

# TC-K615S

## SERVICE MANUAL

US Model  
 Canadian Model  
 E Model  
 AEP Model  
 UK Model  
 Australian Model



Photo: US model

Model Name Using Similar Mechanism	TC-K611S
Tape Transport Mechanism Type	TCM-190VB13

### SPECIFICATIONS

Recording system 4-track 2-channel stereo  
 Fast winding time Approx. 90 sec. (with Sony C-60 cassette)  
 Bias AC bias  
 Heads Erasing head × 1 (F&F head)  
 Recording head × 1 (SD head)  
 Playback head × 1 (SD head)  
 Motors Capstan motor × 1 (DC servo motor)  
 Reel motor × 1 (DC motor)

#### Signal-to-noise ratio (at peak level and weighted)

Cassette (Dolby NR off)	Type IV	Type II	Type I
	61 dB	59 dB	57 dB

#### S/N ratio improvement (approximate values)

With Dolby B NR on : 5 dB at 1 kHz; 10 dB at 5 kHz  
 With Dolby C NR on : 15 dB at 500 Hz; 20 dB at 1 kHz  
 With Dolby S NR on : 10 dB at 100 Hz; 24 dB at 1 kHz

Harmonic distortion 0.4% (with Type I, 160 nWb/m, 315 Hz, 3rd H.D.)  
 1.5% (with Type IV, 250 nWb/m, 315 Hz, 3rd H.D.)

#### Frequency response (Dolby NR off)

Type IV cassette	20 - 20,000 Hz (±3 dB, IEC) 20 - 16,000 Hz [±3 dB (-4dB recording)]
Type II cassette	20 - 18,000 Hz (±3 dB, IEC)
Type I cassette	20 - 17,000 Hz (±3 dB, IEC)

Type IV : Sony Type IV (METAL)  
 Type II : Sony Type II (HIGH)  
 Type I : Sony Type I (NORMAL)

Wow and flutter ±0.065% W.Peak (IEC)  
 0.045% W.RMS (NAB)  
 ±0.12% W.Peak (DIN)

Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.  
 "DOLBY", the double-D symbol  $\square\square$  and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

#### Inputs

Line inputs (phono jacks)	Sensitivity	0.16 V
	Input impedance	47 k ohms

#### Outputs

Line outputs (phono jacks)	Rated output level	0.5 V at a load impedance of 47 k ohms
	Load impedance	Over 10 k ohms
Headphones (stereo phone jack)	Output level	1 mW at a load impedance of 32 ohms

#### General

Power requirements US, Canadian model : 120V AC, 60Hz  
 AEP, German model : 220 - 230V AC, 50/60Hz  
 UK model : 240V AC, 50Hz  
 Australian model : 240V AC, 50/60Hz  
 E model : 120 - 240V AC, 50/60Hz  
 Adjustable with the Voltage Selector

Power consumption 23 W  
 Dimensions Approx. 430 × 123 × 310 mm (w/h/d)

(17 × 4<sup>7</sup>/<sub>8</sub> × 12<sup>1</sup>/<sub>4</sub> inches)  
 including projecting parts and controls

Mass Approx. 4.3 kg (9 lbs 8 oz)

#### Supplied accessories

Audio connecting cords (2)

#### Optional accessory

Wireless remote commander RM-J701

Design and specifications are subject to change without notice.

STEREO CASSETTE DECK  
**SONY**®

## SAFETY CHECK-OUT

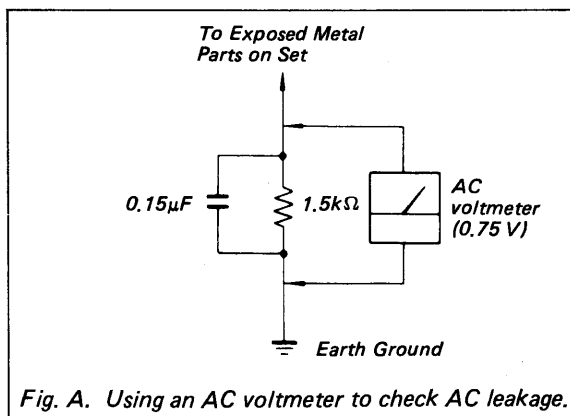
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE TEST

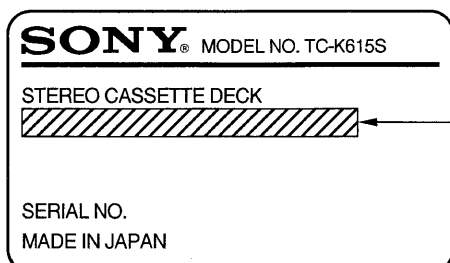
The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)



### MODEL IDENTIFICATION

— Specification Label —





US, Canadian model : AC120V 60Hz 23W  
 AEP, German model : AC220-230V~50/60Hz 23W  
 UK, Australian model : AC240V~50Hz/60Hz 23W  
 E model : AC120, 220, 240V~50/60Hz


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### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS 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.

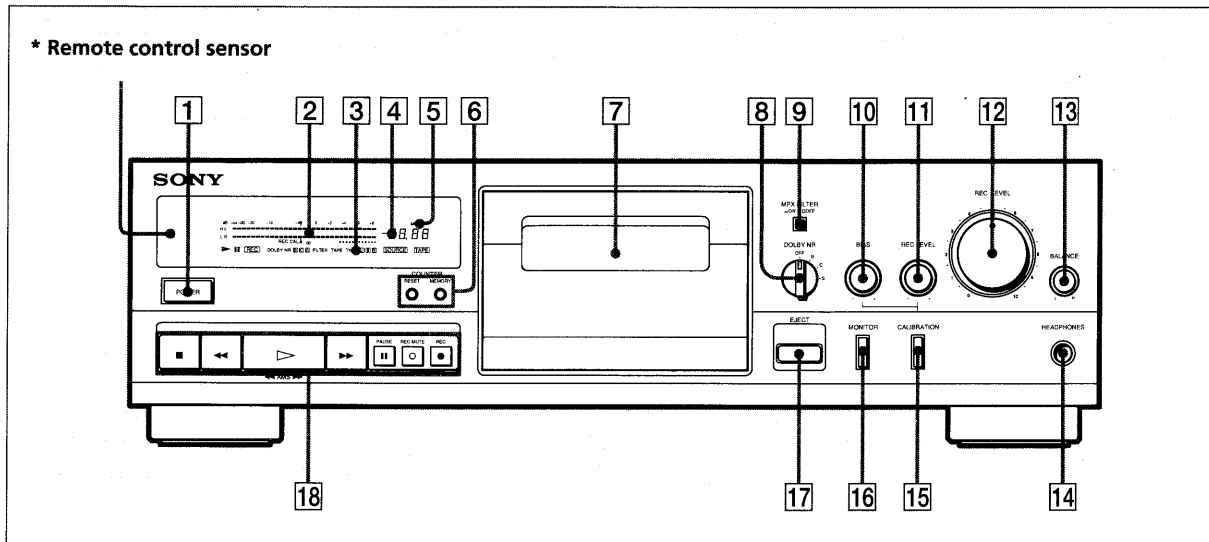
### ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES 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 DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

# SECTION 1 GENERAL

This section is extracted from instruction manual.

## Identifying the Parts on the Front Panel



For details, refer to the page number(s) indicated in parentheses.

- |   |   |
|---|---|
| <p>1 POWER switch<br/> 2 Peak level meter (page 12)<br/> 3 TAPE TYPE indicator<br/> 4 Linear counter (page 9)<br/> 5 MEMORY indicator<br/> 6 COUNTER buttons<br/>     RESET button (page 9)<br/>     MEMORY button (pages 9 and 10)<br/> 7 Cassette holder<br/> 8 DOLBY NR (noise reduction) switch (pages 7 and 10)<br/> 9 MPX FILTER button (page 12)<br/> 10 BIAS control (pages 14 and 15)<br/> 11 REC (recording) LEVEL control for calibration (pages 14 and 15)<br/> 12 REC (recording) LEVEL control (pages 11 and 12)<br/> 13 BALANCE control (page 11)<br/> 14 HEADPHONES jack (stereo phone jack) (page 7)<br/> 15 CALIBRATION button (pages 14 and 15)<br/> 16 MONITOR button (page 13)</p> | <p>17  (EJECT) button<br/> 18 Tape operation buttons<br/>     ■ (stop) button<br/>     ◀ (rewind) (Multi-AMS**) button<br/>     ▶ (play) button<br/>     ▶▶ (fast-forward) (Multi-AMS**) button<br/>        PAUSE button<br/>     ○ REC MUTE (record muting) button (page 15)<br/>     ● REC (recording) button</p> |
|---|---|

\* Remote control sensor

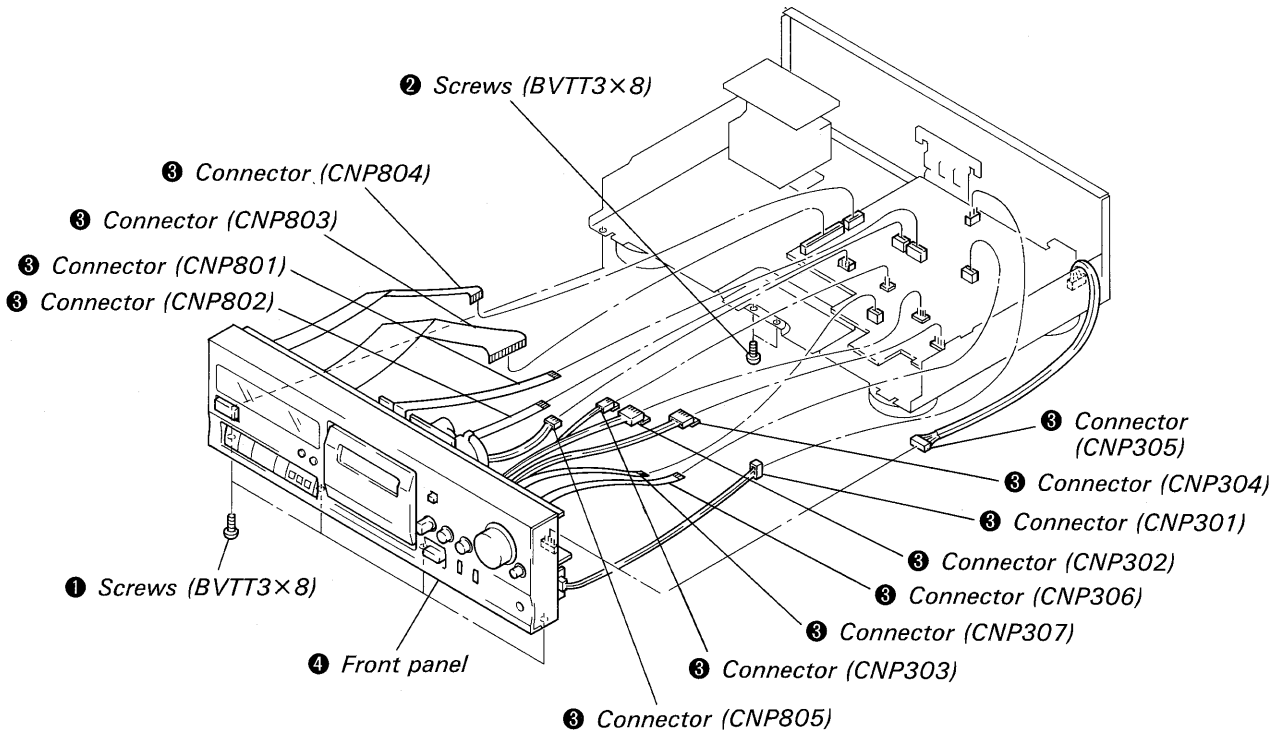
- You can remotely control this cassette deck with:
- A remote commander that came with a Sony amplifier or receiver if it has the mark and cassette deck control capability.
  - An optional Sony remote commander with the mark and cassette deck control capability.

\*\* AMS is an abbreviation for Automatic Music Sensor.

## SECTION 2 DISASSEMBLY

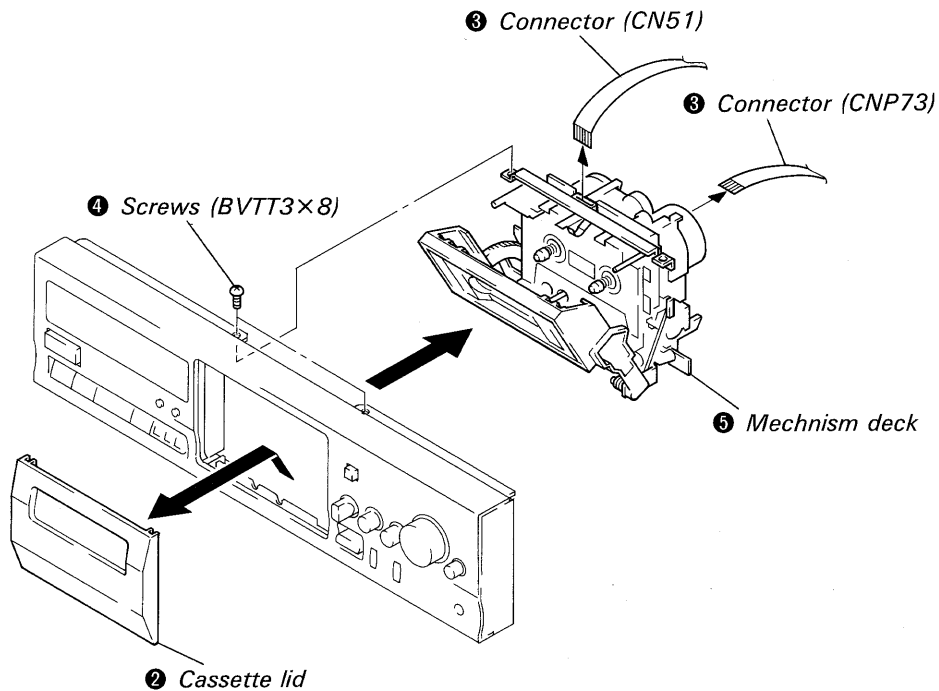
**NOTE:** Follow the disassembly procedure in the numerical order given.

### 2-1. FRONT PANEL

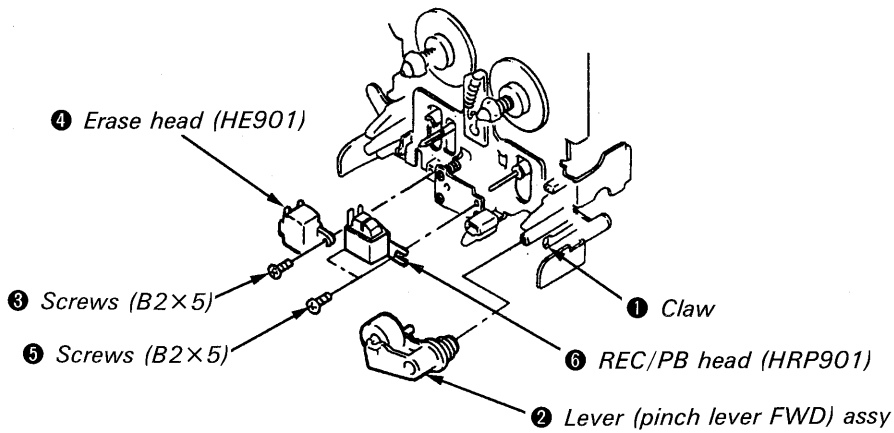


### 2-2. MECHANISM DECK

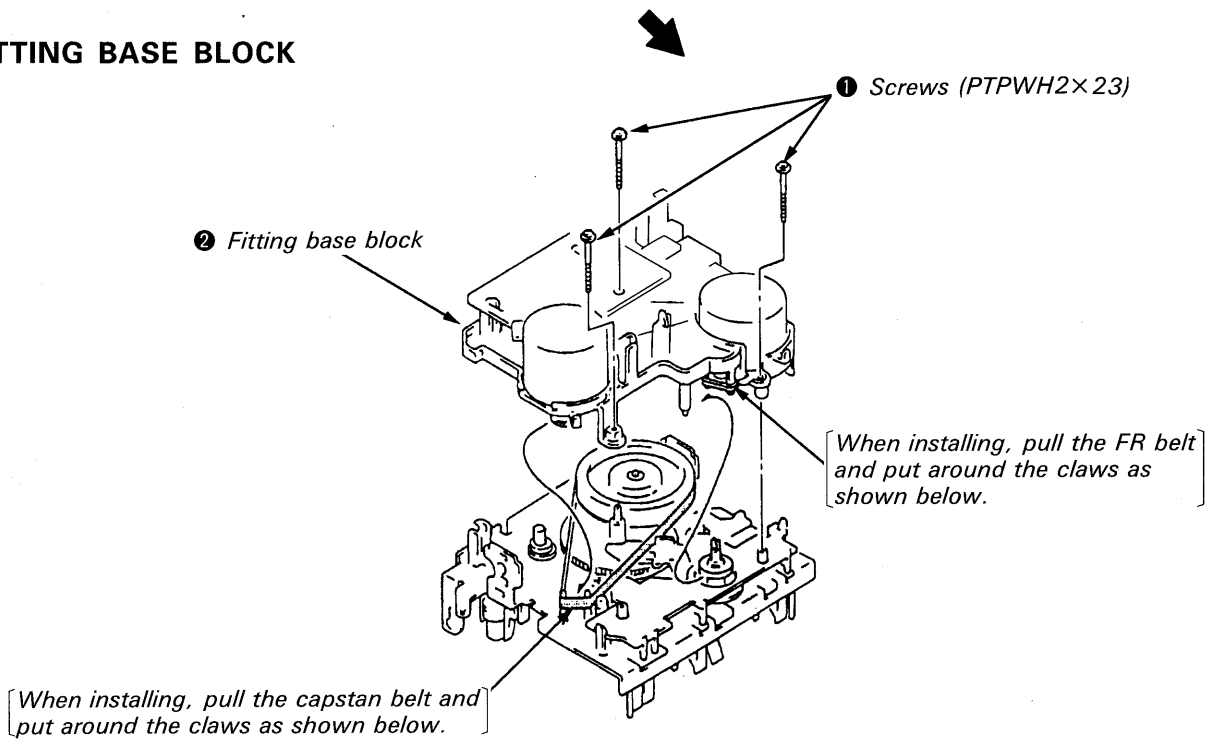
① Press the eject button.



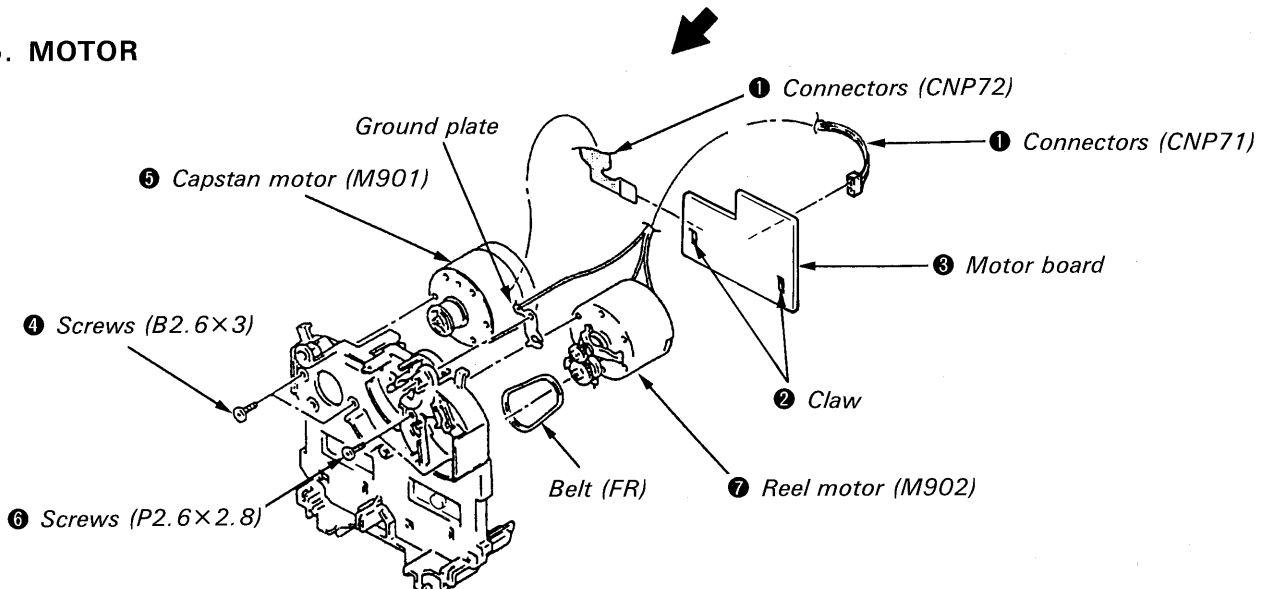
### 2-3. HEAD



### 2-4. FITTING BASE BLOCK



### 2-5. MOTOR



## SECTION 3 MECHANICAL ADJUSTMENTS

### PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab:
 

record/playback/erase head	pinch roller
rubber belts	capstan
idlers	
2. Demagnetize the record/playback head with a head demagnetizer. (Head demagnetizer do not approach for the erase head.)
3. Do not use a magnetized screwdriver for the adjustment.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

### Torque Measurement

Torque	Torque	Meter reading
Forward	CQ-102C	30 to 60g•cm (0.42 to 0.83oz•inch)
Forward back tension	CQ-102C	1 to 6g•cm (0.014 to 0.08 oz•inch)
FF/REW	CQ-201B	65 to 90g•cm (0.91 to 1.24oz•inch)

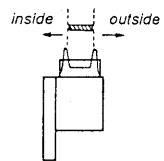
### Record/Playback Head Height/Declination Adjustment

#### Procedures :

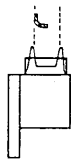
1. Test cassette : CQ-009C
2. Insert the mirror cassette and put the unit in record/Playback mode.

#### 1) Height Adjustment :

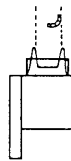
Check to see if the tape is curling at the tape guide of the head. If it is curling, tighten screws **A**, **B** and **C**, respectively by the same angle, moving the head so that it remains at the same angle throughout the procedure. If it curls on the bottom side of the mirror cassette (actually the inner side), tighten all the screws equally ; but loosen them if the tape begins to curl on the top side (outer side).



Normal  
(Record/playback head  
as seen from the side  
of the erasehead.)



Curling on the inner  
side  
Tighten screws **A**, **B**  
and **C**.



Curling on the outer  
side  
Loosen screws **A**, **B**  
and **C**.

#### 2) Declination Adjustment :

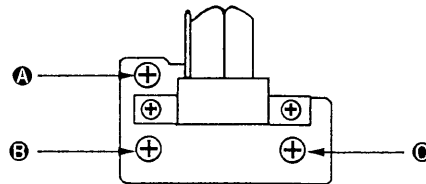
While in the record/playback position, set the back tension to 0 (wind the supply reel with something thin like a pencil in a counterclockwise direction) and make sure there is no curling or shifting (shifting up/shifting down) at the guide of the record/playback head.

Because shifting can only occur due to a difference in the width of the tape and that of the tape guides (curling will otherwise occur), it is necessary to pay close attention since it can be easily overlooked.

When there is a shift, tighten screws **B** and **C** equally and and change the declination of the head. If the tape is shifting up, tighten the screws, and if it is shifting down, loosen them.

Repeat the adjustments in steps 1) to 2) and fine adjust the height and the declination.

Adjustment Location : - record/playback head -



## SECTION 4 ELECTRICAL ADJUSTMENTS

**Note:** The adjustment should be performed in the order given in the service manual. As a rule, adjustments about playback should be performed before those about recording.

The adjustments should be performed before for both L-CH and R-CH.

- Switches and controls should be set as follows unless otherwise specified.

DOLBY NR switch: OFF

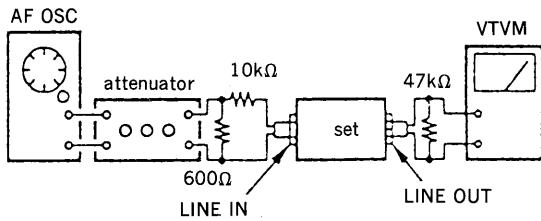
MPX FILTER switch: OFF

MONITOR switch: Tape

- Standard Record:

Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level.

### —Record Mode—



**0dB = 775mV**

#### Standard Input Level

input terminal	LINE IN
source impedance	10kΩ
input level	0.5V (-3.8dBs)

#### Standard Output Level

output terminal	LINE OUT
load impedance	47kΩ
output level	0.5V (-3.8dBs)

#### Test Tape

Type	Signal	Used for
P-4-A100	10kHz, -10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	PB Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

#### Test Mode

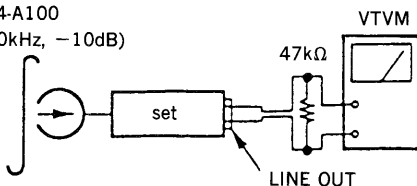
This set will get into test mode by shorting the pins of TP801 (TEST) on MAIN board before turning the power on.

#### Record/Playback Head Azimuth Adjustment

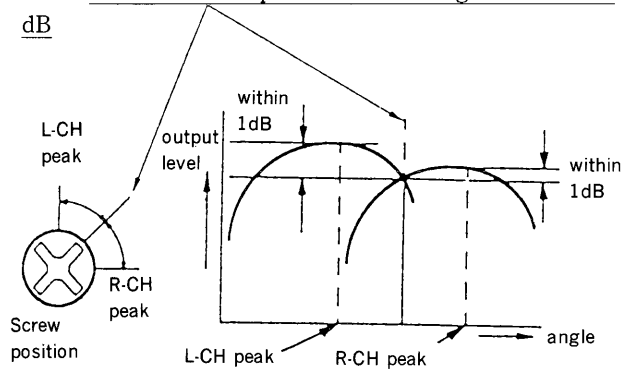
##### Procedure :

- Mode: FWD playback

Test tape  
P-4-A100  
(10kHz, -10dB)



- Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1 dB



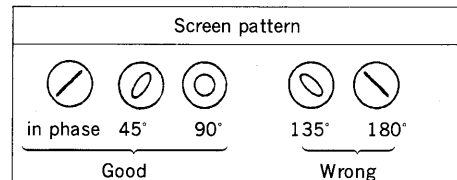
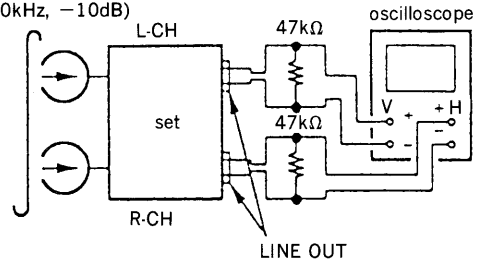
- Phase Check

Mode: playback

test tape

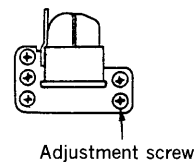
P-4-A100

(10kHz, -10dB)



- After the adjustment, lock the screws with locking compound.

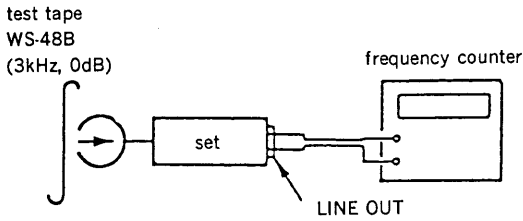
**Adjustment Location :** Record/Playback head



### Tape Speed Check

#### Procedure :

Mode : playback



1. Short the connector TP801 (pins ① and ②). (test mode)
2. Set to FWD playback mode.
3. Confirm that the frequency counter reading becomes  $3,000 \pm 30\text{Hz}$ .
4. Push the COUNTER RESET button on the front panel.
5. Confirm that the counter display of fluorescent indicator tube (FLT751) is "09.5".

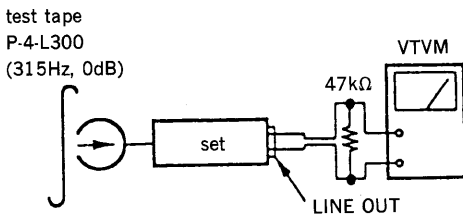
Note : " " Displayed segment may be flicking.

6. After checked, open the connector TP801.

### Playback Level Adjustment

#### Procedure :

Mode : playback



Adjust RV121 (L-CH) and RV221 (R-CH) so that the reading on VTVM meets the adjustment limits below.

#### Adjustment Limits :

LINE OUT level :  $-8.2$  to  $-7.2\text{dB}$  (0.301 to 0.338V)

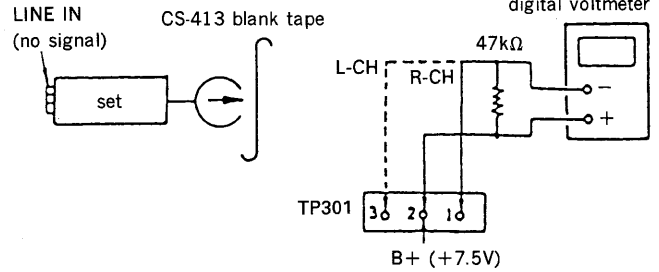
Level difference between channels : within 0.5dB

Check that the LINE OUT level does not change even if Playback and Stop operation is repeated several times.

Adjustment Location : MAIN board

### Bias Consumption Current Adjustment

#### Procedure :



1. Set RV103 (L-CH) and RV203 (R-CH) to mechanical center and turn the set recording mode.
2. Connect digital voltmeter as shown by the following table.
3. Adjust the following transformers for the minimum readings on the digital voltmeter

	Measurement Point	Adjustment Part	Value
L-CH	② and ③, TP301	T101	less than 220mV
R-CH	① and ②, TP301	T201	

Adjustment Location : MAIN board

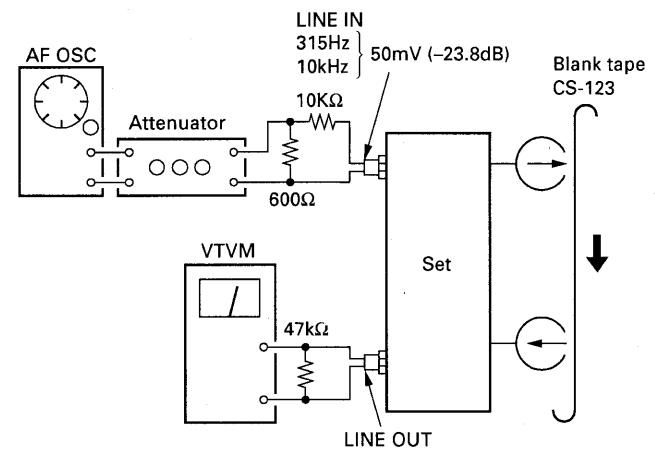
### Record Bias Adjustment

#### Setting :

REC LEVEL control : Standard Record

#### Procedure :

1. Mode : record and playback



2. Adjust RV103 (L-CH) and RV203 (R-CH) so that 10kHz playback output is  $0 \pm 0.3$  dB relative to the 315Hz output.

Adjustment Location : MAIN board



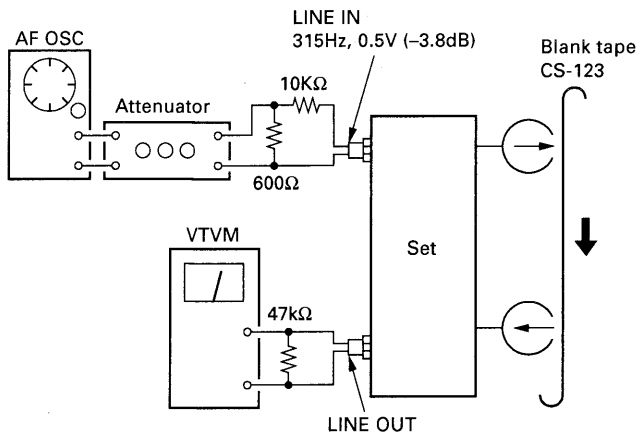
### Record Level Adjustment

#### Setting :

REC LEVEL control : Standard Record

#### Procedure :

1. Mode : record and playback



2. Adjust RV101 (L-CH) and RV201 (R-CH) .

**Adjustment Limits :** -4.3 to -3.3dB (0.47 to 0.53V)

**Adjustment Location :** MAIN board

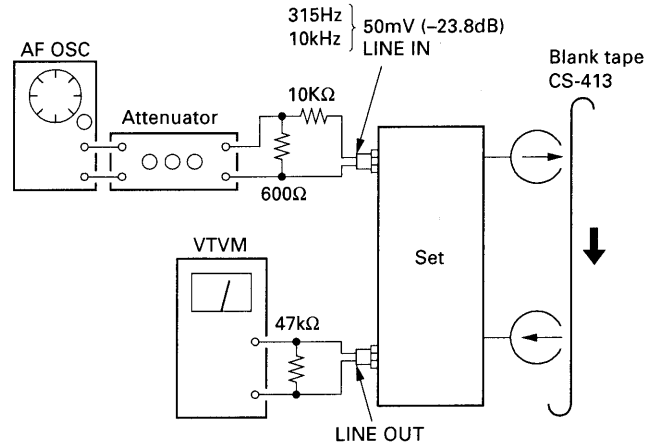
### Record EQ (IV) Adjustment

#### Setting :

REC LEVEL control : Standard Record

#### Procedure :

1. Mode : record and playback



2. Adjust RV102 and 202 so that they become maximum.
3. Adjust RV102 (L-CH) and 202 (R-CH) so that the difference between R-CH and L-CH at 10 kHz is within 1 dB.
4. Adjust RV306 so that the R-CH meet the specification.

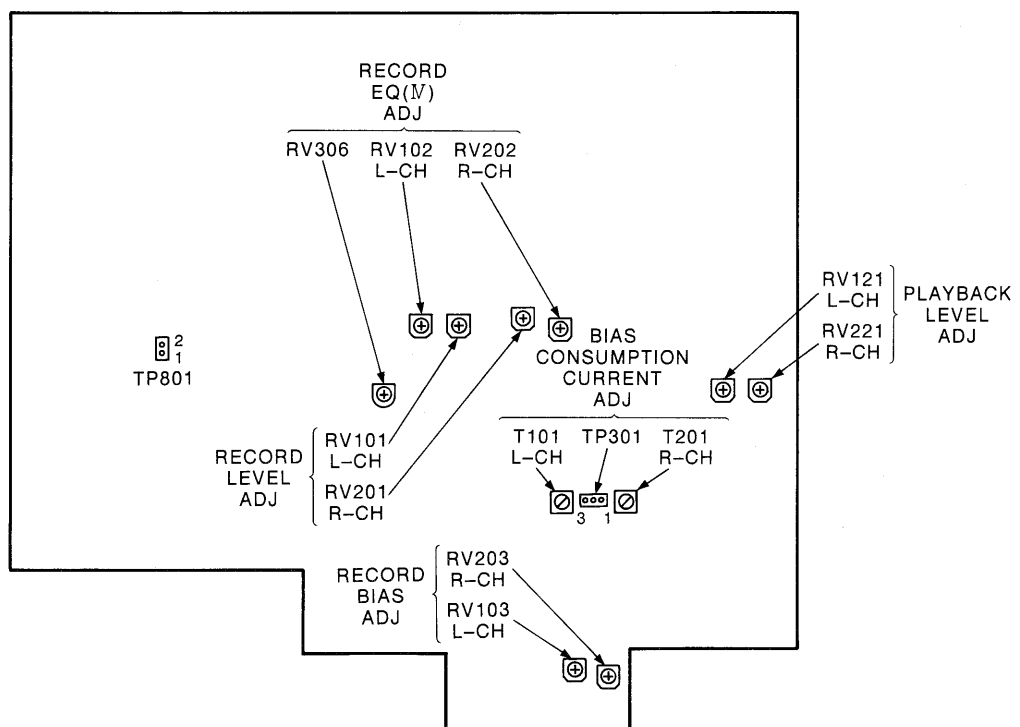
#### Adjustment Limits :

10kHz level difference against 315Hz reference.  
0 ± 1.0dB

**Adjustment Location :** MAIN board

**Adjustment Location :**

### [ MAIN BOARD ] (COMPONENT SIDE)



## SECTION 5 DIAGRAMS

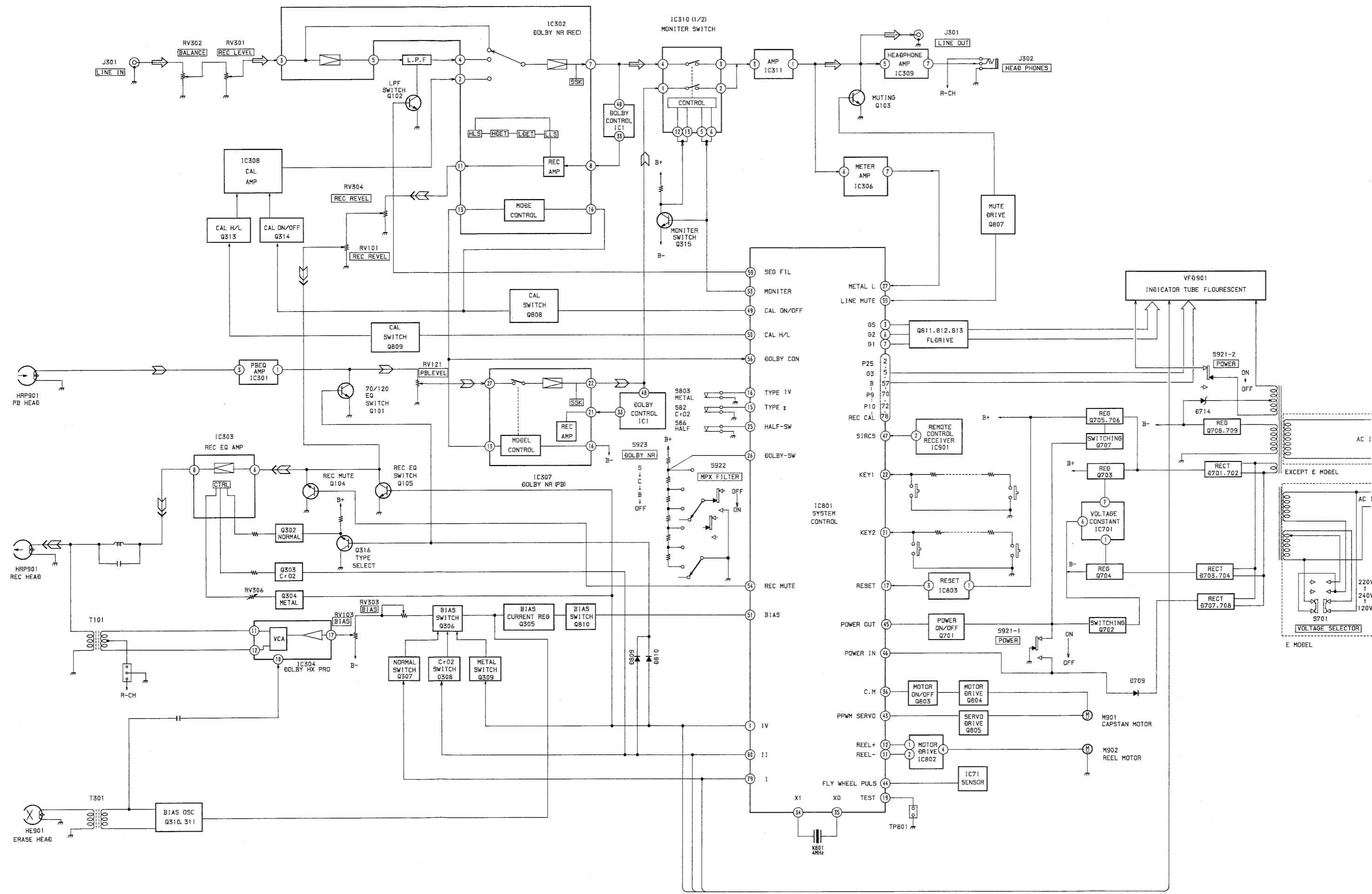
### 5-1. IC PIN DESCRIPTIONS

• IC801  $\mu$ PD78042GF-072-3B9

Pin No.	Pin name	I/O	Description
1	IV	O	FLT segment IV / IV output terminal
2	P25	O	FLT segment P25
3	G5-MODE	O	FLT column Mode
4	G4-SEC	O	FLT column Sec
5	G3-MIN	O	FLT column Min
6	G2-RCH	O	FLT column RCH
7	G1-LCH	O	FLT column LCH
8	Vdd	—	Power supply (+5V)
9	—	—	Not used
10	—	—	Not ussd
11	REEL-	O	Reel motor - output
12	REEL+	O	Reel motor + output
13	—	—	Not used
14	—	—	Not used
15	TYPE.II	I	TYPE II SW input terminal
16	TYPE.IV	I	TYPE IV SW input terminal
17	RESET	I	Reset signal input RESET: 0V
18	TEST	I	Test mode selector "L": Test mode
19	TEST	I	Test mode selector "L": Test mode
20	AVss	—	GND
21	KEY2	I	KEY 2 0(V) 0.8(V) 1.6(V) 2.5(V) 3.4(V) 4.2(V) PLAY PAS RES MEM MON CAL
22	KEY1	I	KEY 1 0(V) 1(V) 2(V) 3(V) 4(V) STOP REW FF REC MUT
23	T-PULSE	I	Take up pulse input terminal
24	S-PULSE	I	Supply pulse input terminal
25	HALF-SW	I	Half pawl input terminal
26	DOLBY-SW	I	DOLBY type input terminal
27	METER-L	I	Meter level L-CH input terminal
28	METER-R	I	Meter level R-CH input terminal
29	AVdd	—	Power supply (+5V)
30	AVref	I	A/D reference voltage 5V
31	AMS-SIG	I	AMS signal input terminal
32	—	—	Not used
33	Uss	—	GND
34	XI	I	System clock input terminal
35	XO	O	System clock output terminal
36	C. M	O	Capstan motor ON/OFF ON=1 OFF=0
37	—	—	Not used
38	—	—	Not used
39	—	—	Not used
40	—	—	Not used
41	—	—	Not used
42	—	—	Not used
43	PPWM SERVO	O	Capstan motor Servo
44	FLY WHEEL PULSE	I	FLY Wheel Pulse input terminal
45	POWER OUT	O	Power ON/OFF ON=0 OFF=1 or open

Pin No.	Pin name	I/O	Description
46	POWER IN	I	Power ON=1 OFF=0
47	SIRCS	I	Sircs signal input terminal
48	IC	—	GND
49	CAL1 ON/OFF	O	Calibration ON/OFF ON=OPEN OFF=0
50	CAL2 H/L	O	Calibration H/L H=OPEN L=0
51	BIAS	O	Bias ON/OFF ON=0
52	Vdd	—	Power supply (+5V)
53	MONITOR	O	Audio mode selector SOURCE=5V TAPE=OPEN
54	REC-MUT	O	Recording Mute ON/OFF MUTE=5V
55	LINE-MUT	O	Line Mute ON/OFF Cancel=5V MUTE=OPEN
56	DOLBY CON	O	C=5V B=ON OFF=-6V
57	SEG B	O	FLT segment DOLBY B
58	SEG C	O	FLT segment DOLBY C
59	SEG FIL	O	FLT segment MPX, Filter ON/OFF ON=5V
60	SEG S	O	FLT segment DOLBY S DOLBY S ON/OFF ON=5V
61—70	P1—P9	O	FLT segment P1—P9 output terminal
71	-21V	I	-21V
72—78	P10—REC CAL	O	FLT segment P10—REC CAL output terminal
79	I	O	FLT segment I Normal Bias ON=5V
80	II	O	FLT segment II CrO <sub>2</sub> Bias ON=5V

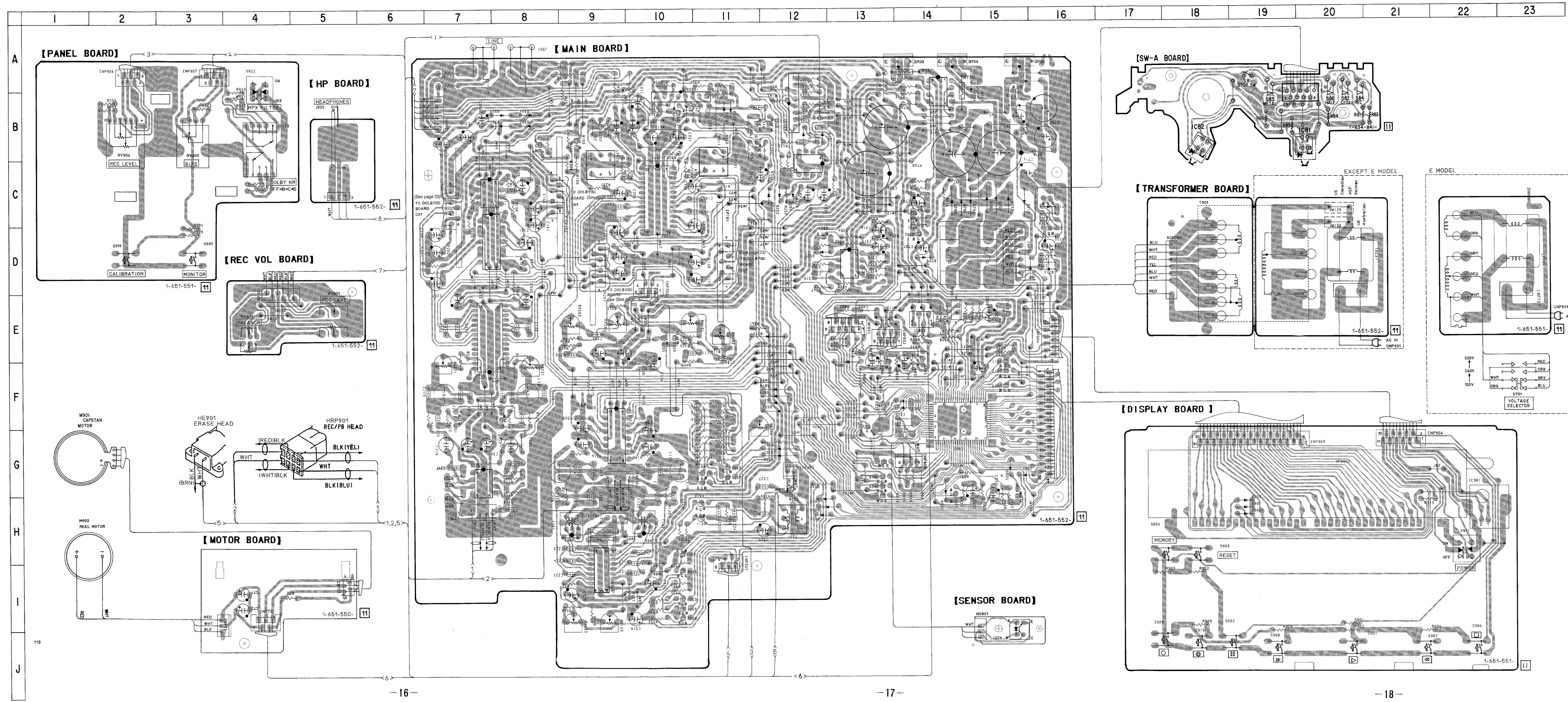
5-2. BLOCK DIAGRAM



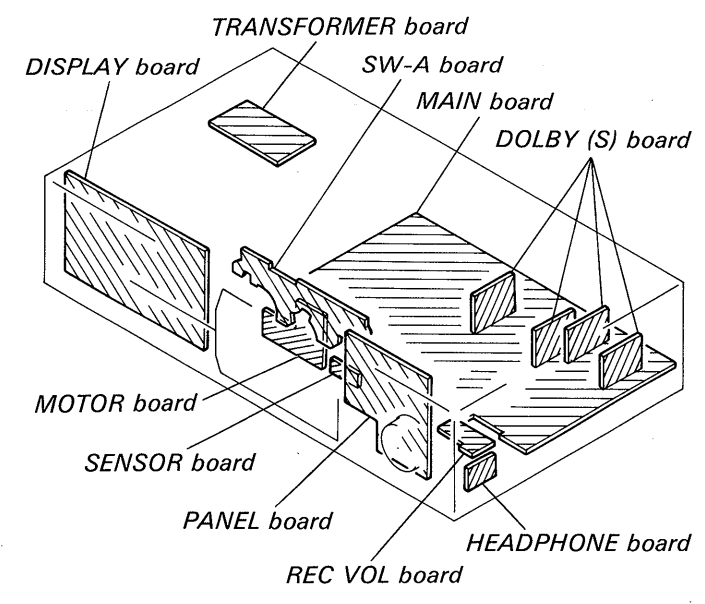
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	B-12	D810	H-12
D102	B-12	D814	F-12
D201	C-12	D815	F-12
D202	C-12	D901	H-19
D301	B-8	D902	H-19
D302	B-8	D903	H-19
D303	B-8		
D304	B-8	IC71	I-15
D305	D-12	IC81	B-20
D306	F-12	IC82	B-18
D307	G-12	IC301	G-7
D308	G-12	IC302	C-10
D309	B-11	IC303	G-9
D310	B-11	IC304	H-9
D311	C-12	IC305	D-13
D312	E-12	IC306	C-12
D313	F-12	IC307	E-7
D701	C-14	IC308	B-10
D702	C-15	IC309	B-12
D703	C-15	IC310	D-7
D704	C-15	IC311	C-7
D705	C-14	IC701	B-14
D706	A-15	IC801	F-14
D707	C-15	IC802	E-14
D708	C-14	IC803	E-15
D709	D-14	IC901	H-22
D711	B-15		
D712	A-15	Q101	F-7
D713	D-15	Q102	B-11
D714	D-16	Q103	F-13
D715	C-16	Q805	E-14
D718	C-15	Q807	G-14
D801	G-14	Q808	G-13
D802	F-14	Q809	G-13
D803	F-14	Q810	G-13
D804	F-13	Q811	F-15
D805	G-15	Q812	F-15
D807	G-15	Q813	F-15
D808	H-12	Q814	G-15
D809	H-12		

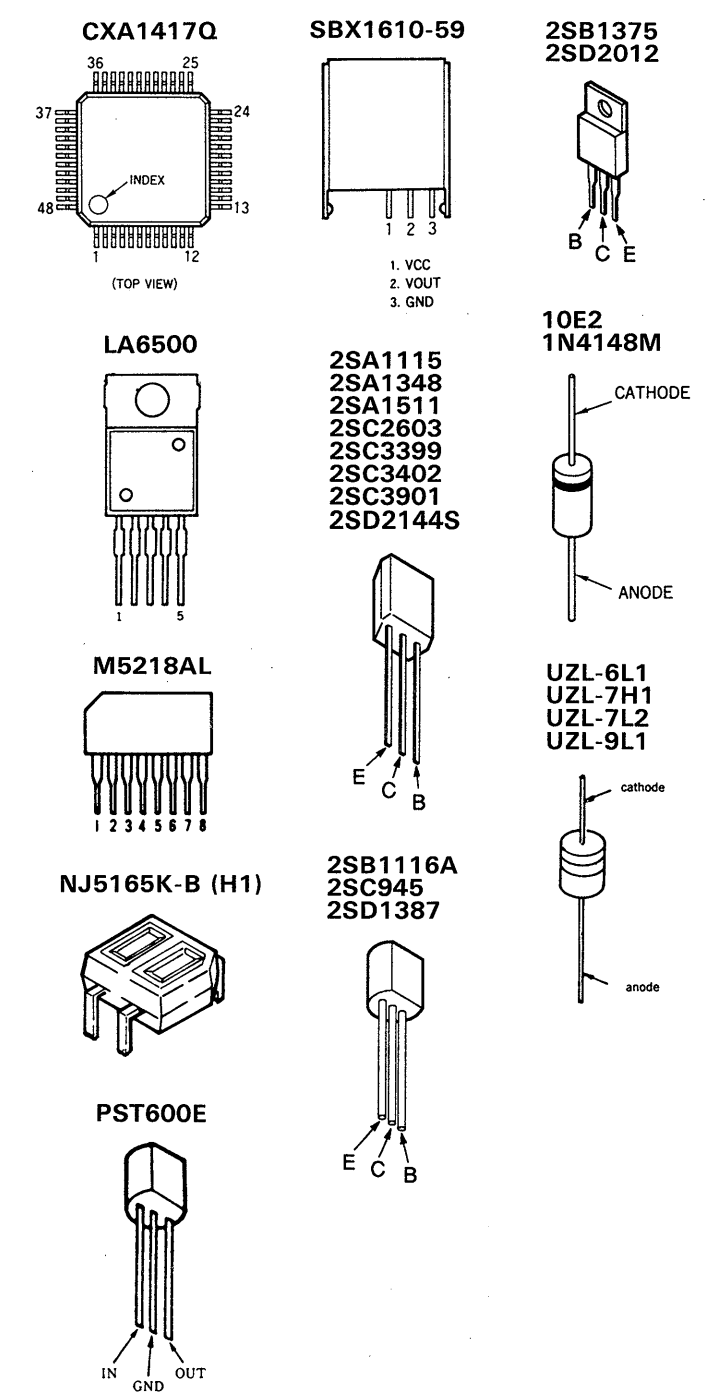
Note:  
 • : parts extracted from the component side.  
 • : parts extracted from the conductor side.  
 • : Pattern on the side which is seen.



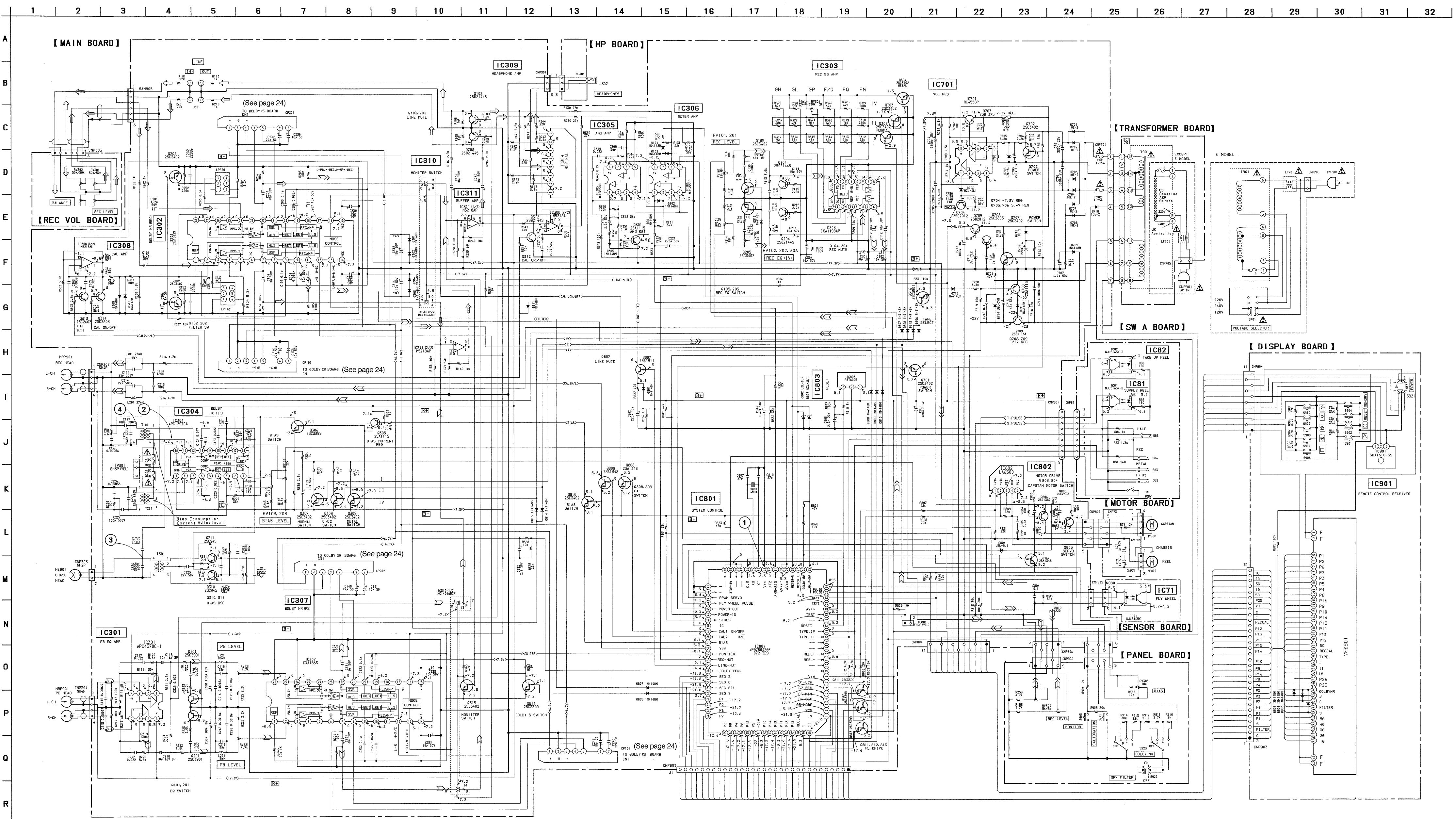
5-5. CIRCUIT BOARDS LOCATION



5-6. SEMICONDUCTOR LEAD LAYOUTS



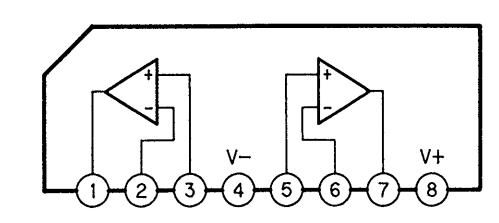
5-4. SCHEMATIC DIAGRAM - MAIN Section -



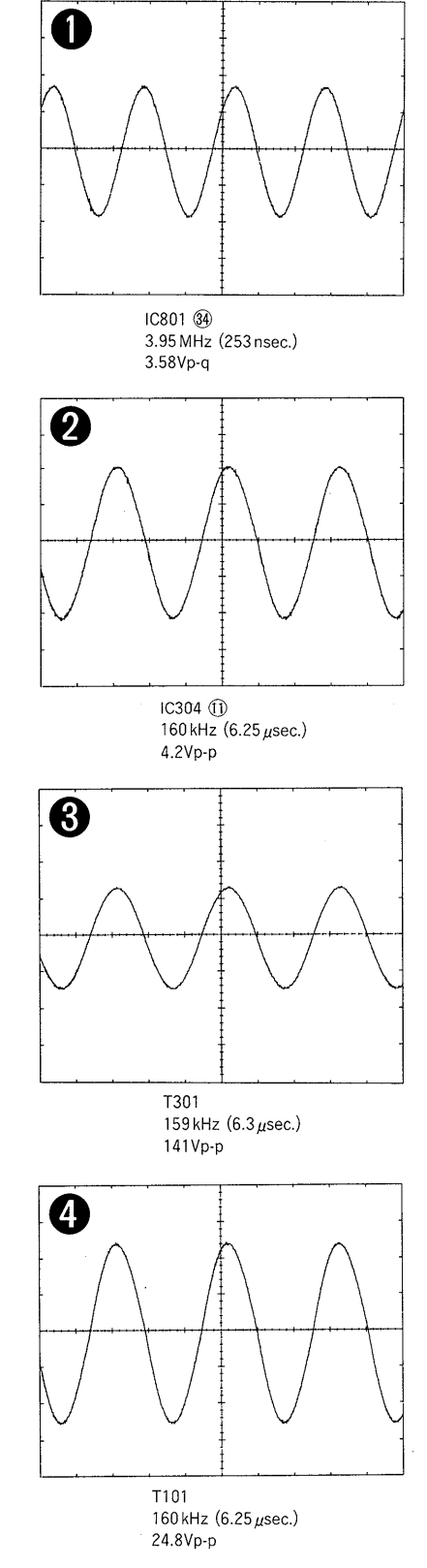
Note: All capacitors are in  $\mu F$  unless otherwise noted.  $\mu F$ :  $\mu F$  50WV or less are not indicated except for electrolytics and tantalums. All resistors are in  $\Omega$  and  $\frac{1}{2}W$  or less unless otherwise specified.  $\Delta$ : internal component.  $\square$ : fusible resistor.

- B+ : B+ Line
- B- : B- Line
- $\square$  : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: REC
- Voltages are taken with a VOM (Input Impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.

IC Block Diagram

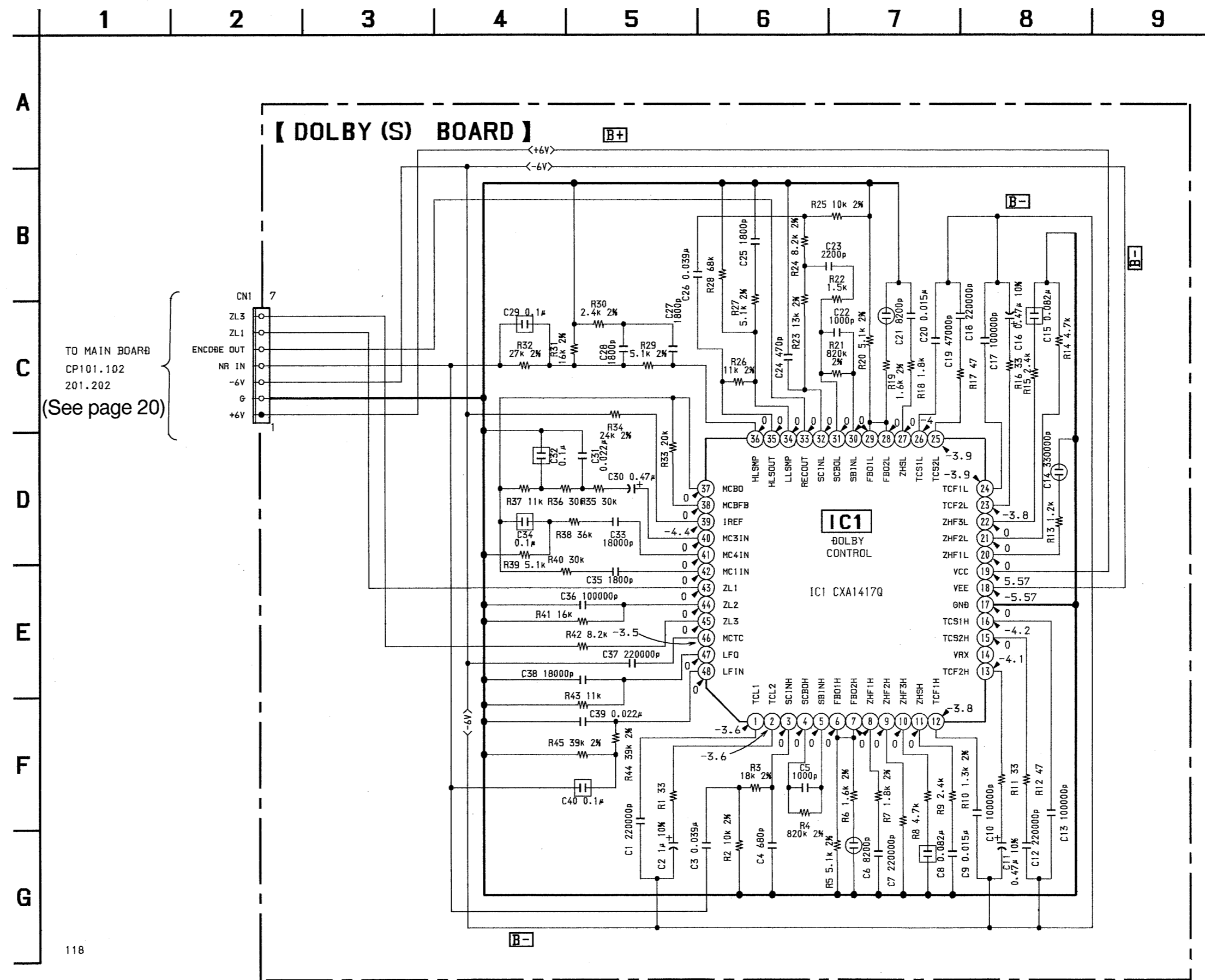
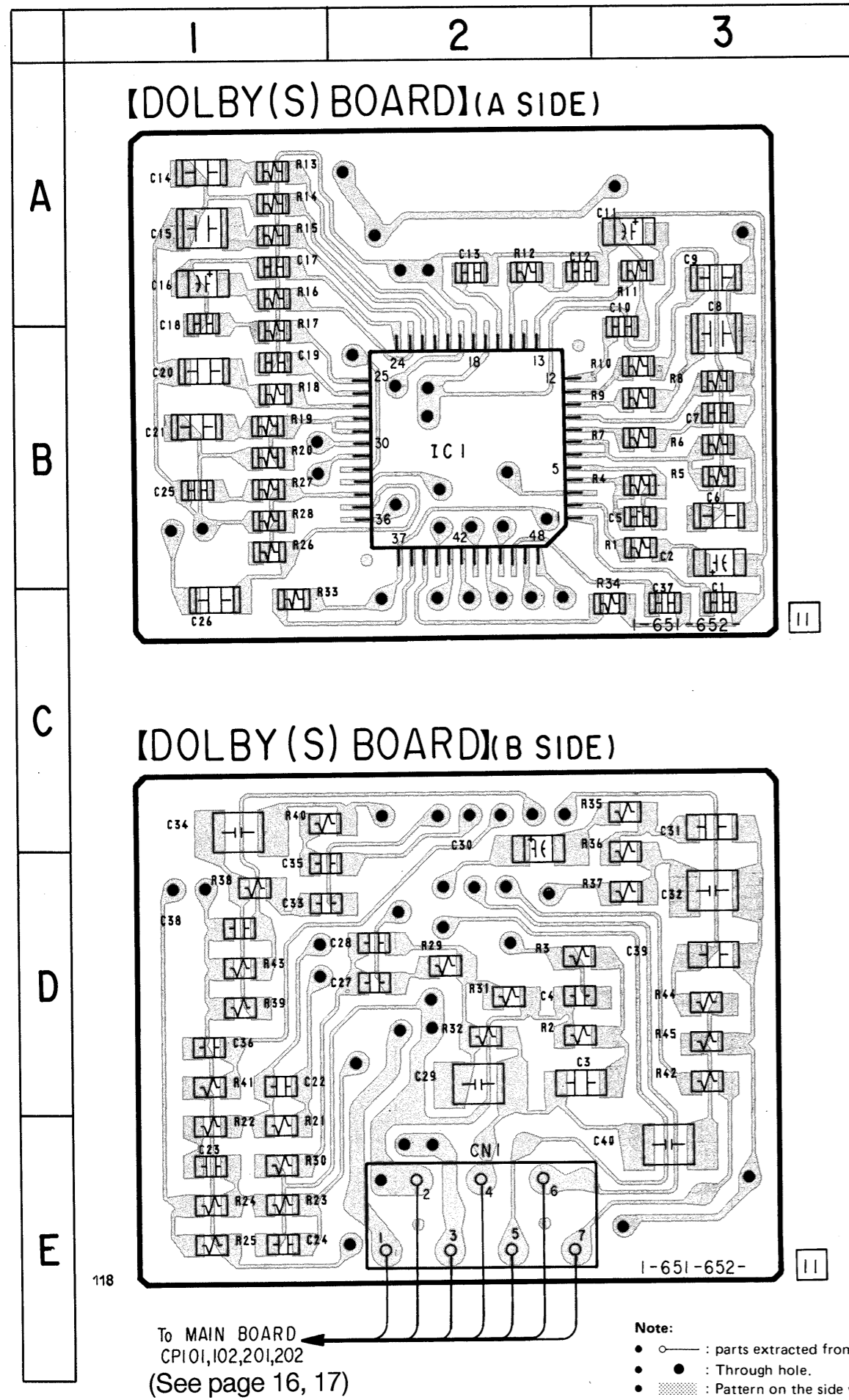


Waveforms



5-7. PRINTED WIRING BOARD —DOLBY (S) Section—

• See page 19 for Circuit Boards Location and Semiconductor Lead Layouts.



# SECTION 6 EXPLODED VIEWS

## NOTE:

- -xx,-x mean standardized parts, so they may have some differences from the original one.
  - Color Indication of Appearance Parts  
Example:  
KNOB, BALANCE (WHITE)...(RED)
- ↑                    ↑  
 Parts color      Cabinet's color

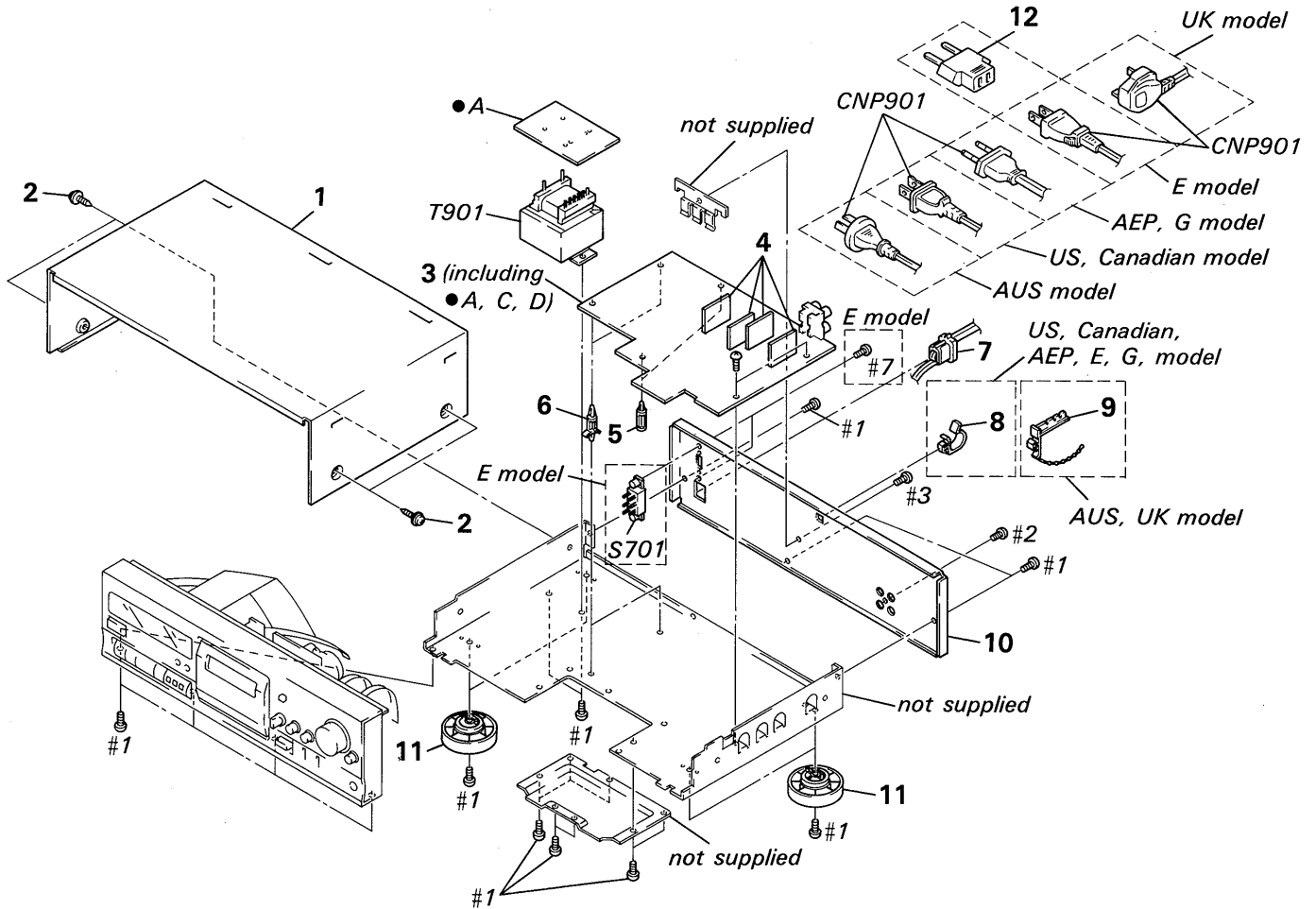
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Abbreviations  
G : German  
AUS : Australian

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## 6-1. CHASSIS SECTION

● A : TRANSFORMER board



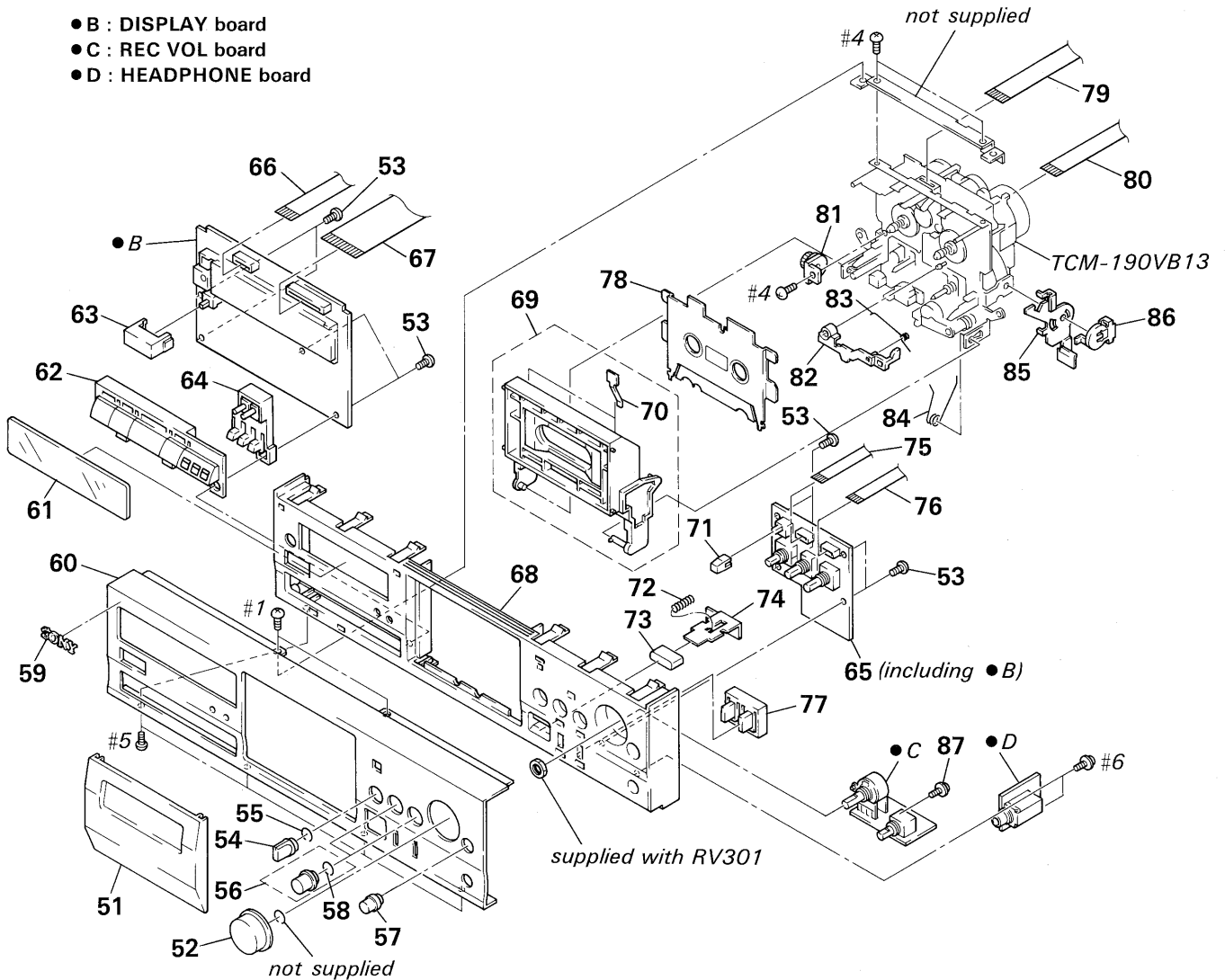
Ref.No.	Part No.	Description	Remark
1	3-332-578-61	CASE	
2	3-704-366-01	SCREW (CASE) (M3X8)	
*3	A-2007-222-A	MAIN BOARD, COMPLETE (US, Canadian, AEP, G)	
*3	A-2007-224-A	MAIN BOARD, COMPLETE (UK, AUS)	
*3	A-2007-225-A	MAIN BOARD, COMPLETE (E)	
*4	A-2007-173-A	DOLBY (S) BOARD, COMPLETE	
*5	3-669-610-00	SPACER	
*6	3-346-265-11	HOLDER, PC BOARD	
*7	3-703-244-00	BUSHING (2104), CORD (AEP, UK, G, AUS)	
7	3-703-571-11	BUSHING (S) (4516), CORD (US, Canadian, E)	
*8	4-949-235-01	HOOK (US, Canadian, AEP, E, G)	
*9	4-956-370-02	BAND, PLUG FIXED (AUS, UK)	
*10	3-911-451-01	PANEL, BACK (US, Canadian)	
*10	3-911-451-11	PANEL, BACK (UK, AUS)	

Ref.No.	Part No.	Description	Remark
*10	3-911-451-21	PANEL, BACK (AEP, G)	
*10	3-911-451-31	PANEL, BACK (E)	
11	4-956-885-01	FOOT (F58175S2W) (US, Canadian)	
11	4-956-885-11	FOOT (F58175S2W) (AEP, UK, E, G, AUS)	
$\Delta$ 12	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
$\Delta$ CNP901	1-558-945-21	CORD, POWER (POLAR. SPT-1) (US, Canadian)	
$\Delta$ CNP901	1-575-651-21	CORD, POWER (AEP, G)	
$\Delta$ CNP901	1-696-027-11	CORD, POWER (E)	
$\Delta$ CNP901	1-696-586-11	CORD, POWER (UK)	
$\Delta$ CNP901	1-696-845-11	CORD, POWER (AUS)	
$\Delta$ S701	1-692-155-11	SELECTOR, POWER VOLTAGE (E)	
$\Delta$ T901	1-426-726-11	TRANSFORMER, POWER (US, Canadian)	
$\Delta$ T901	1-426-727-11	TRANSFORMER, POWER (AEP, UK, G, AUS)	
$\Delta$ T901	1-426-728-11	TRANSFORMER, POWER (E)	



## 6-2. FRONT PANEL SECTION

- B : DISPLAY board
- C : REC VOL board
- D : HEADPHONE board

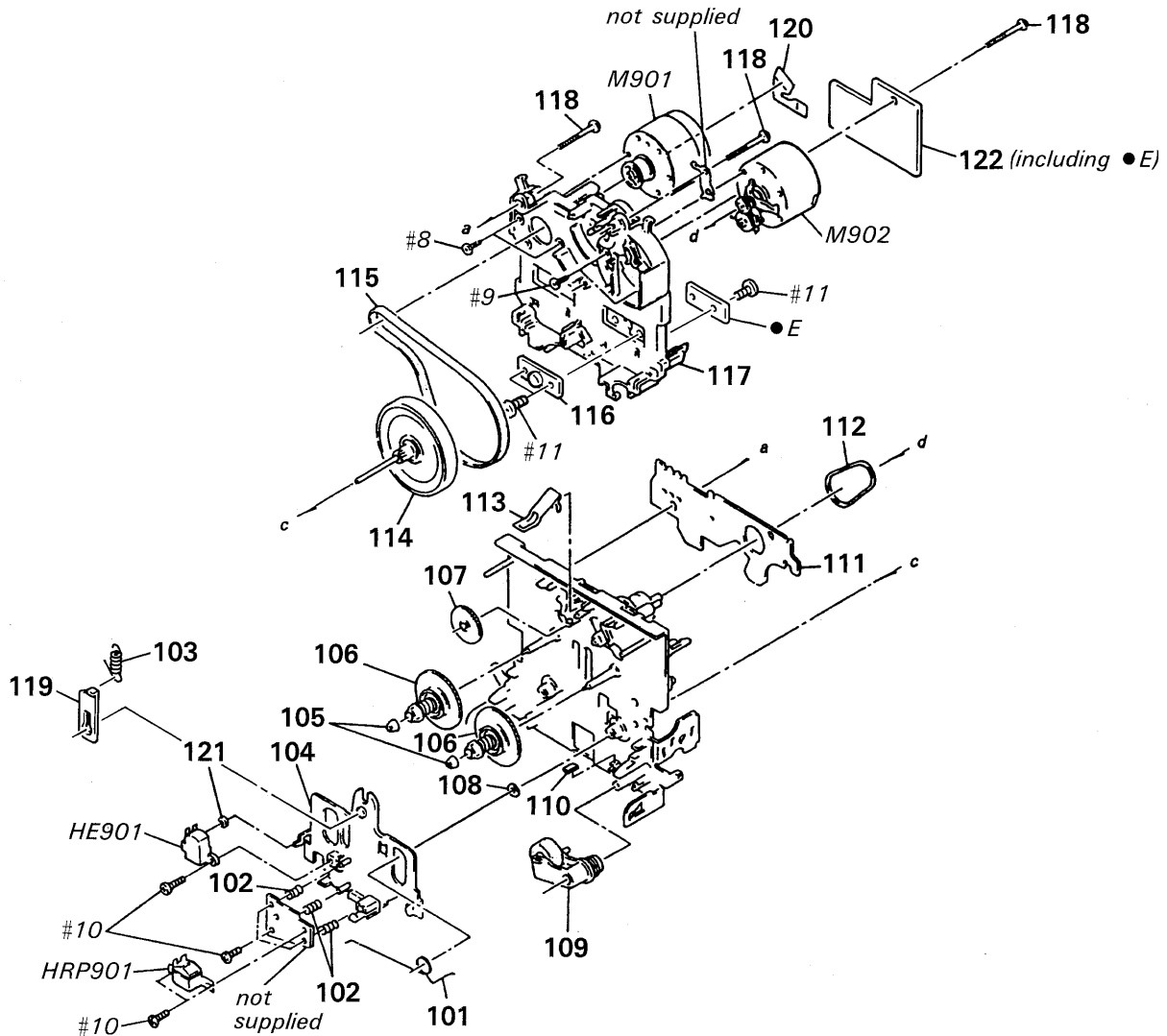


Ref.No.	Part No.	Description	Remark
51	X-3368-043-1	LID ASSY, CASSETTE	
52	3-367-438-11	KNOB (REC)	
53	4-951-620-01	SCREW (2.6X8), +BVTP	
54	4-908-097-21	KNOB	
55	3-350-440-01	SPRING	
56	A-2004-274-A	KNOB (RB) ASSY	
57	3-367-431-01	KNOB (BAL)	
58	3-354-981-01	SPRING (SUS), RING	
59	4-942-568-01	EMBLEM (NO.5), SONY	
60	3-911-445-01	PANEL, FRONT (US,Canadian)	
60	3-911-445-11	PANEL, FRONT (AEP,UK,E,G,AUS)	
61	3-387-831-01	WINDOW (M)	
62	3-386-247-01	BUTTON (FW)	
63	3-354-932-01	BUTTON (POWER)	
64	3-386-248-01	BUTTON (RE)	
*65	A-2007-223-A	PANEL BOARD, COMPLETE (US,Canadian,AEP,UK,G,AUS)	
*65	A-2007-254-A	PANEL BOARD, COMPLETE (E)	
66	1-751-097-11	WIRE (FLAT TYPE) (11 CORE)	
67	1-751-096-11	WIRE (FLAT TYPE) (31 CORE)	

Ref.No.	Part No.	Description	Remark
68	3-911-449-01	PANEL (BASE)	
69	X-3368-119-1	HOLDER (R) ASSY, CASSETTE	
70	3-308-823-11	DETENT, CASSETTE	
71	3-380-952-01	BUTTON	
72	3-359-906-01	SPRING, COMPRESSION	
73	3-387-830-01	BUTTON (EJECT)	
74	3-912-198-01	SLIDER (EJECT)	
75	1-575-778-11	WIRE, FLAT TYPE (5 CORE)	
76	1-575-666-11	WIRE, FLAT TYPE (5 CORE)	
77	3-910-394-01	BUTTON (CAL)	
78	3-367-711-01	RETAINER, CASSETTE	
79	1-575-781-11	WIRE, FLAT TYPE (9 CORE)	
80	1-575-779-11	WIRE, FLAT TYPE (5 CORE)	
81	3-354-963-01	DAMPER	
82	3-354-956-01	LEVER (EJ SAFTY LEVER R)	
83	3-354-962-01	SPRING (EJ SAFTY SPRING R)	
84	3-354-960-01	SPRING (LOADING R), TORSION	
*85	3-354-954-01	LEVER (LOCK LEVER R)	
86	3-354-957-01	JOINT (LOCK LEVER)	
87	4-933-134-11	SCREW (+PTPWH M2.6X8)	

### 6-3. MECHANISM SECTION-1 (TCM-190VB13)

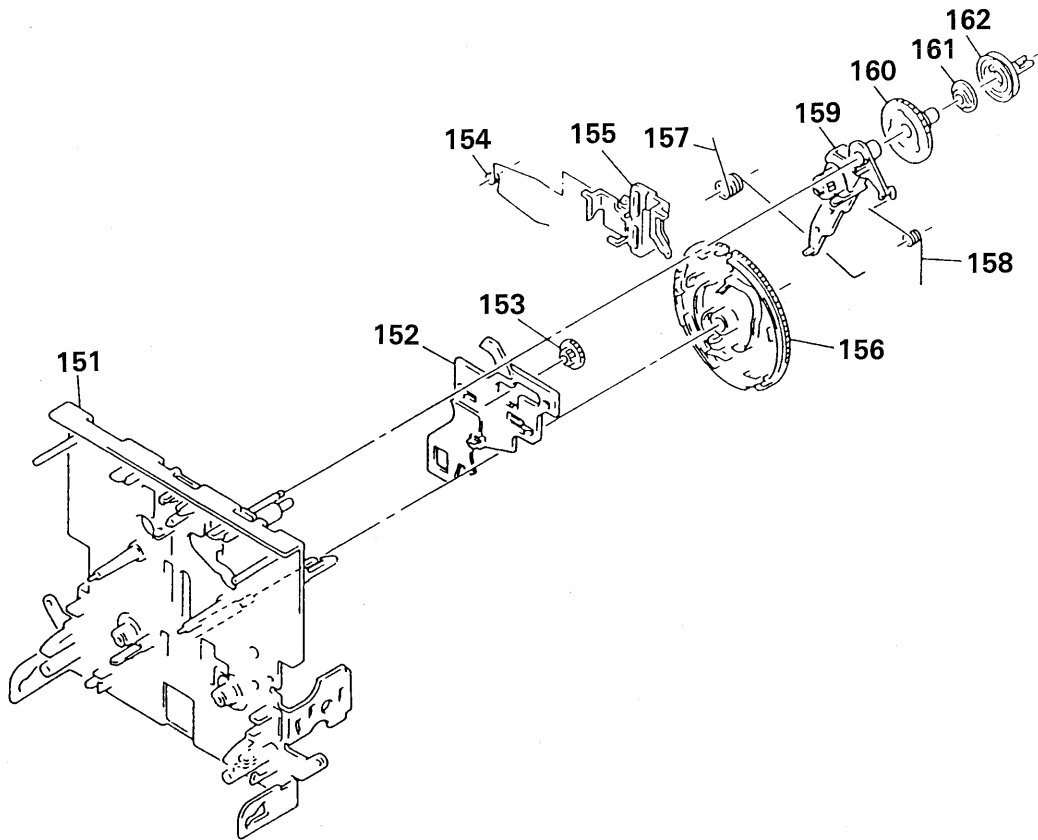
● E : SENSOR board



Ref.No.	Part No.	Description	Remark
101	3-911-014-01	SPRING, TORSION	
102	3-356-659-01	SPRING (RPH), COMPRESSION	
103	3-363-868-01	SPRING (HEAD CHASSIS), TENSION	
104	X-3368-169-1	SLIDER (HEAD CHASSIS) ASSY	
105	3-362-308-01	CAP (REEL)	
106	X-3362-078-1	TABLE ASSY (B), REEL	
107	3-359-424-01	GEAR (REV GEAR)	
108	3-356-713-01	WASHER	
109	X-3367-969-1	LEVER (PINCH LEVER FWD) ASSY	
110	3-359-469-01	SPACER	
*111	1-634-841-14	SW-A BOARD	
112	3-359-466-01	BELT (FR), SQUARE	
113	3-359-430-01	SPRING (CASSETTE RETAINER), LEAF	
114	X-3367-967-1	FLYWHEEL (FWD) COMPLETE ASSY	

Ref.No.	Part No.	Description	Remark
115	3-359-467-01	BELT (1 WAY FLAT BELT)	
116	X-3367-966-1	LAPIS ASSY	
117	3-911-007-01	BASE (THRUST RETAINER), FITTING	
118	3-359-414-01	SCREW (+PTPH 2X23)	
*119	X-3362-589-2	SLIDER (LIMITER) ASSY	
120	1-638-983-11	MOTOR FLEXIBLE BOARD	
121	3-701-437-01	WASHER (t=0.13)	
121	3-701-437-11	WASHER (t=0.25)	
*122	1-651-550-11	MOTOR BOARD	
HE901	1-543-673-11	HEAD, MAGNETIC (ERASE)	
HRP901	1-543-733-11	HEAD, MAGNETIC (RECORD/PLAYBACK)	
M901	X-3368-855-1	MOTOR ASSY, CAPSTAN	
M902	X-3363-501-2	MOTOR ASSY, REEL	

### 6-4. MECHANISM SECTION-2 (TCM-190VB13)



Ref.No.	Part No.	Description	Remark
151	X-3368-718-1	CHASSIS (ONE) ASSY, MECHANICAL	
*152	3-359-415-01	SLIDER (TRIGGER SLIDER)	
153	3-359-448-01	GEAR (TRIGGER)	
154	3-359-454-01	SPRING, TORSION	
155	3-359-429-01	SLIDER (BRAKE PLATE)	
156	3-359-420-01	GEAR (CAM GEAR)	

Ref.No.	Part No.	Description	Remark
157	3-359-456-01	SPRING (TRIGGER SPRING), TORSION	
158	3-359-453-01	SPRING (FR ARM), TORSION	
159	X-3359-405-1	LEVER (FR ARM) ASSY	
160	3-359-419-01	GEAR (FR GEAR)	
161	3-359-421-01	CLUTCH (REEL DISK)	
162	3-359-418-01	PULLEY (FR PULLEY)	

# SECTION 7

## ELECTRICAL PARTS LIST

**DOLBY (S)**

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable

- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- SEMICONDUCTORS  
In each case, u :  $\mu$ , for example:  
uA... :  $\mu$ A..., uPA... :  $\mu$ PA..., uPB... :  $\mu$ PB...,  
uPC... :  $\mu$ PC..., uPD... :  $\mu$ PD...

- CAPACITORS

uF :  $\mu$ F

- COILS

uH :  $\mu$ H

- Abbreviations

G : German

AUS : Australian

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref.No.	Part No.	Description	Remark
*	A-2007-173-A	DOLBY (S) BOARD, COMPLETE *****	
		< CAPACITOR >	
C1	1-164-222-11	CERAMIC CHIP 0.22uF	25V
C2	1-135-177-21	TANTALUM CHIP 1uF	20% 20V
C3	1-104-558-11	FILM CHIP 0.039uF	5% 16V
C4	1-163-007-11	CERAMIC CHIP 680PF	10% 50V
C5	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C6	1-164-717-11	CERAMIC CHIP 0.0082uF	5% 50V
C7	1-164-222-11	CERAMIC CHIP 0.22uF	25V
C8	1-104-562-11	FILM CHIP 0.082uF	5% 16V
C9	1-104-553-11	FILM CHIP 0.015uF	5% 16V
C10	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C11	1-135-145-11	TANTALUM CHIP 0.47uF	10% 35V
C12	1-164-222-11	CERAMIC CHIP 0.22uF	25V
C13	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C14	1-162-568-11	CERAMIC CHIP 0.33uF	10% 16V
C15	1-104-562-11	FILM CHIP 0.082uF	5% 16V
C16	1-135-145-11	TANTALUM CHIP 0.47uF	10% 35V
C17	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C18	1-164-222-11	CERAMIC CHIP 0.22uF	25V
C19	1-163-035-00	CERAMIC CHIP 0.047uF	50V
C20	1-104-553-11	FILM CHIP 0.015uF	5% 16V
C21	1-164-717-11	CERAMIC CHIP 0.0082uF	5% 50V
C22	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C23	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
C24	1-163-005-11	CERAMIC CHIP 470PF	10% 50V
C25	1-163-012-00	CERAMIC CHIP 0.0018uF	10% 50V
C26	1-104-558-11	FILM CHIP 0.039uF	5% 16V
C27	1-163-012-00	CERAMIC CHIP 0.0018uF	10% 50V
C28	1-163-012-00	CERAMIC CHIP 0.0018uF	10% 50V
C29	1-104-563-11	FILM CHIP 0.1uF	5% 16V
C30	1-135-145-11	TANTALUM CHIP 0.47uF	10% 35V
C31	1-104-555-11	FILM CHIP 0.022uF	5% 16V
C32	1-104-563-11	FILM CHIP 0.1uF	5% 16V
C33	1-163-024-00	CERAMIC CHIP 0.018uF	10% 50V
C34	1-104-563-11	FILM CHIP 0.1uF	5% 16V
C35	1-163-012-00	CERAMIC CHIP 0.0018uF	10% 50V

Ref.No.	Part No.	Description	Remark
C36	1-165-319-11	CERAMIC CHIP 0.1uF	50V
C37	1-164-222-11	CERAMIC CHIP 0.22uF	25V
C38	1-163-024-00	CERAMIC CHIP 0.018uF	10% 50V
C39	1-104-555-11	FILM CHIP 0.022uF	5% 16V
C40	1-104-563-11	FILM CHIP 0.1uF	5% 16V
		< CONNECTOR >	
CN1	1-695-092-11	SOCKET, CONNECTOR 7P	
		< IC >	
IC1	8-752-056-51	IC CXA1417Q-T6	
		< RESISTOR >	
R1	1-208-353-41	METAL GLAZE 33 2%	1/10W
R2	1-216-675-11	METAL CHIP 10K 0.5%	1/10W
R3	1-208-812-11	METAL GLAZE 18K 2%	1/10W
R4	1-208-556-41	METAL GLAZE 820K 2%	1/10W
R5	1-216-668-11	METAL CHIP 5.1K 0.5%	1/10W
R6	1-208-442-41	METAL GLAZE 1.6K 2%	1/10W
R7	1-216-657-11	METAL CHIP 1.8K 0.5%	1/10W
R8	1-216-667-11	METAL CHIP 4.7K 0.5%	1/10W
R9	1-208-446-41	METAL GLAZE 2.4K 2%	1/10W
R10	1-208-440-41	METAL GLAZE 1.3K 2%	1/10W
R11	1-208-353-41	METAL GLAZE 33 2%	1/10W
R12	1-208-357-41	METAL GLAZE 47 2%	1/10W
R13	1-216-653-11	METAL CHIP 1.2K 0.5%	1/10W
R14	1-216-667-11	METAL CHIP 4.7K 0.5%	1/10W
R15	1-208-446-41	METAL GLAZE 2.4K 2%	1/10W
R16	1-208-353-41	METAL GLAZE 33 2%	1/10W
R17	1-208-357-41	METAL GLAZE 47 2%	1/10W
R18	1-216-657-11	METAL CHIP 1.8K 0.5%	1/10W
R19	1-208-442-41	METAL GLAZE 1.6K 2%	1/10W
R20	1-216-668-11	METAL CHIP 5.1K 0.5%	1/10W
R21	1-208-556-41	METAL GLAZE 820K 2%	1/10W
R22	1-216-655-11	METAL CHIP 1.5K 0.5%	1/10W
R23	1-216-678-11	METAL CHIP 13K 0.5%	1/10W
R24	1-216-673-11	METAL CHIP 8.2K 0.5%	1/10W
R25	1-216-675-11	METAL CHIP 10K 0.5%	1/10W

**DOLBY (S)****SW-A****MAIN****HP****REC VOL****TRANSFORMER**

Ref.No.	Part No.	Description	Remark
R26	1-216-676-11	METAL CHIP	11K 0.5% 1/10W
R27	1-216-668-11	METAL CHIP	5.1K 0.5% 1/10W
R28	1-216-695-11	METAL CHIP	68K 0.5% 1/10W
R29	1-216-668-11	METAL CHIP	5.1K 0.5% 1/10W
R30	1-208-446-41	METAL GLAZE	2.4K 2% 1/10W
R31	1-216-680-11	METAL CHIP	16K 0.5% 1/10W
R32	1-216-685-11	METAL CHIP	27K 0.5% 1/10W
R33	1-208-469-41	METAL GLAZE	20K 2% 1/10W
R34	1-216-684-11	METAL CHIP	24K 0.5% 1/10W
R35	1-208-521-41	METAL GLAZE	30K 2% 1/10W
R36	1-208-521-41	METAL GLAZE	30K 2% 1/10W
R37	1-216-676-11	METAL CHIP	11K 0.5% 1/10W
R38	1-208-523-41	METAL GLAZE	36K 2% 1/10W
R39	1-216-668-11	METAL CHIP	5.1K 0.5% 1/10W
R40	1-208-521-41	METAL GLAZE	30K 2% 1/10W
R41	1-216-680-11	METAL CHIP	16K 0.5% 1/10W
R42	1-216-673-11	METAL CHIP	8.2K 0.5% 1/10W
R43	1-216-676-11	METAL CHIP	11K 0.5% 1/10W
R44	1-216-689-11	METAL CHIP	39K 0.5% 1/10W
R45	1-216-689-11	METAL CHIP	39K 0.5% 1/10W

\*\*\*\*\*

\* 1-634-841-14 SW-A BOARD  
\*\*\*\*\*

&lt; CONNECTOR &gt;

\*CNP81 1-568-852-11 SOCKET, CONNECTOR 9P

&lt; IC &gt;

IC81 8-749-924-10 IC PHONT REFLECTOR NJL5165K-B(H1)  
IC82 8-749-924-10 IC PHONT REFLECTOR NJL5165K-B(H1)

&lt; RESISTOR &gt;

R81 1-249-414-11 CARBON 560 5% 1/4W  
R83 1-247-834-11 CARBON 1.3K 5% 1/4W  
R84 1-249-417-11 CARBON 1K 5% 1/4W  
R85 1-249-408-11 CARBON 180 5% 1/4W  
R86 1-249-408-11 CARBON 180 5% 1/4W

&lt; SWITCH &gt;

S81 1-571-958-11 SWITCH, PUSH (1 KEY) (STOP)  
S82 1-571-281-21 SWITCH, LEAF (CrO2)  
S83 1-571-281-21 SWITCH, LEAF (METAL)  
S84 1-571-281-21 SWITCH, LEAF (REC)  
S86 1-571-281-21 SWITCH, LEAF (HALF)

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Ref.No.	Part No.	Description	Remark
*	A-2007-222-A	MAIN BOARD, COMPLETE (US, Canadian, AEP, G)	
*	A-2007-224-A	MAIN BOARD, COMPLETE (UK, AUS)	
*	A-2007-225-A	MAIN BOARD, COMPLETE (E)	

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HP BOARD

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REC VOL BOARD

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TRANSFORMER BOARD

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&lt; FUSE HOLDER &gt;

1-533-293-11 FUSE HOLDER

&lt; CAPACITOR &gt;

C101	1-124-927-11	ELECT	4.7uF	20%	100V
C102	1-161-375-00	CERAMIC	0.0022uF	20%	50V
C104	1-124-907-11	ELECT	10uF	20%	50V
C105	1-136-165-00	FILM	0.1uF	5%	50V
C106	1-136-163-00	FILM	0.068uF	5%	50V
C107	1-124-907-11	ELECT	10uF	20%	50V
C110	1-136-175-00	FILM	0.68uF	5%	50V
C111	1-124-907-11	ELECT	10uF	20%	50V
C112	1-124-907-11	ELECT	10uF	20%	50V
C113	1-110-338-51	MYLAR	180PF	5%	50V
C114	1-107-210-00	MICA	22PF	5%	500V
C115	1-110-340-11	MYLAR	270PF	5%	50V
C116	1-130-474-00	MYLAR	0.0018uF	5%	50V
C117	1-136-157-00	FILM	0.022uF	5%	50V
C118	1-126-320-11	ELECT, NONPOLAR	10uF	20%	16V
C119	1-102-518-11	CERAMIC	33PF	5%	50V
C120	1-130-488-00	MYLAR	0.027uF	5%	50V
C121	1-124-925-11	ELECT	2.2uF	20%	100V
C122	1-136-153-00	FILM	0.01uF	5%	50V
C123	1-136-157-00	FILM	0.022uF	5%	50V
C124	1-136-161-00	FILM	0.047uF	5%	50V
C125	1-136-803-11	FILM	560PF	5%	630V
C126	1-130-468-00	MYLAR	560PF	5%	50V
C127	1-107-169-00	MICA	100PF	5%	500V
C128	1-130-474-00	MYLAR	0.0018uF	5%	50V
C130	1-130-475-00	MYLAR	0.0022uF	5%	50V
C131	1-124-907-11	ELECT	10uF	20%	50V
C132	1-136-165-00	FILM	0.1uF	5%	50V
C133	1-136-163-00	FILM	0.068uF	5%	50V
C136	1-124-907-11	ELECT	10uF	20%	50V
C137	1-124-916-11	ELECT	22uF	20%	63V
C138	1-124-907-11	ELECT	10uF	20%	50V
C140	1-124-916-11	ELECT	22uF	20%	63V
C141	1-124-907-11	ELECT	10uF	20%	50V
C201	1-124-927-11	ELECT	4.7uF	20%	100V

**MAIN**

**HP**

**REC VOL**

**TRANSFORMER**

Ref.No.	Part No.	Description	Remark		
C202	1-161-375-00	CERAMIC	0.0022uF	20%	50V
C204	1-124-907-11	ELECT	10uF	20%	50V
C205	1-136-165-00	FILM	0.1uF	5%	50V
C206	1-136-163-00	FILM	0.068uF	5%	50V
C207	1-124-907-11	ELECT	10uF	20%	50V
C210	1-136-175-00	FILM	0.68uF	5%	50V
C211	1-124-907-11	ELECT	10uF	20%	50V
C212	1-124-907-11	ELECT	10uF	20%	50V
C213	1-110-338-51	MYLAR	180PF	5%	50V
C214	1-107-210-00	MICA	22PF	5%	500V
C215	1-110-340-11	MYLAR	270PF	5%	50V
C216	1-130-474-00	MYLAR	0.0018uF	5%	50V
C217	1-136-157-00	FILM	0.022uF	5%	50V
C218	1-126-320-11	ELECT, NONPOLAR	10uF	20%	16V
C219	1-102-518-11	CERAMIC	33PF	5%	50V
C220	1-130-488-00	MYLAR	0.027uF	5%	50V
C221	1-124-925-11	ELECT	2.2uF	20%	100V
C222	1-136-153-00	FILM	0.01uF	5%	50V
C223	1-136-157-00	FILM	0.022uF	5%	50V
C224	1-136-161-00	FILM	0.047uF	5%	50V
C225	1-136-803-11	FILM	560PF	5%	630V
C226	1-130-468-00	MYLAR	560PF	5%	50V
C227	1-107-169-00	MICA	100PF	5%	500V
C228	1-130-474-00	MYLAR	0.0018uF	5%	50V
C230	1-130-475-00	MYLAR	0.0022uF	5%	50V
C231	1-124-907-11	ELECT	10uF	20%	50V
C232	1-136-165-00	FILM	0.1uF	5%	50V
C233	1-136-163-00	FILM	0.068uF	5%	50V
C236	1-124-907-11	ELECT	10uF	20%	50V
C237	1-124-916-11	ELECT	22uF	20%	63V
C238	1-124-907-11	ELECT	10uF	20%	50V
C240	1-124-916-11	ELECT	22uF	20%	63V
C241	1-124-907-11	ELECT	10uF	20%	50V
C301	1-124-907-11	ELECT	10uF	20%	50V
C302	1-124-907-11	ELECT	10uF	20%	50V
C303	1-130-478-00	MYLAR	0.0039uF	5%	50V
C304	1-124-907-11	ELECT	10uF	20%	50V
C305	1-136-164-00	FILM	0.082uF	5%	50V
C306	1-124-903-11	ELECT	1uF	20%	50V
C307	1-124-443-00	ELECT	100uF	20%	10V
C308	1-124-443-00	ELECT	100uF	20%	10V
C309	1-162-217-31	CERAMIC	56PF	5%	50V
C310	1-161-494-00	CERAMIC	0.022uF		25V
C311	1-124-925-11	ELECT	2.2uF	20%	100V
C312	1-162-217-31	CERAMIC	56PF	5%	50V
C313	1-124-925-11	ELECT	2.2uF	20%	100V
C314	1-124-907-11	ELECT	10uF	20%	50V
C315	1-124-907-11	ELECT	10uF	20%	50V
C316	1-124-902-00	ELECT	0.47uF	20%	50V

Ref.No.	Part No.	Description	Remark		
C319	1-124-907-11	ELECT	10uF	20%	50V
C320	1-124-477-11	ELECT	47uF	20%	25V
C321	1-124-477-11	ELECT	47uF	20%	25V
C322	1-136-253-11	FILM	0.0018uF	5%	100V
C323	1-136-253-11	FILM	0.0018uF	5%	100V
C324	1-136-233-11	FILM	0.0047uF	5%	100V
C325	1-124-916-11	ELECT	22uF	20%	63V
C326	1-136-558-11	FILM	0.0039uF	5%	630V
C327	1-107-584-11	CERAMIC	4PF	0.25PF	500V
C329	1-161-494-00	CERAMIC	0.022uF		25V
C330	1-124-907-11	ELECT	10uF	20%	50V
C331	1-124-907-11	ELECT	10uF	20%	50V
C332	1-124-925-11	ELECT	2.2uF	20%	100V
C333	1-124-907-11	ELECT	10uF	20%	50V
C334	1-124-907-11	ELECT	10uF	20%	50V
C701	1-126-029-51	ELECT	3300uF	20%	25V
C702	1-126-029-51	ELECT	3300uF	20%	25V
C703	1-126-176-11	ELECT	220uF	20%	10V
C704	1-124-563-11	ELECT	2200uF	20%	25V
C705	1-124-563-11	ELECT	2200uF	20%	25V
C706	1-124-120-11	ELECT	220uF	20%	25V
C707	1-124-927-11	ELECT	4.7uF	20%	100V
C712	1-124-903-11	ELECT	1uF	20%	50V
C713	1-126-926-11	ELECT	1000uF	20%	10V
C714	1-124-122-11	ELECT	100uF	20%	50V
C715	1-124-910-11	ELECT	47uF	20%	50V
C716	1-164-159-11	CERAMIC	0.1uF		50V
C801	1-124-443-00	ELECT	100uF	20%	10V
C802	1-126-176-11	ELECT	220uF	20%	10V
C803	1-124-916-11	ELECT	22uF	20%	63V
C804	1-162-306-11	CERAMIC	0.01uF	20%	16V
C805	1-164-159-11	CERAMIC	0.1uF		50V
C806	1-124-925-11	ELECT	2.2uF	20%	100V
C807	1-162-209-31	CERAMIC	27PF	5%	50V
C808	1-126-962-11	ELECT	3.3uF	20%	50V
C810	1-162-209-31	CERAMIC	27PF	5%	50V

< CONNECTOR >

- \*CNP301 1-564-337-00 PIN, CONNECTOR 3P
- \*CNP302 1-560-062-00 PIN, CONNECTOR 4P
- \*CNP303 1-560-060-00 PIN, CONNECTOR 2P
- \*CNP304 1-560-062-00 PIN, CONNECTOR 4P
- \*CNP305 1-691-462-11 PIN, CONNECTOR (PC BOARD) 6P
- \*CNP306 1-568-824-11 SOCKET, CONNECTOR 5P
- \*CNP307 1-568-824-11 SOCKET, CONNECTOR 5P
- CNP701 1-564-510-11 PLUG, CONNECTOR 7P
- \*CNP705 1-580-230-31 PIN, CONNECTOR (PC BOARD) 2P  
(US, Canadian, AEP, UK, G, AUS)
- \*CNP801 1-568-828-11 SOCKET, CONNECTOR 9P

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**REC VOL**

**TRANSFORMER**

Ref.No.	Part No.	Description	Remark
*CNP802	1-568-824-11	SOCKET, CONNECTOR 5P	
*CNP803	1-568-845-11	SOCKET, CONNECTOR 31P	
*CNP804	1-568-830-11	SOCKET, CONNECTOR 11P	
*CNP805	1-564-337-00	PIN, CONNECTOR 3P	
CP101	1-695-087-11	PIN, CONNECTOR (PC BOARD) 7P	
CP102	1-695-087-11	PIN, CONNECTOR (PC BOARD) 7P	
CP201	1-695-087-11	PIN, CONNECTOR (PC BOARD) 7P	
CP202	1-695-087-11	PIN, CONNECTOR (PC BOARD) 7P	
< DIODE >			
D101	8-719-987-63	DIODE 1N4148M	
D102	8-719-987-63	DIODE 1N4148M	
D201	8-719-987-63	DIODE 1N4148M	
D202	8-719-987-63	DIODE 1N4148M	
D301	8-719-987-63	DIODE 1N4148M	
D302	8-719-987-63	DIODE 1N4148M	
D303	8-719-987-63	DIODE 1N4148M	
D304	8-719-987-63	DIODE 1N4148M	
D305	8-719-987-63	DIODE 1N4148M	
D306	8-719-987-63	DIODE 1N4148M	
D307	8-719-987-63	DIODE 1N4148M	
D308	8-719-987-63	DIODE 1N4148M	
D309	8-719-987-63	DIODE 1N4148M	
D310	8-719-987-63	DIODE 1N4148M	
D311	8-719-987-63	DIODE 1N4148M	
D312	8-719-987-63	DIODE 1N4148M	
D313	8-719-987-63	DIODE 1N4148M	
D701	8-719-200-02	DIODE 10E2	
D702	8-719-200-02	DIODE 10E2	
D703	8-719-200-02	DIODE 10E2	
D704	8-719-200-02	DIODE 10E2	
D705	8-719-933-33	DIODE HZS6A1L	
D706	8-719-933-33	DIODE HZS6A1L	
D707	8-719-200-02	DIODE 10E2	
D708	8-719-200-02	DIODE 10E2	
D709	8-719-987-63	DIODE 1N4148M	
D711	8-719-000-78	DIODE UZL-7L2	
D712	8-719-200-02	DIODE 10E2	
D713	8-719-987-63	DIODE 1N4148M	
D714	8-719-000-93	DIODE UZL-7H1	
D715	8-719-987-63	DIODE 1N4148M	
D718	8-719-200-02	DIODE 10E2	
D801	8-719-987-63	DIODE 1N4148M	
D802	8-719-933-33	DIODE HZS6A1L	
D803	8-719-933-33	DIODE HZS6A1L	
D804	8-719-933-54	DIODE HZS9A2L	
D805	8-719-987-63	DIODE 1N4148M	
D807	8-719-987-63	DIODE 1N4148M	

Ref.No.	Part No.	Description	Remark
D808	8-719-987-63	DIODE 1N4148M	
D809	8-719-987-63	DIODE 1N4148M	
D810	8-719-987-63	DIODE 1N4148M	
D814	8-719-987-63	DIODE 1N4148M	
D815	8-719-987-63	DIODE 1N4148M	
< FUSE >			
△F701	1-532-285-00	FUSE, TIME-LAG (AEP, UK, E, G, AUS)	1.25A 250V
△F701	1-532-741-11	FUSE, GLASS TUBE (US, Canadian)	1.25A 125V
△F702	1-532-285-00	FUSE, TIME-LAG (AEP, UK, E, G, AUS)	1.25A 250V
△F702	1-532-741-11	FUSE, GLASS TUBE (US, Canadian)	1.25A 125V
< IC >			
IC301	8-759-111-44	IC UPC4570C-1	
IC302	8-752-066-35	IC CXA1563S	
IC303	8-752-060-64	IC CXA1198AP	
IC304	8-759-106-56	IC UPC1297CA	
IC305	8-759-145-58	IC UPC4558C	
IC306	8-759-145-58	IC UPC4558C	
IC307	8-752-066-35	IC CXA1563S	
IC308	8-759-634-50	IC M5218AL	
IC309	8-759-634-50	IC M5218AL	
IC310	8-759-000-49	IC MC14066BCP	
IC311	8-759-634-51	IC M5218AP	
IC701	8-759-145-58	IC UPC4558C	
IC801	8-759-254-85	IC uPD78042GF-072-3B9	
IC802	8-759-803-42	IC LA6500-FA	
IC803	8-759-165-82	IC PST600E-T	
< JACK >			
J301	1-565-258-11	JACK, PIN 4P (LINE)	
J302	1-750-735-11	JACK (LARGE TYPE) (HEADPHONES)	
< COIL >			
L101	1-410-780-11	INDUCTOR	27mH
L121	1-410-778-11	INDUCTOR	18mH
L201	1-410-780-11	INDUCTOR	27mH
L221	1-410-778-11	INDUCTOR	18mH
< LINE FILTER >			
LF701	1-424-485-11	FILTER, LINE (US, Canadian, AEP, UK, G, AUS)	
< FILTER >			
LPF101	1-231-388-00	FILTER, LOW PASS	
LPF201	1-231-388-00	FILTER, LOW PASS	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**MAIN** **HP** **REC VOL** **TRANSFORMER**

Ref.No.	Part No.	Description	Remark
< TRANSISTOR >			
Q101	8-729-900-74	TRANSISTOR DTC143TS	
Q102	8-729-900-80	TRANSISTOR DTC114ES	
Q103	8-729-922-37	TRANSISTOR 2SD2144S	
Q104	8-729-922-37	TRANSISTOR 2SD2144S	
Q105	8-729-900-80	TRANSISTOR DTC114ES	
Q201	8-729-900-74	TRANSISTOR DTC143TS	
Q202	8-729-900-80	TRANSISTOR DTC114ES	
Q203	8-729-922-37	TRANSISTOR 2SD2144S	
Q204	8-729-922-37	TRANSISTOR 2SD2144S	
Q205	8-729-900-80	TRANSISTOR DTC114ES	
Q301	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q302	8-729-900-80	TRANSISTOR DTC114ES	
Q303	8-729-900-80	TRANSISTOR DTC114ES	
Q304	8-729-900-80	TRANSISTOR DTC114ES	
Q305	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q306	8-729-900-89	TRANSISTOR DTC144ES	
Q307	8-729-900-80	TRANSISTOR DTC114ES	
Q308	8-729-900-80	TRANSISTOR DTC114ES	
Q309	8-729-900-80	TRANSISTOR DTC114ES	
Q310	8-729-194-57	TRANSISTOR 2SC945-P	
Q311	8-729-194-57	TRANSISTOR 2SC945-P	
Q312	8-729-922-37	TRANSISTOR 2SD2144S	
Q313	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q314	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q315	8-729-900-80	TRANSISTOR DTC114ES	
Q316	8-729-900-74	TRANSISTOR DTC143TS	
Q701	8-729-900-80	TRANSISTOR DTC114ES	
Q702	8-729-900-80	TRANSISTOR DTC114ES	
Q703	8-729-024-95	TRANSISTOR 2SB1565EF	
Q704	8-729-019-01	TRANSISTOR 2SD2394-EF	
Q705	8-729-019-01	TRANSISTOR 2SD2394-EF	
Q706	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q707	8-729-900-80	TRANSISTOR DTC114ES	
Q708	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q709	8-729-140-04	TRANSISTOR 2SB1116A-L	
Q803	8-729-900-61	TRANSISTOR DTA114ES	
Q804	8-729-801-93	TRANSISTOR 2SD1387	
Q805	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q807	8-729-142-36	TRANSISTOR BN1L3Z	
Q808	8-729-900-61	TRANSISTOR DTA114ES	
Q809	8-729-900-61	TRANSISTOR DTA114ES	
Q810	8-729-900-80	TRANSISTOR DTC114ES	
Q811	8-729-900-89	TRANSISTOR DTC144ES	
Q812	8-729-900-89	TRANSISTOR DTC144ES	
Q813	8-729-900-89	TRANSISTOR DTC144ES	
Q814	8-729-900-89	TRANSISTOR DTC144ES	

Ref.No.	Part No.	Description	Remark
< RESISTOR >			
R101	1-249-433-11	CARBON 22K 5%	1/4W
R102	1-249-417-11	CARBON 1K 5%	1/4W
R103	1-249-423-11	CARBON 3.3K 5%	1/4W
R104	1-249-428-11	CARBON 8.2K 5%	1/4W
R105	1-249-441-11	CARBON 100K 5%	1/4W
R107	1-249-421-11	CARBON 2.2K 5%	1/4W
R108	1-247-860-11	CARBON 16K 5%	1/4W
R109	1-249-421-11	CARBON 2.2K 5%	1/4W
R110	1-249-417-11	CARBON 1K 5%	1/4W
R112	1-249-423-11	CARBON 3.3K 5%	1/4W
R113	1-249-424-11	CARBON 3.9K 5%	1/4W
R114	1-249-429-11	CARBON 10K 5%	1/4W
R115	1-249-421-11	CARBON 2.2K 5%	1/4W
R116	1-249-425-11	CARBON 4.7K 5%	1/4W
R117	1-249-441-11	CARBON 100K 5%	1/4W
R118	1-249-403-11	CARBON 68 5%	1/4W
R119	1-247-882-11	CARBON 130K 5%	1/4W
R120	1-249-426-11	CARBON 5.6K 5%	1/4W
R121	1-249-421-11	CARBON 2.2K 5%	1/4W
R122	1-249-420-11	CARBON 1.8K 5%	1/4W
R123	1-247-838-00	CARBON 2K 5%	1/4W
R124	1-249-441-11	CARBON 100K 5%	1/4W
R125	1-249-421-11	CARBON 2.2K 5%	1/4W
R126	1-249-425-11	CARBON 4.7K 5%	1/4W
R127	1-249-435-11	CARBON 33K 5%	1/4W
△R128	1-219-153-11	FUSIBLE 10 5%	1/4W F
R129	1-247-883-00	CARBON 150K 5%	1/4W
R130	1-249-434-11	CARBON 27K 5%	1/4W
R131	1-247-874-11	CARBON 62K 5%	1/4W
R133	1-249-410-11	CARBON 270 5%	1/4W
R137	1-249-441-11	CARBON 100K 5%	1/4W
R138	1-249-441-11	CARBON 100K 5%	1/4W
R139	1-247-864-11	CARBON 24K 5%	1/4W
R140	1-249-429-11	CARBON 10K 5%	1/4W
R141	1-249-419-11	CARBON 1.5K 5%	1/4W
R142	1-249-421-11	CARBON 2.2K 5%	1/4W
R143	1-247-844-11	CARBON 3.6K 5%	1/4W
R144	1-249-409-11	CARBON 220 5%	1/4W
R145	1-249-426-11	CARBON 5.6K 5%	1/4W
R152	1-247-887-00	CARBON 220K 5%	1/4W
R201	1-249-433-11	CARBON 22K 5%	1/4W
R202	1-249-417-11	CARBON 1K 5%	1/4W
R203	1-249-423-11	CARBON 3.3K 5%	1/4W
R204	1-249-428-11	CARBON 8.2K 5%	1/4W
R205	1-249-441-11	CARBON 100K 5%	1/4W
R207	1-249-421-11	CARBON 2.2K 5%	1/4W
R208	1-247-860-11	CARBON 16K 5%	1/4W

<p>The components identified by mark <math>\Delta</math> or dotted line with mark <math>\Delta</math> are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque <math>\Delta</math> sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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**MAIN**

**HP**

**REC VOL**

**TRANSFORMER**

Ref.No.	Part No.	Description	Remark
R209	1-249-421-11	CARBON	2.2K 5% 1/4W
R210	1-249-417-11	CARBON	1K 5% 1/4W
R212	1-249-423-11	CARBON	3.3K 5% 1/4W
R213	1-249-424-11	CARBON	3.9K 5% 1/4W
R214	1-249-429-11	CARBON	10K 5% 1/4W
R215	1-249-421-11	CARBON	2.2K 5% 1/4W
R216	1-249-425-11	CARBON	4.7K 5% 1/4W
R217	1-249-441-11	CARBON	100K 5% 1/4W
R218	1-249-403-11	CARBON	68 5% 1/4W
R219	1-247-882-11	CARBON	130K 5% 1/4W
R220	1-249-426-11	CARBON	5.6K 5% 1/4W
R221	1-249-421-11	CARBON	2.2K 5% 1/4W
R222	1-249-420-11	CARBON	1.8K 5% 1/4W
R223	1-247-838-00	CARBON	2K 5% 1/4W
R224	1-249-441-11	CARBON	100K 5% 1/4W
R225	1-249-421-11	CARBON	2.2K 5% 1/4W
R226	1-249-425-11	CARBON	4.7K 5% 1/4W
R227	1-249-435-11	CARBON	33K 5% 1/4W
△R228	1-219-153-11	FUSIBLE	10 5% 1/4W F
R229	1-247-883-00	CARBON	150K 5% 1/4W
R230	1-249-434-11	CARBON	27K 5% 1/4W
R231	1-247-874-11	CARBON	62K 5% 1/4W
R233	1-249-410-11	CARBON	270 5% 1/4W
R237	1-249-441-11	CARBON	100K 5% 1/4W
R238	1-249-441-11	CARBON	100K 5% 1/4W
R239	1-247-864-11	CARBON	24K 5% 1/4W
R240	1-249-429-11	CARBON	10K 5% 1/4W
R241	1-249-419-11	CARBON	1.5K 5% 1/4W
R242	1-249-421-11	CARBON	2.2K 5% 1/4W
R243	1-247-844-11	CARBON	3.6K 5% 1/4W
R244	1-249-409-11	CARBON	220 5% 1/4W
R245	1-249-426-11	CARBON	5.6K 5% 1/4W
R252	1-247-887-00	CARBON	220K 5% 1/4W
R302	1-247-848-11	CARBON	5.1K 5% 1/4W
R303	1-249-421-11	CARBON	2.2K 5% 1/4W
R304	1-249-421-11	CARBON	2.2K 5% 1/4W
R305	1-215-452-00	METAL	20K 1% 1/6W
R306	1-249-436-11	CARBON	39K 5% 1/4W
R307	1-249-433-11	CARBON	22K 5% 1/4W
R308	1-249-441-11	CARBON	100K 5% 1/4W
R309	1-247-864-11	CARBON	24K 5% 1/4W
R310	1-249-441-11	CARBON	100K 5% 1/4W
R311	1-249-441-11	CARBON	100K 5% 1/4W
R312	1-249-433-11	CARBON	22K 5% 1/4W
R313	1-247-878-00	CARBON	91K 5% 1/4W
R314	1-249-439-11	CARBON	68K 5% 1/4W
R315	1-247-870-11	CARBON	43K 5% 1/4W
R316	1-249-435-11	CARBON	33K 5% 1/4W

Ref.No.	Part No.	Description	Remark
R317	1-247-876-11	CARBON	75K 5% 1/4W
R318	1-247-887-00	CARBON	220K 5% 1/4W
R319	1-247-878-00	CARBON	91K 5% 1/4W
R320	1-247-874-11	CARBON	62K 5% 1/4W
R321	1-247-878-00	CARBON	91K 5% 1/4W
R322	1-249-437-11	CARBON	47K 5% 1/4W
R323	1-249-439-11	CARBON	68K 5% 1/4W
R324	1-247-886-11	CARBON	200K 5% 1/4W
R325	1-247-874-11	CARBON	62K 5% 1/4W
R326	1-247-874-11	CARBON	62K 5% 1/4W
R327	1-249-435-11	CARBON	33K 5% 1/4W
R328	1-249-438-11	CARBON	56K 5% 1/4W
R329	1-249-440-11	CARBON	82K 5% 1/4W
R330	1-247-836-11	CARBON	1.6K 5% 1/4W
R331	1-249-429-11	CARBON	10K 5% 1/4W
R332	1-249-422-11	CARBON	2.7K 5% 1/4W
R333	1-249-417-11	CARBON	1K 5% 1/4W
R334	1-249-417-11	CARBON	1K 5% 1/4W
R335	1-247-822-11	CARBON	430 5% 1/4W
R336	1-249-417-11	CARBON	1K 5% 1/4W
R337	1-249-429-11	CARBON	10K 5% 1/4W
R338	1-249-421-11	CARBON	2.2K 5% 1/4W
R339	1-249-440-11	CARBON	82K 5% 1/4W
R340	1-249-440-11	CARBON	82K 5% 1/4W
R341	1-249-390-11	CARBON	5.6 5% 1/6W
R342	1-249-390-11	CARBON	5.6 5% 1/6W
R343	1-249-437-11	CARBON	47K 5% 1/4W
R344	1-249-429-11	CARBON	10K 5% 1/4W
R345	1-249-441-11	CARBON	100K 5% 1/4W
R346	1-249-441-11	CARBON	100K 5% 1/4W
R347	1-249-429-11	CARBON	10K 5% 1/4W
R348	1-249-428-11	CARBON	8.2K 5% 1/4W
R349	1-249-441-11	CARBON	100K 5% 1/4W
R350	1-249-441-11	CARBON	100K 5% 1/4W
R351	1-249-423-11	CARBON	3.3K 5% 1/4W
R352	1-249-429-11	CARBON	10K 5% 1/4W
R353	1-249-429-11	CARBON	10K 5% 1/4W
R354	1-249-417-11	CARBON	1K 5% 1/4W
R355	1-249-430-11	CARBON	12K 5% 1/4W
R356	1-249-435-11	CARBON	33K 5% 1/4W
R357	1-247-848-11	CARBON	5.1K 5% 1/4W
R358	1-249-437-11	CARBON	47K 5% 1/4W
R359	1-249-434-11	CARBON	27K 5% 1/4W
R360	1-249-437-11	CARBON	47K 5% 1/4W
R361	1-249-429-11	CARBON	10K 5% 1/4W
R363	1-215-452-00	METAL	20K 1% 1/6W
R365	1-249-433-11	CARBON	22K 5% 1/4W
R366	1-247-862-11	CARBON	20K 5% 1/4W
R367	1-249-429-11	CARBON	10K 5% 1/4W

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**MAIN**

**HP**

**REC VOL**

**TRANSFORMER**

**PANEL**

**DISPLAY**

Ref.No.	Part No.	Description	Remark		
R368	1-249-429-11	CARBON	10K	5%	1/4W
R701	1-249-433-11	CARBON	22K	5%	1/4W
R702	1-249-425-11	CARBON	4.7K	5%	1/4W
R703	1-249-420-11	CARBON	1.8K	5%	1/4W
R704	1-249-421-11	CARBON	2.2K	5%	1/4W
R705	1-249-427-11	CARBON	6.8K	5%	1/4W
R706	1-249-419-11	CARBON	1.5K	5%	1/4W
R707	1-249-429-11	CARBON	10K	5%	1/4W
R708	1-249-419-11	CARBON	1.5K	5%	1/4W
R709	1-249-425-11	CARBON	4.7K	5%	1/4W
R711	1-249-417-11	CARBON	1K	5%	1/4W
R712	1-249-427-11	CARBON	6.8K	5%	1/4W
R713	1-249-427-11	CARBON	6.8K	5%	1/4W
R714	1-249-419-11	CARBON	1.5K	5%	1/4W
R715	1-249-425-11	CARBON	4.7K	5%	1/4W
R716	1-249-429-11	CARBON	10K	5%	1/4W
R718	1-249-433-11	CARBON	22K	5%	1/4W
R719	1-249-429-11	CARBON	10K	5%	1/4W
R720	1-249-423-11	CARBON	3.3K	5%	1/4W
R721	1-249-437-11	CARBON	47K	5%	1/4W
△R730	1-219-137-11	FUSIBLE	0.33	10%	1/4W F
△R731	1-219-136-11	FUSIBLE	0.22	10%	1/4W F
R801	1-249-435-11	CARBON	33K	5%	1/4W
R802	1-249-429-11	CARBON	10K	5%	1/4W
R803	1-247-862-11	CARBON	20K	5%	1/4W
R804	1-249-429-11	CARBON	10K	5%	1/4W
R805	1-249-418-11	CARBON	1.2K	5%	1/4W
R806	1-249-417-11	CARBON	1K	5%	1/4W
R807	1-249-430-11	CARBON	12K	5%	1/4W
R808	1-249-433-11	CARBON	22K	5%	1/4W
R809	1-249-433-11	CARBON	22K	5%	1/4W
R810	1-249-409-11	CARBON	220	5%	1/4W
R811	1-249-425-11	CARBON	4.7K	5%	1/4W
R812	1-249-425-11	CARBON	4.7K	5%	1/4W
R813	1-247-866-11	CARBON	30K	5%	1/4W
R814	1-247-866-11	CARBON	30K	5%	1/4W
R815	1-249-437-11	CARBON	47K	5%	1/4W
R817	1-249-441-11	CARBON	100K	5%	1/4W
R818	1-249-417-11	CARBON	1K	5%	1/4W
R819	1-249-436-11	CARBON	39K	5%	1/4W
R820	1-249-419-11	CARBON	1.5K	5%	1/4W
R821	1-249-433-11	CARBON	22K	5%	1/4W
R822	1-249-393-11	CARBON	10	5%	1/4W
R823	1-249-437-11	CARBON	47K	5%	1/4W
R824	1-249-437-11	CARBON	47K	5%	1/4W
R825	1-249-429-11	CARBON	10K	5%	1/4W
R826	1-249-429-11	CARBON	10K	5%	1/4W
R827	1-247-807-31	CARBON	100	5%	1/4W

Ref.No.	Part No.	Description	Remark		
R828	1-249-429-11	CARBON	10K	5%	1/4W
R829	1-249-429-11	CARBON	10K	5%	1/4W
R830	1-249-429-11	CARBON	10K	5%	1/4W
R831	1-249-429-11	CARBON	10K	5%	1/4W
R832	1-249-441-11	CARBON	100K	5%	1/4W
< VARIABLE RESISTOR >					
RV101	1-241-765-11	RES, ADJ, CARBON	22K		
RV102	1-238-019-11	RES, ADJ, CARBON	47K		
RV103	1-241-765-11	RES, ADJ, CARBON	22K		
RV121	1-241-763-11	RES, ADJ, CARBON	4.7K		
RV201	1-241-765-11	RES, ADJ, CARBON	22K		
RV202	1-238-019-11	RES, ADJ, CARBON	47K		
RV203	1-241-765-11	RES, ADJ, CARBON	22K		
RV221	1-241-763-11	RES, ADJ, CARBON	4.7K		
RV301	1-223-328-11	RES, VAR, CARBON	50K/50K		(REC LEVEL)
RV302	1-223-331-11	RES, VAR, CARBON	50K/50K		(BALANCE)
RV306	1-223-387-21	RES, ADJ, CARBON	330K		
< TRANSFORMER >					
T101	1-433-344-11	TRANSFORMER, BIAS OSCILLATION			
T201	1-433-344-11	TRANSFORMER, BIAS OSCILLATION			
T301	1-423-614-11	TRANSFORMER, BIAS OSCILLATION			
△T901	1-426-726-11	TRANSFORMER, POWER (US, Canadian)			
△T901	1-426-727-11	TRANSFORMER, POWER (AEP, UK, G, AUS)			
△T901	1-426-728-11	TRANSFORMER, POWER (E)			
< TEST PIN >					
*TP301	1-564-506-11	PLUG, CONNECTOR	3P		
*TP801	1-564-505-11	PLUG, CONNECTOR	2P		
< VIBRATOR >					
X801	1-579-066-31	VIBRATOR, CRYSTAL	(4MHz)		
*****					
*	A-2007-223-A	PANEL BOARD, COMPLETE			(US, Canadian, AEP, UK, G, AUS)
*	A-2007-254-A	PANEL BOARD, COMPLETE	(E)		*****
DISPLAY BOARD					
*****					
*	3-386-245-01	HOLDER (FL)			
< CONNECTOR >					
*CNP705	1-580-230-31	PIN, CONNECTOR	2P		(E)
*CNP903	1-568-845-11	SOCKET, CONNECTOR	31P		
*CNP904	1-568-830-11	SOCKET, CONNECTOR	11P		

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**PANEL**

**DISPLAY**

**MOTOR**

**SENSOR**

Ref.No.	Part No.	Description	Remark
*CNP906	1-568-824-11	SOCKET, CONNECTOR 5P	
*CNP907	1-568-824-11	SOCKET, CONNECTOR 5P	
< DIODE >			
D901	8-719-987-63	DIODE IN4148M	
D902	8-719-987-63	DIODE IN4148M	
D903	8-719-987-63	DIODE IN4148M	
< IC >			
IC901	8-741-100-48	IC SBX1610-59	
< LINE FILTER >			
LF701	1-424-485-11	FILTER, LINE (E)	
< RESISTOR >			
R153	1-249-425-11	CARBON 4.7K 5% 1/4W	
R253	1-249-425-11	CARBON 4.7K 5% 1/4W	
R362	1-249-429-11	CARBON 10K 5% 1/4W	
R901	1-247-838-00	CARBON 2K 5% 1/4W	
R902	1-249-422-11	CARBON 2.7K 5% 1/4W	
R903	1-247-848-11	CARBON 5.1K 5% 1/4W	
R904	1-249-430-11	CARBON 12K 5% 1/4W	
R905	1-247-866-11	CARBON 30K 5% 1/4W	
R906	1-249-422-11	CARBON 2.7K 5% 1/4W	
R907	1-249-424-11	CARBON 3.9K 5% 1/4W	
R908	1-249-428-11	CARBON 8.2K 5% 1/4W	
R909	1-249-434-11	CARBON 27K 5% 1/4W	
R910	1-247-838-00	CARBON 2K 5% 1/4W	
R911	1-249-422-11	CARBON 2.7K 5% 1/4W	
R912	1-247-848-11	CARBON 5.1K 5% 1/4W	
R913	1-249-430-11	CARBON 12K 5% 1/4W	
R914	1-247-866-11	CARBON 30K 5% 1/4W	
R915	1-249-441-11	CARBON 100K 5% 1/4W	
< VARIABLE RESISTOR >			
RV303	1-223-327-11	RES, VAR, CARBON 10K (BIAS)	
RV304	1-223-329-11	RES, VAR, CARBON 5K/5K (REC LEVEL)	
< SWITCH >			
S901	1-554-303-21	SWITCH, TACTILE (▷)	
S902	1-554-303-21	SWITCH, TACTILE (▢)	
S903	1-554-303-21	SWITCH, TACTILE (RESET)	
S904	1-554-303-21	SWITCH, TACTILE (MEMORY)	
S905	1-554-303-21	SWITCH, TACTILE (MONITOR)	
S906	1-554-303-21	SWITCH, TACTILE (□)	
S907	1-554-303-21	SWITCH, TACTILE (◀)	
S908	1-554-303-21	SWITCH, TACTILE (▷)	
S909	1-554-303-21	SWITCH, TACTILE (○)	

Ref.No.	Part No.	Description	Remark
S910	1-554-303-21	SWITCH, TACTILE (◎)	
S911	1-554-303-21	SWITCH, TACTILE (CALIBRATION)	
S921	1-692-409-11	SWITCH, PUSH (1 KEY) (POWER)	
S922	1-554-118-00	SWITCH, PUSH (1 KEY) (MPX FILTER)	
S923	1-692-410-11	SWITCH, ROTARY (DOLBY NR)	
< FLUORESCENT INDICATOR TUBE >			
VFD901	1-517-163-11	INDICATOR TUBE, FLUORESCENT	
*****			
*	1-651-550-11	MOTOR BOARD	
*****			
SENSOR BOARD			
*****			
< CAPACITOR >			
C71	1-124-903-11	ELECT 1uF 20% 50V	
C72	1-124-903-11	ELECT 1uF 20% 50V	
< CONNECTOR >			
*CNP71	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CNP72	1-764-902-11	CONNECTOR, FFC/FPC 4P	
*CNP73	1-568-824-11	SOCKET, CONNECTOR 5P	
< IC >			
IC71	8-749-924-10	IC PHONT REFLECTOR NJL5165K-B(H1)	
< RESISTOR >			
R71	1-249-430-11	CARBON 12K 5% 1/4W	
*****			
MISCELLANEOUS			
*****			
△12	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
66	1-751-097-11	WIRE (FLAT TYPE) (11 CORE)	
67	1-751-096-11	WIRE (FLAT TYPE) (31 CORE)	
75	1-575-778-11	WIRE, FLAT TYPE (5 CORE)	
76	1-575-666-11	WIRE, FLAT TYPE (5 CORE)	
79	1-575-781-11	WIRE, FLAT TYPE (9 CORE)	
80	1-575-779-11	WIRE, FLAT TYPE (5 CORE)	
120	1-638-983-11	MOTOR FLEXIBLE BOARD	
△CNP901	1-558-945-21	CORD, POWER (POLAR. SPT-1) (US, Canadian)	
△CNP901	1-575-651-21	CORD, POWER (AEP, G)	
△CNP901	1-696-027-11	CORD, POWER (E)	
△CNP901	1-696-586-11	CORD, POWER (UK)	
△CNP901	1-696-845-11	CORD, POWER (AUS)	

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# TC-K615S

Ref.No.	Part No.	Description	Remark
HE901	1-543-673-11	HEAD, MAGNETIC (ERASE)	
HRP901	1-543-733-11	HEAD, MAGNETIC (RECORD/PLAYBACK)	
M901	X-3368-855-1	MOTOR ASSY, CAPSTAN	
M902	X-3363-501-2	MOTOR ASSY, REEL	
△S701	1-692-155-11	SELECTOR, POWER VOLTAGE (E)	

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ACCESSORIES & PACKING MATERIALS  
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- 1-558-271-11 CORD, CONNECTION
- 3-758-576-11 MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (Canadian, AEP, E)
- 3-758-576-21 MANUAL, INSTRUCTION (ENGLISH) (US, UK, AUS)
- 3-758-576-41 MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP)
- 3-758-576-51 MANUAL, INSTRUCTION (GERMAN) (G)

- \* 3-913-407-01 CUSHION
  - \* 3-913-835-21 INDIVIDUAL CARTON
- \*\*\*\*\*

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**HARDWARE LIST**  
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- #1 7-682-548-09 SCREW +BVIT 3X8 (S)
- #2 7-621-849-00 SCREW (BV/RING)
- #3 7-682-547-09 SCREW +BVIT 3X6 (S)
- #4 7-621-773-95 SCREW +BVIT 2.6X6 (S)
- #5 7-685-534-19 SCREW +BTP 2.6X8 TYPE2 N-S
- #6 7-685-134-19 SCREW (+ PTPWH) (2.6X8)
- #7 7-685-646-79 SCREW +BVTP 3X8 TYPE2 N-S (E)
- #8 7-621-775-00 SCREW +B 2.6X3
- #9 7-627-556-08 SCREW +P 2.6X2.8
- #10 7-621-772-20 SCREW +B 2X5
- #11 7-685-533-19 SCREW +BTP 2.6X6 TYPE2 N-S

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