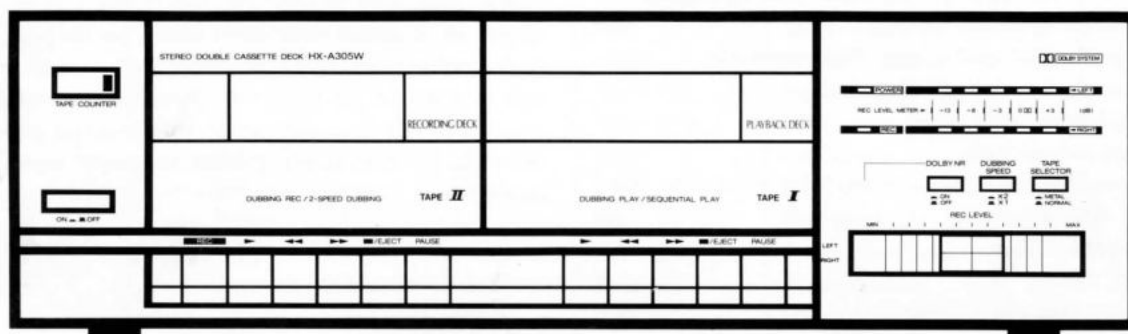


AKAI SERVICE MANUAL



STEREO DOUBLE CASSETTE DECK

MODEL HX-A305W

SPECIFICATIONS

Track system	4 track 2 channel stereo	S/N (Metal)	57dB (Measured via tape with peak recording level)
Heads	HD head for recording and playback × 2 Erase head × 1		Dolby B type NR switch ON: Improves up to 5dB at 1kHz, 10dB above 5kHz
Motors	DC motor for capstan drive × 1 DC motor for reel drive × 2	Total harmonic distortion	0.9% (Metal)
Winding time	140sec.(C-60 tape)	Input sensitivity/ Impedance	70mV/50kohms
Wow & flutter	0.16% (DIN)	Output level/ Impedance	440mV/22kohms
Frequency response	Normal: 30Hz to 15,000Hz ± 3dB Metal: 30Hz to 16,000Hz ± 3dB	Dimensions	415(W) × 123(H) × 240(D)mm (16.3 × 4.8 × 9.5 inches)
		Weight	4.1kg (9.01bs)

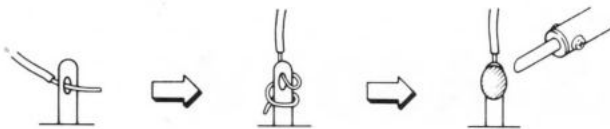
* For improvement Purposes, specifications and design are subject to change without notice.

* Noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"Dolby" and the double-D symbol are trade marks of Dloby Laboratories Licensing Corporation.

★ SAFETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

1. Parts identified by the Δ symbol parts are critical for safety. Replace only with parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation. These must also be replaced only with specified replacements.
Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
 - 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
 - 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers (Insulating Barriers)
 - 4) Insulation sheets for transistors
 - 5) Plastic screws for fixing microswitch (especially in turntable)
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap ends of wires securely about the terminals before soldering.



6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).

7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locatoins.
9. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

Confirm the specified insulation resistance between power cord plug prongs and externally exposed parts of the set is greater than 10 M ohms. but for equipment with external antenna terminals (tuner, receiver, etc.) and is intended for $\square C$ or $\square A$, specified insulation resistance should be headphone jacks line-in-out jacks etc. more than 2.2 M ohms (ground terminals, microphone jacks).

★ INFORMATION

SYMBOLS FOR PRIMARY DESTINATION

Alphabet indicates the destination of the units as listed below.

Symbols	Principal Destinations
$\square A$	USA
$\square B$	UK
$\square C$	Canada
$\square E$	Europe (except UK)
$\square J$	Japan
$\square S$	Australia
$\square V$	W. Germany only
$\square U$	Universal Area
$\square Y^*$	Custom version

I. DISASSEMBLY

1-1 Removal of Top and Bottom Covers

- 1) Remove the 7 screws ① as shown in Fig.1-1 and remove the top cover by sliding it off to the rear.
- 2) The bottom cover can be removed by removing the 6 screws ②.

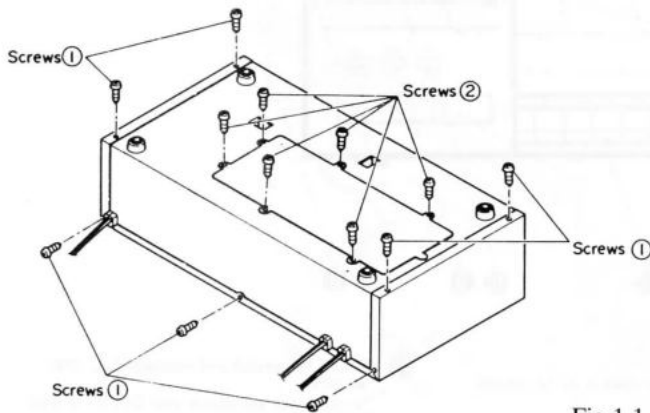


Fig.1-1

1-2 Removal of Front Panel

- 1) Remove the 2 screws ③ on either side of the front panel, the 3 screws ④ on the bottom, and the 1 screw ⑤ on the top, as shown in Fig.1-2.
- 2) Disconnecting all wiring from the Main P.C.B. and the ground lead connected to the mechanism chassis will permit removal of the front panel.

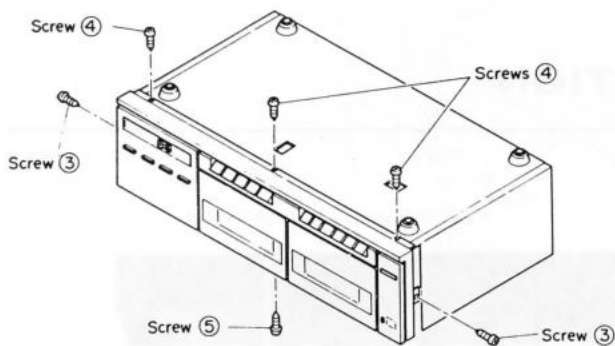


Fig.1-2

1-3 Removal of Mechanism Section

1-3-1 Removal of Mechanism Assembly

- 1) Remove the front panel, following the procedures in section 2.
- 2) The mechanism assembly can be removed by pushing the EJECT button, and removing the 6 screws ⑥ which secure the mechanism assembly. (Fig.1-3)

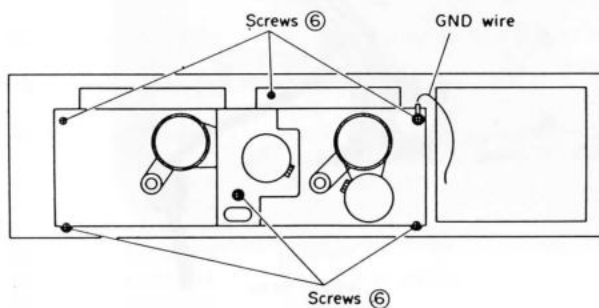


Fig.1-3

1-3-2 Removal of REC/PB, Erase Head and Pinch Roller

- 1) The button assembly can be removed by removing the 2 screws ⑦.
- 2) The REC/PB and Erase heads can be removed by removing their securing screws ⑧ (2 each).
- 3) After replacing the REC/PB head, be sure to carry out the head azimuth adjustment.
- 4) Remove the pinch roller by removing the 1 screw ⑨.

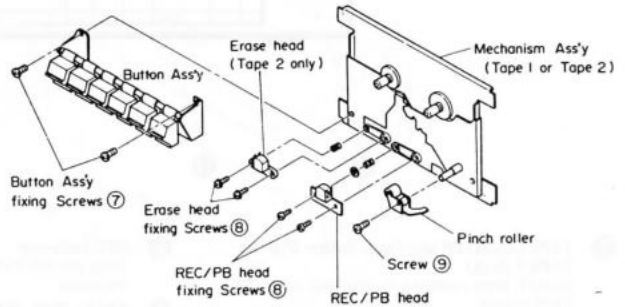


Fig.1-4

1-3-3 Removal of Motor, Flywheel

- 1) Removing the 2 screws ① which secure the motor plate will allow disassembly of the plate with the motor 1 still attached.
- 2) Removing the 2 screws ② which secure the motor 1 will allow the motor 1 to be removed from the plate.
- 3) After the motor 1 has been removed, the flywheel 1 can be removed.
- 4) Removing the 6 screws ③ which secure the motor plate will allow disassembly of the plate with the motor 2 still attached.
- 5) Removing the 3 screws ④ which secure the motor 2 will allow the motor 2 to be removed from the plate.
- 6) After the motor 2 has been removed, the flywheel 2 can be removed.

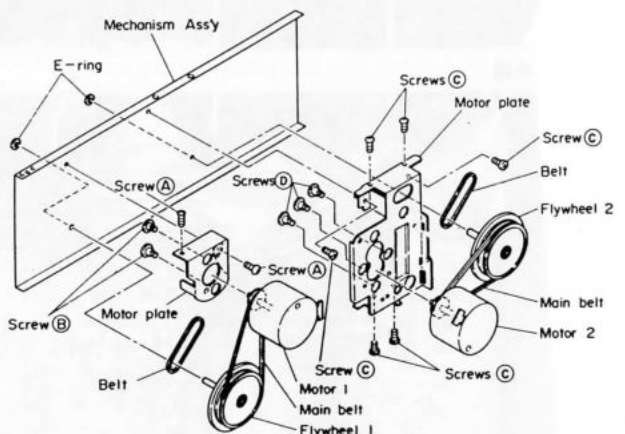
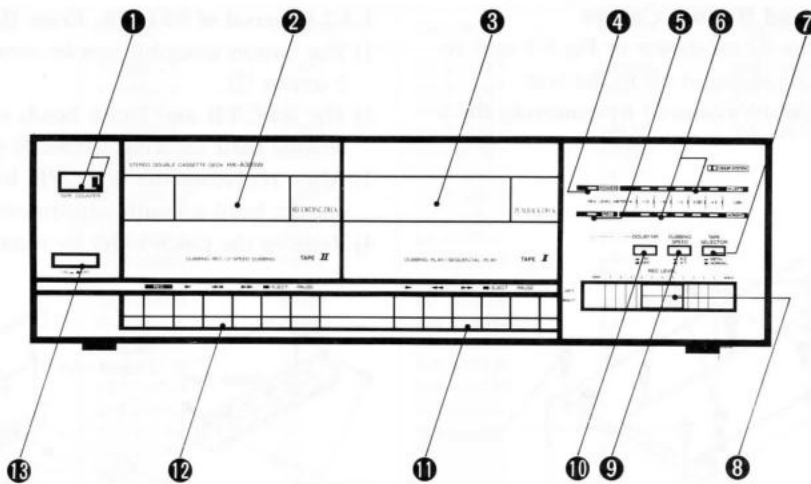


Fig.1-5

II. CONTROLS



- | | | |
|---|---|--|
| <p>1 TAPE COUNTER and Reset button (For the TAPE II deck)
Shows tape running numerical index for TAPE II deck.</p> <p>2 TAPE II cassette lid and holder
Load a cassette tape here for recording and playback.</p> <p>3 TAPE I cassette lid and holder
Load a cassette tape here for playback.
* The TAPE I deck has the auto tape selector inside of the cassette compartment.</p> <p>4 POWER indicator
Tells you the cassette deck is turned on.</p> | <p>5 REC indicator
Tells you the cassette deck is in the recording mode.</p> <p>6 PEAK LEVEL METER
Shows recording and playback levels.</p> <p>7 TAPE SELECTOR Switch (METAL / NORMAL , For the TAPE II deck)
To select the tape position according to the tape being used.
Attention: Do not change the switch during recording.</p> <p>8 REC LEVEL controls (LEFT/RIGHT)
To set the recording input levels.</p> <p>9 DUBBING SPEED switch ($\times 2$ / $\times 1$)
To select speed for dubbing operation.</p> | <p>10 DOLBY NR switch and indicator (ON / OFF)
To record or playback with DOLBY B-type NR system.
The indicator will light when the switch is set to ON.</p> <p>11 TAPE I deck Tape operation buttons
For winding tape and playback operations.</p> <p>12 TAPE II deck Tape operation buttons
For winding tape, playback and recording operations.</p> <p>13 POWER switch
To turn on and off the power.</p> |
|---|---|--|

III. PRINCIPAL PARTS LOCATION

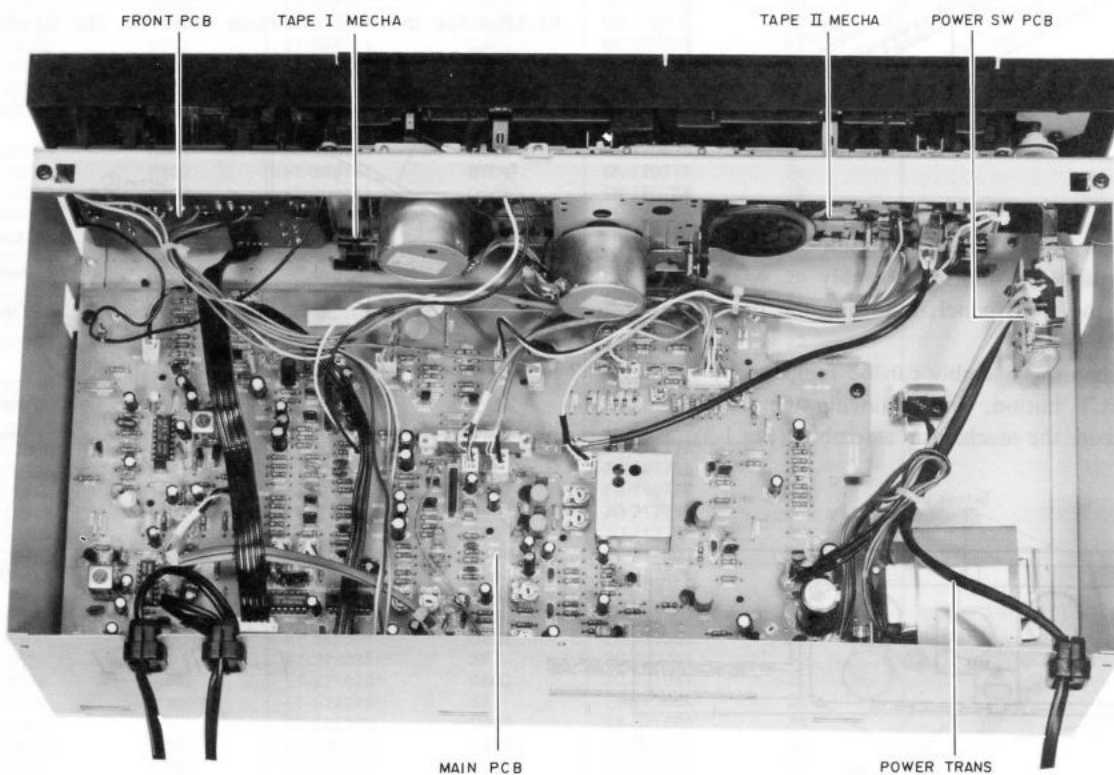


Fig.3-1

IV. ADJUSTMENT

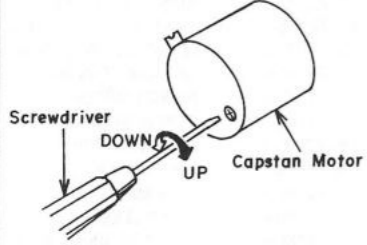
Step	Adjustment Item
1.	Test Tape, Input signal
2.	Mode
3.	Test point & Adjustment point
4.	Result & Remarks

ADJUSTMENT PART
TEST POINT

TAPE SPEED ADJUSTMENT

1 NORMAL TAPE SPEED (TAPE II)

- Test tape (TF-110CT)
3,150 Hz, 0VU (AT-751263)
- PLAY
- LINE OUT, Capstan motor (TAPE II)
- Connect a frequency counter to LINE-OUT
• 3,150 ± 10 Hz



2 NORMAL TAPE SPEED (TAPE I)

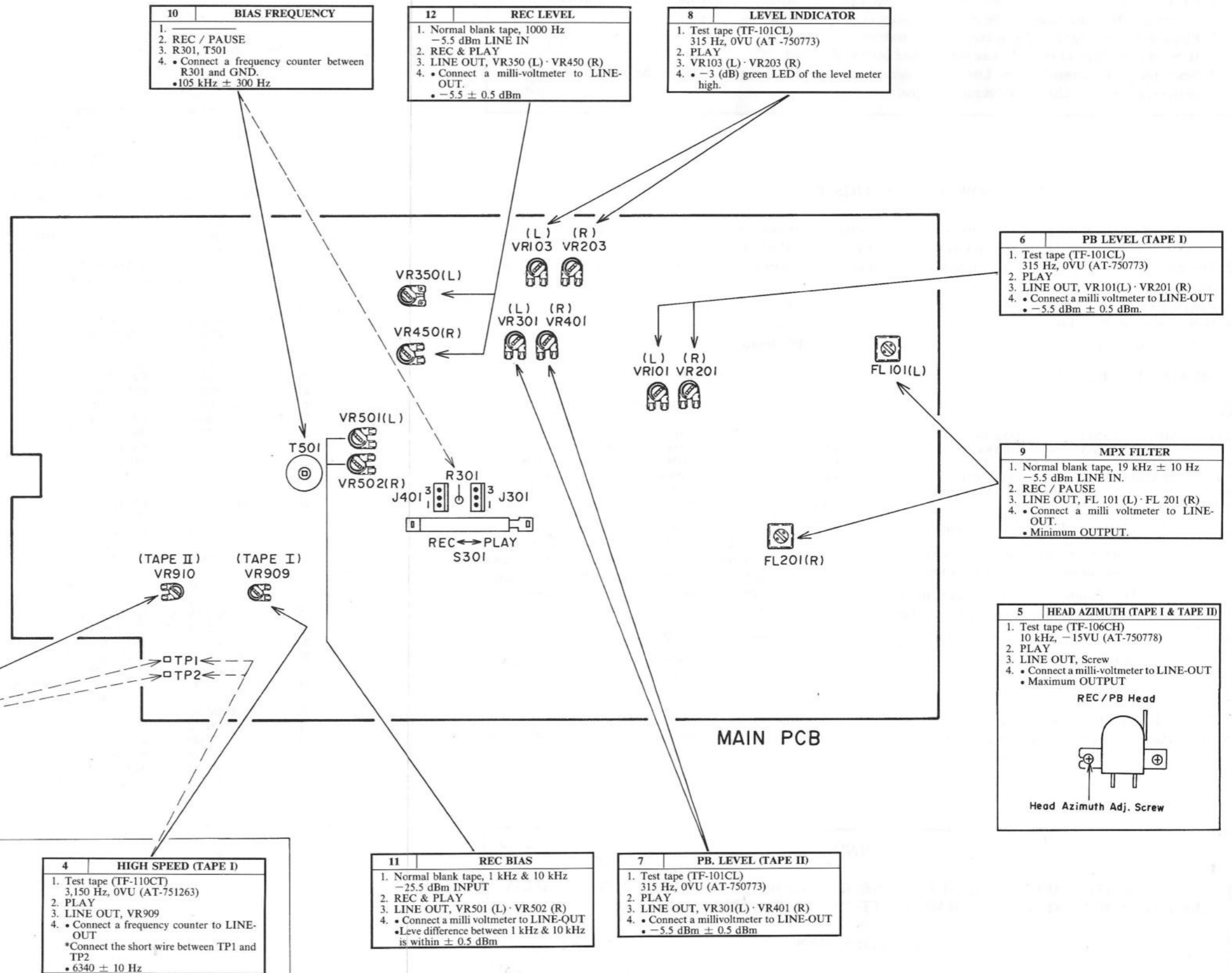
- Test tape (TF-110CT)
3,150 Hz, 0VU (AT-751263)
- PLAY
- LINE OUT, Capstan motor (TAPE I)
- Connect a frequency counter to LINE-OUT
• 3,170 ± 10 Hz

3 HIGH SPEED (TAPE II)

- Test tape (TF-110CT)
3,150 Hz, 0VU (AT-751263)
- PLAY
- LINE OUT VR910
- Connect a frequency counter to LINE-OUT
*Connect the short wire between TP1 and TP2.
• 6300 ± 10 Hz

4 HIGH SPEED (TAPE I)

- Test tape (TF-110CT)
3,150 Hz, 0VU (AT-751263)
- PLAY
- LINE OUT, VR909
- Connect a frequency counter to LINE-OUT
*Connect the short wire between TP1 and TP2
• 6340 ± 10 Hz



V. PARTS LIST

ATTENTION

1. When placing an order for parts, be sure to list Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
2. Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

b) PC Board

2. HEAD BASE BLOCK

REF. NO.	PART NO.	DESCRIPTION
2-1x	BH-T2023A320A	HEAD BASE BLOCK
2-2	HP-H2206A010A	HEAD R/P PR4-8FU C
2-3	ZS-477876	PAN20×03STL CMT
2-4	ZS-536488	BID20×08STL CMT
2-5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

A small "x" indicates that this part is not shown in the Photo or Illustration.

This number corresponds with the individual parts index number in that figure.

This number corresponds with the Figure Number.

6. MAIN PC BOARD

REF. NO.	PART NO.	DESCRIPTION
6-IC1	EI-324536	IC HD14049BP
6-IC2	EI-336801	IC MB8841-564M
6-C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
6-C1B	EC-350949	C MMY V 223M 250DC [J]
6-C1C	EC-338397	C MMY V 223M 125AC [C,A]
6-X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A]: AAL(U.S.A.) [S]: SAA(Australia)
 [B]: BEAB(England) [U]: U/T(Universal Area)
 [C]: CSA(Canada) [V]: VDE(W. Germany)
 [E]: CEE(Europe) [Y]: Custom Version
 [J]: JPN(Japan)

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No. listed at right of Part No.

WARNING

△ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

△ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT.

1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref. No.	Part No.	Description
1	BB-720738	MECH BLK HX-A305W
2	BF-717792	FLYWHEEL PART P
3	BF-717793	FLYWHEEL PART R/P
4	BL-721068	RF PULLEY ASSY
5	BM-720761	MOTOR HX-A305W
6	BR-720752	SUPPLY REEL TABLE BLK HX-A305W
7	BR-720754	TAKE-UP REEL TABLE BLK HX-A305W
8	*BT-720791	TRANS POWER K80027D (B.S) [B.S]
9	*BT-720792	TRANS POWER T3671D (V.E) [E]
10	ED-619784	D GERMA H 1N60
11	ED-720783	D LED LTL-3233A GREEN
12	ED-720784	D LED LTL-3293A YELLOW
13	ED-327057	D SILICON H DS442X
14	ED-348990	D SILICON H DS446
15	ED-720805	D SILICON H 1N5393
16	ED-720799	D ZENER H RD11E B3
17	ED-703903	D ZENER H RD15E B2
18	*EF-601942	FUSE SEMKO T 250V 630MA
19	EH-720815	FILTER KM-10DF
20	EH-720759	HEAD R/P HX-A305W
21	EI-345551	IC LB1403
22	EI-709250	IC M51522L
23	EI-310036	IC TC4066BP
24	EI-720804	IC UPC1210C
25	ES-717779	SW LEAF MSW-1541
26	ES-720768	SW LEEF [REC]
27	ES-720769	SW LEEF [PLAY]
28	ES-720767	SW LEEF [TAPE SELECTOR]
29	ES-720782	SW PUSH SPEA12MC06-OL [TAPE SELECTOR]
30	*ES-720817	SW PUSH 125V 10A [POWER SW]
31	ET-348302	TR FET 2SK381 C.D F05
32	ET-308472	TR 2SA1115 E,F,G F05
33	ET-522270	TR 2SC1210 D
34	ET-330225	TR 2SC1815 BL
35	ET-308141	TR 2SC2603 G F05
36	ET-338410	TR 2SC2878 A,B
37	ET-371028	TR 2SD1266 P,Q
38	EV-720781	VR SLIDE VJ6013PVN10C-15A50K [REC LEVEL]
39	HE-720760	HEAD E
40	MB-720770	BELT COUNTER
41	MB-717803	BELT MAIN
42	MB-717820	BELT MAIN P
43	MB-720746	BELT RF
44	MC-720777	COUNTER HX-A305W
45	MZ-717796	GEAR FF
46	MZ-717795	GEAR TU

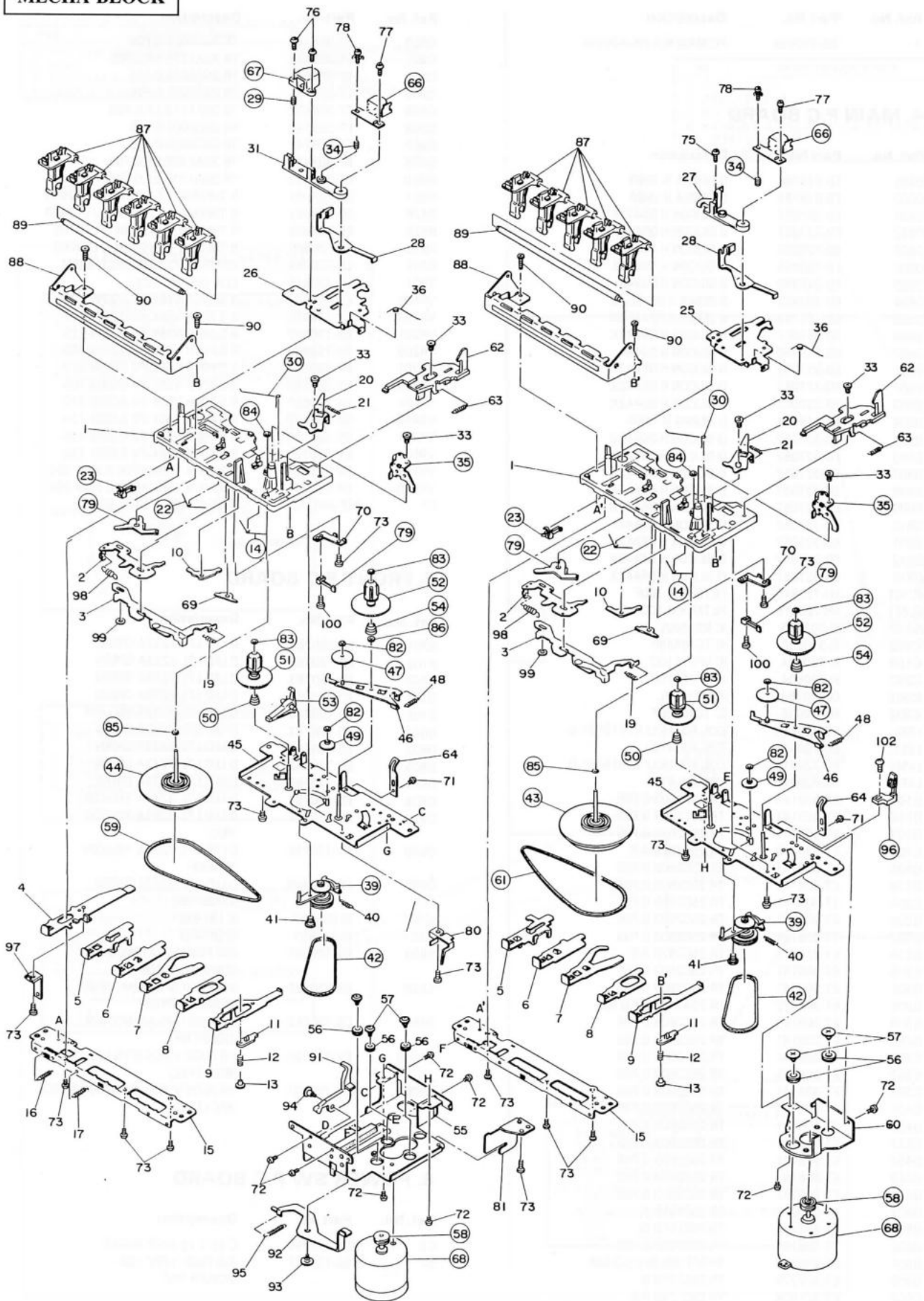
2. MECHA BLOCK

Ref. No.	Part No.	Description
11	ML-717774	LEVER PAUSE
12	ZG-717775	SP PAUSE LEVER
13	MZ-717776	STOPPER PAUSE
14	ZG-717777	SP BUTTON LEVER(C)
22	ZG-721061	SP BUTTON LEVER (E)
23	ES-717779	SW LEAF MSW-1541
27	HZ-717780	HEAD BASE
28	ML-717781	LEVER DETECTION
29	ZG-717782	SP EH
30	ZG-717784	SP HEAD PANEL (S) R/P
31	HZ-717785	HEAD BASE
34	ZG-717786	SP AZIMUTH
35	ML-717787	ARM PINCH ROLLER PART R/P
36	ZG-717788	SP PINCH ROLLER R/P
39	BL-721068	RF PULLEY ASSY
40	ZG-719563	RF PULLEY ARM SPRING
42	MB-720746	BELT RF
43	BF-717792	FLYWHEEL PART P
44	BF-717793	FLYWHEEL PART R/P
47	MZ-717795	GEAR TU
49	MZ-717796	GEAR FF
50	ZG-720751	SP BACK TENTION
51	BR-720752	SUPPLY REEL TABLE BLK HX-A305W
52	BR-720754	TAKE-UP REEL TABLE BLK HX-A305W
53	ML-717800	LEVER REC DETECTION
54	ZG-717801	SP BACK TENSION TU
56	MB-712094	RUBBER MOTOR
57	ZS-721062	SCREW SPECIAL
58	MR-720756	PULLEY MOTOR
59	MB-717803	BELT MAIN
61	MB-717820	BELT MAIN P
62	ML-717804	LEVER SLIDE EJECT
63	ZG-717806	SP LEVER SLIDE EJECT
64	ZG-717807	SP PLATE CASSETTE HOLDER
66	EH-720759	HEAD R/P HX-A305W
67	HE-720760	HEAD E
68	BM-720761	MOTOR HX-A305W
78	ZS-717809	SCREW AZIMUTH
79	ES-720769	SW LEEF [PLAY]
82	ZW-720762	PW12X030X025NYL
83	ZW-720763	PW 12X20X04NYL
84	ZW-720765	PW155X380X050NYL
85	ZW-720766	PW205X400X040NYL
87	ML-717811	LEVER OPERATION
90	ZS-362011	(+)PAN20X07STL BNI
96	ES-720767	SW LEEF [TAPE SELECTOR]
142	ML-361092	LEVER OPERATION (2) PART
150	ML-361090	LEVER OPERATION (1) PART

NOTE

Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

MECHA BLOCK



PARTS LIST

3. P.C BOARD BLOCK

Ref. No.	Part No.	Description
1	BA-720788	PC MAIN BLK HX-A305W

4. MAIN P.C BOARD

Ref. No.	Part No.	Description
D301	ED-619784	D GERMA H 1N60
D302	ED-619784	D GERMA H 1N60
D501	ED-327057	D SILICON H DS442X
D502	ED-327057	D SILICON H DS442X
D601	ED-720805	D SILICON H 1N5393
D602	ED-720805	D SILICON H 1N5393
D603	ED-348990	D SILICON H DS446
D604	ED-703903	D ZENER H RD15E B2
D605	ED-720799	D ZENER H RD11E B3
D606	ED-327057	D SILICON H DS442X
D607	ED-348990	D SILICON H DS446
D901	ED-327057	D SILICON H DS442X
D902	ED-327057	D SILICON H DS442X
D903	ED-327057	D SILICON H DS442X
D904	ED-619784	D GERMA H 1N60
D905	ED-327057	D SILICON H DS442X
D906	ED-327057	D SILICON H DS442X
D907	ED-327057	D SILICON H DS442X
D908	ED-327057	D SILICON H DS442X
D909	ED-327057	D SILICON H DS442X
D910	ED-327057	D SILICON H DS442X
D911	ED-327057	D SILICON H DS442X
D912	ED-327057	D SILICON H DS442X
D915	ED-327057	D SILICON H DS442X
FL101	EH-720815	FILTER KM-10DF
FL201	EH-720815	FILTER KM-10DF
IC101	EI-709250	IC M51522L
IC102	EI-310036	IC TC4066BP
IC103	EI-720804	IC UPC1210C
IC203	EI-720804	IC UPC1210C
IC301	EI-709250	IC M51522L
IC302	EI-310036	IC TC4066BP
L350	EO-720814	COIL FIX 153J V3615031-G
L351	EO-720813	COIL FIX 472J
L450	EO-720814	COIL FIX 153J V3615031-G
L451	EO-720813	COIL FIX 472J
Q101	ET-308141	TR 2SC2603 G F05
Q102	ET-308141	TR 2SC2603 G F05
Q103	ET-308141	TR 2SC2603 G F05
Q104	ET-338410	TR 2SC2878 A,B
Q105	ET-308141	TR 2SC2603 G F05
Q106	ET-308141	TR 2SC2603 G F05
Q201	ET-308141	TR 2SC2603 G F05
Q202	ET-308141	TR 2SC2603 G F05
Q203	ET-308141	TR 2SC2603 G F05
Q204	ET-338410	TR 2SC2878 A,B
Q206	ET-308141	TR 2SC2603 G F05
Q301	ET-308141	TR 2SC2603 G F05
Q302	ET-308472	TR 2SA1115 E,F,G F05
Q303	ET-308141	TR 2SC2603 G F05
Q350	ET-308141	TR 2SC2603 G F05
Q351	ET-308141	TR 2SC2603 G F05
Q352	ET-308141	TR 2SC2603 G F05
Q353	ET-308141	TR 2SC2603 G F05
Q401	ET-308141	TR 2SC2603 G F05
Q450	ET-308141	TR 2SC2603 G F05
Q451	ET-308141	TR 2SC2603 G F05
Q452	ET-308141	TR 2SC2603 G F05
Q453	ET-308141	TR 2SC2603 G F05
Q501	ET-308141	TR 2SC2603 G F05
Q502	ET-330225	TR 2SC1815 BL
Q503	ET-330225	TR 2SC1815 BL
Q504	ET-308141	TR 2SC2603 G F05
Q601	ET-348302	TR FET 2SK381 C,D F05
Q602	ET-522270	TR 2SC1210 D
Q603	ET-371028	TR 2SD1266 P,Q
Q604	ET-308141	TR 2SC2603 G F05
Q605	ET-308141	TR 2SC2603 G F05

Ref. No.	Part No.	Description
Q606	ET-308141	TR 2SC2603 G F05
Q901	ET-308472	TR 2SA1115 E,F,G F05
Q902	ET-308141	TR 2SC2603 G F05
Q903	ET-308141	TR 2SC2603 G F05
Q904	ET-308472	TR 2SA1115 E,F,G F05
Q906	ET-308141	TR 2SC2603 G F05
Q907	ET-308141	TR 2SC2603 G F05
Q909	ET-308472	TR 2SA1115 E,F,G F05
Q910	ET-308472	TR 2SA1115 E,F,G F05
R927	ER-720801	R THERMO H 1/4S 150-J LT2600
R928	ER-720801	R THERMO H 1/4S 150-J LT2600
R929	ER-720800	R THERMO 1/4S 1.6K-J LT0700
R930	ER-720800	R THERMO 1/4S 1.6K-J LT0700
S301	ES-720798	SW SLIDE CL104K E8234438M
T501	EO-720816	COIL OSC MC-129J
VR101	EV-720807	R S-FIX H V8EK-PV 0.20W 223
VR103	EV-720809	R S-FIX H V8EK-PV 0.20W 473
VR201	EV-720807	R S-FIX H V8EK-PV 0.20W 223
VR203	EV-720809	R S-FIX H V8EK-PV 0.20W 473
VR301	EV-720807	R S-FIX H V8EK-PV 0.20W 223
VR350	EV-355120	R S-FIX H V8EK-PV 0.20W 104
VR401	EV-720807	R S-FIX H V8EK-PV 0.20W 223
VR450	EV-355120	R S-FIX H V8EK-PV 0.20W 104
VR501	EV-355120	R S-FIX H V8EK-PV 0.20W 104
VR502	EV-355120	R S-FIX H V8EK-PV 0.20W 104
VR909	EV-371287	R S-FIX H VM6CKPVB 0.30W 204
VR910	EV-371287	R S-FIX H VM6CKPVB 0.30W 204
F1	*EF-601942	FUSE SEMKO T 250V 630MA

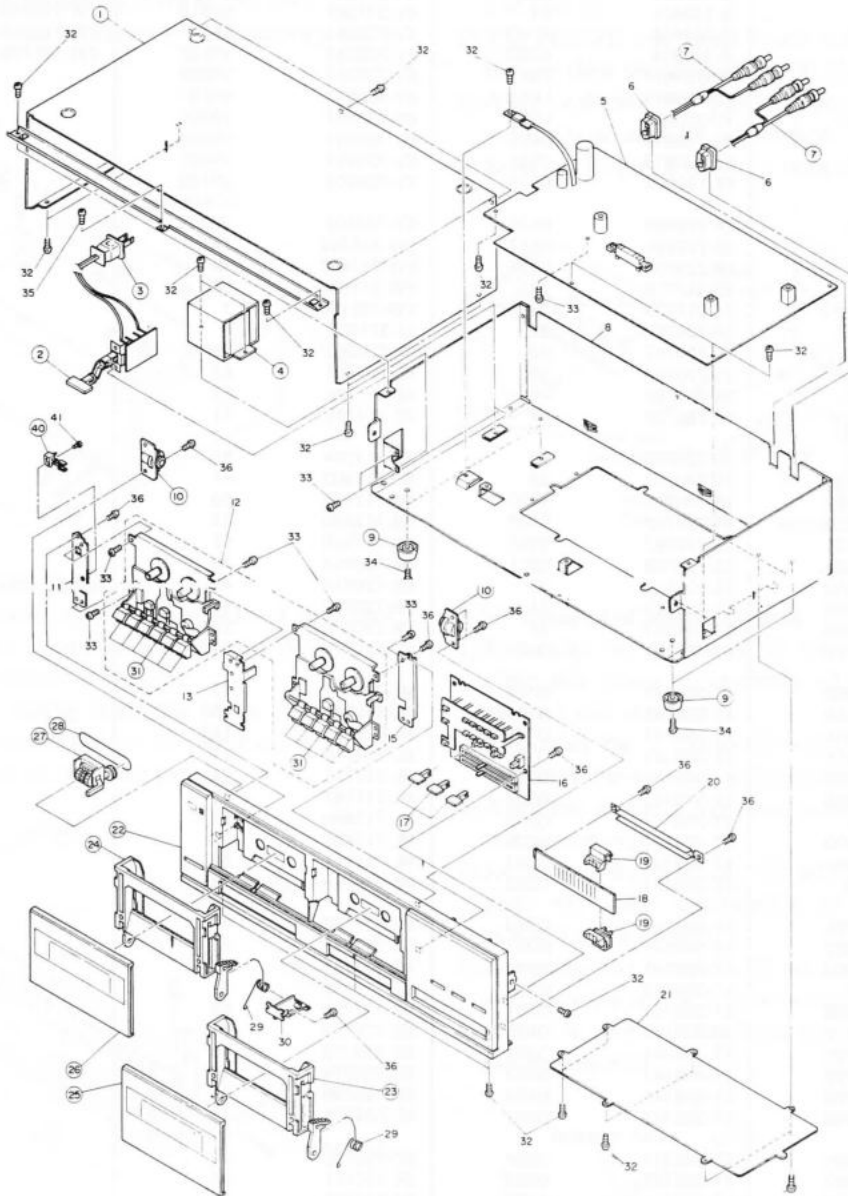
5. FRONT P.C BOARD

Ref. No.	Part No.	Description
D701	ED-720783	D LED LTL-3233A GREEN
D702	ED-720783	D LED LTL-3233A GREEN
D703	ED-720783	D LED LTL-3233A GREEN
D704	ED-720783	D LED LTL-3233A GREEN
D705	ED-720784	D LED LTL-3293A YELLOW
D801	ED-720783	D LED LTL-3233A GREEN
D802	ED-720783	D LED LTL-3233A GREEN
D803	ED-720783	D LED LTL-3233A GREEN
D804	ED-720783	D LED LTL-3233A GREEN
D805	ED-720784	D LED LTL-3293A YELLOW
D930	ED-720784	D LED LTL-3293A YELLOW [REC]
D940	ED-720784	D LED LTL-3293A YELLOW [POWER]
D950	ED-720783	D LED LTL-3233A GREEN [DOLBY NR]
IC701	EI-345551	IC LB1403
IC801	EI-345551	IC LB1403
S930	ES-720782	SW PUSH SPEA12MC06-OL [TAPE SELECTOR]
S940	ES-720782	SW PUSH SPEA12MC06-OL [DUBBING SPEED]
S950	ES-720782	SW PUSH SPEA12MC06-OL [DOLBY NR]
VR102	EV-720781	VR SLIDE VJ6013PVN10C-15A50K [REC LEVEL]
VR202	EV-720781	VR SLIDE VJ6013PVN10C-15A50K [REC LEVEL]

6. POWER SW P.C BOARD

Ref. No.	Part No.	Description
C1	*EC-338496	C CE V FZ 472P 400AC
S1	*ES-720817	SW PUSH 125V 10A [POWER SW]

FINAL ASSEMBLY BLOCK



7. FINAL ASSEMBLY BLOCK

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	SP-720737	COVER UPPER	19	SK-720776	KNOB REC LEVEL
2	SK-720678	KNOB POWER	22	SP-720823	PANEL FRONT BLK HX-A305W
3A	*EW-346249	AC CORD 2 CORES LCFL2X0.75 B [B]	23	SZ-721063	HOLDER PL
3B	*EW-347897	AC CORD 2 CORES VM0364.LCFL EV [E]	24	SZ-721063	HOLDER PL
3C	*EW-347898	AC CORD 2 CORES VM-0436.LCFL S [S]	25	SP-720736	SIDE PANEL (R)
4A	*BT-720791	TRANS POWER K80027D (B.S) [B,S]	26	SP-720735	SIDE PANEL (L)
4B	*BT-720792	TRANS POWER T3671D (V.E) [E]	27	MC-720777	COUNTER HX-A305W
6	EZ-371605	BUSH CORD 2271	28	MB-720770	BELT COUNTER
7	EW-720796	CORD RCA	29	ZG-721064	SP TDC
9	SA-720789	FOOT	31	SK-720771	KNOB DECK
10	MZ-720774	DUMPER	32	ZS-447761	T2BR30X06STL BNI
12	BB-720738	MECH BLK HX-A305W	34	ZS-331568	T2BR30X10STL CMT C080
17	SK-720780	KNOB PUSH	40	ES-720768	SW LEEF [REC]
18	SE-720773	ORNAMENT	42	MZ-720772	JOINT REC
			43	SK-720778	KNOB DAMMY (S)
			44	SK-720779	KNOB DAMMY (C)
			45	MZ-720772	JOINT REC

INDEX

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
BA-720788	1	EI-709250	IC301	EV-371287	VR909	ZW-720762	82
BB-720738	1	EI-720804	24	EV-371287	VR910	ZW-720763	83
BB-720738	12	EI-720804	IC103	EV-720781	38	ZW-720765	84
BF-717792	2	EI-720804	IC203	EV-720781	VR102	ZW-720766	85
BF-717792	43	EO-720813	L351	EV-720781	VR202		
BF-717793	3	EO-720813	L451	EV-720807	VR101		
BF-717793	44	EO-720814	L350	EV-720807	VR201		
BL-721068	4	EO-720814	L450	EV-720807	VR301		
BL-721068	39	EO-720816	T501	EV-720807	VR401		
BM-720761	5	ER-720800	R929	EV-720809	VR103		
BM-720761	68	ER-720800	R930	EV-720809	VR203		
BR-720752	6	ER-720801	R927	EW-346249	3A		
BR-720752	51	ER-720801	R928	EW-347897	3B		
BR-720754	7	ES-717779	25	EW-347898	3C		
BR-720754	52	ES-717779	23	EW-720796	7		
BT-720791	8	ES-720767	28	EZ-371605	6		
BT-720791	4A	ES-720767	96	HE-720760	39		
BT-720792	9	ES-720768	26	HE-720760	67		
BT-720792	4B	ES-720768	40	HZ-717780	27		
EC-338496	C1	ES-720769	27	HZ-717785	31		
ED-327057	13	ES-720769	79	MB-712094	56		
ED-327057	D501	ES-720782	29	MB-717803	41		
ED-327057	D502	ES-720782	S930	MB-717803	59		
ED-327057	D606	ES-720782	S940	MB-717820	42		
ED-327057	D901	ES-720782	S950	MB-717820	61		
ED-327057	D902	ES-720798	S301	MB-720746	43		
ED-327057	D903	ES-720817	30	MB-720746	42		
ED-327057	D905	ES-720817	S1	MB-720770	40		
ED-327057	D906	ET-308141	35	MB-720770	28		
ED-327057	D907	ET-308141	Q101	MC-720777	44		
ED-327057	D908	ET-308141	Q102	MC-720777	27		
ED-327057	D909	ET-308141	Q103	ML-361090	150		
ED-327057	D910	ET-308141	Q105	ML-361092	142		
ED-327057	D911	ET-308141	Q106	ML-717774	11		
ED-327057	D912	ET-308141	Q201	ML-717781	28		
ED-327057	D915	ET-308141	Q202	ML-717787	35		
ED-348990	14	ET-308141	Q203	ML-717800	53		
ED-348990	D603	ET-308141	Q206	ML-717804	62		
ED-348990	D607	ET-308141	Q301	ML-717811	87		
ED-619784	10	ET-308141	Q303	MR-720756	58		
ED-619784	D301	ET-308141	Q350	MZ-717776	13		
ED-619784	D302	ET-308141	Q351	MZ-717795	46		
ED-619784	D904	ET-308141	Q352	MZ-717795	47		
ED-703903	17	ET-308141	Q353	MZ-717796	45		
ED-703903	D604	ET-308141	Q401	MZ-717796	49		
ED-720783	11	ET-308141	Q450	MZ-720772	42		
ED-720783	D701	ET-308141	Q451	MZ-720772	45		
ED-720783	D702	ET-308141	Q452	MZ-720774	10		
ED-720783	D703	ET-308141	Q453	SA-720789	9		
ED-720783	D704	ET-308141	Q501	SE-720773	18		
ED-720783	D801	ET-308141	Q504	SK-720678	2		
ED-720783	D802	ET-308141	Q604	SK-720771	31		
ED-720783	D803	ET-308141	Q605	SK-720776	19		
ED-720783	D804	ET-308141	Q606	SK-720778	43		
ED-720783	D950	ET-308141	Q902	SK-720779	44		
ED-720784	12	ET-308141	Q903	SK-720780	17		
ED-720784	D705	ET-308141	Q906	SP-720735	26		
ED-720784	D805	ET-308141	Q907	SP-720736	25		
ED-720784	D930	ET-308472	32	SP-720737	1		
ED-720784	D940	ET-308472	Q302	SP-720823	22		
ED-720799	16	ET-308472	Q901	SZ-721063	23		
ED-720799	D605	ET-308472	Q904	SZ-721063	24		
ED-720805	15	ET-308472	Q909	ZG-717775	12		
ED-720805	D601	ET-308472	Q910	ZG-717777	14		
ED-720805	D602	ET-330225	34	ZG-717782	29		
EF-601942	18	ET-330225	Q502	ZG-717784	30		
EF-601942	F1	ET-330225	Q503	ZG-717786	34		
EH-720759	20	ET-338410	36	ZG-717788	36		
EH-720759	66	ET-338410	Q104	ZG-717801	54		
EH-720815	19	ET-338410	Q204	ZG-717806	63		
EH-720815	FL101	ET-348302	31	ZG-717807	64		
EH-720815	FL201	ET-348302	Q601	ZG-719563	40		
EI-310036	23	ET-371028	37	ZG-720751	50		
EI-310036	IC102	ET-371028	Q603	ZG-721061	22		
EI-310036	IC302	ET-522270	33	ZG-721064	29		
EI-345551	21	ET-522270	Q602	ZS-331568	34		
EI-345551	IC701	EV-355120	VR350	ZS-362011	90		
EI-345551	IC801	EV-355120	VR450	ZS-447761	32		
EI-709250	22	EV-355120	VR501	ZS-717809	78		
EI-709250	IC101	EV-355120	VR502	ZS-721062	57		

ABBREVIATIONS

Abbreviation	Description	Abbreviation	Description
ACC	Automatic Color level Control	IR	Infra Red
AFC	Automatic Frequency Control	IRE	Image Ratio Efficiency
AFT	Automatic Frequency Tuning	IRQ	InterRupt reQuest
AGC	Automatic Gain Control	LE	Loading End
AL	ALways	LED	Light Emitting Diode
ALC	Automatic Level Control	LIM	Limiter
A-mode	Audio-mode	LM	Loading Motor
A.mute	Audio mute	LM-EMG	Loading Motor-EMerGency
APC	Automatic Phase Control	LSI	Large Scale Intergated IC
ASB	ASsemBly (AECrec)	MESECAM	Middle East SECAM
BEF	Band Elimination Filter	MM	Mono Multivibrator
BGP	Burst Gate Pulse	NTSC	NTTSC color system
BPF	Band Pass Filter	NVRAM	Non Volatile Random Access Memory
BU	Back Up	OPE-PCB	OPERation Printed Circuit Board
B/W	Black/White (mode)	OSC	OSCillator
C	Capacitor or Condenser, Chroma	PAL	PAL color system
C.K	Color Killer	PB	Play Back
CM	Capstan Motor	PG	Pulse Generator
C MOS	Complementary Metal Oxide Semicon- ductor	PLL	Phase Locked Loop
CPU	Central Processing Unit (IC)	P/V	Phase to Voltage(converter)
CR	Capacitor and Resistor (oscillator)	PWM	Pulse Width Modulation
CUE.REV	CUE Review (input)	RCK	Reference Clock
C.SYNC	Composite Sync.	RDY	ReaDY
CTL	ConTroL	REC	RECOrd
DET	DETECTOR	REF	REFErence
DEMO	DEMOdulator	REV	REVerse
DIFF	DIFFerential	ROM	Read Only Memory
DIP	Dual Inline Package	SCK	Serial Clock
DM	Drum Motor	SD	Secam Detector
DMM	Digital Mono-Multivibrator	SI	Serial In
DOC	DropOut Compensator	SLP	Super-Long Play
EE	Electronic to Electronic	SO	Serial Out
EP	Extra long Play	SP	Standard Play
fCK	frequency of Clock	STRB	STRoBe
FF	Flip-Flop	SW	SWitch
FF	Fast Forward (mode)	SWP	SWitching Pulse
FG	Frequency Generator	SYS	SYStem
fH	Horizontal frequency	T.mute	Tuner mute
F OFF	Function OFF	TRMM	Tracking Mono multivibrator
F ON	Function ON	TRP	Take up Reel Pulse
F/R	Forward / Reverse	TV	Television
fRCK	frequency of Reference Clock	UNR	UNRegulated
fSC	frequency of Sub Carrier	V	vertical
F/V	Frequency to Voltage (converter)	VCO	Voltage Controlled Oscillator
FWD	ForWard	VH	VHF High Band
H	length of one Horizontal line	VIF	Video Intermediate Frequency
HPF	High Pass Filter	VL	VHF Low Band
H-SYNC	Horizontal SYNChronization	VOW	Video OnWard
IDL-5V	IDLing 5V (voltage)	VP	Vertical pulse (Quasi Vsync pulse)
IMS	Interactive Monitor System	VPS	Video Program identification system
INST	INSerT (record)	VT	Tuning Voltage
INT	INTerrupt	U	UHF (Ultra High Frequency)

AKAI ELECTRIC CO., LTD.

12-14, 2-Chome, Higashi-Kojiya, Ohta-Ku, Tokyo, Japan
TEL: Tokyo (742) 5111 CABLE: HIFIAKAI TOKYO TELEX: J26261

Printed No. 870731-A1-900

Printed Date: September 1, 1987

350 Printed in Japan