JVC

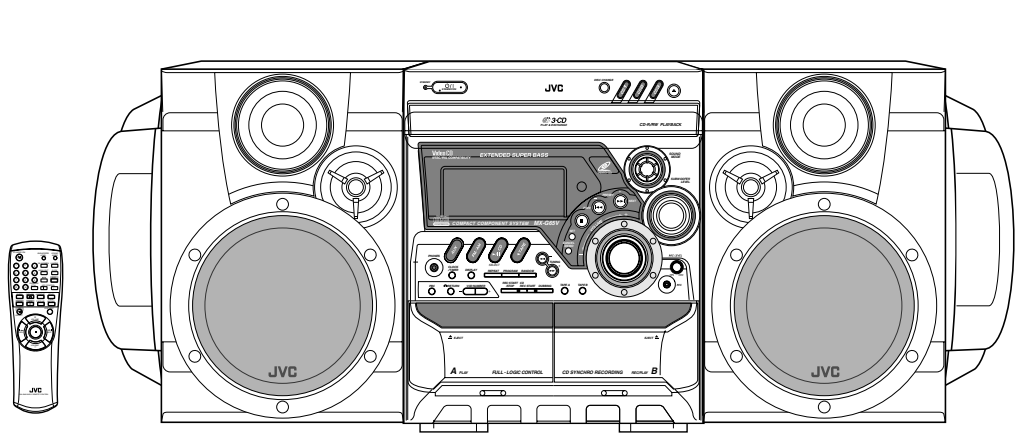
SERVICE MANUAL

COMPACT COMPONENT SYSTEM

MX-G68V
MX-G65V

Area Suffix

US ---------- Singapore
UX ---------- Saudi Arabia



SP-MXG65V CA-MXG65V SP-MXG65V

VIDEO CD

COMPACT disc DIGITAL AUDIO

PlayBack Control

COMPACT disc DIGITAL VIDEO

Video CD

Model	Color
CA-MXG68V	Shanpagne-gold
CA-MXG65V	Silver

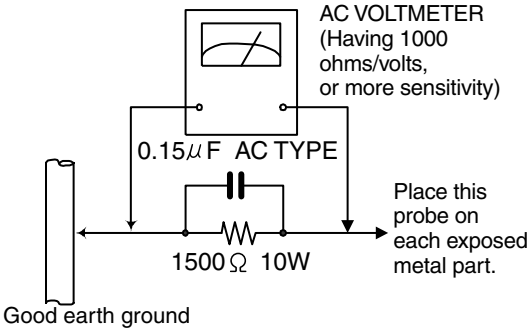
Contents

Safety precautions ---------- 1-2
Preventing static electricity ---------- 1-3
Important for laser products ---------- 1-4
Disassembly method ---------- 1-5
Wiring connection ---------- 1-18
Adjustment method ---------- 1-19
Flow of functional operation until TOC read ---------- 1-23
Maintenance of laser pickup ---------- 1-24
Replacement of laser pickup ---------- 1-24
Troubleshooting ---------- 1-25
Description of major ICs ---------- 1-33~52

No.20995
Jul. 2001

Safety Precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

⚠ 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 preforming repair of this system.

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▮) and ICP (●) or identified by the "⚠" mark nearby are critical for safety.
When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer. (Except the J&C version)

Preventing static electricity

1. Grounding to prevent damage by static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

2. About the earth processing for the destruction prevention by static electricity

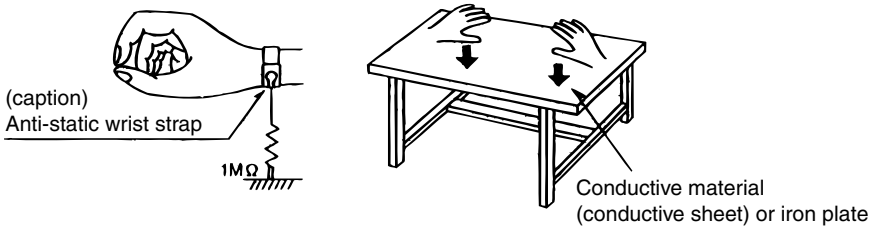
In the equipment which uses optical pick-up (laser diode), optical pick-up is destroyed by the static electricity of the work environment.
Be careful to use proper grounding in the area where repairs are being performed.

2-1 Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

2-2 Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.



3. Handling the optical pickup

1. In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)

2. Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

4. Handling the traverse unit (optical pickup)

1. Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.

2. Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.

3. Handle the flexible cable carefully as it may break when subjected to strong force.

4. It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it

Attention when CD mechanism assembly is decomposed

***Please refer to "Disassembly method" in the text for pick-up and how to detach the CD mechanism assembly.**

1. Remove the CD changer unit.
2. Remove the CD holder mechanism.
3. Solder is put up before the card wire is removed from the pickup unit connector on the CD mechanism assembly.
   (When the card wire is removed without putting up solder, the CD pick-up assembly might destroy.)
4. Please remove solder after connecting the card wire with the pickup unit connector when you install picking up in the substrate.

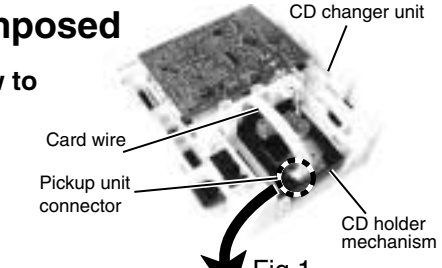


Fig.1

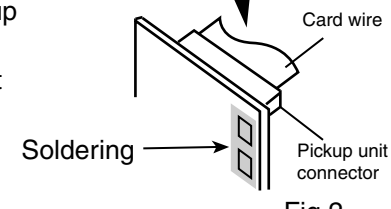


Fig.2

Important for laser products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The compact disc player uses invisible laserradiation and is equipped with safety switches whichprevent emission of radiation when the drawer is open and the safety interlocks have failed or are de feated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

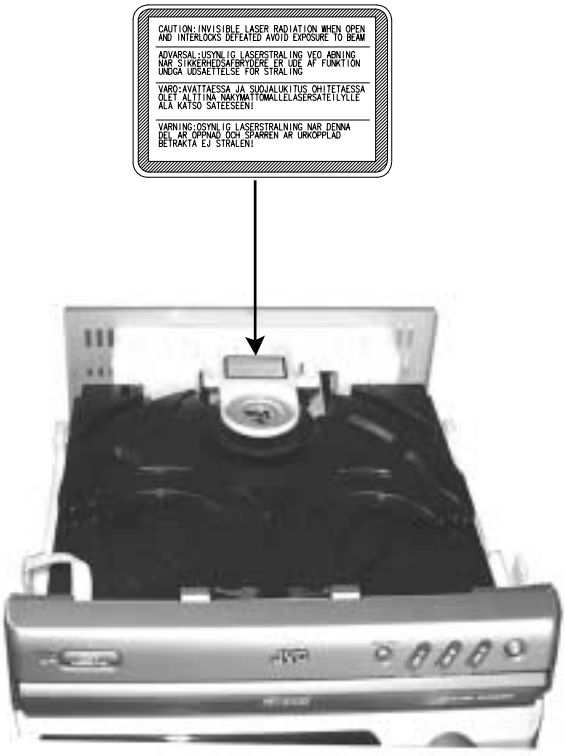
6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

Position of labels

CLASS 1
LASER PRODUCT

WARNING LABEL



Disassembly method

<Main body>

■Removing the metal cover

(See Fig.1 and 2)

1. Remove the three screws **A** attaching the metal cover on the back of the body.
2. Remove the six screws **B** attaching the metal cover on both sides of the body.
3. Remove the metal cover from the body by lifting the rear part of the cover.

ATTENTION: Do not break the front panel tab fitted to the metal cover.

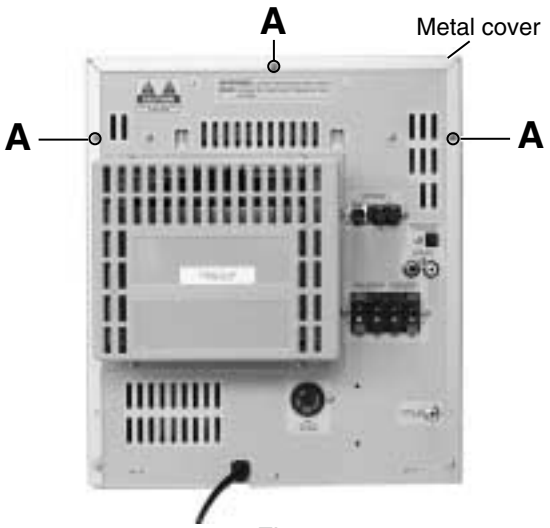


Fig.1

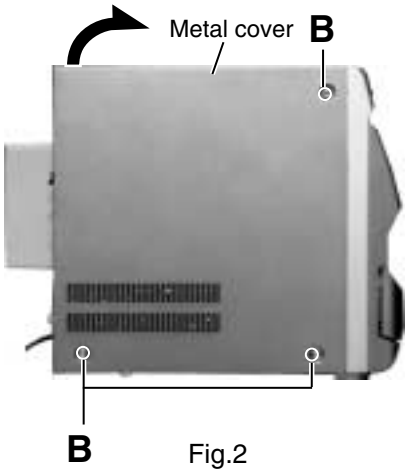


Fig.2

■Removing the CD changer unit

(See Fig.3 to 6)

- Prior to performing the following procedure, remove the metal cover.

1. Disconnect the card wire which is attached with adhesive to the left side of the CD changer unit.
2. Disconnect the harness from connector CW1 and CW7 on the back of the video CD board.
3. Disconnect the harness from connector RCW6 on the main board.
4. Disconnect the card wire from connector UCW3 on the FL dispaly & system control board.
5. Remove the two screws **C** attaching the CD changer unit on the rear panel.
6. Remove the two screws **D** attaching the CD changer unit on the side body.
7. Draw the CD changer unit upward from behind while pulling the rear panel outward.

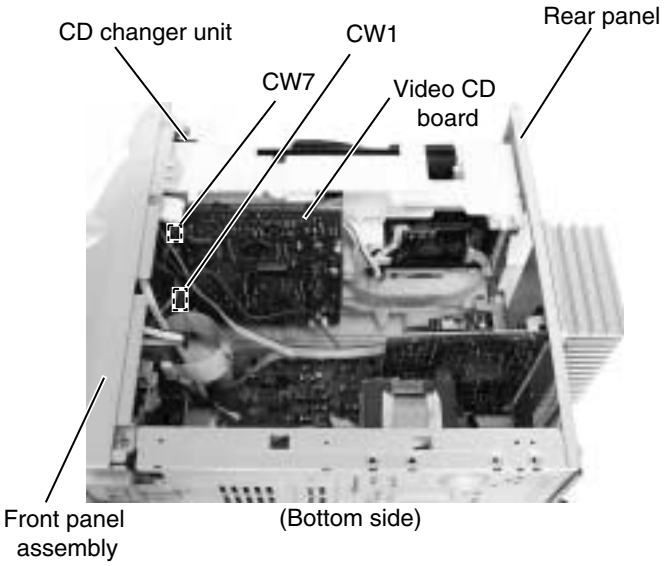


Fig.3

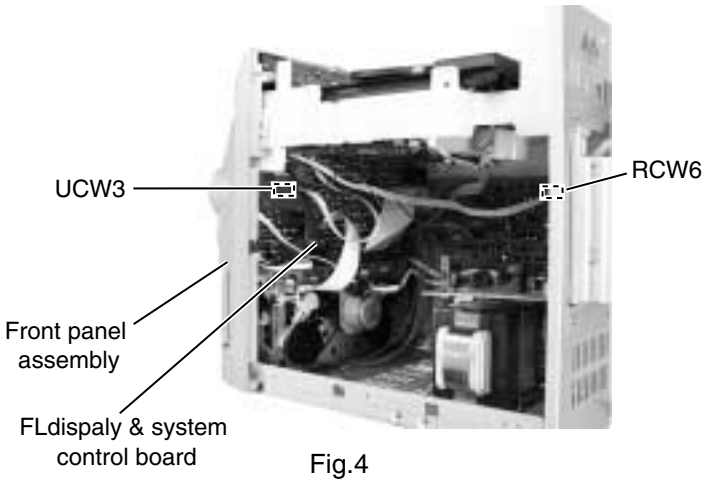


Fig.4

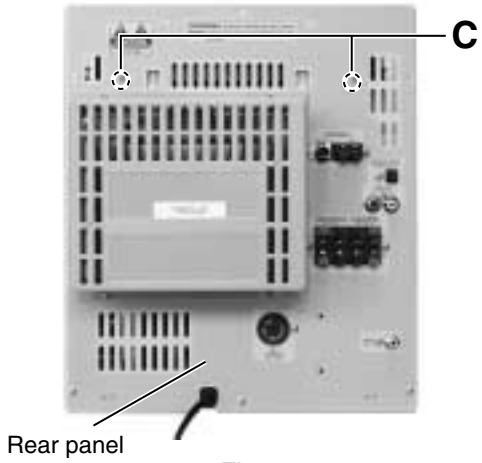


Fig.5

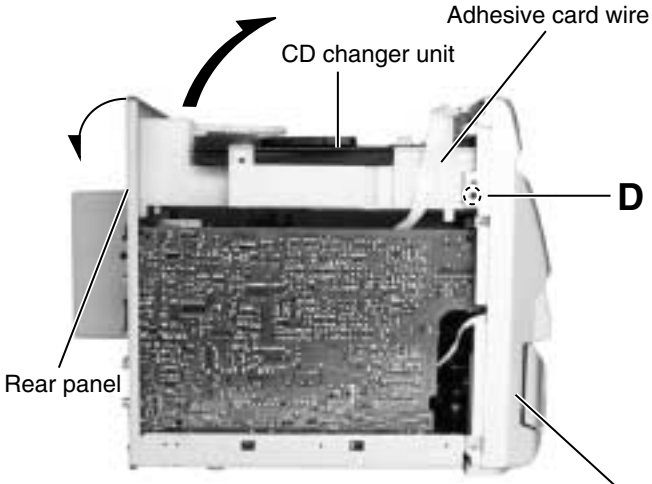


Fig.6a

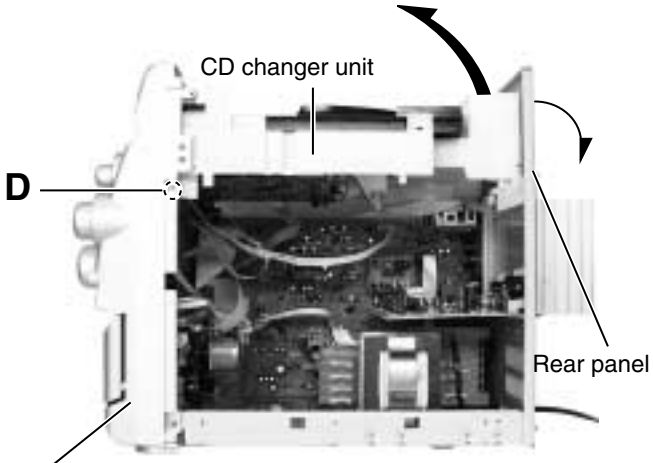


Fig.6b

Front panel assembly

■Removing the front panel assembly (See Fig.7 to 9)

- Prior to performing the following procedure, remove the metal cover and the CD changer unit.

1. Disconnect the card wire from connector FCW3 and the harness from connector JCW1, JCW2 ECW1 and HCW3 on the inner side of the main board in the body.

2. Remove the two screws **E** attaching the front panel assembly on both sides of the body.

3. Remove the screw **F** attaching the earth terminal extending from the cassette mechanism assembly.

4. Remove the screw **G** attaching the front panel assembly and main board.

5. Remove the screw **H** attaching the front panel assembly on the bottom of the body.

6. Release the two joints **a** on both sides and two joints **b** on the bottom of the body using a screwdriver.

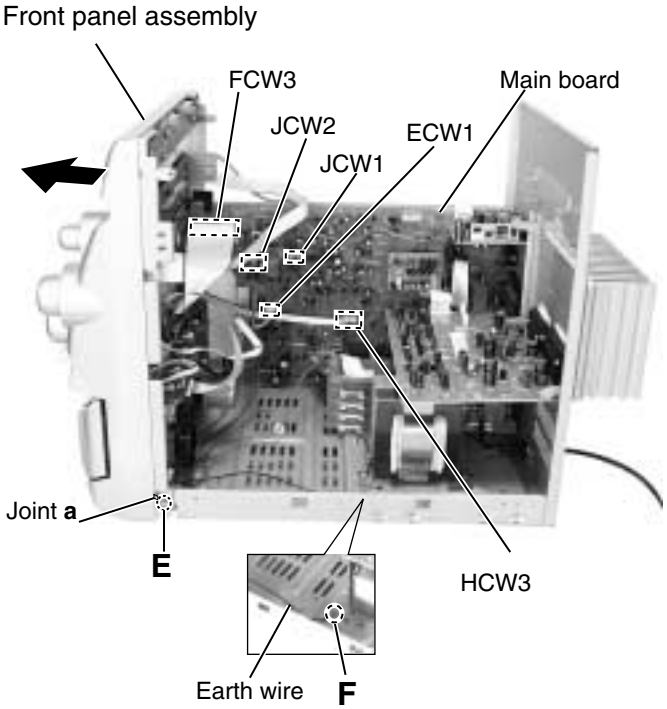


Fig.7

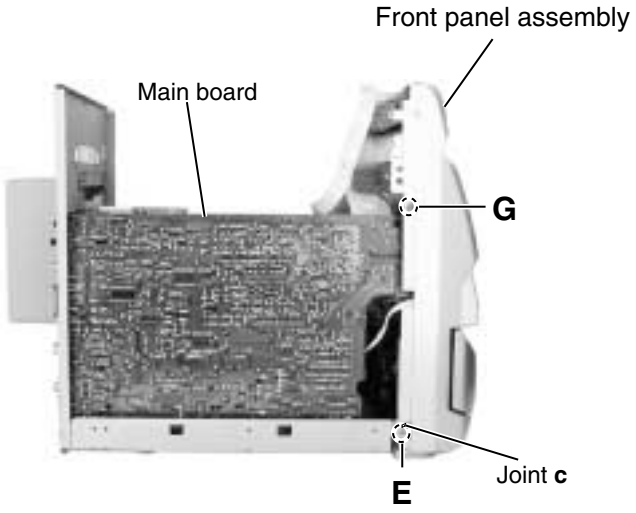


Fig.8

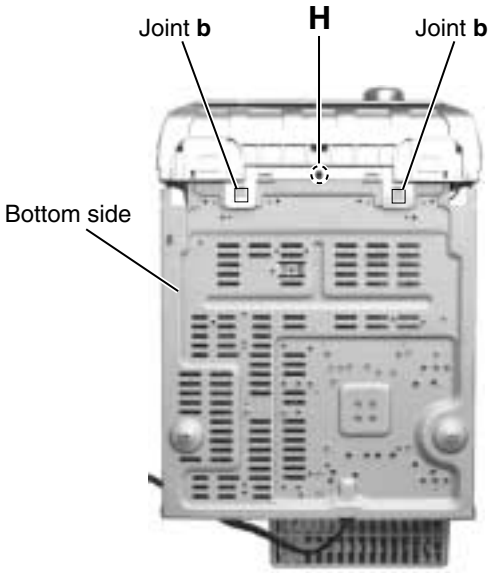


Fig.9

■ Removing the heat sink & amplifier board (See Fig.10 to 12)

・ Prior to performing the following procedure, remove the metal cover and the CD changer unit.

1. Remove the four screws **I** attaching the heat sink cover to the rear panel on the back of the body.
2. Remove the four screws **J** attaching the heat sink & amplifier board to the rear panel on the back of the body.
3. Remove the two screws **K** attaching the speaker terminal to the rear panel on the back of the body.
4. Disconnect the card wire from connector ACW1 and the harness from connector ACW2 on the amplifier board.
5. After moving the heat sink upward, remove the claws. Then pull out the heat sink & amplifier board .

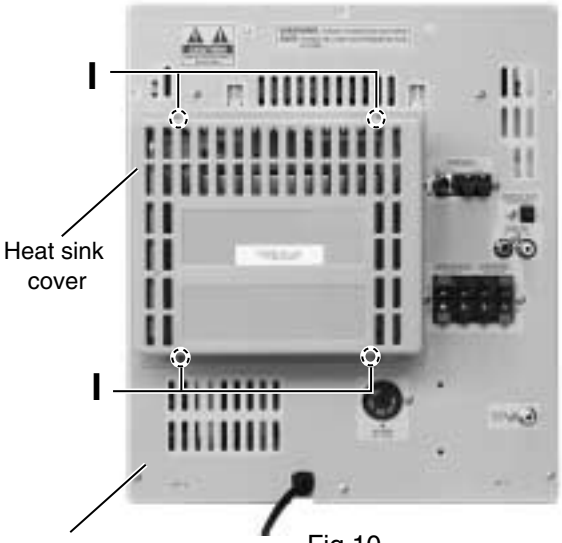


Fig.10

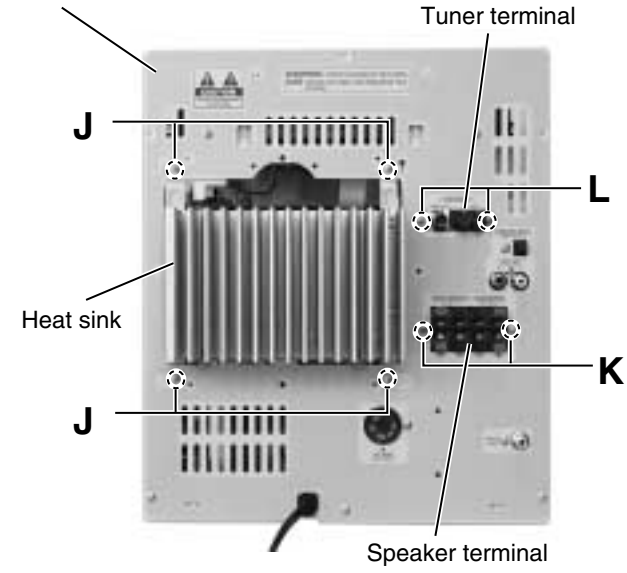


Fig.11

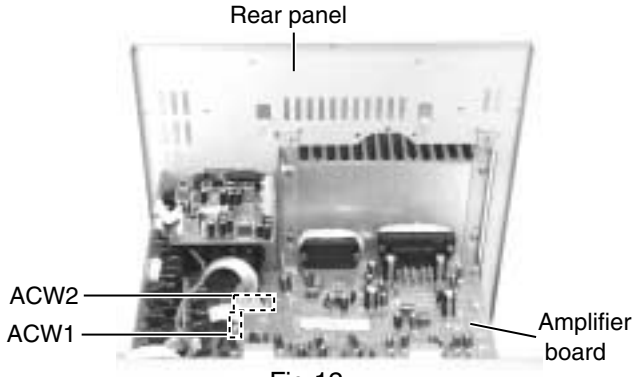


Fig.12

■Removing the tuner board (See Fig.11 and 13)

・ Prior to performing the following procedure, remove the metal cover and CD changer unit.

1. Disconnect the card wire from connector CON01 on the tuner board.

2. Remove the two screws **L** attaching the tuner board.

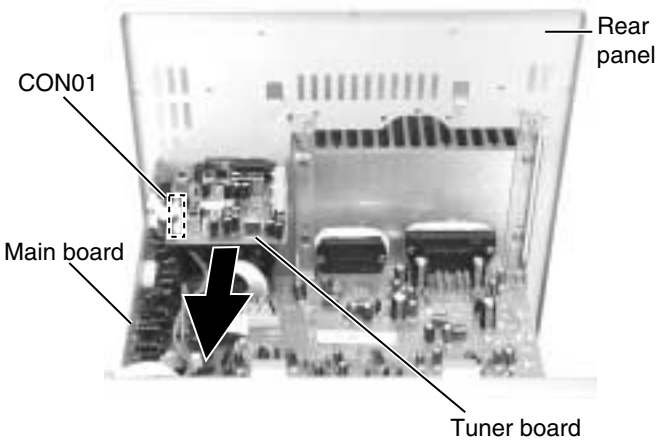


Fig.13

■ Removing the rear panel (See Fig.14)

・ Prior to performing the following procedure, remove the metal cover, CD changer unit, heat sink & amplifier board and tuner board.

1. Remove the one screw **M**, three screws **N** and three screws **N'** attaching the rear panel.

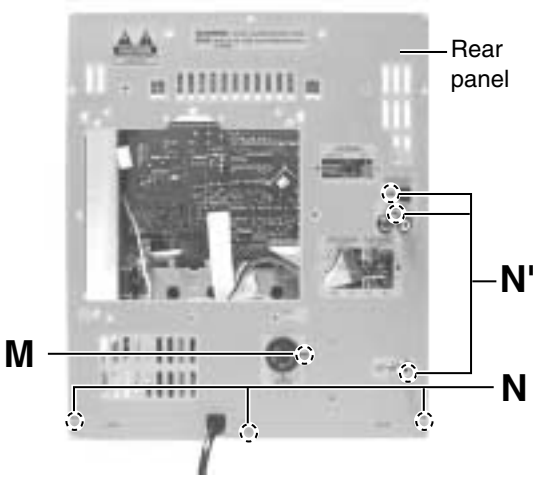


Fig.14

■Removing the main Board (See Fig. 15)

・ Prior to performing the following procedure, remove the metal cover, CD changer unit, heat sink & amplifier board, tuner board and rear cover.

1. Disconnect the card wire from connector FCW3 and the harness from connector JCW1, JCW2, ECW1 and HCW3 on the main board.

2. Disconnect the harness from connector PCW1 on the power transformer board.

3. Remove the screw **G** attaching the main board holder. (See Fig.8)

4. Remove the two screws **O** attaching the heat sink and bottom chassis.

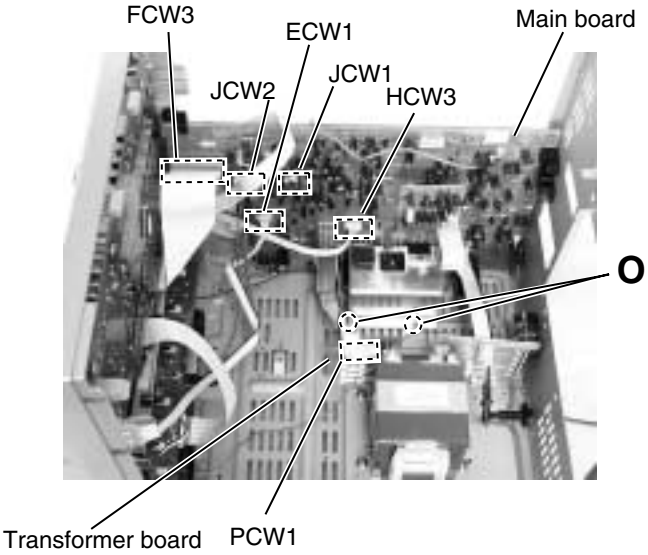


Fig.15

■Removing the power ICs
(See Fig.16 and 17)

・ Prior to performing the following procedure, remove the metal cover, CD changer unit, heat sink & amplifier board .

1. Remove the four screws **P** attaching the power ICs to the heat sink.

2. Unsolder the power ICs solder point.

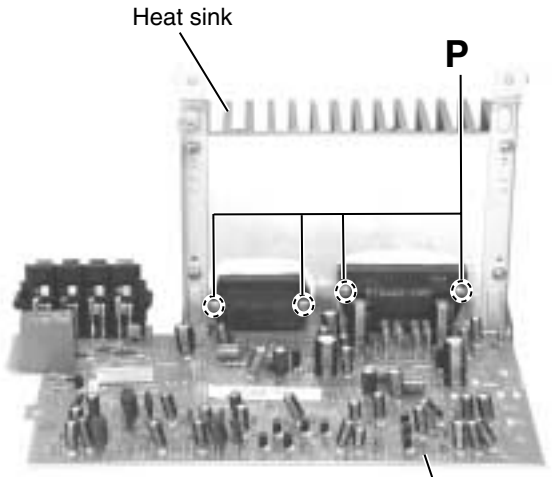


Fig.16

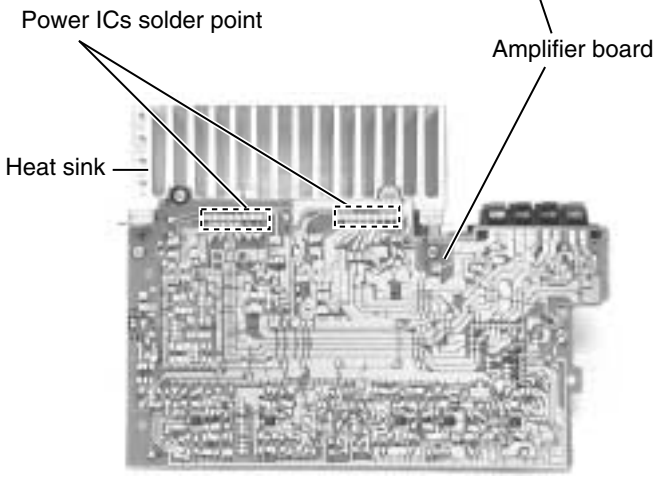


Fig.17

■Removing the power transformer
(See Fig.18)

・ Prior to performing the following procedure, remove the metal cover, CD changer unit, heat sink & amplifier board, tuner board and rear cover.

1. Disconnect the power cord from connector RCW2 of the power transformer board.

2. Disconnect the harness from connector PCW1 of the power transformer board.

3. Remove the four screws **Q** attaching the power transformer.

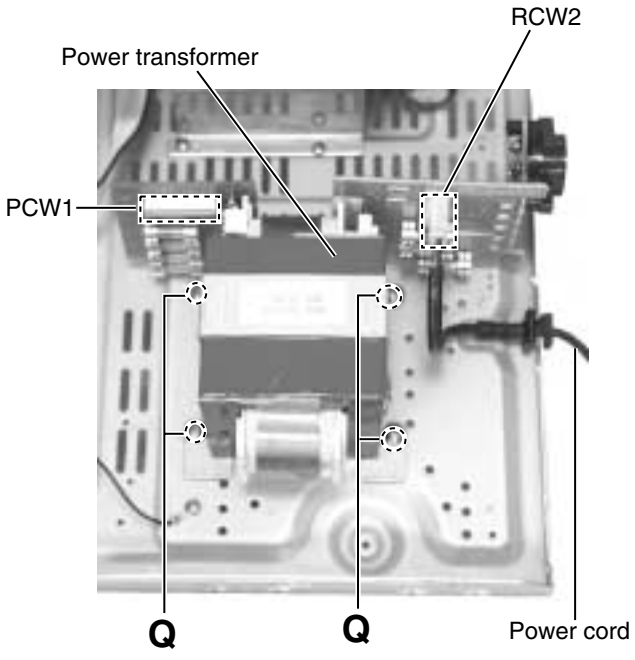


Fig.18

<Front panel assembly>

・Prior to performing the following procedure, remove the metal cover, the CD changer unit and the front panel assembly.

■Removing the power switch board (See Fig.19)

1. Disconnect the card wire from connector UCW1 of the power switch board.
2. Remove the five screws **R** attaching the power switch board and release the tab **c** outward.

■Removing the FL display & system control board (See Fig.19)

1. Disconnect the card wire from the connectors UCW3, UCW5,UCW6 and UJW5 on the FL display & system control board.
2. Remove the five screws **S** attaching the FL display & system board.
3. Disconnect the card wire from the connector UCW2 on the FL display & system control board.

■Removing the headphone board (See Fig.20)

・Prior to performing the following procedure remove the FL display & system control board.

1. You can pull out the headphone board.

■Removing the front board / MIC board (See Fig. 20 and 21)

・Prior to performing the following procedure, remove the FL display & system control board.

1. Pull out the volume knob, subwoofer level knob and sound mode knob from front side.
2. Remove the eleven screws **T** attaching the front board and release the two tabs **d** outward.
3. Release the two tabs **e** outward and remove the MIC board.

■Removing the cassette mechanism assembly (See Fig.20)

1. Disconnect the card wire **f** from the mechanism board on the cassette mechanism assembly.
2. Remove the six screws **U** attaching the cassette mechanism assembly.

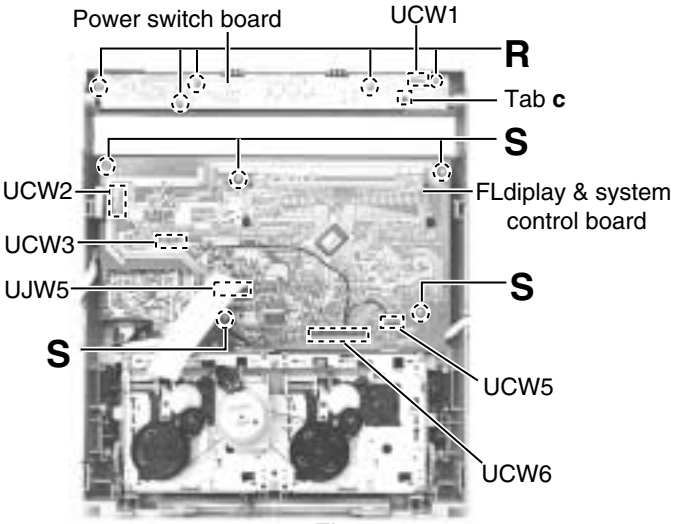


Fig.19

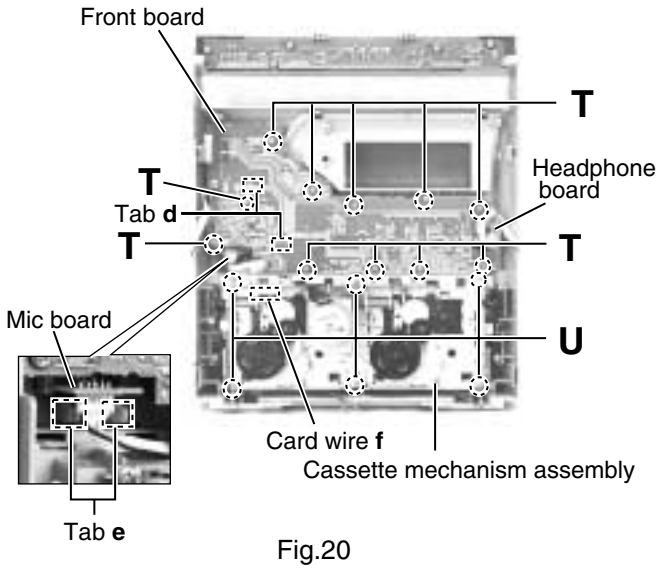


Fig.20

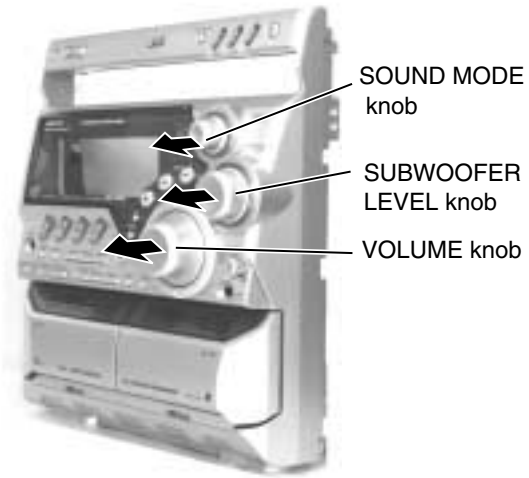


Fig.21

<CD changer unit>

・ Prior to performing the following procedure, remove the CD changer unit.

■Removing the CD tray (See Fig.1 to 3)

1. Disconnect the card wire from connector SW1 of the video CD board.

2. Turn the black loading pulley gear on the under side of the CD changer unit in the direction of the arrow and draw the CD tray toward the front until it stops.

3. Disconnect the card wire from connector CW6 of the Video CD board on the upper side of the CD changer unit.

4. Push down the two tray stoppers marked **a** and pull out the CD tray.

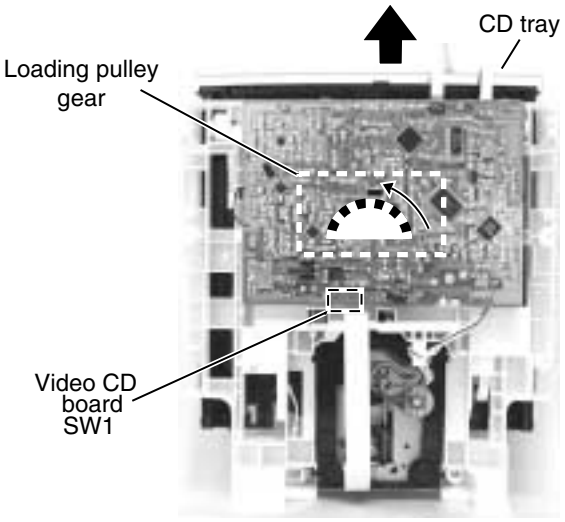


Fig.1

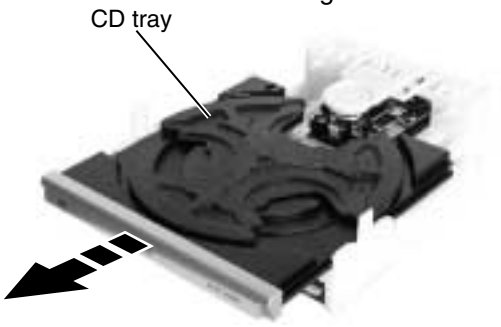


Fig.2

■Reinstall the CD tray (See Fig.4 and 5)

1. Align the gear-cam with the gear-tray as shown fig.4, then mount the CD tray.

2. When assembling the CD tray, take extreme care not engage with gear-synchro.

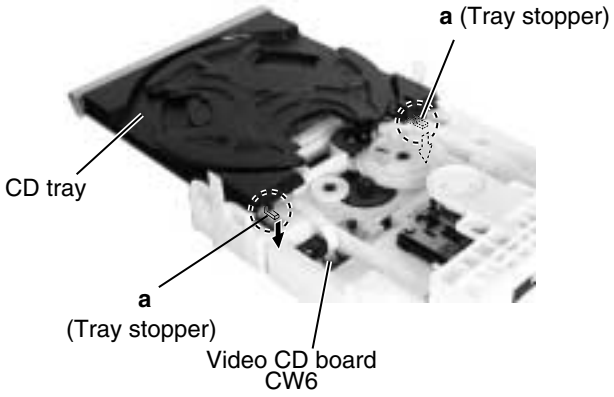


Fig.3

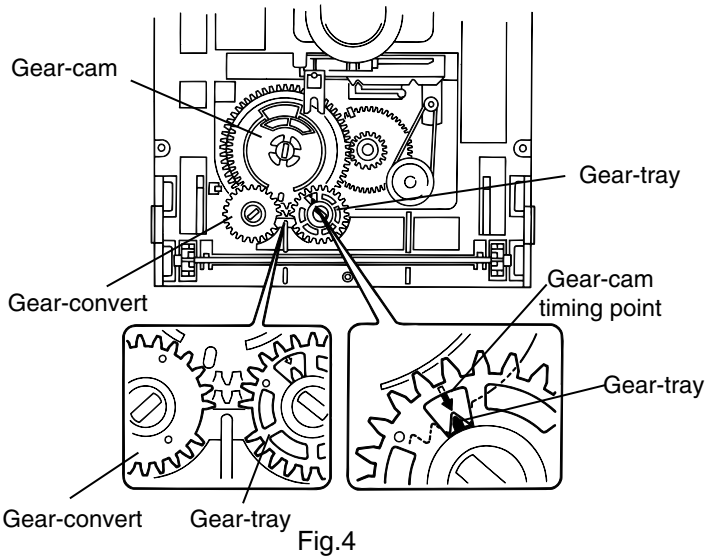


Fig.4

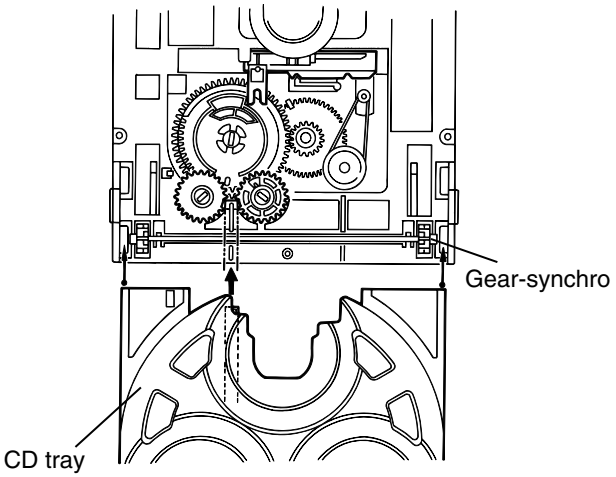


Fig.5

■Removing the sensor board / the turn table motor assembly (See Fig.6 to 8)

・ Prior to performing the following procedure, remove the CD tray.

1. Remove the screw **A** attaching the sensor board and release the two tabs **b** attaching the sensor board on the under side of the CD tray.

2. Disconnect the harness from connector CW1 on the sensor board and release the harness from the two hooks **c**. Remove the sensor board.

3. Remove the screw **B** attaching the turn table. Detach the turn table from the tray.

4. Pull outward the tab marked **d** attaching the turn table motor assembly on the upper side of the tray and detach the turn table motor assembly from the tray.

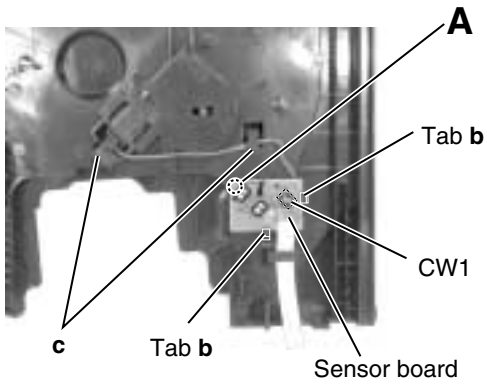


Fig.6

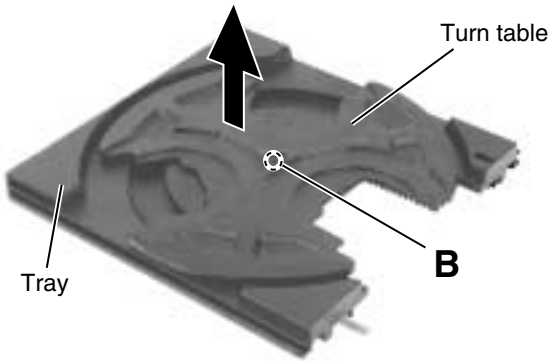


Fig.7

■Removing the belt, the Video CD board (See Fig.9 and 10)

・ Prior to performing the following procedure, remove the CD tray.

1. Disconnect the harness from connector on the CD mechanism board in the CD mechanism assembly on the under side of the CD changer unit. Disconnect the card wire from the pickup unit connector.

2. Detach the belt from the pulley on the upper side of the CD changer unit (Do not stain the belt with grease).

3. Disconnect the card wire from the connector SW1 on the Video CD board.

※ Remove the three screws **D** attaching the video CD board. First release the three tabs **f** and tabs **e** attaching the video CD board motor to raise the video CD board slightly, then release the video CD board.

If the tabs **e** and **f** are hard to release, it is recommendable to unsolder the two soldered points on the motor terminal of the video CD board.

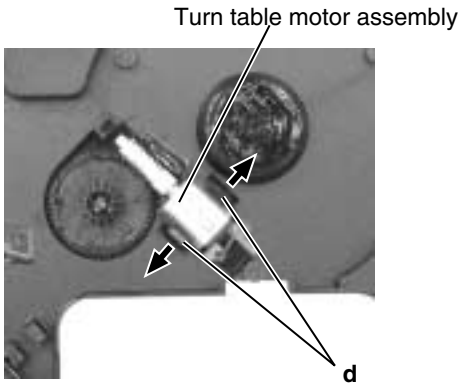


Fig.8

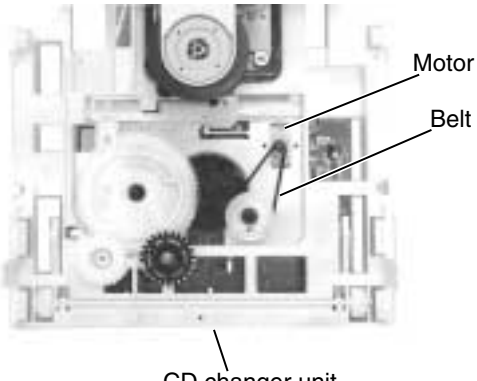


Fig.9

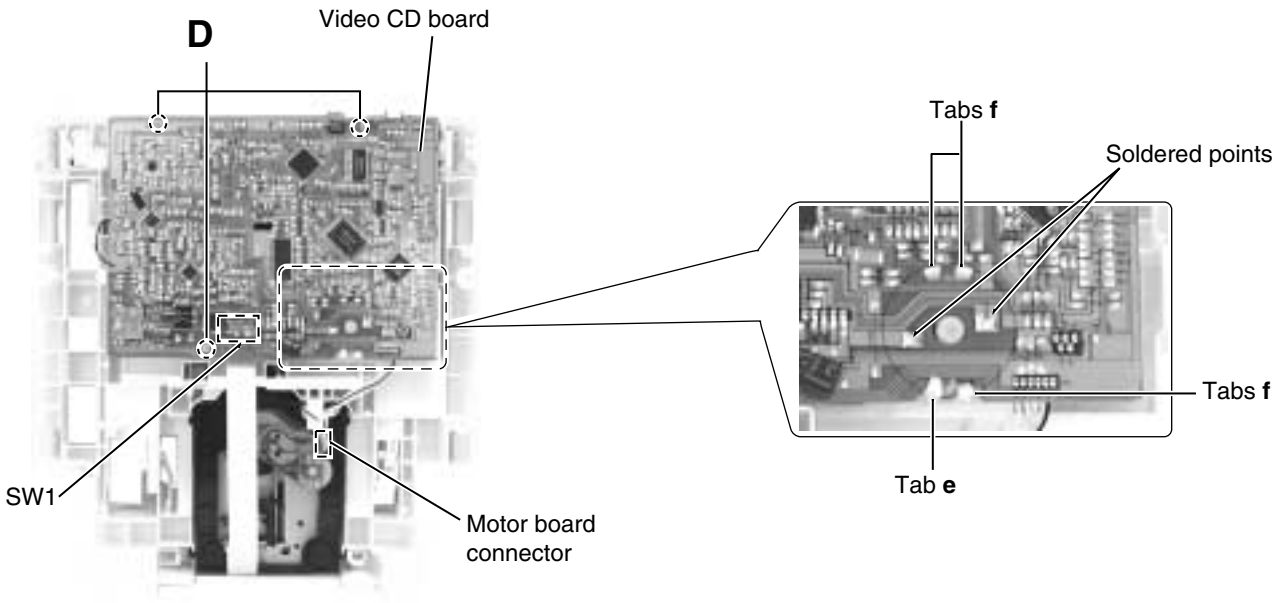


Fig.10

■ Removing the CD mechanism holder assembly (mechanism included) (See Fig.11 to 13)

1. Disconnect the card wire from pickup unit connector on the motor board in the CD mechanism holder assembly on the under side of the CD changer unit.
2. Remove the screw **E** attaching the shaft on the right side of the CD mechanism holder assembly.
3. Pull outward the stopper fixing the shaft on the left side and remove the CD mechanism holder assembly from behind in the direction of the arrow ★.
4. Pull out the CD mechanism holder assembly.

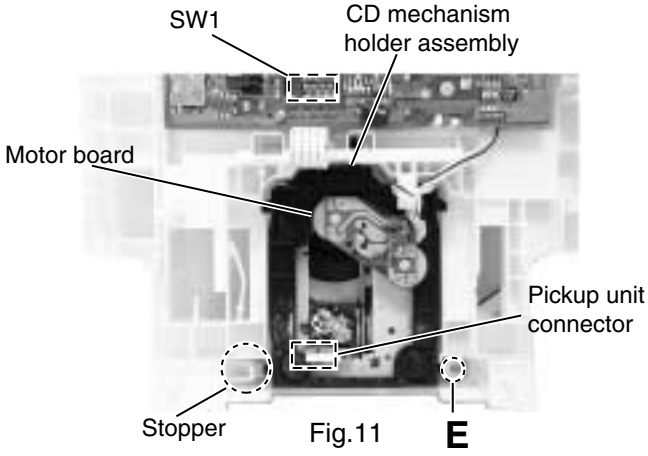


Fig.11

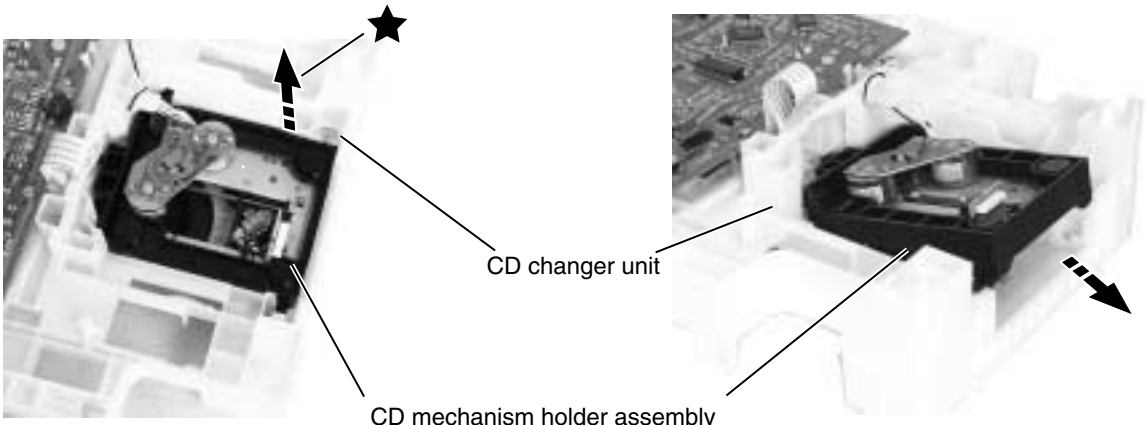


Fig.12

Fig.13

<Cassette mechanism section>

- Prior to performing the following procedure, removing the cassette mechanism.

■ Removing the R/P head. (Fig.1 to 3)

1. Remove the screw **A** attaching the R/P head right side.
2. Remove the screw **B** attaching R/P head left side. (Screw **B** : Head azimuth adjusting screw.)

■ Removing the P.B. head. (Fig.1 to 3)

1. Removing the screw **C** attaching the P.B. head right side.
2. Removing the screw **D** attaching the P.B. head left side. (Screw **D** : Head azimuth adjusting screw.)

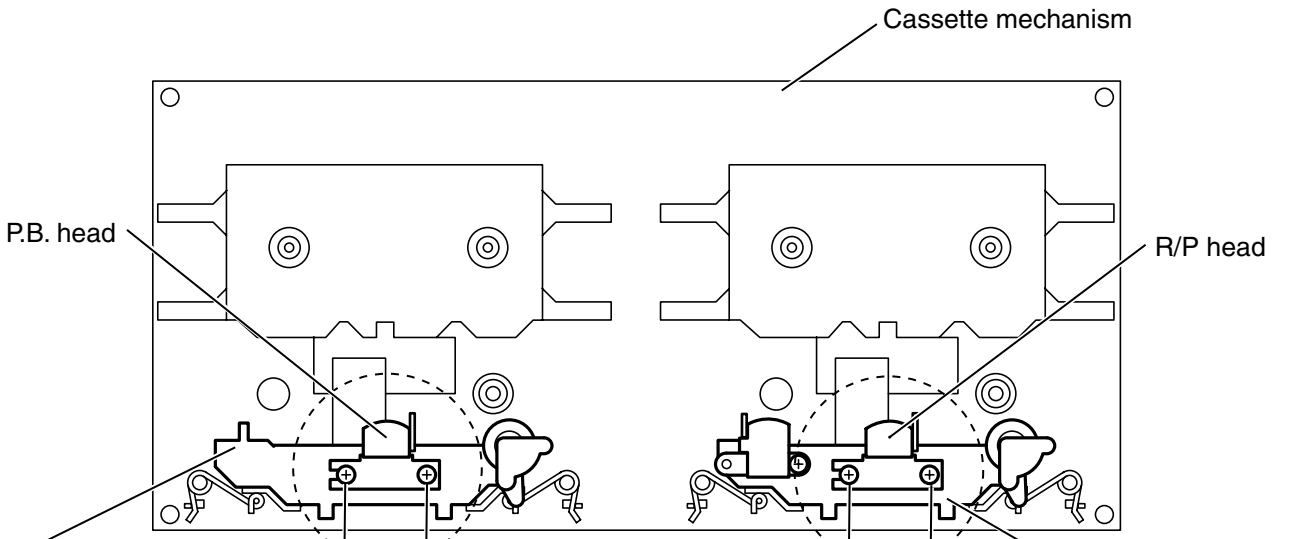


Fig.1

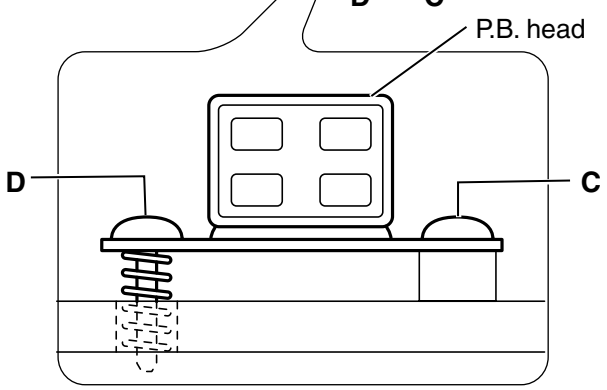


Fig.3

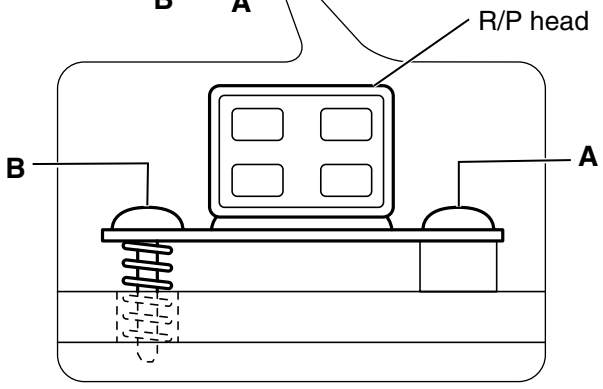


Fig.2

■ Removing the pinch roller unit.

(Fig. 4)

- Prior to performing the following procedure, removing the cassette mechanism.

1. Remove the two screws **E** attaching the pinch roller unit.

Attention:
The pinch roller cap is forcefully fitted to the shaft of the pinch roller unit. If the pinch roller cap is taken out by force, the shaft will be broken. When replacing the pinch roller, it should be changed as a pinch roller unit itself.

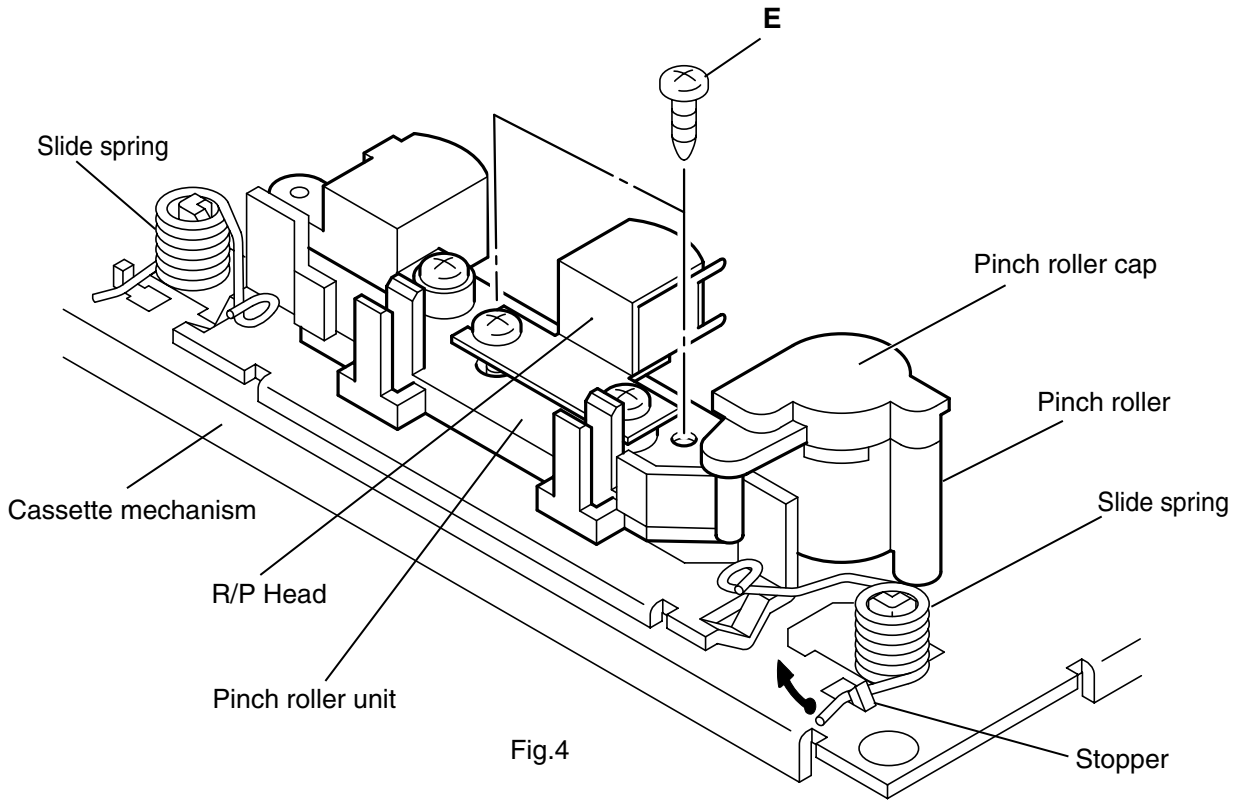


Fig.4

■ Removing the flywheel. (Fig.5 to 7)

- Prior to performing the following procedure, removing the cassette mechanism.

1. Remove the cut washers at **a** and **b** from the capstan shaft. Then remove the flywheel. When reassembling the flywheel, be sure to use new cut washers as they cannot be reused.

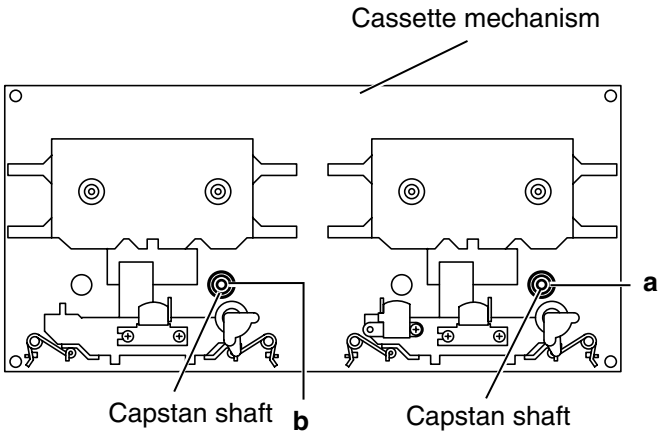


Fig.5

■ Removing the motor. (Fig.7 to 9)

- Prior to performing the following procedure, removing the cassette mechanism.

1. Unsolder the solder point on the motor terminal.
2. Remove the capstan belt from the motor pulley.
3. Remove the two screws **F** attaching the motor bracket.
4. Remove the two screws **G** attaching the motor.

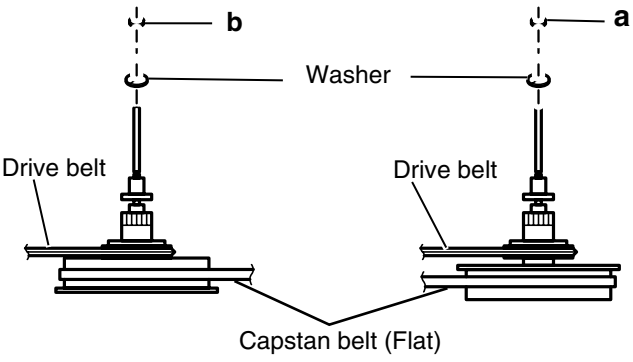


Fig.6

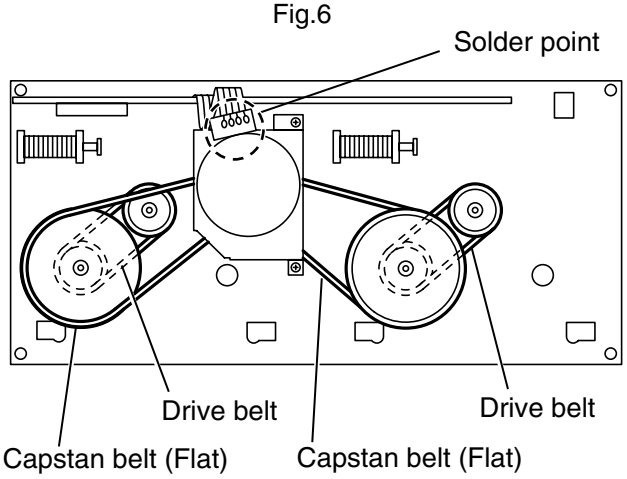


Fig.7

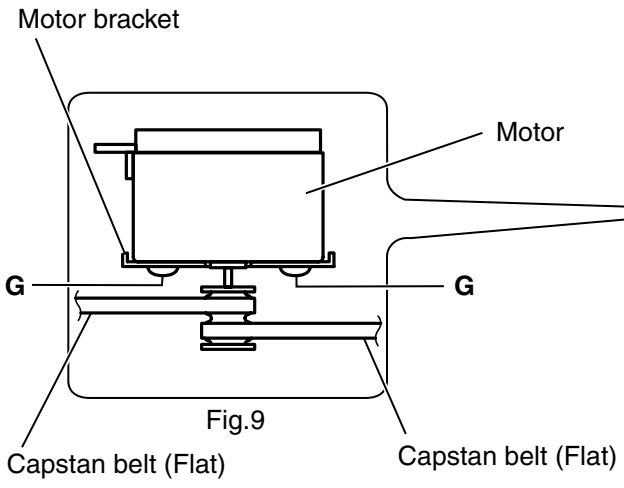


Fig.9

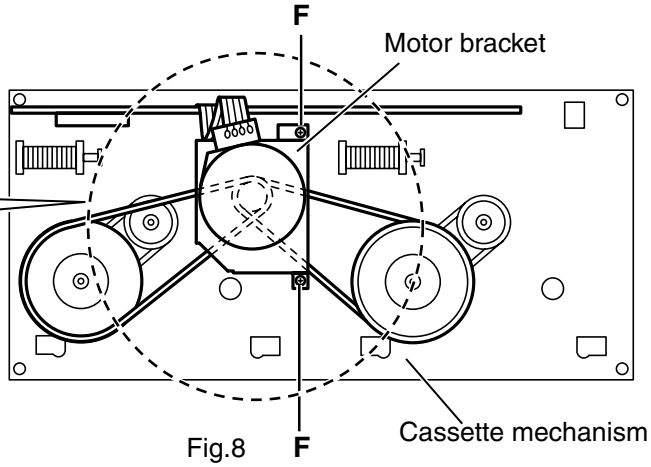


Fig.8

< Speaker section >

■ Removing the side panel (See Fig. 1)

1. Remove the five screws **A** and **B** attaching the side panel, then remove the side panel.

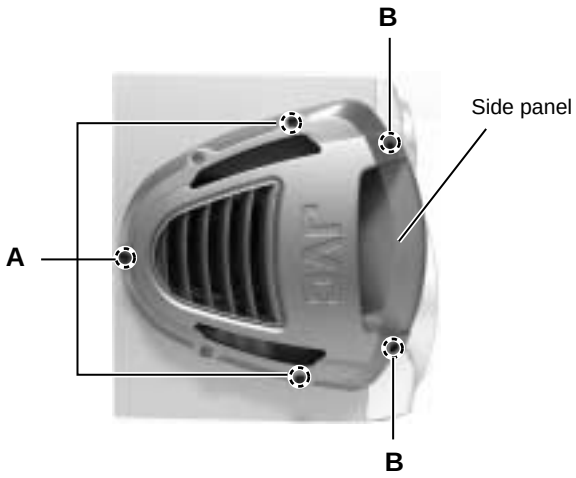


Fig.1

■ Removing the side speaker (See Fig. 2 and 3)

Prior to performing the following procedure, remove the side panel.

1. Remove the fore screws **C** attaching the side speaker.
2. Pull out the side speaker and remove the speaker cord from the speaker terminal.

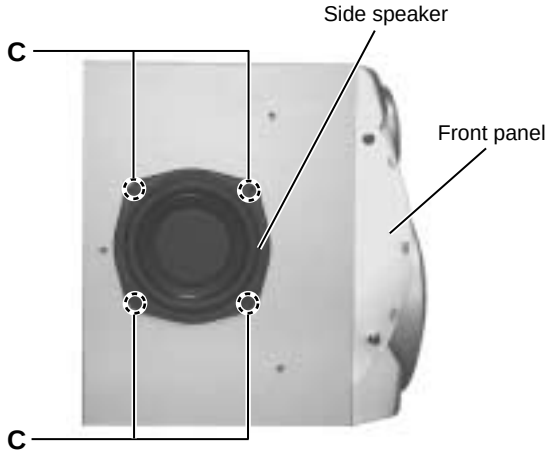


Fig.2

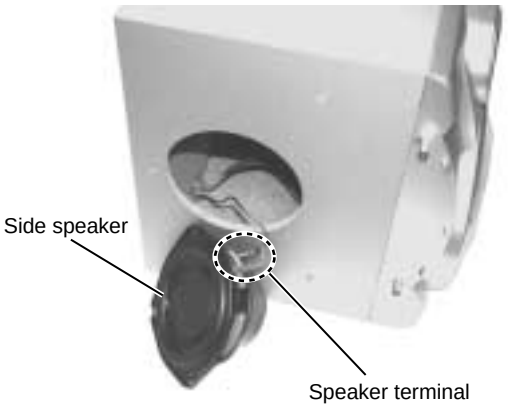
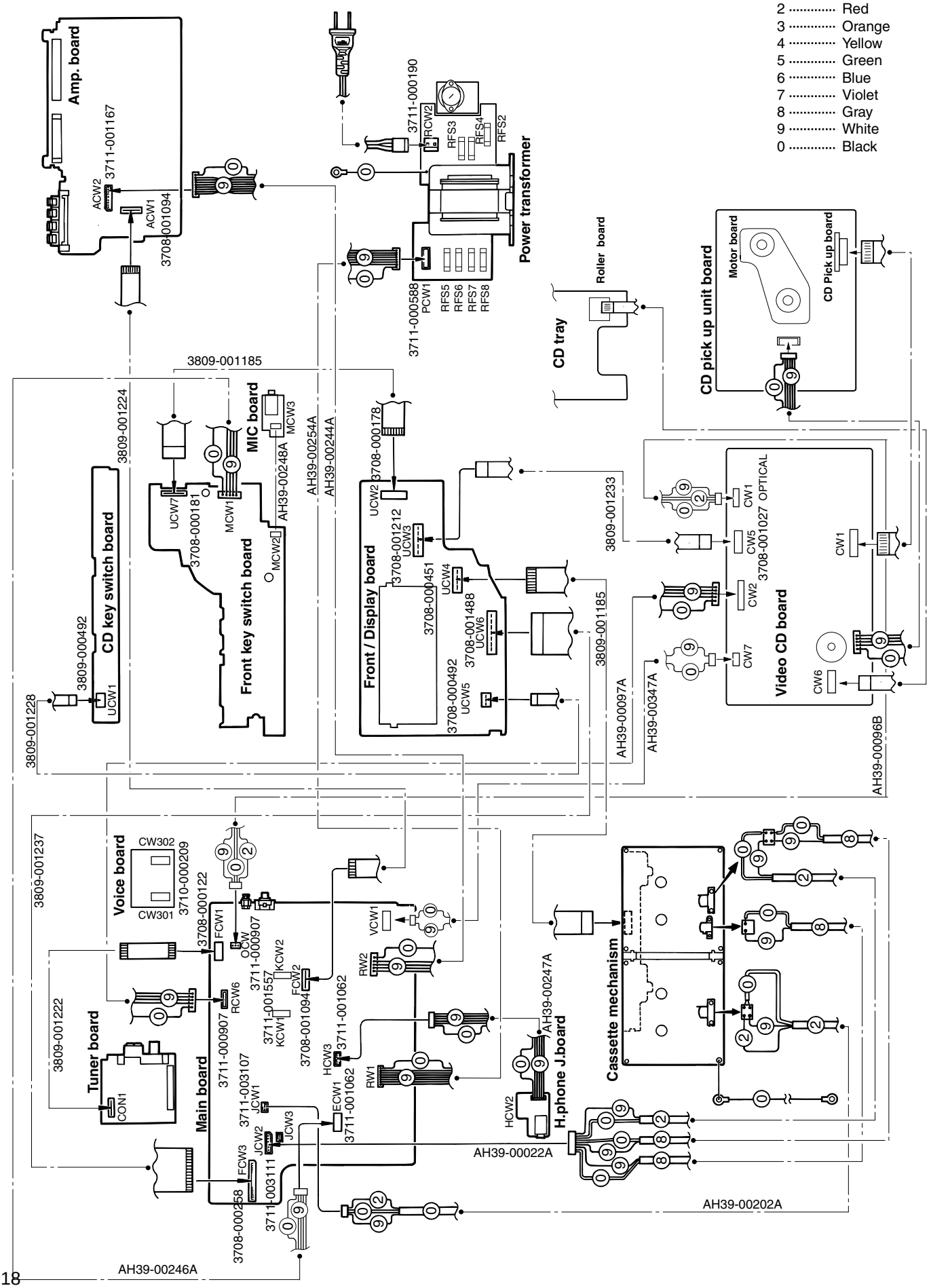


Fig.3

Wiring connection

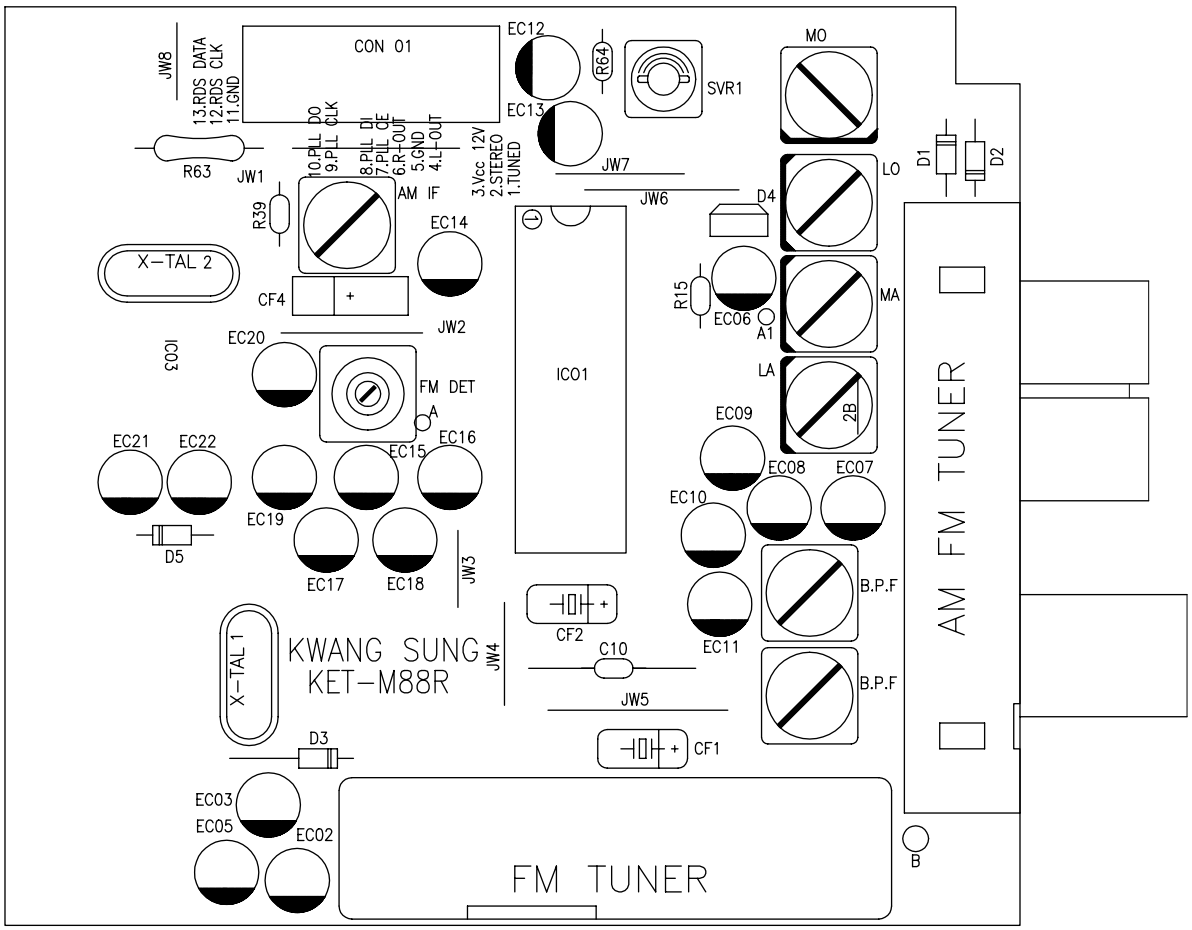
Color codes are shown below.

1 ····· Brown
2 ····· Red
3 ····· Orange
4 ····· Yellow
5 ····· Green
6 ····· Blue
7 ····· Violet
8 ····· Gray
9 ····· White
0 ····· Black



Adjustment method

1. Tuner



* Adjustment Location of Tuner PCB

ITEAM	AM(MW) OSC Adjustment	AM(MW) RF Adjustment	LW OSC Adjustment (Except for J/C)	AM(MW) RF Adjustment
Received FREQ.	531~1602 KHz (9kHz step) 530~1600 KHz (10kHz step)	594 KHz	146~290 KHz	150 KHz
Adjustment point	MO	MA	LO	LA
Output	1~7.0± 0.5V	Maximum Output(Fig1-4)	2~7.0±0.5V	Maximum Output(Fig1-4)

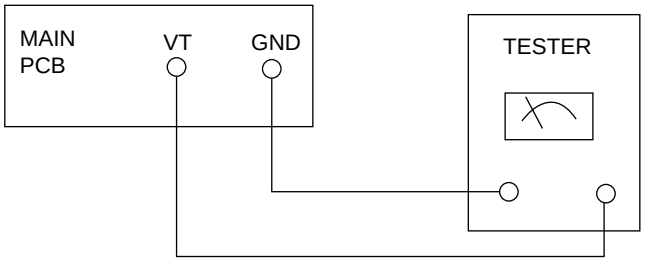


Fig 1-4 OSC Voltage

FM THD Adjustment	
SSG FREQ.	98 MHz
Adjustment point (FM DET)	FM DETECTOR COIL
Output	60 dB
Minumum Distortion (0.4% below) (Figure 1-1)	

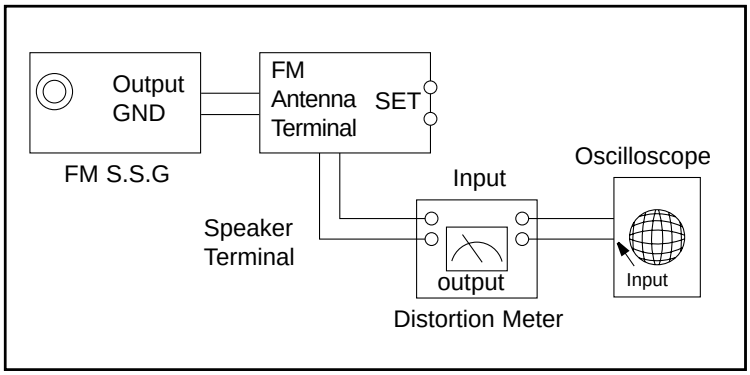


Figure1-1 IF CENTER and THD Adjustment

FM Search Level Adjustment	
SSG FREQ.	98 MHz
Adjustment point (SVR1)	BEACON SENSITIVITY SEMI-VR(20KΩ)
Output	28 dB(± 2dB)
Adjust SVR1 so that "TUNED" of FL T is lighted (Figure 1-2)	

*Adjust FM S.S.G level to 28dB

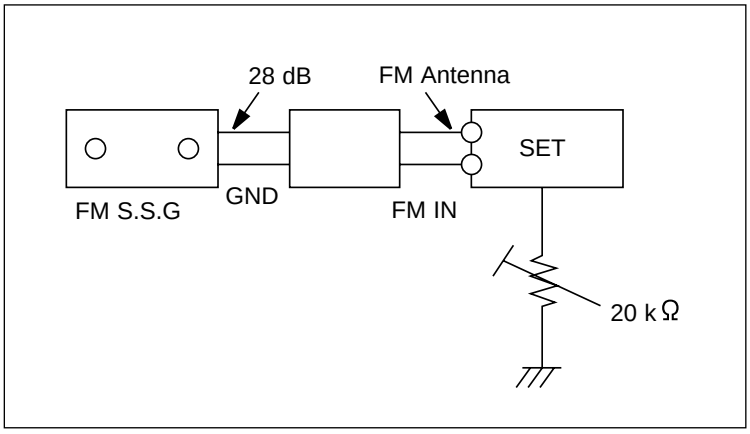


Figure1-2 FM Auto Search Level Adjustment

AM(MW) I.F Adjustment	
SSG FREQ.	450 kHz
Frequency	531 kHz (9kHz step) 530 kHz (10kHz step)
Adjustment point	AM IF
Maximum output (Figure 1-3)	

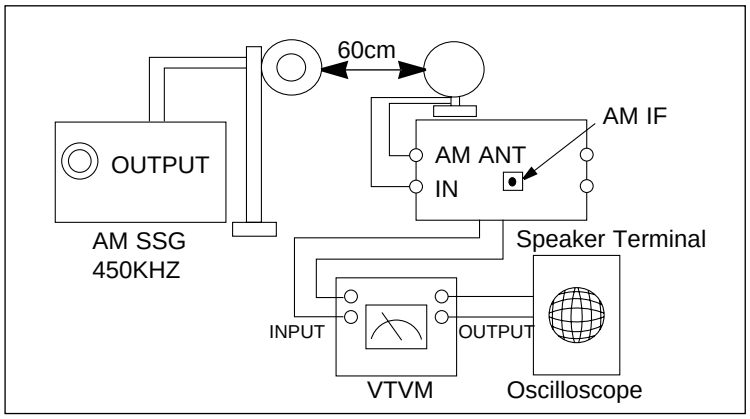


Figure1-3 AM I.F Adjustment

2 Cassette Deck

To adjust tape speed

Notes

1) Measuring tape: i) VT-712
(Tapes recorded with 3kHz)
ii) AC-225
2) Connect the cassette deck to the frequency counter as in figure 1-5.

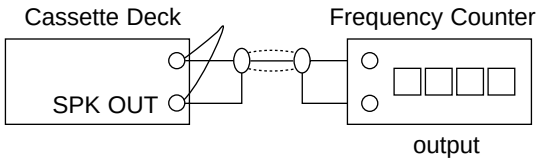


Figure 1-5

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	NOR SPEED Control	OUT (connected to the frequency counter)	1) Deck 1:VT-712 2) Press PLAY SW button 3) Deck 2:Same as above	Turn VSR1 to left and right (FRONT PCB)	3KHz	±1% range

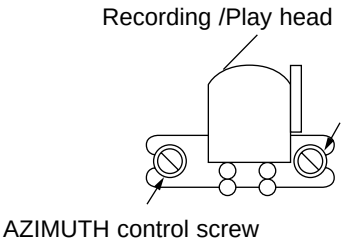


Figure 1-6

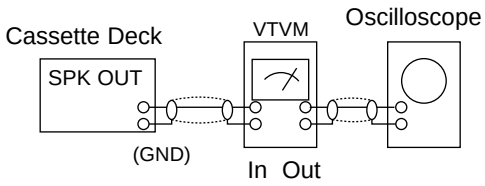


Figure 1-7

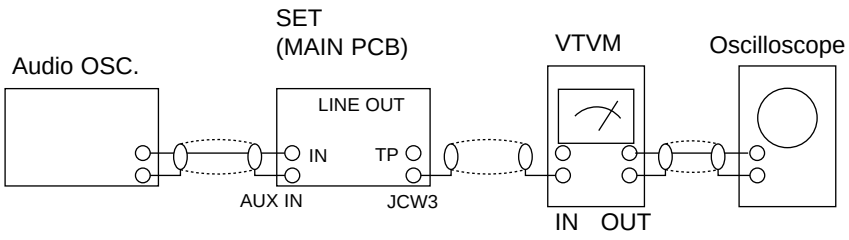


Figure 1-8

To adjust plabyback level/REC

Notes

1) Before the actual adjustment, clean the play/recording head.
2) Measuring tape :
   i) VT-703 (10kHz AZIMUTH control)
   ii) AC-225
3) The cassette deck is connections as shown in figure 1-7.

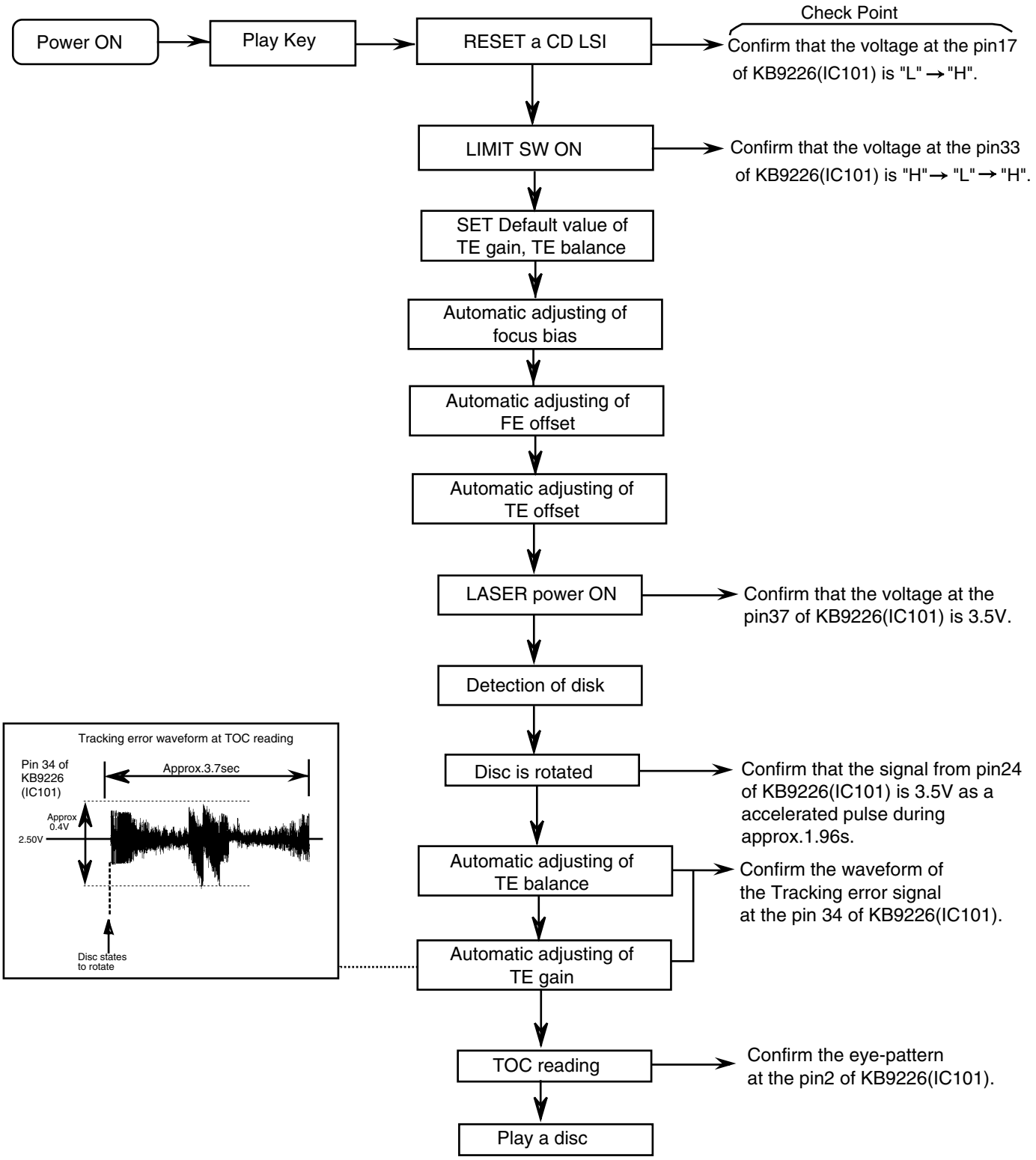
1. Adjust Deck A Play Level

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	AZIMUTH	SPK OUT (VTVM is connected to the scope)	After putting VT-703 into Deck A - Press FWD PLAY button.	- Turn the control screw to as shown in Figure 1-6.	Max output and same phase (both channels)	After adjustment secure it with REGION LOCK.

2. Adjust Deck B Play Level/REC BIAS

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	AZIMUTH	SPK OUT (VTVM is connected to the scope)	After putting VT-703 into Deck B 1)Press FWD PLAY button.	- Turn the control screw to as shown in Figure 1-6.	Max output and same phase (both channels)	After adjustment secure it with REGION LOCK.
2	Recording Bias Voltage	Fig 1-8	After putting AC-225 into Deck B 1)Press REC PLAY button. 2)MAIN PCB JCW3, connectted to VTVM	Turn JSR2L,JSR2R to the right and left	7mV(± 0.5mV)	

Flow of functional operation until TOC read

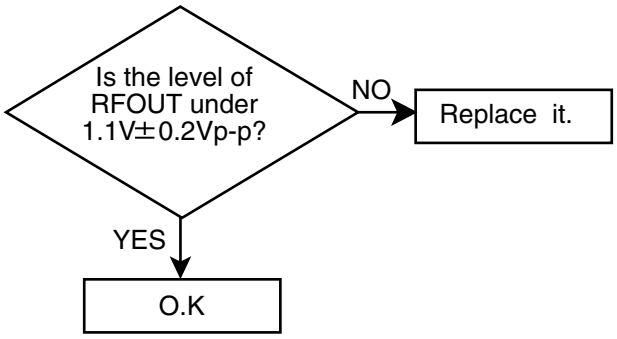


Maintenance of laser pickup

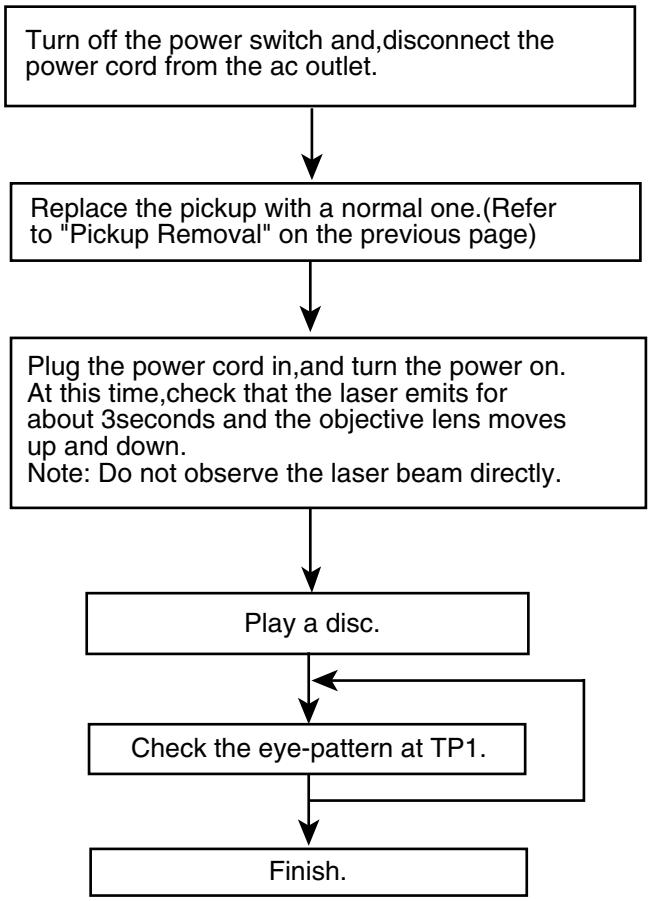
(1) Cleaning the pick up lens
Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

(2) Life of the laser diode
When the life of the laser diode has expired, the following symptoms will appear.

1. The level of RF output (EFM output:amplitude of eye pattern) will below.



Replacement of laser pickup

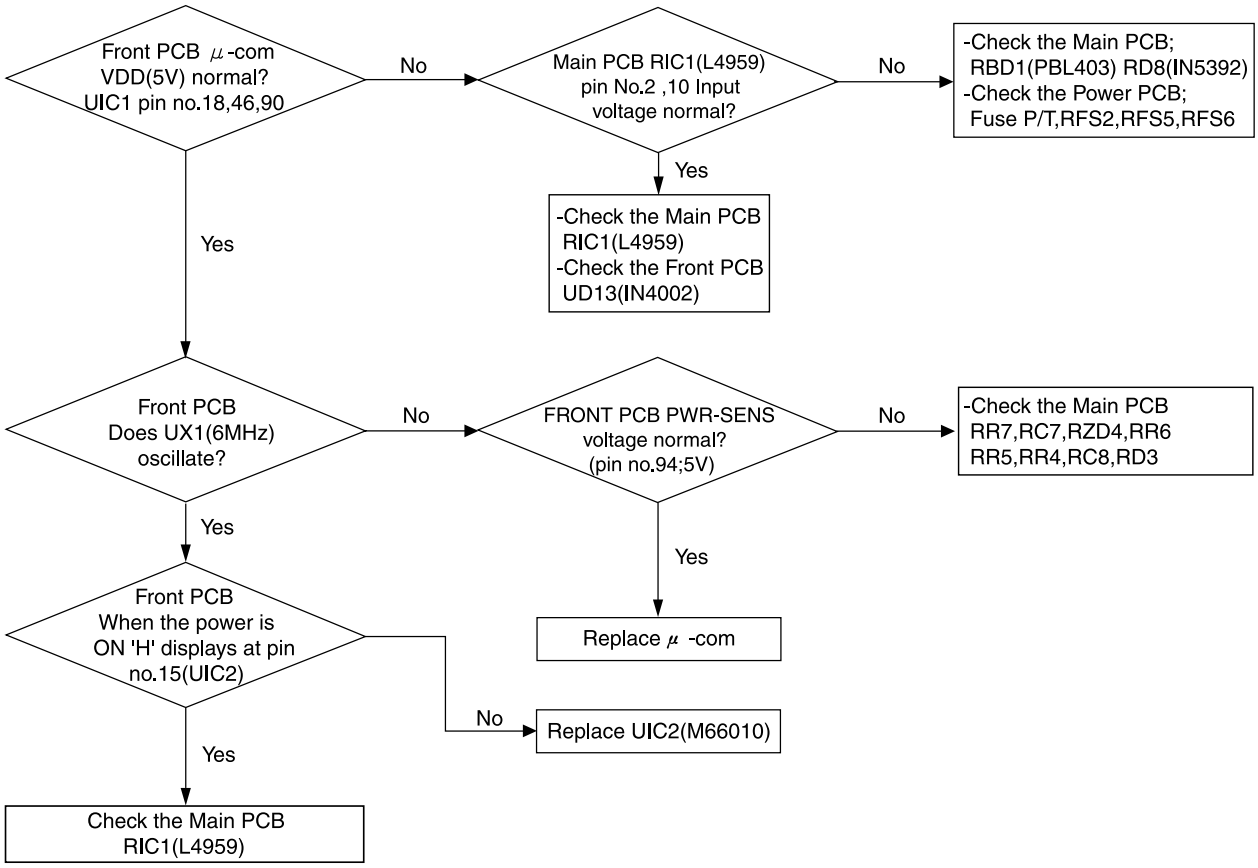


(3) Semi-fixed resistor on the APC PC board
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value,the laser diode is almost worn out, and the laser pickup should be replaced.
If the semi-fixed resistor is adjusted while the pickup is functioning normally,the laser pickup may be damaged due to excessive current.

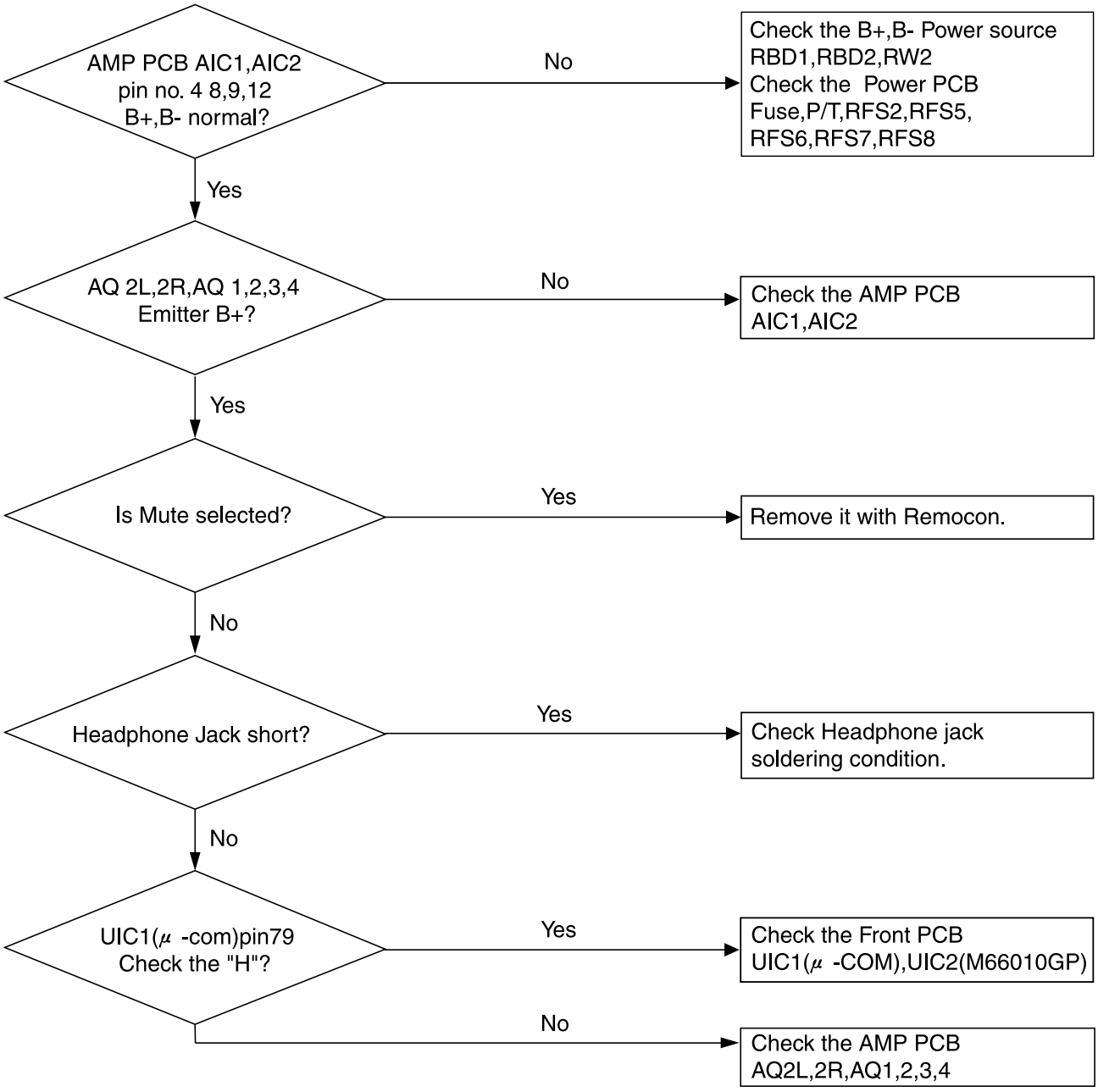
Troubleshooting

1.Amplifier

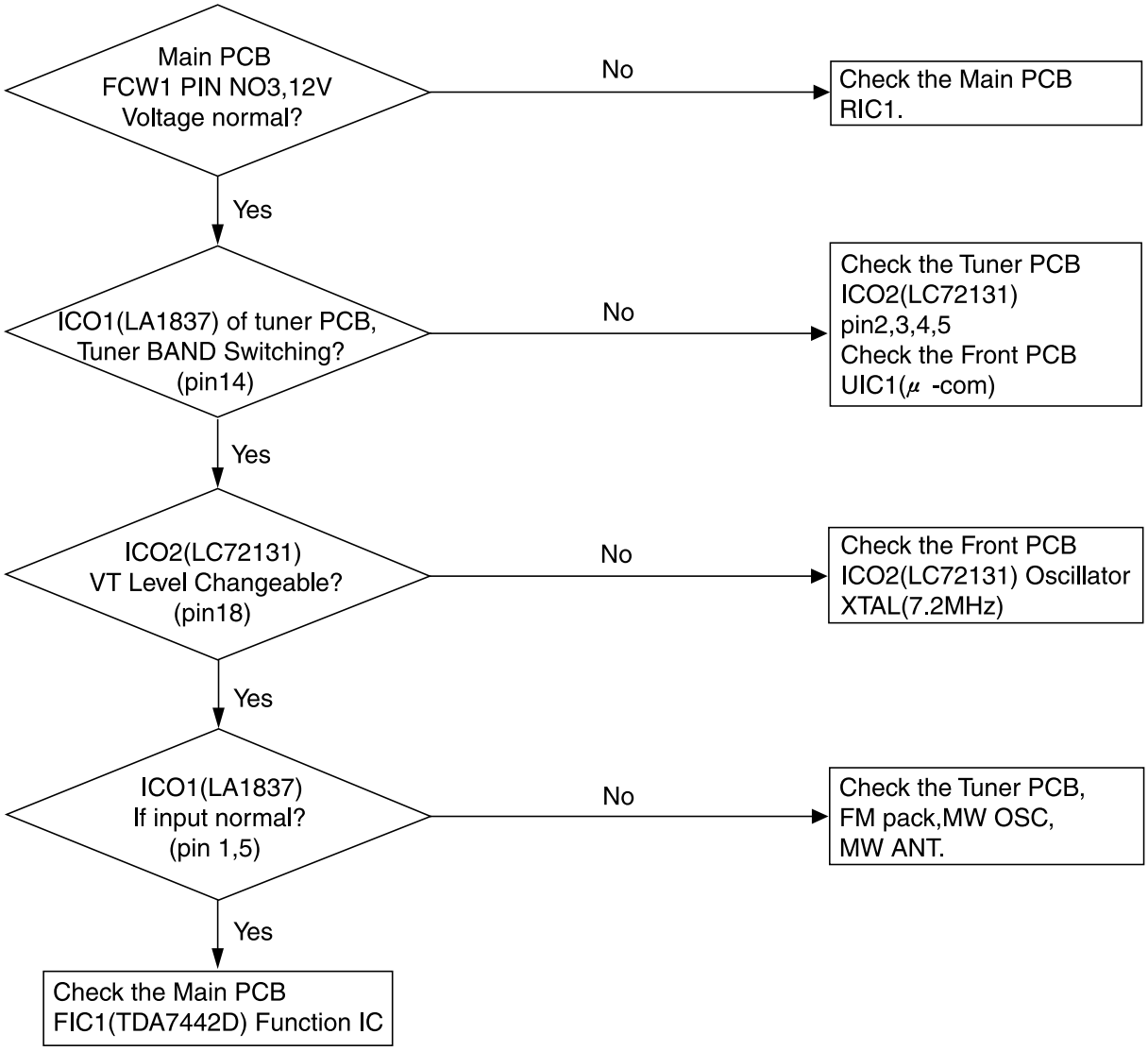
Power Malfunction : COMMON



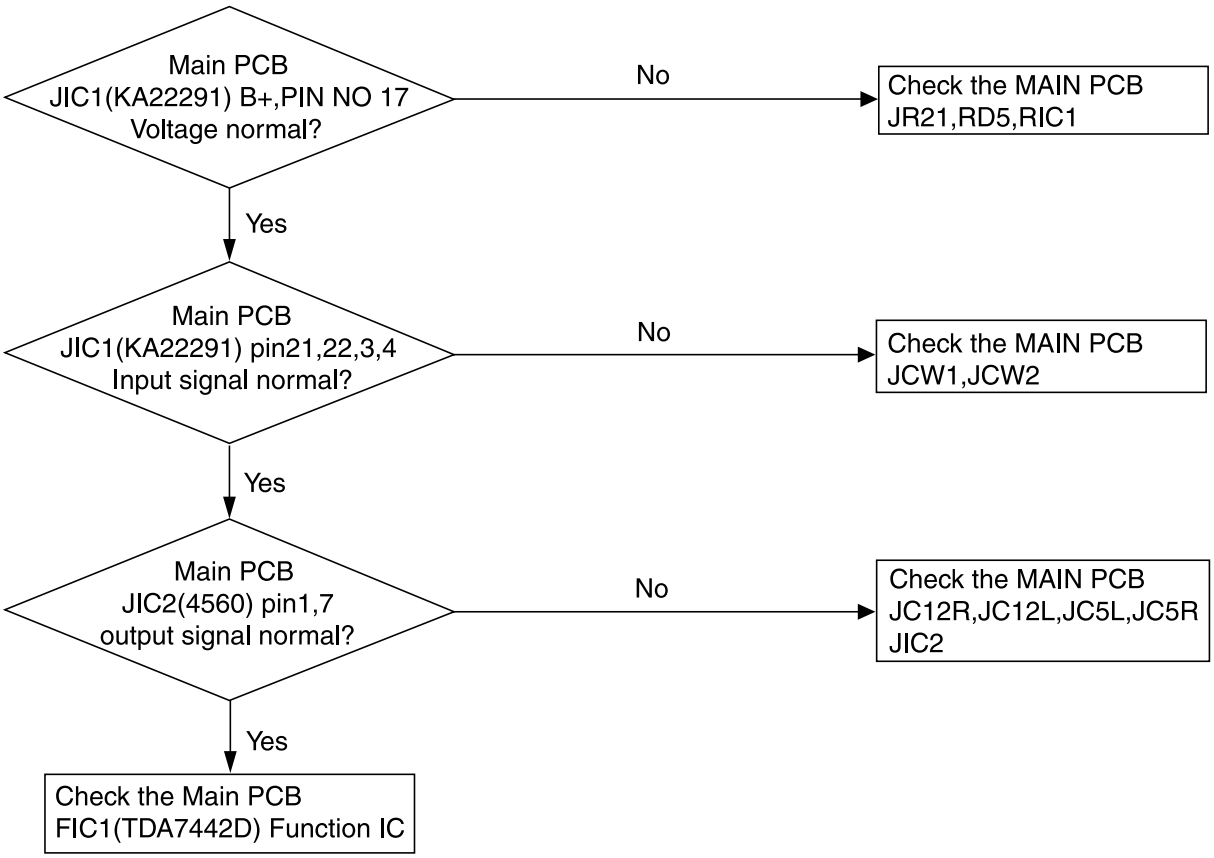
<No Output>


AMP PCB AIC1,AIC2
pin no. 4 8,9,12
B+,B- normal?
No
Check the B+,B- Power source
RBD1,RBD2,RW2
Check the Power PCB
Fuse,P/T,RFS2,RFS5,
RFS6,RFS7,RFS8
Yes
AQ 2L,2R,AQ 1,2,3,4
Emitter B+?
No
Check the AMP PCB
AIC1,AIC2
Yes
Is Mute selected?
Yes
Remove it with Remocon.
No
Headphone Jack short?
Yes
Check Headphone jack
soldering condition.
No
UIC1(μ -com)pin79
Check the "H"?
Yes
Check the Front PCB
UIC1(μ -COM),UIC2(M66010GP)
No
Check the AMP PCB
AQ2L,2R,AQ1,2,3,4

2. Tuner malfunction (FM/AM)

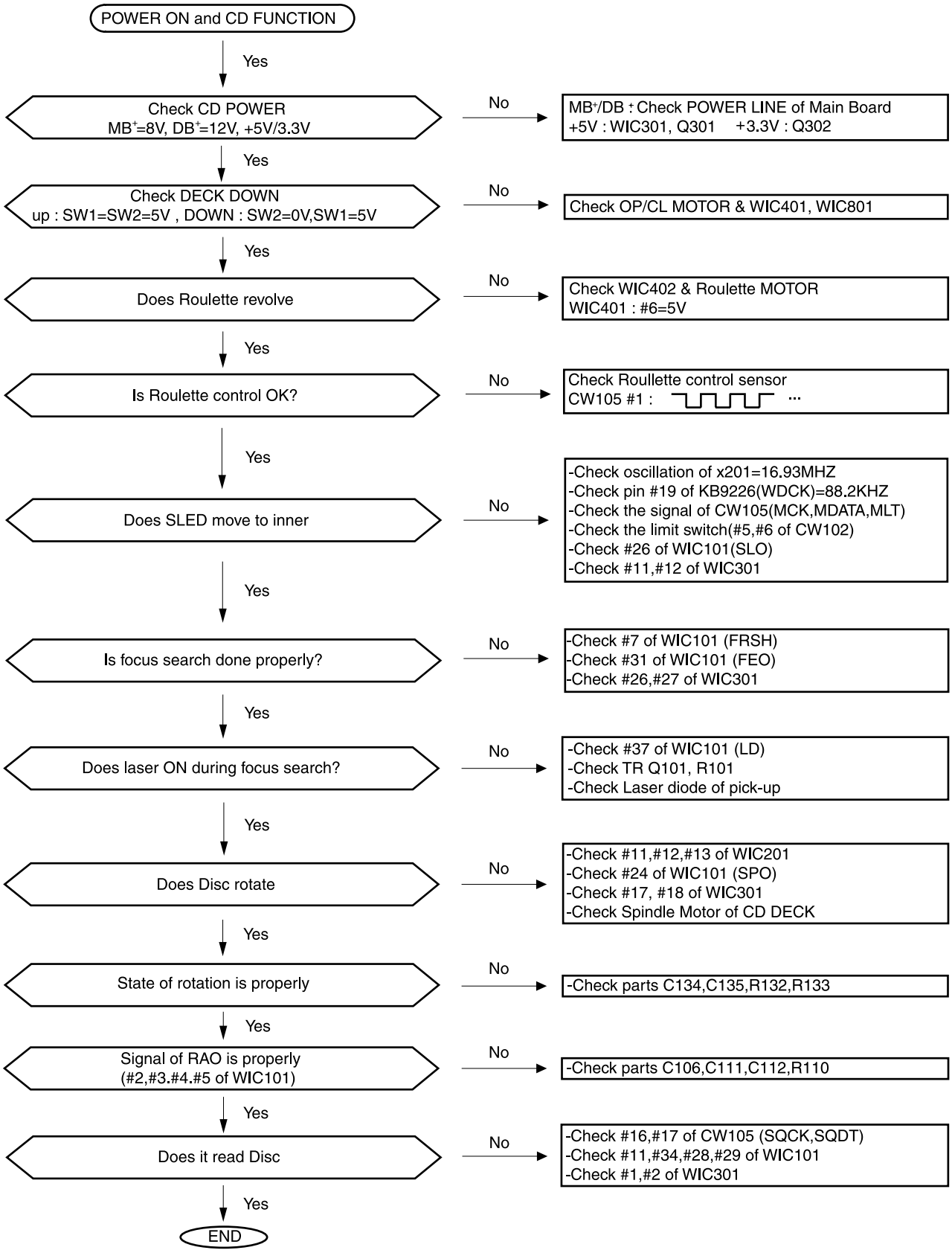


3. Tape


Main PCB
JIC1(KA22291) B+,PIN NO 17
Voltage normal?
No
Check the MAIN PCB
JR21,RD5,RIC1
Yes
Main PCB
JIC1(KA22291) pin21,22,3,4
Input signal normal?
No
Check the MAIN PCB
JCW1,JCW2
Yes
Main PCB
JIC2(4560) pin1,7
output signal normal?
No
Check the MAIN PCB
JC12R,JC12L,JC5L,JC5R
JIC2
Yes
Check the Main PCB
FIC1(TDA7442D) Function IC

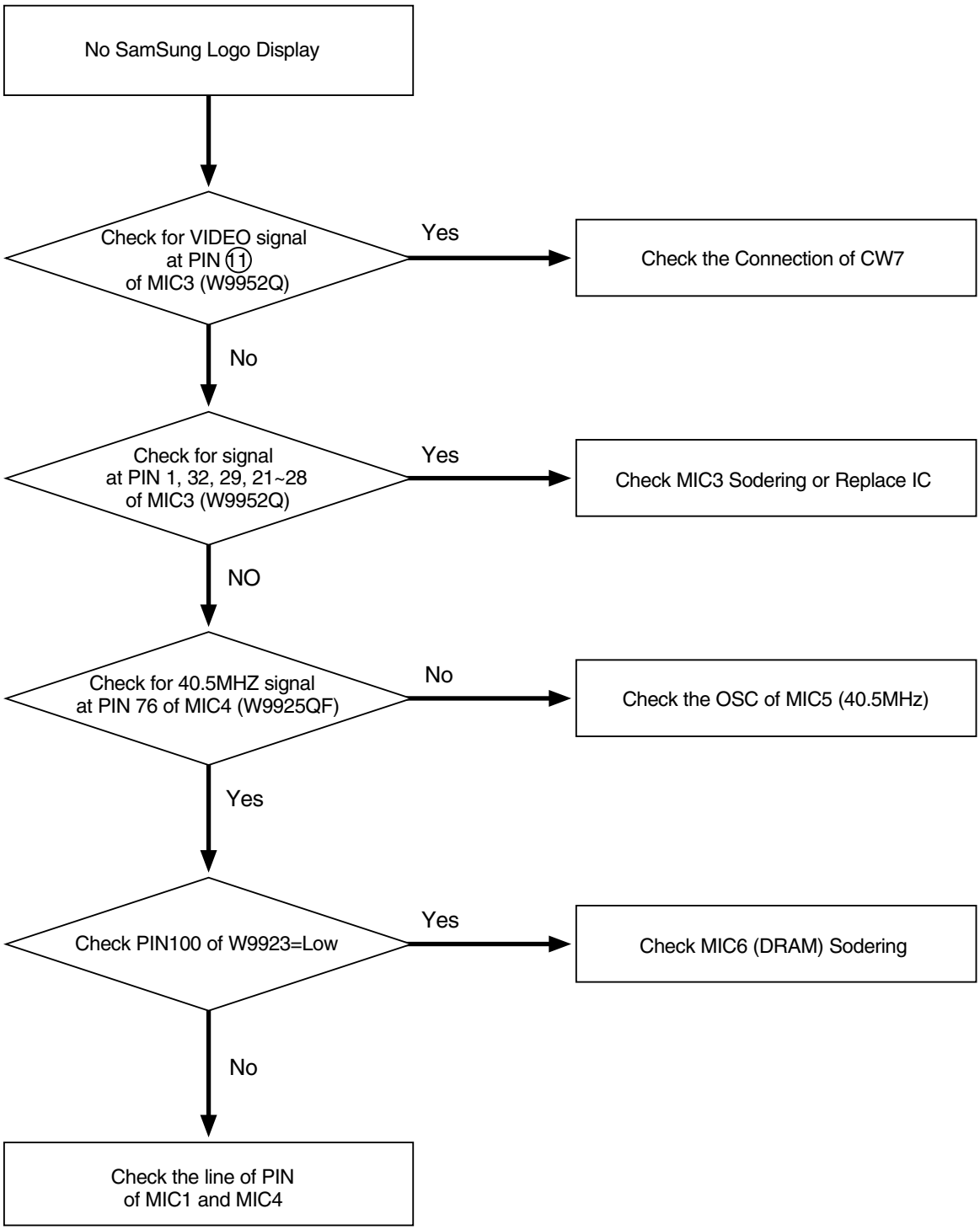
4. Video CD

< No DISC>



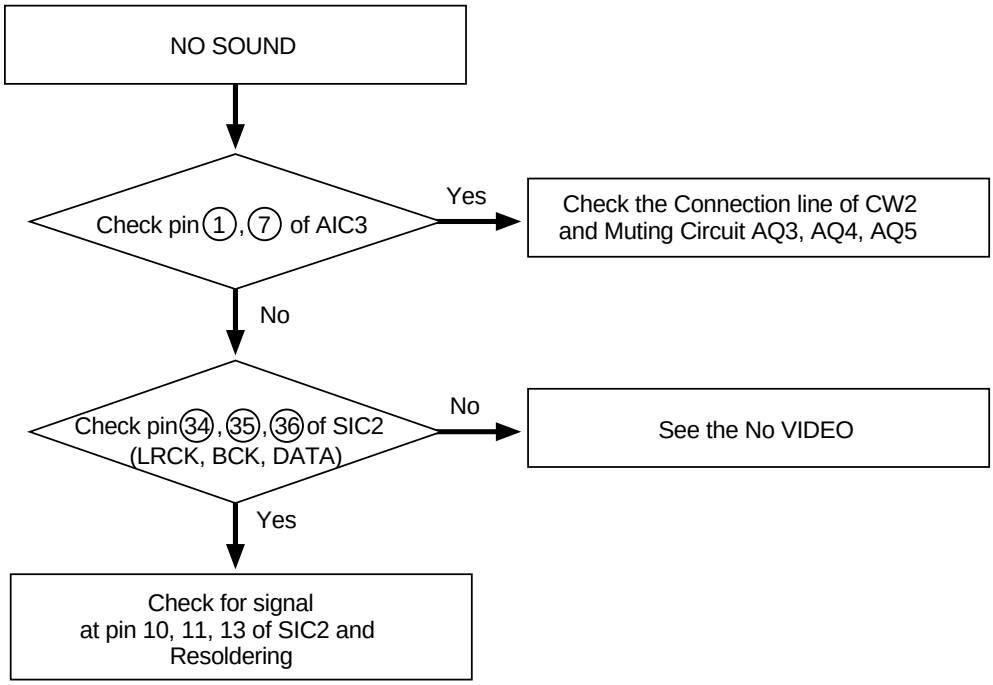
<No VIDEO>

- Check the Voltage (+5V, +3.3V)

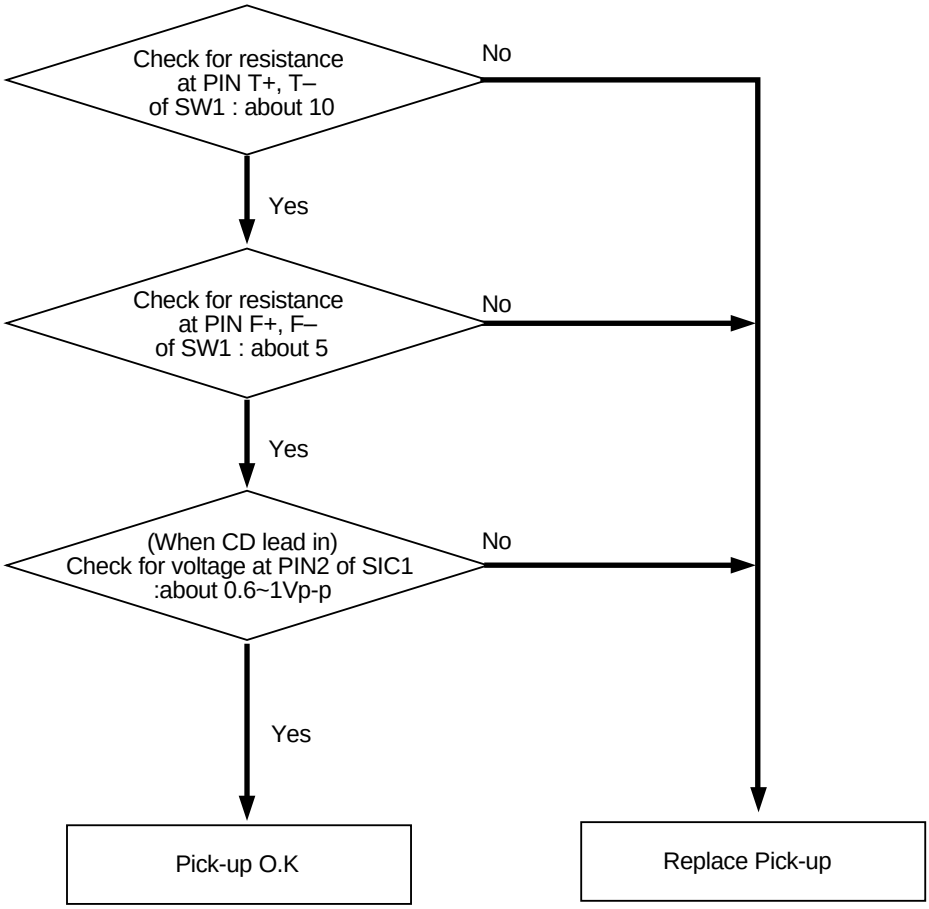


<No sound of CD Play>

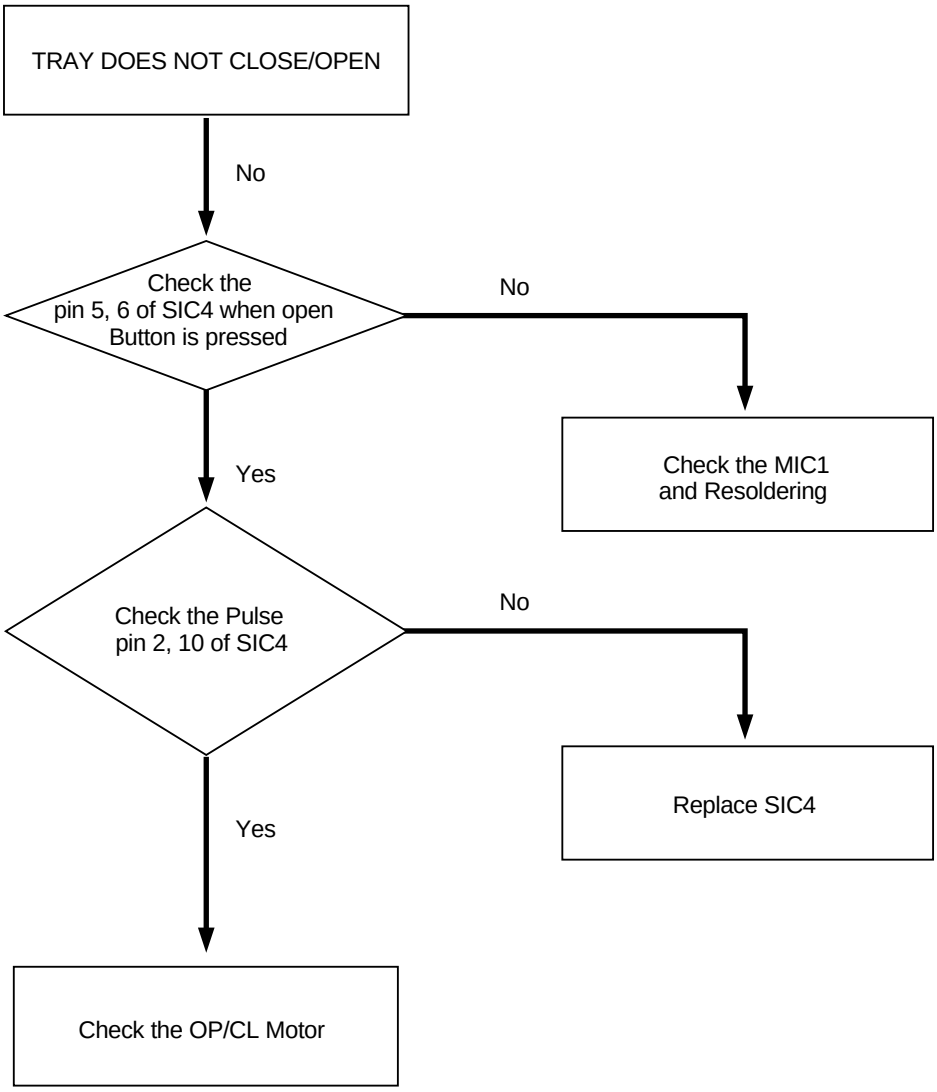
- Check 16.9344MHz OSC at pin38 of MIC1
- Check Voltage (+5, ±12)
- Check all Connection between VCD pack PCB and Main, Front PCB



<Check Pick-up>



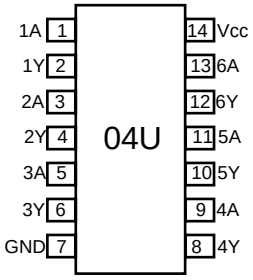
<3CD Tray does not close/open>



Description of major ICs

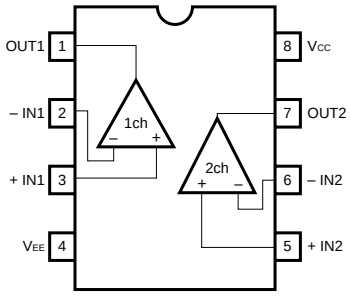
■ 74HCU04 (OIC1) : Optical

1. Pin layout



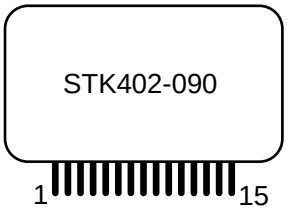
■ BA4560 (AIC3,AIC4,AIC5,AIC6,AIC7, FIC2,FIC4,HIC1, JIC2,UIC3) : Dual op. amplifier

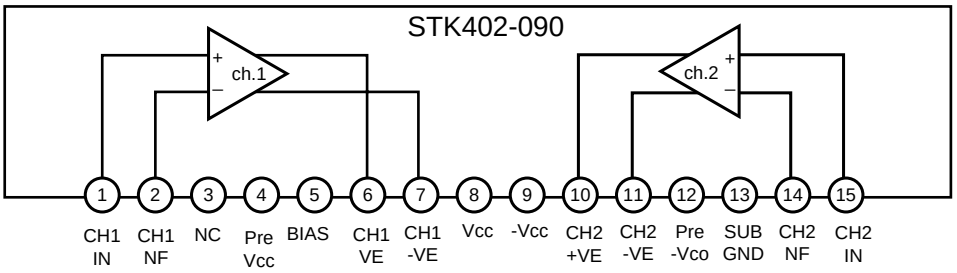
1. Pin layout



■ STK402-090 (AIC2) : Power amplifier

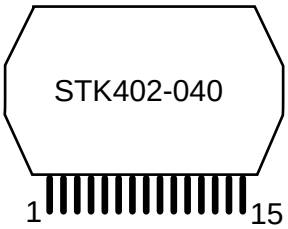
1.Pin layout

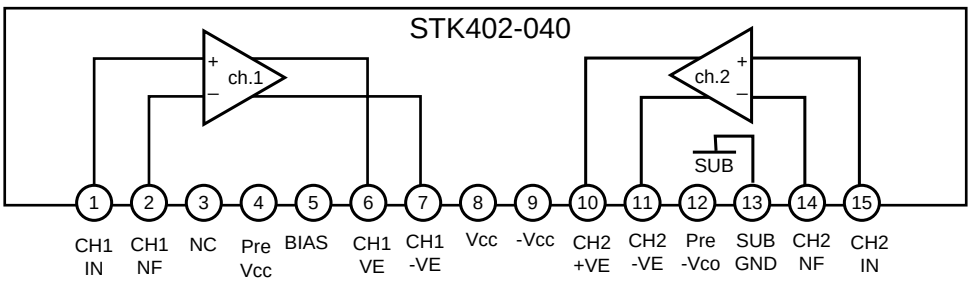




■ STK402-040 (AIC1) : Power amplifier

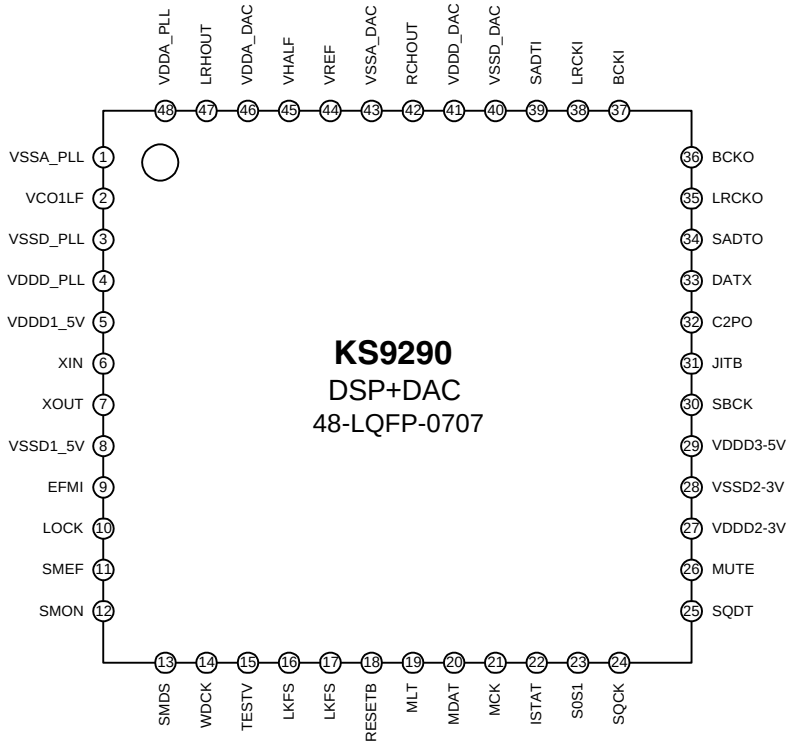
1.Pin layout



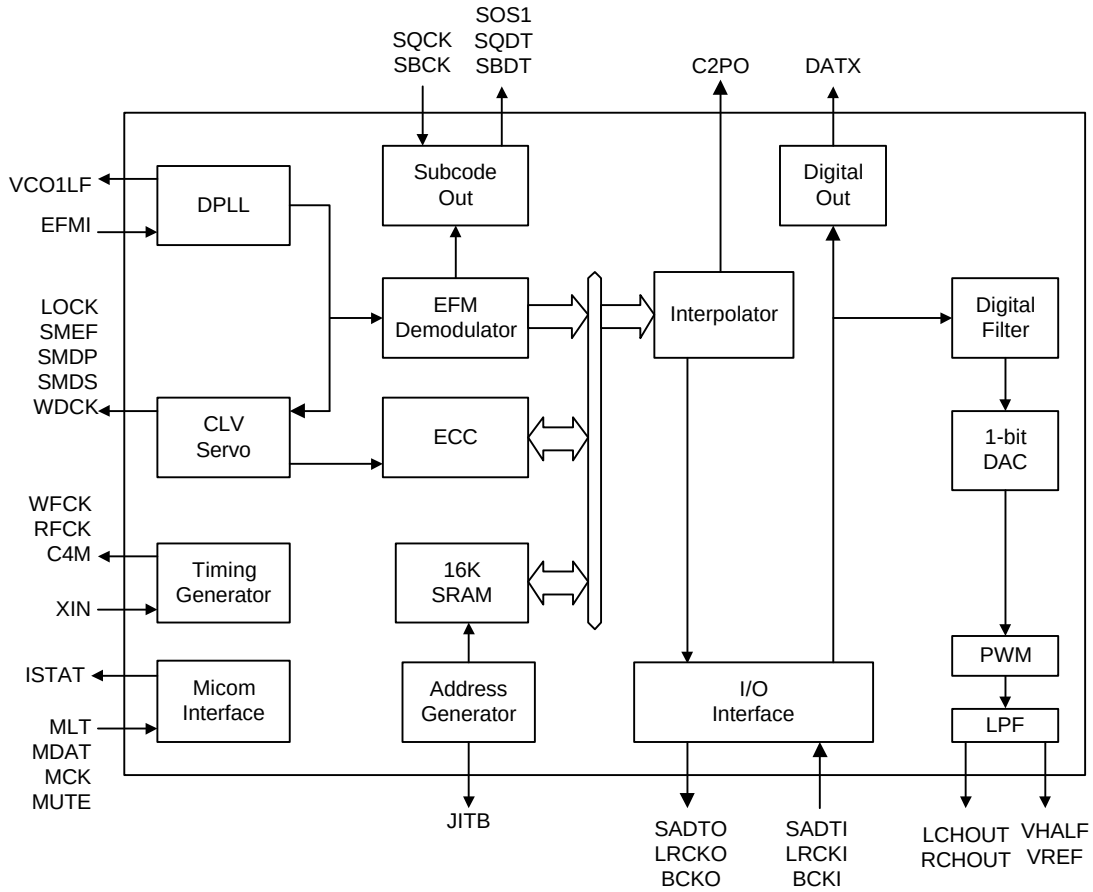


■ KS9290 (IC201) : Digital signal processor for CD player

1. Pin layout



2. Block diagram



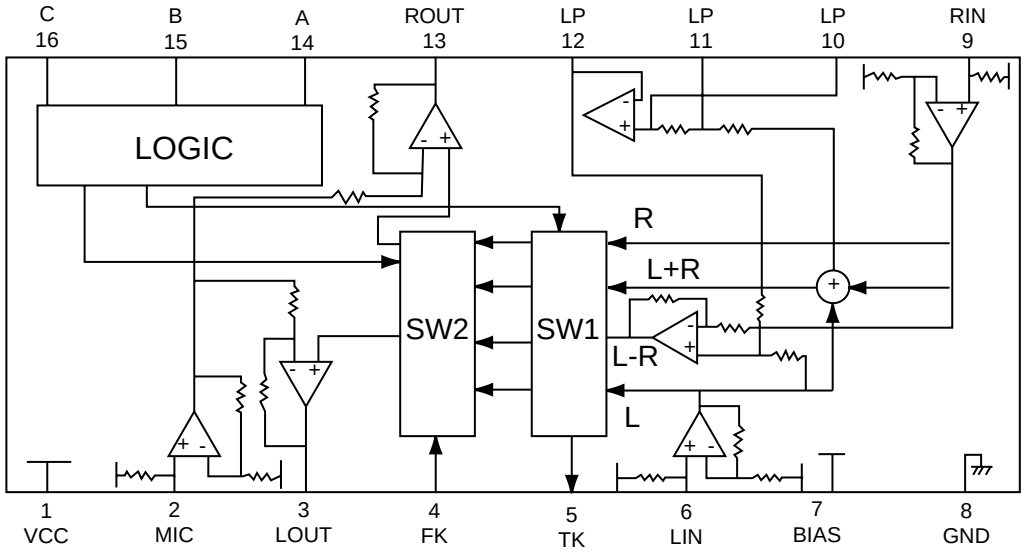
3. Pin function

KS9290

Pin No.	Symbol	I/O	Function
1	VSSA_PLL	-	Analog Ground for DPLL
2	VCO1LF	O	Pump out for VCO1
3	VSSD_PLL	-	Digital Ground Separated Bulk Bias for DPLL
4	VDDD_PLL	-	Digital Power Separated Bulk Bias for DPLL (3V Power)
5	VDDD1-5V	-	Digital Power (5V Power, I/O PAD)
6	XIN	I	X'tal oscillator input (16.9344MHz)
7	XOUT	O	X'tal oscillator output
8	VSSD1	-	Digital Ground (I/O PAD)
9	EFMI	I	EFM signal input
10	LOCK	O	CLV Servo locking status output
11	SMEF	O	LPF time constant control of the spindle servo error signal
12	SMDP	O	Phase control output for Spindle Motor drive
13	SMDS	O	Speed control output for Spindle Motor drive
14	WDCK	O	Word clock output (Normal Speed : 88.2KHz, Double Speed : 176.4KHz)
15	TESTV	I	Various Data/Clock Input
16	LKFS	O	The Lock status output of frame sync
17	C4M	O	4.2336MHz clock output
18	RESETB	I	System Reset at 'L'
19	MLT	I	Latch signal input from Micom
20	MDAT	I	Serial data input from Micom
21	MCK	I	Serial data receiving clock input from Micom
22	ISTAT	O	The internal status output to Micom
23	S0S1	O	Sub code sync signal (S0+S1) output
24	SQCK	I	Sub code-Q data transfering bit clock input
25	SQDT	O	Sub code-Q data serial output
26	MUTE	I	System mute at 'H'
27	VDDD2-3V	-	Digital Power (3V Power, Internal Logic)
28	VSSD2	-	Digital Ground (Internal Logic)
28	VDDD3-5V	-	Digital Power (5V Power, I/O PAD)
30	SBCK	I	Sub code data transfering bit clock
31	JITB	O	Internal SRAM jitter margin status output
32	C2PO	O	C2 pointer output
33	DATX	O	Digital audio data output
34	SADTO	O	Serial audio data output (48 slot, MSB first)
35	LRCKO	O	Channel clock output
36	BCKO	O	Bit clock output
37	BCKI	I	Bit clock input
38	LRCKI	I	Channel clock input
39	SADTI	I	Serial audio data input (48 slot, MSB first)
40	VSSD_DAC	-	Digital Ground for DAC
41	VDDD_DAC	-	Digital Power for DAC (3V Power)
42	RCHOUT	O	Right-Channel audio output through DAC
43	VSSA_DAC	-	Analog Ground for DAC
44	VREF	O	Reference Voltage output for bypass
45	VHALF	O	Reference Voltage output for bypass
46	VDDA_DAC	-	Analog Power for DAC (3V Power)
47	LCHOUT	O	Left-Channel audio output through DAC
48	VDDA_PLL	-	Analog Power for PLL (3V Power)

■BA3837 (IC301) : MIC Mixer

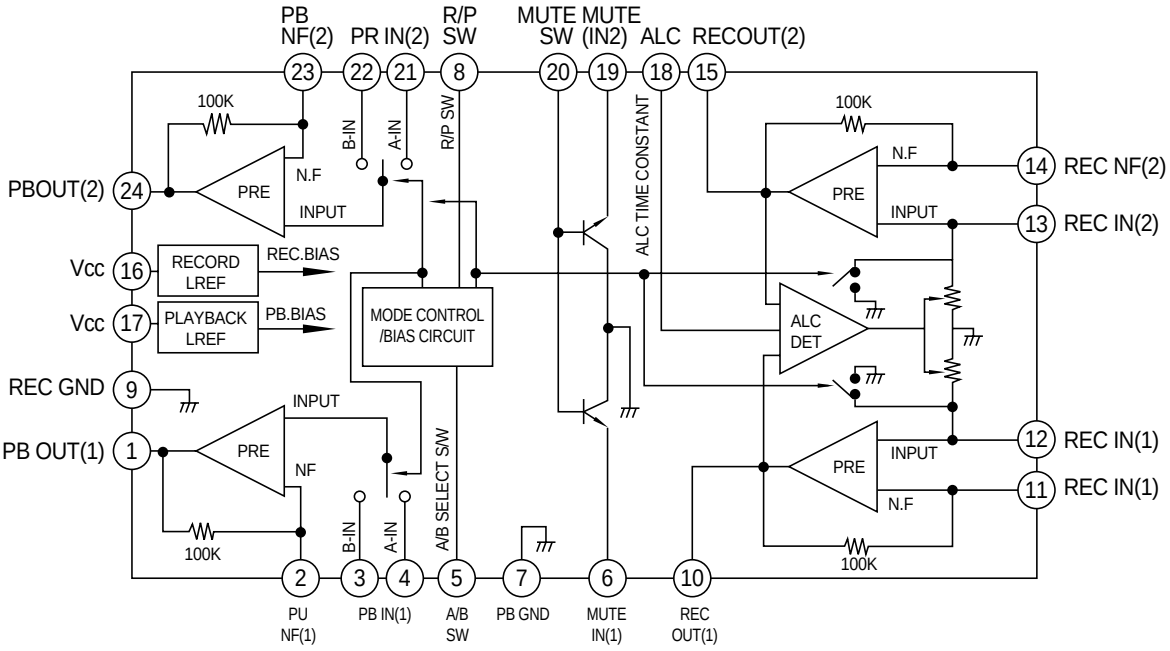
1.Block diagram



2.Pin function

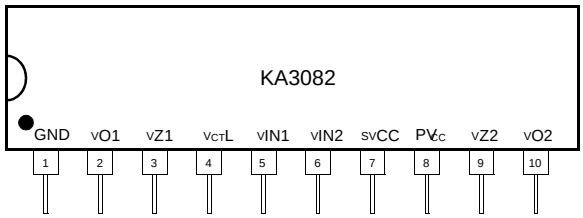
Pin No.	Symbol	I/O	Function
1	VCC	-	Power supply
2	MIC IN	I	Microphone mixing input
3	LOUT	O	Channel L output
4	FK	-	Non connect
5	TK	-	Non connect
6	LIN	I	Channel L input
7	BIAS	I	Signal bias
8	GND	-	Connect to GND
9	RIN	I	Channel R input
10	LPF1	O	Connects to LPF time constant element
11	LPF2	O	Connects to LPF time constant element
12	LPF3	O	LPF output
13	ROUT	O	Channel R output
14	CONTA	I	Mode select input A
15	CONTB	I	Mode select input B
16	CONTC	I	Mode select input C

■ KA22291 (JIC1) : Cassette amp.



■ KA3082 (SIC4) : Bi-directional DC motor driver

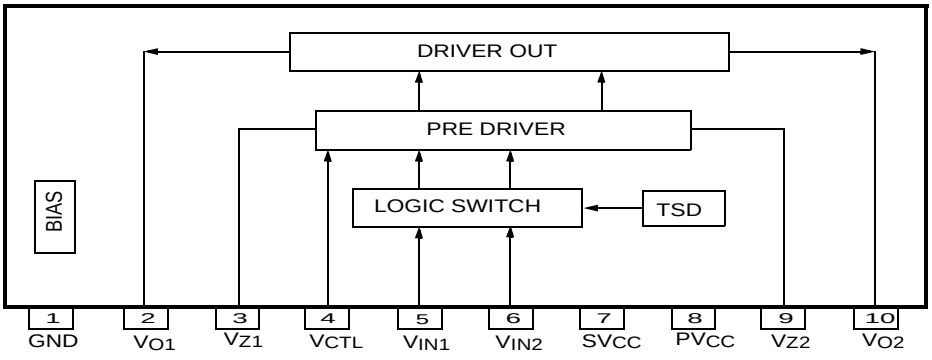
1.Pin layout



2.Pin function

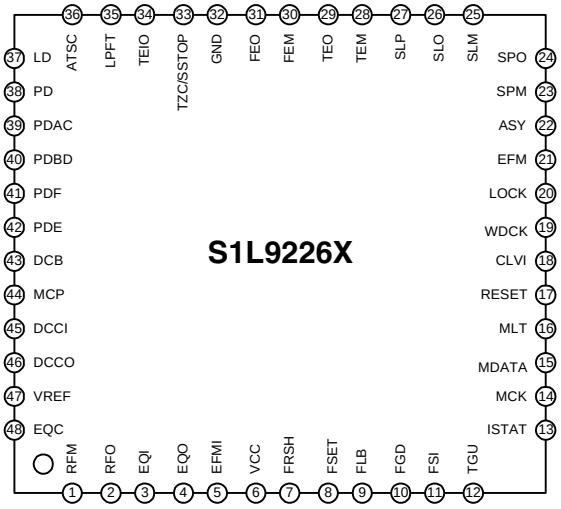
Pin No.	Symbol	I/O	Function
1	GND	-	Ground
2	V_{O1}	O	Output 1
3	V_{Z1}	-	Phase compensation
4	V_{CTL}	I	Motor speed control
5	V_{IN1}	I	Input 1
6	V_{IN2}	I	Input 2
7	SV_{CC}	-	Supply voltage (Signal)
8	PV_{CC}	-	Supply voltage (Power)
9	V_{Z2}	-	Phase compensation
10	V_{O2}	O	Ooutput 2

3.Block Diagram

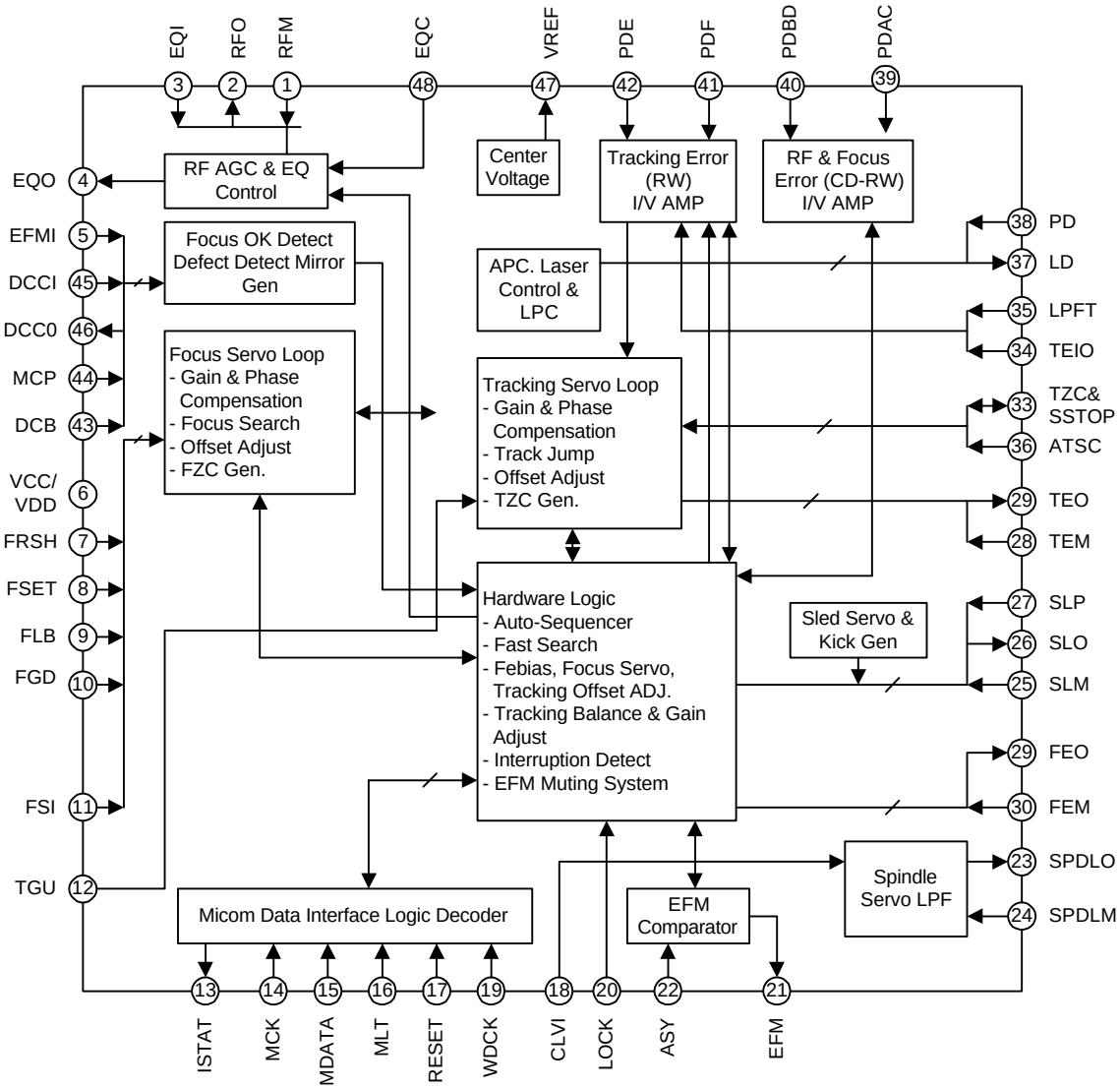


■ KB9226 (IC101) : RF amp. & Servo signal processor

1. Pin layout



2. Block diagram



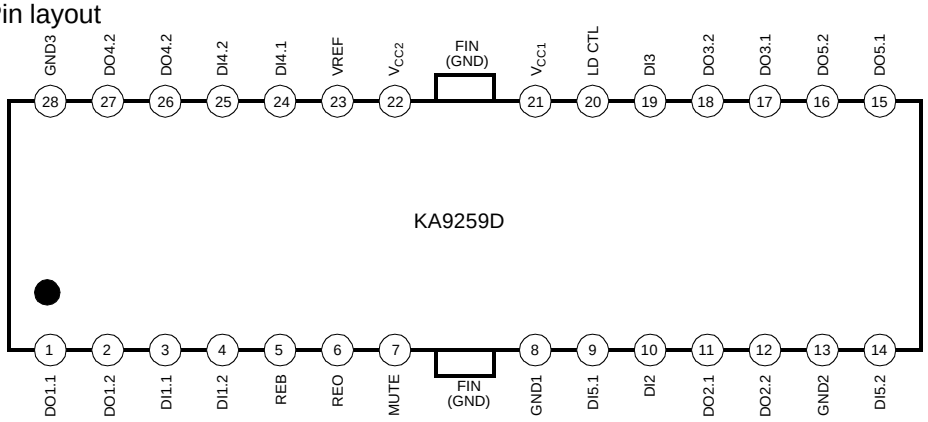
3. Pin function

KB9226

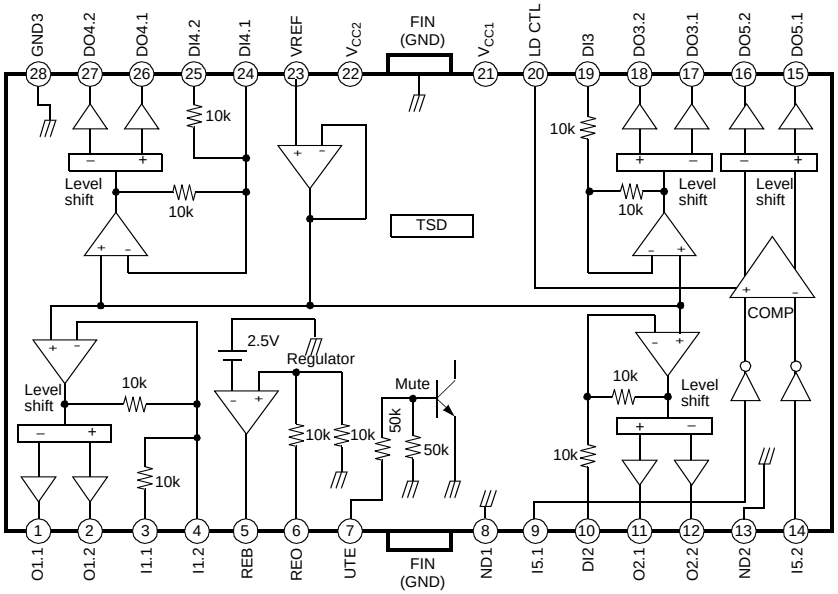
Pin No.	Symbol	I/O	Function
1	RFM	I	RF summing amp. inverting input
2	RFO	O	RF summing amp. output
3	EQI	I	RFO DC eliminating input(use by MIRROR, FOK ,AGC & EQ terminal)
4	EQO	O	RF equalizer output
5	EFMI	I	EFM slice input. (input impedance 47K)
6	VCC	P	Main power supply
7	FRSH	I	Capcitor connection to focus search
8	FSET	I	Filter bias for focus,tracking,spindle
9	FLB	I	Capacitor connection to make focus loop rising band
10	FGD	I	Terminal to change the hign frequency gain of focus loop
11	FSI	I	Focus servo input
12	TGU	I	Connect the component to change the high frequency of tracking Loop
13	ISTAT	O	Internal status output
14	MCK	I	Micom clock
15	MDATA	I	Data input
16	MLT	I	Data latch input
17	RESET	I	Reset input
18	CLVI	I	Input the spindle control output from DSP
19	WDCK	I	88.2KHz input terminal from DSP
20	LOCK	I	Sled run away inhibit pin (L: sled off & tracking gain up)
21	EFM	O	EFM output for RFO slice(to DSP)
22	ASY	I	Auto asymmetry control input
23	SPM	I	Spindle amp. inverting input
24	SPO	O	Spindle amp. output
25	SLM	I	Sled servo inverting input
26	SLO	O	Sled servo output
27	SLP	I	Sled servo noninverting input
28	TEM	I	Tracking servo amp.inverting input
29	TEO	O	Tracking servo amp. output
30	FEM	I	Focus servo amp. inverting input
31	FEO	O	Focus servo amp. output pin
32	GND	P	Main ground
33	TZC/ SSTOP	I	Tracking zero crossing input & Check the position of pick-up wherther inside or not
34	TEIO	B	Tracking error output & Tracking servo input
35	LPFT	I	Tracking error integration input (to automatic control)
36	ATSC	I	Anti-shock input
37	LD	O	APC amp. output
38	PD	I	APC amp. input
39	PDAC	I	Photo diode A & C RF I/V amp. inverting input
40	PDBD	I	Photo diode B & D RF I/V amp. inverting input
41	PDF	I	Photo diode F & tracking(F) I/V amp. inverting input
42	PDE	I	Photo diode E & tracking(E) I/V amp. inverting input
43	DCB	I	Capacitor connection to limit the defect detection
44	MCP	I	Capacitor connection to mirror hold
45	DCCI	O	Output pin to connect the component for defect detect
46	DCCO	I	Input pin to connect the component for defect detect
47	VREF	O	(VCC+GND)/2 Voltage reference output
48	EQC	I	AGC_equalize level control terminal & capacitor terminal to input in to VCA

■ KA9259D (SIC3) : 5-ch Motor driver

1. Pin layout



2. Block diaguram

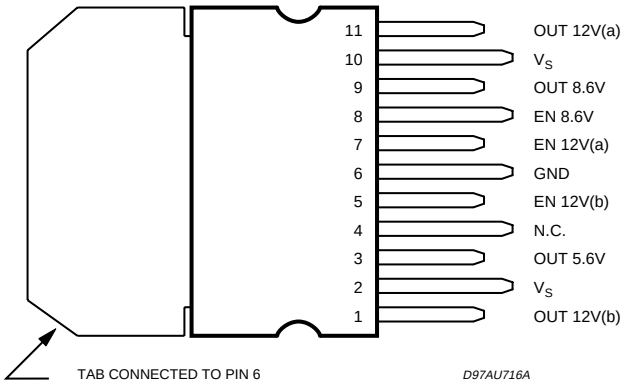


3. Pin function

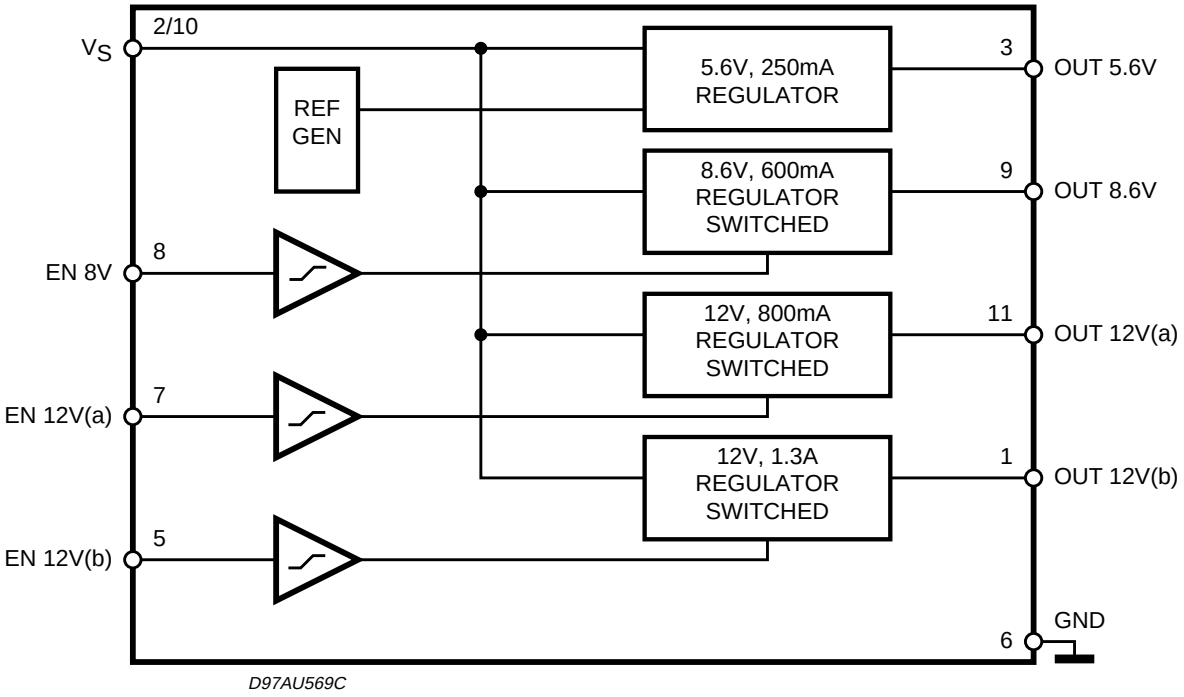
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	DO1.1	O	Focus output 1 (–)	15	DO5.1	O	Loading output 1(+)
2	DO1.2	O	Focus output 2 (+)	16	DO5.2	O	Loading output 2(–)
3	DI1.1	I	Focus input 1	17	DO3.1	O	Sled output (–)
4	DI1.2	I	Focus input 2 (Adjustable)	18	DO3.2	O	Sled output (+)
5	REB	O	Regulator base	19	DI3	I	Sled input
6	REO	O	Regulator output, 5V	20	LD CTL	I	Loading motor speed control
7	MUTE	I	Mute	21	V_{CC1}	–	Supply voltage 1
8	GND1	–	Ground 1	22	V_{CC2}	–	Supply voltage 2
9	DI5.1	I	Loading input 1	23	VREF	I	2.5V bias
10	DI2	I	Spindle input 2	24	DI4.1	I	Tracking input 1 (Adjustable)
11	DO2.1	O	Spindle output (+)	25	DI4.2	I	Tracking input 2
12	DO2.2	O	Spindle output (–)	26	DO4.1	O	Tracking output 1 (+)
13	GND2	–	Ground 2	27	DO4.2	O	Tracking output 2 (–)
14	DI5.2	I	Loading input 2	28	GND3	–	Ground 3

■ L4959 (RIC1) : Voltage regulator

1.Pin layout



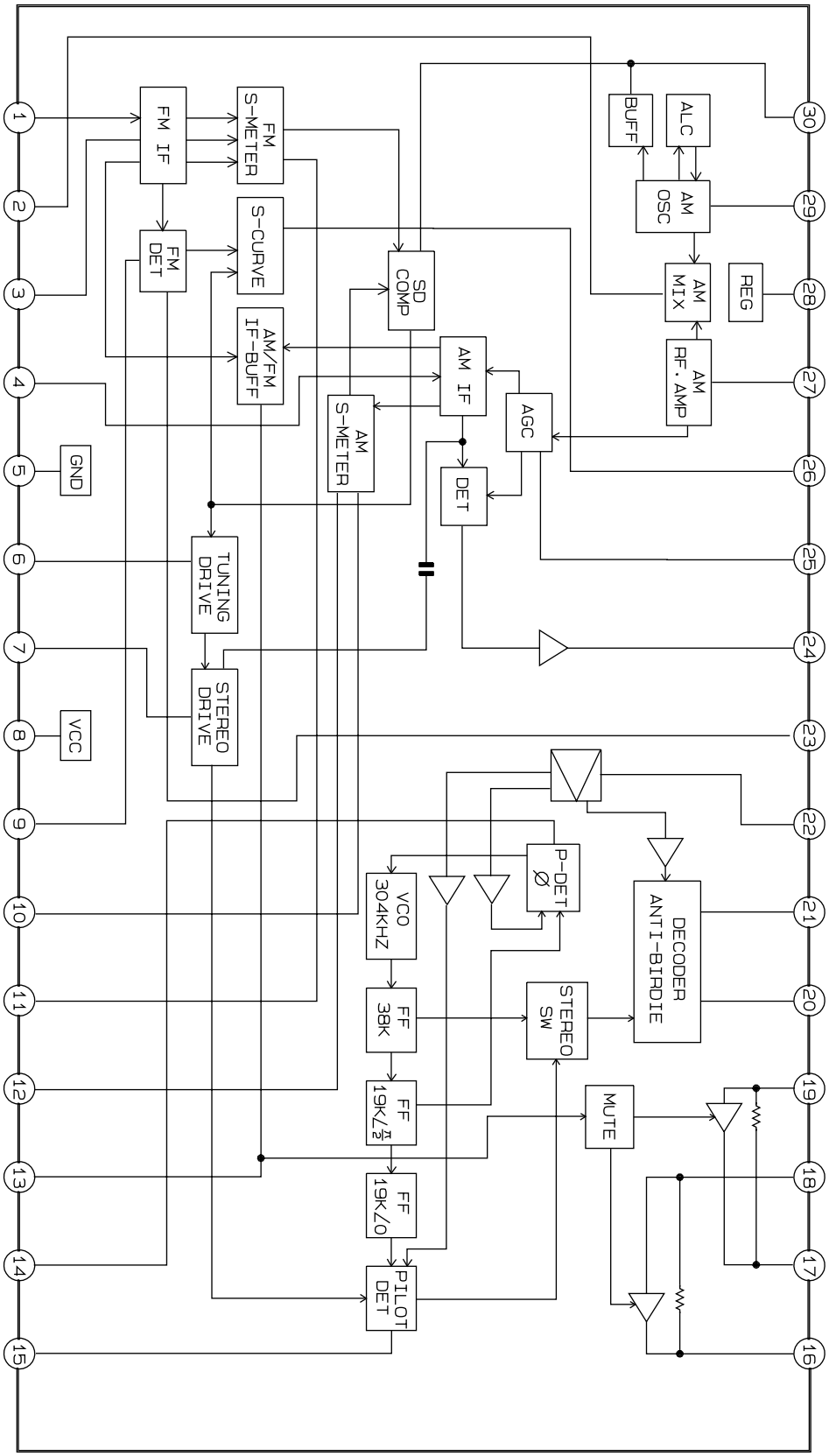
2.Block diagram



3.Pin function

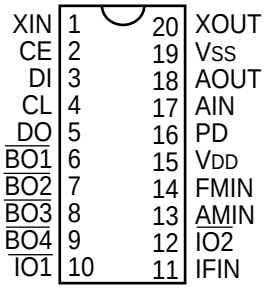
Pin No.	Symbol	Function
1	OUT 12V (b)	12V/1.3A SWITCHED OUTPUT VOLTAGE
2	V_S	Supply Voltage
3	OUT 5.6V	5.6V/250mA OUTPUT VOLTAGE
4	N.C.	not connected
5	EN 12V (b)	Enable 12V/1.3A SWITCHED OUTPUT VOLTAGE
6	GND	Ground
7	EN 12V (a)	Enable 12V/0.8A SWITCHED OUTPUT VOLTAGE
8	EN 8.6V	Enable 8.6V/0.6A SWITCHED OUTPUT VOLTAGE
9	OUT 8.6	8.6V/0.6A SWITCHED OUTPUT VOLTAGE
10	V_S	Supply Voltage
11	OUT 12V (a)	12V/0.8A SWITCHED OUTPUT VOLTAGE

■ LA1837 (IC01) : FM IF/DET AM RF/IF/DET

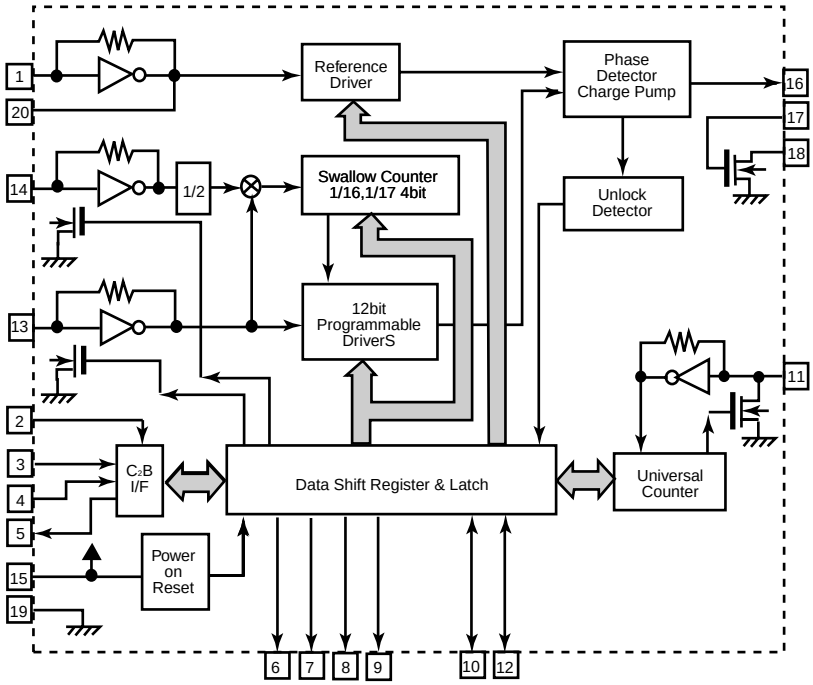


■ LC72131M (IC02) : PLL frequency synthesizer

1. Pin layout



2. Block diagram

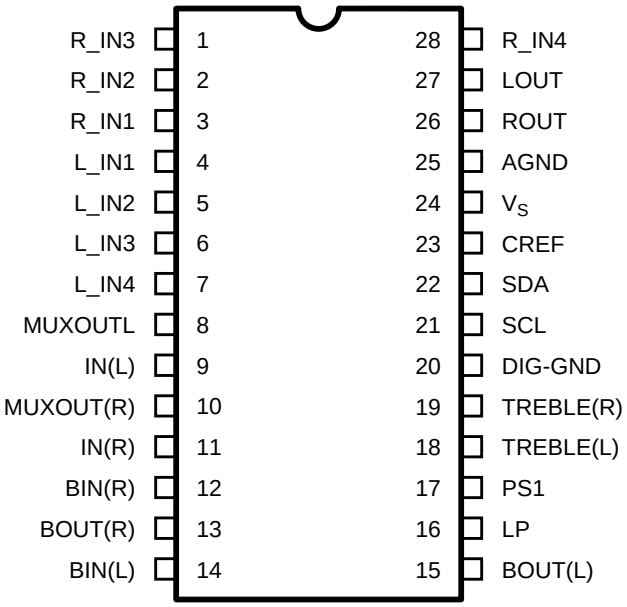


3. Pin function

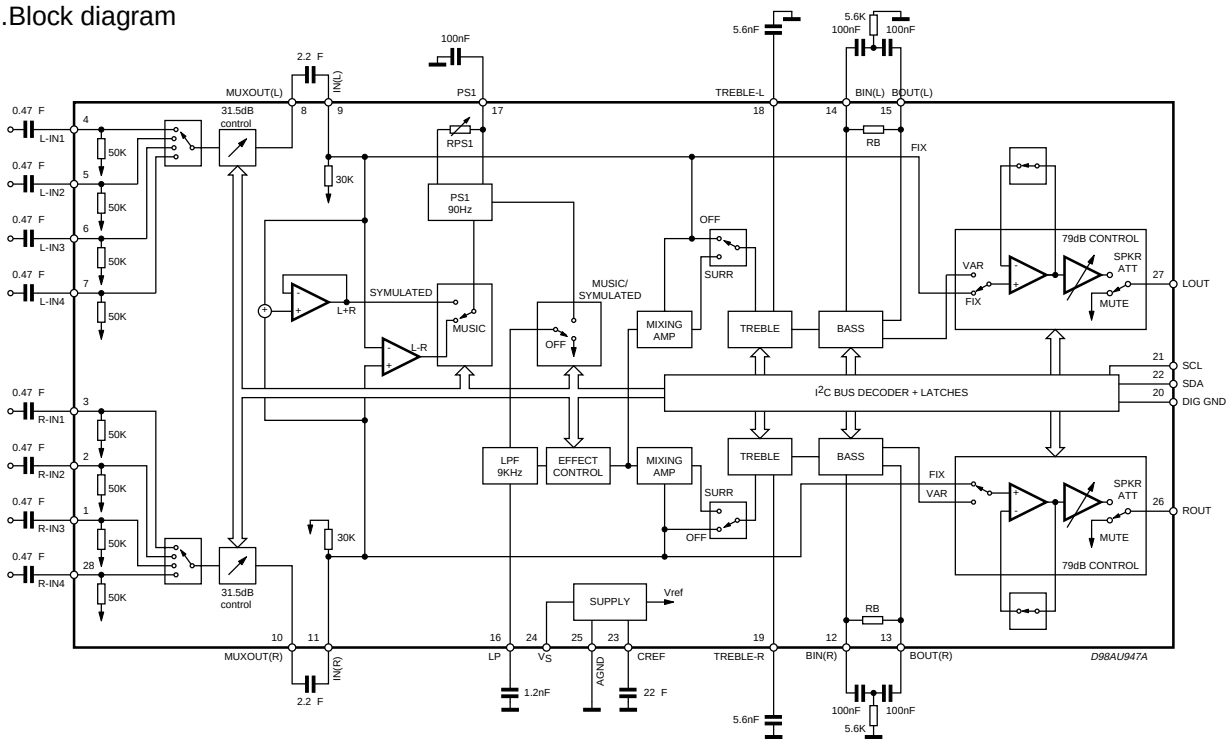
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XIN	I	X'tal oscillator connect (4.5MHz/7.2MHz)	11	IFIN	I	IF counter signal input
2	CE	-	Chip enable	12	$\overline{IO2}$	I/O	I/O port
3	DI	I	Input data	13	AMIN	I	AM Local oscillator signal input
4	CL	I	Clook	14	FMIN	I	FM Local oscillator signal input
5	DO	O	Output data	15	VDD	I	Power suplly(VDD=4.5-5.5V)
6	$\overline{BO1}$	O	Output port	16	PD	O	Charge pump output
7	$\overline{BO2}$	O	Output port	17	AIN	I	Low-pass filter
8	$\overline{BO3}$	O	Output port	18	AOUT	O	Amplifier Tr
9	$\overline{BO4}$	O	Output port	19	GND	-	Connected to GND
10	$\overline{IO1}$	I/O	I/O port	20	XOUT	I	X'tal oscillator connect (4.5MHz/7.2MHz)

■ TDA7442D (FIC1) : Audio processor

1.Pin layout

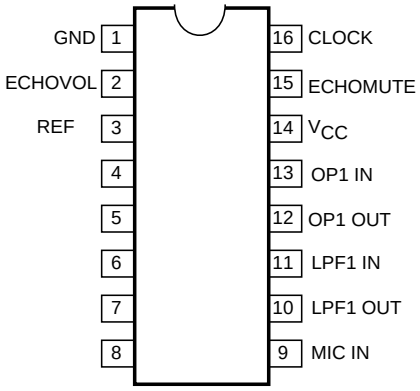


2.Block diagram



■ M65855FP (EIC1) : Sound processor

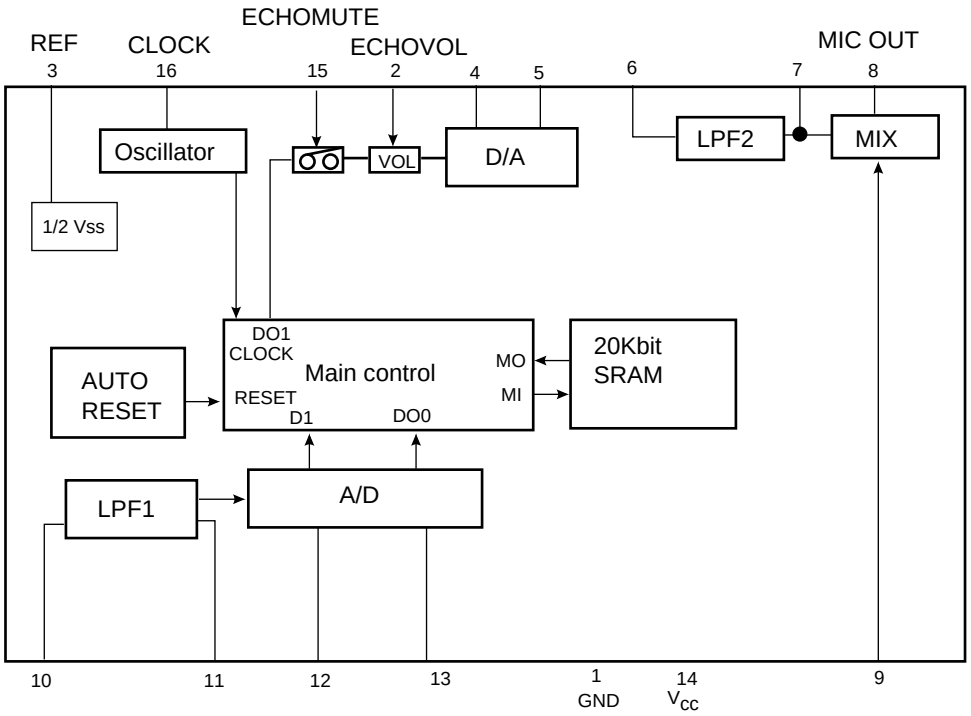
1. Pin layout



2. Pin function

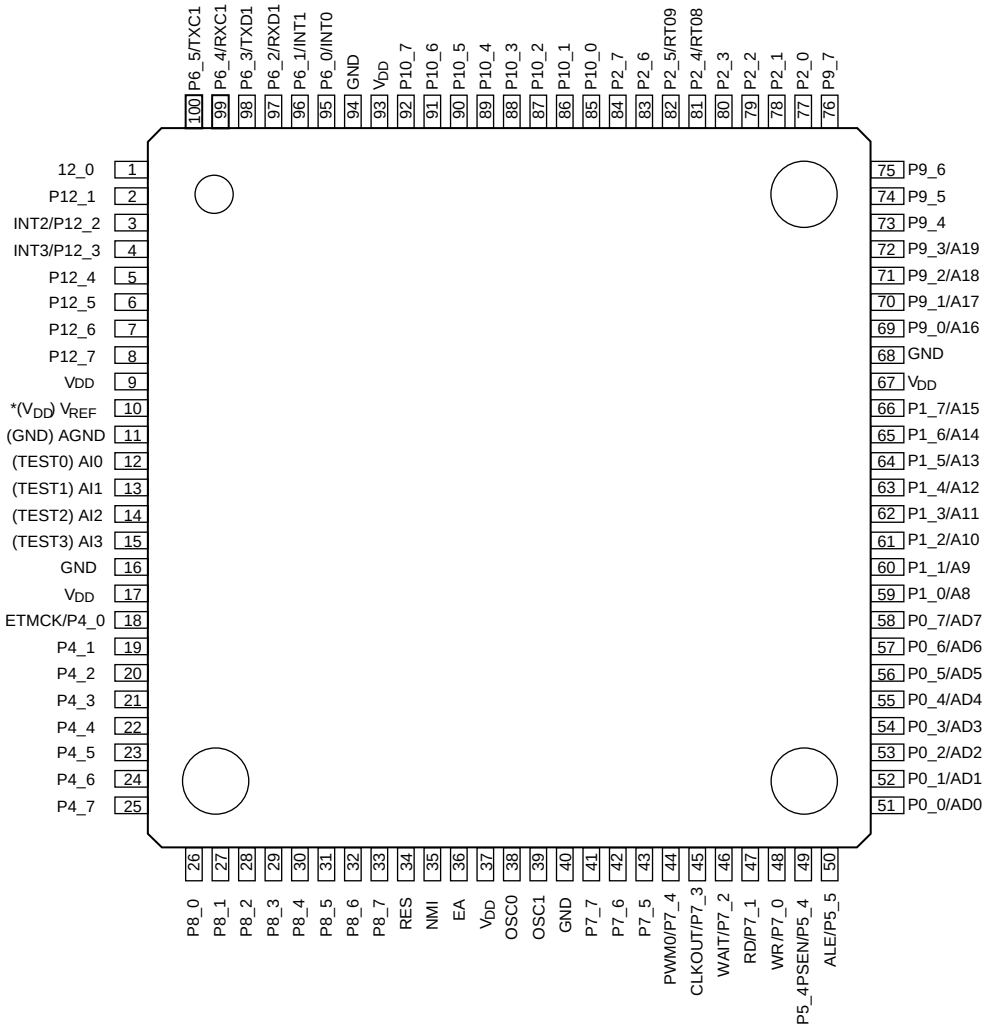
Pin No.	Symbol	Function
1	GND	
2	ECHOVOL	Echo level control with external DC voltage
3	REF	To connect 1/2 Vcc output and filter capacitor
4	OP2 IN	Uses external C to from an D/A conversion integrator
5	OP2 OUT	
6	LPF2 IN	Uses external CR to from a low pass filter at the input side
7	LPF2 OUT	
8	MIC OUT	Mixing output echo output and microphone
9	MIC IN	Microphone input
10	LPF1 OUT	Uses external CR to from a low pass filter at the input side
11	LPF1 IN	
12	OP1 OUT	Uses external C to from an D/A conversion integrator
13	OP1 IN	
14	V_{CC}	Applies a voltage of 3.5V to 5.5V(Rated5V)
15	ECHOMUTE	Echo mute control and clock stop control with external DC voltage
16	CLOCK	Controls a built -in clock generation circuit with external R

3. Block diagram.

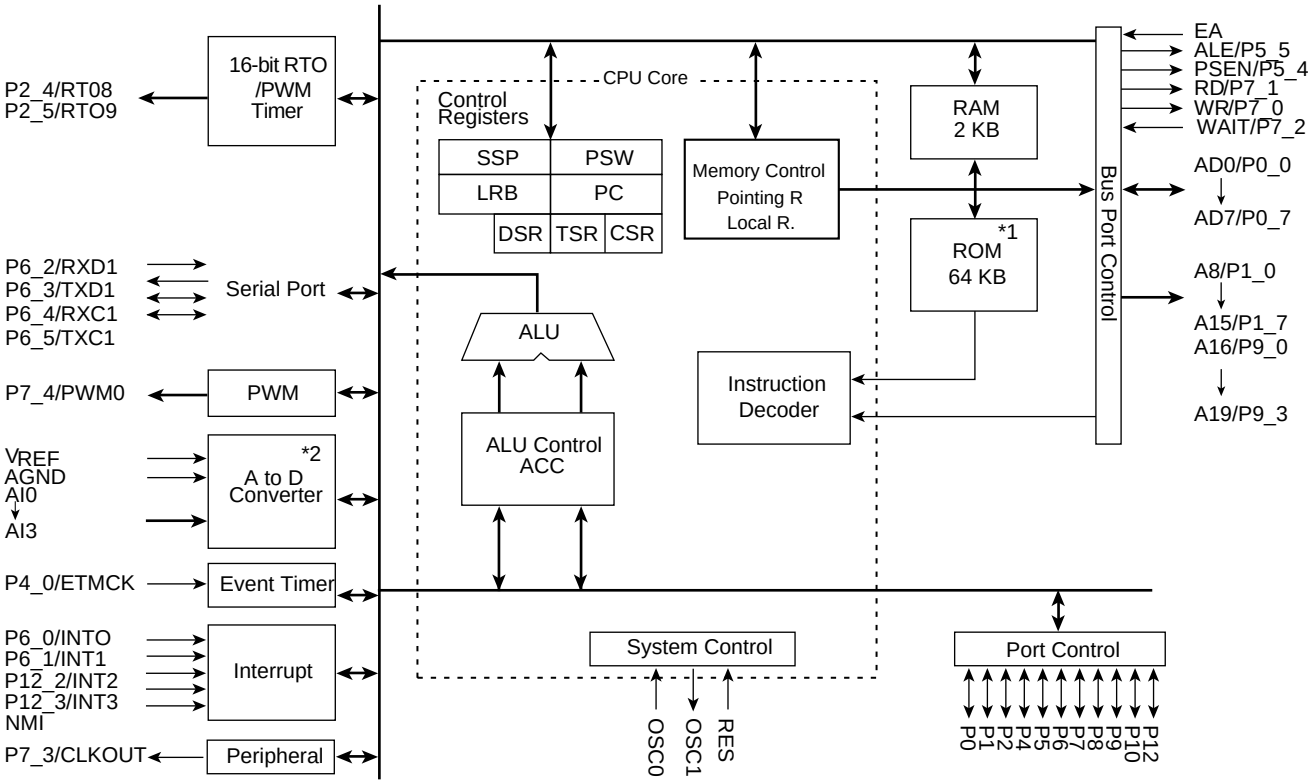


■ MSM66587 (MIC1) : Microprocessor

1.Pin layout



2.Block diagram



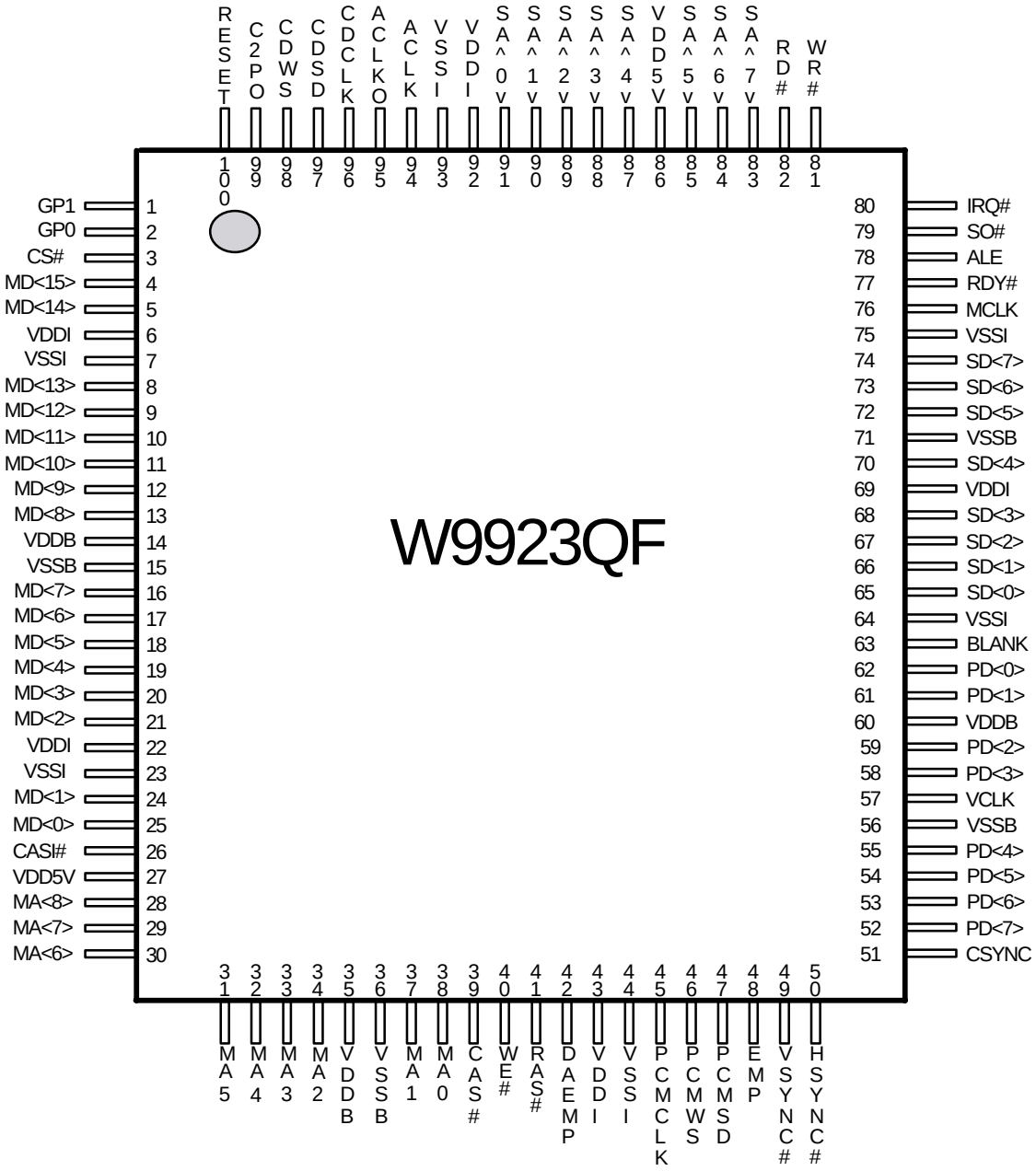
3.Pin function

MSM66587

Pin No.	Symbol	I/O	Function
1~2	P12_0~P12~2	I/O	Input or output can be specified for each bit with the port 12 Mode Register
3	INT2/P12_2	I/O	Input or output can be specified for each bit with the port 12 Mode Register
4	INT3/P12_3	I/O	Input or output can be specified for each bit with the port 12 Mode Register
5~8	P12_4~P12_7	I/O	Input or output can be specified for each bit with the port 12 Mode Register
9	VDD	I	Power supply +5V
10	(VDD) VREF	I	This is the reference voltage pin for the A/D converter (VDD for MSM66585).
11	(GND) AGND	I	This is the ground input pin for the A/D converter (GND for MSM66585).
12~15	(TEST0) AI0~AI3	I	These are analog input pins for the A/D converter (test pins for MSM66585).
16	GND	I	Connect to GND
17	VDD	I	Power supply +5V
18	EIMOK/P4_0	I	Input or output can be specified for each bit with the port 4 Mode Register
19~25	P4_1~P4_7	I	Input or output can be specified for each bit with the port 4 Mode Register
26~33	P8_0~P8_7	I	Input or output can be specified for each bit with the port 8 Mode Register
34	RES	I	This is an active-low reset input pin.
35	NMI	I	This input pin requests a non-maskable interrupt.
36	EA	I	When this pin is low, all program addresses will access external program memory.
37	VDD	I	Power supply +5V
38	OSO0	I	This pins connect to a crystal oscillator.
39	OSC1	O	This pins connect to a crystal oscillator.
40	GND	I	Connect to GND
41~43	P7_5~P7_7	I/O	Input or output can be specified for each bit with the port 7 Mode Register
44	PWN0/P7_4	I/O	Input or output can be specified for each bit with the port 7 Mode Register
45	CLKOUT/P7_3	I/O	Input or output can be specified for each bit with the port 7 Mode Register
46	WAIT/P7_2	I/O	Input or output can be specified for each bit with the port 7 Mode Register
47	RD/P7_1	I/O	Input or output can be specified for each bit with the port 7 Mode Register
48	WR/P7_0	I/O	Input or output can be specified for each bit with the port 7 Mode Register
49	P5_4PSEN/P5_4	I/O	Input or output can be specified for each bit with the port 5 Mode Register
50	ALE/P5_5	I/O	Input or output can be specified for each bit with the port 5 Mode Register
51~58	P0_0~7/AD0~AD7	I/O	Input or output can be specified for each bit with the port 0 Mode Register
59~66	P1_0~7/A8~A15	I/O	Input or output can be specified for each bit with the port 1 Mode Register
67	VDD	I	Power supply +5V
68	GND	I	Connect to GND
69~72	P9_0~3/A16~A19	I/O	Input or output can be specified for each bit with the port 9 Mode Register
73~76	P9_4~P9_7	I/O	Input or output can be specified for each bit with the port 9 Mode Register
77~80	P2_0~P2_3	I/O	Input or output can be specified for each bit with the port 2 Mode Register
81	P2_4/RT08	I/O	Input or output can be specified for each bit with the port 2 Mode Register
82	P2_5/RT09	I/O	Input or output can be specified for each bit with the port 2 Mode Register
83~84	P2_6~P2_7	I/O	Input or output can be specified for each bit with the port 2 Mode Register
85~92	P10_1~P10_7	I/O	Input or output can be specified for each bit with the port 10 Mode Register
93	VDD	I	Power supply +5V
94	GND	I	Connect to GND
95~96	P6_0~1/INT0~1	I/O	Input or output can be specified for each bit with the port 6 Mode Register
97	P6_2/RXD1	I/O	Input or output can be specified for each bit with the port 6 Mode Register
98	P6_3/TXD1	I/O	Input or output can be specified for each bit with the port 6 Mode Register
99	P6_4/TXD1	I/O	Input or output can be specified for each bit with the port 6 Mode Register
100	P6_5/RXC1	I/O	Input or output can be specified for each bit with the port 6 Mode Register

■ W9923QF (MIC4) : VCD driver

1. Pin layout



2 Pin function (1/2)

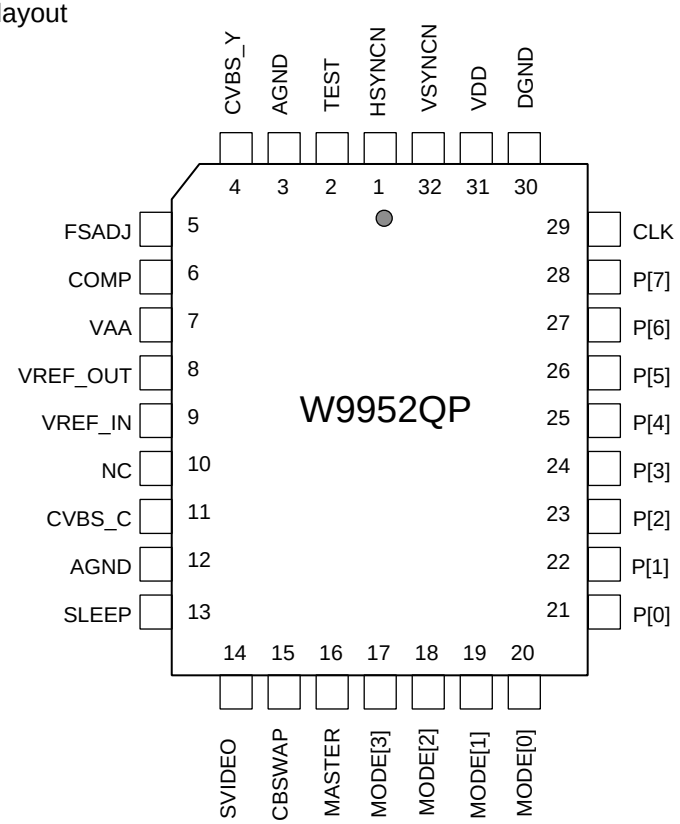
Pin No.	Symbol	type	Function
1~2	GP0~1	I/O	Programmable input/output 1
3	CS#	I	Chip select input, active LOW; optional
4~5	MD<14~15>	I/O	DRAM data bus
6,14,22,35	VDD		3.3V power supply
7,15,23,36,44	VSS		0V ground
8~13	MD<8~13>	I/O	DRAM data bus
16~21	MD<2~7>	I/O	DRAM data bus
24~25	MD<0~1>	I/O	DRAM data bus
26	CASIN#		Column address strobe input to lach data from DRAM, rising edge active

(2/2)
KB9226

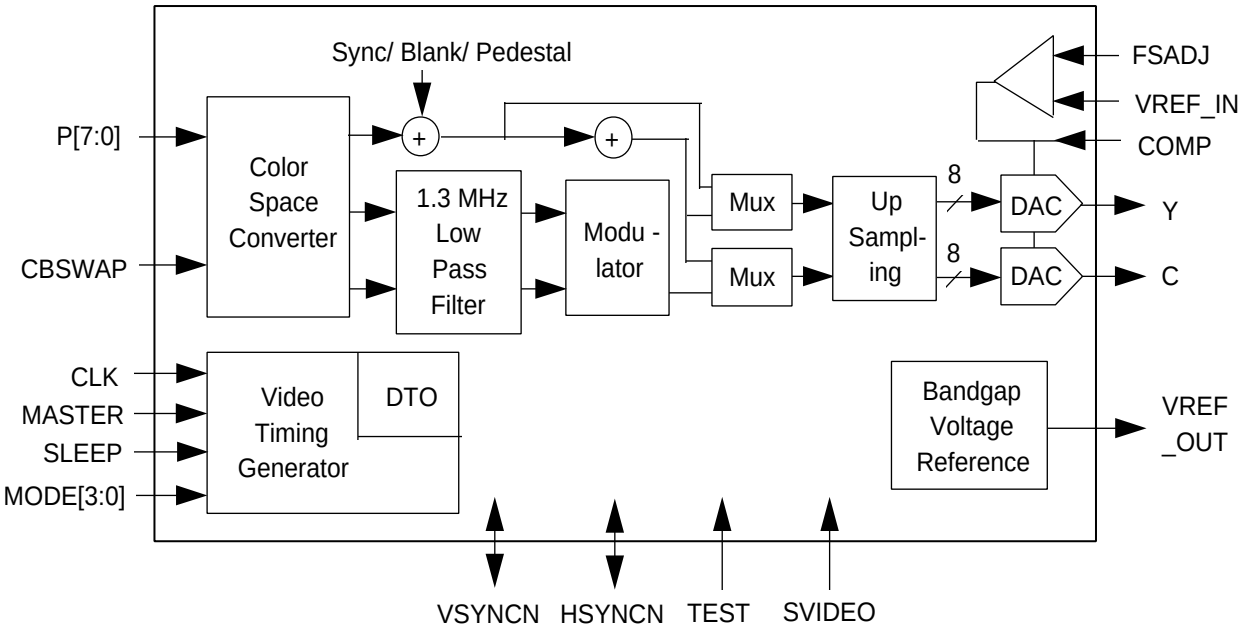
Pin No.	Pin Name	type	Function
27	VDD5V		5V power supply
28~34	MA<2~8>	O	DRAM address bus
37~38	MA<0~1>	O	DRAM address bus
39	CS#	O	Column address strobe output, falling edge active
40	WE#	O	Write enableoutput, active LOW to indicate write operation to DRAM
41	RAS#	O	Row address strobe output, falling edge active
42	DAEMP	I	DA emphasis input, active HIGH
43,60,69,92	VDD		3.3V power supply
45	PCMCLK	O	Audio PCM clock output
46	PCMWS	O	PCM channel word selector, active HIGH, programmable
47	PCMSD	O	Audio PCM serial data output
48	EMP	O	Audio emphasis flag, active HIGH
49	VSYNC#	I/O	Vertical synch, active LOW, input/output programmable, default in INPUT state
50	HSYNC#	I/O	Horizontal sync, active LOW, input/output programmable, default in INPUT state
51	CSYNC	O	Composite sync signal, active LOW
52~55	PD<4~7>	O	Pixel Data bus
57	VCLK	I/O	Video clock, usually 27MHz for TV scan, twice the luminance rate, input/output programmable, default in INPUT state
58~59	PD<2~3>	O	Pixel Data bus
61~62	PD<0~1>	O	Pixel Data bus
63	BLANK#	O	Composite blank, active LOW HSYNC# are in input state
64,71,75,93	VSS		0V ground
65~68,70	SD<0~3,4>	I/O	System data bus
72~73	SD<5~7>	I/O	System data bus
76	MCLK	I	Main clock input, typically 40.5MHz
77	BUSY#	O	Bus BUSY, LOW indicates bus busy, open
78	ALE	I	active HIGH, address latch enable for 8051
79	SO	O	Address select output, valid from IOAR+10h to IOAR+2fh (total 32 byteaddresses), active LOW
80	IRQ#	O	Interrupt request output, active when an interrupt event is triggered, active LOW
81	WR#	I	write enable, active LOW
82	RD#	I	Read enable, active LOW
83~85	SA<5~7>	I	System address bus
86	VDD5V		3.3V power supply
87~91	SA<0~4>	I	System address bus
94	ACLK	I	Optional secondary clock for audio sampling rate, PCM clock
95	ACLKO	O	ACLK output, ACLK and ACLKO are used for crystal input pins
96	CDCLK	I	CD bit clock input
97	CDSD	I	CD serial data input
98	CDWS	I	CD data word selector
99	C2PO	I	CD data byte erasure flag
100	RESET	I	System reset, active HIGH

■ W9952QP (MIC3) : TV encoder

1. Pin layout



2. Block diagram.



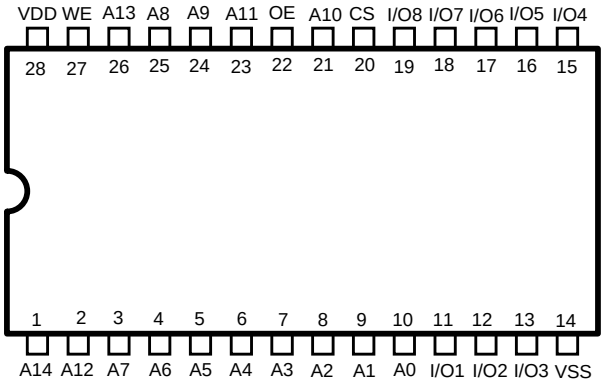
3. Pin function

W9952QP

Pin No.	Symbol	I/O	Function
21-28	P[7:0]	I	YCrCb pixel inputs. They are latched on the falling edge of CLK. YCrCb input data conform to CCIR 601.
29	CLK	I	2x Pixel clock input for 8-bit YCrCb data.
32	VSYNCN	I/O	Vertical sync input/output. VSYNCN is latched/output following the rising edge of CLK.
1	HSYNCN	I/O	Horizontal sync input/output. HSYNCN is latched/output following the rising edge of CLK.
16	MASTER	I	Master/slave mode select. A logical high for master mode operation. A logical 0 for slave mode operation
15	CBSWAP	I	Cr and Cb pixel sequence set up pin. A logic high swap the Cr and Cb sequence.
14	SVIDEO	I	SVIDEO select input pin. A logic high selects Y/C output. A logic low selects composite video output.
13	SLEEP	I	Power save mode. A logic high on this pin puts the chip into power-down mode.
17-20	Mode[3:0]	I	Mode configuration pin.
2	TEST	I	Test pin. These pins must be connected to DGND.
9	VREF_IN	I	Voltage reference input. An external voltage reference must supply typical 1.235V to this pin. A 0.1uF ceramic capacitor must be used to decouple this input to GND. The decoupling capacitor must be as close as possible to minimize the length of the load. This pin may be connected directly to VREF_OUT.
8	VREF_OUT	O	Voltage reference output. It generates typical 1.2V voltage reference and may be used to drive VREF_IN pin directly.
5	FSADJ	---	Full-Scale adjust control pin. The Full-Scale current of D/A converters can be adjusted by connecting a resistor (RSET) between this pin and ground. The relationship is
6	COMP	---	Compensation pin. A 0.1uF ceramic capacitor must be used to bypass this pin to VAA. The lead length must be kept as short as possible to avoid noise.
4	CVBS_Y	O	Composite/Luminance output. This is a high-impedance current source output. The output format can be selected by the PAL pin. The pin can drive a 37.5 W load. If unused , this pin must be connected directly to GND.
11	CVBS_C	O	Composite/Chroma output. This is a high impedance current source Output. The output format can be selected by the PAL pin. The pin can drive a 37.5 W load. If unused, this pin must be connected directly to GND.
10	NC	---	No connection
31	VDD	---	Digital power pin
30	DGND	---	Digital ground pin
7	VAA	---	Analog power pin
3,12	AGND	---	Analog ground pin

■ W24257 (MIC2) : CMOS static RAM

1. Pin layout



2. Pin function

Pin No.	Symbol	I/O	Function
1	A14	I	Address input
2	A12	I	Address input
3	A7	I	Address input
4	A6	I	Address input
5	A5	I	Address input
6	A4	I	Address input
7	A3	I	Address input
8	A2	I	Address input
9	A1	I	Address input
10	A0	I	Data Input/Output
11	I/O1	I/O	Data Input/Output
12	I/O2	I/O	Data Input/Output
13	I/O3	I/O	Data Input/Output
14	VSS	–	Ground
15	I/O4	I/O	Data Input/Output
16	I/O5	I/O	Data Input/Output
17	I/O6	I/O	Data Input/Output
18	I/O7	I/O	Data Input/Output
19	I/O8	I/O	Data Input/Output
20	CS	I	Chip select Input
21	A10	I	Address input
22	OE	O	Out put enable
23	A11	I	Address input
24	A9	I	Address input
25	A8	I	Address input
26	A13	I	Address input
27	WE	I	Write Enable input
28	VDD	–	Power Supply

3. Truth table

CS	OE	WE
H	X	X
L	H	H
L	H	H
L	L	H
L	X	L

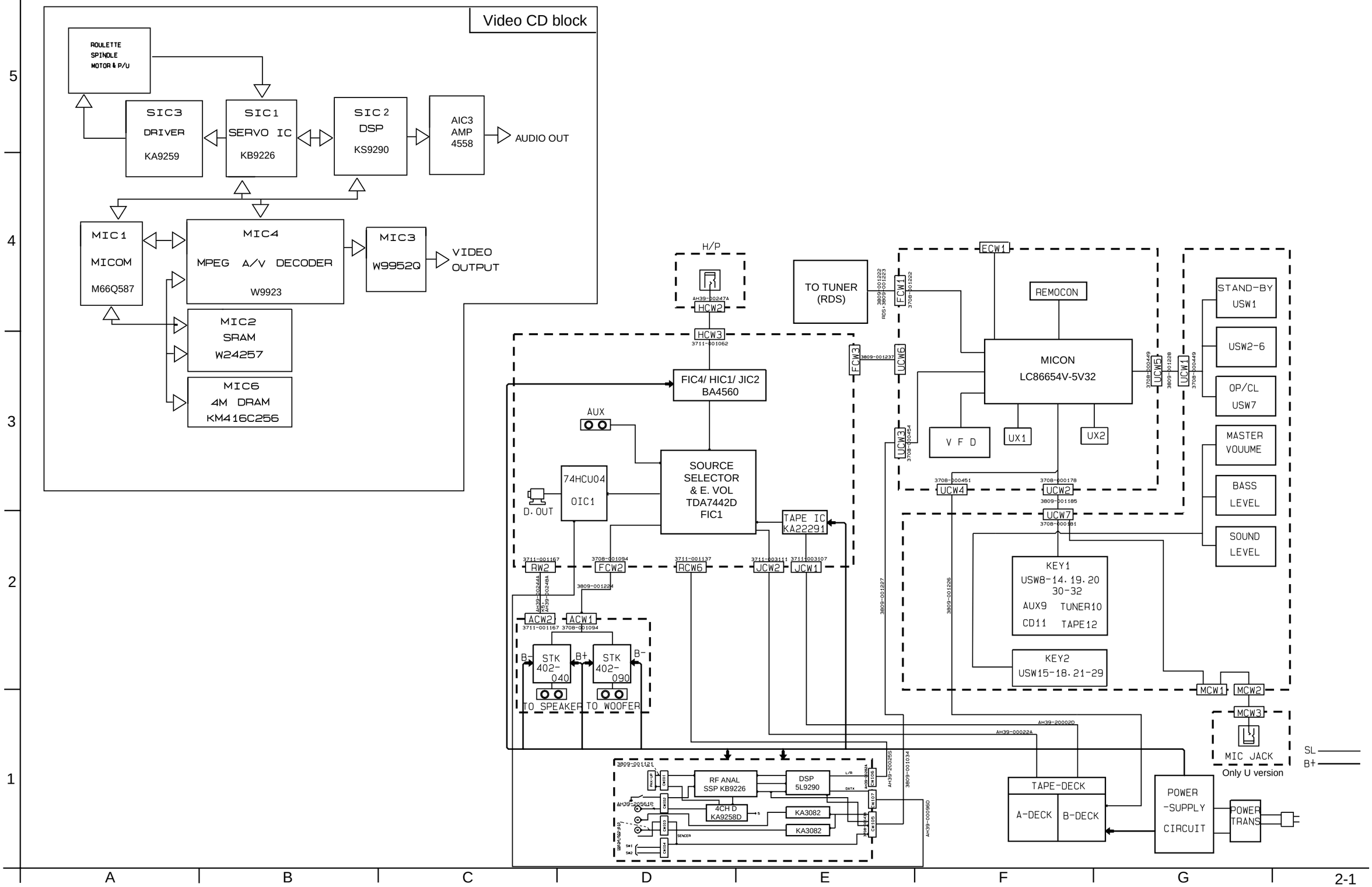
< MEMO >

JVC
VICTOR COMPANY OF JAPAN, LIMITED
PERSONAL & MOBILE NETWORK BUSINESS UNIT. 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.20995)

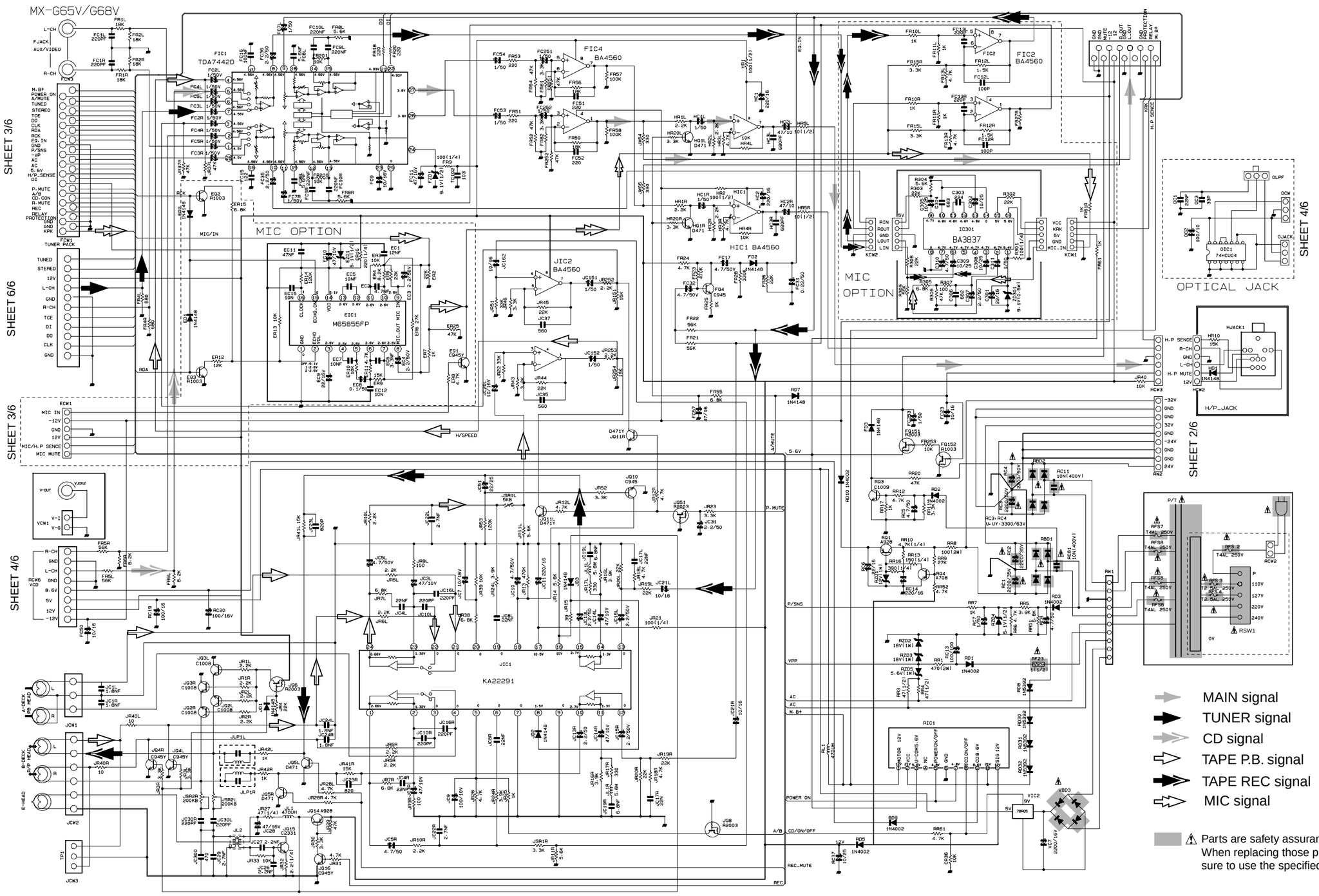
200107(V)

Block diagram

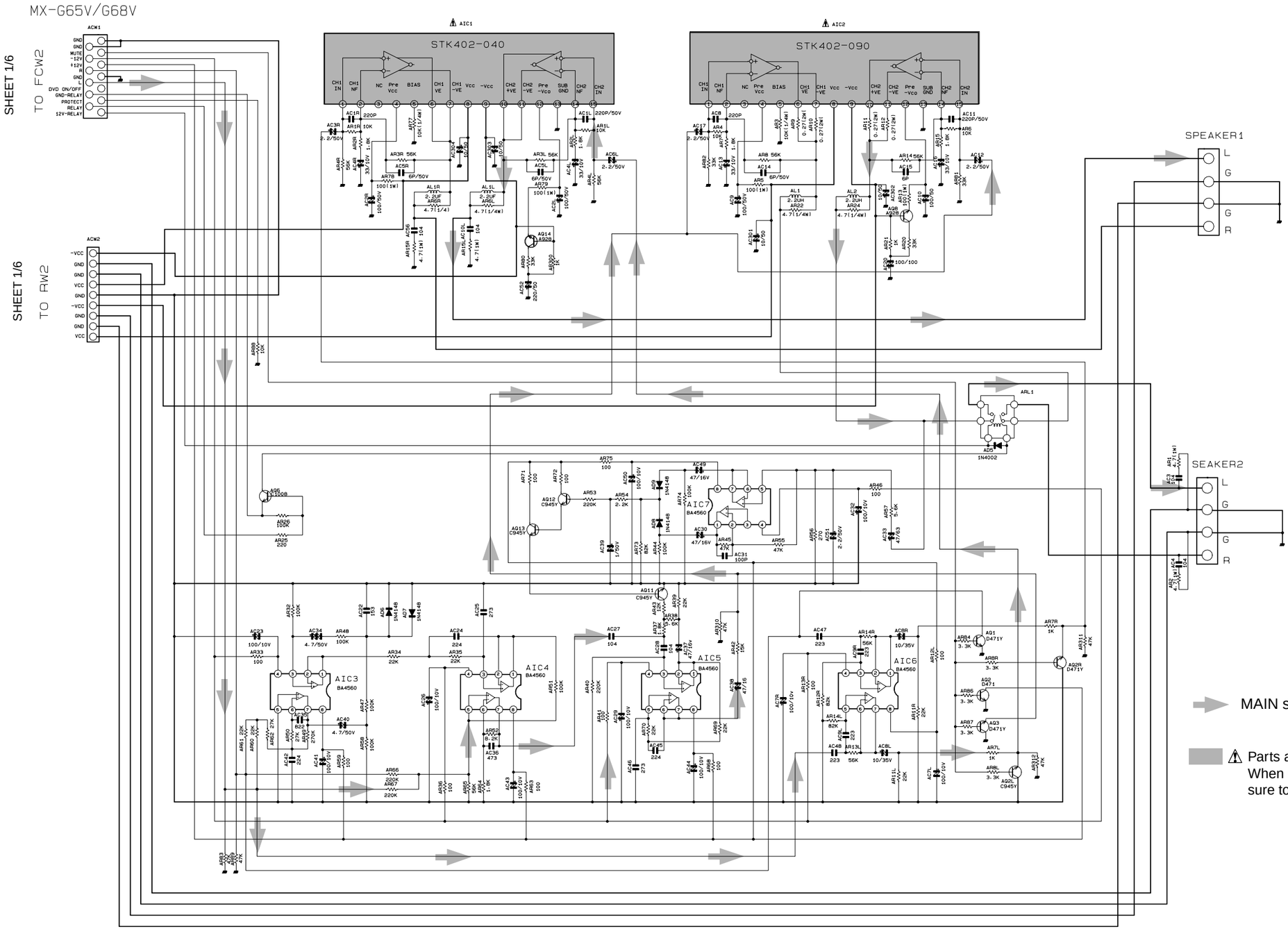


Standard schematic diagrams

■ Main section



■ Amplifier section



■ Display & system control

SHEET 1/6

SHEET 4/6

SHEET 3/6

MX-G65V/68V/K55V

TO MAIN

VFD

F.L.T

DIODE MATRIX

UD1	X
UD2	X
UD3	X
UD4	X
UD5	X
UD6	X
UD7	X
UD8	ONLY K55V
UD9	X
UD10	X

UIC1

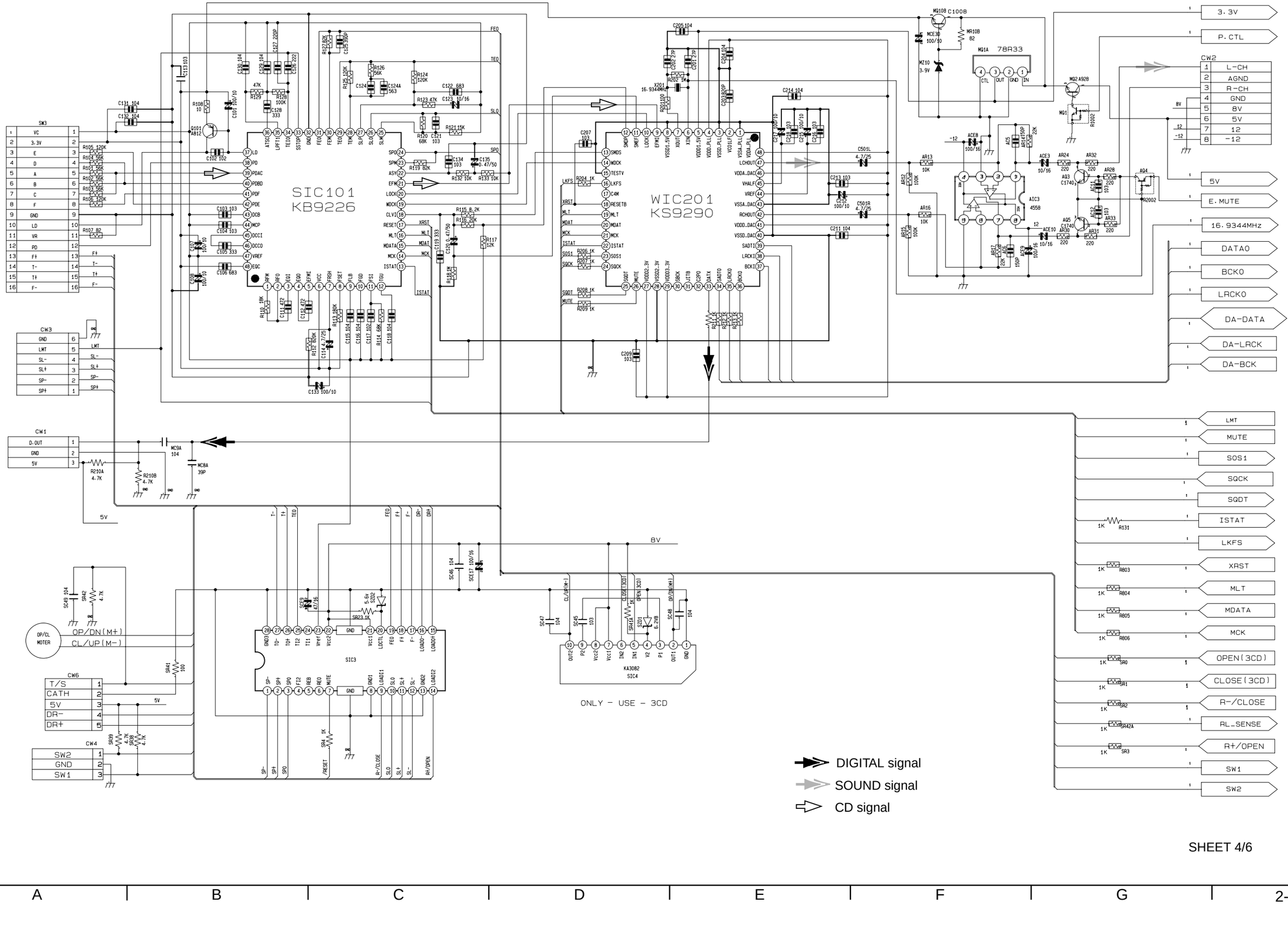
UIC2

UIC3

UIC4

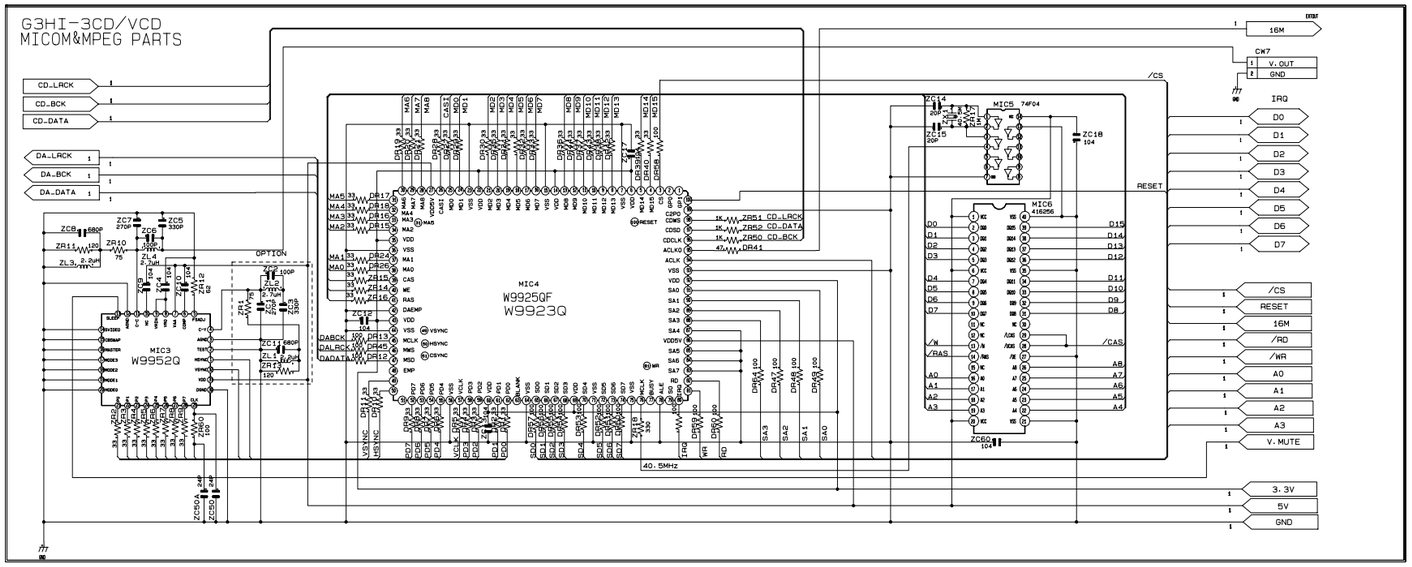
MIC signal

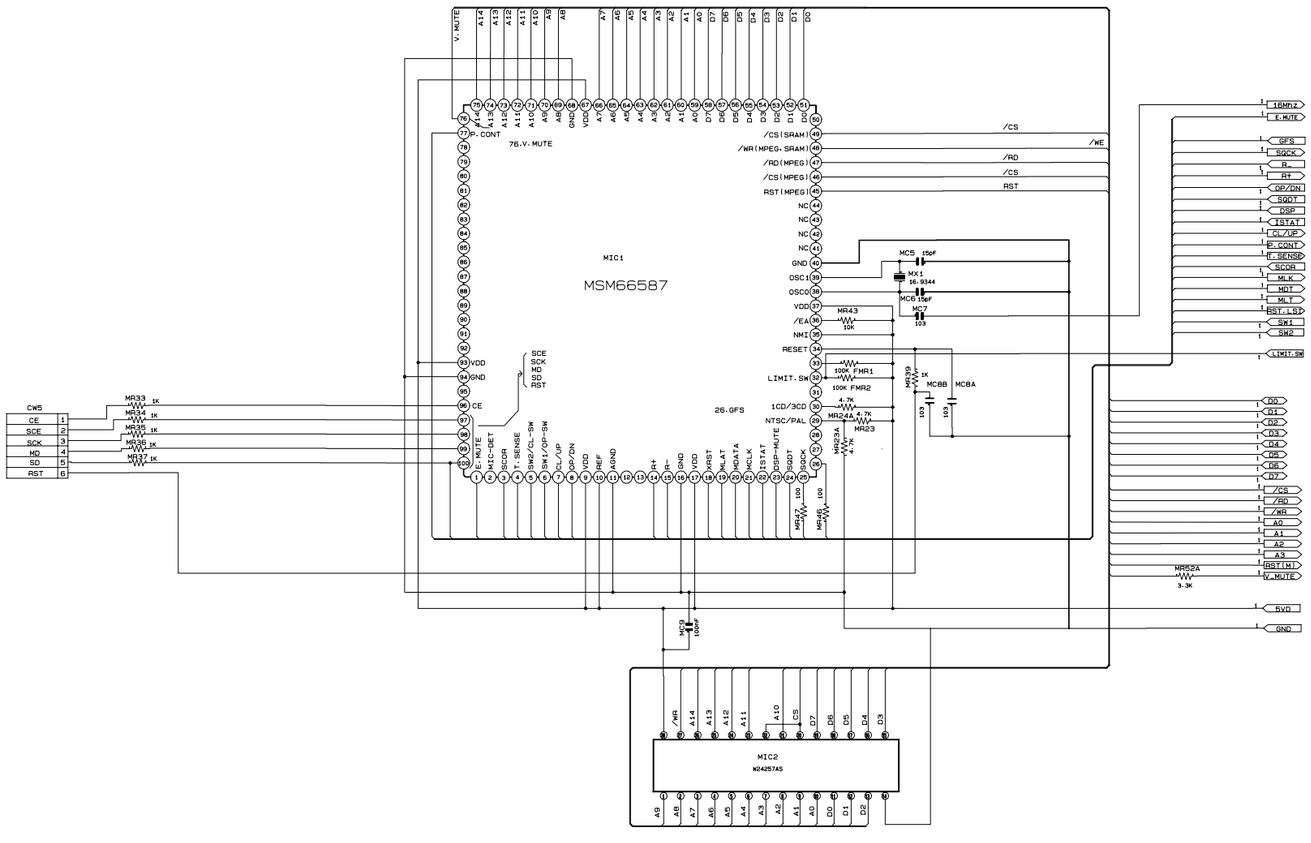
■VCD servo section



SHEET 4/6

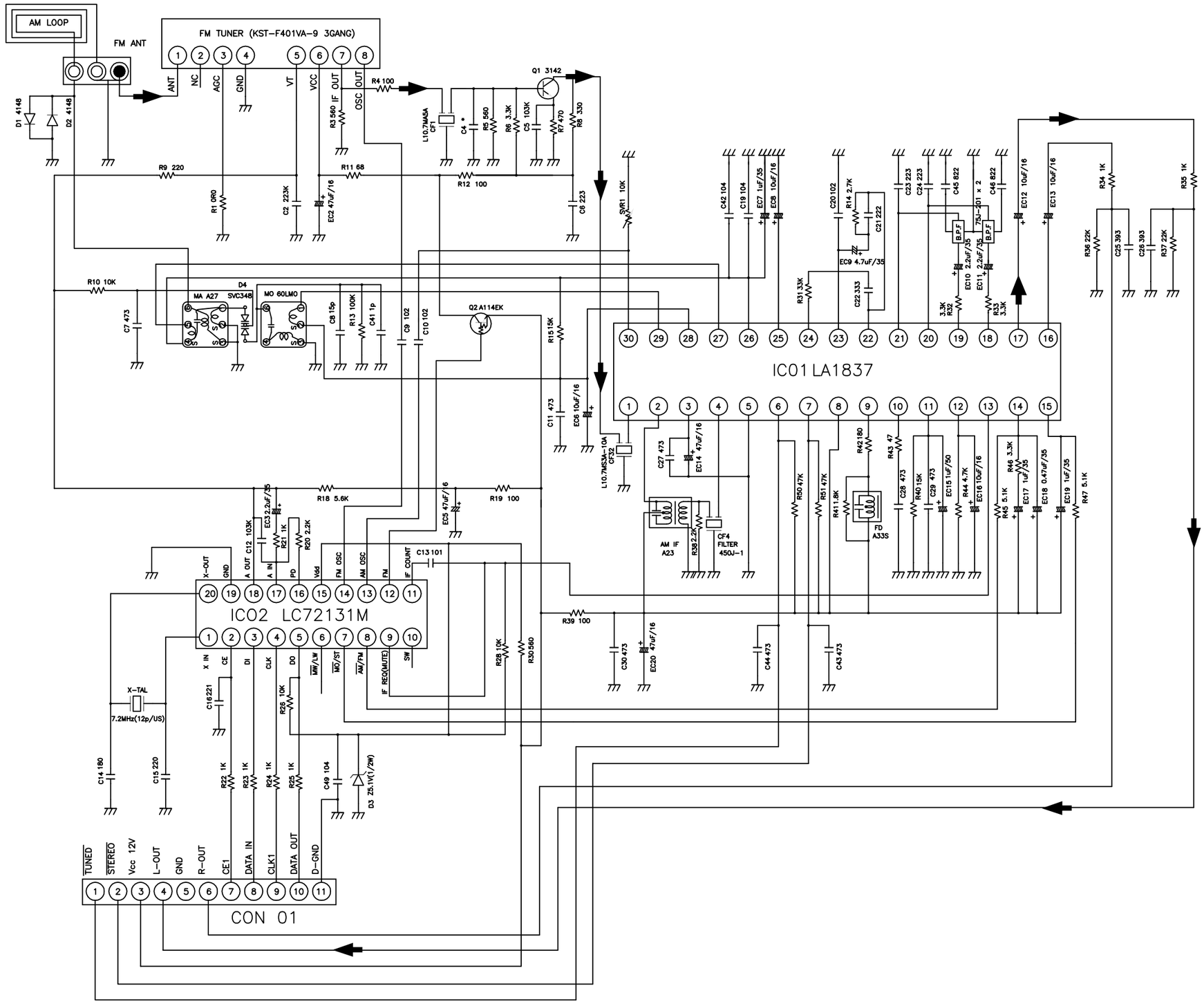
■ VCD MPEG & micom section





SHEET 5/6

■ Tuner section

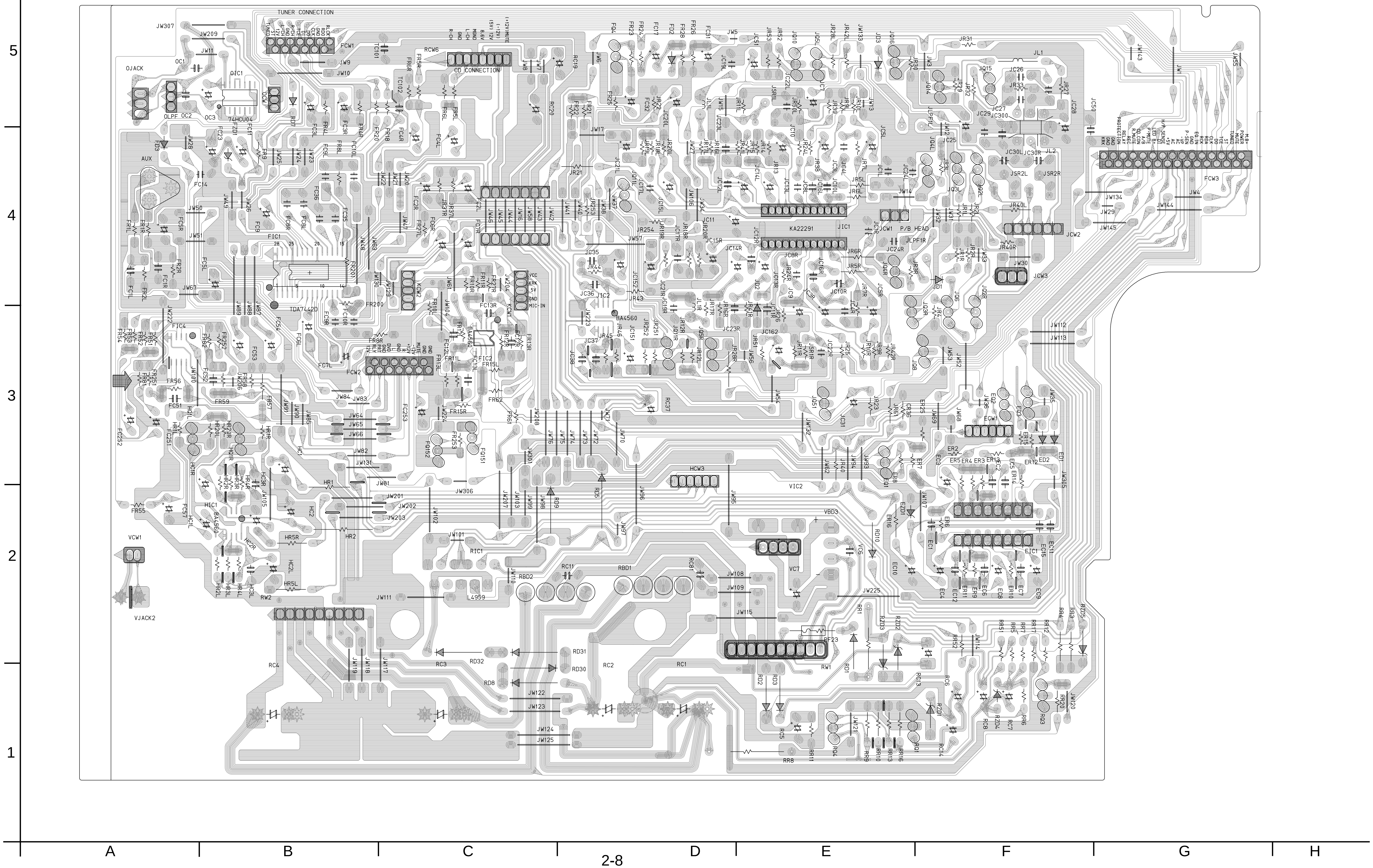


SHEET 6/6

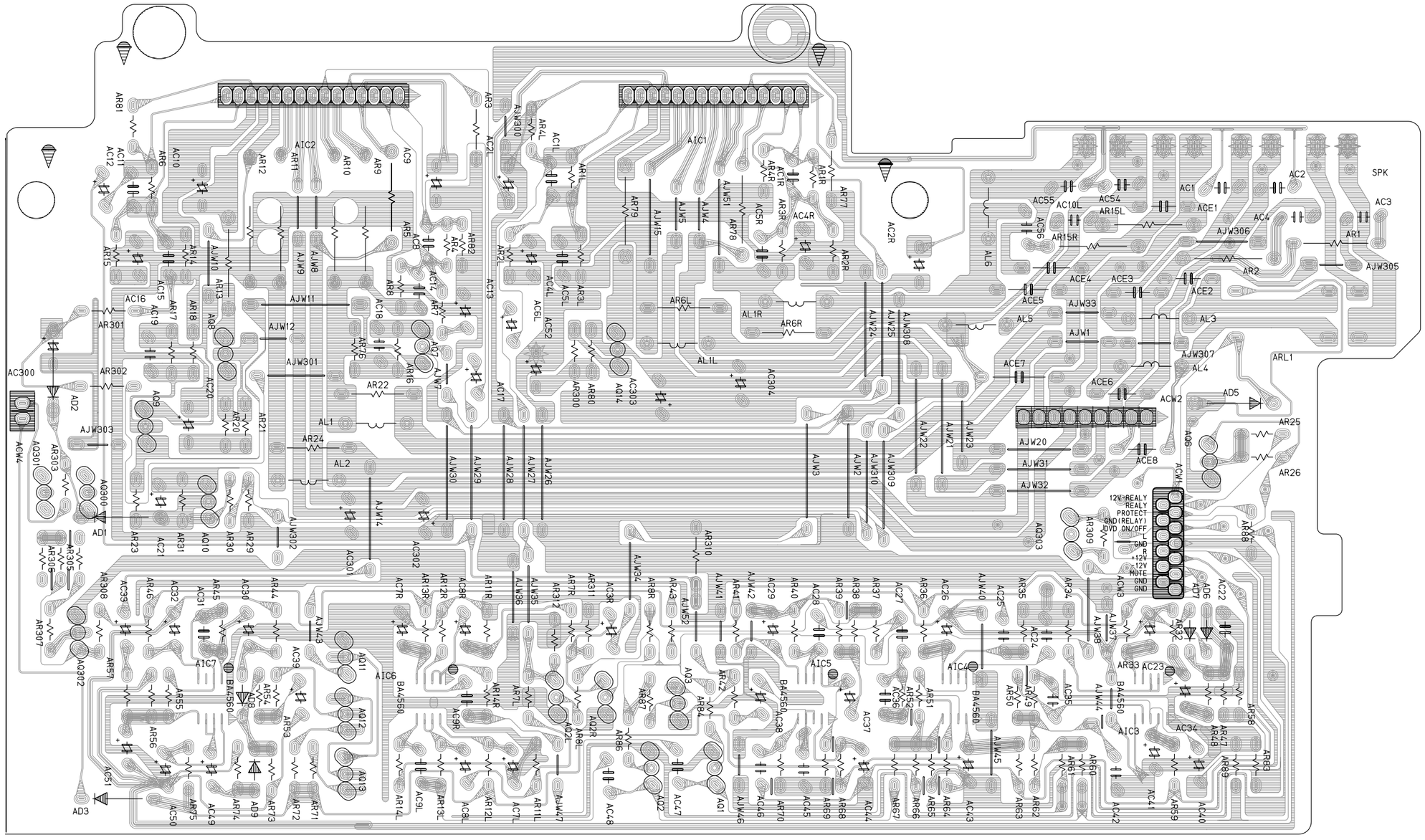
 MX-G68V/MX-G65V

Printed circuit boards

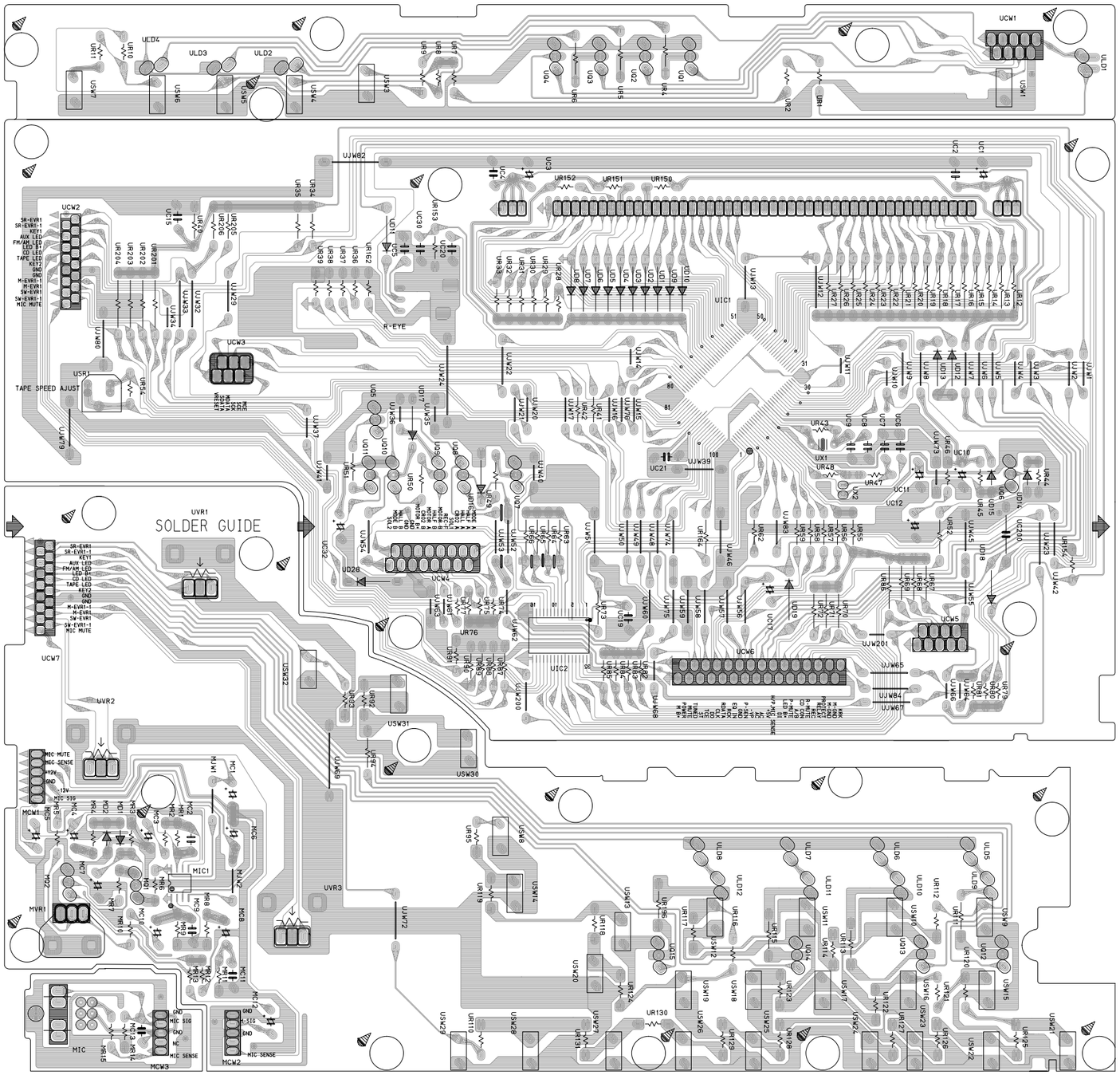
■ Main board



■ Amplifier board



■ Front board

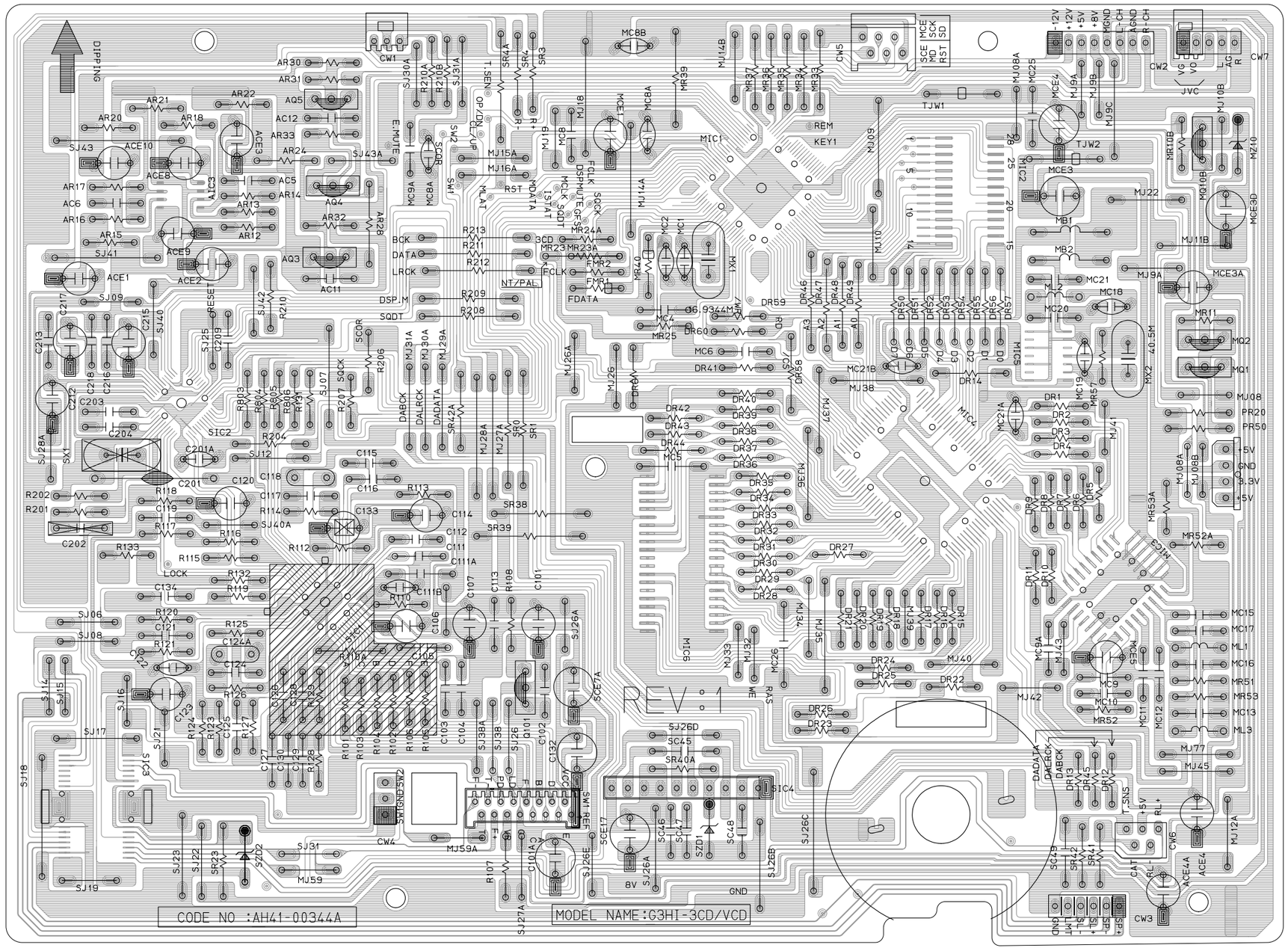


Power / CD switch board

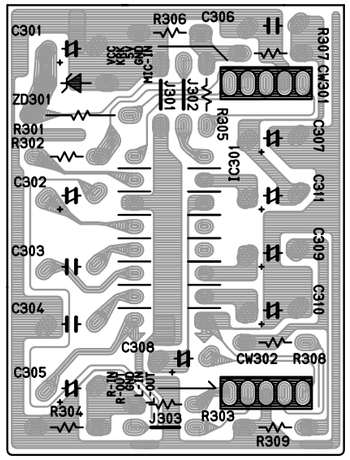
FL display & system control board

Front key switch board

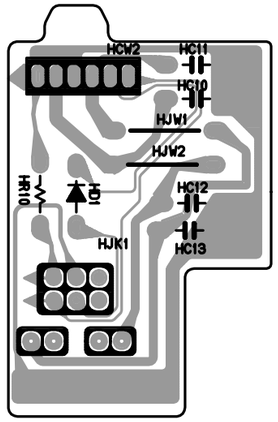
■ **Vido CD board**



■ Voice board

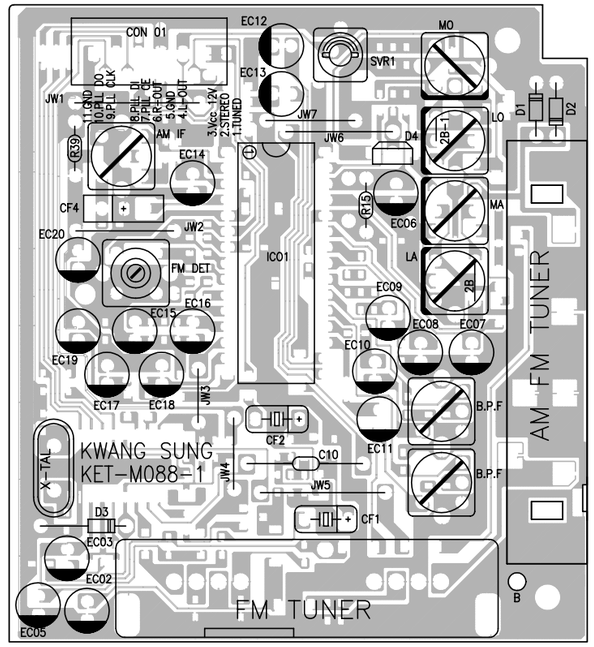


■ Headphone board



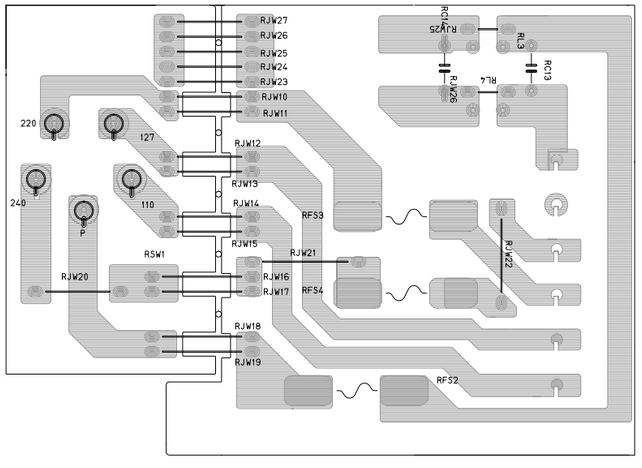
■ Tuner board

Front side

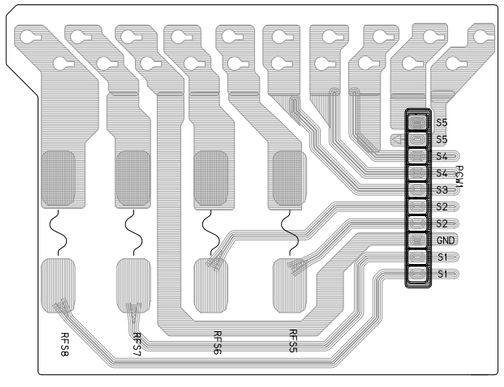


■ Power supply board

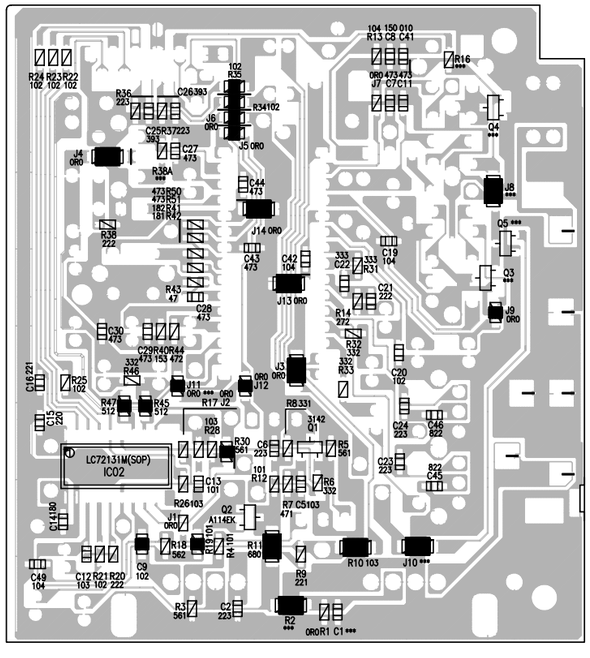
Primary part



Secondary parts



Reverse side



PARTS LIST

[MX-G68V]
[MX-G65V]

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

Area suffix

US ---------- Singapore
UX ---------- Saudi Arabia

- Contents -

Exploded view of general assembly and parts list (Block No.M1) ---------- 3- 3
CD changer mechanism assembly and parts list (Block No.MA) ---------- 3- 5
CD mechanism assembly and parts list (Block No.MB) ---------- 3- 7
Cassette mechanism assembly and parts list (Block No.MP) ---------- 3- 8
Electrical parts list (Block No.01~05) ---------- 3-10
Packing materials and accessories parts list (Block No.M3,M5) ---------- 3-22

< MEMO >

Exploded view of general assembly and parts list

Block No. M 1 M M

CD changer unit

Tuner board

Front key switch board

CD key switch board

Front / display board

Amp board

Voltage Selector

Trans. board

H.phone J.board

MIC J.board

Voice Cancel board

Main board

L/Caution

Cassette mechanism assembly

■ Parts list (Genaral assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	A	6002-000126	SCREW	2	FH M3*10 BLK	
	B	6003-000276	SCREW	78	BH M3*10 YEL	
	C	AH60-10107A	SCREW	4	M4*6 YEL	
	D	6003-000277	SCREW	2	BH M3*12 YEL	
	E	6002-000398	SCREW	3	BH M3*6 YEL	
	F	6003-000278	SCREW	4		
	1	AH64-01141A	DOOR WINDOW	1	A	
	2	AH64-01142A	DOOR WINDOW	1	B	
	3	AH64-01128D	CASSETTE DOOR	1	A MX-G68V	
		AH64-01128B	CASSETTE DOOR	1	A MX-G65V	
	4	AH64-01129D	CASSETTE DOOR	1	B MX-G68V	
		AH64-01129B	CASSETTE DOOR	1	B MX-G65V	
	5	AH61-00552A	DOOR SPRING	1	A	
	6	AH61-00553A	DOOR SPRING	1	B	
	7	AH64-01140L	VFD WINDOW	1	MX-G68V	
		AH64-01140K	VFD WINDOW	1	MX-G65V	
	8	AH63-00252A	VFD SHEET	1		
	9	AH64-01126B	TRAY DOOR	1		
	10	AH64-00462B	JVC MARK	1		
	12	AH64-01135B	VOLUME KNOB	1		
	13	AH61-00659B	VOLUME CAP	1		
	15	AH61-00657C	MIC CAP	1	MX-G68V	
		AH61-00657B	MIC CAP	1	MX-G65V	
	16	AJ64-01136B	MIC KNOB VOL	1		
	17	AH64-01134B	WOOFER KNOB	1		
	18	AH67-00105A	WOOFER LENS	1		
	19	AH64-01133B	S/MODE KNOB	1		
	20	AH67-00104A	S/MODE LENS	1		
	21	AH64-01123J	FRONT CABINET	1	MX-G65V	
		AH64-01123Q	FRONT CABINET	1	MX-G68V	
	22	AH61-80030A	DAMPER	2	ASSY	
	23	AH95-50001A	LATCH	2	ASSY	
	24	AH64-01130B	POWER KNOB	1		
	26	AH67-00106A	POWER LENS	1		
	27	AH67-00103B	FUNCTION LENS	1		
	28	AH61-00661A	FUNCTION HOLDER	1		
	29	AH64-01139B	RDS KNOB	1		
	30	AH64-01138B	MAIN KNOB	1		
	31	AH67-00102B	CD LENS	1		
	32	AH64-01132B	DISC KNOB	1		
	35	AH64-01137B	STOP KNOB	1		
	36	AH61-00662A	VFD HOLDER	1		
	37	AH61-40014A	RIVET SUPPORT	1		
	38	AH61-00021B	PCB SUPPORT	1		
	39	AH64-30416C	BOTTOM CABINET	1		
	40	AH62-00043B	HEAT SINK	1		
	41	AH61-00655A	H/SINK BRKT	1	L	
	42	AH61-00656A	H/SINK BRKT	1	R	

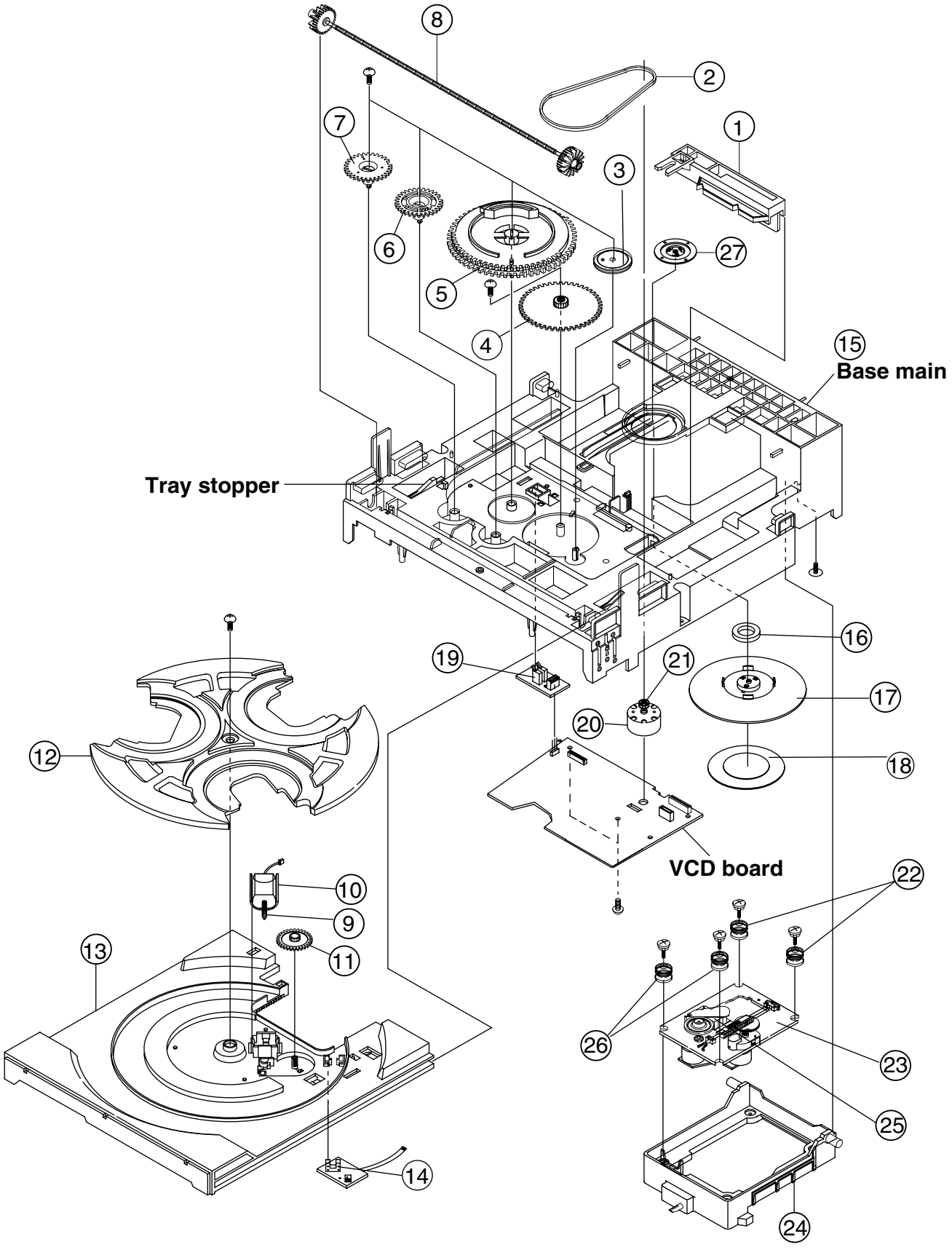
■ Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	43	AH64-01125J	REAR CABINET	1		
	46	AH63-00250A	REAR COVER	1		
⚠	47	AH39-00257G	POWER CORD	1		
	48	AH64-30390F	TOP CABINET	1	MX-G65V	
		AH64-30390G	TOP CABINET	1	MX-G68V	
	49	AH62-00042A	HEAT SINK	1	4959	
	50	AH68-50275D	CD STICKER	1		
	51	AH68-00897E	RATING LABEL	1	MX-G68V	US
		AH68-00897F	RATING LABEL	1	MX-G68V	UX
		AH68-00897C	RATING LABEL	1	MX-G65V	US
		AH68-00897D	RATING LABEL	1	MX-G65V	UX
⚠	57	AH26-00104A	POWER TRANS	1		
	58	AH68-50282K	CAUTION LABEL	1		
	59	AH61-00721A	HOLDER	1		
	60	AH40-00011A	TUNER BLOCK	1		

CD changer mechanism assembly and parts list

Block No. M A M M



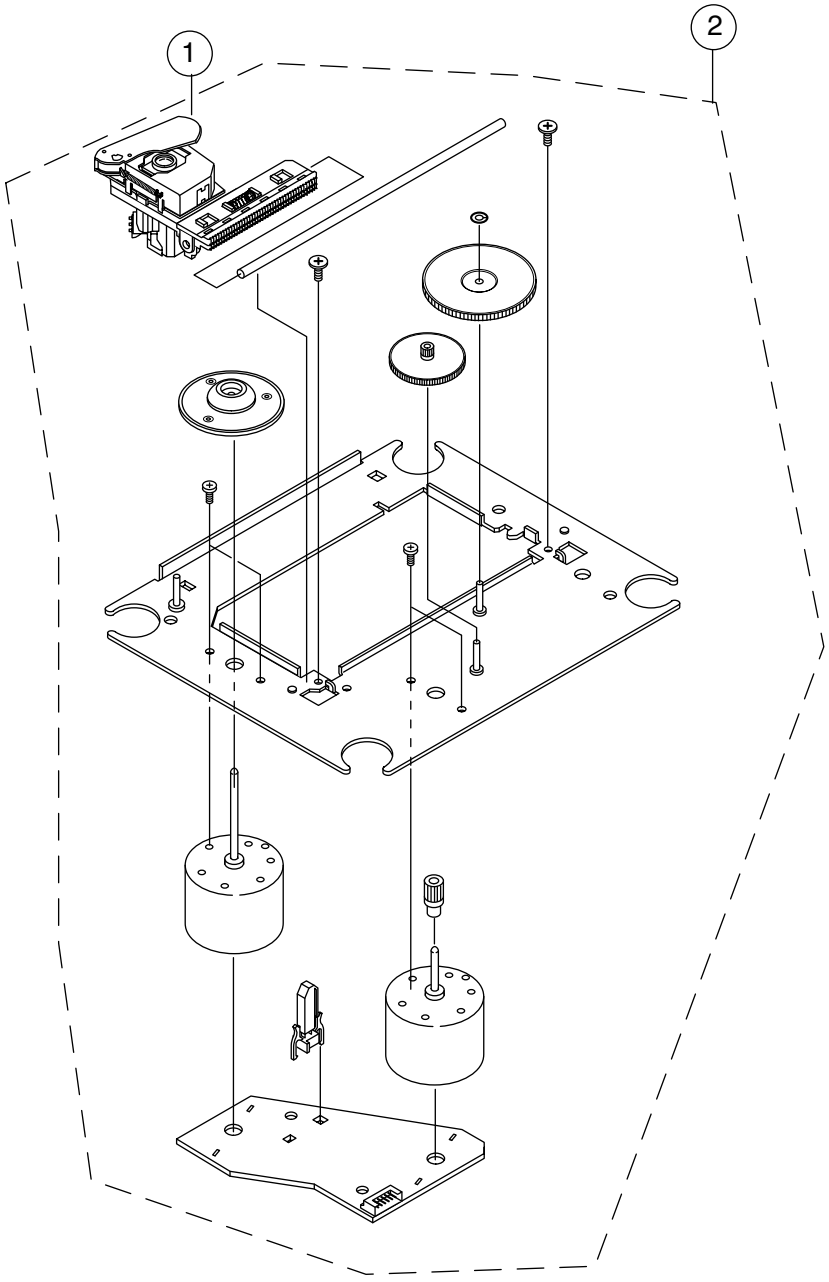
■ Parts list (CD changer mechanism)

Block No. MAMM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	AH66-80022A	SLIDE CAM	1	ABS HF-380 NTR	
	2	AH66-60034A	BELT LOAD	1	CR	
	3	AH66-20186A	GEAR PULLEY	1	POM (M90-44)WHT	
	4	AH66-20187A	GEAR-LOAD	1	POM (M90-44)BLK	
	5	AH66-20188A	GEAR-CAM	1	POM(M90-44)WHT	
	6	AH66-20189A	GEAR-TRAY	1	POM(M90-44)BLK	
	7	AH66-20190A	GEAR-CONVERTOR	1	POM (M90-44) WH	
	8	AH66-20191A	GEAR-SYNCRO	1	ABS HF-380 NTR	
	9	AH66-20192A	GEAR-WORM	1	POM (M90-44)WHT	
	10	AH31-12001A	LOADING MOTOR	1	FF-030PN-09120	
	11	AH66-20193A	GEAR-ROULETTE	1	POM(M90-44)BLK	
	12	AH66-90056A	TRAY-ROULETTE	1	ABS XR-401 BLK	
	13	AH66-90055A	TRAY DISC	1	ABS XR-401 BLK	
	14	AH32-10001F	SENSOR	1	KPI-L06	
	15	AH61-20428A-1	BASE MAIN	1		
	16	3302-000159	MAGNET-FERRITE	1		
	17	AH66-90053A	TABTE-CHUCK UNI	1		
	18	AH63-00068B	SHEET CHUCK	1		
	19	3404-000101	SWICH MICRO	1	MLS-24	
	20	AH31-10021A	DC MORTOR	1		
	21	AH66-10008A	PULLEY-MOTOR	1		
	22	AH73-10031A	RUBBER-CD	1		
	23	AH91-60150C	SP MOTOR ASS'Y	1	CMS-D73SG6U	
	24	AH66-30098A	LEVER-LIFTER	1		
	25	AH30-00007A	CD PICKUP	1	SOH-AD3	
	26	AH73-10034A	RUBBER-CD(G)	1		
	27	AH61-00255A	BRKT CHUCK	1	SECL 0.8T	

CD mechanism assembly and parts list

Block No. M B M M



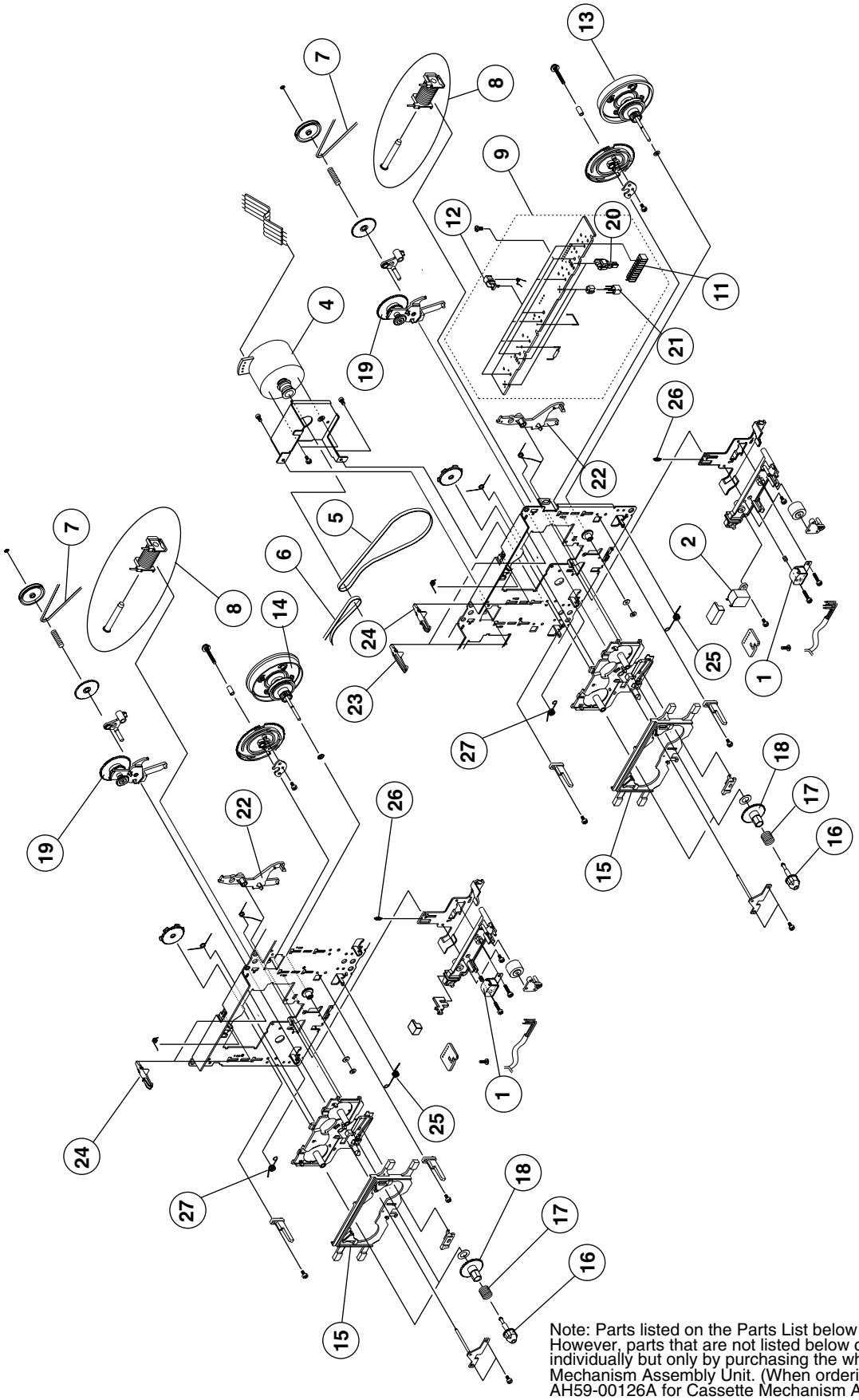
■ Parts list(CD mechanism)

Block No. M2MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	AH30-00007A	OPTICAL PICK-UP	1	SOH-AD3	
	2	AH91-60150C	CDP-DECK ASS'Y	1	CMS-D73SG6U	

Cassette mechanism assembly and parts list

Block No. M P M M



Note: Parts listed on the Parts List below can be supplied. However, parts that are not listed below cannot be supplied individually but only by purchasing the whole Cassette Mechanism Assembly Unit. (When ordering, use the Parts No. AH59-00126A for Cassette Mechanism Assembly Unit.)

■ Parts list (Cassette machanism)

Block No. MPMM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	AH81-00472A	PB HEAD	2	TC881CB067P	
	2	AH81-00472B	E HEAD	1	TC2131	
	4	AH81-00472W	MOTOR ASS'Y	1	SHU2L61	
	5	AH81-00472C	MAIN BELT B	1	02-084-4204	
	6	AH81-00472D	MAIN BELT A	1	02-084-4202	
	7	AH81-00472X	FR BELT	2	02-083-4188	
	8	AH81-00474A	SOLENOID	2	50-093-4145	
	9	AH81-00472Y	PCB ASS'Y	1	50-093-4558	
	11	AH81-00473A	HOUSING	1	16FESTVKN	
	12	AH81-00473D	BOX SWITCH	5	50-219-4028	
	13	AH81-00472K	FLYWHEEL B	1	50-093-3441	
	14	AH81-00472H	FLYWHEEL A	1	50-093-3440	
	15	AH81-00472R	BRAKE LEVER	2	50-259-3246	
	16	AH81-00472P	REEL F CAP	4	50-228-4020	
	17	AH81-00473F	DESK SPRING 02	4	01-081-4601	
	18	AH81-00472Q	REEL DESK GEAR	4	50-222-4245	
	19	AH81-00472V	CLUTCH ASS'Y	2	50-093-4503	
	20	AH81-00473B	MODE SWITCH	4	MSW17220MVQ1	

■ **Electrical parts list (Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	AUX	3722-000377	RCA JACK		
	EC 1	2202-000148	C.CAPACITOR		
	EC 2	2202-000817	C.CAPACITOR		
	EC 3	2401-002180	E.CAPACITOR		
	EC 4	2401-002180	E.CAPACITOR		
	EC 5	2202-000797	C.CAPACITOR		
	EC 6	2202-000809	C.CAPACITOR		
	EC 7	2202-000797	C.CAPACITOR		
	EC 8	2401-001889	E.CAPACITOR		
	EC 9	2401-000907	E.CAPACITOR		
	EC 10	2401-001465	E.CAPACITOR		
	EC 11	2202-000854	C.CAPACITOR		
	EC 12	2202-000797	C.CAPACITOR		
	EC 15	2202-000797	C.CAPACITOR		
	ECW 1	3711-001062	CONNECTOR		
	ED 1	0401-000101	DIODE		
	ED 2	0401-000101	DIODE		
	EIC 1	1204-001730	IC		
	EQ 1	0501-000398	TRANSISTOR		
	EQ 2	0504-000118	DIGITAL TR		
	EQ 3	0504-000118	DIGITAL TR		
	ER 2	2001-000522	CARBON RESISTOR		
	ER 3	2001-000290	CARBON RESISTOR		
	ER 4	2001-000977	CARBON RESISTOR		
	ER 5	2001-000522	CARBON RESISTOR		
	ER 6	2001-000563	CARBON RESISTOR		
	ER 7	2001-000429	CARBON RESISTOR		
	ER 8	2001-000734	CARBON RESISTOR		
	ER 9	2001-000008	CARBON RESISTOR		
	ER 10	2001-000290	CARBON RESISTOR		
	ER 11	2001-000734	CARBON RESISTOR		
	ER 12	2001-000563	CARBON RESISTOR		
	ER 13	2001-000290	CARBON RESISTOR		
	ER 14	2001-000319	CARBON RESISTOR		
	ER 15	2001-000563	CARBON RESISTOR		
	ER 16	2001-000034	CARBON RESISTOR		
	ER 25	2001-000786	CARBON RESISTOR		
	EZD 1	0403-000354	DIODE-ZENER		
	FC 9	2401-000419	E.CAPACITOR		
	FC 11	2401-001975	E.CAPACITOR		
	FC 17	2401-001954	E.CAPACITOR		
	FC 23	2401-000419	E.CAPACITOR		
	FC 31	2401-000759	E.CAPACITOR		
	FC 32	2401-001954	E.CAPACITOR		
	FC 35	2301-000361	M.CAPACITOR		
	FC 36	2301-000375	M.CAPACITOR		
	FC 50	2401-000419	E.CAPACITOR		
	FC 51	2202-000806	C.CAPACITOR		
	FC 52	2202-000806	C.CAPACITOR		
	FC 53	2401-001912	E.CAPACITOR		
	FC 54	2401-001912	E.CAPACITOR		
	FC 57	2401-001975	E.CAPACITOR		
	FCW 1	3708-000122	CONNECTOR		
	FCW 2	3708-001094	CONNECTOR		
	FCW 3	3708-000258	CONNECTOR	30P 1.25MM52045	
	FC1L	2201-000368	C.CAPACITOR		
	FC1R	2201-000368	C.CAPACITOR		
	FC10L	2301-000216	C-FLIM,PEF		
	FC10R	2301-000216	C-FLIM,PEF		
	FC12L	2202-000781	C.CAPACITOR		
	FC12R	2202-000781	C.CAPACITOR		
	FC13L	2202-000806	C.CAPACITOR		
	FC13R	2201-000368	C.CAPACITOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	FC2L	2401-001912	E.CAPACITOR		
	FC2R	2401-001912	E.CAPACITOR		
	FC251	2401-001912	E.CAPACITOR		
	FC252	2401-001912	E.CAPACITOR		
	FC253	2401-001912	E.CAPACITOR		
	FC3L	2401-001912	E.CAPACITOR		
	FC3R	2401-001912	E.CAPACITOR		
	FC4L	2401-001912	E.CAPACITOR		
	FC4R	2401-001912	E.CAPACITOR		
	FC5L	2401-001912	E.CAPACITOR		
	FC6L	2401-002180	E.CAPACITOR		
	FC6R	2401-002180	E.CAPACITOR		
	FC7L	2401-001912	E.CAPACITOR		
	FC7R	2401-001912	E.CAPACITOR		
	FC8L	2301-000454	M.CAPACITOR		
	FC8R	2301-000454	M.CAPACITOR		
	FC9L	2301-000216	C-FLIM,PEF		
	FC9R	2301-000216	C-FLIM,PEF		
	FD 2	0401-000101	DIODE		
	FD 3	0401-000101	DIODE		
	FIC 1	1204-001776	IC		
	FIC 2	1201-000163	IC		
	FIC 4	1201-000163	IC		
	FQ 2	0504-001003	DIGITAL TR		
	FQ 4	0501-000398	TRANSISTOR		
	FQ1L	0504-000122	DIGITAL TR		
	FQ1R	0504-000122	DIGITAL TR		
	FQ151	0504-000144	DIGITAL TR		
	FQ152	0504-000118	DIGITAL TR		
	FR 9	2001-000027	CARBON RESISTOR		
	FR 18	2001-000515	CARBON RESISTOR		
	FR 20	2001-000515	CARBON RESISTOR		
	FR 21	2001-000864	CARBON RESISTOR		
	FR 22	2001-000864	CARBON RESISTOR		
	FR 23	2001-000773	CARBON RESISTOR		
	FR 24	2001-000290	CARBON RESISTOR		
	FR 25	2001-000429	CARBON RESISTOR		
	FR 26	2001-000850	CARBON RESISTOR		
	FR 28	2001-000645	CARBON RESISTOR		
	FR 51	2001-000515	CARBON RESISTOR		
	FR 52	2001-000786	CARBON RESISTOR		
	FR 53	2001-000515	CARBON RESISTOR		
	FR 54	2001-000786	CARBON RESISTOR		
	FR 55	2001-000890	CARBON RESISTOR		
	FR 56	2001-000411	CARBON RESISTOR		
	FR 57	2001-000273	CARBON RESISTOR		
	FR 58	2001-000273	CARBON RESISTOR		
	FR 59	2001-000411	CARBON RESISTOR		
	FR 61	2001-000429	CARBON RESISTOR		
	FR 62	2001-000429	CARBON RESISTOR		
	FR 81	2001-000786	CARBON RESISTOR		
	FR 82	2001-000591	CARBON RESISTOR		
	FR1L	2001-000411	CARBON RESISTOR		
	FR1R	2001-000411	CARBON RESISTOR		
	FR10L	2001-000429	CARBON RESISTOR		
	FR10R	2001-000429	CARBON RESISTOR		
	FR11L	2001-000429	CARBON RESISTOR		
	FR11R	2001-000429	CARBON RESISTOR		
	FR12L	2001-000241	CARBON RESISTOR		
	FR12R	2001-000241	CARBON RESISTOR		
	FR13L	2001-000734	CARBON RESISTOR		
	FR13R	2001-000734	CARBON RESISTOR		
	FR15L	2001-000591	CARBON RESISTOR		

■ **Electrical parts list (Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	FR15R	2001-000591	CARBON RESISTOR		
	FR2L	2001-000411	CARBON RESISTOR		
	FR2R	2001-000411	CARBON RESISTOR		
	FR200	2001-000273	CARBON RESISTOR		
	FR201	2001-000273	CARBON RESISTOR		
	FR251	2001-000591	CARBON RESISTOR		
	FR252	2001-000786	CARBON RESISTOR		
	FR253	2001-000290	CARBON RESISTOR		
	FR27L	2001-000786	CARBON RESISTOR		
	FR27R	2001-000786	CARBON RESISTOR		
	FR4L	2001-000924	CARBON RESISTOR		
	FR4R	2001-000924	CARBON RESISTOR		
	FR5L	2001-000864	CARBON RESISTOR		
	FR5R	2001-000864	CARBON RESISTOR		
	FR6L	2001-000977	CARBON RESISTOR		
	FR6R	2001-000977	CARBON RESISTOR		
	FR8L	2001-000802	CARBON RESISTOR		
	FR8R	2001-000802	CARBON RESISTOR		
	FZD 1	0403-000372	ZENER DIODE		
	HC 1	2401-000795	E.CAPACITOR		
	HC 2	2401-000795	E.CAPACITOR		
	HCW 2	AH39-00247A	LEAD CONNECTOR		
	HCW 3	3711-001062	CONNECTOR		
	HC1L	2401-001912	E.CAPACITOR		
	HC1R	2401-001912	E.CAPACITOR		
	HC2L	2401-001465	E.CAPACITOR		
	HC2R	2401-001465	E.CAPACITOR		
	HC3L	2201-000642	C.CAPACITOR		
	HC3R	2201-000642	C.CAPACITOR		
	HD 1	0401-000101	DIODE		
	HIC 1	1201-000163	IC		
	HJK 1	3722-000351	PHONE JACK		
	HQ1L	0501-000407	TRANSISTOR		
	HQ1R	0501-000407	TRANSISTOR		
	HR 1	2001-000028	CARBON RESISTOR		
	HR 2	2001-000028	CARBON RESISTOR		
	HR 10	2001-000008	CARBON RESISTOR		
	HR1L	2001-000449	CARBON RESISTOR		
	HR1R	2001-000449	CARBON RESISTOR		
	HR2L	2001-000449	CARBON RESISTOR		
	HR2R	2001-000591	CARBON RESISTOR		
	HR3L	2001-000734	CARBON RESISTOR		
	HR3R	2001-000734	CARBON RESISTOR		
	HR4L	2001-000290	CARBON RESISTOR		
	HR4R	2001-000290	CARBON RESISTOR		
	HR5L	2001-000019	CARBON RESISTOR		
	HR5R	2001-000019	CARBON RESISTOR		
	JC 7	2401-000419	E.CAPACITOR		
	JC 9	2401-000240	E.CAPACITOR		
	JC 10	2401-001954	E.CAPACITOR		
	JC 11	2401-000795	E.CAPACITOR		
	JC 26	2301-000404	M.CAPACITOR		
	JC 27	2301-000404	M.CAPACITOR		
	JC 28	2401-001975	E.CAPACITOR		
	JC 29	2301-000407	M.CAPACITOR		
	JC 31	2401-002180	E.CAPACITOR		
	JC 35	2201-000601	C.CAPACITOR		
	JC 37	2201-000601	C.CAPACITOR		
	JC 51	2401-001938	E.CAPACITOR		
	JCW 1	3711-003107	CONNECTOR		
	JCW 2	3711-003111	CONNECTOR		
	JCW 3	3711-003107	CONNECTOR		
	JC1L	2301-000370	M.CAPACITOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	JC1R	2301-000370	M.CAPACITOR		
	JC10L	2201-000368	C.CAPACITOR		
	JC10R	2201-000368	C.CAPACITOR		
	JC12R	2401-000419	E.CAPACITOR		
	JC13L	2401-002180	E.CAPACITOR		
	JC13R	2401-002180	E.CAPACITOR		
	JC14L	2401-001465	E.CAPACITOR		
	JC14R	2401-001465	E.CAPACITOR		
	JC15L	2401-002180	E.CAPACITOR		
	JC15R	2401-002180	E.CAPACITOR		
	JC151	2401-001912	E.CAPACITOR		
	JC16L	2201-000368	C.CAPACITOR		
	JC16R	2201-000368	C.CAPACITOR		
	JC17L	2301-000413	M.CAPACITOR		
	JC17R	2301-000413	M.CAPACITOR		
	JC19L	2301-000462	C-FILM,PEF		
	JC19R	2301-000462	C-FILM,PEF		
	JC20L	2401-000419	E.CAPACITOR		
	JC21L	2401-000419	E.CAPACITOR		
	JC21R	2401-000419	E.CAPACITOR		
	JC22L	2301-000407	M.CAPACITOR		
	JC22R	2301-000407	M.CAPACITOR		
	JC23L	2201-000674	C.CAPACITOR		
	JC23R	2201-000674	C.CAPACITOR		
	JC24L	2301-000370	M.CAPACITOR		
	JC24R	2301-000370	M.CAPACITOR		
	JC3L	2401-001465	E.CAPACITOR		
	JC3R	2401-001465	E.CAPACITOR		
	JC30L	2201-000368	C.CAPACITOR		
	JC30R	2201-000368	C.CAPACITOR		
	JC300	2201-000499	C.CAPACITOR		
	JC4L	2301-000413	M.CAPACITOR		
	JC4R	2301-000413	M.CAPACITOR		
	JC5L	2401-001954	E.CAPACITOR		
	JC5R	2401-001954	E.CAPACITOR		
	JC8L	2301-000413	M.CAPACITOR		
	JC8R	2301-000413	M.CAPACITOR		
	JD 1	0401-000101	DIODE		
	JD 2	0401-000101	DIODE		
	JD 3	0401-000101	DIODE		
	JIC 1	1201-000358	IC	S1A0291*01-A0B0	
	JIC 2	1201-000163	IC		
	JL 1	2701-000298	INDUCTOR	AX470UH 04	
	JL 2	AH26-10003C	TRAP COIL	BIAS-TRAP	
	JLP1L	AH26-10002W	TRAP COIL	BIAS-TRAP	
	JLP1R	AH26-10002W	TRAP COIL	BIAS-TRAP	
	JL1L	AH27-10001D	CHOKE COIL		
	JL1R	AH27-10001D	CHOKE COIL		
	JQ 6	0504-001003	DIGITAL TR	300MW22KOHM	
	JQ 8	0504-001003	DIGITAL TR		
	JQ 10	0501-000398	TRANSISTOR		
	JQ 14	0501-000610	TRANSISTOR		
	JQ 15	0501-000369	TRANSISTOR		
	JQ 16	0501-000398	TRANSISTOR		
	JQ 51	0504-001003	DIGITAL TR		
	JQ11L	0501-000407	TRANSISTOR		
	JQ11R	0501-000407	TRANSISTOR		
	JQ2L	0501-000010	TRANSISTOR		
	JQ2R	0501-000010	TRANSISTOR		
	JQ3L	0501-000010	TRANSISTOR		
	JQ3R	0501-000010	TRANSISTOR		
	JQ4L	0501-000398	TRANSISTOR		
	JQ4R	0501-000398	TRANSISTOR		

■ **Electrical parts list (Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	JQ5L	0501-000407	TRANSISTOR		
	JQ5R	0501-000407	TRANSISTOR		
	JR 4	2001-000522	CARBON RESISTOR		
	JR 13	2001-000773	CARBON RESISTOR		
	JR 14	2001-000802	CARBON RESISTOR		
	JR 15	2001-000708	CARBON RESISTOR		
	JR 21	2001-000027	CARBON RESISTOR		
	JR 22	2001-000660	CARBON RESISTOR		
	JR 23	2001-000591	CARBON RESISTOR		
	JR 25	2001-000429	CARBON RESISTOR		
	JR 26	2001-000734	CARBON RESISTOR		
	JR 27	2001-000023	CARBON RESISTOR		
	JR 29	2001-000786	CARBON RESISTOR		
	JR 30	2001-000591	CARBON RESISTOR		
	JR 31	2001-000734	CARBON RESISTOR		
	JR 32	2001-000456	CARBON RESISTOR		
	JR 33	2001-000290	CARBON RESISTOR		
	JR 38	2001-000890	CARBON RESISTOR		
	JR 39	2001-000290	CARBON RESISTOR		
	JR 40	2001-000290	CARBON RESISTOR		
	JR 43	2001-000591	CARBON RESISTOR		
	JR 44	2001-000522	CARBON RESISTOR		
	JR 45	2001-000522	CARBON RESISTOR		
	JR 46	2001-000591	CARBON RESISTOR		
	JR 51	2001-000660	CARBON RESISTOR		
	JR 52	2001-000591	CARBON RESISTOR		
	JR 53	2001-000319	CARBON RESISTOR		
	JR 61	2001-000734	CARBON RESISTOR		
	JR1L	2001-000449	CARBON RESISTOR		
	JR1R	2001-000449	CARBON RESISTOR		
	JR10L	2001-000449	CARBON RESISTOR		
	JR10R	2001-000449	CARBON RESISTOR		
	JR11L	2001-000802	CARBON RESISTOR		
	JR11R	2001-000802	CARBON RESISTOR		
	JR12L	2001-000734	CARBON RESISTOR		
	JR12R	2001-000734	CARBON RESISTOR		
	JR16L	2001-000613	CARBON RESISTOR		
	JR16R	2001-000613	CARBON RESISTOR		
	JR17L	2001-000003	CARBON RESISTOR		
	JR17R	2001-000003	CARBON RESISTOR		
	JR18L	2001-000734	CARBON RESISTOR		
	JR18R	2001-000734	CARBON RESISTOR		
	JR19L	2001-000522	CARBON RESISTOR		
	JR19R	2001-000522	CARBON RESISTOR		
	JR2L	2001-000449	CARBON RESISTOR		
	JR2R	2001-000456	CARBON RESISTOR		
	JR20L	2001-000977	CARBON RESISTOR		
	JR20R	2001-000977	CARBON RESISTOR		
	JR24L	2001-000613	CARBON RESISTOR		
	JR24R	2001-000613	CARBON RESISTOR		
	JR251	2001-000008	CARBON RESISTOR		
	JR252	2001-000449	CARBON RESISTOR		
	JR253	2001-000449	CARBON RESISTOR		
	JR254	2001-000008	CARBON RESISTOR		
	JR28L	2001-000734	CARBON RESISTOR		
	JR28R	2001-000734	CARBON RESISTOR		
	JR3L	2001-000591	CARBON RESISTOR		
	JR3R	2001-000591	CARBON RESISTOR		
	JR37L	2001-000786	CARBON RESISTOR		
	JR37R	2001-000786	CARBON RESISTOR		
	JR40L	2001-000302	CARBON RESISTOR		
	JR40R	2001-000302	CARBON RESISTOR		
	JR41L	2001-000008	CARBON RESISTOR		
	JR41R	2001-000008	CARBON RESISTOR		
	JR42L	2001-000429	CARBON RESISTOR		
	JR42R	2001-000429	CARBON RESISTOR		
	JR5L	2001-000449	CARBON RESISTOR		
	JR5R	2001-000449	CARBON RESISTOR		
	JR6L	2001-000449	CARBON RESISTOR		
	JR6R	2001-000449	CARBON RESISTOR		
	JR7L	2001-000890	CARBON RESISTOR		
	JR7R	2001-000890	CARBON RESISTOR		
	JR9L	2001-000281	CARBON RESISTOR		
	JR9R	2001-000281	CARBON RESISTOR		
	JSR1L	2103-000492	VR-SEMI		
	JSR1R	2001-000591	CARBON RESISTOR		
	JSR2L	2103-000248	SEMI V RESISTOR		
	JSR2R	2103-000248	SEMI V RESISTOR		
	JW 64	2001-000003	CARBON RESISTOR		
	JW 66	2001-000003	CARBON RESISTOR		
	KCW 1	3711-001557	CONNECTOR		
	KCW 2	3711-001557	CONNECTOR		
	OC 1	2202-000807	C.CAPACITOR		
	OC 2	2201-000483	C.CAPACITOR		
	OC 3	2401-000240	E.CAPACITOR		
	OCW	3711-001137	CONNECTOR		
	OIC 1	AH14-10004R	IC		
	OJACK	0603-001069	OPTIC TRANSMITT		
	OLPF	AH29-00004A	FILTER NOISE		
	PCW 1	3711-000588	CONNECTOR	5267-10P	
⚠	RBD 1	0402-000450	DIODE		
⚠	RBD 2	0402-001258	DIODE		
⚠	RC 1	2401-001928	E.CAPACITOR		
⚠	RC 2	2401-001928	E.CAPACITOR		
⚠	RC 3	2401-003381	E.CAPACITOR		
⚠	RC 4	2401-003381	E.CAPACITOR		
	RC 5	2401-001954	E.CAPACITOR		
	RC 6	2401-000907	E.CAPACITOR		
	RC 7	2401-001912	E.CAPACITOR		
	RC 8	2401-001954	E.CAPACITOR		
⚠	RC 11	2201-000161	C.CAPACITOR		
	RC 13	2401-000230	E.CAPACITOR		
	RC 14	2401-000795	E.CAPACITOR		
	RC 19	2401-001893	E.CAPACITOR		
	RC 20	2401-001893	E.CAPACITOR		
	RC 37	2401-000438	E.CAPACITOR		
⚠	RC 81	2201-000161	C.CAPACITOR		
	RCW 1	AH37-22001N	CONNECTOR JACK		
	RCW 6	3711-001137	CONNECTOR		
	RD 1	0402-000127	DIODE		
	RD 2	0402-000127	DIODE		
	RD 3	0402-000127	DIODE		
	RD 5	0402-000127	DIODE		
	RD 7	0401-000101	DIODE		
	RD 8	0402-000151	DIODE		
	RD 9	0402-000127	DIODE		
	RD 10	0402-000127	DIODE		
	RD 30	0402-000151	DIODE		
	RD 31	0402-000151	DIODE		
	RD 32	0402-000151	DIODE		
⚠	RF 23	2008-000135	FUSE RESISTOR		
	RFS 5	3602-000147	FUSE CLIP		
⚠	RFS 5	3601-000282	FUSE CARTRIDGE		
	RFS 6	3602-000147	FUSE CLIP		
⚠	RFS 6	3601-000282	FUSE CARTRIDGE		
	RFS 7	3602-000147	FUSE CLIP		

■ **Electrical parts list (Main board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
⚠	RFS 7	3601-000282	FUSE CARTRIDGE		
	RFS 8	3602-000147	FUSE CLIP		
⚠	RFS 8	3601-000282	FUSE CARTRIDGE		
	RIC 1	1203-001653	IC		
	RJW 1	AH39-50001L	LEAD-FASTEN		
	RL 1	2701-000298	INDUCTOR	AX470UH 04	
	RQ 1	0501-000610	TRANSISTOR		
	RQ 3	0501-000331	TRANSISTOR		
	RQ 4	0501-000294	TRANSISTOR		
	RR 1	2003-000701	OMF RESISTOR		
	RR 3	2001-000023	CARBON RESISTOR		
	RR 4	2001-000023	CARBON RESISTOR		
	RR 5	2001-000613	CARBON RESISTOR		
	RR 6	2001-000734	CARBON RESISTOR		
	RR 8	2003-000455	OMF RESISTOR		
	RR 9	2001-000563	CARBON RESISTOR		
	RR 10	2001-000055	CARBON RESISTOR		
	RR 11	2001-000591	CARBON RESISTOR		
	RR 12	2001-000734	CARBON RESISTOR		
	RR 13	2001-000111	CARBON RESISTOR		
	RR 15	2001-000734	CARBON RESISTOR		
	RR 16	2001-000038	CARBON RESISTOR		
	RR 17	2001-000429	CARBON RESISTOR		
	RR 20	2001-000786	CARBON RESISTOR		
	RW 1	AH39-00338A	LEAD CONNECTOR		
	RW 2	AH39-00244A	LEAD CONNECTOR		
	RZD 1	0403-000379	ZENER DIODE		
	RZD 2	0403-000570	ZENER DIODE		
	RZD 3	0403-000570	ZENER DIODE		
	RZD 4	0403-000354	DIODE-ZENER		
	RZD 5	0403-001010	ZENER DIODE		
	TC101	2201-000783	C.CAPACITOR		
	TC102	2201-000783	C.CAPACITOR		
	VBD 3	0402-001077	DIODE		
	VC 6	2201-000161	C.CAPACITOR		
	VC 7	2401-000686	E.CAPACITOR		
	VCW 1	AH39-00096C	CONNECTOR		
	VIC 2	1203-001006	IC		
	VJACK	AH37-00005A	JACK KRCA	YELLOW(WITH SHI	

■ **Electrical parts list (Front board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	MC 1	2401-001975	E.CAPACITOR		
	MC 2	2201-000576	C.CAPACITOR		
	MC 3	2401-001954	E.CAPACITOR		
	MC 4	2401-001954	E.CAPACITOR		
	MC 5	2401-001954	E.CAPACITOR		
	MC 6	2401-001975	E.CAPACITOR		
	MC 7	2401-001954	E.CAPACITOR		
	MC 8	2401-001912	E.CAPACITOR		
	MC 9	2201-000653	C.CAPACITOR		
	MC 10	2401-001954	E.CAPACITOR		
	MC 11	2201-000747	C.CAPACITOR		
	MC 12	2401-001912	E.CAPACITOR		
	MC 17	2401-001954	E.CAPACITOR		
	MCW 1	AH39-00246A	LEAD CONNECTOR		
	MCW 2	AH39-00248A	LEAD CONNECTOR		
	MCW 3	AH39-00248A	LEAD CONNECTOR		
	MD 1	0401-000101	DIODE		
	MD 2	0401-000101	DIODE		
	MIC	3722-000351	PHONE JACK		
	MIC 1	1201-000163	IC		
	MQ 1	0501-000398	TRANSISTOR		
	MQ 2	0501-000398	TRANSISTOR		
	MR 1	2001-000319	CARBON RESISTOR		
	MR 2	2001-000290	CARBON RESISTOR		
	MR 3	2001-000290	CARBON RESISTOR		
	MR 4	2001-000449	CARBON RESISTOR		
	MR 5	2001-000472	CARBON RESISTOR		
	MR 6	2001-000290	CARBON RESISTOR		
	MR 7	2001-000290	CARBON RESISTOR		
	MR 8	2001-000290	CARBON RESISTOR		
	MR 9	2001-000290	CARBON RESISTOR		
	MR 10	2001-000290	CARBON RESISTOR		
	MR 11	2001-000522	CARBON RESISTOR		
	MR 12	2001-000734	CARBON RESISTOR		
	MR 13	2001-000290	CARBON RESISTOR		
	MR 14	2001-000734	CARBON RESISTOR		
	MR 15	2001-000290	CARBON RESISTOR		
	MVR 1	2101-001052	ROTA V.RESISTOR	10KOHM XV092PVP	
	R-EYE	AC59-60060A	REMOCON MODULE		
	U 15	0504-000117	DIGITAL TR		
	UC 1	2401-000475	E.CAPACITOR		
	UC 2	2201-000565	C.CAPACITOR		
	UC 3	2401-000475	E.CAPACITOR		
	UC 4	2201-000565	C.CAPACITOR		
	UC 5	2201-000565	C.CAPACITOR		
	UC 6	2201-000825	C.CAPACITOR		
	UC 7	2201-000825	C.CAPACITOR		
	UC 8	2201-000247	C.CAPACITOR		
	UC 9	2201-000247	C.CAPACITOR		
	UC 10	2401-000240	E.CAPACITOR		
	UC 11	2401-000759	E.CAPACITOR		
	UC 12	2401-001355	E.CAPACITOR		
	UC 15	2201-000565	C.CAPACITOR		
	UC 19	2201-000565	C.CAPACITOR		
	UC 20	2201-000163	C.CAPACITOR		
	UC 21	2201-000163	C.CAPACITOR		
	UC 30	2201-000146	C.CAPACITOR		
	UC 32	2401-001364	E.CAPACITOR		
	UCW 1	3708-000492	CONNECTOR		
	UCW 2	3708-000178	CONNECTOR		
	UCW 3	3708-000448	CONNECTOR		
	UCW 4	3708-000451	CONNECTOR		
	UCW 5	3708-000492	CONNECTOR		

■ **Electrical parts list (Front board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	UCW 6	3708-001488	CONNECTOR		
	UCW 7	3708-000181	CONNECTOR		
	UD 11	0402-000127	DIODE		
	UD 12	0402-000127	DIODE		
	UD 13	0402-000127	DIODE		
	UD 14	0401-000101	DIODE		
	UD 15	0401-000101	DIODE		
	UD 16	0401-000101	DIODE		
	UD 17	0401-000101	DIODE		
	UD 18	0402-000127	DIODE		
	UD 19	0402-000127	DIODE		
	UIC 1	AH11-00039A	IC		
	UIC 2	0904-001316	IC		
	ULD 2	0601-001238	LED		
	ULD 3	0601-001238	LED		
	ULD 4	0601-001238	LED		
	ULD 5	0601-001238	LED		
	ULD 6	0601-001238	LED		
	ULD 7	0601-001238	LED		
	ULD 8	0601-001238	LED		
	ULD 9	0601-001238	LED		
	ULD10	0601-001238	LED		
	ULD11	0601-001238	LED		
	ULD12	0601-001238	LED		
	UQ 1	0504-000117	DIGITAL TR		
	UQ 2	0504-000117	DIGITAL TR		
	UQ 3	0504-000117	DIGITAL TR		
	UQ 4	0504-000117	DIGITAL TR		
	UQ 5	0504-000118	DIGITAL TR		
	UQ 6	0501-000398	TRANSISTOR		
	UQ 7	0504-000118	DIGITAL TR		
	UQ 8	0501-000610	TRANSISTOR		
	UQ 9	0504-000118	DIGITAL TR		
	UQ 10	0501-000610	TRANSISTOR		
	UQ 11	0501-000610	TRANSISTOR		
	UQ 12	0504-000117	DIGITAL TR		
	UQ 13	0504-000117	DIGITAL TR		
	UQ 14	0504-000117	DIGITAL TR		
	UR 1	2001-000003	CARBON RESISTOR		
	UR 2	2001-000995	CARBON RESISTOR		
	UR 4	2001-000855	CARBON RESISTOR		
	UR 5	2001-000855	CARBON RESISTOR		
	UR 6	2001-000855	CARBON RESISTOR		
	UR 7	2001-000429	CARBON RESISTOR		
	UR 8	2001-000221	CARBON RESISTOR		
	UR 9	2001-000241	CARBON RESISTOR		
	UR 10	2001-000258	CARBON RESISTOR		
	UR 11	2001-000449	CARBON RESISTOR		
	UR 12	2001-000734	CARBON RESISTOR		
	UR 13	2001-000734	CARBON RESISTOR		
	UR 14	2001-000734	CARBON RESISTOR		
	UR 15	2001-000734	CARBON RESISTOR		
	UR 16	2001-000734	CARBON RESISTOR		
	UR 17	2001-000734	CARBON RESISTOR		
	UR 18	2001-000734	CARBON RESISTOR		
	UR 19	2001-000734	CARBON RESISTOR		
	UR 20	2001-000734	CARBON RESISTOR		
	UR 21	2001-000734	CARBON RESISTOR		
	UR 22	2001-000734	CARBON RESISTOR		
	UR 23	2001-000734	CARBON RESISTOR		
	UR 24	2001-000734	CARBON RESISTOR		
	UR 25	2001-000734	CARBON RESISTOR		
	UR 26	2001-000734	CARBON RESISTOR		
	UR 27	2001-000734	CARBON RESISTOR		
	UR 28	2001-000786	CARBON RESISTOR		
	UR 29	2001-000786	CARBON RESISTOR		
	UR 30	2001-000786	CARBON RESISTOR		
	UR 31	2001-000786	CARBON RESISTOR		
	UR 32	2001-000786	CARBON RESISTOR		
	UR 33	2001-000786	CARBON RESISTOR		
	UR 34	2001-000290	CARBON RESISTOR		
	UR 35	2001-000290	CARBON RESISTOR		
	UR 36	2001-000290	CARBON RESISTOR		
	UR 37	2001-000290	CARBON RESISTOR		
	UR 38	2001-000290	CARBON RESISTOR		
	UR 39	2001-000290	CARBON RESISTOR		
	UR 40	2001-000591	CARBON RESISTOR		
	UR 41	2001-000429	CARBON RESISTOR		
	UR 42	2001-000429	CARBON RESISTOR		
	UR 43	2001-000435	CARBON RESISTOR		
	UR 44	2001-000734	CARBON RESISTOR		
	UR 45	2001-000508	CARBON RESISTOR		
	UR 46	2001-000793	CARBON RESISTOR		
	UR 47	2001-000850	CARBON RESISTOR		
	UR 48	2001-000295	CARBON RESISTOR		
	UR 49	2001-001178	CARBON RESISTOR		
	UR 50	2001-001178	CARBON RESISTOR		
	UR 51	2001-001178	CARBON RESISTOR		
	UR 52	2001-000449	CARBON RESISTOR		
	UR 54	2001-000995	CARBON RESISTOR		
	UR 55	2001-000290	CARBON RESISTOR		
	UR 56	2001-000429	CARBON RESISTOR		
	UR 57	2001-000429	CARBON RESISTOR		
	UR 58	2001-000429	CARBON RESISTOR		
	UR 59	2001-000429	CARBON RESISTOR		
	UR 62	2001-000429	CARBON RESISTOR		
	UR 63	2001-000290	CARBON RESISTOR		
	UR 64	2001-000290	CARBON RESISTOR		
	UR 65	2001-000290	CARBON RESISTOR		
	UR 66	2001-000290	CARBON RESISTOR		
	UR 67	2001-000290	CARBON RESISTOR		
	UR 68	2001-000290	CARBON RESISTOR		
	UR 69	2001-000290	CARBON RESISTOR		
	UR 70	2001-000290	CARBON RESISTOR		
	UR 71	2001-000290	CARBON RESISTOR		
	UR 72	2001-000290	CARBON RESISTOR		
	UR 73	2001-000290	CARBON RESISTOR		
	UR 74	2001-000290	CARBON RESISTOR		
	UR 75	2001-000290	CARBON RESISTOR		
	UR 76	2001-000290	CARBON RESISTOR		
	UR 77	2001-000005	CARBON RESISTOR		
	UR 79	2001-000290	CARBON RESISTOR		
	UR 80	2001-000290	CARBON RESISTOR		
	UR 81	2001-000290	CARBON RESISTOR		
	UR 82	2001-000290	CARBON RESISTOR		
	UR 83	2001-000290	CARBON RESISTOR		
	UR 84	2001-000290	CARBON RESISTOR		
	UR 85	2001-000290	CARBON RESISTOR		
	UR 86	2001-000290	CARBON RESISTOR		
	UR 87	2001-000290	CARBON RESISTOR		
	UR 88	2001-000290	CARBON RESISTOR		
	UR 89	2001-000290	CARBON RESISTOR		
	UR 90	2001-000290	CARBON RESISTOR		
	UR 91	2001-000290	CARBON RESISTOR		
	UR 92	2001-000429	CARBON RESISTOR		
	UR 93	2001-000995	CARBON RESISTOR		

■ **Electrical parts list (Front board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	UR 94	2001-000221	CARBON RESISTOR		
	UR 95	2001-000522	CARBON RESISTOR		
	UR110	2001-000995	CARBON RESISTOR		
	UR111	2001-000855	CARBON RESISTOR		
	UR112	2001-000241	CARBON RESISTOR		
	UR113	2001-000855	CARBON RESISTOR		
	UR114	2001-000258	CARBON RESISTOR		
	UR115	2001-000855	CARBON RESISTOR		
	UR116	2001-000591	CARBON RESISTOR		
	UR117	2001-000449	CARBON RESISTOR		
	UR118	2001-000890	CARBON RESISTOR		
	UR119	2001-000290	CARBON RESISTOR		
	UR120	2001-000890	CARBON RESISTOR		
	UR121	2001-000290	CARBON RESISTOR		
	UR123	2001-000010	CARBON RESISTOR		
	UR124	2001-000734	CARBON RESISTOR		
	UR125	2001-000734	CARBON RESISTOR		
	UR126	2001-000591	CARBON RESISTOR		
	UR127	2001-000449	CARBON RESISTOR		
	UR128	2001-000258	CARBON RESISTOR		
	UR129	2001-000241	CARBON RESISTOR		
	UR130	2001-000221	CARBON RESISTOR		
	UR131	2001-000429	CARBON RESISTOR		
	UR150	2001-000786	CARBON RESISTOR		
	UR151	2001-000786	CARBON RESISTOR		
	UR152	2001-000786	CARBON RESISTOR		
	UR153	2001-000786	CARBON RESISTOR		
	UR154	2001-000290	CARBON RESISTOR		
	UR162	2001-000290	CARBON RESISTOR		
	UR164	2001-000515	CARBON RESISTOR		
	UR196	2001-000855	CARBON RESISTOR		
	UR201	2001-000290	CARBON RESISTOR		
	UR202	2001-000290	CARBON RESISTOR		
	UR203	2001-000290	CARBON RESISTOR		
	UR204	2001-000290	CARBON RESISTOR		
	UR205	2001-000290	CARBON RESISTOR		
	UR206	2001-000290	CARBON RESISTOR		
	USR 1	2103-000492	VR-SEMI		
	USW 1	3404-000165	TACT SWITCH		
	USW 3	3404-000165	TACT SWITCH		
	USW 4	3404-000165	TACT SWITCH		
	USW 5	3404-000165	TACT SWITCH		
	USW 6	3404-000165	TACT SWITCH		
	USW 7	3404-000165	TACT SWITCH		
	USW 8	3404-000165	TACT SWITCH		
	USW 9	3404-000165	TACT SWITCH		
	USW10	3404-000165	TACT SWITCH		
	USW11	3404-000165	TACT SWITCH		
	USW12	3404-000165	TACT SWITCH		
	USW13	3404-000165	TACT SWITCH		
	USW14	3404-000165	TACT SWITCH		
	USW15	3404-000165	TACT SWITCH		
	USW16	3404-000165	TACT SWITCH		
	USW17	3404-000165	TACT SWITCH		
	USW18	3404-000165	TACT SWITCH		
	USW19	3404-000165	TACT SWITCH		
	USW20	3404-000165	TACT SWITCH		
	USW21	3404-000165	TACT SWITCH		
	USW22	3404-000165	TACT SWITCH		
	USW23	3404-000165	TACT SWITCH		
	USW24	3404-000165	TACT SWITCH		
	USW25	3404-000165	TACT SWITCH		
	USW26	3404-000165	TACT SWITCH		

⚠	Item	Parts number	Parts name	Remarks	Area
	USW27	3404-000165	TACT SWITCH		
	USW28	3404-000165	TACT SWITCH		
	USW29	3404-000165	TACT SWITCH		
	USW30	3404-000165	TACT SWITCH		
	USW31	3404-000165	TACT SWITCH		
	USW32	3404-000165	TACT SWITCH		
	UVR 2	3406-001047	ROTARY SWITCH		
	UVR 3	3406-001047	ROTARY SWITCH		
	UX 1	2802-000181	RESONATOR		
	UX 2	2801-001394	CRYSTAL		
	VFD	AH07-00040A	VF DISPLAY		

■ **Electrical parts list (Amp board)** **Block No. 03**

⚠	Item	Parts number	Parts name	Remarks	Area
	AC 3	2301-000375	M.CAPACITOR		
	AC 4	2301-000375	M.CAPACITOR		
	AC 8	2201-000368	C.CAPACITOR		
	AC 9	2401-000357	E.CAPACITOR		
	AC 10	2401-000357	E.CAPACITOR		
	AC 11	2201-000368	C.CAPACITOR		
	AC 12	2401-002180	E.CAPACITOR		
	AC 13	2401-001154	E.CAPACITOR		
	AC 14	2201-000658	C.CAPACITOR		
	AC 15	2201-000658	C.CAPACITOR		
	AC 16	2401-001154	E.CAPACITOR		
	AC 17	2401-002180	E.CAPACITOR		
	AC 20	2401-000230	E.CAPACITOR		
	AC 22	2301-000390	M.CAPACITOR		
	AC 23	2401-000240	E.CAPACITOR		
	AC 24	2301-000411	M.CAPACITOR		
	AC 25	2301-000419	M.CAPACITOR		
	AC 26	2401-000240	E.CAPACITOR		
	AC 27	2201-000783	C.CAPACITOR		
	AC 28	2201-000783	C.CAPACITOR		
	AC 29	2401-000240	E.CAPACITOR		
	AC 30	2401-001975	E.CAPACITOR		
	AC 31	2201-000146	C.CAPACITOR		
	AC 32	2401-000240	E.CAPACITOR		
	AC 33	2401-003621	E.CAPACITOR		
	AC 34	2401-001954	E.CAPACITOR		
	AC 35	2301-000475	M.CAPACITOR		
	AC 36	2201-000547	C.CAPACITOR		
	AC 37	2401-001975	E.CAPACITOR		
	AC 38	2401-001975	E.CAPACITOR		
	AC 39	2401-001912	E.CAPACITOR		
	AC 40	2401-001954	E.CAPACITOR		
	AC 41	2401-000240	E.CAPACITOR		
	AC 42	2301-000411	M.CAPACITOR		
	AC 43	2401-000240	E.CAPACITOR		
	AC 44	2401-000240	E.CAPACITOR		
	AC 45	2301-000411	M.CAPACITOR		
	AC 46	2301-000419	M.CAPACITOR		
	AC 47	2201-000381	C.CAPACITOR		
	AC 49	2401-001975	E.CAPACITOR		
	AC 50	2401-000240	E.CAPACITOR		
	AC 51	2401-002180	E.CAPACITOR		
	AC 52	2401-000871	E.CAPACITOR		
	AC 54	2201-000783	C.CAPACITOR		
	AC 55	2201-000783	C.CAPACITOR		
	AC 56	2301-000375	M.CAPACITOR		
	ACW 1	3708-001094	CONNECTOR		
	ACW 2	3711-001167	CONNECTOR	9P 1R 2.5MM STR	
	AC1L	2201-000368	C.CAPACITOR		
	AC1R	2201-000368	C.CAPACITOR		
	AC10L	2301-000375	M.CAPACITOR		
	AC2L	2401-000357	E.CAPACITOR		
	AC2R	2401-000357	E.CAPACITOR		
	AC3R	2401-002180	E.CAPACITOR		
	AC301	2401-000475	E.CAPACITOR		
	AC302	2401-000475	E.CAPACITOR		
	AC303	2401-000475	E.CAPACITOR		
	AC304	2401-000475	E.CAPACITOR		
	AC4L	2401-001154	E.CAPACITOR		
	AC4R	2401-001154	E.CAPACITOR		
	AC5L	2201-000658	C.CAPACITOR		
	AC6L	2401-002180	E.CAPACITOR		
	AC7L	2401-000240	E.CAPACITOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	AC7R	2401-000240	E.CAPACITOR		
	AC8L	2401-000459	E.CAPACITOR		
	AC8R	2401-000459	E.CAPACITOR		
	AC9L	2201-000381	C.CAPACITOR		
	AC9R	2201-000381	C.CAPACITOR		
	AD 5	0402-000127	DIODE		
	AD 6	0401-000101	DIODE		
	AD 7	0401-000101	DIODE		
	AD 8	0401-000101	DIODE		
	AD 9	0401-000101	DIODE		
⚠	AIC 1	1201-001544	IC		
⚠	AIC 2	1201-001599	IC		
	AIC 3	1201-000163	IC		
	AIC 4	1201-000163	IC		
	AIC 5	1201-000163	IC		
	AIC 6	1201-000163	IC		
	AIC 7	1201-000163	IC		
	AL 1	AH27-90001A	COIL-SPRING		
	AL 2	AH27-90001A	COIL-SPRING		
	AL1L	AH27-90001A	COIL-SPRING		
	AL1R	AH27-90001A	COIL-SPRING		
	AQ 1	0501-000407	TRANSISTOR		
	AQ 2	0501-000407	TRANSISTOR		
	AQ 3	0501-000407	TRANSISTOR		
	AQ 6	0501-000010	TRANSISTOR	KSC1008-YTA	
	AQ 8	0501-000610	TRANSISTOR		
	AQ 11	0501-000398	TRANSISTOR		
	AQ 12	0501-000398	TRANSISTOR		
	AQ 13	0501-000398	TRANSISTOR		
	AQ 14	0501-000610	TRANSISTOR		
	AQ2L	0501-000407	TRANSISTOR		
	AQ2R	0501-000407	TRANSISTOR		
	AR 1	2003-000689	OMF RESISTOR		
	AR 2	2003-000689	OMF RESISTOR		
	AR 3	2001-000065	CARBON RESISTOR		
	AR 4	2001-000290	CARBON RESISTOR		
	AR 5	2003-000008	OMF RESISTOR		
	AR 6	2001-000290	CARBON RESISTOR		
	AR 7	2001-000258	CARBON RESISTOR		
	AR 8	2001-000864	CARBON RESISTOR		
	AR 9	2003-000390	OMF RESISTOR		
	AR 10	2003-000390	OMF RESISTOR		
	AR 11	2003-000390	OMF RESISTOR		
	AR 12	2003-000390	OMF RESISTOR		
	AR 13	2003-000008	OMF RESISTOR		
	AR 14	2001-000864	CARBON RESISTOR		
	AR 15	2001-000258	CARBON RESISTOR		
	AR 20	2001-000660	CARBON RESISTOR		
	AR 21	2001-000429	CARBON RESISTOR		
	AR 22	2001-000017	CARBON RESISTOR		
	AR 24	2001-000017	CARBON RESISTOR		
	AR 25	2001-000515	CARBON RESISTOR		
	AR 26	2001-000273	CARBON RESISTOR		
	AR 32	2001-000273	CARBON RESISTOR		
	AR 33	2001-000281	CARBON RESISTOR		
	AR 34	2001-000522	CARBON RESISTOR		
	AR 35	2001-000522	CARBON RESISTOR		
	AR 36	2001-000281	CARBON RESISTOR		
	AR 37	2001-000258	CARBON RESISTOR		
	AR 38	2001-000802	CARBON RESISTOR		
	AR 39	2001-000522	CARBON RESISTOR		
	AR 40	2001-000508	CARBON RESISTOR		
	AR 41	2001-000281	CARBON RESISTOR		

■ **Electrical parts list (Amp board)** **Block No. 03**

⚠	Item	Parts number	Parts name	Remarks	Area
	AR 42	2001-000008	CARBON RESISTOR		
	AR 43	2001-000331	CARBON RESISTOR		
	AR 44	2001-000273	CARBON RESISTOR		
	AR 45	2001-000786	CARBON RESISTOR		
	AR 46	2001-000281	CARBON RESISTOR		
	AR 47	2001-000273	CARBON RESISTOR		
	AR 48	2001-000273	CARBON RESISTOR		
	AR 49	2001-000548	CARBON RESISTOR		
	AR 50	2001-000563	CARBON RESISTOR		
	AR 51	2001-000273	CARBON RESISTOR		
	AR 52	2001-000977	CARBON RESISTOR		
	AR 53	2001-000508	CARBON RESISTOR		
	AR 54	2001-000449	CARBON RESISTOR		
	AR 55	2001-000786	CARBON RESISTOR		
	AR 56	2001-000554	CARBON RESISTOR		
	AR 57	2001-000802	CARBON RESISTOR		
	AR 58	2001-000273	CARBON RESISTOR		
	AR 59	2001-000281	CARBON RESISTOR		
	AR 60	2001-000522	CARBON RESISTOR		
	AR 61	2001-000522	CARBON RESISTOR		
	AR 62	2001-000563	CARBON RESISTOR		
	AR 63	2001-000281	CARBON RESISTOR		
	AR 64	2001-000258	CARBON RESISTOR		
	AR 65	2001-000864	CARBON RESISTOR		
	AR 66	2001-000508	CARBON RESISTOR		
	AR 67	2001-000508	CARBON RESISTOR		
	AR 68	2001-000281	CARBON RESISTOR		
	AR 69	2001-000522	CARBON RESISTOR		
	AR 70	2001-000522	CARBON RESISTOR		
	AR 71	2001-000281	CARBON RESISTOR		
	AR 72	2001-000281	CARBON RESISTOR		
	AR 73	2001-001000	CARBON RESISTOR		
	AR 74	2001-000273	CARBON RESISTOR		
	AR 75	2001-000281	CARBON RESISTOR		
	AR 77	2001-000065	CARBON RESISTOR		
	AR 78	2003-000008	OMF RESISTOR		
	AR 79	2003-000008	OMF RESISTOR		
	AR 80	2001-000660	CARBON RESISTOR		
	AR 81	2001-000660	CARBON RESISTOR		
	AR 82	2001-000660	CARBON RESISTOR		
	AR 83	2001-000786	CARBON RESISTOR		
	AR 84	2001-000591	CARBON RESISTOR		
	AR 86	2001-000591	CARBON RESISTOR		
	AR 87	2001-000591	CARBON RESISTOR		
	AR 88	2001-000290	CARBON RESISTOR		
	AR 89	2001-000786	CARBON RESISTOR		
	ARL 1	3501-001197	RELAY MINIATURE	OSA-SS-212DM3	
	AR1L	2001-000290	CARBON RESISTOR		
	AR1R	2001-000290	CARBON RESISTOR		
	AR11L	2001-000522	CARBON RESISTOR		
	AR11R	2001-000522	CARBON RESISTOR		
	AR12L	2001-000281	CARBON RESISTOR		
	AR12R	2001-001000	CARBON RESISTOR		
	AR13L	2001-000864	CARBON RESISTOR		
	AR13R	2001-000281	CARBON RESISTOR		
	AR14L	2001-001000	CARBON RESISTOR		
	AR14R	2001-000864	CARBON RESISTOR		
	AR15L	2003-000689	OMF RESISTOR		
	AR15R	2003-000689	OMF RESISTOR		
	AR2L	2001-000258	CARBON RESISTOR		
	AR2R	2001-000258	CARBON RESISTOR		
	AR3L	2001-000864	CARBON RESISTOR		
	AR3R	2001-000864	CARBON RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	AR300	2001-000429	CARBON RESISTOR		
	AR310	2001-000786	CARBON RESISTOR		
	AR311	2001-000786	CARBON RESISTOR		
	AR312	2001-000786	CARBON RESISTOR		
	AR4L	2001-000864	CARBON RESISTOR		
	AR4R	2001-000864	CARBON RESISTOR		
	AR6L	2001-000017	CARBON RESISTOR		
	AR6R	2001-000017	CARBON RESISTOR		
	AR7L	2001-000429	CARBON RESISTOR		
	AR7R	2001-000429	CARBON RESISTOR		
	AR8L	2001-000591	CARBON RESISTOR		
	AR8R	2001-000591	CARBON RESISTOR		
	SPK	3716-001164	TERMINAL-BLOCK		

■ **Electrical parts list (Voice cancel board)** **Block No. 04**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 301	2401-000907	E.CAPACITOR		
	C 302	2401-000438	E.CAPACITOR		
	C 303	2301-000216	C-FLIM,PEF		
	C 304	2301-000470	C-FILM,PEF		
	C 305	2401-000438	E.CAPACITOR		
	C 306	2301-000462	C-FILM,PEF		
	C 307	2401-000656	E.CAPACITOR		
	C 308	2401-000438	E.CAPACITOR		
	C 309	2401-000438	E.CAPACITOR		
	C 310	2401-001954	E.CAPACITOR		
	C 311	2401-001912	E.CAPACITOR		
	CW301	3710-000209	CONNECTOR		
	CW302	3710-000209	CONNECTOR		
	IC301	1204-000393	IC		
	R 301	2001-000027	CARBON RESISTOR		
	R 302	2001-000522	CARBON RESISTOR		
	R 303	2001-000522	CARBON RESISTOR		
	R 304	2001-000802	CARBON RESISTOR		
	R 305	2001-000894	CARBON RESISTOR		
	R 306	2001-000786	CARBON RESISTOR		
	R 307	2001-000281	CARBON RESISTOR		
	R 308	2001-000522	CARBON RESISTOR		
	R 309	2001-000802	CARBON RESISTOR		
	RCW 2	3711-000190	CONNECTOR		
	RFS 2	3602-000147	FUSE CLIP		
⚠	RFS 2	3601-000282	FUSE CARTRIDGE		
⚠	RFS 3	3601-000226	FUSE CARTRIDGE		
	RFS 3	3602-000147	FUSE CLIP		
⚠	RFS 4	3601-000216	FUSE CARTRIDGE		
	RFS 4	3602-000147	FUSE CLIP		
⚠	RSW 1	AH34-00013A	VOLTAGE SELECT		
	ZD301	0403-000317	ZENER DIODE		

■ **Electrical parts list (VCD board)** **Block No. 05**

⚠	Ite	Parts number	Parts name	Remarks	Area
	AC 5	2202-000791	C.CAPACITOR		
	AC 6	2202-000791	C.CAPACITOR		
	AC 11	2202-000780	C.CAPACITOR		
	AC 12	2202-000780	C.CAPACITOR		
	ACE 1	2401-000419	E.CAPACITOR		
	ACE 2	2401-000419	E.CAPACITOR		
	ACE 3	2401-000459	E.CAPACITOR		
	ACE 4	2401-001092	E CAPACITOR		
	ACE 8	2401-001511	E.CAPACITOR		
	ACE 9	2401-001511	E.CAPACITOR		
	ACE10	2401-000459	E.CAPACITOR		
	ACE4A	2401-001364	E.CAPACITOR		
	AIC 3	A4012-0597	IC	KA4558DTF STICK	
	AQ 3	0501-000637	TRANSISTOR		
	AQ 4	0504-000144	DIGI TRANSISTOR		
	AQ 5	0501-000637	TRANSISTOR		
	AR 12	2001-000273	CARBON RESISTOR		
	AR 13	2001-000290	CARBON RESISTOR		
	AR 15	2001-000273	CARBON RESISTOR		
	AR 16	2001-000290	CARBON RESISTOR		
	AR 17	2001-000522	CARBON RESISTOR		
	AR 20	2001-000273	CARBON RESISTOR		
	AR 22	2001-000273	CARBON RESISTOR		
	AR 24	2001-000515	CARBON RESISTOR		
	AR 28	2001-000515	CARBON RESISTOR		
	AR 30	2001-000515	CARBON RESISTOR		
	AR 31	2001-000515	CARBON RESISTOR		
	AR 32	2001-000515	CARBON RESISTOR		
	AR 33	2001-000515	CARBON RESISTOR		
	C 101	2401-000244	E.CAPACITOR		
	C 102	2202-000796	C.CAPACITOR		
	C 103	2202-000797	C.CAPACITOR		
	C 104	2202-000848	C.CAPACITOR		
	C 105	2202-000644	C.CAPACITOR		
	C 106	2401-001965	E.CAPACITOR		
	C 107	2401-000244	E.CAPACITOR		
	C 111	2202-000797	C.CAPACITOR		
	C 112	2202-000796	C.CAPACITOR		
	C 113	2202-000797	C.CAPACITOR		
	C 114	2401-001627	E.CAPACITOR		
	C 115	2202-000780	C.CAPACITOR		
	C 116	2202-000780	C.CAPACITOR		
	C 117	2202-000796	C.CAPACITOR		
	C 118	2202-000780	C.CAPACITOR		
	C 119	2202-000644	C.CAPACITOR		
	C 120	2401-001965	E.CAPACITOR		
	C 121	2202-000797	C.CAPACITOR		
	C 122	2301-000469	M.CAPACITOR		
	C 123	2401-000419	E.CAPACITOR		
	C 124	2202-000780	C.CAPACITOR		
	C 125	2202-000814	C.CAPACITOR		
	C 126	2201-000338	C.CAPACITOR		
	C 127	2201-000368	C.CAPACITOR		
	C 128	2202-000644	C.CAPACITOR		
	C 129	2202-000780	C.CAPACITOR		
	C 130	2202-000780	C.CAPACITOR		
	C 132	2401-000795	E.CAPACITOR		
	C 133	2401-000244	E.CAPACITOR		
	C 134	2202-000797	C.CAPACITOR		
	C 201	2202-000797	C.CAPACITOR		
	C 203	2202-000829	C.CAPACITOR		
	C 204	2202-000797	C.CAPACITOR		
	C 209	2202-000797	C.CAPACITOR		

■ **Electrical parts list (VCD board)** **Block No. 05**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 212	2401-000244	E.CAPACITOR		
	C 213	2202-000797	C.CAPACITOR		
	C 215	2401-000244	E.CAPACITOR		
	C 216	2202-000797	C.CAPACITOR		
	C 217	2401-000244	E.CAPACITOR		
	C 218	2202-000797	C.CAPACITOR		
	CW 1	3711-000906	CONNECTOR		
	CW 2	AH39-00345A	WIRE HARNESS		
	CW 3	AH39-20561P	LEAD CONNECTOR		
	CW 4	3711-003379	CONNECTOR	35366-0310	
	CW 5	3708-001027	CONNECTOR		
	CW 6	3708-001131	CONNECTOR		
	CW 7	3711-000826	CONNECTOR		
	C101A	2401-000795	E.CAPACITOR		
	C111B	2201-000432	C.CAPACITOR		
	C120A	2401-000795	E.CAPACITOR		
	C124A	2301-000456	M.CAPACITOR		
	C201A	2202-000797	C.CAPACITOR		
	DR 1	2001-000666	CARBON RESISTOR		
	DR 2	2001-000666	CARBON RESISTOR		
	DR 3	2001-000666	CARBON RESISTOR		
	DR 4	2001-000666	CARBON RESISTOR		
	DR 5	2001-000666	CARBON RESISTOR		
	DR 6	2001-000666	CARBON RESISTOR		
	DR 7	2001-000666	CARBON RESISTOR		
	DR 8	2001-000666	CARBON RESISTOR		
	DR 9	2001-000666	CARBON RESISTOR		
	DR 10	2001-000666	CARBON RESISTOR		
	DR 11	2001-000666	CARBON RESISTOR		
	DR 12	2001-000281	CARBON RESISTOR		
	DR 13	2001-000281	CARBON RESISTOR		
	DR 14	2001-000281	CARBON RESISTOR		
	DR 15	2001-000666	CARBON RESISTOR		
	DR 16	2001-000666	CARBON RESISTOR		
	DR 17	2001-000666	CARBON RESISTOR		
	DR 18	2001-000666	CARBON RESISTOR		
	DR 19	2001-000666	CARBON RESISTOR		
	DR 20	2001-000666	CARBON RESISTOR		
	DR 21	2001-000666	CARBON RESISTOR		
	DR 22	2001-000666	CARBON RESISTOR		
	DR 23	2001-000666	CARBON RESISTOR		
	DR 24	2001-000666	CARBON RESISTOR		
	DR 25	2001-000666	CARBON RESISTOR		
	DR 26	2001-000666	CARBON RESISTOR		
	DR 27	2001-000666	CARBON RESISTOR		
	DR 28	2001-000666	CARBON RESISTOR		
	DR 29	2001-000666	CARBON RESISTOR		
	DR 30	2001-000666	CARBON RESISTOR		
	DR 31	2001-000666	CARBON RESISTOR		
	DR 32	2001-000666	CARBON RESISTOR		
	DR 33	2001-000666	CARBON RESISTOR		
	DR 34	2001-000666	CARBON RESISTOR		
	DR 35	2001-000666	CARBON RESISTOR		
	DR 36	2001-000666	CARBON RESISTOR		
	DR 37	2001-000666	CARBON RESISTOR		
	DR 38	2001-000666	CARBON RESISTOR		
	DR 39	2001-000666	CARBON RESISTOR		
	DR 40	2001-000666	CARBON RESISTOR		
	DR 41	2001-000281	CARBON RESISTOR		
	DR 42	2001-000666	CARBON RESISTOR		
	DR 43	2001-000666	CARBON RESISTOR		
	DR 44	2001-000666	CARBON RESISTOR		
	DR 45	2001-000281	CARBON RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	DR 46	2001-000281	CARBON RESISTOR		
	DR 47	2001-000281	CARBON RESISTOR		
	DR 48	2001-000281	CARBON RESISTOR		
	DR 49	2001-000281	CARBON RESISTOR		
	DR 50	2001-000281	CARBON RESISTOR		
	DR 51	2001-000281	CARBON RESISTOR		
	DR 52	2001-000281	CARBON RESISTOR		
	DR 53	2001-000281	CARBON RESISTOR		
	DR 54	2001-000281	CARBON RESISTOR		
	DR 55	2001-000281	CARBON RESISTOR		
	DR 56	2001-000281	CARBON RESISTOR		
	DR 57	2001-000281	CARBON RESISTOR		
	DR 58	2001-000281	CARBON RESISTOR		
	DR 59	2001-000281	CARBON RESISTOR		
	DR 60	2001-000281	CARBON RESISTOR		
	DR 61	2001-000429	CARBON RESISTOR		
	FMR 1	2001-000273	CARBON RESISTOR		
	FMR 2	2001-000273	CARBON RESISTOR		
	MB 1	3301-000297	FERRITE BEAD	3.6X1.2X5.7MM	
	MB 2	3301-000297	FERRITE BEAD	3.6X1.2X5.7MM	
	MC 1	2201-000247	C.CAPACITOR		
	MC 2	2201-000247	C.CAPACITOR		
	MC 4	2202-000797	C.CAPACITOR		
	MC 5	2202-000797	C.CAPACITOR		
	MC 6	2202-000797	C.CAPACITOR		
	MC 8	2202-000797	C.CAPACITOR		
	MC 9	2202-000780	C.CAPACITOR		
	MC 10	2202-000780	C.CAPACITOR		
	MC 11	2202-000780	C.CAPACITOR		
	MC 12	2202-000780	C.CAPACITOR		
	MC 13	2202-000825	C.CAPACITOR		
	MC 15	2202-000851	C.CAPACITOR		
	MC 16	2202-000781	C.CAPACITOR		
	MC 17	2202-000231	C.CAPACITOR		
	MC 18	2201-000247	C.CAPACITOR		
	MC 19	2201-000247	C.CAPACITOR		
	MC 20	2201-000423	C.CAPACITOR		
	MC 21	2202-000797	C.CAPACITOR		
	MC 25	2202-000780	C.CAPACITOR		
	MC 26	2202-000780	C.CAPACITOR		
	MCE 1	2401-001511	E.CAPACITOR		
	MCE 3	2401-001511	E.CAPACITOR		
	MCE 4	2401-001511	E.CAPACITOR		
	MCE 5	2401-000244	E.CAPACITOR		
	MCE3A	2401-000244	E.CAPACITOR		
	MCE3D	2401-000244	E.CAPACITOR		
	MC21A	2202-000797	C.CAPACITOR		
	MC21B	2202-000797	C.CAPACITOR		
	MC8A	2201-000504	C.CAPACITOR		
	MC8B	2202-000797	C.CAPACITOR		
	MC8V	2202-000797	C.CAPACITOR		
	MC9A	2202-000780	C.CAPACITOR		
	MC9V	2202-000797	C.CAPACITOR		
	MIC 1	AH09-00072A	IC		
	MIC 2	AJ11-12001A	IC-SRAM		
	MIC 3	1204-001370	IC		
	MIC 4	1204-001723	IC	W9923QF	
	MIC 5	AH14-10004R	IC		
	MIC 6	AH11-12001A-1	IC	MHB416256A-35J	
	ML 1	2701-000150	INDUCTOR		
	ML 2	2701-000197	INDUCTOR		
	ML 3	2701-000146	INDUCTOR		
	MQ 1	0504-000117	DIGI TRANSISTOR		

■ **Electrical parts list (VCD board)** **Block No. 05**

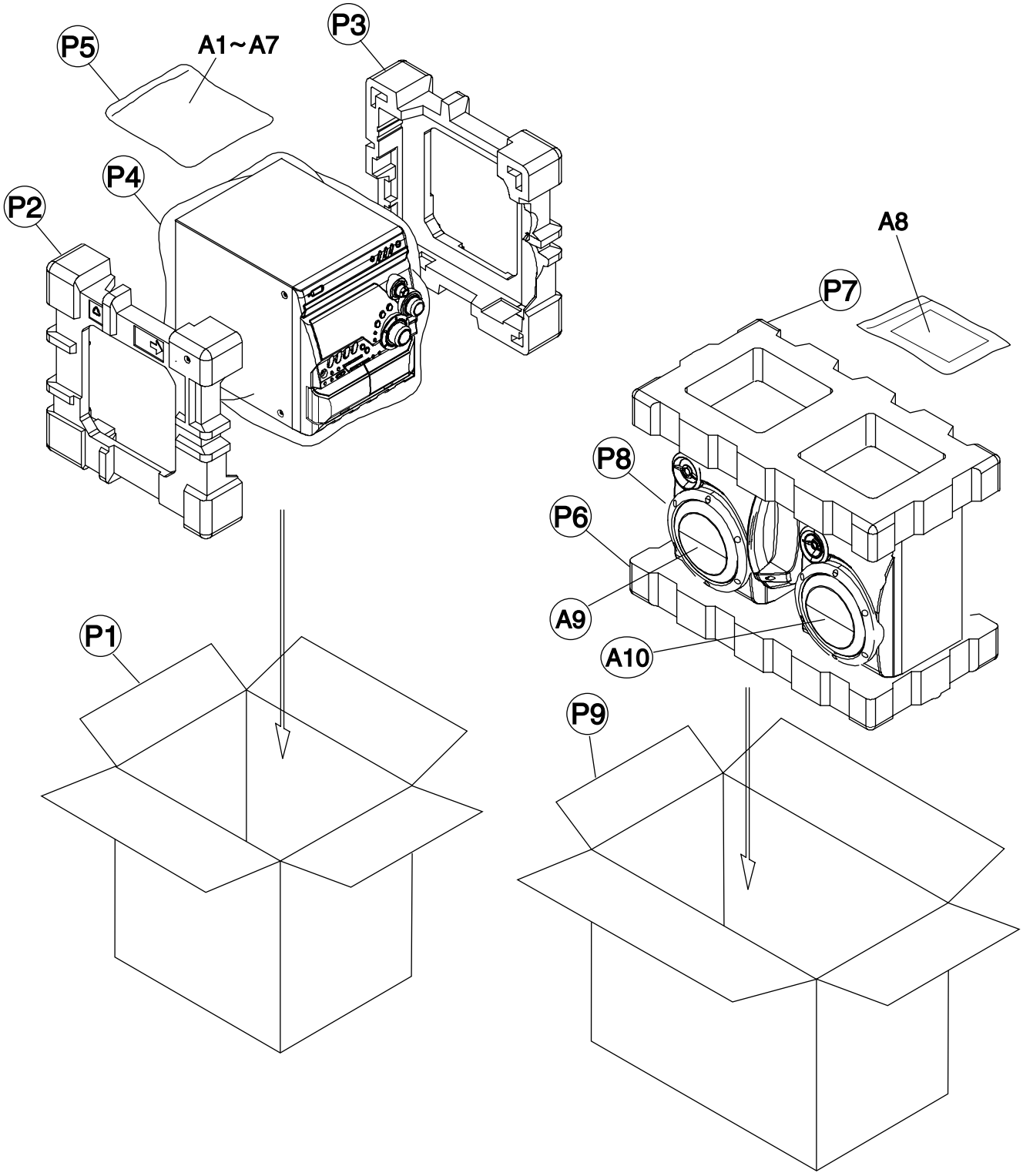
⚠	Item	Parts number	Parts name	Remarks	Area
	MQ 2	0501-000610	TRANSISTOR		
	MQ1A	1203-001543	IC	78R33	
	MQ10B	0501-000010	TRANSISTOR		
	MR 11	2001-000522	CARBON RESISTOR		
	MR 25	2001-000429	CARBON RESISTOR		
	MR 33	2001-000429	CARBON RESISTOR		
	MR 34	2001-000429	CARBON RESISTOR		
	MR 35	2001-000429	CARBON RESISTOR		
	MR 36	2001-000429	CARBON RESISTOR		
	MR 37	2001-000429	CARBON RESISTOR		
	MR 39	2001-000429	CARBON RESISTOR		
	MR 40	2001-000290	CARBON RESISTOR		
	MR 51	2001-000969	CARBON RESISTOR		
	MR 52	2001-000924	CARBON RESISTOR		
	MR 53	2001-000325	CARBON RESISTOR		
	MR 57	2001-000435	CARBON RESISTOR		
	MR10B	2001-000995	CARBON RESISTOR		
	MR23A	2001-000734	CARBON RESISTOR		
	MR24A	2001-000734	CARBON RESISTOR		
	MR52A	2001-000591	CARBON RESISTOR		
	MR53A	2001-000660	CARBON RESISTOR		
	MX 1	2801-001423	CRYSTAL		
	MX 2	2801-003130	CRYSTAL		
	MZ 10	0403-000344	ZENER DIODE		
	PR 20	2001-000734	CARBON RESISTOR		
	PR 50	2001-001004	CARBON RESISTOR		
	R 101	2001-000864	CARBON RESISTOR		
	R 102	2001-000864	CARBON RESISTOR		
	R 103	2001-000864	CARBON RESISTOR		
	R 104	2001-000864	CARBON RESISTOR		
	R 105	2001-000319	CARBON RESISTOR		
	R 106	2001-000319	CARBON RESISTOR		
	R 107	2001-001006	CARBON RESISTOR		
	R 108	2001-000302	CARBON RESISTOR		
	R 110	2001-000411	CARBON RESISTOR		
	R 112	2001-000989	CARBON RESISTOR		
	R 113	2001-000548	CARBON RESISTOR		
	R 114	2001-000522	CARBON RESISTOR		
	R 115	2001-000591	CARBON RESISTOR		
	R 116	2001-000009	CARBON RESISTOR		
	R 117	2001-000331	CARBON RESISTOR		
	R 118	2001-000435	CARBON RESISTOR		
	R 119	2001-000319	CARBON RESISTOR		
	R 120	2001-000864	CARBON RESISTOR		
	R 121	2001-000008	CARBON RESISTOR		
	R 123	2001-000702	CARBON RESISTOR		
	R 124	2001-000319	CARBON RESISTOR		
	R 125	2001-000273	CARBON RESISTOR		
	R 126	2001-000864	CARBON RESISTOR		
	R 127	2001-000319	CARBON RESISTOR		
	R 128	2001-000273	CARBON RESISTOR		
	R 129	2001-000786	CARBON RESISTOR		
	R 131	2001-000429	CARBON RESISTOR		
	R 132	2001-000290	CARBON RESISTOR		
	R 133	2001-001000	CARBON RESISTOR		
	R 201	2001-000281	CARBON RESISTOR		
	R 202	2001-000435	CARBON RESISTOR		
	R 204	2001-000429	CARBON RESISTOR		
	R 206	2001-000429	CARBON RESISTOR		
	R 207	2001-000429	CARBON RESISTOR		
	R 208	2001-000429	CARBON RESISTOR		
	R 209	2001-000429	CARBON RESISTOR		
	R 210	2001-000515	CARBON RESISTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	R 211	2001-000281	CARBON RESISTOR		
	R 212	2001-000281	CARBON RESISTOR		
	R 213	2001-000281	CARBON RESISTOR		
	R 803	2001-000429	CARBON RESISTOR		
	R 804	2001-000429	CARBON RESISTOR		
	R 805	2001-000429	CARBON RESISTOR		
	R 806	2001-000429	CARBON RESISTOR		
	R110A	2001-000850	CARBON RESISTOR		
	R210A	2001-000734	CARBON RESISTOR		
	R210B	2001-000734	CARBON RESISTOR		
	SC 45	2202-000797	C.CAPACITOR		
	SC 46	2202-000780	C.CAPACITOR		
	SC 47	2202-000780	C.CAPACITOR		
	SC 48	2202-000780	C.CAPACITOR		
	SC 49	2202-000780	C.CAPACITOR		
	SCE17	2401-001893	E.CAPACITOR		
	SCE7A	2401-001893	E.CAPACITOR		
	SIC 1	1204-001799	IC		
	SIC 2	0904-001524	IC		
	SIC 3	1003-001100	IC		
	SIC 4	1003-001162	IC		
	SR 0	2001-000429	CARBON RESISTOR		
	SR 1	2001-000429	CARBON RESISTOR		
	SR 3	2001-000429	CARBON RESISTOR		
	SR 4	2001-000429	CARBON RESISTOR		
	SR 23	2001-000429	CARBON RESISTOR		
	SR 38	2001-000734	CARBON RESISTOR		
	SR 39	2001-000734	CARBON RESISTOR		
	SR 41	2001-000281	CARBON RESISTOR		
	SR 42	2001-000734	CARBON RESISTOR		
	SR4A	2001-000429	CARBON RESISTOR		
	SR40A	2001-000429	CARBON RESISTOR		
	SR42A	2001-000429	CARBON RESISTOR		
	SW 1	3708-001388	CONNECTOR		
	SW 2	3711-001061	CONNECTOR		
	SX 1	2801-001423	CRYSTAL		
	SZD 1	0403-000361	DIODE-ZENER		
	SZD 2	0403-000354	DIODE-ZENER		

< MEMO >

Packing materials and accessories parts list

Block No. M 3 M M
Block No. M 5 M M



■ Parts list (Packing)

Block No. M3MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	AH69-00351G	PACKING CASE	1	MX-G65V	
		AH69-00351H	PACKING CASE	1	MX-G68V	
	P 2	AH69-00343A	CUSHION-L	1	FOR SET	
	P 3	AH69-00344A	CUSHION-R	1	FOR SET	
	P 4	AH69-30012T	POLY BAG	1	FOR SET	
	P 5	18654-101-00	POLY BAG	1	FOR ACCESSORIES	
	P 6	AH81-00374U	CUSHION-BOTTOM	1	FOR SPEAKER	
	P 7	AH81-00374T	CUSHION-TOP	1	FOR SPEAKER	
	P 8	AH81-00373P	POLY BAG	2	FOR SPEAKER	
	P 9	AH81-00373S	PACKING-CASE	1	SP-MXG65V	UX
		AH81-00374Z	PACKING-CASE	1	SP-MXG68V	US
		AH81-00374Y	PACKING-CASE	1	SP-MXG65V	US
		AH81-00373T	PACKING-CASE	1	SP-MXG68V	UX

■ Parts list (Accessories)

Block No. M5MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	AH68-00900A	I/B MX-G65V/68V	1	ARA	US
		AH68-00900B	I/B MX-G65V/68V	1	ARA	UX
		AH68-00900B	I/B MX-G65V/68V	1	ENG CHI(PEKIN)	UX
		AH68-00900A	I/B MX-G65V/68V	1	ENG CHI(PEKIN)	US
	A 2	AH59-00125B	REMOCON-ASSY	1	RM-SMXG65V(G65V	
	A 3	AH38-10001A	FM-WIRE	1		
	A 4	AH42-20001S	LOOP ANTENNA	1		
	A 5	----------	BATTERY	2		
⚠	A 6	3721-000117	CONVERSION PLUG	1		US
⚠		3721-001045	CONVERSION PLUG	1		UX
	A 7	AH39-40001T	VIDEO CABLE	1		
	A 8	LVT0731-001A	I/B SP-MXG68/65	1	ARA	
		LVT0731-001A	I/B SP-MXG68/65	1	ENG CHI(PEKIN)	
	A 9	MXG68K-SPBOX-L	SPEAKER BOX	1	MX-G68V	
		MXG65K-SPBOX-L	SPEAKER BOX	1	MX-G65V	
	A 10	MXG68K-SPBOX-R	SPEAKER BOX	1	MX-G68V	
		MXG65K-SPBOX-R	SPEAKER BOX	1	MX-G65V	