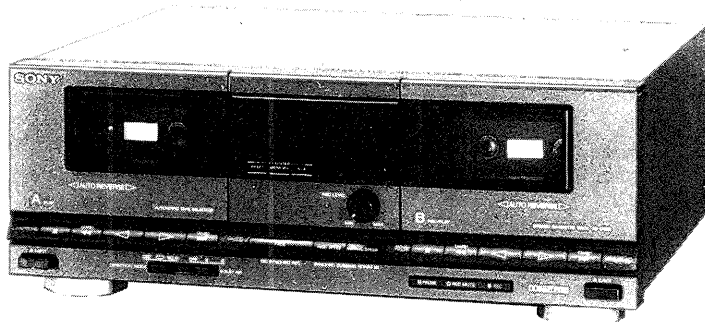


# TC-D505

## SERVICE MANUAL

*AEP Model  
UK Model  
E Model  
Australian Model*



Model Name Using Similar Mechanism		TC-WR520
Tape Transport Mechanism Type	DECK A	TCM-190RA12 or TCM-190RA13
	DECK B	TCM-190RB22

### SPECIFICATIONS

Recording system	4-track 2-channel stereo
Frequency response	DOLBY NR OFF With Type IV cassette (Sony METAL-ES) 30 Hz to 15 kHz ( $\pm 3$ dB) With Type II cassette (Sony UX-S) 40 Hz to 14 kHz ( $\pm 3$ dB) With Type I cassette (Sony HF-S) 40 Hz to 14 kHz ( $\pm 3$ dB)
Wow and flutter	$\pm 0.2\%$ (DIN)
Weight	Approx. 3.4 kg (7 lbs 8 oz)
Dimensions	Approx. 355 × 132.5 × 310 mm (w/h/d, including projections) (14 × 5 1/4 × 12 1/4 inches)

Design and specifications subject to change without notice.

#### Note

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

\* *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.  
"DOLBY" and the double-D symbol  $\square\square$  are trademarks of Dolby Laboratories Licensing Corporation.*

STEREO CASSETTE DECK  
**SONY**<sup>®</sup>



## 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 2V AC range are suitable. (See Fig. A)

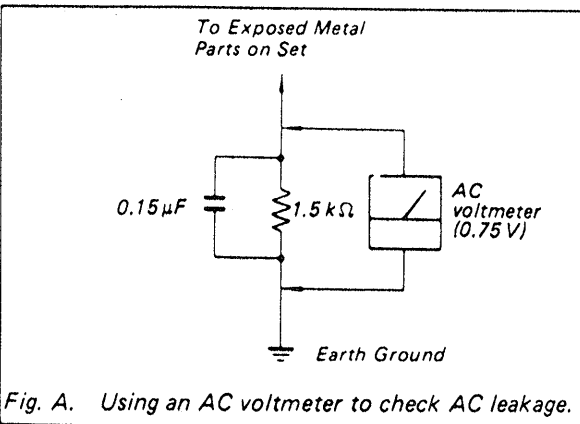


Fig. A. Using an AC voltmeter to check AC leakage.

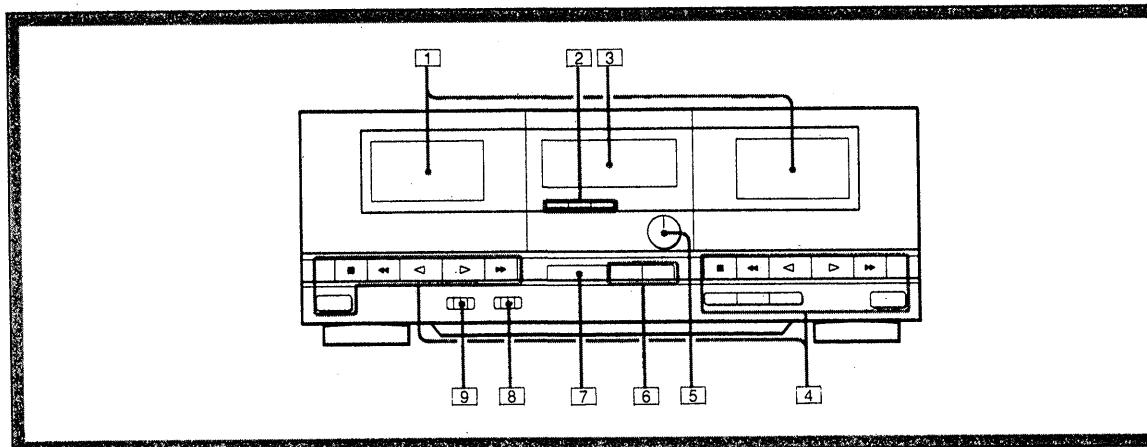
## TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
SECTION 1.	GENERAL . . . . .	3
SECTION 2.	DISASSEMBLY . . . . .	4
SECTION 3.	MECHANICAL ADJUSTMENTS . . . . .	5
SECTION 4.	ELECTRICAL ADJUSTMENTS . . . . .	5
SECTION 5.	DIAGRAMS	
5-1.	Printed Wiring Boards	
	—Main Section— . . . . .	9
5-2.	Schematic Diagram	
	—Main Section— . . . . .	13
5-3.	Circuit Boards Location . . . . .	17
5-4.	Printed Wiring Boards	
	—Panel Section— . . . . .	17
5-5.	Schematic Diagram	
	—Panel Section— . . . . .	19
SECTION 6.	EXPLODED VIEWS	
6-1.	Chassis Section . . . . .	21
6-2.	Front Panel Section . . . . .	22
6-3.	Mechanism Section 1 . . . . .	23
6-4.	Mechanism Section 2 . . . . .	24
SECTION 7.	ELECTRICAL PARTS LIST . . . . .	25

### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  $\Delta$  OR DOTTED LINE WITH MARK  $\Delta$  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.

# SECTION 1 GENERAL



## Cassette deck

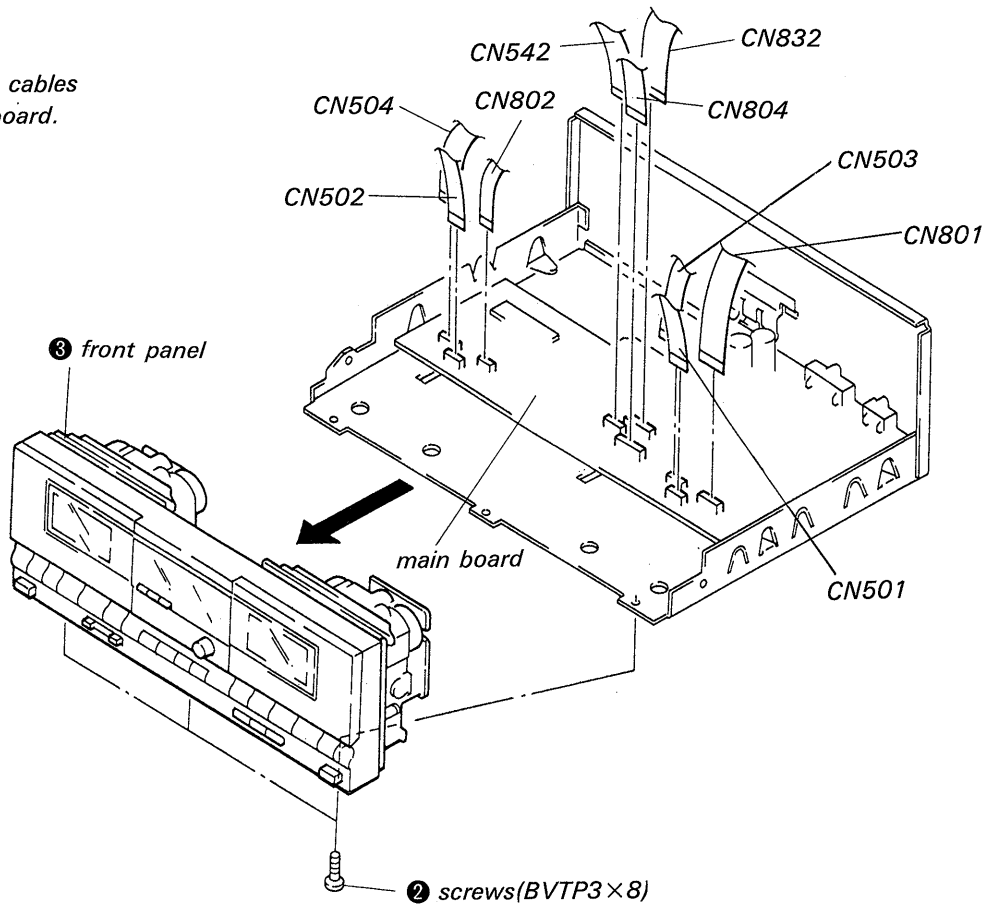
- 1 Cassette holders
- 2 Counter setting buttons 26
- 3 Display window
- 4 Tape operation buttons
  - ◀◀ Leftward or fast reverse winding, ▶▶ Rightward or fast forward winding.
  - ▶ Forward play, ◀ Reverse play, ■ Stop, ▲ Eject.
  - ▬▬ Pause (deck B only), ○ Record muting,
  - Record (deck B only)
- 5 REC (recording) LEVEL control 26
- 6 SYNCHRO DUBBING buttons 33
- 7 CD SYNCHRO REC (EDIT) button  
(only for the system used with CDP-M42) 33
- 8 DOLBY NR (noise reduction) switch 16
- 9 DIRECTION MODE selector 20

## SECTION 2 DISASSEMBLY

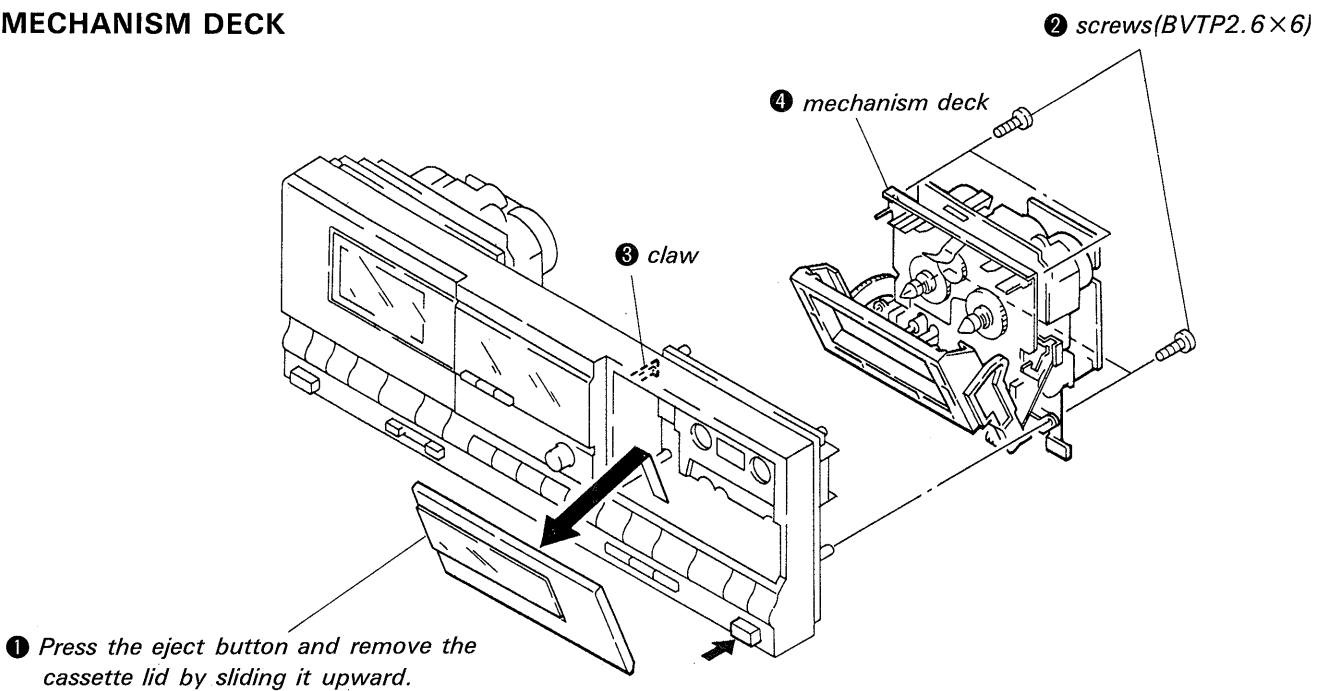
Note: Follow the disassembly procedure in the numerical order given.

### FRONT PANEL

- 1 Remove the flat cables from the main board.



### MECHANISM DECK



- 1 Press the eject button and remove the cassette lid by sliding it upward.

## SECTION 3 MECHANICAL ADJUSTMENTS

### PRECAUTION

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

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

### Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	35 to 60g · cm (0.49 to 0.83 oz · inch)
FWD Back tension	CQ-102C	2 to 6g · cm (0.03 to 0.08 oz · inch)
REV	CQ-102RC	35 to 60g · cm (0.49 to 0.83 oz · inch)
REV Back tension	CQ-102RC	2 to 6g · cm (0.03 to 0.08 oz · inch)
FF, REW	CQ-201B	70 to 110g · cm (0.98 to 1.52 oz · inch)

## SECTION 4 ELECTRICAL ADJUSTMENTS

**Note:** The adjustment should be performed in the order given in the service manual. As a rule, adjustment about playback should be performed before adjustment about recording. The adjustments should be performed for both L-CH and R-CH.

### ● Test Mode

The Test mode is activated by shorting Test Point Service mode (IC851 34 pin changes over to "L") with the POWER switch in OFF position, then turning on the POWER switch.

In this mode, the following functions operate:

#### 1. Source monitor

Line mute is cancelled during recording.

#### 2. High speed playback

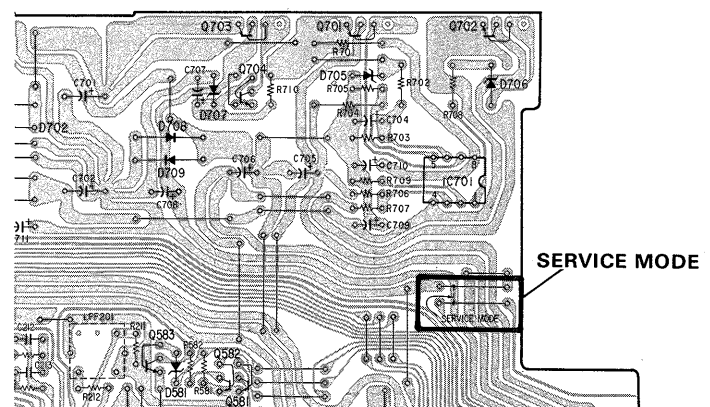
High speed playback is executed when the HIGH SPEED (BUBBING) button is pressed during playback. Normal speed playback is restored when the button is pressed again.

#### 3. Record memory

The tape counter is reset to "0" at the record start point.

After adjustment, open the Service mode to cancel the Test mode.

### [MAIN BOARD] (CONDUCTOR SIDE)

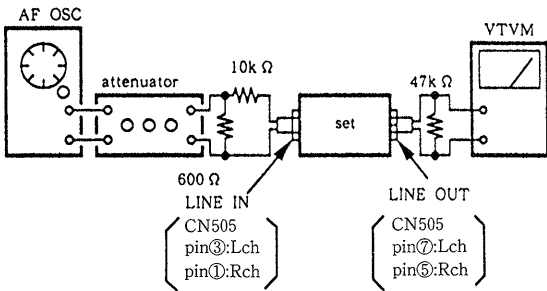


- Switches and controls should be set as follows unless otherwise specified.

NR switch : OFF  
DIR MODE switch : ⇄

- 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**



**Standard Input Level**

input terminal	LINE IN
source impedance	10kΩ
input level	0.25V (-10dB)

**Standard Output Level**

output terminal	LINE OUT
load impedance	47kΩ
output level	0.44V (-5dB)

**Test tape**

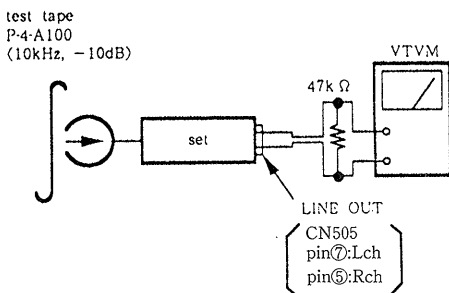
Type	Signal	Used for
P-4-A100	10kHz, -10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	PB Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

**Record/Playback Head Azimuth Adjustment**

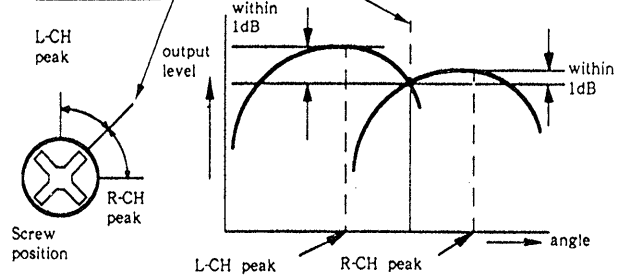
**DECK A** **DECK B**

**Procedure :**

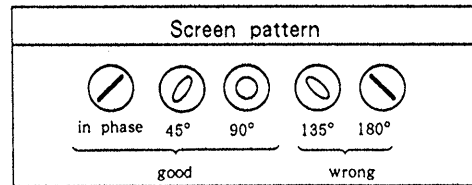
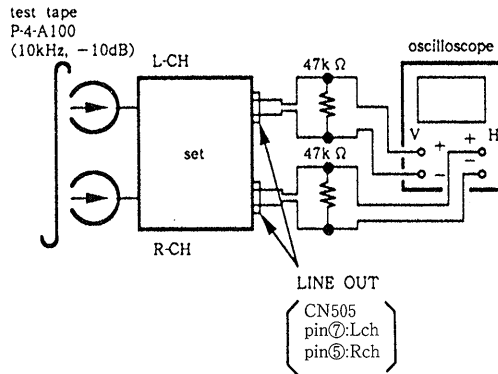
- Mode: FWD playback



- 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 1dB.

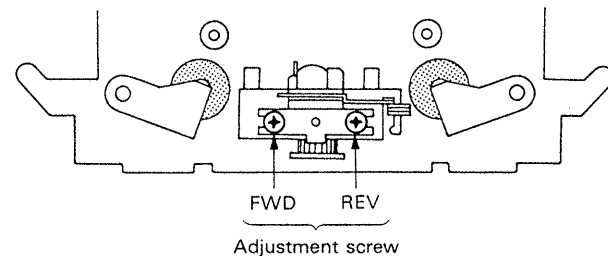


- Phase Check  
Mode: playback



- Set in the REV mode and repeat the step 1-3.
- After the adjustment, lock the screws with locking compound.

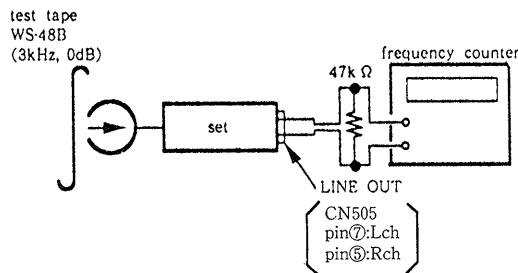
**Adjustment Location :** Record/playback head



## Tape Speed Adjustment DECK A DECK B

### Procedure :

Mode: playback



Perform high speed adjustment before normal speed adjustment.

(High speed adjustment)

1. Continue pressing the SYNCHRO BUBBING HIGH SPEED switch.
2. Check that frequency counter reading is within the standard value  $6,000 \pm 30$  Hz.
3. If out of the standard, adjust each RV72 so that the frequency counter reading satisfies  $6,000 \pm 30$  Hz on both A and B decks.

4. Change over to REV playback status, and repeat the above steps 1 to 3.

(Normal speed adjustment)

1. Continue pressing the SYNCHRO BUBBING NORM SPEED switch.
2. Check that the frequency counter reading is within the standard value  $3,000 \pm 30$  Hz.
3. If out of the standard, adjust each RV71 so that the frequency counter reading satisfies  $3,000 \pm 30$  Hz on both A and B decks.
4. Change over to REV playback status, and repeat the above steps 1 to 3.

Frequency difference between the beginning and the end of the tape should be within 3%.

Frequency difference between deck A and deck B the beginning of the tape should be within 1.5%.

### Adjustment Location :

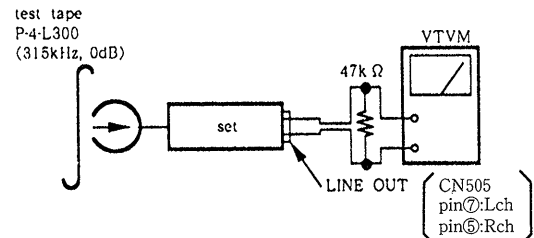
MD(A), MD(B) board

## Playback Level Adjustment

### DECK A DECK B

### Procedure :

Mode: playback



Adjust RV11 (L-CH), RV21 (R-CH) so that the reading on VTVM meets the adjustment limits below.

### Adjustment Limits :

LINE OUT level:  $-5 \pm 0.5$  dB (0.42–0.46V)

Level difference between channels: less than 0.5dB

Check that the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

**Adjustment Location :** MD(A), MD(B) board

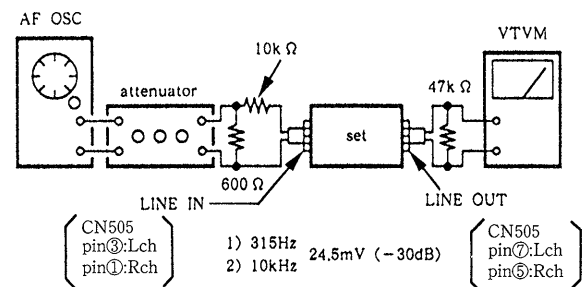
## Record Bias Adjustment DECK B

### Setting :

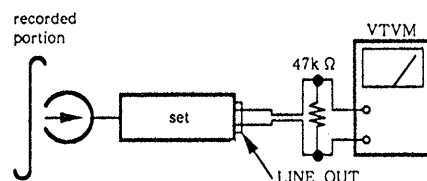
REC LEVEL control: Standard Record (See page 6.)

### Procedure :

1. Mode: record



2. Mode: playback



Playback the signal recorded in step 1.

Confirm that the 10kHz playback output is  $0 \pm 0.5$  dB relative to the 315Hz output. If necessary, adjust RV12 (L-CH), RV22 (R-CH) and repeat the steps given above.

**Adjustment Location :** MD(B) board

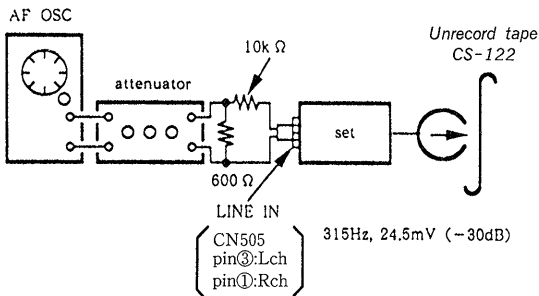
## Record Level Adjustment **DECK B**

### Setting :

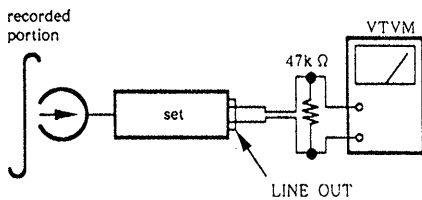
REC LEVEL control: Standard Record (See page 6.)

### Procedure :

1. Mode: record



2. Mode: playback



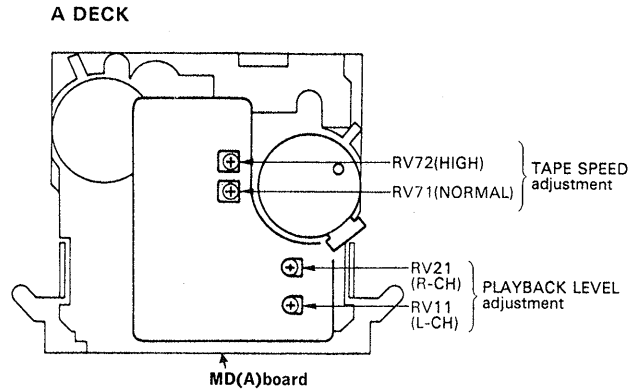
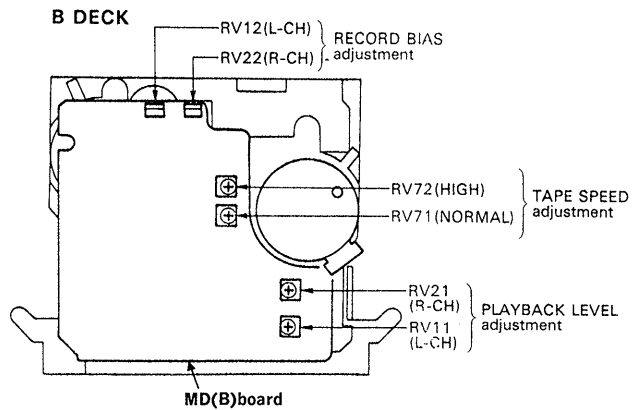
3. Playback the signal recorded in step 1.

Confirm that the signal level is within the adjustment limits below. If necessary, adjust RV101 (L-CH), RV 201 (R-CH) and repeat the step1-2.

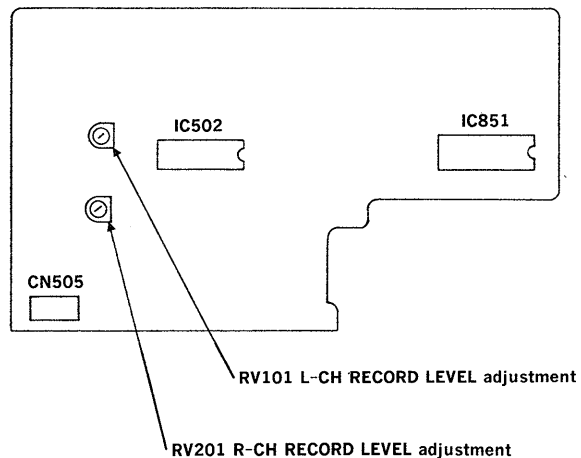
**Adjustment Limits :**  $-25\text{dB} \pm 0.5\text{dB}$  (42-46mV)

**Adjustment Location :** AUDIO board (component side)

## - Adjustment Parts Location Diagrams -



### AUDIO BOARD (COMPONENT SIDE)





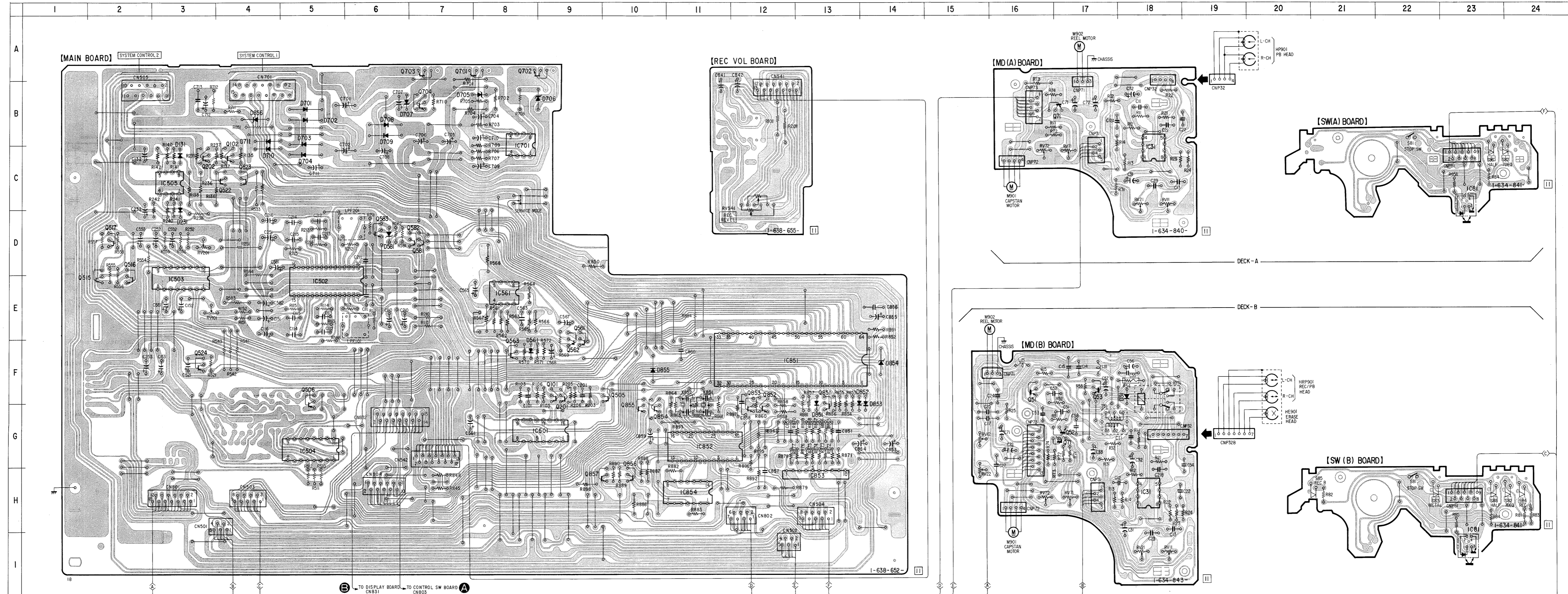
SECTION 5  
DIAGRAMS

5-1. PRINTED WIRING BOARDS —Main Section—

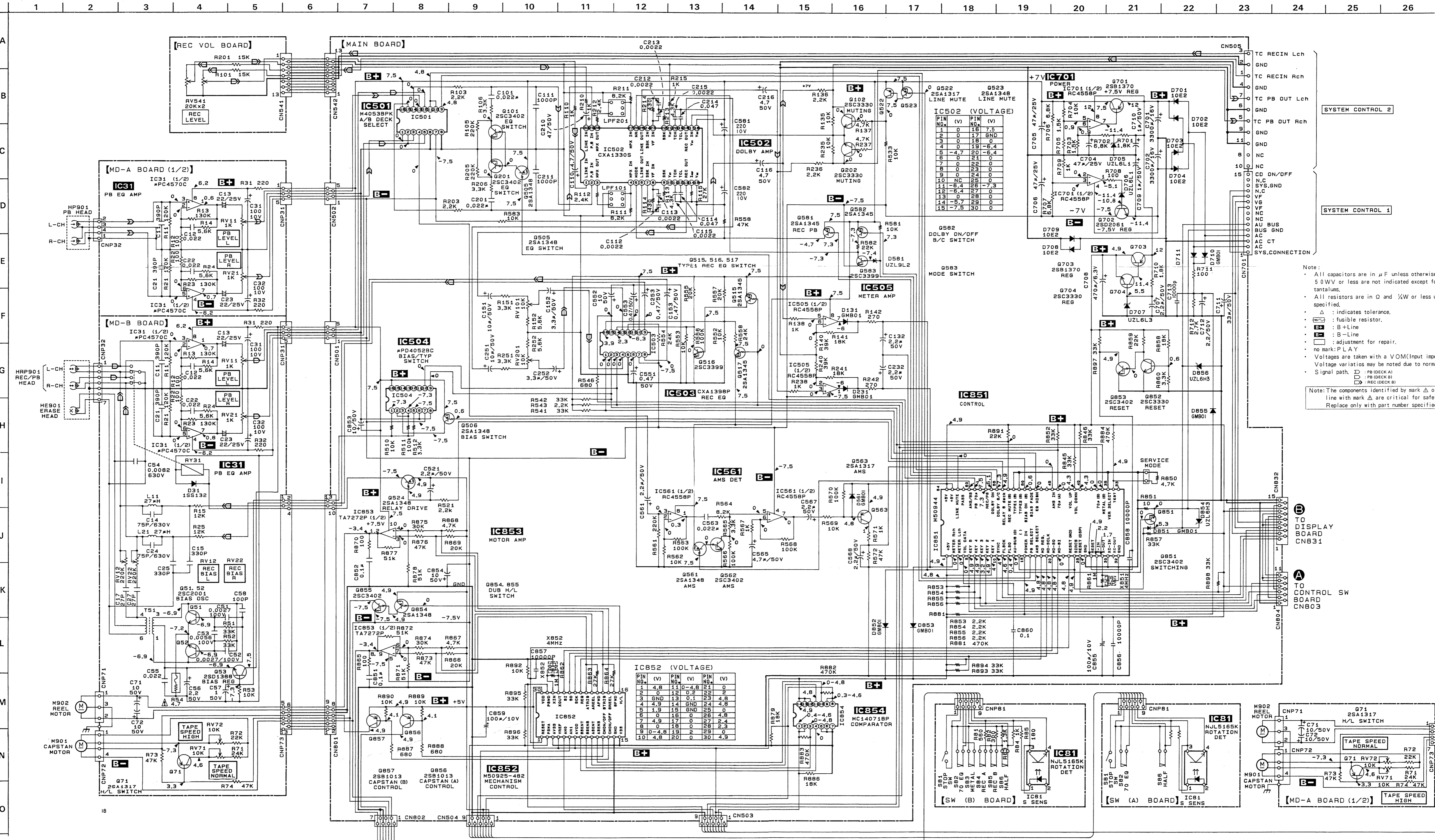
● SEMICONDUCTOR LOCATION

Ref. No.	Location
D 31	F-1 8
D 131	C-3
D 231	D-3
D 561	F-8
D 581	D-6
D 701	B-5
D 702	B-5
D 703	C-5
D 704	C-5
D 705	B-8
D 706	B-9
D 707	B-6
D 708	B-6
D 709	B-6
D 710	C-4
D 711	B-4
D 851	G-1 3
D 852	F-1 4
D 853	G-1 4
D 854	F-1 4
D 855	F-1 0
D 856	B-4
I C 31 (MD (A))	C-1 8
I C 31 (MD (B))	H-1 8
I C 81 (SW (A))	C-2 3
I C 81 (SW (B))	I-2 3
I C 501	G-9
I C 502	E-5
I C 503	E-3
I C 504	G-5
I C 505	C-3
I C 561	E-8
I C 701	B-8
I C 851	F-1 2
I C 852	G-1 1
I C 853	H-1 3
I C 854	H-1 1
Q 51	F-1 6
Q 52	G-1 7
Q 53	F-1 7
Q 71 (MD (A))	B-1 7
Q 71 (MD (B))	G-1 7
Q 101	F-9
Q 102	C-4
Q 201	F-9
Q 202	C-3
Q 505	F-1 0
Q 506	F-5
Q 515	E-2
Q 516	E-2
Q 517	D-2
Q 522	C-4
Q 523	C-4
Q 524	F-3
Q 561	E-9
Q 562	F-9
Q 563	F-8
Q 581	D-7
Q 582	D-7
Q 583	D-6
Q 701	A-8
Q 702	A-9
Q 703	A-7
Q 704	B-7
Q 851	F-1 3
Q 852	G-1 2
Q 853	G-1 2
Q 854	G-1 0
Q 855	G-1 0
Q 856	H-1 0
Q 857	H-1 0

○ : parts extracted from the component side.



5-2. SCHEMATIC DIAGRAM —Main Section—



**SYSTEM CONTROL 2**

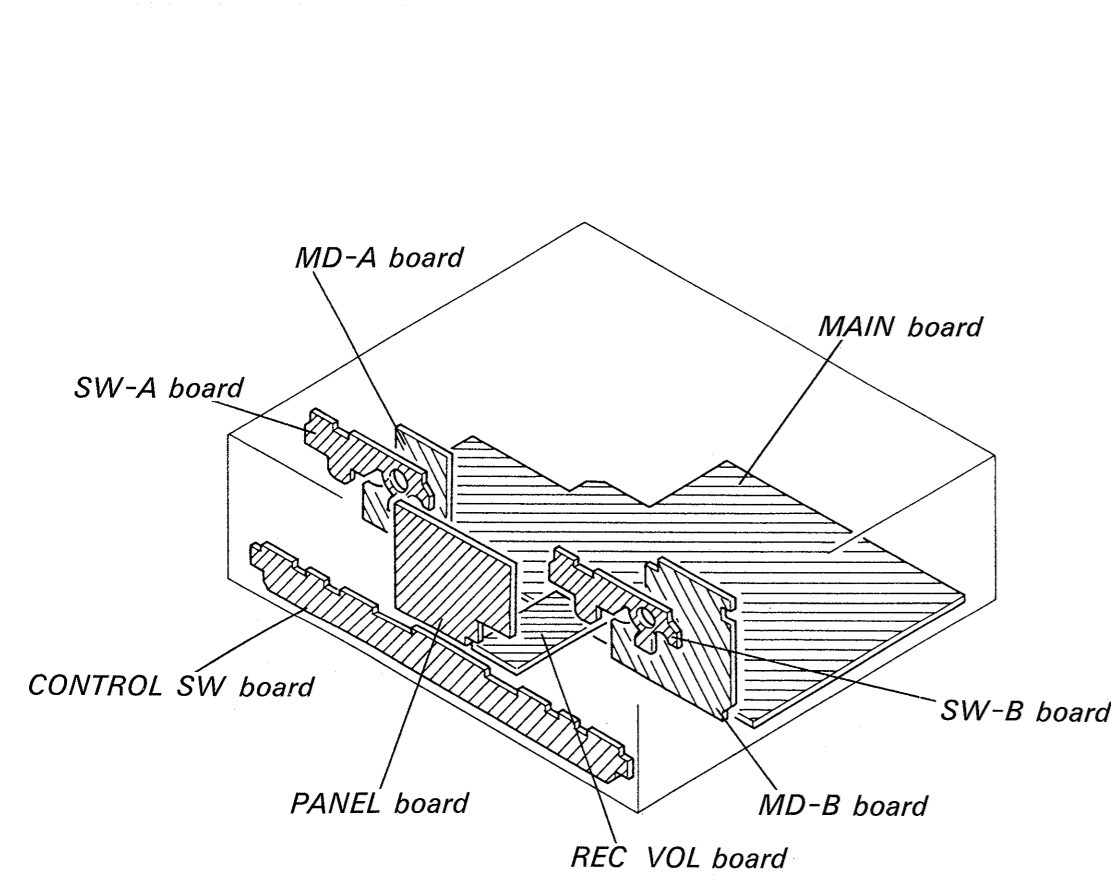
**SYSTEM CONTROL 1**

Note:

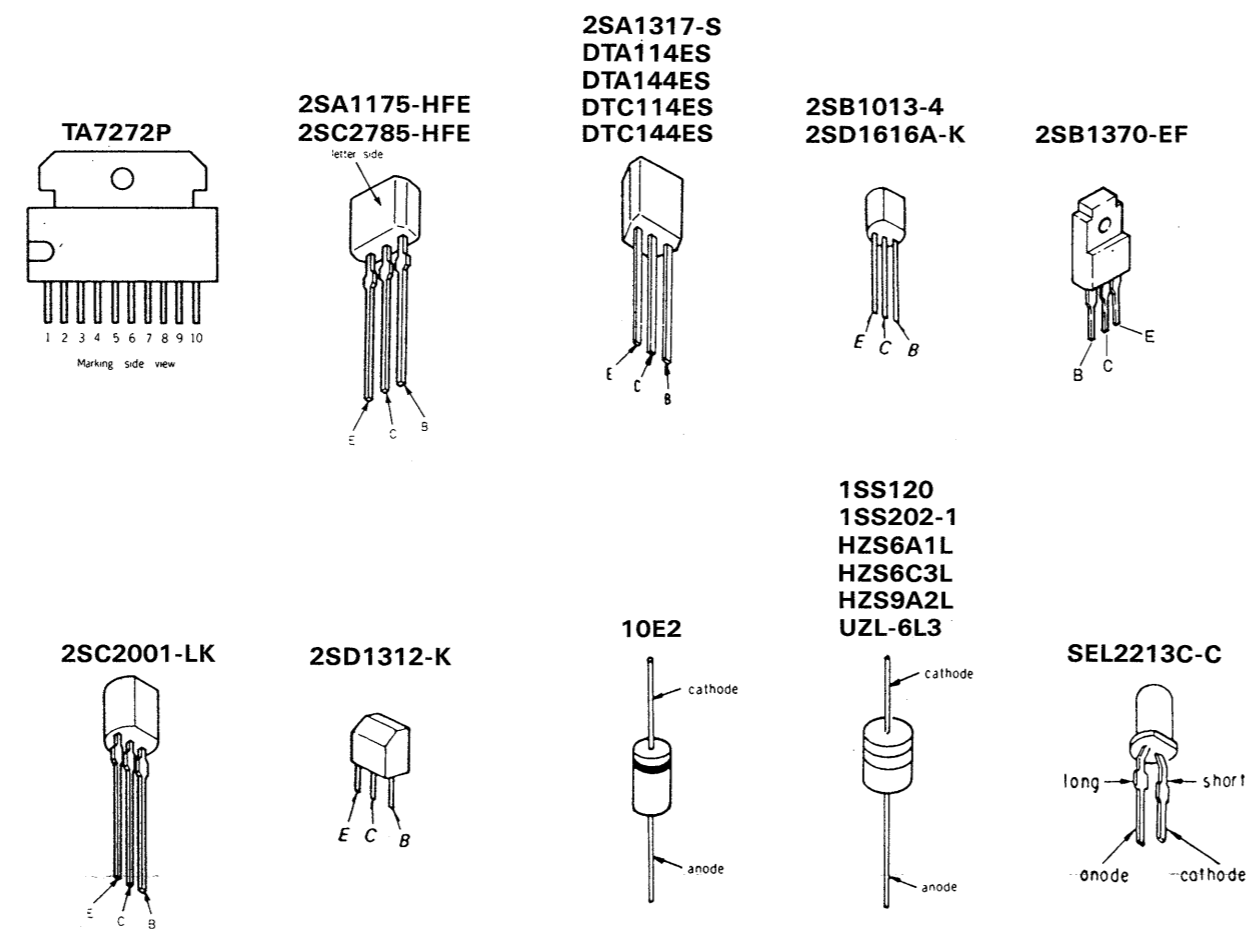
- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  5.0WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{2}\text{W}$  or less unless otherwise specified.
- $\Delta$ : indicates tolerance.
- $\square$ : fusible resistor.
- $\square$ : B-Line
- $\square$ : B-Line
- $\square$ : adjustment for repair.
- no mark: P.L.A.Y.
- Voltagess are taken with a VOM (input impedance 10M $\Omega$ ).
- Voltage variations may be noted due to normal production tolerances.
- Signal path:  $\square$ : PB (DECK A)  $\square$ : REC (DECK B)

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

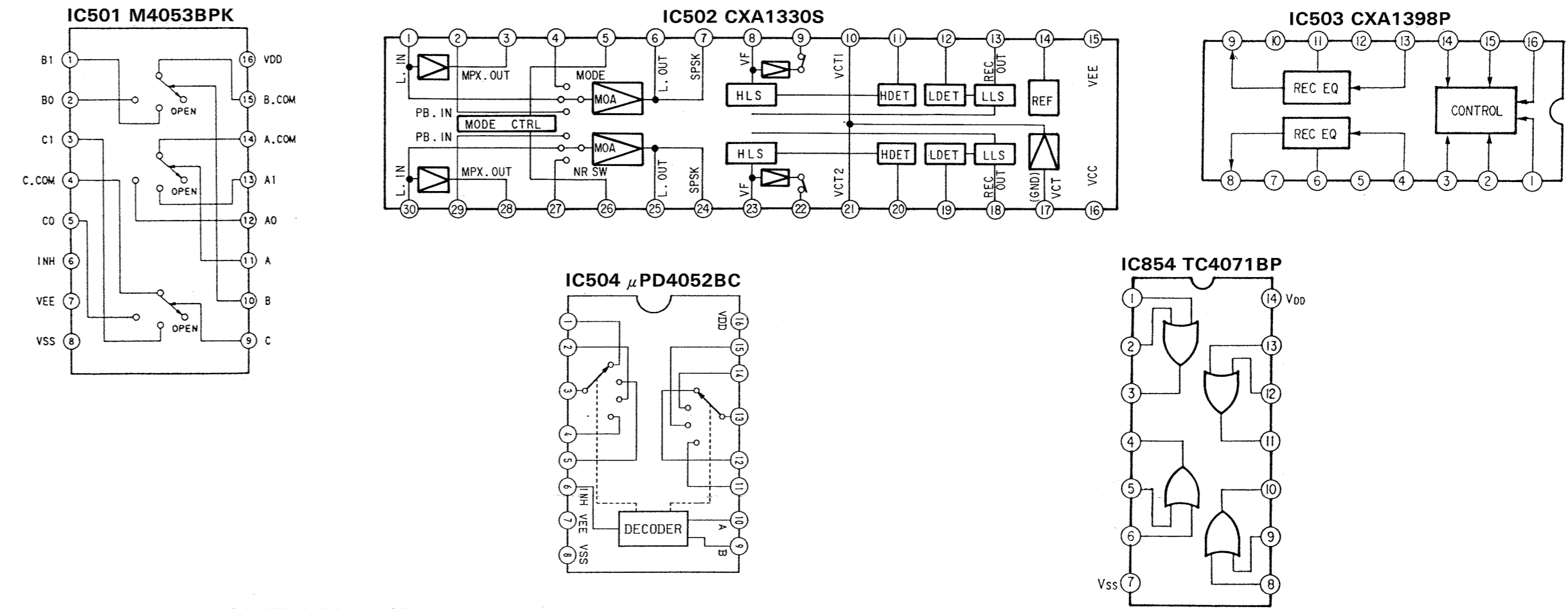
5-3. CIRCUIT BOARDS LOCATION



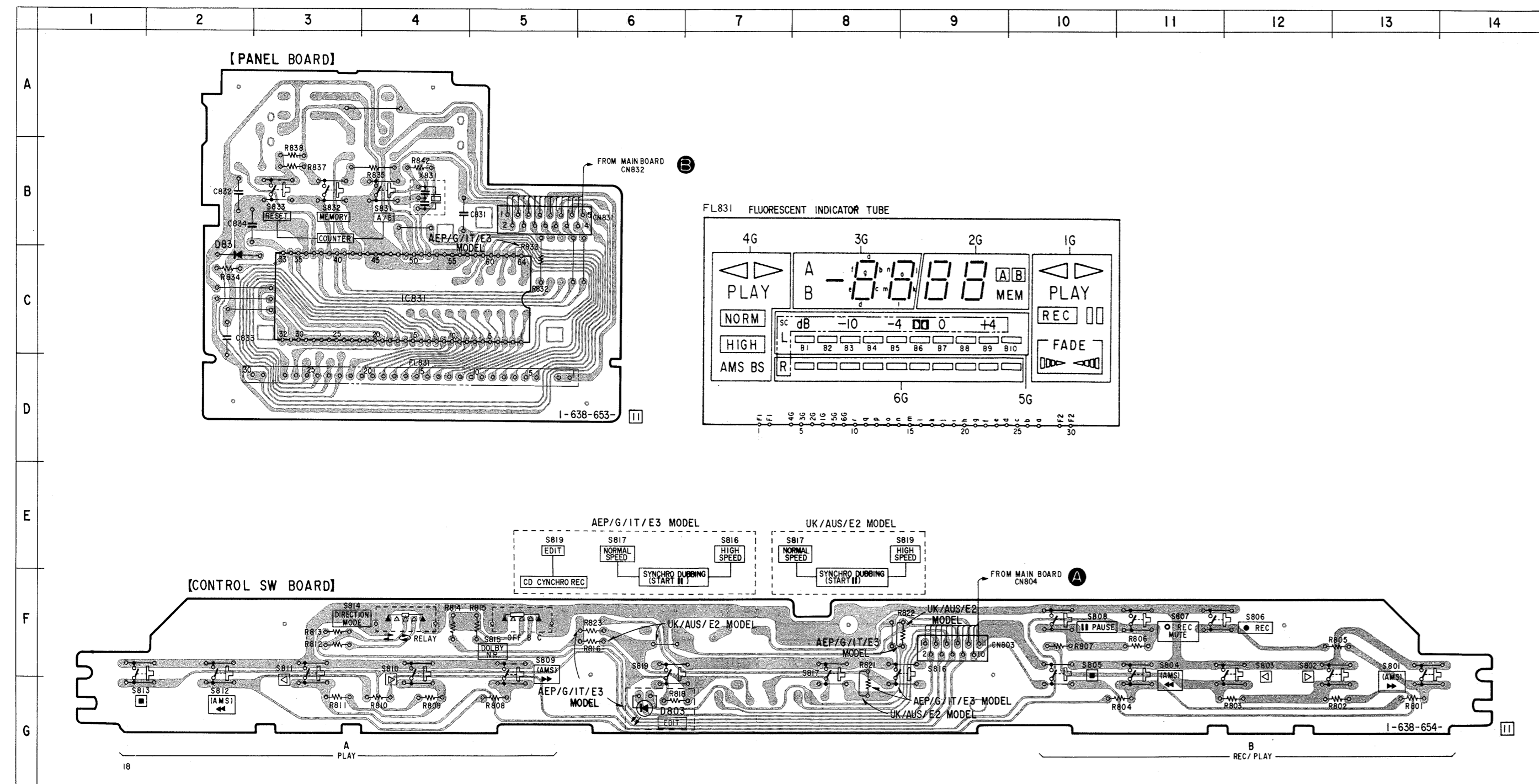
● Semiconductor Lead Layouts



● IC Block Diagrams



5-4. PRINTED WIRING BOARDS —Panel Section—

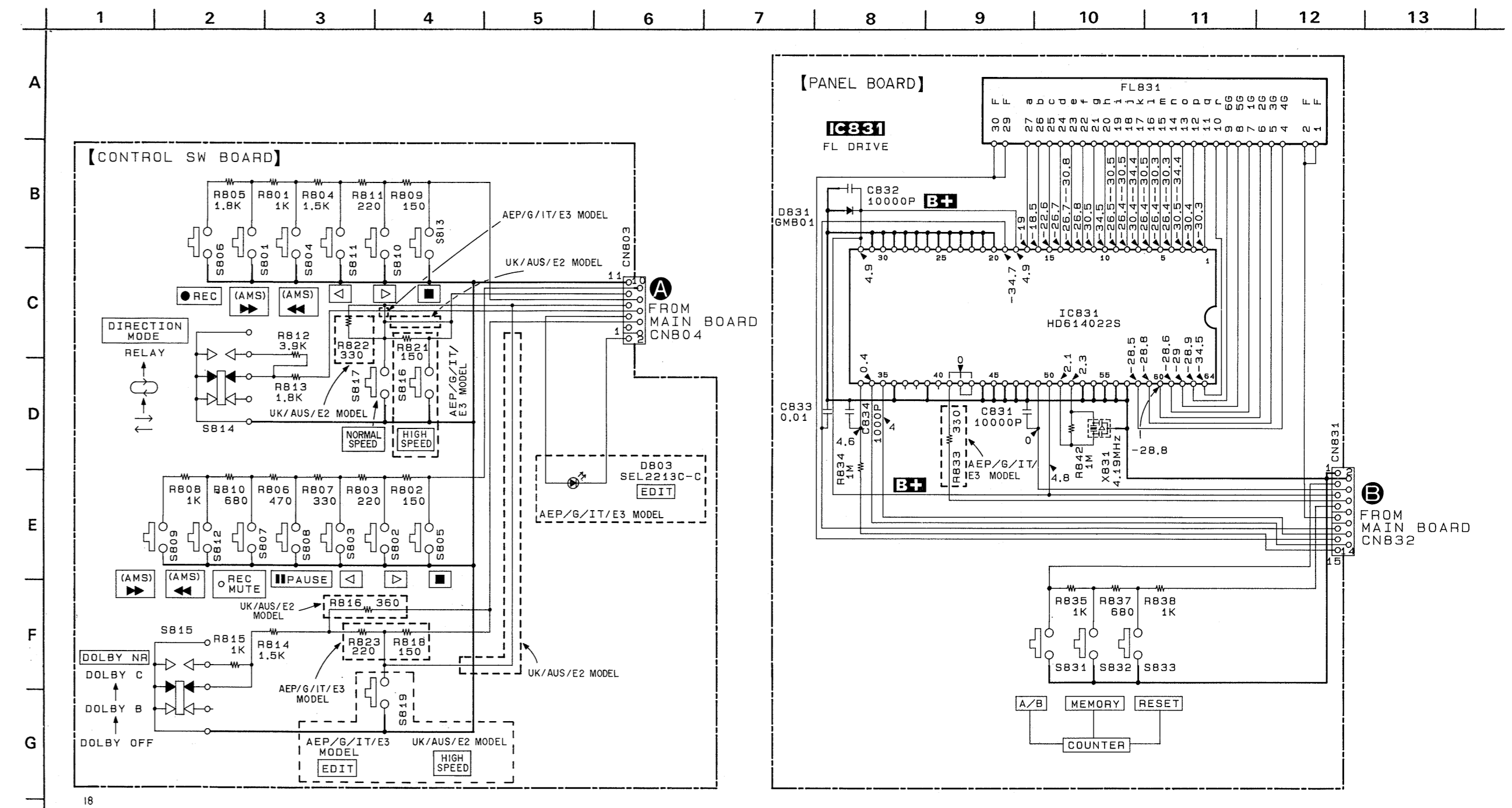


● SEMICONDUCTOR LOCATION

Ref. No.	Location
D 8 0 3	G-6
D 8 3 1	C-2
I C 8 3 1	C-4

○ : parts extracted from the component side.  
 G : Germany  
 IT : Italian  
 AUS : Australian

5-5. SCHEMATIC DIAGRAM —Panel Section—



Note:

- All capacitors are in  $\mu F$  unless otherwise noted, pF :  $\mu F \times 10^{-12}$ , 5.0WV 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.
- $\Delta$  : indicates tolerance.
- B+Line
- Voltage is dc with respect to ground under no-signal(detuned) conditions.

- no mark: PLAY
- Voltages are taken with a VOM (input impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.

G : Germany  
 IT : Italian  
 AUS : Australian

# SECTION 6 EXPLODED VIEWS

**NOTE:**

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked " \* " are not stocked since they are seldom required for

routine service. Some delay should be anticipated when ordering these items.

- Color Indication of Appearance Parts Example:

KNOB, BALANCE(WHITE)...(WHT)

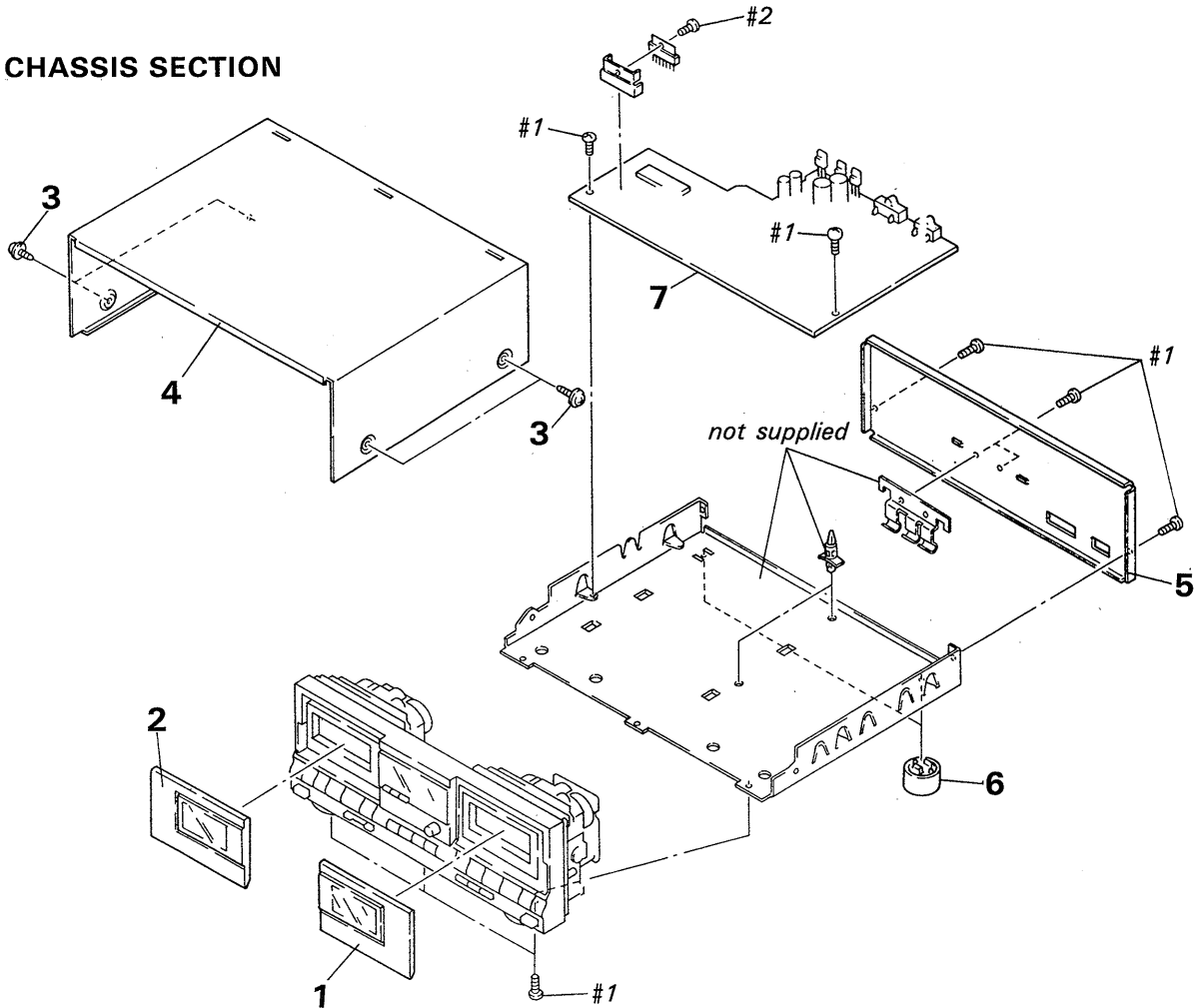
↑                      ↑  
Part's Color    Cabinet's Color

- Hardware (#mark) list is given in the last of this parts list.

G : Germany  
IT : Italian  
AUS : Australian

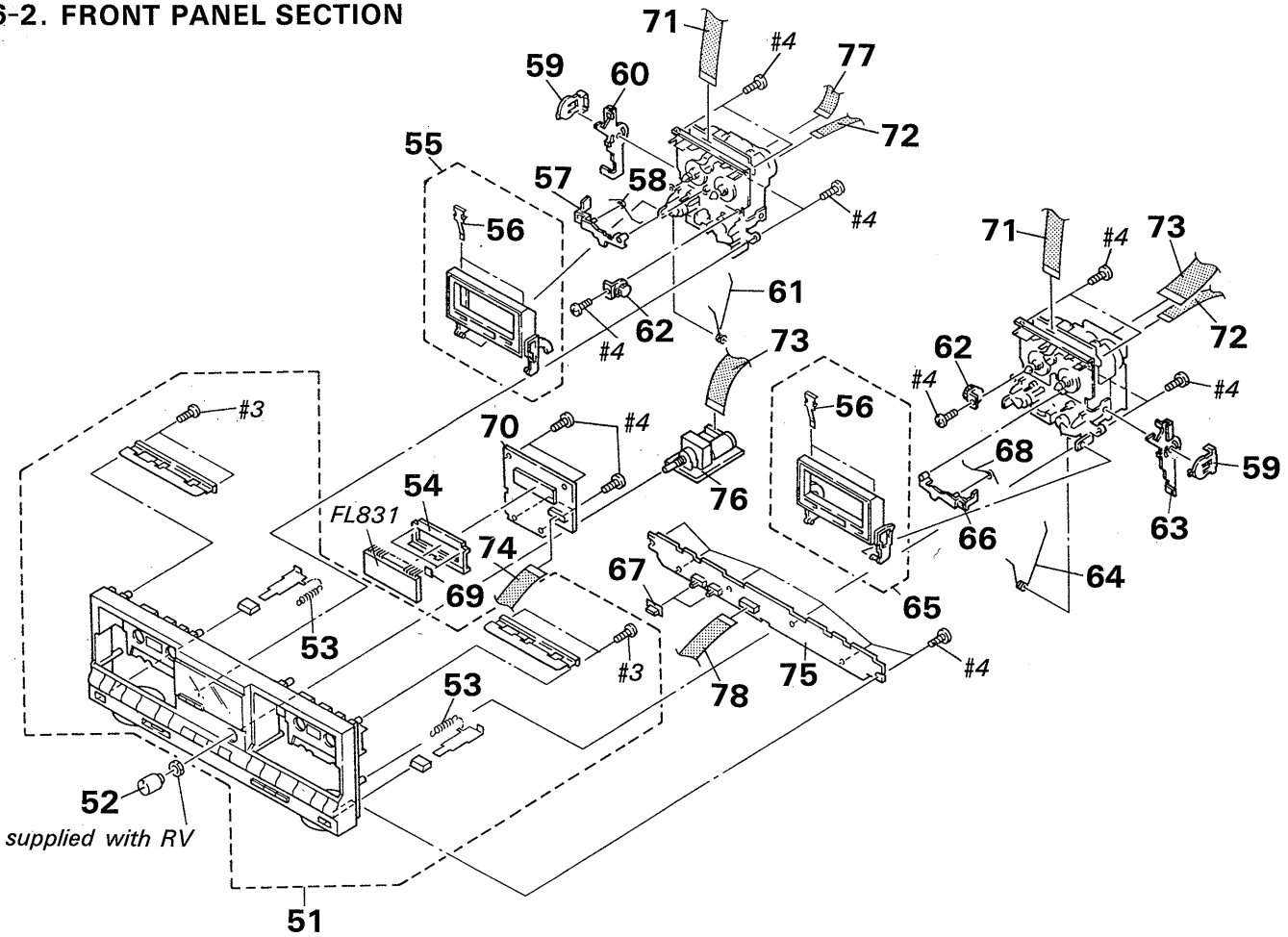
Note: The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

## 6-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-3362-796-1	LID (B) ASSY, CASSETTE (IT, AUS)		5	* 3-362-787-21	PANEL, BACK (ABP, IT, UK, AUS, E2/E3)	
1	X-3362-798-1	LID (B) ASSY, CASSETTE (ABP, G, UK, E2/E3)		5	* 3-362-787-13	PANEL, BACK (G)	
2	X-3362-226-1	LID (A) ASSY, CASSETTE (ABP, G, UK, E2/E3)		6	4-931-169-01	FOOT	
2	X-3362-797-1	LID (A) ASSY, CASSETTE (IT, AUS)		7	* A-2006-428-A	MAIN BOARD, COMPLETE (ABP, G, IT, E3)	
3	3-363-099-01	SCREW (CASE +3X8 TP2)		7	* A-2006-432-A	MAIN BOARD, COMPLETE (UK, AUS, E2)	
4	* 4-939-803-71	CASE					

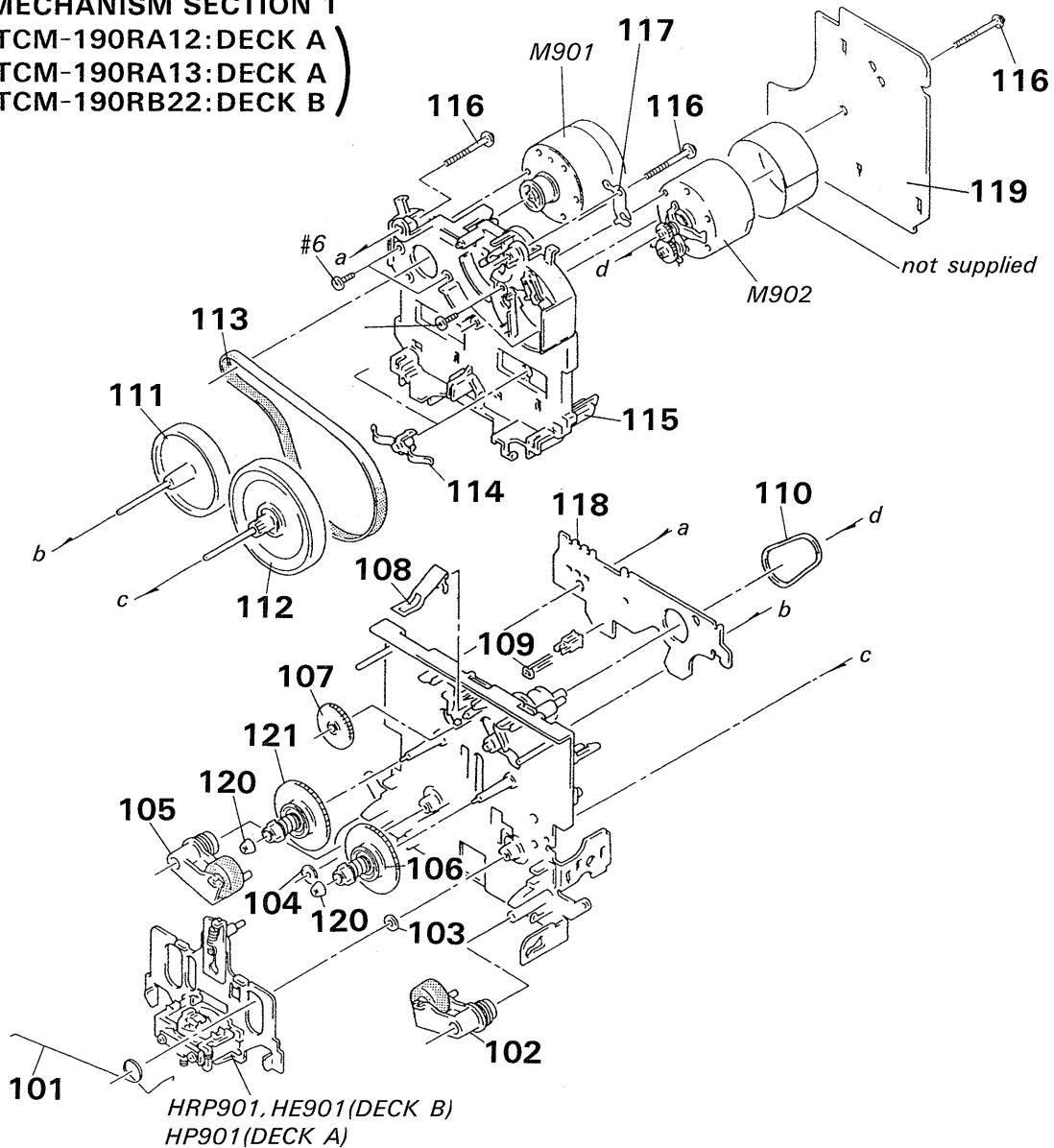
6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	X-3362-800-1	PANEL ASSY, FRONT (ABP, G, E3)	
51	X-3362-801-1	PANEL ASSY, FRONT (UK, AUS, E2)	
51	X-3362-799-1	PANEL ASSY, FRONT (IT)	
52	3-349-039-01	KNOB (VOL)	
53	3-662-752-21	SPRING, TENSION	
54	* 4-933-646-01	HOLDER (TC), FL TUBE	
55	X-3340-194-1	HOLDER (L) ASSY, CASSETTE	
56	3-308-823-11	SPRING	
57	3-354-955-01	LEVER (EJ SAFTY LEVER L)	
58	3-354-961-01	SPRING (EJ SAFTY SPRING L)	
59	3-354-957-01	JOINT (LOCK LEVER)	
60	* 3-363-638-01	LEVER (LOCK LEVER L)	
61	3-354-959-01	SPRING (LOADING L), TORSION	
62	3-354-963-01	DAMPER	
63	* 3-363-639-01	LEVER (LOCK LEVER R)	

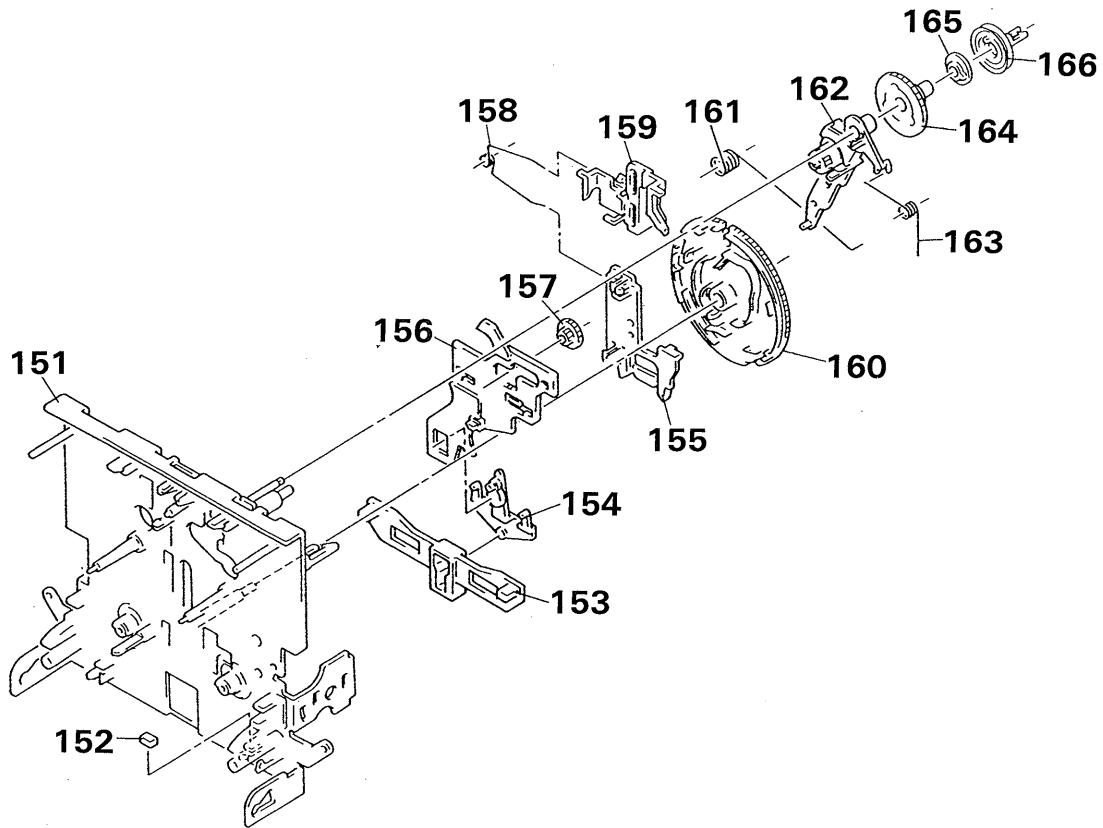
Ref. No.	Part No.	Description	Remark
64	3-354-960-01	SPRING (LOADING R), TORSION	
65	X-3340-195-1	HOLDER (R) ASSY, CASSETTE	
66	3-354-956-01	LEVER (EJ SAFTY LEVER R)	
67	3-363-640-01	KNOB (SLIDE)	
68	3-354-962-01	SPRING (EJ SAFTY SPRING R)	
69	* 4-921-941-01	CUSHION (FL)	
70	* A-2006-429-A	PANEL BOARD, COMPLETE	
71	* 1-574-727-11	WIRE, FLAT TYPE (9 CORE)	
72	1-575-220-11	WIRE, FLAT TYPE (5 CORE)	
73	1-590-036-11	WIRE, FLAT TYPE (13 CORE)	
74	1-575-217-11	WIRE, FLAT TYPE (15 CORE)	
75	* 1-638-654-11	CONTROL SW BOARD	
76	* 1-638-655-11	REC VOL BOARD	
77	1-575-731-11	WIRE, FLAT TYPE (7 CORE)	
78	1-590-218-11	WIRE, FLAT TYPE (11 CORE)	
FL831	1-519-570-11	INDICATOR TUBE, FLUORESCENT	

**6-3. MECHANISM SECTION 1**  
**( TCM-190RA12:DECK A )**  
**( or TCM-190RA13:DECK A )**  
**( TCM-190RB22:DECK B )**



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-359-455-01	SPRING, TORSION		115	* 3-359-436-01	BASE (THRUST RETAINER), FITTING	
102	X-3359-408-1	LEVER (PINCH LEVER FWD) ASSY		116	3-359-414-01	SCREW (+PTPWH 2X23)	
103	3-356-713-01	WASHER		117	3-359-450-01	PLATE, GROUND	
104	3-356-714-01	WASHER		118	* 1-634-841-11	SW-A BOARD	
105	X-3359-409-1	LEVER (PINCH LEVER REV) ASSY		118	* 1-634-841-11	SW-B BOARD	
106	X-3359-404-1	TABLE ASSY, REEL		119	* 1-634-843-11	MD-B BOARD (DECK B)	
107	3-359-424-01	GEAR (REV GEAR)		120	3-362-308-01	CAP (REEL)	
108	3-359-430-01	SPRING (CASSETTE RETAINER), LEAF		121	X-3362-078-1	TABLE ASSY (B), REEL	
109	3-343-419-01	HOLDER (S SENSER A)		HP901	A-2003-418-A	BASE ASSY, HEAD (DECK A) (TCM-190RA12)	
110	3-359-466-01	BELT (FR), SQUARE		HP901	A-2003-867-A	BASE ASSY, HEAD (DECK A) (TCM-190RA13)	
111	X-3359-410-1	FLYWHEEL (REV) ASSY		HRP901	A-2003-477-A	BASE ASSY, HEAD (DECK B)	
112	X-3359-406-1	FLYWHEEL (FWD) COMPLETE ASSY		HE901			
113	3-359-417-01	BELT (FLAT), CAPSTAN		M901	X-3359-417-1	MOTOR (CAPSTAN) ASSY	
114	3-575-321-00	RETAINER, THRUST, CAPSTAN		M902	A-2003-474-A	MOTOR (REEL) ASSY	

6-4. MECHANISM SECTION 2



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	X-3359-415-1	CHASSIS ASSY, MECHANICAL		159	3-359-429-01	SLIDER (BRAKE PLATE)	
152	3-359-469-01	SPACER		160	3-359-420-01	GEAR (CAM GEAR)	
153	* 3-359-425-01	SLIDER (REVERSE SLIDER)		161	3-359-456-01	SPRING (TRIGGER SPRING), TORSION	
154	3-359-426-01	LEVER (REVERSE LEVER)		162	X-3359-405-1	LEVER (FR ARM) ASSY	
155	* 3-359-427-01	SLIDER (LEVERSE SLIDER)		163	3-359-453-01	SPRING (FR ARM), TORSION	
156	* 3-359-415-01	SLIDER (TRIGGER SLIDER)		164	3-359-419-01	GEAR (FR GEAR)	
157	3-359-448-01	GEAR (TRIGGER)		165	3-359-421-01	CLUTCH (REEL DISK)	
158	3-359-454-01	SPRING, TORSION		166	3-359-418-01	PULLEY (FR PULLEY)	

## SECTION 7 ELECTRICAL PARTS LIST

MAIN
PANEL
CONTROL SW
REC VOL

**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.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -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
- SEMI CONDUCTORS  
In each case, u:μ, for example:  
uA...: μA..., uPA...: μPA...,  
uPB...: μPB..., uPC...: μPC...,  
uPD...: μPD...
- CAPACITORS  
uF : μF
- COILS  
uH : μH

- G : Germany
- IT : Italian
- AUS : Australian

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

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	* A-2006-428-A	MAIN BOARD, COMPLETE (ABP, G, IT, E3)		C232	1-126-161-11	ELECT	2.2uF 20% 50V
	* A-2006-432-A	MAIN BOARD, COMPLETE (UK, AUS, E2)		C251	1-126-059-11	ELECT	10uF 20% 50V
	*****			C252	1-126-162-11	ELECT	3.3uF 20% 50V
	* A-2006-429-A	PANEL BOARD, COMPLETE		C253	1-126-300-11	ELECT	0.47uF 20% 50V
	*****			C521	1-126-161-11	ELECT	2.2uF 20% 50V
	* 1-638-654-11	CONTROL SW BOARD		C551	1-126-300-11	ELECT	0.47uF 20% 50V
	*****			C552	1-126-059-11	ELECT	10uF 20% 50V
	* 1-638-655-11	REC VOL BOARD		C553	1-126-300-11	ELECT	0.47uF 20% 50V
	*****			C561	1-126-161-11	ELECT	2.2uF 20% 50V
	* 4-921-941-01	CUSHION (FL)		C563	1-136-157-00	FILM	0.022uF 5% 50V
	* 4-933-646-01	HOLDER (TC), FL TUBE		C565	1-126-163-11	ELECT	0.68uF 20% 50V
	* 4-942-204-01	PLATE, GROUND		C567	1-126-161-11	ELECT	2.2uF 20% 50V
	7-682-547-04	SCREW +BVTT 3X6 (S)		C568	1-126-161-11	ELECT	2.2uF 20% 50V
	< CAPACITOR >			C581	1-126-101-11	ELECT	220uF 20% 10V
				C582	1-126-101-11	ELECT	220uF 20% 10V
C101	1-136-157-00	FILM	0.022uF 5% 50V	C701	1-124-887-00	ELECT	3300uF 20% 16V
C110	1-126-163-11	ELECT	0.68uF 20% 50V	C702	1-124-887-00	ELECT	3300uF 20% 6V
C111	1-126-163-11	ELECT	0.68uF 20% 50V	C704	1-124-910-11	ELECT	47uF 20% 50V
C112	1-130-475-00	MYLAR	0.0022uF 5% 50V	C705	1-124-910-11	ELECT	47uF 20% 50V
C113	1-130-475-00	MYLAR	0.0022uF 5% 50V	C706	1-124-910-11	ELECT	47uF 20% 50V
C114	1-136-161-00	FILM	0.047uF 5% 50V	C707	1-126-161-11	ELECT	2.2uF 20% 50V
C115	1-130-475-00	MYLAR	0.0022uF 5% 50V	C708	1-124-472-11	ELECT	470uF 20% 10V
C116	1-126-163-11	ELECT	4.7uF 20% 50V	C709	1-126-301-11	ELECT	1uF 20% 50V
C132	1-126-161-11	ELECT	2.2uF 20% 50V	C710	1-126-301-11	ELECT	1uF 20% 50V
C151	1-126-059-11	ELECT	10uF 20% 50V	C711	1-126-867-11	ELECT	33uF 20% 50V
C152	1-126-162-11	ELECT	3.3uF 20% 50V	C712	1-126-161-11	ELECT	2.2uF 20% 50V
C153	1-126-300-11	ELECT	0.47uF 20% 50V	C713	1-161-379-00	CERAMIC	0.01uF 30% 25V
C201	1-136-157-00	FILM	0.022uF 5% 50V	C831	1-161-379-00	CERAMIC	0.01uF 20% 25V
C210	1-126-163-11	ELECT	0.68uF 20% 50V	C832	1-161-379-00	CERAMIC	0.01uF 20% 25V
C211	1-126-163-11	ELECT	0.68uF 20% 50V	C833	1-161-379-00	CERAMIC	0.01uF 20% 25V
C212	1-130-475-00	MYLAR	0.0022uF 5% 50V				
C213	1-130-475-00	MYLAR	0.0022uF 5% 50V				
C214	1-136-161-00	FILM	0.047uF 5% 50V				
C215	1-130-475-00	MYLAR	0.0022uF 5% 50V				
C216	1-126-163-11	ELECT	4.7uF 20% 50V				



MAIN

PANEL

CONTROL SW

REC VOL

Ref. No.	Part No.	Description	Remark
C834	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C851	1-164-159-11	CERAMIC 0.1uF 50V	
C852	1-164-159-11	CERAMIC 0.1uF 50V	
C853	1-126-059-11	ELECT 10uF 20% 50V	
C854	1-126-059-11	ELECT 10uF 20% 50V	
< CONNECTOR >			
C855	1-124-994-11	ELECT 100uF 20% 10V	
C856	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C857	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C858	1-161-379-00	CERAMIC 0.01uF 20% 25V	
C859	1-124-994-11	ELECT 100uF 20% 10V	
C860	1-164-159-11	CERAMIC 0.1uF 50V	
CN501	* 1-568-824-11	SOCKET, CONNECTOR 5P	
CN502	* 1-568-824-11	SOCKET, CONNECTOR 5P	
CN503	* 1-568-828-11	SOCKET, CONNECTOR 9P	
CN504	* 1-568-828-11	SOCKET, CONNECTOR 9P	
CN505	* 1-566-858-11	SOCKET, CONNECTOR 11P (SYSTEM CONTROL 2)	
CN542	* 1-568-832-11	SOCKET, CONNECTOR 13P	
CN701	* 1-566-859-11	SOCKET, CONNECTOR 15P (SYSTEM CONTROL 1)	
CN801	* 1-568-832-11	SOCKET, CONNECTOR 13P	
CN802	* 1-568-826-11	SOCKET, CONNECTOR 7P	
CN803	* 1-568-854-11	SOCKET, CONNECTOR 11P	
CN804	* 1-568-830-11	SOCKET, CONNECTOR 11P	
CN831	* 1-568-834-11	SOCKET, CONNECTOR 15P	
CN832	* 1-568-834-11	SOCKET, CONNECTOR 15P	
< DIODE >			
D131	8-719-912-20	DIODE 1SS120	
D231	8-719-912-20	DIODE 1SS120	
D561	8-719-912-20	DIODE 1SS120	
D581	8-719-933-54	DIODE HZS9A2L	
D701	8-719-200-77	DIODE 10E2N	
D702	8-719-200-77	DIODE 10E2N	
D703	8-719-200-77	DIODE 10E2N	
D704	8-719-200-77	DIODE 10E2N	
D705	8-719-933-33	DIODE HZS6A1L	
D706	8-719-933-33	DIODE HZS6A1L	
D707	8-719-000-54	DIODE UZL-6L3	
D708	8-719-200-77	DIODE 10E2N	
D709	8-719-200-77	DIODE 10E2N	
D710	8-719-912-20	DIODE 1SS120	
D711	8-719-912-20	DIODE 1SS120	
D803	8-719-302-23	LED SEL2213C-C (AEP, G, IT, E3)	
D831	8-719-912-20	DIODE 1SS120	
D851	8-719-912-20	DIODE 1SS120	
D852	8-719-912-20	DIODE 1SS120	
D853	8-719-912-20	DIODE 1SS120	

Ref. No.	Part No.	Description	Remark
D854	8-719-933-41	DIODE HZS6C3L	
D855	8-719-912-20	DIODE 1SS120	
D856	8-719-933-41	DIODE HZS6C3L	
< INDICATOR TUBE >			
FL831	1-519-570-11	INDICATOR TUBE, FLUORESCENT	
< IC >			
IC501	8-759-140-53	IC uPD4053BC	
IC502	8-752-036-34	IC CXA1330S	
IC503	8-752-039-24	IC CXA1398P	
IC504	8-759-152-34	IC uPD4052BC-A	
IC505	8-759-945-58	IC RC4558P	
IC561	8-759-945-58	IC RC4558P	
IC701	8-759-945-58	IC RC4558P	
IC831	8-759-321-92	IC HD614022S	
IC851	8-759-636-60	IC M50944-168SP	
IC852	8-759-635-94	IC M50925SP-482SP	
IC853	8-759-207-05	IC TA7272P	
IC854	8-759-240-71	IC TC4071BP	
< FILTER >			
LPF101	1-236-087-11	FILTER, LOW PASS	
LPF201	1-236-087-11	FILTER, LOW PASS	
< TRANSISTOR >			
Q101	8-729-900-80	TRANSISTOR DTC114ES	
Q102	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q201	8-729-900-80	TRANSISTOR DTC114ES	
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q505	8-729-900-61	TRANSISTOR DTA114ES	
Q506	8-729-900-61	TRANSISTOR DTA114ES	
Q515	8-729-900-65	TRANSISTOR DTA144ES	
Q516	8-729-900-89	TRANSISTOR DTC144ES	
Q517	8-729-900-65	TRANSISTOR DTA144ES	
Q522	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q523	8-729-900-61	TRANSISTOR DTA114ES	
Q524	8-729-900-61	TRANSISTOR DTA114ES	
Q561	8-729-900-61	TRANSISTOR DTA114ES	
Q562	8-729-900-80	TRANSISTOR DTC114ES	
Q563	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q581	8-729-900-65	TRANSISTOR DTA144ES	
Q582	8-729-900-65	TRANSISTOR DTA144ES	
Q583	8-729-900-89	TRANSISTOR DTC144ES	
Q701	8-729-924-90	TRANSISTOR 2SB1370-EF	
Q702	8-729-111-55	TRANSISTOR 2SD1312-K	

MAIN

PANEL

CONTROL SW

REC VOL

Ref. No.	Part No.	Description	Remark
Q703	8-729-924-90	TRANSISTOR 2SB1370-EF	
Q704	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q851	8-729-900-80	TRANSISTOR DTC114ES	
Q852	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q853	8-729-900-80	TRANSISTOR DTC114ES	
Q854	8-729-900-61	TRANSISTOR DTA114ES	
Q855	8-729-900-80	TRANSISTOR DTC114ES	
Q856	8-729-801-84	TRANSISTOR 2SB1013-4	
Q857	8-729-801-84	TRANSISTOR 2SB1013-4	
< RESISTOR >			
R103	1-249-421-11	CARBON 2.2K 5%	1/4W
R105	1-247-887-00	CARBON 220K 5%	1/4W
R106	1-249-423-11	CARBON 3.3K 5%	1/4W
R110	1-249-417-11	CARBON 1K 5%	1/4W
R111	1-249-428-11	CARBON 8.2K 5%	1/4W
R112	1-249-423-11	CARBON 3.3K 5%	1/4W
R113	1-247-846-11	CARBON 4.3K 5%	1/4W
R114	1-247-822-11	CARBON 430 5%	1/4W
R115	1-249-434-11	CARBON 27K 5%	1/4W
R135	1-249-429-11	CARBON 10K 5%	1/4W
R136	1-249-421-11	CARBON 2.2K 5%	1/4W
R137	1-249-425-11	CARBON 4.7K 5%	1/4W
R138	1-249-417-11	CARBON 1K 5%	1/4W
R140	1-249-436-11	CARBON 39K 5%	1/4W
R141	1-249-432-11	CARBON 18K 5%	1/4W
R142	1-249-410-11	CARBON 270 5%	1/4W
R151	1-249-423-11	CARBON 3.3K 5%	1/4W
R152	1-249-426-11	CARBON 5.6K 5%	1/4W
R203	1-249-421-11	CARBON 2.2K 5%	1/4W
R205	1-247-887-00	CARBON 220K 5%	1/4W
R206	1-249-423-11	CARBON 3.3K 5%	1/4W
R210	1-249-417-11	CARBON 1K 5%	1/4W
R211	1-249-428-11	CARBON 8.2K 5%	1/4W
R212	1-249-423-11	CARBON 3.3K 5%	1/4W
R213	1-247-846-11	CARBON 4.3K 5%	1/4W
R214	1-247-822-11	CARBON 430 5%	1/4W
R215	1-249-417-11	CARBON 1K 5%	1/4W
R235	1-249-429-11	CARBON 10K 5%	1/4W
R236	1-249-421-11	CARBON 2.2K 5%	1/4W
R237	1-249-425-11	CARBON 4.7K 5%	1/4W
R238	1-249-417-11	CARBON 1K 5%	1/4W
R240	1-249-436-11	CARBON 39K 5%	1/4W
R241	1-249-432-11	CARBON 18K 5%	1/4W
R242	1-249-410-11	CARBON 270 5%	1/4W
R251	1-249-423-11	CARBON 3.3K 5%	1/4W

Ref. No.	Part No.	Description	Remark
R252	1-249-426-11	CARBON 5.6K 5%	1/4W
R510	1-249-429-11	CARBON 10K 5%	1/4W
R511	1-249-441-11	CARBON 100K 5%	1/4W
R512	1-249-423-11	CARBON 3.3K 5%	1/4W
R521	1-249-421-11	CARBON 2.2K 5%	1/4W
R533	1-249-429-11	CARBON 10K 5%	1/4W
R541	1-249-435-11	CARBON 33K 5%	1/4W
R542	1-249-435-11	CARBON 33K 5%	1/4W
R543	1-249-421-11	CARBON 33K 5%	1/4W
R552	1-249-429-11	CARBON 10K 5%	1/4W
R553	1-249-429-11	CARBON 10K 5%	1/4W
R554	1-247-864-11	CARBON 24K 5%	1/4W
R555	1-247-862-11	CARBON 20K 5%	1/4W
R556	1-249-441-11	CARBON 100K 5%	1/4W
R557	1-247-862-11	CARBON 20K 5%	1/4W
R558	1-247-864-11	CARBON 24K 5%	1/4W
R561	1-247-887-00	CARBON 220K 5%	1/4W
R562	1-249-429-11	CARBON 10K 5%	1/4W
R563	1-249-441-11	CARBON 100K 5%	1/4W
R564	1-249-428-11	CARBON 8.2K 5%	1/4W
R565	1-249-423-11	CARBON 3.3K 5%	1/4W
R566	1-249-441-11	CARBON 100K 5%	1/4W
R567	1-249-417-11	CARBON 1K 5%	1/4W
R568	1-249-441-11	CARBON 100K 5%	1/4W
R569	1-249-429-11	CARBON 10K 5%	1/4W
R570	1-249-441-11	CARBON 100K 5%	1/4W
R571	1-249-417-11	CARBON 1K 5%	1/4W
R572	1-249-437-11	CARBON 47K 5%	1/4W
R581	1-249-429-11	CARBON 10K 5%	1/4W
R582	1-249-433-11	CARBON 22K 5%	1/4W
R583	1-249-429-11	CARBON 10K 5%	1/4W
R588	1-249-437-11	CARBON 47K 5%	1/4W
R701	1-249-420-11	CARBON 1.8K 5%	1/4W
R702	1-249-427-11	CARBON 6.8K 5%	1/4W
R703	1-249-419-11	CARBON 1.5K 5%	1/4W
R704	1-249-429-11	CARBON 10K 5%	1/4W
R705	1-249-419-11	CARBON 1.5K 5%	1/4W
R706	1-249-427-11	CARBON 6.8K 5%	1/4W
R707	1-249-427-11	CARBON 6.8K 5%	1/4W
R708	1-249-405-11	CARBON 100 5%	1/4W
R709	1-249-417-11	CARBON 1K 5%	1/4W
R710	1-249-420-11	CARBON 1.8K 5%	1/4W
R711	1-249-405-11	CARBON 100 5%	1/4W
R712	1-249-422-11	CARBON 2.7K 5%	1/4W
R801	1-249-417-11	CARBON 1K 5%	1/4W
R802	1-249-407-11	CARBON 150 5%	1/4W
R803	1-249-409-11	CARBON 220 5%	1/4W
R804	1-249-419-11	CARBON 1.5K 5%	1/4W
R805	1-249-420-11	CARBON 1.8K 5%	1/4W

MAIN

PANEL

CONTROL SW

REC VOL

Ref. No.	Part No.	Description	Remark
R806	1-249-413-11	CARBON 470 5% 1/4W	
R807	1-249-411-11	CARBON 330 5% 1/4W	
R808	1-249-417-11	CARBON 1K 5% 1/4W	
R809	1-249-407-11	CARBON 150 5% 1/4W	
R810	1-249-415-11	CARBON 680 5% 1/4W	
R811	1-249-409-11	CARBON 220 5% 1/4W	
R812	1-249-424-11	CARBON 3.9K 5% 1/4W	
R813	1-249-420-11	CARBON 1.8K 5% 1/4W	
R814	1-249-419-11	CARBON 1.5K 5% 1/4W	
R815	1-249-417-11	CARBON 1K 5% 1/4W	
R816	1-247-820-11	CARBON 360 5% 1/4W (UK, AUS, E2)	
R818	1-249-407-11	CARBON 150 5% 1/4W (AEP, G, IT, E3)	
R821	1-249-407-11	CARBON 150 5% 1/4W (AEP, G, IT, E3)	
R822	1-249-411-11	CARBON 330 5% 1/4W (UK, AUS, E2)	
R823	1-249-409-11	CARBON 220 5% 1/4W (AEP, G, IT, E3)	
R831	1-249-411-11	CARBON 330 5% 1/4W (AEP, G, IT, E3)	
R833	1-249-411-11	CARBON 330 5% 1/4W (AEP, G, IT, E3)	
R834	1-247-903-00	CARBON 1M 5% 1/4W	
R835	1-249-417-11	CARBON 1K 5% 1/4W	
R837	1-249-415-11	CARBON 680 5% 1/4W	
R838	1-249-417-11	CARBON 1K 5% 1/4W	
R842	1-247-903-00	CARBON 1M 5% 1/4W	
R845	1-249-435-11	CARBON 33K 5% 1/4W	
R846	1-249-435-11	CARBON 33K 5% 1/4W	
R850	1-249-425-11	CARBON 4.7K 5% 1/4W	
R851	1-249-393-11	CARBON 10 5% 1/4W	
R852	1-249-435-11	CARBON 33K 5% 1/4W	
R853	1-249-421-11	CARBON 2.2K 5% 1/4W	
R854	1-249-421-11	CARBON 2.2K 5% 1/4W	
R855	1-249-421-11	CARBON 2.2K 5% 1/4W	
R856	1-249-421-11	CARBON 2.2K 5% 1/4W	
R857	1-249-435-11	CARBON 33K 5% 1/4W	
R858	1-249-432-11	CARBON 18K 5% 1/4W	
R859	1-249-433-11	CARBON 22K 5% 1/4W	
R860	1-249-423-11	CARBON 3.3K 5% 1/4W	
R861	1-247-903-00	CARBON 1M 5% 1/4W	
R862	1-247-903-00	CARBON 1M 5% 1/4W	
R863	1-249-434-11	CARBON 27K 5% 1/4W	
R864	1-249-434-11	CARBON 27K 5% 1/4W	
R865	1-249-405-11	CARBON 100 5% 1/4W	
R866	1-247-862-11	CARBON 20K 5% 1/4W	
R867	1-249-425-11	CARBON 4.7K 5% 1/4W	
R868	1-249-425-11	CARBON 4.7K 5% 1/4W	
R869	1-247-862-11	CARBON 20K 5% 1/4W	
R870	1-249-405-11	CARBON 100 5% 1/4W	
R871	1-247-872-11	CARBON 51K 5% 1/4W	
R872	1-247-872-11	CARBON 51K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R873	1-249-437-11	CARBON 47K 5% 1/4W	
R874	1-247-866-11	CARBON 30K 5% 1/4W	
R875	1-247-866-11	CARBON 30K 5% 1/4W	
R876	1-249-437-11	CARBON 47K 5% 1/4W	
R877	1-247-872-11	CARBON 51K 5% 1/4W	
R878	1-247-872-11	CARBON 51K 5% 1/4W	
R879	1-249-432-11	CARBON 18K 5% 1/4W	
R881	1-247-895-00	CARBON 470K 5% 1/4W	
R882	1-247-895-00	CARBON 470K 5% 1/4W	
R883	1-247-895-00	CARBON 470K 5% 1/4W	
R884	1-247-895-00	CARBON 470K 5% 1/4W	
R886	1-249-432-11	CARBON 18K 5% 1/4W	
R887	1-249-415-11	CARBON 680 5% 1/4W	
R888	1-249-415-11	CARBON 680 5% 1/4W	
R889	1-249-429-11	CARBON 10K 5% 1/4W	
R890	1-249-429-11	CARBON 10K 5% 1/4W	
R891	1-249-433-11	CARBON 22K 5% 1/4W	
R893	1-249-435-11	CARBON 33K 5% 1/4W	
R894	1-249-435-11	CARBON 33K 5% 1/4W	
R895	1-249-435-11	CARBON 33K 5% 1/4W	
R896	1-249-435-11	CARBON 33K 5% 1/4W	
R898	1-249-435-11	CARBON 33K 5% 1/4W	
< VARIABLE RESISTOR >			
RV101	1-238-600-11	RES. ADJ. CARBON 10K	
RV201	1-238-600-11	RES. ADJ. CARBON 10K	
RV541	1-241-493-11	RES. VAR. CARBON 20K/20K (REC LEVEL)	
< SWITCH >			
S801	1-554-303-21	SWITCH, TACTILE (FF AMS)	
S802	1-554-303-21	SWITCH, TACTILE (FORWARD)	
S803	1-554-303-21	SWITCH, TACTILE (REVERSE)	
S804	1-554-303-21	SWITCH, TACTILE (FR AMS)	
S805	1-554-303-21	SWITCH, TACTILE (STOP)	
S806	1-554-303-21	SWITCH, TACTILE (REC)	
S807	1-554-303-21	SWITCH, TACTILE (REC MUTE)	
S808	1-554-303-21	SWITCH, TACTILE (PAUSE)	
S809	1-554-303-21	SWITCH, TACTILE (FF AMS)	
S810	1-554-303-21	SWITCH, TACTILE (FORWARD)	
S811	1-554-303-21	SWITCH, TACTILE (REVERSE)	
S812	1-554-303-21	SWITCH, TACTILE (FR AMS)	
S813	1-554-303-21	SWITCH, TACTILE (STOP)	
S814	1-571-452-11	SWITCH, SLIDE (DIRECTION MODE)	
S815	1-571-452-11	SWITCH, SLIDE (DOLBY NR)	
S816	1-554-303-21	SWITCH, TACTILE (NORMAL SPEED) (AEP, G, IT, E3)	
S817	1-554-303-21	SWITCH, TACTILE (HIGH SPEED) (AEP, G, IT, E3) / (NORMAL SPEED) (UK, AUS, E2)	
S819	1-554-303-21	SWITCH, TACTILE (ED1T) (AEP, G, IT, E3)/ (HIGH SPEED) (UK, AUS, E2)	

MAIN

PANEL

CONTROL SW

REC VOL

MD-A

MD-B

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
S831	1-554-303-21	SWITCH, TACTILE (A/B)		R71	1-247-864-11	CARBON 24K 5% 1/4W	
S832	1-554-303-21	SWITCH, TACTILE (MEMORY)		R72	1-249-433-11	CARBON 22K 5% 1/4W	
S833	1-554-303-21	SWITCH, TACTILE (RESET)		R73	1-249-437-11	CARBON 47K 5% 1/4W	
		< CERAMIC >		R74	1-249-437-11	CARBON 47K 5% 1/4W	
X831	1-567-775-11	VIBRATOR, CERAMIC 4.19MHZ				< VARIABLE RESISTOR >	
X851	1-577-358-21	VIBRATOR, CERAMIC 4MHZ		RV11	1-238-597-11	RES. ADJ. CARBON 1K	
X852	1-577-358-21	VIBRATOR, CERAMIC 4MHZ		RV21	1-238-597-11	RES. ADJ. CARBON 1K	
		*****		RV71	1-238-600-11	RES. ADJ. CARBON 10K	
		* 1-634-840-11 MD-A BOARD (DECK A)		RV72	1-238-600-11	RES. ADJ. CARBON 10K	
		*****				*****	
		< CAPACITOR >				* 1-634-843-11 MD-B BOARD (DECK B)	
C11	1-110-342-11	MYLAR 390PF 5% 50V				*****	
C12	1-136-157-00	FILM 0.022uF 5% 50V				< CAPACITOR >	
C13	1-124-282-00	ELECT 22uF 20% 25V		C11	1-110-342-11	MYLAR 390PF 5% 50V	
C21	1-110-342-11	MYLAR 390PF 5% 50V		C12	1-136-157-00	FILM 0.022uF 5% 50V	
C22	1-136-157-00	FILM 0.022uF 5% 50V		C13	1-124-282-00	ELECT 22uF 20% 25V	
C23	1-124-282-00	ELECT 22uF 20% 25V		C14	1-136-273-91	FILM 75PF 5% 630V	
C31	1-124-443-00	ELECT 100uF 20% 10V		C15	1-162-288-31	CERAMIC 330PF 10% 50V	
C32	1-124-443-00	ELECT 100uF 20% 10V		C17	1-162-209-31	CERAMIC 27PF 5% 50V	
C71	1-123-875-11	ELECT 10uF 20% 50V		C21	1-110-342-11	MYLAR 390PF 5% 50V	
C72	1-123-875-11	ELECT 10uF 20% 50V		C22	1-136-157-00	FILM 0.022uF 5% 50V	
		< CONNECTOR >		C23	1-124-282-00	ELECT 22uF 20% 25V	
CNP31	* 1-568-824-11	SOCKET, CONNECTOR 5P		C24	1-136-273-91	FILM 75PF 5% 630V	
CNP32	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P		C25	1-162-288-31	CERAMIC 330PF 10% 50V	
CNP71	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P		C27	1-162-209-31	CERAMIC 27PF 5% 50V	
CNP72	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P		C31	1-124-443-00	ELECT 100uF 20% 10V	
CNP73	* 1-568-826-11	SOCKET, CONNECTOR 7P		C32	1-124-443-00	ELECT 100uF 20% 10V	
		< IC >		C33	1-124-119-00	ELECT 330uF 20% 16V	
IC31	8-759-111-44	IC uPC4570C-1		C51	1-130-729-00	FILM 0.0027uF 5% 100V	
		< TRANSISTOR >		C52	1-130-729-00	FILM 0.0027uF 5% 100V	
Q71	8-729-820-16	TRANSISTOR 2SA1317-S		C53	1-130-339-00	FILM 0.0056uF 5% 100V	
		< RESISTOR >		C54	1-136-562-11	FILM 0.0082uF 5% 630V	
R11	1-247-881-00	CARBON 120K 5% 1/4W		C55	1-161-494-00	CERAMIC 0.022uF 25V	
R12	1-249-405-11	CARBON 100 5% 1/4W		C56	1-124-925-11	ELECT 2.2uF 20% 100V	
R13	1-247-882-11	CARBON 130K 5% 1/4W		C57	1-124-791-11	ELECT 1.0uF 20% 100V	
R14	1-249-426-11	CARBON 5.6K 5% 1/4W		C58	1-162-282-31	CERAMIC 100PF 10% 50V	
R21	1-247-881-00	CARBON 120K 5% 1/4W		C71	1-123-875-11	ELECT 10uF 20% 50V	
R22	1-249-405-11	CARBON 100 5% 1/4W		C72	1-123-875-11	ELECT 10uF 20% 50V	
R23	1-247-882-11	CARBON 130K 5% 1/4W				< CONNECTOR >	
R24	1-249-426-11	CARBON 5.6K 5% 1/4W		CNP31	* 1-568-824-11	SOCKET, CONNECTOR 5P	
R31	1-249-409-11	CARBON 220 5% 1/4W		CNP32	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
R32	1-249-409-11	CARBON 220 5% 1/4W		CNP71	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
				CNP72	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P	
				CNP73	* 1-568-832-11	SOCKET, CONNECTOR 13P	

MD-B

SW-A

SW-B

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D31	8-719-107-94	DIODE 1SS202-1	
		< IC >	
IC31	8-759-111-44	IC uPC4570C-1	
		< COIL >	
L11	1-410-780-11	INDUCTOR 27mH	
L21	1-410-780-11	INDUCTOR 27mH	
		< TRANSISTOR >	
Q51	8-729-142-46	TRANSISTOR 2SC2001-LK	
Q52	8-729-142-46	TRANSISTOR 2SC2001-LK	
Q53	8-729-111-29	TRANSISTOR 2SD1616A-K	
Q71	8-729-820-16	TRANSISTOR 2SA1317-S	
		< RESISTOR >	
R11	1-247-881-00	CARBON 120K 5% 1/4W	
R12	1-249-405-11	CARBON 100 5% 1/4W	
R13	1-247-882-11	CARBON 130K 5% 1/4W	
R14	1-249-426-11	CARBON 5.6K 5% 1/4W	
R15	1-249-430-11	CARBON 12K 5% 1/4W	
R21	1-247-881-00	CARBON 120K 5% 1/4W	
R22	1-249-405-11	CARBON 100 5% 1/4W	
R23	1-247-882-11	CARBON 130K 5% 1/4W	
R24	1-249-426-11	CARBON 5.6K 5% 1/4W	
R25	1-249-430-11	CARBON 12K 5% 1/4W	
R31	1-249-409-11	CARBON 220 5% 1/4W	
R32	1-249-409-11	CARBON 220 5% 1/4W	
R51	1-249-435-11	CARBON 33K 5% 1/4W	
R52	1-249-435-11	CARBON 33K 5% 1/4W	
R53	1-249-429-11	CARBON 10K 5% 1/4W	
R54	△ 1-212-849-00	FUSIBLE 4.7 5% 1/4W F	
R71	1-247-864-11	CARBON 24K 5% 1/4W	
R72	1-249-433-11	CARBON 22K 5% 1/4W	
R73	1-249-437-11	CARBON 47K 5% 1/4W	
R74	1-249-437-11	CARBON 47K 5% 1/4W	
		< VARIABLE RESISTOR >	
RV11	1-238-597-11	RES. ADJ. CARBON 1K	
RV12	1-230-500-11	RES. ADJ. CARBON 220K	
RV21	1-238-597-11	RES. ADJ. CARBON 1K	
RV22	1-230-500-11	RES. ADJ. CARBON 220K	
RV71	1-238-600-11	RES. ADJ. CARBON 10K	
RV72	1-238-600-11	RES. ADJ. CARBON 10K	
		< RELAY >	
RY31	1-515-726-11	RELAY	

Ref. No.	Part No.	Description	Remark
		< TRANSFORMER >	
T51	1-433-337-11	TRANSFORMER, BIAS OSCILLATION	
		*****	
	* 1-634-841-11	SW-A BOARD	
		*****	
	3-343-419-01	HOLDER (S SENSER A)	
		< CONNECTOR >	
CNP81	* 1-568-852-11	SOCKET, CONNECTOR 9P	
		< IC >	
IC81	8-719-710-03	PHOTO INTERRUPTOR NJL5165K-B	
		< RESISTOR >	
R84	1-249-417-11	CARBON 1K 5% 1/4W	
R85	1-249-408-11	CARBON 180 5% 1/4W	
		< SWITCH >	
S81	1-571-958-11	SWITCH, PUSH (1 KEY) (STOP SWITCH)	
S82	1-571-281-21	SWITCH, LEAF (70EQ)	
S86	1-571-281-21	SWITCH, LEAF (HALF)	
		*****	
	* 1-634-841-11	SW-B BOARD	
		*****	
	3-343-419-01	HOLDER (S SENSER A)	
		< CONNECTOR >	
CNP81	* 1-568-852-11	SOCKET, CONNECTOR 9P	
		< IC >	
IC81	8-719-710-03	PHOTO INTERRUPTOR NJL5165K-B	
		< RESISTOR >	
R81	1-249-414-11	CARBON 560 5% 1/4W	
R82	1-247-818-11	CARBON 300 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	

SW-B

MISCELLANEOUS

Ref. No.	Part No.	Description	Remark
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< SWITCH >

S81	1-571-958-11	SWITCH, PUSH (1 KEY) (STOP SWITCH)	
S82	1-571-281-21	SWITCH, LEAF (70EQ)	
S83	1-571-281-21	SWITCH, LEAF (METAL)	
S84	1-571-281-21	SWITCH, LEAF (REC A)	
S85	1-571-281-21	SWITCH, LEAF (REC B)	
S86	1-571-281-21	SWITCH, LEAF (HALF)	

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MISCELLANEOUS

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71	* 1-574-727-11	WIRE, FLAT TYPE (9 CORE)	
72	1-575-220-11	WIRE, FLAT TYPE (5 CORE)	
73	1-590-036-11	WIRE, FLAT TYPE (13 CORE)	
74	1-575-217-11	WIRE, FLAT TYPE (15 CORE)	
77	1-575-731-11	WIRE, FLAT TYPE (7 CORE)	
78	1-590-218-11	WIRE, FLAT TYPE (11 CORE)	
HP901	A-2003-418-A	BASE ASSY, HEAD (DECK A)	
HRP901	} A-2003-477-A	BASE ASSY, HEAD (DECK B)	
HE901			
M901	X-3359-417-1	MOTOR (CAPSTAN) ASSY	
M902	A-2003-474-A	MOTOR (REEL) ASSY	

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ACCESSORY & PACKING MATERIAL

\* 3-350-154-01 CUSHION  
 \* 3-704-350-01 SHEET (STANDARD), PROTECTION

\*\*\*\*\*

HARDWARE LIST

# 1	7-685-646-79	SCREW +BVTP 3X8	TYPE2 N-S
# 2	7-682-547-04	SCREW +BVTT 3X6	(S)
# 3	7-685-134-19	SCREW +BTP 2.6X8	TYPE2 N-S
# 4	7-621-773-93	SCREW (PANEL 2.6	TP2)
# 5	7-627-556-08	SCREW +P 2.6X2.8	
# 6	7-621-775-00	SCREW +B 2.6X3	

**Sony Corporation**  
**Audio Group**

English  
91D1814-1  
Printed in Japan  
©1991, 4

# TC-D505

## SONY SERVICE MANUAL

AEP Model  
UK Model  
E Model  
Australian Model

### SUPPLEMENT-1

File this supplement with the service manual.

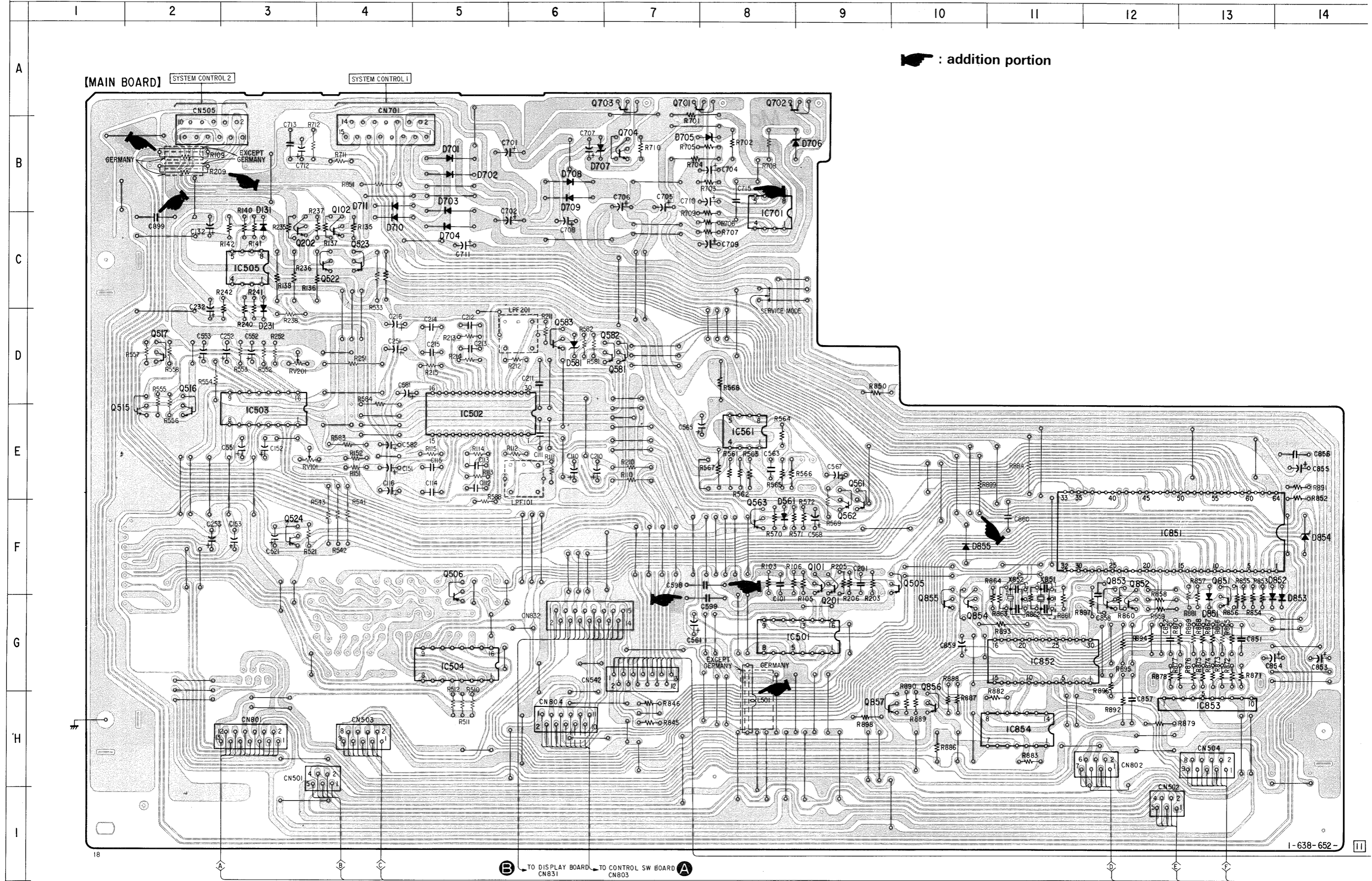
Subject: Printed Wiring Board is changed.  
(MAIN board)

 : addition portion

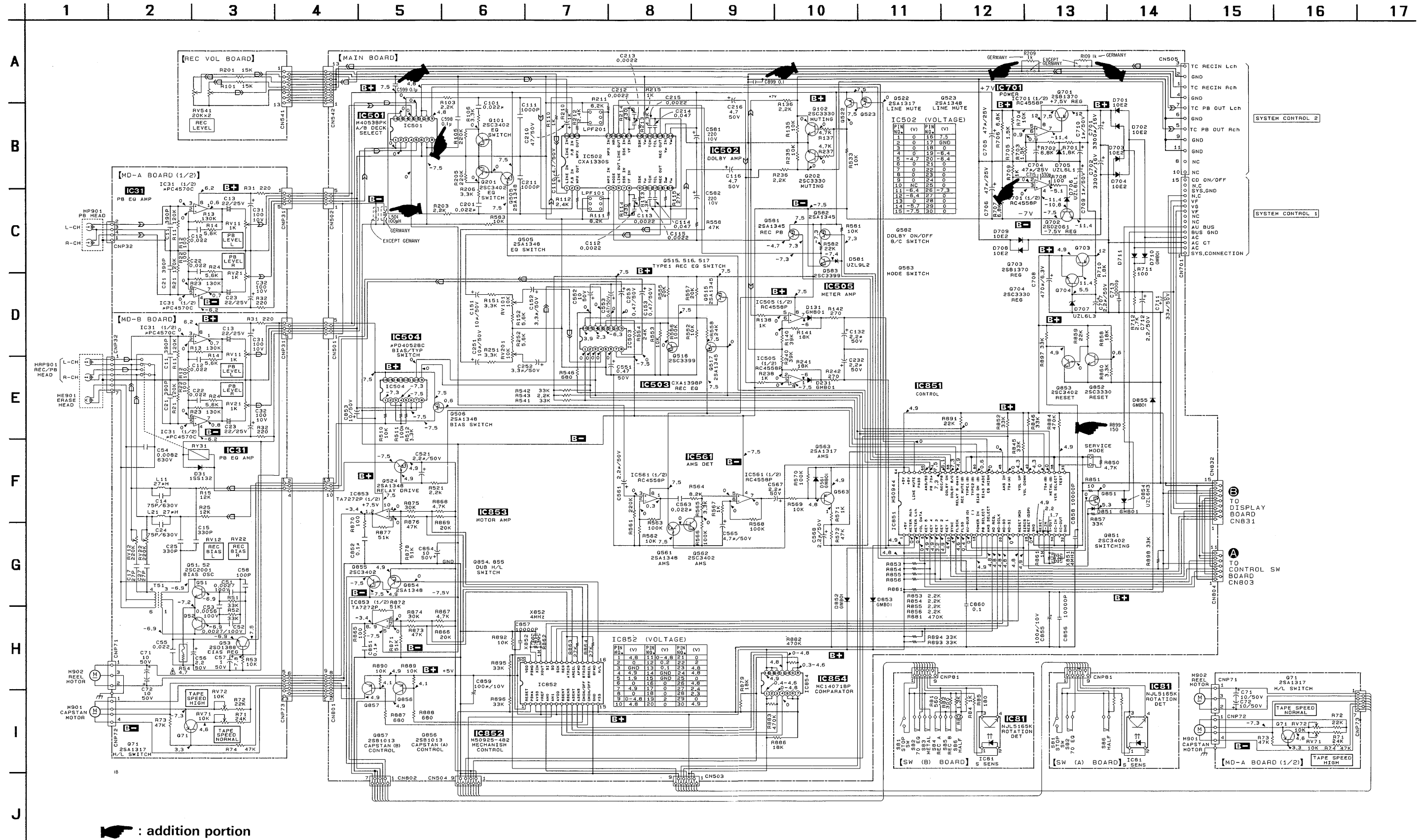
FORMER TYPE				NEW TYPE			
Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
	Not used			C598	1-164-159-11	CERAMIC	0.1uF 50V
	Not used			C599	1-164-159-11	CERAMIC	0.1uF 50V
	Not used			C715	1-162-288-11	CERAMIC	330pF 10% 50V
	Not used			C899	1-164-159-11	CERAMIC	0.1uF 50V
D856	8-719-933-41	DIODE UZL-6H3			Not used		
	Not used			L501	1-408-080-31	INDUCTOR	100uH (Germany)
	Not used			R109	1-247-831-81	CARBON	1K 5% 1/4W (Germany)
	Not used			R209	1-247-831-81	CARBON	1K 5% 1/4W (Germany)
	Not used			R899	1-249-407-11	CARBON	150 5% 1/4W



5-1. PRINTED WIRING BOARDS -MAIN Section-



5-2. SCHEMATIC DIAGRAMS —MAIN Section—



Hand icon: addition portion