

TC-FX100

SERVICE MANUAL

AEP Model
E Model



Model Name Using Similar Mechanism	TC-FX150
Tape Transport Mechanism Type	TCM-YM47CW-62

SPECIFICATIONS

Recording system 4-track 2-channel stereo
Fast-forward and rewind time
Approx. 120 sec. (with C-60 cassette)
Bias AC bias
Signal-to-noise ratio (NAB, at peak level)

Cassette	Dolby NR switch		
	OFF	B-TYPE ON	C-TYPE ON
TYPE IV (Sony METAL-ES)	58 dB	65 dB	71 dB
TYPE II (Sony UX-S)	56 dB	63 dB	69 dB
TYPE I (Sony HF-S)	54 dB	61 dB	67 dB

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

Frequency response (DOLBY NR OFF)

TYPE IV cassette (Sony METAL-ES)	30-15,000 Hz (± 3 dB, DIN) 30-13,000 Hz (OVU recording)
TYPE II cassette (Sony UX-S)	30-14,000 Hz (± 3 dB, DIN)
TYPE I cassette (Sony HF-S)	30-13,000 Hz (± 3 dB, DIN)

Wow and flutter 0.12% WRMS (NAB)
 $\pm 0.2\%$ (DIN)

Inputs

Line inputs (phono jacks)	Sensitivity	77.5 mV (-20 dB)
	Input impedance	50 k ohms

Outputs

Line outputs (phono jacks)	Rated output level	0.44 V (-5 dB) at a load impedance 47 k ohms
	Load impedance	Over 10 k ohms
Headphone output (stereo phone jack)	Output level	0.4 mW at a load impedance of 32 ohms

General

Power requirements

AEP Model
220 V AC, 50/60 Hz
E Model
120, 220 or 240 V AC, adjustable,
50/60 Hz

Power consumption

10 W

Dimensions

Approx. 430 x 117.5 x 250 mm (w/h/d)
(17 x 4 $\frac{3}{4}$ x 9 $\frac{7}{8}$ inches)


Weight

Including projecting parts and controls
Approx. 2.75 kg (6 lbs 1 oz)



Supplied accessory

Audio connecting cord (2)

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.

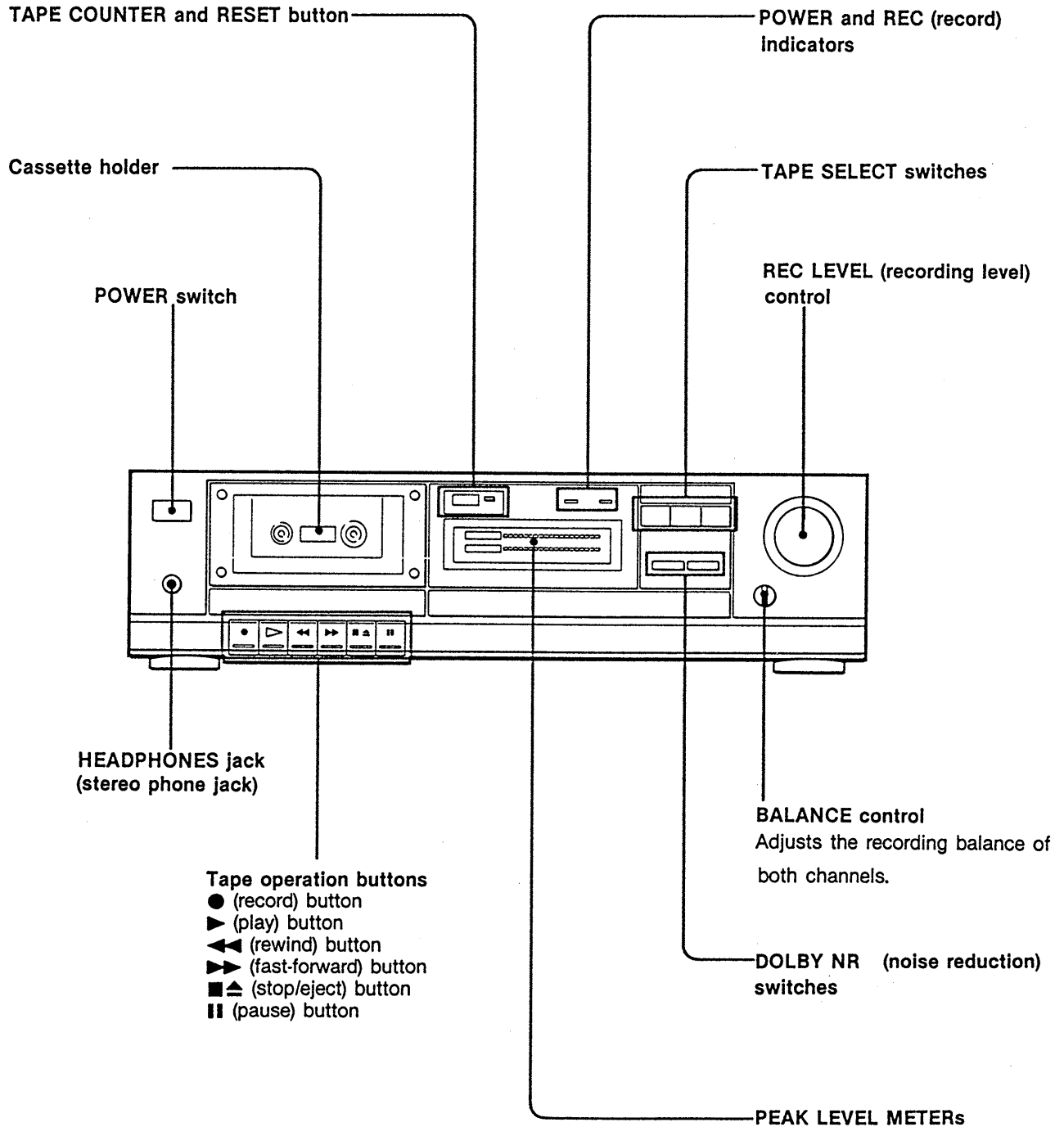
STEREO CASSETTE DECK

SONY®



SECTION 1
GENERAL

1-1. LOCATION AND FUNCTION OF CONTROLS



SECTION 2 MECHANICAL MEASUREMENT

PRECAUTION

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

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers
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 with the rated power supply voltage unless otherwise noted.

2-1. TORQUE MEASUREMENT

Torque	Torque	Meter reading
FWD	CQ-102C	30 to 70g·cm (0.43 to 0.97oz·inch)
FWD Back tension	CQ-102C	1.5 to 5.5g·cm (0.02 to 0.07oz·inch)
EF, REW	CQ-201B	63g·cm or more (0.87oz·inch or more)

SECTION 3 ELECTRICAL ADJUSTMENT

Note: The adjustment should be performed in the order given in this service manual.

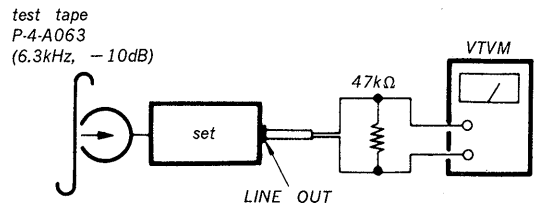
The adjustments should be performed for both L-CH and R-CH.

- Switches and controls should be set as follows unless otherwise specified.
 - DOLBY NR switch: OFF
 - 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.

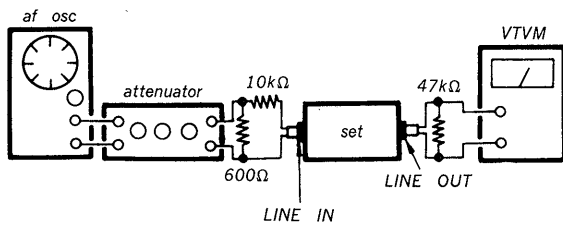
3-1. RECORD/PLAYBACK HEAD AZIMUTH ADJUSTMENT

Procedure:

1. Mode: playback



—Record Mode—



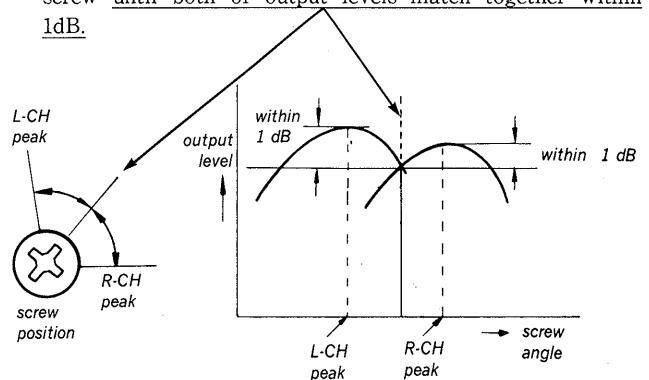
Standard Input Level

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

Standard Output Level

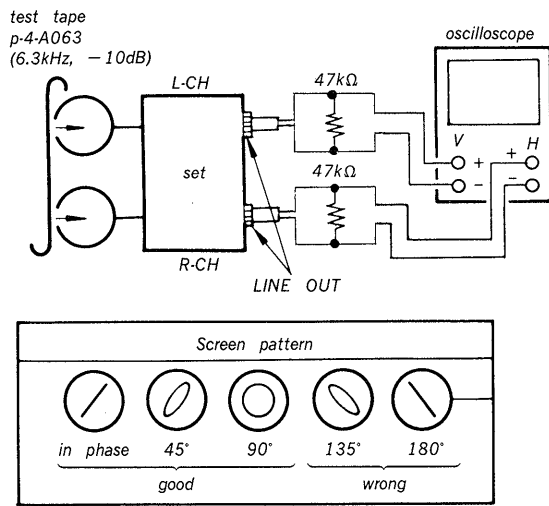
	LINE OUT
load impedance	47kΩ
output level	0.44V (-5dB)

2. 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.



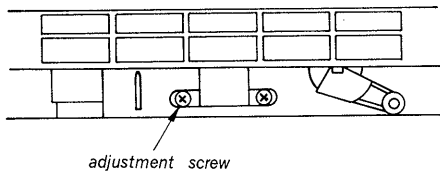
3. Phase Check

Mode : playback



Adjustment Location:

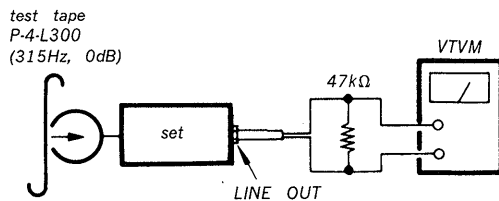
—Record/Playback head—



3-2. PLAYBACK LEVEL ADJUSTMENT

Procedure :

1. Mode : playback



Adjust RV131 (L-CH) and RV213 (R-CH) so that the specification is met.

Specification :

LINE OUT level: 0.41 to 0.46V
(-5.5 to -4.5dB)

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.

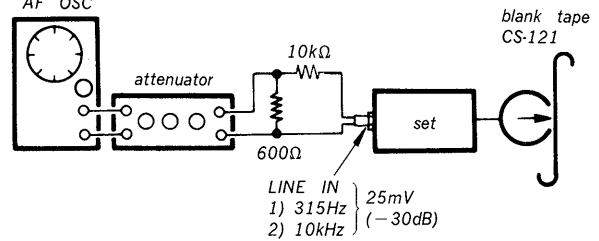
3-3. RECORD BIAS ADJUSTMENT

Setting :

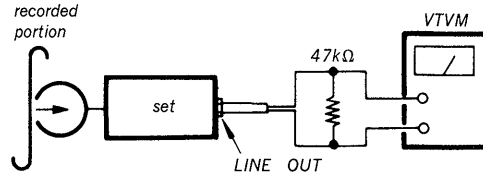
REC LEVEL control : standard record
(See page 3)

Procedure:

1. Mode : record



2. Mode : playback



Confirm that the 10kHz playback output is 0 ± 0.5 dB relative to the 315Hz output. If necessary, adjust CT381-1 (L-CH), CT381-2 (R-CH) and repeat the steps given above.

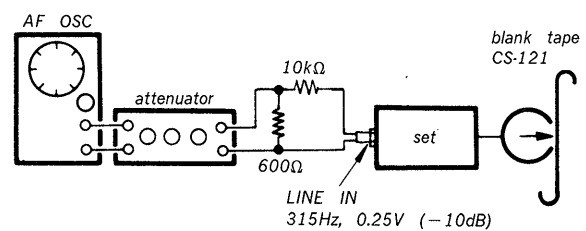
3-4. RECORD LEVEL ADJUSTMENT

Setting :

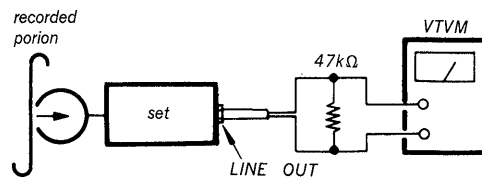
REC LEVEL control : standard record
(See page 3)

Procedure :

1. Mode : record



2. Mode : playback



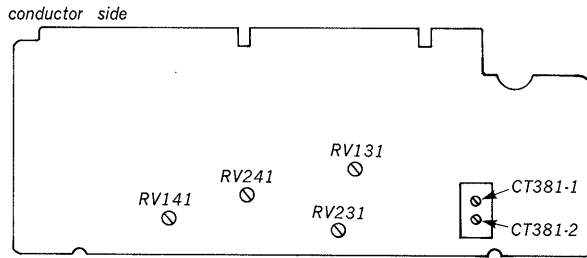
**SECTION 4
DIAGRAMS**

- Playback the signal recorded in step 1.
Confirm that the signal level is within the specification below. If necessary, adjust RV141 (L-CH), RV241 (R-CH) and repeat the step 1-3.

Specification :

LINE OUT level: 0.41 to 0.46V
(-5.5 to -4.5dB)

Adjustment Location : audio board



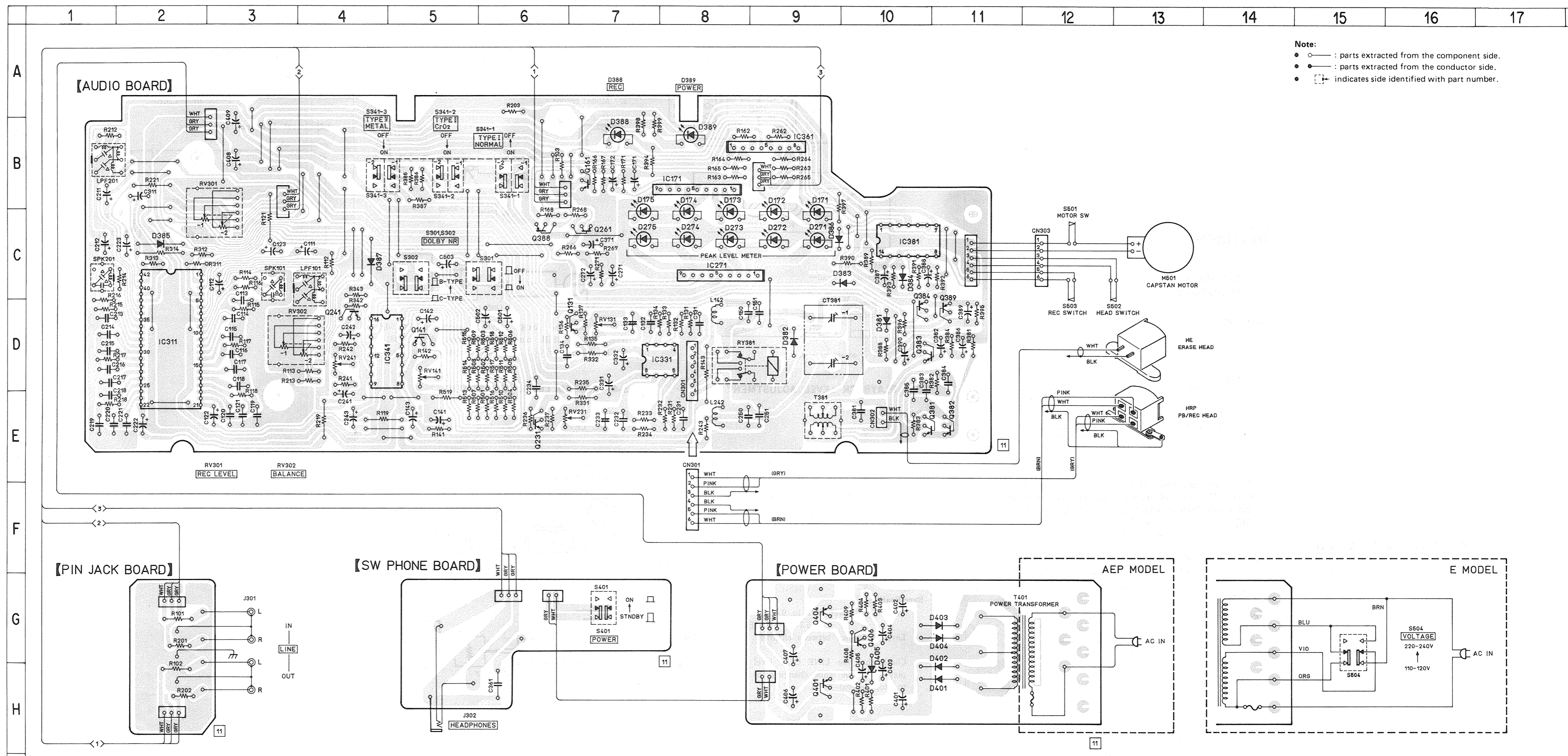
4-1. SEMICONDUCTOR LEAD LAYOUTS

<p>CXA1198AP</p> <p>(Top view)</p>	<p>BA1L3Z BN1L3Z DTC114ES 2SC634SP</p>	<p>1SS132 10E2N</p>
<p>CX20187</p> <p>(Top view)</p>	<p>BN1A4M BN1L4M 2SA1175 2SC2785</p>	<p>SEL1210S SEL1410E</p>
<p>IR2E31A</p>	<p>M4011BP</p> <p>(Top view)</p>	<p>SEL4214S SEL4414E</p>
<p>M5218L</p>	<p>2SB1375 2SD2012</p>	
<p>μPC4570C-1</p> <p>(Top view)</p>	<p>2SC1815Y</p>	
	<p>HZS7B2L</p>	

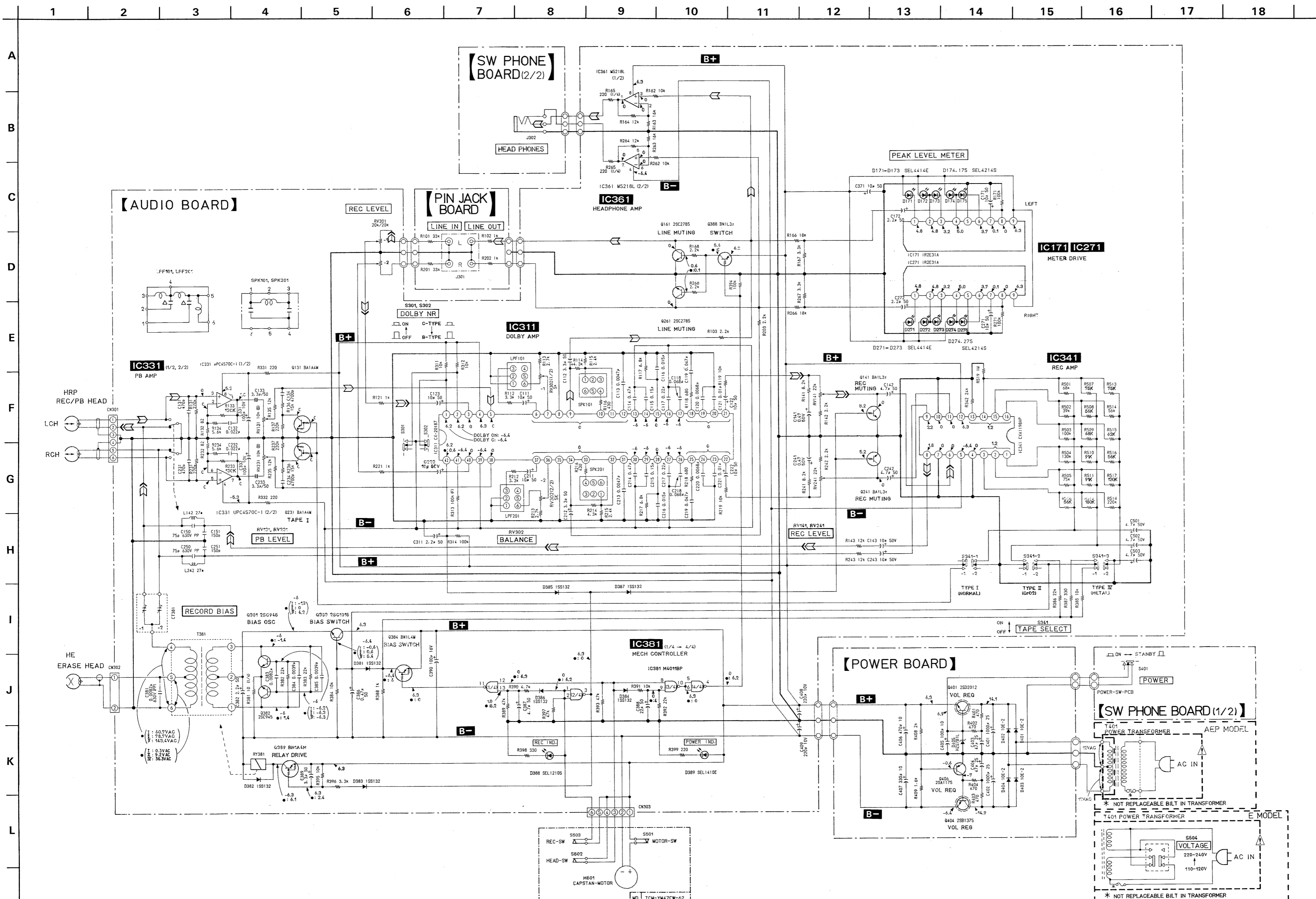
• Semiconductor Location

Ref. No.	Location
D171	C-9
D172	C-9
D173	C-8
D174	C-8
D175	C-7
D271	C-9
D272	C-9
D273	C-8
D274	C-8
D275	C-7
D381	D-10
D382	D-9
D383	C-10
D384	C-10
D385	C-2
D386	C-9
D387	C-4
D388	B-7
D389	B-8
D401	H-11
D402	H-11
D403	G-11
D404	G-11
D405	H-10
IC171	B-8
IC271	C-8
IC311	D-2
IC331	D-8
IC341	D-4
IC361	B-9
IC381	C-10
Q131	D-7
Q141	D-5
Q161	B-7
Q231	E-6
Q241	D-4
Q261	C-7
Q381	E-10
Q382	E-11
Q383	D-10
Q384	D-10
Q388	C-6
Q389	D-11
Q401	H-9
Q404	G-9
Q406	G-10

4-2. PRINTED WIRING BOARDS



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



Note:

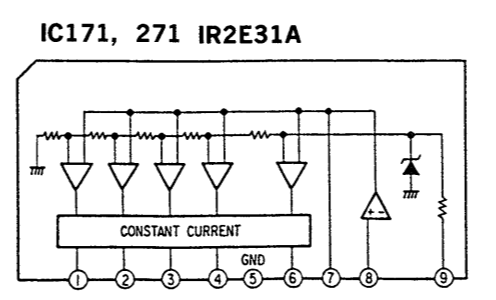
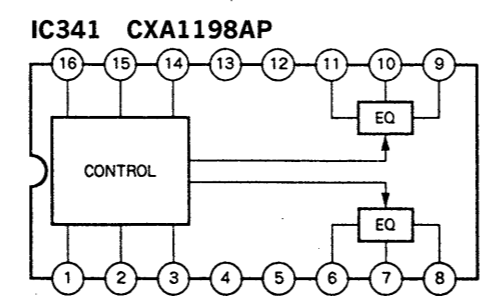
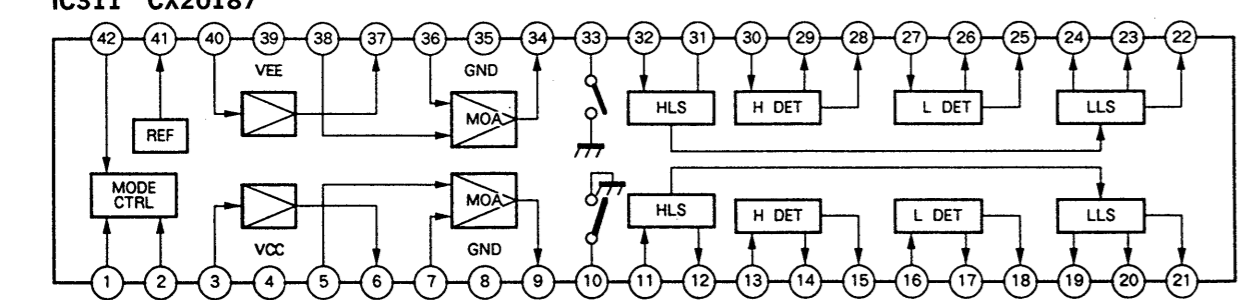
- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\mu\text{F}$. 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- Δ : internal component.
- B+**: B+ Line
- B-**: B- Line
- \square : adjustment for repair.
- AC voltage readings in the bias oscillator with a VTVM.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: PLAY
- (): REC
- Volts are taken with a VOM (50 $\text{k}\Omega/\text{V}$). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- \curvearrowright : PB
- \curvearrowright : REC

Switch

Ref No.	Switch	Position
S301	DOLBY NR ON/OFF	OFF
S302	DOLBY NR TYPE B/C	TYPE-B
S341-1	TAPE SELECT TYPE-I	ON
S341-2	TAPE SELECT TYPE-II	OFF
S341-3	TAPE SELECT TYPE-IV	OFF
S401	POWER	STANDBY
S501	MOTOR	OFF
S502	HEAD	OFF
S503	REC	OFF
S504	VOLTAGE (E MODEL)	110-120V

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

IC BLOCK DIAGRAMS



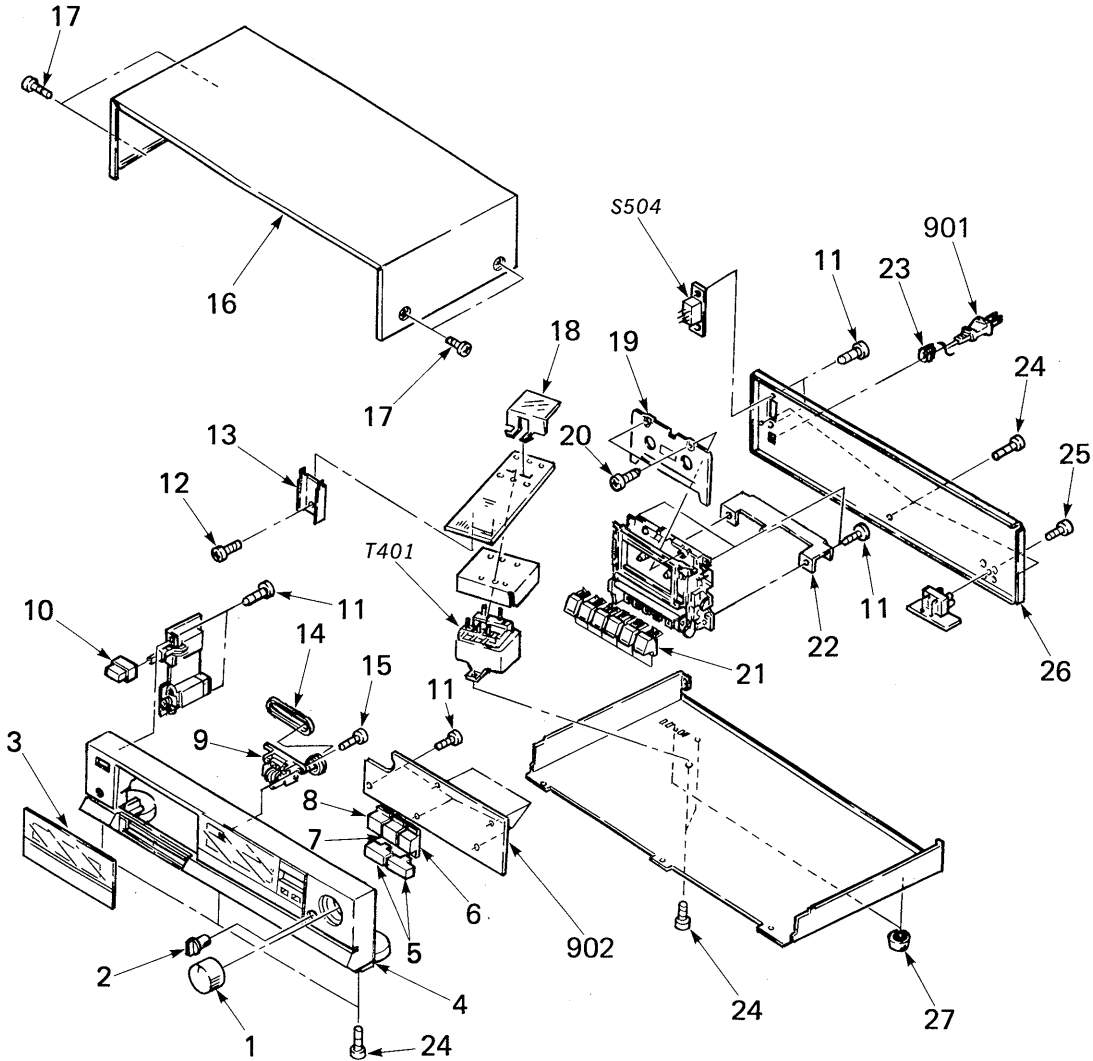
SECTION 5 EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
Example:
(RED) ... KNOB, BALANCE (WHITE)
↑ Cabinet's Color ↑ Parts Color

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



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	3-346-380-01	KNOB (VOL)		19	4-914-974-01	PLATE, ORNAMENTAL, CASSETTE	
2	3-327-846-01	KNOB		20	7-685-133-19	SCREW +P 2.6X6 TYPE2 NON-SLIT	
3	X-3318-957-1	LID ASSY, CASSETTE		21	3-346-385-01	BUTTON (BLOCK B)	
4	X-3318-958-1	PANEL ASSY, FRONT		22	*3-346-376-01	REINFORCEMENT, MD	
5	3-327-864-01	BUTTON (DOLBY)		23	*3-703-244-00	(AEP)....BUSHING (2104), CORD	
6	3-327-867-21	BUTTON (TAPE)(METAL)			3-703-571-00	(E)...BUSHING (S) (4516), CORD	
7	3-327-867-11	BUTTON (TAPE)(CrO2)		24	7-682-548-04	SCREW +BVTT 3X8 (S)	
8	3-327-867-01	BUTTON (TAPE)(NORMAL)		25	7-621-849-00	SCREW, TAPPING	
9	1-548-596-61	COUNTER, TAPE (MIDDLE TYPE)		26	*3-327-858-11	(AEP)...PANEL, BACK	
10	4-917-460-01	KNOB, POWER			*3-327-858-21	(E)....PANEL, BACK	
11	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S		27	X-4864-303-0	FOOT ASSY	
12	7-682-147-01	SCREW +BVTT 3X6 (S)		901	▲.1-551-472-00	(E)....CORD, POWER	
13	*3-309-144-21	HEAT SINK			▲.1-551-908-11	(AEP)...CORD, POWER, EURO PLUG	
14	3-506-040-XX	BELT, SQUARE		902	*A-2056-427-A	MOUNTED PCB, AUDIO	
15	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S		S504	▲.1-552-535-00	(E)...SWITCH, POWER & VOLTAGE CHANGE	
16	*3-327-856-02	CASE		T401	▲.1-449-388-11	(E)....TRANSFORMER, POWER	
17	3-704-366-01	SCREW (CASE) (M3X8)		T401	▲.1-449-390-11	(AEP)...TRANSFORMER, POWER	
18	*3-327-872-01	COVER (TRANSFORMER)					

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.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

MF: μ F, PF: μ μ F.

RESISTORS

- All resistors are in ohms.
- F: nonflammable

COILS

- MMH: mH, UH: μ H

SEMICONDUCTORS

In each case, U: μ , for example:

UA...: μ A..., UPA...: μ PA...,
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.

Ref.No.	Part No.	Description				
901	Δ .1-551-472-00	(E)....CORD, POWER				
	Δ .1-551-908-11	(AEP)...CORD, POWER, EURO PLUG				
902	*A-2056-427-A	MOUNTED PCB, AUDIO				
C111	1-123-875-11	ELECT	10MF	20%	50V	
C112	1-123-382-00	ELECT	3.3MF	20%	50V	
C113	1-130-479-00	MYLAR	0.0047MF	5%	50V	
C114	1-136-173-00	FILM	0.47MF	5%	50V	
C115	1-136-167-00	FILM	0.15MF	5%	50V	
C116	1-136-155-00	FILM	0.015MF	5%	50V	
C117	1-136-169-00	FILM	0.22MF	5%	50V	
C118	1-136-163-00	FILM	0.068MF	5%	50V	
C119	1-136-161-00	FILM	0.047MF	5%	50V	
C120	1-130-481-00	MYLAR	0.0068MF	5%	50V	
C121	1-136-153-00	FILM	0.01MF	5%	50V	
C122	1-123-875-11	ELECT	10MF	20%	50V	
C123	1-123-875-11	ELECT	10MF	20%	50V	
C131	1-162-290-31	CERAMIC	470PF	10%	50V	
C132	1-136-157-00	FILM	0.022MF	5%	50V	
C133	1-124-273-00	ELECT	3.3MF	20%	50V	
C134	1-161-377-00	CERAMIC	0.0047MF	30%	16V	
C141	1-124-902-00	ELECT	0.47MF	20%	50V	
C142	1-124-927-11	ELECT	4.7MF	20%	50V	
C143	1-123-875-11	ELECT	10MF	20%	50V	
C150	1-136-273-91	FILM	75PF	5%	630V	
C151	1-162-284-31	CERAMIC	150PF	10%	50V	
C171	1-123-875-11	ELECT	10MF	20%	50V	
C172	1-124-925-11	ELECT	2.2MF	20%	50V	
C211	1-123-875-11	ELECT	10MF	20%	50V	
C212	1-123-382-00	ELECT	3.3MF	20%	50V	
C213	1-130-479-00	MYLAR	0.0047MF	5%	50V	
C214	1-136-173-00	FILM	0.47MF	5%	50V	
C215	1-136-167-00	FILM	0.15MF	5%	50V	
C216	1-136-155-00	FILM	0.015MF	5%	50V	
C217	1-136-169-00	FILM	0.22MF	5%	50V	
C218	1-136-163-00	FILM	0.068MF	5%	50V	
C219	1-136-161-00	FILM	0.047MF	5%	50V	
C220	1-130-481-00	MYLAR	0.0068MF	5%	50V	
C221	1-136-153-00	FILM	0.01MF	5%	50V	
C222	1-123-875-11	ELECT	10MF	20%	50V	
C223	1-123-875-11	ELECT	10MF	20%	50V	
C231	1-162-290-31	CERAMIC	470PF	10%	50V	
C232	1-136-157-00	FILM	0.022MF	5%	50V	
C233	1-124-273-00	ELECT	3.3MF	20%	50V	
C234	1-161-377-00	CERAMIC	0.0047MF	30%	16V	
C241	1-124-902-00	ELECT	0.47MF	20%	50V	

Ref.No.	Part No.	Description				
C242	1-124-927-11	ELECT	4.7MF	20%	50V	
C243	1-123-875-11	ELECT	10MF	20%	50V	
C250	1-136-273-91	FILM	75PF	5%	630V	
C251	1-162-284-31	CERAMIC	150PF	10%	50V	
C271	1-123-875-11	ELECT	10MF	20%	50V	
C272	1-124-925-11	ELECT	2.2MF	20%	50V	
C311	1-124-925-11	ELECT	2.2MF	20%	50V	
C331	1-124-443-00	ELECT	100MF	20%	10V	
C332	1-124-443-00	ELECT	100MF	20%	10V	
C371	1-124-261-00	ELECT	10MF	20%	50V	
C381	1-136-562-11	FILM	0.0082MF	5%	630V	
C382	1-124-925-11	ELECT	2.2MF	20%	50V	
C383	1-130-482-00	MYLAR	0.0082MF	5%	50V	
C384	1-130-478-00	MYLAR	0.0039MF	5%	50V	
C385	1-130-478-00	MYLAR	0.0039MF	5%	50V	
C386	1-124-902-00	ELECT	0.47MF	20%	50V	
C387	1-124-927-11	ELECT	4.7MF	20%	50V	
C388	1-124-908-11	ELECT	22MF	20%	50V	
C389	1-123-382-00	ELECT	3.3MF	20%	50V	
C390	1-126-101-11	ELECT	100MF	20%	16V	
C401	1-124-557-11	ELECT	1000MF	20%	25V	
C402	1-124-557-11	ELECT	1000MF	20%	25V	
C403	1-124-477-11	ELECT	47MF	20%	25V	
C404	1-124-477-11	ELECT	47MF	20%	25V	
C405	1-124-443-00	ELECT	100MF	20%	10V	
C406	1-124-472-11	ELECT	470MF	20%	10V	
C407	1-124-604-00	ELECT	330MF	20%	10V	
C408	1-126-176-11	ELECT	220MF	20%	10V	
C409	1-126-176-11	ELECT	220MF	20%	10V	
C501	1-124-927-11	ELECT	4.7MF	20%	50V	
C502	1-124-927-11	ELECT	4.7MF	20%	50V	
C503	1-124-927-11	ELECT	4.7MF	20%	50V	
CN301	*1-564-509-11	PLUG, CONNECTOR 6P				
CN302	*1-564-505-11	PLUG, CONNECTOR 2P				
CT381	1-141-225-00	CAP, TUNING, TRIMAR				
D171	8-719-304-37	DIODE SEL4414E				
D172	8-719-304-37	DIODE SEL4414E				
D173	8-719-304-37	DIODE SEL4414E				
D174	8-719-304-32	DIODE SEL4214S				
D175	8-719-304-32	DIODE SEL4214S				
D271	8-719-304-37	DIODE SEL4414E				
D272	8-719-304-37	DIODE SEL4414E				
D273	8-719-304-37	DIODE SEL4414E				
D274	8-719-304-32	DIODE SEL4214S				

Ref.No.	Part No.	Description
D275	8-719-304-32	DIODE SEL4214S
D381	8-719-940-76	DIODE 1SS132
D382	8-719-940-76	DIODE 1SS132
D383	8-719-940-76	DIODE 1SS132
D384	8-719-940-76	DIODE 1SS132
D385	8-719-940-76	DIODE 1SS132
D386	8-719-940-76	DIODE 1SS132
D387	8-719-940-76	DIODE 1SS132
D388	8-719-302-45	DIODE SEL1210S
D389	8-719-302-52	DIODE SEL1410E
D401	8-719-200-77	DIODE 10E2N
D402	8-719-200-77	DIODE 10E2N
D403	8-719-200-77	DIODE 10E2N
D404	8-719-200-77	DIODE 10E2N
D405	8-719-933-47	DIODE HZS7B2L
IC171	8-759-917-42	IC IR2E31A
IC271	8-759-917-42	IC IR2E31A
IC311	8-752-018-70	IC CX20187
IC331	8-759-111-44	IC UPC4570C-1
IC341	8-752-033-61	IC CXA1198AP
IC361	8-759-600-02	IC M5218L
IC381	8-759-601-10	IC M4011BP
J301	1-565-258-11	JACK, PIN 4P (LINE IN/OUT)
J302	1-507-982-11	JACK (LARGE TYPE)(HEADPHONES)
L142	1-410-780-11	INDUCTOR 27MMH
L242	1-410-780-11	INDUCTOR 27MMH
LPF101	1-235-980-11	FILTER, LOW PASS
LPF201	1-235-980-11	FILTER, LOW PASS
Q131	8-729-900-80	TRANSISTOR DTC114ES
Q141	8-729-115-87	TRANSISTOR BAI13Z-P
Q161	8-729-178-54	TRANSISTOR 2SC2785
Q231	8-729-900-80	TRANSISTOR DTC114ES
Q241	8-729-115-87	TRANSISTOR BAI13Z-P
Q261	8-729-178-54	TRANSISTOR 2SC2785
Q381	8-729-600-27	TRANSISTOR 2SC634SP
Q382	8-729-600-27	TRANSISTOR 2SC634SP
Q383	8-729-281-52	TRANSISTOR 2SC1815Y
Q384	8-729-115-12	TRANSISTOR BN1L4M
Q388	8-729-115-27	TRANSISTOR BN1L3Z
Q389	8-729-115-15	TRANSISTOR BN1A4M
Q401	8-729-209-15	TRANSISTOR 2SD2012
Q404	8-729-209-60	TRANSISTOR 2SB1375
Q406	8-729-117-54	TRANSISTOR 2SA1175
R101	1-249-435-11	CARBON 33K 5% 1/4W
R102	1-249-417-11	CARBON 1K 5% 1/4W
R103	1-249-421-11	CARBON 2.2K 5% 1/4W
R112	1-249-423-11	CARBON 3.3K 5% 1/4W

Ref.No.	Part No.	Description
R113	1-249-422-11	CARBON 2.7K 5% 1/4W
R114	1-247-846-11	CARBON 4.3K 5% 1/4W
R115	1-247-840-00	CARBON 2.4K 5% 1/4W
R116	1-247-822-11	CARBON 430 5% 1/4W
R117	1-249-427-11	CARBON 6.8K 5% 1/4W
R118	1-249-415-11	CARBON 680 5% 1/4W
R119	1-249-429-11	CARBON 10K 5% 1/4W
R121	1-249-417-11	CARBON 1K 5% 1/4W
R131	1-247-889-00	CARBON 270K 5% 1/4W
R132	1-249-404-00	CARBON 82 5% 1/4W
R133	1-247-882-11	CARBON 130K 5% 1/4W
R134	1-249-426-11	CARBON 5.6K 5% 1/4W
R135	1-249-430-11	CARBON 12K 5% 1/4W
R136	1-249-431-11	CARBON 15K 5% 1/4W
R137	1-247-887-00	CARBON 220K 5% 1/4W
R141	1-249-428-11	CARBON 8.2K 5% 1/4W
R142	1-249-421-11	CARBON 2.2K 5% 1/4W
R143	1-249-430-11	CARBON 12K 5% 1/4W
R162	1-249-429-11	CARBON 10K 5% 1/4W
R163	1-247-860-11	CARBON 16K 5% 1/4W
R164	1-249-430-11	CARBON 12K 5% 1/4W
R165	1-249-409-11	CARBON 220 5% 1/4W
R166	1-249-432-11	CARBON 18K 5% 1/4W
R167	1-249-423-11	CARBON 3.3K 5% 1/4W
R168	1-249-421-11	CARBON 2.2K 5% 1/4W
R171	1-249-441-11	CARBON 100K 5% 1/4W
R201	1-249-435-11	CARBON 33K 5% 1/4W
R202	1-249-417-11	CARBON 1K 5% 1/4W
R203	1-249-421-11	CARBON 2.2K 5% 1/4W
R212	1-249-423-11	CARBON 3.3K 5% 1/4W
R213	1-249-422-11	CARBON 2.7K 5% 1/4W
R214	1-247-846-11	CARBON 4.3K 5% 1/4W
R215	1-247-840-00	CARBON 2.4K 5% 1/4W
R216	1-247-822-11	CARBON 430 5% 1/4W
R217	1-249-427-11	CARBON 6.8K 5% 1/4W
R218	1-249-415-11	CARBON 680 5% 1/4W
R219	1-249-429-11	CARBON 10K 5% 1/4W
R221	1-249-417-11	CARBON 1K 5% 1/4W
R231	1-247-889-00	CARBON 270K 5% 1/4W
R232	1-249-404-00	CARBON 82 5% 1/4W
R233	1-247-882-11	CARBON 130K 5% 1/4W
R234	1-249-426-11	CARBON 5.6K 5% 1/4W
R235	1-249-430-11	CARBON 12K 5% 1/4W
R236	1-249-431-11	CARBON 15K 5% 1/4W
R237	1-247-887-00	CARBON 220K 5% 1/4W
R241	1-249-428-11	CARBON 8.2K 5% 1/4W

Ref.No.	Part No.	Description							
R242	1-249-421-11	CARBON	2.2K	5%	1/4W				
R243	1-249-430-11	CARBON	12K	5%	1/4W				
R262	1-249-429-11	CARBON	10K	5%	1/4W				
R263	1-247-860-11	CARBON	16K	5%	1/4W				
R264	1-249-430-11	CARBON	12K	5%	1/4W				
R265	1-249-409-11	CARBON	220	5%	1/4W				
R266	1-249-432-11	CARBON	18K	5%	1/4W				
R267	1-249-423-11	CARBON	3.3K	5%	1/4W				
R268	1-249-421-11	CARBON	2.2K	5%	1/4W				
R271	1-249-441-11	CARBON	100K	5%	1/4W				
R311	1-249-429-11	CARBON	10K	5%	1/4W				
R312	1-249-429-11	CARBON	10K	5%	1/4W				
R313	1-215-469-00	METAL	100K	1%	1/6W				
R314	1-249-441-11	CARBON	100K	5%	1/4W				
R331	1-249-409-11	CARBON	220	5%	1/4W				
R332	1-249-409-11	CARBON	220	5%	1/4W				
R342	1-247-864-11	CARBON	24K	5%	1/4W				
R381	1-249-393-11	CARBON	10	5%	1/4W				
R382	1-249-433-11	CARBON	22K	5%	1/4W				
R383	1-249-433-11	CARBON	22K	5%	1/4W				
R384	1-249-429-11	CARBON	10K	5%	1/4W				
R385	1-249-429-11	CARBON	10K	5%	1/4W				
R386	1-249-433-11	CARBON	22K	5%	1/4W				
R387	1-249-411-11	CARBON	330	5%	1/4W				
R388	1-249-417-11	CARBON	1K	5%	1/4W				
R389	1-249-437-11	CARBON	47K	5%	1/4W				
R390	1-249-425-11	CARBON	4.7K	5%	1/4W				
R391	1-249-429-11	CARBON	10K	5%	1/4W				
R392	1-249-433-11	CARBON	22K	5%	1/4W				
R393	1-249-437-11	CARBON	47K	5%	1/4W				
R394	1-249-441-11	CARBON	100K	5%	1/4W				
R395	1-249-429-11	CARBON	10K	5%	1/4W				
R396	1-249-423-11	CARBON	3.3K	5%	1/4W				
R397	1-249-437-11	CARBON	47K	5%	1/4W				
R398	1-249-411-11	CARBON	330	5%	1/4W				
R399	1-249-409-11	CARBON	220	5%	1/4W				
R401	1-249-413-11	CARBON	470	5%	1/4W				
R402	1-249-413-11	CARBON	470	5%	1/4W				
R403	1-249-413-11	CARBON	470	5%	1/4W				
R404	1-249-413-11	CARBON	470	5%	1/4W				
R408	1-247-838-00	CARBON	2K	5%	1/4W				
R409	1-247-836-11	CARBON	1.6K	5%	1/4W				
R501	1-249-439-11	CARBON	68K	5%	1/4W				
R502	1-249-436-11	CARBON	39K	5%	1/4W				
R503	1-249-441-11	CARBON	100K	5%	1/4W				
R504	1-247-882-11	CARBON	130K	5%	1/4W				
R505	1-247-876-11	CARBON	75K	5%	1/4W				
R506	1-249-438-11	CARBON	56K	5%	1/4W				
R507	1-247-876-11	CARBON	75K	5%	1/4W				
R508	1-249-438-11	CARBON	56K	5%	1/4W				
R509	1-249-439-11	CARBON	68K	5%	1/4W				
R510	1-247-878-00	CARBON	91K	5%	1/4W				
R511	1-247-878-00	CARBON	91K	5%	1/4W				
R512	1-247-885-00	CARBON	180K	5%	1/4W				
R513	1-247-876-11	CARBON	75K	5%	1/4W				
R514	1-249-438-11	CARBON	56K	5%	1/4W				
R515	1-247-874-11	CARBON	62K	5%	1/4W				
R516	1-249-438-11	CARBON	56K	5%	1/4W				
R517	1-247-881-00	CARBON	120K	5%	1/4W				
R518	1-247-887-00	CARBON	220K	5%	1/4W				
R519	1-247-903-00	CARBON	1M	5%	1/4W				
RV131	1-228-994-00	RES, ADJ, CARBON	10K						
RV141	1-228-995-00	RES, ADJ, CARBON	22K						
RV231	1-228-994-00	RES, ADJ, CARBON	10K						
RV241	1-228-995-00	RES, ADJ, CARBON	22K						
RV301	1-238-262-11	RES, VAR, CARBON	20K/20K						(REC LEVEL)
RV302	1-238-263-11	RES, VAR, CARBON	5K/5K						(BALANCE)
RY381	1-515-683-11	RELAY							
S301	1-571-510-11	SWITCH, PUSH (1 KEY)	(DOLBY NR ON/OFF)						
S302	1-571-510-11	SWITCH, PUSH (1 KEY)	(DOLBY NR B/C)						
S341	1-571-629-11	SWITCH, PUSH (3 KEY)	(TAPE SELECT)						
S401	1-570-393-11	SWITCH, PUSH (1 KEY)	(POWER)						
S504	1-552-535-00	(E)...SWITCH, POWER & VOLTAGE CHANGE							
T401	1-449-388-11	(E)...TRANSFORMER, POWER							
T401	1-449-390-11	(AEP)...TRANSFORMER, POWER							
SPK101	1-235-186-00	ENCAPSULATED COMPONENT							
SPK201	1-235-186-00	ENCAPSULATED COMPONENT							
T381	1-433-303-11	TRANSFORMER, BIAS OSCILLATION							

ACCESSORY & PACKING MATERIAL

1-526-565-00 (E)...AC PLUG ADAPTOR
1-559-533-11 CORD, CONNECTION

*3-346-344-01 CUSHION
*3-346-378-11 INDIVIDUAL CARTON
*3-704-343-01 SHEET (STANDARD), PROTECTION

3-786-253-11 MANUAL, INSTRUCTION
3-786-253-41 (AEP)...MANUAL, INSTRUCTION

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

TC-FX100

SONY® SERVICE MANUAL

*AEP Model
E Model*

SUPPLEMENT-1(R)

File this supplement with the service manual.

Subject: exploded view mechanism section

- REVISED
Discard SUPPLEMENT-1 (9-953-379-81) previously issued.
This Service Manual contains it.

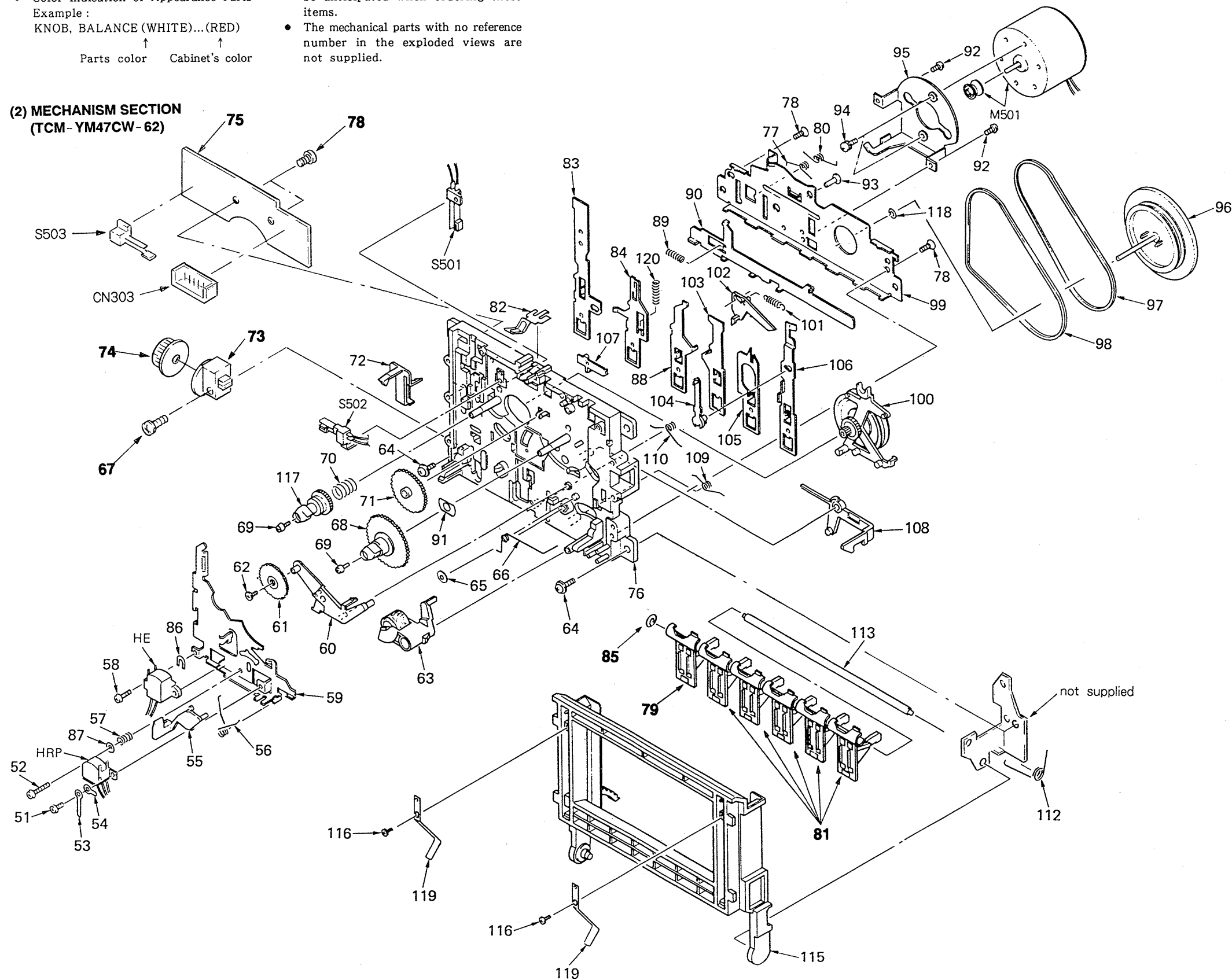
SECTION 5 EXPLODED VIEWS

NOTE:

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

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

**(2) MECHANISM SECTION
(TCM-YM47CW-62)**



Ref. No.	Part No.	Description	Remarks
51	7-621-255-15	SCREW +P 2X3	
52	7-621-255-55	SCREW, TOTSU P 2X8	
* 53	3-390-819-01	LUG	
54	3-390-817-01	LUG	
55	4-894-956-01	TAPE SENSOR	
56	3-390-804-01	SPRING, PINCH ARM	
57	4-894-955-01	C SPRING	
58	7-685-852-01	SCREW, BVTT 2X5 (S)	
* 59	4-894-957-01	HEAD BASE B	
60	4-894-962-01	IDLER ARM	
61	4-894-961-01	IDLER GEAR	
62	4-894-960-01	BUSH	
63	3-390-805-01	ROLLER ASSY, PINCH	
64	7-621-770-67	SCREW, TOTSU PTTWH 2.6X6	
65	4-894-969-01	N WASHER	
66	4-894-967-01	SPRING	
67	7-621-772-68	SCREW +BVTT 2X12 (S)	
68	4-894-963-01	T REEL ASSY	
69	3-390-803-01	BUSHING (D)	
70	4-894-954-01	C SPRING	
71	4-894-964-01	F GEAR	
72	4-894-958-01	INTERLOCK ARM	
* 73	3-392-143-01	HOLDER, GEAR	
74	3-392-144-01	DAMPER, GEAR	
* 75	1-628-420-11	PC BOARD, MAIN (A)	
76	4-894-968-01	CHASSIS ASSY	
77	4-894-978-01	SPRING	
78	7-685-133-19	SCREW +P 2.6X6 TYPE2	
79	3-392-147-01	LEVER (R), BUTTON	
80	4-894-979-01	SPRING	
81	3-392-140-01	LEVER, BUTTON	
82	4-894-966-01	SPRING	
83	4-894-994-01	REC LEVER	
84	3-390-810-01	LEVER, PLAY	
85	7-624-104-04	STOP RING 2.0, TYPE -E	
86	3-390-821-01	SPACER	
87	3-390-823-01	WASHER, F	
* 88	4-894-990-01	REW LEVER	
89	4-894-983-01	C SPRING	
* 90	4-894-984-01	FUNCTION LEVER	
91	3-390-820-01	SPRING, LEAF	
92	7-621-255-25	SCREW +PTT 2X4 (S)	
93	3-390-822-01	BUSHING (C)	
94	7-628-253-90	SCREW +PS 2.6X4	
* 95	3-390-814-01	BRACKET, MOTOR	
96	3-390-806-11	FW ASSY	
97	3-390-807-01	BELT, SQUARE	
98	3-561-892-00	BELT, SQUARE	
* 99	4-894-977-01	BACK PLATE	
100	4-894-997-01	POWER ARM ASSY	
101	3-390-809-01	SPRING	
102	4-894-982-01	S ARM	
* 103	4-894-988-01	FF LEVER W	
104	4-894-985-01	PAUSE ARM	
* 105	4-894-987-01	S.E LEVER	
* 106	4-894-986-01	PAUSE LEVER	
107	3-390-811-01	LEVER, REC STOP	
108	4-894-980-01	EJECT ARM	
109	4-894-989-01	SPRING	
110	4-894-999-01	SPRING	
112	3-392-142-01	SPRING	
* 113	3-392-139-01	SHAFT	
115	3-390-801-01	CASE, CASSETTE	
116	7-685-103-19	SCREW +P 2X5 TYPE2 NON-SLIT	
117	4-894-953-01	S REEL	
118	4-894-976-01	P WASHER	
119	4-894-951-01	KEEP PLATE	
120	3-390-827-01	SPRING	
* CN303	1-564-499-11	PIN, CONNECTOR 6P	
HE	1-543-261-11	HEAD, ERASE (886-01-24)	
HRP	1-543-424-21	HEAD, MAGNETIC (REC/PB)	
M501	X-3390-802-1	MOTOR ASSY	
S501	1-572-394-11	SWITCH, LEAF	
S502	1-571-555-11	SWITCH, LEAF	
S503	1-571-714-11	SWITCH, LEAF	