


WM-100II/102

SERVICE MANUAL



WM-100II
US Model
Canadian Model
WM-102
AEP Model
E Model
UK Model

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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SPECIFICATIONS

Model Name Using Similar Mechanism	WM-F100II WM-F102
Tape Transport Mechanism Type	MT-WM102-01

0dB = 0.775V

Frequency response (DOLBY NR OFF)
40-15,000Hz (with the TAPE selector set to
CrO₂/METAL)
40-15,000Hz (with the TAPE selector set to NORM)

Power output

4.5mW + 4.5mW at dc operation
(at 10% total harmonic distortion)

Power requirements

1.5V dc
Rechargeable battery
IEC designation (LR6 battery (size AA)
DC IN 1.5V jack accepts:
Sony AC-D1 ac power adaptor (optional)
for use on 100, 120, 220 or 240 V AC, ad-
justable
Sony EBP-10 battery case (optional)
for use on two IEC designation R6 batteries (size
AA)
Sony DCC-70 car battery cord (optional)
for use with 12V car battery

Battery life (hours)

Battery	Tape playback
Sony NC-5WM rechargeable (full charge)	Approx. 2
Sony SUM-3(NS) New Super	Approx. 2
Sony Eveready AM3 alkaline	Approx. 5.5

For maximum performance we recommend the use of alkaline battery.

Dimensions

excl. projecting parts and controls
Approx.
69.8x110.8x19.8mm (w/h/d)
(2³/₄ x 4³/₈ x ²⁵/₃₂ inches)
with rechargeable battery pack
attached
Approx.
69.8 x 119.4 x 19.8 mm (w/h/d)
(2³/₄ x 4³/₄ x ²⁵/₃₂ inches)
with battery pack attached
incl. projecting parts and controls
Approx.
74.6 x 112.6 x 22.2 mm (w/h/d)
(3 x 4¹/₂ x ⁷/₈ inches)
with rechargeable battery pack
attached
Approx.
74.6 x 120.2 x 22.2 mm (w/h/d)
(3 x 4⁷/₈ x ⁷/₈ inches)
with battery pack attached
Weight
Approx.
190 g (6.7 oz) incl. rechargeable
battery pack and rechargeable
battery, not incl. other
accessories
Approx.
190 g (6.7 oz) incl. battery and
battery pack, not incl. other
accessories

STEREO CASSETTE-PLAYER
SONY®

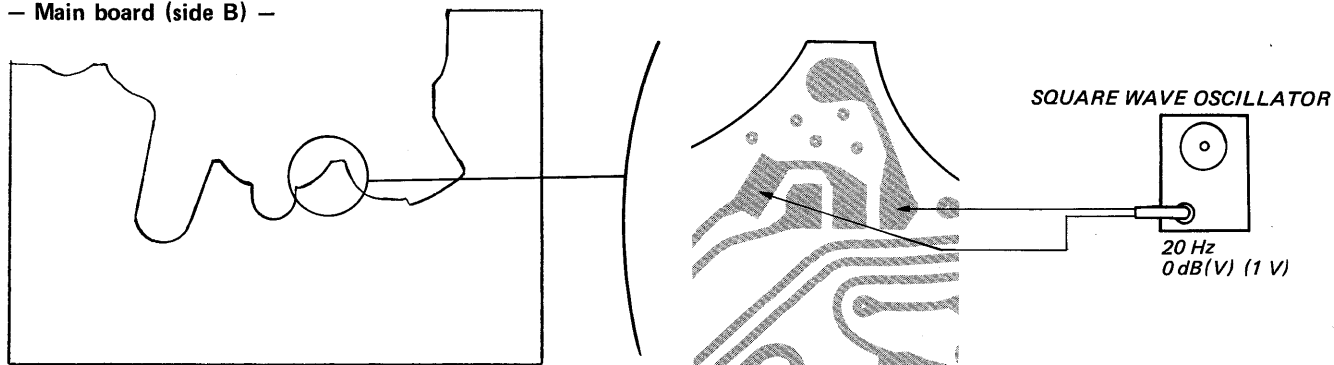
Servicing Note

This set detects rotation of reel table by PH701 (Photo interrupter).

It cannot be detected when the main board is removed, because PH701 is mounted on the main board is removed.

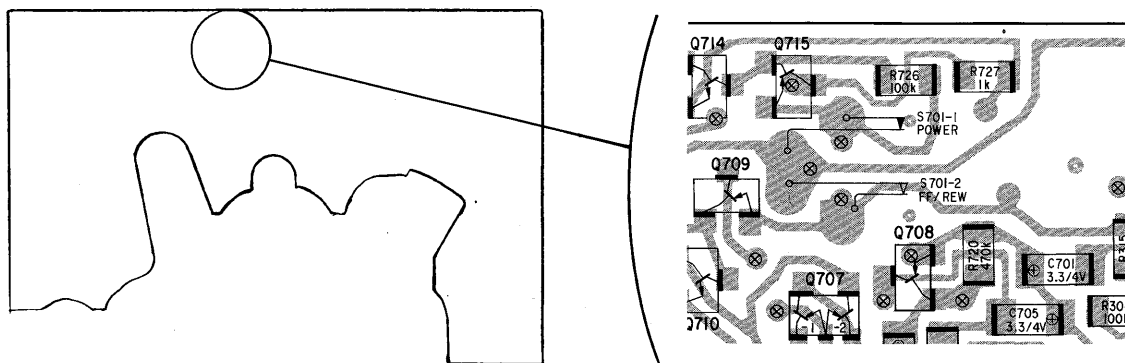
Therefore, the auto off circuit and tape end detection will misoperate.

Operation check can be done by the method shown below even when the main board is removed.

— Main board (side B) —

For PLAY, press the ► button and turn only the POWER switch ON.

For FF and REW, press ►► or ◀◀ button and turn both POWER switch and FF/REW switch ON.

— Main board (side A) —

Replacing chip components

All chip components should be connected and disconnected, using a tapered soldering iron [temperature of the iron tip: less than 280°C (536°F)], a pair of tweezers and braided wire.

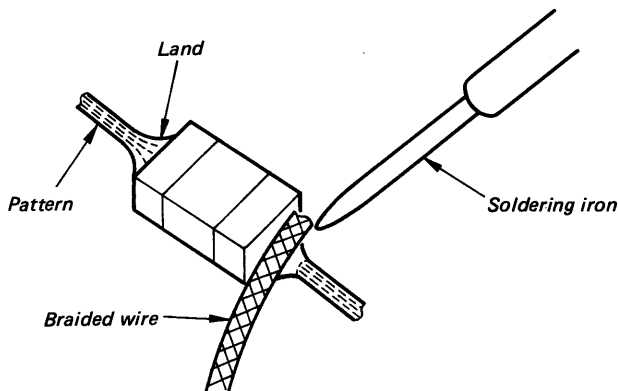
Precautions for replacement

1. Do not disconnect the chip component forcefully. Otherwise, the pattern may peel off.
2. Never re-use a disconnected chip component. Dispose of all old chip components.
3. To protect the chip component, heating time for attaching the component should be within 3 seconds.

○ Removing chip components

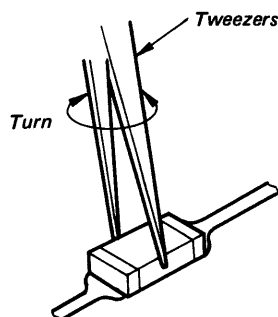
(1) Removing solder at electrode

Remove the solder at the electrode, using a thin braided wire. Do not remove the solder of the part (chip component) attached adjacent to the electrode.



(2) Disconnecting chip components

Turn the tweezers with the soldering iron alternately applied to both electrodes, and the chip component will be disconnected. Take careful precautions while disconnecting, because if the chip component is forcefully removed the land may peel off. Never re-use a disconnected chip component.



(3) Smoothing the soldered surface

After disconnecting the chip component, remove the solder by using a braided wire to smooth the land surface.

○ Connecting chip components

The value of chip components is not displayed on the main body. Take due precautions to avoid mixing new chip components with other ones.

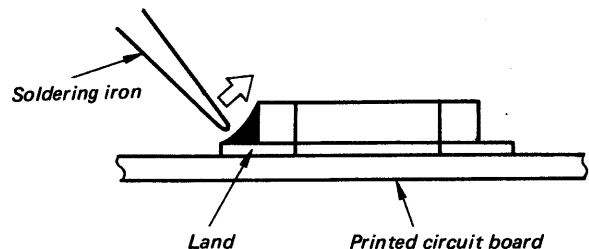
(1) Applying solder to land on one side

Apply a thin layer of solder to the land on one side where the chip component is to be connected. Too much solder may cause bridging.



(2) Speedy soldering

Hold the chip component at the desired position, using tweezers, and apply the soldering iron in the arrow-marked direction. To protect the chip component, heating time should be within 3 seconds.



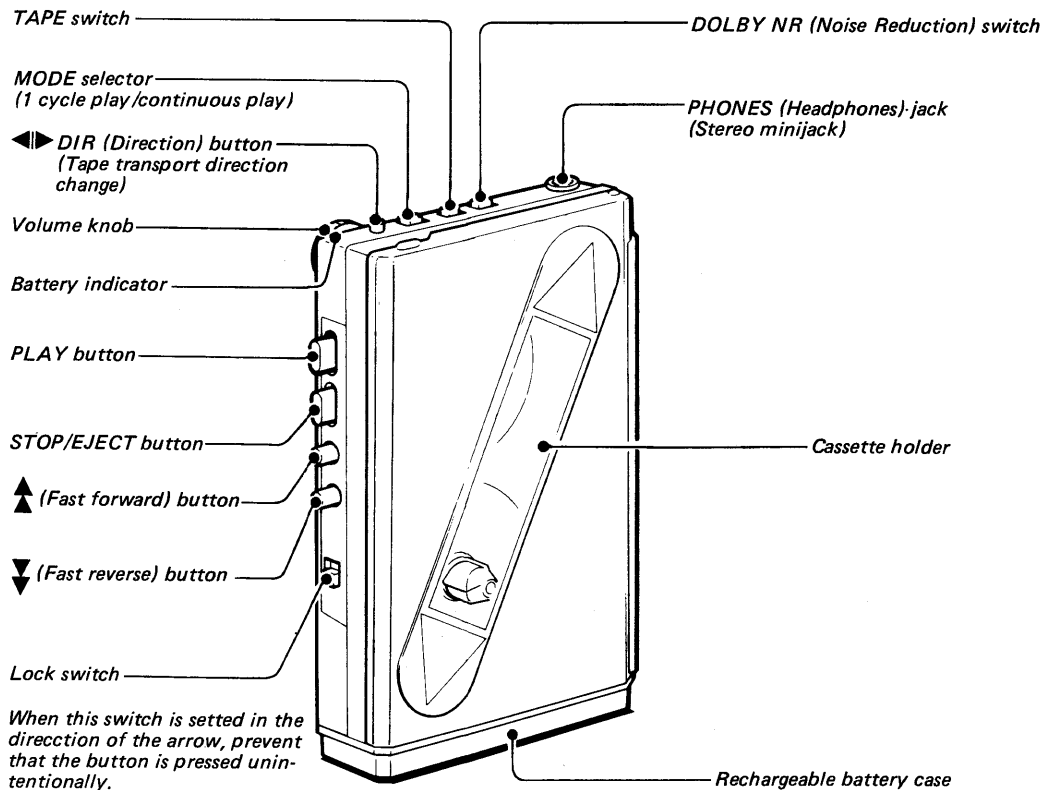
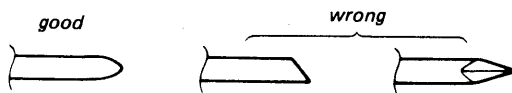
(3) Speedy soldering of electrode on the other side

Solder the electrode on the other side in the same way as in (2) above.

Flexible Circuit Board Repairing

1. Keep the temperature of the soldering iron at $270^{\circ} \pm 10^{\circ} \text{C}$ during repairing.
2. Do not touch the soldering iron more than 4 seconds or 3 times on the same conductor of the circuit board.
3. Do not apply force on the conductor when soldering or unsoldering.

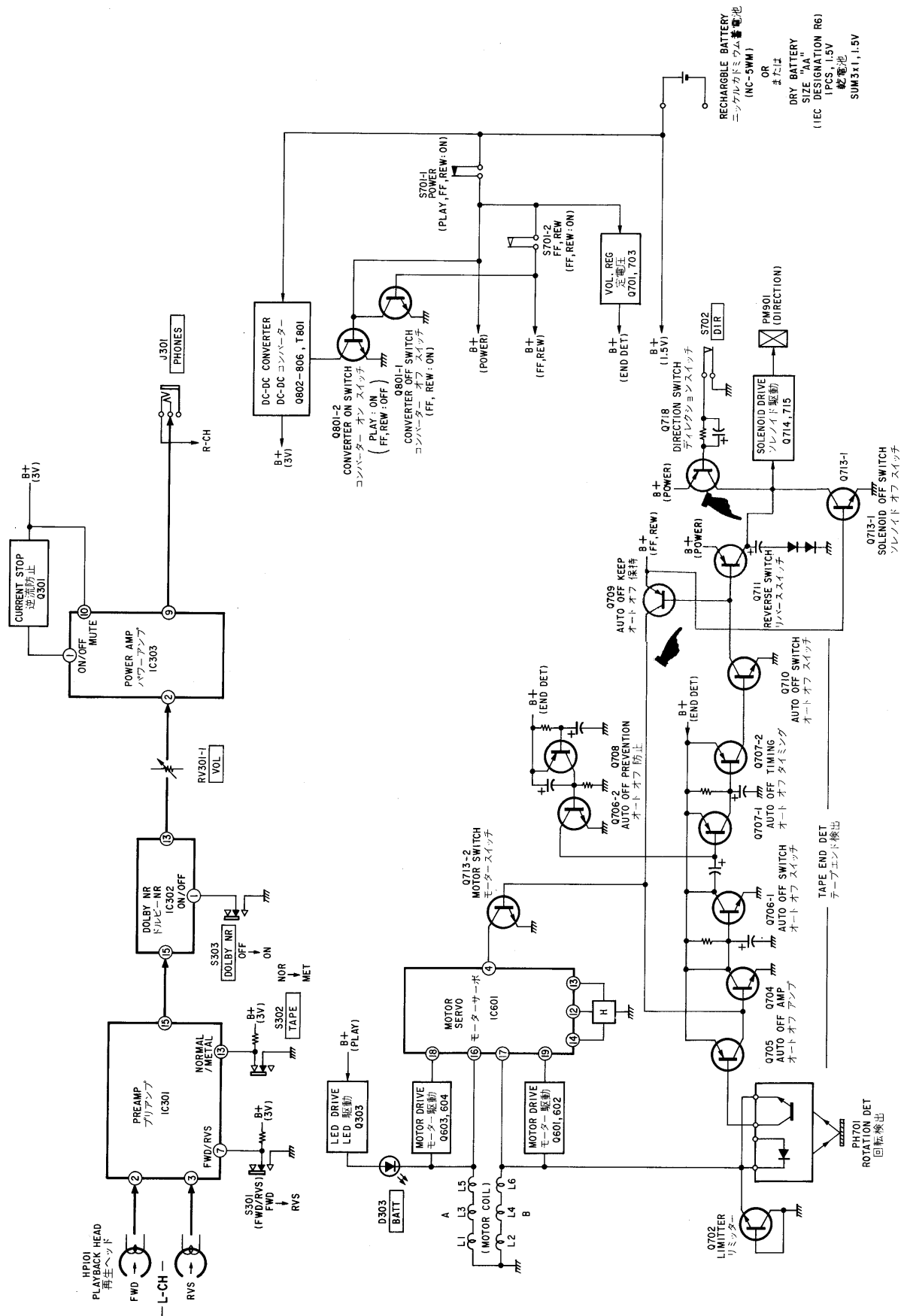
Tip of soldering iron



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SECTION 1 BLOCK DIAGRAM

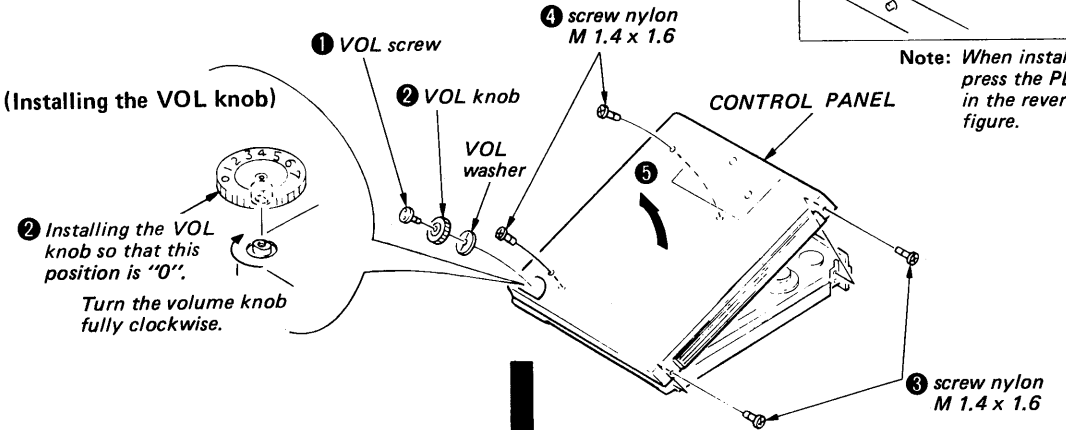


— R-CH —
SAME AS L-CH

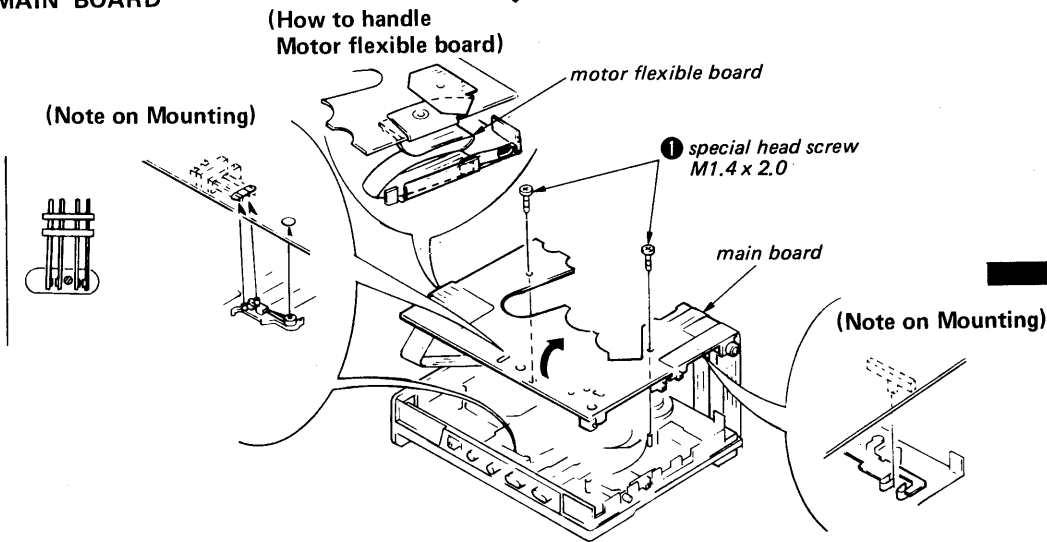
SECTION 2
DISASSEMBLY

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

CONTROL PANEL

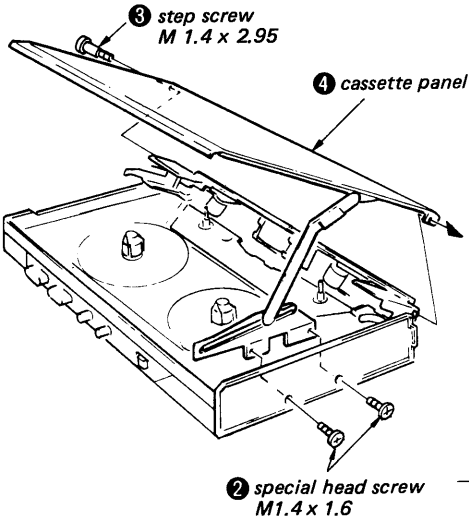


MAIN BOARD

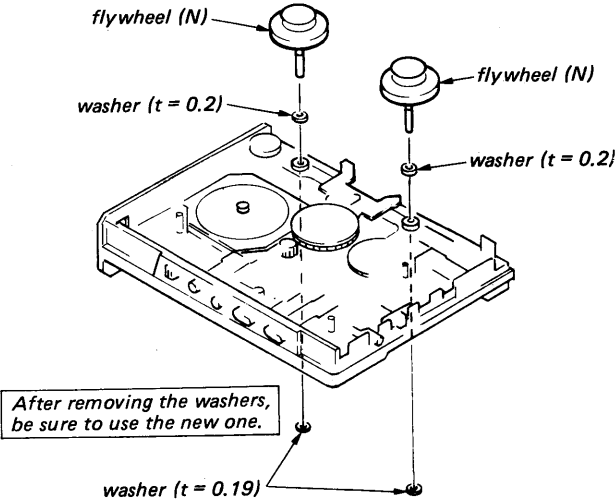


CASSETTE PANEL

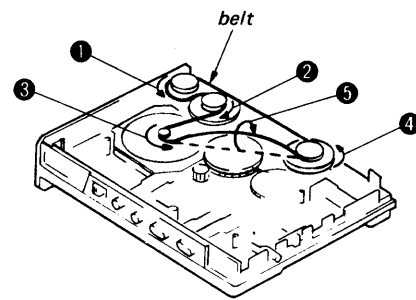
Open the cassette panel.



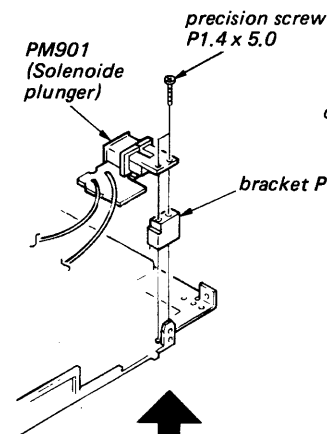
FLYWHEEL



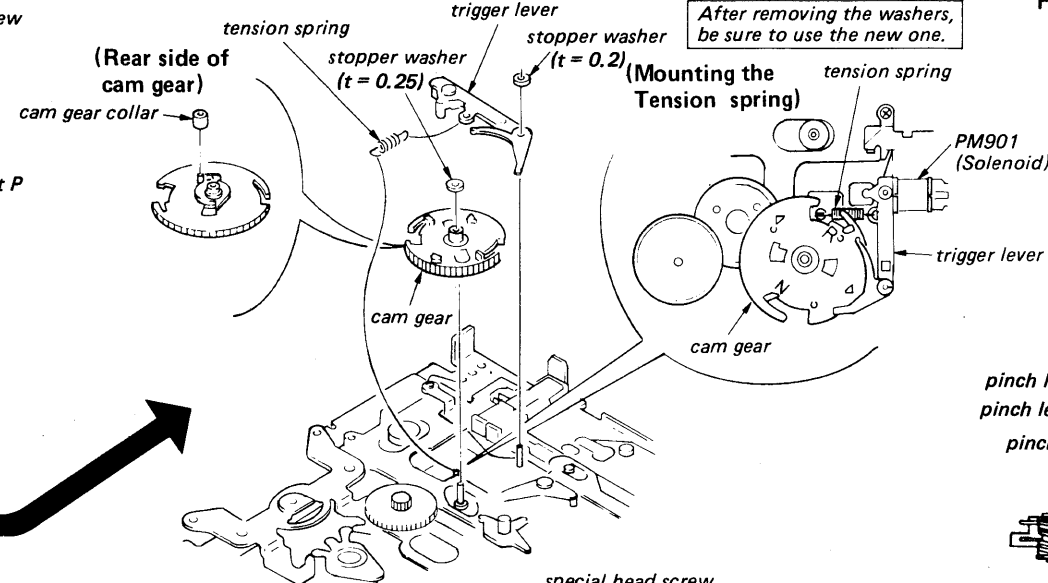
INSTALLING THE BELT



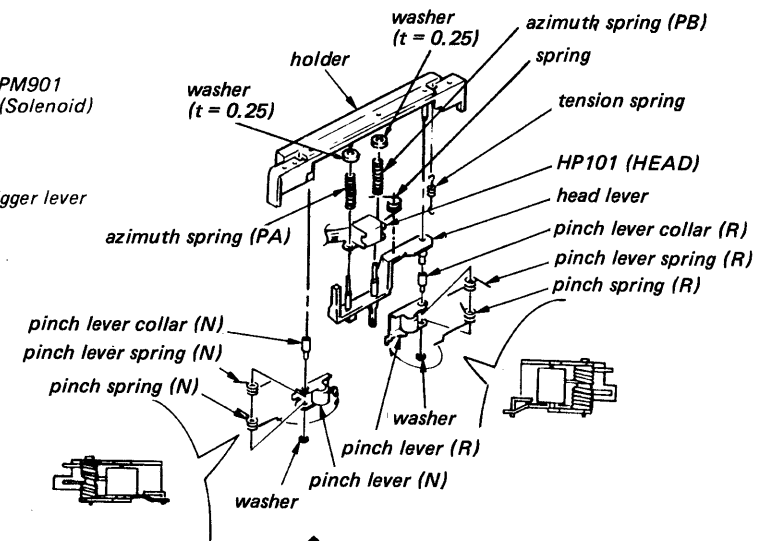
SOLENOID PLUNGER



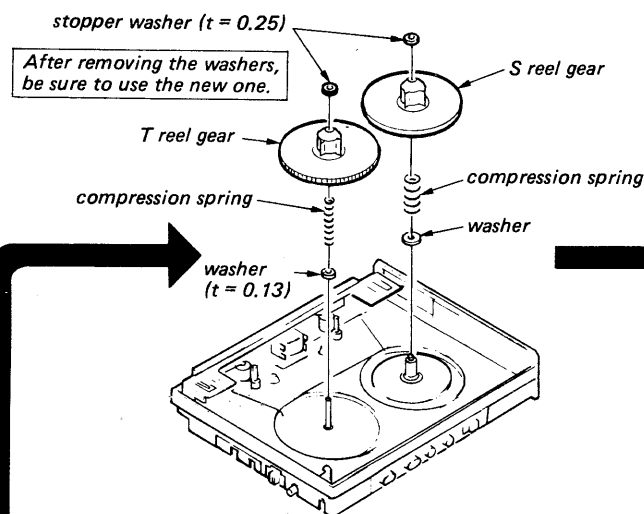
TRIGGER LEVER, CAM GEAR



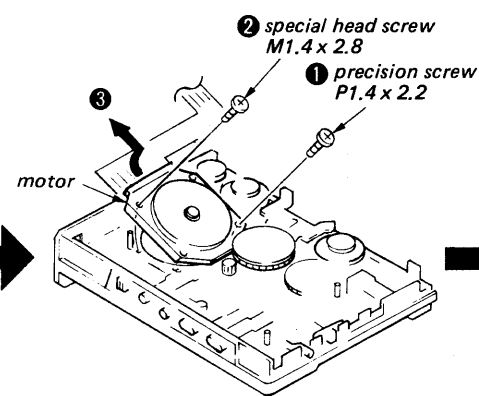
HEAD, PINCHROLLER



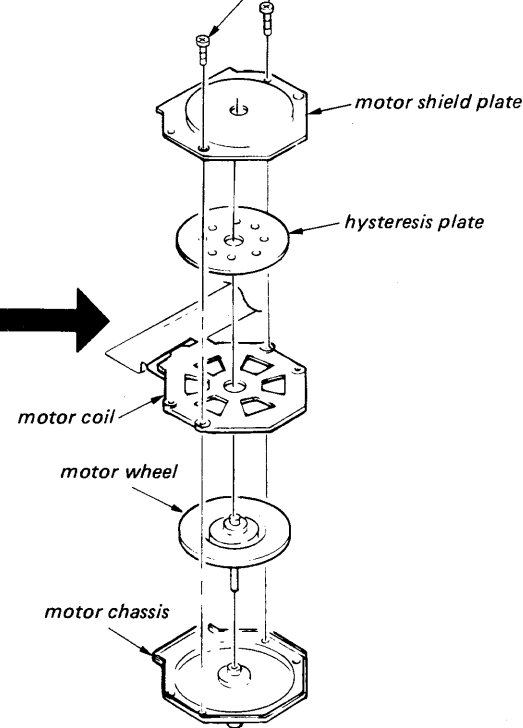
REEL GEAR



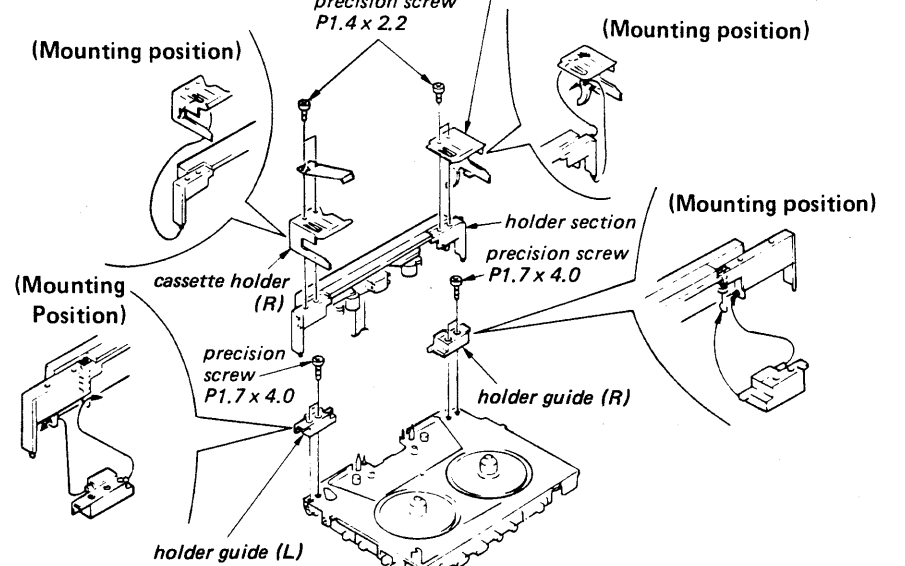
MOTOR



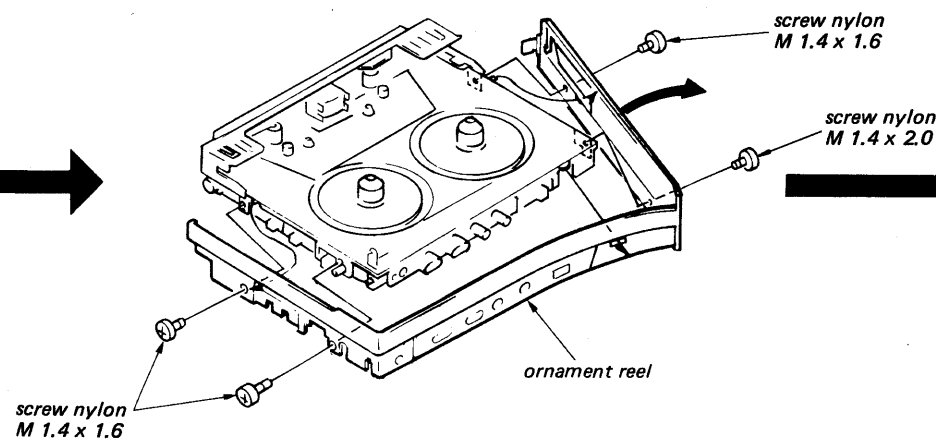
MOTOR COIL



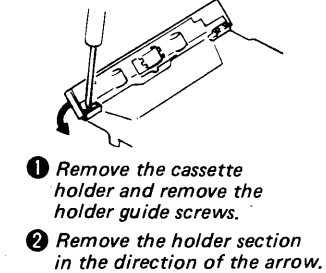
HOLDER



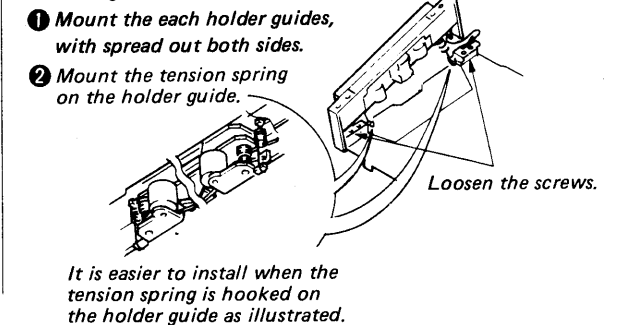
ORNAMENT REEL



Removal



Mounting



SECTION 3 ADJUSTMENTS

MECHANICAL ADJUSTMENTS AND MEASUREMENT

PRECAUTION

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

playback head	rubber belts
capstan	idlers
pinch roller	
- Demagnetize the 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 with the rated power supply voltage (1.3V) unless otherwise noted.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	23 – 40 g·cm 0.32 – 0.55 oz·inch
FWD Back Tension		1.5 – 3 g·cm 0.02 – 0.04 oz·inch
REV	CQ-102RB	23 – 40 g·cm 0.32 – 0.55 oz·inch
REV Back Tension		1.5 – 3 g·cm 0.02 – 0.04 oz·inch
FF	CQ-201B	more than 60 g·cm more than 0.83 oz·inch
REW		more than 60 g·cm more than 0.83 oz·inch

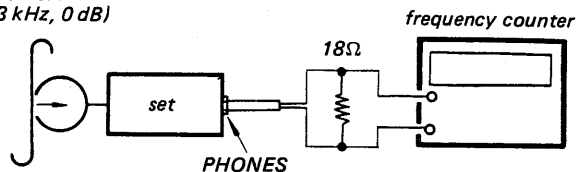
Tape Pulling Force Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 50 g more than 1.76 oz
REV	CQ-403R	more than 50 g more than 1.76 oz

Tape Speed Adjustment

Procedure:

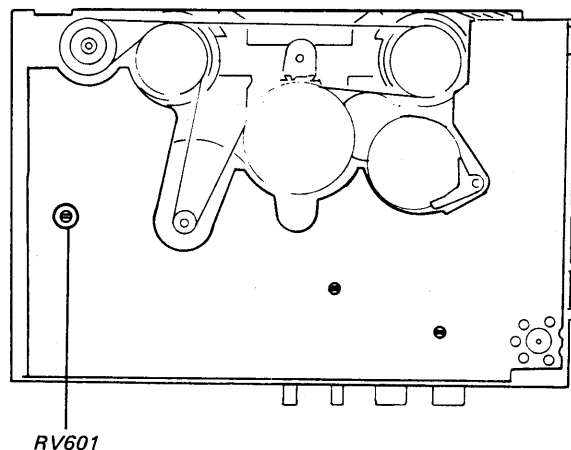
test tape
WS-48A
(3 kHz, 0 dB)



- Playback WS-48A (Tape center portion) in FWD mode.
Adjust the RV601 so that the frequency counter reads 3,000 Hz \pm 10 Hz.
- Playback WS-48A (Tape center portion) in REV mode.
Confirm that the reading of frequency counter is within 1.5% from the reading in step 1.

Adjustment Location:

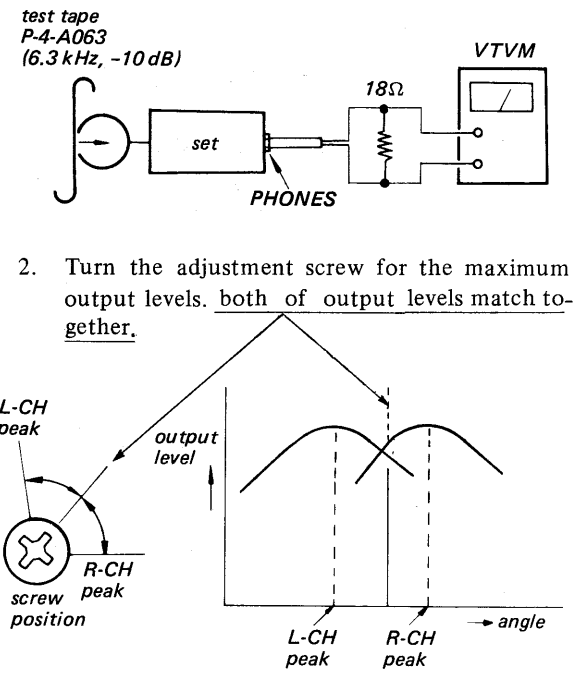
Main Board – Side B –



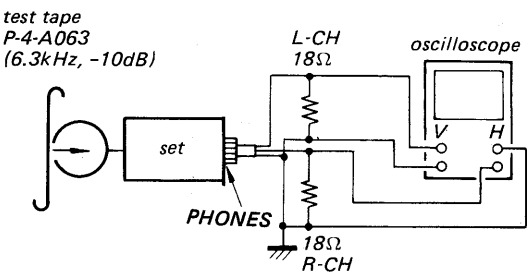
Playback Head Azimuth Adjustment

Procedure:

- 1. Playback mode



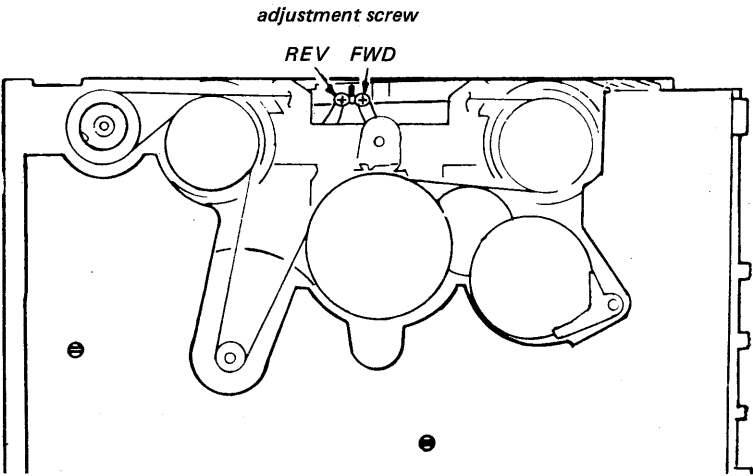
- 6. Phase Check



Screen Pattern				
in phase	45°	90°	135°	180°
good			wrong	

- 4. Open and close the cassette holder and make sure that playback level does not decrease.
- 5. Adjustment should be made in both directions of FWD and REV.
Adjustment screws should be stopped turning in the clockwise direction.
After the adjustment, lock the screws with locking compound.

Adjustment Location:



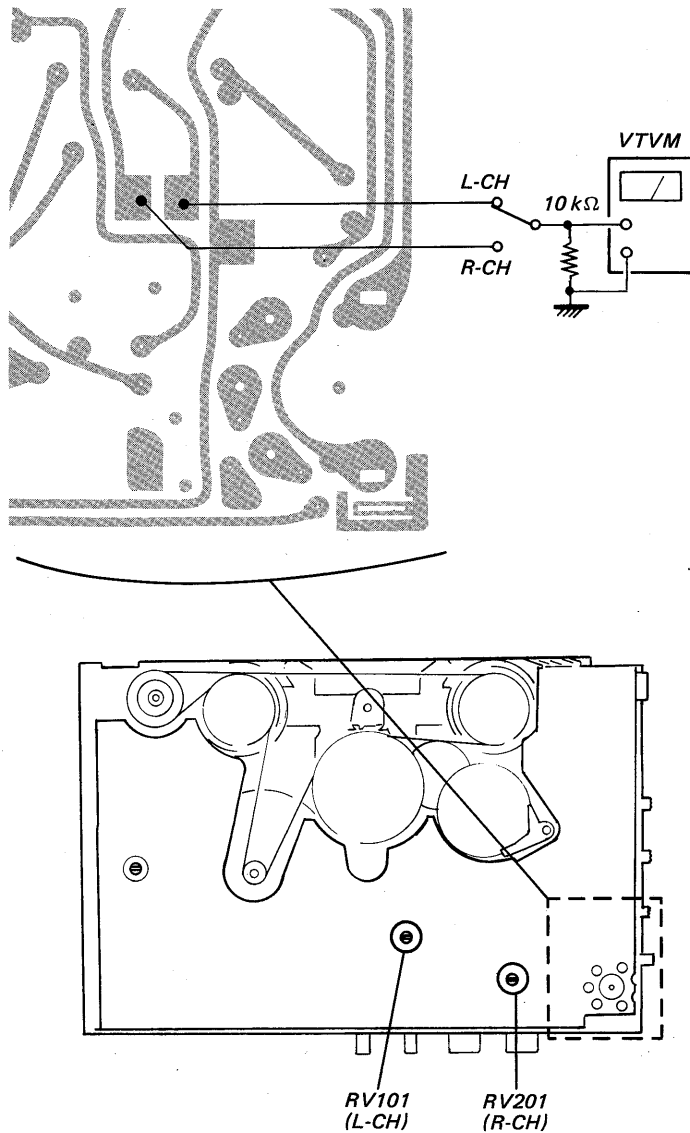
Playback Level Adjustment

DOLBY NR switch OFF

VOL knob MINIMUM

Procedure:

1. Playback mode
2. Adjust RV101 (L-CH), RV201 (R-CH) so that the VTVM reading is -20.5 ± 0.5 dB (0.07 V – 0.077 V).



Semiconductor Lead Layouts

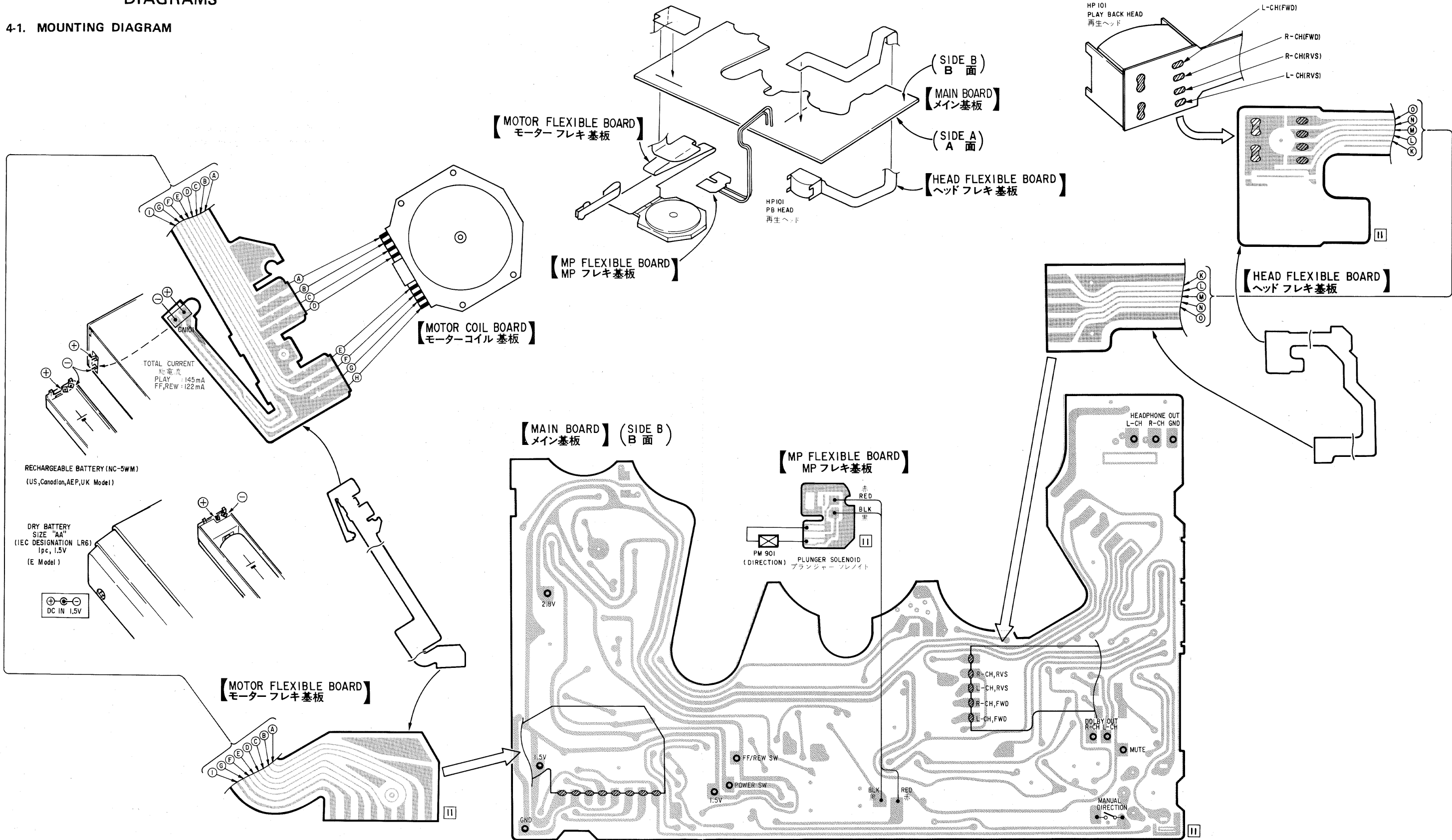
<p>NJL5141E</p>	<p>TA7739F</p>
<p>DA106K RD3.9M-B1</p>	<p>LA4535M</p>
<p>1SS123</p>	<p>NJM2063AM</p>
<p>GL2PR9</p>	<p>2SA1162 2SB624-BV4 2SC2712 2SD596 DTA114TK DTC114TK</p>
<p>CX20123</p>	<p>FMG4 FMS1 TA86E</p>

— For Schematic Diagram —

- Note:**
- All capacitors are in μF unless otherwise noted. 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.
 - : L-CH signal path
 - : R-CH signal path
 - : B+ bus.
 - Total current is measured with no cassette installed.
 - Readings are taken under no-signal conditions with a VOM (50 $\text{k}\Omega/\text{V}$).
 - No mark: PLAY
 - () : When the square wave of 20 Hz, 0 dB (0.775 V) is applied to collector of photo transistor (PH701).
 - Power voltage is 1.5 V and fed with stabilized power supply from DC IN jack.
 - Voltages are dc with respect to ground in STOP mode.
 - Waveforms are taken to ground in no-signal mode by using oscilloscope.
 - Voltage variations may be noted due to normal production tolerances.

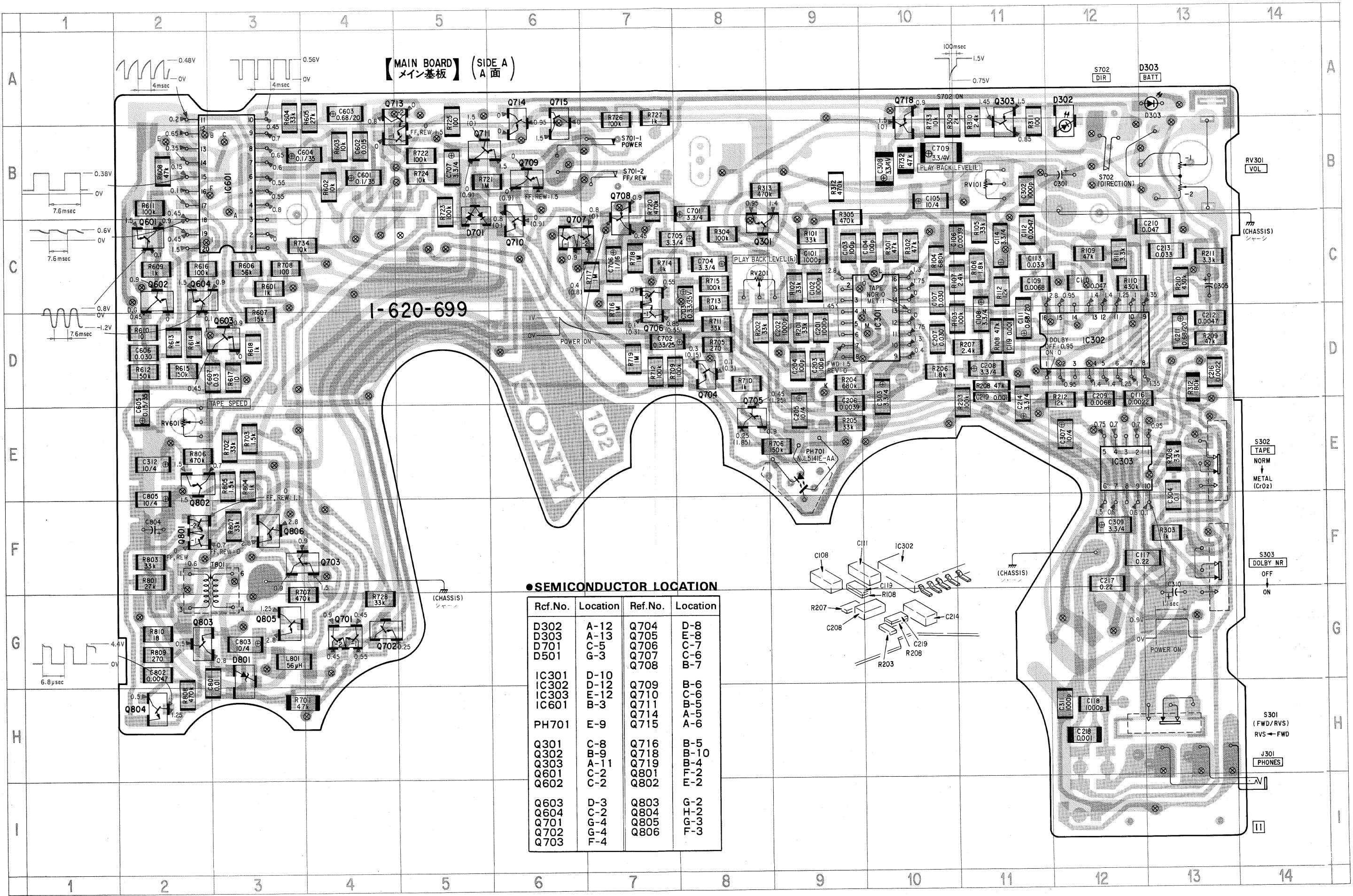
SECTION 4
DIAGRAMS

4.1. MOUNTING DIAGRAM



Note:
● : parts extracted from the component side.
⊗ : Through hole.
⊞ : component-side pattern.

See page 12 for Semiconductor Lead Layouts.



4-2. SCHEMATIC DIAGRAM

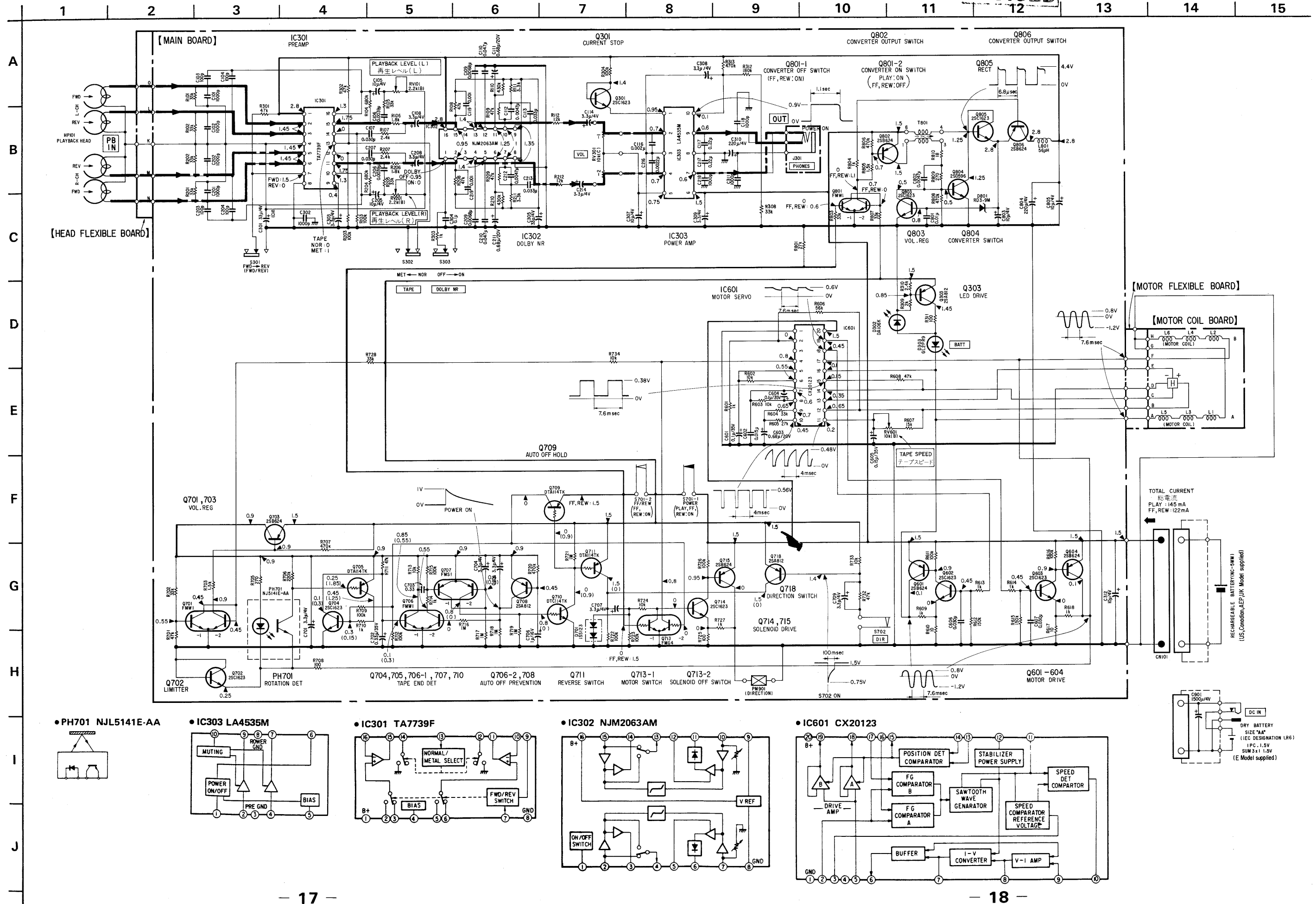
See page 12 for Note.

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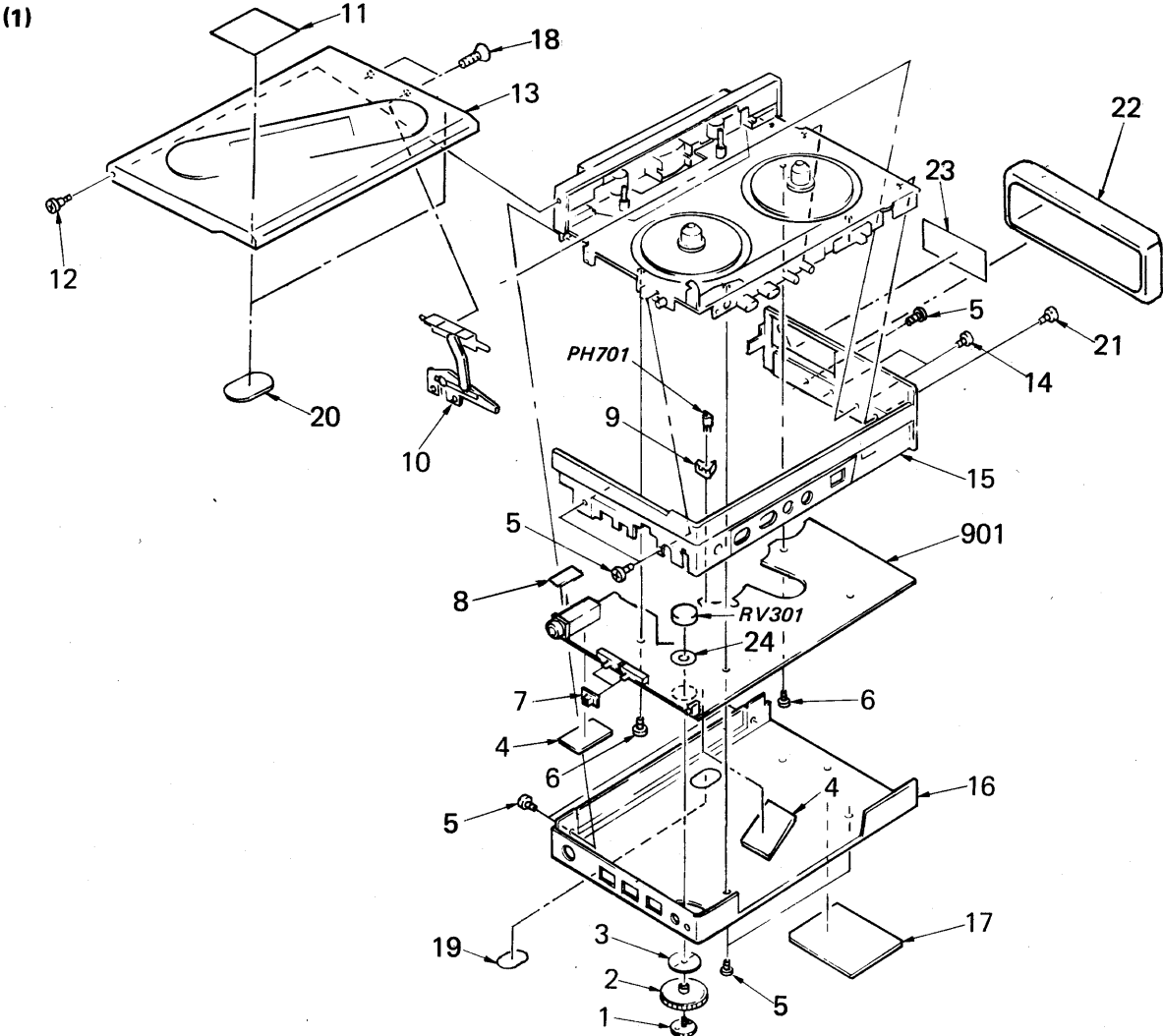


SECTION 5
EXPLODED VIEWS AND PARTS LIST

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.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
 - Color Indication of Appearance Parts
Example: (RED) KNOB, BALANCE (WHITE)

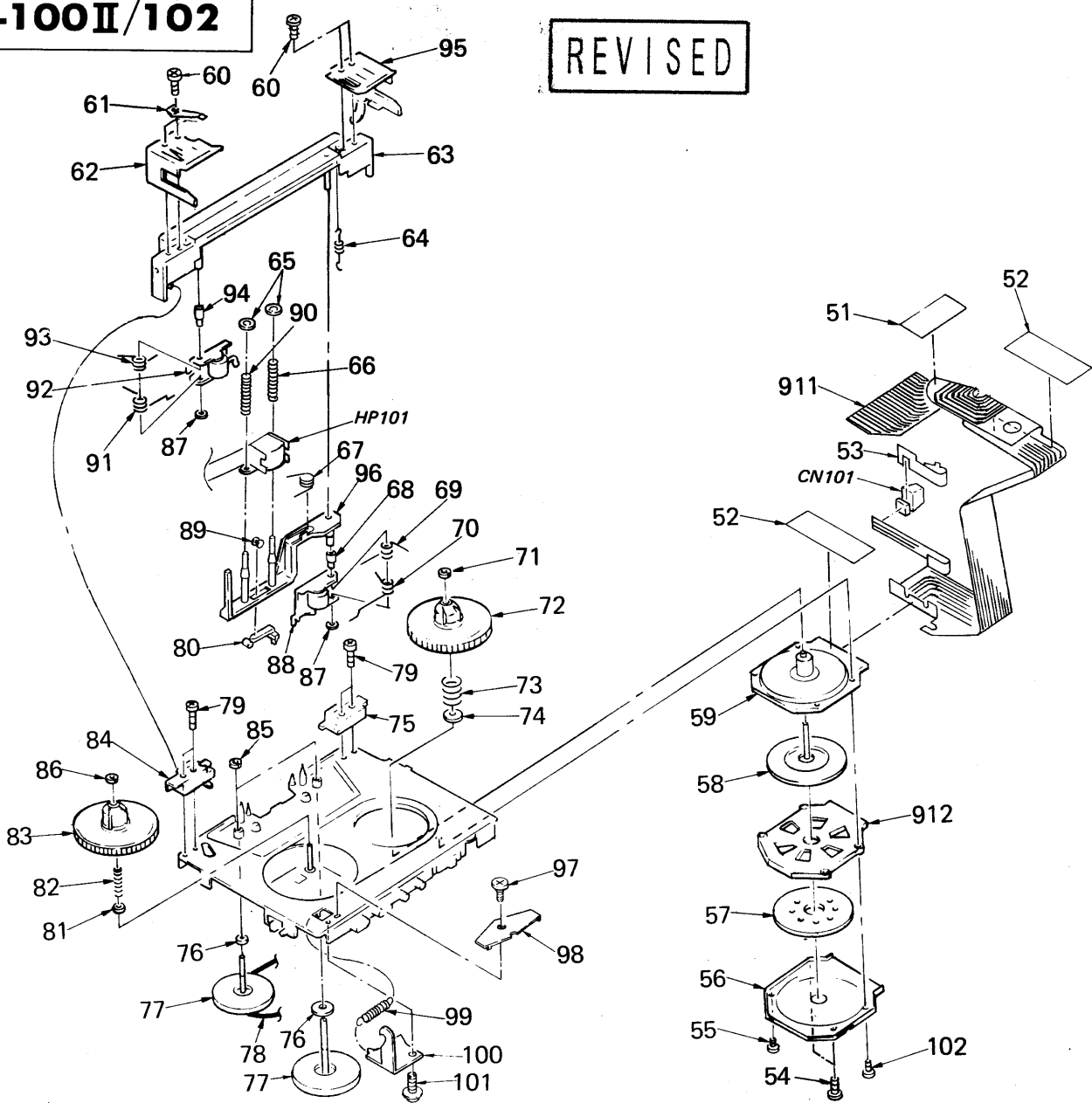
Cabinet's Color Parts' Color



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	3-315-308-00	SCREW, CONTROL		16	X-3329-735-1	(BLACK)....PANEL ASSY, CONTROL	
2	3-329-767-01	KNOB, VOL			X-3329-736-1	(SILVER)....PANEL ASSY, CONTROL	
3	3-315-467-00	WASHER, CONTROL			X-3329-737-1	(RED).....PANEL ASSY, CONTROL	
4	3-831-441-XX	CUSHION, CABINET UPPER 10X7X0.3		17	3-335-975-01	(AEP,UK,E:RED,SILVER)..LABEL, MODEL NUMBER	
5	3-704-197-01	SCREW (M1.4X1.6), NYLON			3-335-975-11	(AEP,UK,E:BLACK).....LABEL, MODEL NUMBER	
6	3-703-816-01	SCREW (M1.4X2.0), SPECIAL HEAD			3-338-620-01	(US,Canadian:SILVER)...LABEL, MODEL NUMBER	
7	3-329-762-01	KNOB, SW			3-338-620-11	(US,Canadian:BLACK)....LABEL, MODEL NUMBER	
8	3-703-929-01	SPACER (P)		18	7-627-451-07	SCREW, PRECISION +K 1.4X1.6	
9	3-329-761-01	ADJUSTOR, REFLECTOR		19	3-333-162-01	(SILVER)...SHEET, AZIMUTH HOLE	
10	X-3329-745-1	BACKET ASSY, ARM			3-333-162-11	(BLACK)....SHEET, AZIMUTH HOLE	
11	3-703-710-01	STICKER, SONY SYMBOL (12)			3-333-162-21	(RED).....SHEET, AZIMUTH HOLE	
12	3-329-766-01	SCREW (M1.4X2.95), STEP		20	3-323-130-01	CUSHION, CASSETTE	
13	X-3329-726-1	(AEP,UK,E:BLACK).....PANEL ASSY, CASSETTE		21	3-704-197-11	SCREW (M1.4X2.0), NYLON	
	X-3329-727-1	(AEP,UK,E:SILVER)....PANEL ASSY, CASSETTE		22	X-3329-743-1	CASE (A) ASSY, R BATTERY (FOR RECHARGEABLE BATTERY)	
	X-3329-728-1	(AEP,UK,E:RED).....PANEL ASSY, CASSETTE		23	3-527-213-00	(Canadian,AEP,UK,E)..LABEL, SERIAL NUMBER	
	X-3329-780-1	(US,Canadian:SILVER)..PANEL ASSY, CASSETTE			*3-701-999-00	(US)...LABEL, SERIAL NUMBER	
	X-3329-781-1	(US,Canadian:BLACK)...PANEL ASSY, CASSETTE		24	3-330-442-01	SHEET, ADHESIVE, VOL	
14	3-703-816-31	SCREW (M1.4X1.6), SPECIAL HEAD		901	A-3070-181-A	PC BOARD ASSY, AU	
15	3-335-950-01	ORNAMENT, REEL		PH701	8-719-751-42	DIODE NJL5141E-AA	
				RV301	1-230-955-11	RES, VAR, CARBON 10K/10K (VOL)	

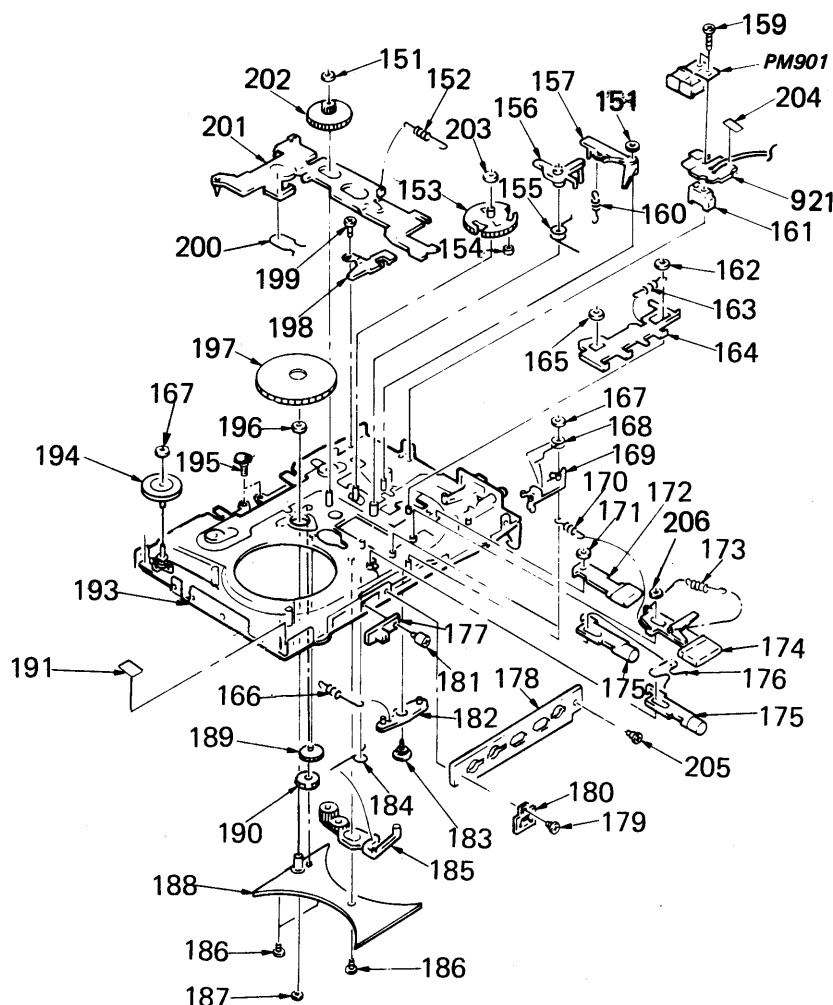
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(2)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
51	3-485-343-01	CUSHION, CABINET UPPER 10X7X0.5		79	7-627-552-48	SCREW, PRECISION +P 1.7X4	
52	3-703-929-01	SHEET, INSULATING		80	3-333-101-01	LEVER, AZIMUTH	
53	3-335-977-01	SPRING		81	3-315-415-21	WASHER (1.5-2.3)	
54	3-703-816-92	SCREW (M1.4X2.8), SPECIAL HEAD		82	3-331-013-01	SPRING, COMPRESSION	
55	3-703-816-62	SCREW (M1.4X2.2), SPECIAL HEAD		83	X-3329-705-1	GEAR (R) ASSY, T REEL	
56	*3-333-126-01	PLATE (R), SHIELD, MOTOR		84	3-329-736-01	GUIDE (RIGHT), HOLDER	
57	3-333-173-01	PLATE (S), HYSTERESIS		85	3-331-007-01	WASHER	
58	A-3133-236-A	WHEEL BLOCK ASSY, MOTOR		86	3-578-242-21	WASHER	
59	X-3329-625-1	CHASSIS ASSY, MOTOR		87	3-331-036-01	WASHER	
60	7-627-551-98	PRECISION SCREW +P 1.4X2.2		88	X-3329-602-1	PINCH LEVER (R) ASSY	
61	*3-331-087-01	SPRING		89	3-333-102-01	SHAFT, AZIMUTH	
62	3-329-714-01	HOLDER (RIGHT), CASSETTE		90	3-337-943-01	SPRING, COMPRESSION (PA)	
63	X-3329-719-1	HOLDER (D) ASSY		91	3-329-642-01	SPRING (N)	
64	3-331-012-01	SPRING (HOLDER), TENSION		92	X-3329-601-1	PINCH LEVER (N) ASSY	
65	3-335-902-01	WASHER		93	3-329-640-01	SPRING (N)	
66	3-337-942-01	SPRING, COMPRESSION (PB)		94	3-329-637-01	COLLAR, PINCH LEVER	
67	3-337-963-11	SPRING		95	3-329-713-01	HOLDER (LEFT), CASSETTE	
68	3-331-027-01	COLLAR (R), PINCH LEVER		96	X-3329-765-1	LEVER ASSY, HEAD	
69	3-329-643-01	SPRING (R)		97	3-333-124-01	SCREW (M1.4), STEP, PRECISION	
70	3-329-641-01	SPRING (R)		98	*3-335-942-01	LEVER (B), EJECT	
71	3-578-242-21	WASHER		99	3-337-964-01	SPRING, TENSION (EJECT LEVER A)	
72	3-329-729-01	GEAR, SUPPLY REEL		100	*3-335-943-01	LEVER (A), EJECT	
73	3-331-014-01	SPRING, COMPRESSION		101	3-703-502-01	SCREW (M1.4X2.8), EJECT LEVER (A)	
74	3-320-354-01	WASHER		102	3-703-816-91	SCREW (M1.4X2.8), SPECIAL HEAD	
75	3-329-737-01	GUIDE (LEFT), HOLDER		911	1-617-017-11	PC BOARD, MOTOR CONNECTION	
76	3-321-394-21	WASHER		912	1-462-230-11	COIL, MOTOR (STATOR)	
77	X-3329-670-1	FLYWHEEL ASSY (N)		CN101	1-506-573-12	CONNECTOR 2P	
78	3-329-695-01	BELT		HP101	1-543-310-11	HEAD, MAGNETIC (PLAYBACK)	

(3)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	3-315-384-11	WASHER STOPPER		180	3-331-043-01	SPRING	
152	3-337-962-01	SPRING, TENSION (DRIVING LEVER)		181	3-329-697-01	SCREW, STEP, PRECISION	
153	3-329-730-01	GEAR, CAM		182	X-3329-617-1	LEVER (B) ASSY, DRIVING	
154	3-329-693-01	COLLAR, CAM GEAR		183	3-331-056-01	SHAFT, DRIVING LEVER (B)	
155	3-329-700-01	SPRING, LEVER (A) SHUT-OFF		184	3-329-699-01	SPRING, LEVER (B) FR	
156	3-329-733-01	LEVER (A), SHUT-OFF		185	X-3329-626-1	LEVER (B) ASSY, F.R	
157	X-3329-615-1	LEVER ASSY, TRIGGER		186	3-331-047-01	SCREW (M1.4X1.4), SPECIAL HEAD	
159	7-627-551-37	SCREW, PRECISION +P 1.4X5		187	3-331-007-01	WASHER	
160	3-331-011-01	SPRING (TRIGGER LEVER), TENSION		188	X-3329-618-1	COVER ASSY, REEL	
161	*3-331-041-01	BRACKET, P		189	3-329-688-01	GEAR (A), T	
162	3-578-224-00	WASHER, LEVER LOCK		190	3-329-689-01	GEAR (B), T	
163	3-331-009-01	SPRING (LOCK LEVER), TENSION		191	3-327-119-01	SHEET (B), INSULATING	
164	3-329-731-01	LEVER, LOCK		193	X-3329-635-2	CHASSIS COMPLETE ASSY	
165	3-311-815-21	WASHER, POLYETHYLENE		194	3-329-686-01	WHEEL, REVERSE	
166	3-331-018-01	SPRING, TENSION		195	3-331-097-01	SCREW, AZIMUTH	
167	3-331-036-11	WASHER, SW		196	3-321-394-21	WASHER	
168	3-329-702-01	SPRING, SW		197	X-3329-628-1	PULLEY COMPLETE ASSY, MIDWAY	
169	3-329-692-05	LEVER, SW		198	3-329-685-01	SPRING (A), NR	
170	3-331-010-01	SPRING (STOP LEVER), TENSION		199	3-331-008-01	SCREW (M1.4X1.1) (1), PRECISION	
171	3-315-414-00	WASHER, PLAY		200	3-329-698-01	SPRING (B), NR	
172	X-3329-679-1	LEVER ASSY, PLAY		201	X-3329-755-1	LEVER (AD) (P) ASSY, DRIVING	
173	3-331-111-01	SPRING, TENSION		202	3-329-687-01	GEAR, DRIVING	
174	X-3329-678-1	LEVER ASSY, STOP		203	3-578-242-11	WASHER, CAM GEAR	
175	X-3329-696-1	LEVER (A) ASSY, FR		204	3-703-929-01	SPACER, SWITCH	
176	3-331-016-01	SPRING, FR		205	3-703-816-31	SCREW (M1.4X1.6), SPECIAL HEAD	
177	3-329-769-01	KNOB, SAFETY LOCK		206	3-578-224-11	WASHER, STOP	
178	*3-329-734-01	HOLDER, BUTTON		921	1-617-019-11	PC BOARD, MP FLEXIBLE	
179	3-703-816-02	SCREW (M1.4X2.0), SPECIAL HEAD		PM901	1-454-406-11	SOLENOID, PLUNGER	

NOTE:

- 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:μF, PF:μμF.

RESISTORS

- All resistors are in ohms.
- F : nonflammable

COILS

- MMH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:

UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
901	A-3070-181-A	PC BOARD ASSY, AU			
911	1-617-017-11	PC BOARD, MOTOR CONNECTION			
912	1-462-230-11	COIL, MOTOR (STATOR)			
921	1-617-019-11	PC BOARD, MP FLEXIBLE			
C101	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C102	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C103	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C104	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C105	1-135-104-00	TANTAL. CHIP 10MF	10%	4V	
C106	1-163-016-00	CERAMIC CHIP 0.0039MF	10%	50V	
C107	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V	
C108	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C109	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V	
C110	1-163-075-00	CERAMIC CHIP 0.047MF	10%	25V	
C111	1-135-087-21	TANTAL. CHIP 0.68MF	10%	20V	
C112	1-163-017-00	CERAMIC CHIP 0.0047MF	5%	50V	
C113	1-163-074-00	CERAMIC CHIP 0.033MF	5%	25V	
C114	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C116	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	
C117	1-163-081-00	CERAMIC CHIP 0.22MF		25V	
C118	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C119	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C201	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C202	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C203	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C204	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C205	1-135-104-00	TANTAL. CHIP 10MF	10%	4V	
C206	1-163-016-00	CERAMIC CHIP 0.0039MF	10%	50V	
C207	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V	
C208	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C209	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V	
C210	1-163-075-00	CERAMIC CHIP 0.047MF	10%	25V	
C211	1-135-087-21	TANTAL. CHIP 0.68MF	10%	20V	
C212	1-163-017-00	CERAMIC CHIP 0.0047MF	5%	50V	
C213	1-163-074-00	CERAMIC CHIP 0.033MF	5%	25V	
C214	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C216	1-163-013-00	CERAMIC CHIP 0.0022MF	10%	50V	
C217	1-163-081-00	CERAMIC CHIP 0.22MF		25V	
C218	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C219	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C301	1-124-431-00	ELECT 33MF	20%	4V	
C302	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C303	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C304	1-163-038-00	CERAMIC CHIP 0.1MF		25V	
C305	1-124-431-00	ELECT 33MF	20%	4V	
C307	1-135-104-00	TANTAL. CHIP 10MF	10%	4V	

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C308	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C309	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C310	1-124-413-00	ELECT 220MF	20%	4V	
C311	1-163-141-00	CERAMIC CHIP 0.001MF	10%	50V	
C312	1-135-104-00	TANTAL. CHIP 10MF	10%	4V	
C601	1-135-070-00	TANTAL. CHIP 0.1MF	10%	35V	
C602	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V	
C603	1-135-087-21	TANTAL. CHIP 0.68MF	10%	20V	
C604	1-135-070-00	TANTAL. CHIP 0.1MF	10%	35V	
C605	1-135-071-21	TANTAL. CHIP 0.15MF	10%	35V	
C606	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V	
C607	1-163-810-00	CERAMIC CHIP 0.03MF	10%	25V	
C701	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C702	1-135-073-00	TANTAL. CHIP 0.33MF	10%	35V	
C703	1-135-073-00	TANTAL. CHIP 0.33MF	10%	35V	
C704	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C705	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C706	1-135-091-00	TANTAL. CHIP 1MF	10%	16V	
C707	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C709	1-135-103-00	TANTAL. CHIP 3.3MF	10%	4V	
C801	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V	
C802	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	
C803	1-135-104-00	TANTAL. CHIP 10MF	10%	4V	
C804	1-124-413-00	ELECT 220MF	20%	4V	
C805	1-135-104-00	TANTAL. CHIP 10MF	10%	4V	
CN101	1-506-573-12	CONNECTOR 2P			
D302	8-719-908-30	DIODE DA106K			
D303	1-807-305-11	DIODE GL2PR9 (LED)			
D701	8-719-104-22	DIODE 1SS123			
D801	8-719-105-57	DIODE RD3.9M-B1			
HP101	1-543-310-11	HEAD, MAGNETIC (PLAYBACK)			
IC301	8-759-203-85	IC TA7739F			
IC302	8-759-701-07	IC NJM2063AM			
IC303	8-759-802-80	IC LA4535M			
IC601	8-752-012-32	IC CX20123			
J301	1-562-974-11	JACK (PHONE)			
L801	1-410-213-51	INDUCTOR CHIP 56UH			
PH701	8-719-751-42	DIODE NJL5141E-AA			
PM901	1-454-406-11	SOLENOID, PLUNGER			
Q301	8-729-271-29	TRANSISTOR 2SC2712			
Q303	8-729-216-22	TRANSISTOR 2SA1162			
Q601	8-729-162-44	TRANSISTOR 2SB624-BV4			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q602	8-729-271-29	TRANSISTOR 2SC2712
Q603	8-729-271-29	TRANSISTOR 2SC2712
Q604	8-729-162-44	TRANSISTOR 2SB624-BV4
Q701	8-729-902-38	TRANSISTOR TA86E
Q702	8-729-271-29	TRANSISTOR 2SC2712
Q703	8-729-162-44	TRANSISTOR 2SB624-BV4
Q704	8-729-271-29	TRANSISTOR 2SC2712
Q705	8-729-900-51	TRANSISTOR DTA114TK
Q706	8-729-902-38	TRANSISTOR TA86E
Q707	8-729-902-96	TRANSISTOR FMS1
Q708	8-729-216-22	TRANSISTOR 2SA1162
Q709	8-729-900-51	TRANSISTOR DTA114TK
Q710	8-729-902-99	TRANSISTOR DTC114TK
Q711	8-729-900-51	TRANSISTOR DTA114TK
Q713	8-729-902-93	TRANSISTOR FMG4
Q714	8-729-271-29	TRANSISTOR 2SC2712
Q715	8-729-162-44	TRANSISTOR 2SB624-BV4
Q718	8-729-216-22	TRANSISTOR 2SA1162
Q801	8-729-902-38	TRANSISTOR TA86E
Q802	8-729-162-44	TRANSISTOR 2SB624-BV4
Q803	8-729-271-29	TRANSISTOR 2SC2712
Q804	8-729-159-64	TRANSISTOR 2SD596
Q805	8-729-271-29	TRANSISTOR 2SC2712
Q806	8-729-162-44	TRANSISTOR 2SB624-BV4
R101	1-216-085-00	METAL CHIP 33K 5% 1/10W
R102	1-216-085-00	METAL CHIP 33K 5% 1/10W
R103	1-216-097-00	METAL CHIP 100K 5% 1/10W
R104	1-216-117-00	METAL CHIP 680K 5% 1/10W
R105	1-216-085-00	METAL CHIP 33K 5% 1/10W
R106	1-216-055-00	METAL CHIP 1.8K 5% 1/10W
R107	1-216-058-00	METAL CHIP 2.4K 5% 1/10W
R108	1-216-089-00	METAL CHIP 47K 5% 1/10W
R109	1-216-089-00	METAL CHIP 47K 5% 1/10W
R110	1-216-112-00	METAL CHIP 430K 5% 1/10W
R111	1-216-061-00	METAL CHIP 3.3K 5% 1/10W
R112	1-216-075-00	METAL CHIP 12K 5% 1/10W
R201	1-216-085-00	METAL CHIP 33K 5% 1/10W
R202	1-216-085-00	METAL CHIP 33K 5% 1/10W
R203	1-216-097-00	METAL CHIP 100K 5% 1/10W
R204	1-216-117-00	METAL CHIP 680K 5% 1/10W
R205	1-216-085-00	METAL CHIP 33K 5% 1/10W
R206	1-216-055-00	METAL CHIP 1.8K 5% 1/10W
R207	1-216-058-00	METAL CHIP 2.4K 5% 1/10W
R208	1-216-089-00	METAL CHIP 47K 5% 1/10W
R209	1-216-089-00	METAL CHIP 47K 5% 1/10W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R210	1-216-112-00	METAL CHIP 430K 5% 1/10W
R211	1-216-061-00	METAL CHIP 3.3K 5% 1/10W
R212	1-216-075-00	METAL CHIP 12K 5% 1/10W
R301	1-216-089-00	METAL CHIP 47K 5% 1/10W
R302	1-216-089-00	METAL CHIP 47K 5% 1/10W
R303	1-216-049-00	METAL CHIP 1K 5% 1/10W
R304	1-216-097-00	METAL CHIP 100K 5% 1/10W
R308	1-216-085-00	METAL CHIP 33K 5% 1/10W
R309	1-216-056-00	METAL CHIP 2K 5% 1/10W
R310	1-216-058-00	METAL CHIP 2.4K 5% 1/10W
R311	1-216-025-00	METAL CHIP 100 5% 1/10W
R312	1-216-103-00	METAL CHIP 180K 5% 1/10W
R313	1-216-113-00	METAL CHIP 470K 5% 1/10W
R601	1-216-049-00	METAL CHIP 1K 5% 1/10W
R602	1-216-073-00	METAL CHIP 10K 5% 1/10W
R603	1-216-073-00	METAL CHIP 10K 5% 1/10W
R604	1-216-085-00	METAL CHIP 33K 5% 1/10W
R605	1-216-083-00	METAL CHIP 27K 5% 1/10W
R606	1-216-091-00	METAL CHIP 56K 5% 1/10W
R607	1-216-077-00	METAL CHIP 15K 5% 1/10W
R608	1-216-089-00	METAL CHIP 47K 5% 1/10W
R609	1-216-049-00	METAL CHIP 1K 5% 1/10W
R610	1-216-001-00	METAL CHIP 10 5% 1/10W
R611	1-216-097-00	METAL CHIP 100K 5% 1/10W
R612	1-216-101-00	METAL CHIP 150K 5% 1/10W
R613	1-216-049-00	METAL CHIP 1K 5% 1/10W
R614	1-216-049-00	METAL CHIP 1K 5% 1/10W
R615	1-216-101-00	METAL CHIP 150K 5% 1/10W
R616	1-216-097-00	METAL CHIP 100K 5% 1/10W
R617	1-216-001-00	METAL CHIP 10 5% 1/10W
R618	1-216-049-00	METAL CHIP 1K 5% 1/10W
R701	1-216-089-00	METAL CHIP 47K 5% 1/10W
R702	1-216-085-00	METAL CHIP 33K 5% 1/10W
R703	1-216-053-00	METAL CHIP 1.5K 5% 1/10W
R705	1-216-035-00	METAL CHIP 270 5% 1/10W
R706	1-216-101-00	METAL CHIP 150K 5% 1/10W
R707	1-216-113-00	METAL CHIP 470K 5% 1/10W
R708	1-216-025-00	METAL CHIP 100 5% 1/10W
R709	1-216-097-00	METAL CHIP 100K 5% 1/10W
R710	1-216-049-00	METAL CHIP 1K 5% 1/10W
R711	1-216-089-00	METAL CHIP 47K 5% 1/10W
R712	1-216-097-00	METAL CHIP 100K 5% 1/10W
R713	1-216-073-00	METAL CHIP 10K 5% 1/10W
R714	1-216-049-00	METAL CHIP 1K 5% 1/10W
R715	1-216-097-00	METAL CHIP 100K 5% 1/10W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R716	1-216-121-00	METAL CHIP	1M	5%	1/10W
R717	1-216-121-00	METAL CHIP	1M	5%	1/10W
R718	1-216-121-00	METAL CHIP	1M	5%	1/10W
R719	1-216-121-00	METAL CHIP	1M	5%	1/10W
R720	1-216-113-00	METAL CHIP	470K	5%	1/10W
R721	1-216-121-00	METAL CHIP	1M	5%	1/10W
R722	1-216-097-00	METAL CHIP	100K	5%	1/10W
R723	1-216-097-00	METAL CHIP	100K	5%	1/10W
R724	1-216-073-00	METAL CHIP	10K	5%	1/10W
R725	1-216-025-00	METAL CHIP	100	5%	1/10W
R726	1-216-097-00	METAL CHIP	100K	5%	1/10W
R727	1-216-049-00	METAL CHIP	1K	5%	1/10W
R728	1-216-085-00	METAL CHIP	33K	5%	1/10W
R732	1-216-089-00	METAL CHIP	47K	5%	1/10W
R733	1-216-073-00	METAL CHIP	10K	5%	1/10W
R734	1-216-073-00	METAL CHIP	10K	5%	1/10W
R801	1-216-083-00	METAL CHIP	27K	5%	1/10W
R803	1-216-085-00	METAL CHIP	33K	5%	1/10W
R804	1-216-049-00	METAL CHIP	1K	5%	1/10W
R805	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R806	1-216-113-00	METAL CHIP	470K	5%	1/10W
R807	1-216-085-00	METAL CHIP	33K	5%	1/10W
R808	1-216-113-00	METAL CHIP	470K	5%	1/10W
R809	1-216-035-00	METAL CHIP	270	5%	1/10W
R810	1-216-007-00	METAL CHIP	18	5%	1/10W
RV101	1-237-002-11	RES, ADJ, METAL GLAZE 2.2K (L LEVEL)			
RV201	1-237-002-11	RES, ADJ, METAL GLAZE 2.2K (R LEVEL)			
RV301	1-230-955-11	RES, VAR, CARBON 10K/10K (VOL)			
RV601	1-237-004-11	RES, ADJ, METAL GLAZE 10K (TAPE SPEED)			
S301	1-570-396-11	SWITCH, SLIDE (FWD/REV)			
S302	1-570-397-11	SWITCH, SLIDE (TAPE)			
S303	1-570-397-11	SWITCH, SLIDE (DOLBY NR)			
S701	1-570-548-11	SWITCH, LEAF (POWER,FF/REW)			
S702	1-570-395-11	SWITCH, LEAF (DIR)			
T801	1-447-864-11	TRANSFORMER, DC-DC CONVERTER			

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-528-052-11	(E)...BATTERY, ALKALINE, MANGANIN (LR6)
1-528-176-11	(US,Canadian,AEP,UK) ...BATTERY, STORAGE (NC-5WM)
1-528-221-11	(US).....BATTERY CHARGER (BC-7F)
1-528-224-11	(Canadian)...BATTERY CHARGER (BC-7F)
1-528-222-11	(UK).....BATTERY CHARGER (BC-7F)
1-528-223-11	(AEP).....BATTERY CHARGER (BC-7F)
3-335-958-02	(E).....INDIVIDUAL CARTON
3-335-963-01	(AEP,UK).....INDIVIDUAL CARTON
3-335-965-01	(US).....INDIVIDUAL CARTON
3-335-966-01	(Canadian)...INDIVIDUAL CARTON
3-335-959-01	CUSHION
3-335-960-01	LID, CUSHION
3-335-961-01	SPACER
3-337-975-01	CASE, CARRYING
3-527-213-02	(Canadian)...LABEL, SERIAL NUMBER
3-701-999-00	(US).....LABEL, SERIAL NUMBER
3-701-623-00	BAG, POLYETHYLENE
3-703-895-01	LABEL, COLOR (BLACK)
3-703-905-01	LABEL, COLOR (RED)
3-703-906-01	LABEL, COLOR (SILVER)
3-704-080-01	LABEL (RED), GENERAL DISCERN
3-704-086-01	LABEL (BLACK), GENERAL DISCERN
3-704-087-01	LABEL (SILVER), GENERAL DISCERN
3-765-698-11	(AEP,UK,E).....MANUAL, INSTRUCTION
3-765-698-21	(US,Canadian)...MANUAL, INSTRUCTION
3-765-698-31	(Canadian).....MANUAL, INSTRUCTION
3-765-698-41	(AEP).....MANUAL, INSTRUCTION
3-795-748-21	(US ONLY)...SAFETY INSTRUCTIONS, HEADPHONE
8-952-266-94	(US,Canadian,AEP,UK)...HEADPHONE MDR-A10L/B
8-952-321-90	(E).....HEADPHONE MDR-434/B
X-3329-742-1	CASE (A) ASSY, BATTERY (DRY BATTERY)
X-3329-743-1	CASE (A) ASSY, R BATTERY (RECHARGEABLE)

Sony Corporation

9-952-524-11

(Including 9-952-524-91, -92)