

WM-EX170/EX172

SERVICE MANUAL

Canadian Model
WM-EX170

AEP Model
E Model
WM-EX170/172



Photo : WM-EX172

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Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MT-WMEX170-114

SPECIFICATIONS

- **Power requirements**
3V DC batteries R6 (AA) × 2 / External DC 3V power sources
- **Dimensions**
88.5 × 111.5 × 37.6 mm
(3 1/2 × 4 1/2 × 1 1/2 inches) (w / h / d) incl. projecting parts and controls
- **Mass**
EX170 : Approx. 125 g (4.5 oz) / Approx. 185 g (6.6 oz) incl. batteries and a cassette
EX172 : Approx. 130 g (4.6 oz) / Approx. 190g (6.8 oz) incl. batteries and a cassette
- **Supplied accessories**
Stereo headphones or Stereo earphones (1) / Belt clip (1)

Design and specifications are subject to change without notice.

CASSETTE PLAYER



SONY®

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Flexible Circuit Board Repairing

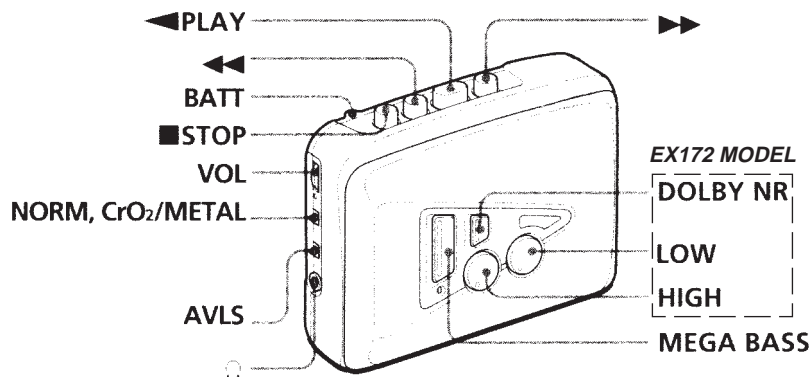
- Keep the temperature of the soldering iron around 270° C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

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.

SECTION 1 GENERAL

This section is extracted from instruction manual.



SECTION 2 DISASSEMBLY

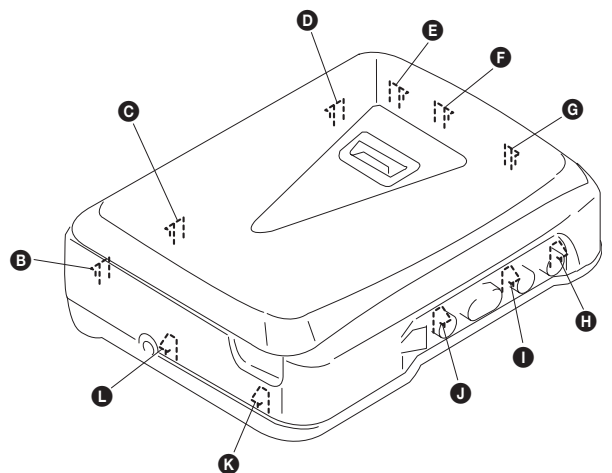
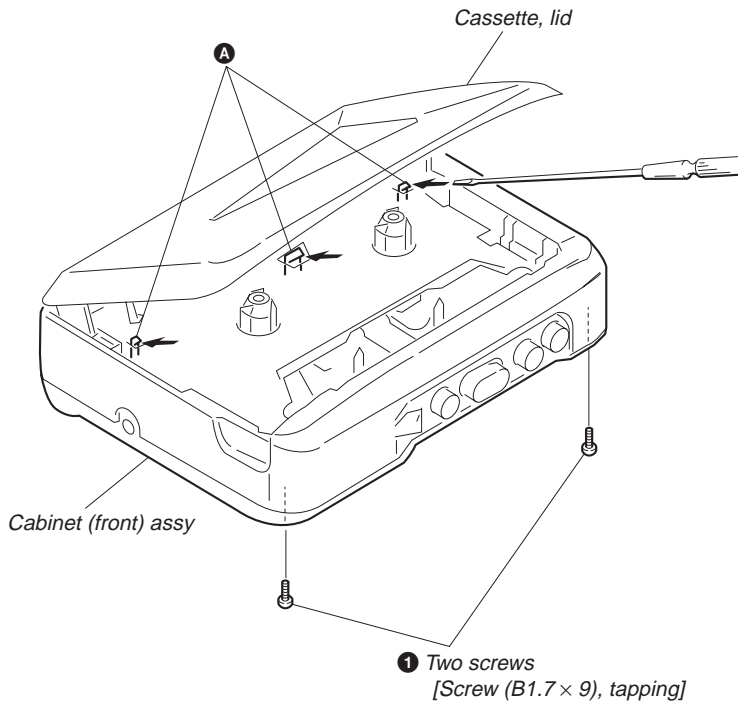
- This set can be disassembled in the order shown below.

2-1. CABINET (FRONT) ASSY → 2-2. MAIN BOARD → 2-4. MECHANISM DECK → 2-5. BELT, MOTOR (REEL/CAPSTAN)
↳ 2-3. CASSETTE LID

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

2-1. CABINET (FRONT) ASSY

- 2 Insert the precision screwdriver (1.4 mm flat-blade) into the slit at claw **A** and release the claw.
- 3 Remove the cabinet (front) assy. (Release all claws **B** to **L** in alphabetical order.)



2-2. MAIN BOARD

③ Remove the four solders.

② Flexible board (CN302)

④ Screw (M1.4), toothed lock (WH)

⑥ MAIN board

⑤ Two claws

① Head flexible board (CN301)

2-3. CASSETTE LID

② Insert a precision screwdriver (1.4 mm flat-blade) vertically into portion **A** to release the hinge plate.

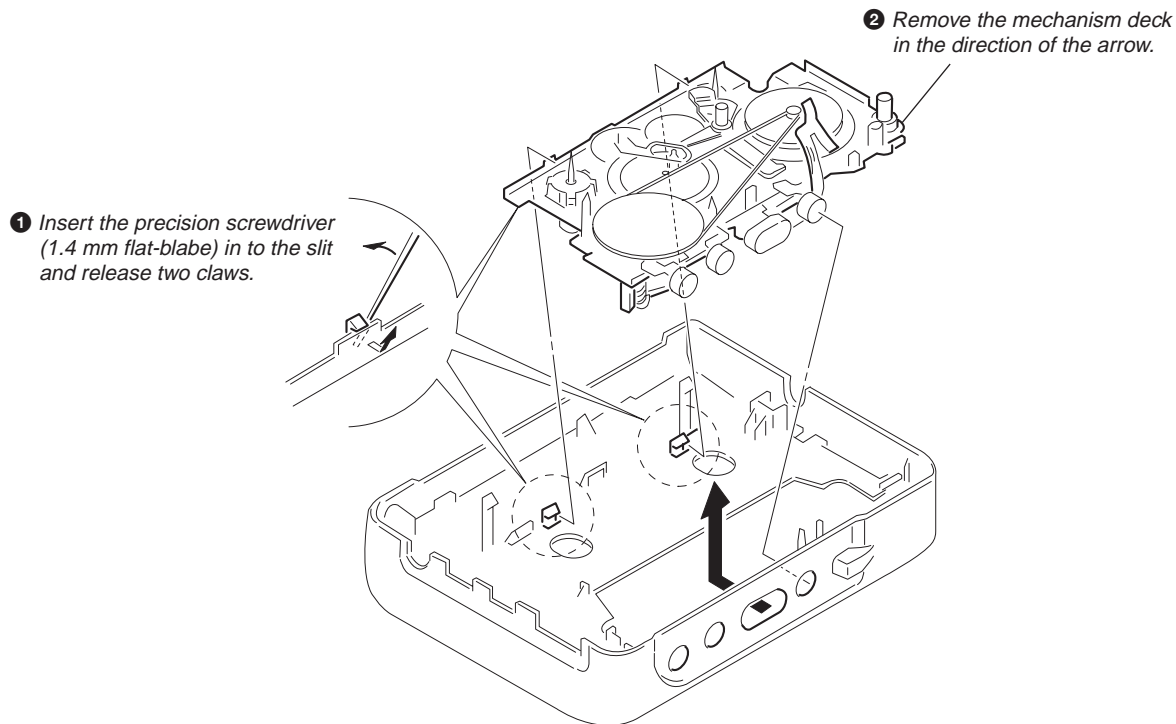
③ Portion **B** to release the hinge plate.

⑤ Spring (torsion)

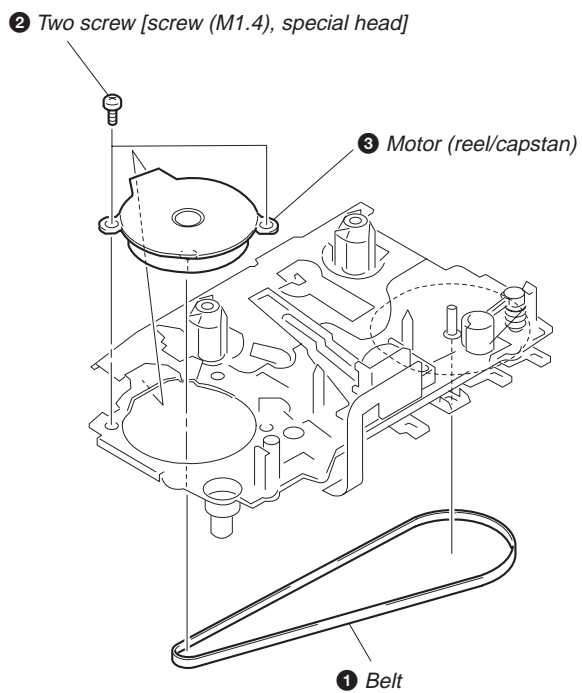
① Open the cassette lid.

④ Cassette lid.

2-4. MECHANISM DECK



2-5. BELT, MOTOR (REEL/CAPSTAN)



SECTION 3 MECHANICAL ADJUSTMENT

PRECAUTION

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

Playback head	Pinch roller
Rubber belt	Capstan
2. Demagnetize the playback head using a demagnetizer.
3. Do not use a magnetized screwdriver for adjustments.
4. After adjusting, apply screw-locking compound onto the adjusted parts.
5. Unless specified otherwise, use a specified voltage (3.0V) to perform the adjustments.

Torqu Measurement

Mode	Torqu meter	Meter reading
FWD	CQ-102C	20 - 30 g · cm
FWD Back Tension		0.4 - 2.0 g · cm
REV	CQ-102RC	20 - 30 g · cm
REV Back Tension		0.4 - 2.0 g · cm
FF	CQ-201B	More than 40 g · cm
REW		

SECTION 4 ELECTRICAL ADJUSTMENT

PRECAUTION

1. Specified voltage : 3.0V
2. Switch position

DOLBY NR switch	: OFF (EX172 MODEL)
AVLS switch	: NORM

CASSETTE SECTION

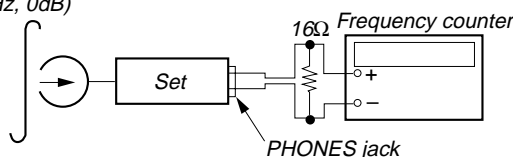
Test Tape

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

Tape Speed Adjustmnet

Procedure :

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



1. Playback WS-48A (Tape center part) and adjust RV601 so that the frequency counter reading becomes $3,000\text{Hz} \pm 15\text{Hz}$.
2. Playback WS-48A (Tape top and end).
Check that frequency counter reading is within 1.5% of the reading of step1.

Adjustment Point :

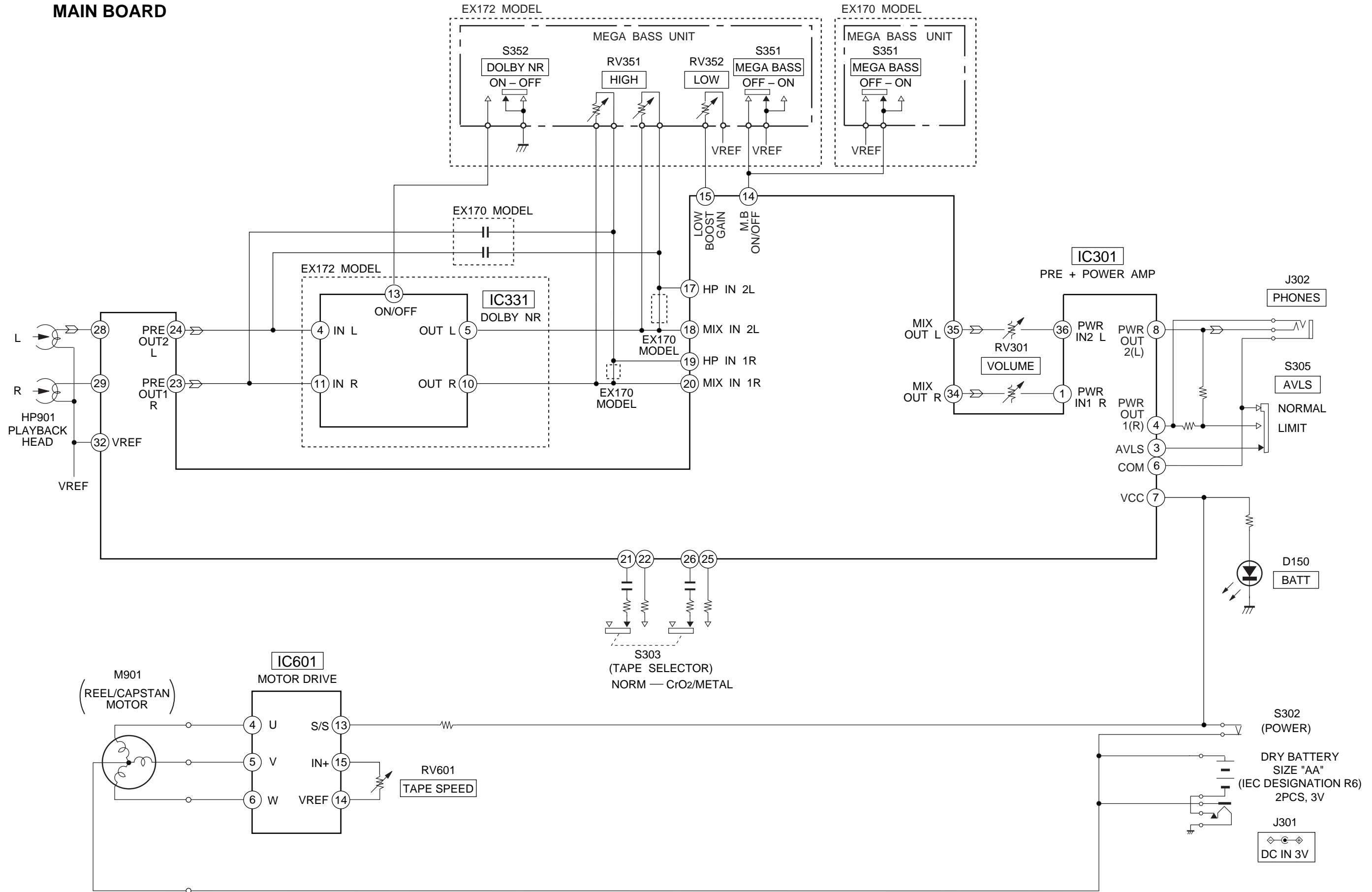
[MAIN BOARD] —CONDUCTOR SIDE —



SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAM

MAIN BOARD

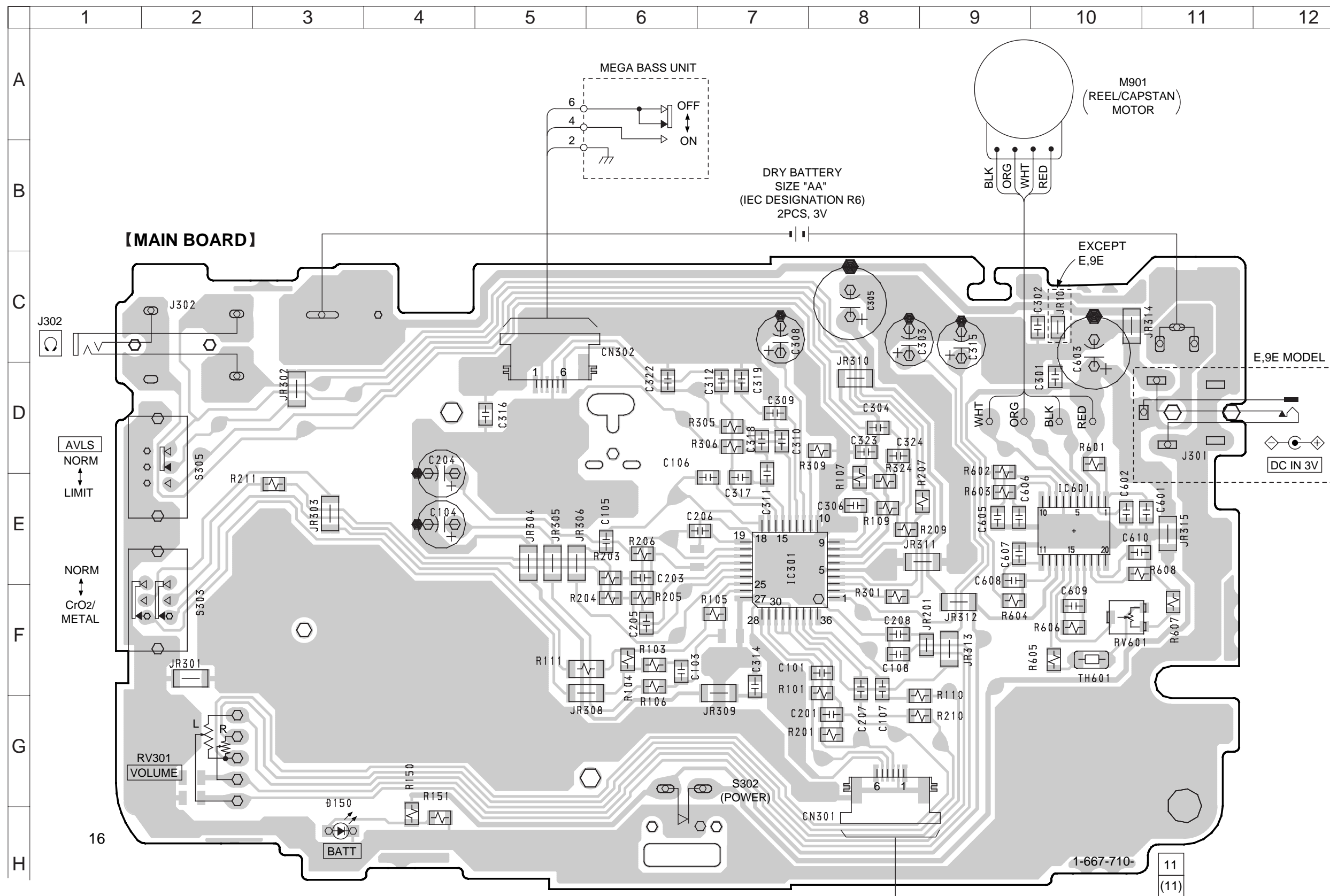


• Signal path.
⊃ : PB

5-2. PRINTED WIRING BOARD
(EX170 MODEL)

• Semiconductor Location

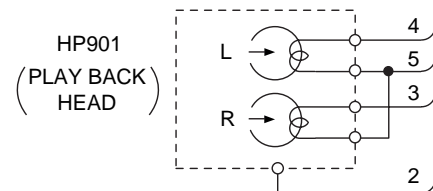
Ref. No.	Location
D150	H-3
IC301	E-7
IC601	E-10



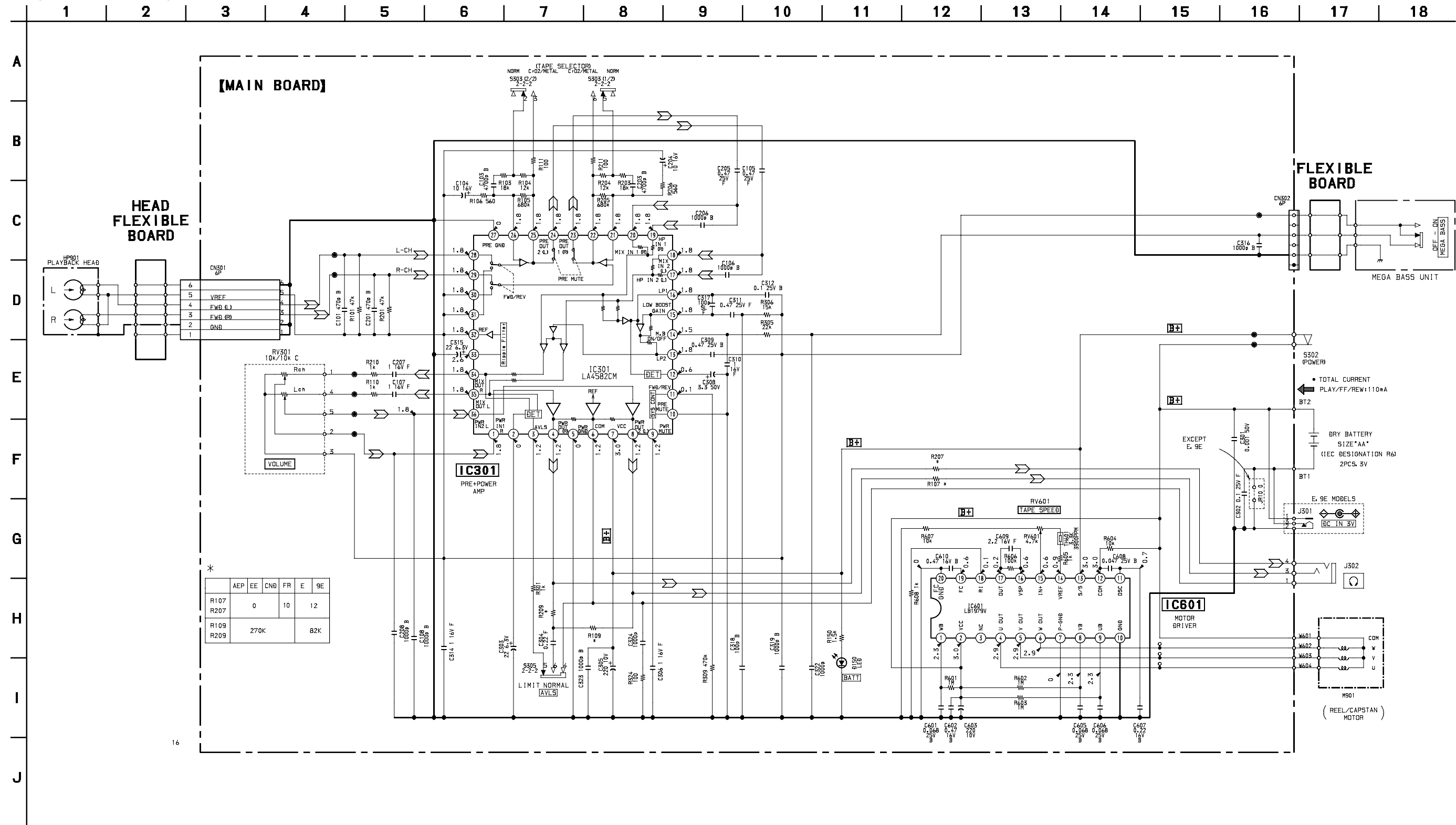
Note on Printed Wiring Board:

- — : parts extracted from the component side.
- ▨ : Pattern from the side which enables seeing.
(The other layers' patterns are not indicated.)

- Abbreviation
CND : Canadian.
EE : East European.
FR : French.
9E : Country of origin is not shown.



5-3. SCHEMATIC DIAGRAM
(EX170 MODEL)



Note on Schematic Diagram:

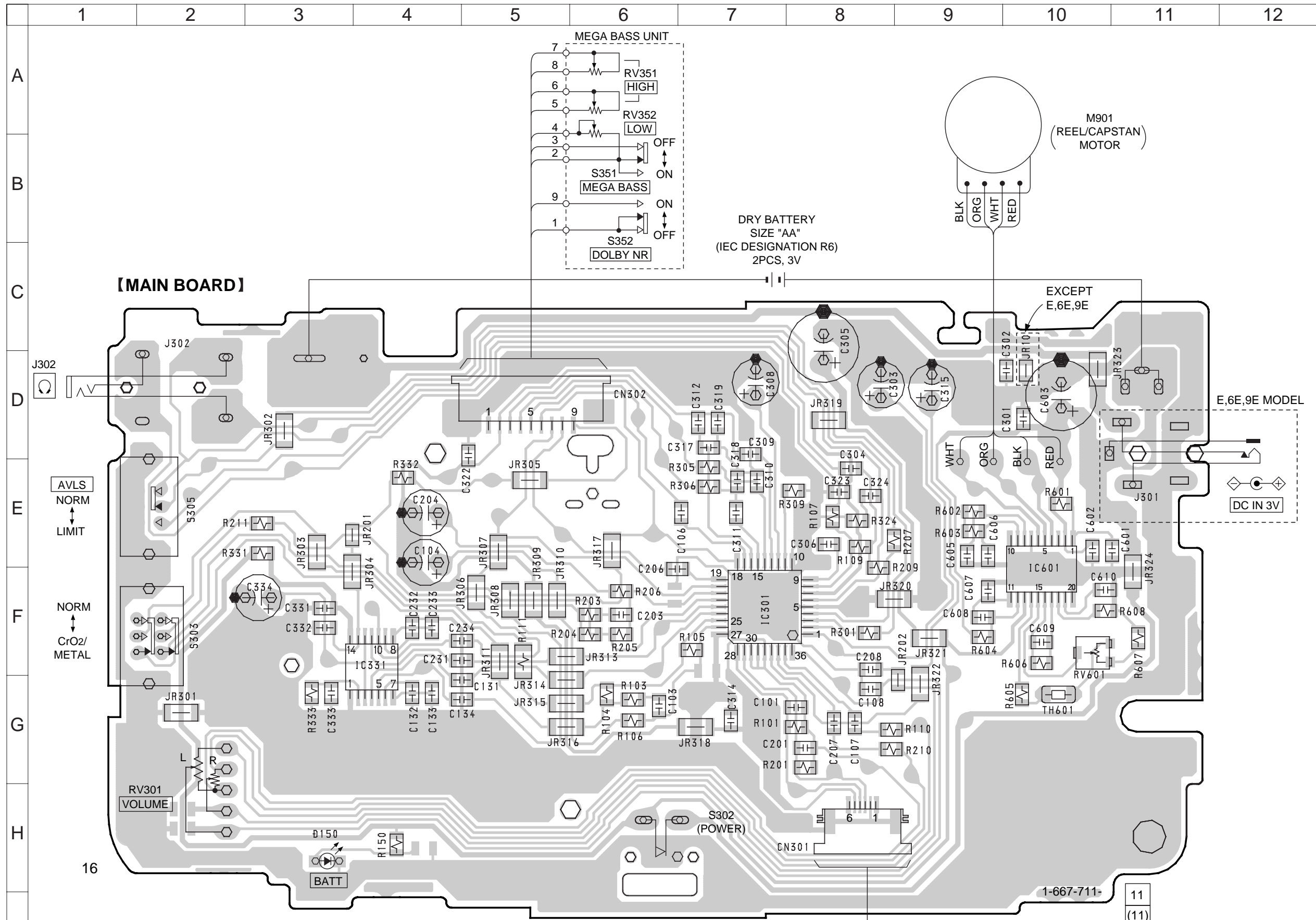
- All capacitors are in μF unless otherwise noted. pF : μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- % : indicates tolerance.
- [] : panel designation.
- B+ : B+ Line.
- [] : adjustment for repair.
- Total current is measured with no cassette installed.
- Power voltage is dc V and fed with regulated dc power supply from external power voltage jack.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : PLAY

- Voltages are taken with a VOM (Input impedance $10\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- Σ : PB
- Abbreviation
 CND : Canadian.
 EE : East European.
 FR : French.
 9E : Country of origin is not shown.

5-4. PRINTED WIRING BOARD
(EX172 MODEL)

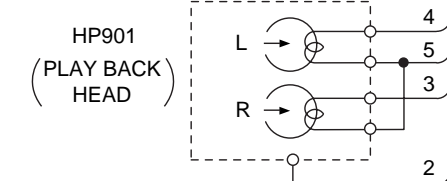
• Semiconductor Location

Ref. No.	Location
D150	H-3
IC301	F-7
IC331	F-4
IC601	E-10

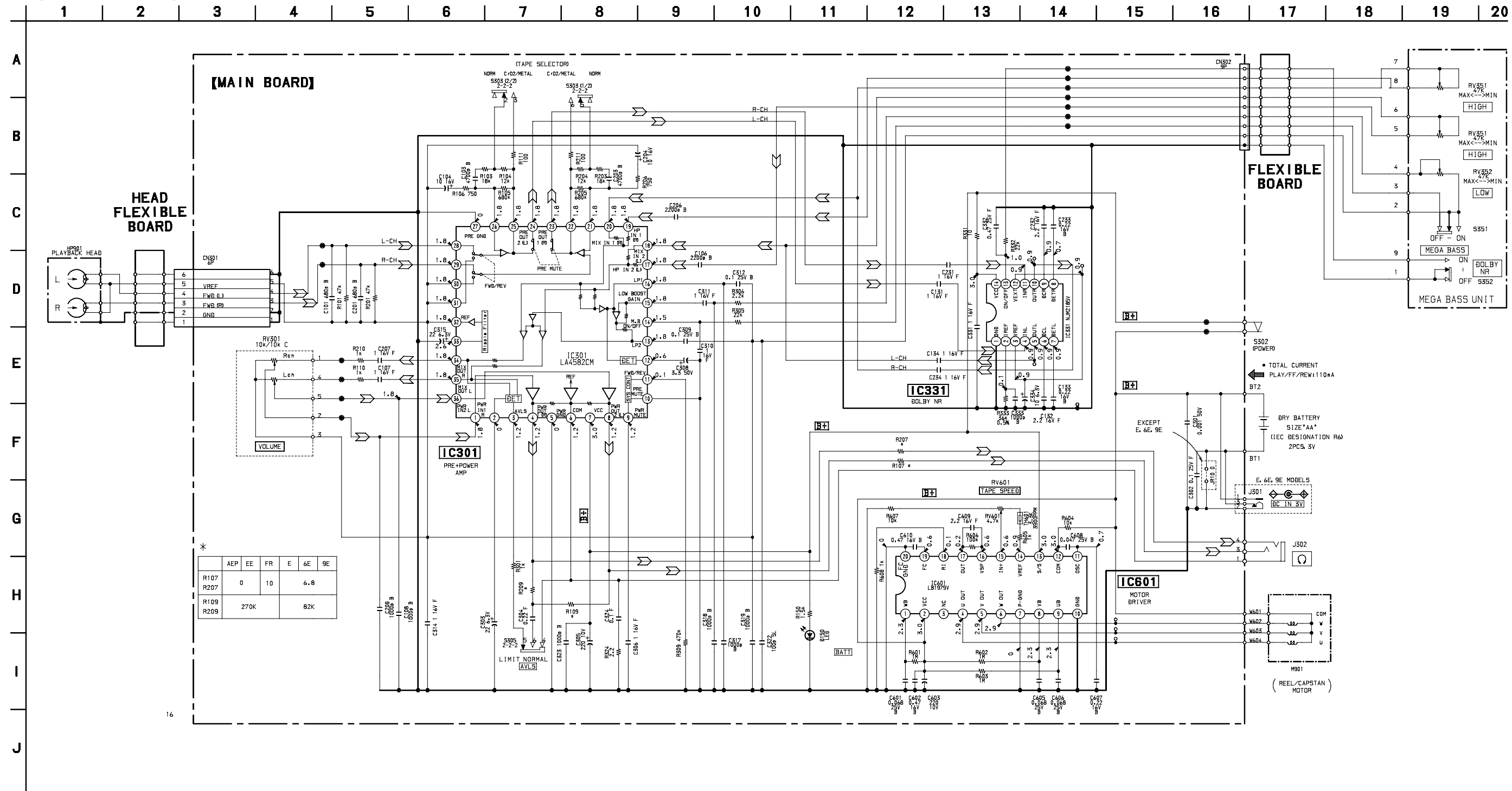


Note on Printed Wiring Board:
 • — : parts extracted from the component side.
 • : Pattern from the side which enables seeing.
 (The other layers' patterns are not indicated.)

- Abbreviation
- CND : Canadian.
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- 9E : Country of origin is not shown.



5-5. SCHEMATIC DIAGRAM
(EX172 MODEL)



Note on Schematic Diagram:

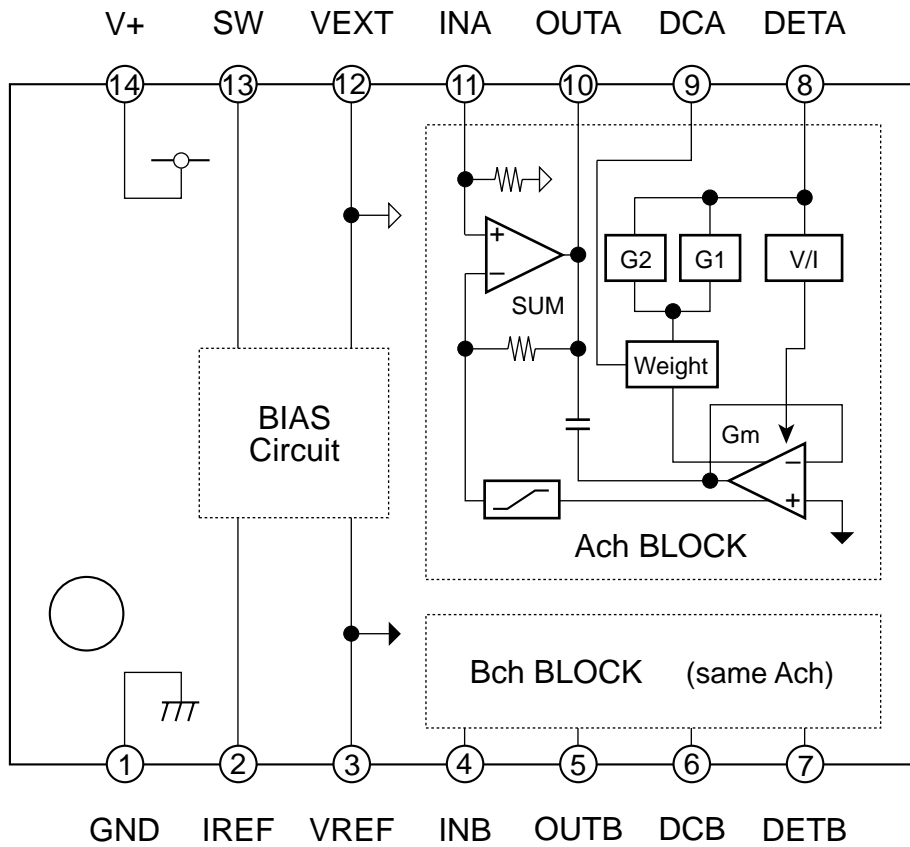
- All capacitors are in μF unless otherwise noted. pF : μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- % : indicates tolerance.
- [] : panel designation.
- [B+] : B+ Line.
- [] : adjustment for repair.
- Total current is measured with no cassette installed.
- Power voltage is dc V and fed with regulated dc power supply from external power jack.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : PLAY
- Voltages are taken with a VOM (Input impedance 10 M Ω).

Voltage variations may be noted due to normal production tolerances.

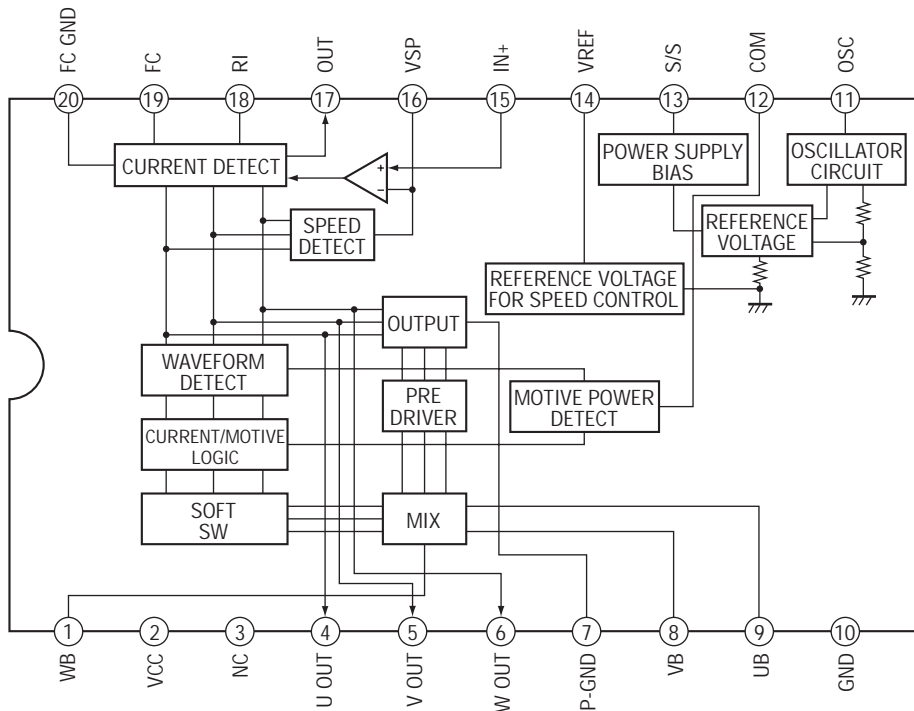
- Signal path.
- [] : PB
- Abbreviation
- EE : East European model.
- FR : French model
- 6E : Central and South America.
- 9E : Country of origin is not shown.

5-6. IC BLOCK DIAGRAMS

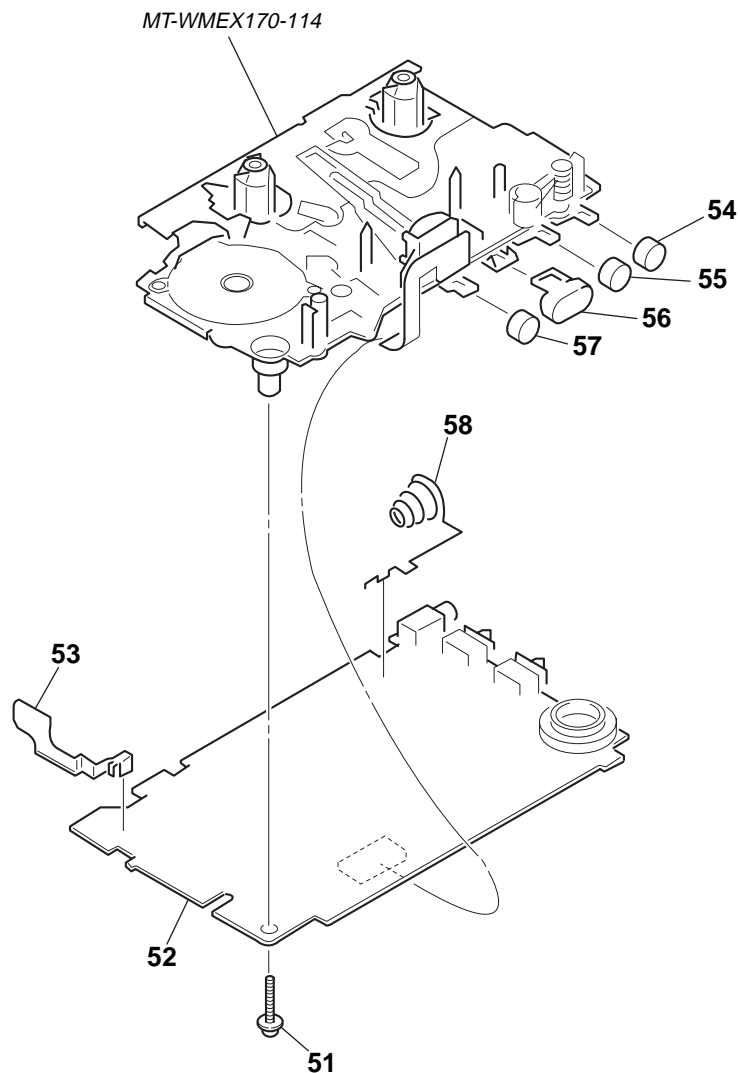
IC331 NJM2185V



IC601 LB1979V

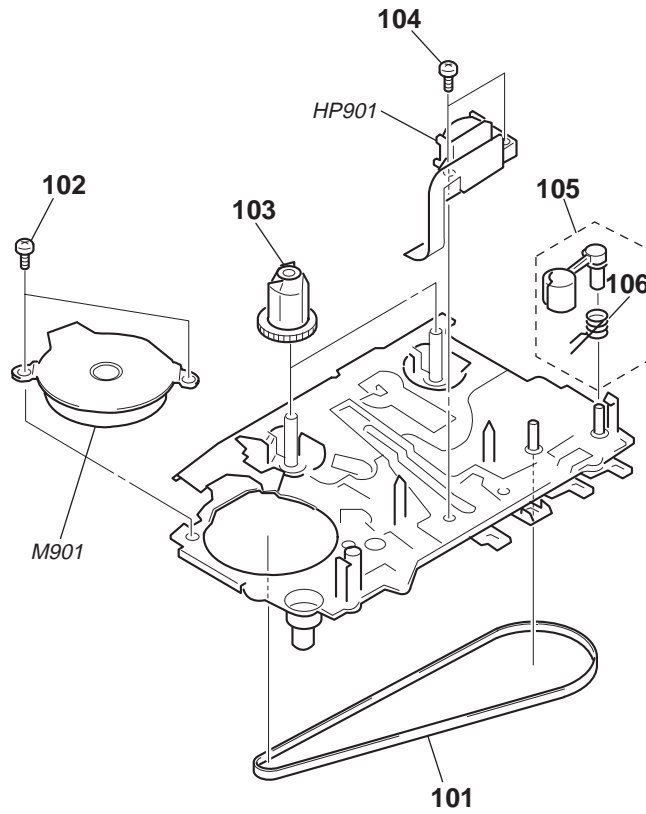


6-2. MAIN BOARD SECTION



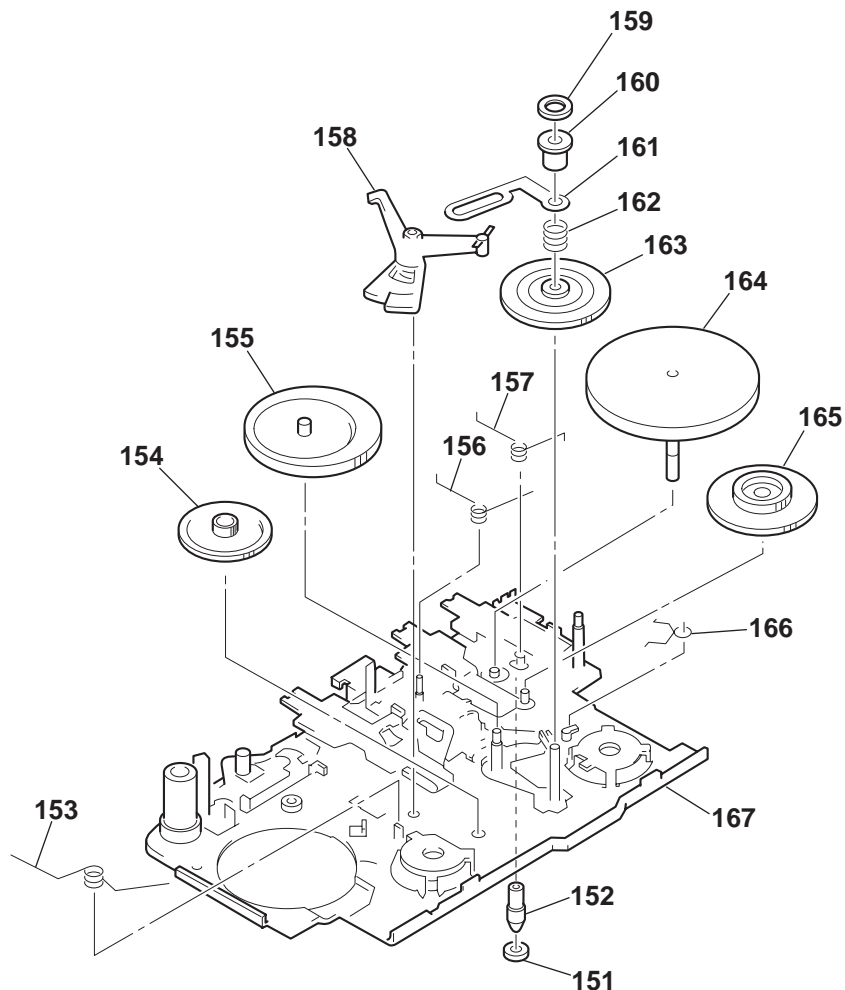
Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
51	3-015-285-01	SCREW (M1.4),TOOTHED LOCK (WH)		53	3-019-950-01	TERMINAL (+),BATTERY	
52	A-3021-030-A	MAIN BOARD, COMPLETE(EX170:E,9E)		54	3-019-944-01	BUTTON (STOP)	
52	A-3021-008-A	MAIN BOARD, COMPLETE(EX170:CND,AE,PEE)		55	3-019-943-01	BUTTON (REW)	
52	A-3021-040-A	MAIN BOARD, COMPLETE(EX172:E,6E,9E)		56	3-019-941-01	BUTTON (PLAY)	
52	A-3021-041-A	MAIN BOARD, COMPLETE(EX172:FR)		57	3-019-942-01	BUTTON (FF)	
52	A-3021-039-A	MAIN BOARD, COMPLETE(EX172:AE,PEE)		58	3-018-977-01	TERMINAL (-),BATTERY	
52	A-3021-031-A	MAIN BOARD, COMPLETE(EX170:FR)					

6-3. MECHANISM SECTION-1 (MT-WMEX170-114)



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>
101	3-013-560-11	BELT		106	3-920-996-01	SPRING (PINCH N)	
102	3-703-816-31	SCREW (M1.4), SPECIAL HEAD		M901	1-763-073-11	MOTOR	
103	3-019-776-01	GEAR (REEL-S)		HP901	1-500-517-11	HEAD, MAGNETIC (PLAYBACK)	
104	3-703-816-73	SCREW (M1.4), SPECIAL HEAD					
105	X-3369-749-1	PINCH LEVER (N) ASSY					

6-4. MECHANISM SECTION-2 (MT-WMEX170-114)



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
151	3-921-797-01	WASHER		161	3-921-335-01	WASHER, LEVER	
152	3-921-003-01	BEARING		162	3-920-990-01	SPRING (UD), COMPRESSION	
153	3-938-628-01	SPRING (PLAY-CP)		163	3-019-774-01	GEAR (BS)	
154	3-019-773-01	GEAR (AS)		164	X-3369-747-1	WHEEL ASSY (SP), CAPSTAN	
155	X-3374-598-1	CLUTCH ASSY (S)		165	3-019-775-01	GEAR (DS)	
156	3-022-093-01	SPRING (FR-S)		166	3-014-709-01	SPRING (FR LEVER OW)	
157	3-022-094-01	SPRING (STOP-S)		* 167	X-3374-601-1	CHASSIS ASSY (GL-OS)	
158	3-019-777-01	LEVER (OW-S), DETECTION					
159	3-728-091-01	WASHER, STOPPER					
160	3-019-778-01	SLEEVE (MS)					

SECTION 7 ELECTRICAL PARTS LIST

NOTE:

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

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

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
uF: μ F
- RESISTORS
All resistors are in ohms.
- METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable

- COILS
uH: μ H
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA..., μ PA...,
uPB..., μ PB..., uPC..., μ PC...,
uPD..., μ PD...
- Abbreviation
CND : Canadian.
EE : East European.
FR : French.
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9E : Country of origin is not shown.

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
A-3021-008-A	MAIN BOARD, COMPLETE	(EX170:CND,AEP,EE)		C207	1-164-346-11	CERAMIC CHIP 1uF	16V
A-3021-030-A	MAIN BOARD, COMPLETE	(EX170:E,9E)		C208	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
A-3021-031-A	MAIN BOARD, COMPLETE	(EX170:FR)		C231	1-164-346-11	CERAMIC CHIP 1uF	16V (EX172)
A-3021-039-A	MAIN BOARD, COMPLETE	(EX172:AEP,EE)		C232	1-164-505-11	CERAMIC CHIP 2.2uF	16V (EX172)
A-3021-040-A	MAIN BOARD, COMPLETE	(EX172:E,6E,9E)		C233	1-164-489-11	CERAMIC CHIP 0.22uF	10% 16V (EX172)
A-3021-041-A	MAIN BOARD, COMPLETE	(EX172:FR)		C234	1-164-346-11	CERAMIC CHIP 1uF	16V (EX172)
3-018-977-01	TERMINAL (-), BATTERY			C301	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
3-019-950-01	TERMINAL (+), BATTERY			C302	1-163-038-91	CERAMIC CHIP 0.1uF	25V
	< CAPACITOR >			C303	1-126-153-11	ELECT 22uF	20% 6.3V
C101	1-163-005-11	CERAMIC CHIP 470PF	10% 50V (EX170)	C304	1-164-222-11	CERAMIC CHIP 0.22uF	25V
C101	1-163-007-11	CERAMIC CHIP 680PF	10% 50V (EX172)	C305	1-126-176-11	ELECT 220uF	20% 10V
C103	1-163-017-00	CERAMIC CHIP 0.0047uF	5% 50V	C306	1-164-346-11	CERAMIC CHIP 1uF	16V
C104	1-126-157-11	ELECT 10uF	20% 16V	C308	1-126-162-11	ELECT 3.3uF	20% 50V
C105	1-164-005-11	CERAMIC CHIP 0.47uF	25V (EX170)	C309	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V (EX170)
C106	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V (EX170)	C309	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V (EX172)
C106	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V (EX172)	C310	1-164-346-11	CERAMIC CHIP 1uF	16V
C107	1-164-346-11	CERAMIC CHIP 1uF	16V	C311	1-164-005-11	CERAMIC CHIP 0.47uF	25V (EX170)
C108	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V	C311	1-164-346-11	CERAMIC CHIP 1uF	16V (EX172)
C131	1-164-346-11	CERAMIC CHIP 1uF	16V (EX172)	C312	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V (EX170)
C132	1-164-505-11	CERAMIC CHIP 2.2uF	16V (EX172)	C312	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V (EX172)
C133	1-164-489-11	CERAMIC CHIP 0.22uF	10% 16V (EX172)	C314	1-164-346-11	CERAMIC CHIP 1uF	16V
C134	1-164-346-11	CERAMIC CHIP 1uF	16V (EX172)	C315	1-126-153-11	ELECT 22uF	20% 6.3V
C201	1-163-005-11	CERAMIC CHIP 470PF	10% 50V (EX170)	C316	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V (EX170)
C201	1-163-007-11	CERAMIC CHIP 680PF	10% 50V (EX172)	C317	1-163-117-00	CERAMIC CHIP 100PF	5% 50V (EX170)
C203	1-163-017-00	CERAMIC CHIP 0.0047uF	5% 50V	C317	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V (EX172)
C204	1-126-157-11	ELECT 10uF	20% 16V	C318	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
C205	1-164-005-11	CERAMIC CHIP 0.47uF	25V (EX170)	C319	1-163-117-00	CERAMIC CHIP 100PF	5% 50V (EX170)
C206	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V (EX170)	C319	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V (EX172)
C206	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V (EX172)	C322	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V (EX170)
				C322	1-163-117-00	CERAMIC CHIP 100PF	5% 50V (EX172)

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C323	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V	JR313	1-216-296-91	SHORT	0
C324	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V	JR314	1-216-296-91	SHORT	0
			(EX170)	JR315	1-216-296-91	SHORT	0
C324	1-163-038-91	CERAMIC CHIP	0.1uF 25V	JR316	1-216-296-91	SHORT	0 (EX172)
			(EX172)	JR317	1-216-296-91	SHORT	0 (EX172)
C331	1-164-346-11	CERAMIC CHIP	1uF 16V	JR318	1-216-296-91	SHORT	0 (EX172)
			(EX172)	JR319	1-216-296-91	SHORT	0 (EX172)
C332	1-164-005-11	CERAMIC CHIP	0.47uF 25V	JR320	1-216-296-91	SHORT	0 (EX172)
			(EX172)	JR321	1-216-296-91	SHORT	0 (EX172)
C333	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V	JR322	1-216-296-91	SHORT	0 (EX172)
			(EX172)				
C334	1-126-157-11	ELECT	10uF 20% 16V	JR323	1-216-296-91	SHORT	0 (EX172)
			(EX172)	JR324	1-216-296-91	SHORT	0 (EX172)
C601	1-164-344-11	CERAMIC CHIP	0.068uF 10% 25V				
C602	1-107-823-11	CERAMIC CHIP	0.47uF 10% 16V			< RESISTOR >	
C603	1-126-176-11	ELECT	220uF 20% 10V	R101	1-216-089-91	RES,CHIP	47K 5% 1/10W
C605	1-164-344-11	CERAMIC CHIP	0.068uF 10% 25V	R103	1-216-079-00	METAL CHIP	18K 5% 1/10W
C606	1-164-344-11	CERAMIC CHIP	0.068uF 10% 25V	R104	1-216-075-00	METAL CHIP	12K 5% 1/10W
C607	1-164-489-11	CERAMIC CHIP	0.22uF 10% 16V	R105	1-216-117-00	METAL CHIP	680K 5% 1/10W
C608	1-163-809-11	CERAMIC CHIP	0.047uF 10% 25V	R106	1-216-043-91	RES,CHIP	560 5% 1/10W
C609	1-164-505-11	CERAMIC CHIP	2.2uF 16V				(EX170)
C610	1-107-823-11	CERAMIC CHIP	0.47uF 10% 16V	R106	1-216-046-00	METAL CHIP	750 5% 1/10W
							(EX172)
		< CONNECTOR >		R107	1-216-003-11	RES,CHIP	12 5% 1/10W
							(EX170:E,9E)
L CN301	1-750-346-21	CONNECTOR, FFC/EPC (ZIF) 6P		R107	1-216-295-91	SHORT	0 (CND,AEP,EE)
L CN302	1-750-346-21	CONNECTOR, FFC/EPC (ZIF) 6P (EX170)		R107	1-216-311-00	METAL CHIP	6.8 5% 1/10W
* CN302	1-784-527-11	CONNECTOR, FPC (ZIF) 9P (EX172)					(EX172:E,6E,9E)
				R107	1-216-001-00	RES,CHIP	10 5% 1/10W
		< DIODE >					(FR)
D150	8-719-067-62	DIODE LNJ210C6AOSO		R109	1-216-095-00	METAL CHIP	82K 5% 1/10W
							(E,6E,9E)
		< IC >		R109	1-216-107-00	METAL CHIP	270K 5% 1/10W
							(CND,AEP,EE,FR)
IC301	8-759-285-29	IC LA4582CM (EX170)		R110	1-216-049-91	RES,CHIP	1K 5% 1/10W
IC301	8-759-332-69	IC LA4585M-TLM (EX172)		R111	1-216-174-00	RES,CHIP	100 5% 1/8W
IC331	8-759-488-80	IC NJM2185AV-TE2 (EX172)		R150	1-216-053-00	METAL CHIP	1.5K 5% 1/10W
IC601	8-759-447-73	IC LB1979V-TLM					
		< JACK >		R201	1-216-089-91	RES,CHIP	47K 5% 1/10W
J301	1-750-061-11	JACK,DC(POLARITY UNIFIED TYPE)(DC IN 3V)		R203	1-216-079-00	METAL CHIP	18K 5% 1/10W
			(E,6E,9E)	R204	1-216-075-00	METAL CHIP	12K 5% 1/10W
J302	1-565-287-11	JACK(PHONES)		R205	1-216-117-00	METAL CHIP	680K 5% 1/10W
				R206	1-216-043-91	RES,CHIP	560 5% 1/10W
		< JUMPER RESISTOR >					(EX170)
JR10	1-216-295-91	SHORT	0 (EXCEPT E,6E,9E)	R206	1-216-046-00	METAL CHIP	750 5% 1/10W
JR201	1-216-295-91	SHORT	0				(EX172)
JR202	1-216-295-91	SHORT	0 (EX172)	R207	1-216-003-11	RES,CHIP	12 5% 1/10W
JR301	1-216-296-91	SHORT	0				(EX170:E,9E)
JR302	1-216-296-91	SHORT	0	R207	1-216-295-91	SHORT	0 (CND,AEP,EE)
				R207	1-216-311-00	METAL CHIP	6.8 5% 1/10W
JR303	1-216-296-91	SHORT	0				(EX172:E,6E,9E)
JR304	1-216-296-91	SHORT	0	R207	1-216-001-00	RES,CHIP	10 5% 1/10W
JR305	1-216-296-91	SHORT	0				(FR)
JR306	1-216-296-91	SHORT	0	R209	1-216-095-00	METAL CHIP	82K 5% 1/10W
JR307	1-216-296-91	SHORT	0 (EX172)				(E,6E,9E)
				R209	1-216-107-00	METAL CHIP	270K 5% 1/10W
JR308	1-216-296-91	SHORT	0				(CND,AEP,EE,FR)
JR309	1-216-296-91	SHORT	0	R210	1-216-049-91	RES,CHIP	1K 5% 1/10W
JR310	1-216-296-91	SHORT	0	R211	1-216-025-91	RES,CHIP	100 5% 1/10W
JR311	1-216-296-91	SHORT	0	R301	1-216-049-91	RES,CHIP	1K 5% 1/10W
JR312	1-216-296-91	SHORT	0 (EX170)				
				R305	1-216-081-00	METAL CHIP	22K 5% 1/10W

WM-EX170/EX172

MAIN

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks	
R306	1-216-077-00	METAL CHIP	15K 5%			ACCESSORIES & PACKING MATERIALS *****		
R306	1-216-057-00	METAL CHIP	2.2K 5%					
R309	1-216-113-00	METAL CHIP	470K 5%		1-505-521-11	HEADPHONES (MDR-023)(EXCEPT E,6E,9E)		
R324	1-216-025-91	RES,CHIP	100 5%		3-022-755-01	CLIP, BELT		
R324	1-216-298-00	METAL CHIP	2.2 5%		3-861-488-11	MANUAL, INSTRUCTION(ENGLISH/FRENCH) (CND,EE)		
R331	1-216-001-00	METAL CHIP	10 5%		3-861-488-21	MANUAL, INSTRUCTION (ENGLISH/GERMAN/SPANISH/DUTCH/FRENCH /ITALIAN/PORTUGUESE/FINNISH)(AEP)		
R332	1-216-081-00	METAL CHIP	22K 5%		3-861-488-31	MANUAL, INSTRUCTION(FRENCH)(AEP,FR)		
R333	1-216-688-11	METAL CHIP	36K 0.5%		3-861-488-41	MANUAL, INSTRUCTION (GERMAN/POLISH/RUSSIAN/HUNGARIAN /BULGARIAN/CZECH/GREEK/TURKISH)(EE)		
R601	1-216-121-91	RES,CHIP	1M 5%		3-861-488-51	MANUAL, INSTRUCTION (ENGLISH/CHINESE/KOREAN)(E)		
R602	1-216-121-91	RES,CHIP	1M 5%		3-861-488-61	MANUAL, INSTRUCTION (SPANISH/PORTUGUESE)(6E)		
R603	1-216-121-91	RES,CHIP	1M 5%		3-861-488-71	MANUAL, INSTRUCTION (ENGLISH/CHINESE/KOREAN)(9E)		
R604	1-216-073-00	METAL CHIP	10K 5%		8-953-224-90	HEADPHONE MDR-E802LP//K SET(E,6E,9E)		
R605	1-216-049-91	RES,CHIP	1K 5%					
R606	1-216-097-91	RES,CHIP	100K 5%					
R607	1-216-073-00	METAL CHIP	10K 5%					
R608	1-216-049-91	RES,CHIP	1K 5%					
		< VARIABLE RESISTOR >						
RV301	1-225-544-11	RES, VAR, CARBON 10K/10K(VOLUME)						
RV601	1-238-663-11	RES, ADJ, CARBON 4.7K						
		< SWITCH >						
S302	1-762-917-11	SWITCH, DETECTION (SMALL TYPE)(POWER)						
S303	1-692-298-11	SWITCH, SLIDE(TAPE SELECTOR)						
S305	1-692-298-11	SWITCH, SLIDE(AVLS)						
		< THERMISTOR >						
TH601	1-810-794-11	THERMISTOR, POSITIVE						

		MISCELLANEOUS *****						
11	1-475-439-11	MEGA BASS UNIT (SWITCH) (EX170)						
11	1-475-441-11	MEGA BASS UNIT (DOLBY) (EX172)						
HP901	1-500-517-11	HEAD, MAGNETIC (PLAYBACK)						
M901	1-763-073-11	MOTOR						
