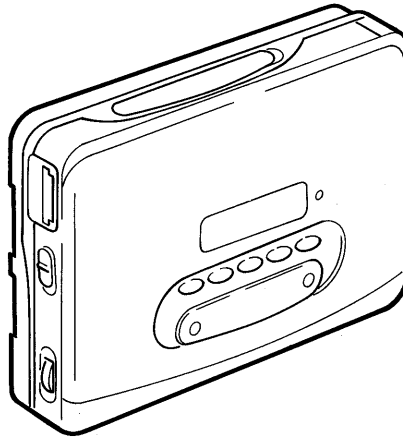


WM-FX999

SERVICE MANUAL

Tourist Model



WALKMAN

Model Name Using Similar Mechanism	WM-EX909
Tape Transport Mechanism Type	MT-WMEX999-107

SPECIFICATIONS

Radio section

Frequency range TV: 1 – 12 ch FM: 76.0 – 90.0 MHz
AM: 531 – 1,710 kHz
Antenna FM/TV: Ear receiver cord antenna
AM: Built-in ferrite bar antenna

Tape player section and general

Frequency response (DOLBY* NR off)
20 – 18,000 Hz (EIAJ**)
Output Earphones (Ω REMOTE jack)
load impedance 8 – 300 Ω
Power output 4 mW + 4 mW at DC operation
(EIAJ 16 Ω)
Power requirements 1.5 V DC
Rechargeable battery
One R6 (size AA) battery
Battery life (EIAJ) (hours)

Battery	Playback	Radio/TV reception
Rechargeable NH-9WM fully charged	Approx. 8.5	Approx. 12
Sony alkaline AM3 (N)	Approx. 16	Approx. 25


For maximum performance we recommend the use of an alkaline battery.

Dimensions Approx. 108.8 × 77.9 × 25.8 mm (w/h/d) incl. projecting parts and controls (EIAJ)
Mass Approx. 200 g incl. rechargeable battery, not incl. other accessories

Accessories supplied

Battery case (1)
Sony alkaline battery (1)
Rechargeable battery (1)
Battery charger (1)
Lithium battery (1)
Remote control unit (1)
Stereo earphones (1)
Ear adaptors (2) (If the earphones do not fit your ears, attach the ear adaptors.)
Plug adaptor (1)
Carrying case (1)

Design and specifications subject to change without notice.

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

Using the External Power Sources

Attach the supplied battery case and connect an optional power cord such as the AC power adaptor (AC-E15L), etc. to the DC IN 1.5V jack of the battery case.

Notes

- Remove the rechargeable battery or a dry battery if it is installed before using the unit. Otherwise, the rechargeable battery will be damaged.
- When replacing the battery or connecting an alternative power source, the unit will operate momentarily. However, this is not a malfunction.
- Use only the AC-E15L AC power adaptor.
Do not use any other AC power adaptor.

Polarity of the plug



RADIO CASSETTE PLAYER

SONY®



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.

SAFETY-RELATED COMPONENT WARNING!!



COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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SECTION 1

SERVICING NOTE

This set detects reel rotation by H701 (S.REEL) and H702 (T.REEL) (Hall elements).

Reel rotation cannot be detected when the main board is removed, because H701 and H702 are mounted on the main board.

As a result, the auto-off circuit will misoperate.

Therefore, operation check of the mechanism deck and voltage check can be performed by the method shown below.

NOTE:

Do not change the setting position of switch S701 when removing the main board. If it has been changed accidentally, or if the desired mode cannot be set with the switch, adjust the setting again after the main board is installed.

Opening the main board. (How to open)

- 1) Remove the five screws.
- 2) Disconnect the HP901 flexible board from the connector CN301.
- 3) Remove the flexible board of CN501.

Operation check

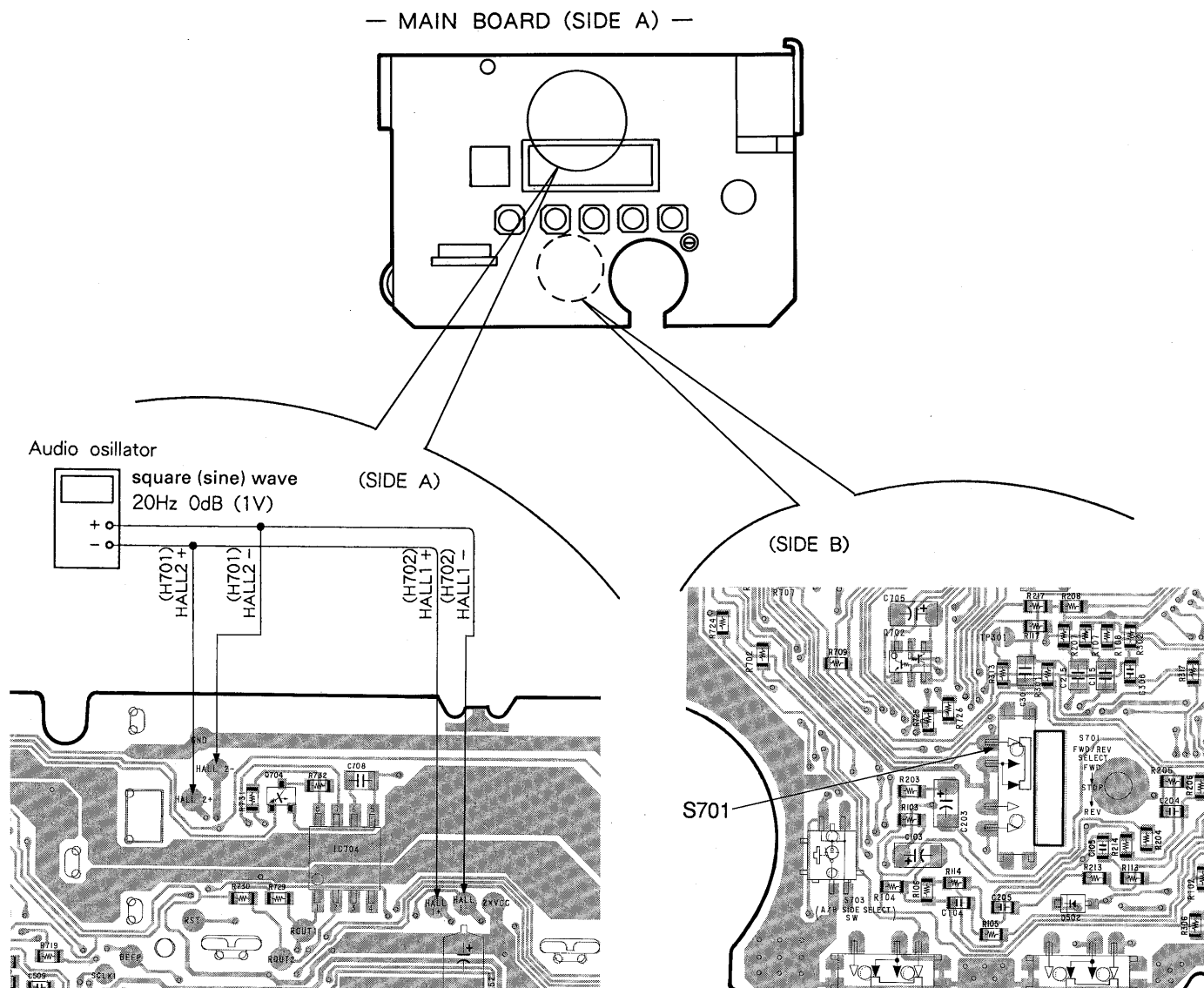
- 1) FWD/REV operation check by the switch S701 ON/OFF.

FF / REW mode

- 1) Apply the square wave or a sine wave signal to the H701/H702.
- 2) Press the FF or REW key.

PLAY mode

- 1) Apply the square wave or a sine wave signal to the H701/H702.
- 2) Press the ► key.

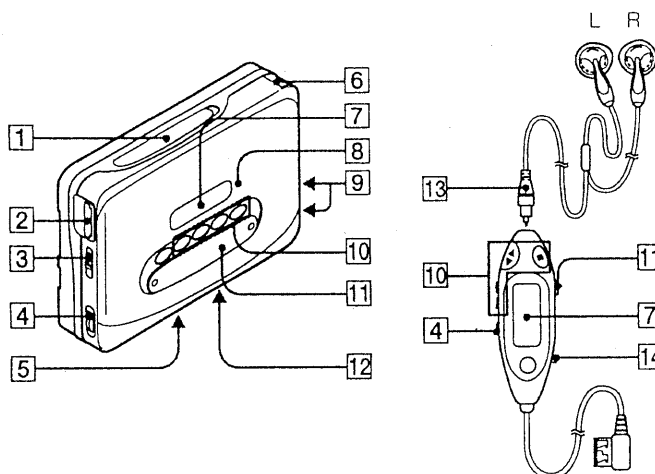


SECTION 2 GENERAL

This section is extracted
from instruction manual.

MAIN

REMOTE CONTROL UNIT

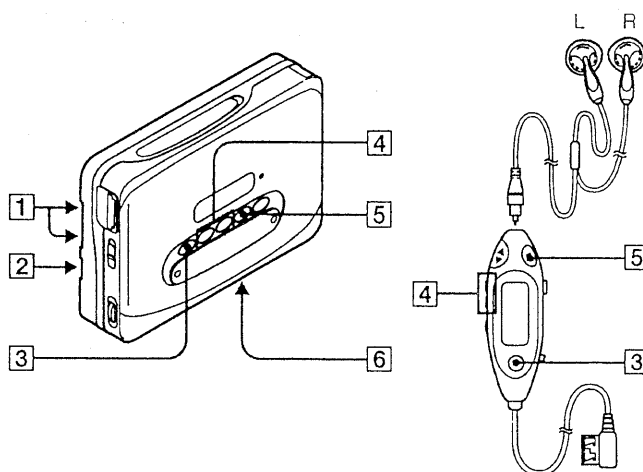


Parts Identification

Tape Player Section and General Operation

- 1 OPEN switch
- 2 Ω REMOTE (headphones/remote controller) jack
- 3 EX DBB (dynamic bass boost) selector
To listen to heavy and powerful sound, set it to MID (medium) or MAX (maximum).
- 4 VOL (volume) control
- 5 \square NR (Dolby noise reduction) selector
To listen to a tape recorded in the Dolby B NR system, set it to ON.
- 6 Battery compartment for the rechargeable battery
- 7 Display window
- 8 BATT (battery) indicator
- 9 Battery connecting points (for supplied battery case)
- 10 Tape operational buttons
 - \blacktriangleleft (playback/tape transport direction change) button
To change the tape transport direction, press it during playback.
 - \blacksquare (stop) button
 - FF (fast-forward)/AMS button
To fast-forward the tape, press it while the unit is in the stop mode.
To listen to the next track from the beginning, press it once during playback. (AMS*2 function)
To listen to the other side of the cassette from the beginning, press it twice during playback. (Skip reverse function)
 - REW (rewind)/AMS button
To rewind the tape rapidly, press it while the unit is in the stop mode.
To listen to the current track from the beginning, press it once during playback. (AMS function)
To listen to the currently played back side of the cassette from the beginning, press it twice during playback. (Auto play function)

- 11 Hold cover/HOLD switch
To prevent accidentally pressing the operational buttons on the main unit, close the cover. (You can still operate the unit with the operational buttons on the remote controller.)
To prevent accidentally pressing the operational buttons on the remote controller, set the HOLD switch to HOLD. (You can still operate the unit with the operational buttons on the main unit.)
- 12 \rightleftarrows (playback mode)/BL SKIP (blank skip) selector
 - \rightleftarrows : Plays back both sides of the cassette once
When the playback starts from the reverse side of the cassette, the unit shuts off automatically at the end of that side.
 - \rightarrow : Plays back both sides of the cassette continuously and fast-forward the tape to the next track if there is a blank space longer than 12 seconds (Blank skip function*1)
- 13 Micro plug
- 14 AVLS*3 (Automatic Volume Limiter System) selector
To limit the maximum volume, set it to either 1 or 2.



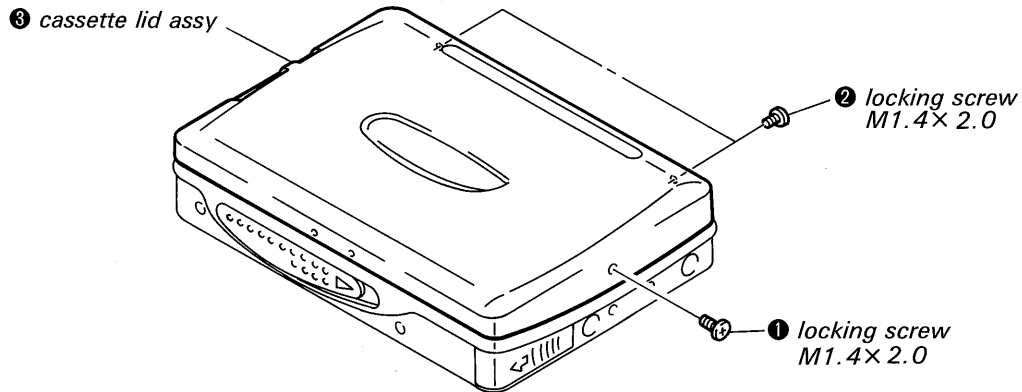
Radio Section

- 1 TUNE $-/+$ buttons
- 2 ENTER button
- 3 RADIO ON-BAND (FM, AM, TV select) • AREA FREE (AREA/FREE select) button
- 4 PRESET $-/+$ (preset number select) buttons
- 5 RADIO OFF • \blacksquare button
- 6 MONO ST FM/AM (monaural/stereo) selector
To listen to stereo broadcast, set it to ST.
If stereo broadcast is difficult to receive, set it to MONO.

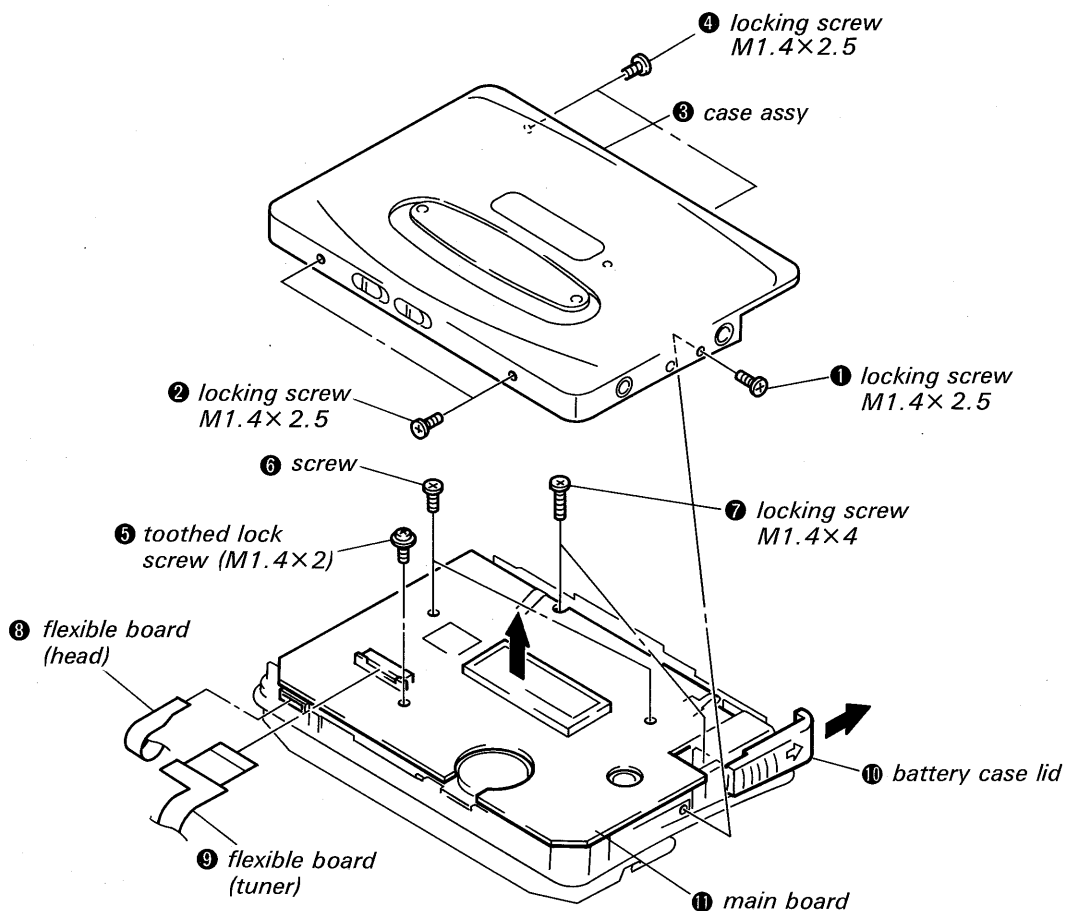
SECTION 3 DISASSEMBLY

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

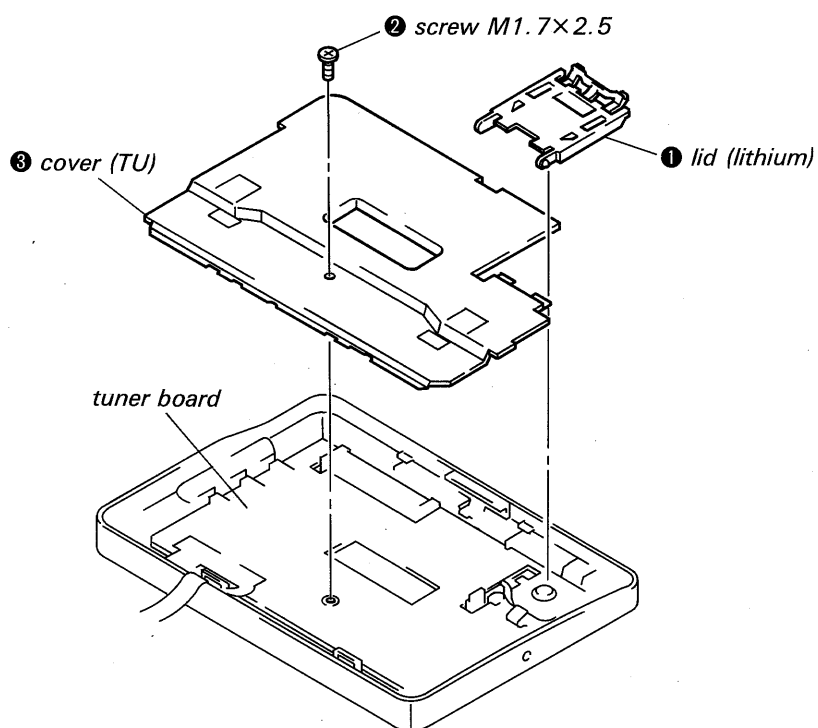
CASSETTE LID ASSY



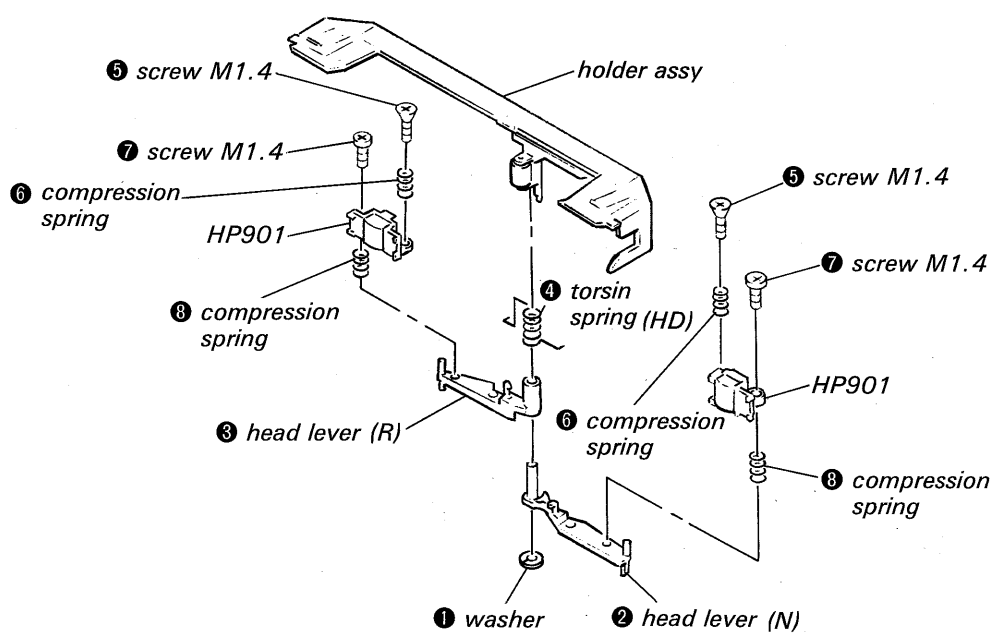
CASE ASSY/MAIN BOARD



TUNER BOARD



HOLDER ASSY



SECTION 4 ADJUSTMENTS

4-1. MECHANICAL ADJUSTMENTS

PRECAUTION

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

Playback head	rubber belts
capstan	idlers
pinch roller	
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 (1.3 V) unless otherwise noted.

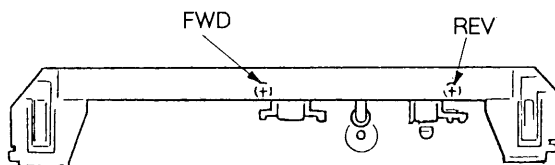
Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102D	22-38 g • cm 0.28-0.55 oz • inch
FWD Back Tension		0.5-3 g • cm 0.02-0.04 oz • inch
REV	CQ-102RC	22-38 g • cm 0.28-0.55 oz • inch
REV Back Tension		0.5-3 g • cm 0.02-0.04 oz • inch
FF	CQ-201B	more than 55g
REW		

Tape Puling Force Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-501A (8-909-708-45)	more than 35g
REV	CQ-501R (8-909-708-46)	

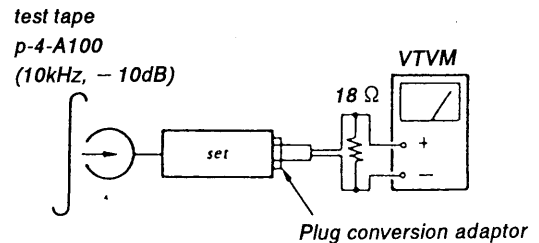
Adjustment Parts Location Diagram (Playback Head Vertical Adjustment)



Play back Head Vertical Adjustment

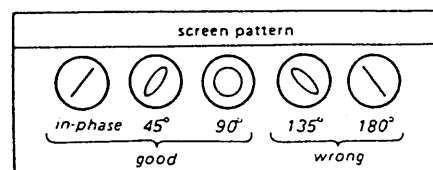
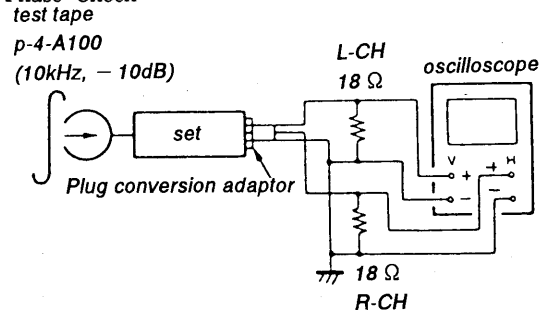
Procedure:

1. Playback mode



- 1) Play back the P-4-A100 in FWD mode and read the VTVM (both L-ch and R-ch).
- 2) Change to REV mode and read the VTVM (both L-ch and R-ch).
- 3) Confirm that the level difference between step 1 and 2 is within 5 dB (both L-ch and R-ch).

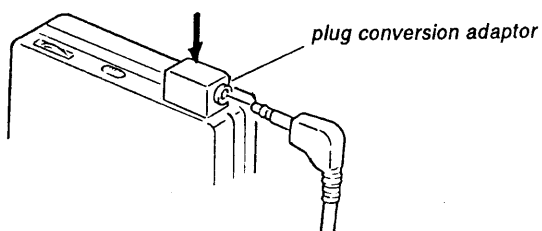
2. Phase Check



4-2. ELECTRICAL ADJUSTMENTS

PRECAUTION

1. Power supply voltage : 1.3 V
2. Switch position
 MONO/ST switch : ST
 DOLBY NR switch (S301) : OFF
 EX DBB switch (S302) : NORM
3. For electrical adjustments, use the supplied plug conversion adaptor (Part No. 1-691-322-11).



TEST TAPE

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

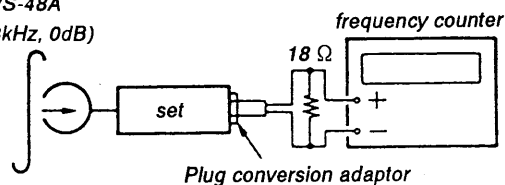
Tape Speed Adjustment

Procedure:

test tape

WS-48A

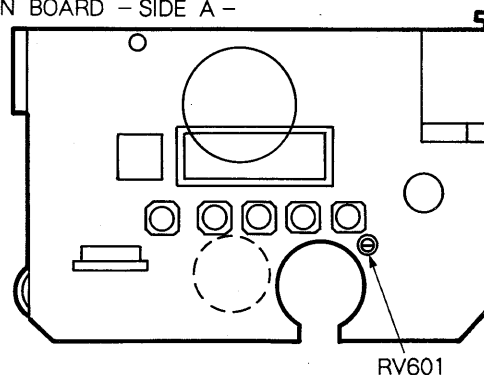
(3kHz, 0dB)



1. Playback WS-48A (tape center portion) in FWD mode. Adjust the RV601 so that the frequency counter reads $3,015 \text{ Hz} \pm 15 \text{ Hz}$.
2. Playback WS-48A (tape center portion) in REV mode. Confirm that the reading of frequency counter is within 2.0% from the reading in step 1.

Adjustment Parts Location Diagram

MAIN BOARD - SIDE A -



SECTION 5 DIAGRAMS

5-1. IC PIN FUNCTIONS

IC501 μ PD1724GB-655-1A7 (LCD Driver, PLL Synthesizer Control)

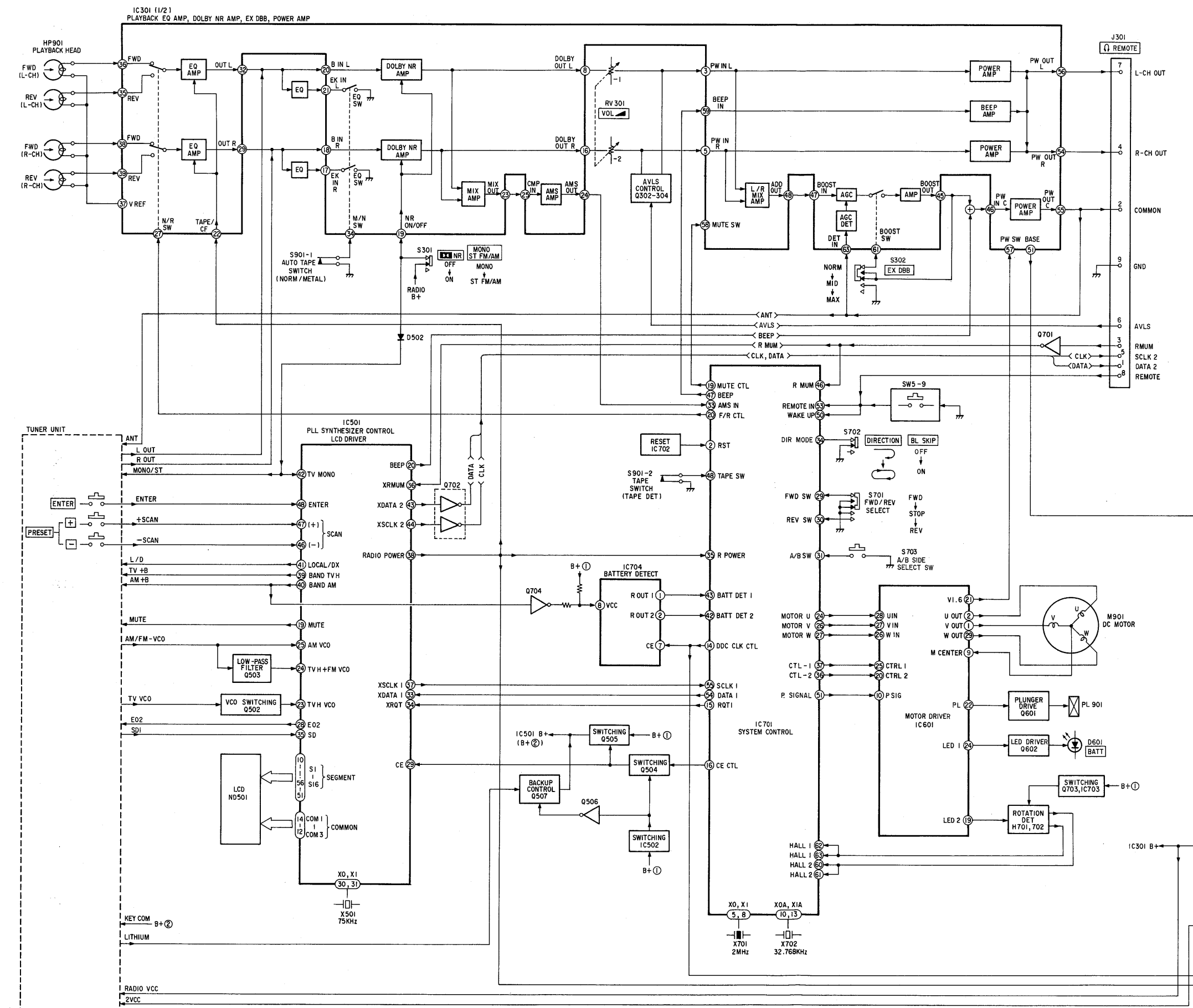
Pin No.	Pin Name	I/O	Description
1 ~ 10	S10~S1	O	Segment signal output to LCD (ND501).
11	N.C	—	No connection.
12 ~ 14	COM3~COM1	O	Common signal output to LCD (ND501).
15	VSS3	—	Connect capacitors for doubler circuit to generate LCD (ND501) drive voltage (3.1V type).
16	CAP2	—	
17	CAP1	—	
18	VSS2	—	
19	MUTE	O	Mute signal output to tuner unit.
20	BEEP	O	Beep signal (3kHz) output terminal.
21	N.C	—	No connection.
22	VDD	—	Power supply terminal.
23	TVH VCO	I	FM local oscillation input terminal.
24	TVH+FM VCO	I	FM local oscillation input terminal. (PLL local oscillation frequency input at pulse swallow.)
25	AM VCO	I	AM local oscillation input terminal. (PLL local oscillation frequency input at direct frequency division.)
26	VSS1	—	Ground terminal.
27	E01	O	PLL error output terminal. (Not used this set.)
28	E02	O	PLL error output terminal.
29	CE	I	Chip enable input terminal. (Device select signal input. "H": Normal operation.)
30	X0	O	75 kHz clock oscillation output terminal.
31	XI	I	75 kHz clock oscillation input terminal.
32	VSS4	—	Connect regulator capacitor in clock oscillation circuit.
33	XDATA1	I	Data signal input from system control (IC701).
34	XRQT	I	Request signal input from system control (IC701).
35	SD	I	SD signal input from tuner unit.
36	XRUM	I	Control signal input from remote commander unit. ("L": Used remote commander.)
37	XSCLK1	O	Clock signal output to system control (IC701).
38	RADIO POWER	I	Tuner power control signal input terminal.
39	BAND TVH	O	TVH band select signal output to tuner unit.
40	BAND AM	O	AM band select signal output to tuner unit.
41	LOCAL/DX	O	LOCAL/DX select signal output to tuner unit.
42	TV MONO	I	TV monaural select signal input from S301 (FM MODE switch).
43	XDATA2	O	Data signal output to remote commander unit.
44	XSCLK2	O	Clock signal output to remote commander unit.
45	—	—	Not used. (Fixed at "L".)
46	SCAN-	I	Scan down signal input from tuner unit.
47	SCAN+	I	Scan up signal input from tuner unit.
48	ENTER	I	Enter signal input from tuner unit.
49、50	N.C	—	No connection.
51 ~ 56	S16~S11	O	Segment signal output to LCD (ND501).

IC701 MB89131PFV-G-154-BND (System Control Micro Processor)

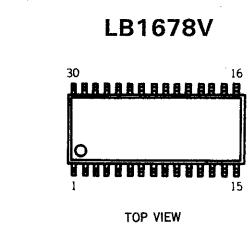
Pin No.	Pin Name	I/O	Description
1	AVCC	—	Power supply terminal.
2	RST	I	System reset input terminal.
3	MODE0	I	Not used this set. (Fixed at "L".)
4	MODE1	I	Not used this set. (Fixed at "L".)
5	XO	O	2 MHz clock oscillation output terminal.
6、7	N.C	—	No connection.
8	XI	I	2 MHz clock oscillation input terminal.
9	VCC	—	Power supply terminal.
10	XOA	O	32.768 kHz clock oscillation output terminal.
11、12	N.C	—	No connection.
13	XIA	I	32.768 kHz clock oscillation input terminal.
14	DDC CLK CTL	O	Control signal output to DC/DC converter unit.
15	RQT1	O	Request signal output to PLL synthesizer control (IC501).
16	CE CTL	O	Chip enable signal output to PLL synthesizer control (IC501).
17	N.C	—	No connection.
18	BACKUP CTL	O	Not used this set.
19	MUTE CTL	O	Mute signal output to TA2032AF (IC301).
20	F/R CTL	O	FWD/REV select signal output to TA2032AF (IC301).
21	N.C	—	No connection.
22	B.SKIP	O	Not used this set.
23	—	—	No connection.
24	MOTOR-U	O	Motor control (U) signal output to motor driver (IC601).
25	VSS	—	Ground terminal.
26	MOTOR-V	O	Motor control (V) signal output to motor driver (IC601).
27	MOTOR-W	O	Motor control (W) signal output to motor driver (IC601).
28	N.C	—	No connection.
29	FWD SW	I	FWD/REV select signal input terminal. "L": FWD.
30	REV SW	I	FWD/REV select signal input terminal. "L": REV.
31	A/B SW	I	A side/B side detection signal input terminal. "H": A side, "L": B side.
32	N.C	—	No connection.
33	AMS IN	I	AMS signal input terminal.
34	DIR MODE	I	Direction mode input from S702 (DIRECTION switch). "L": Shut off mode, "H": Endless mode.
35	R POWER	O	Radio power control signal output to PLL synthesizer control (IC501).
36	CTL-2	O	Motor control signal output to motor driver (IC601).
37	CTL-1	O	Motor control signal output to motor driver (IC601).
38、39	N.C	—	No connection.
40	S.MODE 2	I	Setting for service mode.
41	S.MODE 1	I	Setting for service mode.
42	BATT DET 2	I	Battery voltage detection input terminal.
43	BATT DET 1	I	Battery voltage detection input terminal.
44、45	N.C	—	No connection.

Pin No.	Pin Name	I/O	Description
4 6	RMUM	I	Control signal input from remote commander unit. ("L": Used remote commander.)
4 7	BEEP	O	Beep signal output terminal.
4 8	TAPE SW	I	With/No tape detection input terminal. "H": No tape.
4 9	N. C	—	No connection.
5 0	WAKE UP	I	Remote control signal input from remote commander unit.
5 1	P. SIGNAL	O	Motor control signal output to motor driver (IC601).
5 2	TC/CF	I	Not used this set. (Fixed at "L".)
5 3	REMOTE IN	I	Remote control signal input from remote commander unit.
5 4	DATA 1	O	Data signal output to PLL synthesizer control (IC501).
5 5	SCLK 1	I	Clock signal input from PLL synthesizer control (IC501).
5 6	N. C	—	No connection.
5 7	AVSS	—	Ground terminal.
5 8	N. C	—	No connection.
5 9	AVR	I	Not used this set. (Fixed at "H".)
6 0、6 1	HALL 2	I	Hall element (H702) detected by rotation.
6 2、6 3	HALL 1	I	Hall element (H701) detected by rotation.
6 4	N. C	—	No connection.

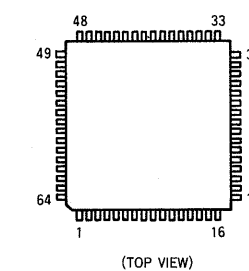
5-2. BLOCK DIAGRAM



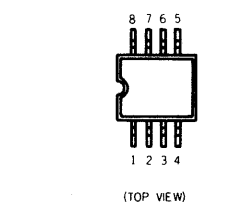
5-3. SEMICONDUCTOR LEAD LAYOUTS



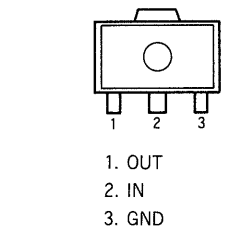
MB89131PFV-G-154-BND
TA2032AF



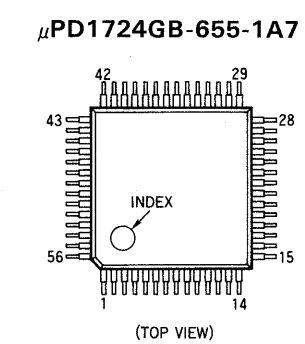
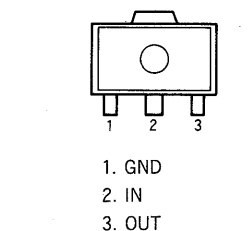
MM1210-XFF



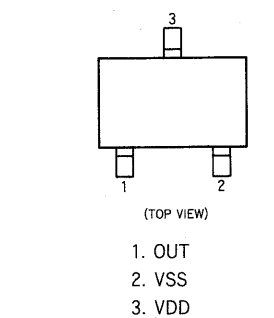
S-80718HN-UF-T1



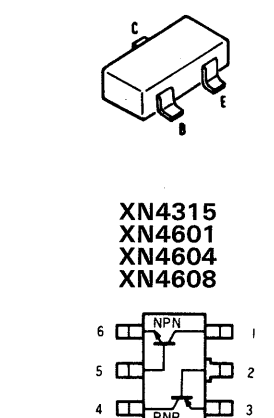
S-81211PG-PA-T1



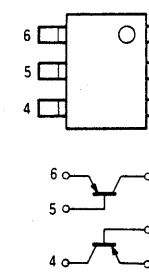
XC61AN1402MX



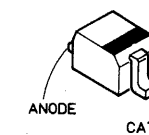
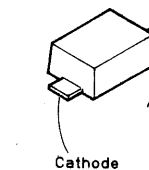
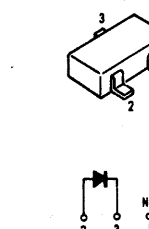
2SB1295-UL5
2SC4154-F
2SC4178-F13
2SD1935-CT7
2SK880GR-TE85L
DTC144TU
UN5115
UN5215



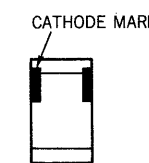
XN4401



MA110

MA729
MA805**SB05-05CP**

CL-170UR-CD



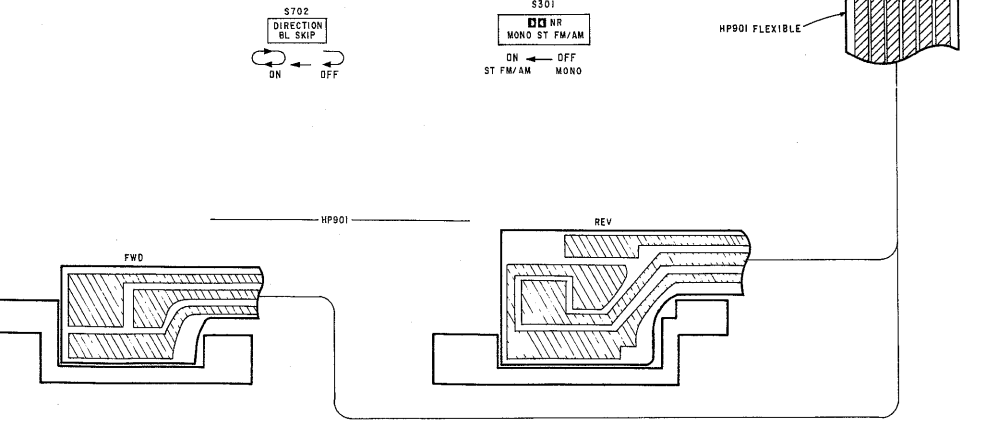
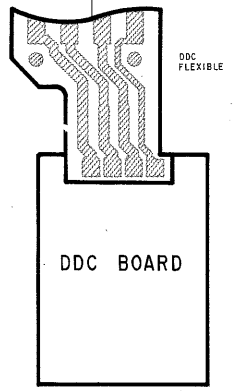
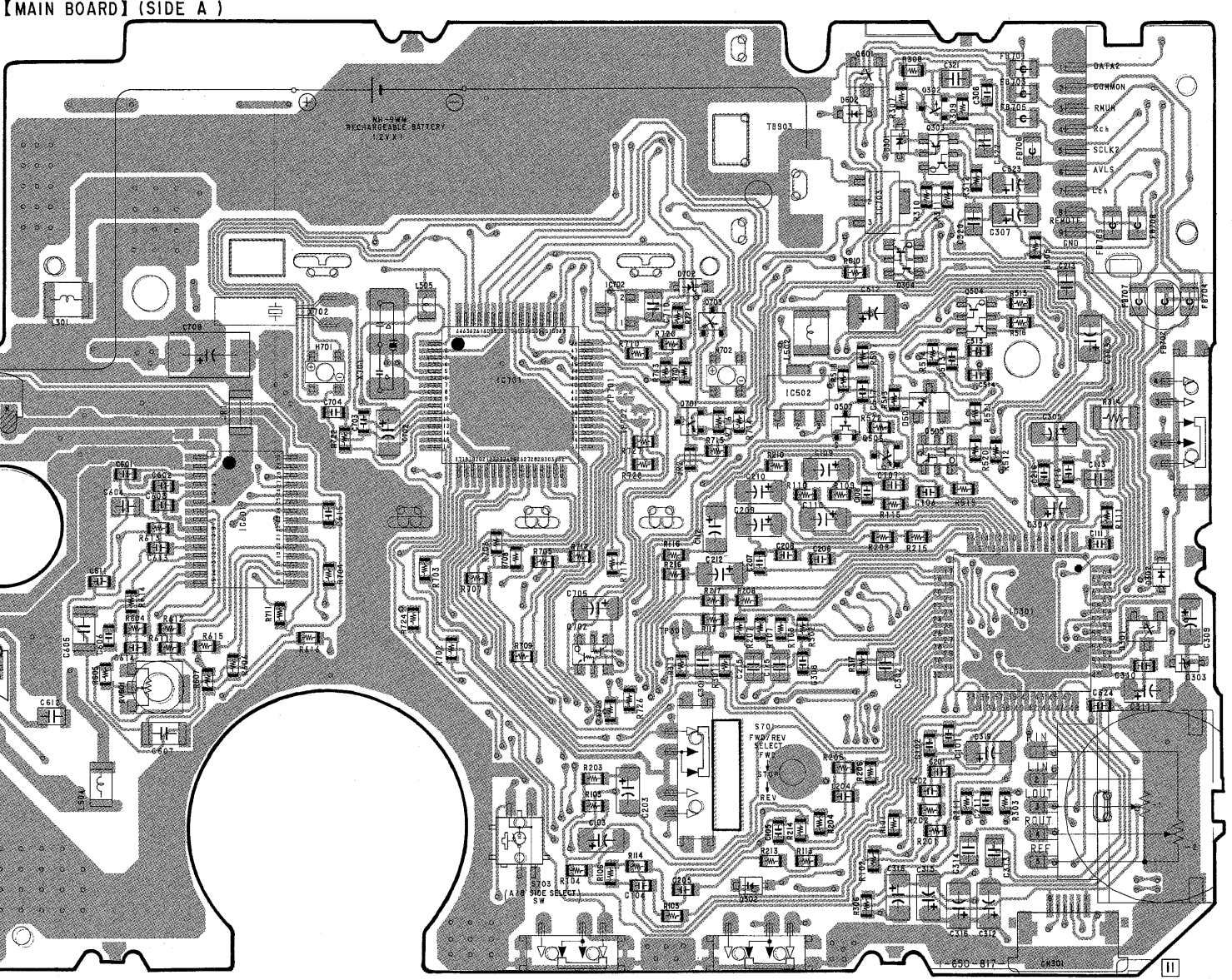
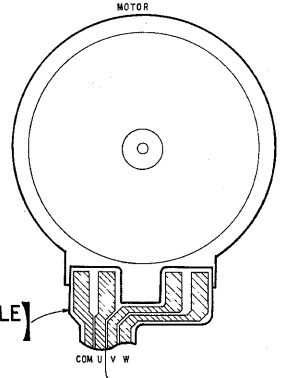
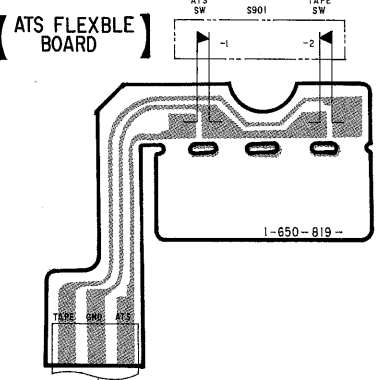
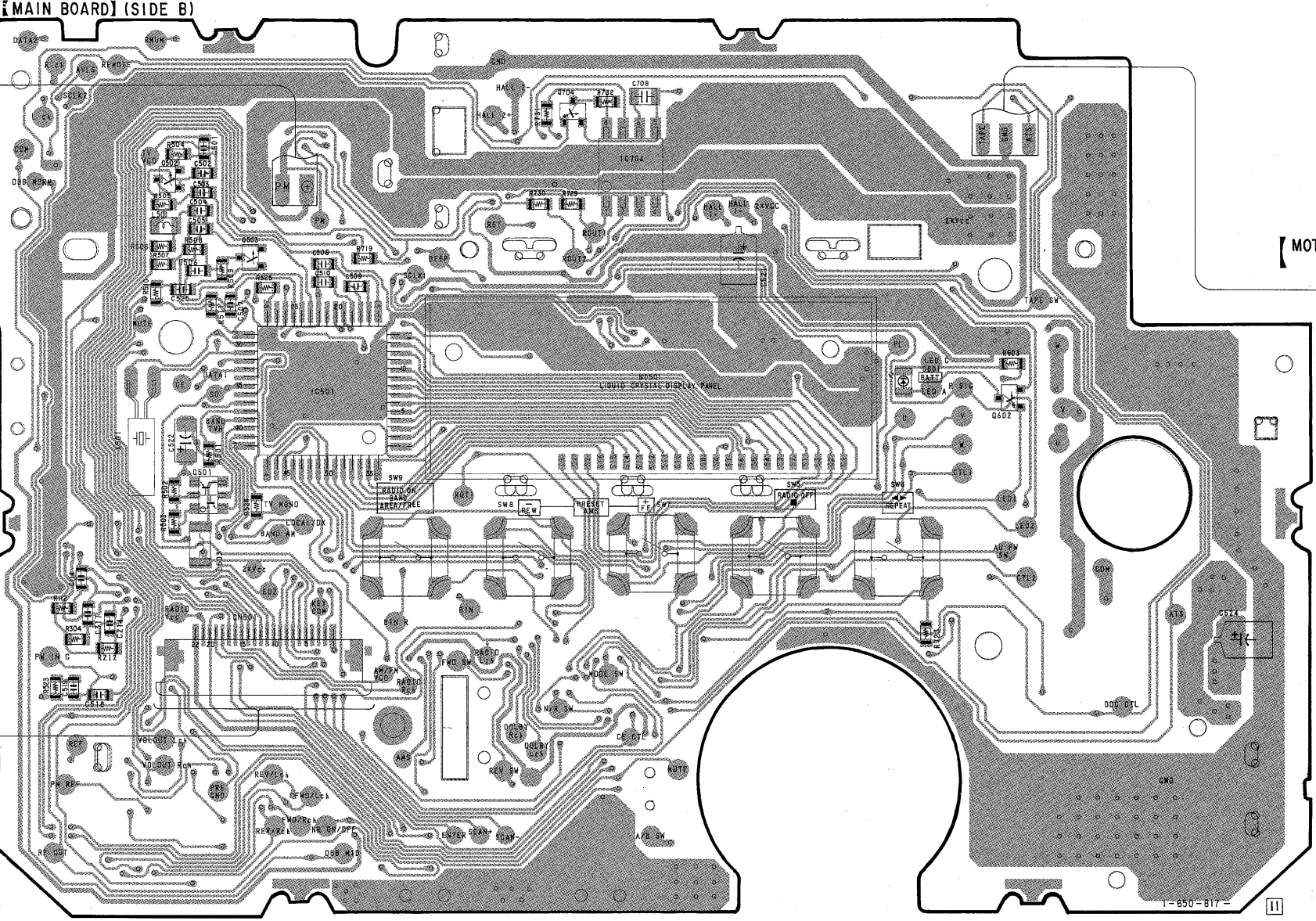
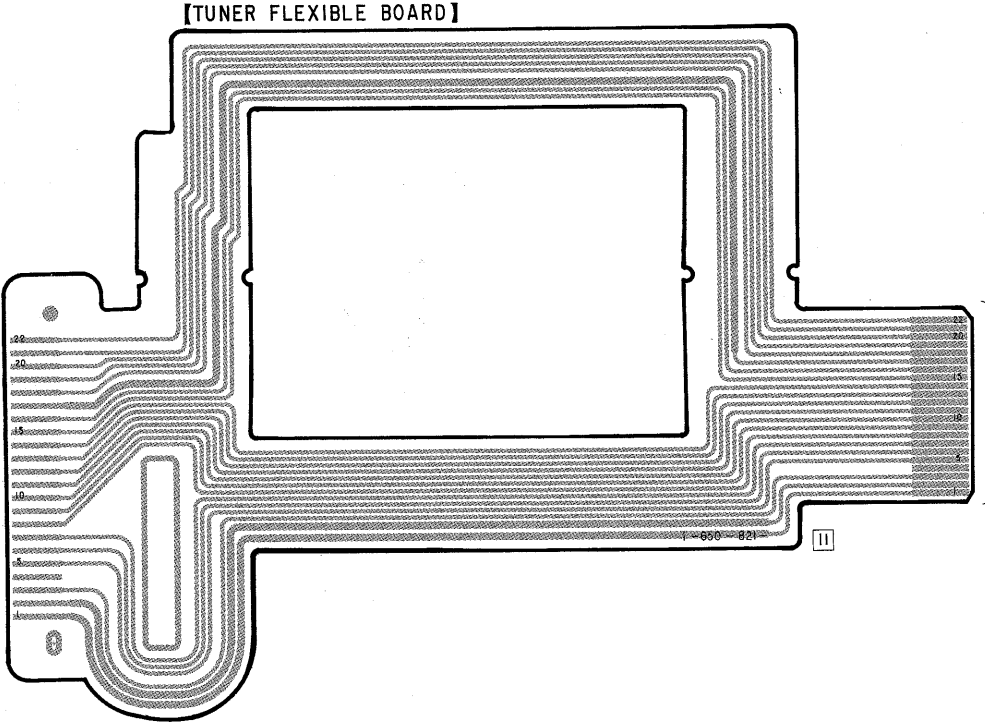
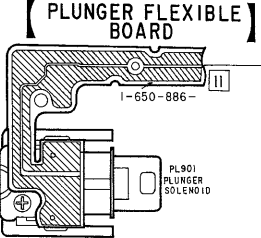
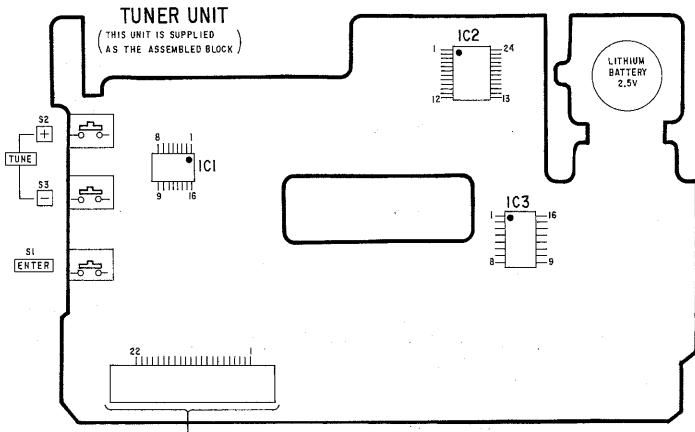
5-4. PRINTED WIRING BOARDS

• Semiconductor Location

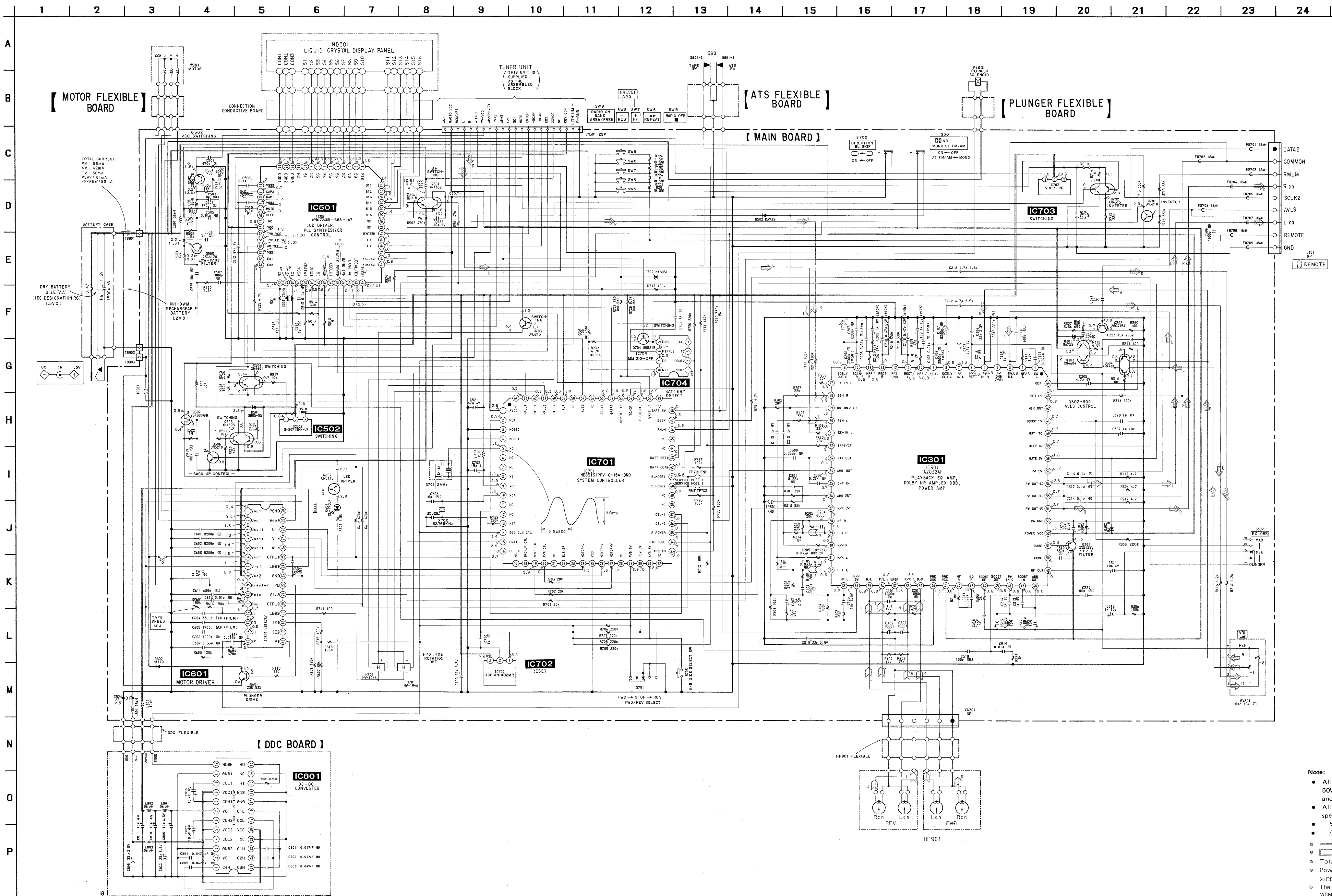
Ref. No.	Location
D301	B - 27
D302	E - 29
D303	F - 30
D501	D - 28
D502	G - 26
D601	D - 15
D602	B - 27
D702	C - 26
IC301	E - 28
IC501	D - 10
IC502	D - 27
IC601	E - 23
IC701	D - 25
IC702	C - 25
IC703	B - 27
IC704	B - 13
Q301	F - 29
Q302	B - 28
Q303	B - 28
Q304	C - 27
Q501	E - 10
Q502	B - 9
Q503	C - 10
Q504	C - 28
Q505	D - 28
Q506	D - 27
Q507	D - 27
Q601	A - 27
Q602	D - 16
Q701	D - 26
Q702	F - 25
Q703	C - 26
Q704	B - 12

Note:

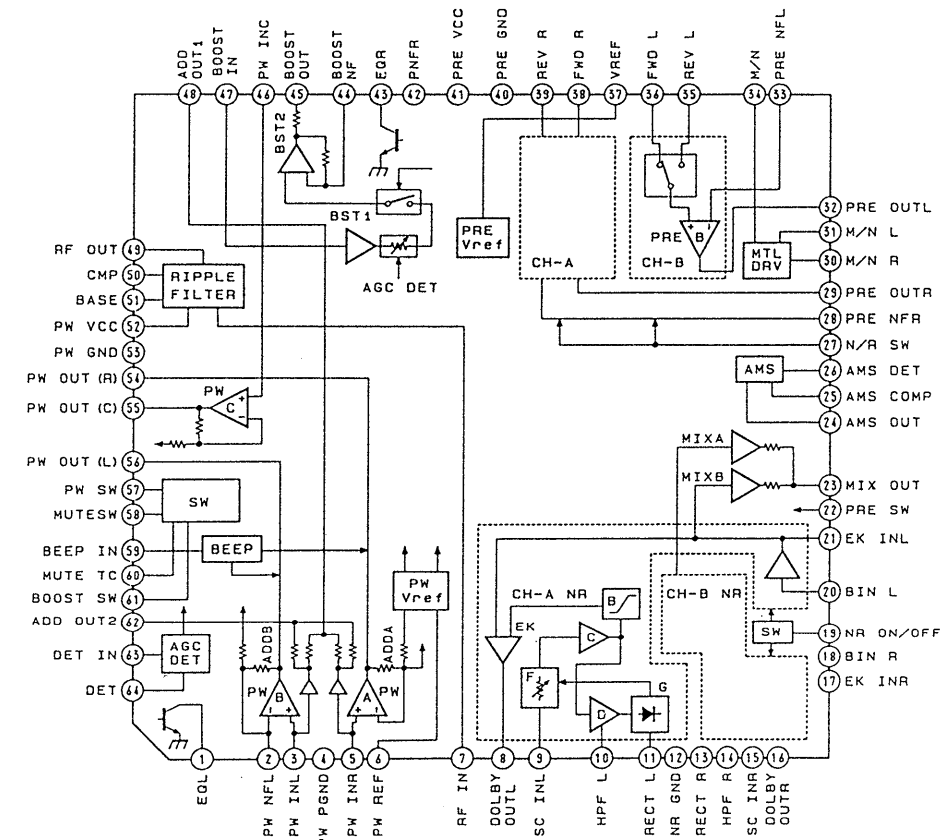
- : Through hole.
- : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)



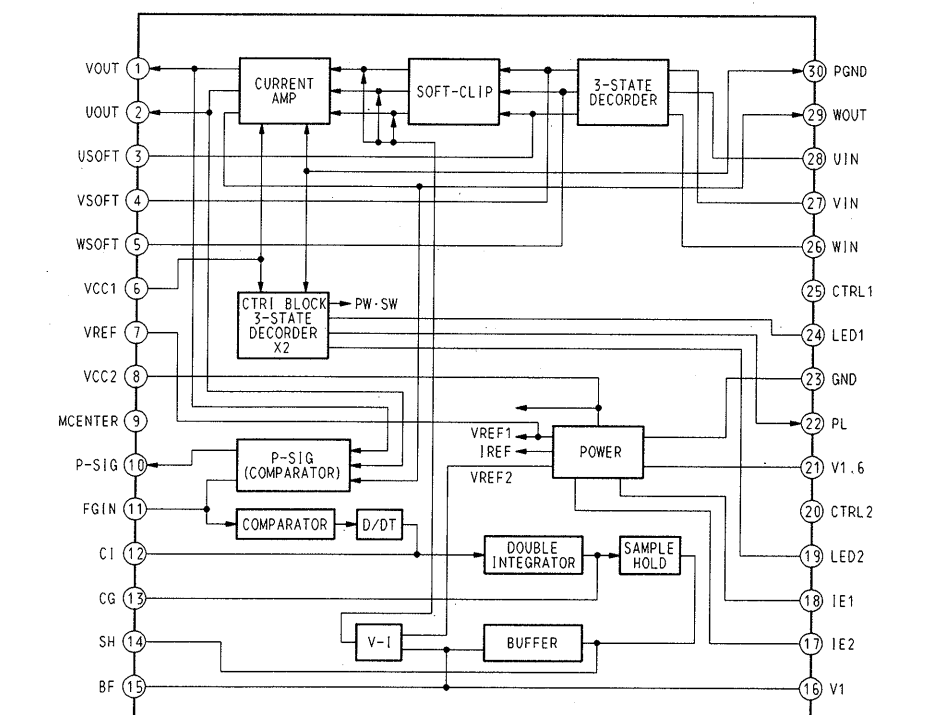
5-5. SCHEMATIC DIAGRAM



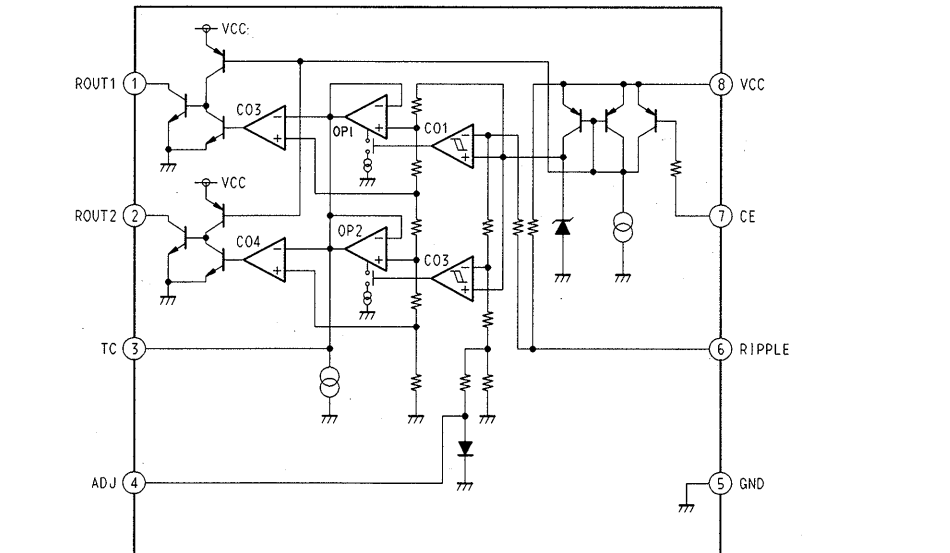
IC301 TA2032AF (MAIN BOARD)



IC601 LB1678V



IC704 MM1210-XFF



Note:

- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- % : indicates tolerance.
- Δ : internal component.
- \square : B+ Line
- \square : adjustment for repair.
- Total current is measured with no cassette installed.
- Power voltage is dc 1.5 V and fed with regulated dc power supply from external power voltage jack.
- The voltage and waveform are measured against the ground when the square-wave or a sine wave signal of 20Hz OdB (1V) is input to the H701 (S-reel) and H702 (T-reel).
- no mark: PB
- \square : FM
- \square : AM
- \square : TV
- Voltages are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveform are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Signal path.
- \square : PB
- \square : RADIO

SECTION 6 EXPLODED VIEWS

NOTE:

- -xx,-x mean standardized parts, so they may have some differences from the original one.

- Color Indication of Appearance Parts

Example:

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

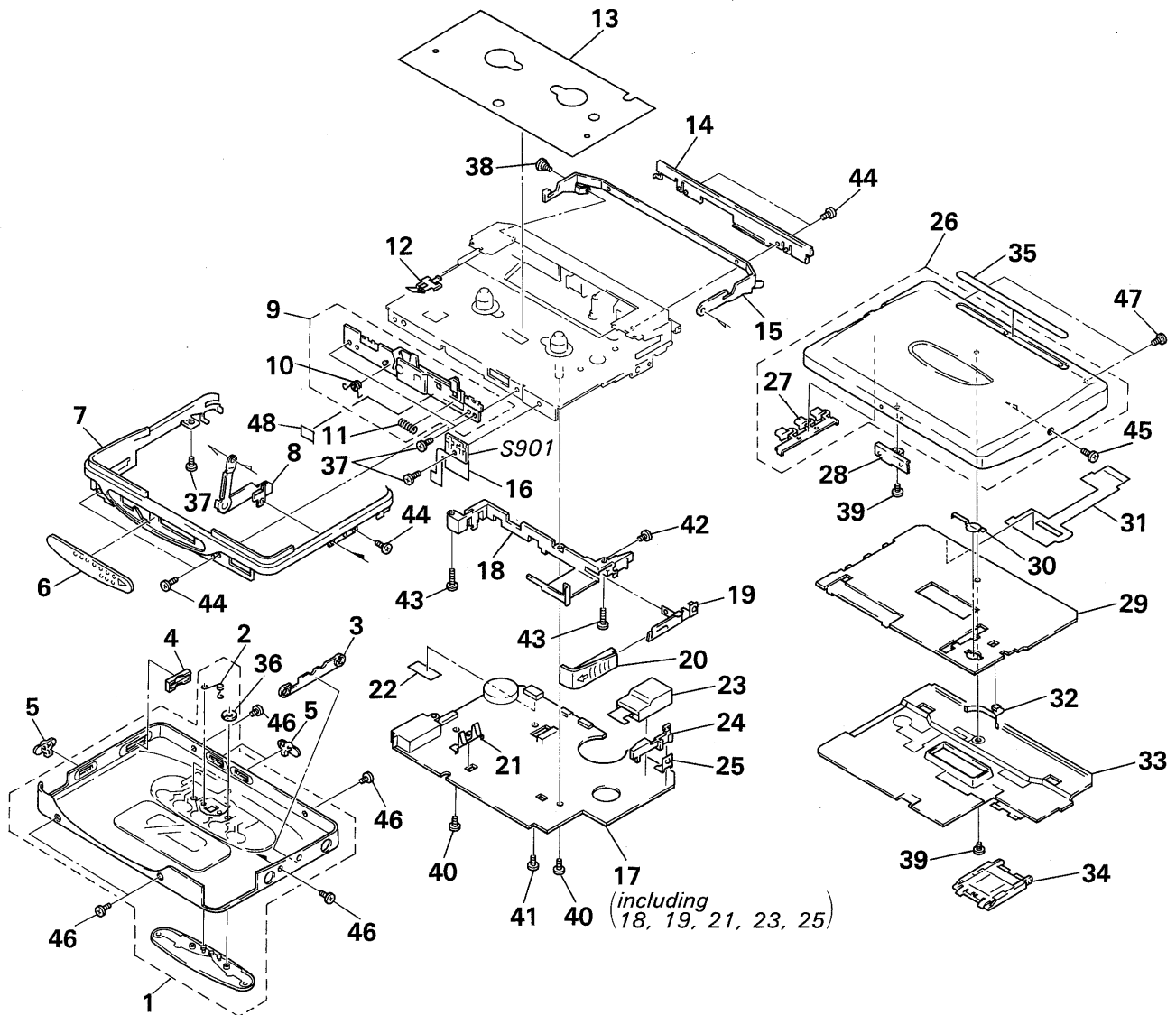
↑
Parts color

↑
Cabinet's color

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (#mark) list is given in the last of this parts list.

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

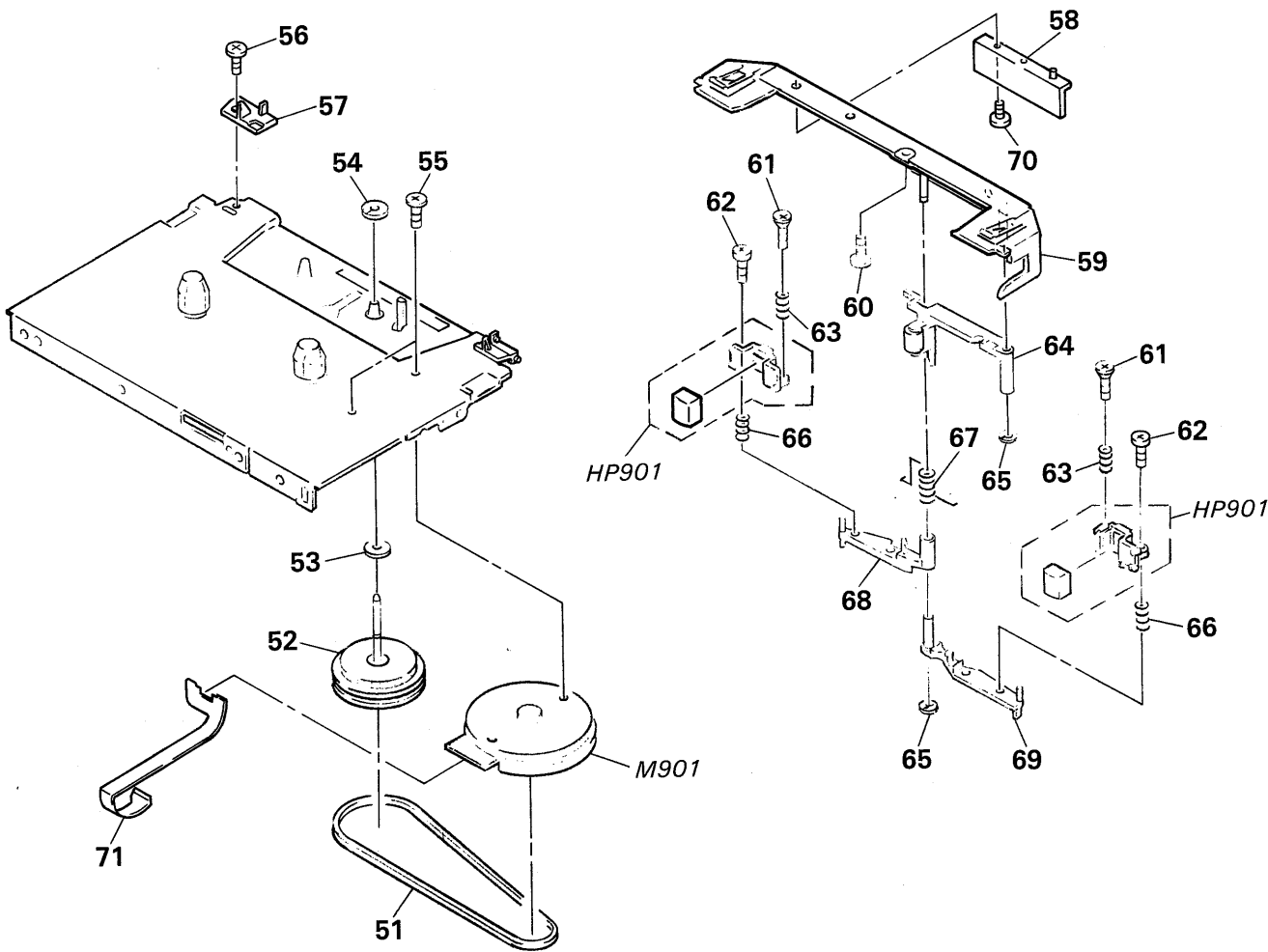
6-1. CASE SECTION



Ref.No.	Part No.	Description	Remark
1	X-3367-729-1	CASE (CF) ASSY (B) (BLACK)	
1	X-3367-758-1	CASE (CF) ASSY (S) (SILVER)	
1	X-3367-759-1	CASE (CF) ASSY (Z) (TITAN)	
2	3-909-268-01	SPRING (SHUTTER)	
3	3-909-292-01	PLATE (TERMINAL), BLIND	
4	3-909-280-01	PLATE (VOL), BLIND	
5	3-909-277-01	KNOB (SW) (BLACK, TITAN)	
5	3-909-277-11	KNOB (SW) (SILVER)	
6	3-909-288-01	KNOB (OPEN)	
7	3-909-305-01	ORNAMENT (OUTSERT), REEL (BLACK, TITAN)	
7	3-909-305-31	ORNAMENT (OUTSERT), REEL (SILVER)	
8	X-3367-718-1	ARM ASSY, CLICK	
9	X-3367-722-1	BRACKET ASSY	
10	3-909-270-01	SPRING (LOCK)	
11	3-909-269-01	SPRING (OPEN)	
12	3-909-357-01	SPRING (CASSETTE CF)	
13	3-909-354-01	COVER, MD	
14	3-909-294-01	ORNAMENT (B), REEL (BLACK, TITAN)	
14	3-909-294-31	ORNAMENT (B), REEL (SILVER)	
15	3-909-302-01	BRACKET (CASSETTE)	
16	1-650-819-11	ATS FLEXIBLE BOARD	
17	A-3016-509-A	MAIN BOARD, COMPLETE	
18	3-909-304-01	HOLDER, BATTERY	
19	X-3366-555-1	TERMINAL BOARD ASSY, BATTERY	
20	3-909-293-01	LID, BATTERY CASE (BLACK)	
20	3-909-293-11	LID, BATTERY CASE (SILVER)	
20	3-909-293-21	LID, BATTERY CASE (TITAN)	
21	3-373-823-01	TERMINAL BOARD (MINUS)	
22	4-017-441-01	CUSHION (B)	
23	A-3042-269-A	DDC ASSY	
24	3-387-898-01	PLATE (TERMINAL), ORNAMENTAL	
25	3-373-824-01	TERMINAL BOARD	

Ref.No.	Part No.	Description	Remark
26	X-3367-728-1	LID (CF) ASSY, CASSETTE (BLACK)	
26	X-3367-756-1	LID (CF) ASSY (S), CASSETTE (SILVER)	
26	X-3367-757-1	LID (CF) ASSY (Z), CASSETTE (TITAN)	
27	3-909-352-01	BUTTON (TU) (BLACK, TITAN)	
27	3-909-352-11	BUTTON (TU) (SILVER)	
28	3-909-351-01	LOCKER, OPEN	
29	1-693-237-11	TUNER UNIT	
30	3-385-161-02	TERMINAL BOARD (LITHIUM M)	
31	1-650-821-11	PC BOARD, FLEXIBLE BOARD	
32	3-905-339-01	TERMINAL BOARD (LITHIUM P)	
33	3-909-356-01	COVER (TU)	
34	3-909-353-01	LID (LITHIUM), BATTERY CASE	
35	3-386-545-31	SHEET (ADJUSTMENT TC) (SILVER)	
35	3-386-545-41	SHEET (ADJUSTMENT TC) (TITAN)	
35	3-386-545-01	SHEET (ADJUSTMENT TC) (BLACK)	
36	3-910-829-01	WASHER	
37	3-366-892-01	SCREW (M1.4X1.1)	
38	3-907-009-01	SCREW (M1.4)	
39	3-375-114-21	SCREW (M1.7X2.5)	
40	3-375-114-11	SCREW	
41	3-335-797-01	SCREW (M1.4X2), TOOTHED LOCK	
42	3-704-197-03	SCREW (M1.4X1.6), LOCKING	
43	3-704-197-61	SCREW (M1.4X4.0), LOCKING	
44	3-704-197-11	SCREW (M1.4X2.0), LOCKING	
45	3-704-197-11	SCREW (M1.4X2.0), LOCKING (SILVER)	
45	3-704-197-13	SCREW (M1.4X2.0), LOCKING (BLACK, TITAN)	
46	3-704-197-21	SCREW (M1.4X2.5), LOCKING (SILVER)	
46	3-704-197-23	SCREW (M1.4X2.5), LOCKING (BLACK, TITAN)	
47	3-349-825-11	SCREW (M1.4X2.0), LOCKING (SILVER)	
47	3-349-825-82	SCREW (M1.4X2.0), LOCKING (BLACK, TITAN)	
*48	3-578-260-00	SPACER	
S901	1-572-580-11	SWITCH, LEAF (TAPE, ATS)	

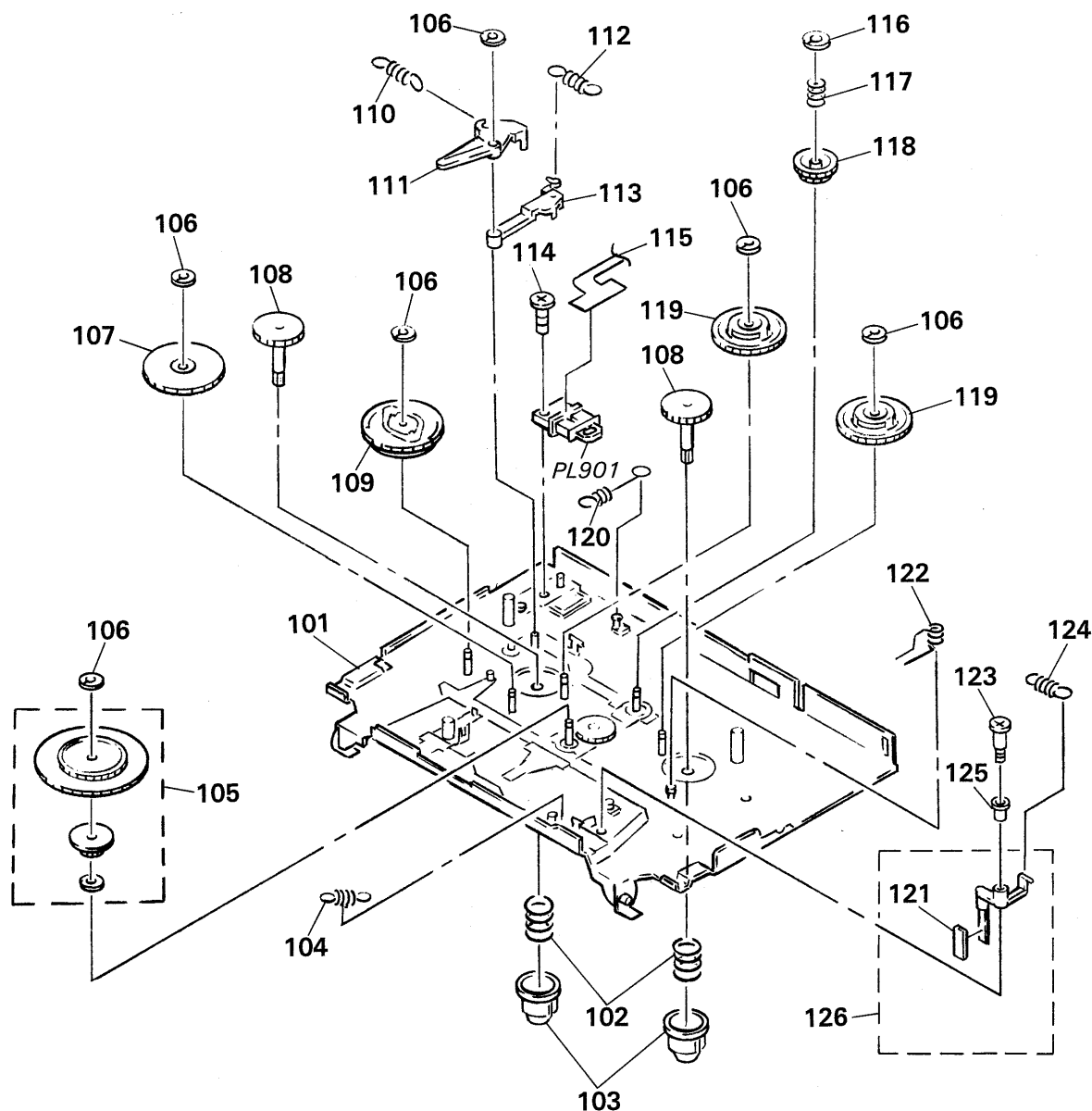
6-2. MECHANISM SECTION-1
(MT-WMEX999-107)



Ref.No.	Part No.	Description	Remark
51	3-385-060-01	BELT	
52	X-3367-697-1	WHEEL ASSY, CAPSTAN	
53	3-350-945-31	WASHER	
54	3-348-993-01	WASHER	
55	3-906-045-01	SCREW	
56	3-704-197-12	SCREW (M1.4X2.0), LOCKING	
57	3-909-136-01	GUIDE (R), HOLDER	
58	3-386-122-01	COVER	
59	X-3367-696-1	HOLDER ASSY	
60	3-342-376-11	SCREW (M1.4X1.2), SPECIAL	
61	3-386-115-01	SCREW (M1.4), PRECISION	
62	3-386-118-01	SCREW (M1.4)	

Ref.No.	Part No.	Description	Remark
63	3-388-050-01	SPRING, COMPRESSION	
64	X-3366-934-1	PINCH LEVER (Y) ASSY	
65	3-338-645-31	WASHER (0.8-2.5)	
66	3-386-120-01	SPRING, COMPRESSION	
67	3-909-140-01	SPRING (HD), TORSION	
68	3-909-138-01	LEVER (R), HEAD	
69	3-909-137-01	LEVER (N), HEAD	
70	3-704-252-01	SCREW (M1.4X2.8)	
71	1-646-378-11	MOTOR FLEXIBLE BOARD	
HP901	1-500-001-11	HEAD, MAGNETIC (PLAYBACK)	
M901	1-698-033-01	MOTOR	

6-3. MECHANISM SECTION-2 (MT-WMEX999-107)



Ref.No.	Part No.	Description	Remark
101	X-3367-699-1	CHASSIS ASSY	
102	3-386-117-01	SPRING, COMPRESSION	
103	3-365-801-01	TABLE, REEL	
104	3-909-880-01	SPRING (PRESS), TENSION	
105	X-3365-950-1	CLUTCH ASSY	
106	3-349-859-51	WASHER	
107	X-3365-951-1	GEAR (DECELERATION) ASSY	
108	3-385-046-01	GEAR (REEL)	
109	3-385-055-01	GEAR, CAM	
110	3-385-051-01	SPRING, TENSION (PLB)	
111	3-385-054-01	LEVER (B), TRIGGER	
112	3-385-050-01	SPRING, TENSION (PLA)	
113	3-385-053-01	LEVER (A), TRIGGER	
114	3-361-216-81	SCREW (M1.4X3.0)	

Ref.No.	Part No.	Description	Remark
115	1-650-886-11	PLUNGER FLEXIBLE BOARD	
116	3-348-953-11	WASHER	
117	3-385-049-01	SPRING, COMPRESSION (FR)	
118	3-385-047-01	GEAR (FR)	
119	X-3365-949-1	GEAR (TB) ASSY	
120	3-385-052-01	SPRING, TENSION (PFR)	
121	3-389-491-01	PAD	
122	3-385-056-01	SPRING (NR), TORSION	
123	3-704-197-61	SCREW (M1.4X4.0), LOCKING	
124	3-909-135-01	SPRING (PAD), TENSION	
125	3-386-116-01	COLLOR (P)	
126	X-3367-698-1	ARM ASSY, PAD	
PL901	1-454-529-11	SOLENOID, PLUNGER	

SECTION 7 ELECTRICAL PARTS LIST

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.

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

Ref.No.	Part No.	Description	Remark
	A-3016-509-A	MAIN BOARD, COMPLETE *****	
*	1-537-646-11	CONDUCTIVE BOARD, CONNECTION	
	3-373-823-01	TERMINAL BOARD (MINUS)	
	3-373-824-01	TERMINAL BOARD	
	3-704-197-03	SCREW (M1.4X1.6), LOCKING	
	3-909-304-01	HOLDER, BATTERY	
	3-909-343-01	HOLDER (LCD)	
*	3-909-355-01	SHEET (LCD)	
	< CAPACITOR >		
C101	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
C102	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
C103	1-135-219-11	TANTAL. CHIP 15uF	20% 2.5V
C104	1-162-969-11	CERAMIC CHIP 0.0068uF	10% 25V
C105	1-164-677-11	CERAMIC CHIP 0.033uF	10% 16V
C106	1-162-967-11	CERAMIC CHIP 0.0033uF	10% 50V
C107	1-164-174-11	CERAMIC CHIP 0.0082uF	10% 25V
C108	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C109	1-135-208-11	TANTAL. CHIP 1uF	10% 10V
C110	1-135-192-21	TANTAL. CHIP 0.47uF	10% 20V
C111	1-164-227-11	CERAMIC CHIP 0.022uF	10% 25V
C112	1-135-218-11	TANTAL. CHIP 4.7uF	20% 2.5V
C113	1-164-346-11	CERAMIC CHIP 1uF	16V
C114	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C115	1-164-346-11	CERAMIC CHIP 1uF	16V
C116	1-164-471-11	CERAMIC CHIP 680PF	5% 50V
C201	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
C202	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
C203	1-135-219-11	TANTAL. CHIP 15uF	20% 2.5V
C204	1-162-969-11	CERAMIC CHIP 0.0068uF	10% 25V
C205	1-164-677-11	CERAMIC CHIP 0.033uF	10% 16V
C206	1-162-967-11	CERAMIC CHIP 0.0033uF	10% 50V
C207	1-164-174-11	CERAMIC CHIP 0.0082uF	10% 25V
C208	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C209	1-135-208-11	TANTAL. CHIP 1uF	10% 10V
C210	1-135-192-21	TANTAL. CHIP 0.47uF	10% 20V
C211	1-164-227-11	CERAMIC CHIP 0.022uF	10% 25V
C212	1-135-218-11	TANTAL. CHIP 4.7uF	20% 2.5V

Ref.No.	Part No.	Description	Remark
C213	1-164-346-11	CERAMIC CHIP 1uF	16V
C214	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C215	1-164-346-11	CERAMIC CHIP 1uF	16V
C216	1-164-471-11	CERAMIC CHIP 680PF	5% 50V
C301	1-164-489-11	CERAMIC CHIP 0.22uF	10% 16V
C302	1-164-489-11	CERAMIC CHIP 0.22uF	10% 16V
C303	1-135-151-21	TANTALUM CHIP 4.7uF	20% 4V
C304	1-135-316-11	TANTAL. CHIP 22uF	20% 2.5V
C305	1-135-151-21	TANTALUM CHIP 4.7uF	20% 4V
C306	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
C307	1-135-208-11	TANTAL. CHIP 1uF	20% 10V
C308	1-164-677-11	CERAMIC CHIP 0.033uF	10% 16V
C309	1-135-316-11	TANTAL. CHIP 22uF	20% 2.5V
C310	1-162-961-11	CERAMIC CHIP 330PF	10% 50V
C311	1-135-201-11	TANTALUM CHIP 10uF	20% 4V
C312	1-135-176-21	TANTALUM CHIP 0.68uF	10% 35V
C313	1-164-346-11	CERAMIC CHIP 1uF	16V
C314	1-164-346-11	CERAMIC CHIP 1uF	16V
C315	1-135-176-21	TANTALUM CHIP 0.68uF	10% 35V
C316	1-135-151-21	TANTALUM CHIP 4.7uF	20% 4V
C317	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C318	1-135-208-11	TANTAL. CHIP 1uF	20% 10V
C319	1-135-316-11	TANTAL. CHIP 22uF	20% 2.5V
C320	1-164-346-11	CERAMIC CHIP 1uF	16V
C321	1-164-346-11	CERAMIC CHIP 1uF	16V
C322	1-164-005-11	CERAMIC CHIP 0.47uF	25V
C323	1-135-219-11	TANTAL. CHIP 15uF	20% 2.5V
C324	1-162-953-11	CERAMIC CHIP 100PF	5% 50V
C501	1-162-962-11	CERAMIC CHIP 470PF	10% 50V
C502	1-162-962-11	CERAMIC CHIP 470PF	10% 50V
C503	1-162-941-11	CERAMIC CHIP 10PF	0.5PF 50V
C504	1-162-962-11	CERAMIC CHIP 470PF	10% 50V
C505	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C506	1-162-936-11	CERAMIC CHIP 5PF	0.25PF 50V
C507	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
C508	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C509	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
C510	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C512	1-104-908-11	TANTAL. CHIP 47uF	20% 4V

MAIN

Ref.No.	Part No.	Description	Remark
C513	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C514	1-162-912-11	CERAMIC CHIP	7PF 0.5PF 50V
C515	1-164-237-11	CERAMIC CHIP	16PF 5% 50V
C517	1-162-953-11	CERAMIC CHIP	100PF 5% 50V
C518	1-162-953-11	CERAMIC CHIP	100PF 5% 50V
C519	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C521	1-135-254-11	TANTAL. CHIP	47uF 20% 4V
C522	1-135-201-11	TANTALUM CHIP	10uF 20% 4V
C524	1-135-236-11	TANTALUM CHIP	47uF 20% 2.5V
C525	1-162-941-11	CERAMIC CHIP	10PF 0.5PF 50V
C601	1-164-174-11	CERAMIC CHIP	0.0082uF 10% 25V
C602	1-164-174-11	CERAMIC CHIP	0.0082uF 10% 25V
C603	1-164-174-11	CERAMIC CHIP	0.0082uF 10% 25V
C604	1-104-545-11	FILM CHIP	0.0033uF 5% 16V
C605	1-137-290-11	FILM CHIP	0.0047uF 5% 16V
C606	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C607	1-162-568-11	CERAMIC CHIP	0.33uF 10% 16V
C611	1-164-471-11	CERAMIC CHIP	680PF 5% 50V
C612	1-164-505-11	CERAMIC CHIP	2.2uF 16V
C613	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C614	1-164-245-11	CERAMIC CHIP	0.015uF 10% 25V
C615	1-162-953-11	CERAMIC CHIP	100PF 5% 50V
C702	1-135-158-21	TANTALUM CHIP	15uF 10% 4V
C703	1-162-941-11	CERAMIC CHIP	10PF 0.5PF 50V
C704	1-163-104-00	CERAMIC CHIP	30PF 5% 50V
C705	1-135-151-21	TANTALUM CHIP	4.7uF 20% 4V
C708	1-164-346-11	CERAMIC CHIP	1uF 16V
C709	1-135-161-21	TANTALUM CHIP	22uF 10% 10V
C710	1-164-346-11	CERAMIC CHIP	1uF 16V
< CONNECTOR >			
CN301	1-695-942-21	CONNECTOR, FFC/FPC (ZIF)	
*CN501	1-764-504-21	CONNECTOR, FPC (ZIF) 22P	
< DIODE >			
D301	8-719-420-51	DIODE MA729	
D302	8-719-404-46	DIODE MA110	
D303	8-719-422-37	DIODE MA8051	
D501	8-719-938-75	DIODE SB05-05CP	
D502	8-719-420-51	DIODE MA729	
D601	8-719-026-34	DIODE CL-170UR-CD (BATT)	
D602	8-719-404-46	DIODE MA110	
D702	8-719-422-37	DIODE MA8051	
< FERRITE BEAD >			
FB701	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB702	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB703	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB704	1-414-235-11	INDUCTOR, FERRITE BEAD	

Ref.No.	Part No.	Description	Remark
FB705	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB706	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB707	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB708	1-414-235-11	INDUCTOR, FERRITE BEAD	
FB709	1-414-235-11	INDUCTOR, FERRITE BEAD	
< HOLE ELEMENT >			
H701	8-719-038-26	ELEMENT, HALL HW-104A-FT (S REEL)	
H702	8-719-038-26	ELEMENT, HALL HW-104A-FT (T REEL)	
< IC >			
IC301	8-759-155-37	IC TA2032AF	
IC501	8-759-197-54	IC uPD1724GB-655-1A7	
IC502	8-759-166-42	IC S-80718HN-UF-T1	
IC601	8-759-099-81	IC LB1678V	
IC701	8-759-250-31	IC MB89131PFV-G-154-BND	
IC702	8-759-163-52	IC XC61AN1402MX	
IC703	8-759-190-80	IC S-81211PG-PA-T1	
IC704	8-759-180-33	IC MM1210-XFF	
< JACK >			
J301	1-573-794-21	JACK (REMOTE)	
< JUMPER RESISTOR >			
JR1	1-216-296-00	METAL CHIP 0 5% 1/8W	
JR2	1-216-864-11	METAL CHIP 0 5% 1/16W	
< COIL >			
L301	1-410-213-51	INDUCTOR CHIP 56uH	
L501	1-414-001-11	INDUCTOR CHIP 0.068uH	
L502	1-410-213-51	INDUCTOR CHIP 56uH	
L503	1-410-209-51	INDUCTOR CHIP 27uH	
L504	1-410-204-31	INDUCTOR CHIP 10uH	
L505	1-412-008-31	INDUCTOR CHIP 15uH	
L804	1-414-042-21	INDUCTOR 18uH	
< FLUORECENT INDICATOR >			
ND501	1-810-189-11	DISPLAY PANEL, LIQUID CRYSTAL	
< TRANSISTOR >			
Q301	8-729-807-86	TRANSISTOR 2SB1295-UL5	
Q302	8-729-602-21	TRANSISTOR 2SC4154-F	
Q303	8-729-425-24	TRANSISTOR XN4604	
Q304	8-729-403-27	TRANSISTOR XN4401	
Q501	8-729-402-16	TRANSISTOR XN4608	
Q502	8-729-117-72	TRANSISTOR 2SC4178-F13	
Q503	8-729-117-72	TRANSISTOR 2SC4178-F13	
Q504	8-729-402-84	TRANSISTOR XN4601	

Ref.No.	Part No.	Description	Remark
Q505	8-729-402-16	TRANSISTOR XN4608	
Q506	8-729-921-08	TRANSISTOR DTC144TU	
Q507	8-729-231-96	TRANSISTOR 2SK880GR-TE85L	
Q601	8-729-809-47	TRANSISTOR 2SD1935-CT7	
Q602	8-729-420-53	TRANSISTOR UN5115	
Q701	8-729-921-08	TRANSISTOR DTC144TU	
Q702	8-729-422-18	TRANSISTOR XN4315	
Q703	8-729-420-50	TRANSISTOR UN5215	
Q704	8-729-420-50	TRANSISTOR UN5215	
< RESISTOR >			
R101	1-216-841-11	METAL CHIP 47K 5%	1/16W
R102	1-216-841-11	METAL CHIP 47K 5%	1/16W
R103	1-218-289-11	METAL GLAZE 510 5%	1/16W
R104	1-216-845-11	METAL CHIP 100K 5%	1/16W
R105	1-218-292-11	METAL GLAZE 20K 5%	1/16W
R106	1-216-853-11	METAL CHIP 470K 5%	1/16W
R107	1-216-839-11	METAL CHIP 33K 5%	1/16W
R108	1-216-839-11	METAL CHIP 33K 5%	1/16W
R109	1-216-994-11	METAL GLAZE 13K 5%	1/16W
R110	1-216-852-11	METAL CHIP 390K 5%	1/16W
R111	1-216-824-11	METAL GLAZE 1.8K 5%	1/16W
R112	1-216-793-11	METAL GLAZE 4.7 5%	1/16W
R113	1-216-825-11	METAL CHIP 2.2K 5%	1/16W
R114	1-216-824-11	METAL CHIP 1.8K 5%	1/16W
R115	1-216-822-11	METAL CHIP 1.2K 5%	1/16W
R116	1-216-822-11	METAL CHIP 1.2K 5%	1/16W
R117	1-216-845-11	METAL CHIP 100K 5%	1/16W
R201	1-216-841-11	METAL CHIP 47K 5%	1/16W
R202	1-216-841-11	METAL CHIP 47K 5%	1/16W
R203	1-218-289-11	METAL GLAZE 510 5%	1/16W
R204	1-216-845-11	METAL CHIP 100K 5%	1/16W
R205	1-218-292-11	METAL GLAZE 20K 5%	1/16W
R206	1-216-853-11	METAL CHIP 470K 5%	1/16W
R207	1-216-839-11	METAL CHIP 33K 5%	1/16W
R208	1-216-839-11	METAL CHIP 33K 5%	1/16W
R209	1-216-994-11	METAL GLAZE 13K 5%	1/16W
R210	1-216-852-11	METAL CHIP 390K 5%	1/16W
R211	1-216-824-11	METAL GLAZE 1.8K 5%	1/16W
R212	1-216-793-11	METAL GLAZE 4.7 5%	1/16W
R213	1-216-825-11	METAL CHIP 2.2K 5%	1/16W
R214	1-216-824-11	METAL CHIP 1.8K 5%	1/16W
R215	1-216-822-11	METAL CHIP 1.2K 5%	1/16W
R216	1-216-822-11	METAL CHIP 1.2K 5%	1/16W
R217	1-216-845-11	METAL CHIP 100K 5%	1/16W
R301	1-216-840-11	METAL CHIP 39K 5%	1/16W
R302	1-218-292-11	METAL GLAZE 20K 5%	1/16W
R303	1-218-271-11	METAL GLAZE 2K 5%	1/16W

Ref.No.	Part No.	Description	Remark
R304	1-216-793-11	METAL GLAZE 4.7 5%	1/16W
R305	1-216-849-11	METAL CHIP 220K 5%	1/16W
R306	1-216-845-11	METAL CHIP 100K 5%	1/16W
R307	1-216-827-11	METAL CHIP 3.3K 5%	1/16W
R308	1-216-849-11	METAL CHIP 220K 5%	1/16W
R309	1-216-809-11	METAL CHIP 100 5%	1/16W
R310	1-216-809-11	METAL CHIP 100 5%	1/16W
R311	1-216-809-11	METAL CHIP 100 5%	1/16W
R312	1-216-831-11	METAL CHIP 6.8K 5%	1/16W
R313	1-216-844-11	METAL CHIP 82K 5%	1/16W
R314	1-216-254-00	METAL GLAZE 220K 5%	1/8W
R317	1-218-292-11	METAL GLAZE 20K 5%	1/16W
R501	1-216-841-11	METAL CHIP 47K 5%	1/16W
R502	1-216-853-11	METAL CHIP 470K 5%	1/16W
R503	1-216-821-11	METAL CHIP 1K 5%	1/16W
R504	1-218-484-11	METAL GLAZE 750 5%	1/16W
R505	1-216-836-11	METAL CHIP 18K 5%	1/16W
R506	1-216-809-11	METAL CHIP 100 5%	1/16W
R507	1-216-809-11	METAL CHIP 100 5%	1/16W
R508	1-216-823-11	METAL CHIP 1.5K 5%	1/16W
R509	1-216-841-11	METAL CHIP 47K 5%	1/16W
R510	1-216-830-11	METAL CHIP 5.6K 5%	1/16W
R511	1-216-857-11	METAL CHIP 1M 5%	1/16W
R512	1-216-857-11	METAL CHIP 1M 5%	1/16W
R513	1-216-857-11	METAL CHIP 1M 5%	1/16W
R514	1-216-839-11	METAL CHIP 33K 5%	1/16W
R515	1-216-825-11	METAL CHIP 2.2K 5%	1/16W
R516	1-216-845-11	METAL CHIP 100K 5%	1/16W
R517	1-216-833-11	METAL CHIP 10K 5%	1/16W
R518	1-216-845-11	METAL CHIP 100K 5%	1/16W
R519	1-216-825-11	METAL CHIP 2.2K 5%	1/16W
R520	1-216-841-11	METAL CHIP 47K 5%	1/16W
R521	1-216-833-11	METAL CHIP 10K 5%	1/16W
R522	1-216-857-11	METAL CHIP 1M 5%	1/16W
R523	1-216-857-11	METAL CHIP 1M 5%	1/16W
R524	1-216-839-11	METAL CHIP 33K 5%	1/16W
R525	1-216-829-11	METAL CHIP 4.7K 5%	1/16W
R603	1-216-824-11	METAL CHIP 1.8K 5%	1/16W
R604	1-216-853-11	METAL CHIP 470K 5%	1/16W
R605	1-216-846-11	METAL CHIP 120K 5%	1/16W
R606	1-216-848-11	METAL CHIP 180K 5%	1/16W
R607	1-216-840-11	METAL CHIP 39K 5%	1/16W
R610	1-216-815-11	METAL CHIP 330 5%	1/16W
R611	1-216-853-11	METAL CHIP 470K 5%	1/16W
R612	1-216-853-11	METAL CHIP 470K 5%	1/16W
R613	1-216-841-11	METAL CHIP 47K 5%	1/16W
R614	1-216-847-11	METAL CHIP 150K 5%	1/16W
R615	1-216-845-11	METAL CHIP 100K 5%	1/16W

MAIN

TUNER UNIT

Ref.No.	Part No.	Description	Remark
R616	1-216-859-11	METAL GLAZE	1.5M 5% 1/16W
R701	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R702	1-218-292-11	METAL GLAZE	20K 5% 1/16W
R703	1-218-292-11	METAL GLAZE	20K 5% 1/16W
R704	1-218-292-11	METAL GLAZE	20K 5% 1/16W
R705	1-216-845-11	METAL CHIP	100K 5% 1/16W
R706	1-216-849-11	METAL CHIP	220K 5% 1/16W
R707	1-216-849-11	METAL CHIP	220K 5% 1/16W
R708	1-216-849-11	METAL CHIP	220K 5% 1/16W
R709	1-216-849-11	METAL CHIP	220K 5% 1/16W
R710	1-216-851-11	METAL CHIP	330K 5% 1/16W
R711	1-216-809-11	METAL CHIP	100 5% 1/16W
R712	1-216-845-11	METAL CHIP	100K 5% 1/16W
R713	1-216-851-11	METAL CHIP	330K 5% 1/16W
R714	1-216-821-11	METAL CHIP	1K 5% 1/16W
R715	1-216-839-11	METAL CHIP	33K 5% 1/16W
R716	1-216-851-11	METAL CHIP	330K 5% 1/16W
R717	1-216-845-11	METAL CHIP	100K 5% 1/16W
R719	1-216-843-11	METAL CHIP	68K 5% 1/16W
R720	1-218-870-11	METAL GLAZE	9.1K 0.5% 1/16W
R721	1-218-269-11	METAL CHIP	360 0.50% 1/16W
R722	1-216-852-11	METAL CHIP	390K 5% 1/16W
R723	1-218-845-11	METAL CHIP	820 0.50% 1/16W
R724	1-216-821-11	METAL CHIP	1K 5% 1/16W
R725	1-218-694-11	METAL CHIP	1.2K 0.50% 1/16W
R726	1-216-823-11	METAL CHIP	1.5K 5% 1/16W
R727	1-216-845-11	METAL CHIP	100K 5% 1/16W
R728	1-216-845-11	METAL CHIP	100K 5% 1/16W
R729	1-216-849-11	METAL CHIP	220K 5% 1/16W
R730	1-216-849-11	METAL CHIP	220K 5% 1/16W
R731	1-218-668-11	METAL CHIP	100 0.50% 1/16W
R732	1-218-708-11	METAL CHIP	4.7K 0.50% 1/16W

< VARIABLE RESISTOR >

RV301	1-223-558-11	RES, VAR, CARBON 10K/10K (VOL.▲)
RV601	1-223-325-21	RES, ADJ, METAL GLAZE 100K

< SWITCH >

S301	1-572-922-11	SWITCH, SLIDE (MONO ST/DOLBY NR))
S302	1-692-605-11	SWITCH, SLIDE (EX DBB)
S701	1-572-581-11	SWITCH, SLIDE (FWD/REV)
S702	1-572-922-11	SWITCH, SLIDE (BL SKIP/フコ)
S703	1-692-377-21	SWITCH, PUSH (1 KEY) (A/B)

Ref.No.	Part No.	Description	Remark
		< SWITCH >	
SW5	1-692-453-11	SWITCH, KEY BOARD (RADIO OFF/■)	
SW6	1-692-453-11	SWITCH, KEY BOARD (◀▶/REPEAT)	
SW7	1-692-453-11	SWITCH, KEY BOARD (PRESET+FF/AMS)	
SW8	1-692-453-11	SWITCH, KEY BOARD (PRESET-REW/AMS)	
SW9	1-692-453-11	SWITCH, KEY BOARD (RADIO ON/BAND/	AREA FREE)

< VIBRATOR >

X501	1-577-262-11	VIBRATOR, CRYSTAL (75kHz)
X701	1-579-867-21	VIBRATOR, CERAMIC (2MHz)
X702	1-579-258-11	VIBRATOR, CRYSTAL (32.768kHz)

1-693-237-11 TUNER UNIT

1-650-821-11	TUNER FLEXIBLE BOARD
3-385-161-02	TERMINAL BOARD (LITHIUM M)
3-905-339-01	TERMINAL BOARD (LITHIUM P)

< IC >

IC1	8-759-245-96	IC TA8182FN
IC2	8-759-231-03	IC TA8153FN
IC3	8-759-250-73	IC TA2040F-EL

< SWITCH >

S1	1-692-088-21	SWITCH, TACTILE (ENTER)
S2	1-692-088-21	SWITCH, TACTILE (TUNE +)
S3	1-692-088-21	SWITCH, TACTILE (TUNE -)

MISCELLANEOUS

16	1-650-819-11	ATS FLEXIBLE BOARD
71	1-646-378-11	MOTOR FLEXIBLE BOARD
115	1-650-886-11	PLUNGER FLEXIBLE BOARD
HP901	1-500-001-11	HEAD, MAGNETIC (PLAYBACK)
M901	1-698-033-01	MOTOR

PL901	1-454-529-11	SOLENOID, PLUNGER
S901	1-572-580-11	SWITCH, LEAF (TAPE, ATS)

ACCESSORIES & PACKING MATERIALS

1-467-484-11	REMOTE CONTROL UNIT (RM-WM77F)
1-528-492-11	BATTERY, NICKEL HYDROGEN (NH-9WM)
1-528-274-11	BATTERY, LITHIUM
1-528-445-11	BATTERY CHARGER (BC-8AT)
1-550-640-11	BATTERY CASE

△

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

Ref.No.	Part No.	Description	Remark
△	1-569-007-11	ADAPTOR, CONVERSION 2P	
	1-691-322-11	ADAPTOR, PLUG	
*	3-376-784-11	CUSHION	
	3-377-276-01	CASE, CARRYING	
	3-757-997-41	MANUAL, INSTRUCTION (JAPANESE, ENGLISH)	
	3-757-997-51	MANUAL, INSTRUCTION (KOREAN)	
*	3-908-719-01	INDIVIDUAL CARTON	
	8-953-537-90	HEADPHONE MDR-E741MP//K SET	
	X-3329-657-1	ATTACHMENT	

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

WM-FX999

SONY[®] SERVICE MANUAL

Tourist Model

SUPPLEMENT-1

File this supplement with the service manual.

Subject : Parts are changed and corrected.

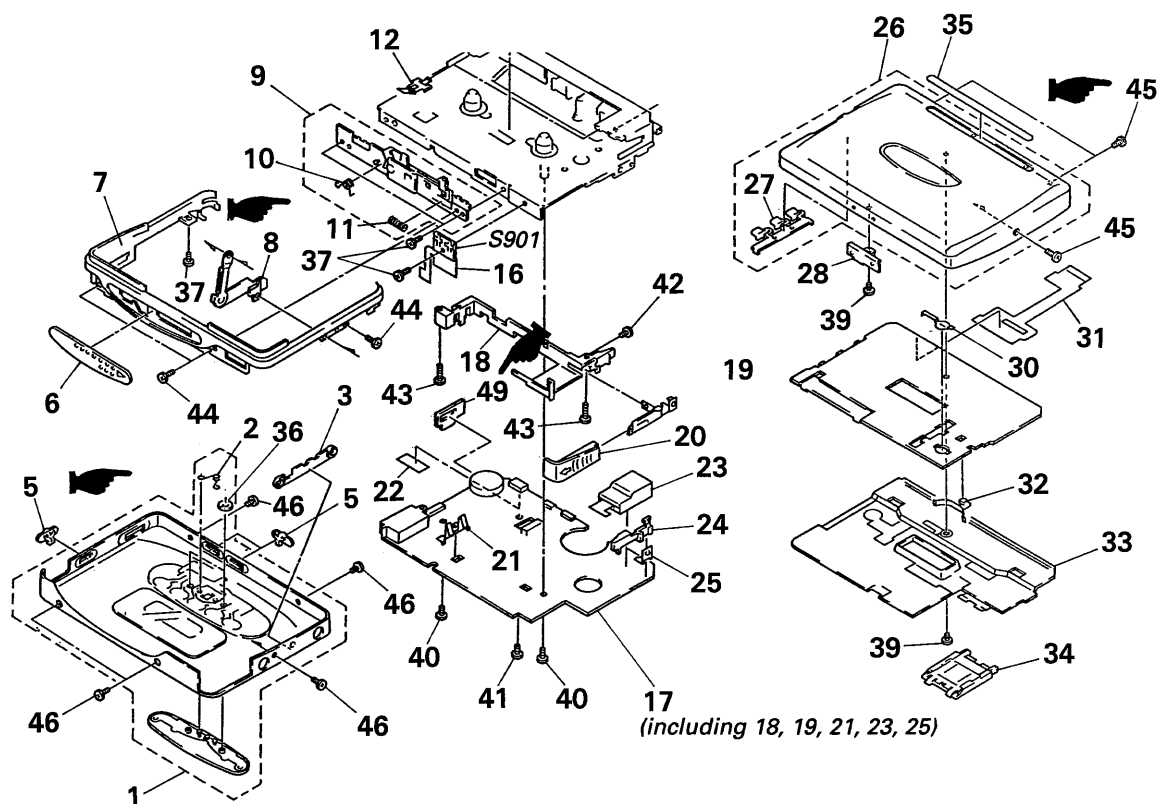
●Corrected parts

Page	INCORRECT	CORRECT
24	3 3-909-292-01 PLATE (TERMINAL), BLIND	3-387-898-01 PLATE (TERMINAL), ORNAMENTAL
	24 3-387-898-01 PLATE (TERMINAL), ORNAMENTAL	3-909-292-01 PLATE (TERMINAL), BLIND
25	M901 1-698-033-01 MOTER	1-698-307-11 MOTOR
26	105 X-3365-950-1 CLUTCH ASSY	X-3367-862-1 CLUTCH (S) ASSY
	107 X-3365-951-1 GEAR (DECELERATION) ASSY	X-3367-861-1 GEAR (DECELERATION) (S) ASSY

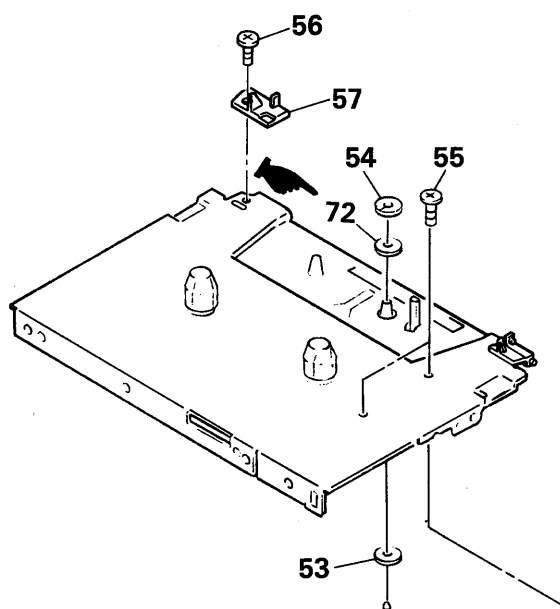
 : Indicates changed portion

● EXPLODED VIEWS

● CASE SECTION (Service Manual Page 23)



● MECHANISM SECTION-1 (Service Manual Page 25)



●Changed parts

Page	FORMER TYPE	NEW TYPE
24	<p>4 3-909-280-01 PLATE (VOL), BLIND</p> <p>12 3-909-357-01 SPRING (CASSETTE CF)</p> <p>36 3-910-829-01 WASHER</p> <p>38 3-907-009-01 SCREW (M1.4)</p> <p>47 3-349-825-11 SCREW (M1.4X2.0), LOCKING (SILVER)</p> <p>47 3-349-825-82 SCREW (M1.4X2.0), LOCKING (BLACK,TITAN)</p> <p>* 48 3-578-260-00 SPACER</p> <p>49 _____</p>	<p>_____</p> <p>3-909-286-01 SPRING (CASSETTE)</p> <p>3-911-816-01 WASHER (SHUTTER)</p> <p>3-907-009-41 SCREW (M1.4)</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>3-911-725-01 SHEET (VOL)</p>
25	<p>52 X-3367-697-1 WHEEL ASSY, CAPSTAN</p> <p>53 3-350-945-31 WASHER (t=0.3mm)</p> <p>54 3-348-993-01 WASHER (t=0.25mm)</p> <p>71 1-646-378-11 MOTOR FLEXIBLE BOARD</p> <p>72 _____</p>	<p>X-3368-640-1 WHEEL (SS) ASSY, CAPSTAN</p> <p>3-350-945-11 WASHER (t=0.2mm)</p> <p>3-348-993-21 WASHER (t=0.19mm)</p> <p>1-644-696-11 MOTOR FLEXIBLE BOARD</p> <p>3-350-989-01 WASHER (t=0.25mm)</p>
26	<p>109 3-385-055-01 GEAR, CAM</p> <p>PL901 1-454-529-11 SOLENOID, PLUNGER</p>	<p>3-385-055-05 GEAR, CAM</p> <p>1-454-674-11 SOLENOID, PLUNGER</p>
28	<p>IC701 8-759-250-31 IC MB89131PFV-G-154-BND</p>	<p>8-759-266-54 IC MB89131PFV-172</p>

