS

All resistors are in ohms. Regular type ¼ W carbon and composition resistors are omitted.
Check schematic diagram for the resistance values.
k = 1000, M = 1000 k

R111,211	1-224-701-00	20 k (A), variable; MIC		
R113,213	1-224-702-00	50 k (A), variable; LINE		
R124,224	1-224-641-XX	470		adjustable
R125,225	1-224-646-XX	22 k		adjustable
R145,245	1-224-644-XX	4.7 k		adjustable
R148,248	1-210-874-11	1.2 k	¼ W	2%
R150,250	1-210-850-11	300	¼ W	2% (E Model)
	1-210-861-11	220	¼ W	2% (AEP, UK Model)
R153,253	1-224-647-XX	47 k		adjustable
R175,275	1-244-868-11	620	½ W	
R181,281	1-224-431-11	20 k/20 k (B) variable; LINE OUT		

Ref. No.	Part No.		Description	
R301	1-206-662-11	820	2W	metal oxide
R302	1-244-817-11	4.7	½W	
R303	1-244-821-11	6.8	½W	
R391	1-244-853-11	150	½W	
R392	1-244-851-11	120	½W	
R393	1-244-859-11	270	½W	
R602	1-221-663-11	2k		adjustable

SWITCHES

S1,2	1-514-976-21	Slide, record/playback
S3~6	1-516-620-00	Lever Slide, DOLBY NR/ LIMITER/EQ/BIAS
S8	1-516-315-00	rocker, POWER
S601	1-516-815-00	Lever Slide, timing
S602,603	1-516-270-00	Leaf, muting/motor

JACKS

J101,201	1-507-448-00	phone, MIC
J301	1-507-477-XX	binaural, LINE IN; front
J302	1-507-415-XX	binaural, HEADPHONES

FUSES

F1	1-532-425-00	Fuse, 160 mA (E Model)
	1-532-079-00	Fuse, 160 mA (AEP, UK Model)
F2	1-532-074-XX	Fuse, 200 mA (AEP, UK Model)
F3	1-532-078-00	Fuse, 1 A (AEP, UK Model)

MISCELLANEOUS

CP301	1-231-057-31	Encapsulated Component
EH	8-825-506-00	Head, erase; EF135-36
M	8-834-013-50	Motor D-013F
PL1~5	1-518-115-XX	Lamp, 6 V 35 mA
RPH	8-825-584-00	Head, record/playback; PF145-3602A
VS-1	1-509-427-12	Voltage Selector (E Model)
	1-509-482-00	Voltage Selector (AEP, UK Model)

Ref. No.	Part No.	Description
	1-507-433-00	Jack, phono; 4 p (LINE IN/ LINE OUT)
	1-509-546-00	Connector, AC IN; 3 p (UK, AEP M
	1-509-549-00	Connector, REC/PB
	1-520-241-21	Meter, VU
	1-526-528-00	Outlet, ac (E Model)
	1-533-102-00	Holder, fuse (E Model)
	1-534-487-00	Cord, power (E Model)
	1-534-819-00	Cord, power; 3p (UK Model)
	1-548-502-21	Counter, tape
	1-582-999-00	Printed Circuit Board, LED

Serial No.
E Model Up to 17650
AEP Model Up to 15650
UK Model Up to 17150

	A-2020-016-A	Complete Circuit Board, servo am		
Q601,602		2SC1363		
Q603		2SC1761		
C601	1-121-352-11	47	10 V	elect
C602	1-121-651-11	10	16 V	elect
C603	1-121-413-11	100	6.3 V	elect
C604	1-121-414-11	100	10 V	elect
R602	1-221-663-11	2k, adjustable		
Th601	1-800-200-11	Thermistor, S-1 k		

Serial No.
E Model 17651 and later
AEP Model 15651 and later
UK Model 17151 and later

	A-2020-019-A	Complete Circuit Board, servo amp		
Q601		2SC1761		
IC601		CX065A		
C601	1-121-398-11	10	25 V	elect
C602	1-105-515-12	0.015		mylar
C603	1-108-550-12	0.082		mylar
C604	1-121-651-11	10	16 V	elect
C605	1-121-450-11	2.2	50 V	elect
C606	1-121-970-11	47	16 V	elect
C607	1-121-395-11	4.7	25 V	elect
R601	1-244-871-31	820	½W	
R607	1-221-630-00	20k, adjustable		

SECTION 6
HARDWARE

SCREWS

All screws are Phillips (cross recess) type unless otherwise indicated. (–): shotted head

Part No.	Description
7-621-770-96	B 2 × 8
7-621-772-00	B 2 × 3
7-621-773-65	B 2.6 × 4
7-627-505-69	(–) P 2 × 4
7-628-254-05	PS 2.6 × 5
7-628-254-35	PS 2.6 × 10
7-682-547-09	B 3 × 6
7-682-646-01	PS 3 × 5
7-682-647-01	PS 3 × 6
7-682-664-01	PS 4 × 14
7-682-947-01	PSW 3 × 6
7-682-948-01	PSW 3 × 8
7-685-103-21	P 2 × 5, self-tapping
7-687-133-21	PTP 2.6 × 6
7-687-204-21	PTPWH 2 × 6
7-687-205-21	PTPWH 2 × 8
7-687-233-21	PTPWH 2.6 × 6
7-687-401-31	PTT 2.6 × 5
7-687-411-31	PTT 3 × 6

WASHERS

Part No.	Description
7-623-107-02	2.6 (small)
7-623-107-12	2.6
7-623-108-12	3 (middle)
7-623-108-22	3 (lage)
7-623-207-22	2.6, spring

RETAINING RINGS

Part No.	Description
7-624-101-01	E 1.2
7-624-102-01	E 1.5
7-624-104-01	E 2
7-624-106-01	E 3
7-624-118-01	E 2.5
7-624-171-51	G 3

MISCELLANEOUS

Part No.	Description
7-623-507-01	Lug 2.6
7-623-508-01	Lug 3
7-632-202-50	Tape, aluminum
7-671-113-01	Steel Ball 3
7-684-023-01	Nut 3

ACCESSORIES

Part No.	Description
X-3701-018-0	Cleaning Tips
1-534-049-51	Cord, connection; RK-74 H
3-780-784-11	Manual, instruction
3-793-075-14	Card, warranty (E, AEP Model)
3-794-520-82	Card, guaranty (UK Model)
8-890-060-00	Tape, cassette; Fe-Cr; C-60

– Hardware Nomenclature –

P – Pan Head Screw

PS – Pan Head Screw with Spring Washer

K – Flat Countersunk Head Screw

B – Binding Head Screw

RK – Oval Countersunk Head Screw

T – Truss Head Screw

R – Round Head Screw

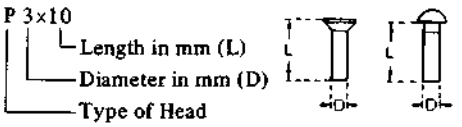
F – Flat Fillister Head Screw

SC – Set Screw

E – Retaining Ring (E Washer)

W – Washer
SW – Spring Washer
LW – Lock Washer
N – Nut

– Example –



Sony Corporation