

# WM-FX477/FX479

## SERVICE MANUAL

Ver 1.0 1999. 02



Photo: WM-FX477

US Model  
Canadian Model  
AEP Model  
E Model  
Chinese Model

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.  
“DOLBY” and the double-D symbol  $\square$  are trademarks of Dolby Laboratories Licensing Corporation.

Model Name Using Similar Mechanism	WM-FX483
Tape Transport Mechanism Type	MF-WMFX483-147

### SPECIFICATIONS

#### Radio section

##### Frequency range

FM: 65 – 74/87.5 – 108 MHz (East European)  
87.5 – 108 MHz (Except East European)  
AM: 530 – 1,710 kHz (US, Canadian)  
531 – 1,602 kHz (Except US, Canadian)

#### Tape section

##### Frequency response (Dolby NR off)

Playback: 30 – 14,000 Hz

##### Output

Headphones/earphones ( $\Omega$  jack)  
Load impedance 8 – 300 ohms

#### General

##### Power requirements

3 V DC batteries R6 (AA)  $\times$  2/  
External DC 3 V power sources

##### Dimensions (w/h/d)

Approx. 115.8  $\times$  85  $\times$  33.4 mm  
(4 5/8  $\times$  3 3/8  $\times$  1 3/8 inches) incl.  
projecting parts and controls

##### Mass

Approx. 175 g (6.2 oz.)/Approx.  
255 g (9.0 oz.) incl. batteries and a  
cassette

##### Supplied accessories

Stereo headphones or Stereo  
earphones (1)  
Carrying case (1)

#### 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.

*Design and specifications are subject to change without notice.*

## RADIO CASSETTE PLAYER



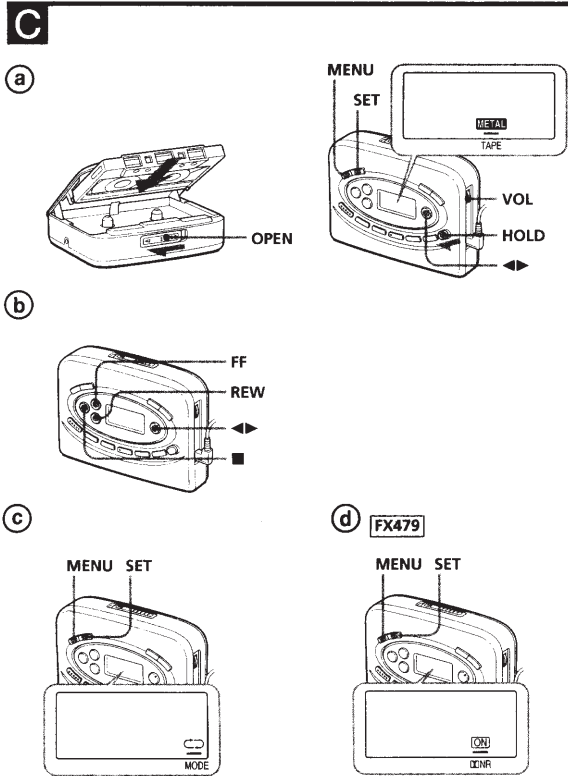
# SONY®

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# SECTION 1 GENERAL

This section is extracted from instruction manual.



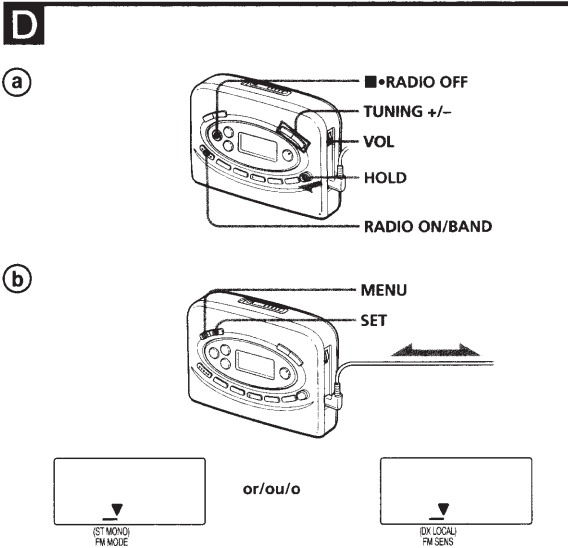
## ▶ Operating the Walkman

### Playing a Tape (see Fig. C-a)

- 1 Open the cassette holder and insert a cassette.
- 2 Make sure the HOLD function is turned off. If it is on, slide the HOLD switch to turn it off.
- 3 Press MENU repeatedly to set the cursor to TAPE in the display. Then press SET to select the tape type.  
**No message: normal (TYPE I)**  
METAL: CrO<sub>2</sub> (TYPE II) or metal (TYPE IV)
- 4 Press ◀ (play) to start playing then adjust the volume.

#### Note on the cassette holder

When opening the cassette holder, press the ■ (stop) button and make sure the tape is stopped by checking through the cassette window, then slide the OPEN switch. If the cassette holder is opened before the tape is stopped, the tape may loosen and be damaged.



### To select playback mode (see Fig. C-b-c)

Press MENU repeatedly to set the cursor to MODE in the display. Then press SET to select the desired mode.

To play	Select
both sides repeatedly	◀▶
both sides once from the side facing the cassette holder	▶

### To play a tape recorded with Dolby\* NR system (FX479 only) (see Fig. C-d)

Press MENU repeatedly to set the cursor to NR (Dolby noise reduction) in the display. Then press SET to show "ON".

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

## Listening to the Radio (see Fig. D-a)

- 1 Make sure the HOLD function is turned off. If it is on, slide the HOLD switch to turn it off.
- 2 Press RADIO ON/BAND to turn on the radio.
- 3 Press RADIO ON/BAND repeatedly to select AM, FM1, FM2, FM3, FM4, or FM5.
- 4 Press TUNING +/- to tune in to the desired station. If you hold down TUNING +/- for a few seconds, the Walkman will start tuning to the stations automatically.

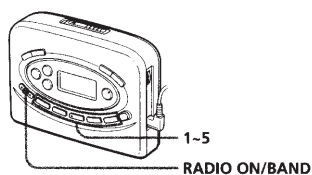
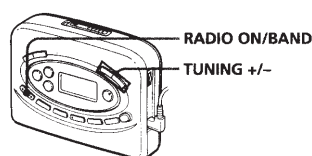
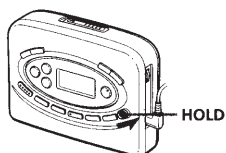
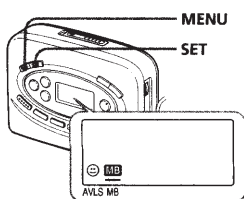
### To turn off the radio

Press ■•RADIO OFF .

### To improve the broadcast reception

- **For AM:** The Walkman has a built-in antenna. Reorient the Walkman horizontally to obtain optimum AM reception.
- **For FM (see Fig. D-b):** Extend the headphones/earphones cord, which serves as the aerial. If the reception is still not good, press MENU repeatedly to set the cursor to FM MODE or FM SENS in the display. Then press SET to choose the mode for best reception.

To	Press (see Fig. C-b)
play the other side	◀▶ (play) during playback
stop playback	■
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 (Skip Reverse function)	FF during playback

**E****F****G****a****b**

## Presetting Radio Stations (see Fig. E)

You can store radio stations into the unit's memory. You can preset up to 30 radio stations, 5 each for the FM1, FM2, FM3, FM4, FM5, or AM bands.

- 1 Tune in the station you wish to store. (Follow steps 1-4 in "Listening to the Radio")
- 2 Press and hold one of the 1-5 buttons for more than 2 seconds. The display flashes twice with a beep sound, and the station is preset. If a station is already stored, the newly preset station replaces the old one.

## To play the preset radio stations

- 1 Press RADIO ON/BAND to select the band.
- 2 Press the corresponding button (1-5) on the unit.

## Receiving Stations Outside Your Country (Excluding models for Europe, Saudi Arabia, and China) (see Fig. F)

The frequency range differs depending on the area (see the chart "Area indication and frequency range"). If you listen to the radio in an area with a different frequency range, change the area indication in the display.

- 1 Turn on the radio and press RADIO ON/BAND for more than 10 seconds until the area indication flashes in the display.
- 2 While the display is flashing, press TUNING +/- to select either the "U" or "E" indication.
- 3 Press RADIO ON/BAND to set the area indication.

### Note

- If you change the frequency range, all the preset stations will be canceled.

## Area indication and frequency range

Area*	Frequency range	
	FM (MHz)	AM(kHz)
E	87.5-108	531-1,602
U	87.5-108	530-1,710

\* E: European and other countries  
U: USA, Canada, and Central and South America

## Using Other Functions

### To lock the controls (see Fig. G-a)

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

### To emphasize bass sound (see Fig. G-b)

Press MENU repeatedly to set the cursor to "MB" in the display. Then, press SET to select the desired mode. With each press, the indications change as follows.  
MB (Mega bass): emphasizes bass sound  
No message: off (normal)

### Notes

- If the sound is distorted in the "MB" mode, select the no message mode.
- 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. G-b)

When you set the AVLS function to active, the maximum volume is kept down to protect your ears.

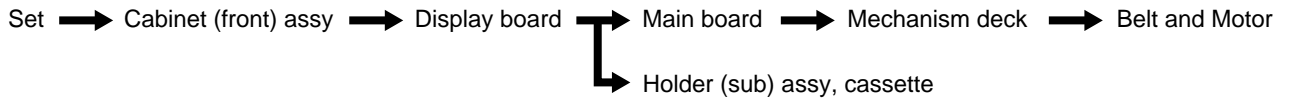
Press MENU repeatedly to set the cursor to AVLS in the display. Then press SET to show "☺".

### Notes

- If the sound is distorted when you listen to the bass-boosted sound with the AVLS function activated, turn down the volume.
- The AVLS setting may be canceled when you replace the batteries.

## SECTION 2 DISASSEMBLY

- The equipment can be removed using the following procedure.



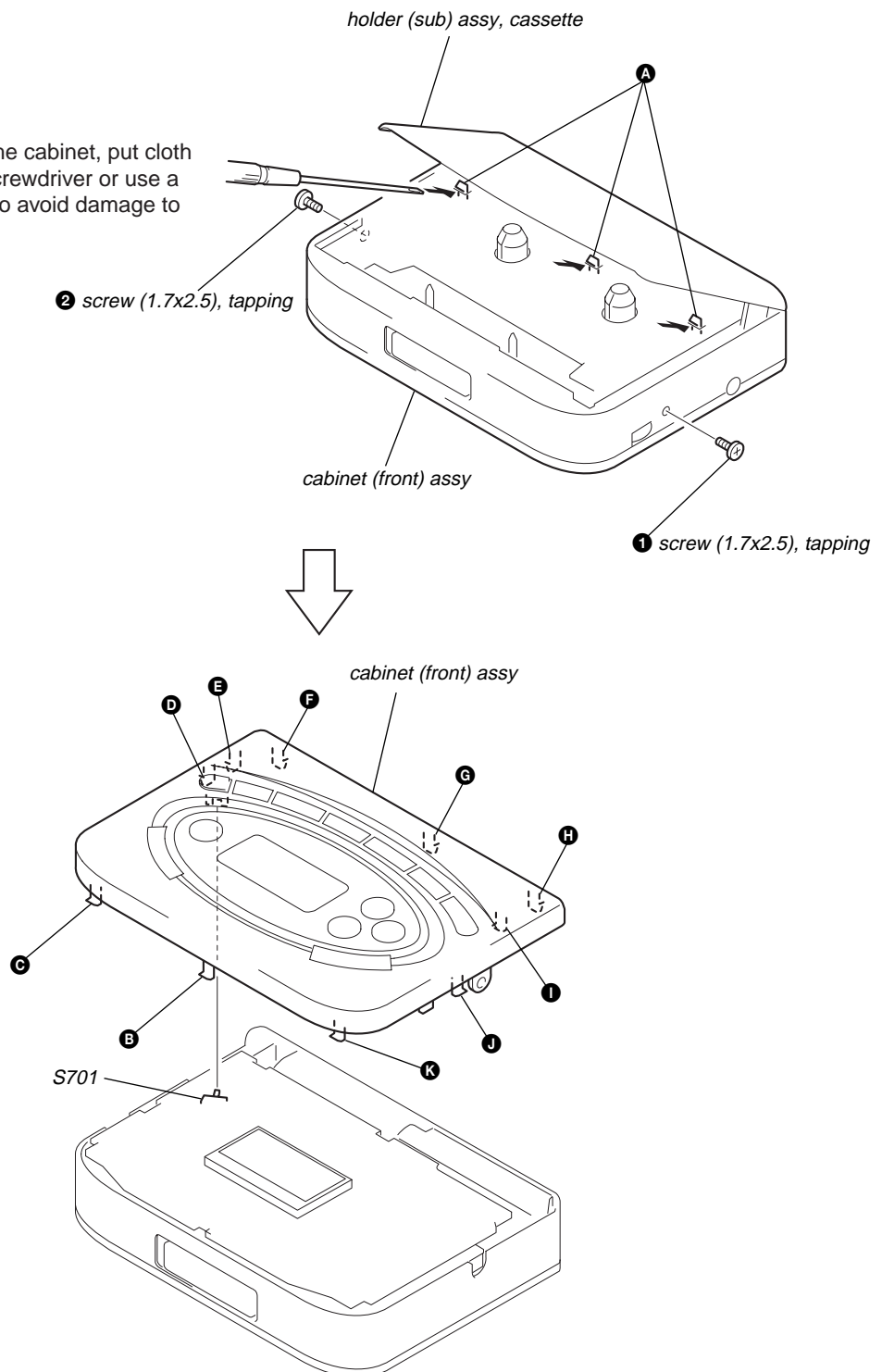
**Note :** Follow the disassembly procedure in the numerical order given.

### 2-1. CABINET (FRONT) ASSY

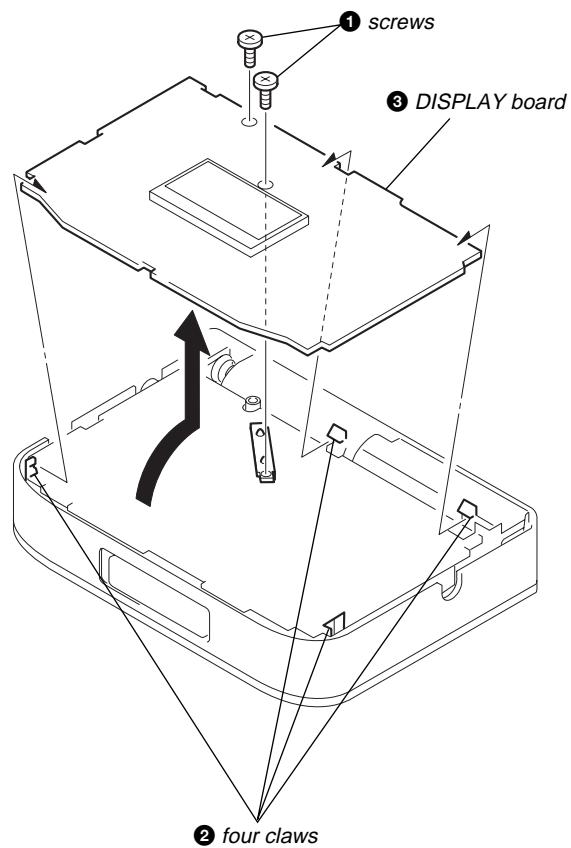
**Note :** When installing, fit the knobs and switches.

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

**Note :** When removing the cabinet, put cloth on the end of a screwdriver or use a polyacetal driver to avoid damage to the cabinet.

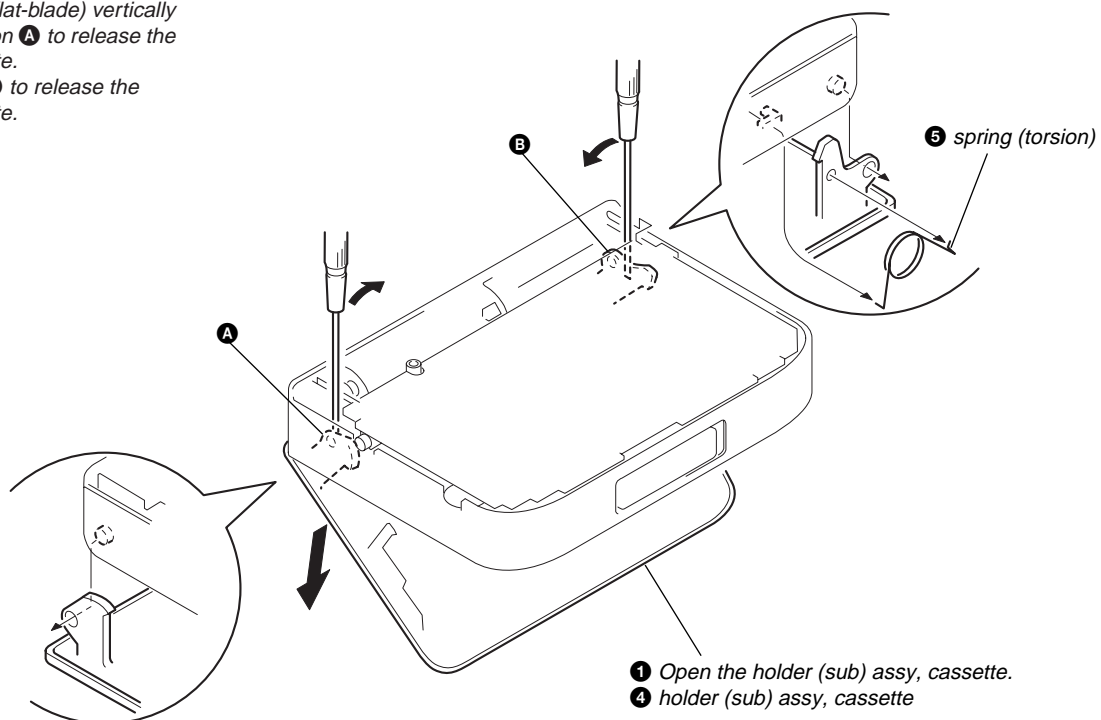


## 2-2. DISPLAY BOARD



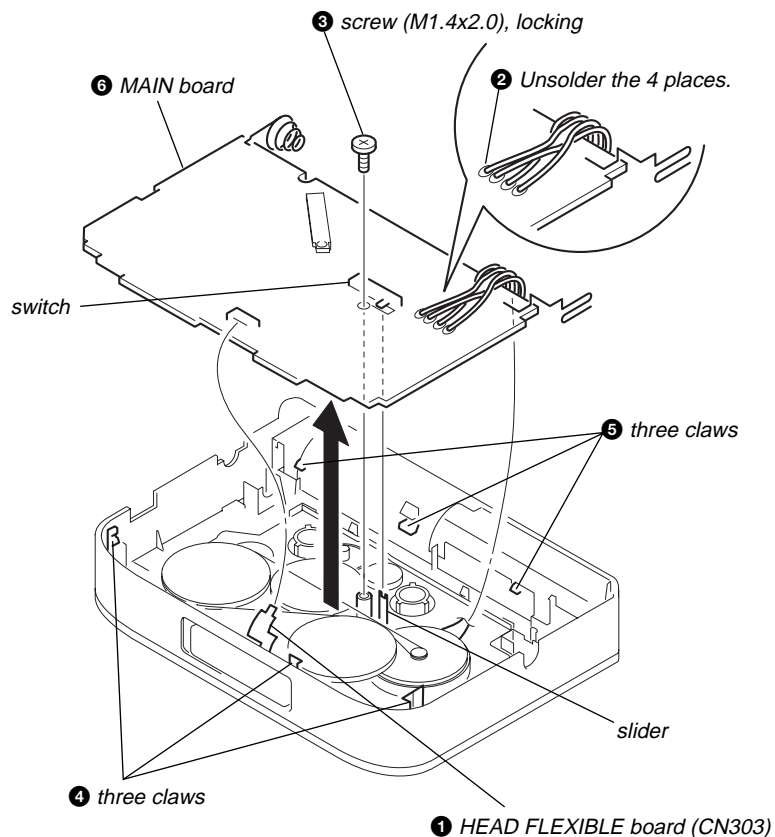
## 2-3. HOLDER (SUB) ASSY, CASSETTE

- 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.

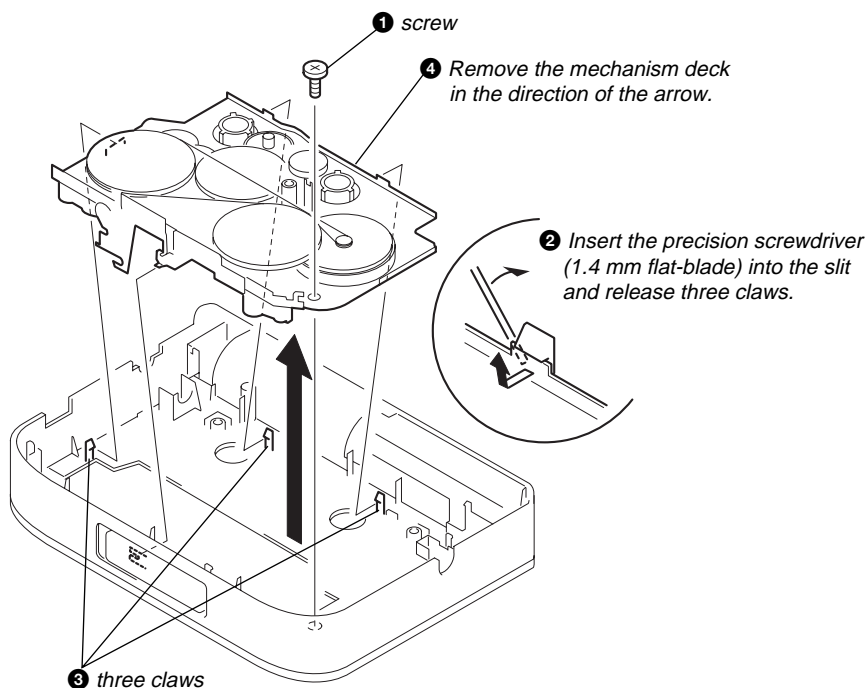


## 2-4. MAIN BOARD

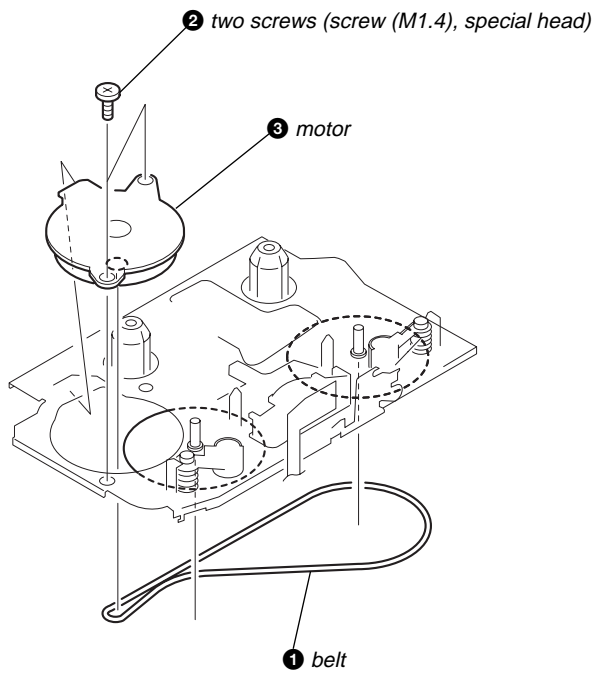
Note : When installing, fit the switch and slider.



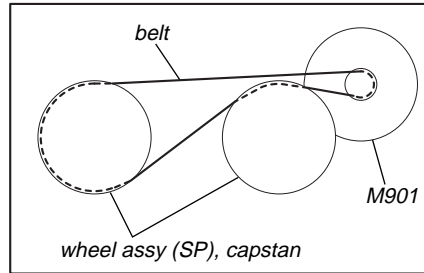
## 2-5. MECHANISM DECK



## 2-6. BELT AND MOTOR



• How to apply the belt





## SECTION 3 MECHANICAL ADJUSTMENTS

### PRECAUTION

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

playback head	pinch lever assy
capstan wheel assy	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	CQ-102C	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	CQ-102RC	less than 2 g • cm (less than 0.03 oz • inch)
FF, REW	CQ-201B	more than 60 g • cm (more than 0.83 oz • inch)

## SECTION 4 ELECTRICAL ADJUSTMENTS

### PRECAUTION

- Supplied voltage : 2.5V
- Control position  
VOL control : maximum

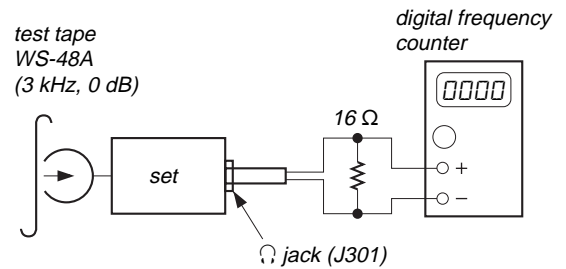
### • Test Tape

Type	Signal	Used for
WS-48A	3 kHz, 0 dB	tape speed adjustment

**TAPE SECTION**    **0 dB = 0.775 V**

### Tape Speed Adjustment

Procedure:



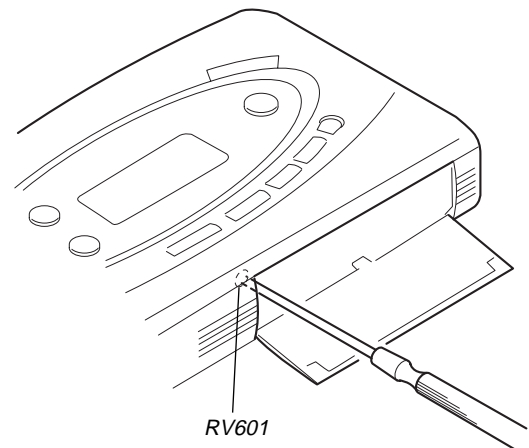
1. Playback WS-48A (tape center part) in the FWD state and adjust RV601 so that the frequency counter reading becomes 3,000 Hz.

### Specification Value:

Digital frequency counter
2,985 to 3,015 Hz

2. Playback WS-48A (tape center part) in the REV state. Check that the frequency counter reading is within  $\pm 1.0\%$  of the reading of step 1.

### Adjustment Location:



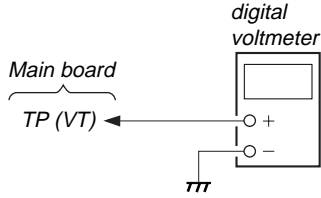
**TUNER SECTION**    **0 dB = 1  $\mu$ V**

• **FM Section**

**Setting:**

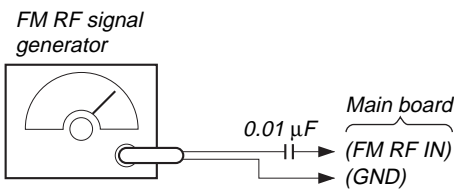
RADIO ON/BAND switch : FM

**FM Tuning Voltage Adjustment**

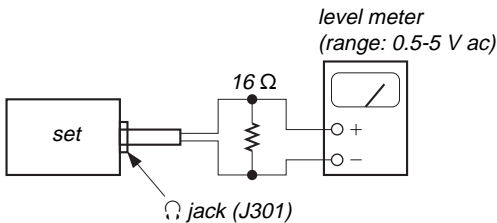


FM TUNING VOLTAGE ADJUSTMENT
Adjust for a $9.0^{+0.5}_0$ ( $14.5 \pm 0.5$ ) Vdc reading on digital voltmeter.
L3
108 MHz

**FM Tracking Adjustment**



Modulation: 1 kHz, 75 kHz dev. (100%)  
Output level: as low as possible



FM TRACKING ADJUSTMENT
Adjust for a maximum reading on level meter.
L1
87.5 (65.0) MHz

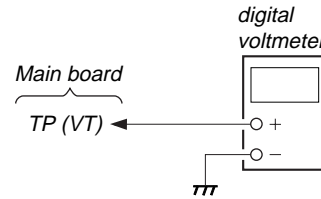
( ): East European model

• **AM Section**

**Setting:**

RADIO ON/BAND switch : AM

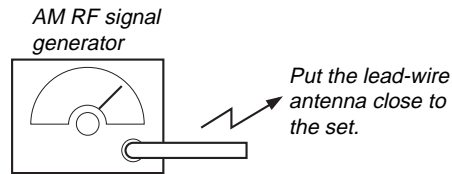
**AM Tuning Voltage Adjustment**



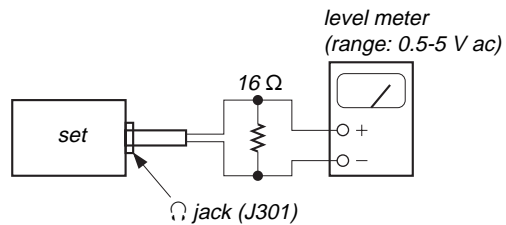
AM TUNING VOLTAGE ADJUSTMENT
Adjust for a $1.4 \pm 0.1$ Vdc reading on digital voltmeter.
L4
530 (531) kHz

( ): Except US, Canadian model

**AM IF Adjustment, AM Tracking Adjustment**



Modulation: 400 Hz, 30%  
Output level: as low as possible



• Repeat the procedures in each adjustment several times, and the tracking adjustment should be finally done by the trimmer capacitors.

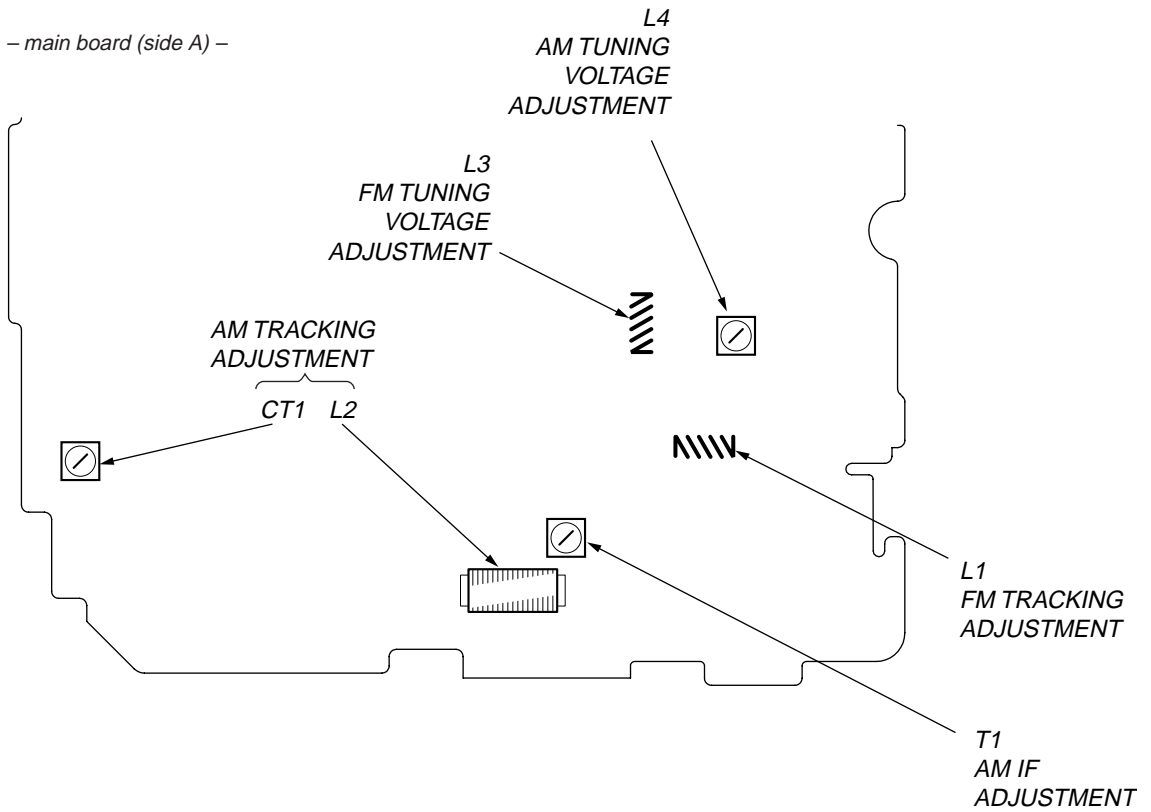
AM IF ADJUSTMENT
Adjust for a maximum reading on level meter.
T1
1,000 (999) kHz

( ): Except US, Canadian model

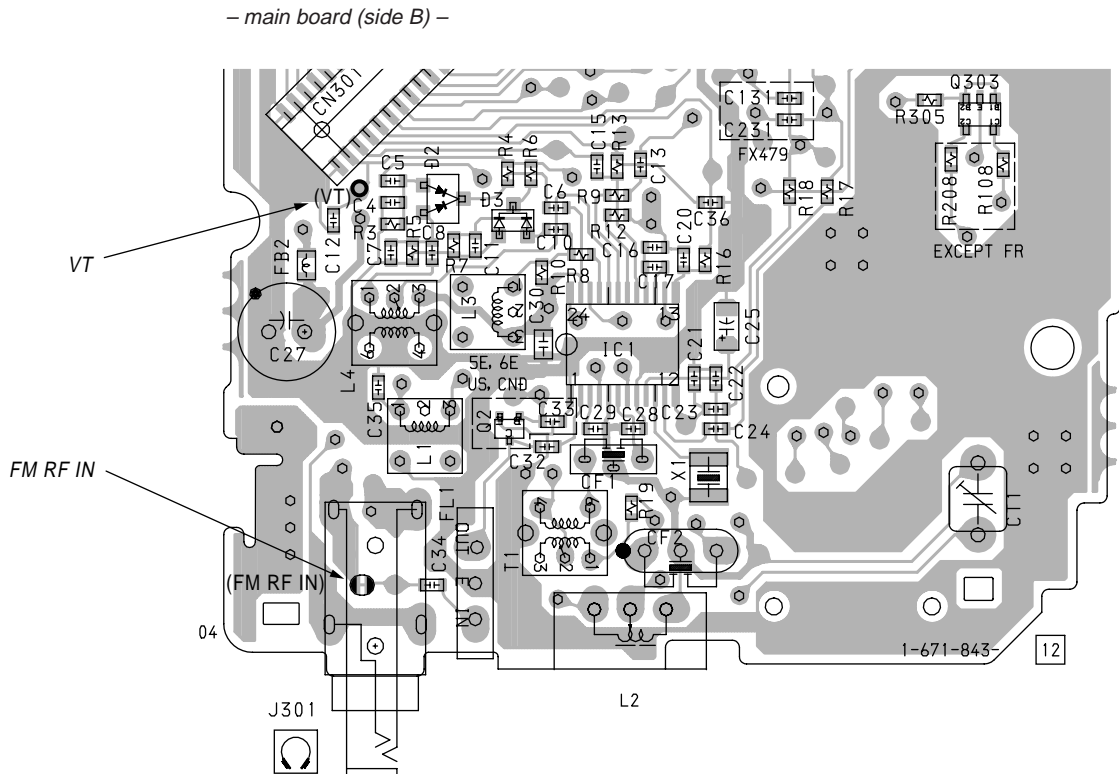
AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L2	CT1
620 (621) kHz	1,400 (1,395) kHz

( ): Except US, Canadian model

**Adjustment Location: main board**



**Measurement Points: main board**



## SECTION 5 DIAGRAMS

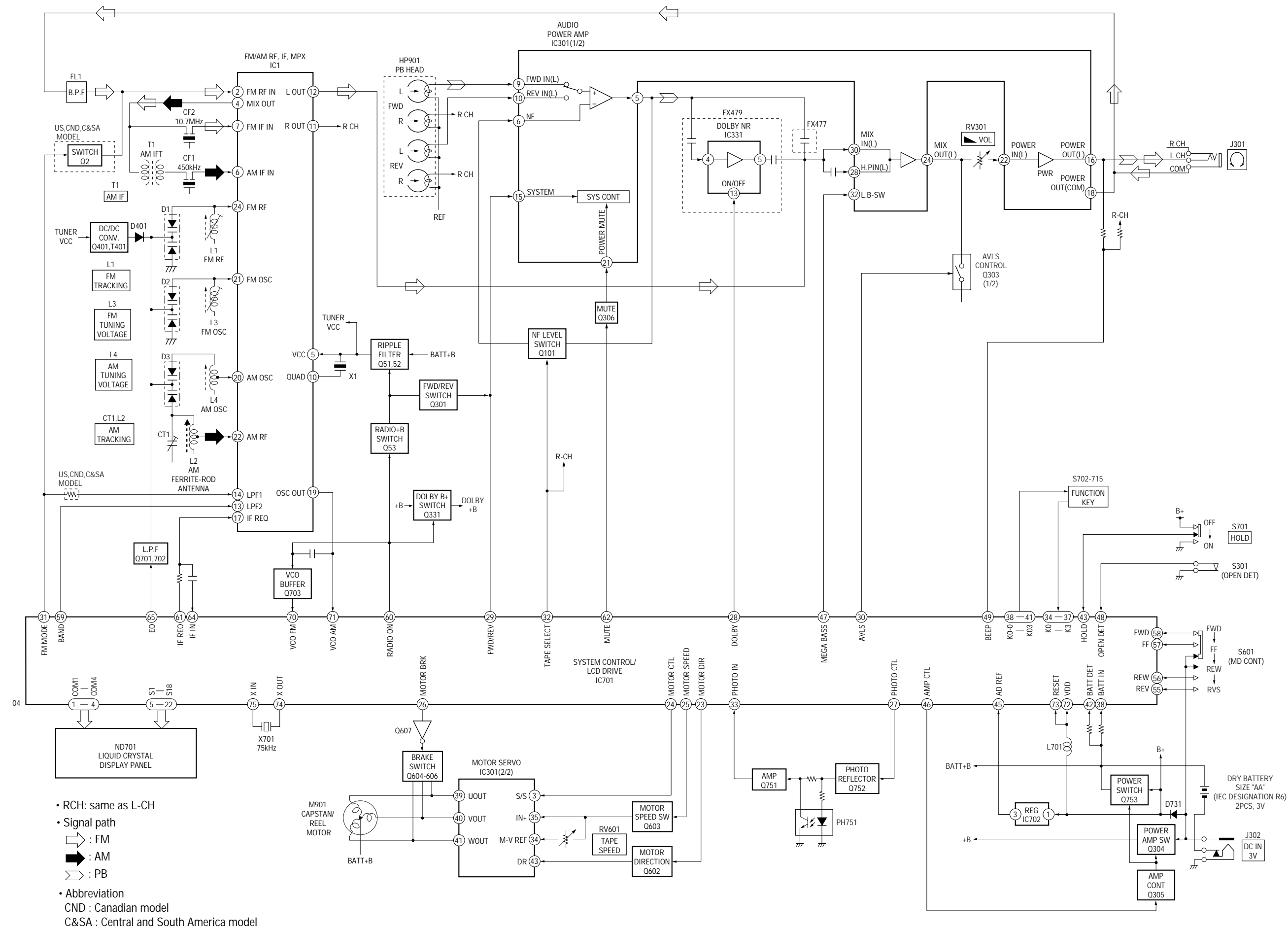
### 5-1. IC PIN DESCRIPTION

#### • IC701 TC9327F-113 (SYSTEM CONTROL/LCD DRIVE)

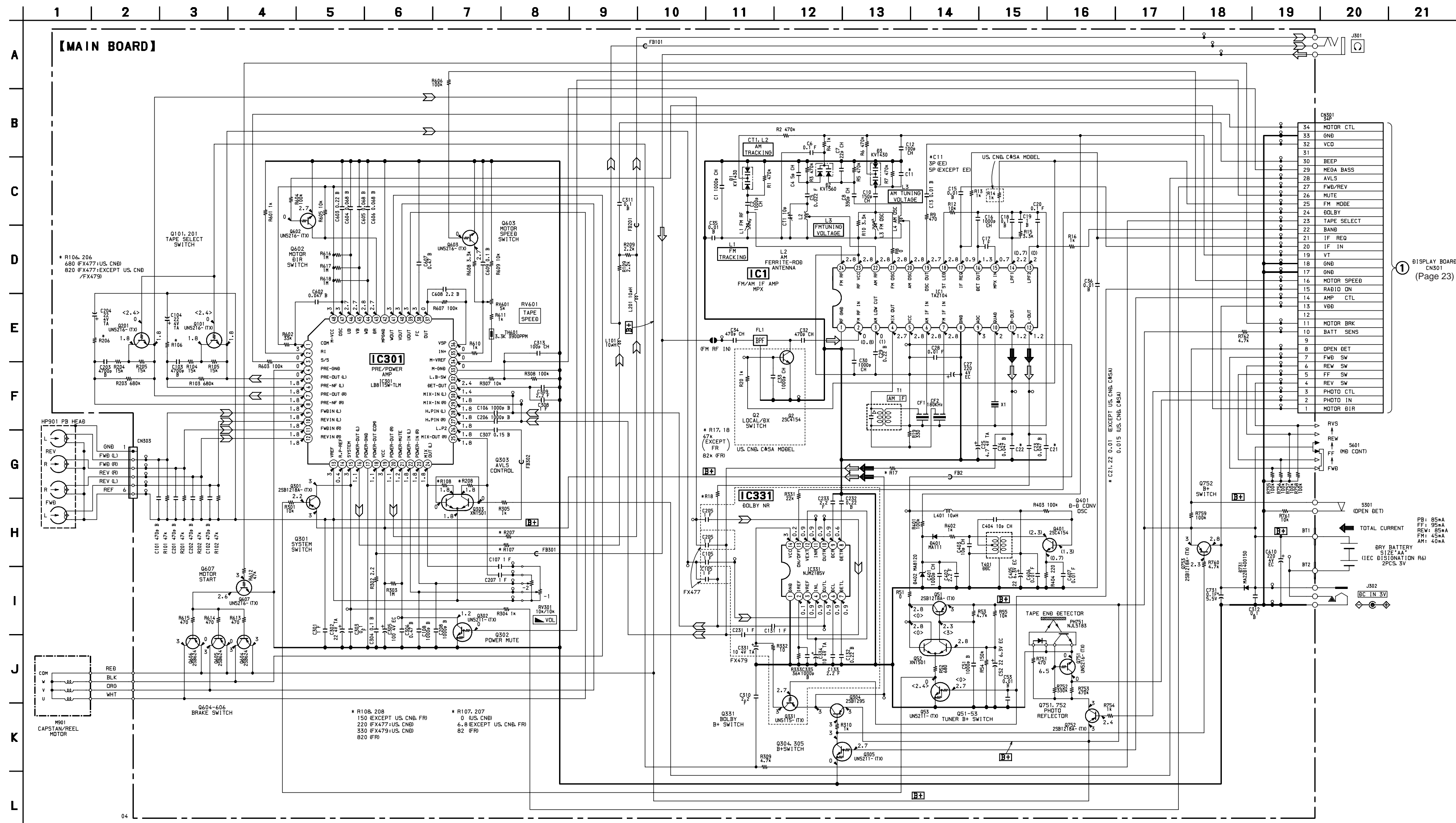
Pin No.	Pin Name	I/O	Pin Description
1 – 4	COM1 – 4	O	LCD driver common output
5 – 22	S1 – 18	O	LCD driver output
23	MOTOR DIR	O	Motor rotation direction control output (FWD: L, REV: H)
24	MOTOR CTL	O	Motor ON/OFF control output (OFF: L, ON: H)
25	MOTOR SPEED	O	Motor speed control output (Normally: L, Speed down: H)
26	MOTOR BRK	O	Motor brake control output (Brake OFF: L, Brake ON: H)
27	PHOTO CTL	O	Photo reflector rotation detection control output
28	DOLBY	O	DOLBY control output (ON: L, OFF: H)
29	FWD/REV	O	Playback head input select output (REV: L, FWD: H)
30	AVLS	O	AVLS control output (AVLS OFF: L, AVLS IN: H)
31	FM MODE	O	LOCAL/DX control output (DX: L, LOCAL: H) (US, CND, 5E, 6E only)
32	TAPE SELECT	O	Tape select control output (Normal: L, CrO <sub>2</sub> /METAL: H)
33	PHOTO IN	I	Photo reflector rotation detection input
34 – 37	K0 – 3	I	Key input 0 – 3
38 – 41	KO0 – 3	O	Key output 0 – 3
42	BATT DET	I	Power supply voltage detection input (A/D input)
43	HOLD	I	HOLD input
44	AD IN3	I	Not used in this set.
45	AD REF	I	Reference voltage of pin 43 and 44.
46	AMP CTL	O	AMP control output (AMP OFF: L, AMP ON: H)
47	MEGA BASS	O	MEGA BASS control output (ON: L, OFF: H)
48	OPEN	I	OPEN detection input (Open: L, Close: H)
49	BEEP	O	BEEP output
50	VER1	I	Destination select input (Fixed at “L” (except EE, E, 9E) or “H” (EE, E, 9E) in this set.)
51	VER2	I	Destination select input (Fixed at “L” (US, CND, E, 5E, 6E, 9E) or “H” (AEP, FR, EE, CEV, CH) in this set.)
52	VER3	I	Destination select input (Fixed at “L” in this set.)
53	MBSET	I	MEGA BASS with/without detection input (Fixed at “L” in this set.)
54	DLBSET	I	DOLBY with/without detection input (Fixed at “L” (WM-FX477) or “H” (WM-FX479) in this set.)
55	REV SW	I	Mechanism deck mode detection switch input (REV ON: H)
56	REW SW	I	Mechanism deck mode detection switch input (REW ON: H)
57	FF SW	I	Mechanism deck mode detection switch input (FF ON: H)
58	FWD SW	I	Mechanism deck mode detection switch input (FWD ON: H)
59	BAND	O	BAND select output (AM: L, FM: input)
60	RADIO ON	O	RADIO ON/OFF control output (OFF: L, ON: H)
61	IF REQ	O	IF request output (Auto scan: L, Normally: H)
62	MUTE	O	Mute signal output (OFF: L, ON: H)
63	NC	—	Not used.
64	IF IN	I	IF input
65	EO	O	Not used in this set.
66	NC	O	Error out signal output
67	HOLD	—	Fixed at “H” in this set.
68	NC	—	Not used.
69	GND	—	Ground
70	VCO FM	I	VCO (FM) input
71	VCO AM	I	VCO (AM) input
72	VDD	—	Power supply pin
73	RESET	—	Reset input
74	XOUT	—	Crystal oscillator output (75 kHz)
75	XIN	—	Crystal oscillator input (75 kHz)

Pin No.	Pin Name	I/O	Pin Description
76	VXT	—	Stabilized capacitor connection of crystal oscillation power supply.
77	VLCD	—	LCD driver power rising pressure pin
78, 79	C1, 2	—	LCD driver power rising pressure pin
80	VEE	—	1.5 V constant voltage power supply for LCD driver.

5-2. BLOCK DIAGRAM



5-3. SCHEMATIC DIAGRAM — MAIN SECTION — • Refer to page 25 for IC Block Diagrams.

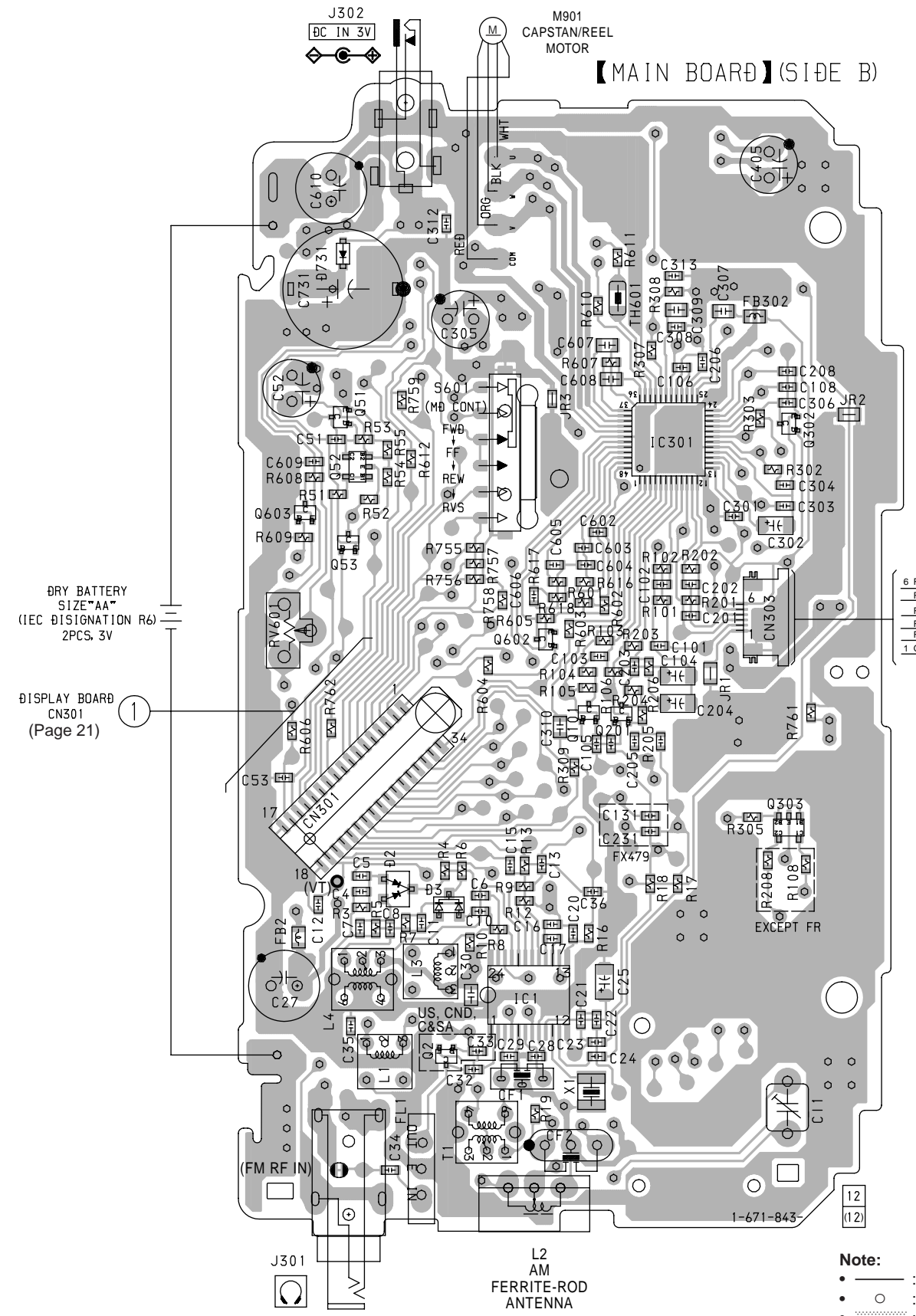
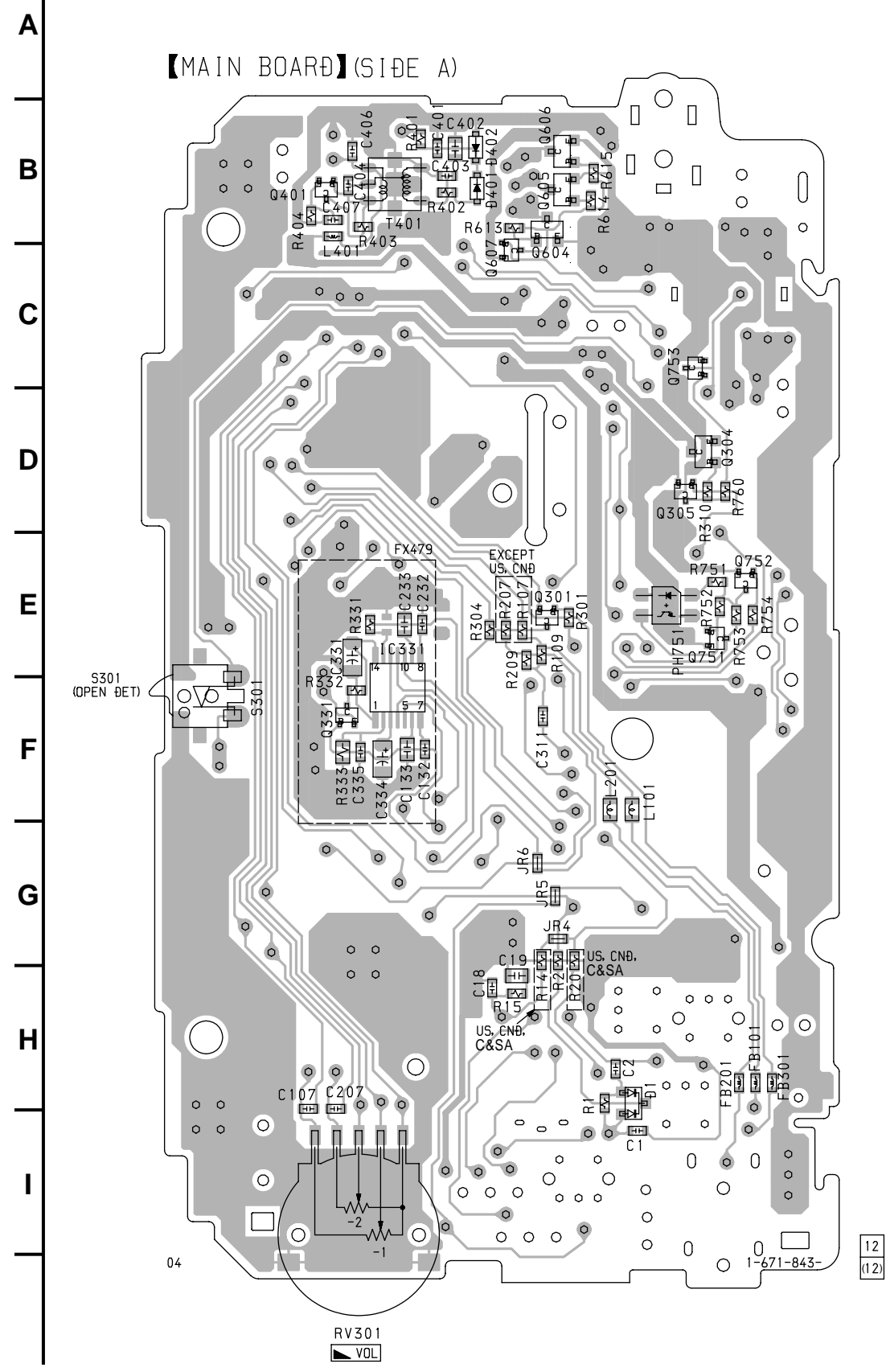


**Note:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
- $\Delta$ : internal component.
- $\square$ : panel designation.
- B+**: B+ Line.
- $\square$ : adjustment for repair.
- Total current is measured with no cassette installed.
- Power voltage is dc 3 V and fed with regulated dc power supply from battery terminal.
- no mark : FM
- ( ) : AM
- < > : PB
- Volts are taken with a VOM (Input impedance 10 M $\Omega$ ).
- Voltage variations may be noted due to normal production tolerances.
- Signal path.
- $\rightarrow$  : FM
- $\rightarrow$  : AM
- $\rightarrow$  : PB
- Abbreviation
- CND : Canadian model.
- C&SA : Central and South America model.
- CH : Chinese model.
- FR : French model.
- CEV : Poland, Czech, Greece and Turkey model.
- EE : East European model.
- 9E : No indication of country of origin.
- E : Indication of country of origin.

5-4. PRINTED WIRING BOARD — MAIN SECTION —

1 2 3 4 5 6 7 8 9 10 11 12 13



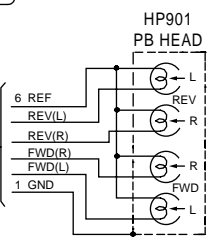
BRY BATTERY  
SIZE "AA"  
(IEC DESIGNATION R6)  
2PCS, 3V

DISPLAY BOARD  
CN301  
(Page 21)

• Semiconductor Location

Ref. No.	Location
D1	H-5
D2	G-9
D3	G-10
D401	B-4
D402	B-4
D731	C-9
IC1	H-10
IC301	D-11
<IC331>	E-3
PH701	E-5
(Q2)	H-10
Q51	D-9
Q52	D-9
Q53	E-9
Q101	F-11
Q201	F-11
Q301	E-4
Q302	D-12
Q303	F-12
Q304	D-5
Q305	D-5
<Q331>	F-2
Q401	B-2
Q602	E-10
Q603	D-9
Q604	B-4
Q605	B-4
Q606	B-4
Q607	C-4
Q751	E-5
Q752	E-5
Q753	C-5

( ) : US, CND, 5E, 6E model only  
< > : FX479 only



Note:

- : parts extracted from the conductor side.
- : Through hole.
- ▨ : Pattern from the side which enables seeing.
- Abbreviation  
CND : Canadian model.  
C&SA : Central and South America model.  
FR : French model.

5-5. PRINTED WIRING BOARD — DISPLAY SECTION —

• Semiconductor Location

Ref. No.	Location
IC701	E-8
IC702	B-12
Q701	G-8
Q702	F-8
Q703	E-8



**Note:**

- ○ : Through hole.
- [Pattern] : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

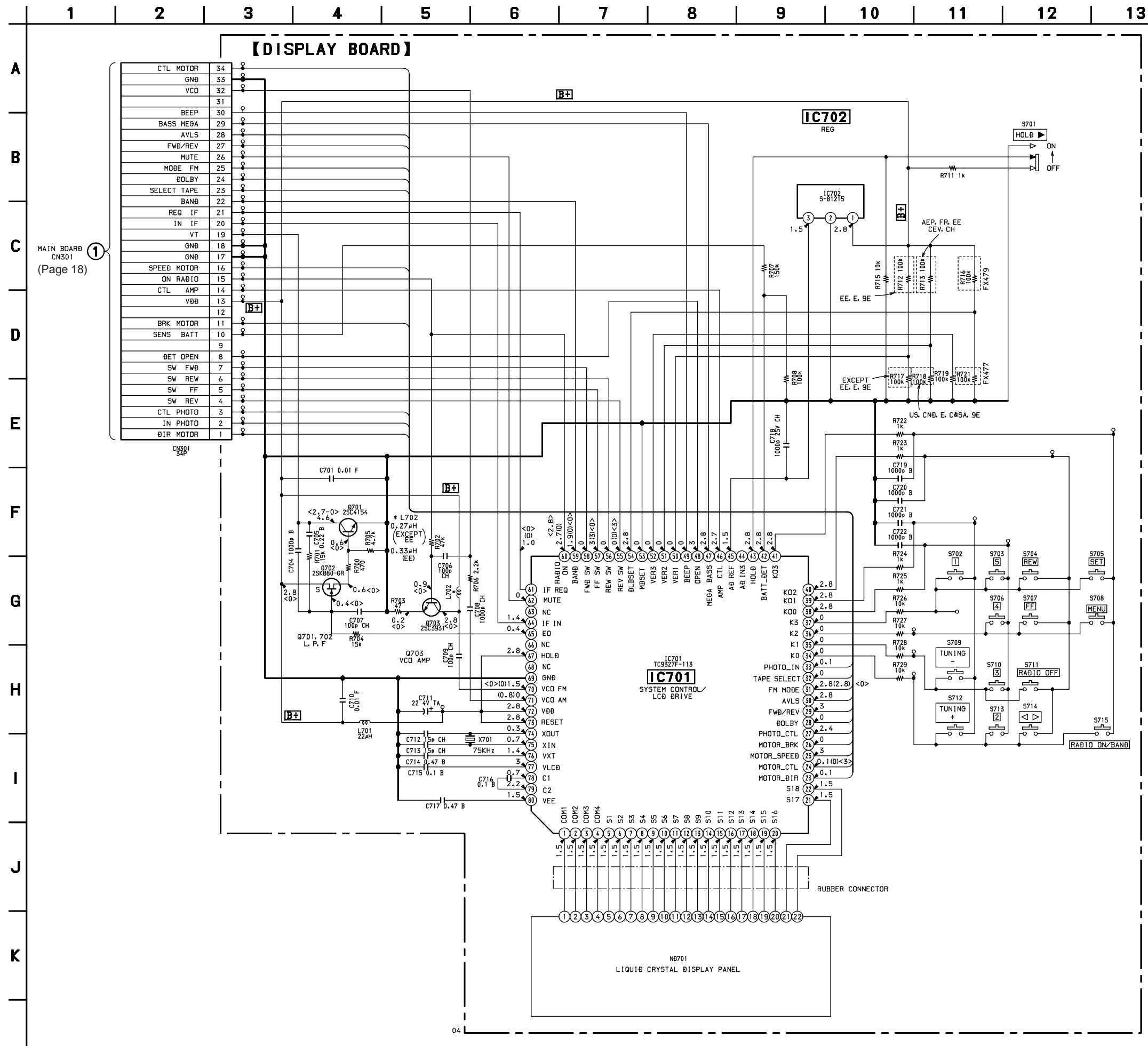
**Caution:**  
 Pattern face side: Parts on the pattern face side seen from the (Side B) pattern face are indicated.  
 Parts face side: Parts on the parts face side seen from the (Side A) parts face are indicated.

• Abbreviation

- CND : Canadian model.
- C&SA : Central and South America model.
- CH : Chinese model.
- FR : French model.
- CEV : Poland, Czech, Greece and Turkey model.
- EE : East European model.
- 9E : No indication of country of origin.
- E : Indication of country of origin.



5-6. SCHEMATIC DIAGRAM — DISPLAY SECTION —



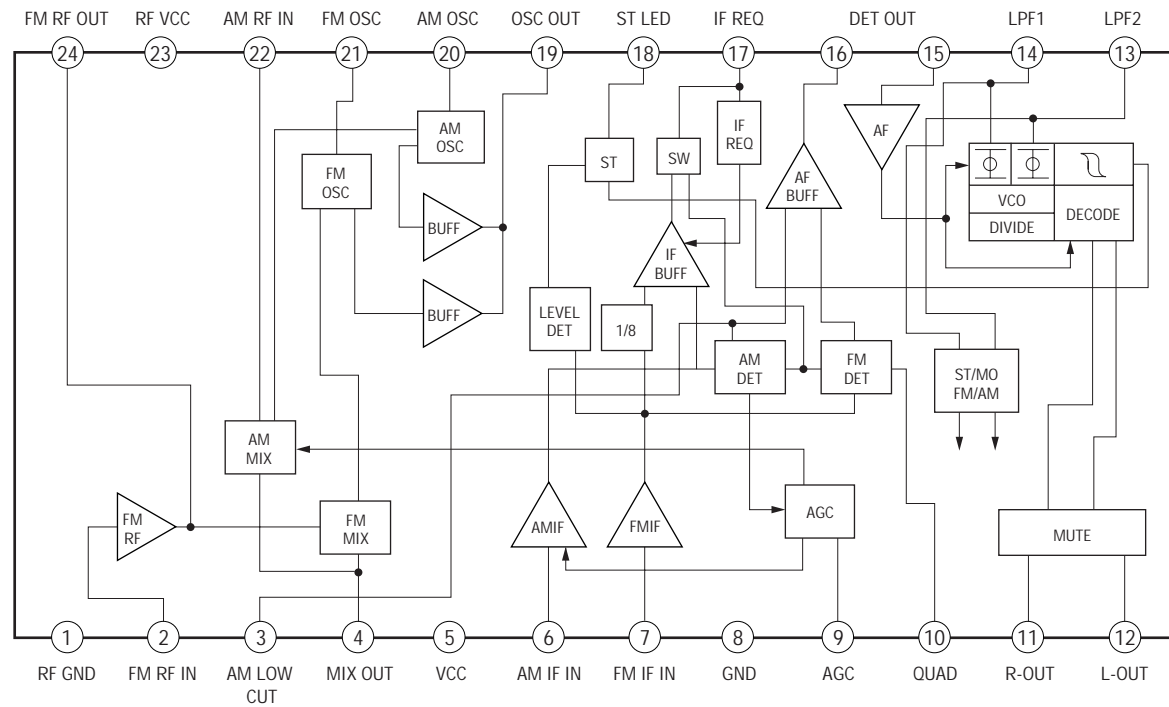
**Note:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
- [ ] : panel designation.
- [B+] : B+ Line.
- Power voltage is dc 3V and fed with regulated dc power supply from battery terminal.  
no mark : FM  
( ) : PB
- Voltagess are taken with a VOM (Input impedance 10 M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Abbreviation  
CND : Canadian model.  
C&SA : Central and South America model.  
CH : Chinese model.  
FR : French model.  
CEV : Poland, Czech, Greece and Turkey model.  
EE : East European model.  
9E : No indication of country of origin.  
E : Indication of country of origin.

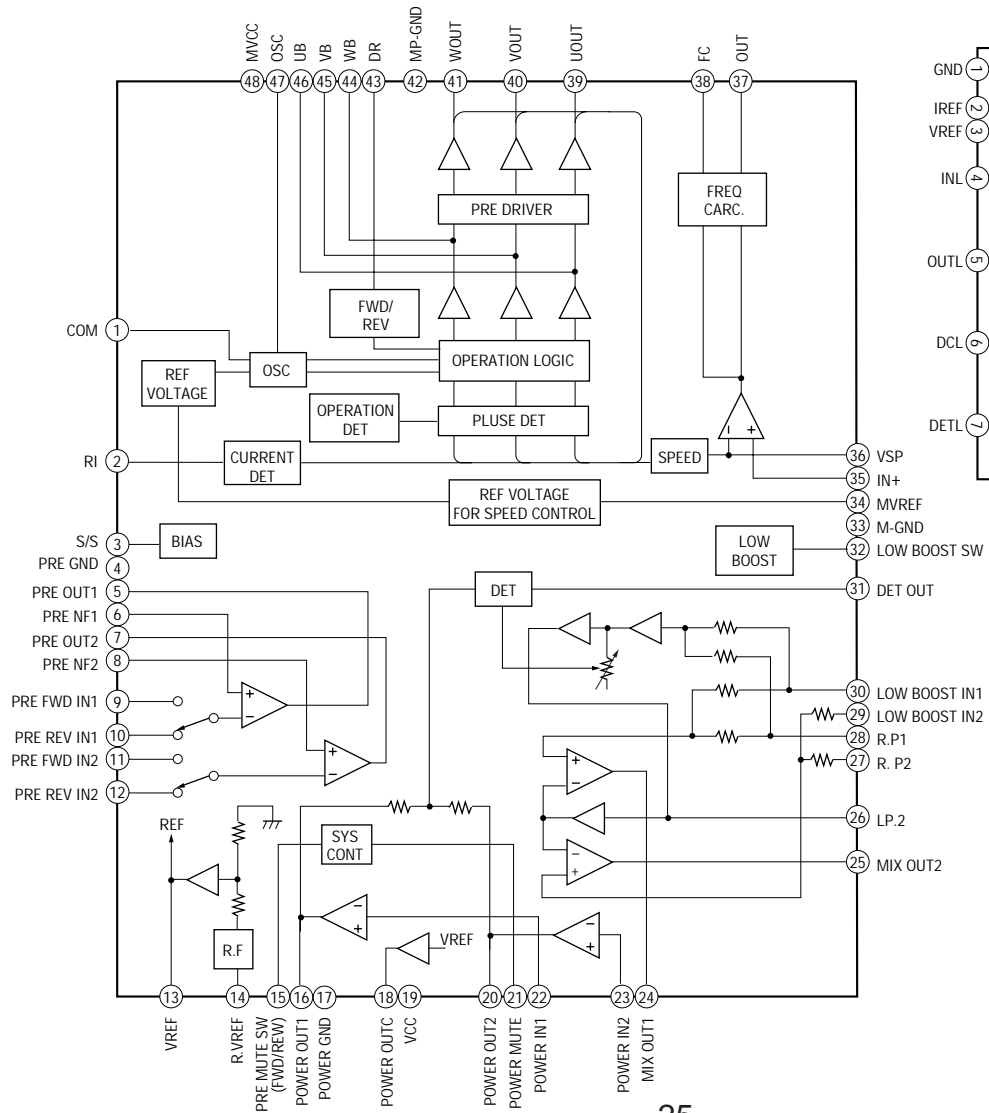
## SECTION 6 EXPLODED VIEWS

### • IC Block Diagrams

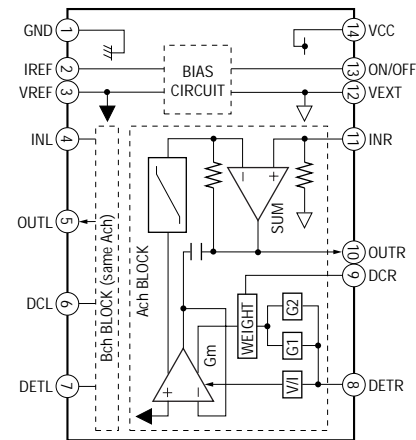
**IC1 TA2104**



**IC301 LB8115W-TLM**



**IC331 NJM2185V**



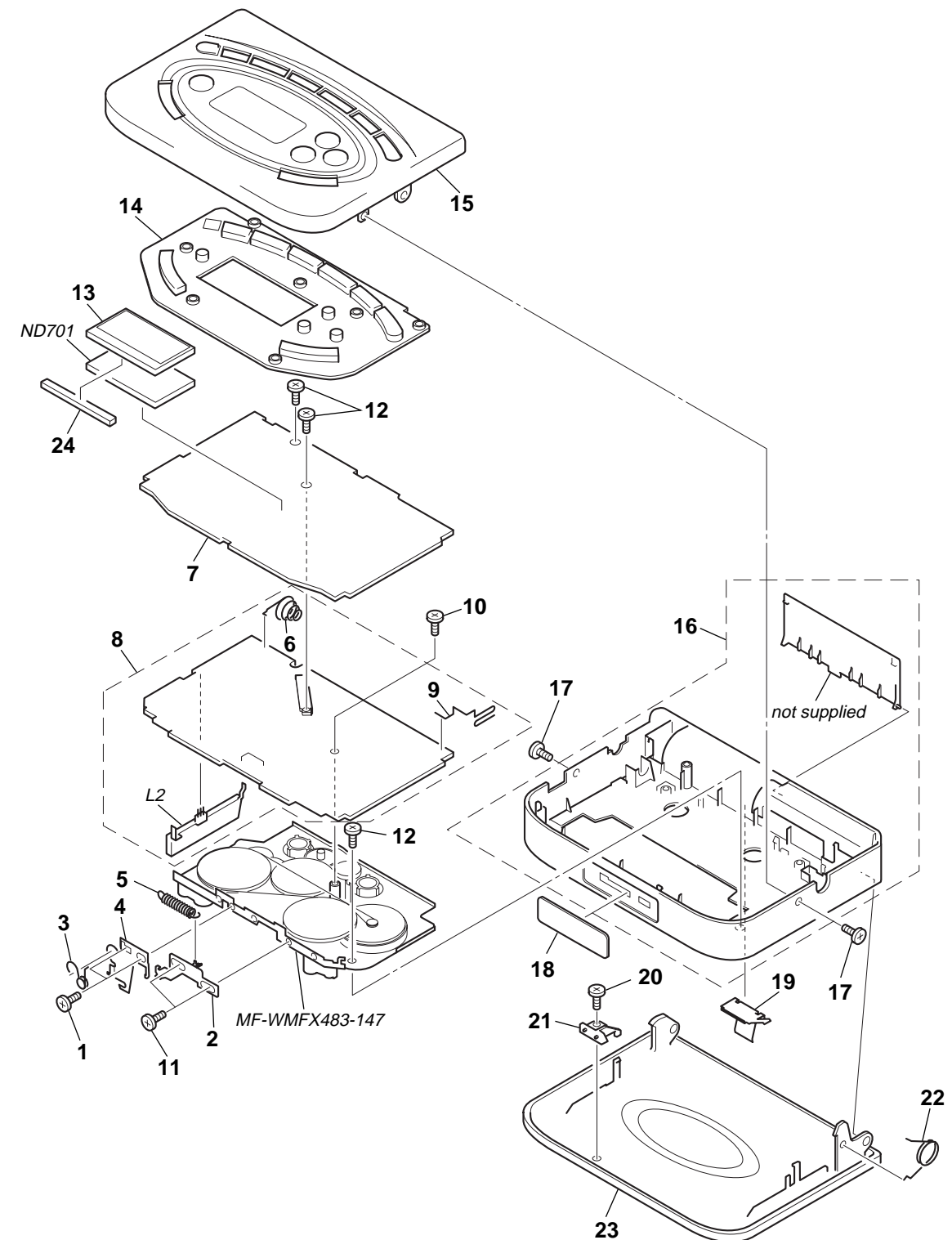
**NOTE:**

- 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.

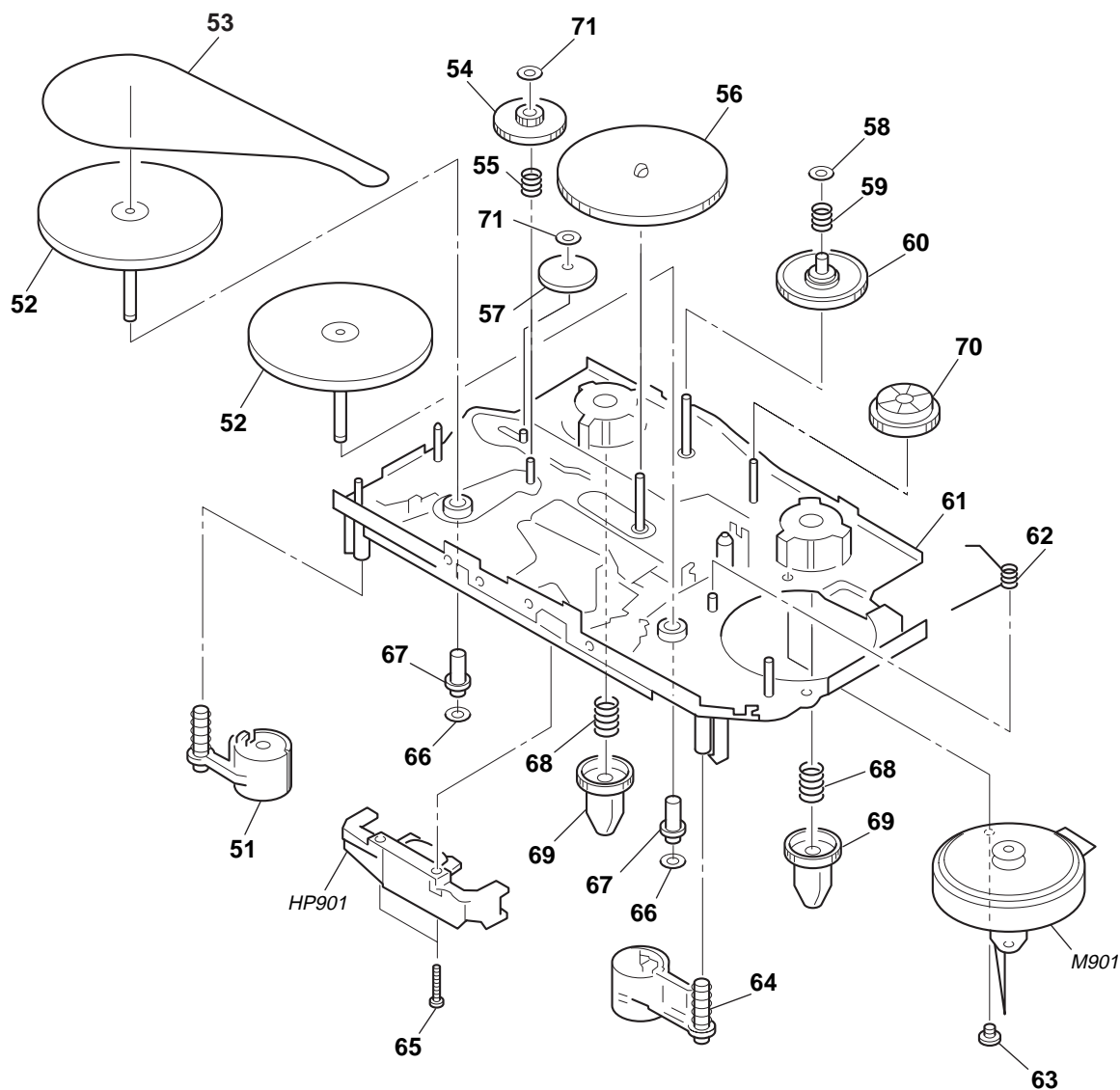
- Abbreviation  
CND : Canadian model.  
C&SA : Central and South America model.  
CH : Chinese model.  
FR : French model.  
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EE : East European model.  
9E : No indication of country of origin.  
E : Indication of country of origin.

### 6-1. CABINET SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	3-349-825-31	SCREW		12	3-892-535-11	SCREW	
2	3-019-422-01	JOINT		13	3-030-025-01	HOLDER (LCD)	
3	3-022-857-01	SPRING (OPEN)		14	3-030-018-01	BUTTON (PRESET)	
4	3-019-421-01	LEVER, OPEN		15	X-3376-953-1	CABINET (FRONT) ASSY (DX/LOCAL) (SILVER) (FX479:US,CND,C&SA)	
5	3-022-856-01	SPRING (KNOB), TENSION		15	X-3376-954-1	CABINET (FRONT) ASSY (ST/MONO) (SILVER) (FX479:EXCEPT US,CND,C&SA)	
6	3-020-512-01	TERMINAL (-), BATTERY		15	X-3376-957-1	CABINET (FRONT) ASSY (DX/LOCAL) (SILVER) (FX477:US,CND,C&SA)	
7	A-3061-893-A	DISPLAY BOARD, COMPLETE (FX479:US,CND,C&SA)		15	X-3376-958-1	CABINET (FRONT) ASSY (ST/MONO) (SILVER) (FX477:AEP,FR,EE,E,9E,CEV)	
7	A-3061-896-A	DISPLAY BOARD, COMPLETE (FX479:AEP,FR,CEV,CH)		15	X-3377-163-1	CABINET (FRONT) ASSY (G) (ST/MONO) (GREEN) (FX477:FR)	
7	A-3061-899-A	DISPLAY BOARD, COMPLETE (FX479:EE)		15	X-3377-164-1	CABINET (FRONT) ASSY (L) (ST/MONO) (BLUE) (FX477:FR)	
7	A-3061-906-A	DISPLAY BOARD, COMPLETE (FX477:US,CND,C&SA)		16	X-3377-069-1	CABINET (CENTER) SUB ASSY	
7	A-3061-909-A	DISPLAY BOARD, COMPLETE (FX477:AEP,FR,CEV)		17	3-318-382-91	SCREW (1.7X2.5), TAPPING	
7	A-3061-912-A	DISPLAY BOARD, COMPLETE (FX477:EE)		18	3-019-514-21	KNOB (OPEN)	
7	A-3061-913-A	DISPLAY BOARD, COMPLETE (FX477:E,9E,CH)		19	3-007-011-01	SPRING (CASSETTE)	
7	A-3061-920-A	DISPLAY BOARD, COMPLETE (FX479:E)		20	3-318-382-61	SCREW (1.7X2.5), TAPPING	
8	A-3021-188-A	MAIN BOARD, COMPLETE (FX479:US,CND)		21	3-019-506-01	LOCKER, OPEN	
8	A-3021-190-A	MAIN BOARD, COMPLETE (FX479:AEP,E,CEV,CH)		22	3-033-384-01	SPRING (TORSION)	
8	A-3021-192-A	MAIN BOARD, COMPLETE (FX479:EE)		23	X-3376-951-1	HOLDER SUB ASSY, CASSETTE (FX479:EXCEPT AEP,FR,CEV)	
8	A-3021-195-A	MAIN BOARD, COMPLETE (FX479:C&SA)		23	X-3376-952-1	HOLDER SUB ASSY, CASSETTE (FX479:AEP,FR,CEV)	
8	A-3021-196-A	MAIN BOARD, COMPLETE (FX479:FR)		23	X-3376-955-1	HOLDER SUB ASSY, CASSETTE (FX477:US,CND,EE,E,C&SA,CH)	
8	A-3021-197-A	MAIN BOARD, COMPLETE (FX477:US,CND)		23	X-3376-956-1	HOLDER SUB ASSY, CASSETTE (FX477:AEP,FR,9E,CEV)	
8	A-3021-199-A	MAIN BOARD, COMPLETE (FX477:AEP,E,9E,CEV,CH)		24	3-030-822-01	RUBBER, CONDUCTIVE	
8	A-3021-201-A	MAIN BOARD, COMPLETE (FX477:EE)		L2	1-501-987-11	ANTENNA, FERRITE-ROD (AM)	
8	A-3021-204-A	MAIN BOARD, COMPLETE (FX477:C&SA)		ND701	1-803-304-11	DISPLAY PANEL, LIQUID CRYSTAL	
8	A-3021-210-A	MAIN BOARD, COMPLETE (FX477:FR)					
9	3-030-022-01	TERMINAL (+), BATTERY					
10	3-704-197-11	SCREW (M1.4X2.0), LOCKING					
11	3-704-197-91	SCREW (M1.4X1.8), LOCKING					

**6-2. TAPE MECHANISM DECK SECTION  
(MF-WMFX483-147)**



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	X-3375-020-1	PINCH LEVER (N-F) ASSY		63	3-703-816-31	SCREW (M1.4), SPECIAL HEAD	
52	X-3369-747-1	WHEEL ASSY (SP), CAPSTAN		64	X-3375-021-1	PINCH LEVER (R-F) ASSY	
53	3-354-868-01	BELT		65	3-703-816-73	SCREW (M1.4), SPECIAL HEAD	
54	3-021-950-01	GEAR (DF)		66	3-921-797-01	WASHER	
55	3-021-982-01	SPRING (MODE), COMPRESSION		67	3-921-003-01	BEARING	
56	X-3375-024-1	CLUTCH ASSY (F)		68	3-022-100-01	SPRING (B.T.), COMPRESSION	
57	3-021-951-01	GEAR (CAM)		69	3-024-223-01	GEAR (REEL-2)	
58	3-348-953-21	WASHER		70	X-3375-268-1	GEAR (AF-SV) ASSY	
59	3-021-979-01	SPRING (UDF), COMPRESSION		71	3-026-340-01	WASHER	
60	3-021-949-01	GEAR (BF)		HP901	1-500-555-11	HEAD, MAGNETIC (PLAYBACK)	
61	X-3375-022-1	CHASSIS ASSY (F)		M901	1-763-073-11	MOTOR (CAPSTAN/REEL) (including PULLEY)	
62	3-021-974-01	SPRING (HEAD BASE)					

## SECTION 7 ELECTRICAL PARTS LIST

**DISPLAY**

**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 :  $\mu$ , for example:  
uA.. :  $\mu$ A.. uPA.. :  $\mu$ PA..  
uPB.. :  $\mu$ PB.. uPC.. :  $\mu$ PC.. uPD.. :  $\mu$ PD..
- CAPACITORS  
uF :  $\mu$ F
- COILS  
uH :  $\mu$ H

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

- Abbreviation  
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C&SA : Central and South America model.  
CH : Chinese model.  
FR : French model.  
CEV : Poland, Czech, Greece and Turkey model.  
EE : East European model.  
9E : No indication of country of origin.  
E : Indication of country of origin.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	A-3061-893-A	DISPLAY BOARD, COMPLETE (FX479:US,CND,C&SA)				< LIQUID CRYSTAL DISPLAY >	
	A-3061-896-A	DISPLAY BOARD, COMPLETE (FX479:AEP,FR,CEV,CH)		ND701	1-803-304-11	DISPLAY PANEL, LIQUID CRYSTAL	
	A-3061-899-A	DISPLAY BOARD, COMPLETE (FX479:EE)				< TRANSISTOR >	
	A-3061-906-A	DISPLAY BOARD, COMPLETE (FX477:US,CND,C&SA)		Q701	8-729-602-21	TRANSISTOR 2SC4154-F	
	A-3061-909-A	DISPLAY BOARD, COMPLETE (FX477:AEP,FR,CEV)		Q702	8-729-231-96	FET 2SK880GR-TE85L	
				Q703	8-729-423-55	TRANSISTOR 2SC3931-D	
	A-3061-912-A	DISPLAY BOARD, COMPLETE (FX477:EE)				< RESISTOR >	
	A-3061-913-A	DISPLAY BOARD, COMPLETE (FX477:E,9E,CH)		R700	1-216-817-11	METAL CHIP 470	5% 1/16W
	A-3061-920-A	DISPLAY BOARD, COMPLETE (FX479:E) *****		R701	1-216-835-11	METAL CHIP 15K	5% 1/16W
		< CAPACITOR >		R702	1-216-841-11	METAL CHIP 47K	5% 1/16W
C701	1-162-974-11	CERAMIC CHIP 0.01uF	50V	R703	1-216-805-11	METAL CHIP 47	5% 1/16W
C704	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	R704	1-216-835-11	METAL CHIP 15K	5% 1/16W
C705	1-164-489-11	CERAMIC CHIP 0.22uF	10% 16V	R705	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
C706	1-162-927-11	CERAMIC CHIP 100PF	5% 50V	R706	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
C707	1-162-927-11	CERAMIC CHIP 100PF	5% 50V	R707	1-218-899-11	RES,CHIP 150K	0.50% 1/16W
C708	1-115-416-11	CERAMIC CHIP 1000PF	5% 25V	R708	1-218-895-11	RES,CHIP 100K	0.50% 1/16W
C709	1-162-927-11	CERAMIC CHIP 100PF	5% 50V	R711	1-216-821-11	METAL CHIP 1K	5% 1/16W
C710	1-162-974-11	CERAMIC CHIP 0.01uF	50V	R712	1-216-845-11	METAL CHIP 100K	5% 1/16W (EE,E,9E)
C711	1-104-847-11	TANTAL. CHIP 22uF	20% 4V	R713	1-216-845-11	METAL CHIP 100K	5% 1/16W (AEP,FR,EE,CEV,CH)
C712	1-162-917-11	CERAMIC CHIP 15PF	5% 50V	R715	1-216-833-11	RES,CHIP 10K	5% 1/16W
C713	1-162-917-11	CERAMIC CHIP 15PF	5% 50V	R716	1-216-845-11	METAL CHIP 100K	5% 1/16W (FX479)
C714	1-107-823-11	CERAMIC CHIP 0.47uF	10% 16V	R717	1-216-845-11	METAL CHIP 100K	5% 1/16W (EXCEPT EE,E,9E)
C715	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V	R718	1-216-845-11	METAL CHIP 100K	5% 1/16W (US,CND,E,5E,6E,9E)
C716	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V	R719	1-216-845-11	METAL CHIP 100K	5% 1/16W
C717	1-107-823-11	CERAMIC CHIP 0.47uF	10% 16V	R721	1-216-845-11	METAL CHIP 100K	5% 1/16W (FX477)
C718	1-115-416-11	CERAMIC CHIP 1000PF	5% 25V	R722	1-216-821-11	METAL CHIP 1K	5% 1/16W
C719	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	R723	1-216-821-11	METAL CHIP 1K	5% 1/16W
C720	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	R724	1-216-821-11	METAL CHIP 1K	5% 1/16W
C721	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	R725	1-216-821-11	METAL CHIP 1K	5% 1/16W
C722	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V	R726	1-216-833-11	RES,CHIP 10K	5% 1/16W
		< IC >		R727	1-216-833-11	RES,CHIP 10K	5% 1/16W
IC701	8-759-574-70	IC TC9327F-113		R728	1-216-833-11	RES,CHIP 10K	5% 1/16W
IC702	8-759-469-63	IC S-81215SGUP-DQK-T1		R729	1-216-833-11	RES,CHIP 10K	5% 1/16W
		< COIL >					
L701	1-412-995-21	INDUCTOR 22uH					
L702	1-412-972-31	INDUCTOR 0.27uH (EXCEPT EE)					
L702	1-412-973-11	INDUCTOR 0.33uH (EE)					

DISPLAY

MAIN

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S701	1-572-922-11	SWITCH, SLIDE (HOLD)	
		< VIBRATOR >	
X701	1-577-262-11	VIBRATOR, CRYSTAL (75kHz)	
*****			
A-3021-188-A	MAIN BOARD, COMPLETE (FX479:US,CND)		
A-3021-190-A	MAIN BOARD, COMPLETE (FX479:AEP,E,CEV,CH)		
A-3021-192-A	MAIN BOARD, COMPLETE (FX479:EE)		
A-3021-195-A	MAIN BOARD, COMPLETE (FX479:C&SA)		
A-3021-196-A	MAIN BOARD, COMPLETE (FX479:FR)		
A-3021-197-A	MAIN BOARD, COMPLETE (FX477:US,CND)		
A-3021-199-A	MAIN BOARD, COMPLETE (FX477:AEP,E,9E,CEV,CH)		
A-3021-201-A	MAIN BOARD, COMPLETE (FX477:EE)		
A-3021-204-A	MAIN BOARD, COMPLETE (FX477:C&SA)		
A-3021-210-A	MAIN BOARD, COMPLETE (FX477:FR)		
*****			
3-020-512-01	TERMINAL (-), BATTERY		
3-030-022-01	TERMINAL (+), BATTERY		
		< CAPACITOR >	
C1	1-115-416-11	CERAMIC CHIP	1000PF 5% 25V
C2	1-115-416-11	CERAMIC CHIP	1000PF 5% 25V
C4	1-162-910-11	CERAMIC CHIP	5PF 0.25PF 50V
C5	1-162-995-11	CERAMIC CHIP	0.022uF 50V
C6	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C7	1-162-919-11	CERAMIC CHIP	22PF 5% 50V
C8	1-164-392-11	CERAMIC CHIP	390PF 5% 50V
C10	1-164-217-11	CERAMIC CHIP	150PF 5% 50V
C11	1-162-908-11	CERAMIC CHIP	3PF 0.25PF 50V
			(EE)
C11	1-162-910-11	CERAMIC CHIP	5PF 0.25PF 50V (EXCEPT EE)
C12	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C13	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C14	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C15	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C16	1-115-416-11	CERAMIC CHIP	1000PF 5% 25V
C17	1-115-156-11	CERAMIC CHIP	1uF 10V
C18	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C19	1-109-982-11	CERAMIC CHIP	1uF 10% 10V
C20	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C21	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (EXCEPT US,CND,C&SA)
C21	1-164-245-11	CERAMIC CHIP	0.015uF 10% 25V (US,CND,C&SA)
C22	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (EXCEPT US,CND,C&SA)
C22	1-164-245-11	CERAMIC CHIP	0.015uF 10% 25V (US,CND,C&SA)
C23	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V

Ref. No.	Part No.	Description	Remark
C24	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C25	1-109-935-11	TANTAL. CHIP	4.7uF 20% 4V
C27	1-124-434-00	ELECT	220uF 20% 4V
C28	1-162-974-11	CERAMIC CHIP	0.01uF 50V
C29	1-115-467-11	CERAMIC CHIP	0.22uF 10% 10V
C30	1-115-416-11	CERAMIC CHIP	1000PF 5% 25V
C32	1-164-315-11	CERAMIC CHIP	470PF 5% 50V
C33	1-115-416-11	CERAMIC CHIP	1000PF 5% 25V (US,CND,C&SA)
C34	1-164-315-11	CERAMIC CHIP	470PF 5% 50V
C35	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C36	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C51	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C52	1-126-153-11	ELECT	22uF 20% 6.3V
C53	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C101	1-162-962-11	CERAMIC CHIP	470PF 10% 50V
C102	1-162-962-11	CERAMIC CHIP	470PF 10% 50V
C103	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C104	1-104-847-11	TANTAL. CHIP	22uF 20% 4V
C105	1-115-156-11	CERAMIC CHIP	1uF 10V
C106	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C107	1-115-156-11	CERAMIC CHIP	1uF 10V
C108	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C131	1-115-156-11	CERAMIC CHIP	1uF 10V (FX479)
C132	1-115-467-11	CERAMIC CHIP	0.22uF 10% 10V (FX479)
C133	1-164-505-11	CERAMIC CHIP	2.2uF 16V (FX479)
C201	1-162-962-11	CERAMIC CHIP	470PF 10% 50V
C202	1-162-962-11	CERAMIC CHIP	470PF 10% 50V
C203	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C204	1-104-847-11	TANTAL. CHIP	22uF 20% 4V
C205	1-115-156-11	CERAMIC CHIP	1uF 10V
C206	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C207	1-115-156-11	CERAMIC CHIP	1uF 10V
C208	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C231	1-115-156-11	CERAMIC CHIP	1uF 10V (FX479)
C232	1-115-467-11	CERAMIC CHIP	0.22uF 10% 10V (FX479)
C233	1-164-505-11	CERAMIC CHIP	2.2uF 16V (FX479)
C301	1-115-156-11	CERAMIC CHIP	1uF 10V
C302	1-104-847-11	TANTAL. CHIP	22uF 20% 4V
C303	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C304	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C305	1-124-433-00	ELECT	100uF 20% 4V
C306	1-107-823-11	CERAMIC CHIP	0.47uF 10% 16V
C307	1-164-492-11	CERAMIC CHIP	0.015uF 10% 16V
C308	1-115-156-11	CERAMIC CHIP	1uF 10V
C309	1-164-505-11	CERAMIC CHIP	2.2uF 16V
C310	1-164-505-11	CERAMIC CHIP	2.2uF 16V
C311	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C312	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V



**MAIN**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q605	8-729-141-48	TRANSISTOR 2SB624-BV345		R107	1-216-864-11	METAL CHIP 0	5% 1/16W (US,CND)
Q606	8-729-141-48	TRANSISTOR 2SB624-BV345		R108	1-216-811-11	METAL CHIP 150	5% 1/16W (EXCEPT US,CND,FR)
Q607	8-729-421-26	TRANSISTOR UN5216		R108	1-216-813-11	METAL CHIP 220	5% 1/16W (FX477:US,CND)
Q751	8-729-421-26	TRANSISTOR UN5216		R108	1-216-815-11	METAL CHIP 330	5% 1/16W (FX479:US,CND)
Q752	8-729-420-24	TRANSISTOR 2SB1218A-QRS		R108	1-216-820-11	RES,CHIP 820	5% 1/16W (FR)
Q753	8-729-420-24	TRANSISTOR 2SB1218A-QRS		R109	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
		< RESISTOR >		R201	1-216-841-11	METAL CHIP 47K	5% 1/16W
R1	1-216-853-11	METAL CHIP 470K	5% 1/16W	R202	1-216-841-11	METAL CHIP 47K	5% 1/16W
R2	1-216-853-11	METAL CHIP 470K	5% 1/16W	R203	1-216-855-11	METAL CHIP 680K	5% 1/16W
R3	1-216-853-11	METAL CHIP 470K	5% 1/16W	R204	1-216-835-11	METAL CHIP 15K	5% 1/16W
R4	1-216-821-11	METAL CHIP 1K	5% 1/16W	R205	1-216-835-11	METAL CHIP 15K	5% 1/16W
R5	1-216-853-11	METAL CHIP 470K	5% 1/16W	R206	1-216-819-11	METAL CHIP 680	5% 1/16W (FX477:US,CND)
R6	1-216-853-11	METAL CHIP 470K	5% 1/16W	R206	1-216-820-11	METAL CHIP 820	5% 1/16W (FX477:EXCEPT US,CND/FX479)
R7	1-216-853-11	METAL CHIP 470K	5% 1/16W	R207	1-216-795-11	RES,CHIP 6.8	5% 1/16W (EXCEPT US,CND,FR)
R8	1-216-864-11	METAL CHIP 0	5% 1/16W	R207	1-216-808-11	RES,CHIP 82	5% 1/16W (FR)
R9	1-216-817-11	METAL CHIP 470	5% 1/16W	R207	1-216-864-11	METAL CHIP 0	5% 1/16W (US,CND)
R10	1-216-827-11	METAL CHIP 3.3K	5% 1/16W	R208	1-216-811-11	METAL CHIP 150	5% 1/16W (EXCEPT US,CND,FR)
R12	1-216-833-11	RES,CHIP 10K	5% 1/16W	R208	1-216-813-11	METAL CHIP 220	5% 1/16W (FX477:US,CND)
R13	1-216-821-11	METAL CHIP 1K	5% 1/16W	R208	1-216-815-11	METAL CHIP 330	5% 1/16W (FX479:US,CND)
R14	1-216-821-11	METAL CHIP 1K	5% 1/16W (US,CND,C&SA)	R208	1-216-820-11	RES,CHIP 820	5% 1/16W (FR)
R15	1-216-827-11	METAL CHIP 3.3K	5% 1/16W	R209	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R16	1-216-821-11	METAL CHIP 1K	5% 1/16W	R301	1-216-833-11	RES,CHIP 10K	5% 1/16W
R17	1-216-841-11	METAL CHIP 47K	5% 1/16W (EXCEPT FR)	R302	1-216-789-11	METAL CHIP 2.2	5% 1/16W
R17	1-216-844-11	METAL CHIP 82K	5% 1/16W (FR)	R303	1-216-857-11	METAL CHIP 1M	5% 1/16W
R18	1-216-841-11	METAL CHIP 47K	5% 1/16W (EXCEPT FR)	R304	1-216-821-11	METAL CHIP 1K	5% 1/16W
R18	1-216-844-11	METAL CHIP 82K	5% 1/16W (FR)	R305	1-216-833-11	RES,CHIP 10K	5% 1/16W
R19	1-216-815-11	METAL CHIP 330	5% 1/16W	R307	1-216-833-11	RES,CHIP 10K	5% 1/16W
R20	1-216-821-11	METAL CHIP 1K	5% 1/16W (US,CND,C&SA)	R308	1-216-845-11	METAL CHIP 100K	5% 1/16W
R51	1-216-864-11	METAL CHIP 0	5% 1/16W	R309	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R52	1-216-819-11	METAL CHIP 680	5% 1/16W	R310	1-216-821-11	METAL CHIP 1K	5% 1/16W
R53	1-216-829-11	METAL CHIP 4.7K	5% 1/16W	R331	1-216-837-11	METAL CHIP 22K	5% 1/16W (FX479)
R54	1-216-847-11	METAL CHIP 150K	5% 1/16W	R332	1-216-797-11	METAL CHIP 10	5% 1/16W (FX479)
R55	1-216-833-11	RES,CHIP 10K	5% 1/16W	R333	1-218-729-11	METAL CHIP 36K	0.50% 1/16W (FX479)
R101	1-216-841-11	METAL CHIP 47K	5% 1/16W	R401	1-216-845-11	METAL CHIP 100K	5% 1/16W
R102	1-216-841-11	METAL CHIP 47K	5% 1/16W	R402	1-216-821-11	METAL CHIP 1K	5% 1/16W
R103	1-216-855-11	METAL CHIP 680K	5% 1/16W	R403	1-216-845-11	METAL CHIP 100K	5% 1/16W
R104	1-216-835-11	METAL CHIP 15K	5% 1/16W	R404	1-216-813-11	METAL CHIP 220	5% 1/16W
R105	1-216-835-11	METAL CHIP 15K	5% 1/16W	R601	1-216-821-11	METAL CHIP 1K	5% 1/16W
R106	1-216-819-11	METAL CHIP 680	5% 1/16W (FX477:US,CND)	R602	1-216-839-11	METAL CHIP 33K	5% 1/16W
R106	1-216-820-11	METAL CHIP 820	5% 1/16W (FX477:EXCEPT US,CND/FX479)				
R107	1-216-795-11	RES,CHIP 6.8	5% 1/16W (EXCEPT US,CND,FR)				
R107	1-216-808-11	RES,CHIP 82	5% 1/16W (FR)				



Ref. No.	Part No.	Description	Remark
R603	1-216-845-11	METAL CHIP	100K 5% 1/16W
R604	1-216-845-11	METAL CHIP	100K 5% 1/16W
R605	1-216-833-11	RES,CHIP	10K 5% 1/16W
R606	1-216-845-11	METAL CHIP	100K 5% 1/16W
R607	1-216-845-11	METAL CHIP	100K 5% 1/16W
R608	1-216-827-11	METAL CHIP	3.3K 5% 1/16W
R609	1-216-833-11	RES,CHIP	10K 5% 1/16W
R610	1-216-821-11	METAL CHIP	1K 5% 1/16W
R611	1-216-821-11	METAL CHIP	1K 5% 1/16W
R612	1-216-841-11	METAL CHIP	47K 5% 1/16W
R613	1-216-817-11	METAL CHIP	470 5% 1/16W
R614	1-216-817-11	METAL CHIP	470 5% 1/16W
R615	1-216-817-11	METAL CHIP	470 5% 1/16W
R616	1-216-857-11	METAL CHIP	1M 5% 1/16W
R617	1-216-857-11	METAL CHIP	1M 5% 1/16W
R618	1-216-857-11	METAL CHIP	1M 5% 1/16W
R751	1-216-817-11	METAL CHIP	470 5% 1/16W
R752	1-216-851-11	METAL CHIP	330K 5% 1/16W
R753	1-216-853-11	METAL CHIP	470K 5% 1/16W
R754	1-216-821-11	METAL CHIP	1K 5% 1/16W
R755	1-216-845-11	METAL CHIP	100K 5% 1/16W
R756	1-216-845-11	METAL CHIP	100K 5% 1/16W
R757	1-216-845-11	METAL CHIP	100K 5% 1/16W
R758	1-216-845-11	METAL CHIP	100K 5% 1/16W
R759	1-216-845-11	METAL CHIP	100K 5% 1/16W
R760	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R761	1-216-833-11	RES,CHIP	10K 5% 1/16W
R762	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
< VARIABLE RESISTOR >			
RV301	1-225-759-21	RES, VAR, CARBON	10K/10K (VOL)
RV601	1-241-784-11	RES, ADJ, CARBON	5K
< SWITCH >			
S301	1-771-040-21	SWITCH, PUSH (OPEN DET)	
S601	1-692-370-11	SWITCH, SLIDE (MD CONT)	
< TRANSFORMER >			
T1	1-416-594-11	TRANSFORMER, IF	
T401	1-449-021-21	TRANSFORMER, DC/DC CONVERTER	
< THERMISTOR (POSITIVE) >			
TH601	1-810-794-11	THERMISTOR, POSITIVE	
< FILTER >			
X1	1-767-830-11	FILTER, CERAMIC (DISCRIMINATOR)	

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Ref. No.	Part No.	Description	Remark
MISCELLANEOUS			
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HP901	1-500-555-11	HEAD, MAGNETIC (PLAYBACK)	
M901	1-763-073-11	MOTOR (CAPSTAN/REEL) (including PULLEY)	
*****			
ACCESSORIES & PACKING MATERIALS			
*****			
1-505-521-11		HEADPHONE (MDR-023) (US,CND)	
3-032-907-01		CASE,CARRYING	
3-864-880-11		MANUAL, INSTRUCTION (ENGLISH,FRENCH, ITALIAN) (US,CND,AEP,FR)	
3-864-880-21		MANUAL, INSTRUCTION (GERMAN,SPANISH, PORTUGUESE) (AEP,C&SA)	
3-864-880-31		MANUAL, INSTRUCTION (DUTCH,SWEDISH, FINNISH) (AEP)	
3-864-880-41		MANUAL, INSTRUCTION (ENGLISH,RUSSIAN, ARABIC) (EE,CEV)	
3-864-880-51		MANUAL, INSTRUCTION (HUNGARIAN,CZECH, POLISH) (CEV)	
3-864-880-61		MANUAL, INSTRUCTION (TURKISH,BULGARIAN, GREEK) (CEV)	
3-864-880-71		MANUAL, INSTRUCTION (ENGLISH, TRADITIONAL CHINESE,KOREAN) (E)	
3-864-880-81		MANUAL, INSTRUCTION (ENGLISH, TRADITIONAL CHINESE,KOREAN) (9E)	
3-864-880-91		MANUAL, INSTRUCTION (SIMPLIFIED CHINESE, ENGLISH) (CH)	
8-953-130-90		HEADPHONE MDR-E801/K SET (EXCEPT US,CND)	

