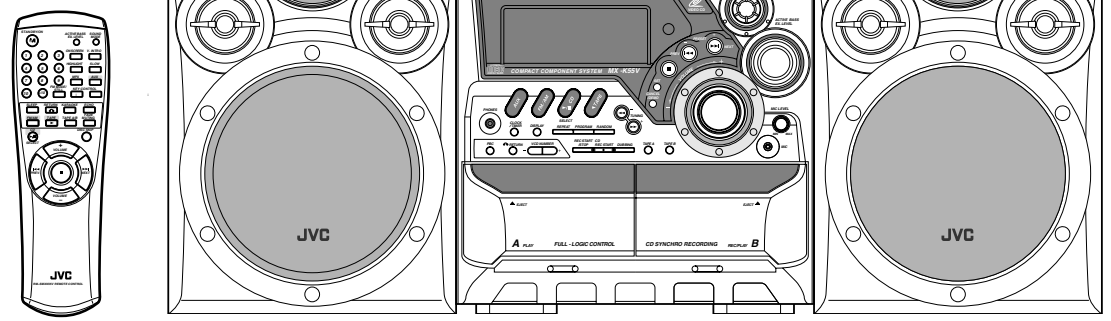
JVC

SERVICE MANUAL

COMPACT COMPONENT SYSTEM

MX-K55V

Area Suffix	
US	Singapore
UX	Saudi Arabia



SP-MXK55 CA-MXK55V SP-MXK55

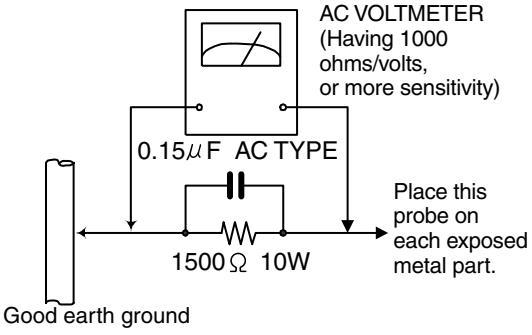
VIDEO CD

Contents

No.21017
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

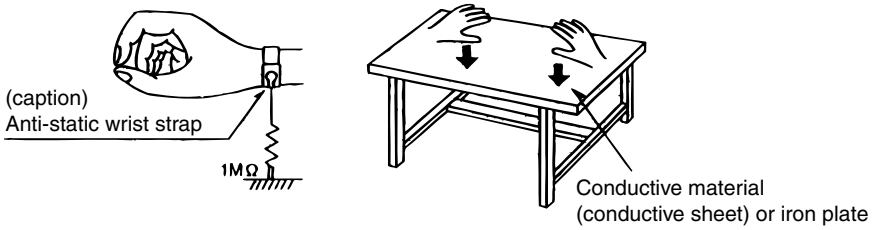
In the equipment which uses optical pick-up (laser diode), optical pick-up is destroyed by the static electricity of the work environment.
Be careful to use proper grounding in the area where repairs are being performed.

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.

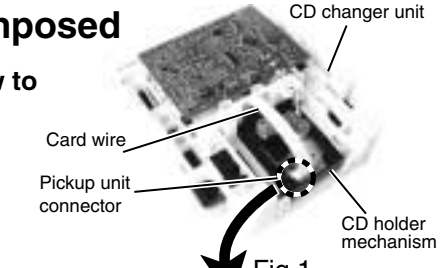


Fig.1

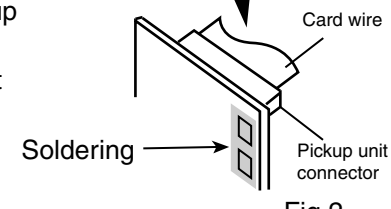


Fig.2

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.

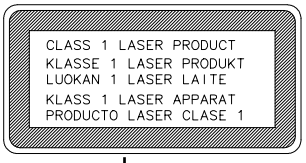
5.CAUTION : If safety switches malfunction, the laser is able to function.

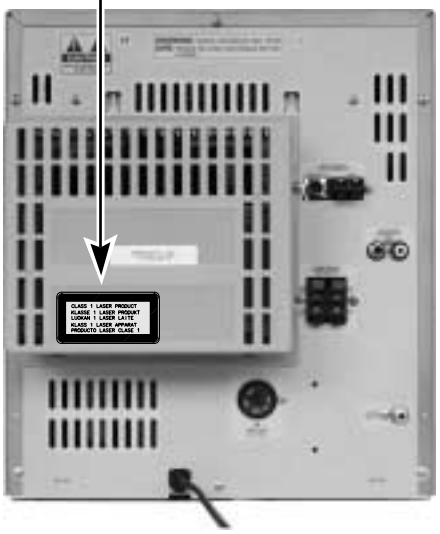
6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

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

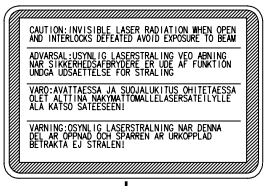
Position of labels

CLASS 1
LASER PRODUCT





WARNING LABEL



Disassembly method

<Main body>

■ Removing the metal cover

(See Fig.1 to 3)

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.

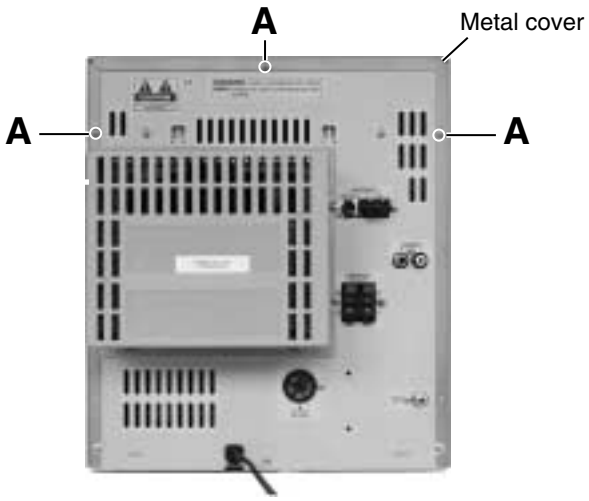


Fig.1

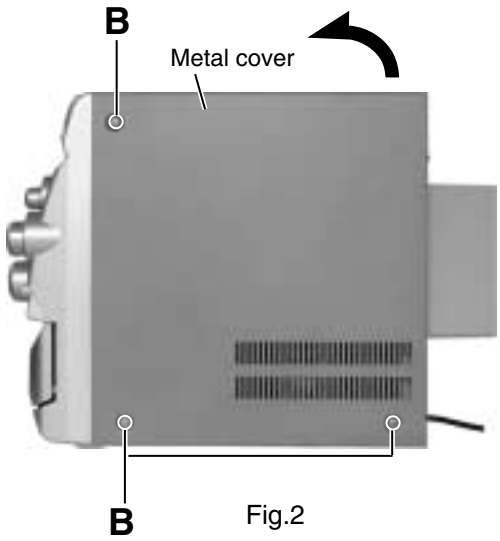


Fig.2

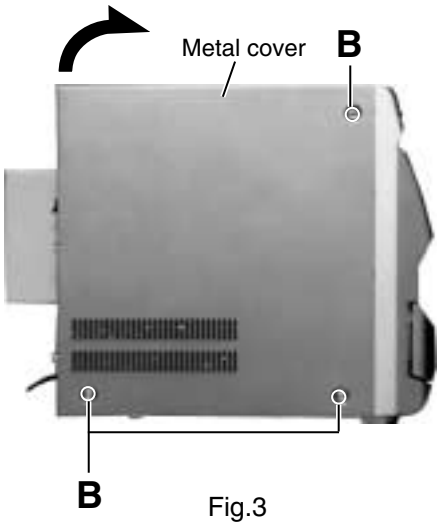


Fig.3

■Removing the CD Tray fitting (1) (See Fig. 4 to 6)

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

1. Press the POWER button. Press the OPEN/CLOSE button to eject the CD tray.
2. After drawing the lower part of the tray fitting toward the front, remove the five claws **a**. Then, while moving the tray fitting upward, remove it.
3. Press the OPEN/CLOSE button to insert the tray.

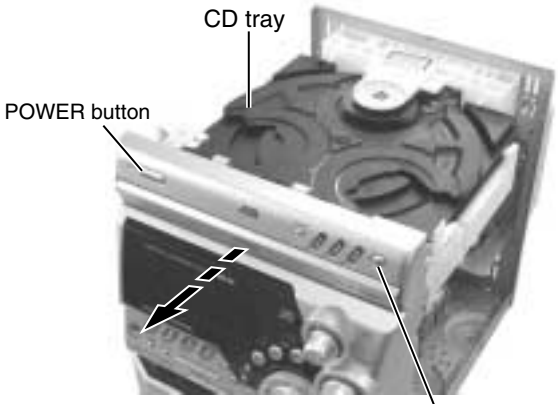


Fig.4

■Removing the CD Tray fitting (2) (See Fig. 5 to 7)

- How to eject the CD tray without turning on power -

1. Turn the black loading pulley gear marked **b** from the back of the CD changer unit as shown in Fig.7 and draw the CD tray toward the front.
2. After drawing the lower part of the tray fitting toward the front, remove the five claws **a**. Then, while moving the tray fitting upward, remove it.
3. Push and insert the CD tray manually.

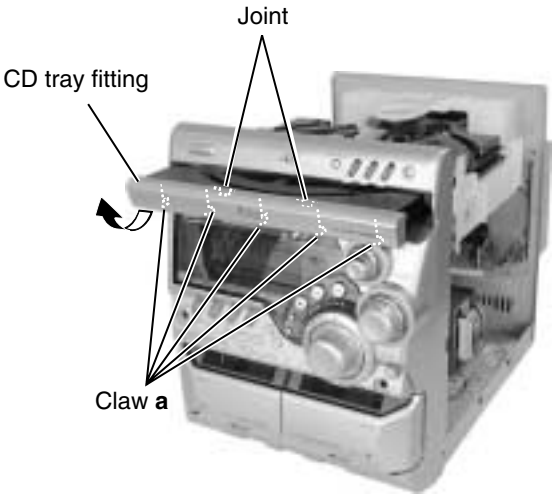


Fig.5

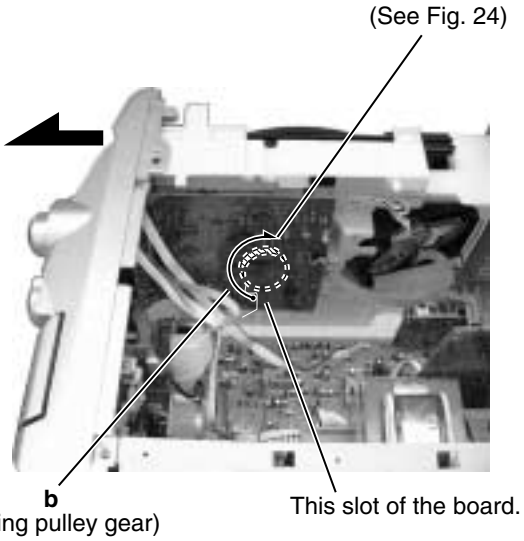


Fig.7

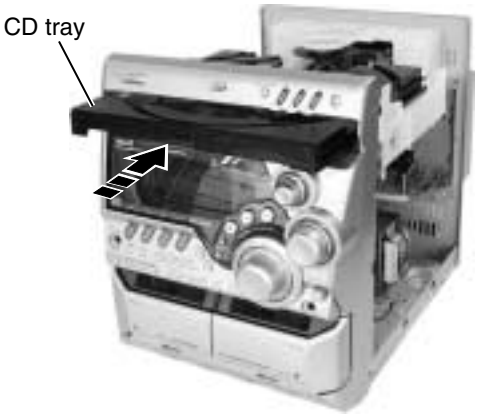


Fig.6

■Removing the CD changer unit (See Fig.8 to 10)

・ 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 card wire from connector UCW3 of the FL display and system control board on the back of the CD changer unit.
3. Disconnect the harness from connector RCW6 on the inner side of the main board in the body.
4. Remove the two screws **C** attaching the CD changer unit on the back of the body.
5. Remove the two screws **D** attaching the CD changer unit on the both side of the body.
6. Draw the CD changer unit upward from behind while pulling the rear panel outward.

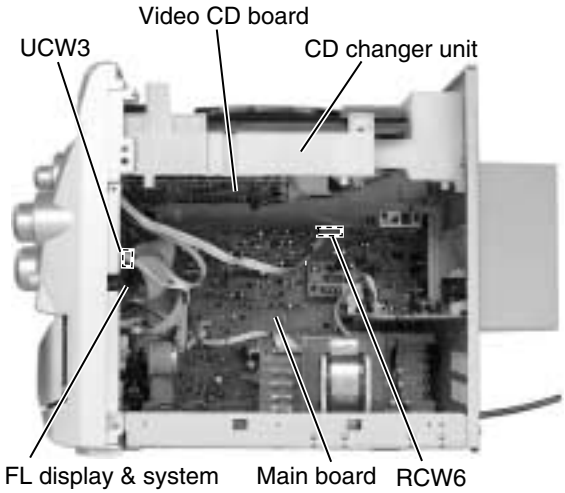


Fig.8

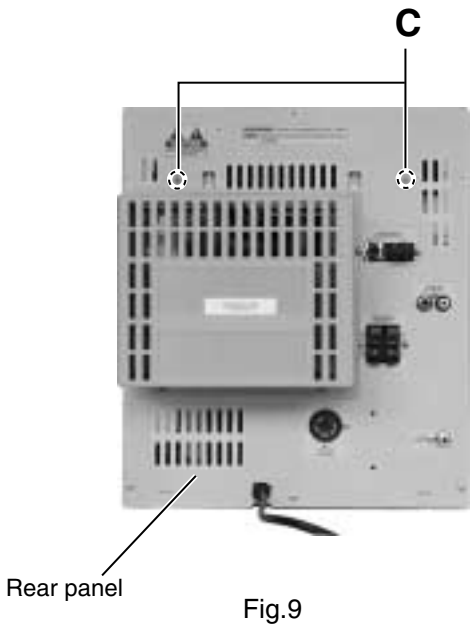


Fig.9

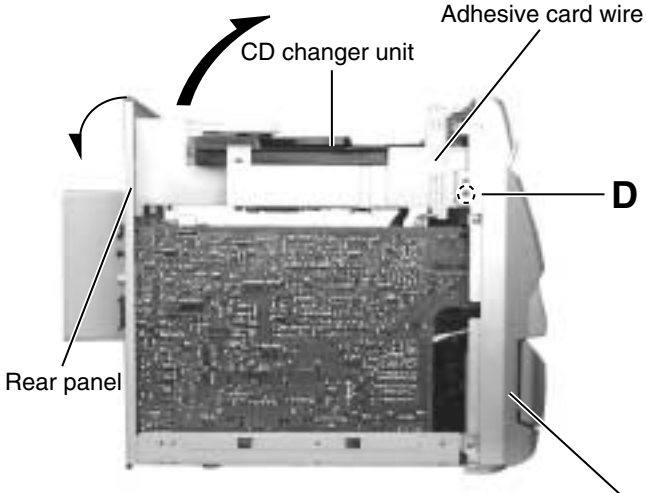


Fig.10 b

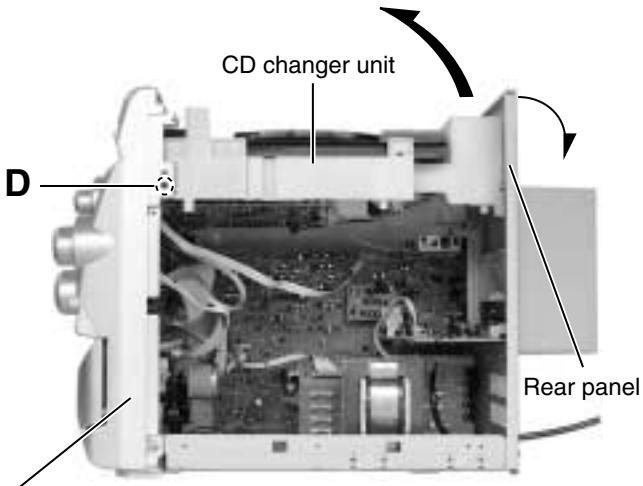


Fig.10 a

Front panel assembly

■Removing the front panel assembly (See Fig.11 to 13)

・ 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 ECW1,JCW1, JCW2 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 **c** on both sides and two joints **d** on the bottom of the body using a screwdriver.

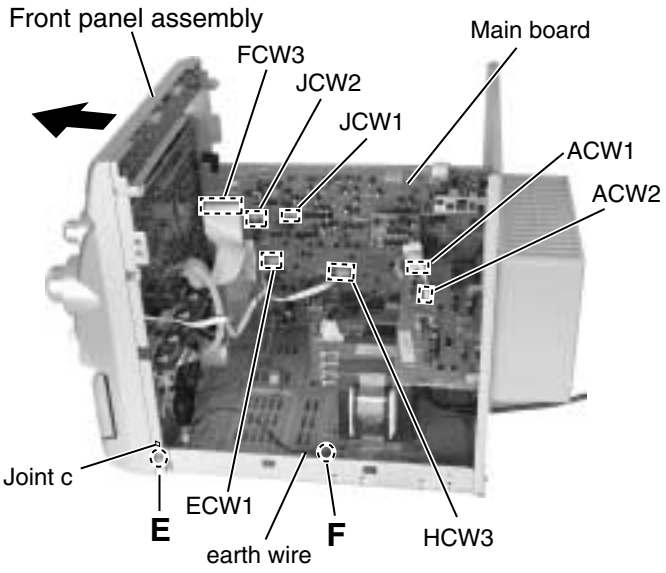


Fig.11

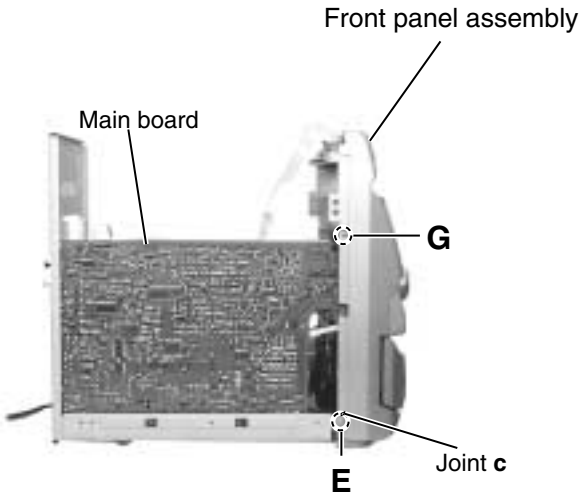


Fig.12

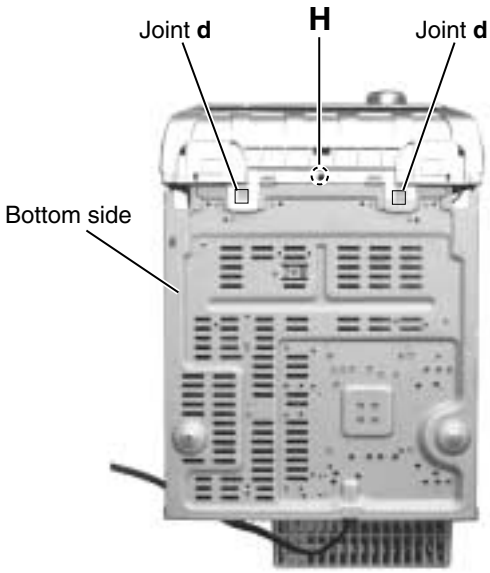


Fig.13

■Removing the heat sink & Amp. board (See Fig.14 and 15)

・ 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 on the back of the body. Remove the heat sink cover.
2. Remove the four screws **J** attaching the heat sink & Amp. 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 & the harness from connector ACW2 on the Amp. board. (See Fig.11)
5. After moving the heat sink upward, remove the claws. Then pull out the heat sink & Amp. board inward.

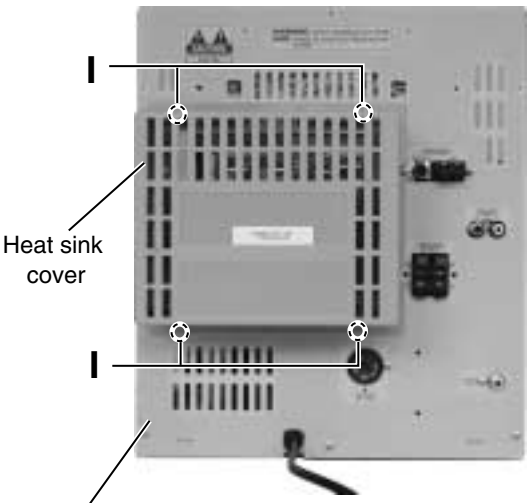


Fig.14

■Removing the tuner pack (See Fig.15 to 16)

・ 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 pack.

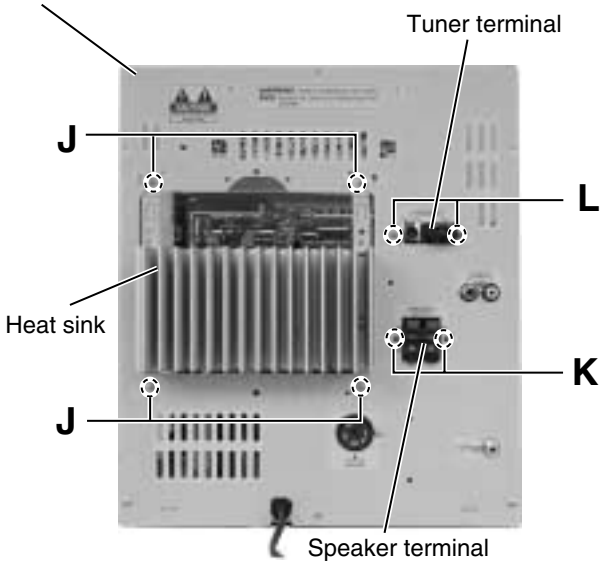


Fig.15

■Removing the rear cover (See Fig.17)

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

1. Remove the five screws **M**, and the screw **M'** attaching the rear panel.

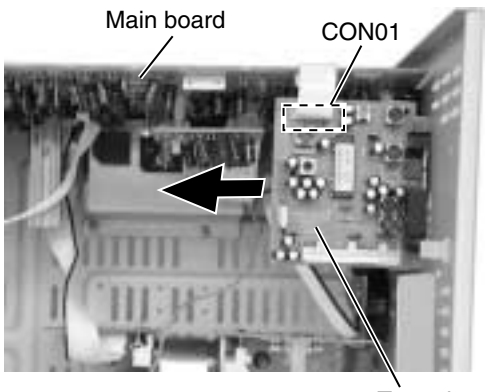


Fig.16

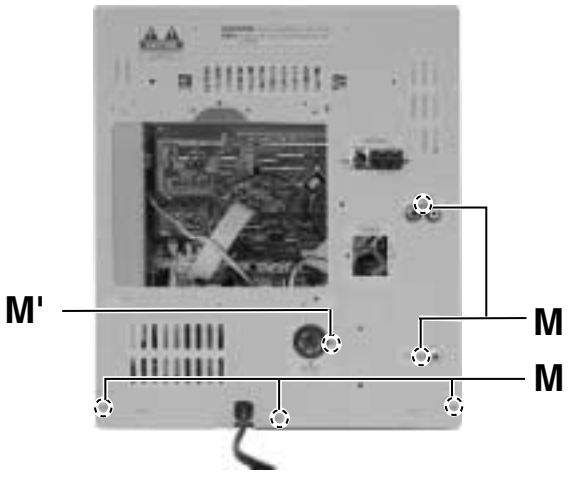


Fig.17

■Removing the main board

(See Fig. 18)

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

1. Disconnect the card wire from connector FCW3 and the harness from connector ECW1,JCW1,JCW2 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.12)
4. Remove the two screws **N** attaching the heat sink and bottom chassis.

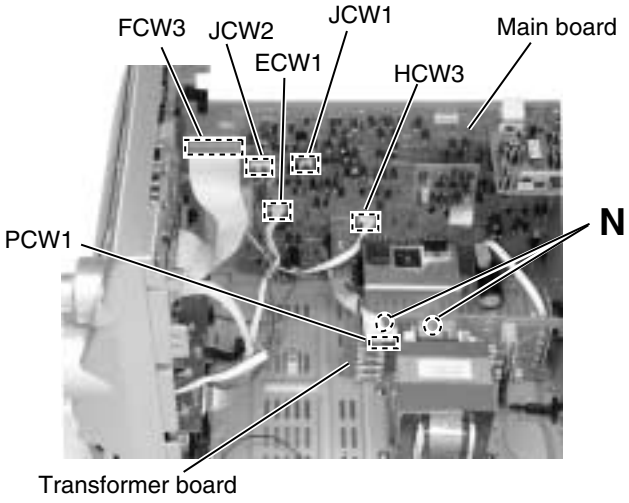


Fig.18

■Removing the power IC

(See Fig.19 and 20)

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

1. Remove the two screws **P** attaching the power IC to the heat sink.
2. Unsolder the power IC solder point.

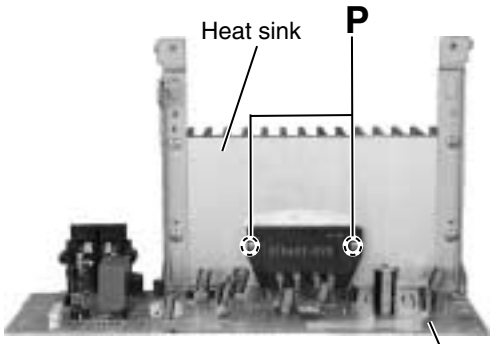


Fig.19

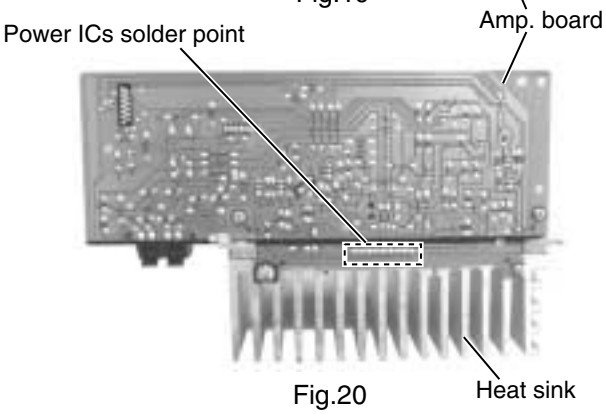


Fig.20

■Removing the power transformer

(See Fig. 21)

・ Prior to performing the following procedure, remove the metal cover, heat sink & Amp board, tuner pack 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 **R** attaching the power transformer.

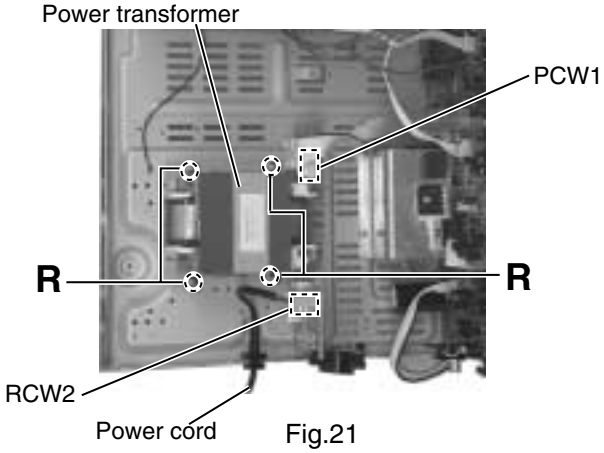


Fig.21

<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 / CD switch board (See Fig.22)

1. Disconnect the card wire from connector UCW1 on the power / CD switch board.

2. Remove the five screws **T** attaching the power / CD switch board and release the tab **e**.

■Removing the FL display & system control board (See Fig. 22)

1. Disconnect the card wire from the connector UCW3, UJW5,UCW5 and UCW6 on the FL & System control board.

2. Remove the five screws **U** attaching the FL & System board.

3. Disconnect the card wire from the connector UCW2 on the FL & System control board.

■Removing the front board (See Fig.23 to Fig.25)

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

1. Pull out the VOLUME knob, ACTIVE BASS EX. LEVEL knob and SOUND MODE knob from front side.

2. Remove the eleven screws **V** attaching the front board and release the two tabs **f** out ward.

■Removing the headphone board & Mic jack board (See Fig.24)

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

1. You can pull out the headphone board.

2. Remove the mic jack board and release the tab **g**.

■Removing the cassette mechanism assembly (See Fig.25)

1. Disconnect the card wire **x** from the mechanism board on the cassette mechanism assembly.

2. Remove the six screws **W** attaching the cassette mechanism assembly.

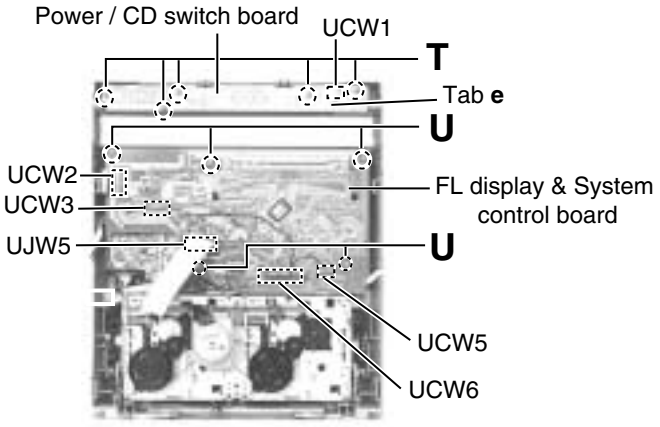


Fig.22

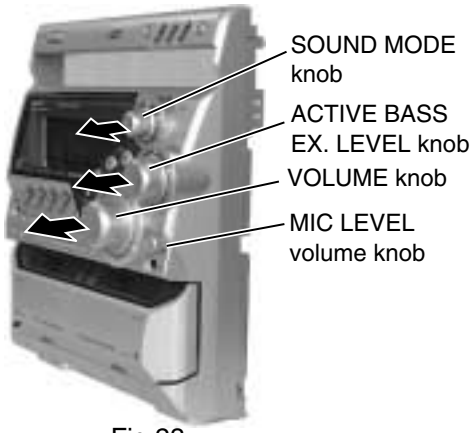


Fig.23

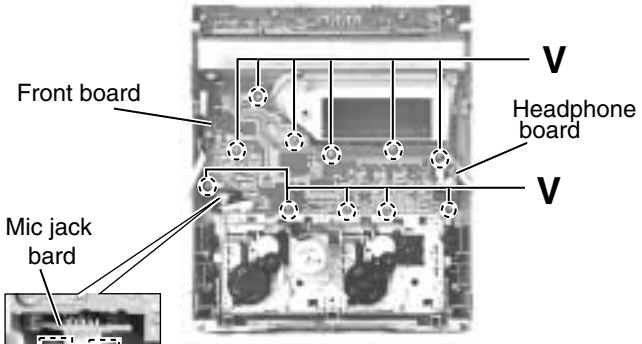


Fig.24

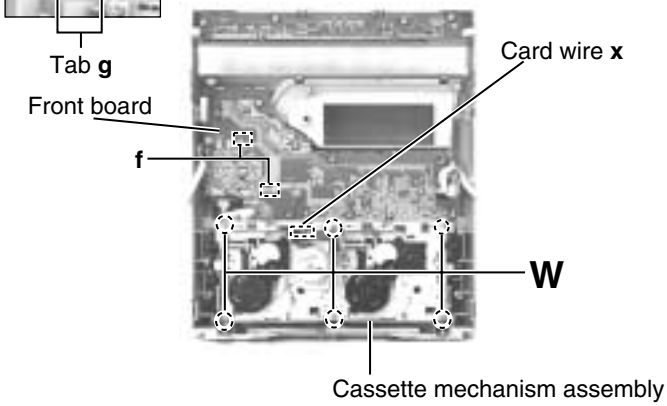


Fig.25

<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 biack 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.

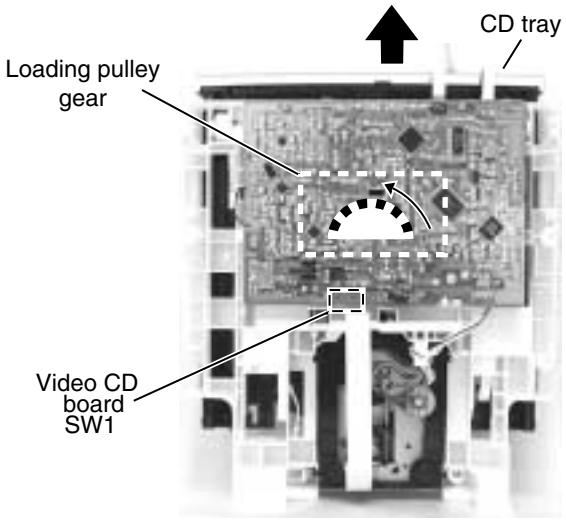


Fig.1

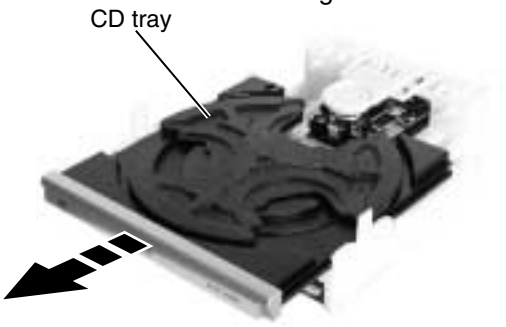


Fig.2

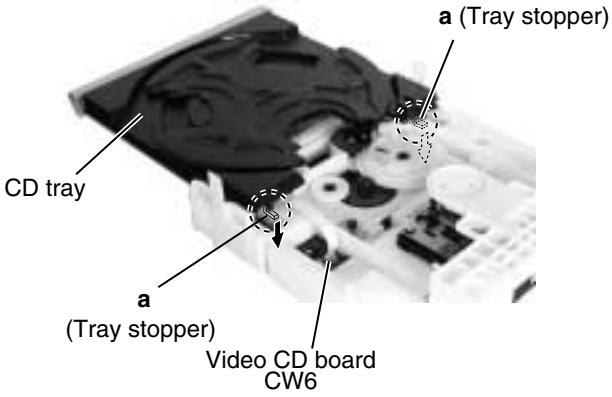


Fig.3

■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.

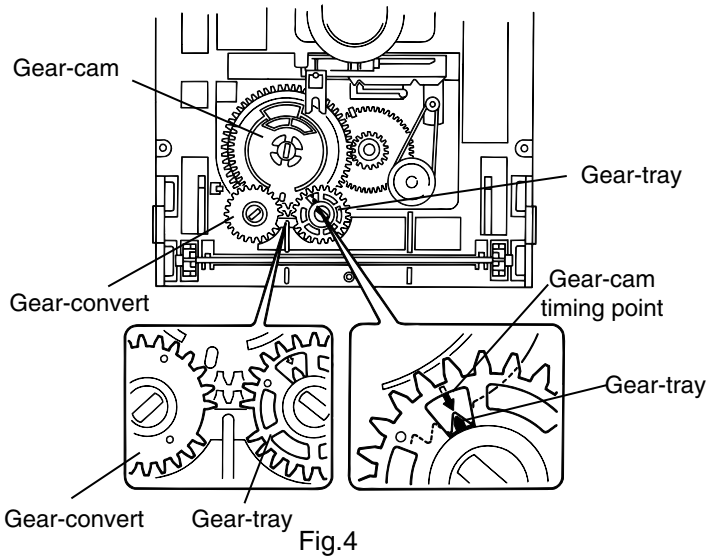


Fig.4

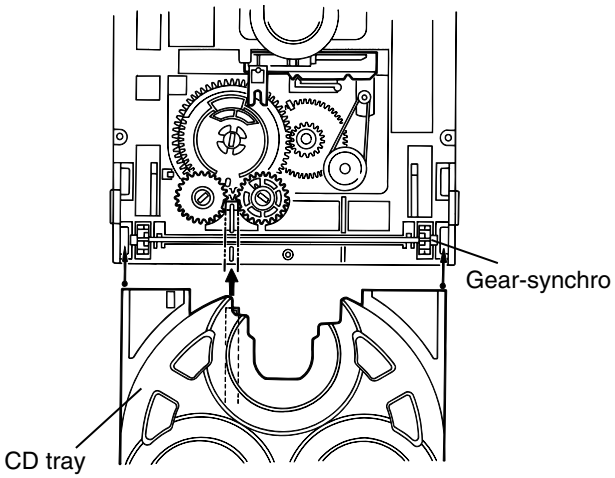


Fig.5

■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.

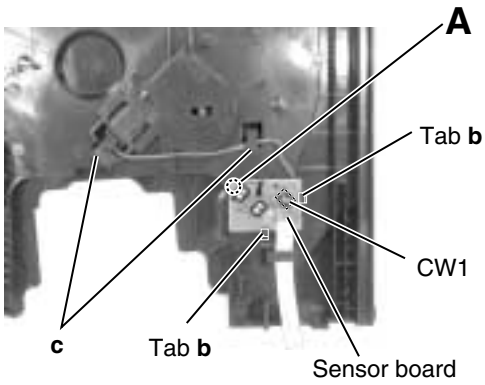


Fig.6

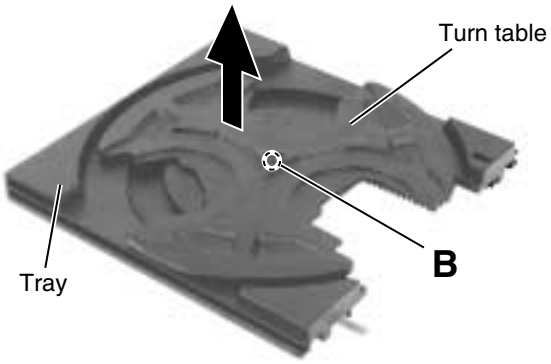


Fig.7

■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.

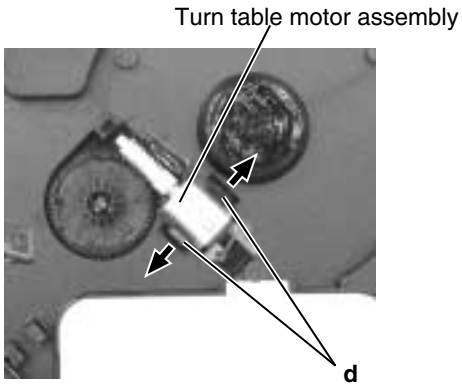


Fig.8

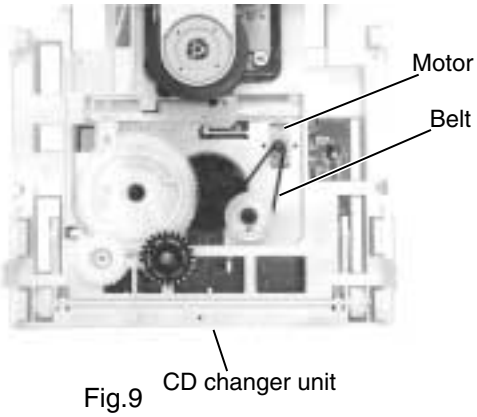


Fig.9

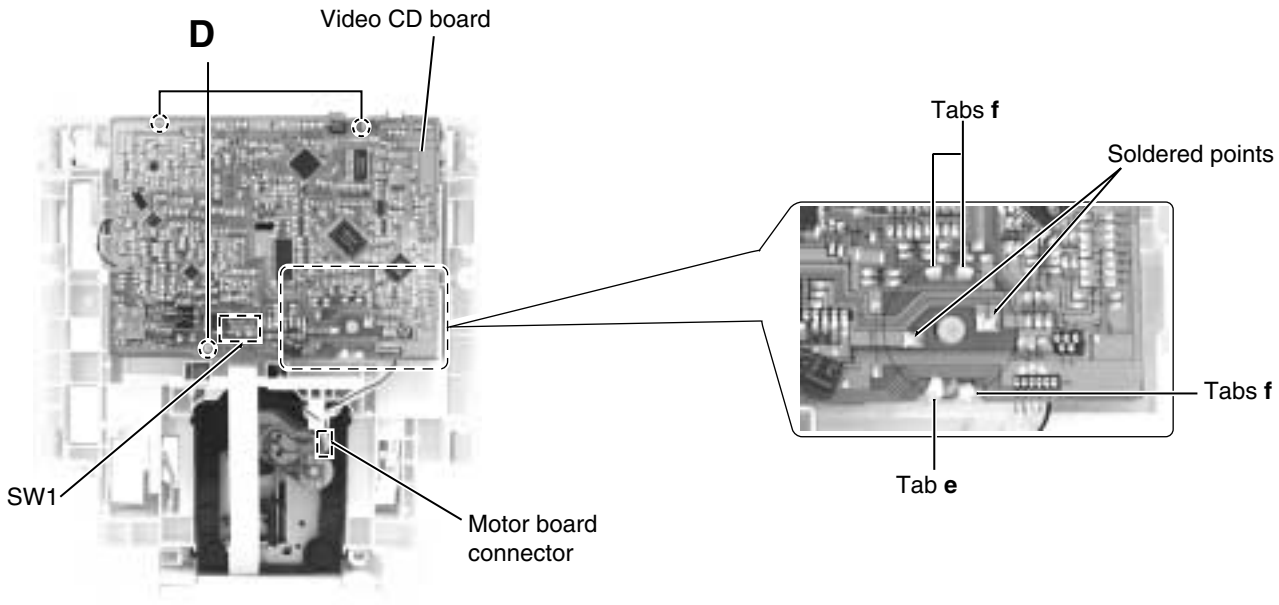


Fig.10

■ 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.

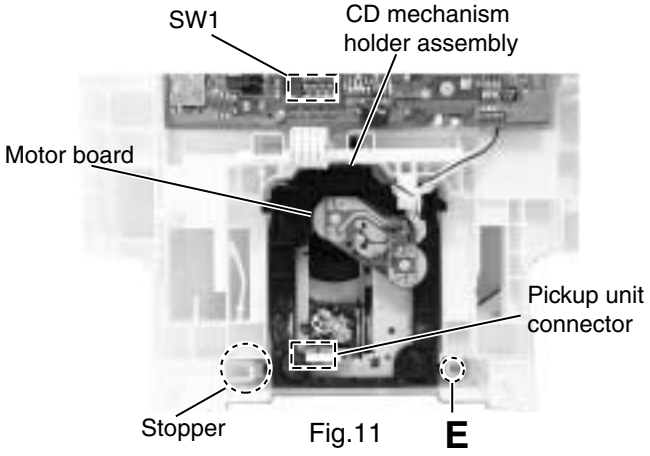


Fig.11

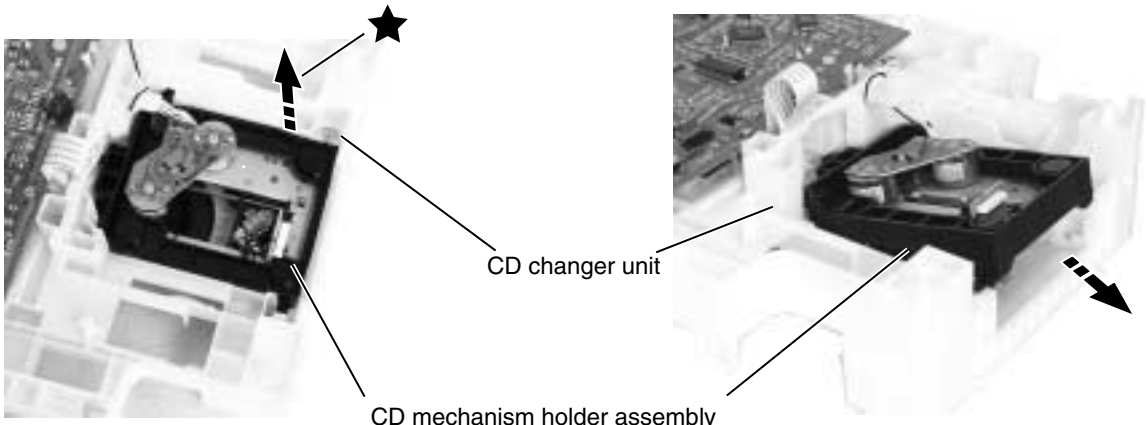


Fig.12

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.)

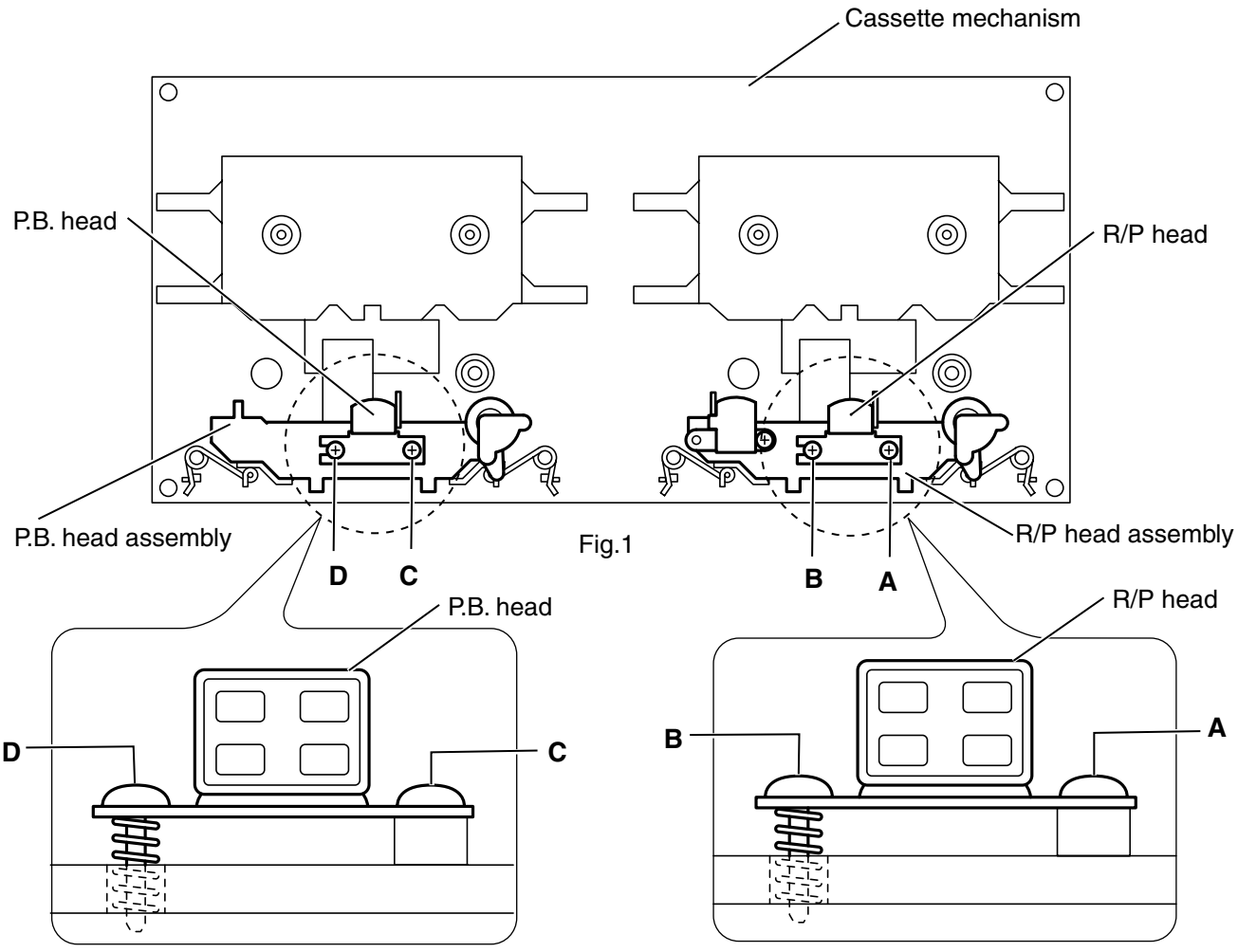


Fig.1

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.

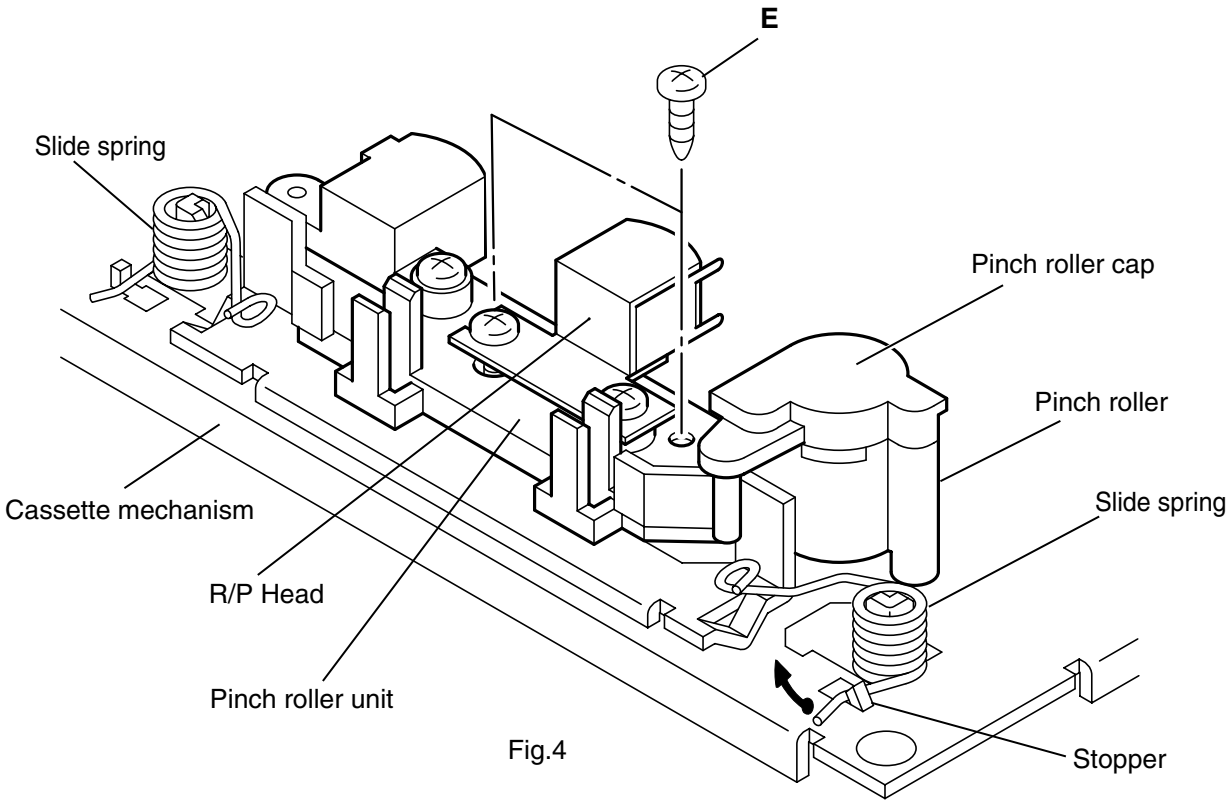


Fig.4

■ 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.

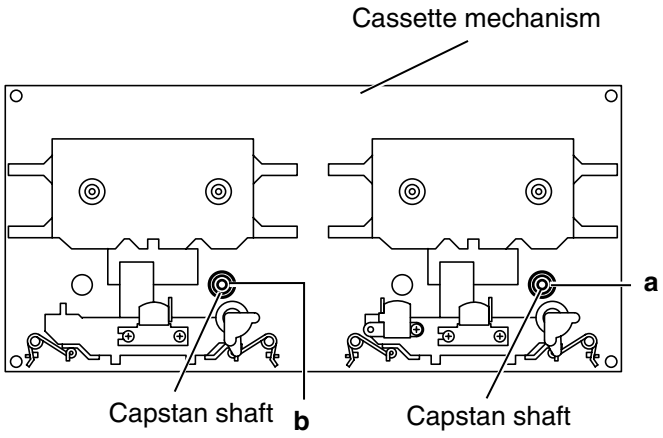


Fig.5

■ 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.

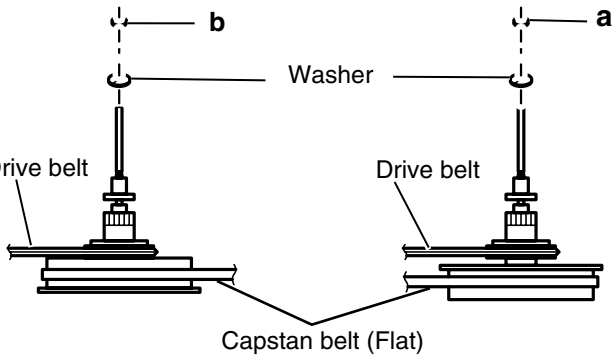


Fig.6

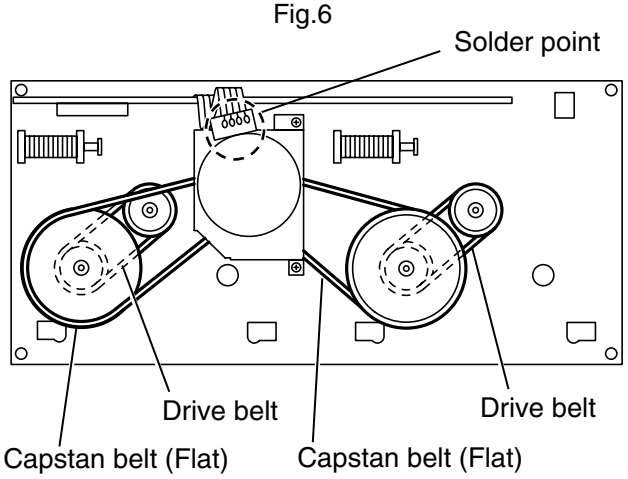


Fig.7

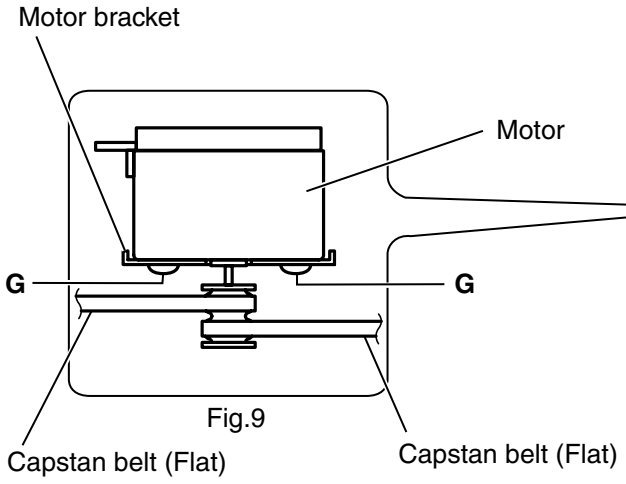


Fig.9

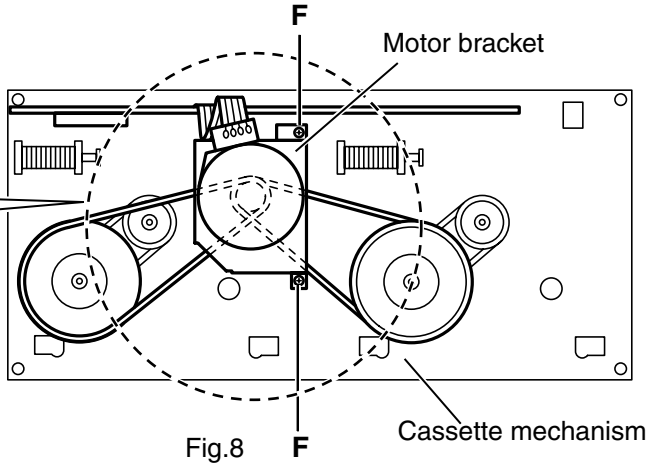
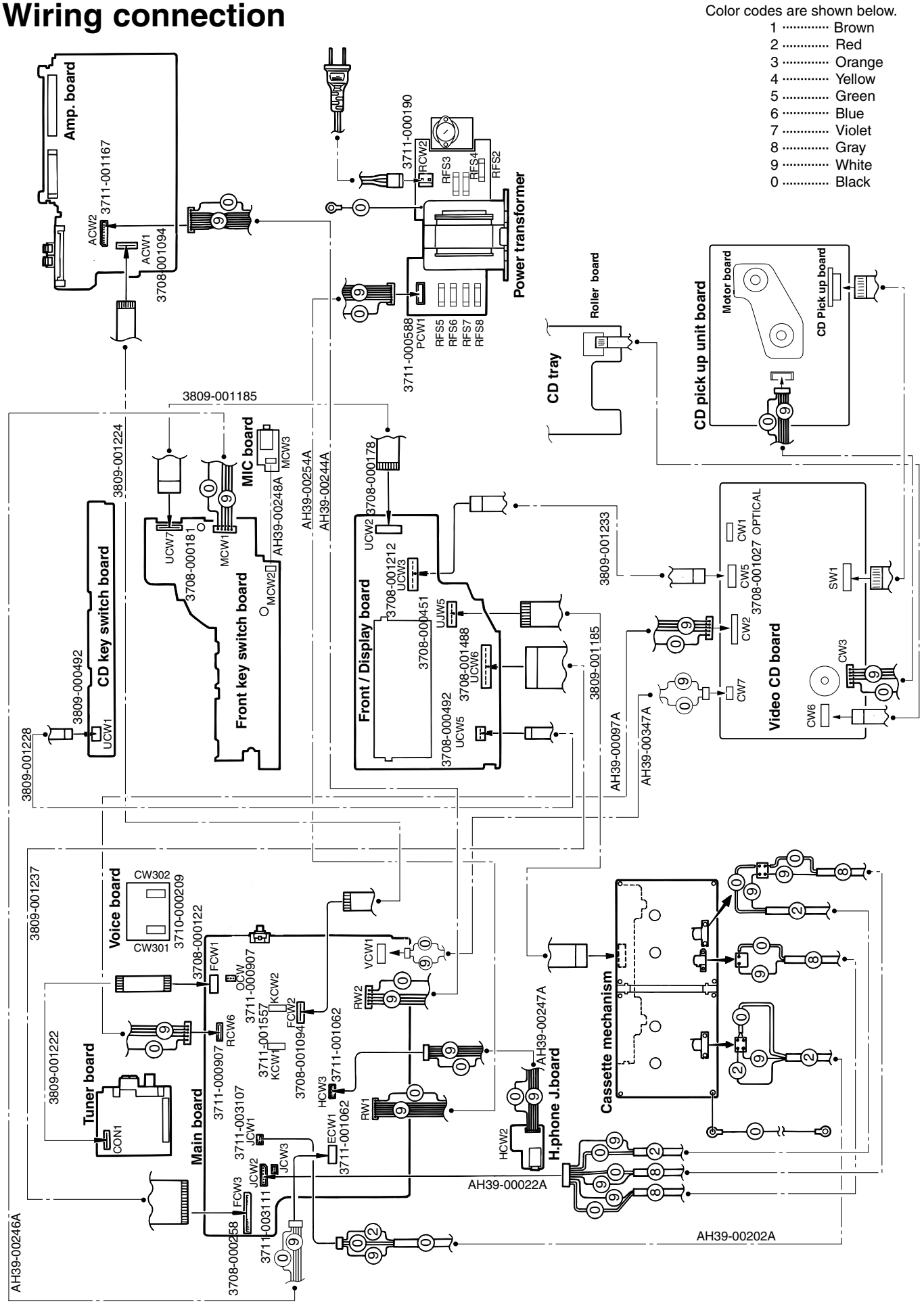


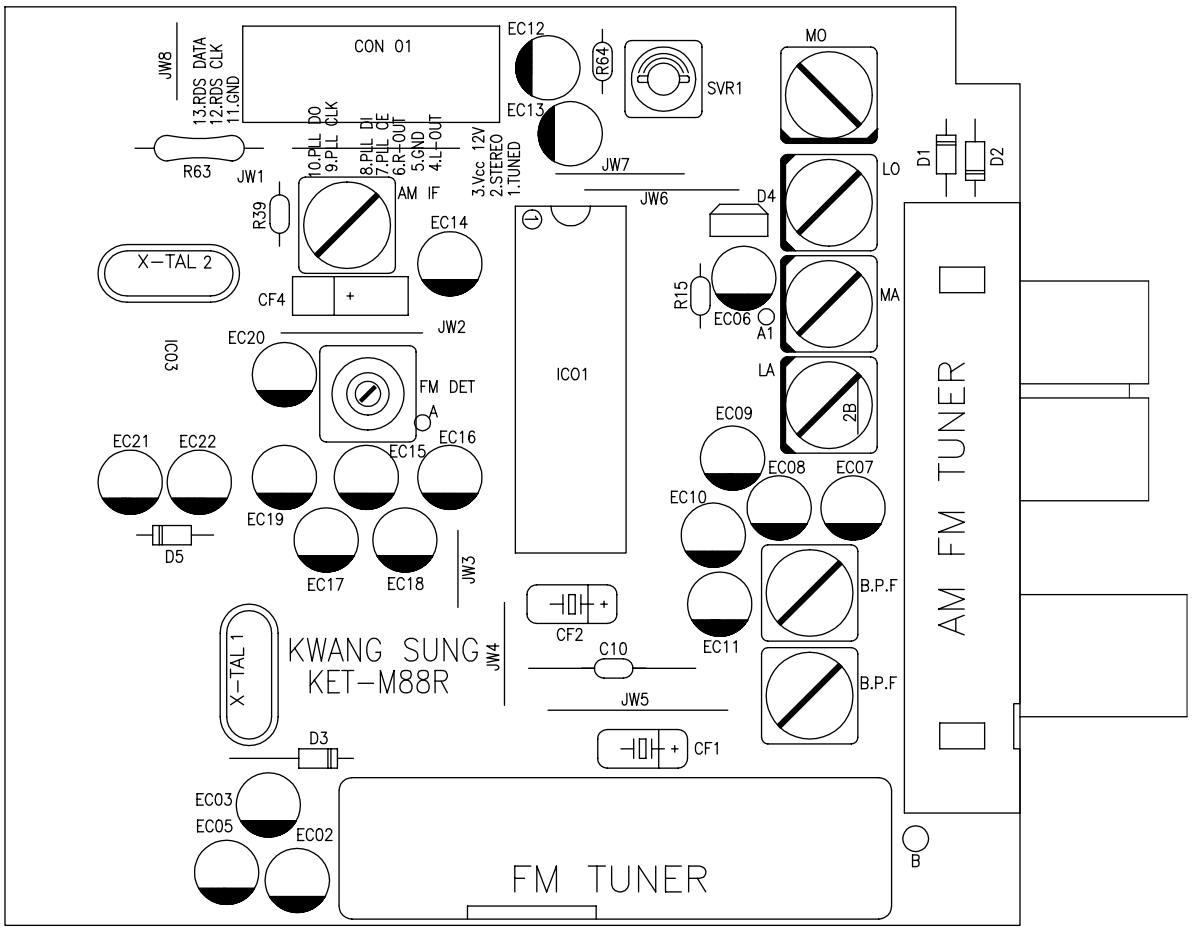
Fig.8

Wiring connection



Adjustment method

1. Tuner



* Adjustment Location of Tuner board

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)

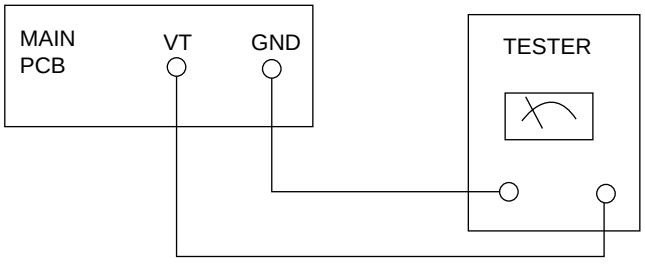


Fig 1-4 OSC Voltage

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

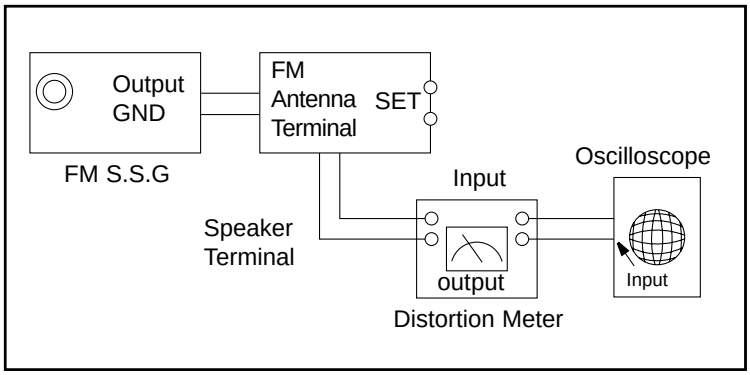


Figure1-1 IF CENTER and THD Adjustment

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

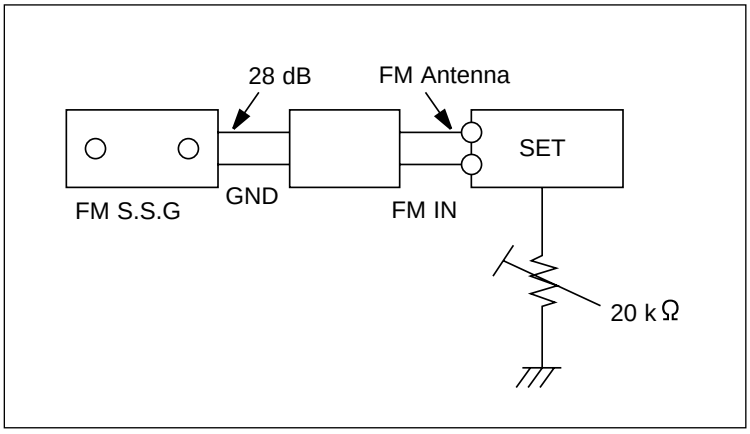


Figure1-2 FM Auto Search Level Adjustment

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)	

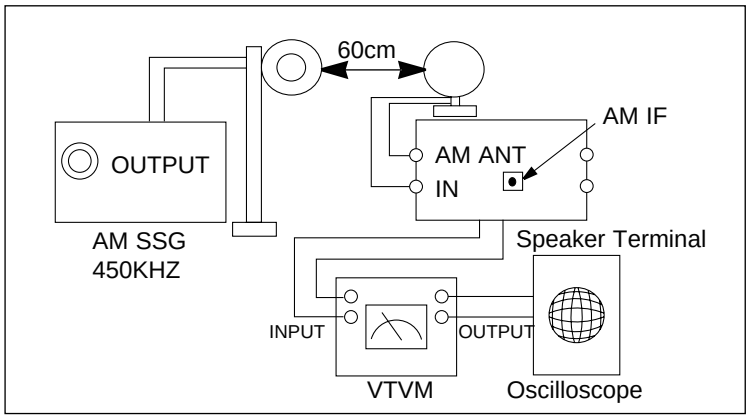


Figure1-3 AM I.F Adjustment

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.

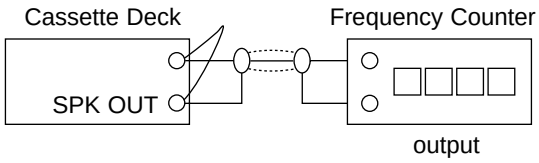


Figure 1-5

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 board)	3KHz	±1% range

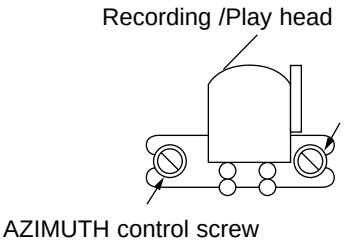


Figure 1-6

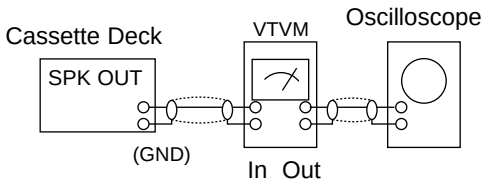


Figure 1-7

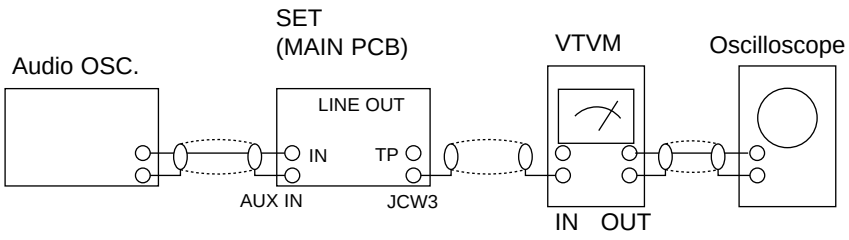


Figure 1-8

To adjust playback 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.

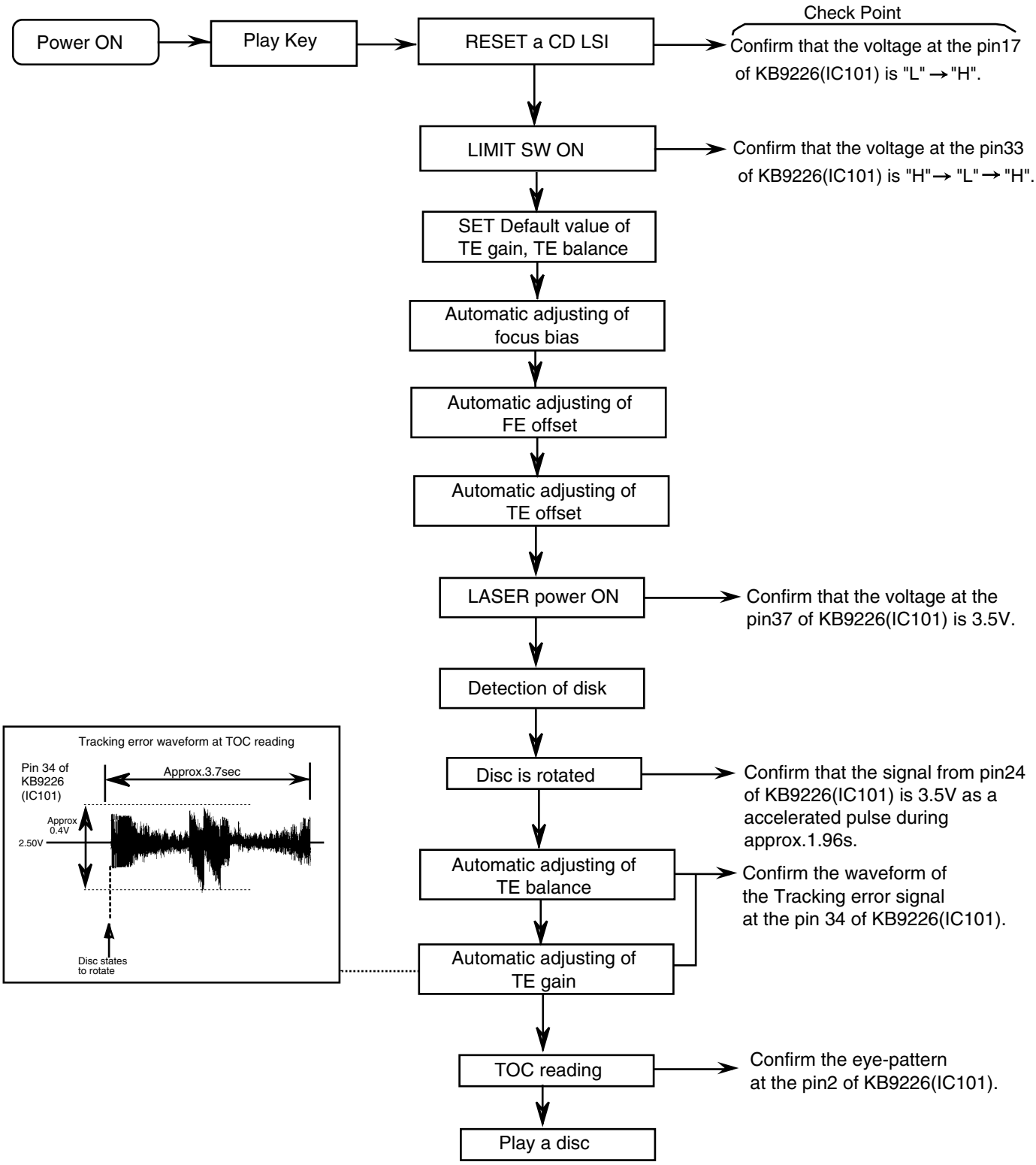
1. Adjust Deck A Play Level

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, connected to VTVM	Turn JSR2L,JSR2R to the right and left	7mV(± 0.5mV)	

Flow of functional operation until TOC read

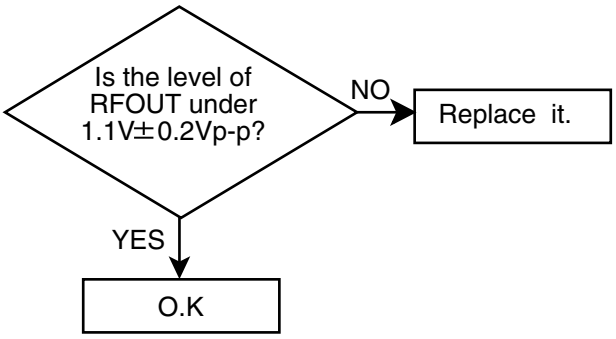


Maintenance of laser pickup

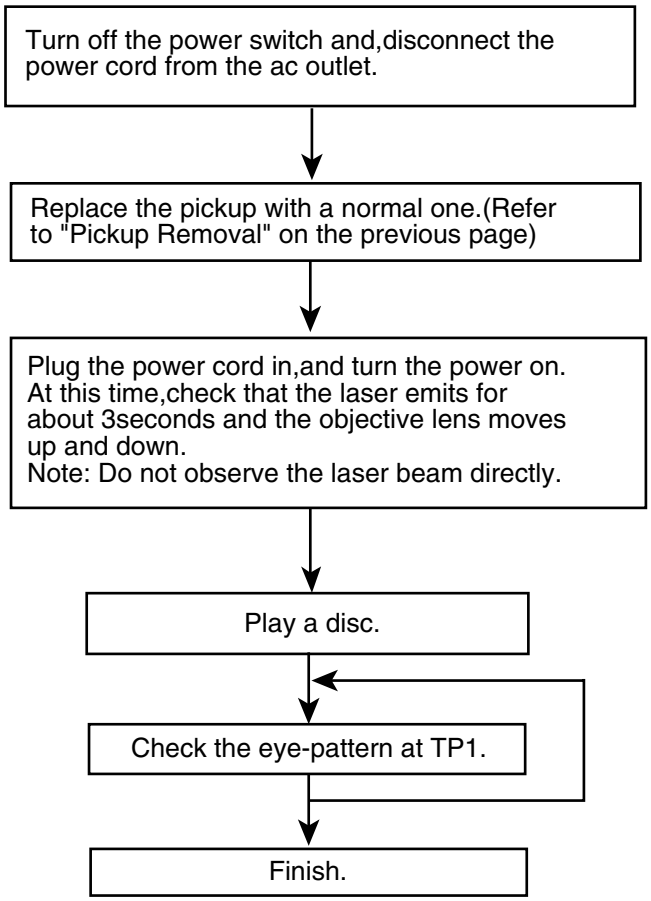
(1) Cleaning the pick up lens
Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

(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

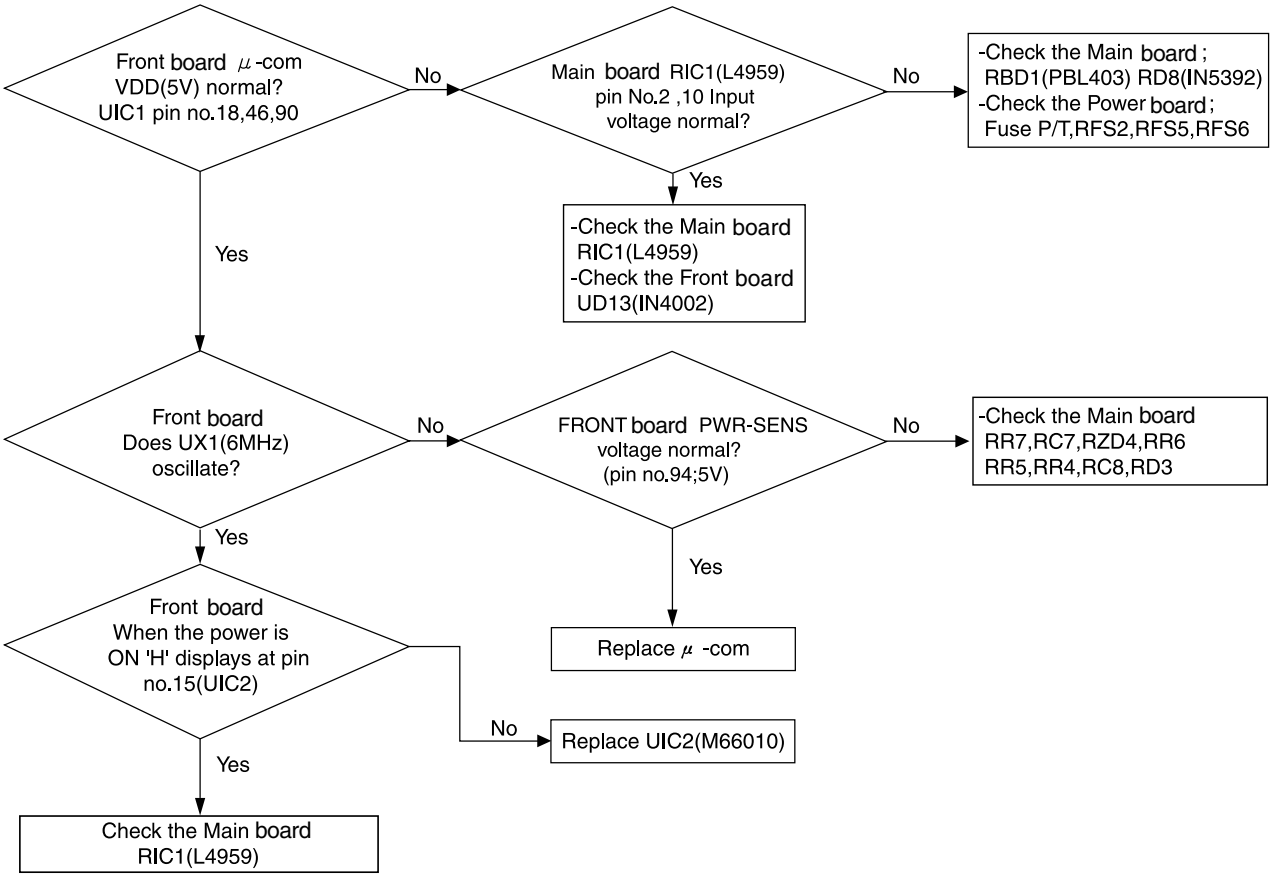


(3) Semi-fixed resistor on the APC PC board
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
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.

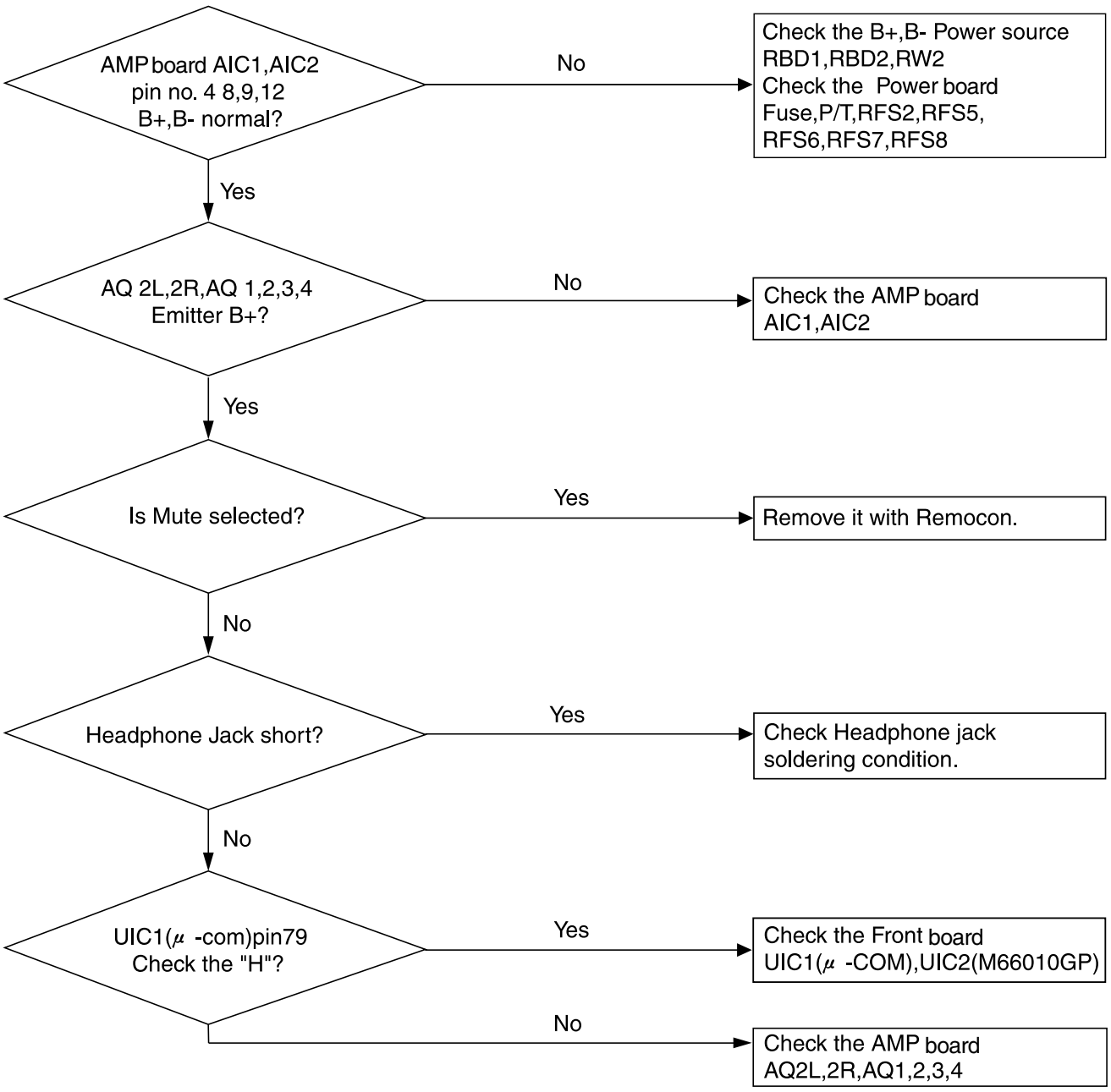
Troubleshooting

1.Amplifier

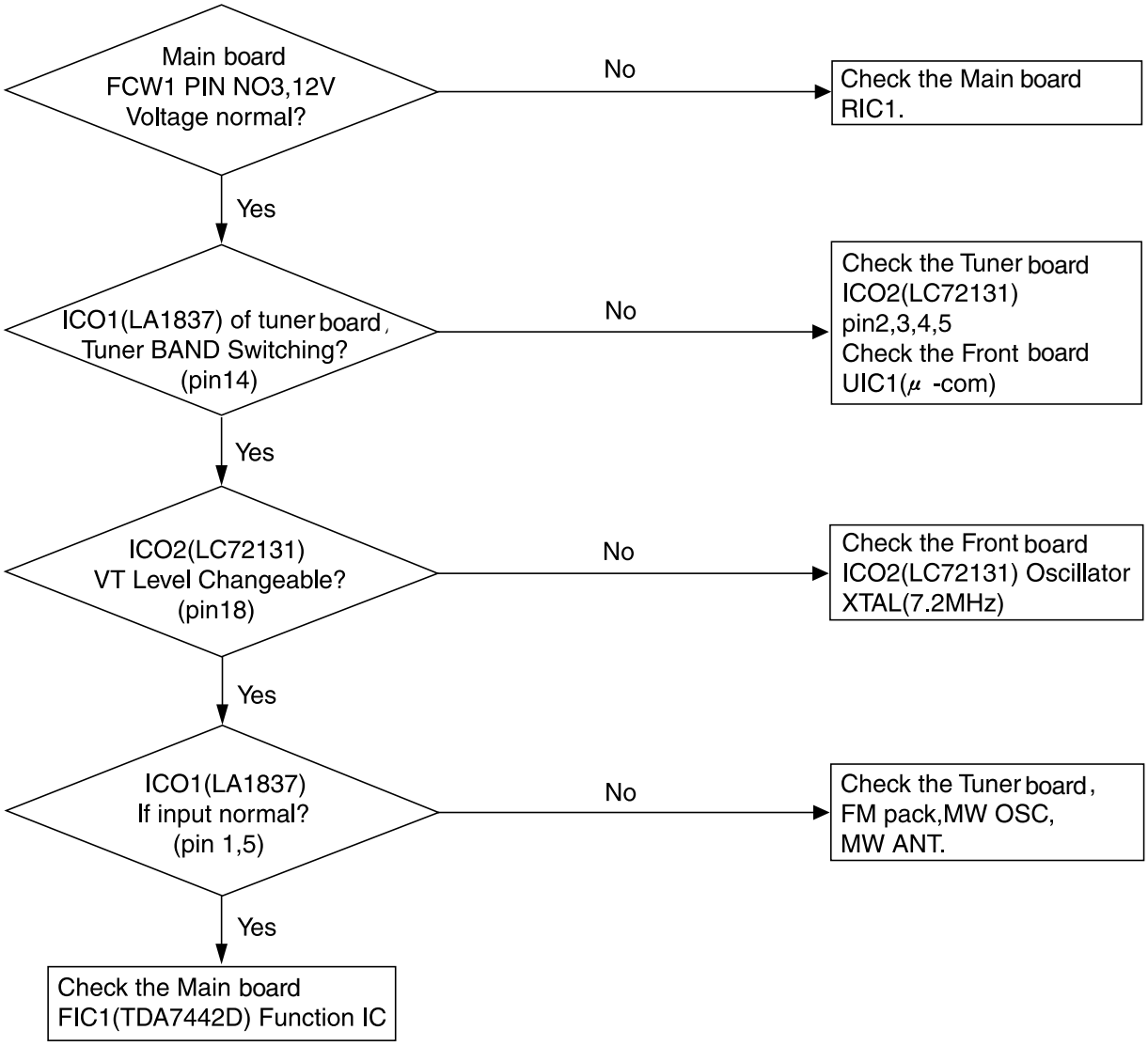
Power Malfunction



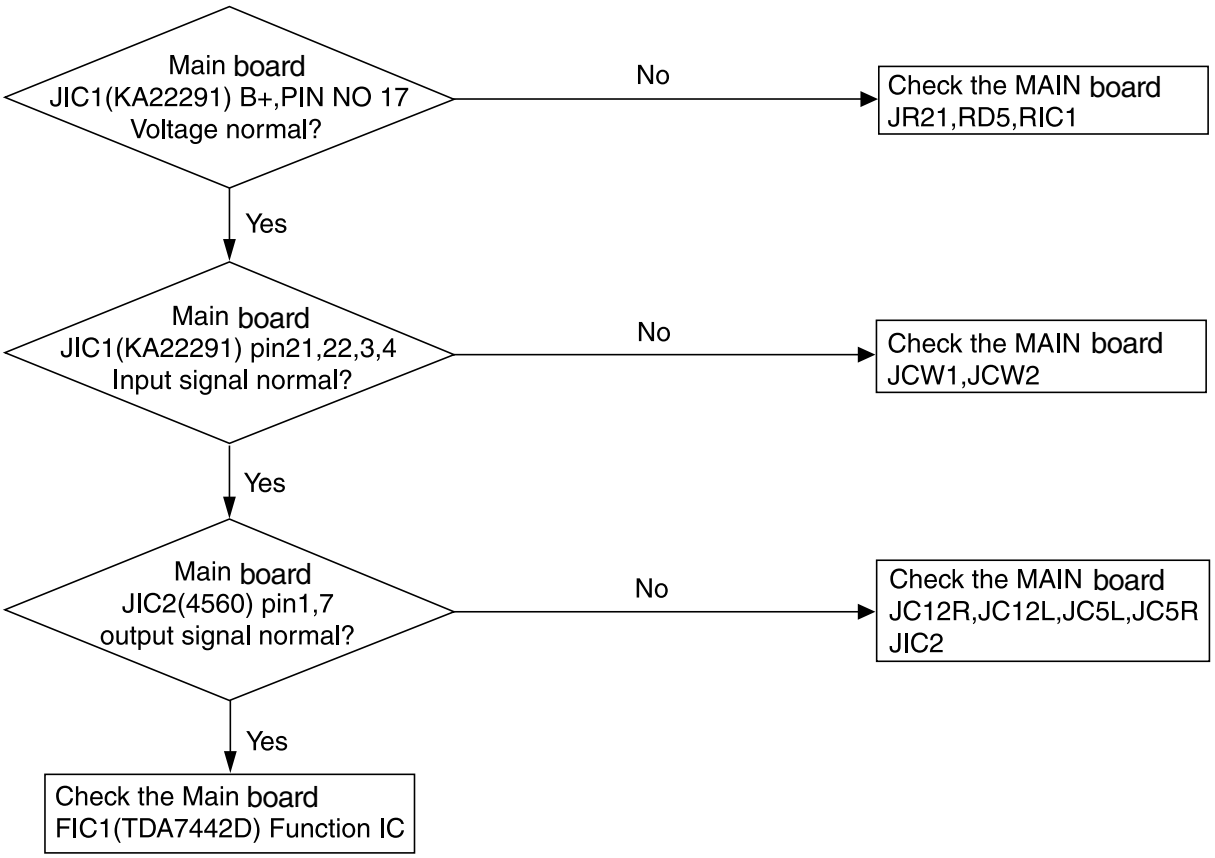
<No Output>


AMP board AIC1,AIC2
pin no. 4 8,9,12
B+,B- normal?
No
Check the B+,B- Power source
RBD1,RBD2,RW2
Check the Power board
Fuse,P/T,RFS2,RFS5,
RFS6,RFS7,RFS8
Yes
AQ 2L,2R,AQ 1,2,3,4
Emitter B+?
No
Check the AMP board
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 board
UIC1(μ -COM),UIC2(M66010GP)
No
Check the AMP board
AQ2L,2R,AQ1,2,3,4

2. Tuner malfunction (FM/AM)

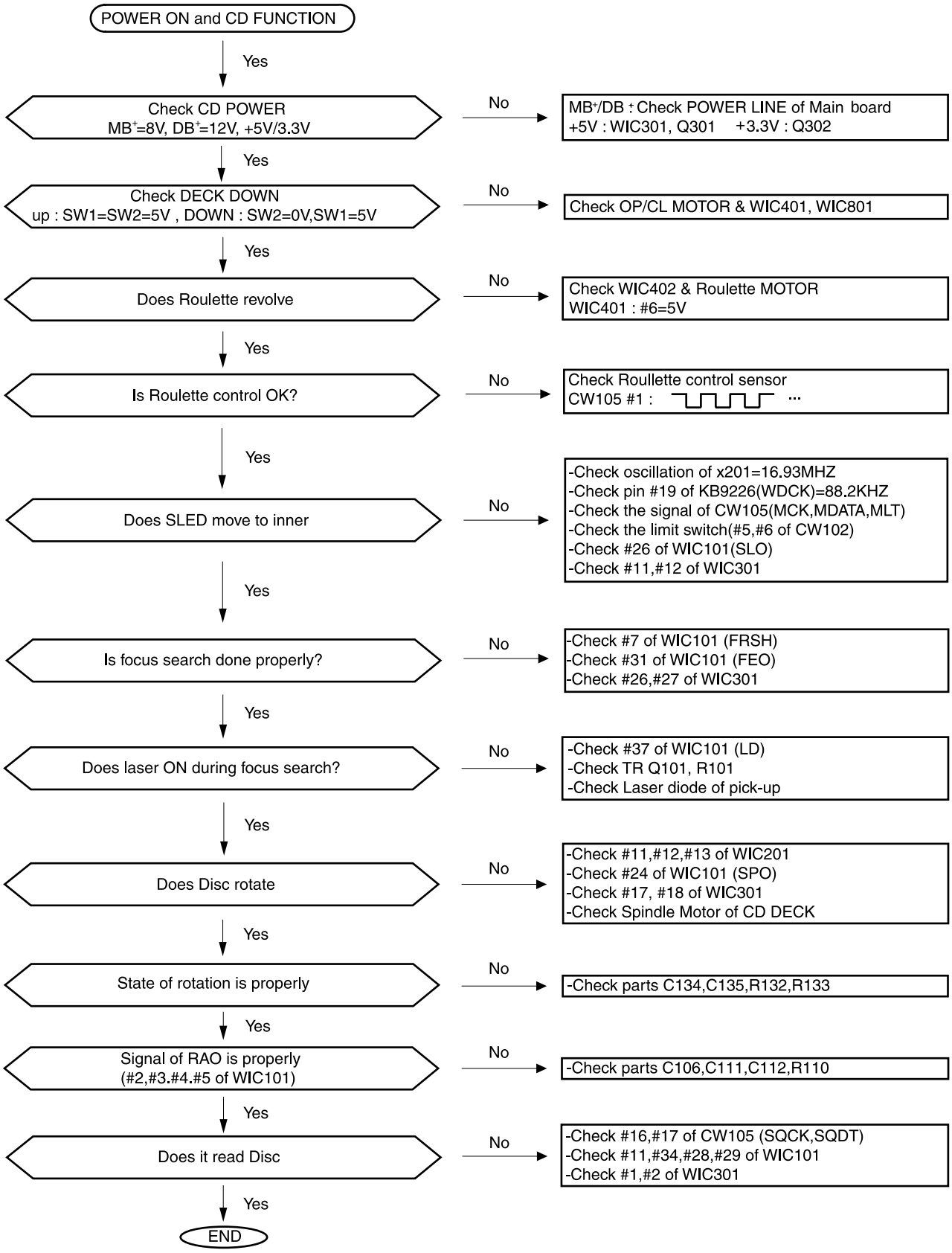


3. Tape


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

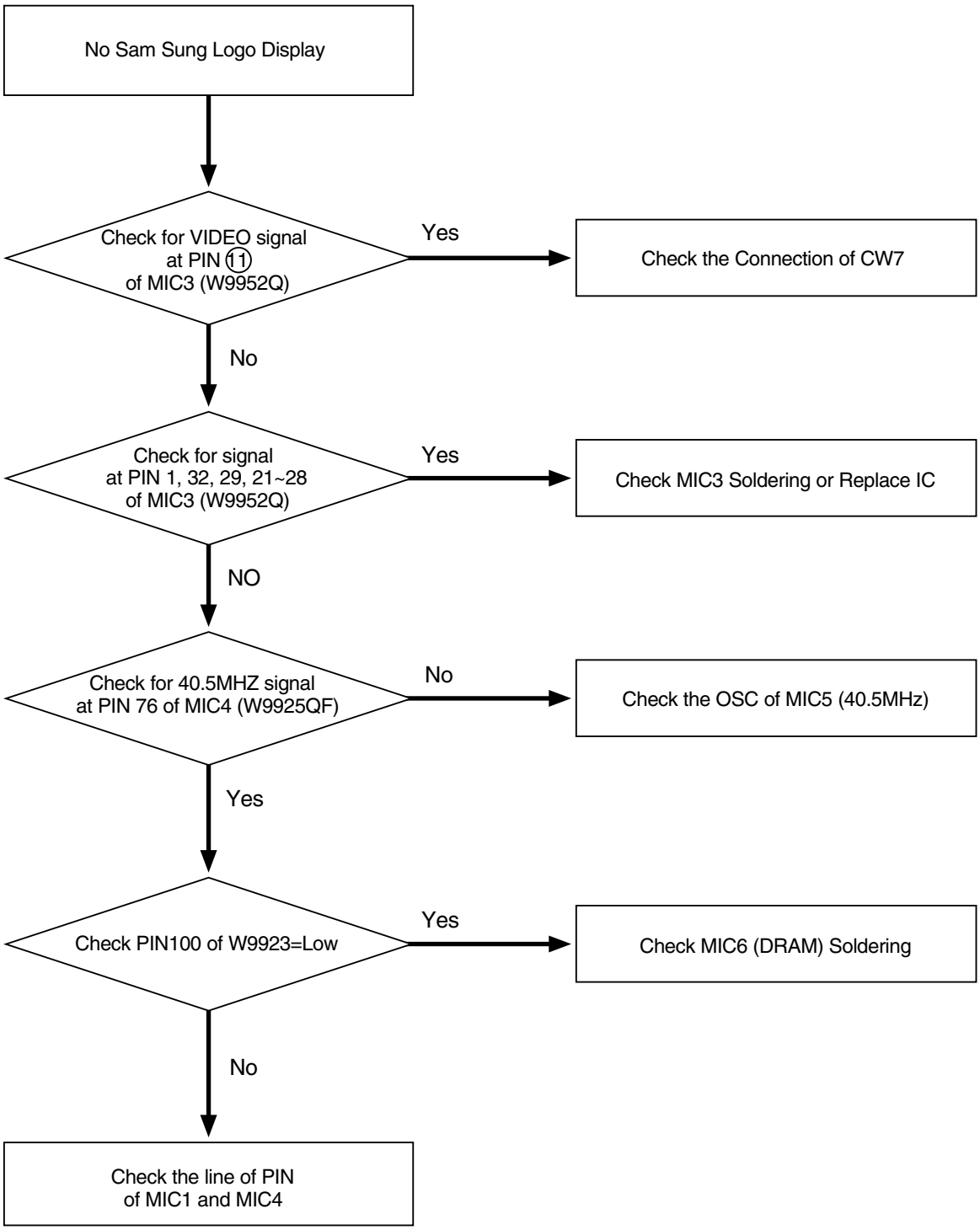
4. Video CD

< No DISC>



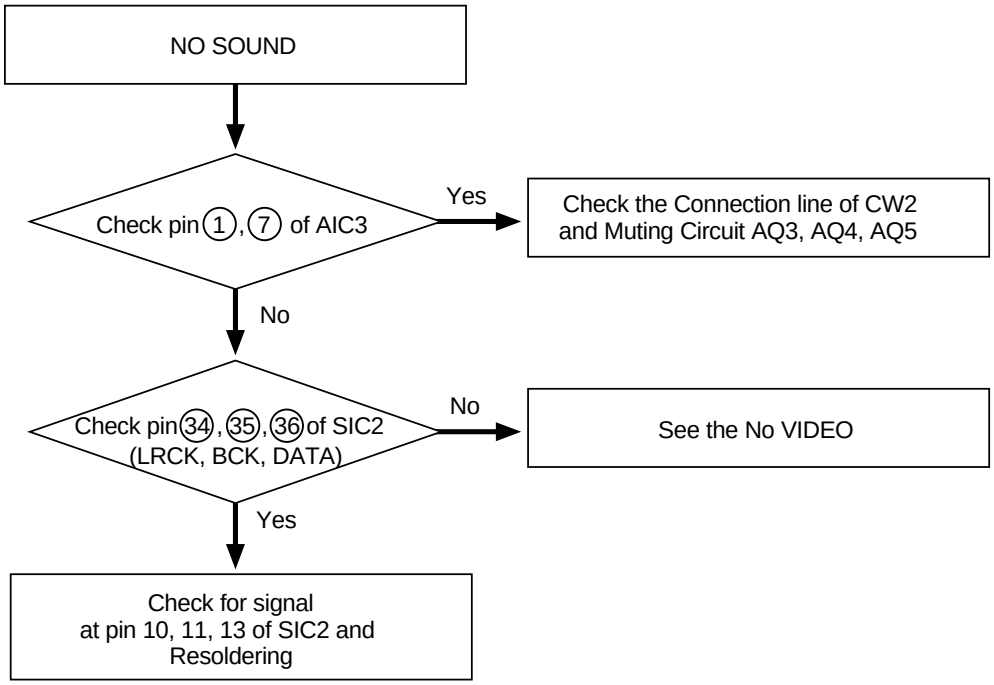
<No VIDEO>

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

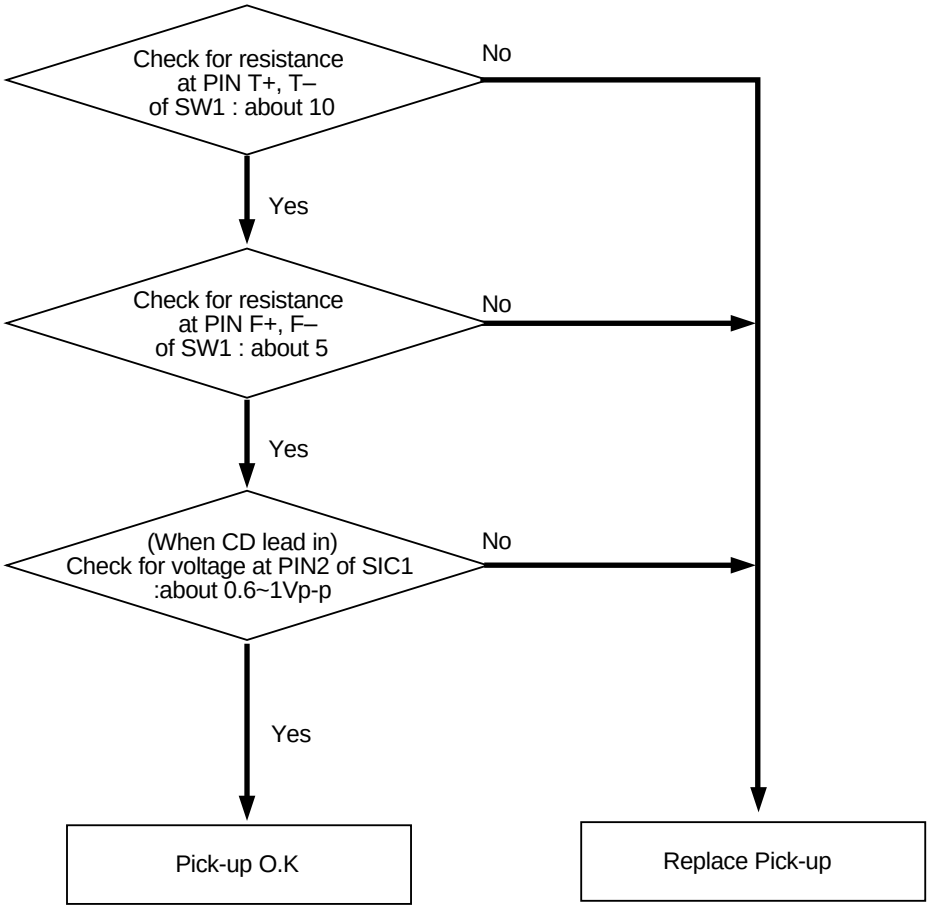


<No sound of CD Play>

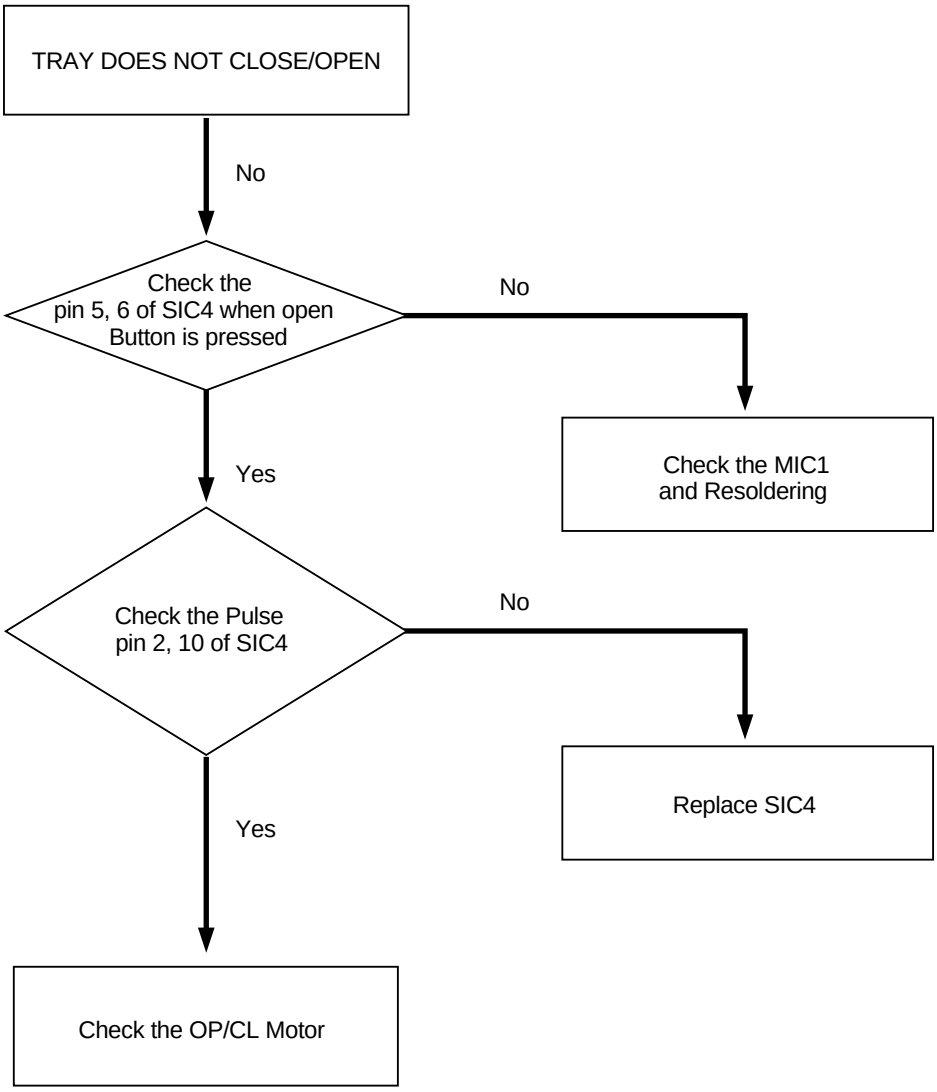
- Check 16.9344MHz OSC at pin38 of MIC1
- Check Voltage (+5, ±12)
- Check all Connection between VCD pack board and Main, Front board



<Check Pick-up>



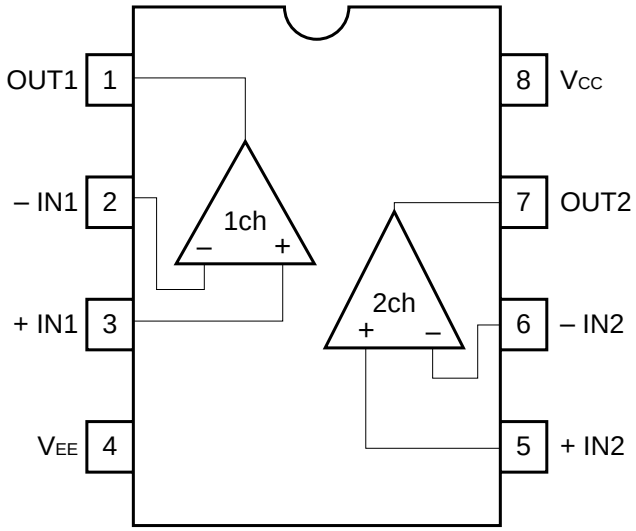
<3CD Tray does not close/open>



Description of major ICs

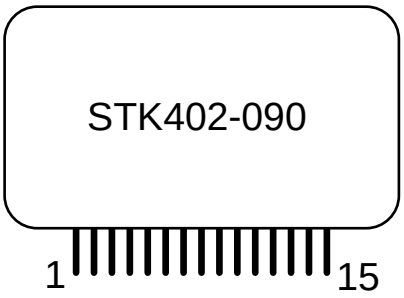
■ BA4560 (FIC2,FIC4,HIC1, JIC2,UIC3) : Dual op. amp.

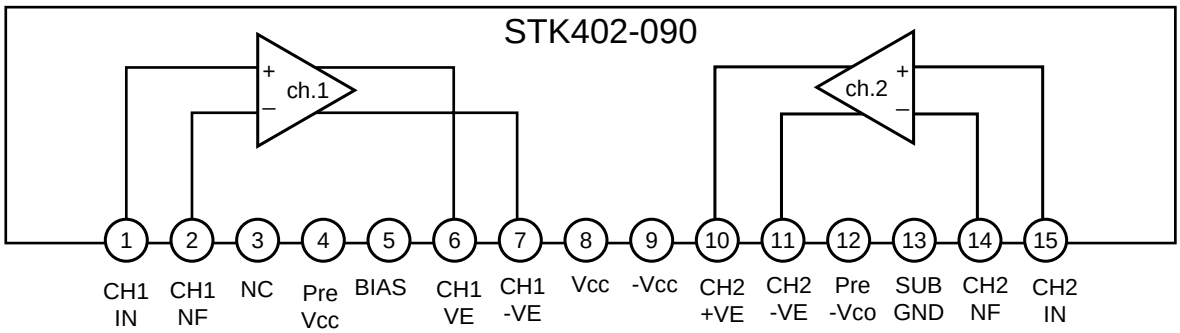
1. Pin layout



■ STK402-090 (AIC1) : Power amp.

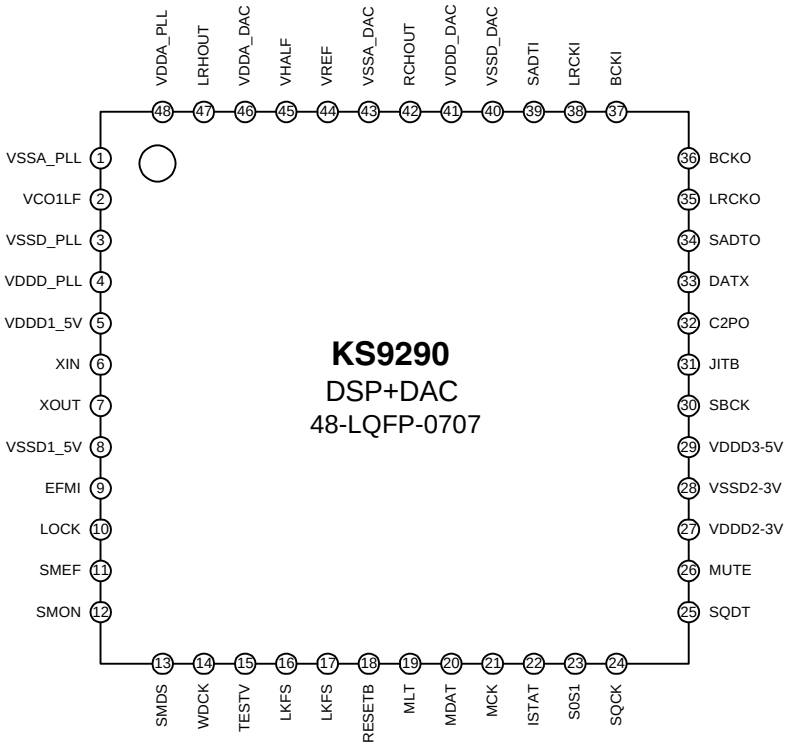
1.Pin layout



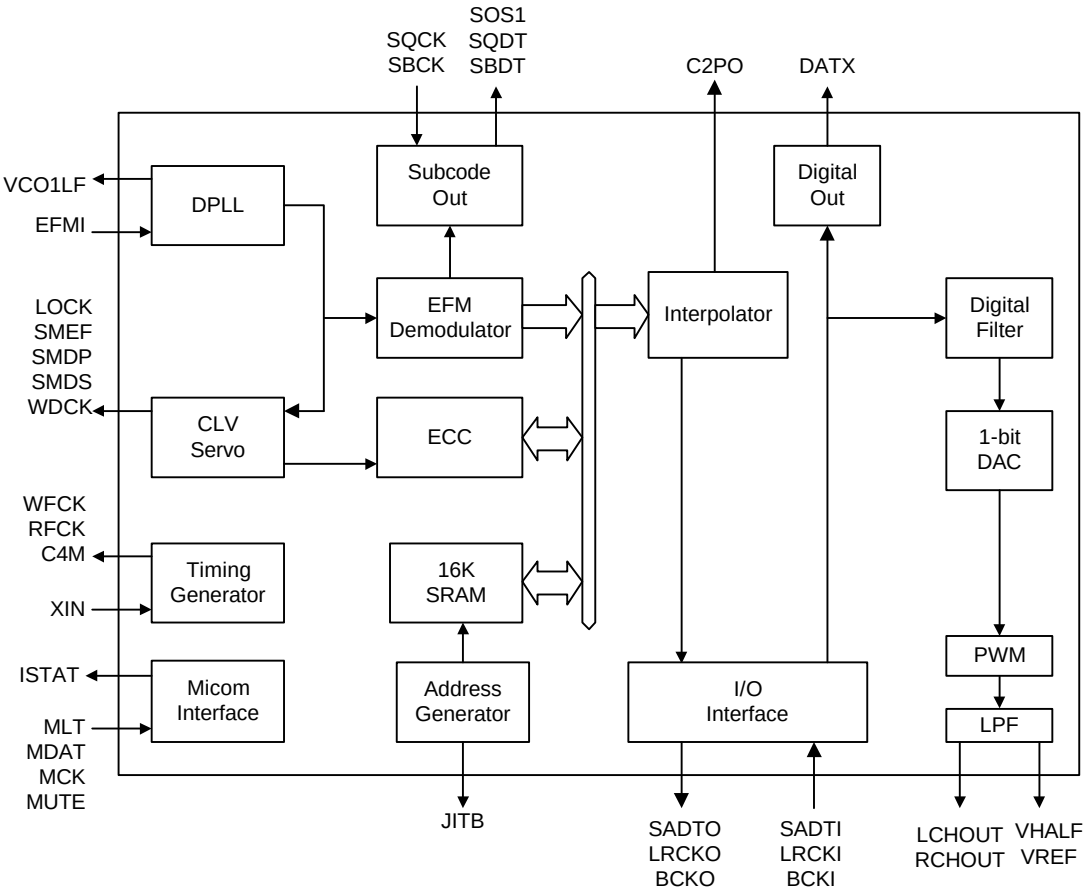


■ KS9290 (IC201) : Digital signal processor for CD player

1. Pin layout



2. Block diagram



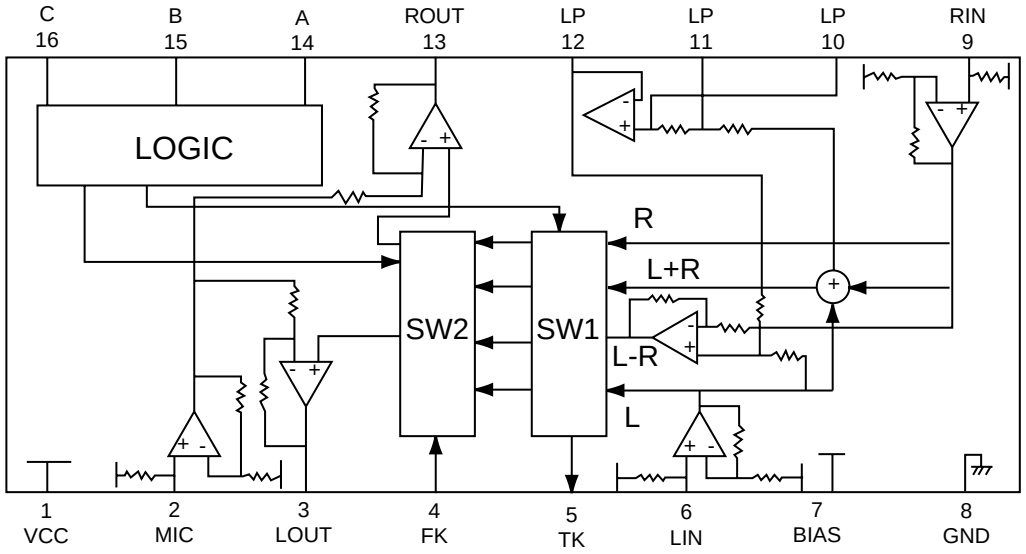
3. Pin function

KS9290

Pin.No.	Symbol	Type	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 transferring 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 transferring 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

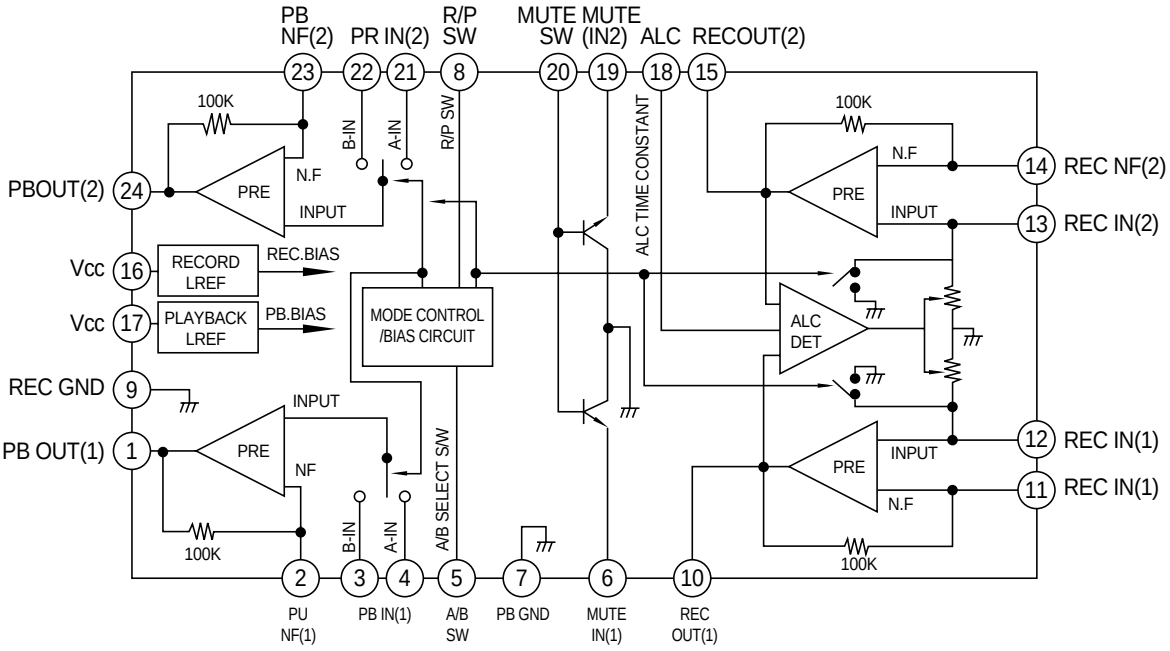
1.Block diagram



2.Pin function

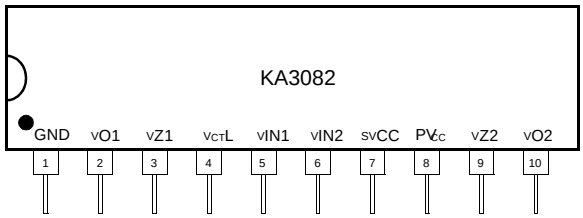
Pin No.	Symbol	I/O	Function
1	VCC	-	Power supply
2	MIC IN	I	Microphone mixing input
3	LOUT	O	Channel L output
4	FK	-	Non connect
5	TK	-	Non connect
6	LIN	I	Channel L input
7	BIAS	I	Signal bias
8	GND	-	Connect to GND
9	RIN	I	Channel R input
10	LPF1	O	Connects to LPF time constant element
11	LPF2	O	Connects 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) : Bidirectional DC motor driver

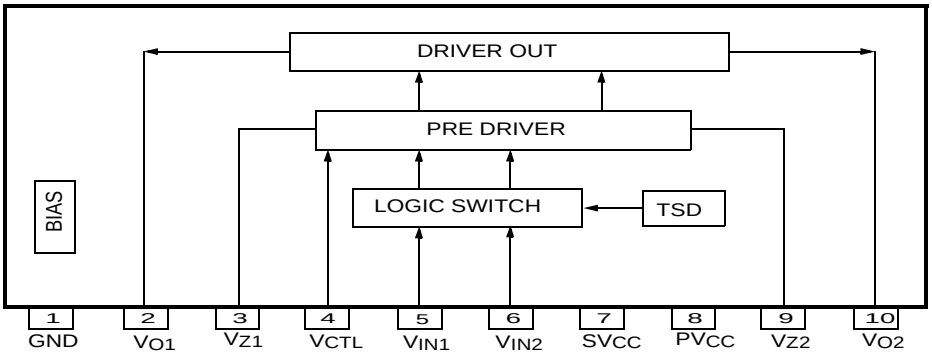
1.Pin layout



2.Pin function

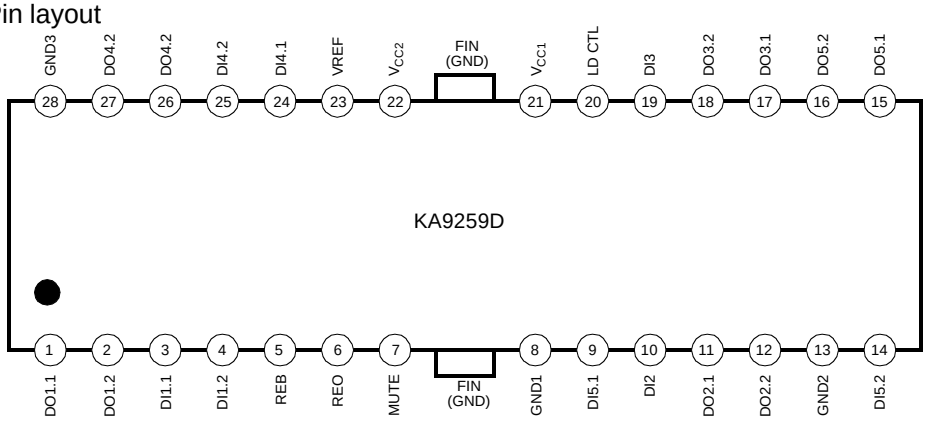
Pin No.	Symbol	Type	Function
1	GND	-	Ground
2	V_{O1}	O	Output 1
3	V_{Z1}	-	Phase compensation
4	V_{CTL}	I	Motor speed control
5	V_{IN1}	I	Input 1
6	V_{IN2}	I	Input 2
7	SV_{CC}	-	Supply voltage (Signal)
8	PV_{CC}	-	Supply voltage (Power)
9	V_{Z2}	-	Phase compensation
10	V_{O2}	O	Ooutput 2

3.Block Diagram

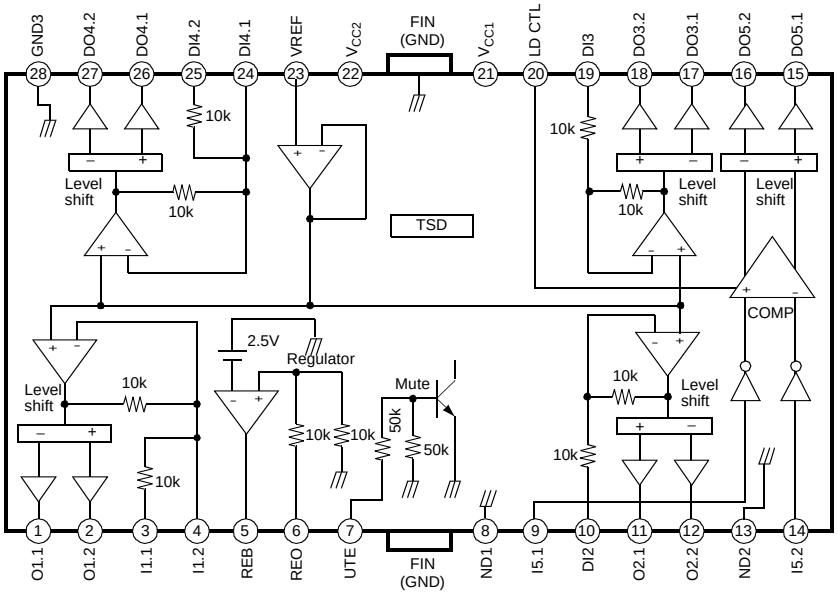


■ KA9259D (SIC3) : 5-ch Motor driver

1. Pin layout



2. Block diagram

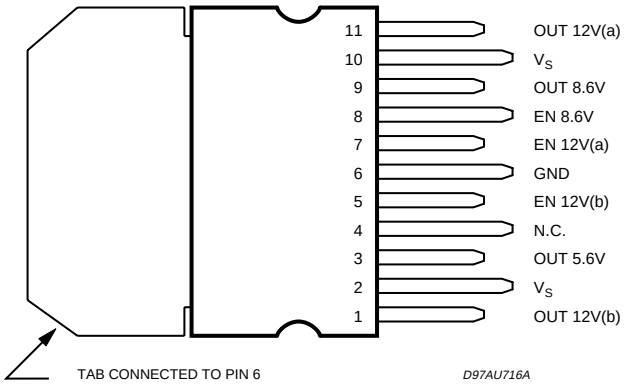


3. Pin function

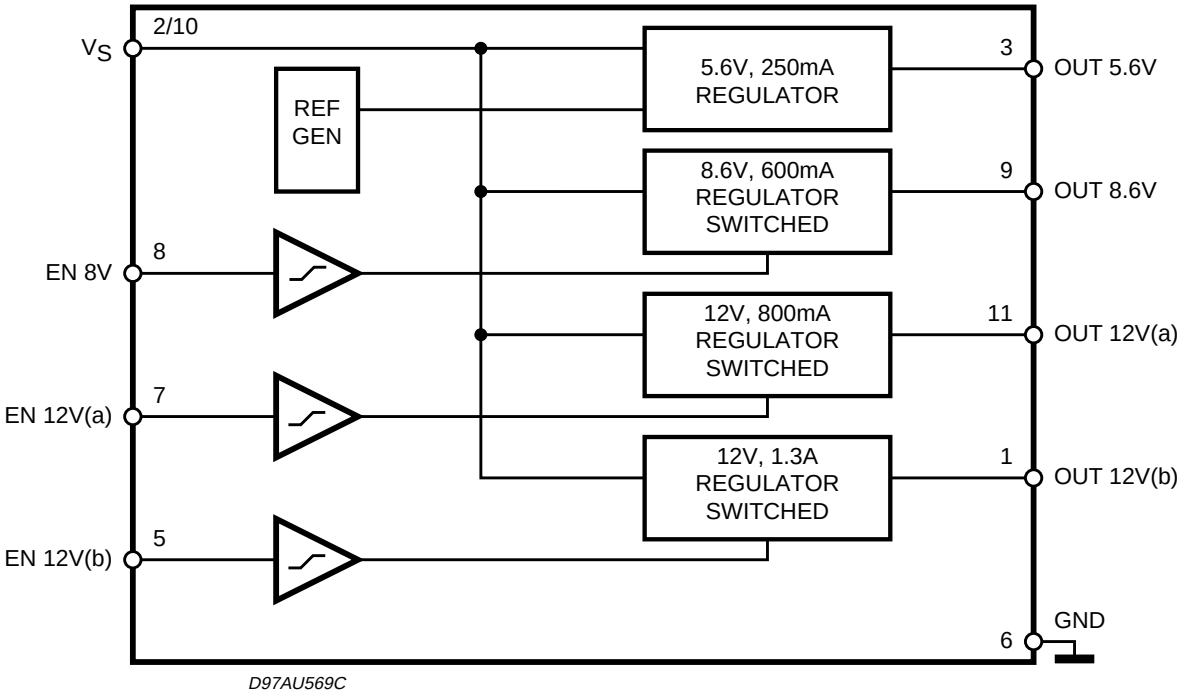
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	DO1.1	O	Focus output 1 (–)	15	DO5.1	O	Loading output 1(+)
2	DO1.2	O	Focus output 2 (+)	16	DO5.2	O	Loading output 2(–)
3	DI1.1	I	Focus input 1	17	DO3.1	O	Sled output (–)
4	DI1.2	I	Focus input 2 (Adjustable)	18	DO3.2	O	Sled output (+)
5	REB	O	Regulator 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

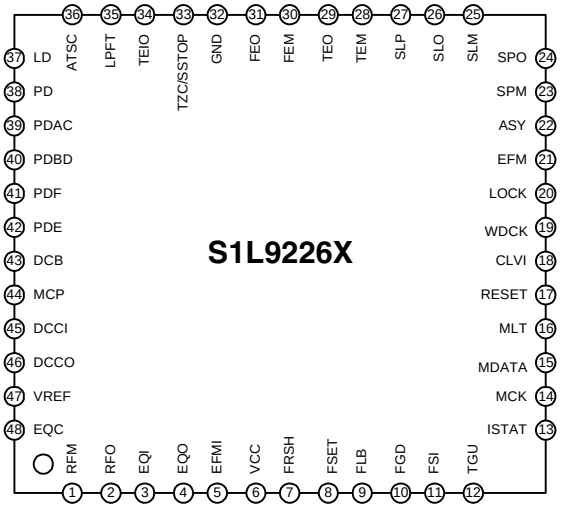


3.Pin function

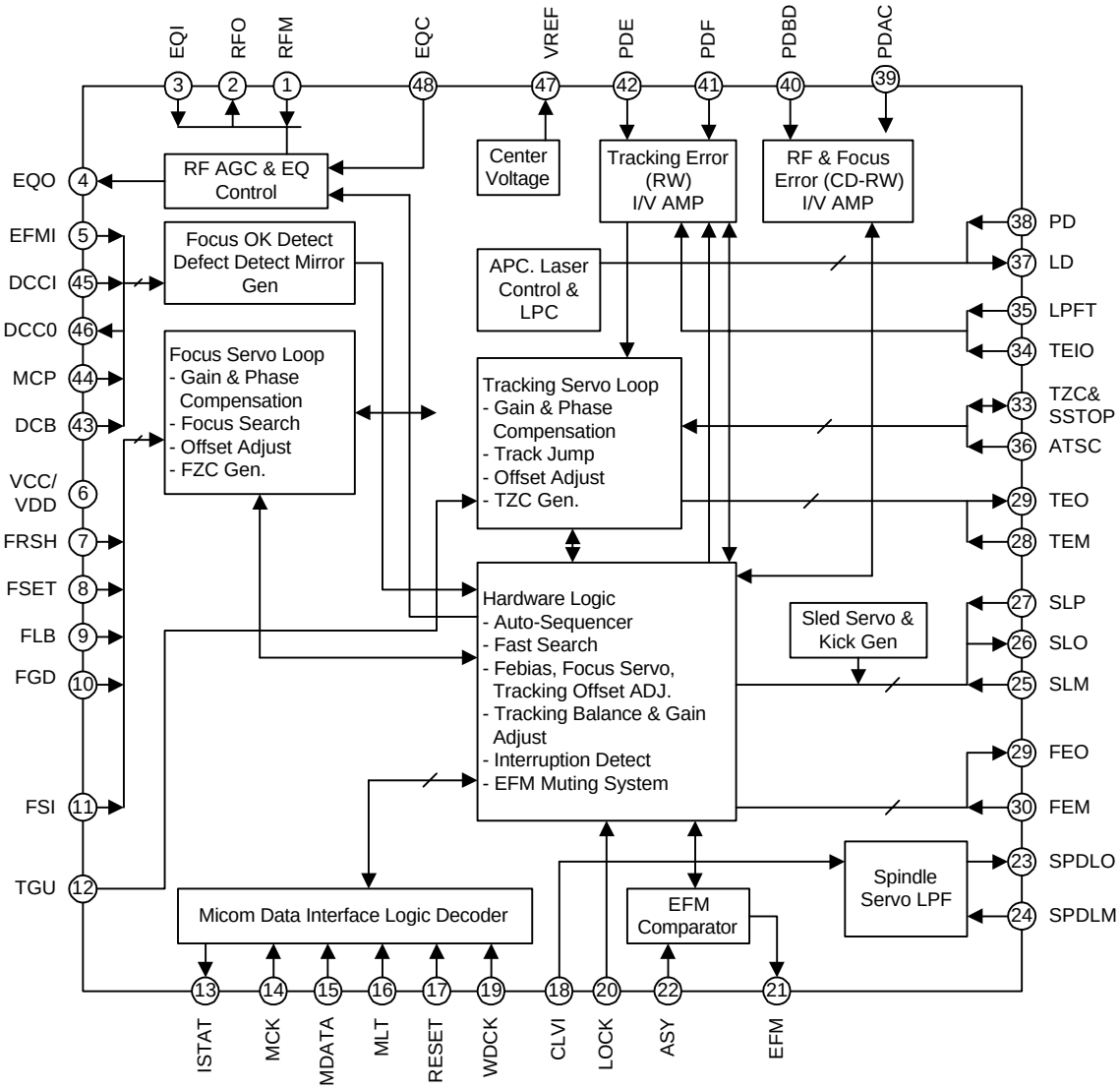
Pin No.	Symbol	Function
1	OUT 12V (b)	12V/1.3A SWITCHED OUTPUT VOLTAGE
2	V_S	Supply Voltage
3	OUT 5.6V	5.6V/250mA OUTPUT VOLTAGE
4	N.C.	not connected
5	EN 12V (b)	Enable 12V/1.3A SWITCHED OUTPUT VOLTAGE
6	GND	Ground
7	EN 12V (a)	Enable 12V/0.8A SWITCHED OUTPUT VOLTAGE
8	EN 8.6V	Enable 8.6V/0.6A SWITCHED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

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

1. Pin layout



2. Block diagram

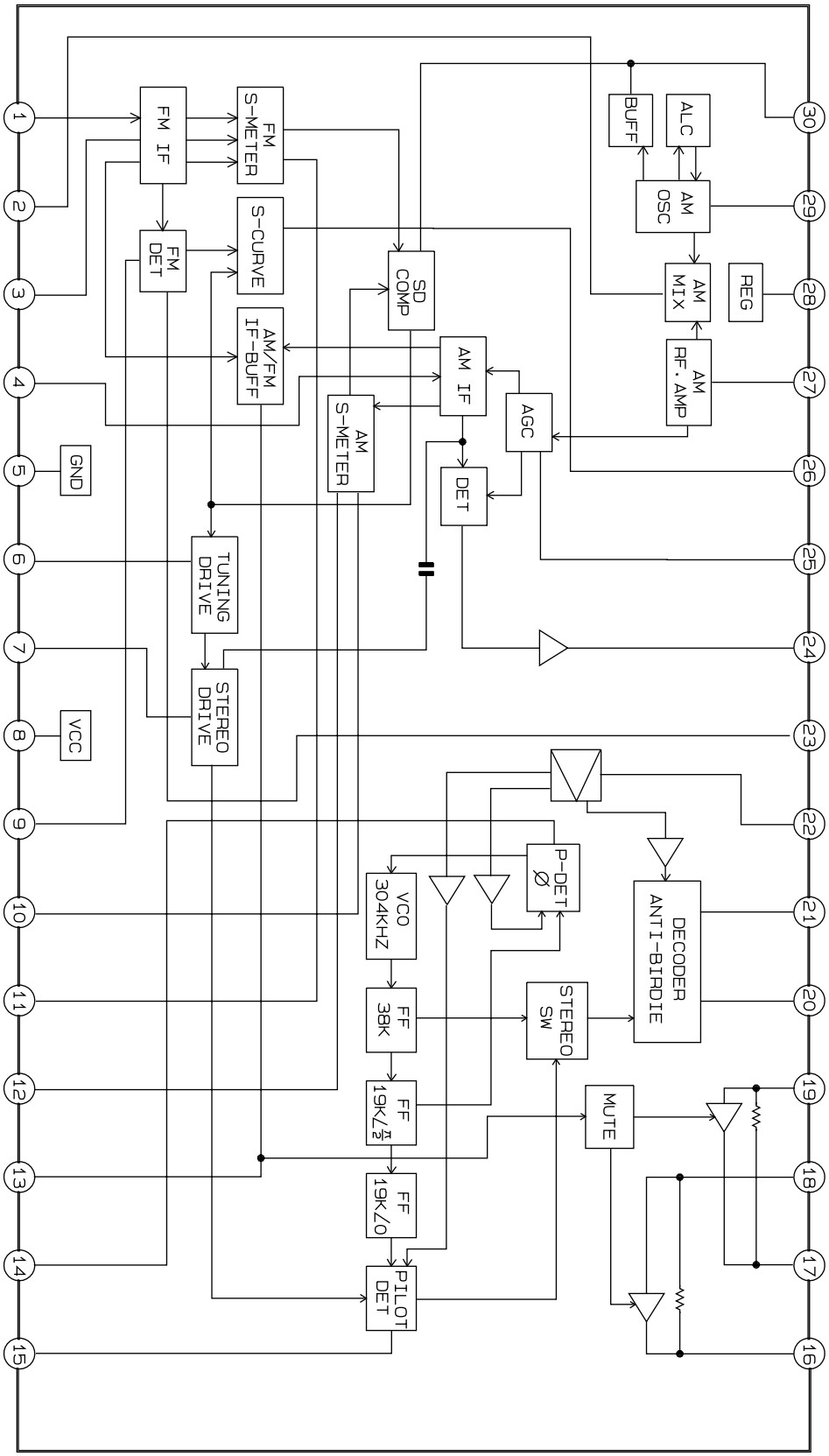


3. Pin function

KB9226

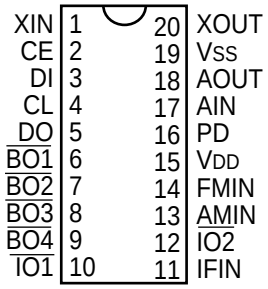
Pin No.	Symbol	Type	Function
1	RFM	I	RF summing amp. inverting input
2	RFO	O	RF summing amp. output
3	EQI	I	RFO DC eliminating input(use by MIRROR, FOK ,AGC & EQ terminal)
4	EQO	O	RF equalizer output
5	EFMI	I	EFM slice input. (input impedance 47K)
6	VCC	P	Main power supply
7	FRSH	I	Capacitor connection 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 non inverting 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 whether 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

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

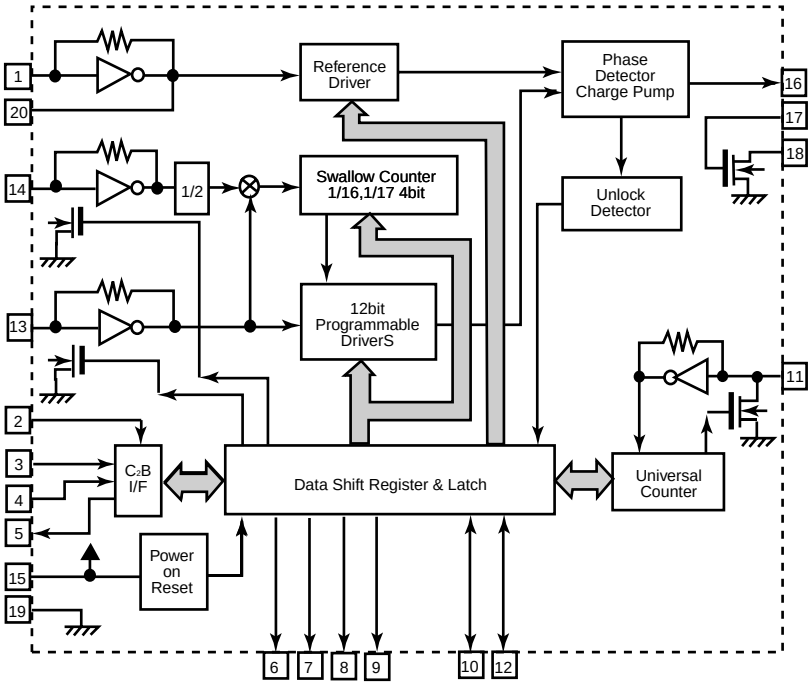


■ LC72131M (IC02) : PLL frequency synthesizer

1. Pin layout



2. Block diagram

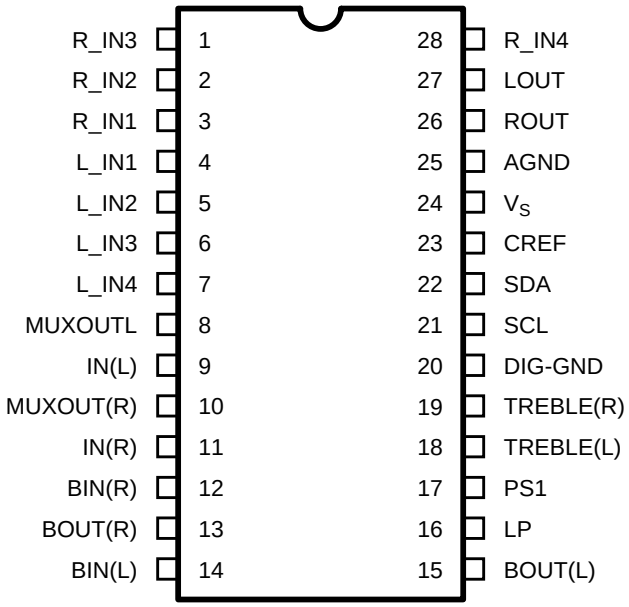


3. Pin function

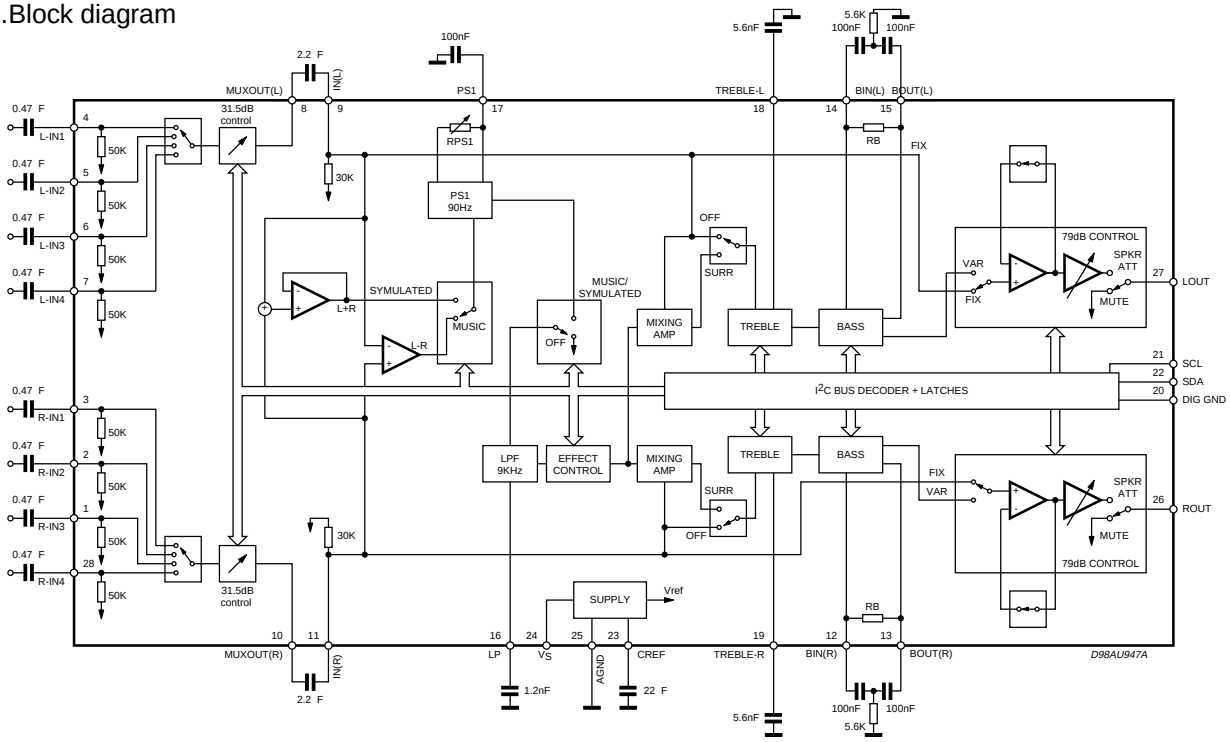
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XIN	I	X'tal oscillator connect (4.5MHz/7.2MHz)	11	IFIN	I	IF counter signal input
2	CE	-	Chip enable	12	$\overline{IO2}$	I/O	I/O port
3	DI	I	Input data	13	AMIN	I	AM Local oscillator signal input
4	CL	I	Clook	14	FMIN	I	FM Local oscillator signal 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

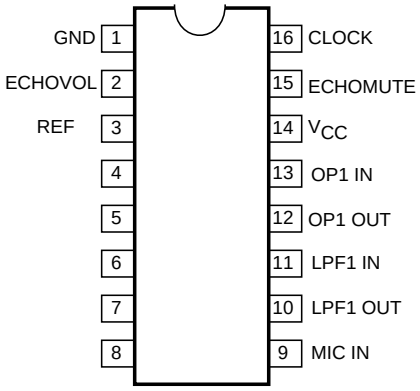


2.Block diagram



■ M65855FP (EIC1) : Sound processor

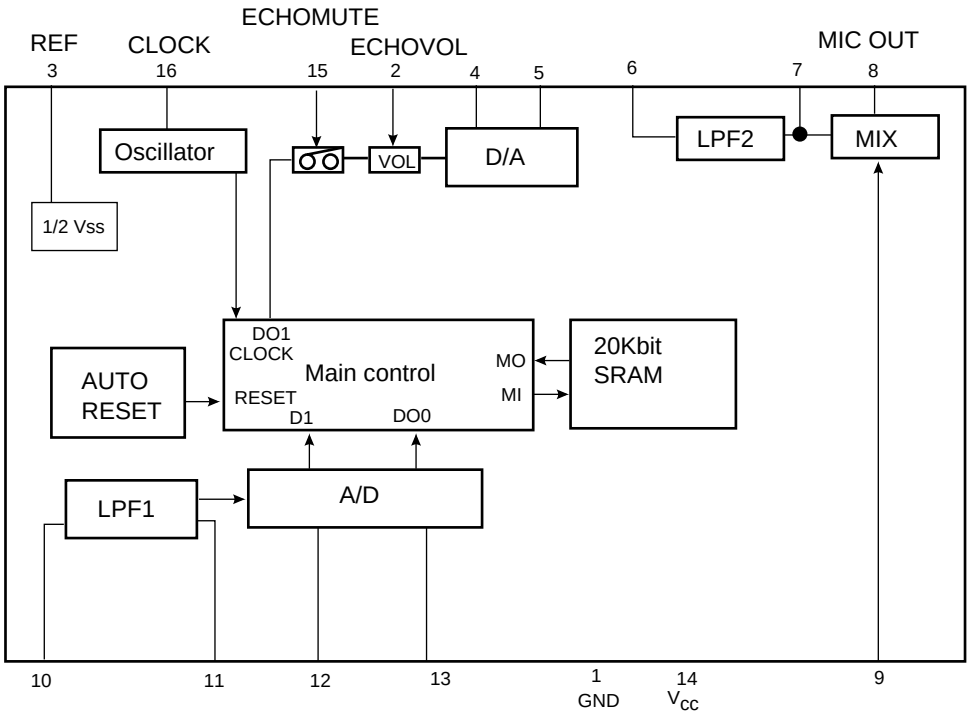
1. Pin layout



2. Pin function

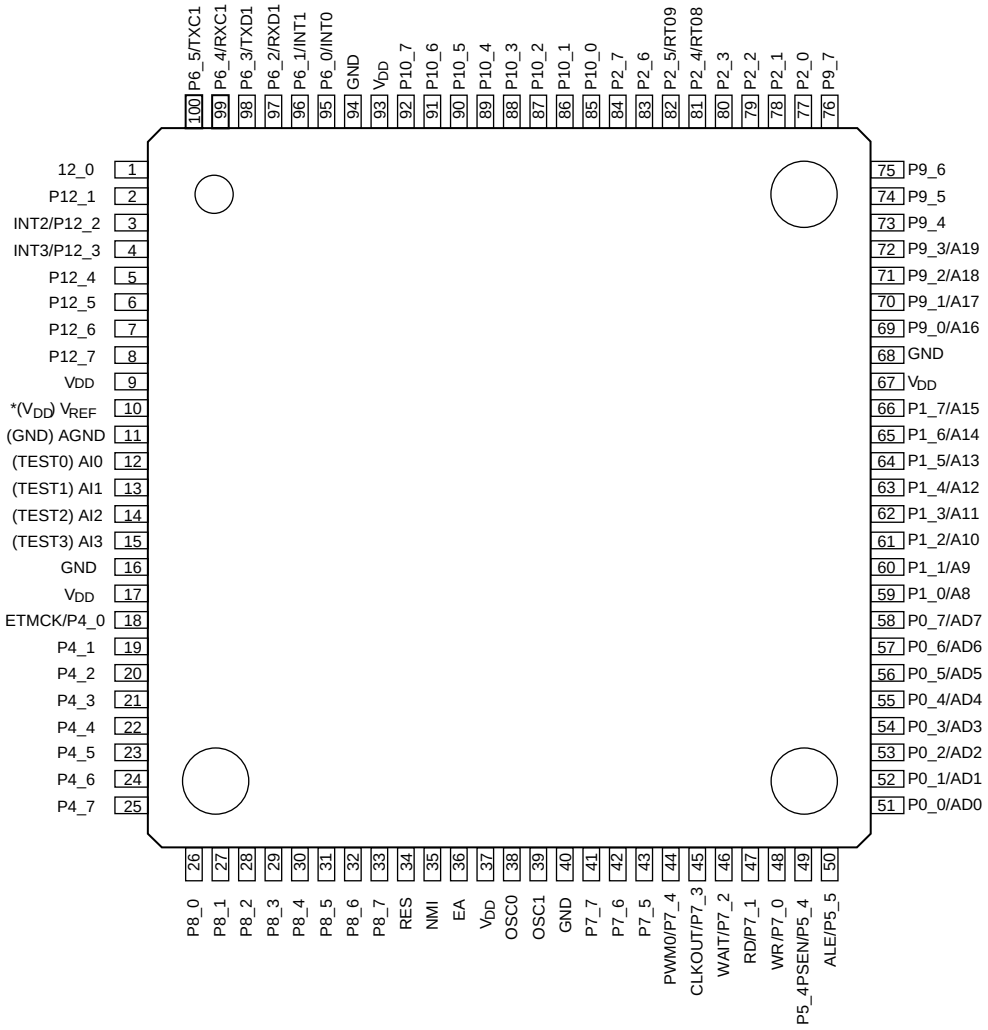
Pin No.	Symbol	Function
1	GND	
2	ECHOVOL	Echo level control with external DC voltage
3	REF	To connect 1/2 Vcc output and filter capacitor
4	OP2 IN	Uses external C to from an D/A conversion integrator
5	OP2 OUT	
6	LPF2 IN	Uses external CR to from a low pass filter at the input side
7	LPF2 OUT	
8	MIC OUT	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

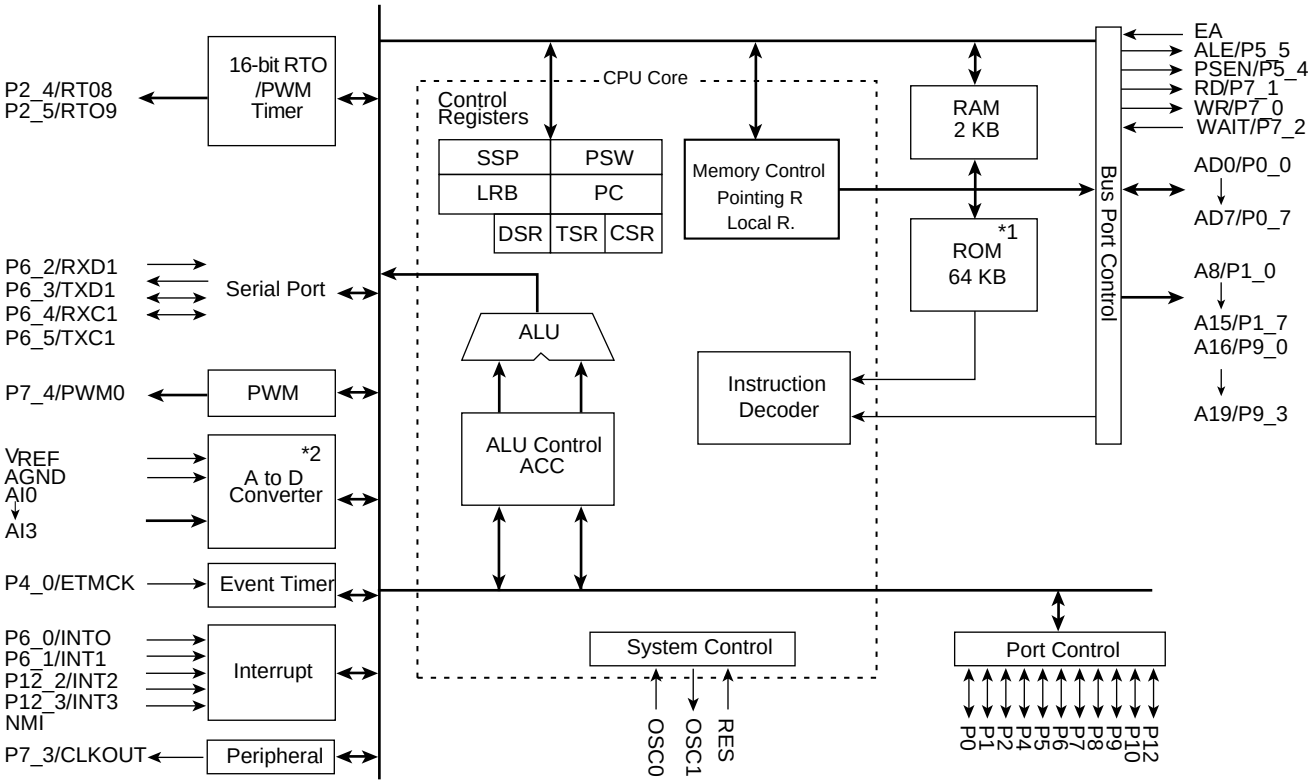


■ MSM66587 (MIC1) : Microprocessor

1.Pin layout



2.Block diagram



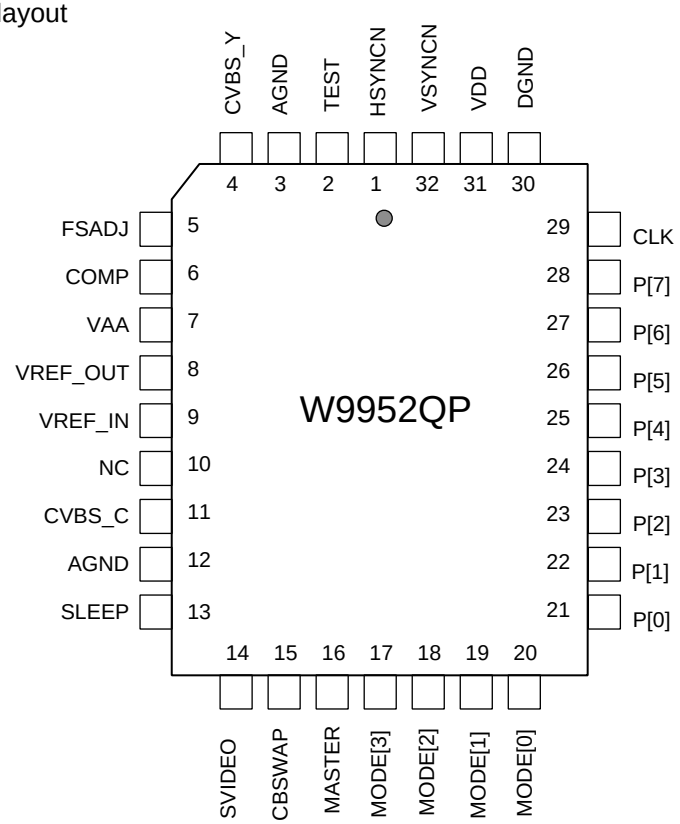
3.Pin function

MSM66587

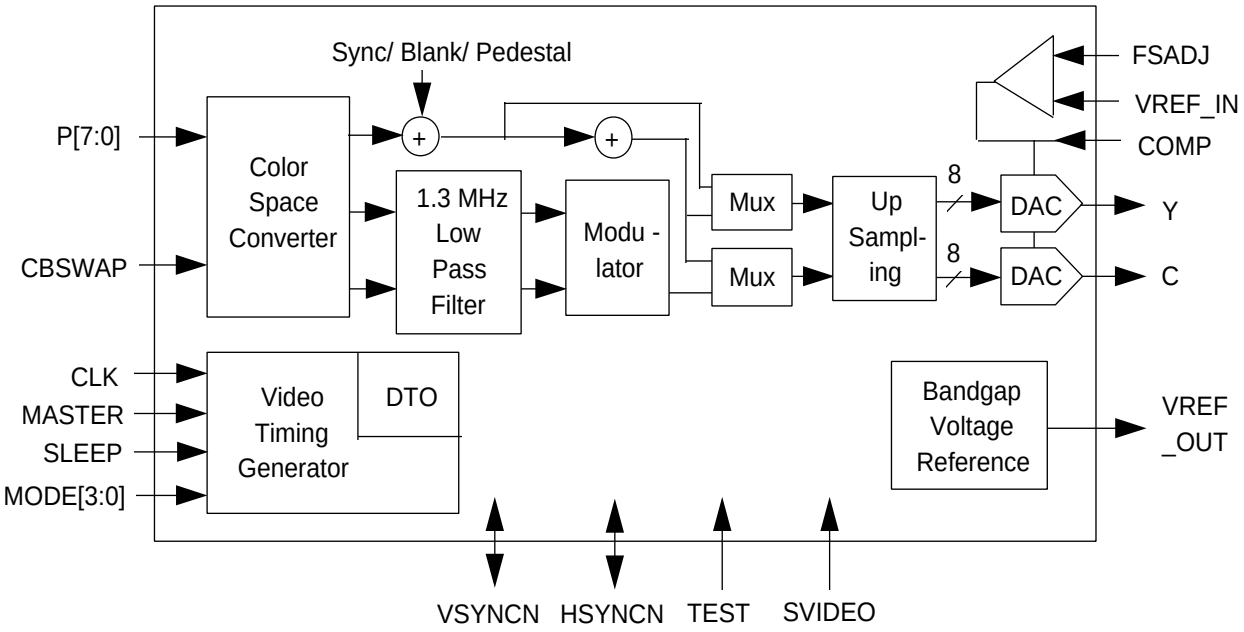
Pin No.	Symbol	I/O	Function
1~2	P12_0~P12~2	I/O	Input or output can be specified for each bit with the port 12 Mode Register
3	INT2/P12_2	I/O	Input or output can be specified for each bit with the port 12 Mode Register
4	INT3/P12_3	I/O	Input or output can be specified for each bit with the port 12 Mode 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

■ W9952QP (MIC3) : Video decoder

1. Pin layout



2. Block diagram.

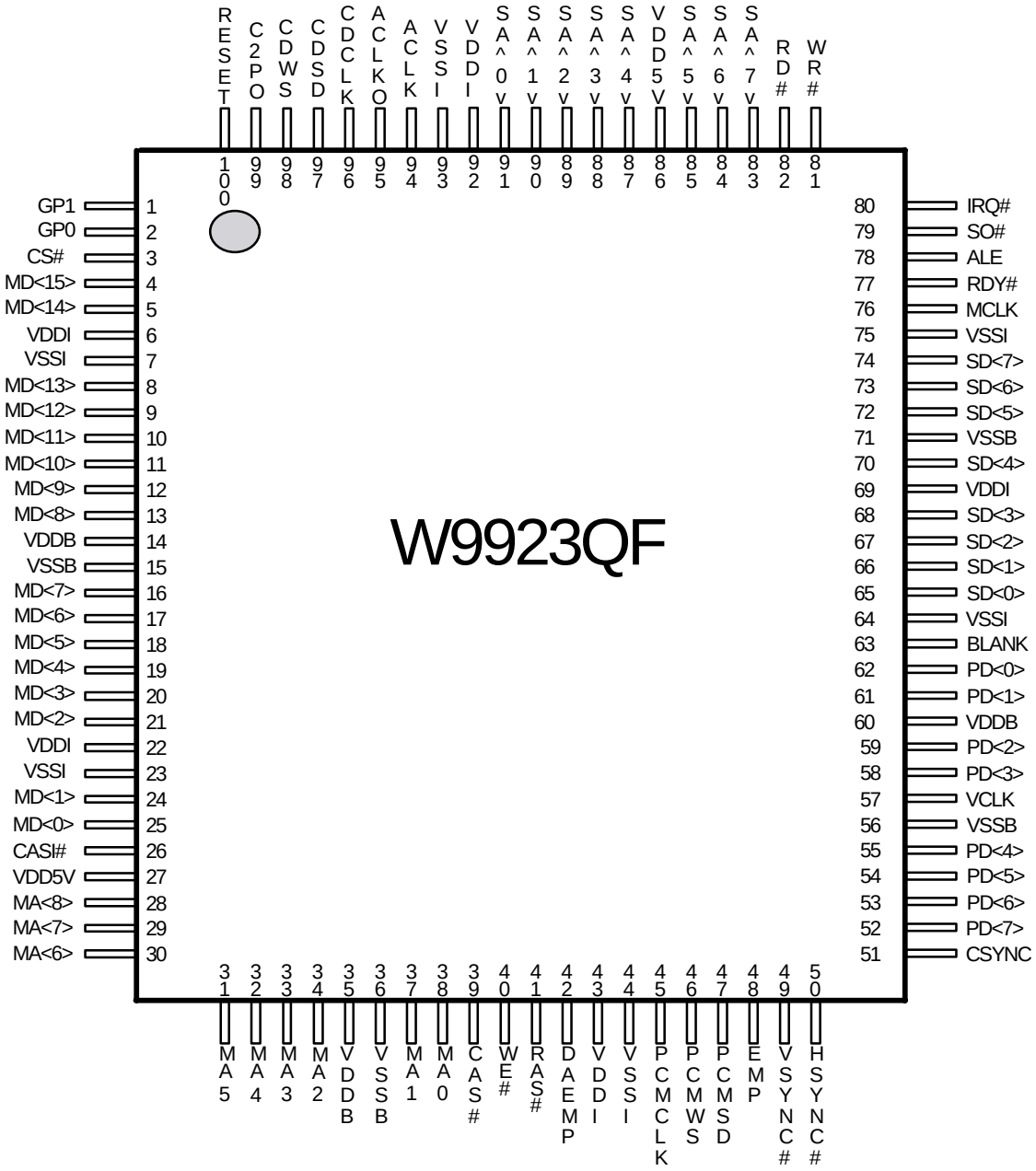


3. Pin function

Pin No.	Type	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

■ W9923QF (MIC4) : MPEG decoder

1. Pin layout



2 Pin function (1/2)

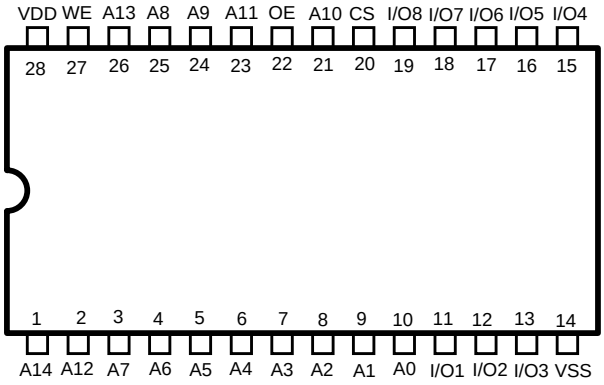
Pin No.	Symbol	type	Function
1~2	GP0~1	I/O	Programmable input/output 1
3	CS#	I	Chip select input, active LOW; optional
4~5	MD<14~15>	I/O	DRAM data bus
6,14,22,35	VDD		3.3V power supply
7,15,23,36,44	VSS		0V ground
8~13	MD<8~13>	I/O	DRAM data bus
16~21	MD<2~7>	I/O	DRAM data bus
24~25	MD<0~1>	I/O	DRAM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

2 Pin function (2/2)

Pin No.	Symbol	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

■ W24257 (MIC2) : SRAM

1. Pin layout



2. Pin function

Pin No.	Symbol	Type	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 >

MX-K55V

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

(No.21017)

200107(V)