

WM-EX402/EX404/EX405/EX406

SERVICE MANUAL

AEP Model
E Model



Photo : WM-EX404

Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MF-WMFX483-147

SPECIFICATIONS

Tape section

Frequency response (Dolby NR off)

Playback: 40 - 14,000 Hz

Output

Headphones ϕ jack

Load impedance 8 - 300 ohms

General

Power requirements

3 V

Two R6 (size AA) batteries
(negative ground)

Dimensions (w/h/d)

Approx. 115.5 × 83.5 × 32.5 mm
(4 5/8 × 3 3/8 × 1 5/16 inches) incl.
projecting parts and controls

Mass

Approx. 135 g (4.8 oz) / Approx.
215 g (7.6 oz) incl. batteries and
a cassette

Supplied accessories

Stereo headphones or Stereo
earphones with remote
control (1) (EX406 only)
Stereo headphones or Stereo
earphones (1) (EX402/EX404/
EX405 only)
Belt clip (1)

Design and specifications are subject to change without notice.

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

“DOLBY” and the double-D symbol $\square\square$ are trademarks of Dolby Laboratories Licensing Corporation.

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.

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.

CASSETTE PLAYER



SONY®

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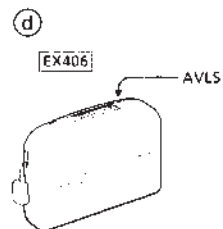
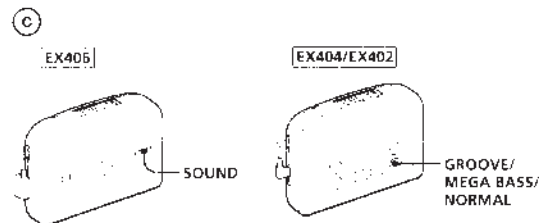
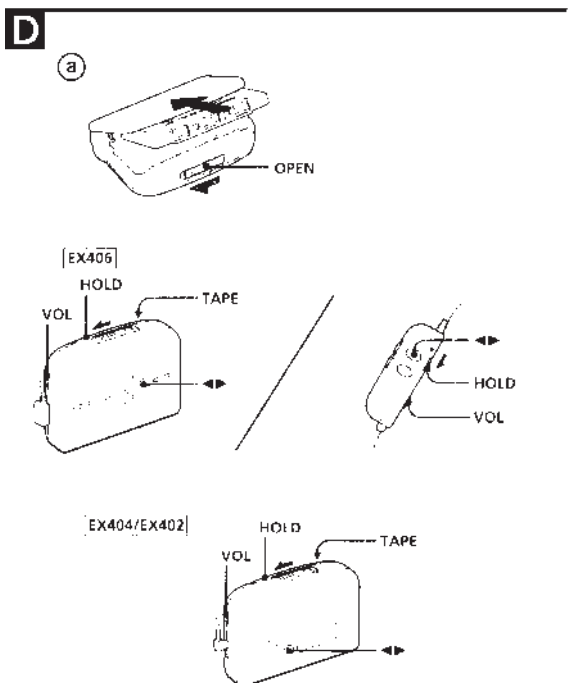
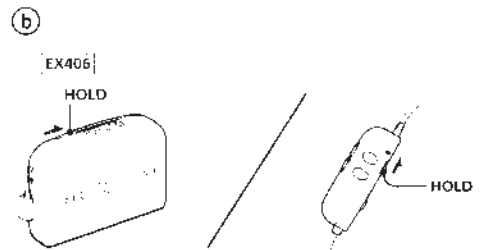
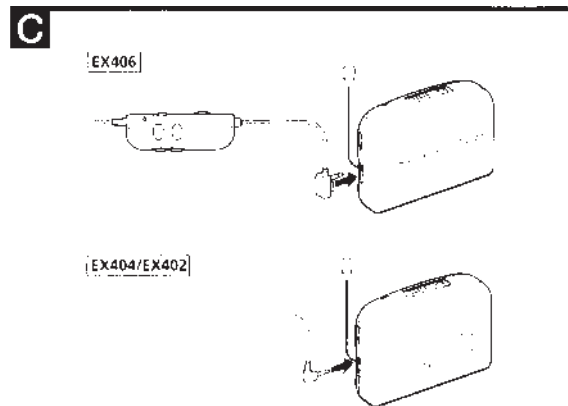
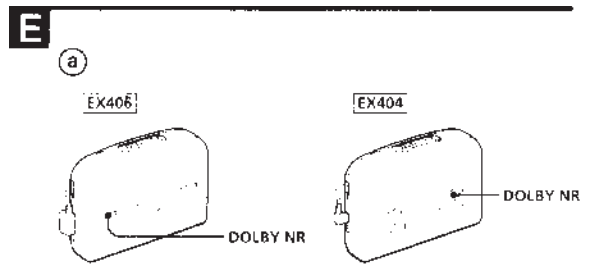
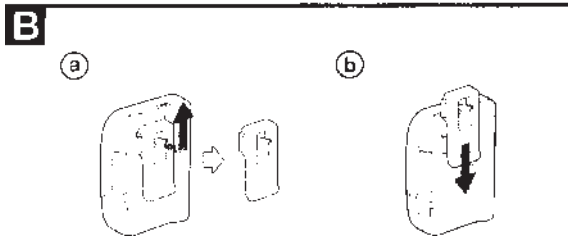
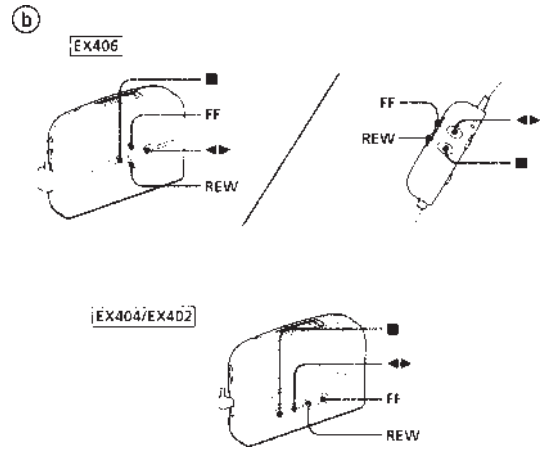
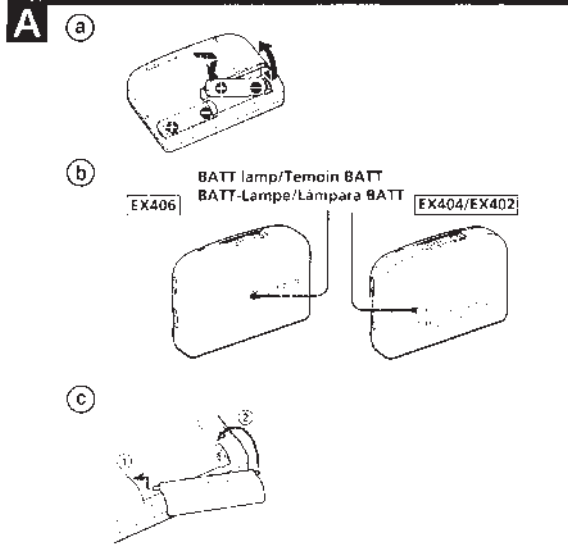
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SECTION 1 GENERAL

This section extracted from instruction manual.



▶ Getting Started

Preparing a Power Source (see Fig. A-①)

Slide and open the battery compartment lid, and insert two R6-size AA dry batteries with correct polarity.

When to replace the batteries (see Fig. A-②)

Replace the batteries when the BATT lamp dims.

Battery life

(Approx. hours) (EIA)*

	Sony alkaline LR6 (5G)	Sony R6P (SR)
Tape playback	24	7.5

* Measured value by the standard of IEC (International Electrotechnical Commission) and JIS (Japanese Association of Japan) (Using a Sony IIE-series cassette tape)

Note

- The battery life may shorten depending on the operation of the unit.

For maximum performance we recommend that you use alkaline batteries.

If the battery compartment lid comes off

Attach it as shown (see Fig. A-③)

To use the belt clip

With the supplied belt clip, you can wear your Walkman on a belt for convenient use.

To remove the belt clip (see Fig. B-①)

To attach the belt clip (see Fig. B-②)

Connecting the Headphones/ Earphones (see Fig. C)

- Connect the headphones/earphones to L .
- Wear the "L" marked side to the left ear and the "R" marked side to the right ear. If the earphones do not fit to your ears or the sound is unbalanced, turn round the earphones a little to fit to your ears firmly.

▶ Operating the Walkman

Playing a Tape (see Fig. D-①)

- Open the cassette holder and insert a cassette.
- Set the TAPE selector to select NORM or CrO₂/METAL to match the tape type.
- Make sure the HOLD function is turned off. If it is on, slide the HOLD switch to turn it off.
- Press \blacktriangleleft (play) to start playing, then adjust the volume.

When adjusting the volume on the Walkman (EX406 only)

Set the VOL control on the remote control at maximum.

When adjusting the volume on the remote control (EX406 only)

Set the VOL control on the Walkman slightly above the appropriate level.

To	Press (see Fig. D-②)
Play the other side	\blacktriangleleft (play) during playback
Stop playback	\blacksquare
Fast forward	FF during stop
Rewind	REW during stop
Play the same side from the beginning (Rewind Auto Play function)	REW during playback
Play the other side from the beginning (Skip Reverse function)	FF during playback

Using Other Functions

To play a tape recorded with Dolby* NR system (EX406/EX404 only) (see Fig. E-①)

Set DOLBY NR to ON.

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

To lock the controls (see Fig. E-②)

Set the HOLD switch to the direction of the arrow to lock the controls.

To emphasize bass sound (see Fig. E-③)

To emphasize deep bass sound, set the SOUND or GROOVE/MEGA BASS/NORMAL switch to MEGA BASS. To emphasize deeper bass sound, set the switch to GROOVE.

Notes

- If the sound is distorted when set to GROOVE, set to MEGA BASS or NORMAL.
- Bass emphasis may not show great effect if the volume is turned up too high.

To protect your hearing—AVLS (Automatic Volume Limiter System) function (see Fig. E-④)

Set AVLS (Automatic Volume Limiter System) to LIMIT. The maximum volume is kept down to protect your ears, even if you turn the volume up. To cancel the AVLS function, set AVLS to NORM.

Note

- If the sound is distorted when you listen to the bass-boosted sound with the AVLS, turn down the volume.

▶ Additional Information

Precautions

On batteries

- Do not charge a dry battery.
- Do not carry the dry batteries with coins or other metallic objects. It can generate heat if the positive and negative terminals of the batteries are accidentally contacted by a metallic object.
- When you do not use the Walkman for a long time, remove the battery to avoid any damage caused by battery leakage and subsequent corrosion.

On the unit

- Do not drop the unit or give a shock to the unit, or it may cause a malfunction.
- Do not leave the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust or sand, moisture, rain, mechanical shock, or in a car with its windows closed.
- If the unit has not been used for long, set it in the playback mode and warm it up for a few minutes before inserting a tape.

On tapes longer than 90 minutes

We do not recommend the use of tapes longer than 90 minutes except for a long continuous playback. They are very thin and tend to be stretched easily.

On the remote control (EX406 only)

Use the supplied remote control only with this unit.

On headphones/earphones Road safety

Do not use headphones/earphones while driving, cycling, or operating any motorized vehicle. It may create a traffic hazard and is illegal in some areas. It can also be potentially dangerous to play your headphones/earphones at high volume while walking, especially at pedestrian crossings. You should exercise extreme caution or discontinue use in potentially hazardous situations.

Preventing hearing damage

Do not use headphones/earphones at high volume. Hearing experts advise against continuous, loud and extended play. If you experience a ringing in your ears, reduce volume or discontinue use.

Caring for others

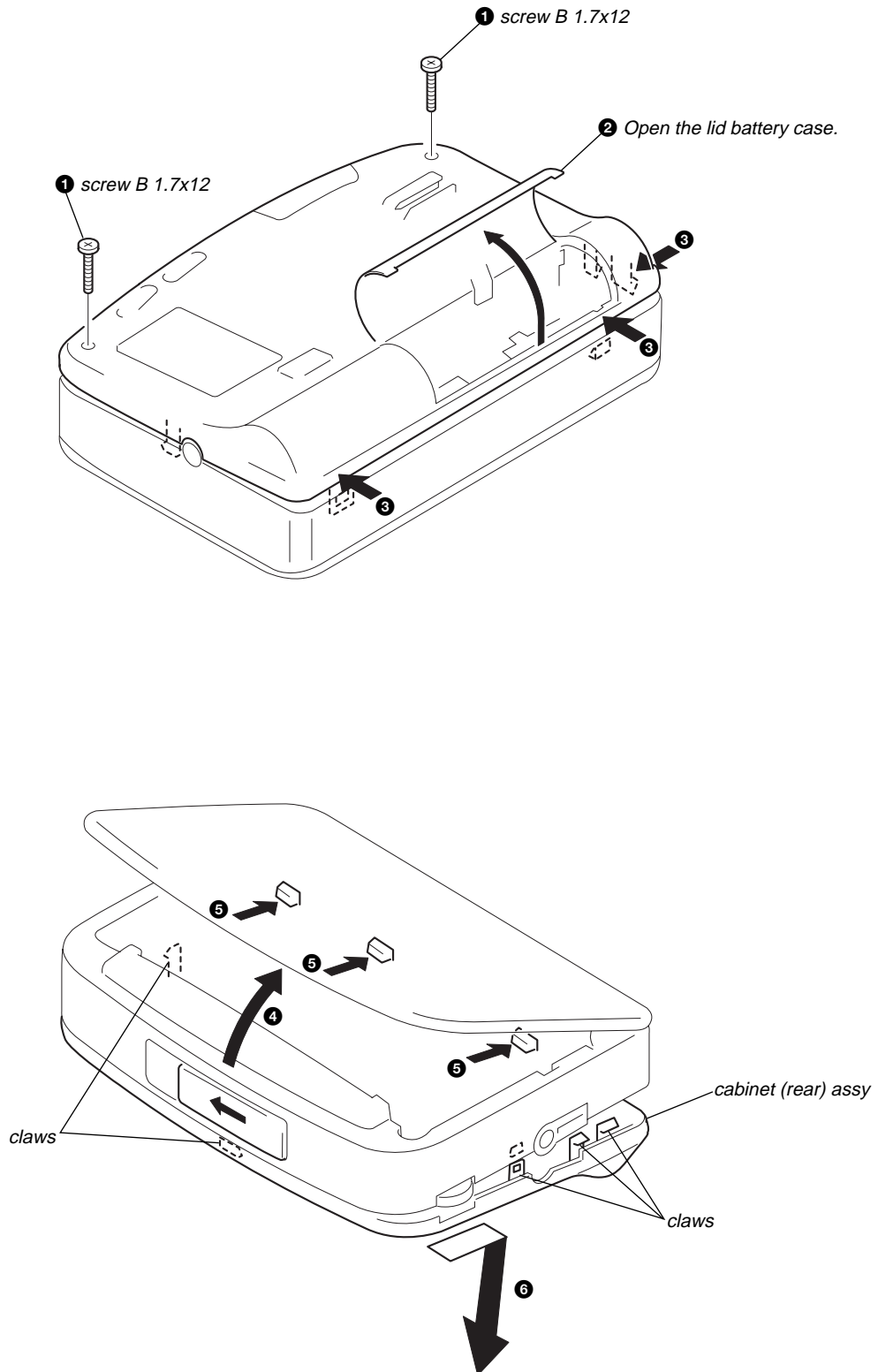
Keep the volume at a moderate level. This will allow you to hear outside sounds and to be considerate to the people around you.

SECTION 2 DISASSEMBLY

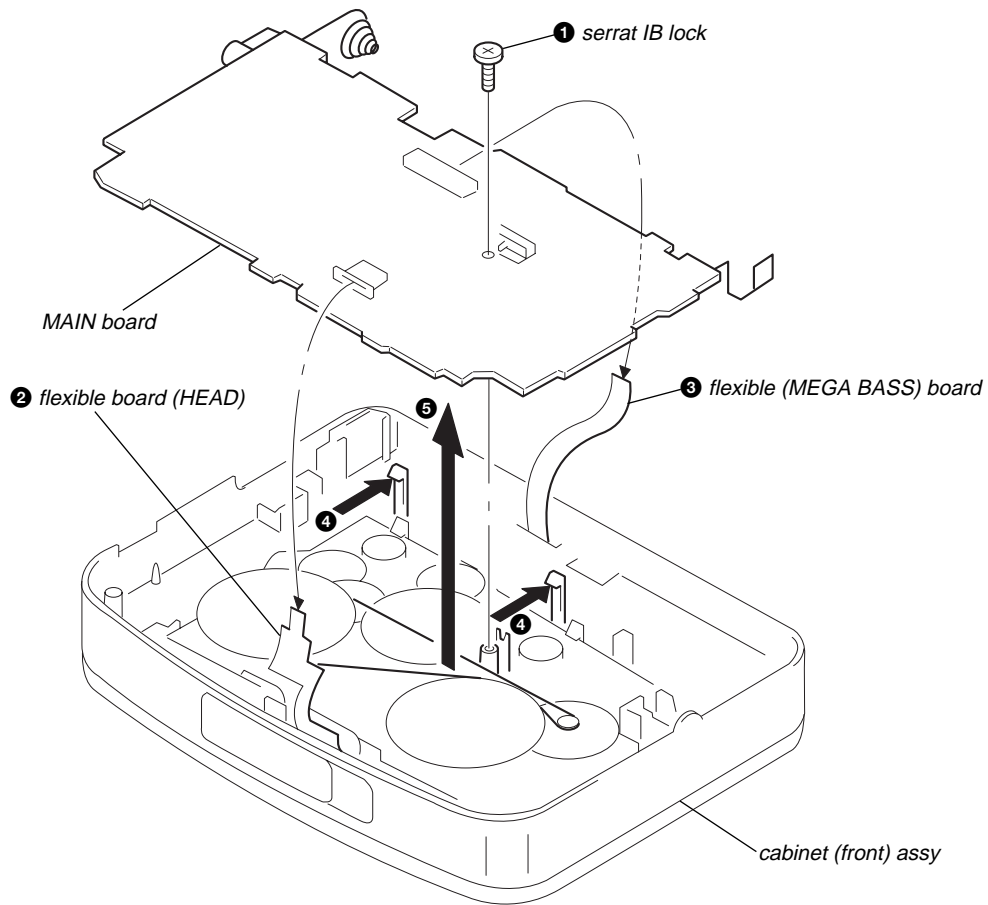
- The equipment can be removed using the following procedure.
Set → Cabinet (rear) assy → Main board → Mechanism deck
Cassette lid sub assy → Display board

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

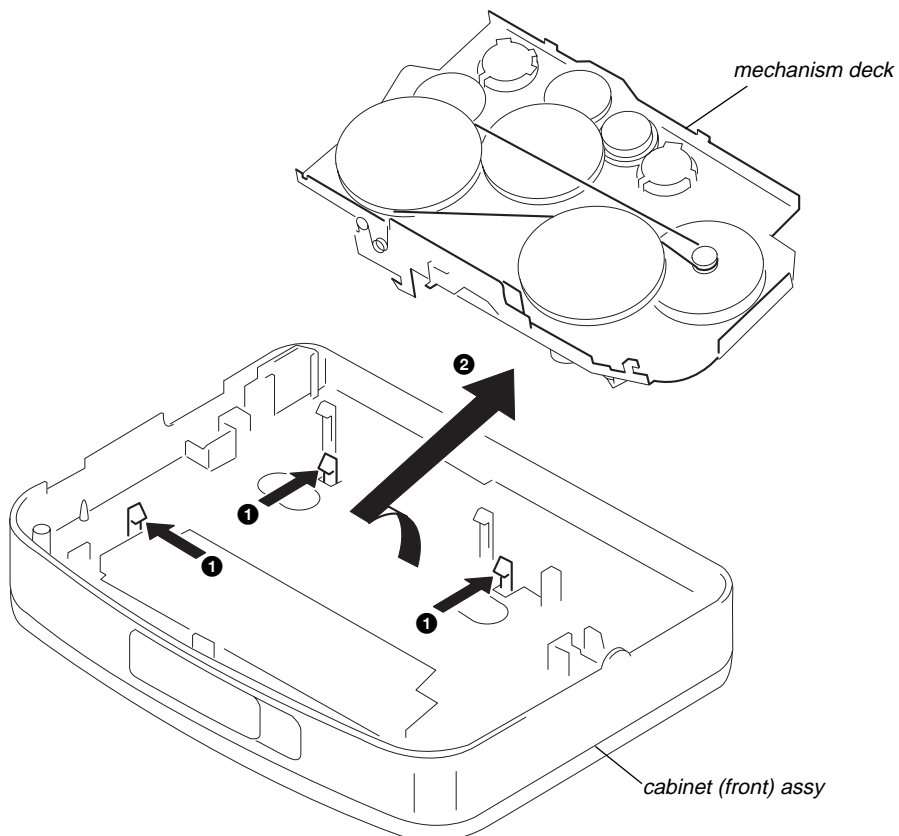
2-1. CABINET (REAR) ASSY



2-2. MAIN BOARD

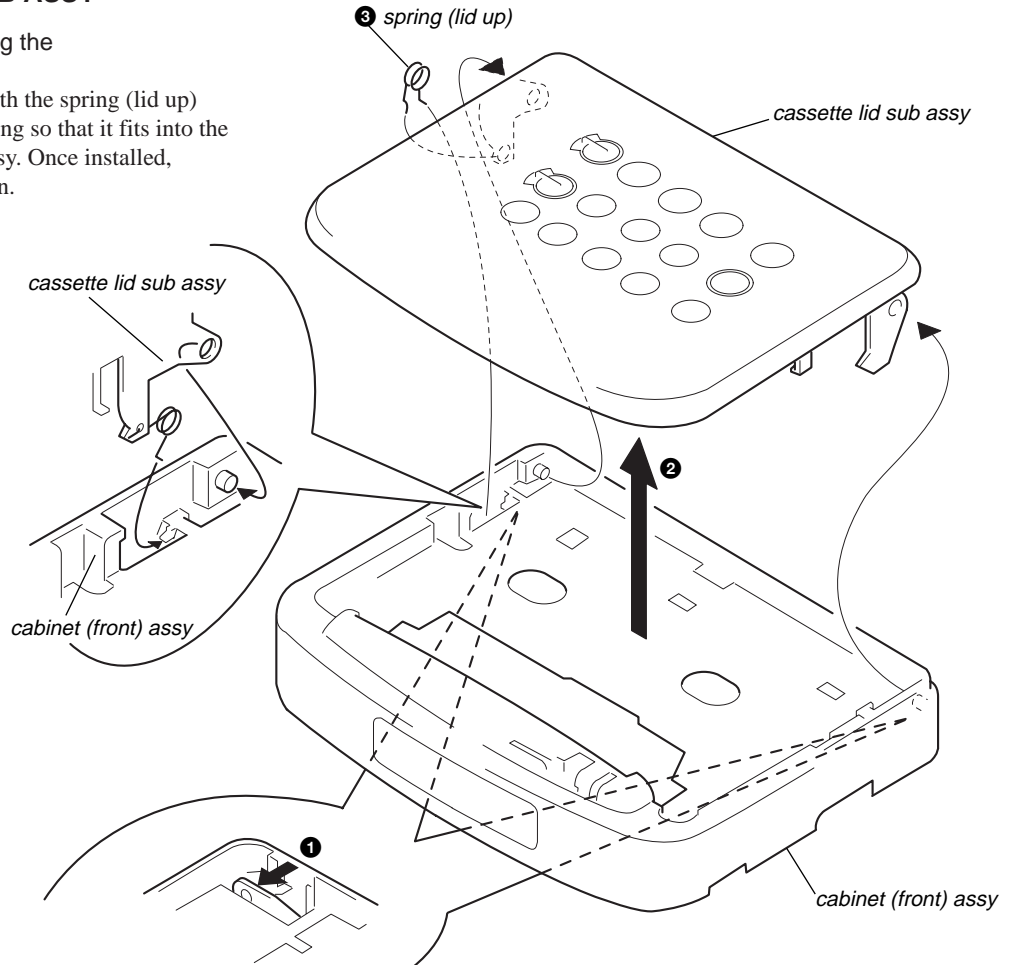


2-3. MACHANISM DECK



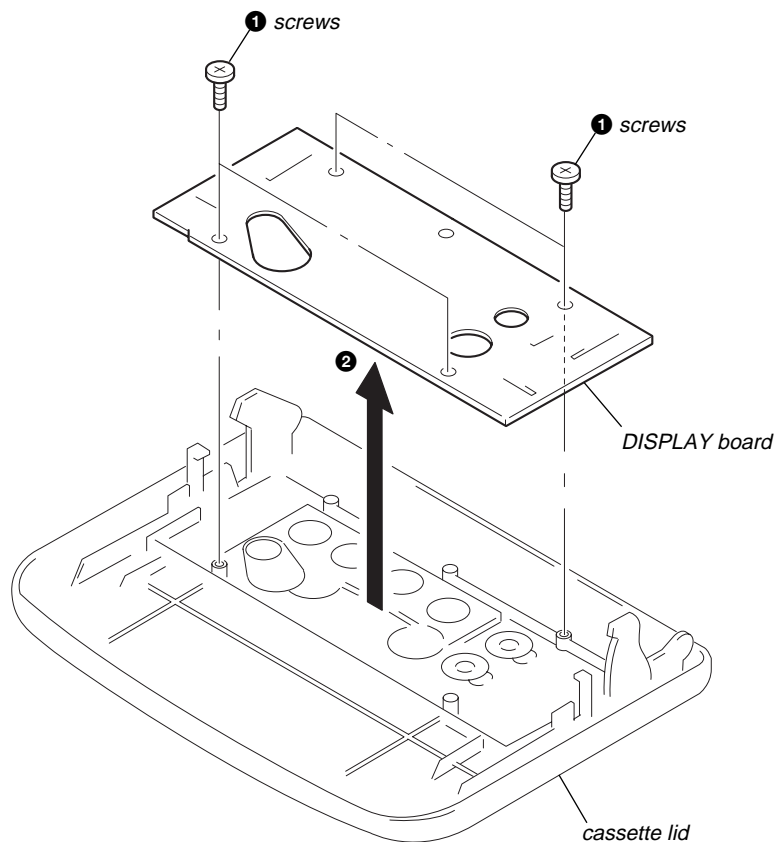
2-4. CASSETTE LID SUB ASSY

- Use caution when installing the cassette holder assy
Install the cassette holder with the spring (lid up) as shown below in the drawing so that it fits into the holes on the cabinet front assy. Once installed, fit the left and right pieces on.



- Press on the left & right clips from the rear of the cabinet (front) assy. and remove the boss.

2-5. DISPLAY BOARD



SECTION 3 MECHANICAL ADJUSTMENTS

PRECAUTION

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

playback head	pinch roller
capstan	rubber belt
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage (2.5 V) unless otherwise noted.

Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	20 – 42 g • cm (0.28 – 0.58 oz • inch)
FWD back tension		less than 2 g • cm (less than 0.03 oz • inch)
REV	CQ-102RC	20 – 42 g • cm (0.28 – 0.58 oz • inch)
REV back tension		less than 2 g • cm (less than 0.03 oz • inch)
FF, REW	CQ-201B	more than 50 g • cm (more than 0.69 oz • inch)

SECTION 4 ELECTRICAL ADJUSTMENTS

PRECAUTION

- Supplied voltage : 2.5 V
- Switches and control position

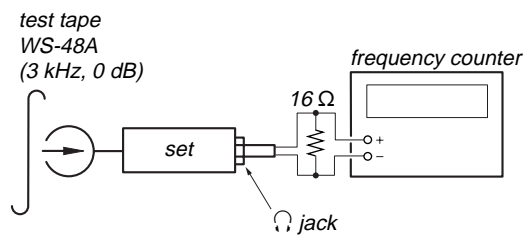
TAPE switch	: NORM
GROOVE/MEGA BASS/ NORMAL switch	: NORMAL (EX402/EX404)
SOUND switch	: NORMAL (EX405/EX406)
VOL control	: maximum
AVLS switch	: NORM
DOLBY NR switch	: OFF (Except EX402)

Test Tape

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

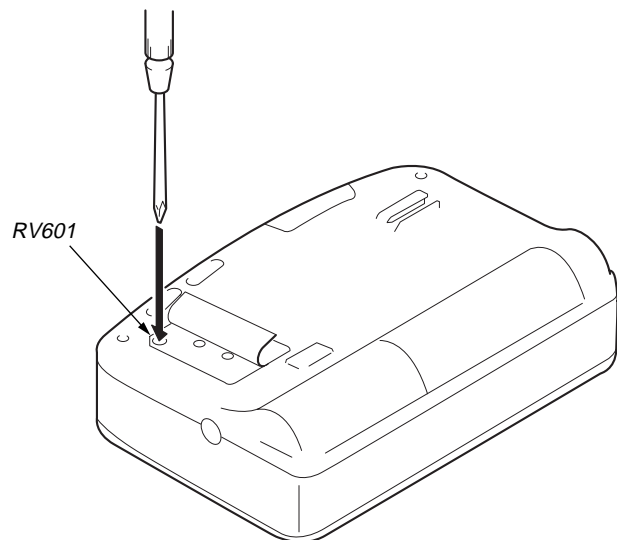
Tape Speed Adjustment

Procedure :



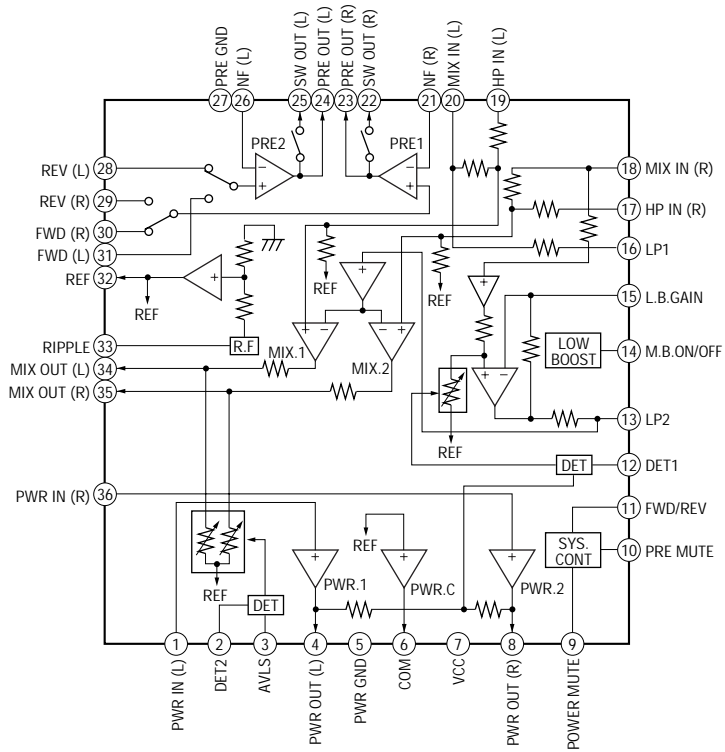
1. Playback WS-48A (tape center part) in the REV state and adjust RV601 so that the frequency counter reading becomes 3,000 Hz.
2. Playback WS-48A (tape center part) in the FWD state. Check that frequency counter reading is within $\pm 1.5\%$ of the reading of step 1.

Adjustment Location :

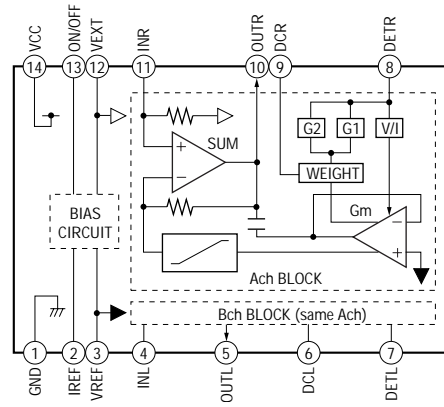


• IC Block Diagrams

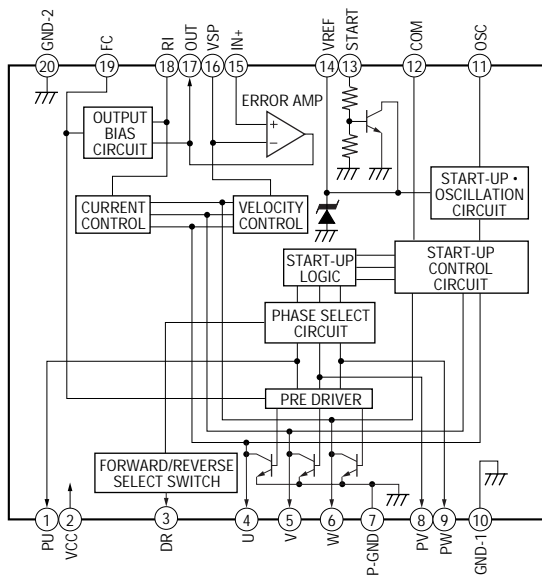
IC301 LA4585M-TLM



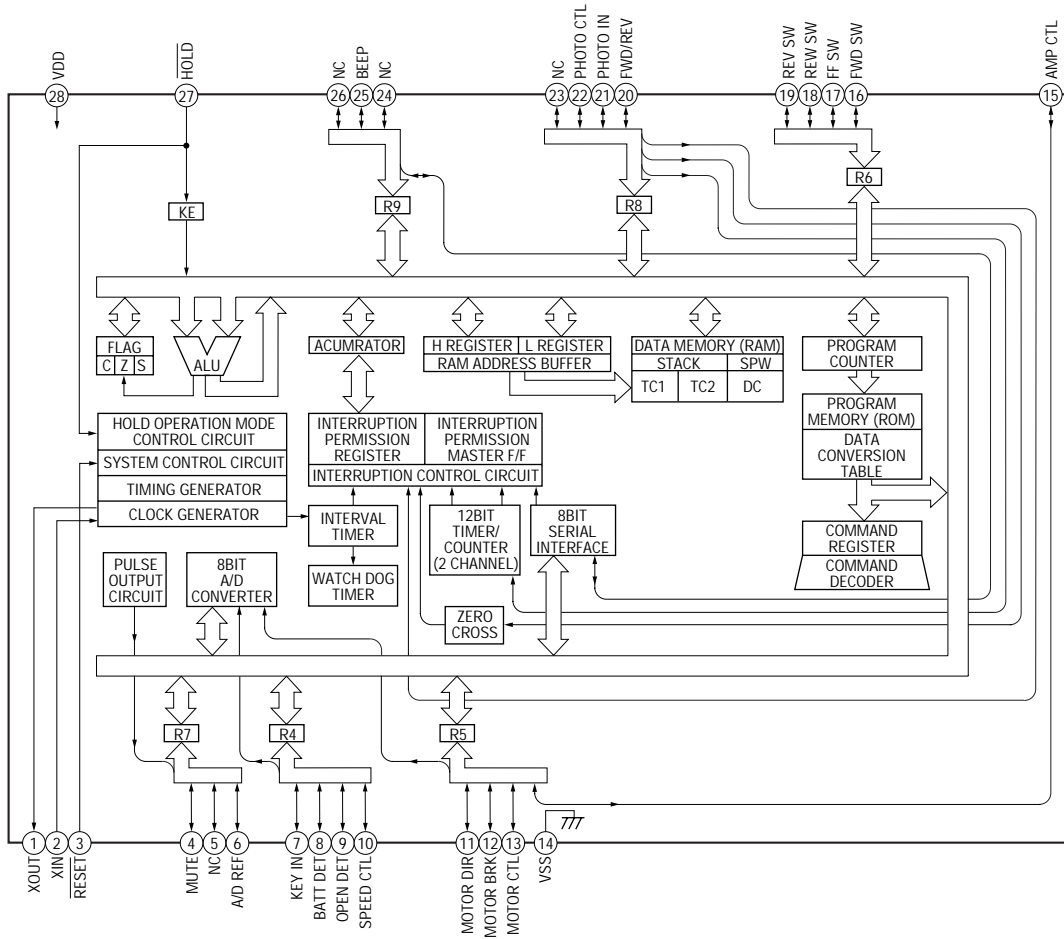
IC302 NJM2185AV-TE2



IC601 MM1370XVBE



IC701 TMP47C243LM-FV81CS



SECTION 6 EXPLODED VIEWS

NOTE:

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

- -XX and -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts

Example :

KNOB, BALANCE (WHITE) ... (RED)

Parts Color Cabinet's Color

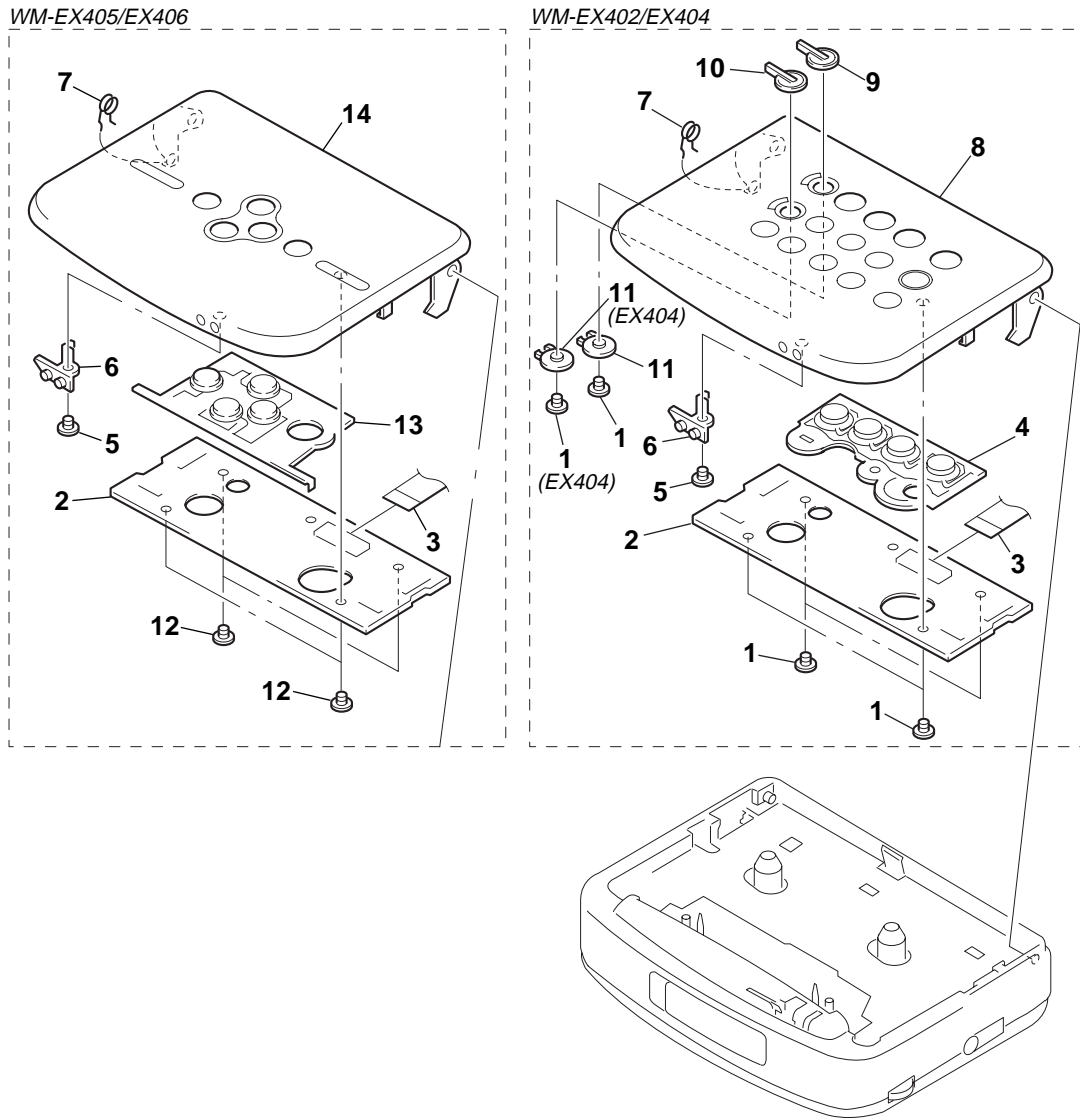
- Accessories and packing materials are given in the last of this parts list.

- Abbreviation

EE : East European model

FR : France model

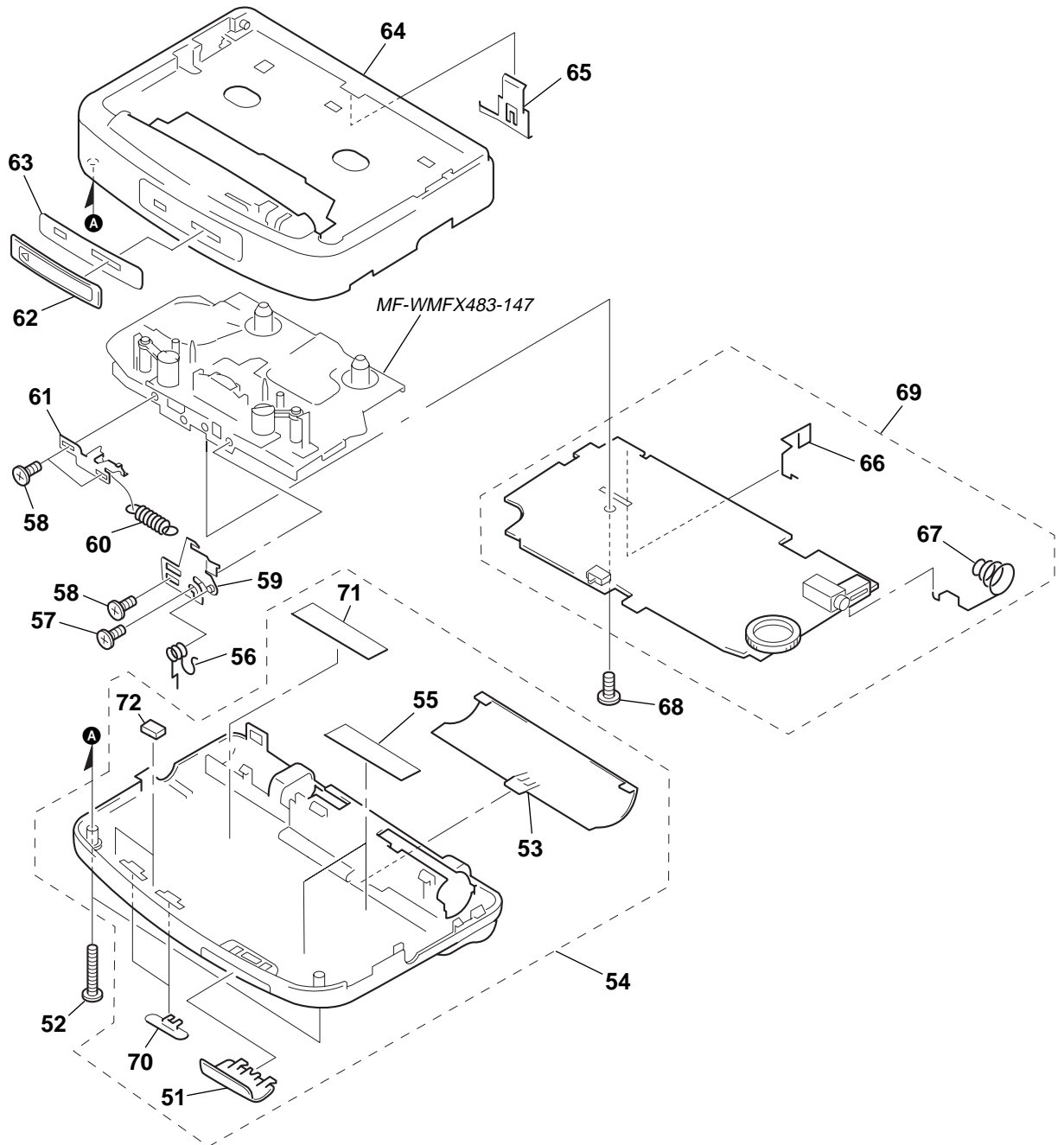
6-1. CASSETTE LID SECTION



Ref. No.	Part No.	Description	Remark
1	3-008-298-11	SCREW (EX402/EX404)	
* 2	1-667-932-11	DISPLAY BOARD	
3	1-667-927-11	FLEXIBLE (MEGA BASS) BOARD	
4	3-019-493-01	BUTTON (CONTROL) (EX402/EX404)	
5	3-318-382-61	SCREW (1.7X2.5), TAPPING	
6	3-019-506-01	LOCKER, OPEN	
7	3-025-276-01	SPRING (LID UP)	
8	X-3374-790-1	LID SUB ASSY, CASSETTE (EX402)	
8	X-3374-793-1	LID SUB ASSY, CASSETTE (EX404)	

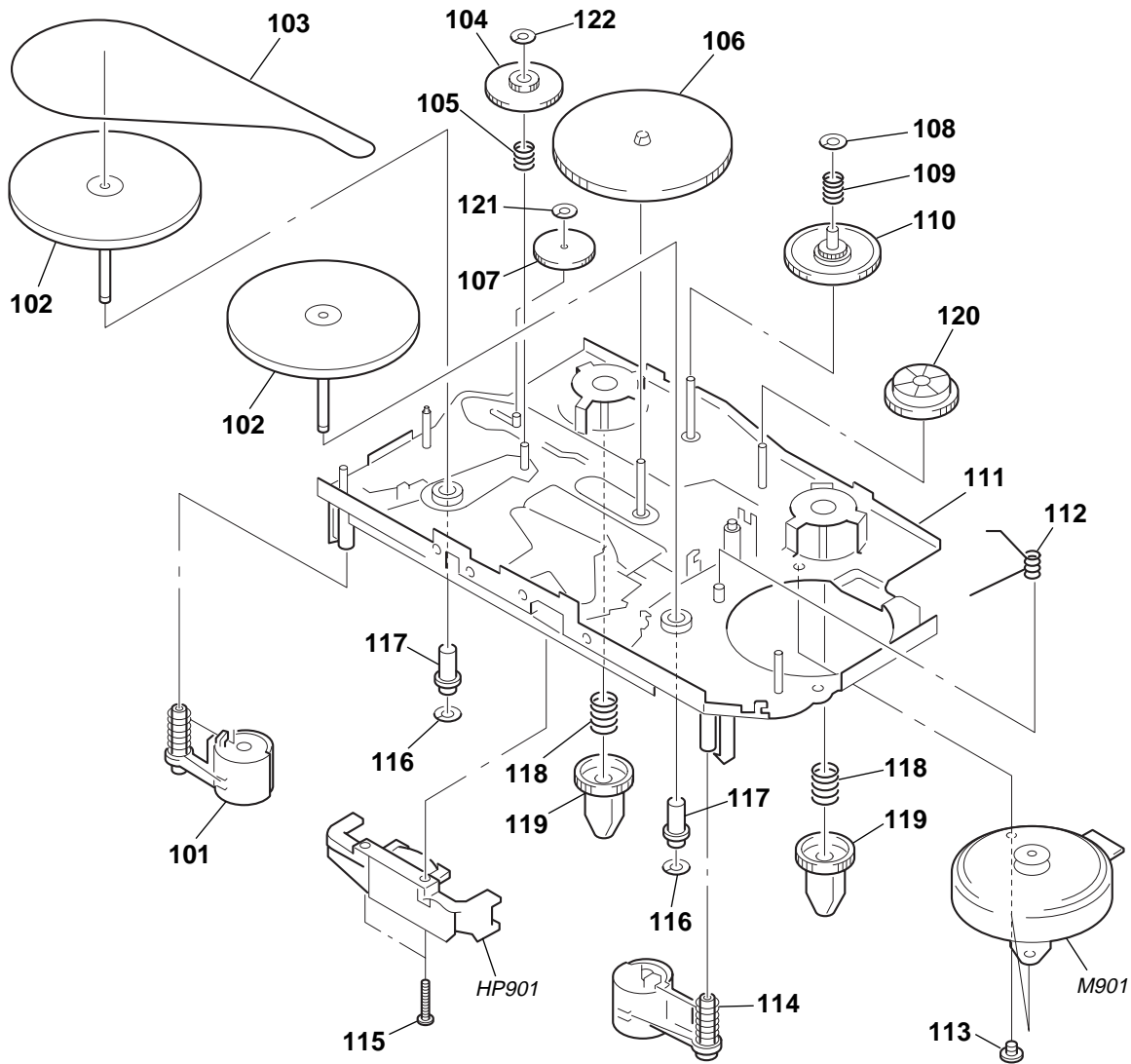
Ref. No.	Part No.	Description	Remark
9	3-019-495-01	KNOB (GROOVE/MEGA BASS/NORMAL)	(EX402/EX404)
10	3-019-495-01	KNOB (DOLBY NR) (EX404)	
11	3-019-504-01	JOINTER (EX402/EX404)	
12	3-008-298-01	SCREW (EX405/EX406)	
13	3-019-488-01	BUTTON (CONTROL) (EX405/EX406)	
14	X-3374-796-1	LID SUB ASSY, CASSETTE (EX406)	
14	X-3375-830-1	LID SUB ASSY, CASSETTE (SILVER) (EX405)	
14	X-3375-831-1	LID SUB ASSY, CASSETTE (BLUE) (EX405)	

6-2. CABINET SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-020-510-01	KNOB (HOLD)		64	3-020-507-01	CABINET (FRONT) (EX402)	
52	3-318-203-51	SCREW (B1.7X12), TAPPING		64	3-020-507-11	CABINET (FRONT) (EX404)	
53	3-020-509-01	LID, BATTERY CASE (EX402)		64	3-020-507-22	CABINET (FRONT) (EX405/EX406)	
53	3-020-509-11	LID, BATTERY CASE (EX404)		65	3-364-675-01	SPRING (CASSETTE)	
53	3-020-509-21	LID, BATTERY CASE (EX405/EX406)		66	3-020-511-01	TERMINAL (+), BATTERY	
54	X-3374-792-1	CABINET (REAR) ASSY (EX402)		67	3-020-512-01	TERMINAL (-), BATTERY	
54	X-3374-795-1	CABINET (REAR) ASSY (EX404)		68	3-010-838-22	LOCK, SERRAT IB	
54	X-3374-798-1	CABINET (REAR) ASSY (EX405/EX406)		69	A-3021-016-A	MAIN BOARD, COMPLETE (EX402:AEP,EE)	
55	3-019-503-01	SHEET (CABINET REAR)		69	A-3021-018-A	MAIN BOARD, COMPLETE (EX404)	
56	3-022-857-01	SPRING (OPEN)		69	A-3021-019-A	MAIN BOARD, COMPLETE (EX405:FR)	
57	3-349-825-31	SCREW		69	A-3021-020-A	MAIN BOARD, COMPLETE (EX405:AEP/EX406)	
58	3-703-816-07	SCREW (M1.4), SPECIAL HEAD		69	A-3021-099-A	MAIN BOARD, COMPLETE (EX402:FR)	
59	3-019-421-01	LEVER, OPEN		70	3-020-516-01	KNOB (TAPE SEL) (EX402)	
60	3-022-856-01	SPRING (KNOB), TENSION		70	3-020-516-11	KNOB (TAPE SEL) (EX404)	
61	3-019-422-01	JOINT		70	3-020-516-21	KNOB (TAPE SEL) (EX405/EX406)	
62	3-019-514-01	KNOB (OPEN)		71	3-025-599-01	CUSHION (H)	
63	3-025-230-01	SPACER (KNOB OPEN)		72	3-025-735-01	CUSHION (S)	

**6-3. MECHANISM DECK SECTION
(MF-WMFX483-147)**



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
101	X-3375-020-1	LEVER ASSY (N-F), PINCH		113	3-703-816-31	SCREW (M1.4), SPECIAL HEAD	
102	X-3372-558-1	WHEEL ASSY (SP), CAPSTAN		114	X-3375-021-1	LEVER ASSY (R-F), PINCH	
103	3-354-868-11	BELT		115	3-703-816-73	SCREW (M1.4), SPECIAL HEAD	
104	3-021-950-01	GEAR (DF)		116	3-921-797-01	WASHER	
105	3-021-982-01	SPRING (MODE)		117	3-921-003-01	BEARING	
106	X-3375-024-1	CLUTCH ASSY (F)		118	3-022-100-01	SPRING (B.T.), COMPRESSION	
107	3-021-951-01	GEAR (CAM)		119	3-024-223-01	GEAR (REEL-2)	
108	3-348-953-21	WASHER		120	X-3375-268-1	GEAR (AF-SV) ASSY	
109	3-021-979-01	SPRING (UDF)		121	3-338-647-31	WASHER (1.0-2.5)	
110	3-021-949-01	GEAR (BF)		122	3-026-340-01	WASHER	
111	X-3375-022-1	CHASSIS ASSY (F)		HP901	1-500-516-11	HEAD, MAGNETIC (PLAYBACK)	
112	3-021-974-01	SPRING (HEAD BASE)		M901	1-763-073-11	MOTOR	

SECTION 7 ELECTRICAL PARTS LIST

DISPLAY

MAIN

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -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.

- Abbreviation
EE : East European model
FR : France model

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-667-932-11	DISPLAY BOARD *****		C103	1-162-968-11	CERAMIC CHIP 0.0047uF 10%	50V
		< CONNECTOR >		C104	1-126-153-11	ELECT 22uF 20%	6.3V
CN702	1-766-585-11	CONNECTOR, FPC (ZIF) 8P		C105	1-115-156-11	CERAMIC CHIP 1uF	10V
		< DIODE >		C106	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
D704	8-719-051-01	LED CL-170HR-CD-T (BATT)		C107	1-115-156-11	CERAMIC CHIP 1uF	10V
		< JUMPER RESISTOR >		C108	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
JC20	1-216-864-11	METAL CHIP 0 5% 1/16W		C151	1-115-156-11	CERAMIC CHIP 1uF	10V (EXCEPT EX402)
JC21	1-216-864-11	METAL CHIP 0 5% 1/16W		C152	1-164-505-11	CERAMIC CHIP 2.2uF	16V (EXCEPT EX402)
JC22	1-216-864-11	METAL CHIP 0 5% 1/16W		C153	1-115-467-11	CERAMIC CHIP 0.22uF 10%	10V (EXCEPT EX402)
JC23	1-216-864-11	METAL CHIP 0 5% 1/16W		C201	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
		< RESISTOR >		C202	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
R709	1-216-823-11	METAL CHIP 1.5K 5% 1/16W		C203	1-162-968-11	CERAMIC CHIP 0.0047uF 10%	50V
R710	1-216-827-11	METAL CHIP 3.3K 5% 1/16W		C204	1-126-153-11	ELECT 22uF 20%	6.3V
R712	1-218-845-11	RES.CHIP 820 0.50% 1/16W		C205	1-115-156-11	CERAMIC CHIP 1uF	10V
R713	1-218-847-11	RES.CHIP 1K 0.50% 1/16W		C206	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
R714	1-218-849-11	RES.CHIP 1.2K 0.50% 1/16W		C207	1-115-156-11	CERAMIC CHIP 1uF	10V
		< SWITCH >		C208	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
S305	1-692-605-31	SWITCH, SLIDE (GROOVE/MEGA BASS/ NORMAL) (EX402/EX404)		C251	1-115-156-11	CERAMIC CHIP 1uF	10V (EXCEPT EX402)
S305	1-692-605-31	SWITCH, SLIDE (SOUND) (EX405/EX406)		C252	1-164-505-11	CERAMIC CHIP 2.2uF	16V (EXCEPT EX402)
S306	1-572-922-11	SWITCH, SLIDE (DOLBY NR) (EXCEPT EX402)		C253	1-115-467-11	CERAMIC CHIP 0.22uF 10%	10V (EXCEPT EX402)
S702	1-771-138-41	SWITCH, KEY BOARD (■)		C301	1-115-156-11	CERAMIC CHIP 1uF	10V
S703	1-771-138-41	SWITCH, KEY BOARD (◀▶)		C302	1-104-847-11	TANTAL. CHIP 22uF 20%	4V
S704	1-771-138-41	SWITCH, KEY BOARD (FF)		C303	1-126-153-11	ELECT 22uF 20%	6.3V
S705	1-771-138-41	SWITCH, KEY BOARD (REW)		C304	1-113-619-11	CERAMIC CHIP 0.47uF	10V
*****				C305	1-115-156-11	CERAMIC CHIP 1uF	10V
A-3021-016-A		MAIN BOARD, COMPLETE (EX402:AEP;EE)		C306	1-124-433-00	ELECT 100uF 20%	4V
A-3021-018-A		MAIN BOARD, COMPLETE (EX404)		C307	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V
A-3021-019-A		MAIN BOARD, COMPLETE (EX405:FR)		C308	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
A-3021-020-A		MAIN BOARD, COMPLETE (EX405:AEP/EX406)		C309	1-126-162-11	ELECT 3.3uF 20%	50V
A-3021-099-A		MAIN BOARD, COMPLETE (EX402:FR) *****		C310	1-124-257-00	ELECT 2.2uF 20%	50V
3-020-511-01		TERMINAL (+), BATTERY		C311	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
3-020-512-01		TERMINAL (-), BATTERY		C312	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V
		< CAPACITOR >		C313	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V
C101	1-162-962-11	CERAMIC CHIP 470PF 10%	50V	C314	1-124-259-11	ELECT 4.7uF 20%	16V
C102	1-162-962-11	CERAMIC CHIP 470PF 10%	50V	C315	1-113-619-11	CERAMIC CHIP 0.47uF	10V
				C316	1-165-128-11	CERAMIC CHIP 0.22uF	16V
				C317	1-162-974-11	CERAMIC CHIP 0.01uF	50V
				C318	1-162-953-11	CERAMIC CHIP 100PF 5%	50V
				C351	1-126-157-11	ELECT 10uF 20%	16V (EXCEPT EX402)

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C352	1-126-157-11	ELECT	10uF 20% 16V (EXCEPT EX402)	JC8	1-216-864-11	METAL CHIP	0 5% 1/16W
C353	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (EXCEPT EX402)	JC9	1-216-295-00	SHORT	0
C354	1-113-619-11	CERAMIC CHIP	0.47uF 10V (EXCEPT EX402)	JC10	1-216-864-11	METAL CHIP	0 5% 1/16W
C601	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	JC11	1-216-295-00	SHORT	0
C602	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V			< COIL >	
C603	1-115-467-11	CERAMIC CHIP	0.22uF 10% 10V	L301	1-410-997-31	INDUCTOR CHIP	2.2uH
C604	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V			< PHOTO REFLECTOR >	
C605	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	PH701	8-719-988-23	PHOTO REFLECTOR	PR-11-C-TL
C606	1-124-434-00	ELECT	220uF 20% 4V			< TRANSISTOR >	
C607	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	Q101	8-729-421-26	TRANSISTOR	UN5216QRS
C608	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	Q201	8-729-421-26	TRANSISTOR	UN5216QRS
C609	1-162-974-11	CERAMIC CHIP	0.01uF 50V	Q303	8-729-807-86	TRANSISTOR	2SB1295-UL5
C701	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	Q304	8-729-230-60	TRANSISTOR	2SA1586-YG
C702	1-162-957-11	CERAMIC CHIP	220PF 5% 50V	Q602	8-729-141-48	TRANSISTOR	2SB624-BV345
C703	1-162-957-11	CERAMIC CHIP	220PF 5% 50V	Q603	8-729-141-48	TRANSISTOR	2SB624-BV345
C704	1-115-467-11	CERAMIC CHIP	0.22uF 10% 10V	Q604	8-729-141-48	TRANSISTOR	2SB624-BV345
C705	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	Q605	8-729-028-76	TRANSISTOR	DTA114YUA-T106
C707	1-124-434-00	ELECT	220uF 20% 4V	Q606	8-729-028-76	TRANSISTOR	DTA114YUA-T106
C708	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	Q607	8-729-028-76	TRANSISTOR	DTA114YUA-T106
		< CONNECTOR >		Q608	8-729-421-26	TRANSISTOR	UN5216QRS
CN301	1-766-819-11	CONNECTOR, FPC (ZIF) 6P		Q609	8-729-421-26	TRANSISTOR	UN5216QRS
CN701	1-766-585-11	CONNECTOR, FPC (ZIF) 8P		Q610	8-729-028-76	TRANSISTOR	DTA114YUA-T106
		< DIODE >		Q701	8-729-421-26	TRANSISTOR	UN5216QRS
D301	8-719-422-46	DIODE MA8056		Q702	8-729-230-60	TRANSISTOR	2SA1586-YG
		< FERRITE BEAD >		Q703	8-729-230-60	TRANSISTOR	2SA1586-YG
FB301	1-414-385-11	INDUCTOR, FERRITE BEAD		Q704	8-729-230-60	TRANSISTOR	2SA1586-YG
		< IC >		Q705	8-729-602-21	TRANSISTOR	2SC4154-F
IC301	8-759-332-69	IC LA4585M-TLM				< RESISTOR >	
IC302	8-759-488-80	IC NJM2185AV-TE2 (EXCEPT EX402)		R101	1-216-841-11	METAL CHIP	47K 5% 1/16W
IC601	8-759-526-37	IC MM1370XVBE		R102	1-216-841-11	METAL CHIP	47K 5% 1/16W
IC701	8-759-526-56	IC TMP47C243LM-FV81CS		R103	1-216-855-11	METAL CHIP	680K 5% 1/16W
IC703	8-759-296-60	IC PST9018NL		R104	1-216-835-11	METAL CHIP	15K 5% 1/16W
		< JACK >		R105	1-216-835-11	METAL CHIP	15K 5% 1/16W
J301	1-580-680-31	JACK (♁)		R106	1-216-820-11	METAL CHIP	820 5% 1/16W
		< JUMPER RESISTOR >		R107	1-216-795-11	RES,CHIP	6.8 5% 1/16W (EXCEPT FR)
JC1	1-216-864-11	METAL CHIP	0 5% 1/16W	R107	1-216-807-11	METAL CHIP	68 5% 1/16W (FR)
JC2	1-216-864-11	METAL CHIP	0 5% 1/16W (EX402)	R108	1-216-841-11	METAL CHIP	47K 5% 1/16W
JC3	1-216-864-11	METAL CHIP	0 5% 1/16W (EX402)	R109	1-216-825-11	METAL CHIP	2.2K 5% 1/16W
JC4	1-216-295-00	SHORT	0	R201	1-216-841-11	METAL CHIP	47K 5% 1/16W
JC5	1-216-295-00	SHORT	0 (EXCEPT EX402)	R202	1-216-841-11	METAL CHIP	47K 5% 1/16W
JC6	1-216-864-11	METAL CHIP	0 5% 1/16W	R203	1-216-855-11	METAL CHIP	680K 5% 1/16W
JC7	1-216-864-11	METAL CHIP	0 5% 1/16W	R204	1-216-835-11	METAL CHIP	15K 5% 1/16W
				R205	1-216-835-11	METAL CHIP	15K 5% 1/16W
				R206	1-216-820-11	METAL CHIP	820 5% 1/16W
				R207	1-216-795-11	RES,CHIP	6.8 5% 1/16W (EXCEPT FR)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R207	1-216-807-11	METAL CHIP	68 5% 1/16W (FR)			< SWITCH >	
R208	1-216-841-11	METAL CHIP	47K 5% 1/16W	S301	1-771-091-21	SWITCH, PUSH (1 KEY) (OPEN DET)	
R209	1-216-825-11	METAL CHIP	2.2K 5% 1/16W	S303	1-572-922-11	SWITCH, SLIDE (TAPE)	
R301	1-216-829-11	METAL CHIP	4.7K 5% 1/16W	S304	1-572-922-11	SWITCH, SLIDE (AVLS)	
R302	1-216-829-11	METAL CHIP	4.7K 5% 1/16W	S601	1-692-370-11	SWITCH, SLIDE (MD CONTROL)	
R303	1-216-833-11	METAL CHIP	10K 5% 1/16W	S701	1-572-922-11	SWITCH, SLIDE (HOLD)	
R304	1-216-843-11	METAL CHIP	68K 5% 1/16W			< THERMISTOR (POSITIVE) >	
R305	1-216-851-11	METAL CHIP	330K 5% 1/16W	TH601	1-803-124-21	THERMISTOR, POSITIVE 4.7K	
R306	1-216-789-11	METAL CHIP	2.2 5% 1/16W			< VIBRATOR >	
R307	1-216-089-00	RES,CHIP	47K 5% 1/10W (EXCEPT EX402)	X701	1-527-532-51	OSCILLATOR, CERAMIC (400kHz)	
R309	1-216-819-11	METAL CHIP	680 5% 1/16W	*****			
R313	1-216-841-11	METAL CHIP	47K 5% 1/16W			MISCELLANEOUS	
R330	1-216-821-11	METAL CHIP	1K 5% 1/16W			*****	
R351	1-218-729-11	METAL CHIP	36K 0.50% 1/16W (EXCEPT EX402)	3	1-667-927-11	FLEXIBLE (MEGA BASS) BOARD	
R352	1-216-797-11	METAL CHIP	10 5% 1/16W (EXCEPT EX402)	HP901	1-500-516-11	HEAD, MAGNETIC (PLAYBACK)	
R601	1-216-809-11	METAL CHIP	100 5% 1/16W	M901	1-763-073-11	MOTOR	
R602	1-216-845-11	METAL CHIP	100K 5% 1/16W	*****			
R603	1-216-830-11	METAL CHIP	5.6K 5% 1/16W			ACCESSORIES & PACKING MATERIALS	
R604	1-216-830-11	METAL CHIP	5.6K 5% 1/16W			*****	
R605	1-216-832-11	METAL CHIP	8.2K 5% 1/16W	1-505-535-21		HEADPHONE (WITH REMOTE CONTROL) (MDR-WME652) (EX406)	
R606	1-216-817-11	METAL CHIP	470 5% 1/16W	3-020-998-01		CLIP, BELT	
R607	1-216-817-11	METAL CHIP	470 5% 1/16W	3-861-493-11		MANUAL, INSTRUCTION (ENGLISH,FRENCH, GERMAN,SPANISH) (EXCEPT E)	
R608	1-216-817-11	METAL CHIP	470 5% 1/16W	3-861-493-21		MANUAL, INSTRUCTION (DUTCH,SWEDISH, ITALIAN,PORTUGUESE) (AEP)	
R609	1-216-821-11	METAL CHIP	1K 5% 1/16W	3-861-493-31		MANUAL, INSTRUCTION (HUNGARIAN,POLISH, RUSSIAN,BULGARIAN) (EE)	
R610	1-216-827-11	METAL CHIP	3.3K 5% 1/16W	3-861-493-41		MANUAL, INSTRUCTION (TURKISH,GREEK, CZECH,FINNISH) (AEP,EE)	
R611	1-216-821-11	METAL CHIP	1K 5% 1/16W	3-861-493-51		MANUAL, INSTRUCTION (ENGLISH,CHINESE, KOREAN) (E)	
R701	1-216-817-11	METAL CHIP	470 5% 1/16W	3-861-493-61		MANUAL, INSTRUCTION (ENGLISH,CHINESE, KOREAN) (E)	
R702	1-216-851-11	METAL CHIP	330K 5% 1/16W	8-953-187-90		HEADPHONE MDR-ED136//K SET (EXCEPT EX406)	
R703	1-216-853-11	METAL CHIP	470K 5% 1/16W				
R705	1-218-870-11	RES,CHIP	9.1K 0.50% 1/16W				
R706	1-216-841-11	METAL CHIP	47K 5% 1/16W				
R708	1-216-845-11	METAL CHIP	100K 5% 1/16W				
R711	1-218-836-11	RES,CHIP	360 0.50% 1/16W				
R715	1-216-841-11	METAL CHIP	47K 5% 1/16W				
R716	1-216-829-11	METAL CHIP	4.7K 5% 1/16W				
R717	1-218-836-11	RES,CHIP	360 0.50% 1/16W				
R718	1-216-845-11	METAL CHIP	100K 5% 1/16W				
R719	1-216-833-11	METAL CHIP	10K 5% 1/16W				
R720	1-216-845-11	METAL CHIP	100K 5% 1/16W				
R721	1-216-845-11	METAL CHIP	100K 5% 1/16W				
		< NETWORK RESISTOR >					
RB701	1-233-810-21	RES, NETWORK	100K (3216)				
		< VARIABLE RESISTOR >					
RV301	1-225-544-11	RES, VAR, CARBON	10K/10K (VOL)				
RV601	1-238-663-11	RES, ADJ, CARBON	4.7K (TAPE SPEED)				

