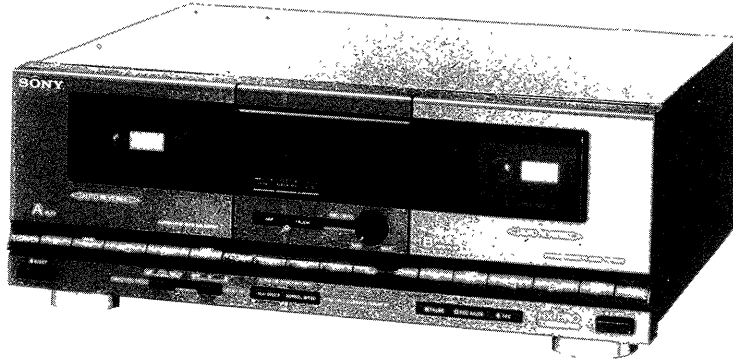


TC-D705

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model



Model Name Using Similar Mechanism	TC-D505	
Tape Transport Mechanism Type	DECK A	TCM-190RA13
	DECK B	TCM-190RB13

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 (± 3 dB) With Type II cassette (Sony UX-S) 40 Hz to 14 kHz (± 3 dB) With Type I cassette (Sony HF-S) 40 Hz to 14 kHz (± 3 dB)
Wow and flutter	$\pm 0.2\%$ (DIN)
Weight	Approx. 3.4 kg (7 lbs 8 oz)
Dimensions	Approx. 355 \times 132.5 \times 310 mm (w/h/d, including projections) (14 \times 5 1/4 \times 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 and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.

"DOLBY", the double-D symbol  and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

STEREO CASSETTE DECK
SONY[®]

SAFETY CHECK-OUT (US Model)

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 microampers). 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)

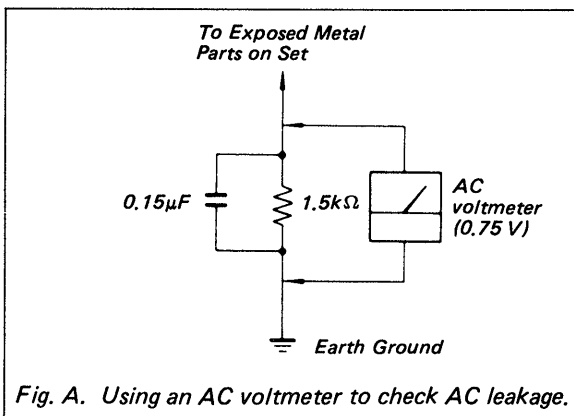


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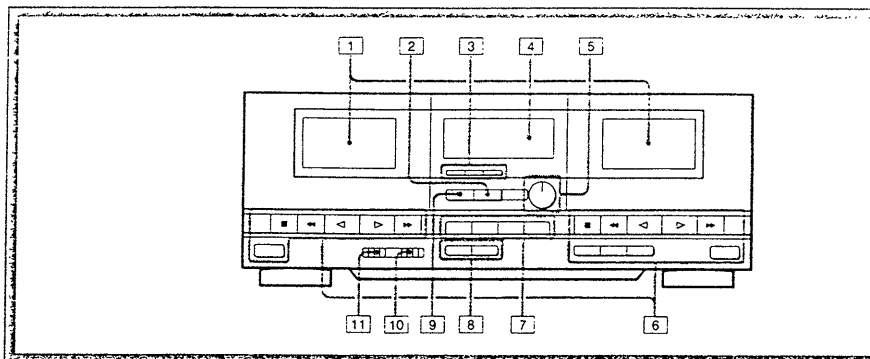
SAFETY-RELATED COMPONENT WARNING!!

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.

SECTION 1 GENERAL

This section is extracted
from instruction manual.

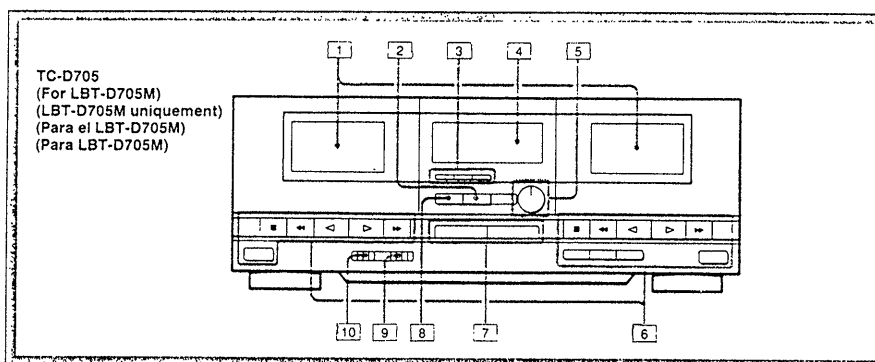
AEP/Germany/Italian/E3 model



Cassette deck

- 1 Cassette holders
- 2 FADER button ②
- 3 COUNTER setting buttons ②
- 4 Display window
- 5 REC (recording) LEVEL control and indicator ②
- 6 Tape operation buttons
 ◀◀ Leftward fast winding/AMS*, ▶▶ Rightward fast winding/AMS*, ▶ Forward play, ◀ Reverse play, ■ Stop, ▲ Eject, || Pause (deck B only), ○ Record muting (deck B only), ● Record (deck B only)
- 7 AUTO CD SYNCHRO REC buttons and indicators
 C.(Cross) FADE
 FADE
 EDIT
 TIME
 (only for the system used with CDP-M42) ②
- 8 SYNCHRO DUBBING buttons ②
- 9 ARL (Automatic Recording Level) button and indicator ②
- 10 DOLBY NR (noise reduction) switch ②
- 11 DIRECTION MODE selector ②

UK/E2/Australian model



Cassette deck

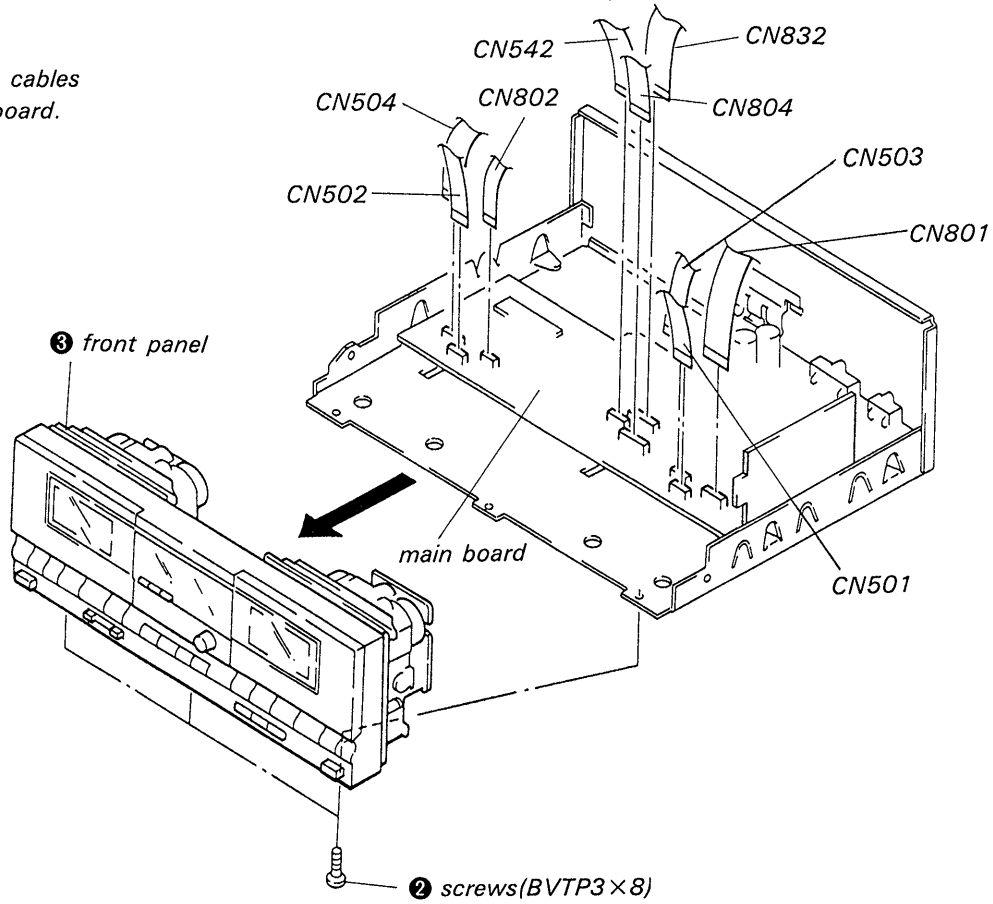
- 1 Cassette holders
- 2 FADER button ②
- 3 COUNTER setting buttons ②
- 4 Display window
- 5 REC (recording) LEVEL control and indicator ②
- 6 Tape operation buttons
 ◀◀ Leftward fast winding/AMS*, ▶▶ Rightward fast winding/AMS*, ▶ Forward play, ◀ Reverse play, ■ Stop, ▲ Eject, || Pause (deck B only), ○ Record muting (deck B only), ● Record (deck B only)
- 7 SYNCHRO DUBBING buttons ②
- 8 ARL (Auto Recording Level) button and indicator ②
- 9 DOLBY NR (noise reduction) switch ②
- 10 DIRECTION MODE selector ②

SECTION 2 DISASSEMBLY

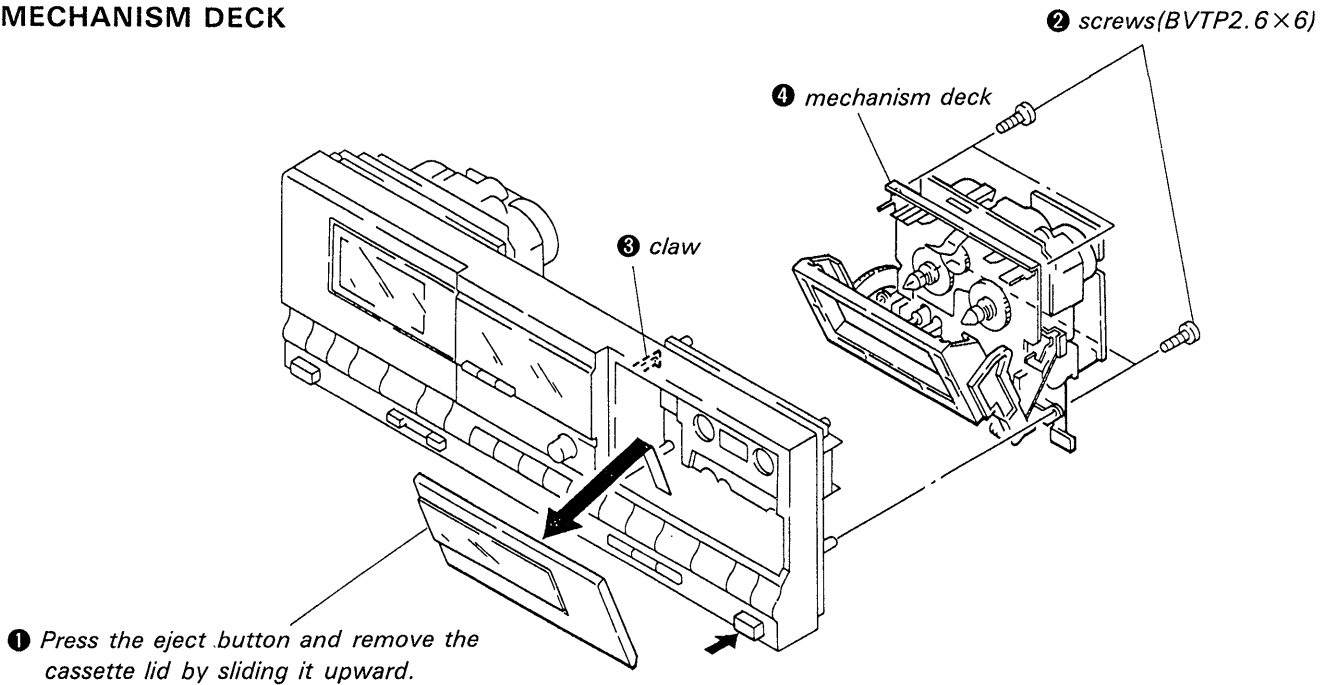
Note: Follow the disassembly procedure in the numerical order given.

FRONT PANEL

- 1 Remove the flat cables from the main board.



MECHANISM DECK



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.

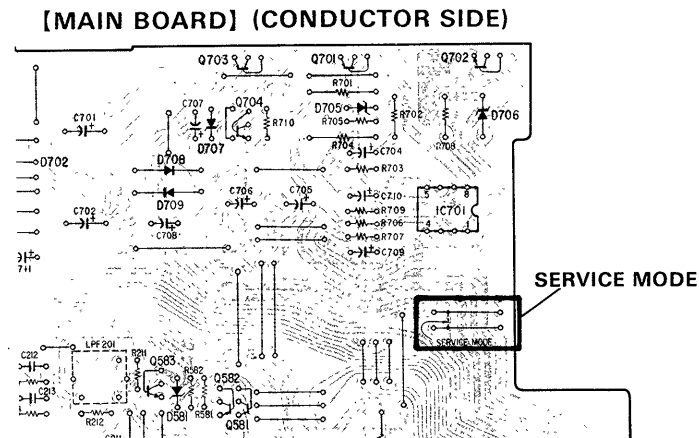
2. High speed playback

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.

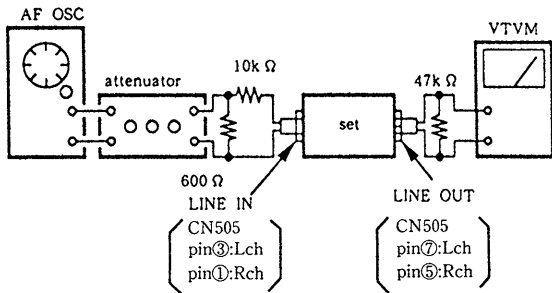


- Switches and controls should be set as follows unless otherwise specified.

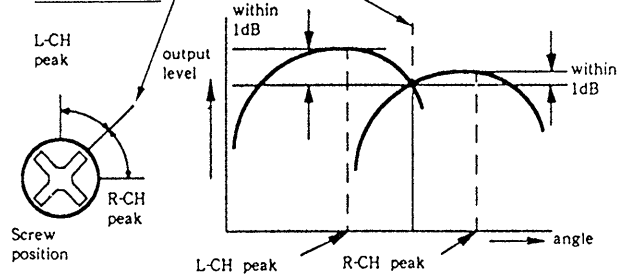
NR switch : OFF
DIR MODE switch : ↺

- 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.

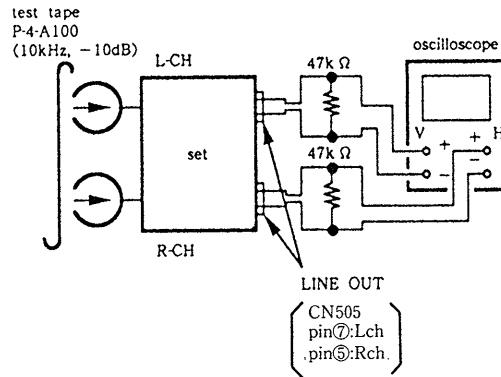
– Record Mode –



- 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



Standard Input Level

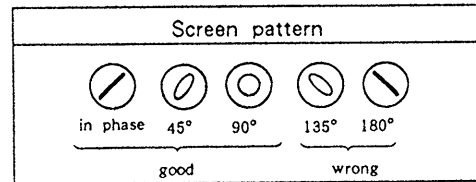
input terminal	LINE IN
source impedance	10kΩ
input level	0.25V (-10dB)

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

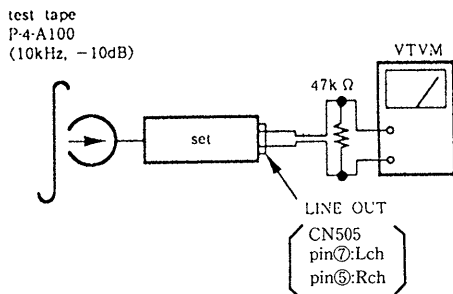


Record/Playback Head Azimuth Adjustment

DECK A DECK B

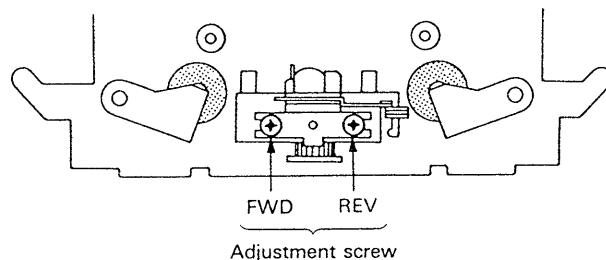
Procedure :

- Mode: FWD playback



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

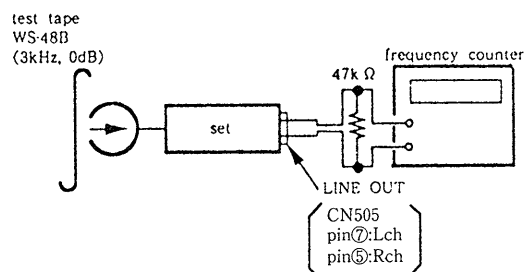
Adjustment Location : Record/playback head



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 DUBBING HIGH SPEED switch.
2. Check that frequency counter reading is within the standard value $6,000 \pm 30\text{Hz}$.
3. If out of the standard, adjust each RV72 so that the frequency counter reading satisfies $6,000 \pm 30\text{Hz}$ 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 DUBBING NORM SPEED switch.
2. Check that the frequency counter reading is within the standard value $3,000 \pm 30\text{Hz}$.
3. If out of the standard, adjust each RV71 so that the frequency counter reading satisfies $3,000 \pm 30\text{Hz}$ 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 :

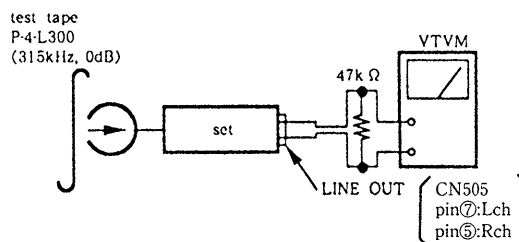
MD(A), MD(D) board

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: $-5 \pm 0.5\text{dB}$ (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(D) board

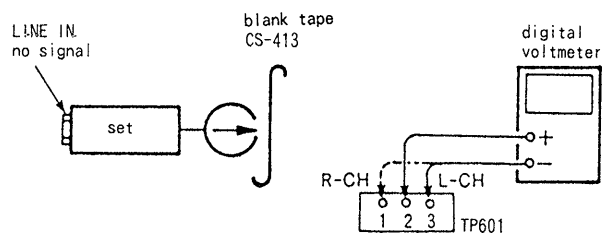
Record Bias Adjustment **DECK B**

Setting :

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

Procedure :

Mode: record



1. Connect the digital voltmeter to test point TP601.
2. Set RV301(L-CH) and RV401(R-CH) to mechanical center.
3. Set to FWD record mode.
4. Adjust T301(L-CH) and T401(R-CH) so that the digital voltmeter reading becomes minimum.

Adjustment Location : HX PRO board

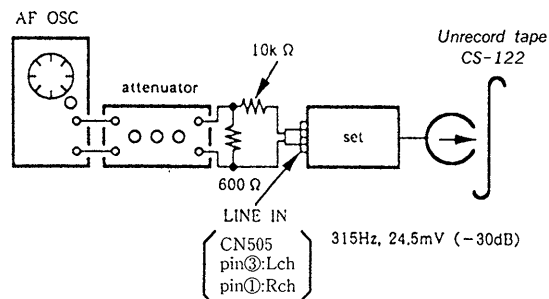
Record Level Adjustment DECK B

Setting :

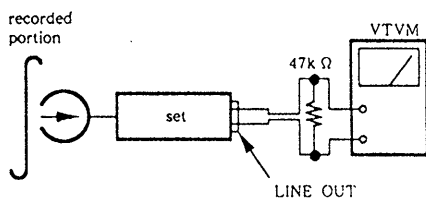
REC LEVEL control: Standard Record (See page 6.)

Procedure :

1. Mode: record



2. Mode: playback



3. Playback the signal recorded in step 1.

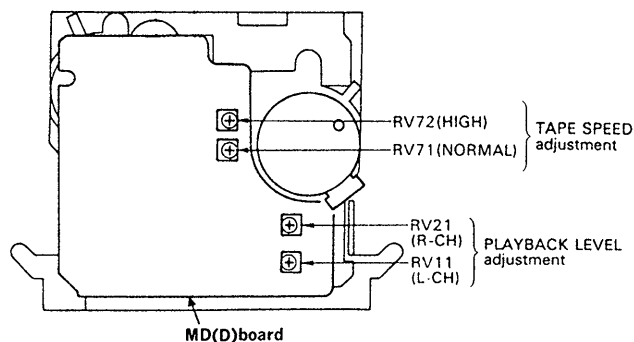
Confirm that the signal level is within the adjustment limits below. If necessary, adjust RV101 (L-CH), RV201 (R-CH) and repeat the step1-2.

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

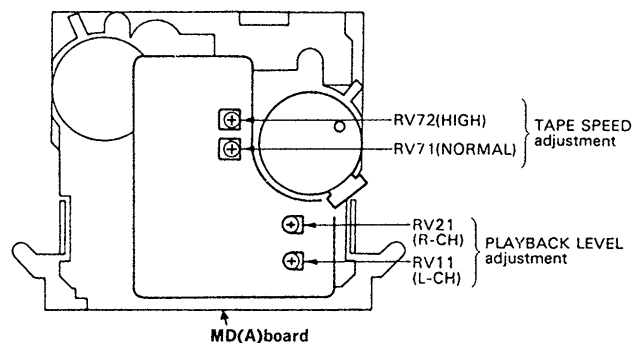
Adjustment Location : MAIN board (component side)

- Adjustment Parts Location Diagrams -

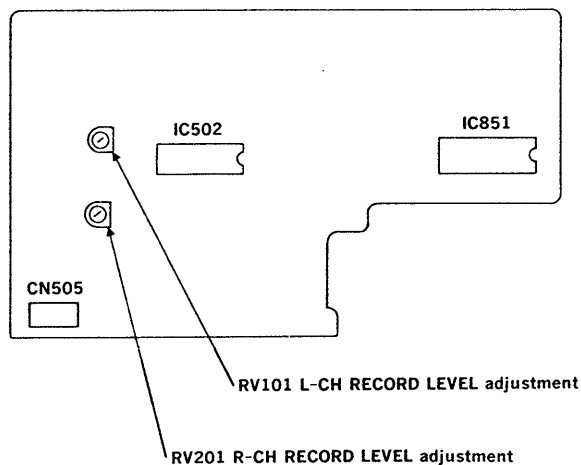
B DECK



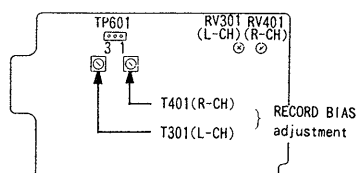
A DECK



MAIN BOARD (COMPONENT SIDE)



HX PRO BOARD (COMPONENT SIDE)

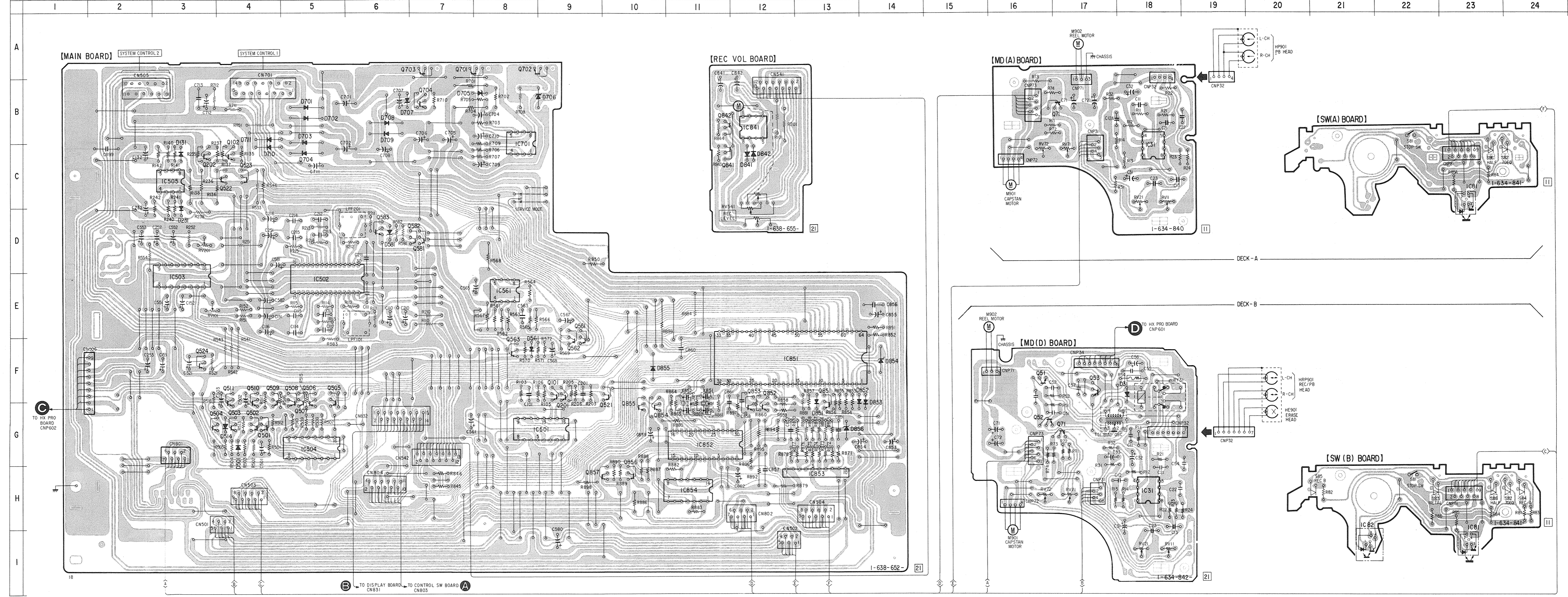


SECTION 5
DIAGRAMS

5-1. PRINTED WIRING BOARDS —Main Section—

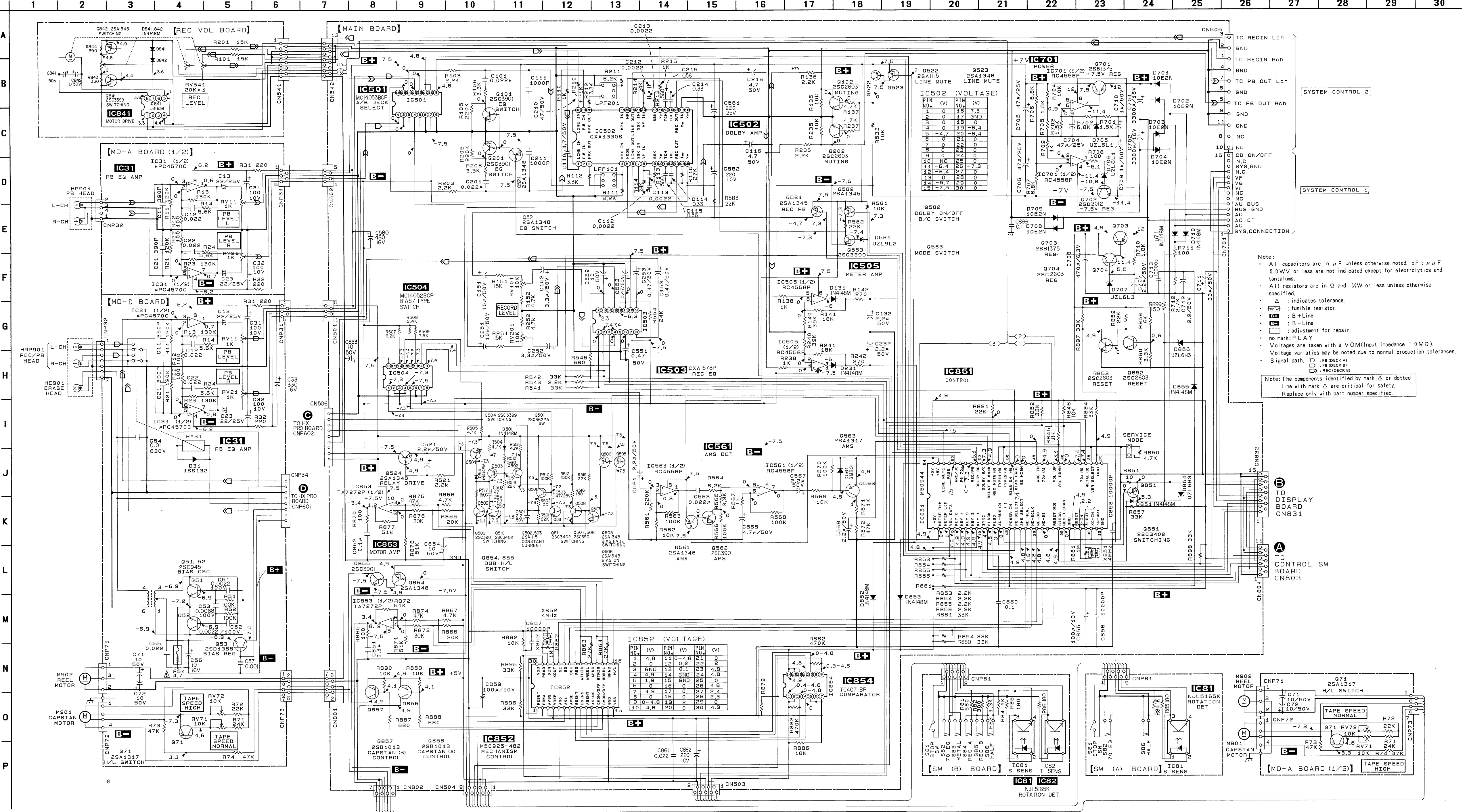
● SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D31	F-18	Q51	F-16
D131	C-3	Q52	G-16
D231	D-3	Q53	F-17
D501	G-4	Q71 (MD(A))	B-17
D514	G-4	Q71 (MD(D))	G-17
D561	F-8	Q101	F-9
D581	D-6	Q102	C-4
D701	B-5	Q201	F-9
D702	B-5	Q202	C-3
D703	B-5	Q501	G-4
D704	C-5	Q502	G-4
D705	B-8	Q503	G-4
D706	B-9	Q504	G-3
D707	B-6	Q505	F-5
D708	B-6	Q506	F-5
D709	B-6	Q507	F-5
D710	C-4	Q508	F-5
D711	B-4	Q509	F-4
D841	C-12	Q510	F-4
D842	C-12	Q511	F-4
D851	G-13	Q521	F-10
D852	F-14	Q522	C-4
D853	G-14	Q523	C-4
D854	F-14	Q524	F-3
D855	F-10	Q561	E-9
D856	G-13	Q562	F-9
		Q563	F-8
IC31 (MD(A))	C-18	Q581	D-7
IC31 (MD(D))	H-18	Q582	D-7
IC81 (SW(A))	C-23	Q583	D-6
IC81 (SW(B))	I-23	Q701	A-7
IC501	G-9	Q702	A-8
IC502	E-5	Q703	A-7
IC503	E-3	Q704	B-7
IC504	G-5	Q841	C-12
IC505	C-3	Q842	B-11
IC561	E-8	Q851	F-13
IC701	B-8	Q852	G-12
IC841	B-12	Q853	G-12
IC851	F-12	Q854	G-10
IC852	G-11	Q855	G-10
IC853	H-13	Q856	H-10
IC854	H-11	Q857	H-9



○ : parts extracted from the component side.

5-2. SCHEMATIC DIAGRAM —Main Section—

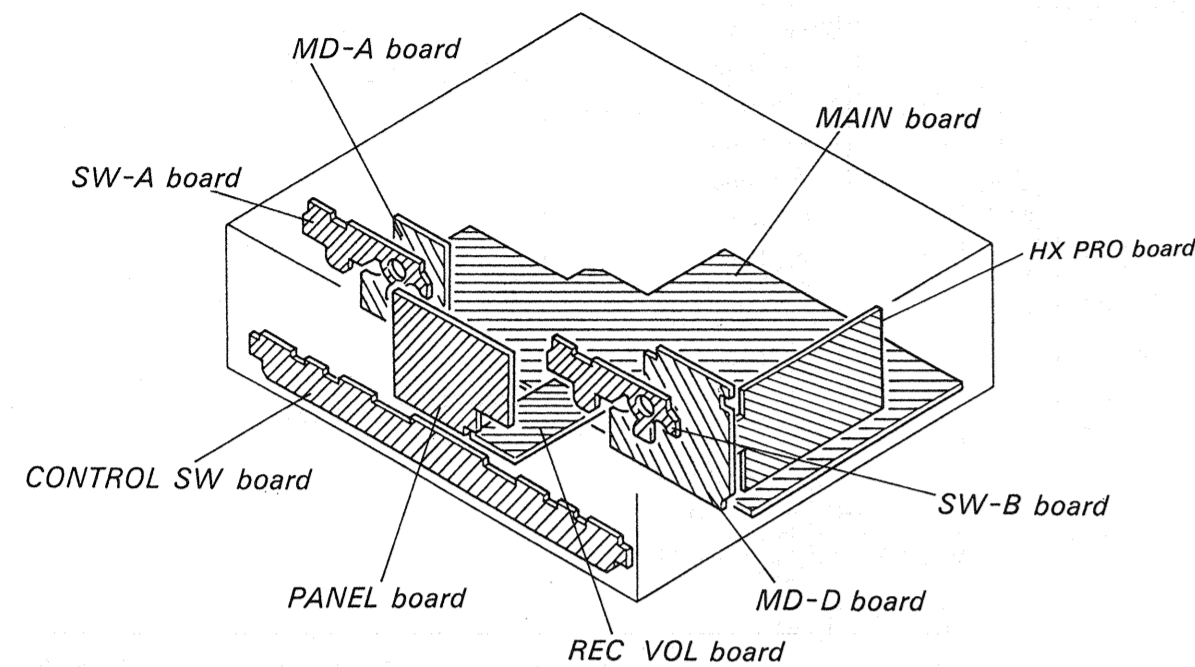


Note:

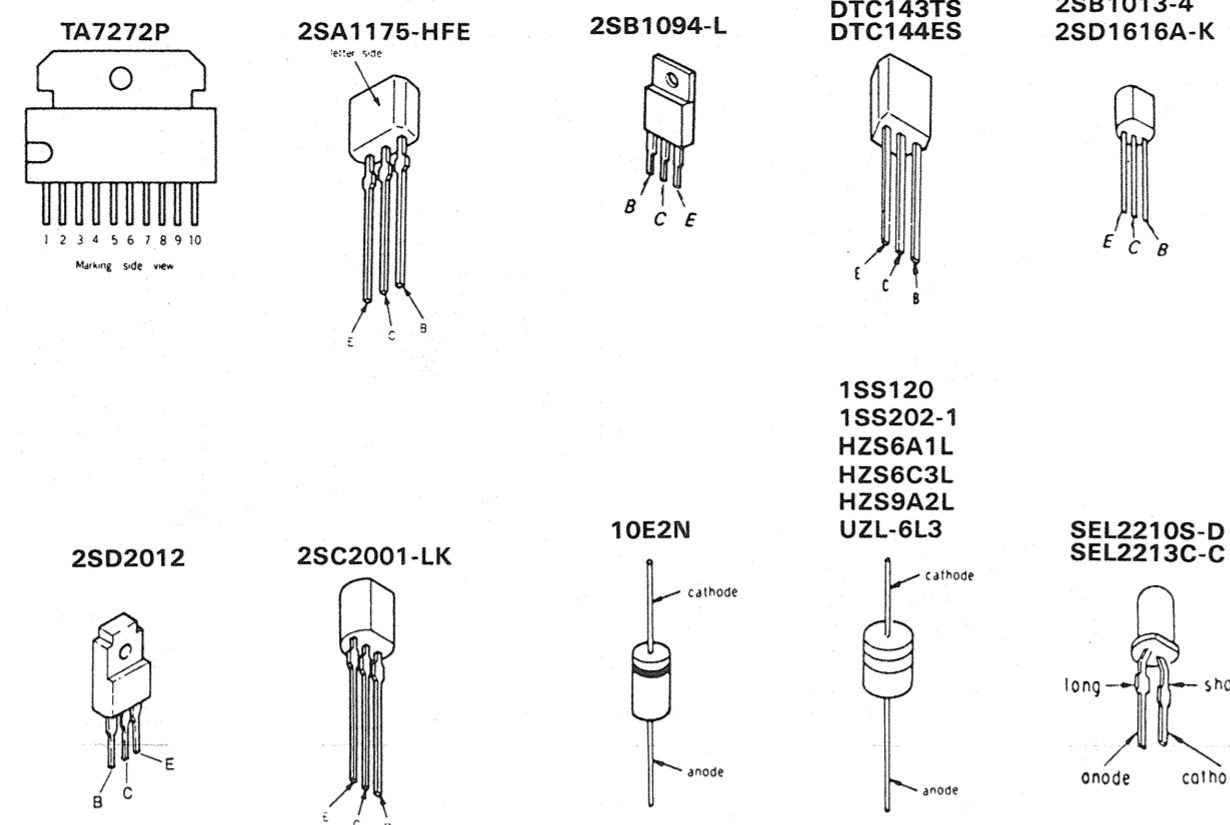
- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{M}$
- 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{2}\text{W}$ or less unless otherwise specified.
- Δ : Indicates tolerance.
- \square : fusible resistor.
- $\text{B}+$: B+Line
- $\text{B}-$: B-Line
- B : adjustment for repair.
- no mark: P.L.A.Y.
- Voltagers are taken with a VOM (Input impedance 10 M Ω).
- Voltage variations may be noted due to normal production tolerances.
- Signal path: \square (PB (LOCK A))
 \square (PB (LOCK B))
 \square (REC (LOCK B))

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

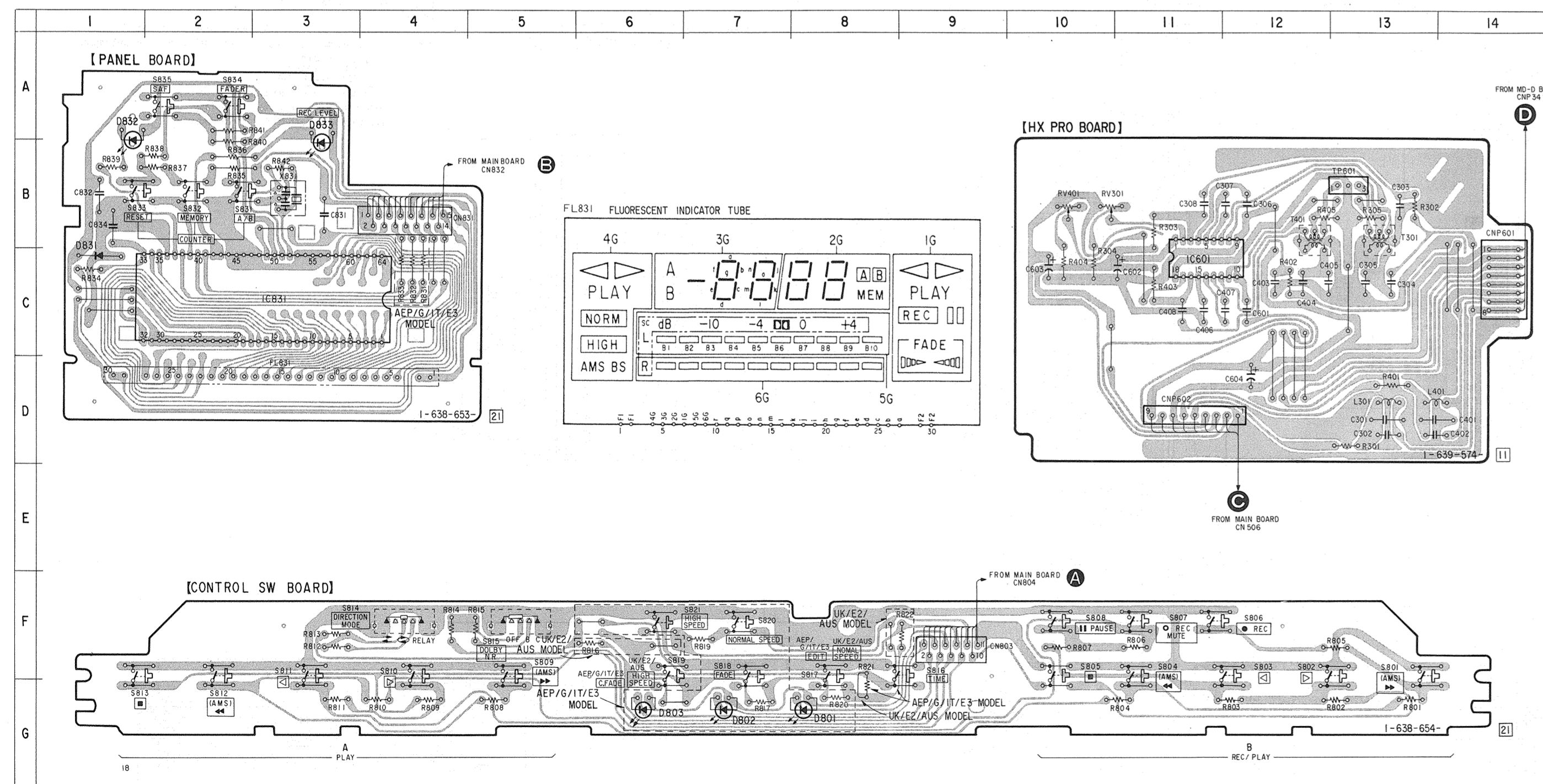
5-3. CIRCUIT BOARDS LOCATION



● Semiconductor Lead Layouts



5-4. PRINTED WIRING BOARDS —Panel Section—

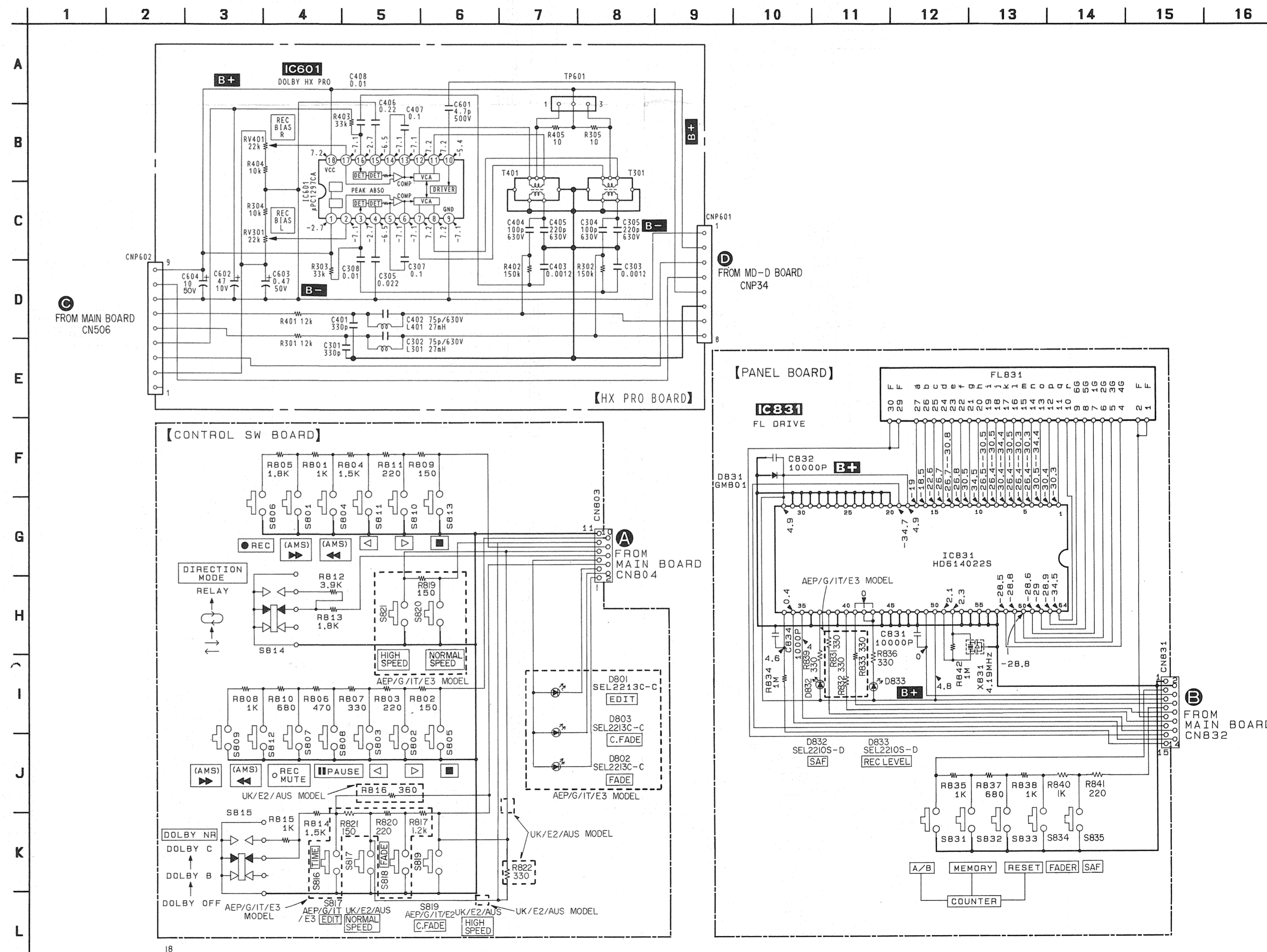


● SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
D801	G-8	D833	A-3
D802	G-7		
D803	G-6	IC601	C-11
D831	C-1	IC831	C-3
D832	A-1		

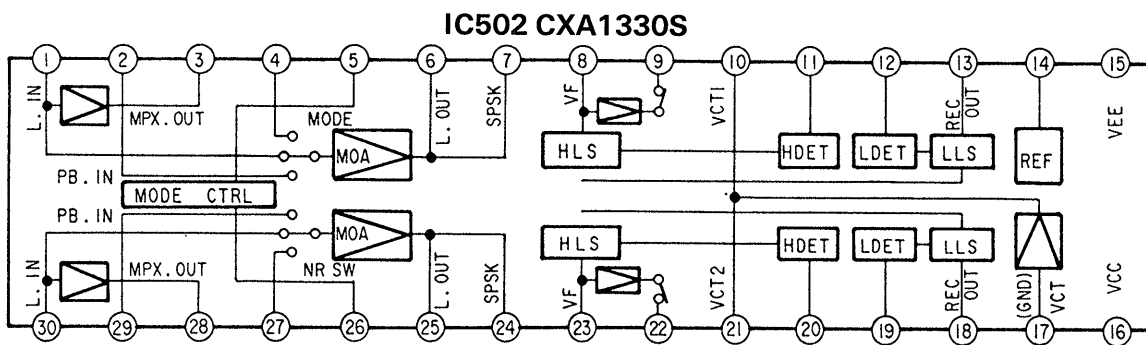
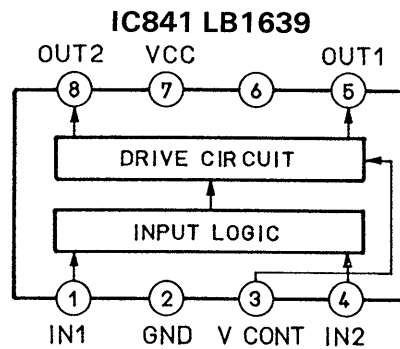
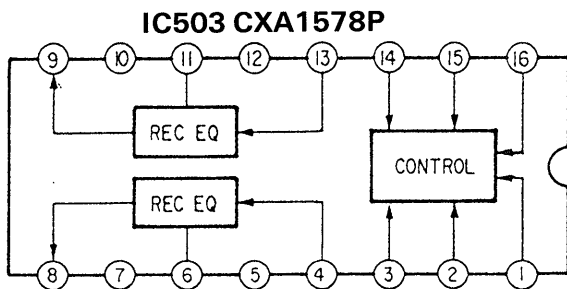
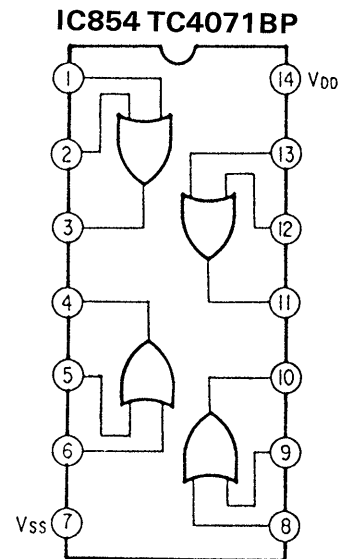
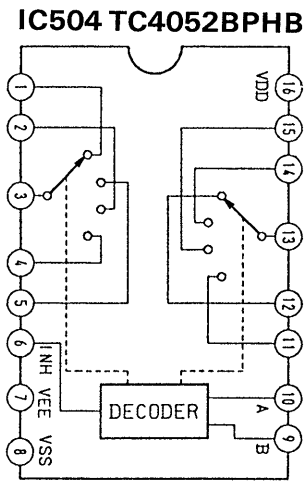
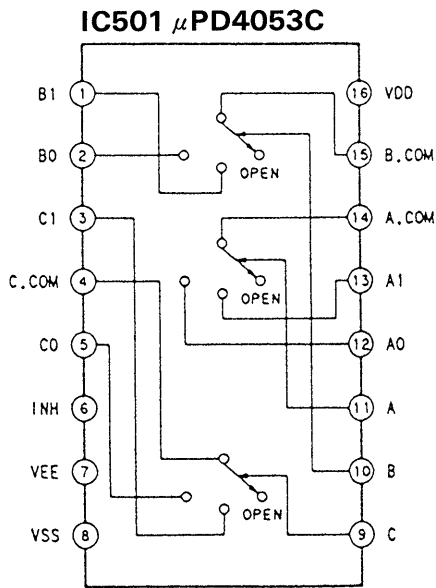
○ : parts extracted from the component side.
 G:Germany
 IT:Italian
 AUS:Australian

5-5. SCHEMATIC DIAGRAM —Panel Section—



Note:
 • All capacitors are in μF unless otherwise noted, pF : μF
 5 0 WV or less are not indicated except for electrolytics and tantalums.
 • All resistors are in Ω and $\frac{1}{4}W$ or less unless otherwise specified.
 • Δ : indicates tolerance.
 • B : B+Line
 • Voltage is dc with respect to ground under no-signal(detuned) conditions.
 • no mark: P.L.A.Y
 • Voltages are taken with a VOM(input impedance 10M Ω).
 Voltage variations may be noted due to normal production tolerances.
 G:Germany
 IT:Italian
 AUS:Australian

● IC Block Diagrams



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.

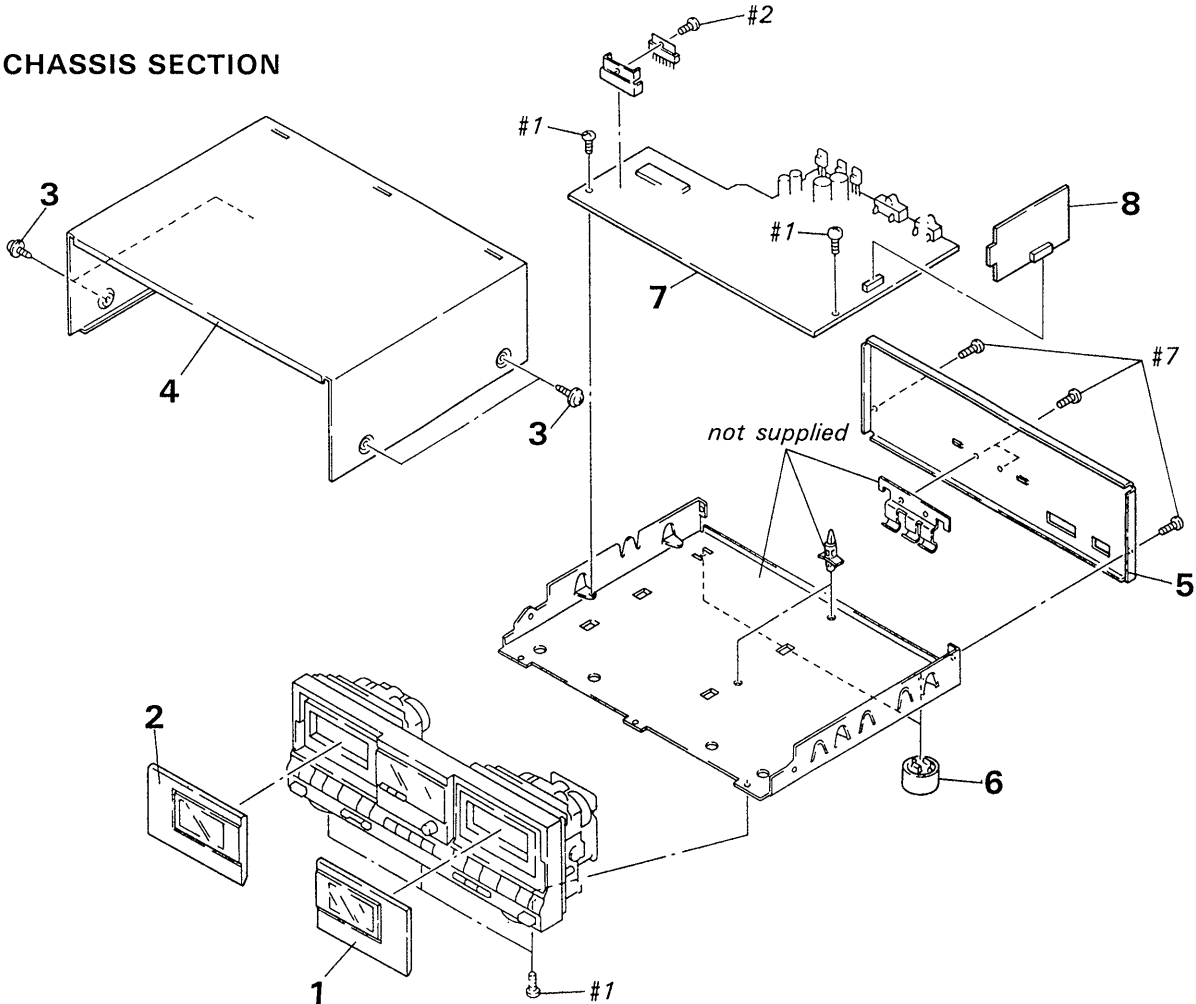
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE(WHITE)...(RED)

↑ ↑
 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 Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

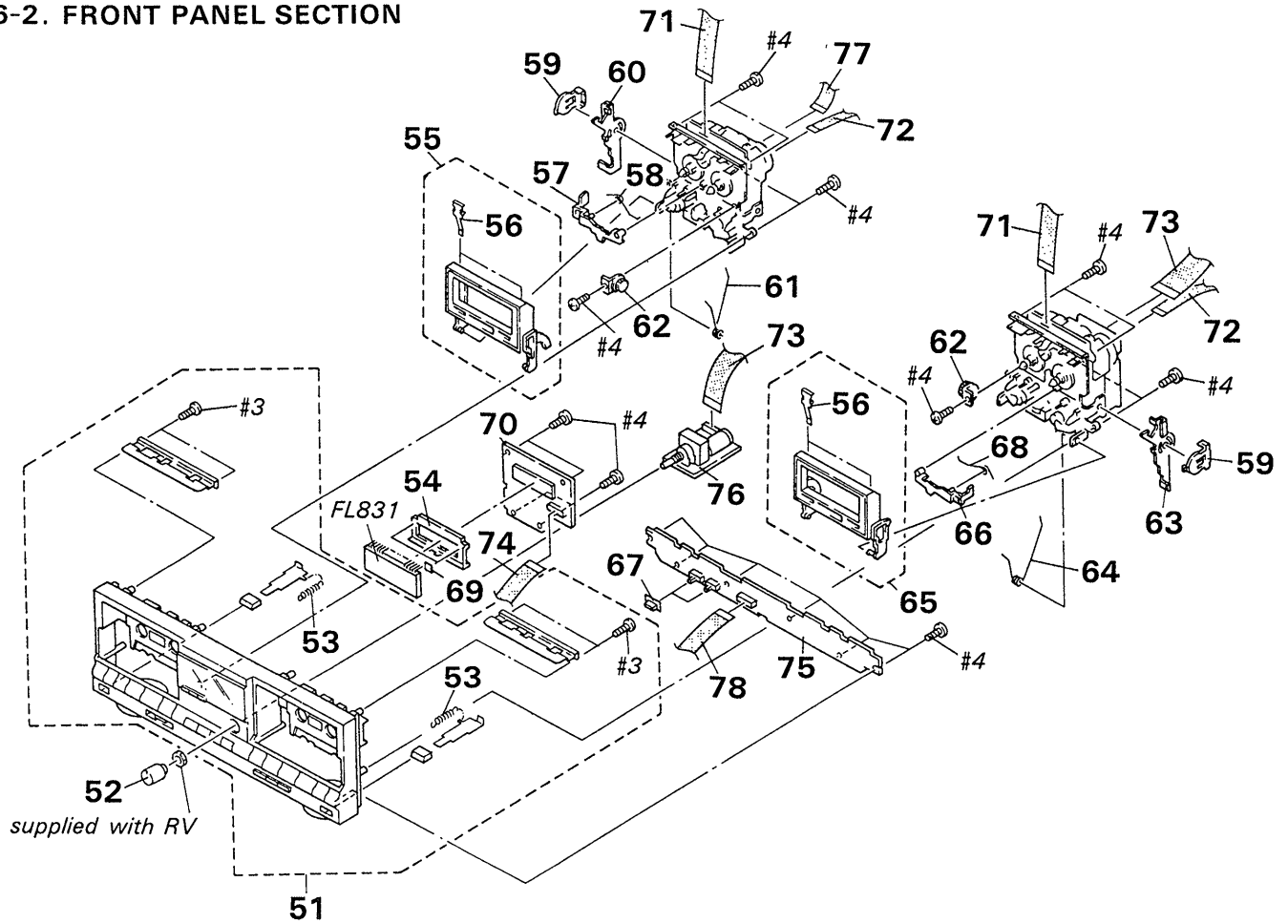
6-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	X-3363-132-1	LID (B) ASSY, CASSETTE (except IT)	
1	X-3363-133-1	LID (B) ASSY, CASSETTE (IT)	
2	X-3362-226-1	LID (A) ASSY, CASSETTE (except IT)	
2	X-3362-797-1	LID (A) ASSY, CASSETTE (IT)	
3	3-363-099-01	SCREW (CASE +3X8 TP2)	
4	* 4-939-803-71	CASE	

Ref. No.	Part No.	Description	Remark
5	* 3-362-787-33	PANEL, BACK (G)	
5	* 3-362-787-42	PANEL, BACK (AEP, IT, UK)	
5	* 3-362-787-41	PANEL, BACK (E2, E3, AUS)	
6	4-931-169-01	FOOT	
7	* A-2006-519-A	MAIN BOARD, COMPLETE (UK, E2, AUS)	
7	* A-2006-524-A	MAIN BOARD, COMPLETE (AEP, G, IT, E3)	
8	* A-2006-523-A	HX PRO BOARD, COMPLETE	

6-2. FRONT PANEL SECTION

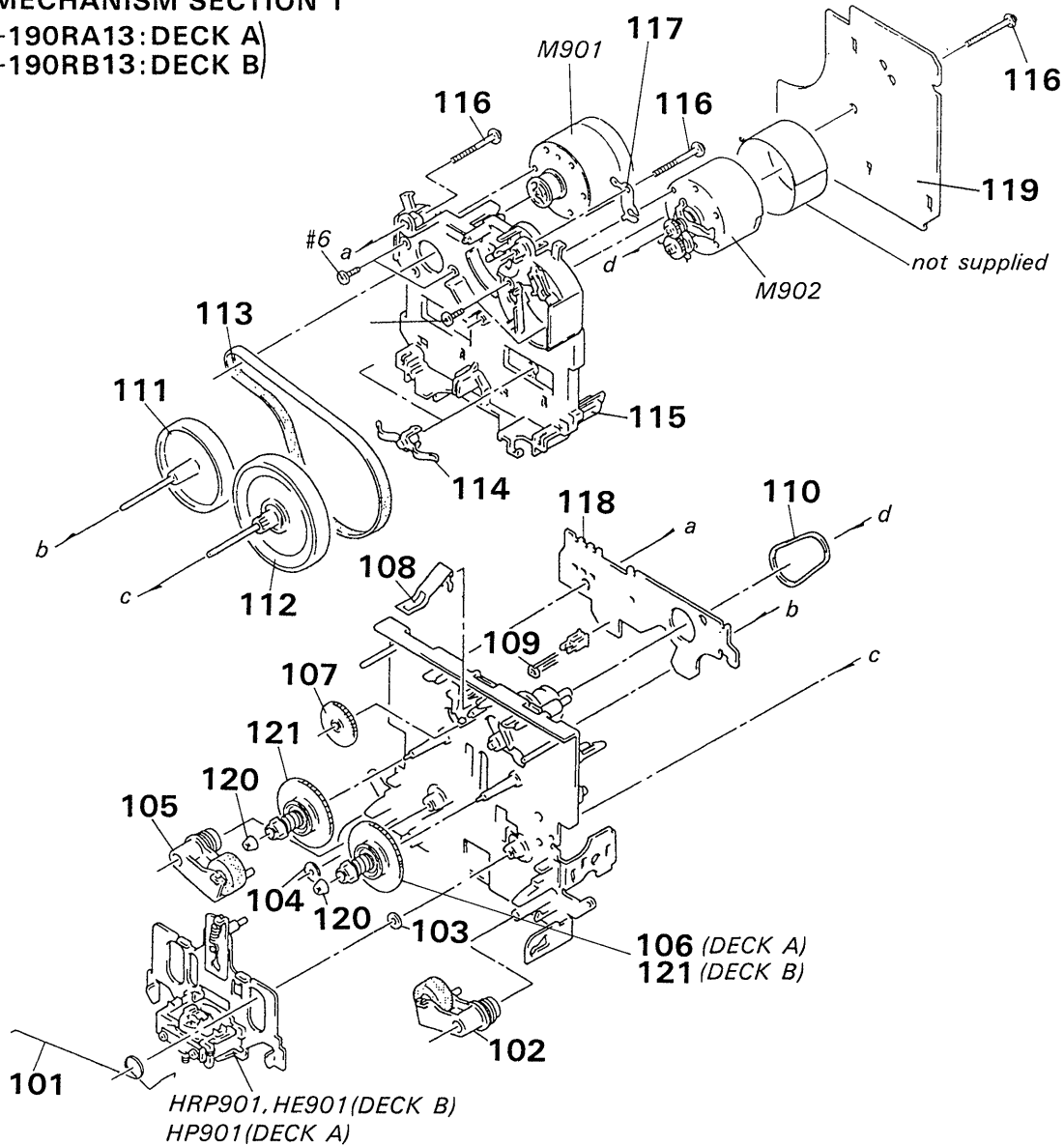


Ref. No.	Part No.	Description	Remark
51	X-3363-131-2	PANEL ASSY, FRONT (UK,E2,AUS)	
51	X-3363-134-2	PANEL ASSY, FRONT (AEP,G,E3)	
51	X-3363-135-2	PANEL ASSY, FRONT (IT)	
52	3-349-039-01	KNOB (VOL)	
53	3-662-752-21	SPRING, TENSION	
54	* 4-933-646-01	HOLDER (TC), FL TUBE	
55	X-3340-194-1	HOLDER (L) ASSY, 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)	
64	3-354-960-01	SPRING (LOADING R), TORSION	
65	X-3340-195-1	HOLDER (R) ASSY, CASSETTE	

Ref. No.	Part No.	Description	Remark
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-2006-520-A	PANEL BOARD, COMPLETE (UK,E2,AUS)	
70	* A-2006-525-A	PANEL BOARD, COMPLETE (AEP,G,IT,E3)	
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	* 1-638-654-21	CONTROL SW BOARD	
76	* 1-638-655-21	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	

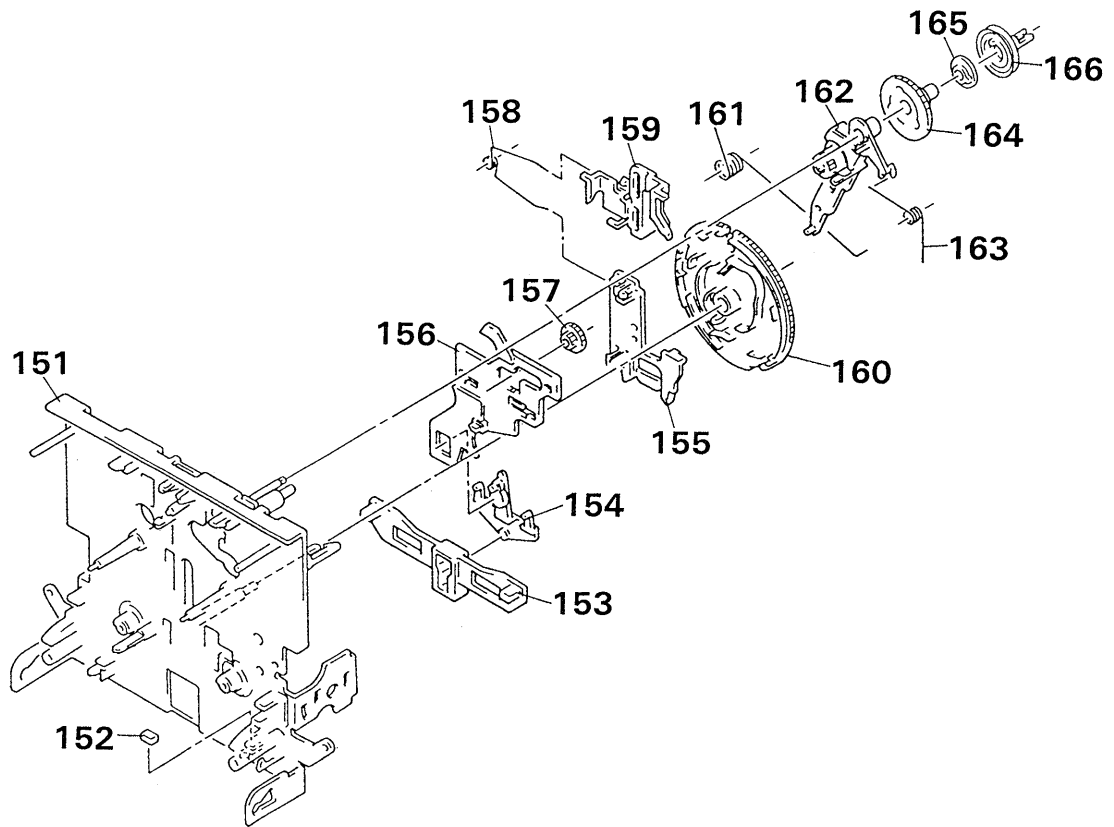
6-3. MECHANISM SECTION 1

(TCM-190RA13:DECK A)
(TCM-190RB13: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 (DECK A)		119	* A-2006-305-A	MD-D BOARD, COMPLETE (DECK B)	
107	3-359-424-01	GEAR (REV GEAR)		119	* 1-634-840-11	MD-A BOARD (DECK A)	
108	3-359-430-01	SPRING (CASSETTE RETAINER), LEAF		120	3-362-308-01	CAP (REEL)	
109	3-343-419-01	HOLDER (S SENSER A)		121	X-3362-078-1	TABLE ASSY (B), REEL	
110	3-359-466-01	BELT (FR), SQUARE		HP901	A-2003-867-B	BASE ASSY, HEAD (DECK A)	
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)	

HX PRO

**SECTION 7
ELECTRICAL PARTS LIST**

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 Δ or dotted line with mark Δ 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
	* A-2006-523-A	HX PRO BOARD, COMPLETE *****	
		< CAPACITOR >	
C301	1-162-288-31	CERAMIC 330PF 10% 50V	
C302	1-136-273-91	FILM 75PF 5% 630V	
C303	1-130-472-00	MYLAR 0.0012uF 5% 50V	
C304	1-136-433-11	FILM 100PF 5% 630V	
C305	1-136-437-11	FILM 220PF 5% 630V	
C306	1-136-157-00	FILM 0.022uF 5% 50V	
C307	1-136-165-00	FILM 0.1uF 5% 50V	
C308	1-136-153-00	FILM 0.01uF 5% 50V	
C401	1-162-288-31	CERAMIC 330PF 10% 50V	
C402	1-136-273-91	FILM 75PF 5% 630V	
C403	1-130-472-00	MYLAR 0.0012uF 5% 50V	
C404	1-136-433-11	FILM 100PF 5% 630V	
C405	1-136-437-11	FILM 220PF 5% 630V	
C406	1-136-157-00	FILM 0.022uF 5% 50V	
C407	1-136-165-00	FILM 0.1uF 5% 50V	
C408	1-136-153-00	FILM 0.01uF 5% 50V	
C601	1-107-046-00	MICA 4.7PF 500V	
C602	1-126-022-11	ELECT 47uF 20% 10V	
C603	1-126-300-11	ELECT 0.47uF 20% 50V	
C604	1-126-059-11	ELECT 10uF 20% 50V	
		< CONNECTOR >	
CNP601	* 1-565-347-11	SOCKET, CONNECTOR (PC BOARD) 8P	
CNP602	* 1-569-504-11	PIN, CONNECTOR 9P	
		< IC >	
IC601	8-759-106-56	IC uPC1297CA	

Ref.No.	Part No.	Description	Remark
		< COIL >	
L301	1-410-780-11	INDUCTOR 27mH	
L401	1-410-780-11	INDUCTOR 27mH	
		< RESISTOR >	
R301	1-249-430-11	CARBON 12K 5% 1/4W	
R302	1-247-883-00	CARBON 150K 5% 1/4W	
R303	1-249-435-11	CARBON 33K 5% 1/4W	
R304	1-249-429-11	CARBON 10K 5% 1/4W	
R305	1-249-393-11	CARBON 10 5% 1/4W	
R401	1-249-430-11	CARBON 12K 5% 1/4W	
R402	1-247-883-00	CARBON 150K 5% 1/4W	
R403	1-249-435-11	CARBON 33K 5% 1/4W	
R404	1-249-429-11	CARBON 10K 5% 1/4W	
R405	1-249-393-11	CARBON 10 5% 1/4W	
		< VARIABLE RESISTOR >	
RV301	1-238-601-11	RES. ADJ. CARBON 22K	
RV401	1-238-601-11	RES. ADJ. CARBON 22K	
		< TRANSFORMER >	
T301	1-433-367-11	TRANSFORMER, BIAS OSCILLATION	
T401	1-433-367-11	TRANSFORMER, BIAS OSCILLATION	
		< TEST PIN >	
TP601	* 1-564-518-11	PLUG, CONNECTOR 3P	

MAIN
PANEL
CONTROL SW
REC VOL

Ref. No.	Part No.	Description	Remark		Ref. No.	Part No.	Description	Remark
* A-2006-519-A		MAIN BOARD, COMPLETE (UK,E2,AUS)			C553	1-126-300-11	ELECT	0.47uF 20% 50V
* A-2006-524-A		MAIN BOARD, COMPLETE (AEP,G,IT,E3)			C561	1-126-161-11	ELECT	2.2uF 20% 50V
		*****			C563	1-136-157-00	FILM	0.022uF 5% 50V
* A-2006-520-A		PANEL BOARD, COMPLETE (UK,E2,AUS)			C565	1-126-163-11	ELECT	4.7uF 20% 50V
* A-2006-525-A		PANEL BOARD, COMPLETE (AEP,G,IT,E3)			C567	1-126-161-11	ELECT	2.2uF 20% 50V
		*****			C568	1-126-161-11	ELECT	2.2uF 20% 50V
* 1-638-654-21		CONTROL SW BOARD			C580	1-123-323-00	ELECT	470uF 20% 16V
		*****			C581	1-126-024-11	ELECT	100uF 20% 25V
* 1-638-655-21		REC VOL BOARD			C582	1-126-024-11	ELECT	100uF 20% 25V
		*****			C701	1-124-887-00	ELECT	3300uF 20% 16V
* 3-362-478-01		HOLDER (T), LED			C702	1-124-887-00	ELECT	3300uF 20% 16V
* 4-921-941-01		CUSHION (FL)			C704	1-124-910-11	ELECT	47uF 20% 50V
* 4-933-646-01		HOLDER (TC), FL TUBE			C705	1-124-910-11	ELECT	47uF 20% 50V
* 4-942-204-01		PLATE, GROUND			C706	1-124-910-11	ELECT	47uF 20% 50V
7-682-547-04		SCREW +BVTT 3X6 (S)			C707	1-126-161-11	ELECT	2.2uF 20% 50V
		< CAPACITOR >			C708	1-124-472-11	ELECT	470uF 20% 10V
C101	1-136-157-00	FILM	0.022uF 5% 50V		C709	1-126-301-11	ELECT	1uF 20% 50V
C110	1-126-163-11	ELECT	4.7uF 20% 50V		C710	1-126-301-11	ELECT	1uF 20% 50V
C111	1-162-294-31	CERAMIC	0.001uF 10% 50V		C711	1-126-867-11	ELECT	33uF 20% 50V
C112	1-130-475-00	MYLAR	0.0022uF 5% 50V		C712	1-126-161-11	ELECT	2.2uF 20% 50V
C113	1-130-475-00	MYLAR	0.0022uF 5% 50V		C713	1-161-379-00	CERAMIC	0.01uF 20% 25V
C114	1-136-171-00	FILM	0.33uF 5% 50V		C831	1-161-379-00	CERAMIC	0.01uF 20% 25V
C115	1-136-174-00	FILM	0.56uF 5% 50V		C832	1-161-379-00	CERAMIC	0.01uF 20% 25V
C116	1-126-163-11	ELECT	4.7uF 20% 50V		C834	1-162-294-31	CERAMIC	0.001uF 10% 50V
C132	1-126-161-11	ELECT	2.2uF 20% 50V		C841	1-126-301-11	ELECT	1uF 20% 50V
C151	1-126-059-11	ELECT	10uF 20% 50V		C842	1-126-301-11	ELECT	1uF 20% 50V
C152	1-126-162-11	ELECT	3.3uF 20% 50V		C851	1-164-159-11	CERAMIC	0.1uF 50V
C153	1-126-059-11	ELECT	10uF 20% 50V		C852	1-164-159-11	CERAMIC	0.1uF 50V
C201	1-136-157-00	FILM	0.022uF 5% 50V		C853	1-126-059-11	ELECT	10uF 20% 50V
C210	1-126-163-11	ELECT	4.7uF 20% 50V		C854	1-126-059-11	ELECT	10uF 20% 50V
C211	1-162-294-31	CERAMIC	0.001uF 10% 50V		C855	1-124-994-11	ELECT	100uF 20% 10V
C212	1-130-475-00	MYLAR	0.0022uF 5% 50V		C856	1-161-379-00	CERAMIC	0.01uF 20% 25V
C213	1-130-475-00	MYLAR	0.0022uF 5% 50V		C857	1-161-379-00	CERAMIC	0.01uF 20% 25V
C214	1-136-171-00	FILM	0.33uF 5% 50V		C858	1-161-379-00	CERAMIC	0.01uF 20% 25V
C215	1-136-174-00	FILM	0.56uF 5% 50V		C859	1-124-994-11	ELECT	100uF 20% 10V
C216	1-126-163-11	ELECT	4.7uF 20% 50V		C860	1-164-159-11	CERAMIC	0.1uF 50V
C232	1-126-161-11	ELECT	2.2uF 20% 50V		C861	1-136-157-00	FILM	0.022uF 5% 50V
C251	1-126-059-11	ELECT	10uF 20% 50V		C862	1-126-121-11	ELECT	220uF 20% 10V
C252	1-126-162-11	ELECT	3.3uF 20% 50V		C899	1-164-159-11	CERAMIC	0.1uF 50V
C253	1-126-059-11	ELECT	10uF 20% 50V				< CONNECTOR >	
C501	1-126-161-11	ELECT	2.2uF 20% 50V		CN501	* 1-568-824-11	SOCKET, CONNECTOR 5P	
C502	1-124-910-11	ELECT	47uF 20% 50V		CN502	* 1-568-824-11	SOCKET, CONNECTOR 5P	
C503	1-124-910-11	ELECT	47uF 20% 50V		CN503	* 1-568-828-11	SOCKET, CONNECTOR 9P	
C521	1-126-161-11	ELECT	2.2uF 20% 50V		CN504	* 1-568-828-11	SOCKET, CONNECTOR 9P	
C551	1-126-300-11	ELECT	0.47uF 20% 50V		CN505	* 1-566-858-41	SOCKET, CONNECTOR 11P	
C552	1-126-059-11	ELECT	10uF 20% 50V		CN506	* 1-569-495-11	SOCKET, CONNECTOR 9P	
					CN541	* 1-568-832-11	SOCKET, CONNECTOR 13P	
					CN542	* 1-568-832-11	SOCKET, CONNECTOR 13P	

MAIN

PANEL

CONTROL SW

REC VOL

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
CN701	* 1-566-859-11	SOCKET, CONNECTOR 15P		IC505	8-759-945-58	IC RC4558P	
CN801	* 1-568-826-11	SOCKET, CONNECTOR 7P		IC561	8-759-945-58	IC RC4558P	
CN802	* 1-568-826-11	SOCKET, CONNECTOR 7P		IC701	8-759-945-58	IC RC4558P	
CN803	* 1-568-854-11	SOCKET, CONNECTOR 11P		IC831	8-759-321-92	IC HD614022S	
				IC841	8-759-820-62	IC LB1639	
CN804	* 1-568-830-11	SOCKET, CONNECTOR 11P					
CN831	* 1-568-834-11	SOCKET, CONNECTOR 15P		IC851	8-759-635-43	IC M50944-164SP	
CN832	* 1-568-834-11	SOCKET, CONNECTOR 15P		IC852	8-759-635-94	IC M50925SP-482SP	
				IC853	8-759-207-05	IC TA7272P	
				IC854	8-759-240-71	IC TC4071BP	
		< DIODE >					
D131	8-719-912-20	DIODE 1SS120				< FILTER >	
D231	8-719-912-20	DIODE 1SS120					
D501	8-719-912-20	DIODE 1SS120		LPF101	1-236-087-11	FILTER, LOW PASS	
D514	8-719-912-20	DIODE 1SS120		LPF201	1-236-087-11	FILTER, LOW PASS	
D561	8-719-912-20	DIODE 1SS120				< TRANSISTOR >	
D581	8-719-933-54	DIODE HZS9A2L		Q101	8-729-900-74	TRANSISTOR DTC143TS	
D701	8-719-200-77	DIODE 10E2N		Q102	8-729-620-05	TRANSISTOR 2SC2603-EF	
D702	8-719-200-77	DIODE 10E2N		Q201	8-729-900-74	TRANSISTOR DTC143TS	
D703	8-719-200-77	DIODE 10E2N		Q202	8-729-620-05	TRANSISTOR 2SC2603-EF	
D704	8-719-200-77	DIODE 10E2N		Q501	8-729-141-30	TRANSISTOR 2SC3623A-LK	
D705	8-719-933-33	DIODE HZS6A1L		Q502	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D706	8-719-933-33	DIODE HZS6A1L		Q503	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D707	8-719-000-54	DIODE UZL-6L3		Q504	8-729-900-89	TRANSISTOR DTC144ES	
D708	8-719-200-77	DIODE 10E2N		Q505	8-729-900-61	TRANSISTOR DTA114ES	
D709	8-719-200-77	DIODE 10E2N		Q506	8-729-900-61	TRANSISTOR DTA114ES	
D710	8-719-912-20	DIODE 1SS120		Q507	8-729-900-74	TRANSISTOR DTC143TS	
D711	8-719-912-20	DIODE 1SS120		Q508	8-729-900-74	TRANSISTOR DTC143TS	
D801	8-719-302-23	DIODE SEL2213C-C (AEP,G,IT,E3)		Q509	8-729-900-74	TRANSISTOR DTC143TS	
D802	8-719-302-23	DIODE SEL2213C-C (AEP,G,IT,E3)		Q510	8-729-900-74	TRANSISTOR DTC143TS	
D803	8-719-302-23	DIODE SEL2213C-C (AEP,G,IT,E3)		Q511	8-729-900-74	TRANSISTOR DTC143TS	
D831	8-719-912-20	DIODE 1SS120		Q521	8-729-900-61	TRANSISTOR DTA114ES	
D832	8-719-301-39	DIODE SEL2210S-D		Q522	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D833	8-719-301-39	DIODE SEL2210S-D		Q523	8-729-900-61	TRANSISTOR DTA114ES	
D841	8-719-912-20	DIODE 1SS120		Q524	8-729-900-61	TRANSISTOR DTA114ES	
D842	8-719-912-20	DIODE 1SS120		Q561	8-729-900-61	TRANSISTOR DTA114ES	
D851	8-719-912-20	DIODE 1SS120		Q562	8-729-900-74	TRANSISTOR DTC143TS	
D852	8-719-912-20	DIODE 1SS120		Q563	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D853	8-719-912-20	DIODE 1SS120		Q581	8-729-900-65	TRANSISTOR DTA144ES	
D854	8-719-933-41	DIODE HZS6C3L		Q582	8-729-900-65	TRANSISTOR DTA144ES	
D855	8-719-912-20	DIODE 1SS120		Q583	8-729-900-89	TRANSISTOR DTC144ES	
D856	8-719-933-41	DIODE HZS6C3L		Q701	8-729-111-67	TRANSISTOR 2SB1094-L	
		< FLUORESCENT INDICATOR >		Q702	8-729-209-15	TRANSISTOR 2SD2012	
FL831	1-519-570-11	INDICATOR TUBE, FLUORESCENT		Q703	8-729-111-67	TRANSISTOR 2SB1094-L	
		< IC >		Q704	8-729-620-05	TRANSISTOR 2SC2603-EF	
IC501	8-759-140-53	IC uPD4053BC		Q841	8-729-900-89	TRANSISTOR DTC144ES	
IC502	8-752-036-34	IC CXA1330S		Q842	8-729-900-65	TRANSISTOR DTA144ES	
IC503	8-752-055-61	IC CXA1578P		Q851	8-729-900-80	TRANSISTOR DTC114ES	
IC504	8-759-208-08	IC TC4052BPH		Q852	8-729-620-05	TRANSISTOR 2SC2603-EF	
				Q853	8-729-620-05	TRANSISTOR 2SC2603-EF	

MAIN

PANEL

CONTROL SW

REC VOL

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q854	8-729-900-61	TRANSISTOR DTA114ES		R507	1-247-850-11	CARBON 6.2K 5%	1/4W
Q855	8-729-900-74	TRANSISTOR DTC143TS		R508	1-247-840-00	CARBON 2.4K 5%	1/4W
Q856	8-729-801-84	TRANSISTOR 2SB1013-4		R509	1-247-852-11	CARBON 7.5K 5%	1/4W
Q857	8-729-801-84	TRANSISTOR 2SB1013-4		R510	1-249-441-11	CARBON 100K 5%	1/4W
		< RESISTOR >		R512	1-247-883-00	CARBON 150K 5%	1/4W
R101	1-249-435-11	CARBON 33K 5%	1/4W	R513	1-249-414-11	CARBON 560 5%	1/4W
R103	1-249-421-11	CARBON 2.2K 5%	1/4W	R515	1-249-433-11	CARBON 22K 5%	1/4W
R105	1-247-887-00	CARBON 220K 5%	1/4W	R516	1-249-407-11	CARBON 150 5%	1/4W
R106	1-249-423-11	CARBON 3.3K 5%	1/4W	R517	1-249-407-11	CARBON 150 5%	1/4W
R110	1-249-417-11	CARBON 1K 5%	1/4W	R518	1-249-433-11	CARBON 22K 5%	1/4W
R111	1-249-428-11	CARBON 8.2K 5%	1/4W	R521	1-249-421-11	CARBON 2.2K 5%	1/4W
R112	1-249-423-11	CARBON 3.3K 5%	1/4W	R533	1-249-429-11	CARBON 10K 5%	1/4W
R113	1-249-414-11	CARBON 560 5%	1/4W	R541	1-249-435-11	CARBON 33K 5%	1/4W
R114	1-247-864-11	CARBON 24K 5%	1/4W	R542	1-249-435-11	CARBON 33K 5%	1/4W
R115	1-249-434-11	CARBON 27K 5%	1/4W	R543	1-249-435-11	CARBON 33K 5%	1/4W
R135	1-249-429-11	CARBON 10K 5%	1/4W	R546	1-249-415-11	CARBON 680 5%	1/4W
R136	1-249-421-11	CARBON 2.2K 5%	1/4W	R554	1-247-864-11	CARBON 24K 5%	1/4W
R137	1-249-425-11	CARBON 4.7K 5%	1/4W	R561	1-247-887-00	CARBON 220K 5%	1/4W
R138	1-249-417-11	CARBON 1K 5%	1/4W	R562	1-249-429-11	CARBON 10K 5%	1/4W
R140	1-249-436-11	CARBON 39K 5%	1/4W	R563	1-249-441-11	CARBON 100K 5%	1/4W
R141	1-249-432-11	CARBON 18K 5%	1/4W	R564	1-249-428-11	CARBON 8.2K 5%	1/4W
R142	1-249-410-11	CARBON 270 5%	1/4W	R565	1-249-423-11	CARBON 3.3K 5%	1/4W
R151	1-249-431-11	CARBON 15K 5%	1/4W	R566	1-249-441-11	CARBON 100K 5%	1/4W
R152	1-249-425-11	CARBON 4.7K 5%	1/4W	R567	1-249-417-11	CARBON 1K 5%	1/4W
R201	1-249-435-11	CARBON 33K 5%	1/4W	R568	1-249-441-11	CARBON 100K 5%	1/4W
R203	1-249-421-11	CARBON 2.2K 5%	1/4W	R569	1-249-429-11	CARBON 10K 5%	1/4W
R205	1-247-887-00	CARBON 220K 5%	1/4W	R570	1-249-441-11	CARBON 100K 5%	1/4W
R206	1-249-423-11	CARBON 3.3K 5%	1/4W	R571	1-249-417-11	CARBON 1K 5%	1/4W
R210	1-249-417-11	CARBON 1K 5%	1/4W	R572	1-249-437-11	CARBON 47K 5%	1/4W
R211	1-249-428-11	CARBON 8.2K 5%	1/4W	R581	1-249-433-11	CARBON 22K 5%	1/4W
R212	1-249-423-11	CARBON 3.3K 5%	1/4W	R582	1-249-433-11	CARBON 22K 5%	1/4W
R213	1-249-414-11	CARBON 560 5%	1/4W	R583	1-249-433-11	CARBON 22K 5%	1/4W
R214	1-247-864-11	CARBON 24K 5%	1/4W	R701	1-249-420-11	CARBON 1.8K 5%	1/4W
R215	1-249-417-11	CARBON 1K 5%	1/4W	R702	1-249-427-11	CARBON 6.8K 5%	1/4W
R235	1-249-429-11	CARBON 10K 5%	1/4W	R703	1-249-419-11	CARBON 1.5K 5%	1/4W
R236	1-249-421-11	CARBON 2.2K 5%	1/4W	R704	1-249-429-11	CARBON 10K 5%	1/4W
R237	1-249-425-11	CARBON 4.7K 5%	1/4W	R705	1-249-419-11	CARBON 1.5K 5%	1/4W
R238	1-249-417-11	CARBON 1K 5%	1/4W	R706	1-249-427-11	CARBON 6.8K 5%	1/4W
R240	1-249-436-11	CARBON 39K 5%	1/4W	R707	1-249-427-11	CARBON 6.8K 5%	1/4W
R241	1-249-432-11	CARBON 18K 5%	1/4W	R708	1-249-405-11	CARBON 100 5%	1/4W
R242	1-249-410-11	CARBON 270 5%	1/4W	R709	1-249-417-11	CARBON 1K 5%	1/4W
R251	1-249-431-11	CARBON 15K 5%	1/4W	R710	1-249-420-11	CARBON 1.8K 5%	1/4W
R252	1-249-425-11	CARBON 4.7K 5%	1/4W	R711	1-249-405-11	CARBON 100 5%	1/4W
R501	1-249-433-11	CARBON 22K 5%	1/4W	R712	1-249-422-11	CARBON 2.7K 5%	1/4W
R502	1-249-405-11	CARBON 100 5%	1/4W	R801	1-249-417-11	CARBON 1K 5%	1/4W
R503	1-249-425-11	CARBON 4.7K 5%	1/4W	R802	1-249-407-11	CARBON 150 5%	1/4W
R504	1-249-425-11	CARBON 4.7K 5%	1/4W	R803	1-249-409-11	CARBON 220 5%	1/4W
R505	1-249-425-11	CARBON 4.7K 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	1-249-418-11	CARBON	1.2K 5% 1/4W
R815	1-249-417-11	CARBON	1K 5% 1/4W
R816	1-247-820-11	CARBON	360 5% 1/4W (UK, E2, AUS)
R817	1-249-418-11	CARBON	1.2K 5% 1/4W (AEP, G, IT, E3)
R819	1-249-407-11	CARBON	150 5% 1/4W (AEP, G, IT, E3)
R820	1-249-409-11	CARBON	220 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, E2, AUS)
R831	1-249-411-11	CARBON	330 5% 1/4W (AEP, G, IT, E3)
R832	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	1-249-409-11	CARBON	220 5% 1/4W
R835	1-249-417-11	CARBON	1K 5% 1/4W
R836	1-249-411-11	CARBON	330 5% 1/4W
R837	1-249-415-11	CARBON	680 5% 1/4W
R838	1-249-413-11	CARBON	470 5% 1/4W
R839	1-249-411-11	CARBON	330 5% 1/4W
R840	1-249-411-11	CARBON	330 5% 1/4W
R841	1-249-409-11	CARBON	220 5% 1/4W
R842	1-247-903-00	CARBON	1M 5% 1/4W
R843	1-249-411-11	CARBON	330 5% 1/4W
R844	1-249-412-11	CARBON	390 5% 1/4W
R845	1-249-420-11	CARBON	1.8K 5% 1/4W
R846	1-249-429-11	CARBON	10K 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	1-247-860-11	CARBON	16K 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

Ref. No.	Part No.	Description	Remark
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
R873	1-247-866-11	CARBON	30K 5% 1/4W
R874	1-249-437-11	CARBON	47K 5% 1/4W
R875	1-249-437-11	CARBON	47K 5% 1/4W
R876	1-247-866-11	CARBON	30K 5% 1/4W
R877	1-247-872-11	CARBON	51K 5% 1/4W
R878	1-247-872-11	CARBON	51K 5% 1/4W
R879	1-249-434-11	CARBON	27K 5% 1/4W
R880	1-249-432-11	CARBON	18K 5% 1/4W
R881	1-249-435-11	CARBON	33K 5% 1/4W
R882	1-247-895-00	CARBON	470K 5% 1/4W
R883	1-247-895-00	CARBON	470K 5% 1/4W
R884	1-249-435-11	CARBON	33K 5% 1/4W
R886	1-249-434-11	CARBON	27K 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
R892	1-249-429-11	CARBON	10K 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
R897	1-249-435-11	CARBON	33K 5% 1/4W
R898	1-249-435-11	CARBON	33K 5% 1/4W
R899	1-249-407-11	CARBON	150 5% 1/4W
< VARIABLE RESISTOR >			
RV101	1-238-600-11	RES. ADJ. CARBON 10K	
RV201	1-238-600-11	RES. ADJ. CARBON 10K	
RV541	1-238-756-21	RES. VAR. CARBON 20K/20K/20K (REC LEVEL)	
< SWITCH >			
S801	1-554-303-21	SWITCH, TACTILE (B FF)	
S802	1-554-303-21	SWITCH, TACTILE (B FWD)	
S803	1-554-303-21	SWITCH, TACTILE (B REV)	
S804	1-554-303-21	SWITCH, TACTILE (B REW)	
S805	1-554-303-21	SWITCH, TACTILE (B STOP)	
S806	1-554-303-21	SWITCH, TACTILE (B REC)	
S807	1-554-303-21	SWITCH, TACTILE (B REC MUTE)	
S808	1-554-303-21	SWITCH, TACTILE (B PAUSE)	
S809	1-554-303-21	SWITCH, TACTILE (A FF)	
S810	1-554-303-21	SWITCH, TACTILE (A FWD)	

MAIN

PANEL

CONTROL SW

REC VOL

MD-A

MD-D

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
S811	1-554-303-21	SWITCH, TACTILE (A REV)				< IC >	
S812	1-554-303-21	SWITCH, TACTILE (A REW)					
S813	1-554-303-21	SWITCH, TACTILE (A STOP)		IC31	8-759-111-44	IC uPC4570C-1	
S814	1-571-452-11	SWITCH, SLIDE (DIRECTION MODE)				< TRANSISTOR >	
S815	1-571-452-11	SWITCH, SLIDE (DOLBY NR)					
S816	1-554-303-21	SWITCH, TACTILE (TIME) (AEP, G, IT, E3)		Q71	8-729-820-16	TRANSISTOR 2SA1317-S	
S817	1-554-303-21	SWITCH, TACTILE ((NORMAL SPEED) (UK, E2, AUS)				< RESISTOR >	
S817	1-554-303-21	SWITCH, TACTILE (EDIT) (AEP, G, IT, E3)					
S818	1-554-303-21	SWITCH, TACTILE (FADE) (AEP, G, IT, E3)		R11	1-247-881-00	CARBON 120K 5% 1/4W	
S819	1-554-303-21	SWITCH, TACTILE (HIGH SPEED) (UK, E2, AUS)		R12	1-249-405-11	CARBON 100 5% 1/4W	
S819	1-554-303-21	SWITCH, TACTILE (C. FADE) (AEP, G, IT, E3)		R13	1-247-882-11	CARBON 130K 5% 1/4W	
S820	1-554-303-21	SWITCH, TACTILE (NORMAL SPEED) (AEP, G, IT, E3)		R14	1-249-426-11	CARBON 5.6K 5% 1/4W	
S821	1-554-303-21	SWITCH, TACTILE (HIGH SPEED) (AEP, G, IT, E3)		R21	1-247-881-00	CARBON 120K 5% 1/4W	
S831	1-554-303-21	SWITCH, TACTILE (A/B)		R22	1-249-405-11	CARBON 100 5% 1/4W	
S832	1-554-303-21	SWITCH, TACTILE (MEMORY)		R23	1-247-882-11	CARBON 130K 5% 1/4W	
S833	1-554-303-21	SWITCH, TACTILE (RESET)		R24	1-249-426-11	CARBON 5.6K 5% 1/4W	
S834	1-554-303-21	SWITCH, TACTILE (FADER)		R31	1-249-409-11	CARBON 220 5% 1/4W	
S835	1-554-303-21	SWITCH, TACTILE (SAF)		R32	1-249-409-11	CARBON 220 5% 1/4W	
		< CERAMIC >		R71	1-247-864-11	CARBON 24K 5% 1/4W	
X831	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz) (UK, E2, AUS)		R72	1-249-433-11	CARBON 22K 5% 1/4W	
X831	1-567-775-11	VIBRATOR, CERAMIC (4.19MHz) (AEP, G, IT, E3)		R73	1-249-437-11	CARBON 47K 5% 1/4W	
X851	1-577-358-21	VIBRATOR, CERAMIC (4MHz)		R74	1-249-437-11	CARBON 47K 5% 1/4W	
X852	1-577-358-21	VIBRATOR, CERAMIC (4MHz)				< VARIABLE RESISTOR >	

	* 1-634-840-11	MD-A BOARD		RV11	1-238-597-11	RES, ADJ, CARBON 1K	
		*****		RV21	1-238-597-11	RES, ADJ, CARBON 1K	
		< CAPACITOR >		RV71	1-238-600-11	RES, ADJ, CARBON 10K	
C11	1-110-342-11	MYLAR 390PF	5% 50V	RV72	1-238-600-11	RES, ADJ, CARBON 10K	
C12	1-136-157-00	FILM 0.022uF	5% 50V	*****			
C13	1-124-282-00	ELECT 22uF	20% 25V			< CAPACITOR >	
C21	1-110-342-11	MYLAR 390PF	5% 50V	* A-2006-305-A	MD-D BOARD, COMPLETE		
C22	1-136-157-00	FILM 0.022uF	5% 50V			*****	
C23	1-124-282-00	ELECT 22uF	20% 25V			< CAPACITOR >	
C31	1-124-443-00	ELECT 100uF	20% 10V	C11	1-110-342-11	MYLAR 390PF	5% 50V
C32	1-124-443-00	ELECT 100uF	20% 10V	C12	1-136-157-00	FILM 0.022uF	5% 50V
C71	1-124-907-11	ELECT 10uF	20% 50V	C13	1-124-282-00	ELECT 22uF	20% 25V
C72	1-124-907-11	ELECT 10uF	20% 50V	C21	1-110-342-11	MYLAR 390PF	5% 50V
		< CONNECTOR >		C22	1-136-157-00	FILM 0.022uF	5% 50V
CNP31	* 1-568-824-11	SOCKET, CONNECTOR 5P		C23	1-124-282-00	ELECT 22uF	20% 25V
CNP32	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P		C31	1-124-443-00	ELECT 100uF	20% 10V
CNP71	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P		C32	1-124-443-00	ELECT 100uF	20% 10V
CNP72	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P		C33	1-124-119-00	ELECT 330uF	20% 16V
CNP73	* 1-568-826-11	SOCKET, CONNECTOR 7P		C51	1-136-230-00	FILM 0.0022uF	5% 100V
				C52	1-136-230-00	FILM 0.0022uF	5% 100V
				C53	1-130-856-00	FILM 0.0068uF	5% 100V
				C54	1-136-601-11	FILM 0.01uF	5% 630V
				C55	1-161-494-00	CERAMIC 0.022uF	25V
				C56	1-126-157-11	ELECT 10uF	20% 16V

MD-D

SW-A

SW-B

Ref. No.	Part No.	Description	Remark
C57	1-162-294-31	CERAMIC 0.001uF	10% 50V
C71	1-124-907-11	ELECT 10uF	20% 50V
C72	1-124-907-11	ELECT 10uF	20% 50V
< CONNECTOR >			
CNP31	* 1-568-824-11	SOCKET, CONNECTOR 5P	
CNP32	* 1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
CNP34	* 1-565-344-11	PIN, CONNECTOR (PC BOARD) 8P	
CNP71	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CNP72	* 1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P	
CNP73	* 1-568-826-11	SOCKET, CONNECTOR 7P	
< DIODE >			
D31	8-719-107-94	DIODE 1SS202-1	
< IC >			
IC31	8-759-111-44	IC uPC4570C-1	
< 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
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
R31	1-249-409-11	CARBON 220	5% 1/4W
R32	1-249-409-11	CARBON 220	5% 1/4W
R51	1-249-441-11	CARBON 100K	5% 1/4W
R52	1-249-441-11	CARBON 100K	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	
RV21	1-238-597-11	RES. ADJ. CARBON 1K	
RV71	1-238-600-11	RES. ADJ. CARBON 10K	
RV72	1-238-600-11	RES. ADJ. CARBON 10K	

Ref. No.	Part No.	Description	Remark
		< RELAY >	
RY31	1-515-726-11	RELAY	
< TRANSFORMER >			
T51	1-433-376-11	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 REFLECTOR 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)	
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 REFLECTOR NJL5165K-B	
IC82	8-719-710-03	PHOTO REFLECTOR 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
R86	1-249-408-11	CARBON 180	5% 1/4W

SW-B

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S81	1-571-958-11	SWITCH, PUSH (1 KEY) (STOP)	
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)	

MISCELLANEOUS

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)	
HE901	A-2003-477-A	BASE ASSY, HEAD (DECK B)	
HP901	A-2003-867-A	BASE ASSY, HEAD (DECK A)	
HRP901	A-2003-477-A	BASE ASSY, HEAD (DECK B)	
M901	X-3359-417-1	MOTOR (CAPSTAN) ASSY	

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	
# 7	7-682-548-09	SCREW +BVTT 3X8 (S)	

Sony Corporation
Audio Group

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