

WM-FX571

SERVICE MANUAL

Tourist Model

Ver 1.0 1999.03



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Model Name Using Similar Mechanism	WM-FX551/FX553
Tape Transport Mechanism Type	MF-WMFX551-125

SPECIFICATIONS

Radio section

Frequency range

FM : 87.5 – 108 MHz
AM : 531 – 1,602 kHz

Tape section

Frequency response

(Dolby NR off)
Playback : 20 – 18,000 Hz

Output

Headphones (Ω REMOTE jack)
Load impedance 8 – 300 Ω

General

Power requirements

1.5 V
One R6 (size AA) battery
Rechargeable battery

Dimensions (w/h/d)

Approx. 109 × 79.2 × 29.4 mm
(4 3/8 × 3 1/8 × 1 3/16 inches) incl.
projecting parts and controls

Mass

Approx. 150 g (5.3 oz)
Approx. 210 g (7.5 oz) incl.
a battery and a cassette

Supplied accessories

Stereo earphones with remote control MDR-WMF653 (1)
Battery charger BC-820T (1)
AC plug adaptor (1)
Rechargeable battery (NC-AA) (1)
Battery R6P (SR) (1)
Carrying pouch (1)

Design and specifications are subject to charge without notice.

RADIO CASSETTE PLAYER

SONY[®]



TABLE OF CONTENTS

1. GENERAL	3
2. SERVICE NOTE	3
3. DISASSEMBLY	
3-1. Case Assy	4
3-2. Tuner Board	4
3-3. Audio Board	5
3-4. Cassette Lid Assy	5
3-5. Tape Mechanism Deck	6
4. MECHANICAL ADJUSTMENTS	7
5. ELECTRICAL ADJUSTMENTS	
Tape Section	7
Tuner Section	8
6. DIAGRAMS	
6-1. Block Diagram	9
6-2. IC Pin Description	11
6-3. Printed Wiring Boards –Tuner Section–	13
6-4. Schematic Diagram –Tuner Section–	17
6-5. Schematic Diagram –Audio Section–	20
6-6. Printed Wiring Board –Audio Section–	23
7. EXPLODED VIEWS	
7-1. Cabinet Section	29
7-2. Audio and Tuner Board Section	30
7-3. Tape Mechanism Section	31
8. ELECTRICAL PARTS LIST	32

Flexible Circuit Board Repairing

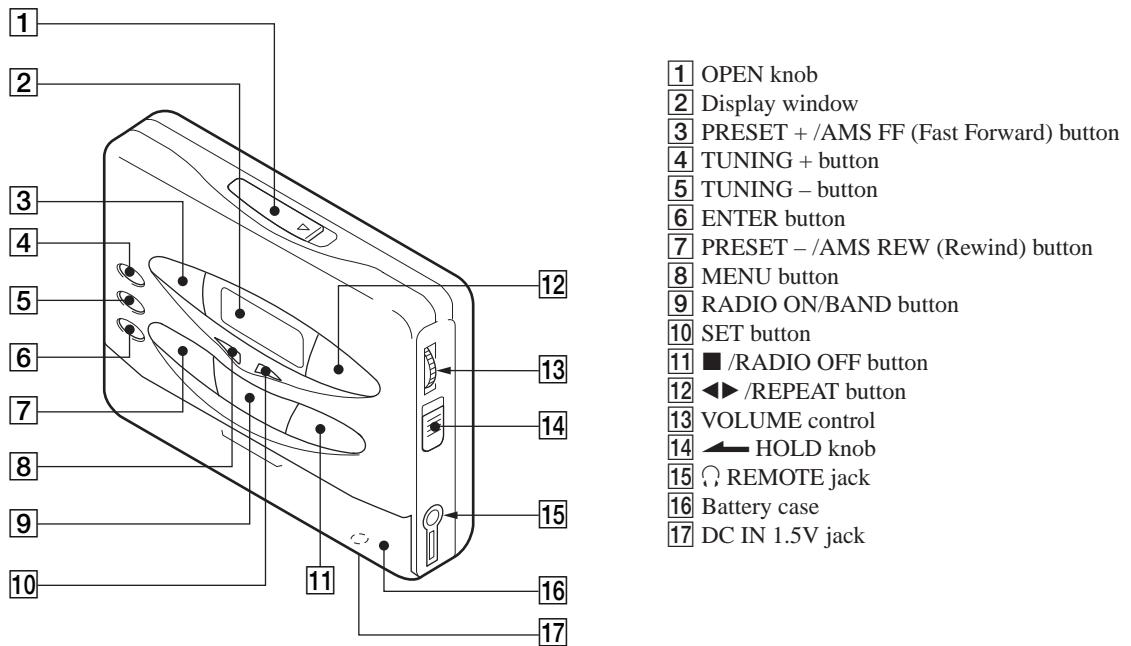
- Keep the temperature of the soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on Chip Component Replacement

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

SECTION 1 GENERAL

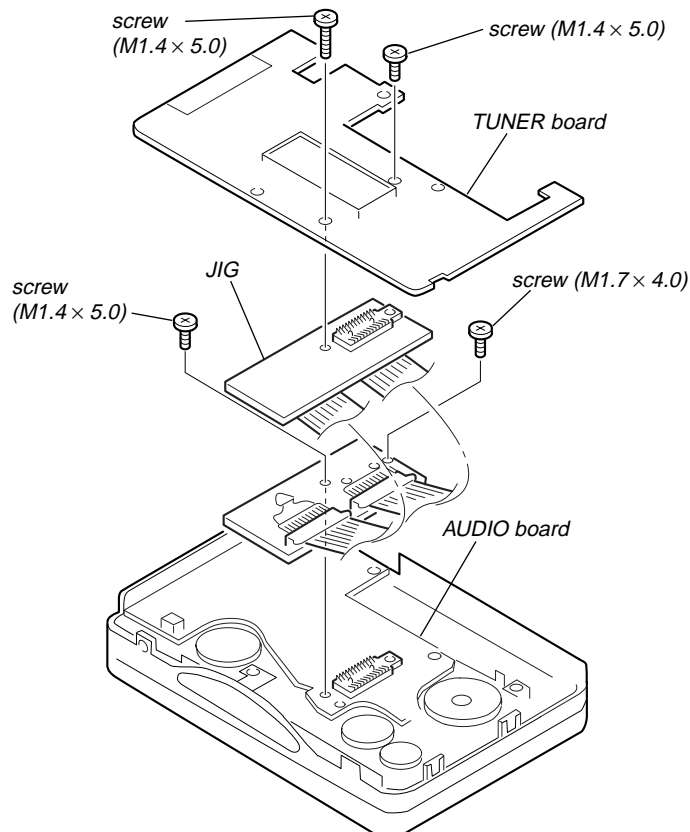
• LOCATION OF CONTROLS



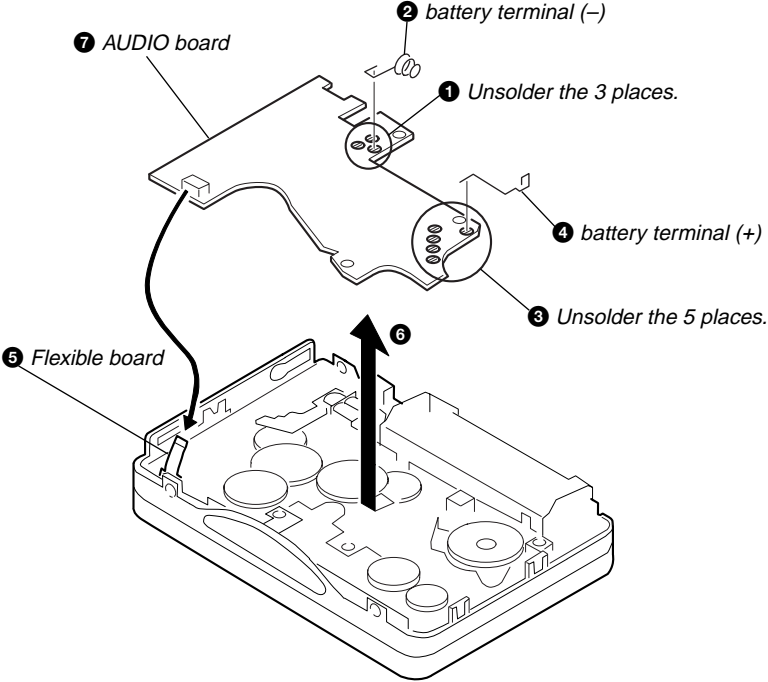
SECTION 2 SERVICE NOTE

- Regarding the method of adjustment and voltage check, perform sections 3-1 and 3-2 of the DISASSEMBLY, and attach the JIG (extension cable) to the AUDIO board as shown below.

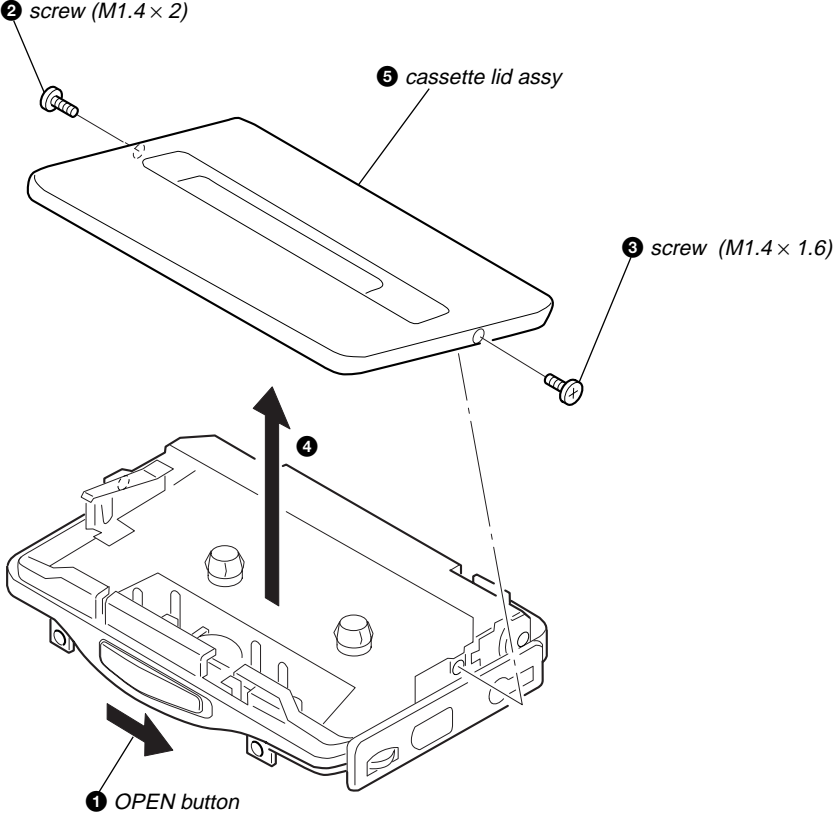
JIG Part No.: J-2503-005-A



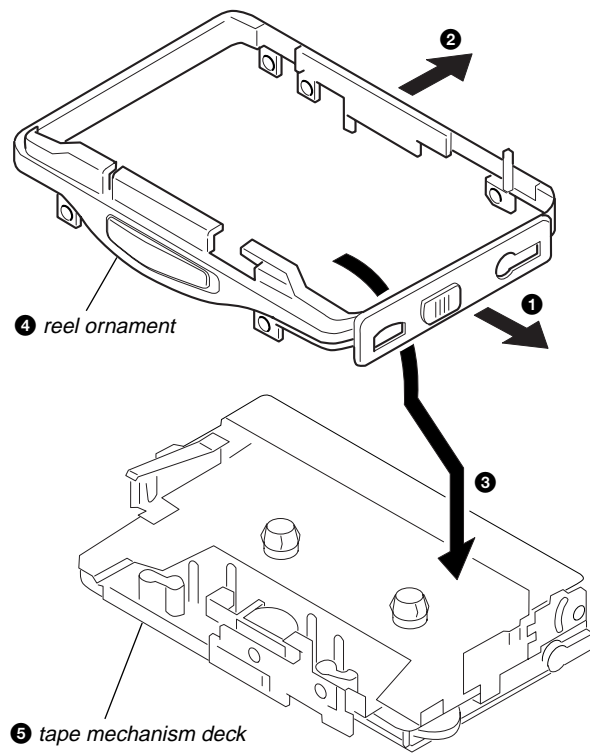
3-3. AUDIO BOARD



3-4. CASSETTE LID ASSY



3-5. TAPE MECHANISM DECK



SECTION 4 MECHANICAL ADJUSTMENTS

PRECAUTION

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

Playback head	Pinch roller
Rubber belt	Capstan
2. Demagnetize the playback head using a demagnetizer.
3. Do not use a magnetized screwdriver for adjustments.
4. After adjusting, apply screw-locking compound onto the adjusted parts.
5. Unless specified otherwise, use a specified voltage (1.3V) to perform the adjustments.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	20 to 30 g · cm (0.28 to 0.42 oz · inch)
FWD Back Tension		0.4 to 2.0 g · cm (0.0056 to 0.028 oz · inch)
REV	CQ-102RC	20 to 30 g · cm (0.28 to 0.42 oz · inch)
REV Back Tension		0.4 to 2.0 g · cm (0.0056 to 0.028 oz · inch)
FF	CQ-201B	More than 40 g · cm
REW		(More than 0.56 oz · inch)

SECTION 5 ELECTRICAL ADJUSTMENTS

PRECAUTION

1. Specified voltage : 1.3V
2. Switch position
MENU button : NR light off (OFF)
 : AVLS light off (OFF)

TAPE SECTION

0 dB=0.775 V

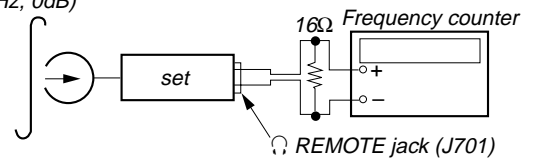
Test Tape

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

Tape Speed Adjustment

Procedure :

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



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:

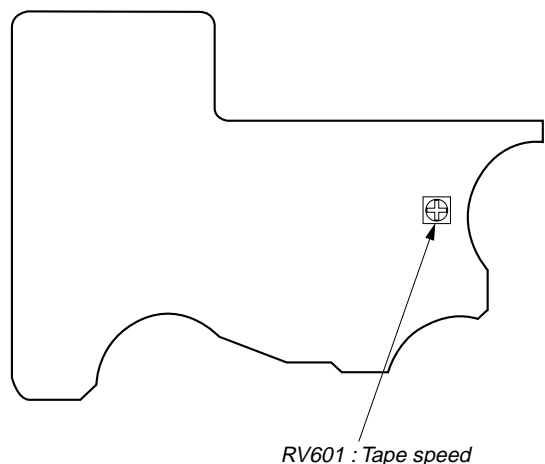
Digital frequency counter

2,970 to 3,030 Hz

2. Playback WS-48A (Tape center part) in the REV state. Check that frequency counter reading is within 60 Hz of the reading of step1.

Adjustment Location :

[MAIN BOARD] — SIDE A —



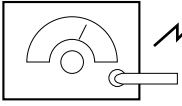
TUNER SECTION

0 dB=1 μV

[AM]

RADIO ON/BAND button : AM

AM RF signal generator



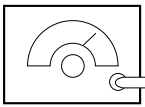
Put the lead-wire antenna close to the set.

30% amplitude modulation by 400Hz signal.
Output level : as low as possible

[FM]

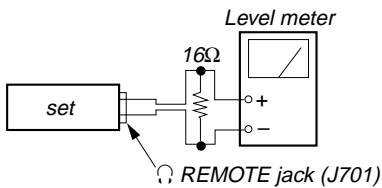
RADIO ON/BAND button : FM

FM RF signal generator



0.01μF to ANT (TP1)

22.5kHz frequency deviation by 400Hz signal.
Output level : as low as possible



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L4	621kHz
CT1	1,395kHz

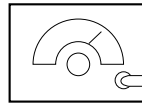
FM IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	10.7MHz

FM VOLTAGE ADJUSTMENT	
1.05 to 1.15 V	
L2	76MHz

FM VCO Adjustment

Procedure :

FM RF signal generator



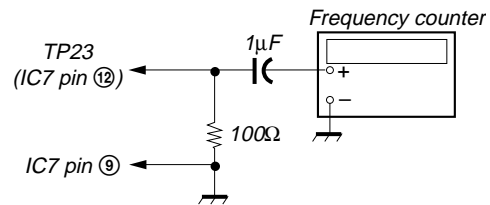
0.01μF to ANT (TP1)

Carrier frequency : 98MHz
Modulation : No modulation
Output level : 0.1V (100dB)

1. Connect the frequency counter to the positions shown below.
2. Turn the set to 98 MHz.
3. Adjust RV1 for 19,000 Hz reading on the frequency counter.

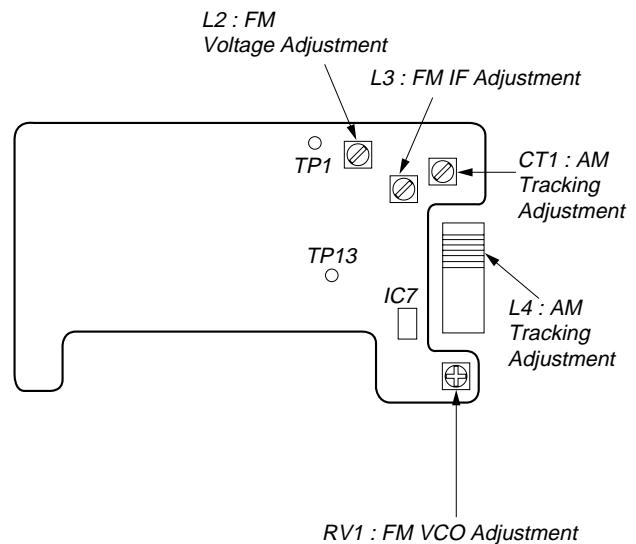
Specification Value:

Digital frequency counter
18,900 to 19,100 Hz



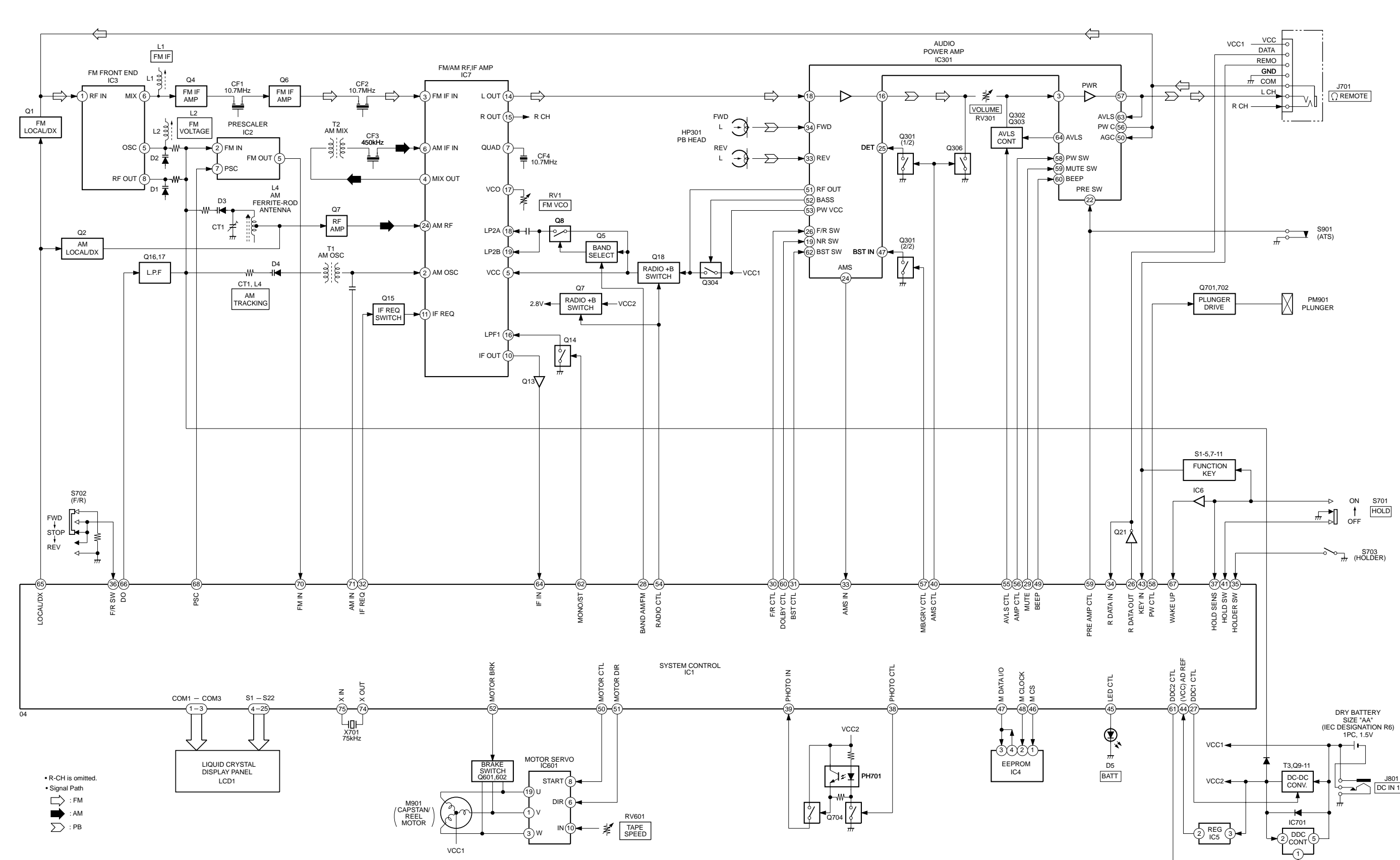
Adjustment Location :

[TUNER BOARD] — SIDE A —



SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAM

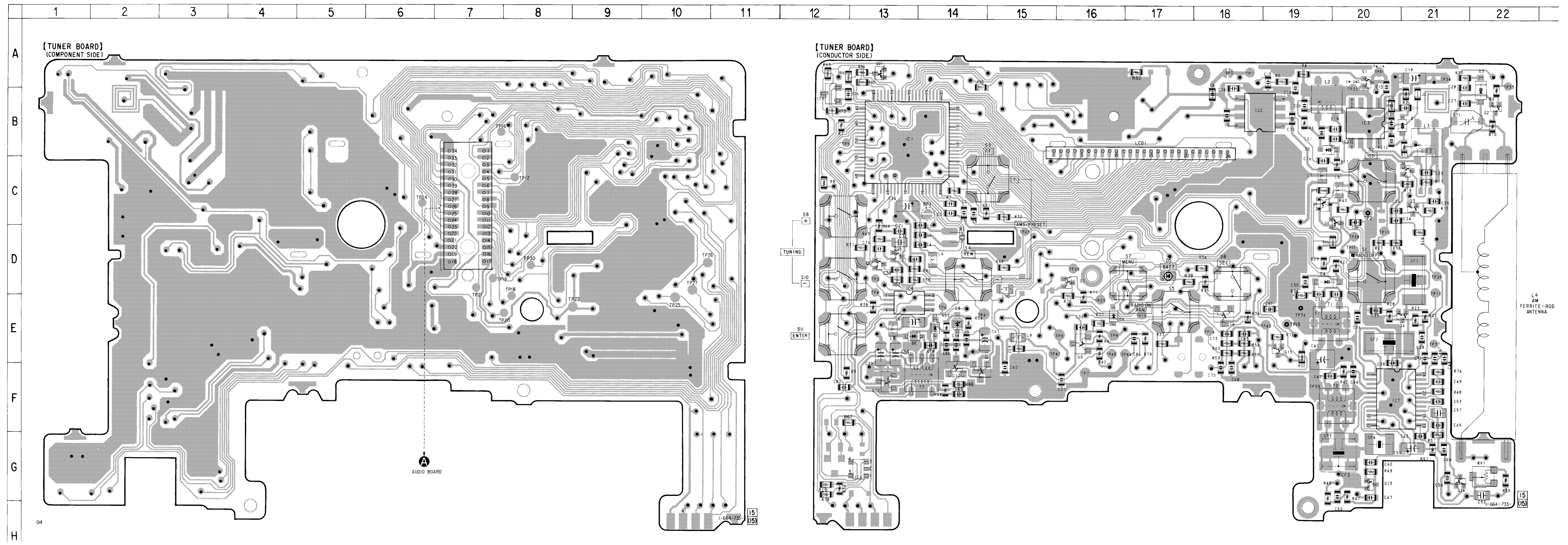


6-2. IC PIN DESCRIPTION
• IC1 TC9326F-051 (SYSTEM CONTROL)

Pin No.	Function	Pin Name	I/O	Circuit	INT	ACT	Description	Remarks
1 to 3	COM 1 to 3	COM 1 to 3	—	—	—	—	Common terminal.	
4 to 25	S1 to 22	S1 to 22	—	—	—	—	Segment output terminal.	
26	R DATA OUT	P13-1	O	Output	H	—	Remote control data output.	VLD at High level.
27	DDC1 CTL	P13-2	O	Output (Nch)	Hi-imp	L	DDC control terminal (when DDC ON = L).	Pull-up at outside (TUNER side).
28	BAND AM/FM	P13-3	O	Output (Nch)	Hi-imp	—	BAND control output (when AM = Hi-imp, when FM = L).	
29	MUTE CTL	P14-0	O	Output (Nch)	Hi-imp	L	MUTE control terminal (when MUTE ON = L).	Pull-up at outside (Vcc).
30	F/R CTL	P14-1	O	Output (Nch)	Hi-imp	—	HEAD select terminal (when FWD = Hi-imp, when REV = L).	Pull-up at outside (Vcc).
31	BST CTL	P14-2	O	Output (Nch)	L	Hi-imp	Tone control terminal (when BOOST ON = Hi-imp, when OFF = L).	Pull-up at outside (Vcc).
32	IF REQ	P14-3	O	Output (Nch)	Hi-imp	L	IF REQ control terminal (when REQ = Hi-imp).	Pull-up at outside (Vref).
33	HOLD SW	IN2	I	Input	—	—	HOLDER detect input (when HOLDER CLOSE = H).	Pull-up at outside (V _{CCS}).
34	R DATA IN	K0	I	Input	L	VCC	Communication request from the remote controller. (H = VCC).	A/D input.
35	HOLDER, TUNE	K1	I	Input	—	—	HOLDER detect and TAPE error erase detect terminal.	A/D input.
36	F/R SW	K2	I	Input	—	—	TAPE rotating direction detect terminal.	A/D input.
37	HOLD SENS	K3	I	Input	L	AD Vref	Input when the key is pressed during HOLD (H = AD Vref).	A/D input.
38	PHOTO CTL	P1-1	O	Input/Output	L	H	Terminal for controlling the rotation detect circuit.	
39	PHOTO IN	P1-2	I	Input/Output	—	—	Rotation detect input.	Pull-down at outside.
40	AMS CTL	P1-3	O	Input/Output	L	H	AMS sensitivity select (when AMS = H, when BLSKIP = L).	
41	AMS IN	P2-0/AD IN1	I	Input/Output	—	—	Tape sound existing or not-existing detect (Music exists: L, music does not exist: H).	Pull-up at outside.
42	BATT DET	P2-1/AD IN2	I	Input/Output	—	—	Voltage detect input.	
43	KEY IN	P2-2	I	Input/Output	H	—	KEY input terminal.	
44	AD Vref	P2-3	I	Input/Output	—	—	Reference voltage of AD IN 1, 2.	
45	LED CTL	P3-0	O	Input/Output	L	H	LED output terminal.	
46	CS	P3-1	O	Input/Output	L	—	E'PROM CS control terminal.	
47	M DATA I/O	P3-2	I/O	Input/Output	L	—	E'PROM DATA I/O.	
48	M CLOCK	P3-3/BUZR	O	Input/Output	L	—	E'PROM CLOCK terminal.	
49	BEEP	P4-0	O	Input/Output	—	—	BEEP (when TC : 1.6 kHz, when CF : 3.0 kHz).	
50	MOTOR CTL	P4-1	O	Input/Output	L	H	MOTOR control terminal.	
51	MOTOR DIR	P4-1	O	Input/Output	L	H	MOTOR control terminal.	
52	MOTOR BRK	P4-2	O	Input/Output	L	H	MOTOR control terminal.	
53	REC CTL	P4-3	O	Input/Output	L	H	REC circuit control output.	
54	RADIO CTL	P5-0	O	Input/Output	H	L	RADIO system control terminal (when RADIO ON = L).	
55	AVLS CTL	P5-1	O	Input/Output	L	L	Terminal for controlling AVLS (when ON = L).	
56	AMP CTL	P5-2	O	Input/Output	L	H	AMP control output (when AMP ON = H).	
57	GRV/MB CTL	P5-3	O	Input/Output	L	H	Tone control terminal (when GRV = L, when MB = H).	
58	PM CTL	P6-0	O	Ternary output	L	H	PL control terminal.	
59	PRE AMP CTL	P6-1	O	Ternary output	Hi-imp	Hi-imp	TC/CF select output (when PRE OFF = H, when PRE ON = Hi-imp).	
60	DOLBY CTL	P6-2	O	Ternary output	Hi-imp	Hi-imp	Terminal for controlling DOLBY circuit (when OFF = H, when ON = Hi-imp).	
61	DDC2 CTL	P6-3	O	Ternary output	Hi-imp	Hi-imp	DDC control terminal (ON at Hi-imp, OFF at L).	
62	MONO/ST	MUTE	O	Output	L	—	TUNER MONO/STEREO select terminal (MONO at H).	
63	TEST	TEST	—	—	—	—	TEST terminal (Normal operation at L or NC).	Open
64	IF IN	IF IN	I	Input	—	—	IF input.	
65	LOCAL/DX	DO1/OT	O	Output	L	—	TUNER sensitivity select terminal (LOCAL at H, DX at L).	
66	DO	DO2	O	Output	—	—	Phase comparator output.	
67	HOLD	HOLD	I	External interrupt	H	—	External interrupt terminal.	
68	PSC	PSC	O	Output	—	H	Pre-scaler output (FM at H).	
69	GND	GND	—	—	—	—	Power supply GND terminal.	

Pin No.	Function	Pin Name	I/O	Circuit	INT	ACT	Description	Remarks
70	FM IN	FM IN	I	—	—	—	Pre-scaler input.	
71	AM IN	AM IN	O	—	—	—	AM local oscillator output.	
72	VDD	VDD	—	—	—	—	Power supply voltage.	
73	RESET	RESET	I	—	L	H	RESET terminal (H during operation).	
74	XOUT	XOUT	O	—	—	—	Terminal to which external oscillator is connected.	
75	XIN	XIN	I	—	—	—	Terminal to which external oscillator is connected.	
76	VXT	VXT	—	—	—	—	Terminal to which external capacitor is connected to stabilize crystal oscillator power supply.	
77	VLCD	VLCD	—	—	—	—	Terminal to step-up power supply voltage for LCD drive.	
78	C1	C1	—	—	—	—	Terminal to step-up power supply voltage for LCD drive.	
79	C2	C2	—	—	—	—	Terminal to step-up power supply voltage for LCD drive.	
80	VEE	VEE	—	—	—	—	Terminal for 1.5 V constant voltage power supply of LCD drive.	

6-3. PRINTED WIRING BOARD — TUNER SECTION —



A
B
C
D
E
F
G
H

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

[TUNER BOARD]
(COMPONENT SIDE)

[TUNER BOARD]
(CONDUCTOR SIDE)

A
AUDIO BOARD

L4
AM
FERRITE-ROD
ANTENNA

15
(15)

04

6-4. SCHEMATIC DIAGRAM — TUNER SECTION — • Refer to page 27 for IC Block Diagrams.

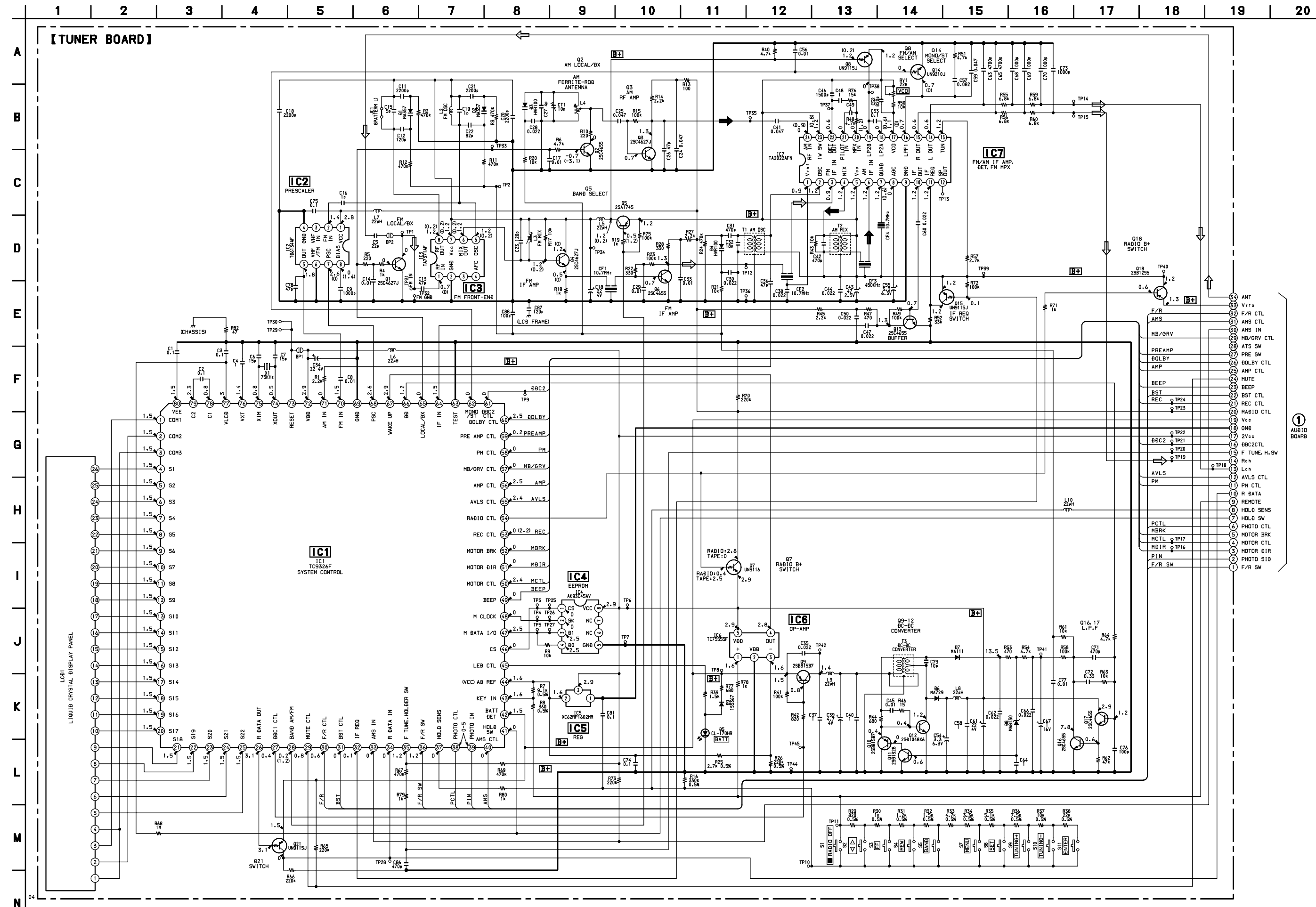
• Semiconductor Location

Ref. No.	Location
D1	B-20
D2	B-19
D3	A-21
D4	D-19
D5	D-17
D6	E-13
D7	E-13
D8	E-14
D9	E-16
IC1	B-13
IC2	B-18
IC3	B-19
IC4	E-13
IC5	B-12
IC6	G-12
IC7	F-20
Q1	A-19
Q2	B-21
Q3	C-20
Q4	C-20
Q5	C-19
Q6	E-20
Q7	D-15
Q8	C-19
Q9	E-15
Q10	F-14
Q11	F-14
Q12	F-13
Q13	G-19
Q14	G-21
Q15	E-18
Q16	D-13
Q17	D-13
Q18	E-17
Q21	A-12

Note on Printed Wiring Board:

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

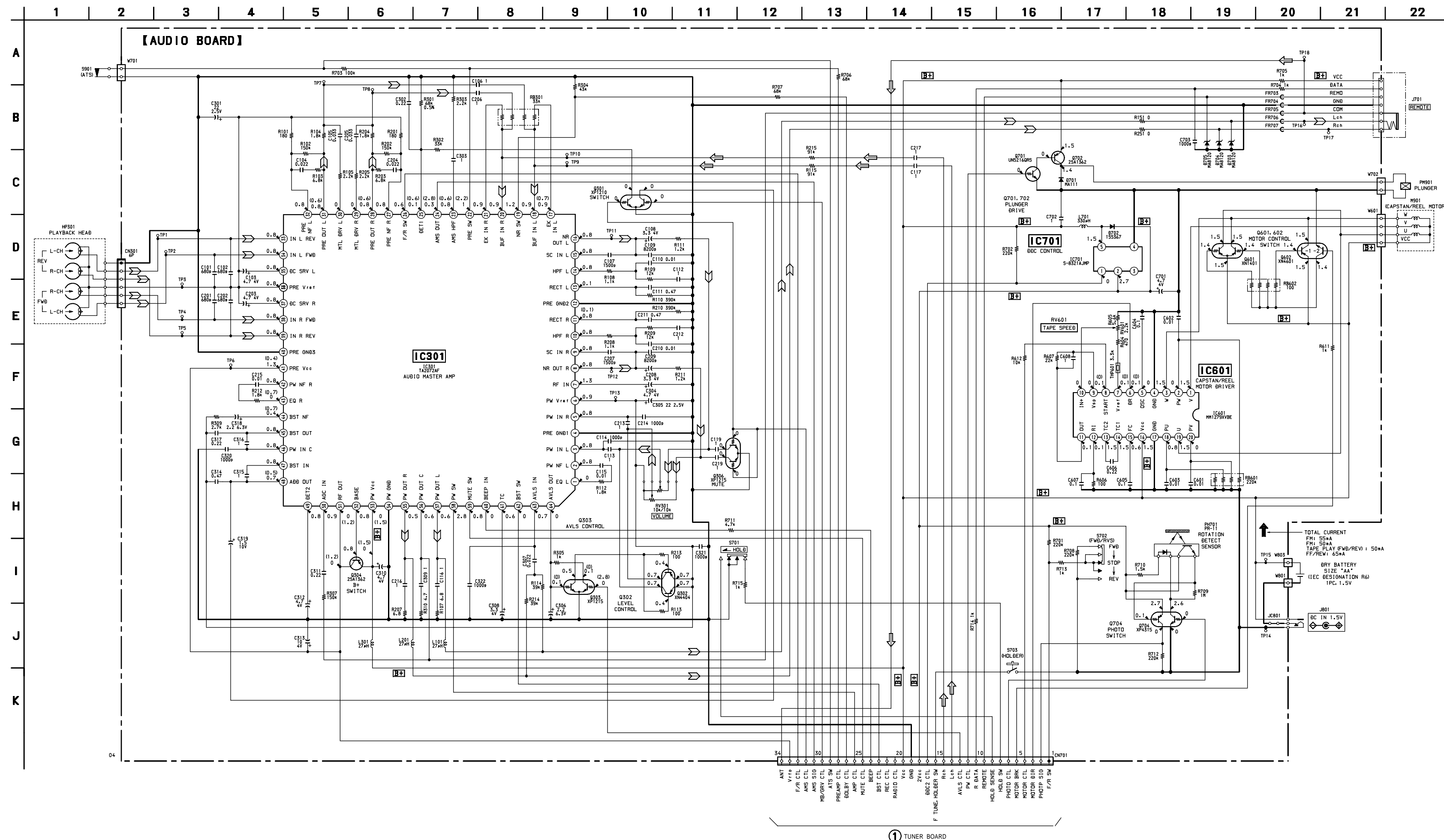
Caution:
 Pattern face side: Parts on the pattern face side seen from the pattern face are indicated.
 (Conductor Side)
 Parts face side: Parts on the parts face side seen from the parts face are indicated.
 (Component Side)



Note on Schematic Diagram:

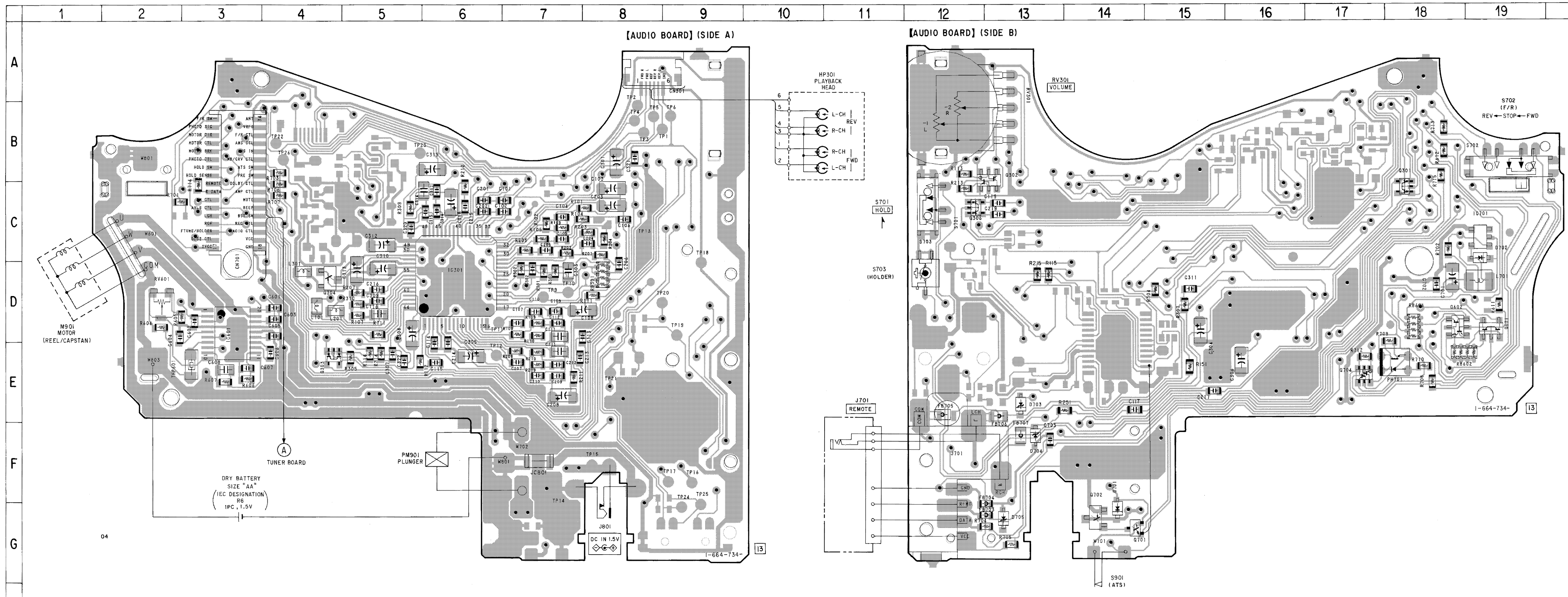
- All capacitors are in μF unless otherwise noted. pF : μpF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- % : indicates tolerance.
- [] : panel designation.
- B+ : B+ Line.
- [] : adjustment for repair.
- Power voltage is dc 1.5 V and fed with regulated dc power supply from external power voltage jack.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM
- () : AM
- * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- * : Printed inductor.
- Signal path.
- [] : FM
- [] : AM

6-5. SCHEMATIC DIAGRAM — AUDIO SECTION — • Refer to page 28 for IC Block Diagrams.



- Note:**
- All capacitors are in μF unless otherwise noted. pF : μpF 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 - % : indicates tolerance.
 - [] : panel designation.
 - [B+] : B+ Line.
 - [] : adjustment for repair.
 - Total current is measured with no cassette installed. Power voltage is dc 1.5 V and fed with regulated dc power supply from external power voltage jack.
 - Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions. no mark : PB () : FM
 - Voltages are taken with a VOM (Input impedance 10 $\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.
 - Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
 - Signal path. \Rightarrow : FM \Rightarrow : PB

6-6. PRINTED WIRING BOARD — AUDIO SECTION —



• Semiconductor Location

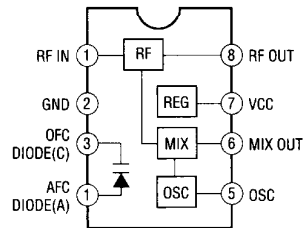
Ref. No.	Location
D701	F-14
D702	C-19
D703	E-13
D704	F-13
D705	G-13
IC301	D-6
IC601	D-3
IC701	C-19
PH701	E-18
Q301	C-18
Q302	B-13
Q303	E-4
Q304	D-4
Q306	C-12
Q601	D-19
Q602	D-18
Q701	G-14
Q702	G-14
Q704	E-17

Note:
 • : Through hole.
 • : Pattern from the side which enables seeing. (The other layer's patterns are not indicated.)

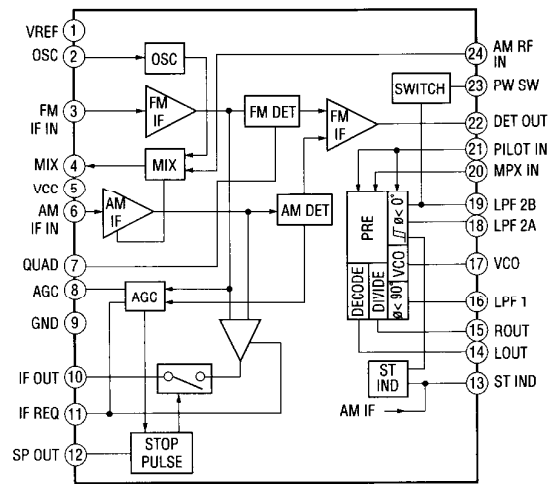
Caution:
 Pattern face side: Parts on the pattern face side seen from the pattern face are indicated.
 Parts face side: Parts on the parts face side seen from the parts face are indicated.

• IC Block Diagrams

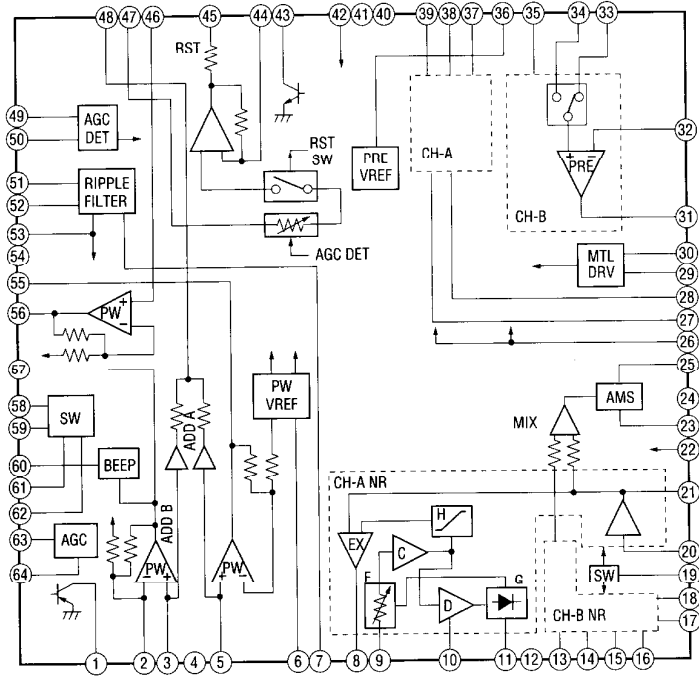
IC3 TA7371AF



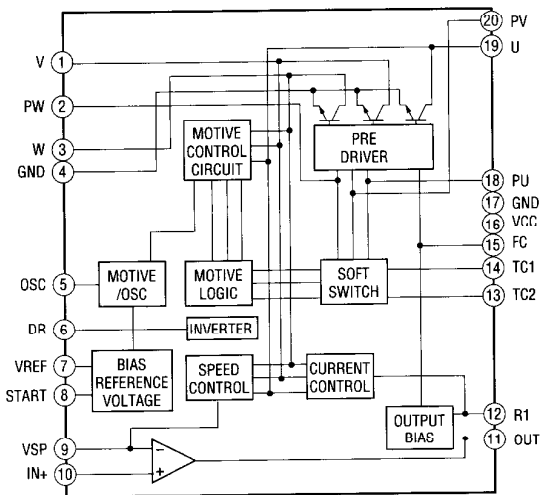
IC7 TA2022AFN



IC301 TA2072AF



IC601 MM1279XVBE



SECTION 7 EXPLODED VIEWS

NOTE:

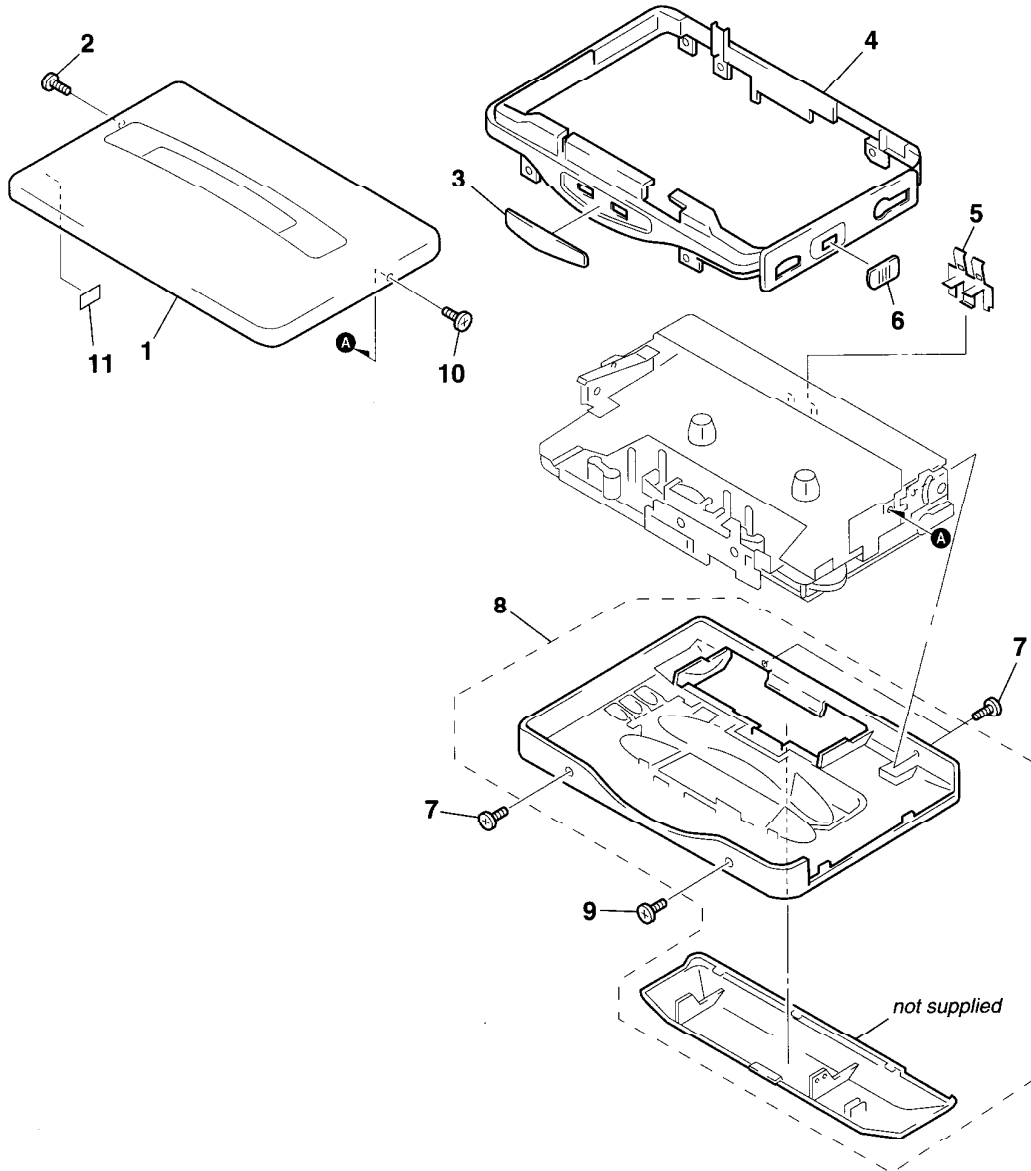
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts

Example :
 KNOB, BALANCE (WHITE) ... (RED)
 ↑ ↑
 Parts Color Cabinet's Color

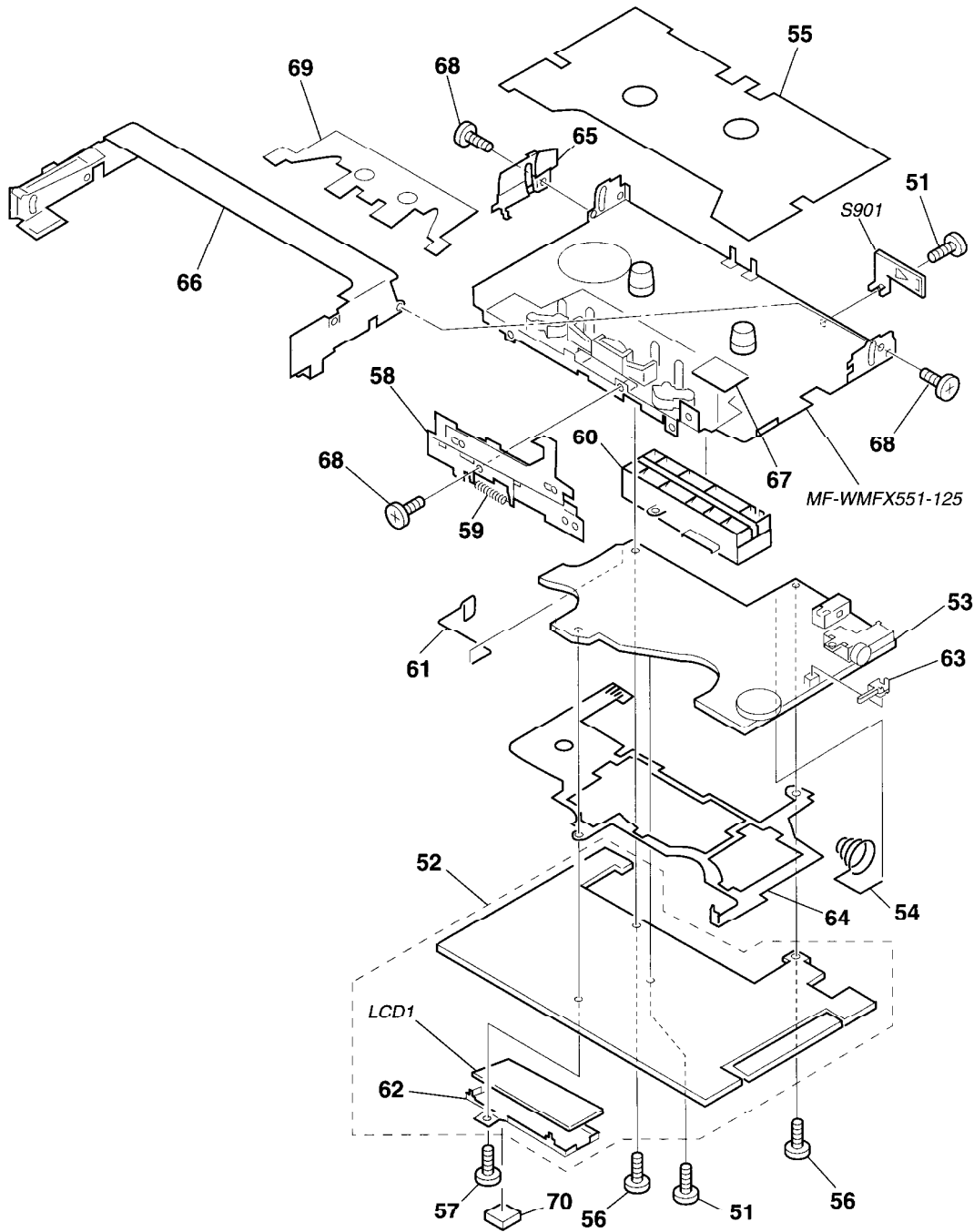
- Accessories and packing materials and hardware (# mark) list are given in the last of this parts list.

7-1. CABINET SECTION



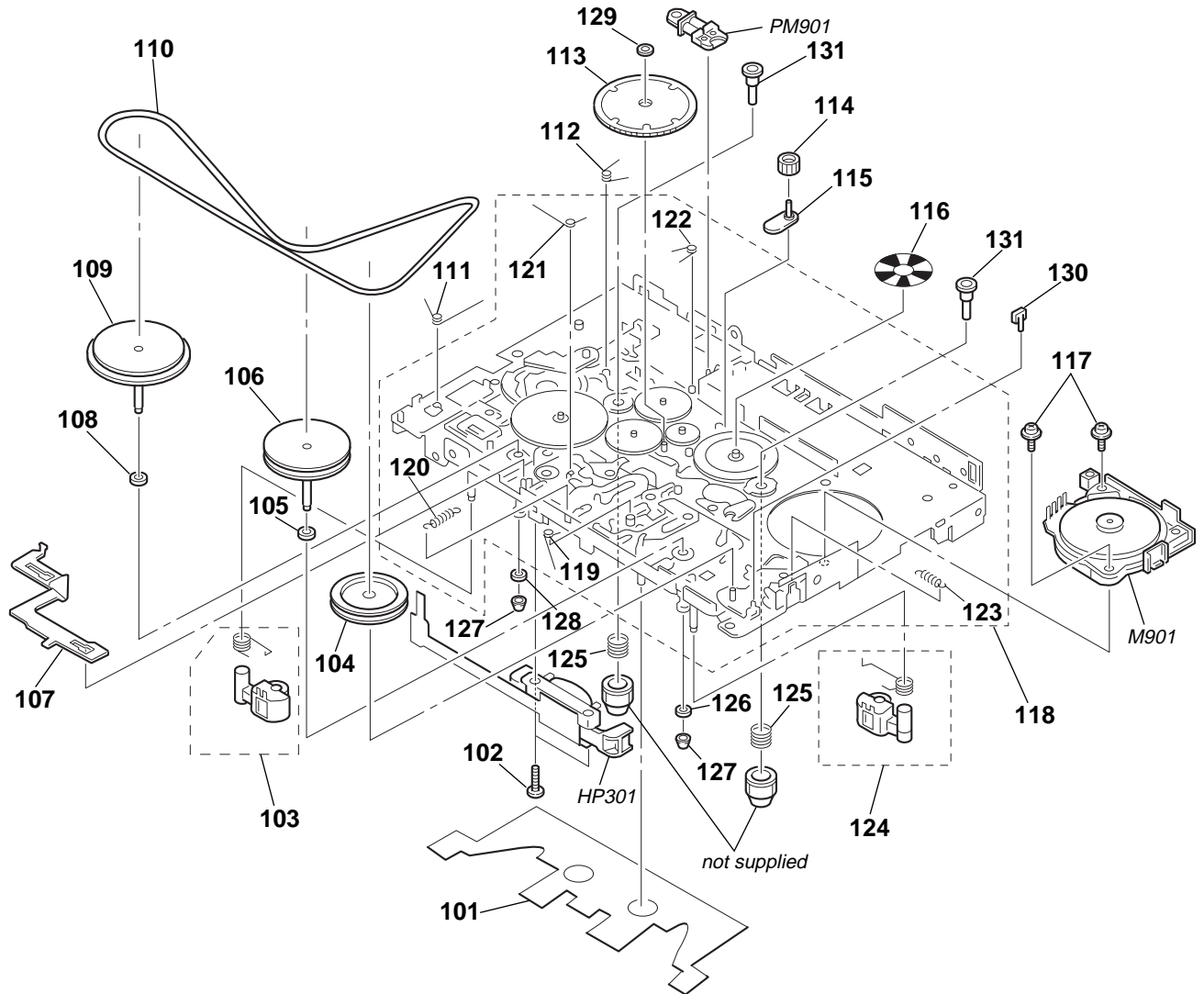
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-3374-617-1	LID ASSY (H), CASSETTE		7	3-704-197-41	SCREW (M1.4X2.2)	
2	3-704-197-11	SCREW (M1.4X2.0), LOCKING		8	X-3377-072-1	CASE (FX-J) ASSY	
3	3-009-677-01	KNOB (OPEN)		9	3-704-197-31	SCREW (M1.4X3.0), LOCKING	
4	3-009-676-11	ORNAMENT, REEL		10	3-704-197-01	SCREW (M1.4X1.6), LOCKING	
5	3-928-465-01	DETENT, CASSETTE		11	3-015-995-01	SPACER (CASSETTE)	
6	3-930-794-21	KNOB (HOLD)					

7-2. AUDIO AND TUNER BOARD SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-375-114-41	SCREW		* 62	3-012-429-01	HOLDER (LCD)	
52	A-3016-925-A	TUNER BOARD, COMPLETE		63	3-010-520-01	COVER, SW	
53	A-3061-472-A	AUDIO BOARD, COMPLETE		64	3-012-434-01	GUIDE (TU)	
54	3-009-670-01	TERMINAL (-), BATTERY		65	3-009-668-01	PLATE, C LOCK	
55	3-012-423-01	COVER (GX), MD		66	X-3374-205-1	HOLDER ASSY, CASSETTE	
56	3-355-424-61	SCREW, TAPPING		67	3-569-706-01	SPACER, CASSETTE LID	
57	3-704-197-71	SCREW (M1.4X1.6), LOCKING		68	3-704-197-01	SCREW (M1.4X1.6), LOCKING	
58	X-3373-172-1	BRACKET ASSY		69	3-011-277-01	COVER (B) (Y), MD	
59	3-009-667-01	SPRING, TENSION		70	3-016-411-11	SHEET (LCD-GX)	
60	3-009-675-01	HOLDER		LCD1	1-801-656-11	DISPLAY PANEL, LIQUID CRYSTAL	
61	3-009-669-01	TERMINAL (+), BATTERY		S901	1-762-793-11	SWITCH, LEAF (ATS)	

**7-3. TAPE MECHANISM SECTION
(MF-WMFX551-125)**



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-011-277-01	COVER (B) (Y), MD		118	X-3374-094-1	CHASSIS (S) ASSY (F)	
102	3-704-413-31	SCREW (M1.4X7.2)		119	3-019-710-01	SPRING (R), TORSION	
103	X-3372-850-1	PINCH LEVER (N) ASSY		120	3-007-458-01	SPRING (H/B), TENSION	
104	3-007-434-01	PULLEY (REVERSE)		121	3-019-709-01	SPRING (N), TORSION	
105	3-007-428-01	WASHER (R)		122	3-007-454-01	SPRING (FR), TORSION	
106	X-3372-851-1	FLYWHEEL (R) ASSY		123	3-007-457-01	SPRING (TEN), TENSION	
107	3-007-439-01	SLIDER (LOCK)		124	X-3372-849-1	PINCH LEVER (R) ASSY	
108	3-386-694-21	WASHER		125	3-010-954-01	SPRING (BT), COMPRESSION	
109	X-3372-852-1	FLYWHEEL (N) ASSY		126	3-918-943-01	WASHER, STOPPER	
110	3-007-430-01	BELT		127	3-366-017-01	BUSHING (CAPSTAN)	
111	3-007-960-01	SPRING (EJECT) (Y), TORSION		128	3-007-429-01	WASHER (R), STOPPER	
112	3-007-436-01	SPRING (TRIGGER), TORSION		129	3-932-724-21	WASHER	
113	X-3372-848-1	CLUTCH ASSY (M)		* 130	3-010-272-01	BELT, RETAINER	
114	3-016-696-01	GEAR (FRN)		131	3-010-274-02	TABLE, REEL	
115	X-3372-853-1	LEVER (FRG) ASSY		HP301	1-500-536-11	HEAD, MAGNETIC (PLAYBACK)	
116	3-007-432-01	SHEET (R), REFLECTION		M901	1-698-885-11	MOTOR (CAPSTAN/REEL) (including PULLEY)	
117	3-029-765-01	SCREW (M1.4), TOOTHED LOCK		PM901	1-454-674-31	SOLENOID, PLUNGER	

**SECTION 8
ELECTRICAL PARTS LIST**

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- **RESISTORS**
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

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

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

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	A-3061-472-A	AUDIO BOARD, COMPLETE *****		C305	1-135-316-11	TANTAL. CHIP 22uF 20%	2.5V
		< CAPACITOR >		C306	1-135-149-21	TANTALUM CHIP 2.2uF 20%	10V
C101	1-162-963-11	CERAMIC CHIP 680PF 10%	50V	C307	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V
C102	1-162-963-11	CERAMIC CHIP 680PF 10%	50V	C308	1-135-180-21	TANTALUM CHIP 3.3uF 20%	6.3V
C103	1-135-151-21	TANTALUM CHIP 4.7uF 20%	4V	C309	1-115-156-11	CERAMIC CHIP 1uF	10V
C104	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V	C310	1-135-151-21	TANTALUM CHIP 4.7uF 20%	4V
C105	1-164-677-11	CERAMIC CHIP 0.033uF 10%	16V	C311	1-165-128-11	CERAMIC CHIP 0.22uF	16V
C106	1-115-156-11	CERAMIC CHIP 1uF	10V	C312	1-135-151-21	TANTALUM CHIP 4.7uF 20%	4V
C107	1-162-965-11	CERAMIC CHIP 0.0015uF 10%	50V	C313	1-135-201-11	TANTALUM CHIP 10uF 20%	4V
C108	1-135-180-21	TANTALUM CHIP 3.3uF 20%	6.3V	C314	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V
C109	1-164-174-11	CERAMIC CHIP 0.0082uF 10%	25V	C315	1-115-156-11	CERAMIC CHIP 1uF	10V
C110	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C316	1-115-156-11	CERAMIC CHIP 1uF	10V
C111	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V	C317	1-115-467-11	CERAMIC CHIP 0.22uF 10%	10V
C112	1-115-156-11	CERAMIC CHIP 1uF	10V	C318	1-135-149-21	TANTALUM CHIP 2.2uF 20%	10V
C113	1-115-156-11	CERAMIC CHIP 1uF	10V	C319	1-107-688-11	TANTAL. CHIP 1.5uF 20%	10V
C114	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	C320	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C115	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	C321	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C116	1-109-982-11	CERAMIC CHIP 1uF 10%	10V	C322	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C117	1-115-156-11	CERAMIC CHIP 1uF	10V	C601	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C119	1-115-156-11	CERAMIC CHIP 1uF	10V	C602	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C201	1-162-963-11	CERAMIC CHIP 680PF 10%	50V	C603	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C202	1-162-963-11	CERAMIC CHIP 680PF 10%	50V	C604	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C203	1-135-151-21	TANTALUM CHIP 4.7uF 20%	4V	C605	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C204	1-164-227-11	CERAMIC CHIP 0.022uF 10%	25V	C606	1-115-467-11	CERAMIC CHIP 0.22uF 10%	10V
C205	1-164-677-11	CERAMIC CHIP 0.033uF 10%	16V	C607	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C206	1-115-156-11	CERAMIC CHIP 1uF	10V	C608	1-109-982-11	CERAMIC CHIP 1uF 10%	10V
C207	1-162-965-11	CERAMIC CHIP 0.0015uF 10%	50V	C701	1-135-151-21	TANTALUM CHIP 4.7uF 20%	4V
C208	1-135-180-21	TANTALUM CHIP 3.3uF 20%	6.3V	C702	1-115-156-11	CERAMIC CHIP 1uF	10V
C209	1-164-174-11	CERAMIC CHIP 0.0082uF 10%	25V	C703	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C210	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V			< CONNECTOR >	
C211	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V	CN301	1-766-336-21	CONNECTOR, FFC/FPC 6P	
C212	1-115-156-11	CERAMIC CHIP 1uF	10V	CN701	1-779-079-11	CONNECTOR, BOARD TO BOARD	
C213	1-115-156-11	CERAMIC CHIP 1uF	10V			< DIODE >	
C214	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V	D701	8-719-404-50	DIODE MA111-TX	
C215	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V	D702	8-719-049-09	DIODE 1SS367-T3SONY	
C216	1-115-156-11	CERAMIC CHIP 1uF	10V	D703	8-719-423-35	DIODE MA8120-H	
C217	1-115-156-11	CERAMIC CHIP 1uF	10V	D704	8-719-423-35	DIODE MA8120-H	
C219	1-115-156-11	CERAMIC CHIP 1uF	10V	D705	8-719-423-35	DIODE MA8120-H	
C301	1-135-316-11	TANTAL. CHIP 22uF 20%	2.5V			< FERRITE BEAD >	
C302	1-115-467-11	CERAMIC CHIP 0.22uF 10%	10V	FB703	1-414-760-21	INDUCTOR, FERRITE BEAD	
C303	1-109-982-11	CERAMIC CHIP 1uF 10%	10V	FB704	1-414-760-21	INDUCTOR, FERRITE BEAD	
C304	1-135-151-21	TANTALUM CHIP 4.7uF 20%	4V	FB705	1-414-235-22	INDUCTOR, FERRITE BEAD	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
FB706	1-414-235-22	INDUCTOR, FERRITE BEAD		R201	1-216-812-11	METAL CHIP 180	5% 1/16W
FB707	1-414-235-22	INDUCTOR, FERRITE BEAD		R202	1-216-847-11	METAL CHIP 150K	5% 1/16W
		< IC >		R203	1-216-831-11	METAL CHIP 6.8K	5% 1/16W
IC301	8-759-359-76	IC TA2072AF		R204	1-216-824-11	METAL CHIP 1.8K	5% 1/16W
IC601	8-759-356-46	IC MM1279XVBE		R205	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
IC701	8-759-460-25	IC S-8321AJMP-DNJ-T2		R207	1-216-795-11	RES,CHIP 6.8	5% 1/16W
		< JACK >		R208	1-218-270-11	RES,CHIP 1.1K	5% 1/16W
J701	1-778-930-21	JACK 7P (⊖ REMOTE)		R209	1-216-834-11	METAL CHIP 12K	5% 1/16W
J801	1-779-080-11	JACK, DC (POLARITY UNIFIED TYPE)	(DC IN 1.5V)	R210	1-216-852-11	METAL CHIP 390K	5% 1/16W
		< JUMPER RESISTOR >		R211	1-216-822-11	METAL CHIP 1.2K	5% 1/16W
JC801	1-216-296-00	SHORT 0		R212	1-216-824-11	METAL CHIP 1.8K	5% 1/16W
		< COIL >		R213	1-216-809-11	METAL CHIP 100	5% 1/16W
L101	1-412-011-31	INDUCTOR CHIP 27uH		R214	1-216-840-11	METAL CHIP 39K	5% 1/16W
L201	1-412-011-31	INDUCTOR CHIP 27uH		R215	1-218-739-11	RES,CHIP 91K	5% 1/16W
L301	1-412-011-31	INDUCTOR CHIP 27uH		R251	1-216-864-11	METAL CHIP 0	5% 1/16W
L701	1-412-034-11	INDUCTOR CHIP 330uH		R301	1-218-891-11	RES,CHIP 68K	0.50% 1/16W
		< PHOTO INTERRUPTER >		R302	1-216-839-11	METAL CHIP 33K	5% 1/16W
PH701	8-719-988-15	PHOTO INTERRUPTER PR-11-C		R303	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
		< TRANSISTOR >		R304	1-218-295-11	RES,CHIP 43K	5% 1/16W
Q301	8-729-426-51	TRANSISTOR XP1210-TXE		R305	1-216-821-11	METAL CHIP 1K	5% 1/16W
Q302	8-729-422-39	TRANSISTOR XN4404		R307	1-216-847-11	METAL CHIP 150K	5% 1/16W
Q303	8-729-426-36	TRANSISTOR XP1215-TXE		R309	1-216-826-11	METAL CHIP 2.7K	5% 1/16W
Q304	8-729-230-72	TRANSISTOR 2SA1362YG		R310	1-216-793-11	RES,CHIP 4.7	5% 1/16W
Q306	8-729-426-36	TRANSISTOR XP1215-TXE		R604	1-216-817-11	METAL CHIP 470	5% 1/16W
Q601	8-729-403-42	TRANSISTOR XN1401		R605	1-216-830-11	METAL CHIP 5.6K	5% 1/16W
Q602	8-729-402-84	TRANSISTOR XN4601		R606	1-216-809-11	METAL CHIP 100	5% 1/16W
Q701	8-729-421-26	TRANSISTOR UN5216		R607	1-216-837-11	METAL CHIP 22K	5% 1/16W
Q702	8-729-230-72	TRANSISTOR 2SA1362YG		R611	1-216-821-11	METAL CHIP 1K	5% 1/16W
Q704	8-729-425-46	TRANSISTOR XP4315-TXE		R612	1-216-833-11	RES,CHIP 10K	5% 1/16W
		< RESISTOR >		R701	1-216-849-11	METAL CHIP 220K	5% 1/16W
R101	1-216-812-11	METAL CHIP 180	5% 1/16W	R702	1-216-849-11	METAL CHIP 220K	5% 1/16W
R102	1-216-847-11	METAL CHIP 150K	5% 1/16W	R703	1-216-845-11	METAL CHIP 100K	5% 1/16W
R103	1-216-831-11	METAL CHIP 6.8K	5% 1/16W	R704	1-216-821-11	METAL CHIP 1K	5% 1/16W
R104	1-216-824-11	METAL CHIP 1.8K	5% 1/16W	R705	1-216-821-11	METAL CHIP 1K	5% 1/16W
R105	1-216-825-11	METAL CHIP 2.2K	5% 1/16W	R706	1-216-843-11	METAL CHIP 68K	5% 1/16W
R107	1-216-795-11	RES,CHIP 6.8	5% 1/16W	R707	1-216-843-11	METAL CHIP 68K	5% 1/16W
R108	1-218-270-11	RES,CHIP 1.1K	5% 1/16W	R708	1-216-849-11	METAL CHIP 220K	5% 1/16W
R109	1-216-834-11	METAL CHIP 12K	5% 1/16W	R709	1-216-857-11	METAL CHIP 1M	5% 1/16W
R110	1-216-852-11	METAL CHIP 390K	5% 1/16W	R710	1-216-823-11	METAL CHIP 1.5K	5% 1/16W
R111	1-216-822-11	METAL CHIP 1.2K	5% 1/16W	R711	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R112	1-216-824-11	METAL CHIP 1.8K	5% 1/16W	R712	1-216-849-11	METAL CHIP 220K	5% 1/16W
R113	1-216-809-11	METAL CHIP 100	5% 1/16W	R713	1-216-821-11	METAL CHIP 1K	5% 1/16W
R114	1-216-840-11	METAL CHIP 39K	5% 1/16W	R714	1-216-821-11	METAL CHIP 1K	5% 1/16W
R115	1-218-739-11	RES,CHIP 91K	5% 1/16W	R715	1-216-821-11	METAL CHIP 1K	5% 1/16W
R151	1-216-864-11	METAL CHIP 0	5% 1/16W			< NETWORK RESISTOR >	
				RB301	1-233-872-21	RES, NETWORK (CHIP TYPE) 33K	(3216)
				RB601	1-233-873-21	RES, NETWORK (CHIP TYPE) 220K	(3216)
				RB602	1-233-576-11	RES, NETWORK (CHIP TYPE) 100	
						< VARIABLE RESISTOR >	
				RV301	1-225-342-23	RES, VAR, CARBON 10K/10K (VOLUME)	
				RV601	1-223-576-11	RES, ADJ, METAL GLAZE 2.2K	

AUDIO **TUNER**

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S701	1-572-922-11	SWITCH, SLIDE (HOLD)	
S702	1-572-581-11	SWITCH, SLIDE (F/R)	
S703	1-762-970-21	SWITCH, PUSH (1 KEY) (HOLDER)	
		< THERMISTOR (POSITIVE) >	
THP601	1-810-794-11	THERMISTOR, POSITIVE	

A-3016-925-A		TUNER BOARD, COMPLETE	

	1-694-248-11	CONDUCTIVE BOARD, CONNECTION	
*	3-012-429-01	HOLDER (LCD)	
		< CAPACITOR >	
C1	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C2	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C3	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C4	1-115-156-11	CERAMIC CHIP	1uF 10V
C5	1-162-919-11	CERAMIC CHIP	22PF 5% 50V
C6	1-162-917-11	CERAMIC CHIP	15PF 5% 50V
C7	1-162-917-11	CERAMIC CHIP	15PF 5% 50V
C8	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C9	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C10	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V
C11	1-164-676-11	CERAMIC CHIP	2200PF 5% 16V
C12	1-162-928-11	CERAMIC CHIP	120PF 5% 50V
C13	1-162-923-11	CERAMIC CHIP	47PF 5% 50V
C14	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C15	1-162-910-11	CERAMIC CHIP	5PF 0.25PF 50V
C16	1-162-905-11	CERAMIC CHIP	1PF 0.25PF 50V
C17	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C18	1-104-847-11	TANTAL. CHIP	22uF 20% 4V
C19	1-162-905-11	CERAMIC CHIP	1PF 0.25PF 50V
C20	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V
C21	1-164-676-11	CERAMIC CHIP	2200PF 5% 16V
C22	1-162-926-11	CERAMIC CHIP	82PF 5% 50V
C23	1-162-928-11	CERAMIC CHIP	120PF 5% 50V
C24	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C25	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C26	1-162-923-11	CERAMIC CHIP	47PF 5% 50V
C27	1-162-935-11	CERAMIC CHIP	4PF 0.25PF 50V
C28	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C29	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C30	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C31	1-164-315-11	CERAMIC CHIP	470PF 5% 50V
C32	1-162-918-11	CERAMIC CHIP	18PF 5% 50V
C33	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C34	1-104-847-11	TANTAL. CHIP	22uF 20% 4V
C35	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C36	1-162-923-11	CERAMIC CHIP	47PF 5% 50V
C37	1-115-156-11	CERAMIC CHIP	1uF 10V

Ref. No.	Part No.	Description	Remark
C38	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C39	1-135-151-21	TANTALUM CHIP	4.7uF 20% 4V
C40	1-115-156-11	CERAMIC CHIP	1uF 10V
C41	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C42	1-164-362-11	CERAMIC CHIP	470PF 5% 50V
C43	1-104-908-11	TANTAL. CHIP	47uF 20% 2.5V
C44	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C45	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C46	1-162-965-11	CERAMIC CHIP	0.0015uF 10% 50V
C47	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C48	1-115-156-11	CERAMIC CHIP	1uF 10V
C49	1-115-156-11	CERAMIC CHIP	1uF 10V
C50	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C52	1-163-139-00	CERAMIC CHIP	820PF 5% 50V
C53	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C54	1-104-912-11	TANTAL. CHIP	3.3uF 20% 6.3V
C55	1-104-912-11	TANTAL. CHIP	3.3uF 20% 6.3V
C56	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C57	1-164-345-11	CERAMIC CHIP	0.082uF 10% 25V
C58	1-115-156-11	CERAMIC CHIP	1uF 10V
C59	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C60	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C61	1-104-847-11	TANTAL. CHIP	22uF 20% 4V
C62	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C63	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C64	1-115-156-11	CERAMIC CHIP	1uF 10V
C65	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C66	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V
C67	1-135-177-21	TANTALUM CHIP	1uF 20% 20V
C68	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C69	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C70	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C71	1-162-962-11	CERAMIC CHIP	470PF 10% 50V
C72	1-110-501-11	CERAMIC CHIP	0.33uF 10% 16V
C73	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C74	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C75	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C76	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
C77	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C78	1-162-923-11	CERAMIC CHIP	47PF 5% 50V
C79	1-162-915-11	CERAMIC CHIP	10PF 0.5PF 50V
C81	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C86	1-164-315-11	CERAMIC CHIP	470PF 5% 50V
C87	1-162-928-11	CERAMIC CHIP	120PF 5% 50V
C88	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
		< FILTER >	
CF1	1-767-313-11	FILTER, CERAMIC	
CF2	1-767-313-11	FILTER, CERAMIC	
CF3	1-767-480-11	FILTER, CERAMIC (AM)	
CF4	1-767-357-11	FILTER, CERAMIC	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< TRIMMER >					
CT1	1-141-327-11	CAP, CHIP TYPE TRIMMER 10PF		Q11	8-729-420-68	TRANSISTOR 2SD1328-R-TX	
		< DIODE >		Q12	8-729-800-37	TRANSISTOR 2SD1048-X7	
D1	8-719-053-30	DIODE MA2S357-(TX).SO		Q13	8-729-028-69	TRANSISTOR 2SC4655-BC(TX)	
D2	8-719-053-30	DIODE MA2S357-(TX).SO		Q14	8-729-037-71	TRANSISTOR UN9210J-(TX).SO	
D3	8-719-055-61	DIODE HVR100-9TRU		Q15	8-729-037-63	TRANSISTOR UN9115J-(TX).SO	
D4	8-719-055-61	DIODE HVR100-9TRU		Q16	8-729-028-69	TRANSISTOR 2SC4655-BC(TX)	
D5	8-719-051-01	LED CL-170HR-CD-T (BATT)		Q17	8-729-028-69	TRANSISTOR 2SC4655-BC(TX)	
D6	8-719-420-51	DIODE MA729		Q18	8-729-800-71	TRANSISTOR 2SB815B7-TB	
D7	8-719-404-50	DIODE MA111-TX		Q21	8-729-037-63	TRANSISTOR UN9115J-(TX).SO	
D8	8-719-420-87	DIODE MA8130				< RESISTOR >	
D9	8-719-049-09	DIODE 1SS367-T3SONY		R1	1-216-825-11	METAL CHIP 2.2K 5%	1/16W
		< IC >		R2	1-216-853-11	METAL CHIP 470K 5%	1/16W
IC1	8-759-535-53	IC TC9326F-051		R3	1-216-853-11	METAL CHIP 470K 5%	1/16W
IC2	8-759-545-88	IC TD6134AF(ER)		R4	1-216-821-11	METAL CHIP 1K 5%	1/16W
IC3	8-759-362-23	IC TA7371AF-EL		R5	1-216-813-11	METAL CHIP 220 5%	1/16W
IC4	8-759-457-68	IC AK93C45AV-L		R6	1-216-829-11	METAL CHIP 4.7K 5%	1/16W
IC5	8-759-457-70	IC XC62RP1602MR		R7	1-218-870-11	RES,CHIP 9.1K 0.50%	1/16W
IC6	8-759-387-31	IC TC75S55F(TE85R)		R8	1-218-836-11	RES,CHIP 360 0.50%	1/16W
IC7	8-759-362-25	IC TA2022AFN-EL		R9	1-216-833-11	RES,CHIP 10K 5%	1/16W
		< JUMPER RESISTOR >		R10	1-216-813-11	METAL CHIP 220 5%	1/16W
JC1	1-216-864-11	METAL CHIP 0 5%	1/16W	R11	1-216-853-11	METAL CHIP 470K 5%	1/16W
		< COIL >		R12	1-216-853-11	METAL CHIP 470K 5%	1/16W
L2	1-416-180-11	COIL (WITH CORE) (FM OSC)		R13	1-216-809-11	METAL CHIP 100 5%	1/16W
L3	1-416-181-11	COIL (WITH CORE) (FM MIX)		R14	1-216-825-11	METAL CHIP 2.2K 5%	1/16W
L4	1-501-812-11	ANTENNA, FERRITE-ROD (AM)		R15	1-216-845-11	METAL CHIP 100K 5%	1/16W
L5	1-412-010-41	INDUCTOR CHIP 22uH		R16	1-218-907-11	RES,CHIP 330K 0.50%	1/16W
L6	1-412-010-41	INDUCTOR CHIP 22uH		R17	1-216-833-11	RES,CHIP 10K 5%	1/16W
L7	1-412-010-41	INDUCTOR CHIP 22uH		R18	1-216-821-11	METAL CHIP 1K 5%	1/16W
L8	1-412-010-41	INDUCTOR CHIP 22uH		R19	1-216-821-11	METAL CHIP 1K 5%	1/16W
L9	1-412-010-41	INDUCTOR CHIP 22uH		R20	1-216-833-11	RES,CHIP 10K 5%	1/16W
L10	1-412-010-41	INDUCTOR CHIP 22uH		R21	1-216-833-11	RES,CHIP 10K 5%	1/16W
		< LIQUID CRYSTAL DISPLAY >		R22	1-216-815-11	METAL CHIP 330 5%	1/16W
LCD1	1-801-656-11	DISPLAY PANEL, LIQUID CRYSTAL		R23	1-216-845-11	METAL CHIP 100K 5%	1/16W
		< TRANSISTOR >		R24	1-216-853-11	METAL CHIP 470K 5%	1/16W
Q1	8-729-037-89	TRANSISTOR 2SC4627J-C(TX).SO		R25	1-218-857-11	RES,CHIP 2.7K 0.50%	1/16W
Q2	8-729-028-69	TRANSISTOR 2SC4655-BC(TX)		R26	1-218-903-11	RES,CHIP 220K 0.50%	1/16W
Q3	8-729-037-89	TRANSISTOR 2SC4627J-C(TX).SO		R27	1-216-825-11	METAL CHIP 2.2K 5%	1/16W
Q4	8-729-037-89	TRANSISTOR 2SC4627J-C(TX).SO		R28	1-216-815-11	METAL CHIP 330 5%	1/16W
Q5	8-729-823-86	TRANSISTOR 2SA1745		R29	1-218-845-11	RES,CHIP 820 0.50%	1/16W
Q6	8-729-028-69	TRANSISTOR 2SC4655-BC(TX)		R30	1-218-847-11	RES,CHIP 1K 0.50%	1/16W
Q7	8-729-037-64	TRANSISTOR UN9116J-(TX).SO		R31	1-218-849-11	RES,CHIP 1.2K 0.50%	1/16W
Q8	8-729-037-63	TRANSISTOR UN9115J-(TX).SO		R32	1-218-851-11	RES,CHIP 1.5K 0.50%	1/16W
Q9	8-729-800-71	TRANSISTOR 2SB815B7-TB		R33	1-218-863-11	RES,CHIP 4.7K 0.50%	1/16W
Q10	8-729-800-71	TRANSISTOR 2SB815B7-TB		R34	1-218-859-11	RES,CHIP 3.3K 0.50%	1/16W
				R35	1-218-864-11	RES,CHIP 5.1K 0.50%	1/16W
				R36	1-218-868-11	RES,CHIP 7.5K 0.50%	1/16W
				R37	1-218-871-11	RES,CHIP 10K 0.50%	1/16W
				R38	1-218-879-11	RES,CHIP 22K 0.50%	1/16W
				R39	1-216-823-11	METAL CHIP 1.5K 5%	1/16W
				R40	1-216-829-11	METAL CHIP 4.7K 5%	1/16W
				R41	1-216-845-11	METAL CHIP 100K 5%	1/16W
				R42	1-216-820-11	METAL CHIP 820 5%	1/16W

TUNER

Ref. No.	Part No.	Description	Remark
R43	1-216-833-11	RES,CHIP 10K	5% 1/16W
R44	1-216-819-11	METAL CHIP 680	5% 1/16W
R45	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R46	1-216-799-11	METAL CHIP 15	5% 1/16W
R47	1-216-817-11	METAL CHIP 470	5% 1/16W
R48	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R49	1-216-845-11	METAL CHIP 100K	5% 1/16W
R50	1-216-833-11	RES,CHIP 10K	5% 1/16W
R51	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R52	1-216-839-11	METAL CHIP 33K	5% 1/16W
R53	1-216-817-11	METAL CHIP 470	5% 1/16W
R54	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R55	1-216-831-11	METAL CHIP 6.8K	5% 1/16W
R56	1-216-831-11	METAL CHIP 6.8K	5% 1/16W
R57	1-216-826-11	METAL CHIP 2.7K	5% 1/16W
R58	1-216-845-11	METAL CHIP 100K	5% 1/16W
R59	1-216-831-11	METAL CHIP 6.8K	5% 1/16W
R60	1-216-831-11	METAL CHIP 6.8K	5% 1/16W
R61	1-216-833-11	RES,CHIP 10K	5% 1/16W
R62	1-216-841-11	METAL CHIP 47K	5% 1/16W
R63	1-216-833-11	RES,CHIP 10K	5% 1/16W
R64	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R65	1-216-849-11	METAL CHIP 220K	5% 1/16W
R66	1-216-849-11	METAL CHIP 220K	5% 1/16W
R67	1-216-853-11	METAL CHIP 470K	5% 1/16W
R68	1-216-857-11	METAL CHIP 1M	5% 1/16W
R69	1-216-853-11	METAL CHIP 470K	5% 1/16W
R70	1-216-849-11	METAL CHIP 220K	5% 1/16W
R71	1-216-821-11	METAL CHIP 1K	5% 1/16W
R72	1-216-845-11	METAL CHIP 100K	5% 1/16W
R73	1-216-849-11	METAL CHIP 220K	5% 1/16W
R75	1-216-845-11	METAL CHIP 100K	5% 1/16W
R76	1-216-835-11	METAL CHIP 15K	5% 1/16W
R77	1-216-819-11	METAL CHIP 680	5% 1/16W
R78	1-216-821-11	METAL CHIP 1K	5% 1/16W
R79	1-216-821-11	METAL CHIP 1K	5% 1/16W
R80	1-216-821-11	METAL CHIP 1K	5% 1/16W
R82	1-216-805-11	METAL CHIP 47	5% 1/16W
< VARIABLE RESISTOR >			
RV1	1-223-578-11	RES, ADJ, METAL GLAZE 22K	
< SWITCH >			
S1	1-692-453-11	SWITCH, KEY BOARD (■ RADIO OFF)	
S2	1-692-453-11	SWITCH, KEY BOARD (◀ ▷)	
S3	1-692-453-11	SWITCH, KEY BOARD (FF)	
S4	1-692-453-11	SWITCH, KEY BOARD (REW)	
S5	1-692-453-11	SWITCH, KEY BOARD (BAND)	
S7	1-771-053-21	SWITCH, KEY BOARD (MENU)	
S8	1-771-053-21	SWITCH, KEY BOARD (SET)	
S9	1-692-453-11	SWITCH, KEY BOARD (TUNING +)	
S10	1-692-453-11	SWITCH, KEY BOARD (TUNING -)	
S11	1-692-453-11	SWITCH, KEY BOARD (ENTER)	

Ref. No.	Part No.	Description	Remark
< COIL >			
T1	1-416-182-11	COIL (AM OSC)	
T2	1-416-183-11	COIL (AM MIX)	
T3	1-423-745-11	TRANSFORMER, DC-DC CONVERTER	
< VIBRATOR >			
X1	1-579-615-11	VIBRATOR, CRYSTAL (75kHz)	

MISCELLANEOUS			

HP301	1-500-536-11	HEAD, MAGNETIC (PLAYBACK)	
M901	1-698-885-11	MOTOR (CAPSTAN/REEL) (including PULLEY)	
PM901	1-454-674-31	SOLENOID, PLUNGER	
S901	1-762-793-11	SWITCH, LEAF (ATS)	

ACCESSORIES & PACKING MATERIALS			

	1-505-536-11	HEADPHONE (WITH REMOTE CONTROL) (MDR-WMF653)	
	1-528-465-15	BATTERY CHARGER (BC-820T)	
△	1-569-007-11	ADAPTOR, CONVERSION 2P	
	3-864-889-91	MANUAL, INSTRUCTION (ENGLISH,ARABIC)	
	3-864-895-11	MANUAL, INSTRUCTION (TRADITIONAL CHINESE,KOREAN)	
	3-918-937-01	CASE (MS), CARRYING	

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