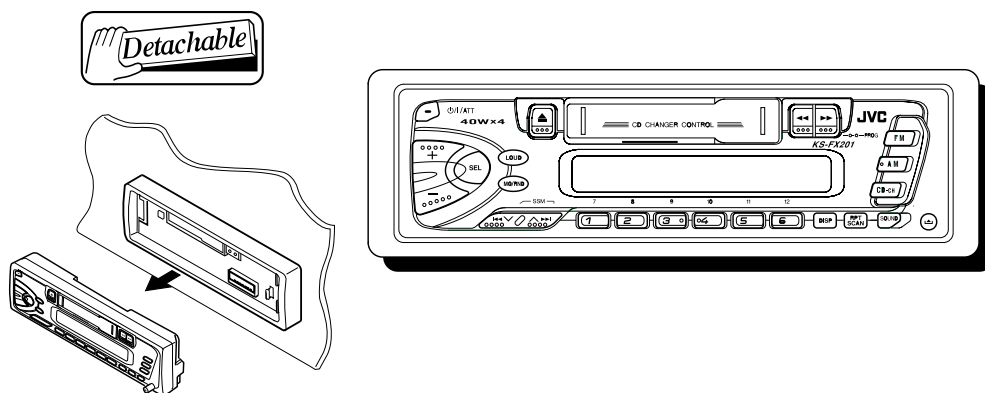


# JVC

# SERVICE MANUAL

## CASSETTE RECEIVER

### KS-FX201




**Area Suffix**

U ---- Other Areas

### Contents

Safety precaution .....	1-2
Disassembly method .....	1-3
Adjustment method .....	1-12
Description of major ICs .....	1-16

## Safety precaution

 **CAUTION** Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.

# Disassembly Method

## ■ Detaching the Front Panel Unit

( See Fig.1 )

Push the Release button in the direction of arrow to detach the front panel unit.

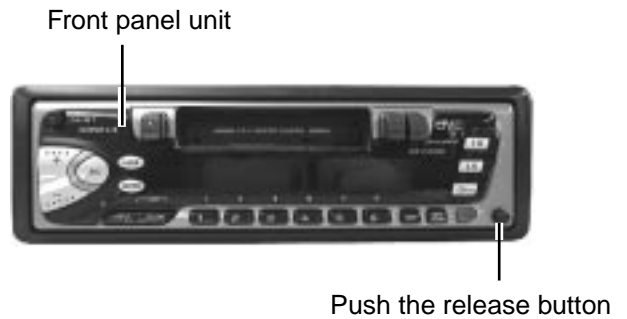


Fig. 1

## ■ Removing the Front Chassis

( See Fig. 2 and 3 )

Disengage the four tabs ( a ) in the right and left sides of unit and pull the front chassis forward to remove it.

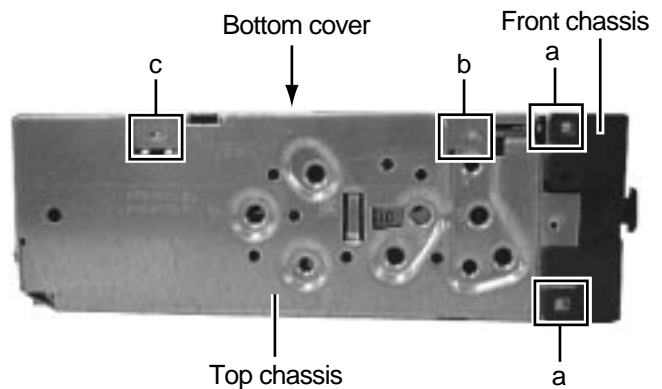


Fig. 2

## ■ Removing the Bottom Cover

( See Fig. 2 to 4 )

1. Removing the front chassis.
2. Turn the unit up side down.
3. Insert the four engagements ( b, c, d, e ) to the screwdriver .
4. Turn the screwdriver and remove the bottom cover.

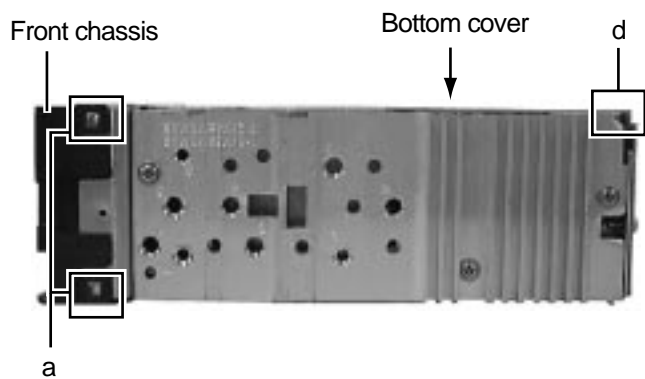


Fig. 3

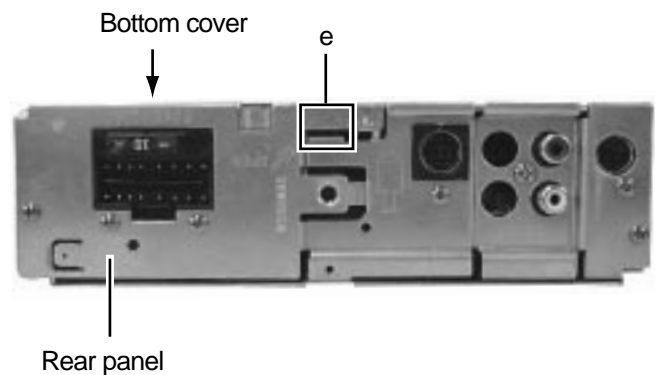


Fig. 4

■ **Removing the Heat Sink ( See Fig. 5 )**

1. Removing the front chassis.
2. Removing the bottom cover.
3. Remove the three screws ( 1 and 1' ) retaining the heat sink.

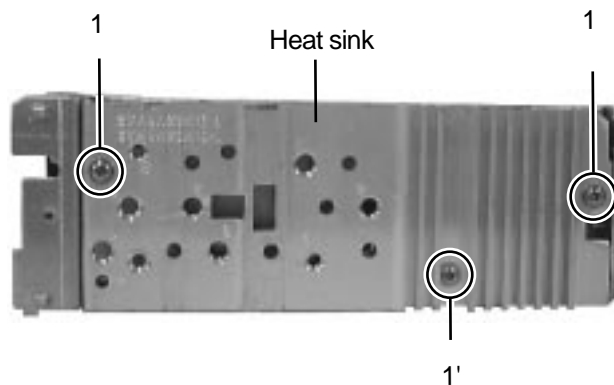


Fig. 5

■ **Removing the Main Board Assembly**

( See Fig. 5 to 7 )

1. Removing the front chassis.
2. Removing the bottom cover.
3. Removing the heat sink.  
 ( Attach the heat sink with a screw ( 1' ) on operating checks. )
4. Remove the two screws ( 2 ) retaining the main board assembly.
5. Remove the six screws ( 3 ) and one screw ( 3' ) retaining the rear panel.
6. Separate the main board assembly and cassette mechanism assembly.
7. Take out the main board assembly.

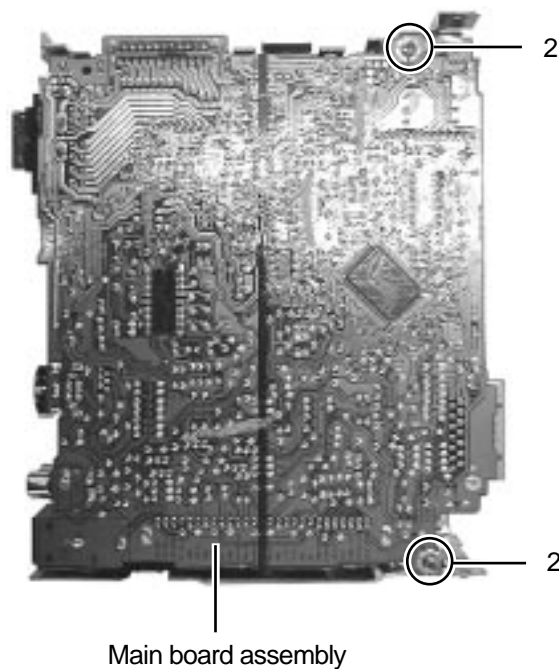


Fig. 6

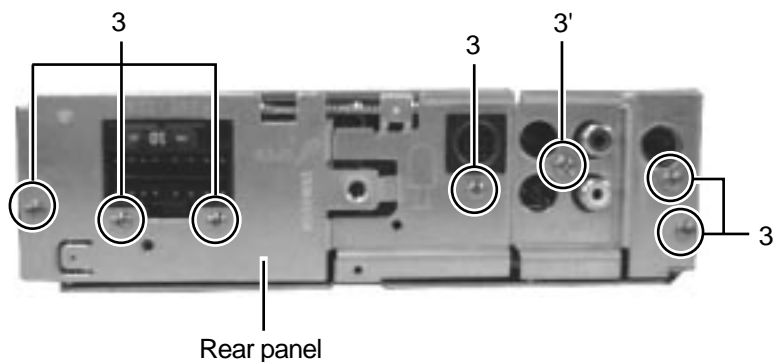


Fig. 7

## ■Removing the Cassette Mechanism assembly

( See Fig. 8 )

1. Removing the front chassis.
2. Removing the bottom cover.
3. Removing the heat sink.
4. Removing the main board assembly.
5. Remove the four screws ( 4 ) retaining the cassette mechanism.
6. Separate the top chassis and cassette mechanism.

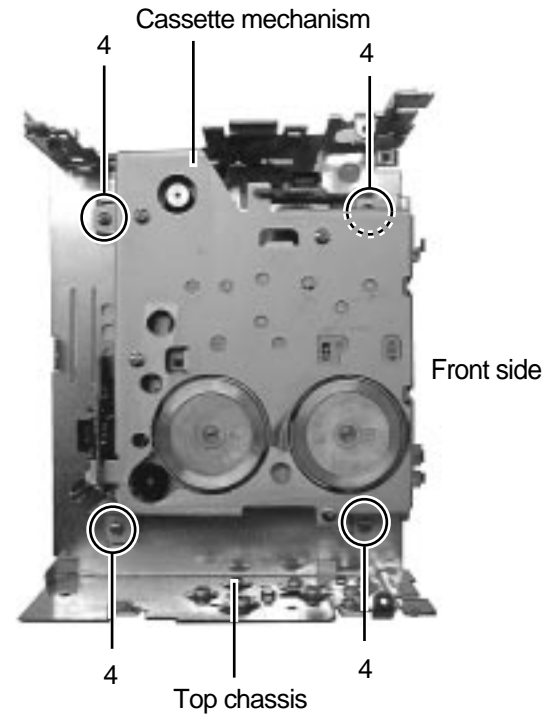


Fig. 8

## ■Removing the Operation Switch board

( See Fig. 9 to 11)

1. Detaching the front panel unit.
2. Turn the front panel back side down.
3. Remove the four screws ( 5 ) retaining the front cover.
4. Open the front cover gradually by disengaging the three engagements ( g ) while pushing the top of the front cover in the arrow "A" direction, then disengage the three engagements ( h ) on the both sides.
5. Place the front panel unit front side down.
6. Disengage the three engagements ( i ) on the bottom to separate the front cover from the front panel.

(Be careful not to lose the button springs.)

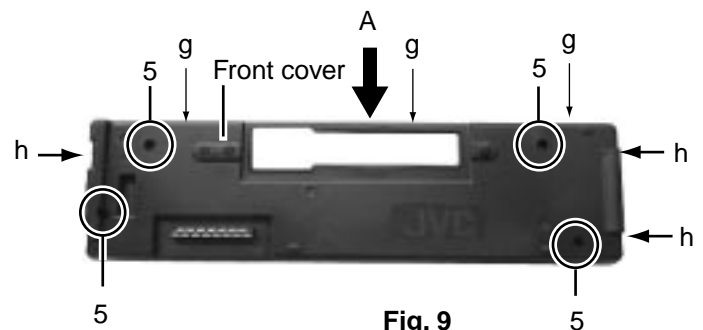


Fig. 9

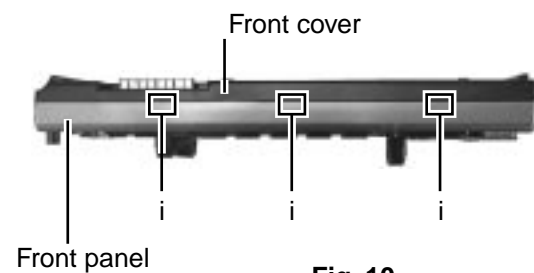


Fig. 10

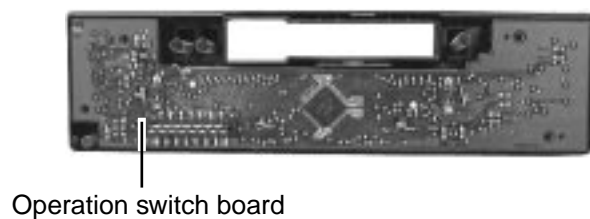
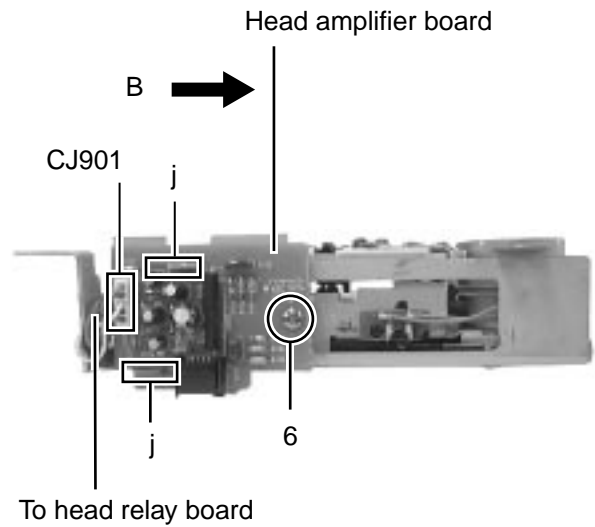


Fig. 11

**■Removing the Head Amplifier Board**

( See Fig. 12 )

1. Removing the front chassis.
2. Removing the bottom cover.
3. Removing the heat sink.
4. Removing the main board assembly.
5. Removing the cassette mechanism.
6. Remove the screw ( 6 ) retaining the head amplifier board.
7. Shift the two inter rocking sections ( j ) securing the head amplifier board in the direction shown by the arrow "B" to remove the printed circuit board.
8. From the connector CJ901 on the head amplifier board from connector wire out going to the head relay board.

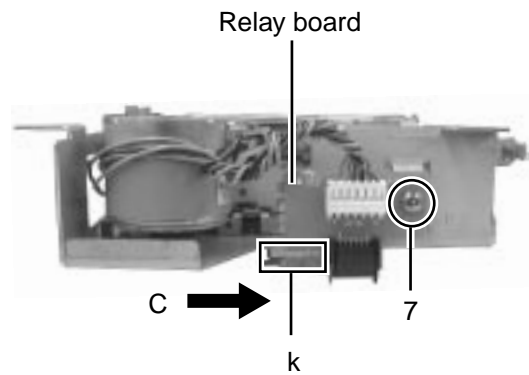


**Fig. 12**

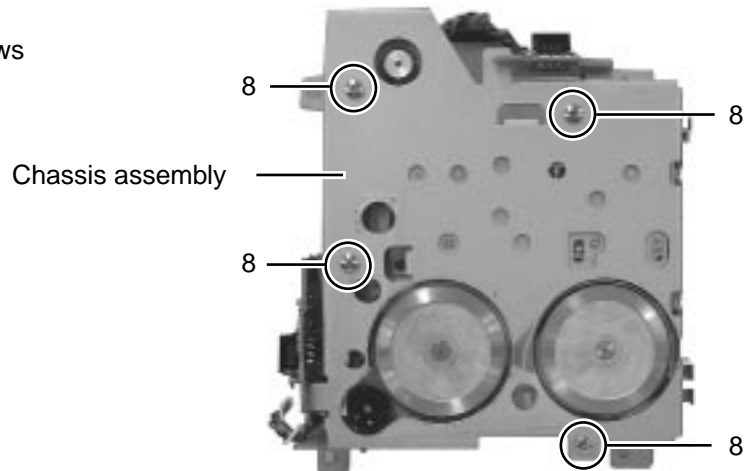
**■Removing the Chassis Assembly**

( See Fig. 13 and 14 )

1. Removing the front chassis.
2. Removing the bottom cover.
3. Removing the heat sink.
4. Removing the main board assembly.
5. Removing the cassette mechanism.
6. Removing the head amplifier board.
7. Turn the left side to cassette mechanism.
8. Remove the screw ( 7 ) retaining the relay board.
9. Shift the one inter rocking sections ( k ) securing the relay board in the direction shown by the arrow "C" to remove the printed circuit board.
10. Turn the back side down, remove the four screws ( 8 ) retaining the chassis assembly.



**Fig. 13**



**Fig. 14**

## <Cassette mechanism assembly>

- Prior to performing the following procedures, remove the head amplifier board, the relay board and the mechanism bracket.

### ■ Removing the direction switch board (See Fig.1)

1. Unsolder the three wires **a** on the direction switch board.
2. Remove the one screw **A** attaching the direction switch board.

### ■ Removing the FF / REW lever assembly (See Fig.1)

1. Remove the screw **B** attaching the FF / REW lever assembly on the back of the cassette mechanism assembly.
2. Remove the screw **C** on the upper side of the FF / REW lever assembly.
3. Lift and pull forward the FF / REW lever assembly to disengage the joints **b**, **c**, **d** and **e**.

### ■ Reattaching the FF / REW lever assembly (See Fig.1)

1. Reattach the FF / REW lever assembly to the joint **c** on the back of the chassis.
2. Reattach the pinch-roller shaft **e**, the change lever **d** and the return link **e** to the chassis.

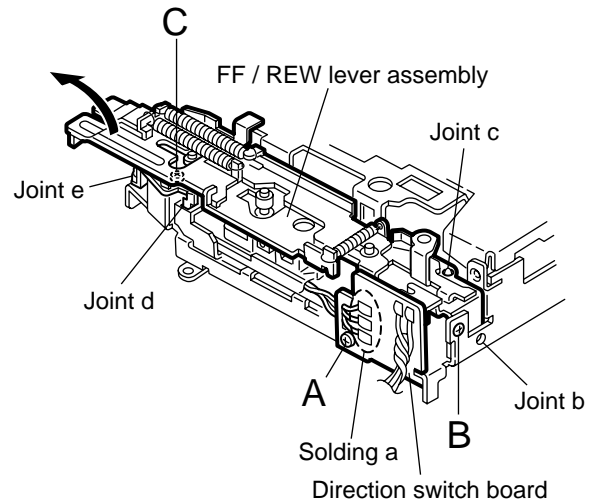


Fig.1

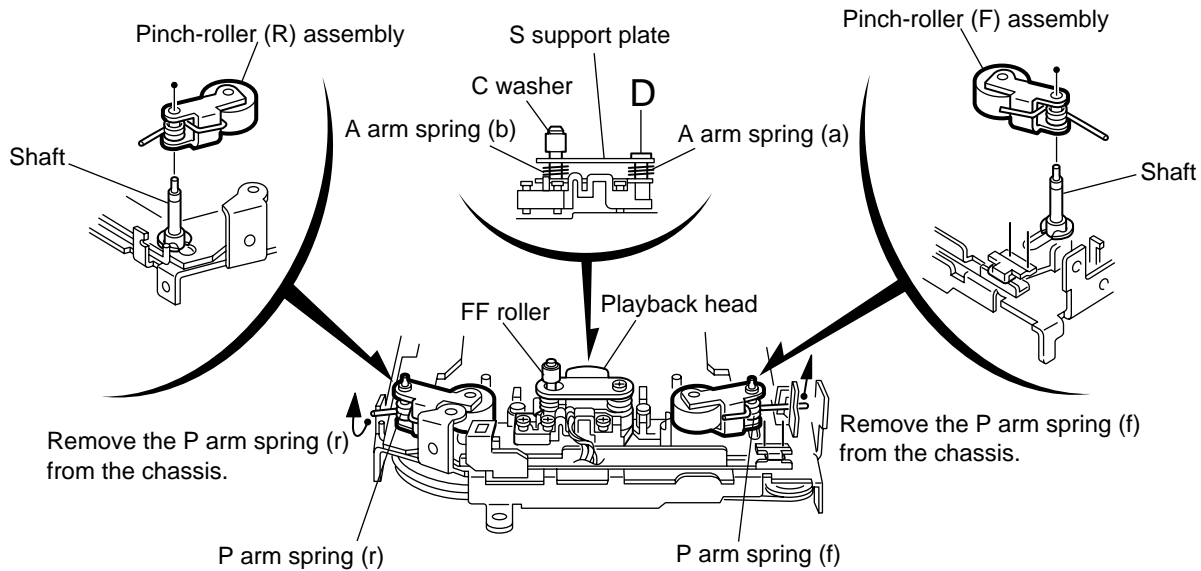


Fig.2

**■ Removing the playback head (See Fig.2)**

• Prior to performing the following procedure, remove the direction switch board and the FF / REW lever assembly.

1. Remove the screw **D** attaching the playback head.
2. Remove the **C** washer and pull out the FF roller.
3. Remove the **S** support plate, the **A** arm spring (a) and (b), the playback head.

ATTENTION: The **A** arm spring (a) differs from the **A** arm spring (b).

**■ Removing the pinch-roller (R) and (F) assembly (See Fig.2)**

• Prior to performing the following procedure, remove the direction switch board and the FF / REW lever assembly.

1. Remove the **P** arm spring (f) in the pinch-roller (F) assembly from the chassis.
2. Remove the **P** arm spring (r) in the pinch-roller (R) assembly from the chassis.
3. Draw out the pinch roller (F) and (R) assembly from the shaft.

ATTENTION: The **P** arm spring (f) differs from the **P** arm spring (r).

ATTENTION: The pinch roller (F) assembly differs from the pinch roller (R) assembly.



**■ Removing the cassette hanger / cassette holder (See Fig.3)**

• Prior to performing the following procedure, remove the FF / REW lever assembly.

1. From the rear of the unit, bend the two tabs **f** outwards and disengage the two joints **g** in the direction of the arrow.
2. Push the eject lever and remove the cassette holder from the playback head. Disengage the two joints **h** of the cassette hanger / cassette holder and the eject lever in the direction of the arrow.
3. Lift the cassette hanger / cassette holder and disengage the joint **i** of the return link and the eject lever.

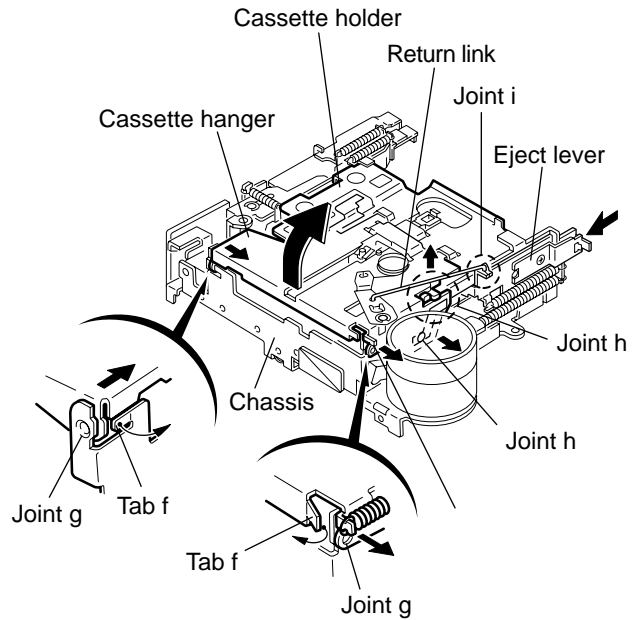


Fig.3

**■ Removing the reel disc assembly (See Fig.4)**

• Prior to performing the following procedure, remove the FF / REW lever assembly and the cassette hanger / cassette holder.

1. Remove the C washer and pull out reel disc assembly.

ATTENTION: Replace with a new C washer when reattaching.

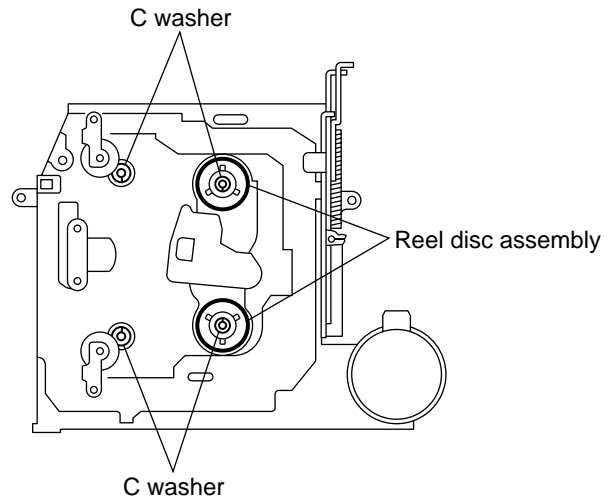


Fig.4

**■ Removing the motor assembly (See Fig.5)**

1. Unsolder the two wires **j** on the motor assembly.

ATTENTION: To replace the sub-belt, remove the main belt and the sub-belt from the motor pulley. Then remove the three screws **E** and one screw **F**. Replace with a new sub-belt while lifting the reel base assembly slightly.

2. Turn over the cassette mechanism assembly and remove the main belt and the sub-belt from the motor pulley.

ATTENTION: The main belt can now be removed.

3. Remove the two screws **G** attaching the motor assembly.

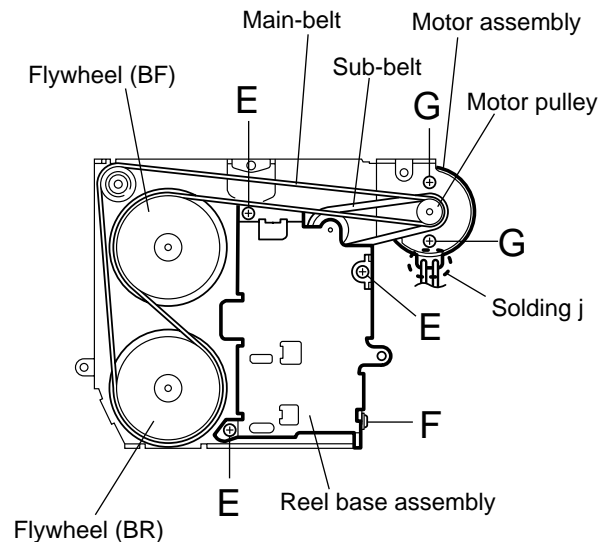


Fig.5

**■ Removing the Flywheel (BF) and (BR) assembly (See Fig.4 and 5)**

• Prior to performing the following procedure, remove the cassette hanger / cassette holder.

1. From the upper side of the cassette mechanism assembly, remove the C washer from each shaft of the flywheel (BF) and (BR).
2. Turn over the cassette mechanism assembly and remove the main belt. Pull out the flywheel (BF) and (BR) downward respectively.

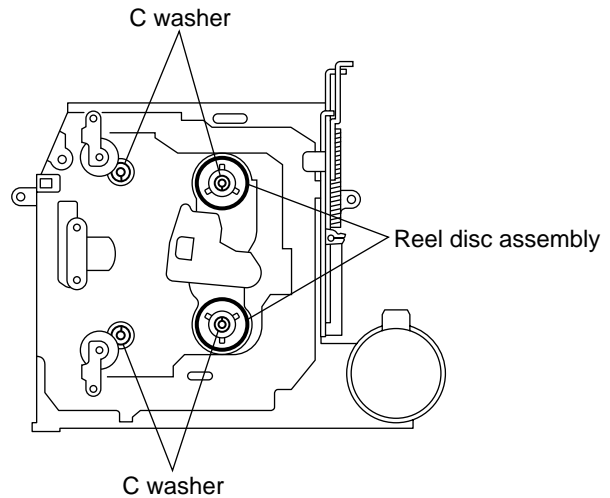


Fig.4

**■ Removing the reel base assembly (See Fig.5 and 6)**

1. Raise the part k of the reel base assembly slightly and remove the selector link (B) on the front side of the cassette mechanism assembly by turning it as shown in Fig.10.
2. Remove the three screws E and the one screw F on the underside of the cassette mechanism assembly.

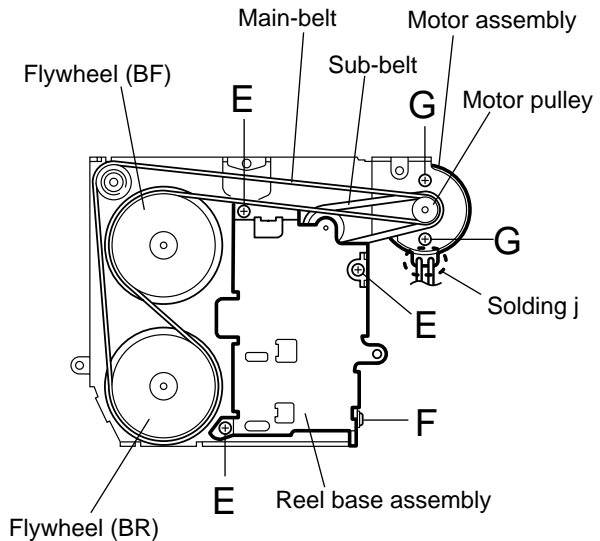


Fig.5

ATTENTION: The reel base assembly is not repairable. Handle with care.

Inside of the reel base assembly

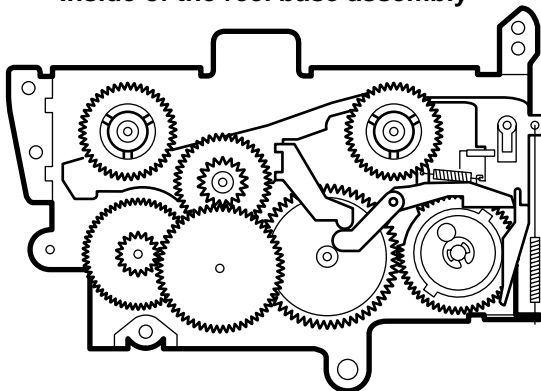


Fig.7

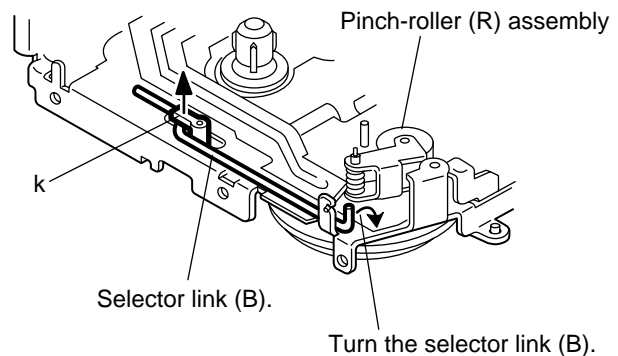


Fig.6

## ■ Removing the mute switch board

(See Fig.8)

1. Unsolder the two wires **I** on the mute switch board on the back of the cassette mechanism assembly.
2. Remove the screw **H** attaching the mute switch board.

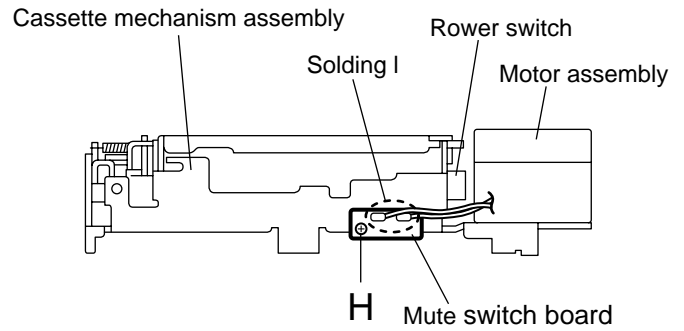


Fig.8

## ■ Removing the power switch (See Fig.9)

- Prior to performing the following procedure, remove the motor assembly.
1. Unsolder the two wires **m** on the power switch on the side of the cassette mechanism assembly.
  2. Remove the screw **I** attaching the power switch.

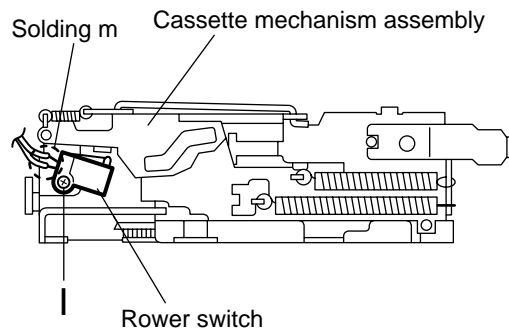


Fig.9

# Adjustment Method

## ■ Test Instruments required for adjustment

1. Digital oscilloscope(100MHz)
2. Frequency Counter meter
3. Electric voltmeter
4. Wow & flutter meter
5. Test Tapes
  - VT724 ..... for DOLBY level measurement
  - VT739 ..... For playback frequency measurement
  - VT712 .... For wow flutter & tape speed measurement
  - VT703 ..... For head azimuth measurement
6. Torque gauge ..... Cassette type for CTG-N  
(mechanism adjustment)

## ■ Measuring conditions(Amplifier section)

- Power supply voltage ..... DC14.4V (10.5 - 16V)
- Load impedance ..... 4 Ω (2Speakers connection)
- Line out ..... 20k Ω

## ■ Standard volume position

Balance and Bass, Treble volume .Fader  
:Center(Indication"0")  
Loudness, Dolby NR, Sound, Cruise:Off  
Volume position is about 2V at speaker output with  
following conditions. Playback the test tape VT721.

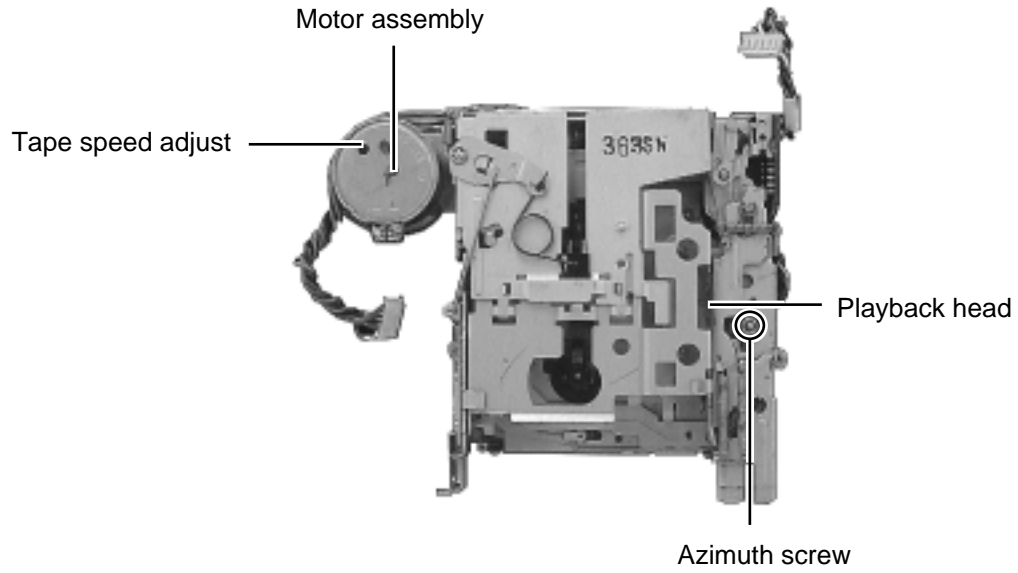
- AM mode            999kHz/62dB, INT/400Hz, 30%  
                         modulation signal on receiving.
- FM mono mode    97.9MHz/66dB, INT/400Hz, 22.5kHz  
                         deviation pilot off mono
- FM stereo mode   1kHz, 67.5kHz dev. pilot 7.5kHz dev.
- Output level      0dB(1 μV, 50 Ω /open terminal)

## ■ Frequency Band

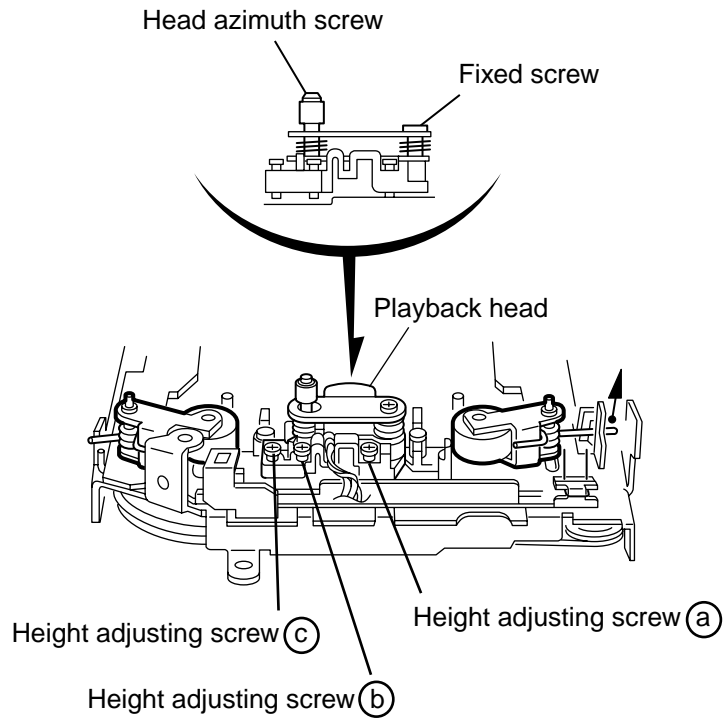
MODEL		KS-FX201	
Band	FM	87.5-108MHz	50KHz step
	AM	531-1602KHz	9KHz step

### ■Arrangement of Adjusting & Test points

Cassette mechanism  
(Surface)



Head section view



### ■ Information for using a Car Audio Service Jig

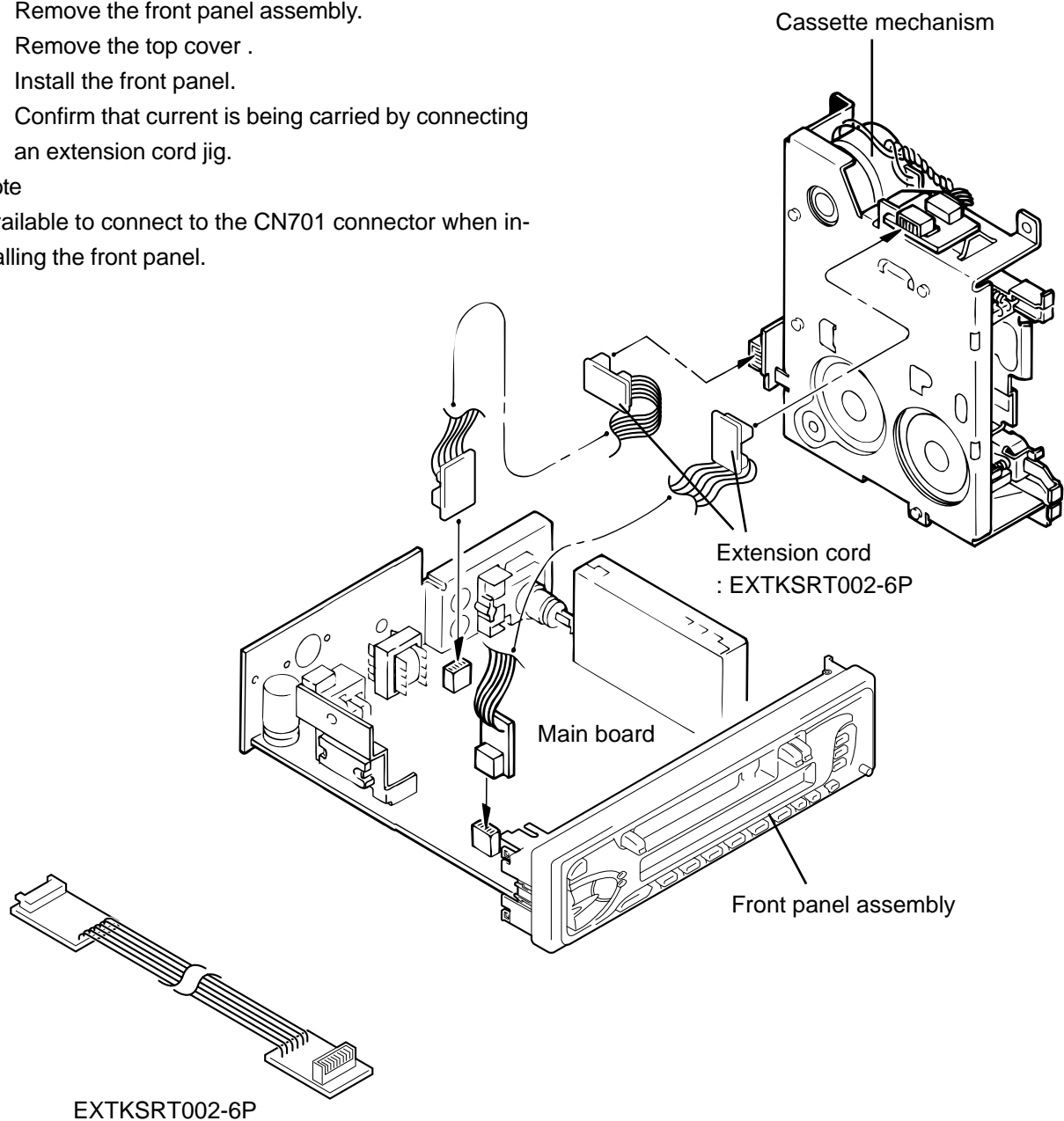
1. For 1995 and 1996 , we're advancing efforts to make our extension cords common for all car audio products. Please use this type of extension cord as follows.
2. As a U-shape type top cover is employed, this type of extension cord is needed to check operation of the mechanism assembly after disassembly.
3. Extension cord : EXTKSRT002-6P ( 6 pin extension cord ) For connection between mechanism assembly and main board assembly.  
Check for mechanism driving section such as motor ,etc..

### ■ Disassembly Method

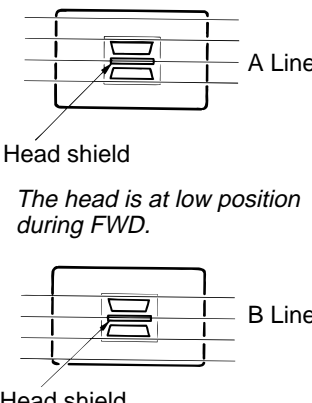
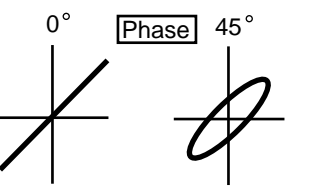
1. Remove the bottom cover.
2. Remove the front panel assembly.
3. Remove the top cover .
4. Install the front panel.
5. Confirm that current is being carried by connecting an extension cord jig.

**Note**

Available to connect to the CN701 connector when installing the front panel.



■Mechanism Adjustment Section

Item	Adjusting & Confirmation Methods	Adjust	Std. Value
<p>1.Head azimuth</p>	<p>"Head Height Adjustment"                      Note                      Adjust the azimuth directly. When you adjust the height using a mirror tape, remove the cassette housing from the mechanism chassis.                      After installing the cassette housing, perform the azimuth adjustment.</p> <ol style="list-style-type: none"> <li>load the mirror tape ( SCC-1659 ). Adjust with height adjustmentscrew (a) and azimuth adjustment screw (b) so that line "A" of the mirror tape runs in the center between Lch and Rch in the reverse play mode.</li> <li>After switching from REV to FWD then to REV, check that the head position set in procedure "1" is not changed.                      *If the position has shifted, adjust again and check.</li> <li>Adjust the azimuth screw (b) so that line "B" of the mirror tape runs in the center between Lch and Rch in the forward play mode.</li> </ol> <p>"Head Azimuth Adjustment"                      1.Load the test tape ( VT724: 1kHz ) and play it back in the reverse play mode. set the Rch output level to maximum.                      2.Load the test tape ( VT703: 10kHz ) and play it back in the forward play mode. Adjust the Rch and Lch output levels to maximum, with azimuth adjustment screw (b).                      In this case, the phase difference should be within 45° .                      3.Engage the reverse mode and adjust the output level to maximum, with azimuth adjustment screw (c).                      *The phase difference should be 45_ Kor more.                      4.When switching between forward and reverse modes, the difference between channels should be within 3dB.                      *Between FWD Lch and Rch, REV Lch and Rch.                      5.When the test tape ( VT721 : 315Hz ) is played back, the level difference between channels should be within 1.5dB.</p>	 <p>Head shield</p> <p><i>The head is at low position during FWD.</i></p> <p>Head shield</p> <p><i>The head is at height position during REV.</i></p> <p>Head azimuth screw      Fixed screw</p> <p>screw (c)      screw (a)</p> <p>screw (b)</p> <p>0°      Phase      45°</p> 	
<p>2. Tape Speed and Wow &amp; Flutter</p>	<ol style="list-style-type: none"> <li>Check to see if the reading of the frequency counter &amp; Wow flutter meter is within 2940-3090 Hz( FWD/REV ), and less than 0.35% ( JIS RMS ).</li> <li>In case of out of specification, adjust the motor with a built-in volume resistor.</li> </ol>	<p>Built-in volume resistor</p>	<p>Tape Speed 2940-3090Hz                      Wow&amp;Flutter Less than 0.35% (JIS RMS)</p>
<p>3.Playback Frequency response</p>	<ol style="list-style-type: none"> <li>Play the test tape ( VT724 : 1kHz ) back and set the volume position at 2V.</li> <li>Play the test tape ( VT739 )back and confirm 0 ± 3dB at 1kHz/ 8kHz and -4+2dB at 1kHz/125Hz.</li> <li>When 8kHz is out of specification, it will be necessary to read adjust the azimuth.</li> </ol>		<p>Speaker out 1kHz/8kHz : 0dB_}3dB, 125Hz/1kHz : -4dB+2dB,</p>

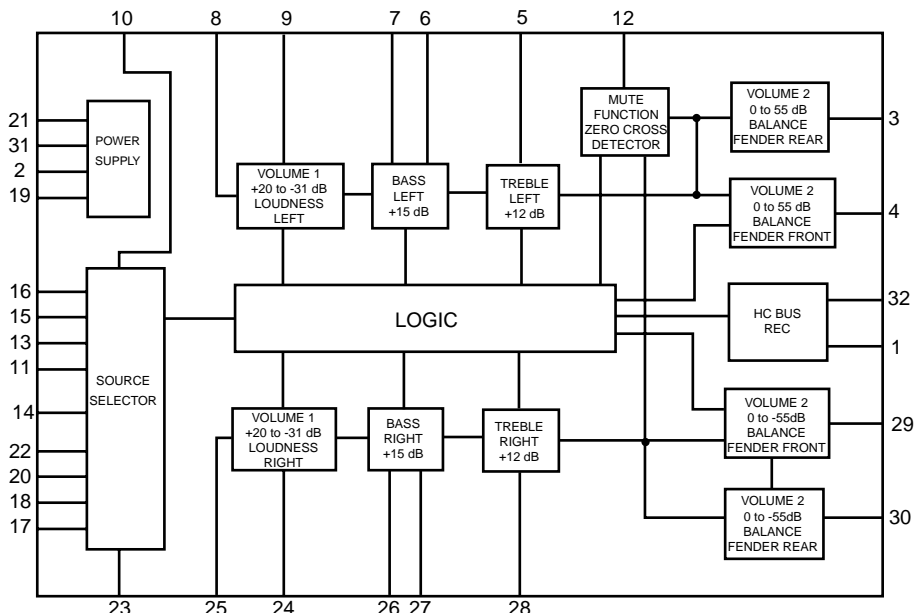
# Description of major ICs

## ■ TEA6320T-X (IC931) : E.volume

1.Pin layout

SDA	1	32	SCL
GND	2	31	VCC
OUTLR	3	30	OUTRR
OUTLF	4	29	OUTRF
TL	5	28	TR
B2L	6	27	B2R
B1L	7	26	B1R
IVL	8	25	ILR
ILL	9	24	ILR
QSL	10	23	QSR
IDL	11	22	IDR
MUTE	12	21	Vref
ICL	13	20	ICR
IMD	14	19	CAP
IBL	15	18	IBR
IAL	16	17	IAR
			CD-CH

2.Block diagram



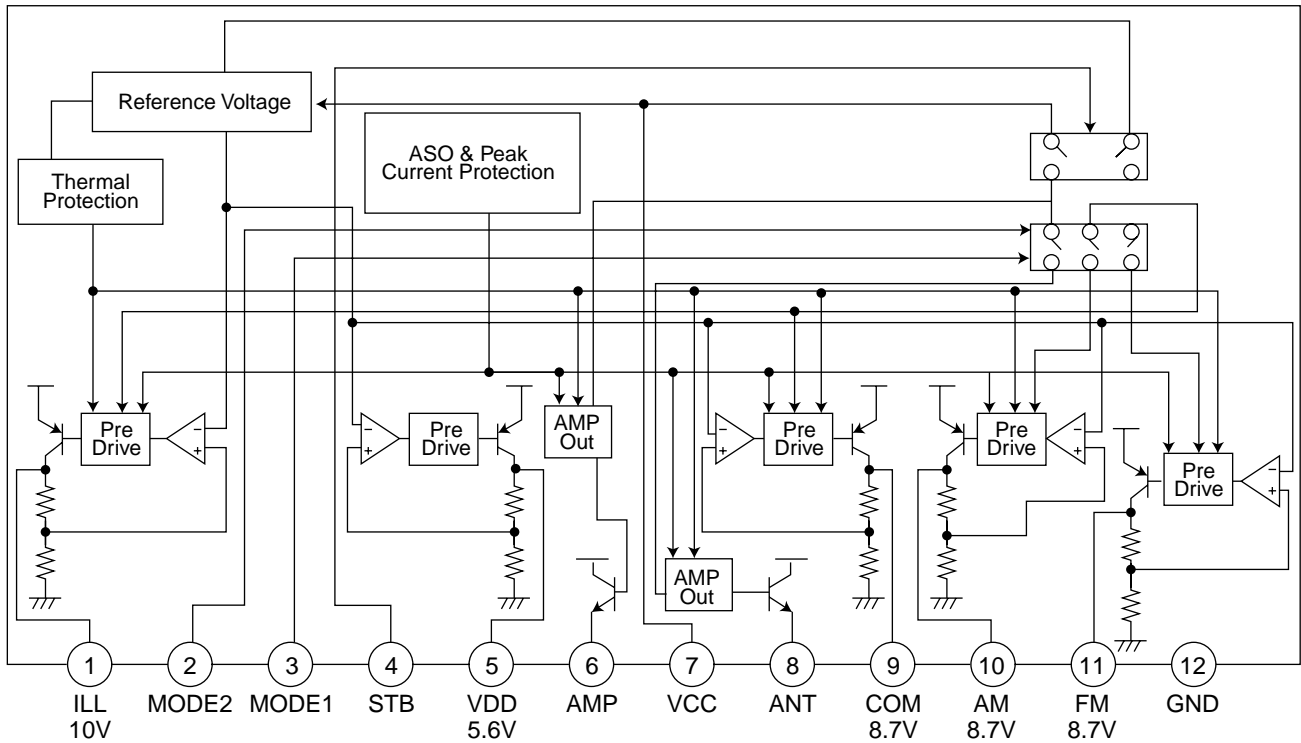
3.Pin functions

Pin No.	Symbol	I/O	Functions	Pin No.	Symbol	I/O	Functions
1	SDA	I/O	Serial data input/output.	17	IAR	I	Input A right source.
2	GND	-	Ground.	18	IBR	I	Input B right source.
3	OUTLR	O	output left rear.	19	CAP	-	Electronic filtering for supply.
4	OUTLF	O	output left front.	20	ICR	I	Input C right source.
5	TL	I	Treble control capacitor left channel or input from an external equalizer.	21	Vref	-	Reference voltage (0.5Vcc)
6	B2L	-	Bass control capacitor left channel or output to an external equalizer.	22	IDR	-	Not used
7	B1L	-	Bass control capacitor left channel.	23	QSR	O	Output source selector right channel.
8	IVL	I	Input volume 1. left control part.	24	ILR	I	Input loudness right channel.
9	ILL	I	Input loudness. left control part.	25	IVR	I	Input volume 1. right control part.
10	QSL	O	Output source selector. left channel.	26	B1R	-	Bass control capacitor right channel
11	IDL	-	Not used	27	B2R	O	Bass control capacitor right channel or output to an external equalizer.
12	MUTE	-	Not used	28	TR	I	Treble control capacitor right channel or input from an external equalizer.
13	ICL	I	Input C left source.	29	OUTRF	O	Output right front.
14	IMO	-	Not used	30	OUTRR	O	Output right rear.
15	IBL	I	Input B left source.	31	Vcc	-	Supply voltage.
16	IAL	I	Input A left source.	32	SCL	I	Serial clock input.



■ AN80T05LF (IC781) : Regulator

1. Terminal layout & Block diagram

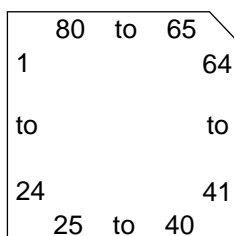


2. Pin function

Pin No.	Symbol	Function
1	ILL	10V power supply for illumination.
2	MODE2	When 5V is input, becomes AM. and the antenna output is turned on.
3	MODE1	When 5V is input, becomes AM. and the output of FM is switched.
4	STB	When 5V is input, outputs to ILL, COM, and AMP. It is 0V usually.
5	VDD	5.6V power supply.
6	AMP	Power supply supply to remote amplifier
7	VCC	Back up. connects with ACC with it.
8	ANT	Power supply supply to auto antenna.
9	COM	8.7V power supply.
10	AM	The power supply of 8.7V to AM.
11	FM	The power supply of 8.7V to FM.
12	GND	Ground

## ■ LC72362N-9920 (IC701) : System control

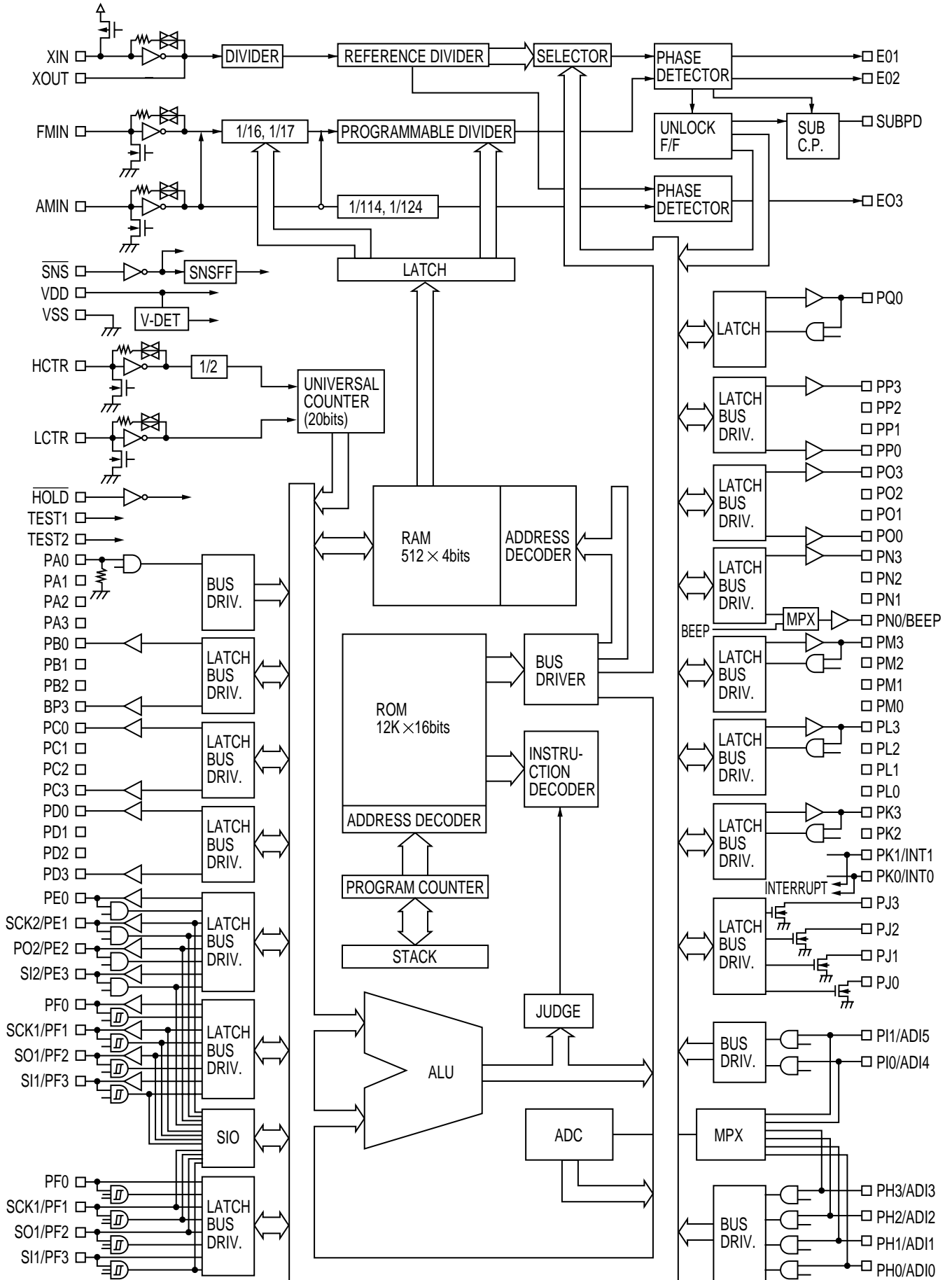
### 1. Pin layout



### 2. Pin function

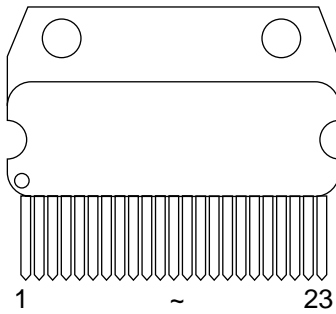
Pin No.	Symbol	I/O	Function
1	XIN	I	4.5MHz crystal oscillator connections
2	TEST2		LSI test pin.
3	PG3/SI0		
4	PG2/SO0		
5	PG1/SCK0		
6	PG0		
7	PF3/SI1		
8	PF2/SO1		
9	PF1/SCK1	I/O	General-purpose input/output and serial input/output shared ports.
10	PF0		
11	PE3/SI2		
12	PE2/SO2		
13	PE1/SCK2		
14	PE0		
15~18	PD3~PD0	O	Output only port.
19~22	PC3~PC0	O	Key source signal output only ports.
23~26	PB3~PB0	O	
27~30	PA3~PA0	I	Key return signal input only port, of which threshold voltage is designed to be low.
31	V DD	O	Power supply connections.
32	PQ0	O	General-purpose input/output port.
33~36	PP3~PP0	O	Output only port.
37~40	PO3~PO0	O	
41~43	PN3~PN1	O	General-purpose output port/BEEP tone shared output pins.
44	PN0/BEEP	O	
45~48	PM3~PM0	I/O	General-purpose input/output ports.
49~52	PL3~PL0	I/O	
53,54	PK3, PK2	I/O	General-purpose input-output/external interrupt shared port.
55,56	PK1/INT1, PK0/INT0	I/O	
57~60	PJ3/DAC3~PJ0/DAC0	O	General-purpose output port/DAC shared output pins.
61,62	PI1/ADI5, PI0/ADI4	I	General-purpose output port/ADC shared input pins.
63~66	PH3/ADI3~PH0/ADI0	I	
67	HOLD	I	PLL control, CLOCK STOP mode control pin.
68	SNS	I	Voltage sense/general-purpose input pin shared port.
69	LCTR	I	Universal counter (frequency, cycle measurement)/general-purpose input shared input port.
70	HCTR	I	Universal counter/general-purpose input shared input port.
71	EO3	O	2nd PLL charge pump output pin.
72	SUBPD	O	Sub-charge pump output pin.
73	V DD	O	Power supply connections.
74	AMIN	I	AM VCO (local oscillator) input pin.
75	FMIN	I	FM VCO (local oscillator) input pin.
76	V SS	O	Power supply connections.
77,78	EO2,EO1	O	Main charge pump output pins.
79	TEST1		LSI test pin.
80	XOUT	O	4.5MHz crystal oscillator connections

3. Block diagram

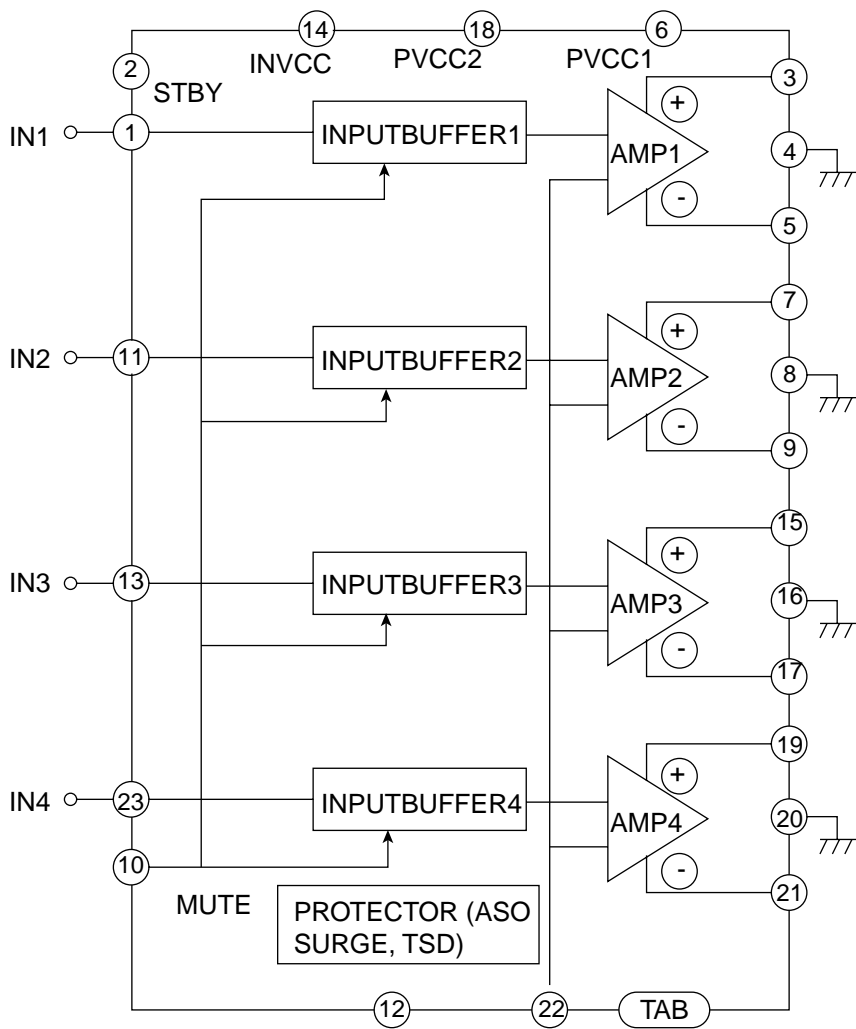


■ HA13158A (IC981) : Power amp

1. Pin layout

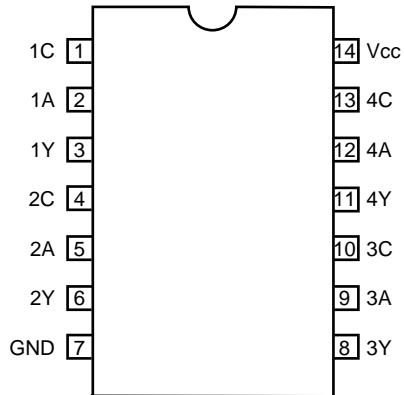


2. Block diagram



■ HD74HC126P(IC751) :CD CHANGER

1.Terminal layout



2.Pin function

Input		Output
C	A	Y
L	X	Z
H	L	L
H	H	H

Note)

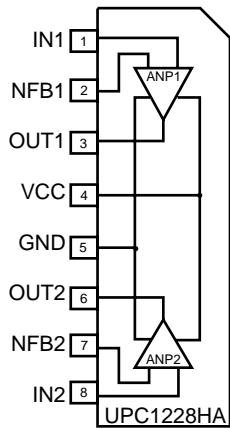
H : High level

L : Low level

X : "H" or "L"

Z : Off state of three state output(High impedance)

■ UPC1228HA(IC901):Head amp

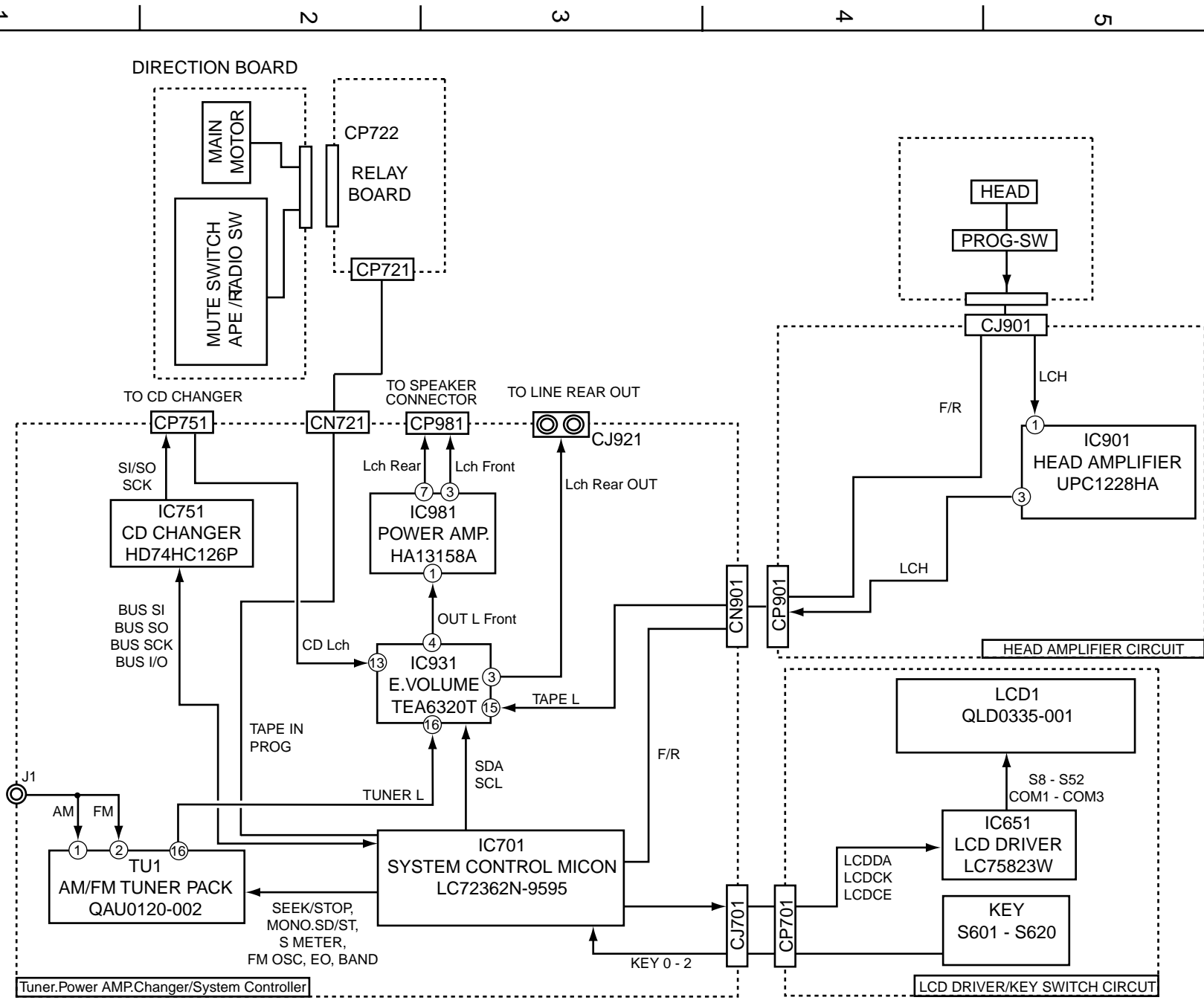




**JVC**

VICTOR COMPANY OF JAPAN, LIMITED  
MOBILE ELECTRONICS DIVISION  
PERSONAL & MOBILE NETWORK BUSINESS UNIT. 10-1,1Chome,Ohwatari-machi,Maebashi-city,Japan

# Block Diagram



Tuner.Power AMP.Changer/System Controller

LCD DRIVER/KEY SWITCH CIRCUIT

HEAD AMPLIFIER CIRCUIT

A  
B  
C

1 2 3 4 5

**< MEMO >**



# Standard schematic diagrams

## Receiver & System control circuit section

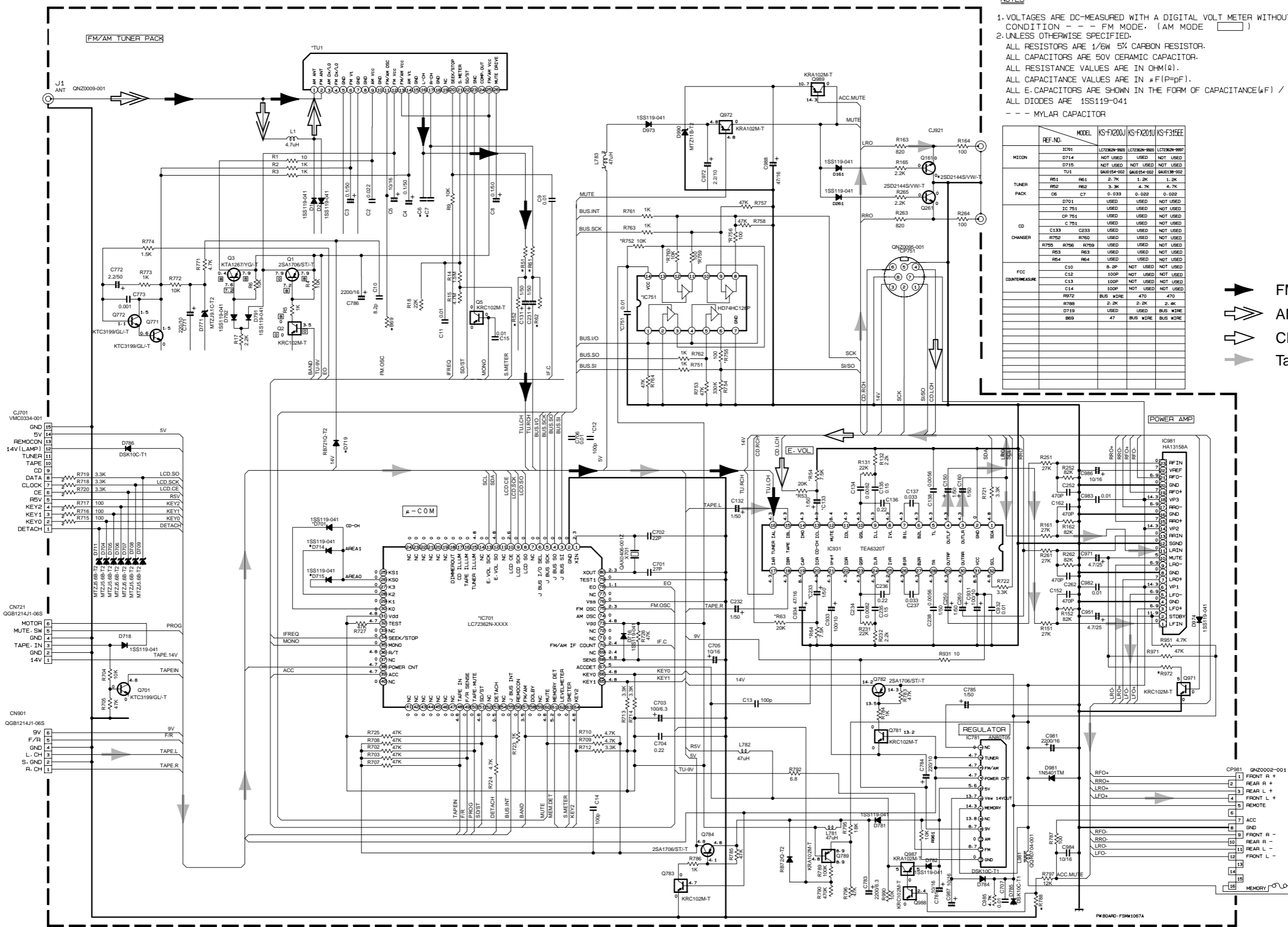
5

4

3

2

1



### NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL. CONDITION - - - FM MODE. (AM MODE )
- UNLESS OTHERWISE SPECIFIED:  
 ALL RESISTORS ARE 1/8W 5% CARBON RESISTOR.  
 ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.  
 ALL RESISTANCE VALUES ARE IN OHM(Ω).  
 ALL CAPACITANCE VALUES ARE IN μF(P=pF).  
 ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF) / RATED VOLTAGE(V).  
 ALL DIODES ARE 1SS119-041  
 - - - MYLAR CAPACITOR

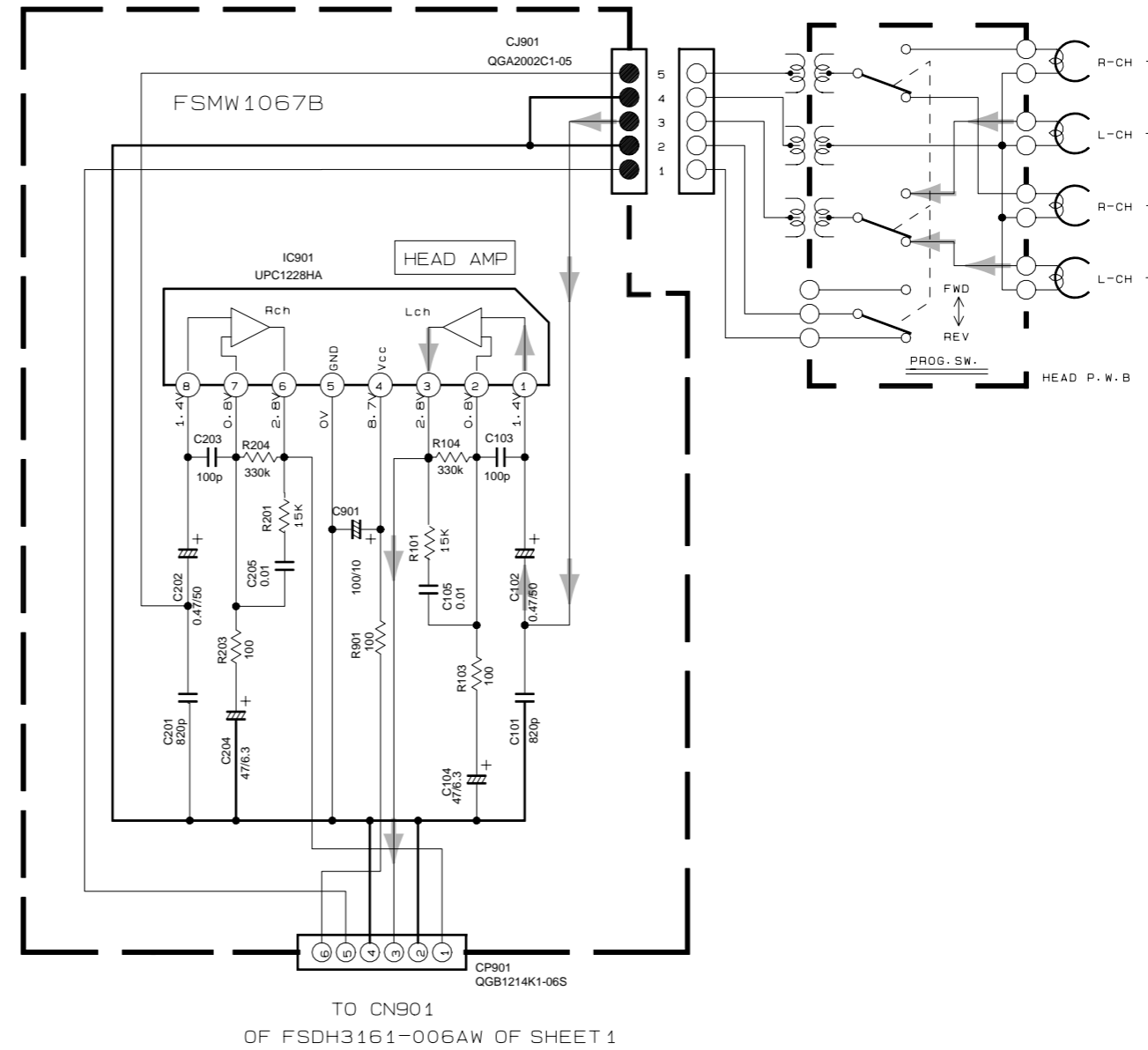
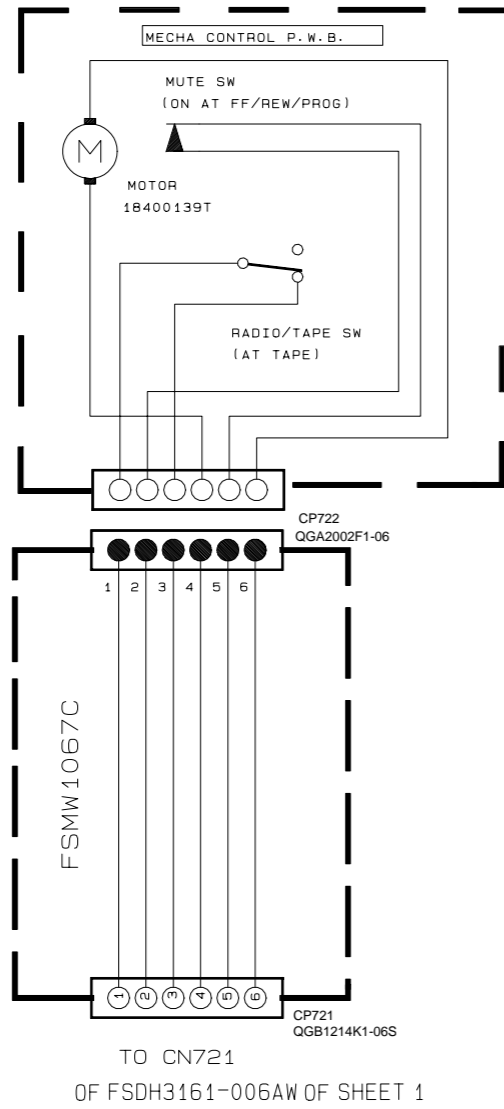
REF. NO.	MODEL	KS-FX200U	KS-FX201U	KS-F315EE
<b>MICRON</b>				
D714	LCT2362N-980	USED	NOT USED	NOT USED
D715	NOT USED	NOT USED	NOT USED	NOT USED
TU1	GAU0154-002	GAU0154-002	GAU0154-002	GAU0154-002
<b>TUNER PACK</b>				
R61	R61	2.7K	1.2K	1.2K
R62	R62	3.3K	4.7K	4.7K
C6	C7	0.033	0.032	0.032
D701	USED	USED	NOT USED	NOT USED
IC 701	USED	USED	NOT USED	NOT USED
CP 701	USED	USED	NOT USED	NOT USED
<b>CD CHANGER</b>				
C133	C233	USED	USED	NOT USED
R750	R750	USED	USED	NOT USED
R755	R756	USED	USED	NOT USED
R63	R63	USED	USED	NOT USED
R64	R64	USED	USED	NOT USED
<b>FOC COMPONENTS</b>				
C10	8.2P	NOT USED	NOT USED	NOT USED
C12	100P	NOT USED	NOT USED	NOT USED
C13	100P	NOT USED	NOT USED	NOT USED
C14	100P	NOT USED	NOT USED	NOT USED
R972	BUS WIRE	470	470	
R780	2.2K	2.2K	2.2K	
D719	USED	USED	BUS WIRE	NOT USED
B69	47	BUS WIRE	BUS WIRE	

- FM Radio signal
- AM Radio signal
- CD signal
- Tape PB/Main signal

NOTE: s/C/es/3161ma.001  
 KS-FX200J/KS-F315EE/KS-FX201USERIES  
 FSDH3161-006AW 1/3

■ Head amplifier circuit section

5  
4  
3  
2  
1



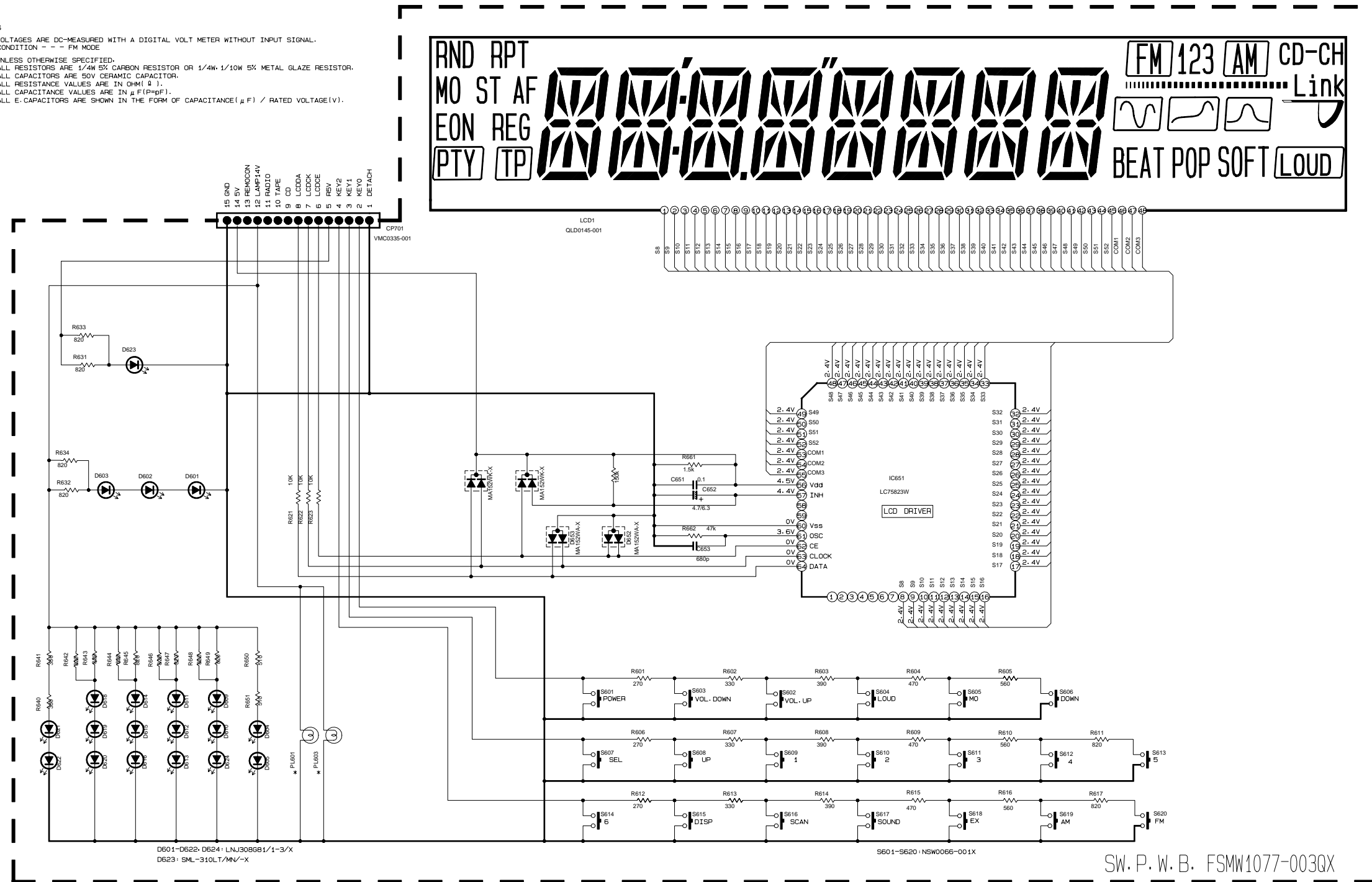
➔ Tape PB/Main signal

NOTE/s/C/jea/3161me.001  
KS-FX200JKS-F315EEIKS-FX201USERIES  
FSDH3161-006MW 2/3

■ LCD driver & Operation switch circuit section

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL. CONDITION - - - FM MODE
2. UNLESS OTHERWISE SPECIFIED:  
 ALL RESISTORS ARE 1/4W 5% CARBON RESISTOR OR 1/4W-1/10W 5% METAL GLAZE RESISTOR.  
 ALL CAPACITORS ARE 50V CERAMIC CAPACITOR.  
 ALL RESISTANCE VALUES ARE IN OHM (Ω).  
 ALL CAPACITANCE VALUES ARE IN μF (P=PF).  
 ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF) / RATED VOLTAGE(V).



SW. P. W. B. FSMW1077-003QX

Version	KS-FX200J/F315EE	KS-FX201U SERIES	MODEL NAME	SWITCH-BOARD
Ref No.	QLL0070-001	QLL0092-001	KS-FX200J/F315EE	KS-SWPCB-6
PL601 PL603			KS-FX201U SERIES	KS-SWPCB-7

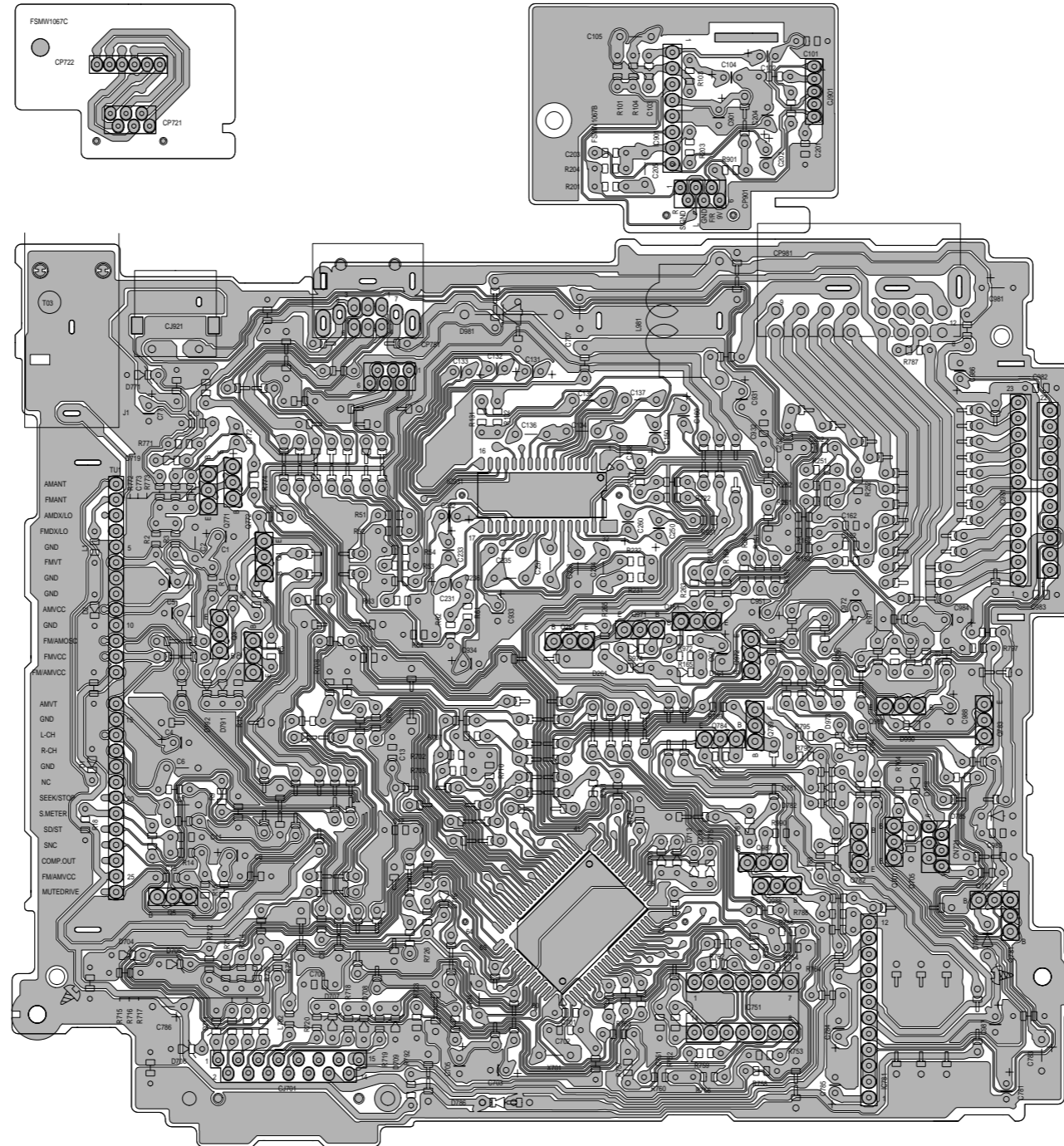
NOTE/S/C/je/3211sw.001  
 KS-FX200J/201U SERIES KS-F315EE  
 FSDH3161-006 3/3

5  
4  
3  
2  
1

# Printed circuit boards

■ Main boards

5  
4  
3  
2  
1



NOTE:KS-FX200J,KS-FX201 FSMW1067-0203  
/d2/c/jea/1067ma/1067mo

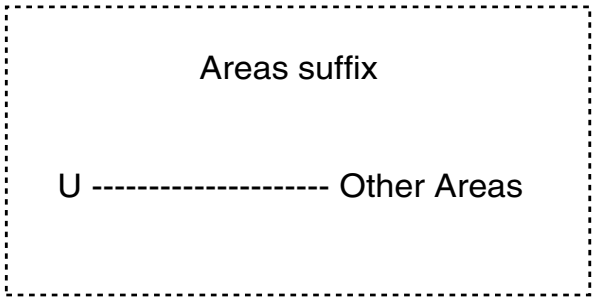
A | B | C | 2-6 | D | E | F | G | H



# PARTS LIST

[ KS-FX201 ]

\* All printed circuit boards and its assemblies are not available as service parts.



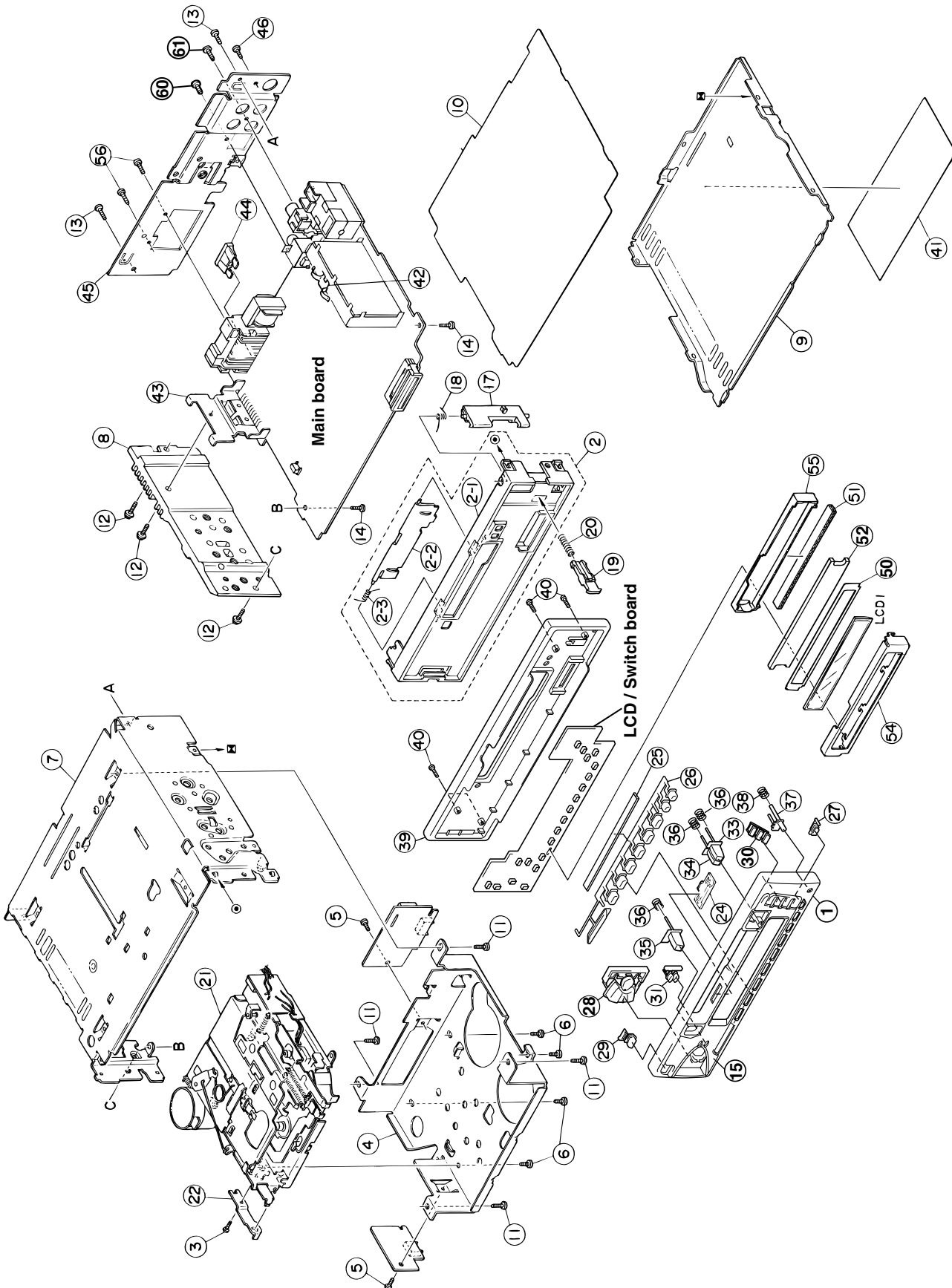
- Contents -

Exploded view of general assembly and parts list .....	3- 2
Cassette mechanism assembly and parts list .....	3- 5
Electrical parts list .....	3-10
Packing materials and accessories parts list .....	3-14

# Exploded view of general assembly and parts list

Block No. 

M	1	M	M
---	---	---	---



**Parts list (General assembly)**

Block No. M1MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	FSJC1053-006	FRONT PANEL	1		
	2	ZCKSFX12J-FB	FRONT CHASS.ASSY	1		
	2-1	FSJC1055-001	FRONT CHASSIS	1		
	2-2	FSJC4003-027	CASSETTE LID	1		
	2-3	VKW4947-002	DOOR SPRING	1		
	3	QYSPSPT2625Z	MINI SCREW	1		
	4	FSKM2005-002	MECHA BRACKET	1		
	5	QYSDST2605Z	SCREW	2	PCB+MECHA	
	6	QYSDSP2604Z	SCREW	4	MECHA+M.BRACKET	
	7	FSJC1029-012	TOP CHASSIS	1		
	8	FSMH3001-002	SIDE PANEL	1		
	9	FSKM3011-002	BOTTOM COVER	1		
	10	FSMA3004-003	INSULATOR	1		
	11	QYSDST2605Z	SCREW	4	CHASSIS+MECHA BKT	
	12	FSKZ4005-001	SCREW	3		
	13	QYSDST2604Z	SCREW	2	CHASSIS+REAR BKT	
	14	QYSDST2606Z	SCREW	2	CHASSIS+MAIN PWB	
	15	FSJD3022-00E	FINDER ASSY	1		
	17	FSKS3010-001	LOCK LEVER	1		
	18	FSKW4005-003	TORSION SPRING	1		
	19	FSXP3026-002	RLS KNOB	1		
	20	FSKW3002-004	COMP.SPRING	1		
	21	-----	CASSETTE MECHA	1	CDS-363SJ1	
	22	VKL7821-001	EJECT LEVER	1		
	24	FSJK3014-001	LIGHT LENS	1		
	25	FSYH4036-031	SHEET	1	PRESET BTN	
	26	FSXP2035-108	PRESET BUTTON	1	1-6,DISP,RPT/SCAN	
	27	FSXP4005-026	BBE BUTTON	1		
	28	FSXP2044-001	COMBO BUTTON	1		
	29	FSXP3053-002	POWER BUTTON	1		
	30	FSXP2034-037	D.FUNC BUTTON	1	FM/AM/CD-CH	
	31	FSXP3068-001	PUSH BUTTON	1	LOUD,MD/RND	
	33	FSXP3066-001	FF BUTTON	1		
	34	FSXP3067-001	REW BUTTON	1		
	35	FSXP3065-001	EJECT BUTTON	1		
	36	FSKW3002-003	COMP. SPRING	3		
	37	FSXP3055-001	DETACH BUTTON	1		
	38	FSKW3002-012	COMP. SPRING	1	FOR DETACH BUTTON	
	39	FSJC1054-001	REAR COVER	1		
	40	VKZ4777-001	MINI SCREW	4	F.PANEL+REAR COVER	
	41	GE30126-002B	NAME PLATE	1		
	42	VMA4652-001SS	EARTH PLATE	1		
	43	FSKL4018-00B	IC BRACKET	1		
△	44	QMFZ047-100-T	FUSE	1		
	45	FSKM3010-011	REAR BRACKET	1		
	46	QYSDST2606Z	SCREW	1	REAR BKT+ANT JACK	
	50	FSYH4076-001	LIGHTING SHEET	1		
	51	QNZ0439-001	RUBBER CONNE	1		



**■ Parts list (General assembly)**

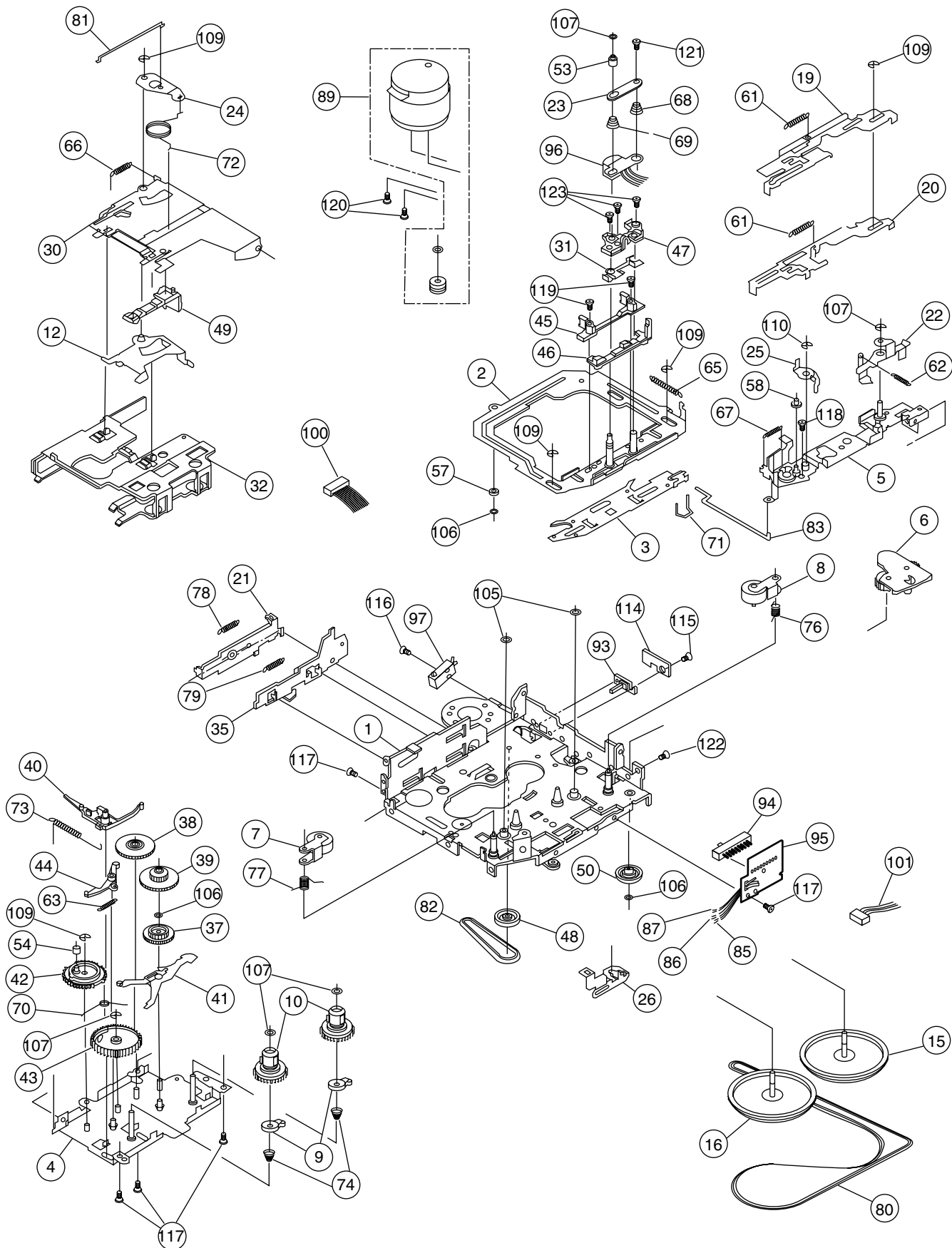
Block No. M1MM

▲	Item	Parts number	Parts name	Q'ty	Description	Area
	52	FSJK3034-001	LCD LENS	1		
	54	FSYH3022-001	LCD CASE	1		
	55	FSKS3021-001	LENS CASE	1		
	56	QYSDST2606Z	SCREW	2	REAR BKT+CONNECTOR	
	60	QYSDST2606Z	SCREW	1	REAR BKT+CD IN JACK	
	61	QYSDSF3006Z	SCREW	1	REAR BKT+PIN JACK	
	LCD 1	QLD0145-001	LCD MODULE	1		

# Cassette mechanism assembly and parts list

CDS-363SJ1

Block No. M 2 M M



**Parts list (Cassette mechanism)**

Block No. M2MM

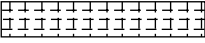


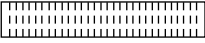

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	X-0363-1001S	MAIN CHASSIS AS	1		
	2	X-0363-1002S	HEAD PLATE ASSY	1		
	3	X-0363-1004S	FR CONVERT ARM	1	(A)	
	4	X-0363-6001S	REEL BASE ASSY	1		
	5	X-0363-6007S	LEVER BRACKET	1	(HD)	
	6	X-0363-6003S	TU GEAR ARM ASS	1		
	7	X-0363-6004S	PINCH ARM(R) AS	1		
	8	X-0363-6005S	PINCH ARM(F) AS	1		
	9	X-0363-6006S	DETECTOR CAM AS	2	(V)	
	10	X-0363-2005S	REEL SPINDLE AS	2		
	12	X-0363-1019S	EJ.CAM LOCK ASS	1		
	15	1-0363-6010S	FLYWHEEL ASSY(F	1	CPL	
	16	1-0363-6011S	FLYWHEEL ASSY(R	1	CPL	
	19	1-0036-1065S	FF LEVER(JVC)	1		
	20	1-0036-1066S	REW LEVER(JVC)	1		
	21	1-0036-1007S	EJECT LEVER	1		
	22	1-0036-1013S	LOCK ARM	1		
	23	1-0036-1015S	SPG SUPPORT PLT	1		
	24	1-0036-1018S	CENTER PLATE	1		
	25	1-0036-1023S	CHANGE LEVER(B)	1		
	26	1-0036-1026S	FR ARM(B)	1		
	30	1-0138-1002S	CASSETTE HANGER	1	(X)	
	31	1-0138-1006S	ADJUSTER SHIM	1	(X)	
	32	1-0138-1010S	CASSETTE HOLDER	1	(X)	
	35	1-0363-1003S	EJECT CAM	1		
	37	1-0036-2001S	IDLE GEAR	1		
	38	1-0036-2003S	REDUCTION GEAR	1	(B)	
	39	1-0036-2004S	REDUCTION GEAR	1	(A)	
	40	1-0036-2007-5S	RATCHET	1		
	41	1-0036-2009S	SENSOR ARM	1		
	42	1-0036-2010S	SELECTOR GEAR	1		
	43	1-0036-2014S	DETECTOR GEAR	1		
	44	1-0038-2014S	GEAR LOCK ARM	1		
	45	1-0038-2018S	TAPE GUIDE	1		
	46	1-0363-2006S	ADJUSTER LINK(B	1		
	47	1-0138-2005-3S	ADJUSTER ARM	1	BLUE	
	48	1-0036-2005S	PULLEY GEAR	1		
	49	1-0032-2007S	TAPE HOOKER	1		
	50	1-0058-2021-5S	IDLE PULLEY(A)	1		
	53	1-0363-3018S	FF ROLLER	1		
	54	1-0036-3018S	COLLAR	1	(SELECTOR GEAR)	
	57	1-0363-3007S	HP ROLLER(A)	1		
	58	1-0363-3011S	PROGRAM ROLLER	1		
	61	1-0036-4001S	FF/REW LEVER SP	2		
	62	1-0036-4002S	LOCK LEVER SPG	1		
	63	1-0036-4003S	G.LOCK ARM SPG	1		
	65	1-0036-4006S	HEAD PLATE SPG	1		
	66	1-0036-4007S	EJ.CAM LOCK SPG	1		

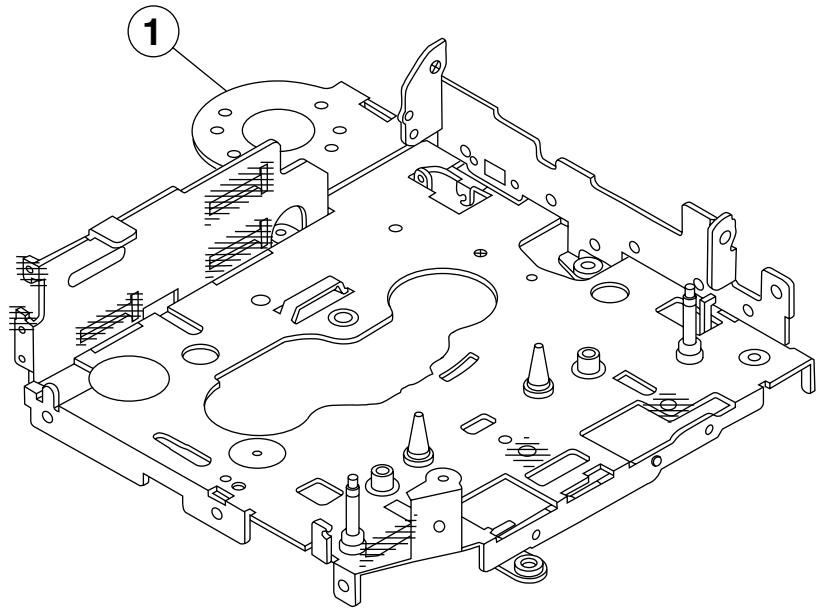
**Parts list (Cassette mechanism)**

Block No. M2MM

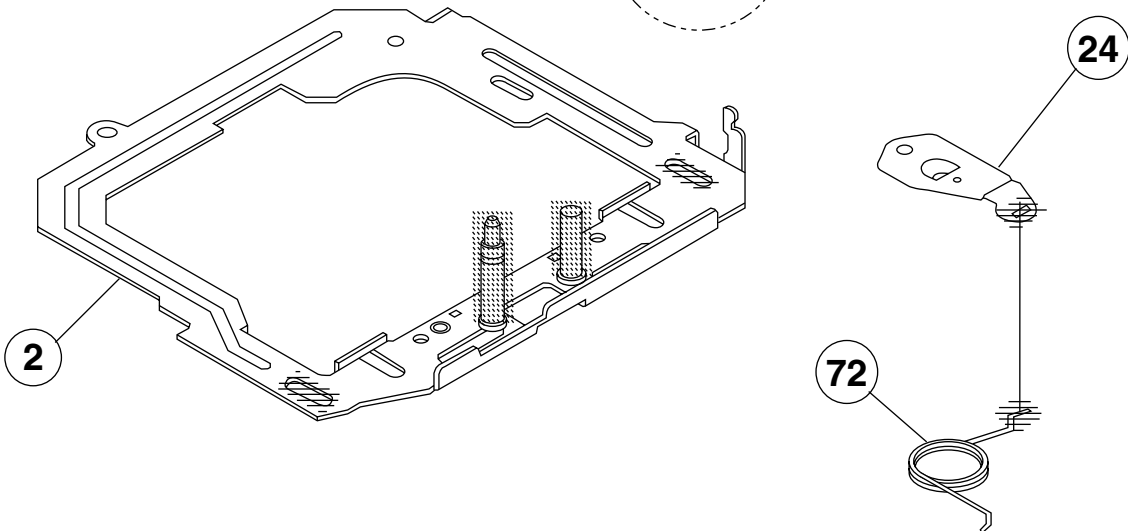
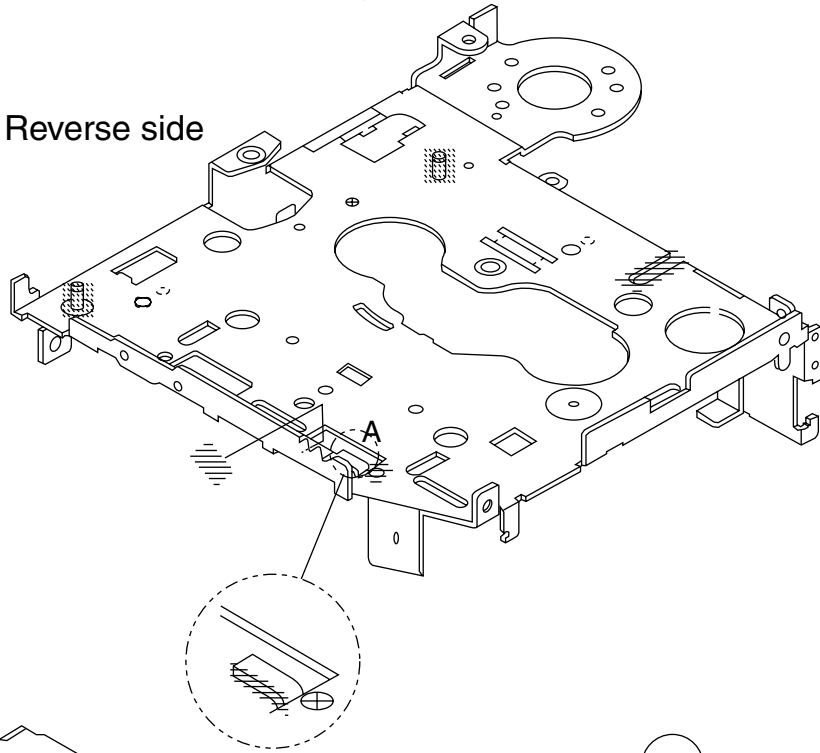
△	Item	Parts number	Parts name	Q'ty	Description	Area
	67	1-0036-4008S	PROGRAM ARM SPG	1		
	68	1-0036-4010S	ADJUSTER ARM SP	1	(A)	
	69	1-0036-4011S	ADJUSTER ARM SP	1	(B)	
	70	1-0036-4015S	DASH SPG	1		
	71	1-0036-4017S	S.SELECT ARM SP	1		
	72	1-0036-4023S	CENTER PLT SP(B	1		
	73	1-0038-4014S	RATCHET SPG	1		
	74	1-0138-4001S	BACK TENSION SP	2		
	76	1-0363-4003S	PINCH ARM SPG F	1		
	77	1-0363-4004S	PINCH ARM SPG R	1		
	78	1-0363-4005S	EJECT LEVER SPG	1		
	79	1-0036-4005S	EJECT CAM SPG	1		
	80	1-0036-5020S	MAIN BELT(AL)	1		
	81	1-0363-5007S	RETURN LINK	1		
	82	1-0036-5001S	SUB BELT	1		
	83	1-0363-5003S	SELECTOR LINK(B	1		
	85	1-0036-7002S	WIRE(A)	1	BLACK 60MM	
	86	1-0036-7003S	WIRE(B)	1	RED 60MM	
	87	1-0036-7073S	WIRE(AL)	1	YELLOW 55MM	
	89	X-0363-7006S	MOTOR ASSY	1		
	93	1-0363-7001S	MUTE SWITCH	1		
	94	1-0363-7002S	SLIDE SWITCH	1		
	95	1-0363-7008S	SLIDE SW PWB	1		
	96	1-0036-7016S	HEAD	1		
	97	1-0363-7005S	POWER SWITCH	1		
	100	1-0036-7089S	6P WIRE ASY(JVC	1		
	101	1-0036-7088S	5P WIRE ASY(JVC	1		
	105	2-1816-0032-E8S	LMW-S	2		
	106	2-1812-0030-D2S	PSW-S	3		
	107	1-0036-5024S	PSW(REEL)B	5		
	109	2-1712-0050-16S	E RING	5		
	110	2-1712-5060-16S	E RING	1		
	114	1-0363-7015S	MUTE SW PWB	1		
	115	2-1331-7040-C2S	SCREW S	1		
	116	2-1331-7060-C2S	SCREW S	1		
	117	2-1382-0030-C2S	SCREW B	5		
	118	2-1332-0040-C1S	SCREW S	1		
	119	2-1032-0070-C2S	SCREW	2		
	120	2-1032-0025-C2S	SCREW	2		
	121	2-1012-0040-C2S	SCREW	1		
	122	2-1012-0030-F2S	SCREW	1		
	123	1-0138-5002S	AZIMUTH SCREW	3		

# Grease point 1/2

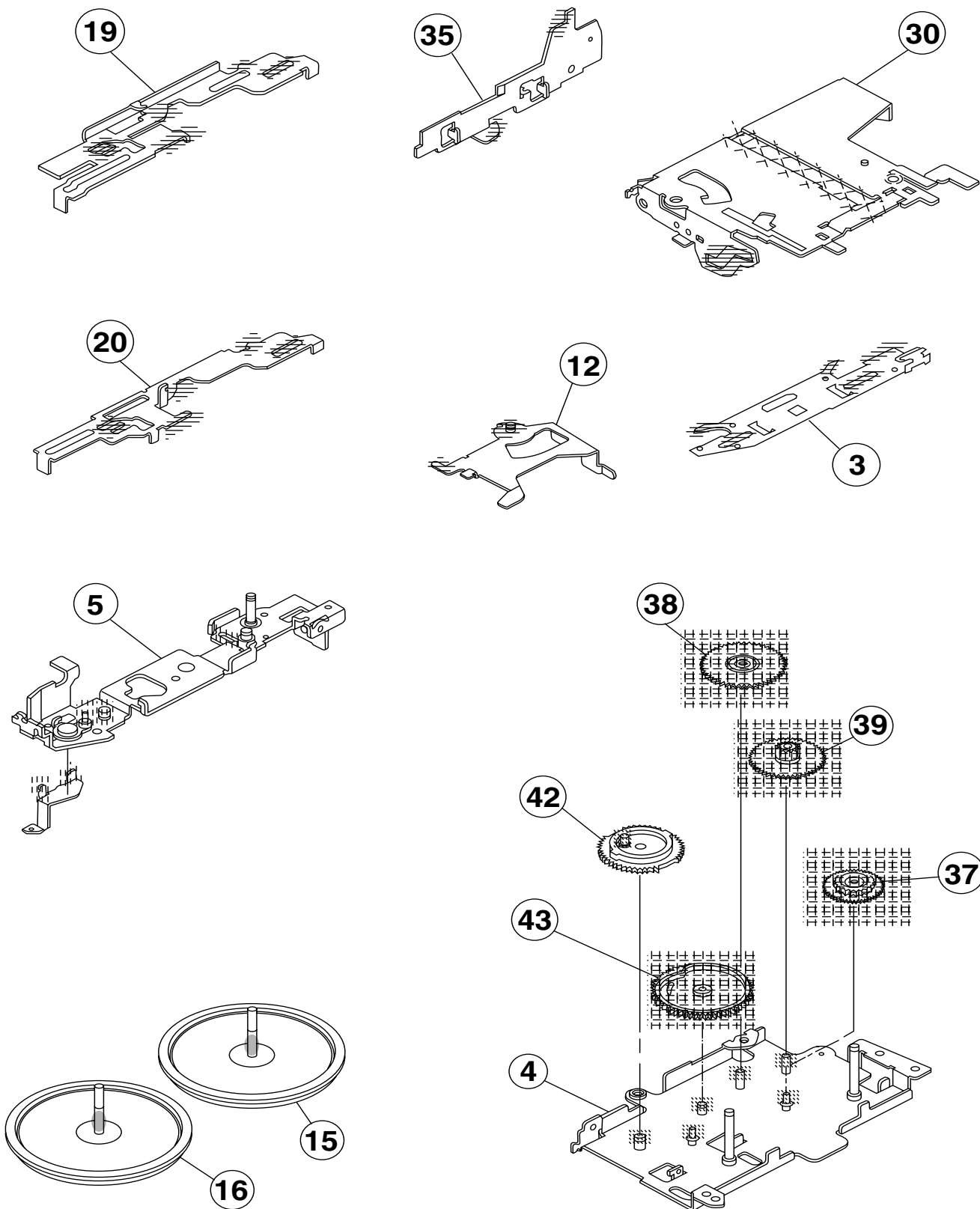
Grease	
	FL-942
	SW-902
	SW522B
	FG-84M
	C68



Reverse side



# Grease point 2/2



## ■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	C 2	QDX11EK-223Z	C CAPACITOR				C 933	QERF1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 3	QEKJ1HM-104Z	E CAPACITOR	0.1MF 20% 50V			C 934	QERF1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 4	QEKJ1HM-104Z	E CAPACITOR	0.1MF 20% 50V			C 951	QERF1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 5	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V			C 971	QERF1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 6	QDX11EK-223Z	C CAPACITOR				C 972	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 7	QDX11EK-223Z	C CAPACITOR				C 981	QEZ0337-228	E CAPACITOR	2200MF	
	C 8	QERF1HM-104Z	E CAPACITOR	0.1MF 20% 50V			C 982	QDYB1CM-103Y	C CAPACITOR		
	C 9	QDYB1CM-103Y	C CAPACITOR				C 983	QDYB1CM-103Y	C CAPACITOR		
	C 11	QDYB1CM-103Y	C CAPACITOR				C 984	QERF1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 15	QDYB1CM-103Y	C CAPACITOR				C 985	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	C 101	QDGB1HK-821Y	C CAPACITOR				C 986	QERF1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 102	QEKJ1HM-474Z	E CAPACITOR	0.47MF 20% 50V			C 987	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 103	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V			C 988	QERF1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 104	QEKJ0JM-476Z	E CAPACITOR	47MF 20% 6.3V			CJ701	VMC0334-001	CONNECTOR	TO FRONT PANEL	
	C 105	QFV61HJ-103Z	MF CAPACITOR	0.01MF 5% 50V			CJ901	QGA2002C1-05	CONNECTOR		
	C 131	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V			CJ921	QNN0183-001	PIN JACK		
	C 132	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V			CN721	QGB1214J1-06S	CONNECTOR	TO MECHA	
	C 133	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V			CN901	QGB1214J1-06S	CONNECTOR	TO MECHA	
	C 134	QLK1HJ-822Z	M CAPACITOR	8200PF 5% 50V			CP721	QGB1214K1-06S	CONNECTOR		
	C 135	QFV61HJ-154Z	MF CAPACITOR	0.15MF 5% 50V			CP722	QGA2002F1-06	CONNECTOR		
	C 136	QFV61HJ-224Z	MF CAPACITOR	0.22MF 5% 50V			CP751	QNZ0095-001	CONNECTOR	CH CONNECTOR	
	C 137	QFV61HJ-333Z	MF CAPACITOR	0.033MF 5% 50V			CP901	QGB1214K1-06S	CONNECTOR		
	C 138	QLK1HJ-562Z	M CAPACITOR	5600PF 5% 50V			CP981	QNZ0002-001	16P CONNECTOR		
	C 150	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V			D 1	1SS119-041	SI DIODE		
	C 152	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V			D 2	1SS119-041	SI DIODE		
	C 160	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V			D 161	1SS119-041	SI DIODE		
	C 162	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V			D 261	1SS119-041	SI DIODE		
	C 201	QDGB1HK-821Y	C CAPACITOR				D 701	1SS119-041	SI DIODE		
	C 202	QERF1HM-474Z	E CAPACITOR	0.47MF 20% 50V			D 704	MTZJ5.6B-T2	ZENER DIODE		
	C 203	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V			D 705	MTZJ5.6B-T2	ZENER DIODE		
	C 204	QEKJ0JM-476Z	E CAPACITOR	47MF 20% 6.3V			D 706	MTZJ5.6B-T2	ZENER DIODE		
	C 205	QFV61HJ-103Z	MF CAPACITOR	0.01MF 5% 50V			D 707	MTZJ5.6B-T2	ZENER DIODE		
	C 231	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V			D 708	MTZJ5.6B-T2	ZENER DIODE		
	C 232	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V			D 709	MTZJ5.6B-T2	ZENER DIODE		
	C 233	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V			D 711	MTZJ5.6B-T2	ZENER DIODE		
	C 234	QLK1HJ-822Z	M CAPACITOR	8200PF 5% 50V			D 714	1SS119-041	SI DIODE		
	C 235	QFV61HJ-154Z	MF CAPACITOR	0.15MF 5% 50V			D 716	1SS119-041	SI DIODE		
	C 236	QFV61HJ-224Z	MF CAPACITOR	0.22MF 5% 50V			D 718	1SS119-041	SI DIODE		
	C 237	QFV61HJ-333Z	MF CAPACITOR	0.033MF 5% 50V			D 719	RB721Q-T2	S.B.DIODE		
	C 238	QLK1HJ-562Z	M CAPACITOR	5600PF 5% 50V			D 771	MTZJ9.1C-T2	ZENER DIODE		
	C 250	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V			D 781	1SS119-041	SI DIODE		
	C 252	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V			D 782	1SS119-041	SI DIODE		
	C 260	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V			D 784	DSK10C-T1	DIODE		
	C 262	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V			D 785	DSK10C-T1	DIODE		
	C 701	QDUB1HJ-270Y	C CAPACITOR				D 786	DSK10C-T1	DIODE		
	C 702	QDCB1HJ-220Y	C CAPACITOR				D 791	1SS119-041	SI DIODE		
	C 703	QERF0JM-107Z	E CAPACITOR	100MF 20% 6.3V			D 792	1SS119-041	SI DIODE		
	C 704	QFV61HJ-224Z	MF CAPACITOR	0.22MF 5% 50V			D 973	1SS119-041	SI DIODE		
	C 705	QERF1CM-106Z	E CAPACITOR	10MF 20% 16V			D 974	1SS119-041	SI DIODE		
	C 706	QDYB1CM-103Y	C CAPACITOR				D 981	1N5401-TM	DIODE		
	C 707	QFV61HJ-103Z	MF CAPACITOR	0.01MF 5% 50V			D 990	MTZ11B-T2	SI DIODE		
	C 751	QDYB1CM-103Y	C CAPACITOR				IC701	LC72362N-9920	IC		
	C 771	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V			IC751	HD74HC126P	IC		
	C 772	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V			IC781	AN80T05LF	IC		
	C 773	QDGB1HK-102Y	C CAPACITOR				IC901	UPC1228HA	IC		
	C 781	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V			IC931	TEA6320T-X	IC		
	C 783	QETN0JM-228Z	E CAPACITOR	2200MF 20% 6.3V			IC981	HA13158A	IC		
	C 784	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V			J 1	QNZ0009-001	CAR ANT JACK		
	C 785	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V			L 1	QQL231K-4R7Y	INDUCTOR		
	C 786	QETM1AM-228	E CAPACITOR	2200MF 20% 10V			L 781	QQL231K-470Y	INDUCTOR		
	C 901	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V			L 782	QQL231K-470Y	INDUCTOR		
	C 931	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V			L 783	QQL231K-470Y	INDUCTOR		
	C 932	QDYB1CM-103Y	C CAPACITOR				L 981	QQR0704-001	CHOCO COIL		

## ■ Electrical parts list (Main board)

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area	△	Item	Parts number	Parts name	Remarks	Area
	Q 1	2SA1706/ST-T	TRANSISTOR				R 703	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	Q 2	KRC102M-T	D.TRANSISTOR				R 704	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	Q 3	KTA1267/YG-T	TRANSISTOR				R 705	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	Q 5	KRC102M-T	D.TRANSISTOR				R 707	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	Q 161	2SD2144S/VW-T	TRANSISTOR				R 708	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	Q 261	2SD2144S/VW-T	TRANSISTOR				R 709	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	Q 701	KTC3199/GL-T	TRANSISTOR				R 710	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	Q 771	KTC3199/GL-T	TRANSISTOR				R 712	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q 772	KTC3199/GL-T	TRANSISTOR				R 713	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q 781	KRC102M-T	D.TRANSISTOR				R 714	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q 782	2SA1706/ST-T	TRANSISTOR				R 715	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	Q 783	KRC102M-T	D.TRANSISTOR				R 716	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	Q 784	2SA1706/ST-T	TRANSISTOR				R 717	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	Q 789	KRA102M-T	D.TRANSISTOR				R 718	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q 971	KRC102M-T	D.TRANSISTOR				R 719	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q 972	KRA102M-T	D.TRANSISTOR				R 720	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q 987	KRA102M-T	D.TRANSISTOR				R 721	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q 988	KRC102M-T	D.TRANSISTOR				R 722	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	Q 989	KRA102M-T	D.TRANSISTOR				R 723	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 1	QRE141J-100Y	C RESISTOR	10 5% 1/4W			R 724	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 2	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			R 725	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 3	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			R 726	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 4	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R 727	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 5	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W			R 751	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 6	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R 752	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 9	QRE141J-103Y	C RESISTOR	10K 5% 1/4W			R 753	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 14	QRE141J-155Y	C RESISTOR	1.5M 5% 1/4W			R 754	QRE141J-334Y	C RESISTOR	330K 5% 1/4W	
	R 15	QRE141J-475Y	C RESISTOR	4.7M 5% 1/4W			R 755	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 17	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W			R 756	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 18	QRE141J-223Y	C RESISTOR	22K 5% 1/4W			R 757	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 51	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W			R 758	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 52	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W			R 759	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 53	QRE141J-203Y	C RESISTOR	20K 5% 1/4W			R 760	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 54	QRE141J-752Y	C RESISTOR	7.5K 5% 1/4W			R 761	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 61	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W			R 762	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 62	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W			R 763	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 63	QRE141J-203Y	C RESISTOR	20K 5% 1/4W			R 764	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 64	QRE141J-752Y	C RESISTOR	7.5K 5% 1/4W			R 771	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 101	QRE141J-153Y	C RESISTOR	15K 5% 1/4W			R 772	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 103	QRE141J-101Y	C RESISTOR	100 5% 1/4W			R 773	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 104	QRE141J-334Y	C RESISTOR	330K 5% 1/4W			R 774	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 131	QRE141J-223Y	C RESISTOR	22K 5% 1/4W			R 783	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 132	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W			R 784	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 151	QRE141J-273Y	C RESISTOR	27K 5% 1/4W			R 785	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 152	QRE141J-823Y	C RESISTOR	82K 5% 1/4W			R 786	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 161	QRE141J-273Y	C RESISTOR	27K 5% 1/4W			R 787	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 162	QRE141J-823Y	C RESISTOR	82K 5% 1/4W			R 788	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 163	QRE141J-821Y	C RESISTOR	820 5% 1/4W			R 789	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 164	QRE141J-101Y	C RESISTOR	100 5% 1/4W			R 790	QRE141J-474Y	C RESISTOR	470K 5% 1/4W	
	R 165	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W			R 792	QRE141J-6R8Y	C RESISTOR	6.8 5% 1/4W	
	R 201	QRE141J-153Y	C RESISTOR	15K 5% 1/4W			R 795	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 203	QRE141J-101Y	C RESISTOR	100 5% 1/4W			R 796	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 204	QRE141J-334Y	C RESISTOR	330K 5% 1/4W			R 797	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R 231	QRE141J-223Y	C RESISTOR	22K 5% 1/4W			R 901	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 232	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W			R 931	QRE141J-100Y	C RESISTOR	10 5% 1/4W	
	R 251	QRE141J-273Y	C RESISTOR	27K 5% 1/4W			R 951	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 252	QRE141J-823Y	C RESISTOR	82K 5% 1/4W			R 971	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 261	QRE141J-273Y	C RESISTOR	27K 5% 1/4W			R 972	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R 262	QRE141J-823Y	C RESISTOR	82K 5% 1/4W			R 990	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 263	QRE141J-821Y	C RESISTOR	820 5% 1/4W			TU 1	QAU0154-002	TUNER		
	R 264	QRE141J-101Y	C RESISTOR	100 5% 1/4W			X 701	QAX0406-001Z	CRYSTAL		
	R 265	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W							
	R 702	QRE141J-473Y	C RESISTOR	47K 5% 1/4W							



■ Electrical parts list (LCD/Switch board)

Block No. 02

△	Item	Parts number	Parts name	Remarks	Area
	C 651	NCB21EK-104X	C CAPACITOR		
	C 652	NBE20JM-475X	TS E CAPACITOR		
	C 653	NCB21HK-681X	C CAPACITOR		
	CP701	VMC0335-001	CONNECTOR		
	D 601	LNJ308G81/1-3/X	LED		
	D 602	LNJ308G81/1-3/X	LED		
	D 603	LNJ308G81/1-3/X	LED		
	D 604	LNJ308G81/1-3/X	LED		
	D 605	LNJ308G81/1-3/X	LED		
	D 609	LNJ308G81/1-3/X	LED		
	D 610	LNJ308G81/1-3/X	LED		
	D 611	LNJ308G81/1-3/X	LED		
	D 612	LNJ308G81/1-3/X	LED		
	D 613	LNJ308G81/1-3/X	LED		
	D 614	LNJ308G81/1-3/X	LED		
	D 615	LNJ308G81/1-3/X	LED		
	D 616	LNJ308G81/1-3/X	LED		
	D 618	LNJ308G81/1-3/X	LED		
	D 619	LNJ308G81/1-3/X	LED		
	D 620	LNJ308G81/1-3/X	LED		
	D 621	LNJ308G81/1-3/X	LED		
	D 622	LNJ308G81/1-3/X	LED		
	D 623	SML-310LT/MN/-X	LED		
	D 624	LNJ308G81/1-3/X	LED		
	IC651	LC75823W	IC		
	PL601	QLL0092-001	LAMP		
	PL603	QLL0092-001	LAMP		
	R 601	NRSA02J-271X	MG RESISTOR		
	R 602	NRSA02J-331X	MG RESISTOR		
	R 603	NRSA02J-391X	MG RESISTOR		
	R 604	NRSA02J-471X	MG RESISTOR		
	R 605	NRSA02J-561X	MG RESISTOR		
	R 606	NRSA02J-271X	MG RESISTOR		
	R 607	NRSA02J-331X	MG RESISTOR		
	R 608	NRSA02J-391X	MG RESISTOR		
	R 609	NRSA02J-471X	MG RESISTOR		
	R 610	NRSA02J-561X	MG RESISTOR		
	R 611	NRSA02J-821X	MG RESISTOR		
	R 612	NRSA02J-271X	MG RESISTOR		
	R 613	NRSA02J-331X	MG RESISTOR		
	R 614	NRSA02J-391X	MG RESISTOR		
	R 615	NRSA02J-471X	MG RESISTOR		
	R 616	NRSA02J-561X	MG RESISTOR		
	R 617	NRSA02J-821X	MG RESISTOR		
	R 621	NRSA02J-103X	MG RESISTOR		
	R 622	NRSA02J-103X	MG RESISTOR		
	R 623	NRSA02J-103X	MG RESISTOR		
	R 631	NRSA02J-821X	MG RESISTOR		
	R 632	NRSA02J-821X	MG RESISTOR		
	R 633	NRSA02J-821X	MG RESISTOR		
	R 634	NRSA02J-821X	MG RESISTOR		
	R 640	NRSA02J-331X	MG RESISTOR		
	R 641	NRSA02J-331X	MG RESISTOR		
	R 642	NRSA02J-821X	MG RESISTOR		
	R 644	NRSA02J-821X	MG RESISTOR		
	R 646	NRSA02J-821X	MG RESISTOR		
	R 648	NRSA02J-821X	MG RESISTOR		
	R 650	NRSA02J-511X	MG RESISTOR		
	R 651	NRSA02J-511X	MG RESISTOR		
	R 661	NRSA02J-152X	MG RESISTOR		
	R 662	NRSA02J-473X	MG RESISTOR		
	R 663	NRSA02J-154X	MG RESISTOR		
	S 601	NSW0066-001X	TACT SWITCH		

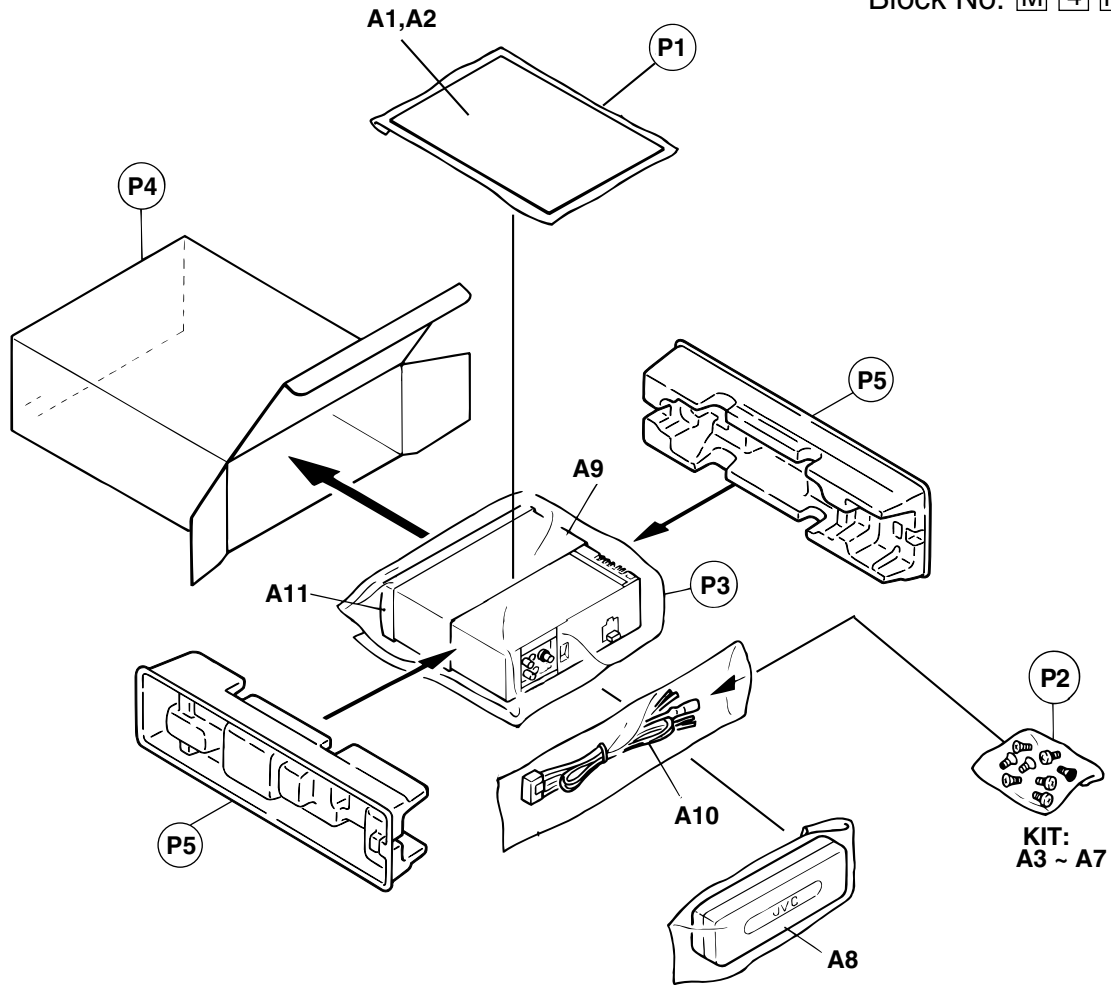
△	Item	Parts number	Parts name	Remarks	Area
	S 602	NSW0066-001X	TACT SWITCH		
	S 603	NSW0066-001X	TACT SWITCH		
	S 604	NSW0066-001X	TACT SWITCH		
	S 605	NSW0066-001X	TACT SWITCH		
	S 606	NSW0066-001X	TACT SWITCH		
	S 607	NSW0066-001X	TACT SWITCH		
	S 608	NSW0066-001X	TACT SWITCH		
	S 609	NSW0066-001X	TACT SWITCH		
	S 610	NSW0066-001X	TACT SWITCH		
	S 611	NSW0066-001X	TACT SWITCH		
	S 612	NSW0066-001X	TACT SWITCH		
	S 613	NSW0066-001X	TACT SWITCH		
	S 614	NSW0066-001X	TACT SWITCH		
	S 615	NSW0066-001X	TACT SWITCH		
	S 616	NSW0066-001X	TACT SWITCH		
	S 617	NSW0066-001X	TACT SWITCH		
	S 618	NSW0066-001X	TACT SWITCH		
	S 619	NSW0066-001X	TACT SWITCH		
	S 620	NSW0066-001X	TACT SWITCH		






< MEMO >

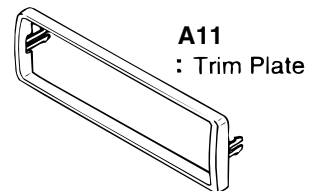
# Packing materials and accessories parts list

Block No. M 3 M M

Block No. M 4 M M



SCREW KIT			
	<b>A7</b> Hook		<b>A4</b> Mount Bolt
	<b>A3</b> Plug Nut		<b>A5</b> Lock Nut
			<b>A6</b> Washer



**Parts list (Packing)**

Block No. M3MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	FSPG4002-001	POLY BAG	1	INSTRUCTIONS	
	P 2	QPA00801205	POLY BAG	1	KIT	
	P 3	QPC03004315P	POLY BAG	1	SET	
	P 4	GE30123-024A	CARTON	1		
	P 5	FSPH1018-002	PAPER CUSHION	2		

**Parts list (Accessories)**

Block No. M4MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	GET0023-001A	INSTRUCTIONS	1	ENG,CHI,ARA	
	A 2	GET0023-002A	INSTALL MANUAL	1	ENG,CHI,ARA,THA	
	A 3	VKZ4027-202	PLUG NUT	1		
	A 4	VKH4871-001SS	MOUNT BOLT	1		
	A 5	VKZ4328-001	LOCK NUT	1	FOR M5	
	A 6	WNS5000Z	WASHER	1		
	A 7	FSKL4010-002	HOOK	2		
	A 8	FSJB3002-30C	HARD CASE ASSY	1		
	A 9	FSKM2004-202	MOUNTING SLEEVE	1		
	A 10	QAM0013-006	16P CORD ASS'Y	1		
	A 11	FSJD2034-004	TRIM PLATE	1		
	KIT	KDGS717K-SCREW1	SCREW PARTS KIT	1	A3-A7	