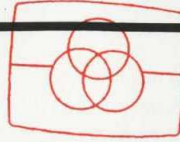


TC-WR770/WR875

SERVICE MANUAL



Free service manuals

Gratis schema's

Digitized by

US Model

TC-WR875

www.freeservicemanuals.info AEP Model

UK Model

TC-WR770



This photo is TC-WR875.

Model Name Using Similar Mechanism	TC-WR97ES/WR870
Tape Transport Mechanism Type	TCM-200R5

SPECIFICATIONS

Recording system 4-track 2-channel stereo
 Fast winding time Approx. 90 sec. (with Sony C-60 cassette)
 Bias AC bias
 Signal-to-noise ratio (at peak level)

Dolby NR switch	OFF	B-Type ON	C-Type ON
Cassette			
Type IV (Sony METAL-S)	58 dB	66 dB	73 dB
Type II (Sony UX-S)	57 dB	65 dB	72 dB
Type I (Sony HF-S)	55 dB	63 dB	70 dB

Total harmonic distortion 1.0% (with Sony METAL-S cassettes)

Frequency response (DOLBY NR OFF)

Type IV cassette (Sony METAL-S)	30 - 18,000 Hz (± 3 dB, IEC) 30 - 14,000 Hz [± 3 dB 0VU(-4dB) recording]
Type II cassette (Sony UX-S)	30 - 17,000 Hz (± 3 dB, IEC)
Type I cassette (Sony HF-S)	30 - 15,000 Hz (± 3 dB, IEC)

Wow and flutter $\pm 0.09\%$ W.Peak (IEC)
 0.06% WRMS (NAB)
 $\pm 0.16\%$ W.Peak (DIN)

Inputs

Line inputs (phono jacks)	Sensitivity	77.5 mV
	Input impedance	47 k ohms

Outputs

Line outputs (phono jacks)	Rated output level	0.32 V at a load impedance of 47 k ohms
	Load impedance	Over 10 k ohms
Headphones (stereo phone jack)	Output level	0 - 1.25 mW at a load impedance of 32 ohms

General

Power requirements

US model :

120V AC, 60Hz

AEP, Germany model :

220—230V AC, 50/60Hz

UK model :

240V AC, 50/60Hz

Power consumption

29 W

Dimensions

Approx. 430 × 135 × 355 mm (w/h/d)
(17 × 5³/₈ × 14 inches)

including projecting parts and controls
 Approx. 6.3 kg (13 lbs 15 oz)

Weight

Supplied accessory

Audio connecting cords (2)

Design and specifications subject to change without notice.



STEREO CASSETTE DECK

SONY®

FEATURES

For higher quality recording/playback

- **The Dolby HX PRO* system** which improves the linearity of the tape's high-range response during recording.
- **B and C type Dolby NR* systems** which reduce tape noise.
- **Bias calibration** to achieve the optimum bias current setting for any tape (Deck B only).


For your convenience

- **Quick reversing** at the end of a tape to minimize interruptions during playback and recording.
- **Automatic tape type detection** during playback and recording.
- **The AMS, Blank Skip and Memory Play functions** which provide easy access to a desired selection.
- **A relay function** for long recording and playback.
- **Auto Play function** which automatically starts playback after tape rewinding to start.
- **Timer-activated playback and recording** through the use of an optional timer.
- **Synchronized dubbing** at normal or high speed.
- **Simultaneous Recording function** for the simultaneous recording of the same source to cassettes in both decks.

For easier operation

- **Twin easy-to-read digital linear counters** which show the elapsed recording or playing time.

* 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.

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

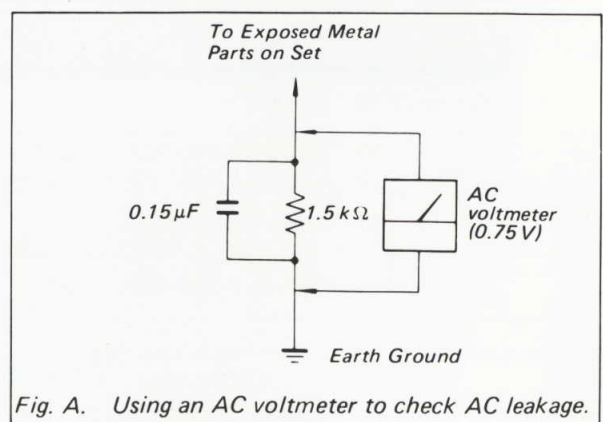





Fig. A. Using an AC voltmeter to check AC leakage.

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

SAFETY-RELATED COMPONENT WARNING!!

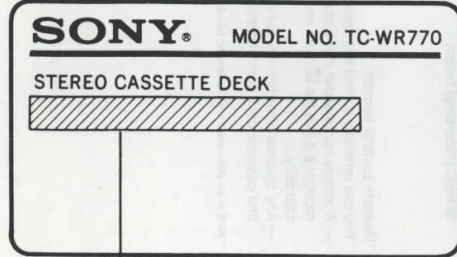
COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

MODEL IDENTIFICATION

— Specification Label —

TC-WR770: AEP, UK, Germany model



AEP, Germany model: AC 220V—230V ~ 50/60Hz
 UK model : AC 240V ~ 50/60Hz

TC-WR875: US model

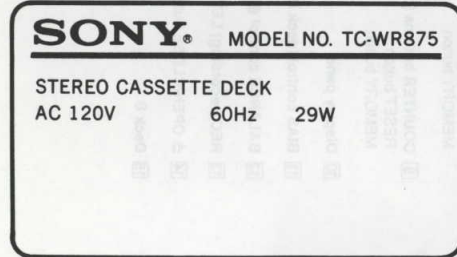
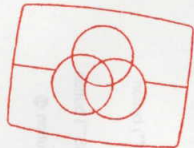


TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
1. GENERAL		
•	Identification of Front Panel Parts	4
2. DISASSEMBLY		
2-1.	Cassette Lid Assy	5
2-2.	Front Panel Assy	5
2-3.	Mechanism Desk Block	5
2-4.	Cassette Holder	6
2-5.	Ornamental Plate	6
2-6.	Pinch Lever, Head	7
2-7.	Capstan Motor, Flywheel	7
2-8.	Bracket (Motor R1) Assy	8
2-9.	Reel Motor Board	8
3. MECHANICAL ADJUSTMENTS		9
4. ELECTRICAL ADJUSTMENTS		9
5. DIAGRAMS		
5-1.	Block Diagram	13
5-2.	Circuit Boards	16
5-3.	Semiconductor Lead Layouts	16
5-4.	Printed Wiring Boards	
	—Display/Deck/SW Section—	17
5-5.	Schematic Diagram	
	—System Control/Display/Deck/SW Section—	19
5-6.	Schematic Diagram	
	—Audio/Power Section—	23
5-7.	Printed Wiring Boards	
	—Audio/System Control/Power Section—	27
6. EXPLODED VIEWS		
6-1.	Chassis Section	30
6-2.	Front Panel Section	31
6-3.	Mechanism Deck Section 1	32
6-4.	Mechanism Deck Section 2	33
7. ELECTRICAL PARTS LIST		34



Free service manuals
 Gratis schema's

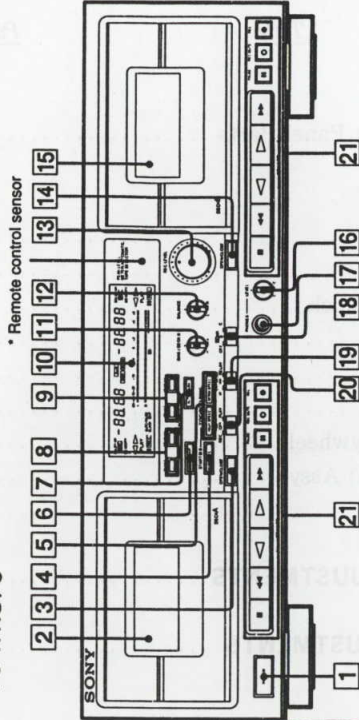
Digitized by

www.freeservicemanuals.info

SECTION 1 GENERAL

This section is extracted from instruction manual.

● TC-WR875



- 1 POWER switch
- 2 Deck A
- 3 OPEN/CLOSE button (deck A)
- 4 A+B REC (simultaneous recording) button
- 5 SYNCHRO DUBBING buttons HIGH SPEED button NORM (normal) SPEED button
- 6 BLANK SKIP button
- 7 AUTO PAUSE button
- 8 COUNTER buttons (deck A) RESET button MEMORY button
- 9 COUNTER buttons (deck B) RESET button MEMORY button
- 10 Display panel
- 11 BIAS control (deck B)
- 12 BALANCE control
- 13 REC (recording) LEVEL control
- 14 OPEN/CLOSE button (deck B)
- 15 Deck B
- 16 PHONES (headphones) LEVEL control
- 17 PHONES (headphones) jack (stereo phone jack)
- 18 NR (Dolby noise reduction) switch
- 19 DIR (direction) MODE switch
- 20 TIMER switch
- 21 Tape operation buttons (stop) button (leftward fast winding)(AMS**) button (reverse play) button (forward play) button (rightward fast winding)(AMS**) button PAUSE button REC MUTE (record muting) button REC (recording) button

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

** AMS is an abbreviation for Automatic Music Sensor.

For details, refer to the page number indicated in ●.

1 POWER switch

2 Deck A

3 OPEN/CLOSE button (deck A)

4 A+B REC (simultaneous recording) button

5 SYNCHRO DUBBING buttons HIGH SPEED button NORM (normal) SPEED button

6 BLANK SKIP button

7 AUTO PAUSE button

8 COUNTER buttons (deck A) RESET button MEMORY button

9 COUNTER buttons (deck B) RESET button MEMORY button

10 Display panel

11 BIAS control (deck B)

12 BALANCE control

13 REC (recording) LEVEL control

14 OPEN/CLOSE button (deck B)

15 Deck B

16 PHONES (headphones) LEVEL control

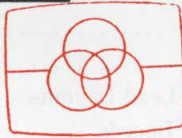
17 PHONES (headphones) jack (stereo phone jack)

18 NR (Dolby noise reduction) switch

19 DIR (direction) MODE switch

20 TIMER switch

21 Tape operation buttons (stop) button (leftward fast winding)(AMS**) button (reverse play) button (forward play) button (rightward fast winding)(AMS**) button PAUSE button REC MUTE (record muting) button REC (recording) button



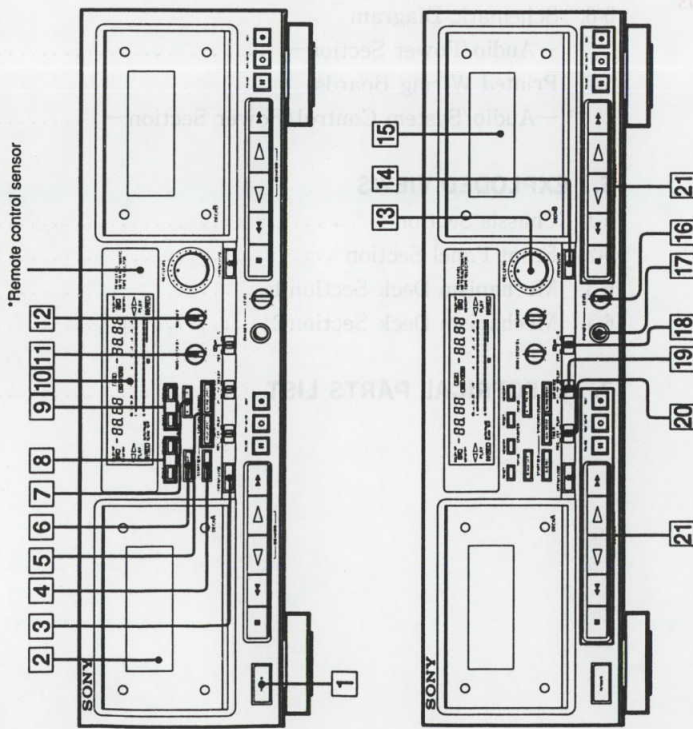
Free service manual
Gratis schema's

Digitized by

www.freescvicmanuals.info

Identification of Front Panel Parts

● TC-WR770



For details, refer to the page number indicated in ●.

- 1 POWER switch
- 2 Deck A
- 3 OPEN/CLOSE button (deck A)
- 4 A+B REC (simultaneous recording) button
- 5 SYNCHRO DUBBING buttons HIGH SPEED button NORM (normal) SPEED button BLANK SKIP button
- 6 AUTO PAUSE button
- 7 COUNTER buttons (deck A) RESET button MEMORY button
- 8 COUNTER buttons (deck B) RESET button MEMORY button
- 9 Display panel
- 10 BIAS control (deck B)
- 11 BALANCE control
- 12 REC (recording) LEVEL control
- 13 OPEN/CLOSE button (deck B)
- 14 Deck B
- 15 Headphones LEVEL control
- 16 PHONES (headphones) jack (stereo phone jack)
- 17 NR (Dolby noise reduction) switch
- 18 DIR (direction) MODE switch
- 19 TIMER switch
- 20 Tape operation buttons (stop) button (leftward fast winding)(AMS**) button (reverse play) button (forward play) button (rightward fast winding)(AMS**) button PAUSE button REC MUTE (record muting) button REC (recording) button

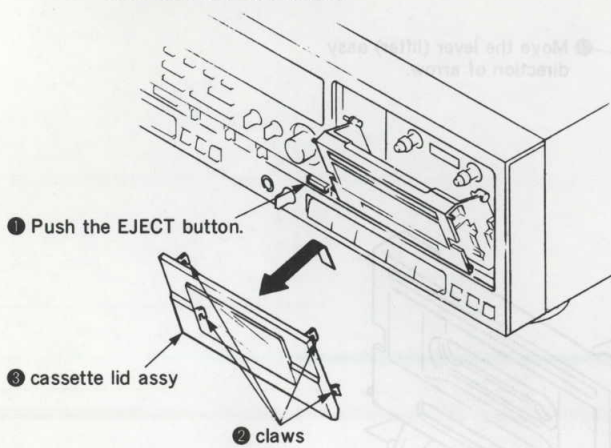
* Remote control sensor
You can remotely control this cassette deck with:
— A remote commander that came with a Sony amplifier or receiver if it has the mark and cassette deck control capability.
— Any optional Sony remote commander with the mark and cassette deck control capability.

** AMS is an abbreviation for Automatic Music Sensor.

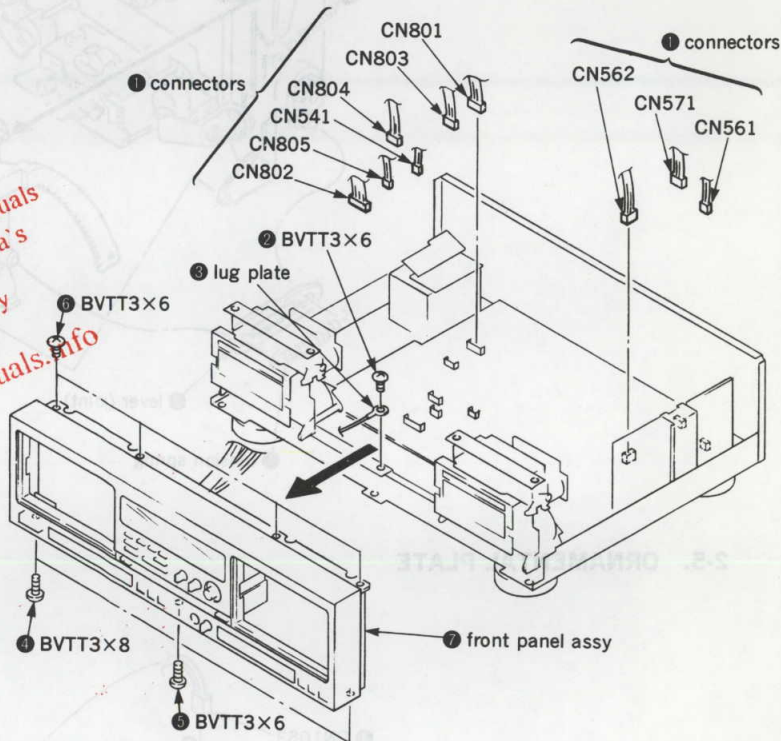
SECTION 2 DISASSEMBLY

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

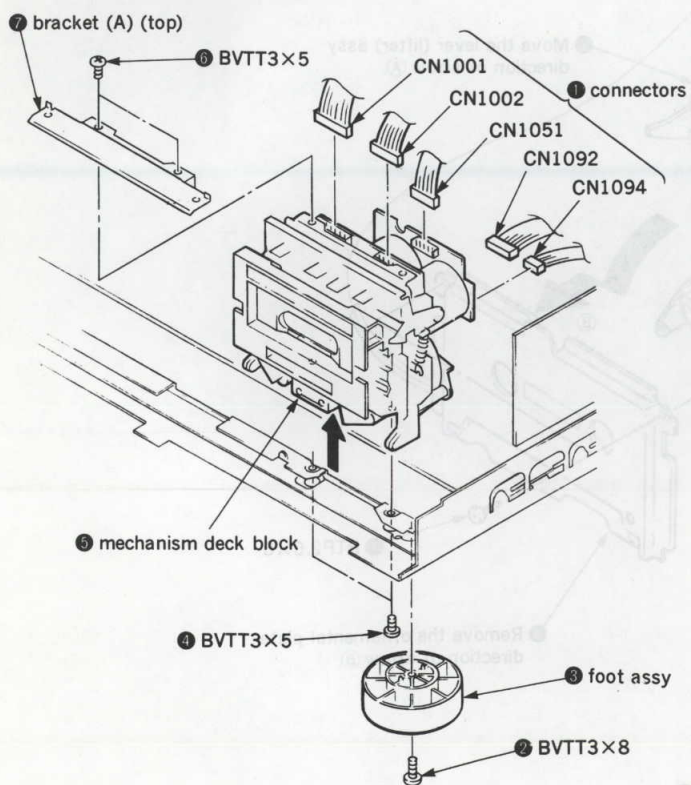
2-1. CASSETTE LID ASSY



2-2. FRONT PANEL ASSY

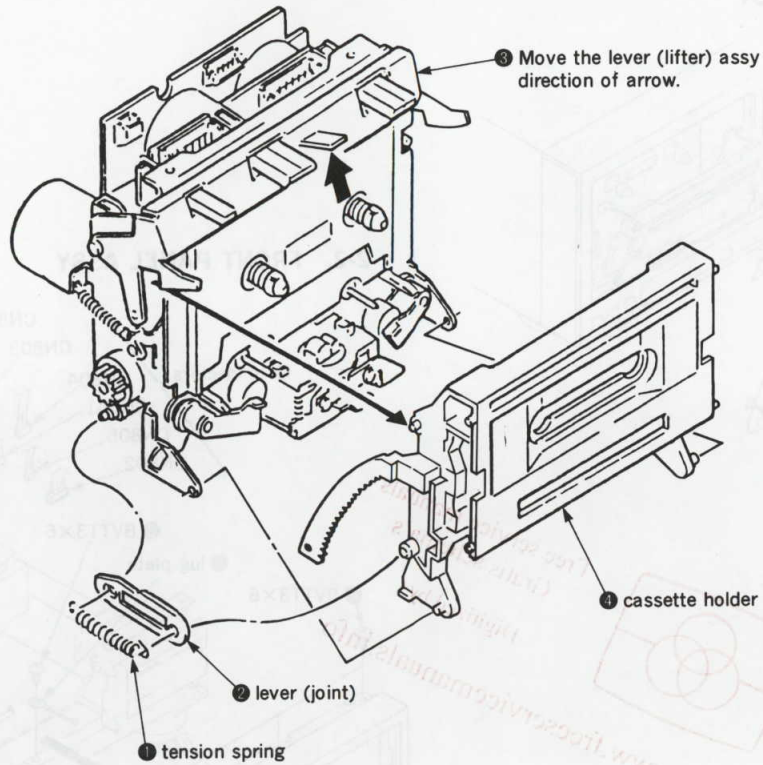


2-3. MECHANISM DECK BLOCK

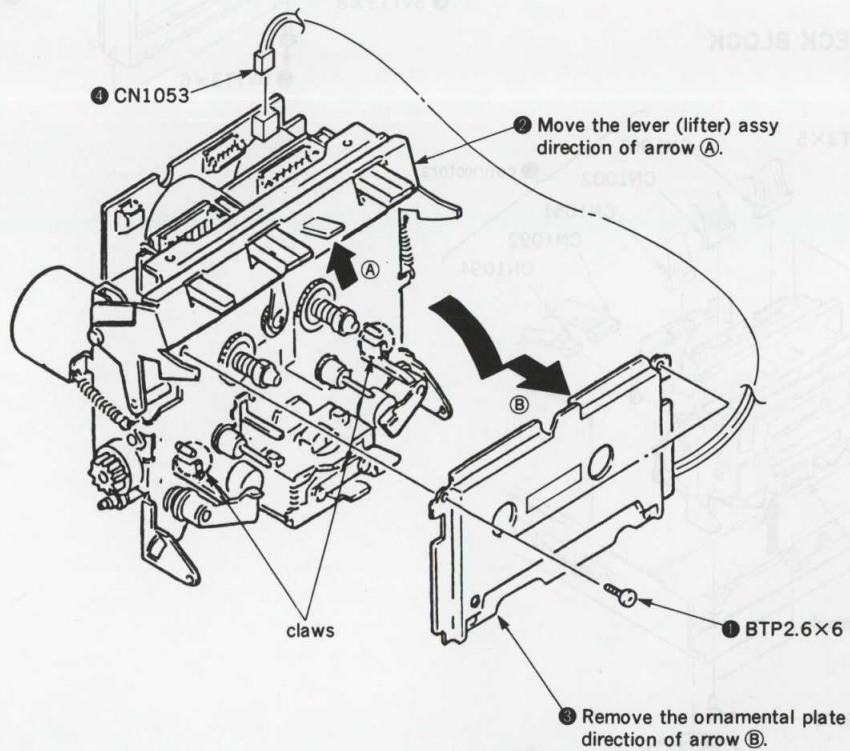


Free service manuals
Gratis schema's
Digitized by
www.freeservicemanuals.info

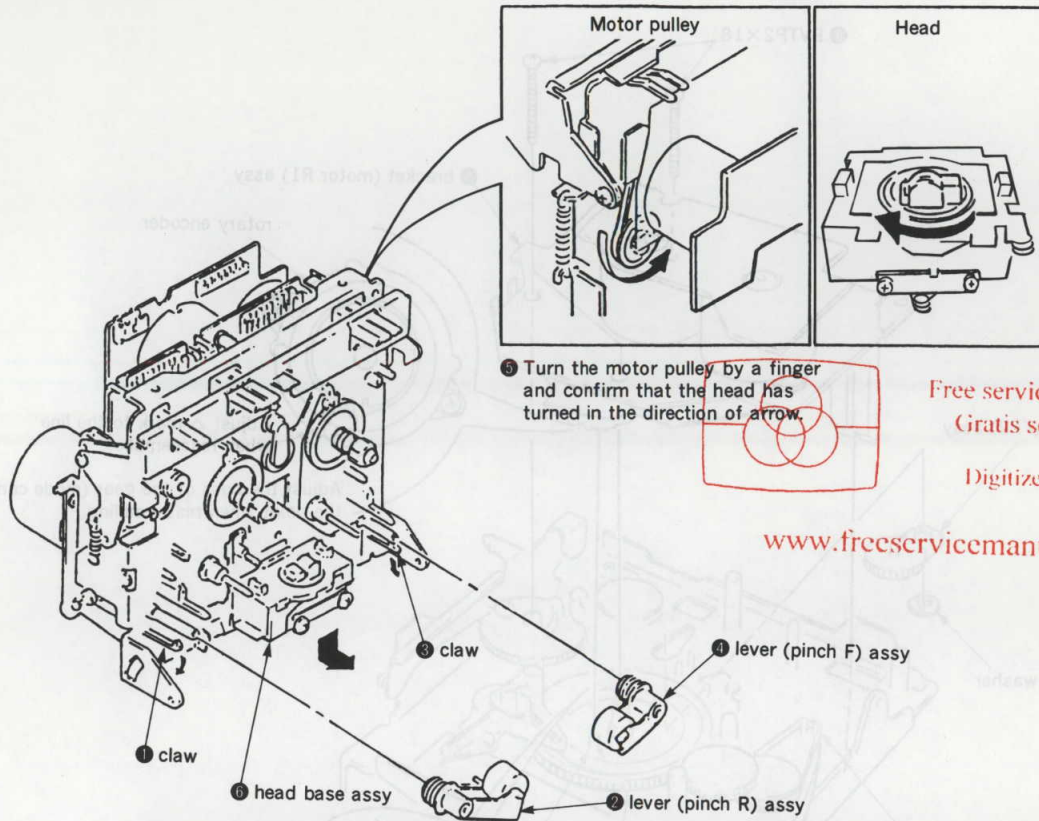
2-4. CASSETTE HOLDER



2-5. ORNAMENTAL PLATE



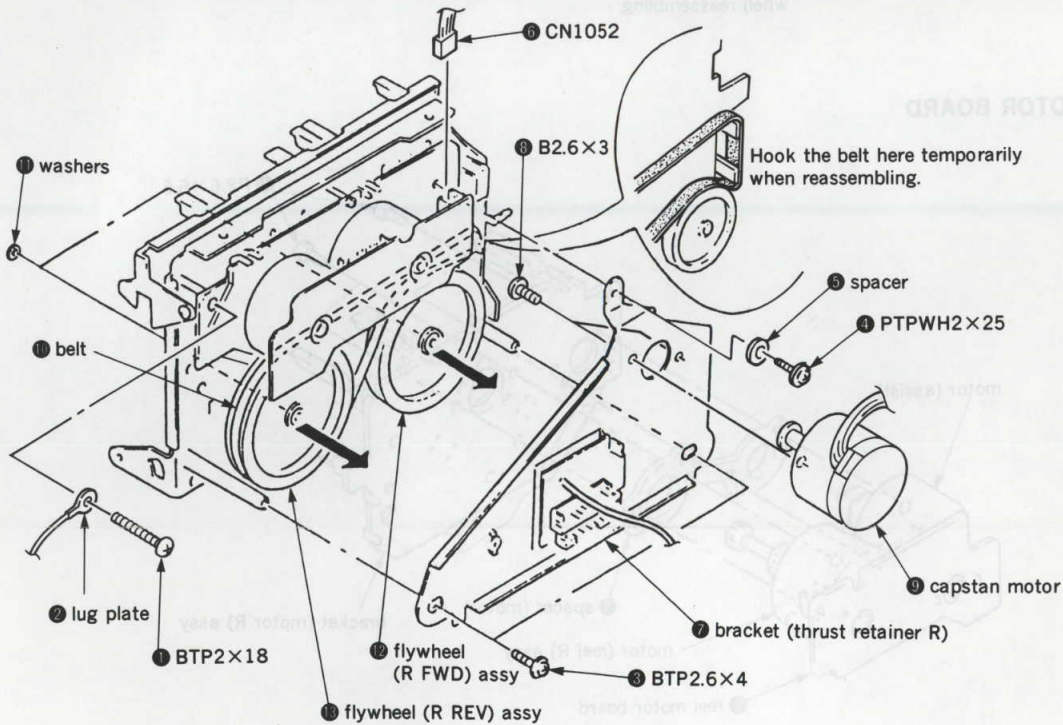
2-6. PINCH LEVER, HEAD



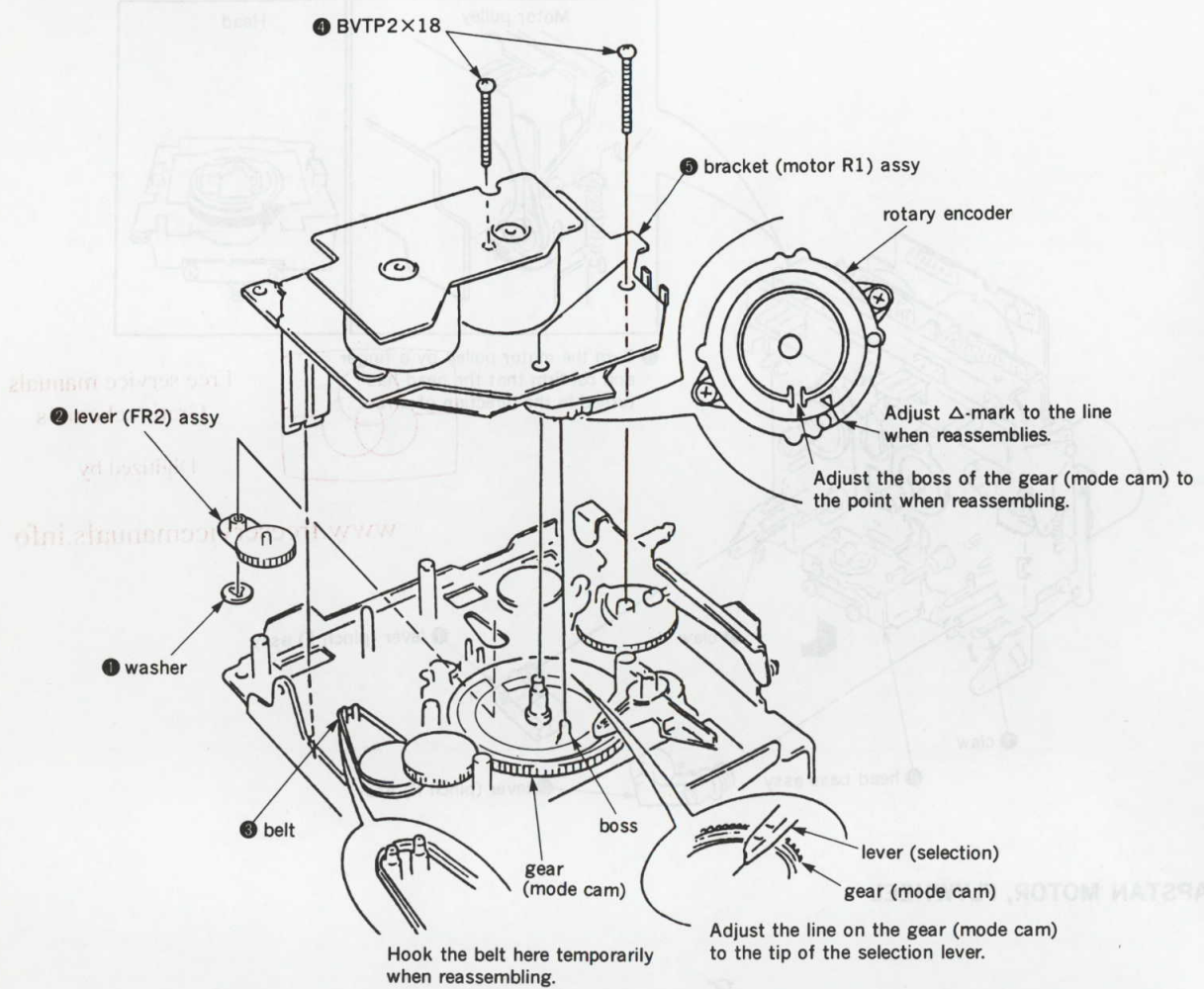
Free service manuals
 Gratis schema's
 Digitized by

www.freeservicemanuals.info

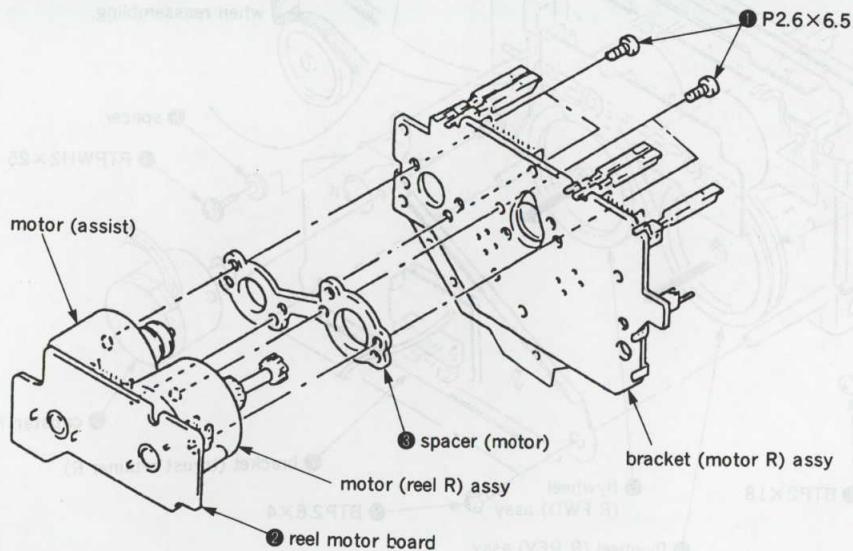
2-7. CAPSTAN MOTOR, FLYWHEEL



2-8. BRACKET (MOTOR R1) ASSY



2-9. REEL MOTOR BOARD



SECTION 3 MECHANICAL ADJUSTMENTS

PRECAUTION

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

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

Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	30—60g·cm (0.42—0.83 oz·inch)
FWD back tension	CQ-102C	1—5g·cm (0.014—0.063 oz·inch)
REV	CQ-102RC	30—60g·cm (0.42—0.83 oz·inch)
REV back tension	CQ-102RC	1—5g·cm (0.014—0.063 oz·inch)
FF, REW	CQ-201B	65—90g·cm (0.90—1.25 oz·inch)

SECTION 4 ELECTRICAL ADJUSTMENTS

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

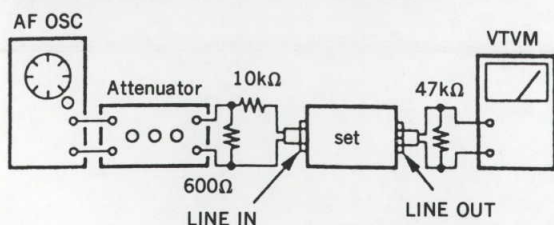
Switches and controls should be set as follows unless otherwise specified.

- (dolby) switch : OFF
 DIR MODE switch : ⇌
 TIMER switch : OFF

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—



0 dB = 775mV

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	0.32V (−7.7dB)

Test tape

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

The set will get into TEST MODE by shorting the pins of TP801 (TEST) on main board before turning the power on, and TEST MODE functions as follows :

- High speed playback
Pushing HIGH SPEED DUBBING button while playback changes to high speed playback and another push of the button returns the set to normal speed playback.
- Record memory stop
When starting recording, tape counter is reset to zero and counter memory turned on.

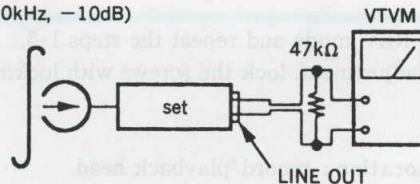
Record/Playback Head Azimuth Adjustment

DECK A **DECK B**

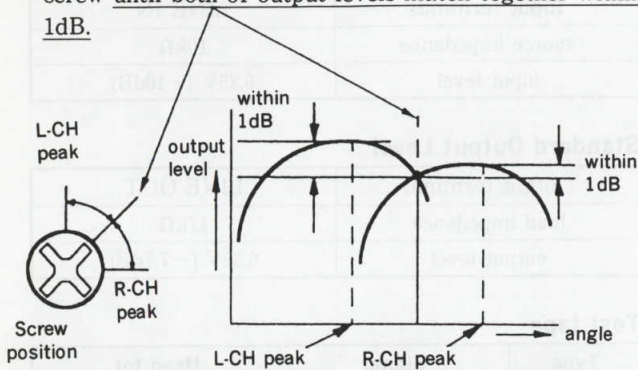
Procedure :

- Mode : FWD playback

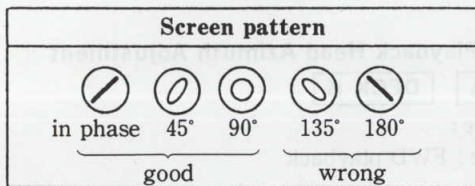
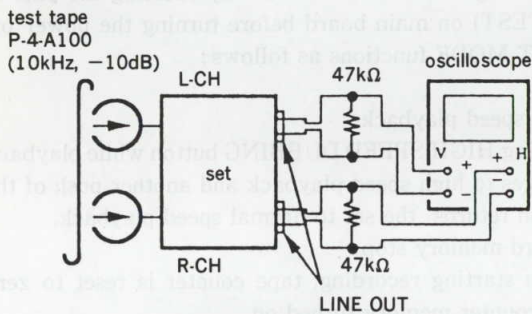
Test tape
P-4-A100
(10kHz, −10dB)



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

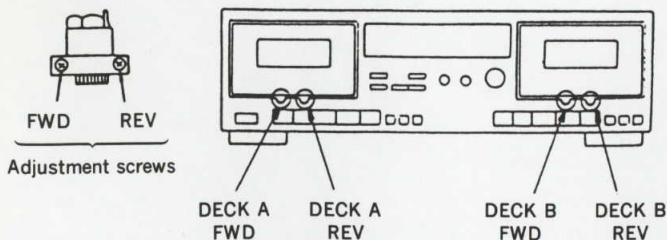


- Phase Check
Mode : playback



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

Adjustment Location : record/playback head

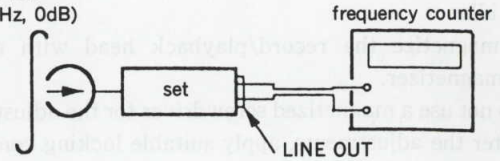


Tape Speed Adjustment [DECK A] [DECK B]

Procedure :

Mode : playback

test tape
WS-48B
(3kHz, 0dB)



(high speed adjustment)

- Short test pin TP801 (TEST) on main board.
- Set to FWD playback mode.
- Push the HIGH SPEED DUBBING button.
- Adjust RV871 (DECK A) and RV881 (DECK B) on main board so that the frequency counter reading becomes $6,000 \pm 30\text{Hz}$.
- After adjustment, disconnect TP801 shorted in step 1.

(normal speed adjustment)

- Set to FWD playback mode.
- Adjust RV872 (DECK A) and RV882 (DECK B) on main board so that the frequency counter reading becomes $3,000 \pm 15\text{Hz}$.

Frequency difference between the beginning and the end of the tape should be within 5%.

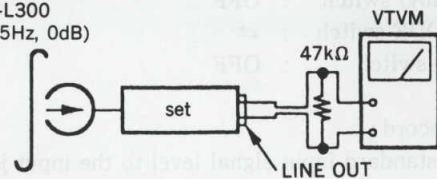
Frequency difference between deck A and deck B should be within 60Hz (high speed) or 30Hz (normal speed).

Adjustment Location : main board (See page 12.)

Playback Level Adjustment [DECK A] [DECK B]

Procedure :

test tape
P-4-L300
(315Hz, 0dB)



Adjust RV131 (L-CH) and RV231 (R-CH) for DECK A and RV151 (L-CH) and RV251 (R-CH) for DECK B so that the reading on VTVM meets the adjustment limits next page.

Adjustment Limits :

LINE OUT level : $-20 \pm 0.5\text{dB}$ (73.2–83.0mV)

Level difference between channels : less than 0.5dB

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

Adjustment Location : main board (See page 12.)

Bias Current Adjustment**Procedure :**

1. Set the RV121 (L-CH) and RV221 (R-CH) for DECK A and RV141 (L-CH) and RV214 (R-CH) for DECK B to mechanical center and turn the set recording mode.
2. Connect digital voltmeter as shown by the following table.
3. Adjust the following transformers for the minimum readings on the digital voltmeter.

DECK	Mesurement point	Adjustment	Value
A	L ① and ②, TP521	T121	less than 140mV
	R ② and ③, TP521	T221	
B	L ① and ②, TP541	T141	
	R ② and ③, TP541	T241	

Adjustment Location : main board (See page 12.)

Record Bias Adjustment

DECK A **DECK B**

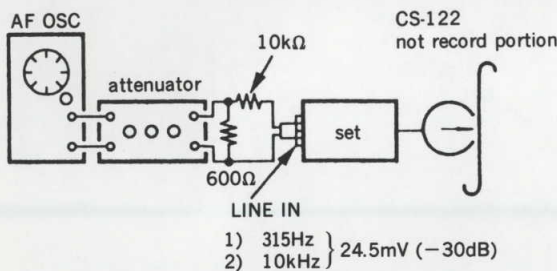
Setting :

REC LEVEL control : Standard Record (See page 9.)

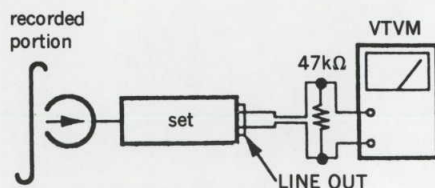
Test pin TP801 : short

Procedure :

1. Mode : record



2. Mode : playback



3. Playback the signal recorded in step 1.
4. Confirm that the 10kHz playback output is $0 \pm 0.5\text{dB}$ relative to the 315Hz output. If necessary, adjust the RV121 (L-CH) and RV221 (R-CH) for DECK A and RV141 (L-CH) and RV241 (R-CH) for DECK B, and repeat the steps 1-2.

Adjustment Location : main board (See page 12.)

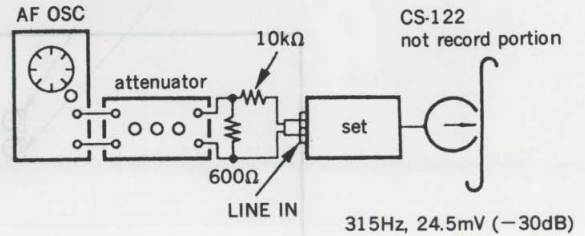
Record Level Adjustment **DECK A** **DECK B****Setting :**

REC LEVEL control : Standard Record (See page 9.)

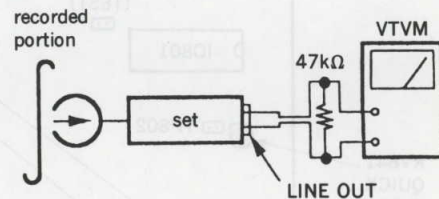
Test pin TP801 : short

Procedure :

1. Mode : record



2. Mode : playback



3. Playback the signal recorded in step 1.
4. Confirm that the signal level is within the adjustment limits below. If necessary, adjust the RV301 (L-CH) and RV401 (R-CH) for DECK A and RV351 (L-CH) and RV451 (R-CH) for DECK B, and repeat the steps 1-2.

Adjustment Limits : $-30 \text{ dB} \pm 0.5\text{dB}$ (23.1–26.0mV)

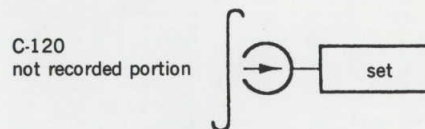
Adjustment Location : REC EQ board (See page 12.)

Quick Reverse Sensitivity Adjustment

DECK A **DECK B**

Setting :

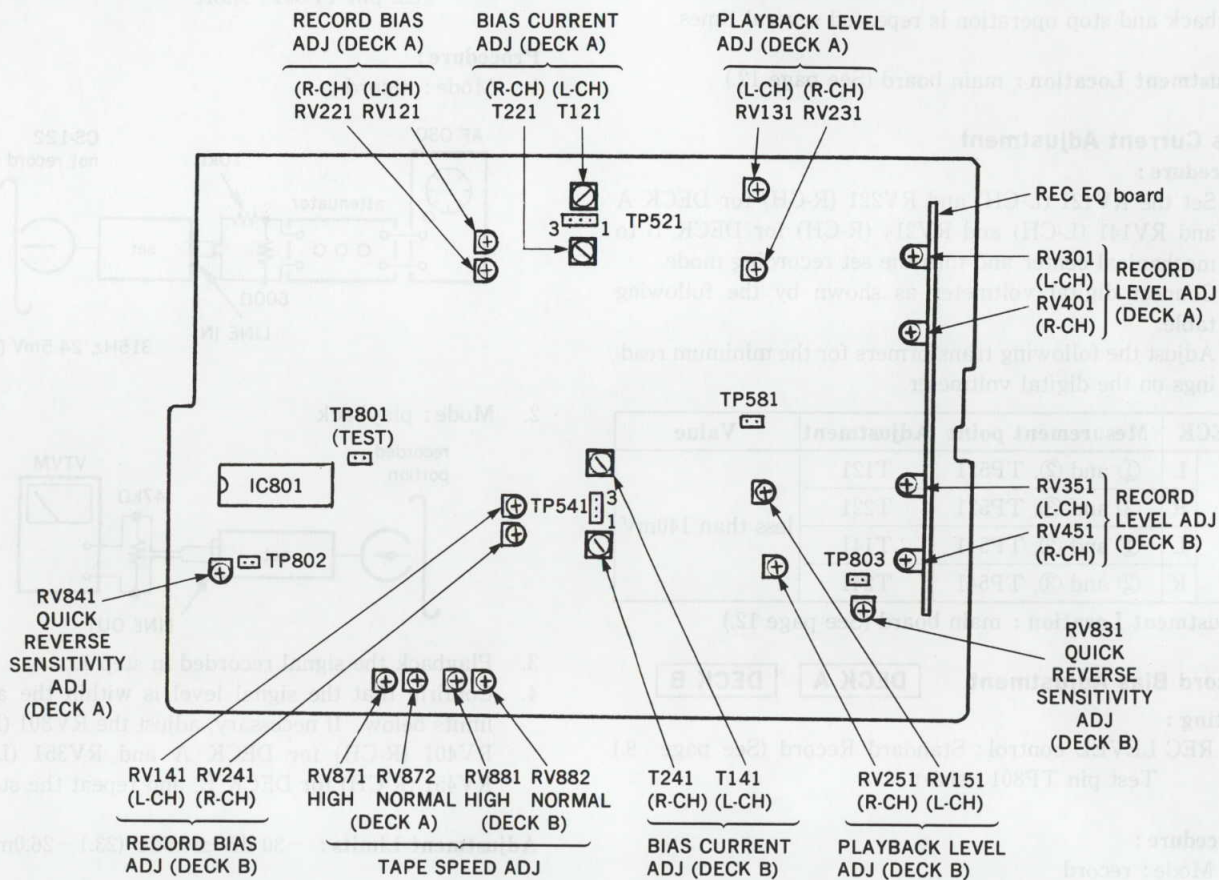
DIR MODE switch : \rightleftarrows

Adjustment procedure :

1. Connect the digital voltmeter to test point TP802 (DECK A) / TP803 (DECK B).
2. Load C-120 cassette tape and playback the leading portion in FWD mode.
3. Adjust the RV841 (DECK A) and RV831 (DECK B) for $4.5 \pm 0.5\text{V}$ reading on the digital voltmeter.
4. Playback C-120 cassette tape in FWD mode again.
5. Confirm that the reading on the digital voltmeter is "L" level at the magnetic portion of the tape.
6. Confirm that the tape stop around the tape end (border of the leading and the magnetic portions).

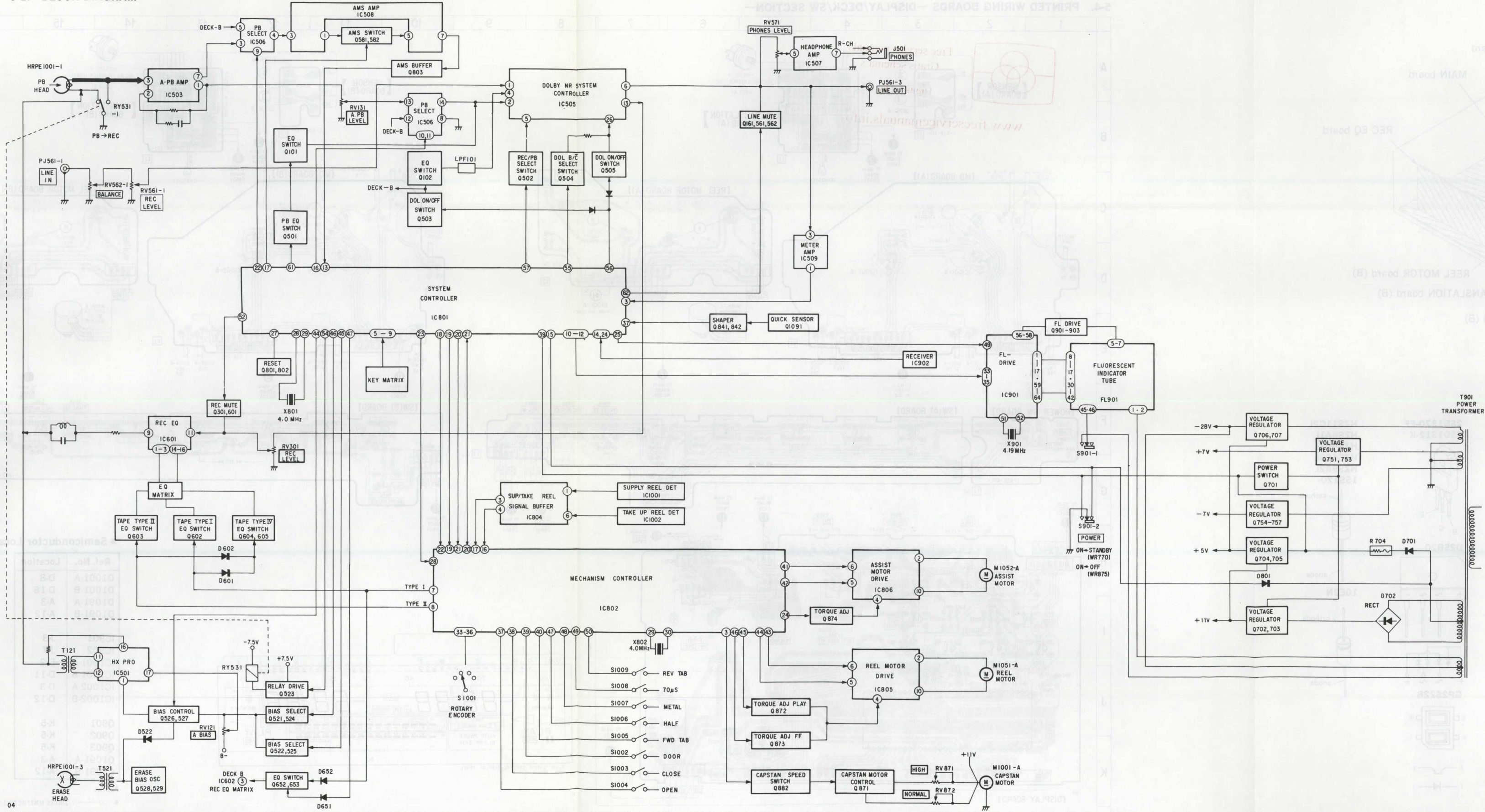
Adjustment Location : main board (See page 12.)

Adjustment Location : main board and REC EQ board
— main board (component side) —



SECTION 5 DIAGRAMS

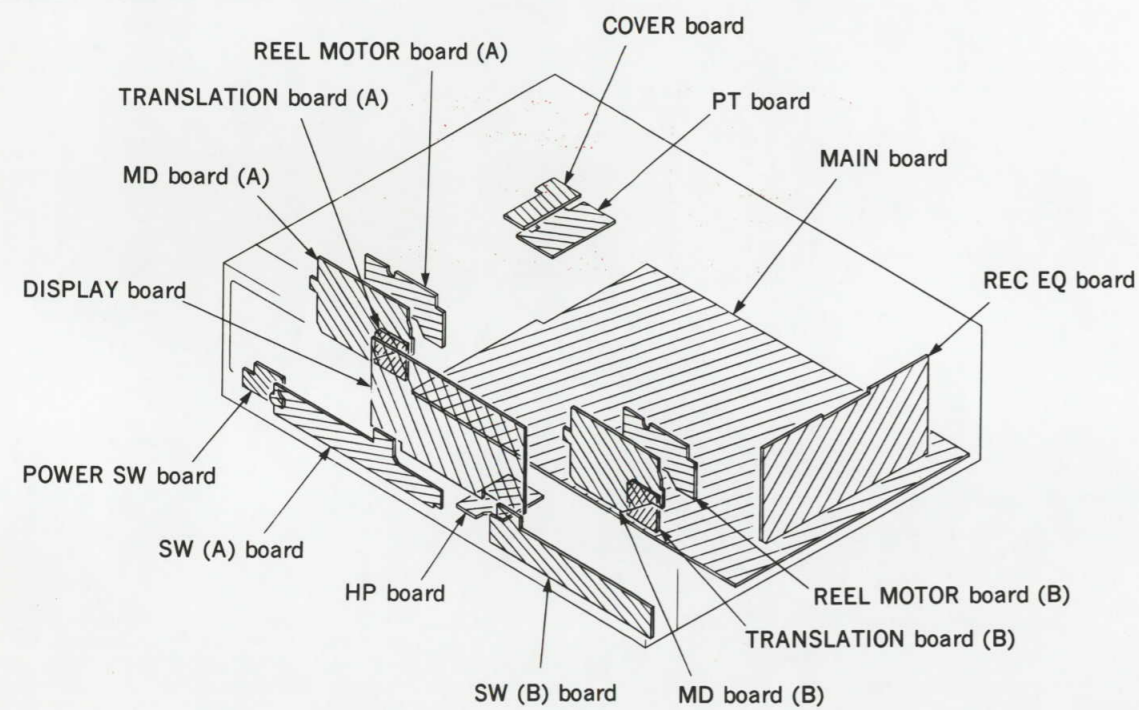
5-1. BLOCK DIAGRAM



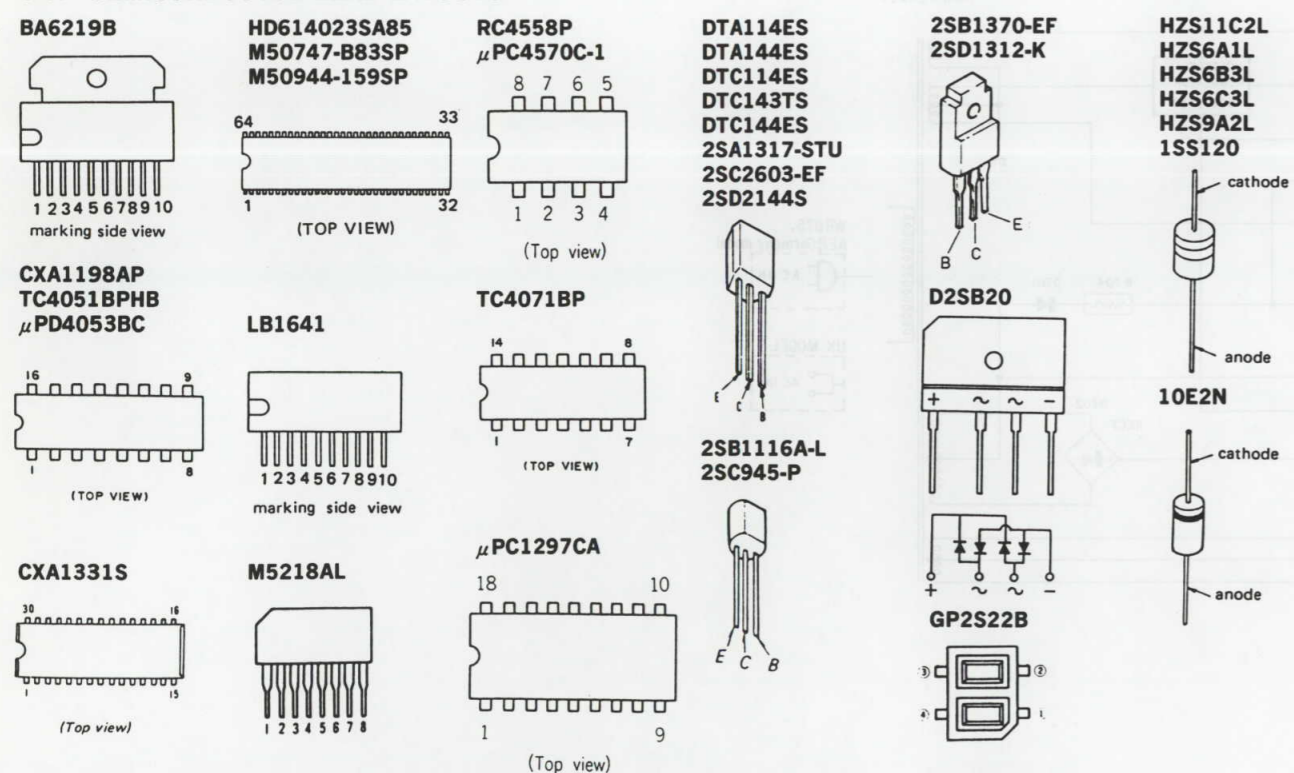
WR875, AER Germany model
AC IN

UK MODEL
AC IN

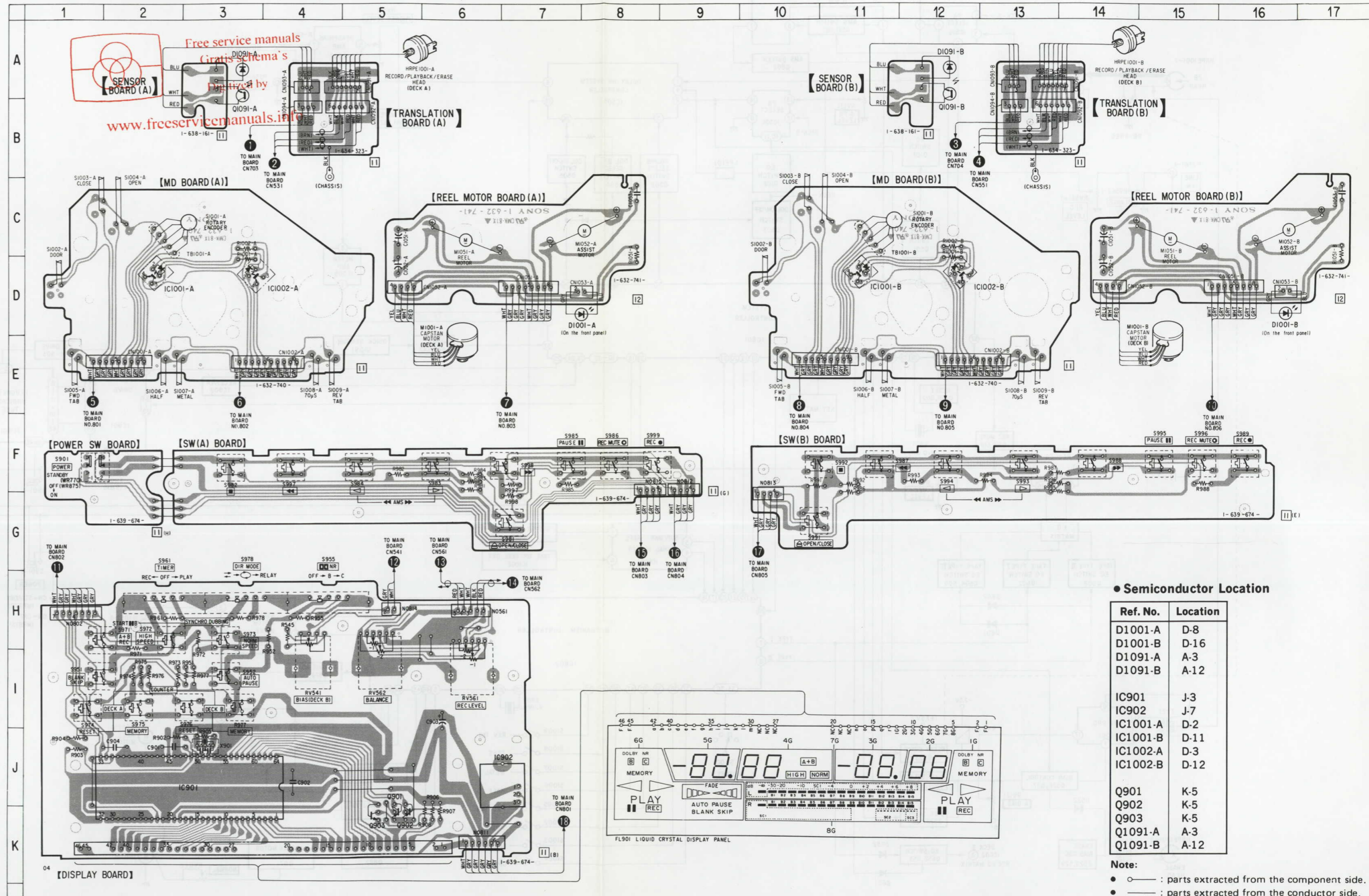
5-2. CIRCUIT BOARDS LOCATION



5-3. SEMICONDUCTOR LEAD LAYOUTS



5-4. PRINTED WIRING BOARDS —DISPLAY/DECK/SW SECTION—

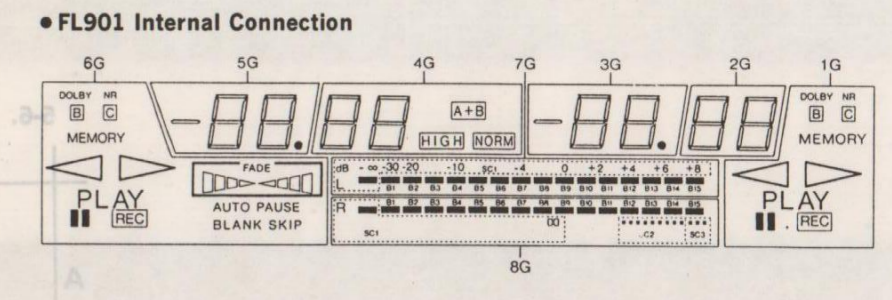
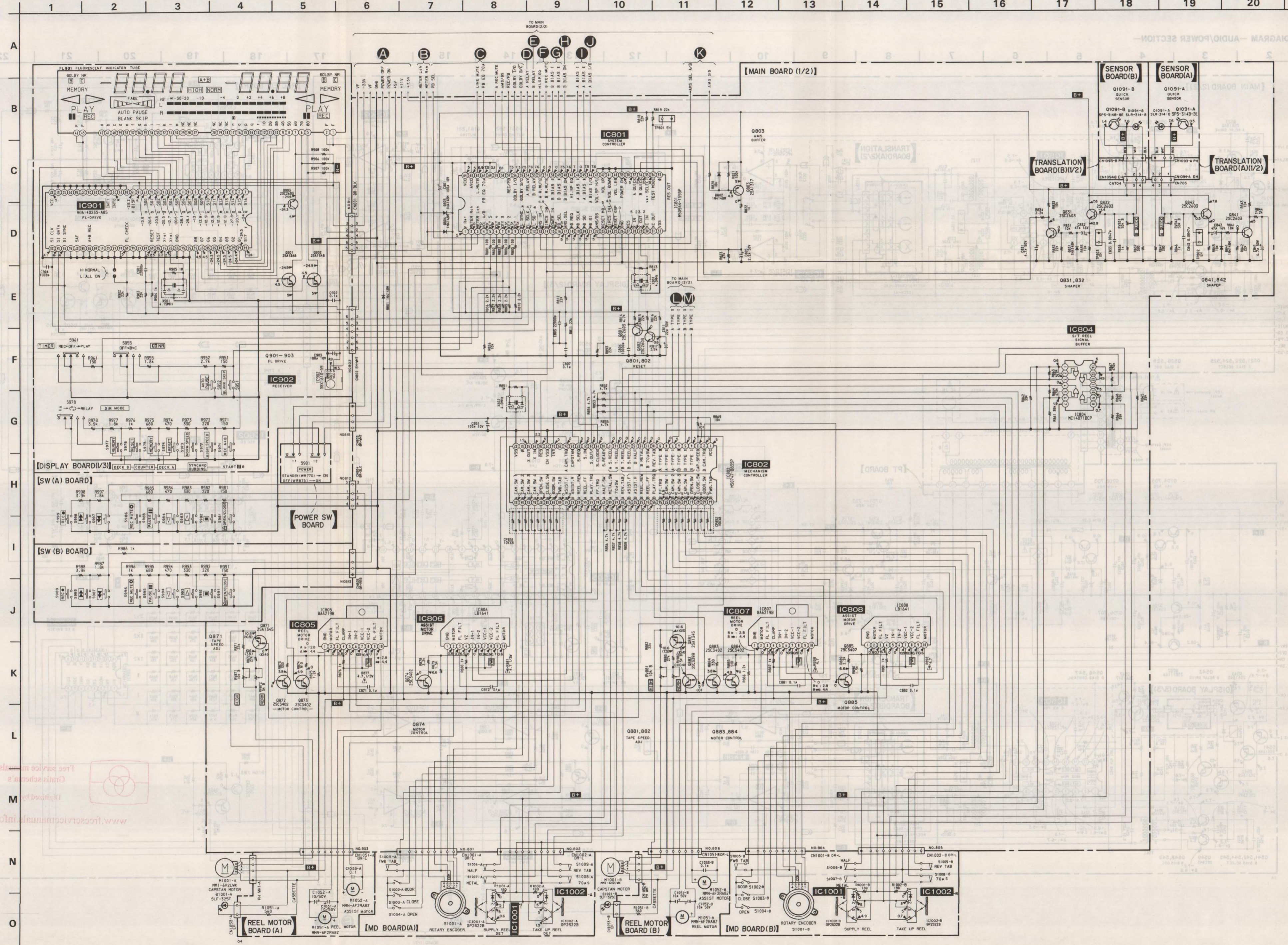


● Semiconductor Location

Ref. No.	Location
D1001-A	D-8
D1001-B	D-16
D1091-A	A-3
D1091-B	A-12
IC901	J-3
IC902	J-7
IC1001-A	D-2
IC1001-B	D-11
IC1002-A	D-3
IC1002-B	D-12
Q901	K-5
Q902	K-5
Q903	K-5
Q1091-A	A-3
Q1091-B	A-12

Note:
 ○ — : parts extracted from the component side.
 ● — : parts extracted from the conductor side.

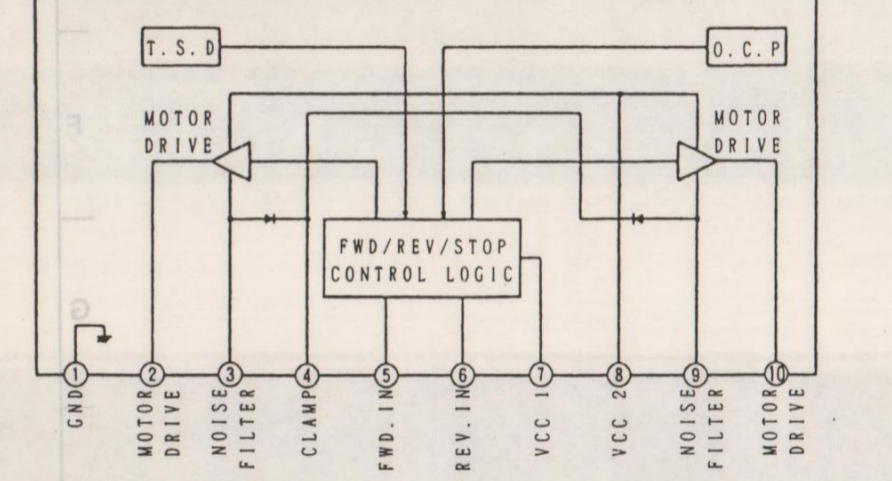
5-5. SCHEMATIC DIAGRAM — SYSTEM CONTROL/DISPLAY/DECK/SW SECTION —



ANODE CONNECTION

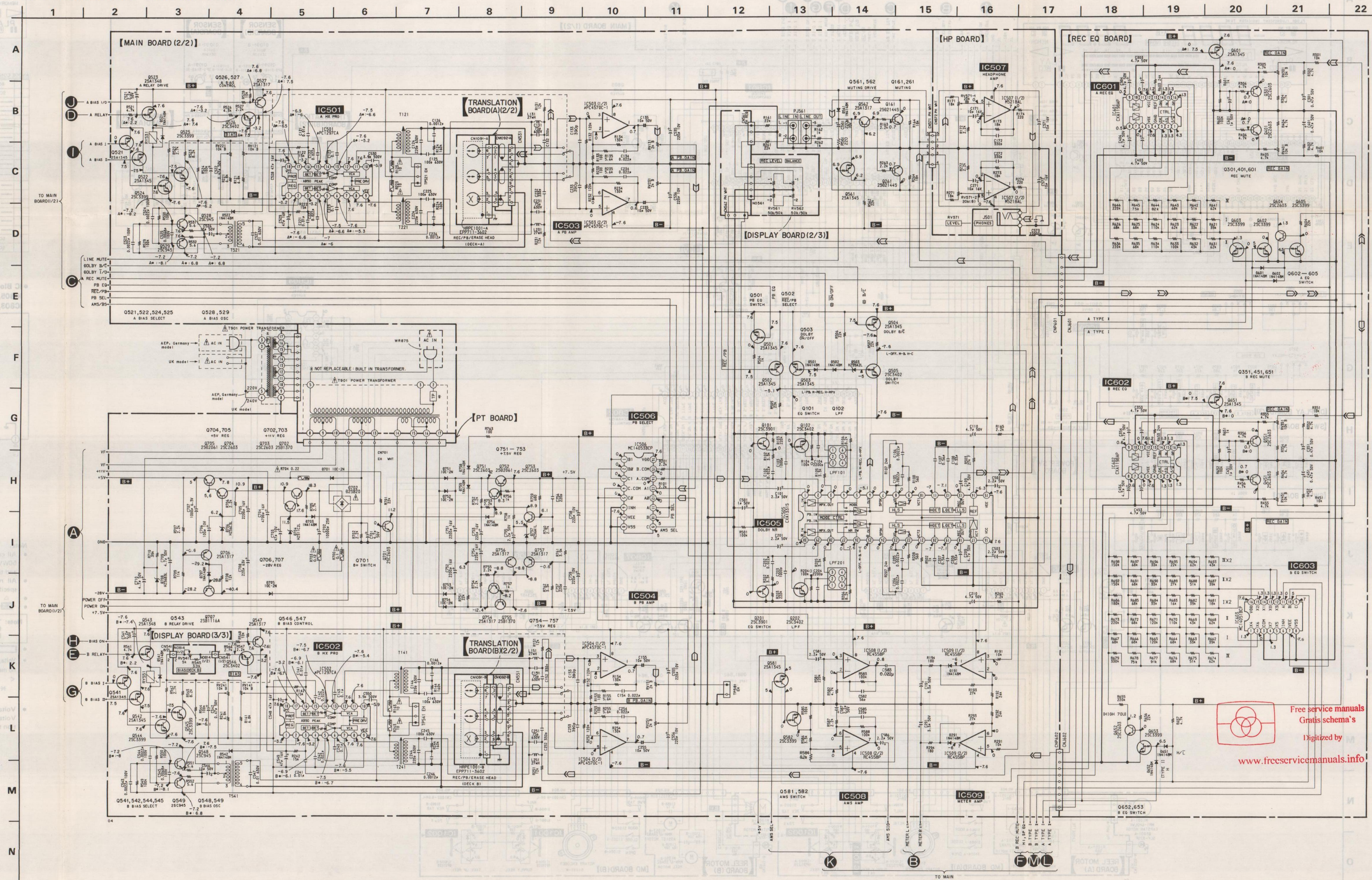
	8G	7G	6G	5G	4G	3G	2G	1G
a	SC1	SC1	DOLBY NR	a	a	a	a	DOLBY NR
b	(B1)	(B1)	b	b	b	b	b	b
c	(B4)	(B4)	c	c	c	c	c	c
d	(B6)	(B6)	PLAY	d	d	d	d	PLAY
e	(B5)	(B5)	e	e	e	e	e	e
f	(B2)	(B2)	f	f	f	f	f	f
g	(B3)	(B3)	MEMORY	g	g	g	g	MEMORY
h	(B7)	(B7)	II	h	h	h	h	II
i	(B8)	(B8)	REC	i	i	i	i	REC
j	(B9)	(B9)	FADE	j	j	j	j	j
k	(B12)	(B12)	+	k	k	k	k	-
l	(B14)	(B14)	BLANK SKIP	l	l	l	l	-
m	(B13)	(B13)	AUTOPAUSE	m	m	m	m	-
n	(B10)	(B10)	n	n	n	n	n	-
o	(B11)	(B11)	o	o	o	o	o	-
p	(B15)	(B15)	* (DP)	A+B	* (DP)	-	-	-
q	SC3	-	-	HIGH	-	-	-	-
r	SC2	-	-	NORM	-	-	-	-

IC Block Diagram
IC805, 807 BA6219B
IC803, 806, 808 LB1641



- Note:**
- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F} / 100$. 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 - Δ : internal component.
 - \square : nonflammable resistor.
- Note:** The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.
- \square : adjustment for repair.
 - Voltage is dc with respect to ground under no-signal conditions.
 - no mark: POWER ON
 - < >: HIGH SPEED DUBBING
 - *: Impossible to measure the voltage at the marked points.
- Note:** Voltages are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.

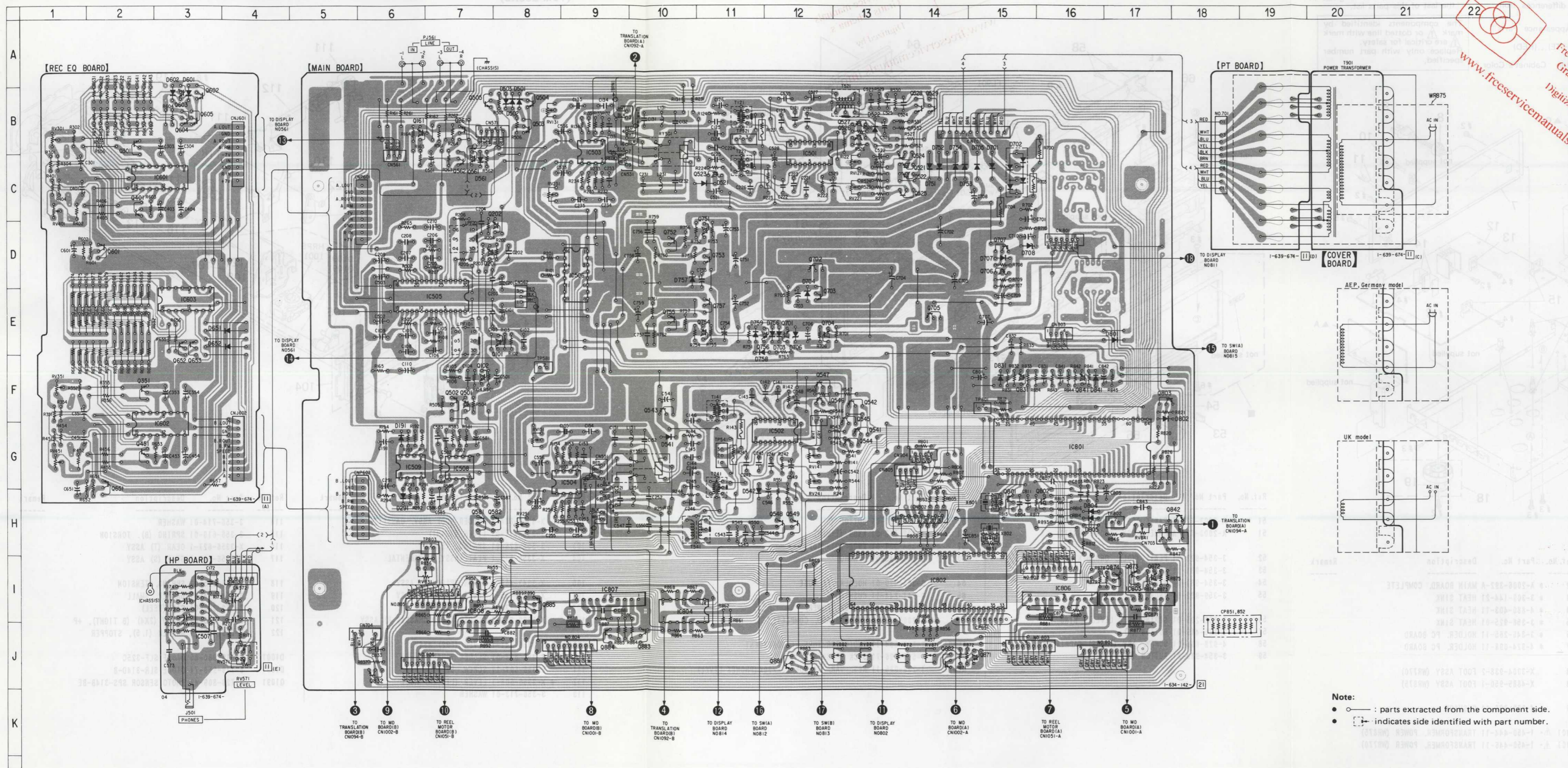
5-6. SCHEMATIC DIAGRAM —AUDIO/POWER SECTION—



- Note:**
- All capacitors are in μF unless otherwise noted. pF: μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 - --- : fusible resistor.
- Note:** The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.
- \square : adjustment for repair.
 - Voltage is dc with respect to ground under no-signal conditions. no mark: POWER ON
 $<$: HIGH SPEED DUBBING
 $*$: Impossible to measure the voltage at the marked points.
 - \blacktriangle : FWD \blacktriangleleft : REV
 \blacktriangleright : FF \blacktriangleleft : REW
 - Voltages are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
 - Signal path.
 \Rightarrow : PB (DECK A)
 \Rightarrow : REC (DECK A)
 \Rightarrow : PB (DECK B)
 \Rightarrow : REC (DECK B)

Free service manuals
 Gratis schema's
 Digitized by
 www.freeservicemanuals.info

5-7. PRINTED WIRING BOARDS —AUDIO/SYSTEM CONTROL/POWER SECTION



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D191	G-6	Q451	G-2
D291	H-6	Q501	F-7
D501	B-8	Q502	F-7
D502	B-8	Q503	B-8
D503	B-8	Q504	B-8
D521	C-11	Q505	B-7
D522	B-13	Q521	C-14
D541	G-10	Q522	C-14
D542	H-11	Q523	C-11
D561	C-7	Q524	C-14
D601	B-3	Q525	C-14
D602	B-3	Q526	B-13
D651	E-3	Q527	B-13
D652	E-3	Q528	B-14
D701	C-15	Q529	B-14
D702	C-15	Q541	G-13
D703	E-12	Q542	F-13
D704	E-12	Q543	F-10
D705	C-15	Q544	G-13
D706	E-12	Q545	G-13
D707	D-15	Q546	F-12
D708	D-15	Q547	F-12
D751	C-14	Q548	H-12
D752	C-14	Q549	H-12
D753	C-14	Q561	C-7
D754	C-14	Q562	C-7
D756	E-12	Q581	H-7
D757	D-10	Q582	H-7
D758	E-11	Q601	D-2
D759	E-11	Q602	B-3
D801	E-17	Q603	B-3
D802	F-17	Q604	B-3
D804	H-16	Q605	B-3
D805	H-16	Q651	G-2
D831	F-15	Q652	E-3
D841	F-16	Q653	E-3
IC501	B-12	Q701	E-12
IC502	G-12	Q702	D-12
IC503	C-9	Q703	E-12
IC504	G-9	Q704	E-12
IC505	E-7	Q705	E-14
IC506	D-9	Q706	D-15
IC507	I-3	Q707	D-15
IC508	G-7	Q751	D-11
IC509	G-6	Q752	D-10
IC509	G-6	Q753	D-11
IC601	C-3	Q754	E-11
IC602	G-3	Q755	E-10
IC603	E-3	Q756	E-11
IC801	G-16	Q757	E-11
IC802	I-14	Q801	H-15
IC804	I-10	Q802	H-16
IC805	I-17	Q803	F-17
IC806	I-16	Q831	F-15
IC807	I-9	Q832	J-6
IC808	I-7	Q841	F-16
		Q842	H-18
Q101	E-8	Q871	J-15
Q102	F-7	Q872	I-17
Q161	B-6	Q873	I-17
Q201	D-7	Q874	I-17
Q202	D-8	Q881	J-12
Q261	B-7	Q882	J-14
Q301	B-2	Q883	J-10
Q351	F-2	Q884	J-9
Q401	C-2	Q885	I-8

Note:
 • ○ — : parts extracted from the component side.
 • □ — indicates side identified with part number.

**SECTION 6
EXPLODED VIEWS**

NOTE:

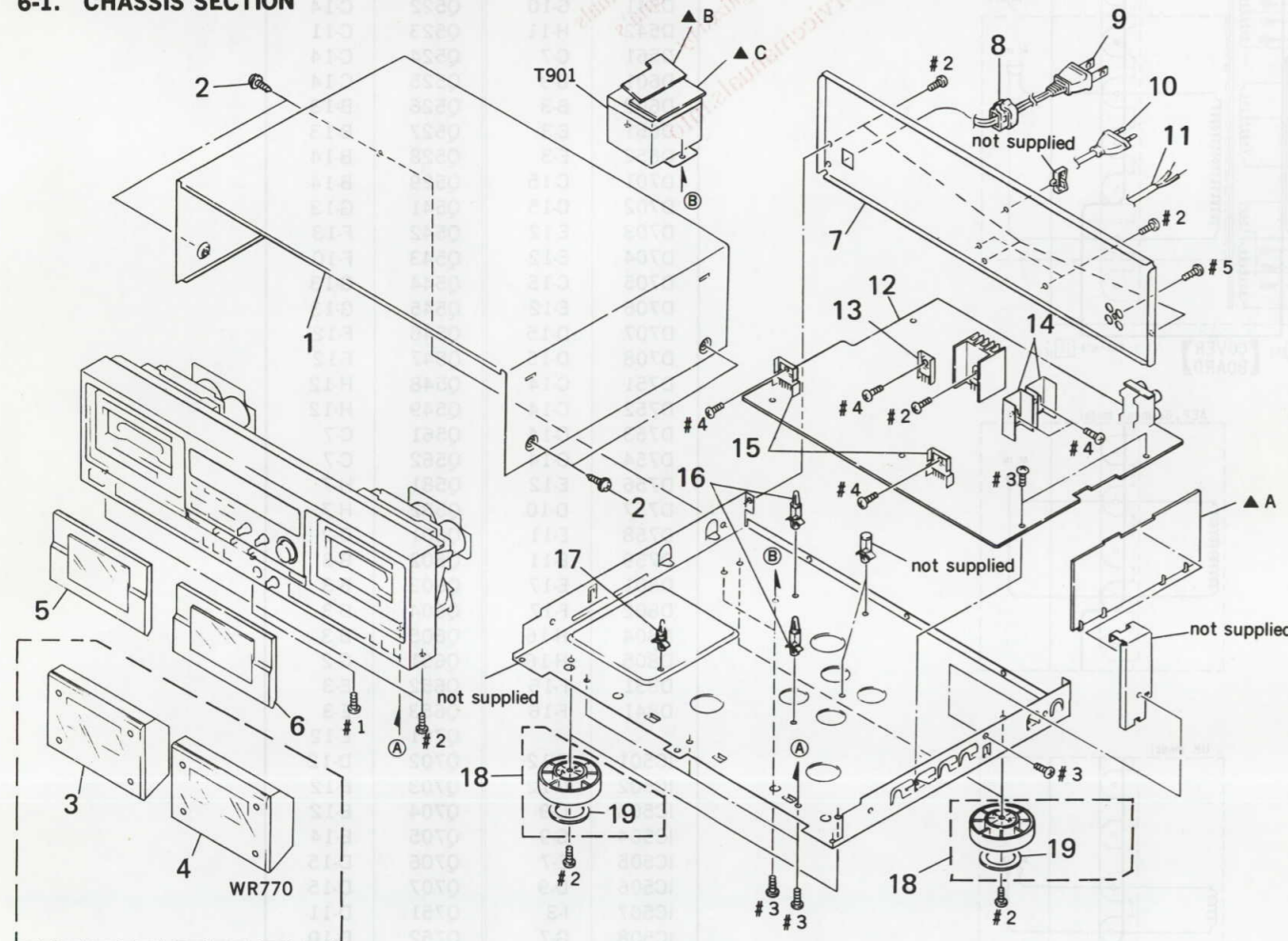
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

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

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

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

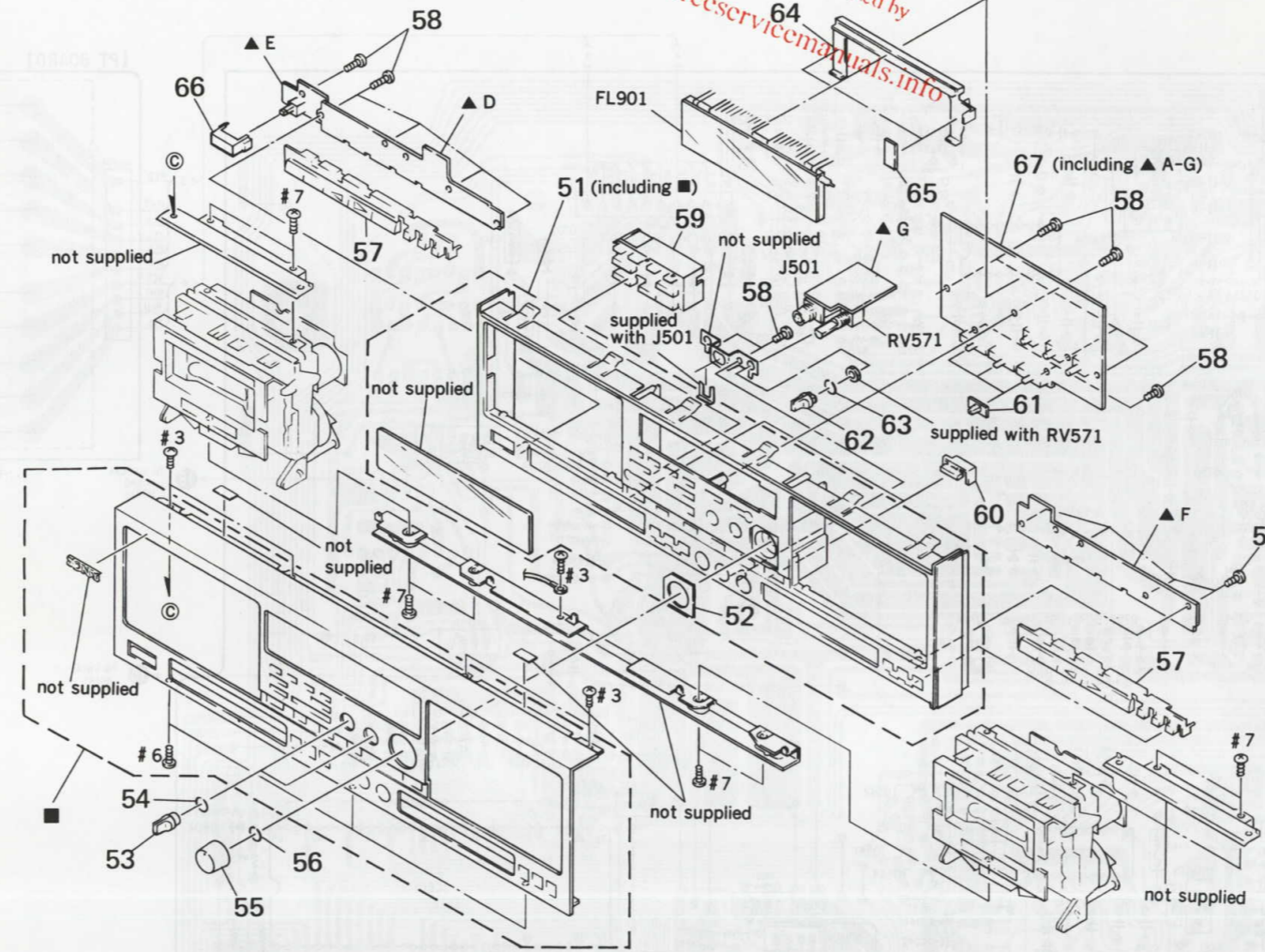
6-1. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	4-925-039-61	CASE	
2	3-704-366-01	SCREW (CASE) (M3X8)	
3	X-3363-200-1	LID (A) ASSY, CASSETTE (WR770)	
4	X-3363-201-1	LID (B) ASSY, CASSETTE (WR770)	
5	X-3362-492-1	LID (A) ASSY, CASSETTE (WR875)	
6	X-3362-493-1	LID (B) ASSY, CASSETTE (WR875)	
7	* 3-365-369-01	PANEL, BACK (US)	
7	* 3-365-369-11	PANEL, BACK (AEP, Germany)	
7	* 3-365-369-21	PANEL, BACK (UK)	
8	* 3-703-244-00	BUSHING (2104), CORD	
9	▲ 1-555-465-00	CORD, POWER (US)	
10	▲ 1-555-795-00	CORD, POWER, EU/0 PLUG (AEP, Germany)	
11	▲ 1-556-035-00	CORD, POWER (UK)	

Ref. No.	Part No.	Description	Remark
12	* A-2006-392-A	MAIN BOARD, COMPLETE	
13	* 3-309-144-21	HEAT SINK	
14	* 4-880-403-11	HEAT SINK	
15	* 3-356-925-01	HEAT SINK	
16	* 3-346-265-11	HOLDER, PC BOARD	
17	* 4-924-098-11	HOLDER, PC BOARD	
18	X-3304-938-2	FOOT ASSY (WR770)	
18	X-4885-950-1	FOOT ASSY (WR875)	
19	4-923-836-11	CUSHION	
T901	▲ 1-450-444-11	TRANSFORMER, POWER (WR875)	
T901	▲ 1-450-446-11	TRANSFORMER, POWER (WR770)	

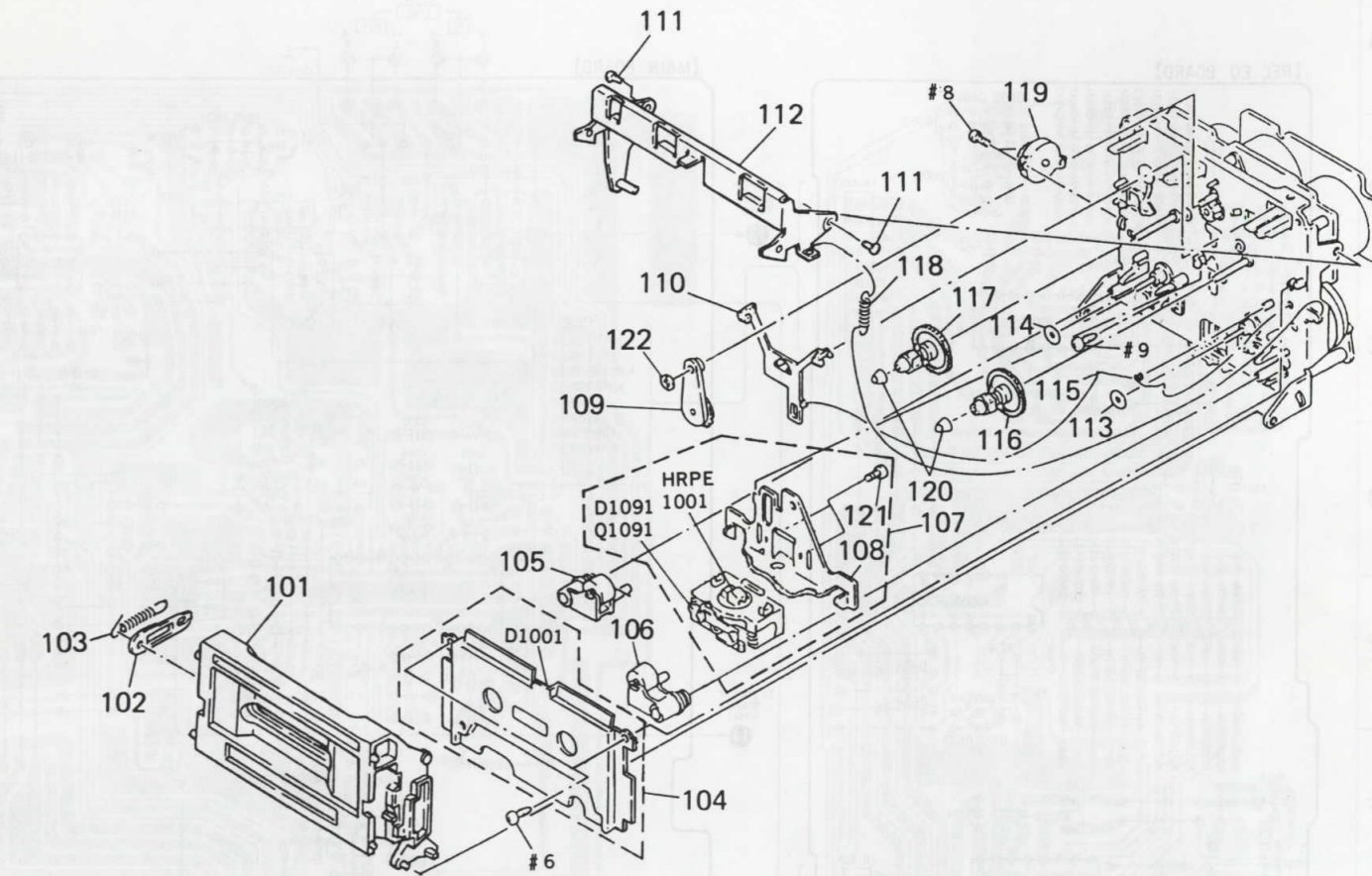
6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	A-2003-720-A	PANEL ASSY, FRONT (WR875)	
51	A-2003-721-A	PANEL ASSY, FRONT (WR770)	
52	3-354-923-01	PLATE (VOL), ORNAMENTAL	
53	3-354-931-11	KNOB (DIA. 10)	
54	3-354-981-01	SPRING (SUS), RING	
55	3-359-932-01	KNOB (REC)	
56	3-362-235-01	SPRING (REC LEVEL), RING	
57	3-365-419-01	BUTTON (A)	
58	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
59	3-354-938-21	BUTTON (B)	

Ref. No.	Part No.	Description	Remark
60	3-354-930-01	BUTTON (D)	
61	4-922-518-01	KNOB (TIMER)	
62	3-354-931-01	KNOB (DIA. 10)	
63	3-356-935-01	SPRING	
64	3-365-420-01	HOLDER, FL TUBE	
65	9-911-844-11	CUSHION	
66	3-354-932-01	BUTTON (POWER)	
67	* A-2006-393-A	PANEL BOARD, COMPLETE	
FL901	1-519-594-11	INDICATOR TUBE, FLUORESCENT	
J501	1-507-796-71	JACK (PHONES)	
RV571	1-238-085-11	RES, VAR, CARBON 20K/20K (PHONES LEVEL)	

**6-3. MECHANISM DECK SECTION 1
(TCM-200R5)**



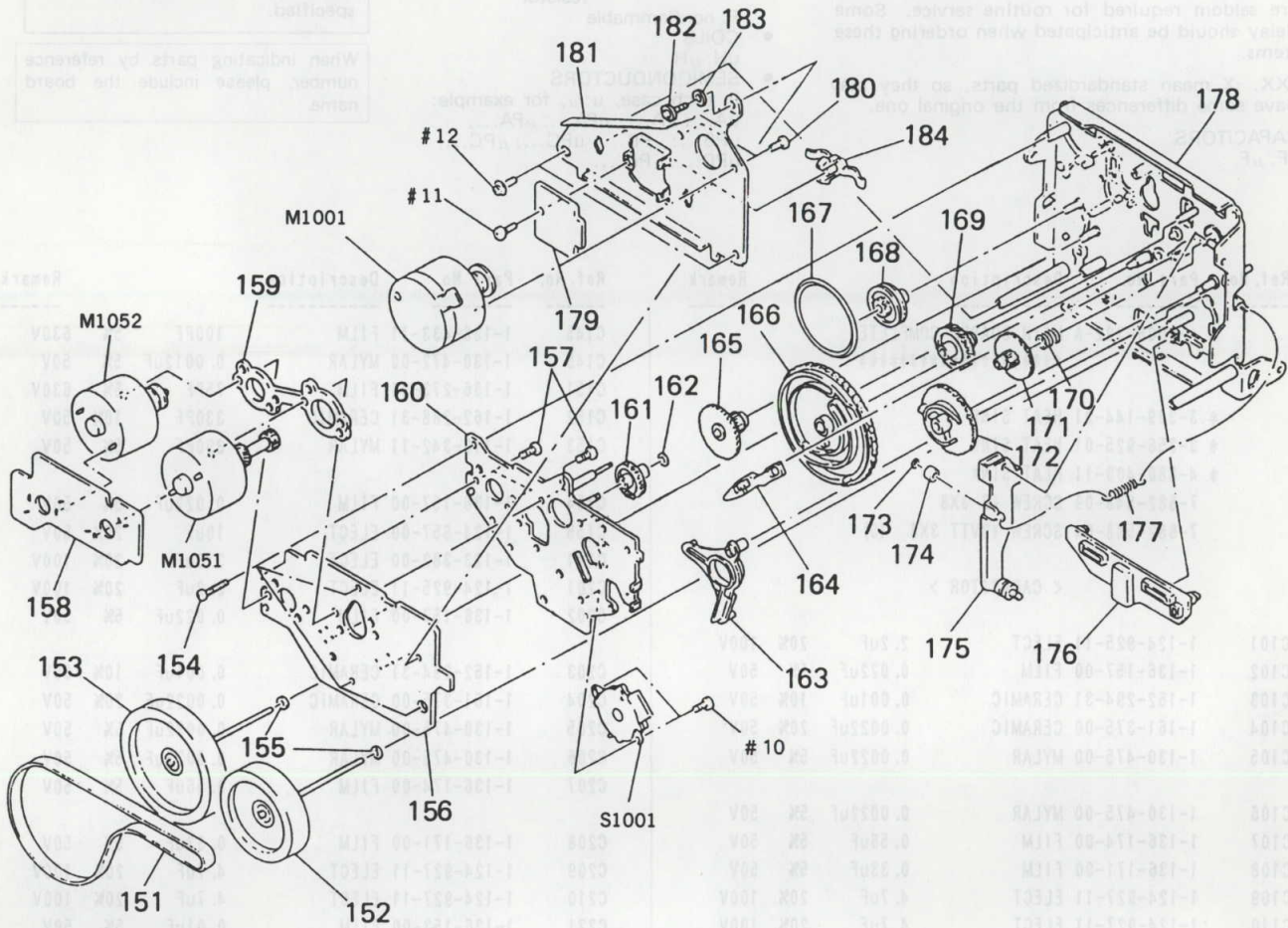
Ref. No.	Part No.	Description	Remark
101	X-3362-814-1	HOLDER (CD) ASSY, CASSETTE	
102	* 3-356-717-01	LEVER (JOINT)	
103	3-356-626-01	SPRING, TENSION	
104	X-3356-613-1	PLATE ASSY, ORNAMENTAL	
105	X-3343-456-1	LEVER (PINCH R) ASSY	
106	X-3343-455-1	LEVER (PINCH F) ASSY	
107	A-2003-723-A	BASE ASSY, HEAD	
108	X-3362-819-2	SLIDER (HEAD CHASSIS R) ASSY	
109	X-3356-641-1	LEVER (FR2) ASSY	
110	3-356-614-01	SLIDER (BRAKE)	
111	3-356-601-11	SCREW, STEP	
112	* X-3356-608-1	LEVER (LIFTER) ASSY	
113	3-356-713-01	WASHER	

Ref. No.	Part No.	Description	Remark
114	3-356-714-01	WASHER	
115	3-356-619-01	SPRING (B), TORSION	
116	X-3356-627-1	GEAR (T) ASSY	
117	X-3356-628-1	GEAR (S) ASSY	
118	3-356-625-01	SPRING, TENSION	
119	3-319-224-31	DAMPER, SMALL	
120	3-362-308-01	CAP (REEL)	
121	3-356-716-01	SCREW (2X4) (B TIGHT), +P	
122	3-669-465-11	WASHER (1.5), STOPPER	
D1001	8-719-980-85	DIODE SLF-325C	
D1091	8-719-950-74	DIODE SLR-314D-B	
Q1091	8-729-809-43	PHOTO SENSOR SPS-314B-BE	

SECTION 7
ELECTRICAL PARTS LIST

MAIN

6-4. MECHANISM DECK SECTION 2
(TCM-200R5)



Ref. No.	Part No.	Description	Remark
151	3-356-604-01	BELT (CAPSTAN)	
152	X-3356-642-1	FLYWHEEL (R FWD) ASSY	
153	X-3356-643-1	FLYWHEEL (R REV) ASSY	
154	3-355-801-01	SCREW (BTP 2X18)	
155	3-356-705-01	WASHER (CAPSTAN)	
156	* 1-632-740-11	MD BOARD	
157	3-363-804-01	SCREW (+P 2.6X6.5)	
158	* 1-632-741-11	REEL MOTOR BOARD	
159	* 3-356-628-01	SPACER (MOTOR)	
160	* X-3356-602-4	BRACKET (MOTOR R) ASSY	
161	3-356-702-01	GEAR (COMMUNICATION B)	
162	3-669-465-00	WASHER (1.5), STOPPER	
163	3-356-613-01	LEVER (MODE)	
164	3-356-617-01	LEVER (SELECTION)	
165	3-356-606-01	GEAR (MODE)	
166	3-356-615-01	GEAR (MODE CAM RR)	
167	3-356-603-01	BELT (MODE)	
168	3-356-607-01	PULLEY (MODE)	
169	3-356-703-01	GEAR (COMMUNICATION C)	

Ref. No.	Part No.	Description	Remark
170	3-356-605-01	SPRING, COMPRESSION	
171	3-356-609-01	GEAR (LOADING)	
172	3-356-616-01	GEAR (LOADING CAM)	
173	3-558-708-11	WASHER, STOPPER	
174	3-356-630-01	ROLLER (LOADING)	
175	* X-3356-606-1	LEVER (LOADING) ASSY	
176	3-356-612-01	SLIDER (REVERSE)	
177	3-356-624-01	SPRING, TENSION	
178	X-3356-634-1	CHASSIS (R2) COMPLETE ASSY, MECH	
179	* 1-634-323-11	TRANSLATION BOARD	
180	4-885-599-00	SCREW, FITTING, REINFORCEMENT	
181	* 3-356-629-01	BRACKET (THRUST RETAINER R)	
182	3-356-707-01	SCREW (+PTPWH 2X25)	
183	* 3-356-718-01	SPACER (THRUST RETAINER R)	
184	3-575-321-00	RETAINER, THRUST, CAPSTAN	
M1001	X-3356-605-1	MOTOR (CAPSTAN R) ASSY	
M1051	X-3356-638-1	MOTOR (REEL R) ASSY	
M1052	X-3356-604-1	MOTOR (ASSIST) ASSY	
S1001	1-466-525-11	ENCODER, ROTARY	

SECTION 7 ELECTRICAL PARTS LIST

MAIN

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 differences from the original one.
- CAPACITORS
 uF: μ F

- RESISTORS
 All resistors are in ohms
 METAL: Metal-film resistor
 METAL OXIDE: Metal Oxide-film resistor
 F: nonflammable
- COILS
 uH: μ H
- SEMICONDUCTORS
 In each case, u: μ , for example:
 uA...: μ A..., uPA...: μ PA...,
 uPB...: μ PB..., uPC...: μ PC...,
 uPD...: μ PD....

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	Ref. No.	Part No.	Description	Remark
	* A-2006-392-A	MAIN BOARD, COMPLETE *****		C145	1-136-433-11	FILM 100PF 5% 630V	
	* 3-309-144-21	HEAT SINK		C146	1-130-472-00	MYLAR 0.0012uF 5% 50V	
	* 3-356-925-01	HEAT SINK		C151	1-136-273-91	FILM 75PF 5% 630V	
	* 4-880-403-11	HEAT SINK		C152	1-162-288-31	CERAMIC 330PF 10% 50V	
	7-682-548-09	SCREW +B 3X8		C153	1-110-342-11	MYLAR 390PF 5% 50V	
	7-682-548-04	SCREW +BVTT 3X8 (S)		C154	1-136-157-00	FILM 0.022uF 5% 50V	
	< CAPACITOR >			C155	1-124-657-00	ELECT 10uF 20% 50V	
C101	1-124-925-11	ELECT 2.2uF 20% 100V		C191	1-123-382-00	ELECT 3.3uF 20% 100V	
C102	1-136-157-00	FILM 0.022uF 5% 50V		C201	1-124-925-11	ELECT 2.2uF 20% 100V	
C103	1-162-294-31	CERAMIC 0.001uF 10% 50V		C202	1-136-157-00	FILM 0.022uF 5% 50V	
C104	1-161-375-00	CERAMIC 0.0022uF 20% 50V		C203	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C105	1-130-475-00	MYLAR 0.0022uF 5% 50V		C204	1-161-375-00	CERAMIC 0.0022uF 20% 50V	
C106	1-130-475-00	MYLAR 0.0022uF 5% 50V		C205	1-130-475-00	MYLAR 0.0022uF 5% 50V	
C107	1-136-174-00	FILM 0.56uF 5% 50V		C206	1-130-475-00	MYLAR 0.0022uF 5% 50V	
C108	1-136-171-00	FILM 0.33uF 5% 50V		C207	1-136-174-00	FILM 0.56uF 5% 50V	
C109	1-124-927-11	ELECT 4.7uF 20% 100V		C208	1-136-171-00	FILM 0.33uF 5% 50V	
C110	1-124-927-11	ELECT 4.7uF 20% 100V		C209	1-124-927-11	ELECT 4.7uF 20% 100V	
C121	1-136-153-00	FILM 0.01uF 5% 50V		C210	1-124-927-11	ELECT 4.7uF 20% 100V	
C122	1-136-157-00	FILM 0.022uF 5% 50V		C221	1-136-153-00	FILM 0.01uF 5% 50V	
C123	1-136-165-00	FILM 0.1uF 5% 50V		C222	1-136-157-00	FILM 0.022uF 5% 50V	
C124	1-136-437-11	FILM 220PF 5% 630V		C223	1-136-165-00	FILM 0.1uF 5% 50V	
C125	1-136-433-11	FILM 100PF 5% 630V		C224	1-136-437-11	FILM 220PF 5% 630V	
C126	1-130-472-00	MYLAR 0.0012uF 5% 50V		C225	1-136-433-11	FILM 100PF 5% 630V	
C131	1-136-273-91	FILM 75PF 5% 630V		C226	1-130-472-00	MYLAR 0.0012uF 5% 50V	
C132	1-162-288-31	CERAMIC 330PF 10% 50V		C231	1-136-273-91	FILM 75PF 5% 630V	
C133	1-110-342-11	MYLAR 390PF 5% 50V		C232	1-162-288-31	CERAMIC 330PF 10% 50V	
C134	1-136-157-00	FILM 0.022uF 5% 50V		C233	1-110-342-11	MYLAR 390PF 5% 50V	
C135	1-124-657-00	ELECT 10uF 20% 50V		C234	1-136-157-00	FILM 0.022uF 5% 50V	
C141	1-136-153-00	FILM 0.01uF 5% 50V		C235	1-124-657-00	ELECT 10uF 20% 50V	
C142	1-136-157-00	FILM 0.022uF 5% 50V		C241	1-136-153-00	FILM 0.01uF 5% 50V	
C143	1-136-165-00	FILM 0.1uF 5% 50V		C242	1-136-157-00	FILM 0.022uF 5% 50V	
C144	1-136-437-11	FILM 220PF 5% 630V		C243	1-136-165-00	FILM 0.1uF 5% 50V	
				C244	1-136-437-11	FILM 220PF 5% 630V	
				C245	1-136-433-11	FILM 100PF 5% 630V	
				C246	1-130-472-00	MYLAR 0.0012uF 5% 50V	

MAIN

Ref. No.	Part No.	Description	Remark
C251	1-136-273-91	FILM	75PF 5% 630V
C252	1-162-288-31	CERAMIC	330PF 10% 50V
C253	1-110-342-11	MYLAR	390PF 5% 50V
C254	1-136-157-00	FILM	0.022uF 5% 50V
C255	1-124-657-00	ELECT	10uF 20% 50V
C291	1-123-382-00	ELECT	3.3uF 20% 100V
C501	1-124-903-11	ELECT	1uF 20% 50V
C502	1-124-925-11	ELECT	2.2uF 20% 100V
C503	1-124-925-11	ELECT	2.2uF 20% 100V
C521	1-124-925-11	ELECT	2.2uF 20% 100V
C522	1-124-902-00	ELECT	0.47uF 20% 50V
C523	1-136-230-00	FILM	0.0022uF 5% 100V
C524	1-136-230-00	FILM	0.0022uF 5% 100V
C525	1-130-856-00	FILM	0.0068uF 5% 100V
C526	1-124-907-11	ELECT	10uF 20% 50V
C527	1-136-601-11	FILM	0.01uF 5% 630V
C528	1-124-477-11	ELECT	47uF 20% 25V
C529	1-124-477-11	ELECT	47uF 20% 25V
C530	1-107-045-00	MICA	3.9PF 500V
C535	1-126-176-11	ELECT	220uF 20% 10V
C536	1-126-176-11	ELECT	220uF 20% 10V
C541	1-124-925-11	ELECT	2.2uF 20% 100V
C542	1-124-902-00	ELECT	0.47uF 20% 50V
C543	1-136-230-00	FILM	0.0022uF 5% 100V
C544	1-136-230-00	FILM	0.0022uF 5% 100V
C545	1-130-856-00	FILM	0.0068uF 5% 100V
C546	1-124-907-11	ELECT	10uF 20% 50V
C547	1-136-601-11	FILM	0.01uF 5% 630V
C548	1-124-477-11	ELECT	47uF 20% 25V
C549	1-124-477-11	ELECT	47uF 20% 25V
C550	1-107-045-00	MICA	3.9PF 500V
C555	1-126-176-11	ELECT	220uF 20% 10V
C556	1-126-176-11	ELECT	220uF 20% 10V
C561	1-124-120-11	ELECT	220uF 20% 25V
C581	1-124-925-11	ELECT	2.2uF 20% 100V
C582	1-162-217-31	CERAMIC	56PF 5% 50V
C583	1-136-157-00	FILM	0.022uF 5% 50V
C585	1-162-286-31	CERAMIC	220PF 10% 50V
C586	1-124-925-11	ELECT	2.2uF 20% 100V
C587	1-124-925-11	ELECT	2.2uF 20% 100V
C701	1-124-927-11	ELECT	4.7uF 20% 100V
C702	1-124-772-11	ELECT	10000uF 20% 25V
C703	1-124-126-00	ELECT	47uF 20% 10V
C704	1-124-898-11	ELECT	4700uF 20% 16V
C705	1-124-556-11	ELECT	2200uF 20% 16V
C706	1-124-443-00	ELECT	100uF 20% 10V
C707	1-124-471-00	ELECT	1000uF 20% 6.3V
C708	1-124-919-11	ELECT	220uF 20% 63V
C709	1-124-927-11	ELECT	4.7uF 20% 100V

Ref. No.	Part No.	Description	Remark
C710	1-124-927-11	ELECT	4.7uF 20% 100V
C751	1-124-556-11	ELECT	2200uF 20% 16V
C752	1-124-556-11	ELECT	2200uF 20% 16V
C753	1-124-120-11	ELECT	220uF 20% 25V
C754	1-124-120-11	ELECT	220uF 20% 25V
C755	1-124-925-11	ELECT	2.2uF 20% 100V
C756	1-162-286-31	CERAMIC	220PF 10% 50V
C757	1-162-286-31	CERAMIC	220PF 10% 50V
C758	1-126-176-11	ELECT	220uF 20% 10V
C759	1-126-176-11	ELECT	220uF 20% 10V
C801	1-124-443-00	ELECT	100uF 20% 10V
C803	1-161-494-00	CERAMIC	0.022uF 25V
C804	1-162-306-11	CERAMIC	0.01uF 20% 16V
C805	1-124-925-11	ELECT	2.2uF 20% 100V
C807	1-164-159-11	CERAMIC	0.1uF 50V
C811	1-126-233-11	ELECT	22uF 20% 50V
C831	1-124-927-11	ELECT	4.7uF 20% 100V
C832	1-124-477-11	ELECT	47uF 20% 25V
C833	1-130-479-00	MYLAR	0.0047uF 5% 50V
C841	1-124-927-11	ELECT	4.7uF 20% 100V
C842	1-124-477-11	ELECT	47uF 20% 25V
C843	1-130-479-00	MYLAR	0.0047uF 5% 50V
C851	1-124-443-00	ELECT	100uF 20% 10V
C871	1-164-159-11	CERAMIC	0.1uF 50V
C872	1-164-159-11	CERAMIC	0.1uF 50V
C881	1-164-159-11	CERAMIC	0.1uF 50V
C882	1-164-159-11	CERAMIC	0.1uF 50V

< CONNECTOR >

CN541	* 1-564-336-00	PIN, CONNECTOR 2P
CN561	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P
CN562	* 1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P
CN571	* 1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P
CN701	* 1-564-513-11	PLUG, CONNECTOR 10P
CN801	* 1-564-340-61	PIN, CONNECTOR 6P
CN802	* 1-564-510-11	PLUG, CONNECTOR 7P
CN803	* 1-564-338-00	PIN, CONNECTOR 4P
CN804	* 1-564-338-61	PIN, CONNECTOR 4P
CN805	* 1-564-338-71	PIN, CONNECTOR 4P



CNP601	* 1-560-339-00	PIN, CONNECTOR 9P
CNP602	* 1-560-339-00	PIN, CONNECTOR 9P

< COMPOSITION CIRCUIT BLOCK >

CP851	1-233-199-11	COMPOSITION CIRCUIT BLOCK 10KX8
CP852	1-233-199-11	COMPOSITION CIRCUIT BLOCK 10KX8

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< DIODE >					
D191	8-719-912-20	DIODE 1SS120		IC806	8-759-822-09	IC LB1641	
D291	8-719-912-20	DIODE 1SS120		IC807	8-759-973-95	IC BA6219B	
D501	8-719-912-20	DIODE 1SS120		IC808	8-759-822-09	IC LB1641	
D502	8-719-912-20	DIODE 1SS120				< COIL >	
D503	8-719-933-54	DIODE HZS9A2L		L131	1-410-780-11	INDUCTOR 27mH	
				L151	1-410-780-11	INDUCTOR 27mH	
D521	8-719-912-20	DIODE 1SS120		L231	1-410-780-11	INDUCTOR 27mH	
D522	8-719-912-20	DIODE 1SS120		L251	1-410-780-11	INDUCTOR 27mH	
D541	8-719-912-20	DIODE 1SS120				< FILTER >	
D542	8-719-912-20	DIODE 1SS120		LPF101	1-235-980-11	FILTER, LOW PASS	
D561	8-719-912-20	DIODE 1SS120		LPF201	1-235-980-11	FILTER, LOW PASS	
						< JACK >	
D701	8-719-200-77	DIODE 10E2N		PJ561	1-565-258-11	JACK, PIN 4P (LINE IN/OUT)	
D702	△ 8-719-500-36	DIODE D2SB20				< TRANSISTOR >	
D703	8-719-912-20	DIODE 1SS120		Q101	8-729-900-74	TRANSISTOR DTC143TS	
D704	8-719-933-70	DIODE HZS11C2L		Q102	8-729-900-80	TRANSISTOR DTC114ES	
D705	8-719-200-77	DIODE 10E2N		Q161	8-729-922-37	TRANSISTOR 2SD2144S	
				Q201	8-729-900-74	TRANSISTOR DTC143TS	
D706	8-719-933-41	DIODE HZS6C3L		Q202	8-729-900-80	TRANSISTOR DTC114ES	
D707	8-719-912-20	DIODE 1SS120		Q261	8-729-922-37	TRANSISTOR 2SD2144S	
D708	8-719-933-38	DIODE HZS6B3L		Q501	8-729-900-65	TRANSISTOR DTA144ES	
D751	8-719-200-77	DIODE 10E2N		Q502	8-729-900-65	TRANSISTOR DTA144ES	
D752	8-719-200-77	DIODE 10E2N		Q503	8-729-900-65	TRANSISTOR DTA144ES	
				Q504	8-729-900-65	TRANSISTOR DTA144ES	
D753	8-719-200-77	DIODE 10E2N		Q505	8-729-900-80	TRANSISTOR DTC114ES	
D754	8-719-200-77	DIODE 10E2N		Q521	8-729-900-65	TRANSISTOR DTA144ES	
D756	8-719-912-20	DIODE 1SS120		Q522	8-729-900-65	TRANSISTOR DTA144ES	
D757	8-719-933-33	DIODE HZS6A1L		Q523	8-729-900-61	TRANSISTOR DTA114ES	
D758	8-719-912-20	DIODE 1SS120		Q524	8-729-900-89	TRANSISTOR DTC144ES	
				Q525	8-729-900-89	TRANSISTOR DTC144ES	
D759	8-719-912-20	DIODE 1SS120		Q526	8-729-900-80	TRANSISTOR DTC114ES	
D801	8-719-912-20	DIODE 1SS120		Q527	8-729-821-04	TRANSISTOR 2SA1317-STU	
D802	8-719-912-20	DIODE 1SS120		Q528	8-729-194-57	TRANSISTOR 2SC945-P	
D804	8-719-912-20	DIODE 1SS120		Q529	8-729-194-57	TRANSISTOR 2SC945-P	
D805	8-719-912-20	DIODE 1SS120		Q541	8-729-900-65	TRANSISTOR DTA144ES	
				Q542	8-729-900-65	TRANSISTOR DTA144ES	
D831	8-719-912-20	DIODE 1SS120		Q543	8-729-900-61	TRANSISTOR DTA114ES	
D841	8-719-912-20	DIODE 1SS120		Q544	8-729-900-89	TRANSISTOR DTC144ES	
				Q545	8-729-900-89	TRANSISTOR DTC144ES	
		< IC >		Q546	8-729-900-80	TRANSISTOR DTC114ES	
IC501	8-759-106-56	IC uPC1297CA		Q547	8-729-821-04	TRANSISTOR 2SA1317-STU	
IC502	8-759-106-56	IC uPC1297CA		Q548	8-729-194-57	TRANSISTOR 2SC945-P	
IC503	8-759-111-44	IC uPC4570C-1		Q549	8-729-194-57	TRANSISTOR 2SC945-P	
IC504	8-759-111-44	IC uPC4570C-1		Q561	8-729-900-65	TRANSISTOR DTA144ES	
IC505	8-752-035-94	IC CXA1331S					
IC506	8-759-140-53	IC uPD4053BC					
IC508	8-759-945-58	IC RC4558P					
IC509	8-759-945-58	IC RC4558P					
IC801	8-759-636-41	IC M50944-159SP					
IC802	8-759-633-86	IC M50747-883SP					
IC804	8-759-240-71	IC TC4071BP					
IC805	8-759-973-95	IC BA6219B					

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

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q562	8-729-821-04	TRANSISTOR 2SA1317-STU		R133	1-249-405-11	CARBON 100	5% 1/4W
Q581	8-729-900-65	TRANSISTOR DTA144ES		R134	1-247-882-11	CARBON 130K	5% 1/4W
Q582	8-729-900-89	TRANSISTOR DTC144ES		R135	1-249-426-11	CARBON 5.6K	5% 1/4W
Q701	8-729-620-05	TRANSISTOR 2SC2603-EF		R141	1-249-427-11	CARBON 6.8K	5% 1/4W
Q702	8-729-924-90	TRANSISTOR 2SB1370-EF		R142	1-249-431-11	CARBON 15K	5% 1/4W
Q703	8-729-620-05	TRANSISTOR 2SC2603-EF		R143	△ 1-219-153-11	FUSIBLE 10	5% 1/4W F
Q704	8-729-620-05	TRANSISTOR 2SC2603-EF		R144	1-247-884-11	CARBON 160K	5% 1/4W
Q705	8-729-111-55	TRANSISTOR 2SD1312-K		R151	1-249-430-11	CARBON 12K	5% 1/4W
Q706	8-729-821-04	TRANSISTOR 2SA1317-STU		R152	1-247-881-00	CARBON 120K	5% 1/4W
Q707	8-729-140-04	TRANSISTOR 2SB1116A-L		R153	1-249-405-11	CARBON 100	5% 1/4W
Q751	8-729-620-05	TRANSISTOR 2SC2603-EF		R154	1-247-882-11	CARBON 130K	5% 1/4W
Q752	8-729-111-55	TRANSISTOR 2SD1312-K		R155	1-249-426-11	CARBON 5.6K	5% 1/4W
Q753	8-729-620-05	TRANSISTOR 2SC2603-EF		R161	1-249-433-11	CARBON 22K	5% 1/4W
Q754	8-729-821-04	TRANSISTOR 2SA1317-STU		R162	1-249-417-11	CARBON 1K	5% 1/4W
Q755	8-729-924-90	TRANSISTOR 2SB1370-EF		R163	1-249-421-11	CARBON 2.2K	5% 1/4W
Q756	8-729-821-04	TRANSISTOR 2SA1317-STU		R164	1-249-432-11	CARBON 18K	5% 1/4W
Q757	8-729-821-04	TRANSISTOR 2SA1317-STU		R165	1-249-421-11	CARBON 2.2K	5% 1/4W
Q801	8-729-620-05	TRANSISTOR 2SC2603-EF		R191	1-249-429-11	CARBON 10K	5% 1/4W
Q802	8-729-620-05	TRANSISTOR 2SC2603-EF		R192	1-247-864-11	CARBON 24K	5% 1/4W
Q803	8-729-821-04	TRANSISTOR 2SA1317-STU		R193	1-249-434-11	CARBON 27K	5% 1/4W
Q831	8-729-620-05	TRANSISTOR 2SC2603-EF		R194	1-249-408-11	CARBON 180	5% 1/4W
Q832	8-729-620-05	TRANSISTOR 2SC2603-EF		R201	1-249-421-11	CARBON 2.2K	5% 1/4W
Q841	8-729-620-05	TRANSISTOR 2SC2603-EF		R202	1-249-423-11	CARBON 3.3K	5% 1/4W
Q842	8-729-620-05	TRANSISTOR 2SC2603-EF		R203	1-247-887-00	CARBON 220K	5% 1/4W
Q871	8-729-900-65	TRANSISTOR DTA144ES		R204	1-249-441-11	CARBON 100K	5% 1/4W
Q872	8-729-900-80	TRANSISTOR DTC114ES		R205	1-249-423-11	CARBON 3.3K	5% 1/4W
Q873	8-729-900-80	TRANSISTOR DTC114ES		R206	1-249-428-11	CARBON 8.2K	5% 1/4W
Q874	8-729-900-80	TRANSISTOR DTC114ES		R207	1-247-864-11	CARBON 24K	5% 1/4W
Q881	8-729-900-65	TRANSISTOR DTA144ES		R208	1-249-414-11	CARBON 560	5% 1/4W
Q882	8-729-900-89	TRANSISTOR DTC144ES		R221	1-249-427-11	CARBON 6.8K	5% 1/4W
Q883	8-729-900-80	TRANSISTOR DTC114ES		R222	1-249-431-11	CARBON 15K	5% 1/4W
Q884	8-729-900-80	TRANSISTOR DTC114ES		R223	△ 1-219-153-11	FUSIBLE 10	5% 1/4W F
Q885	8-729-900-80	TRANSISTOR DTC114ES		R224	1-247-884-11	CARBON 160K	5% 1/4W
		< RESISTOR >		R231	1-249-430-11	CARBON 12K	5% 1/4W
R101	1-249-421-11	CARBON 2.2K	5% 1/4W	R232	1-247-881-00	CARBON 120K	5% 1/4W
R102	1-249-423-11	CARBON 3.3K	5% 1/4W	R233	1-249-405-11	CARBON 100	5% 1/4W
R103	1-247-887-00	CARBON 220K	5% 1/4W	R234	1-247-882-11	CARBON 130K	5% 1/4W
R104	1-249-441-11	CARBON 100K	5% 1/4W	R235	1-249-426-11	CARBON 5.6K	5% 1/4W
R105	1-249-423-11	CARBON 3.3K	5% 1/4W	R241	1-249-427-11	CARBON 6.8K	5% 1/4W
R106	1-249-428-11	CARBON 8.2K	5% 1/4W	R242	1-249-431-11	CARBON 15K	5% 1/4W
R107	1-247-864-11	CARBON 24K	5% 1/4W	R243	△ 1-219-153-11	FUSIBLE 10	5% 1/4W F
R108	1-249-414-11	CARBON 560	5% 1/4W	R244	1-247-884-11	CARBON 160K	5% 1/4W
R121	1-249-427-11	CARBON 6.8K	5% 1/4W	R251	1-249-430-11	CARBON 12K	5% 1/4W
R122	1-249-431-11	CARBON 15K	5% 1/4W	R252	1-247-881-00	CARBON 120K	5% 1/4W
R123	△ 1-219-153-11	FUSIBLE 10	5% 1/4W F	R253	1-249-405-11	CARBON 100	5% 1/4W
R124	1-247-884-11	CARBON 160K	5% 1/4W	R254	1-247-882-11	CARBON 130K	5% 1/4W
R131	1-249-430-11	CARBON 12K	5% 1/4W	R255	1-249-426-11	CARBON 5.6K	5% 1/4W
R132	1-247-881-00	CARBON 120K	5% 1/4W	R261	1-249-433-11	CARBON 22K	5% 1/4W
				R262	1-249-417-11	CARBON 1K	5% 1/4W

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

MAIN

Ref. No.	Part No.	Description	Value	Power	Remark	Ref. No.	Part No.	Description	Value	Power	Remark
R263	1-249-421-11	CARBON	2.2K	5%	1/4W	R703	△ 1-219-154-11	FUSIBLE	0.12	10%	1/4W F
R264	1-249-432-11	CARBON	18K	5%	1/4W	R704	△ 1-219-136-11	FUSIBLE	0.22	10%	1/4W F
R265	1-249-421-11	CARBON	2.2K	5%	1/4W	R705	1-249-422-11	CARBON	2.7K	5%	1/4W
R291	1-249-429-11	CARBON	10K	5%	1/4W	R706	1-249-421-11	CARBON	2.2K	5%	1/4W
R292	1-247-864-11	CARBON	24K	5%	1/4W	R707	1-249-421-11	CARBON	2.2K	5%	1/4W
R293	1-249-434-11	CARBON	27K	5%	1/4W	R708	1-249-430-11	CARBON	12K	5%	1/4W
R294	1-249-408-11	CARBON	180	5%	1/4W	R709	1-247-856-00	CARBON	11K	5%	1/4W
R501	1-249-441-11	CARBON	100K	5%	1/4W	R710	1-249-436-11	CARBON	39K	5%	1/4W
R502	1-249-417-11	CARBON	1K	5%	1/4W	R751	1-249-433-11	CARBON	22K	5%	1/4W
R503	1-215-455-00	METAL	27K	1%	1/6W	R752	1-249-421-11	CARBON	2.2K	5%	1/4W
R504	1-249-417-11	CARBON	1K	5%	1/4W	R753	1-249-421-11	CARBON	2.2K	5%	1/4W
R505	1-249-433-11	CARBON	22K	5%	1/4W	R754	1-249-421-11	CARBON	2.2K	5%	1/4W
R506	1-249-433-11	CARBON	22K	5%	1/4W	R755	1-249-421-11	CARBON	2.2K	5%	1/4W
R507	1-249-433-11	CARBON	22K	5%	1/4W	R756	1-249-417-11	CARBON	1K	5%	1/4W
R521	1-249-425-11	CARBON	4.7K	5%	1/4W	R757	1-249-417-11	CARBON	1K	5%	1/4W
R522	1-249-422-11	CARBON	2.7K	5%	1/4W	R758	1-249-417-11	CARBON	1K	5%	1/4W
R523	1-249-428-11	CARBON	8.2K	5%	1/4W	R759	1-249-415-11	CARBON	680	5%	1/4W
R524	1-249-441-11	CARBON	100K	5%	1/4W	R760	1-249-422-11	CARBON	2.7K	5%	1/4W
R526	1-247-846-11	CARBON	4.3K	5%	1/4W	R761	1-249-424-11	CARBON	3.9K	5%	1/4W
R527	1-249-421-11	CARBON	2.2K	5%	1/4W	R762	1-249-423-11	CARBON	3.3K	5%	1/4W
R528	1-249-429-11	CARBON	10K	5%	1/4W	R763	1-249-405-11	CARBON	100	5%	1/4W
R529	1-249-441-11	CARBON	100K	5%	1/4W	R801	1-249-405-11	CARBON	100	5%	1/4W
R530	1-249-441-11	CARBON	100K	5%	1/4W	R802	1-249-405-11	CARBON	100	5%	1/4W
R531	1-249-390-11	CARBON	5.6	5%	1/6W	R803	1-249-405-11	CARBON	100	5%	1/4W
R532	1-249-390-11	CARBON	5.6	5%	1/6W	R804	1-249-405-11	CARBON	100	5%	1/4W
R541	1-249-425-11	CARBON	4.7K	5%	1/4W	R805	1-249-405-11	CARBON	100	5%	1/4W
R542	1-249-422-11	CARBON	2.7K	5%	1/4W	R806	1-249-421-11	CARBON	2.2K	5%	1/4W
R543	1-249-428-11	CARBON	8.2K	5%	1/4W	R807	1-249-421-11	CARBON	2.2K	5%	1/4W
R544	1-249-441-11	CARBON	100K	5%	1/4W	R808	1-249-421-11	CARBON	2.2K	5%	1/4W
R546	1-249-422-11	CARBON	2.7K	5%	1/4W	R809	1-249-421-11	CARBON	2.2K	5%	1/4W
R547	1-249-421-11	CARBON	2.2K	5%	1/4W	R810	1-249-421-11	CARBON	2.2K	5%	1/4W
R548	1-249-429-11	CARBON	10K	5%	1/4W	R811	1-249-433-11	CARBON	22K	5%	1/4W
R549	1-249-441-11	CARBON	100K	5%	1/4W	R812	1-249-433-11	CARBON	22K	5%	1/4W
R550	1-249-441-11	CARBON	100K	5%	1/4W	R813	1-247-903-00	CARBON	1M	5%	1/4W
R551	1-249-390-11	CARBON	5.6	5%	1/6W	R814	1-249-425-11	CARBON	4.7K	5%	1/4W
R552	1-249-390-11	CARBON	5.6	5%	1/6W	R815	1-249-433-11	CARBON	22K	5%	1/4W
R561	1-249-409-11	CARBON	220	5%	1/4W	R816	1-249-433-11	CARBON	22K	5%	1/4W
R562	1-249-433-11	CARBON	22K	5%	1/4W	R817	1-249-424-11	CARBON	3.9K	5%	1/4W
R581	1-247-887-00	CARBON	220K	5%	1/4W	R818	1-249-433-11	CARBON	22K	5%	1/4W
R582	1-249-425-11	CARBON	4.7K	5%	1/4W	R819	1-249-433-11	CARBON	22K	5%	1/4W
R583	1-249-441-11	CARBON	100K	5%	1/4W	R820	1-249-429-11	CARBON	10K	5%	1/4W
R584	1-249-428-11	CARBON	8.2K	5%	1/4W	R821	1-249-441-11	CARBON	100K	5%	1/4W
R585	1-249-441-11	CARBON	100K	5%	1/4W	R822	1-249-417-11	CARBON	1K	5%	1/4W
R586	1-249-423-11	CARBON	3.3K	5%	1/4W	R823	1-249-437-11	CARBON	47K	5%	1/4W
R587	1-249-421-11	CARBON	2.2K	5%	1/4W	R826	1-249-429-11	CARBON	10K	5%	1/4W
R588	1-249-441-11	CARBON	100K	5%	1/4W	R831	1-249-429-11	CARBON	10K	5%	1/4W
R700	△ 1-219-119-11	FUSIBLE	0.1	5%	1/4W F	R832	1-249-433-11	CARBON	22K	5%	1/4W
R701	1-249-433-11	CARBON	22K	5%	1/4W	R833	1-249-429-11	CARBON	10K	5%	1/4W
R702	1-249-421-11	CARBON	2.2K	5%	1/4W	R834	1-249-421-11	CARBON	2.2K	5%	1/4W

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

MAIN

MD

Ref. No.	Part No.	Description	Value	Tolerance	Power	Remark
R835	1-249-429-11	CARBON	10K	5%	1/4W	
R836	1-249-417-11	CARBON	1K	5%	1/4W	
R837	1-249-412-11	CARBON	390	5%	1/4W	
R841	1-249-429-11	CARBON	10K	5%	1/4W	
R842	1-249-433-11	CARBON	22K	5%	1/4W	
R843	1-249-429-11	CARBON	10K	5%	1/4W	
R844	1-249-421-11	CARBON	2.2K	5%	1/4W	
R845	1-249-429-11	CARBON	10K	5%	1/4W	
R846	1-249-417-11	CARBON	1K	5%	1/4W	
R847	1-249-412-11	CARBON	390	5%	1/4W	
R851	1-247-903-00	CARBON	1M	5%	1/4W	
R852	1-249-425-11	CARBON	4.7K	5%	1/4W	
R853	1-249-425-11	CARBON	4.7K	5%	1/4W	
R854	1-249-425-11	CARBON	4.7K	5%	1/4W	
R855	1-249-425-11	CARBON	4.7K	5%	1/4W	
R856	1-249-425-11	CARBON	4.7K	5%	1/4W	
R857	1-249-425-11	CARBON	4.7K	5%	1/4W	
R858	1-249-425-11	CARBON	4.7K	5%	1/4W	
R859	1-249-425-11	CARBON	4.7K	5%	1/4W	
R861	1-249-436-11	CARBON	39K	5%	1/4W	
R862	1-249-436-11	CARBON	39K	5%	1/4W	
R863	1-247-895-00	CARBON	470K	5%	1/4W	
R864	1-247-895-00	CARBON	470K	5%	1/4W	
R865	1-249-436-11	CARBON	39K	5%	1/4W	
R866	1-249-436-11	CARBON	39K	5%	1/4W	
R867	1-247-895-00	CARBON	470K	5%	1/4W	
R868	1-247-895-00	CARBON	470K	5%	1/4W	
R869	1-249-429-11	CARBON	10K	5%	1/4W	
R871	1-249-433-11	CARBON	22K	5%	1/4W	
R872	1-249-434-11	CARBON	27K	5%	1/4W	
R873	1-249-411-11	CARBON	330	5%	1/4W	
R874	1-247-830-11	CARBON	910	5%	1/4W	
R875	1-249-418-11	CARBON	1.2K	5%	1/4W	
R876	1-249-417-11	CARBON	1K	5%	1/4W	
R877	△ 1-249-482-11	CARBON	4.7	5%	1/2W F	
R878	1-249-421-11	CARBON	2.2K	5%	1/4W	
R879	1-249-419-11	CARBON	1.5K	5%	1/4W	
R880	1-249-417-11	CARBON	1K	5%	1/4W	
R881	△ 1-249-482-11	CARBON	4.7	5%	1/2W F	
R882	1-249-433-11	CARBON	22K	5%	1/4W	
R883	1-249-434-11	CARBON	27K	5%	1/4W	
R884	1-249-411-11	CARBON	330	5%	1/4W	
R885	1-247-830-11	CARBON	910	5%	1/4W	
R886	1-249-418-11	CARBON	1.2K	5%	1/4W	
R887	1-249-417-11	CARBON	1K	5%	1/4W	
R888	△ 1-249-482-11	CARBON	4.7	5%	1/2W F	
R889	1-249-421-11	CARBON	2.2K	5%	1/4W	
R890	1-249-419-11	CARBON	1.5K	5%	1/4W	

Ref. No.	Part No.	Description	Value	Tolerance	Power	Remark
R891	1-249-417-11	CARBON	1K	5%	1/4W	
R892	△ 1-249-482-11	CARBON	4.7	5%	1/2W F	
R893	1-249-433-11	CARBON	22K	5%	1/4W	
< VARIABLE RESISTOR >						
RV121	1-237-459-11	RES. ADJ. CARBON	10K			
RV131	1-237-457-21	RES. ADJ. CARBON	2K			
RV141	1-237-459-11	RES. ADJ. CARBON	10K			
RV151	1-237-457-21	RES. ADJ. CARBON	2K			
RV221	1-237-459-11	RES. ADJ. CARBON	10K			
RV231	1-237-457-21	RES. ADJ. CARBON	2K			
RV241	1-237-459-11	RES. ADJ. CARBON	10K			
RV251	1-237-457-21	RES. ADJ. CARBON	2K			
RV831	1-237-461-11	RES. ADJ. CARBON	50K			
RV841	1-237-461-11	RES. ADJ. CARBON	50K			
RV871	1-237-459-11	RES. ADJ. CARBON	10K			
RV872	1-237-458-21	RES. ADJ. CARBON	5K			
RV881	1-237-459-11	RES. ADJ. CARBON	10K			
RV882	1-237-458-21	RES. ADJ. CARBON	5K			
< RELAY >						
RY531	1-515-683-11	RELAY				
RY551	1-515-683-11	RELAY				
< TRANSFORMER >						
T121	1-433-367-11	TRANSFORMER, BIAS OSCILLATION				
T141	1-433-367-11	TRANSFORMER, BIAS OSCILLATION				
T221	1-433-367-11	TRANSFORMER, BIAS OSCILLATION				
T241	1-433-367-11	TRANSFORMER, BIAS OSCILLATION				
T521	1-433-366-11	TRANSFORMER, BIAS OSCILLATION				
T541	1-433-366-11	TRANSFORMER, BIAS OSCILLATION				
< TEST PIN >						
TP521	* 1-564-506-11	PLUG, CONNECTOR	3P			
TP541	* 1-564-506-11	PLUG, CONNECTOR	3P			
TP581	* 1-564-505-11	PLUG, CONNECTOR	2P			
TP801	* 1-564-505-11	PLUG, CONNECTOR	2P			
TP802	* 1-564-505-11	PLUG, CONNECTOR	2P			
TP803	* 1-564-505-11	PLUG, CONNECTOR	2P			
< CERAMIC >						
X801	1-577-358-21	VIBRATOR, CERAMIC	4MHz			
X802	1-577-358-21	VIBRATOR, CERAMIC	4MHz			

	* 1-632-740-11	MD BOARD				

	3-356-631-01	HOLDER (SENSOR)				

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

MD COVER DISPLAY HP POWER SW PT REC EQ SW (A) SW (B)

Ref. No.	Part No.	Description	Remark		
< CONNECTOR >					
CN1001	1-506-615-11	PIN, CONNECTOR 9P			
CN1002 *	1-564-502-11	PIN, CONNECTOR 10P			
< IC >					
IC1001	8-749-920-97	IC PHOTO REFLECTOR GP2S22B			
IC1002	8-749-920-97	IC PHOTO REFLECTOR GP2S22B			
< RESISTOR >					
R1001	1-249-408-11	CARBON	180	5%	1/4W
R1002	1-249-408-11	CARBON	180	5%	1/4W
< SWITCH >					
S1002	1-570-953-11	SWITCH, PUSH (1 KEY) (DOOR)			
S1003	1-571-958-11	SWITCH, PUSH (1 KEY) (CLOSE)			
S1004	1-572-126-11	SWITCH, PUSH (1 KEY) (OPEN)			
S1005	1-572-125-11	SWITCH, LEAF (FWD TAB)			
S1006	1-572-202-11	SWITCH, LEAF (HALF)			
S1007	1-572-125-11	SWITCH, LEAF (METAL)			
S1008	1-572-125-11	SWITCH, LEAF (70uS)			
S1009	1-572-125-11	SWITCH, LEAF (REV TAB)			
< CONNECTOR >					
TB1001 *	1-569-066-11	PIN, CONNECTOR 5P			

* A-2006-393-A PANEL BOARD, COMPLETE (INCL. COVER BOARD , DISPLAY BOARD, HP BOARD, POWER SW BOARD, PT BOARD, REC EQ BOARD, SW(A) BOARD, SW(B) BOARD) *****					
3-365-420-01 HOLDER, FL TUBE					
9-911-844-XX CUSHION					
< CAPACITOR >					
C171	1-126-157-11	ELECT	10uF	20%	16V
C172	1-162-288-31	CERAMIC	330PF	10%	50V
C271	1-126-157-11	ELECT	10uF	20%	16V
C272	1-162-288-31	CERAMIC	330PF	10%	50V
C301	1-124-902-00	ELECT	0.47uF	20%	50V
C303	1-124-927-11	ELECT	4.7uF	20%	100V
C304	1-124-927-11	ELECT	4.7uF	20%	100V
C351	1-124-902-00	ELECT	0.47uF	20%	50V
C353	1-124-927-11	ELECT	4.7uF	20%	100V
C354	1-124-927-11	ELECT	4.7uF	20%	100V
C401	1-124-902-00	ELECT	0.47uF	20%	50V
C403	1-124-927-11	ELECT	4.7uF	20%	100V
C404	1-124-927-11	ELECT	4.7uF	20%	100V

Ref. No.	Part No.	Description	Remark		
C451	1-124-902-00	ELECT	0.47uF	20%	50V
C453	1-124-927-11	ELECT	4.7uF	20%	100V
C454	1-124-927-11	ELECT	4.7uF	20%	100V
C571	1-126-157-11	ELECT	10uF	20%	16V
C572	1-126-157-11	ELECT	10uF	20%	16V
C573	1-161-494-00	CERAMIC	0.022uF		25V
C601	1-124-903-11	ELECT	1uF	20%	50V
C651	1-124-903-11	ELECT	1uF	20%	50V
C901	1-161-494-00	CERAMIC	0.022uF		25V
C902	1-164-159-11	CERAMIC	0.1uF		50V
C903	1-124-443-00	ELECT	100uF	20%	10V
C904	1-162-294-31	CERAMIC	0.001uF	10%	50V
< CONNECTOR >					
CN572 *	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P			
CNJ601 *	1-563-660-11	CONNECTOR 9P			
CNJ602 *	1-563-660-11	CONNECTOR 9P			
< DIODE >					
D601	8-719-912-20	DIODE 1SS120			
D602	8-719-912-20	DIODE 1SS120			
D651	8-719-912-20	DIODE 1SS120			
D652	8-719-912-20	DIODE 1SS120			
< FLUORESCENT INDICATOR >					
FL901	1-519-594-11	INDICATOR TUBE, FLUORESCENT			
< IC >					
IC507	8-759-634-50	IC M5218AL			
IC601	8-752-038-02	IC CXA1198AP			
IC602	8-752-038-02	IC CXA1198AP			
IC603	8-759-208-06	IC TC4051BPHB			
IC901	8-759-323-40	IC HD614023SA85			
IC902	8-741-100-48	IC SBX1610-59			
< JACK >					
J501	1-507-796-71	JACK (PHONES)			
< TRANSISTOR >					
Q301	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q351	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q401	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q451	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q601	8-729-900-65	TRANSISTOR DTA144ES			
Q602	8-729-900-89	TRANSISTOR DTC144ES			
Q603	8-729-900-89	TRANSISTOR DTC144ES			
Q604	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q605	8-729-900-89	TRANSISTOR DTC144ES			

Be careful to mark the components identified by mark "A" on drawing. The wrong use is liable for safety. Proceed with care when repairing.

COVER

DISPLAY

HP

POWER SW

PT

REC EQ

SW (A)

SW (B)

Ref. No.	Part No.	Description	Remark
Q651	8-729-900-65	TRANSISTOR DTA144ES	
Q652	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q653	8-729-900-89	TRANSISTOR DTC144ES	
Q901	8-729-900-61	TRANSISTOR DTA114ES	
Q902	8-729-900-61	TRANSISTOR DTA114ES	
Q903	8-729-620-05	TRANSISTOR 2SC2603-EF	
< RESISTOR >			
R171	1-249-432-11	CARBON 18K	5% 1/4W
R172	1-249-421-11	CARBON 2.2K	5% 1/4W
R173	1-249-432-11	CARBON 18K	5% 1/4W
R174	1-249-409-11	CARBON 220	5% 1/4W
R271	1-249-432-11	CARBON 18K	5% 1/4W
R272	1-249-421-11	CARBON 2.2K	5% 1/4W
R273	1-249-432-11	CARBON 18K	5% 1/4W
R274	1-249-409-11	CARBON 220	5% 1/4W
R301	1-249-429-11	CARBON 10K	5% 1/4W
R302	1-249-425-11	CARBON 4.7K	5% 1/4W
R304	1-249-425-11	CARBON 4.7K	5% 1/4W
R305	1-249-425-11	CARBON 4.7K	5% 1/4W
R306	1-249-425-11	CARBON 4.7K	5% 1/4W
R351	1-249-429-11	CARBON 10K	5% 1/4W
R352	1-249-425-11	CARBON 4.7K	5% 1/4W
R354	1-249-425-11	CARBON 4.7K	5% 1/4W
R355	1-249-425-11	CARBON 4.7K	5% 1/4W
R356	1-249-425-11	CARBON 4.7K	5% 1/4W
R401	1-249-429-11	CARBON 10K	5% 1/4W
R402	1-249-425-11	CARBON 4.7K	5% 1/4W
R404	1-249-425-11	CARBON 4.7K	5% 1/4W
R405	1-249-425-11	CARBON 4.7K	5% 1/4W
R406	1-249-425-11	CARBON 4.7K	5% 1/4W
R451	1-249-429-11	CARBON 10K	5% 1/4W
R452	1-249-425-11	CARBON 4.7K	5% 1/4W
R454	1-249-425-11	CARBON 4.7K	5% 1/4W
R455	1-249-425-11	CARBON 4.7K	5% 1/4W
R456	1-249-425-11	CARBON 4.7K	5% 1/4W
R545	1-249-424-11	CARBON 3.9K	5% 1/4W
R601	1-249-417-11	CARBON 1K	5% 1/4W
R602	1-249-441-11	CARBON 100K	5% 1/4W
R603	1-247-864-11	CARBON 24K	5% 1/4W
R604	1-249-433-11	CARBON 22K	5% 1/4W
R621	1-249-436-11	CARBON 39K	5% 1/4W
R622	1-249-435-11	CARBON 33K	5% 1/4W
R623	1-247-874-11	CARBON 62K	5% 1/4W
R624	1-247-880-11	CARBON 110K	5% 1/4W
R625	1-249-439-11	CARBON 68K	5% 1/4W
R626	1-249-439-11	CARBON 68K	5% 1/4W
R631	1-247-874-11	CARBON 62K	5% 1/4W

Ref. No.	Part No.	Description	Remark
R632	1-247-870-11	CARBON 43K	5% 1/4W
R633	1-249-441-11	CARBON 100K	5% 1/4W
R634	1-247-880-11	CARBON 110K	5% 1/4W
R635	1-249-439-11	CARBON 68K	5% 1/4W
R636	1-247-887-00	CARBON 220K	5% 1/4W
R641	1-247-874-11	CARBON 62K	5% 1/4W
R642	1-247-872-11	CARBON 51K	5% 1/4W
R643	1-249-439-11	CARBON 68K	5% 1/4W
R644	1-249-440-11	CARBON 82K	5% 1/4W
R645	1-247-876-11	CARBON 75K	5% 1/4W
R646	1-247-887-00	CARBON 220K	5% 1/4W
R651	1-249-417-11	CARBON 1K	5% 1/4W
R652	1-249-441-11	CARBON 100K	5% 1/4W
R653	1-247-864-11	CARBON 24K	5% 1/4W
R655	1-247-887-00	CARBON 220K	5% 1/4W
R656	1-249-433-11	CARBON 62K	5% 1/4W
R657	1-249-425-11	CARBON 4.7K	5% 1/4W
R662	1-249-436-11	CARBON 39K	5% 1/4W
R663	1-249-435-11	CARBON 33K	5% 1/4W
R664	1-249-439-11	CARBON 68K	5% 1/4W
R665	1-247-881-00	CARBON 120K	5% 1/4W
R666	1-249-439-11	CARBON 68K	5% 1/4W
R667	1-249-439-11	CARBON 68K	5% 1/4W
R668	1-247-874-11	CARBON 62K	5% 1/4W
R669	1-247-870-11	CARBON 43K	5% 1/4W
R670	1-247-880-11	CARBON 110K	5% 1/4W
R671	1-247-881-00	CARBON 120K	5% 1/4W
R672	1-249-439-11	CARBON 68K	5% 1/4W
R673	1-247-887-00	CARBON 220K	5% 1/4W
R674	1-247-874-11	CARBON 62K	5% 1/4W
R675	1-247-872-11	CARBON 51K	5% 1/4W
R676	1-249-439-11	CARBON 68K	5% 1/4W
R677	1-247-878-00	CARBON 91K	5% 1/4W
R678	1-247-876-11	CARBON 75K	5% 1/4W
R679	1-247-891-00	CARBON 330K	5% 1/4W
R681	1-249-432-11	CARBON 18K	5% 1/4W
R682	1-249-436-11	CARBON 39K	5% 1/4W
R683	1-247-860-11	CARBON 16K	5% 1/4W
R684	1-249-435-11	CARBON 33K	5% 1/4W
R685	1-249-439-11	CARBON 68K	5% 1/4W
R686	1-247-885-00	CARBON 180K	5% 1/4W
R687	1-249-436-11	CARBON 39K	5% 1/4W
R688	1-247-872-11	CARBON 51K	5% 1/4W
R689	1-249-434-11	CARBON 27K	5% 1/4W
R690	1-249-435-11	CARBON 33K	5% 1/4W
R691	1-249-439-11	CARBON 68K	5% 1/4W
R692	1-247-883-00	CARBON 150K	5% 1/4W
R693	1-247-870-11	CARBON 43K	5% 1/4W
R694	1-247-874-11	CARBON 62K	5% 1/4W

COVER **DISPLAY** **HP** **POWER SW** **PT**
REC EQ **SW (A)** **SW (B)** **REEL MOTOR**

Ref. No.	Part No.	Description	Remark
R695	1-249-433-11	CARBON 22K 5%	1/4W
R696	1-249-435-11	CARBON 33K 5%	1/4W
R697	1-249-439-11	CARBON 68K 5%	1/4W
R698	1-247-883-00	CARBON 150K 5%	1/4W
R902	1-249-433-11	CARBON 22K 5%	1/4W
R903	1-249-433-11	CARBON 22K 5%	1/4W
R904	1-249-417-11	CARBON 1K 5%	1/4W
R905	1-247-903-00	CARBON 1M 5%	1/4W
R906	1-249-441-11	CARBON 100K 5%	1/4W
R907	1-249-441-11	CARBON 100K 5%	1/4W
R908	1-249-441-11	CARBON 100K 5%	1/4W
R951	1-249-407-11	CARBON 150 5%	1/4W
R952	1-249-422-11	CARBON 2.7K 5%	1/4W
R955	1-249-420-11	CARBON 1.8K 5%	1/4W
R961	1-249-407-11	CARBON 150 5%	1/4W
R971	1-249-407-11	CARBON 150 5%	1/4W
R972	1-249-409-11	CARBON 220 5%	1/4W
R973	1-249-411-11	CARBON 330 5%	1/4W
R974	1-249-413-11	CARBON 470 5%	1/4W
R975	1-249-415-11	CARBON 680 5%	1/4W
R976	1-249-417-11	CARBON 1K 5%	1/4W
R977	1-249-420-11	CARBON 1.8K 5%	1/4W
R978	1-249-424-11	CARBON 3.9K 5%	1/4W
R981	1-249-407-11	CARBON 150 5%	1/4W
R982	1-249-409-11	CARBON 220 5%	1/4W
R983	1-249-411-11	CARBON 330 5%	1/4W
R984	1-249-413-11	CARBON 470 5%	1/4W
R985	1-249-415-11	CARBON 680 5%	1/4W
R986	1-249-417-11	CARBON 1K 5%	1/4W
R987	1-249-420-11	CARBON 1.8K 5%	1/4W
R988	1-249-424-11	CARBON 3.9K 5%	1/4W
R991	1-249-407-11	CARBON 150 5%	1/4W
R992	1-249-409-11	CARBON 220 5%	1/4W
R993	1-249-411-11	CARBON 330 5%	1/4W
R994	1-249-413-11	CARBON 470 5%	1/4W
R995	1-249-415-11	CARBON 680 5%	1/4W
R996	1-249-417-11	CARBON 1K 5%	1/4W
R997	1-249-420-11	CARBON 1.8K 5%	1/4W
R998	1-249-424-11	CARBON 3.9K 5%	1/4W
< VARIABLE RESISTOR >			
RV301	1-238-547-11	RES. ADJ. CARBON 10K	
RV351	1-238-547-11	RES. ADJ. CARBON 10K	
RV401	1-238-547-11	RES. ADJ. CARBON 10K	
RV451	1-238-547-11	RES. ADJ. CARBON 10K	
RV541	1-238-952-11	RES. VAR. CARBON 5K (BIAS (DECK B))	
RV561	1-241-133-11	RES. VAR. CARBON 50K/50K (REC LEVEL)	
RV562	1-238-953-11	RES. VAR. CARBON 50K/50K (BALANCE)	
RV571	1-238-085-11	RES. VAR. CARBON 20K/20K (PHONES LEVEL)	

Ref. No.	Part No.	Description	Remark
< SWITCH >			
S901	1-554-118-00	SWITCH, PUSH (1 KEY) (POWER)	
S951	1-554-303-21	SWITCH, TACTILE (BLANK SKIP)	
S952	1-554-303-21	SWITCH, TACTILE (AUTO PAUSE)	
S955	1-571-520-11	SWITCH, SLIDE (□□NR)	
S961	1-571-520-11	SWITCH, SLIDE (TIMER)	
S971	1-554-303-21	SWITCH, TACTILE (A+B REC)	
S972	1-554-303-21	SWITCH, TACTILE (SYNCHRO DUBBING HIGH SPEED)	
S973	1-554-303-21	SWITCH, TACTILE (SYNCHRO DUBBING NORM SPEED)	
S974	1-554-303-21	SWITCH, TACTILE (COUNTER RESET (DECK A))	
S975	1-554-303-21	SWITCH, TACTILE (COUNTER MEMORY (DECK A))	
S976	1-554-303-21	SWITCH, TACTILE (COUNTER RESET (DECK B))	
S977	1-554-303-21	SWITCH, TACTILE (COUNTER MEMORY (DECK B))	
S978	1-571-520-11	SWITCH, SLIDE (DIR MODE)	
S981	1-554-303-21	SWITCH, TACTILE (△OPEN/CLOSE (DECK A))	
S982	1-554-303-21	SWITCH, TACTILE (■(DECK A))	
S983	1-554-303-21	SWITCH, TACTILE (▷(DECK A))	
S984	1-554-303-21	SWITCH, TACTILE (◁(DECK A))	
S985	1-554-303-21	SWITCH, TACTILE (PAUSE ■(DECK A))	
S986	1-554-303-21	SWITCH, TACTILE (REC MUTE ○(DECK A))	
S987	1-554-303-21	SWITCH, TACTILE (◀◀(DECK B))	
S988	1-554-303-21	SWITCH, TACTILE (▶▶(DECK B))	
S989	1-554-303-21	SWITCH, TACTILE (REC ●(DECK B))	
S991	1-554-303-21	SWITCH, TACTILE (△OPEN/CLOSE (DECK B))	
S992	1-554-303-21	SWITCH, TACTILE (■(DECK B))	
S993	1-554-303-21	SWITCH, TACTILE (▷(DECK B))	
S994	1-554-303-21	SWITCH, TACTILE (◁(DECK B))	
S995	1-554-303-21	SWITCH, TACTILE (PAUSE ■(DECK B))	
S996	1-554-303-21	SWITCH, TACTILE (REC MUTE ○(DECK B))	
S997	1-554-303-21	SWITCH, TACTILE (◀◀(DECK A))	
S998	1-554-303-21	SWITCH, TACTILE (▶▶(DECK A))	
S999	1-554-303-21	SWITCH, TACTILE (REC ●(DECK A))	
< CERAMIC >			
X901	1-577-359-21	VIBRATOR, CERAMIC 4.19MHZ	

* 1-632-741-11 REEL MOTOR BOARD			

M1051	X-3356-638-1	MOTOR (REEL R) ASSY	
M1052	X-3356-604-1	MOTOR (ASSIST) ASSY	
< CAPACITOR >			
C1051	1-124-907-11	ELECT 10uF 20% 50V	
C1052	1-124-907-11	ELECT 10uF 20% 50V	
C1053	1-164-159-11	CERAMIC 0.1uF 50V	

REEL MOTOR SENSOR TRANSLATION

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
CN1051	1-564-501-11	PIN. CONNECTOR 8P	
CN1052 *	1-564-720-11	PIN. CONNECTOR (SMALL TYPE) 4P	
CN1053 *	1-564-718-11	PIN. CONNECTOR (SMALL TYPE) 2P	
< RESISTOR >			
R1051	1-249-414-11	CARBON 560 5% 1/4W	

*	1-634-323-11	TRANSLATION BOARD	

< CONNECTOR >			
CN1091 *	1-564-709-11	PIN. CONNECTOR (SMALL TYPE) 7P	
CN1092 *	1-564-509-11	PLUG. CONNECTOR 6P	
CN1093 *	1-564-705-11	PIN. CONNECTOR (SMALL TYPE) 3P	
CN1094 *	1-564-506-11	PLUG. CONNECTOR 3P	

	1-638-161-11	SENSOR BOARD	

< DIODE >			
D1091	8-719-950-74	DIODE SLR-314D-B	
< TRANSISTOR >			
Q1091	8-729-809-43	PHOTO SENSOR SPS-314B-BE	

MISCELLANEOUS			



9	△ 1-555-465-00	CORD. POWER (US)	
10	△ 1-555-795-00	CORD. POWER, EULO PLUG (AEP, Germany)	
11	△ 1-556-035-00	CORD. POWER (UK)	
D1001	8-719-980-85	DIODE SLF-325C	
M1001	X-3356-605-1	MOTOR (CAPSTAN R) ASSY	
S1001	1-466-525-11	ENCODER. ROTARY	
T901	△ 1-450-444-11	TRANSFORMER. POWER (WR875)	
T901	△ 1-450-446-11	TRANSFORMER. POWER (WR770)	

Ref. No.	Part No.	Description	Remark
ACCESSORY & PACKING MATERIAL			

	1-559-533-11	CORD. CONNECTION	
*	3-354-913-01	CUSHION	
*	3-366-699-21	INDIVIDUAL CARTON (WR770)	
*	3-366-699-31	INDIVIDUAL CARTON (WR875)	
	3-703-450-01	INSTRUCTION (WR875)	
	3-753-345-11	MANUAL. INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP, UK)	
	3-753-345-21	MANUAL. INSTRUCTION (ENGLISH) (WR875)	
	3-753-345-41	MANUAL. INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP, Germany)	

HARDWARE LIST

# 1	7-682-547-09	SCREW +BVTT 3X6 (S)
# 2	7-682-548-09	SCREW +BVTT 3X8 (S)
# 3	7-682-547-04	SCREW +BVTT 3X6 (S)
# 4	7-682-548-04	SCREW +BVTT 3X8 (S)
# 5	7-621-849-00	SCREW (BV/RING)
# 6	7-685-133-19	SCREW +BTP 2. 6X6 TYPE2 N-S
# 7	7-685-870-01	SCREW +BVTT 3X5 (S)
# 8	7-621-255-20	SCREW +BVTT 2X4 (S)
# 9	7-621-283-00	SCREW +BVTT 2X5 (S)
#10	7-621-255-35	SCREW +BVTT 2X5 (S)
#11	7-621-770-67	SCREW +BVTT 2. 6X6 (S)
#12	7-685-131-19	SCREW +BTP 2. 6X4 TYPE2 N-S

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

TC-WR770/WR875

SONY SERVICE MANUAL

US Model
TC-WR875

AEP Model
UK Model
TC-WR770

CORRECTION-1

Correct your service manual as shown below.

 : indicates corrected portion.

Page	INCORRECT	CORRECT
10	Playback Level Adjustment : : : : Adjustment limits : LINE OUT level : $-20 \pm 0.5\text{dB}$ (73.2 — 83.0mV)	Playback Level Adjustment : : : : Adjustment limits : LINE OUT level : $-7.8 \pm 0.5\text{dB}$ (<u>0.298</u> — <u>0.334V</u>) 