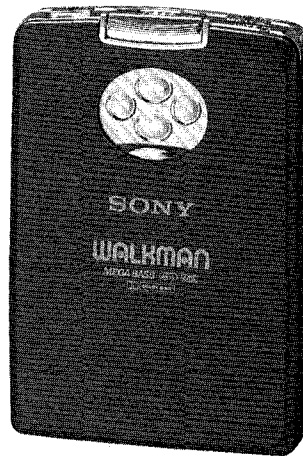


WM-EX5

SERVICE MANUAL

*US Model
Canadian Model
AEP Model
UK Model
E Model
Tourist Model*



Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MT-WMEX5-125

SPECIFICATIONS

Tape section

Frequency response (Dolby NR off)

Playback: 30–18,000 Hz

Output

Headphones (REMOTE jack)

Load impedance 8–300 ohms

Power output

5 mW + 5 mW (16 ohms)

General

Power requirements

1.5 V

Rechargeable battery

One R6 (size AA) battery

Dimensions (w/h/d)

Approx. 79 x 111.7 x 22.8 mm
(3 1/8 x 4 3/8 x 2 1/2), incl. projecting
parts and controls

Mass

Approx. 145 g (6 oz.)

Approx. 245 g (8.7 oz) (incl.
rechargeable battery, headphones
with remote control and cassette)

Supplied accessories

Battery case (1)

Stereo headphones with remote
control (1)

Battery charger (1)

Rechargeable battery

NC-6WM, 1.2V, 600mAh, Ni-Cd

(1) (UK, European continent and
Canadian model only)

NH-9WM(N), 1.2V, 1200mAh, Ni-
MH (1) (U.S.A., Korea and Other
countries model)

Rechargeable battery carrying case
(1)

Carrying pouch (1)

Cleaning cloth (1)

AC plug adaptor (1) (Excluding
UK, European continent, Korea,
U.S.A. and Canada)


Design and specifications subject to
change without notice.

Battery life (Approx. hours)

Rechargeable battery	Tape playback
NC-6WM	12
NH-9WM(N)	22

Some features are:

- You can enjoy high treble sounds to low bass sounds restored by the powerful headphone
- You can choose from 3 different emphasizing tones: REVIVE, MEGA BASS and GROOVE to adjust to your favorite sound
- AMS (Automatic Music Sensor) function that lets you find the beginning of the previous and succeeding 9 tracks
- Repeat Single Track function that lets you listen to a single track repeatedly
- Music Scan function that lets you listen to the beginning of each track for 10 seconds
- Remote control equipped with the EL (electroluminescent) illumination LCD (liquid crystal display) that lets you check operation in the dark

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



CASSETTE PLAYER

SONY®

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle 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.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ

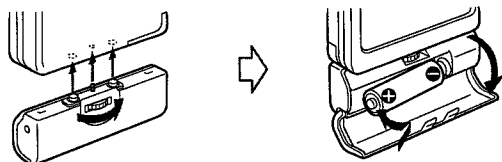
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE \triangle SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

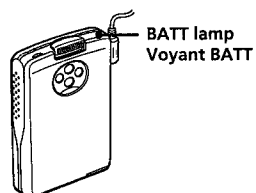
This section is extracted
from instruction manual.

A

(a)

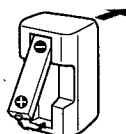


(b)



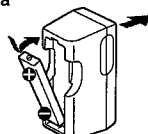
(c)

UK model
Modèle britannique

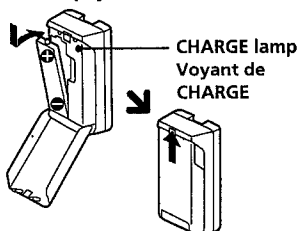
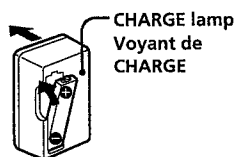


U.S.A. model
Modèle américain

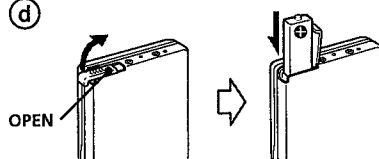
European Continent and
Canadian model
Modèle pour l'Europe et le
Canada



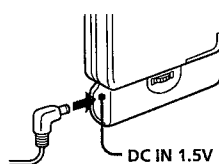
Korean and other countries
model
Modèle pour l'Coréen et le
autres pays



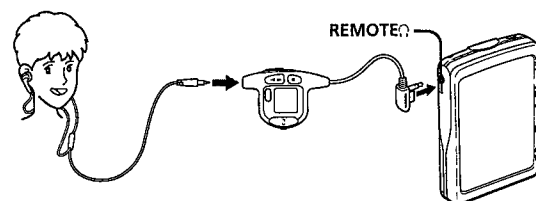
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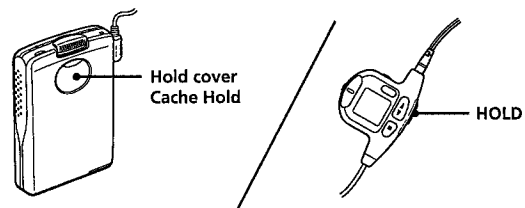
(e)



B

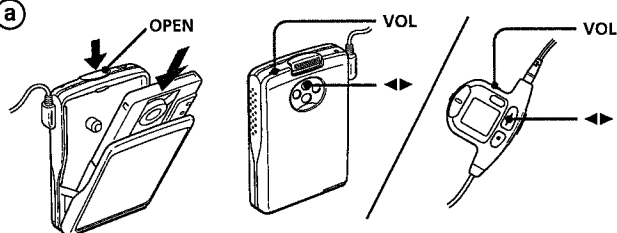


C

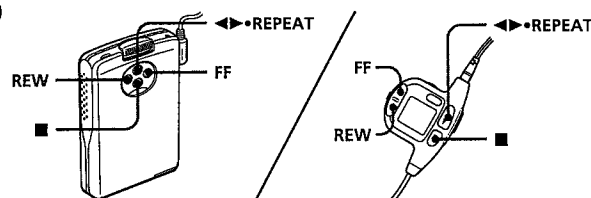


D

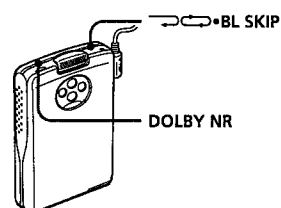
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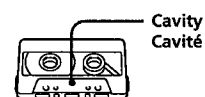
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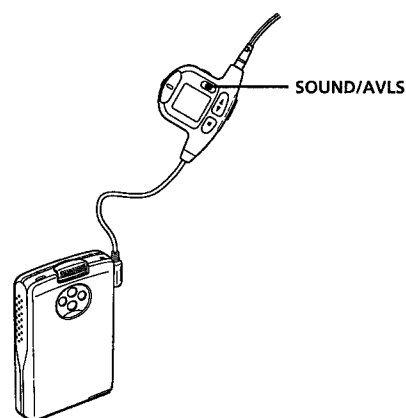
(c)



(d)



E



SECTION 2 SERVICE NOTE

Service Mode

Mode for operating the mechanism section with the AUDIO board opened.

1. Setting

- 1) Refer to "Disassembly", and remove the cabinet and open the AUDIO board.
- 2) Connect the motor and plunger to the AUDIO board using jumper wires. These can be connected easily with the use of the extension tool (1-769-143-11) (ten in one set).
- 3) Solder across the SERVICE MODE terminals (BP701) and the HOLDER terminals (BP702).
- 4) Set the BL SKIP switch to off.
- 5) Supply 1.3V to the \oplus and \ominus terminals of the battery using a regulated power supply.
- 6) Unsolder the SERVICE MODE terminals (BP701).

2. Preset state

To set the PLAY, FF, REW modes, the preset state must be set.

- 1) Check that the lever (SW) and F/R switch (S707) are set to the center position. If not, set the preset state as follows.
- 2) Move the F/R switch (S707) to the side which the lever (SW) is facing.
- 3) The lever (SW) will move when the regulated power supply switch is set to OFF once and then set to ON. Move the F/R switch (S707) according to this timing and set to the center position.

3. FF, REW Modes

- 1) Check that the preset state is set and press the FF and REW switches.

4. PLAY mode

- 1) Check that the preset state is set.
- 2) Pressing the $\blacktriangleleft \blacktriangleright$ switch on the keyboard unit will move the lever (SW) once towards the side F and then to the side R. Moving the F/R switch (S707) according to this timing will set the PLAY mode (side R). Pressing the $\blacktriangleleft \blacktriangleright$ switch another time and moving the F/R switch (S707) according to the movement of the lever (SW) will set the PLAY (side F) mode.

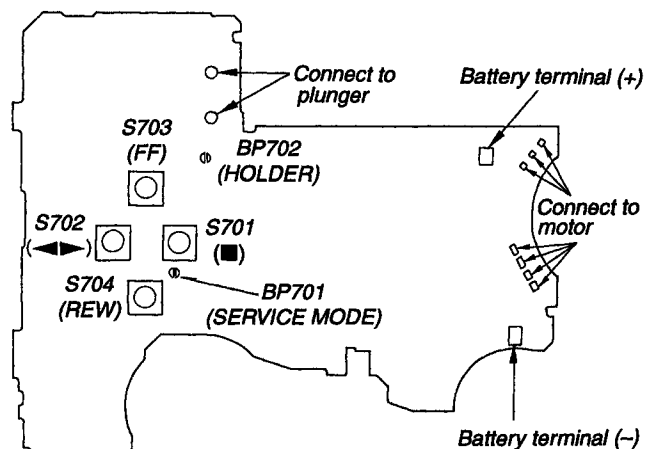
Note 1: If the above fails, perform from preset again.

Note 2: Use the $\blacktriangleleft \blacktriangleright$, \blacksquare , FF, REW switches on the remote commander as much as possible. If no remote commander, do not touch the switches (S701-S704) with your hands, but using a stick with a round tip.

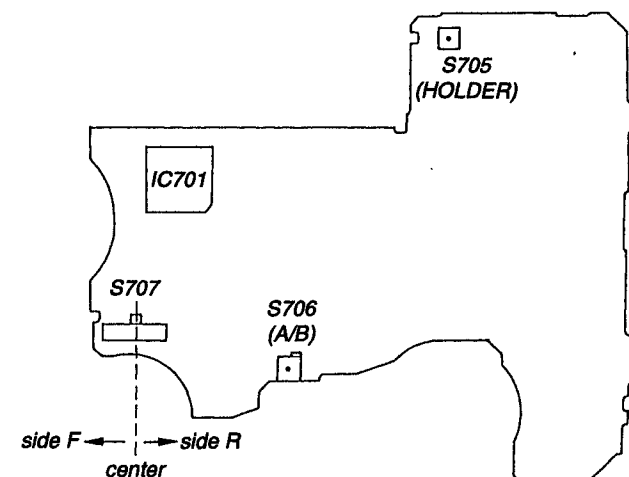
Note 3: When using headphones, the timing for moving the S707

AUDIO BOARD

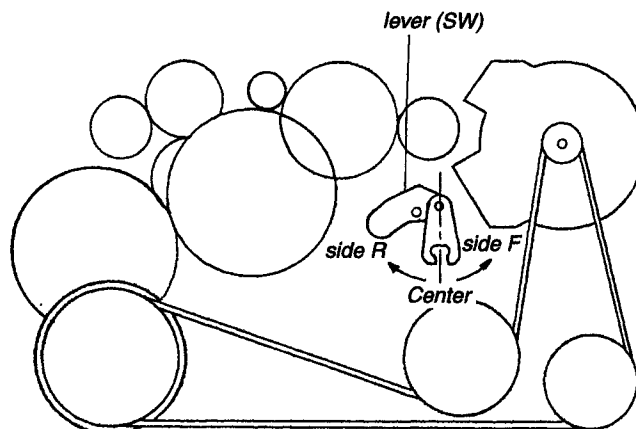
– Side A –



– Side B –

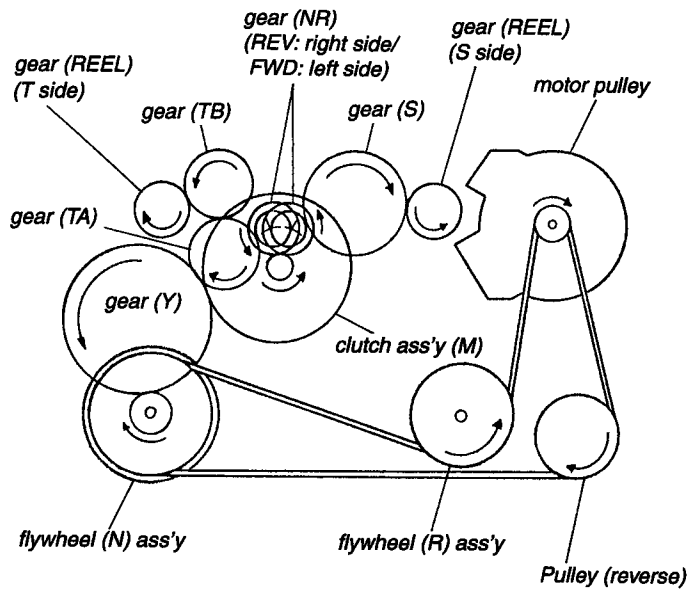


Lever (SW)

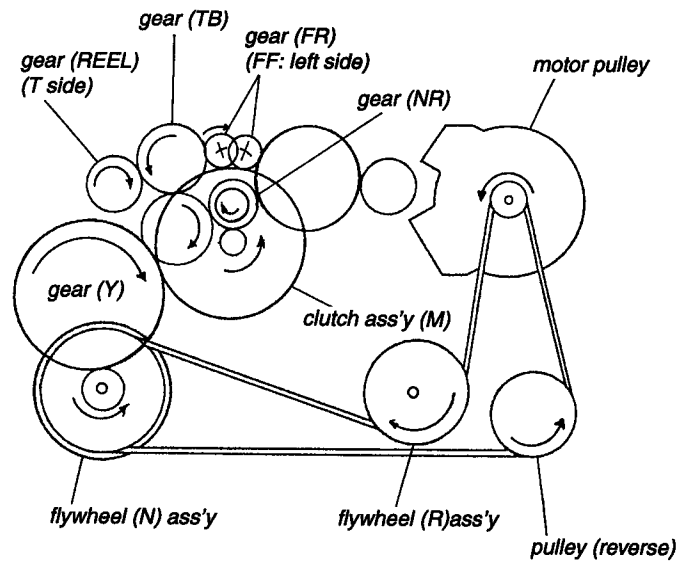


Rotation system

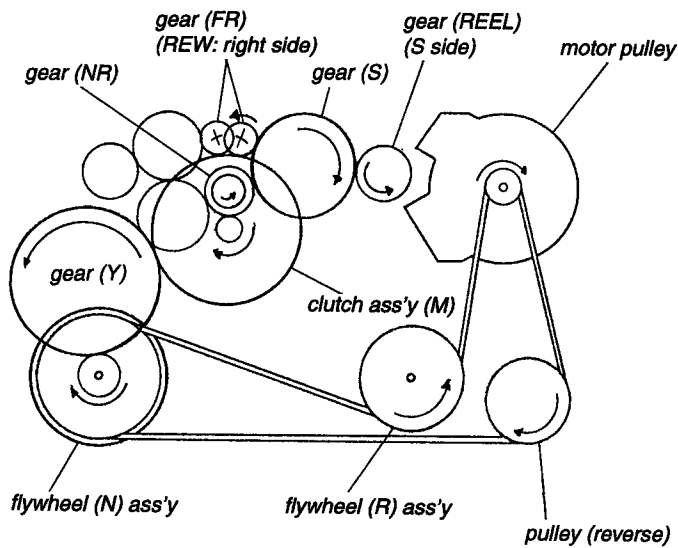
Rotation system during PLAY.



Rotation system during FF.



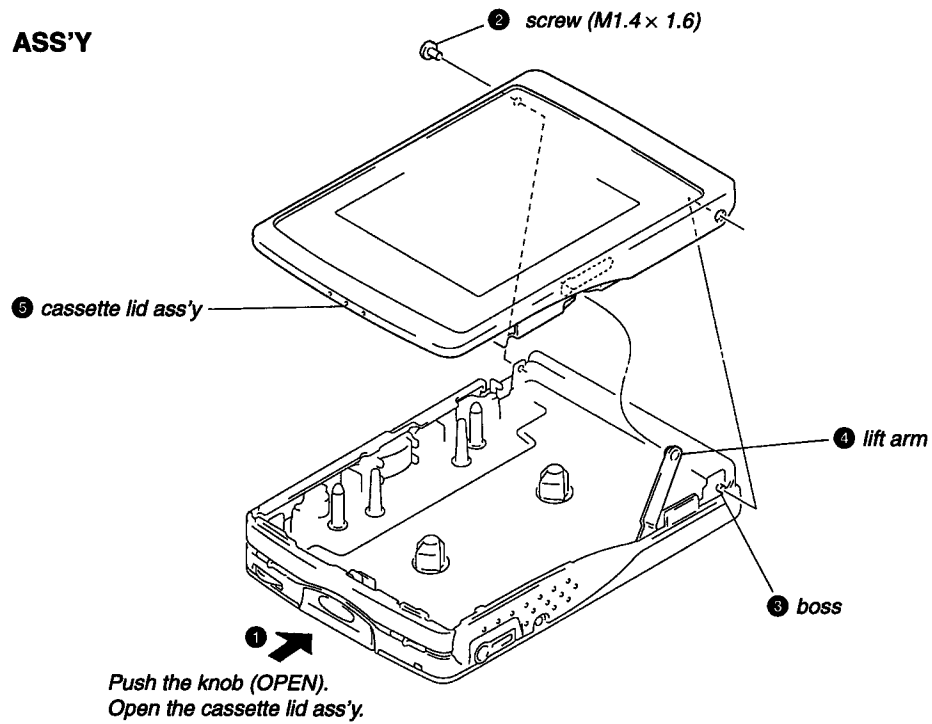
Rotation system during REW.



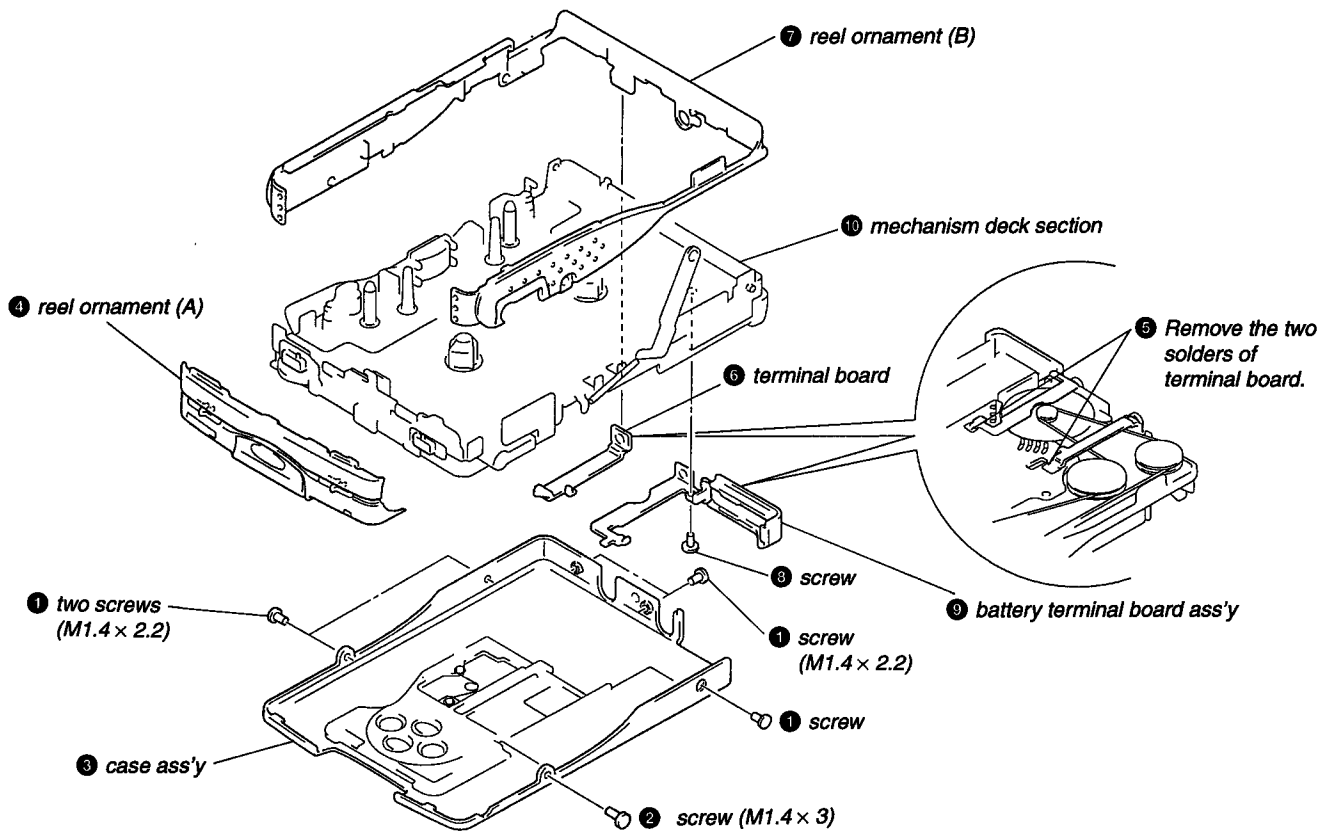
SECTION 3 DISASSEMBLY

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

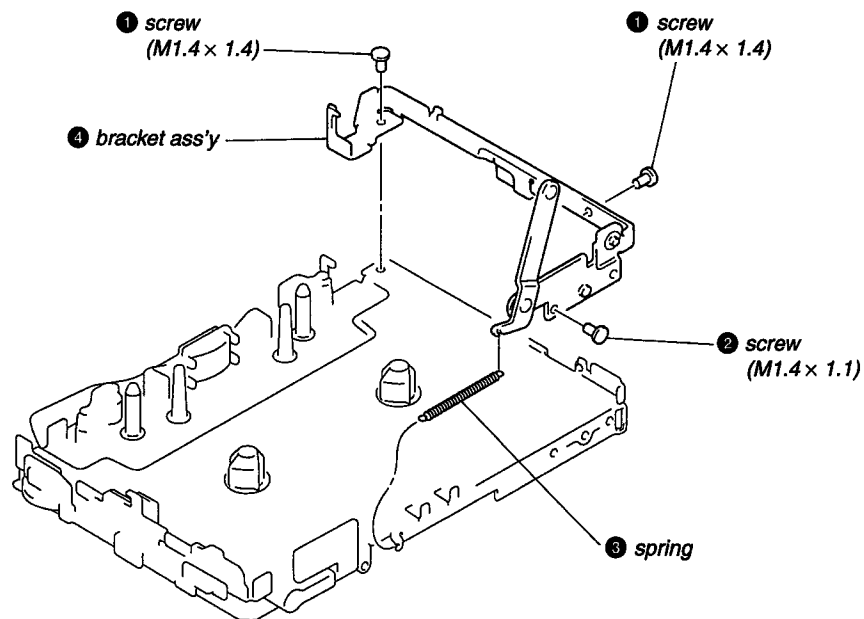
CASSETTE LID ASS'Y



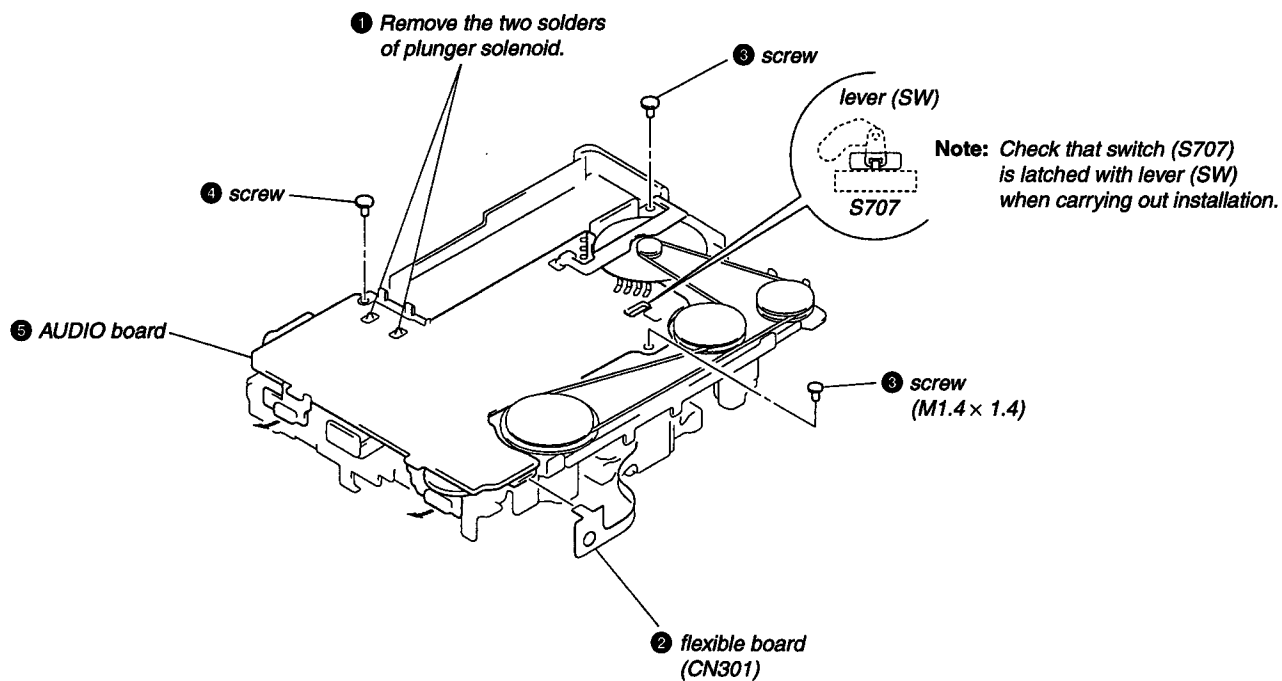
REEL ORNAMENT ASS'Y, CASE ASS'Y



BRACKET ASS'Y



AUDIO BOARD



SECTION 4 MECHANICAL ADJUSTMENTS

PRECAUTION


1. Clean the following parts with a denatured-alcohol-moistened swab:
 record/playback head pinch roller
 rubber belts capstan
2. Demagnetize the record/playback head with a head demagnetizer.
 (Do not bring the head demagnetizer close to the erase head.)
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 (1.3 V) unless otherwise noted.

Torque Measurement:

Mode	Torque meter	Meter reading
FWD	CQ-102D	18~30 g · cm (0.25 – 0.41 oz · inch)
FWD back tension		0.7~2.0 g · cm (0.006 – 0.027 oz · inch)
REV	CQ-102RC	18~30 g · cm (0.25~0.41 oz · inch)
REV back tension		0.7~2.0 g · cm (0.006 – 0.027 oz · inch)
FF	CQ-201B	more than 35 g · cm (more than 0.49 oz · inch)
REW		

SECTION 5 ELECTRICAL ADJUSTMENTS

PRECAUTION

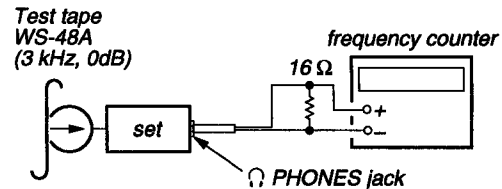
1. Specified voltage : 1.3 V (DC)
2. Switch position
 F/R switch : FWD
 MODE switch : 

Test tape

Type	Signal	Used for
WS-48A	3 kHz, 0 dB	Tape Speed Adjustment

Tape Speed Adjustment

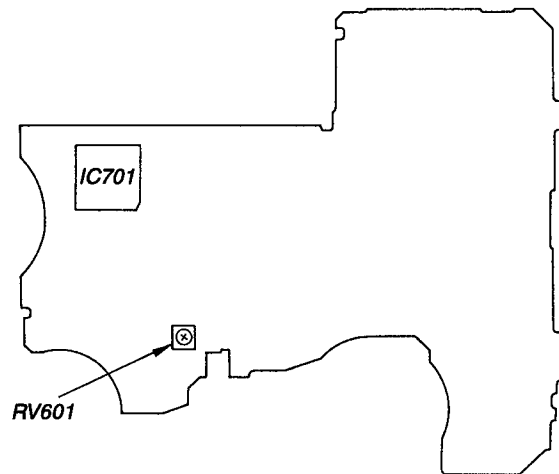
Procedure:



1. Playback WS-48A (tape center part) in the FWD state and adjust RV601 so that the frequency counter reading becomes $3,000 \pm 15$ Hz.
2. Playback WS-48A (tape center) in the REV state.
 Check that the frequency counter reading is within 2.5% of the reading of step 1.

Adjustment Location:

[AUDIO BOARD] (Side B)



6-3. IC PIN FUNCTION DESCRIPTION

AUDIO BOARD IC701 MB89133L-CFX1466 (SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Function
1	AVCC	—	Power supply to A/D converter
2	RESET	I	RESET input pin
3	MODE0	I	Test input pin (connected directly to VSS)
4	MODE1	I	Test input pin (connected directly to VSS)
5	X0	—	Main clock connection (4 MHz)
6	NC		
7	NC		
8	X1	—	Main clock connection (4 MHz)
9	VCC	—	Power supply
10	X0A	—	Subclock connection (32.768 kHz)
11	NC		
12	NC		
13	X1A	—	Subclock connection (32.768 kHz)
14	DDC CTL	O	DDC oscillating frequency change (Stop=L, Operating=H)
15	MUTE CTL	O	MUTE control (MUTE OFF=L, MUTE ON=H)
16	F/R CTL	O	Head switching (FWD=H, REV=L)
17	NC		
18	BOOST CTL	O	Tone control (OFF=L, REVIVE, MB, GROOVE=H)
19	DBB CTL	O	Tone control (MB=H, Others=L)
20	HIGH CTL	O	Tone control (HIGH=H, Other=L)
21	NC		
22	BS CTL	O	Sensitivity switching between BS and AMS (FF/REW=H, Others=L)
23	MOTOR SPEED	O	Middle speed/High speed switching (Low/High speed=L, Middle speed=H)
24	MOTOR-U	O	Motor control (ternary)
25	VSS	—	Power supply (GND)
26	MOTOR-V	O	Motor control (ternary)
27	MOTOR-W	O	Motor control (ternary)
28	NC		
29	PHOTO IN (S)	I	Rotation detection (supply side)
30	PHOTO IN (T)	I	Rotation detection (take-up side)
31	MODE SW	I	MODE and BL SKIP SW input (BL SKIP ON, ENDLESS=L)
32	NC		
33	DOLBY SW	I	DOLBY SW input (OFF=L, ON=H)
34	A/B SW	I	Tape A/B side detection SW input (A side up=L, B side up=H)
35	CTL1	O	Servo IC mode selection (ternary)
36	CYL2	O	Servo IC mode selection (ternary)
37	RMUM	I	With or without remote control (Request to resend=L)
38	NC		
39	NC		
40	MAS IN	I	Presence of music on tape (No music=L, Music=H)
41	AMS SENS	O	AMS sensitivity switching (Low speed=L, Middle/High speed=H)
42	AVLS CTL	O	AVLS control (OFF=H, ON=L)
43	DOLBY CTL	O	DOLBY control (OFF=H, ON=Input)

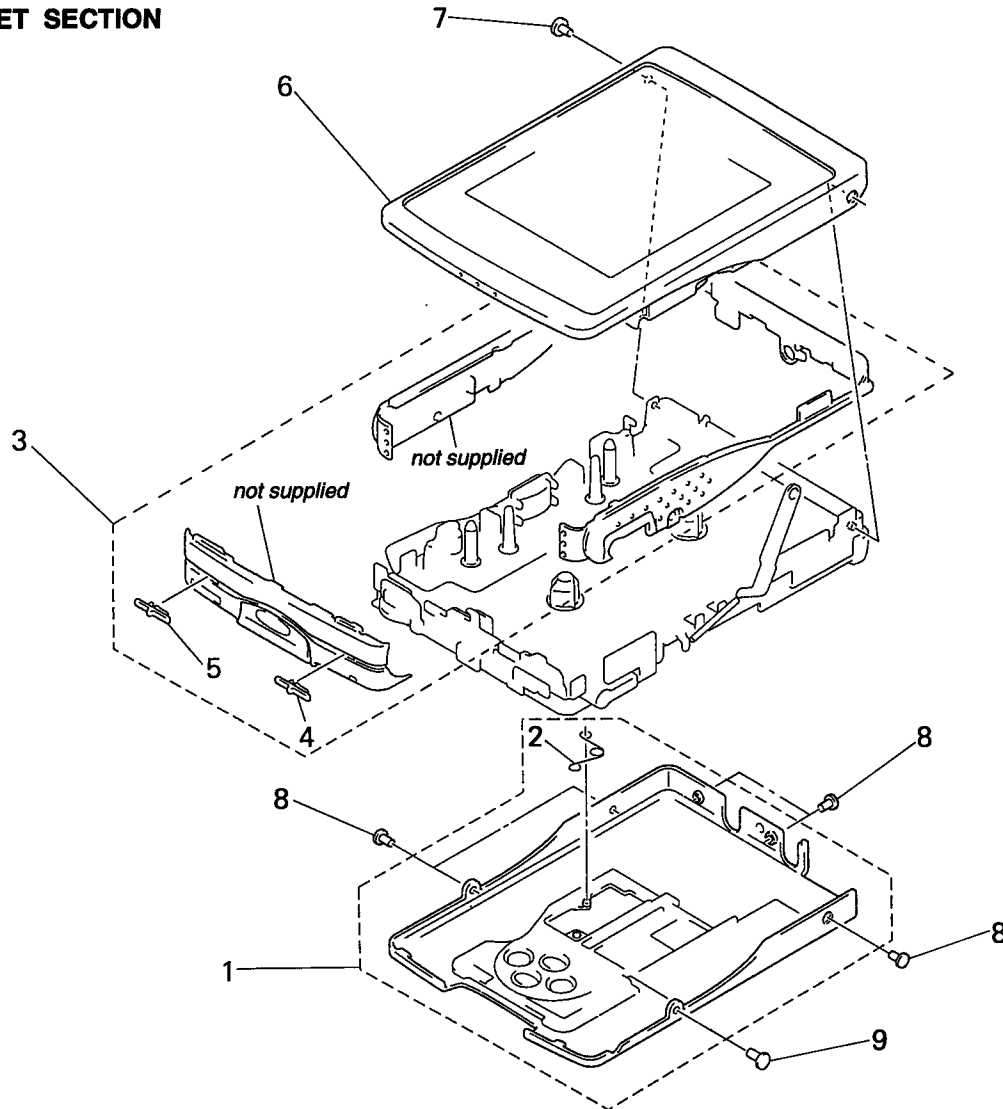
Pin No.	Pin Name	I/O	Function
44	NC		
45	NC		
46	PM CTL	O	Plunger control (OFF=H, ON=L)
47	BEEP	O	Beep sound (f=1.6 kHz)
48	HOLDER	I	Cassette cover open/close SW input (Closed=L, Open=H)
49	NC		
50	WAKE UP	I	Interrupt pin for STOP mode resetting
51	P-SIG	I	Motor control
52	LED CTL	O	LED control (ON=f/32 clock output, OFF=H)
53	SET STOP	I	Low voltage stop detection
54	DATA	O	Communication data output to LCD remote controller
55	BATT CTL	I/O	ON/OFF control of battery detection circuit
56	NC		
57	AVSS	—	Power supply to A/D converter
58	NC		
59	AVR	—	Reference voltage input to A/D converter
60	F/R Ws	I	Mode SW input of MD (A/D input) (FWD=L, REV=VDD/2)
61	KEY IN	I	Key input (A/D input), and also test mode pin
62	BATT DET	I	Voltage detection input (A/D input)
63	MOTOR START	O	Output for motor starting (N-ch open drain) (Start=L)
64	NC		

EXPLODED VIEWS

NOTE:

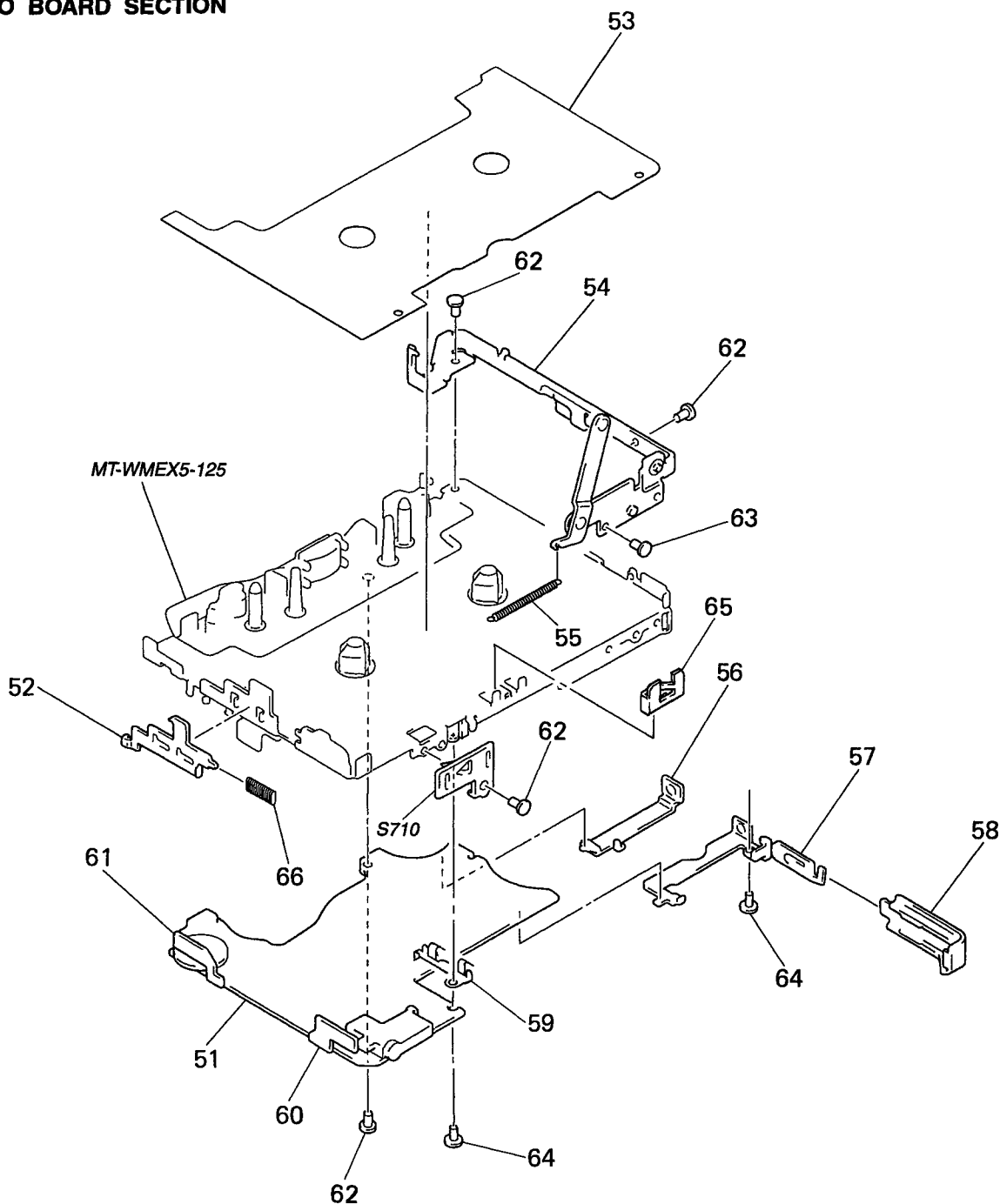
- Accessories and packing materials are given in the last of the electrical parts list.

(1) CABINET SECTION



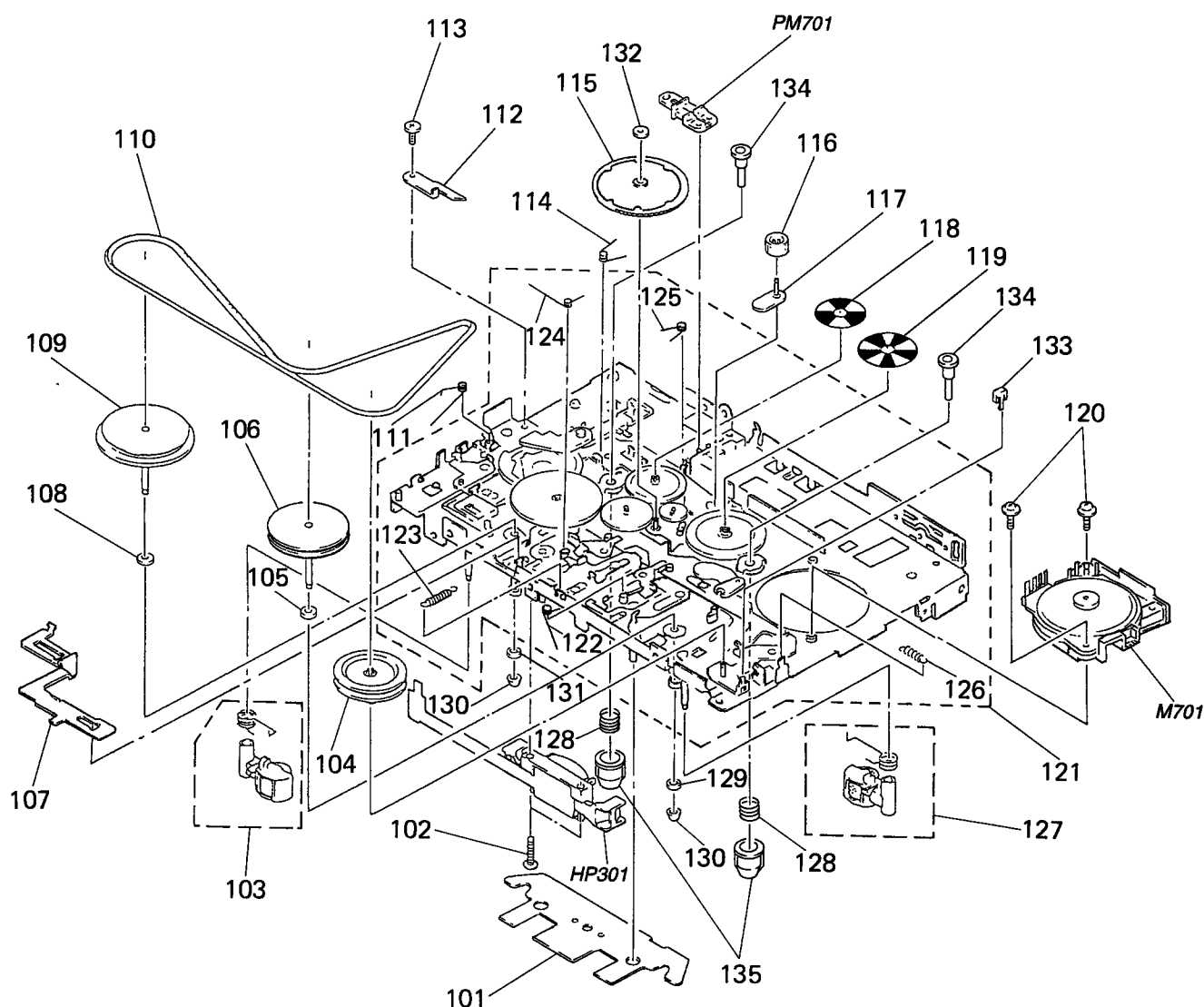
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-3372-825-1	CASE (B) ASSY (for BLACK) (Korea, Tourist)		6	X-3372-829-1	LID (L) ASSY, CASSETTE (for BLUE) (Korea, Tourist)	
1	X-3372-832-1	CASE (L) ASSY (for BLUE) (Korea, Tourist)		6	X-3372-830-1	LID (S) ASSY, CASSETTE (for SILVER)	
1	X-3372-833-1	CASE (S) ASSY (for SILVER)		6	X-3372-831-1	LID (R) ASSY, CASSETTE (for RED) (Korea, Tourist)	
1	X-3372-834-1	CASE (R) ASSY (for RED) (Korea, Tourist)		7	3-365-630-61	SCREW (M1.4) (for BLUE, RED, SILVER)	
2	3-007-272-01	SPRING (HOLD)		7	3-365-630-71	SCREW (M1.4) (for BLACK) (Korea, Tourist)	
3	X-3372-821-1	ORNAMENT (H) ASSY, REEL (for BLACK) (Korea, Tourist)		8	3-704-197-41	SCREW (M1.4X2.2) (for BLUE, RED, SILVER)	
3	X-3372-883-1	ORNAMENT (B) ASSY, REEL (for BLUE, RED, SILVER)		8	3-704-197-42	SCREW (M1.4X2.2), LOCKING (for BLACK) (Korea, Tourist)	
4	3-007-289-01	KNOB (MODE)		9	3-704-197-31	SCREW (M1.4X3), LOCKING (for BLUE, RED, SILVER)	
5	3-007-288-01	KNOB (DOLBY)		9	3-704-197-33	SCREW (M1.4X3), LOCKING (for BLACK) (Korea, Tourist)	
6	X-3372-823-1	LID (B) ASSY, CASSETTE (for BLACK) (Korea, Tourist)					

(2) AUDIO BOARD SECTION



Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
51	A-3061-372-A	AUDIO BOARD, COMPLETE		58	3-007-294-21	LID, BATTERY CASE (for SILVER)	
52	3-007-277-01	LEVER (OPEN)		58	3-007-294-31	LID, BATTERY CASE (for RED)	(Korea, Tourist)
53	3-007-285-01	COVER (A), MD (Tourist)		59	3-007-282-01	TERMINAL BOARD (MINUS), BATTERY	
53	3-007-285-11	COVER (A), MD (AEP, UK)		* 60	1-663-536-12	MODE SWITCH BOARD	
53	3-007-285-21	COVER (A), MD (US, Canadian, E, Korea)		* 61	1-663-535-12	DOLBY SWITCH BOARD	
54	X-3372-820-1	BRACKET ASSY		62	3-366-892-11	SCREW (M1.4X1.4)	
55	3-007-290-01	SPRING, TENSION		63	3-366-892-01	SCREW (M1.4)	
56	3-007-280-01	TERMINAL BOARD		64	3-375-114-41	SCREW	
57	X-3372-828-1	TERMINAL BOARD ASSY, BATTERY		65	3-007-295-01	DETENT (A), CASSETTE	
58	3-007-294-01	LID, BATTERY CASE (for BLACK)	(Korea, Tourist)	66	3-922-933-01	SPRING (LID LOCK LEVER)	
58	3-007-294-11	LID, BATTERY CASE (for BLUE)	(Korea, Tourist)	S710	1-762-793-11	SWITCH, LEAF	

**(3) MECHANISM DECK SECTION
(MT-WMEX5-125)**



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-007-431-01	COVER (B), MD		120	3-007-427-01	SCREW (IB LOCK)	
102	3-704-413-31	SCREW (M1.4X7.2)		121	X-3372-854-1	CHASSIS COMPLETE ASSY	
103	X-3372-850-1	PINCH LEVER (N) ASSY		122	3-007-455-01	SPRING (R), TORSION	
104	3-007-434-01	PULLEY (REVERSE)		123	3-007-458-01	SPRING (H/B), TENSION	
105	3-007-428-01	WASHER (R)		124	3-007-456-01	SPRING (N), TORSION	
106	X-3372-851-1	FLYWHEEL (R) ASSY		125	3-007-454-01	SPRING (FR), TORSION	
107	3-007-439-01	SLIDER (LOCK)		126	3-007-457-01	SPRING (TEN), TENSION	
108	3-386-694-01	WASHER		127	X-3372-849-1	PINCH LEVER (R) ASSY	
109	X-3372-852-1	FLYWHEEL (N) ASSY		128	3-010-954-01	SPRING (BT), COMPRESSION	
110	3-007-430-01	BELT		129	3-918-943-01	WASHER, STOPPER	
111	3-007-437-01	SPRING (EJECT), TORSION		130	3-366-017-02	BUSHING (CAPSTAN)	
112	3-007-438-01	LEVER (TRIGGER B)		131	3-007-429-01	WASHER (R), STOPPER	
113	3-366-892-02	SCREW (M1.4)		132	3-932-724-21	WASHER	
114	3-007-436-01	SPRING (TRIGGER), TORSION		* 133	3-010-272-01	BELT	
115	X-3372-848-1	CLUTCH ASSY (M)		134	3-010-273-01	GEAR (REEL)	
116	3-007-435-01	GEAR (FR)		135	3-010-274-01	TABLE, REEL	
117	X-3372-853-1	LEVER (FRG) ASSY		HP301	1-500-398-11	HEAD, MAGNETIC (PLAYBACK)	
118	3-007-433-01	SHEET (N), REFLECTION		M701	1-698-849-11	MOTOR (REEL/CAPSTAN)	
119	3-007-432-01	SHEET (R), REFLECTION		PM701	1-454-674-31	SOLENOID, PLUNGER	

SECTION 8 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.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A. uPA...: μ PA.
uPB...: μ PB. uPC...: μ PC. uPD...: μ PD.
- CAPACITORS
uF: μ F
- COILS
uH: μ H

When indicating parts by reference number, please include the board.

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

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
A-3061-372-A AUDIO BOARD, COMPLETE				C215	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
*****				C216	1-164-677-11	CERAMIC CHIP	0.033uF 10% 16V
< CAPACITOR >				C217	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C101	1-162-963-11	CERAMIC CHIP	680PF 10% 50V	C301	1-104-847-11	TANTAL. CHIP	22uF 20% 4V
C102	1-162-963-11	CERAMIC CHIP	680PF 10% 50V	C302	1-164-489-11	CERAMIC CHIP	0.22uF 10% 16V
C103	1-117-181-11	TANTAL. CHIP	4.7uF 20% 2.5V	C303	1-109-982-11	CERAMIC CHIP	1uF 10% 10V
C104	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	C304	1-109-935-11	TANTAL. CHIP	4.7uF 20% 6.3V
C105	1-115-156-11	CERAMIC CHIP	1uF 10V	C305	1-104-847-11	TANTAL. CHIP	22uF 20% 4V
C106	1-162-965-11	CERAMIC CHIP	0.0015uF 10% 50V	C306	1-162-974-11	CERAMIC CHIP	0.01uF 50V
C107	1-164-174-11	CERAMIC CHIP	0.0082uF 10% 25V	C307	1-107-815-11	TANTAL. CHIP	2.2uF 20% 4V
C108	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C308	1-117-181-11	TANTAL. CHIP	4.7uF 20% 2.5V
C109	1-115-156-11	CERAMIC CHIP	1uF 10V	C309	1-109-930-11	TANTAL. CHIP	220uF 20% 2.5V
C110	1-107-823-11	CERAMIC CHIP	0.47uF 10% 16V	C310	1-165-128-11	CERAMIC CHIP	0.22uF 16V
C111	1-109-936-11	TANTAL. CHIP	3.3uF 20% 2.5V	C311	1-135-201-11	TANTALUM CHIP	10uF 20% 4V
C112	1-115-156-11	CERAMIC CHIP	1uF 10V	C312	1-165-128-11	CERAMIC CHIP	0.22uF 16V
C113	1-165-128-11	CERAMIC CHIP	0.22uF 16V	C313	1-117-181-11	TANTAL. CHIP	4.7uF 20% 2.5V
C114	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C314	1-115-156-11	CERAMIC CHIP	1uF 10V
C115	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	C315	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C116	1-164-677-11	CERAMIC CHIP	0.033uF 10% 16V	C316	1-109-936-11	TANTAL. CHIP	3.3uF 20% 2.5V
C117	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C317	1-109-982-11	CERAMIC CHIP	1uF 10% 10V
C201	1-162-963-11	CERAMIC CHIP	680PF 10% 50V	C318	1-117-181-11	TANTAL. CHIP	4.7uF 20% 2.5V
C202	1-162-963-11	CERAMIC CHIP	680PF 10% 50V	C319	1-109-930-11	TANTAL. CHIP	220uF 20% 2.5V
C203	1-117-181-11	TANTAL. CHIP	4.7uF 20% 2.5V	C320	1-115-156-11	CERAMIC CHIP	1uF 10V
C204	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	C321	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C205	1-115-156-11	CERAMIC CHIP	1uF 10V	C601	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C206	1-162-965-11	CERAMIC CHIP	0.0015uF 10% 50V	C602	1-109-982-11	CERAMIC CHIP	1uF 10% 10V
C207	1-164-174-11	CERAMIC CHIP	0.0082uF 10% 25V	C603	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C208	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C604	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C209	1-115-156-11	CERAMIC CHIP	1uF 10V	C605	1-137-286-11	FILM CHIP	0.0022uF 5% 16V
C210	1-107-823-11	CERAMIC CHIP	0.47uF 10% 16V	C606	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C211	1-109-936-11	TANTAL. CHIP	3.3uF 20% 2.5V	C607	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C212	1-115-156-11	CERAMIC CHIP	1uF 10V	C608	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C213	1-165-128-11	CERAMIC CHIP	0.22uF 16V	C609	1-109-982-11	CERAMIC CHIP	1uF 10% 10V
C214	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C610	1-164-695-11	CERAMIC CHIP	0.0022uF 5% 50V
				C701	1-115-156-11	CERAMIC CHIP	1uF 10V
				C702	1-115-156-11	CERAMIC CHIP	1uF 10V

Ref. No.	Part No.	Description	Remark
C703	1-115-156-11	CERAMIC CHIP 1uF	10V
C704	1-164-505-11	CERAMIC CHIP 2.2uF	16V
C705	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C801	1-165-176-11	CERAMIC CHIP 0.047uF	10% 16V
C802	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C803	1-165-176-11	CERAMIC CHIP 0.047uF	10% 16V
C804	1-109-935-11	TANTAL. CHIP 4.7uF	20% 6.3V
C805	1-107-685-11	TANTAL. CHIP 15uF	20% 6.3V
C807	1-104-847-11	TANTAL. CHIP 22uF	20% 4V
C901	1-115-156-11	CERAMIC CHIP 1uF	10V
C902	1-115-156-11	CERAMIC CHIP 1uF	10V
< CONNECTOR >			
CN301	1-766-336-21	CONNECTOR, FFC/FPC 6P	
< DIODE >			
D701	8-719-989-53	LED CL-200HR-C-TSL (BATT)	
D702	8-719-404-49	DIODE MA111	
D901	8-719-056-89	DIODE MA8120-TX	
D902	8-719-056-89	DIODE MA8120-TX	
< FUSE >			
△F701	1-533-792-11	FUSE (SMD)	
< FERRITE BEAD >			
FB101	1-414-385-11	INDUCTOR, FERRITE BEAD	
FB201	1-414-385-11	INDUCTOR, FERRITE BEAD	
FB301	1-414-235-11	INDUCTOR, FERRITE BEAD	
< IC >			
IC301	8-759-440-52	IC TA2103F	
IC601	8-759-431-31	IC LB1899M-TLM	
IC701	8-759-440-54	IC MB89133L-CFX1466	
IC702	8-759-438-27	IC MM1305BWBE	
IC703	8-759-445-09	IC XC61ASOVXXMR	
IC704	8-759-445-08	IC XC61ASOTXXMR	
IC801	8-759-440-53	IC MPC1850DTBEL	
< JACK >			
J301	1-778-930-21	JACK 7P (REMOTE □)	
< CHIP CONDUCTOR >			
JC901	1-216-864-11	METAL CHIP 0 5% 1/16W	
< PHOTO INTERRUPTER >			
PH701	8-719-988-15	PHOTO REFLECTOR PR-11-C	
PH702	8-719-988-15	PHOTO REFLECTOR PR-11-C	

Ref. No.	Part No.	Description	Remark
< TRANSISTOR >			
Q301	8-729-807-87	TRANSISTOR 2SB1295-UL6	
Q302	8-729-040-12	TRANSISTOR MUN5215T1	
Q303	8-729-422-39	TRANSISTOR XN4404	
Q304	8-729-426-36	TRANSISTOR XP1215-TXE	
Q305	8-729-040-12	TRANSISTOR MUN5215T1	
Q306	8-729-426-36	TRANSISTOR XP1215-TXE	
Q307	8-729-426-36	TRANSISTOR XP1215-TXE	
Q601	8-729-025-88	TRANSISTOR 2SB1386-T100-R	
Q602	8-729-030-54	TRANSISTOR MSB1218A-RT1	
Q603	8-729-040-13	TRANSISTOR MUN5115T1	
Q604	8-729-039-36	TRANSISTOR MDC06TR	
Q701	8-729-230-72	TRANSISTOR 2SA1362YG	
Q702	8-729-020-99	TRANSISTOR UN5215-RS-TX	
Q704	8-729-425-46	TRANSISTOR XP4315-TXE	
Q705	8-729-427-51	TRANSISTOR XP4215-TXE	
< RESISTOR >			
R101	1-218-944-11	METAL GLAZE 180 5% 1/16W	
R102	1-218-963-11	METAL GLAZE 6.8K 5% 1/16W	
R103	1-218-270-11	METAL GLAZE 1.1K 5% 1/16W	
R104	1-216-834-11	METAL CHIP 12K 5% 1/16W	
R105	1-216-852-11	METAL CHIP 390K 5% 1/16W	
R106	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R107	1-216-793-11	METAL GLAZE 4.7 5% 1/16W	
R108	1-218-979-11	METAL GLAZE 150K 5% 1/16W	
R109	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R110	1-218-956-11	METAL GLAZE 1.8K 5% 1/16W	
R111	1-218-957-11	METAL GLAZE 2.2K 5% 1/16W	
R112	1-216-839-11	METAL CHIP 33K 5% 1/16W	
R113	1-218-971-11	METAL GLAZE 33K 5% 1/16W	
R114	1-216-809-11	METAL CHIP 100 5% 1/16W	
R115	1-216-844-11	METAL CHIP 82K 5% 1/16W	
R201	1-218-944-11	METAL GLAZE 180 5% 1/16W	
R202	1-218-963-11	METAL GLAZE 6.8K 5% 1/16W	
R203	1-218-270-11	METAL GLAZE 1.1K 5% 1/16W	
R204	1-216-834-11	METAL CHIP 12K 5% 1/16W	
R205	1-216-852-11	METAL CHIP 390K 5% 1/16W	
R206	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R207	1-216-793-11	METAL GLAZE 4.7 5% 1/16W	
R208	1-218-979-11	METAL GLAZE 150K 5% 1/16W	
R209	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R210	1-218-956-11	METAL GLAZE 1.8K 5% 1/16W	
R211	1-218-957-11	METAL GLAZE 2.2K 5% 1/16W	
R212	1-216-839-11	METAL CHIP 33K 5% 1/16W	
R213	1-218-971-11	METAL GLAZE 33K 5% 1/16W	
R214	1-216-809-11	METAL CHIP 100 5% 1/16W	
R215	1-216-844-11	METAL CHIP 82K 5% 1/16W	

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Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

AUDIO

DOLBY SWITCH

MODE SWITCH

Ref. No.	Part No.	Description	Remark
R301	1-218-891-11	METAL GLAZE	68K 0.50% 1/16W
R302	1-218-879-11	METAL GLAZE	22K 0.50% 1/16W
R303	1-218-877-11	METAL GLAZE	18K 0.50% 1/16W
R304	1-216-825-11	METAL CHIP	2.2K 5% 1/16W
R305	1-218-295-11	METAL GLAZE	43K 5% 1/16W
R306	1-216-821-11	METAL CHIP	1K 5% 1/16W
R307	1-216-793-11	METAL GLAZE	4.7 5% 1/16W
R308	1-216-849-11	METAL CHIP	220K 5% 1/16W
R309	1-216-837-11	METAL CHIP	22K 5% 1/16W
R601	1-216-849-11	METAL CHIP	220K 5% 1/16W
R602	1-216-853-11	METAL CHIP	470K 5% 1/16W
R603	1-216-857-11	METAL CHIP	1M 5% 1/16W
R604	1-216-857-11	METAL CHIP	1M 5% 1/16W
R605	1-216-849-11	METAL CHIP	220K 5% 1/16W
R608	1-220-372-11	METAL GLAZE	200K 5% 1/16W
R609	1-216-857-11	METAL CHIP	1M 5% 1/16W
R610	1-218-349-11	METAL CHIP	240K 5% 1/16W
R701	1-216-849-11	METAL CHIP	220K 5% 1/16W
R702	1-216-841-11	METAL CHIP	47K 5% 1/16W
R703	1-218-879-11	METAL GLAZE	22K 0.50% 1/16W
R704	1-216-849-11	METAL CHIP	220K 5% 1/16W
R705	1-218-863-11	METAL GLAZE	4.7K 0.50% 1/16W
R706	1-218-881-11	METAL GLAZE	27K 0.50% 1/16W
R707	1-218-887-11	METAL GLAZE	47K 0.50% 1/16W
R708	1-216-849-11	METAL CHIP	220K 5% 1/16W
R709	1-216-837-11	METAL CHIP	22K 5% 1/16W
R710	1-218-981-11	METAL GLAZE	220K 5% 1/16W
R711	1-218-981-11	METAL GLAZE	220K 5% 1/16W
R712	1-218-949-11	METAL GLAZE	470 5% 1/16W
R713	1-216-849-11	METAL CHIP	220K 5% 1/16W
R714	1-216-833-11	METAL CHIP	10K 5% 1/16W
R715	1-216-849-11	METAL CHIP	220K 5% 1/16W
R716	1-218-879-11	METAL GLAZE	22K 0.50% 1/16W
R717	1-218-836-11	METAL GLAZE	360 0.50% 1/16W
R718	1-218-845-11	METAL GLAZE	820 0.50% 1/16W
R719	1-218-847-11	METAL GLAZE	1K 0.50% 1/16W
R720	1-218-849-11	METAL GLAZE	1.2K 0.50% 1/16W
R722	1-216-849-11	METAL CHIP	220K 5% 1/16W
R723	1-216-817-11	METAL CHIP	470 5% 1/16W
R724	1-216-848-11	METAL CHIP	180K 5% 1/16W
R725	1-216-817-11	METAL CHIP	470 5% 1/16W
R726	1-216-848-11	METAL CHIP	180K 5% 1/16W
R731	1-218-973-11	METAL GLAZE	47K 5% 1/16W
R732	1-218-973-11	METAL GLAZE	47K 5% 1/16W
R734	1-216-833-11	METAL CHIP	10K 5% 1/16W
R735	1-216-843-11	METAL CHIP	68K 5% 1/16W
R736	1-218-981-11	METAL GLAZE	220K 5% 1/16W
R801	1-216-859-11	METAL GLAZE	1.5M 5% 1/16W

Ref. No.	Part No.	Description	Remark
R901	1-218-973-11	METAL GLAZE	47K 5% 1/16W
< COMPOSITION CIRCUIT BLOCK >			
RB601	1-236-875-11	RES, NETWORK	
RB602	1-236-907-11	NETWORK RESISTOR (CHIP)	100K
RB701	1-236-883-11	RES, NETWORK	
RB702	1-236-875-11	RES, NETWORK	
< VARIABLE RESISTOR >			
RV301	1-225-333-31	RES, VAR, CARBON 10K/10K (VOL)	
RV601	1-225-408-11	RES, ADJ, METAL GLAZE	150K
< SWITCH >			
S701	1-762-230-11	SWITCH, KEYBOARD (STOP)	
S702	1-762-230-11	SWITCH, KEYBOARD (PLAY)	
S703	1-762-230-11	SWITCH, KEYBOARD (FF)	
S704	1-762-230-11	SWITCH, KEYBOARD (REW)	
S705	1-762-835-11	SWITCH, PUSH (1 KEY) (HOLDER)	
S706	1-762-516-11	SWITCH, PUSH (1 KEY) (A/B)	
S707	1-572-581-11	SWITCH, SLIDE (FWD/REV)	
< VIBRATOR >			
X701	1-767-289-11	VIBRATOR, CERAMIC (4MHz)	

* 1-663-535-12 DOLBY SWITCH BOARD			

< SWITCH >			
S708	1-572-922-11	SWITCH, SLIDE (DOLBY NR)	

* 1-663-536-12 MODE SWITCH BOARD			

< SWITCH >			
S709	1-572-922-11	SWITCH, SLIDE (MODE, BL SKIP)	

MISCELLANEOUS			

HP301	1-500-398-11	HEAD, MAGNETIC (PLAYBACK)	
M701	1-698-849-11	MOTOR (REEL/CAPSTAN)	
PM701	1-454-674-31	SOLENOID, PLUNGER	
S710	1-762-793-11	SWITCH, LEAF	

Ref. No.	Part No.	Description	Remark
ACCESSORIES & PACKING MATERIALS			

		1-473-937-11 REMOTE CONTROL UNIT (RM-WM71EL)	
△		1-528-252-11 BATTERY CHARGER (BC-7S) (UK)	
		1-528-539-21 BATTERY CASE	
		1-528-543-22 BATTERY, NICKEL CADMIUM (NC-6WM)	
		(Canadian, AEP, UK)	
△		1-528-576-11 BATTERY CHARGER (BC-9HU) (US)	
△		1-528-580-11 BATTERY CHARGER (BC-7HT) (E, Tourist)	
△		1-528-676-11 BATTERY CHARGER (BC-9HR) (Korea)	
△		1-528-713-11 BATTERY CHARGER (BC-7DC) (Canadian)	
		1-528-743-11 BATTERY, NICKEL HYDROGEN	
		(US, E, Korea, Tourist)	
△		1-528-744-11 BATTERY CHARGER (BC-7DY) (AEP)	
		1-569-007-11 ADAPTOR, CONVERSION 2P (E, Tourist)	
*		3-008-237-01 CASE, INDIVIDUAL (Tourist)	
*		3-008-238-01 CASE, INDIVIDUAL (US)	
		3-008-521-01 CASE, BATTERY CARRYING	
		3-800-626-01 INSTRUCTION (A7 SIZE) (Tourist)	
		3-856-976-01 MANUAL, INSTRUCTION (JAPANESE, ENGLISH,	
		KOREAN) (Tourist)	
		3-856-976-11 MANUAL, INSTRUCTION (ENGLISH, FRENCH)	
		(US, Canadian, AEP, UK, E, Korea)	
		3-856-976-21 MANUAL, INSTRUCTION (GERMAN, DUTCH,	
		SWEDISH) (AEP)	
		3-856-976-31 MANUAL, INSTRUCTION (ITALIAN, PORTUGUESE,	
		SPANISH) (AEP)	
		3-856-976-41 MANUAL, INSTRUCTION (SPANISH, CHINESE,	
		KOREAN) (E, Korea)	
		3-929-799-01 CASE, CARRYING	
		8-953-171-90 HEADPHONE MDR-ED136MP//K SET	

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