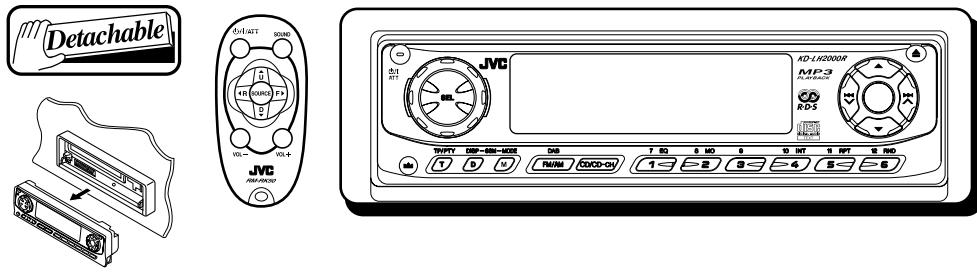


JVC

SERVICE MANUAL

CD RECEIVER

KD-LH2000R



COMPACT
disc
DIGITAL AUDIO
TEXT
R·D·S
MP3
PLAYBACK

Area Suffix
E----- Continental Europe
EX----- Central Europe

Contents

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Disassembly method

■ Removing the front panel unit

(See Fig.1)

1. Press the release switch and remove the front panel unit in the direction of the arrow.

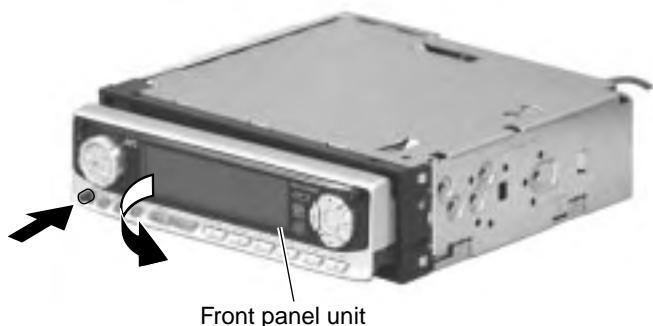


Fig.1

■ Removing the bottom cover

(See Fig.2,3)

1. Turn the body upside down.
2. Insert a screwdriver to the two joints **a** and two joints **b** on both sides of the body and the joint **c** on the back of the body, then detach the bottom cover from the body.

CAUTION: When disengaging the joint **c** using a screwdriver, do not damage or break the board.

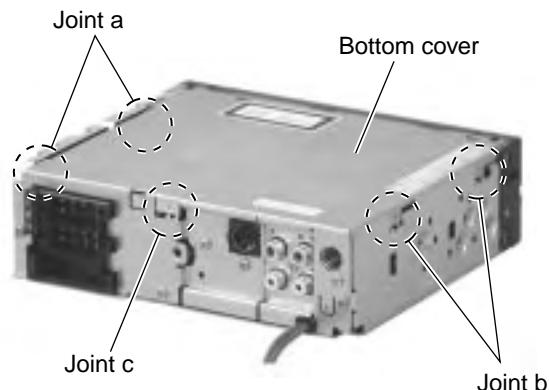


Fig. 2

■ Removing the front chassis (See Fig.4,5)

- Prior to performing the following procedure, remove the bottom cover.
1. Remove the two screws **A** attaching the front chassis.
 2. Remove the two screws **B** on each side of the body.
 3. Release the two joints **d** and the two joints **e** on the sides. remove the front chassis toward the front.

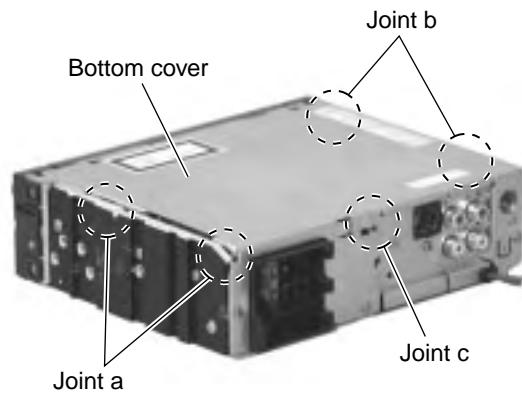


Fig. 3

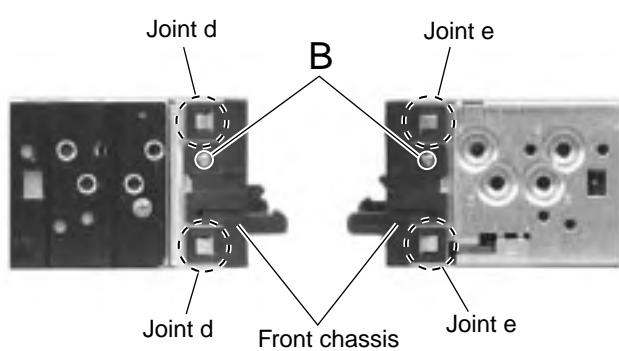


Fig. 5

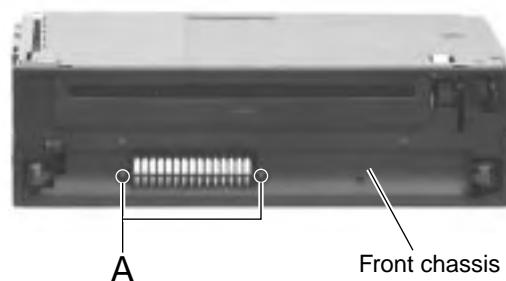


Fig.4

■ Removing the heat sink (See Fig.6)

1. Remove the four screws **C** attaching the heat sink on the left side of the body, and remove the heat sink.

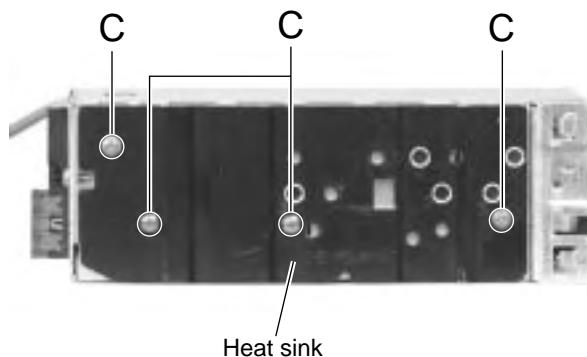


Fig. 6

■ Removing the rear panel (See Fig.7)

- Prior to performing the following procedure, remove the front chassis, the heat sink and bottom cover.
1. Remove the six screws **D** attaching the rear panel and one screw **E** attaching the pine jack on the back of the body.

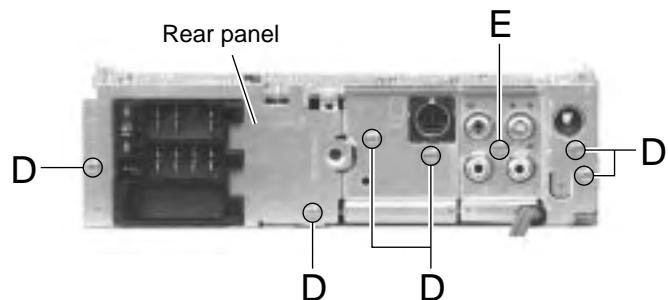


Fig. 7

■ Removing the main amplifier board assembly (See Fig.8)

- Prior to performing the following procedure, remove the front chassis, the heat sink, bottom cover and the rear panel.
1. Remove the two screws **F** attaching the main amplifier board assembly on the top cover.
 2. Disconnect connector CN601 on the main amplifier board assembly from the cassette mechanism assembly.

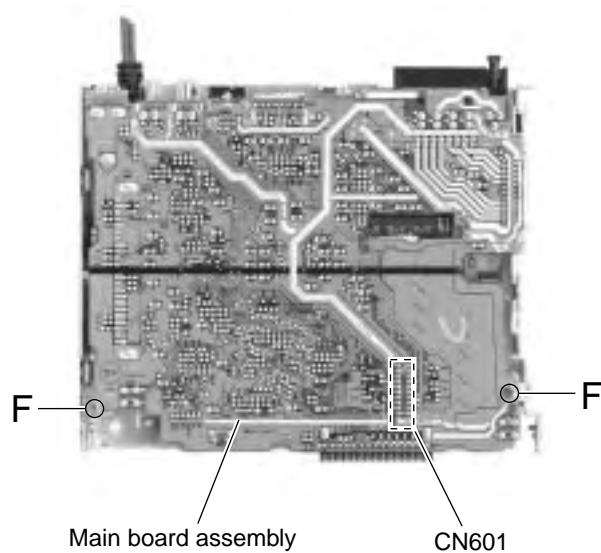


Fig. 8

■ Removing the MP3 board

(See Fig.9)

- Prior to performing the following procedure, remove the top cover.
- Disconnect the wire from connector CN601 on the MP3 board.
 - Remove the five screws **G** and the MP3 board, releasing the joint **f** and **g**.

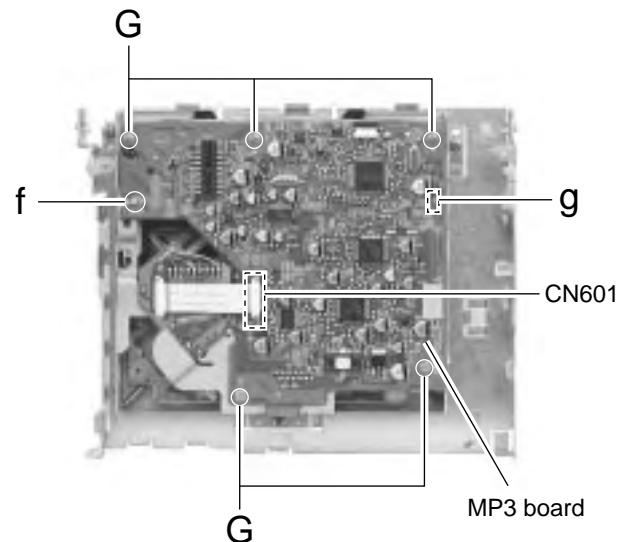


Fig.9

■ Removing the CD mechanism assembly

(See Fig.10)

- Prior to performing the following procedure, remove the front chassis, the heat sink, bottom cover and the main amplifier board assembly.

- Remove the three screws **H** attaching the cassette mechanism assembly from the top cover.

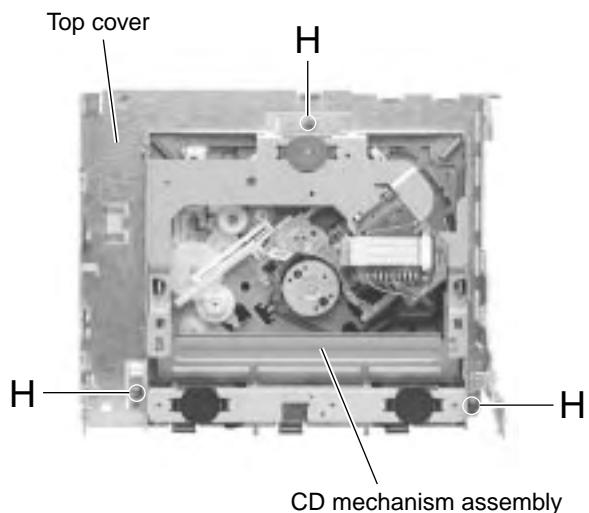


Fig. 10

**■ Removing the (LCD & key) control switch board
(See Fig.11 ~ 13)**

- Prior to performing the following procedure, remove the front panel assembly.
- Remove the four screws **I** attaching the rear cover on the back of the front panel assembly.
 - Unjoint the nine joints **h** with the front panel and the rear cover.
 - Remove the control switch board on the back of the front panel.



Fig. 11

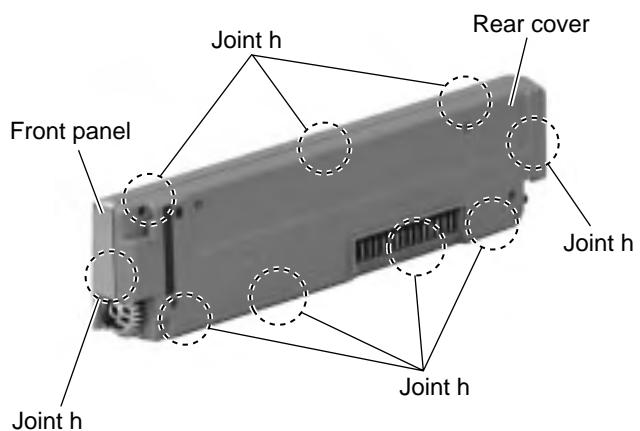


Fig. 12

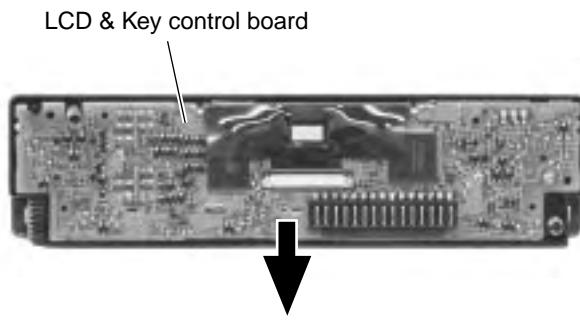


Fig. 13

< CD mechanism section >

■ Removing the top cover

(See Fig.1 and 2)

1. Remove the two screws **A** on each side of the body.
2. Lift the front side of the top cover and move the cover backward to release the two joints **a**.

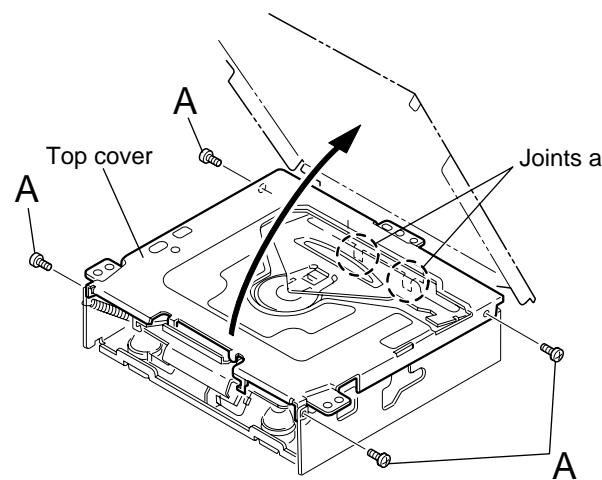


Fig.1

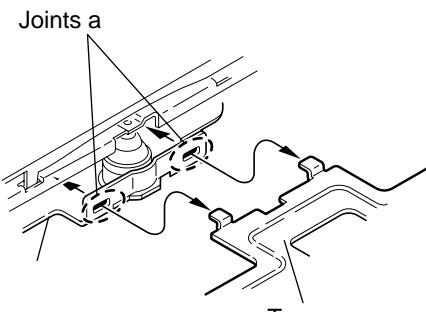


Fig.2

1. Remove the screw **B** fixing the connector board.
2. Solder the short-circuit point on the connector board.
- Disconnect the flexible wire from the pickup.
3. Move the connector board in the direction of the arrow to release the two joints **b**.
4. Unsolder the wire on the connector board if necessary.

CAUTION: Unsolder the short-circuit point after reassembling.

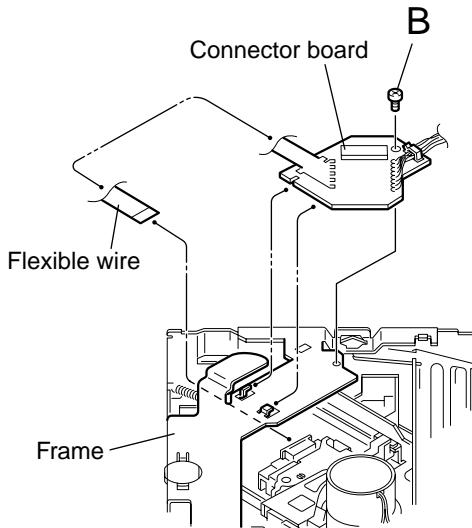


Fig.5

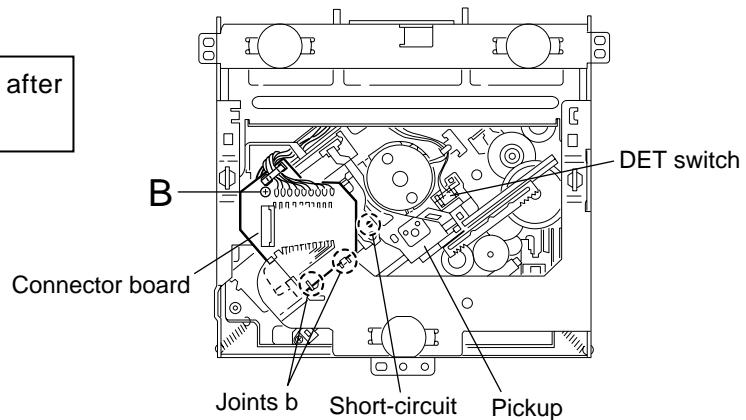


Fig.3

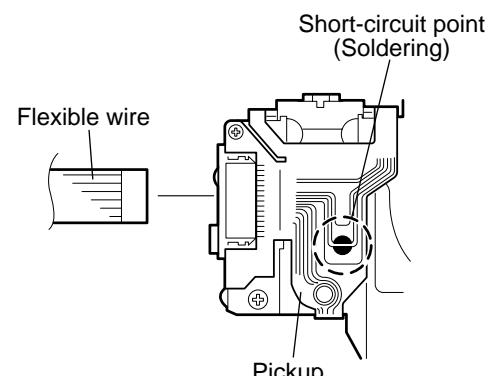


Fig.4

■ Removing the DET switch (See Fig.3 and 6)

1. Extend the two tabs **c** of the feed sw. holder and pull out the switch.
2. Unsolder the DET switch wire if necessary.

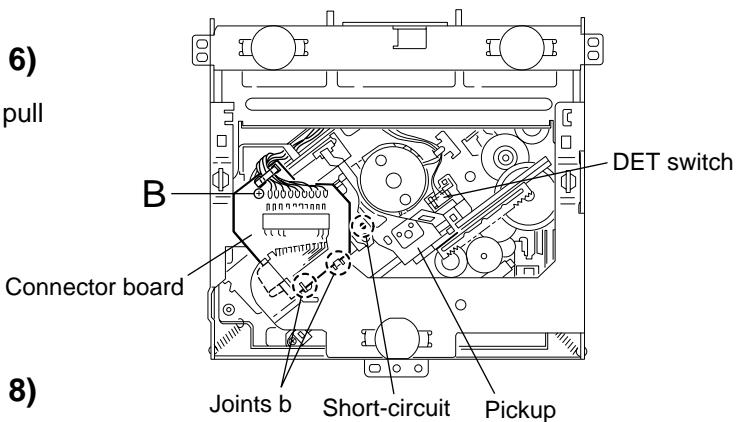


Fig.3

■ Removing the chassis unit (See Fig.7 and 8)

- Prior to performing the following procedure, remove the top cover and the connector board.
- 1. Remove the two suspension springs (L) and (R) attaching the chassis unit to the frame.

CAUTION: The shape of the suspension spring (L) and (R) are different. Handle them with care.

CAUTION: When reassembling, make sure that the three shafts on the underside of the chassis unit are inserted to the dampers certainly.

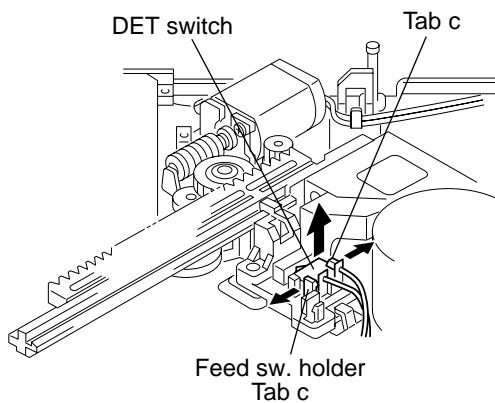


Fig.6

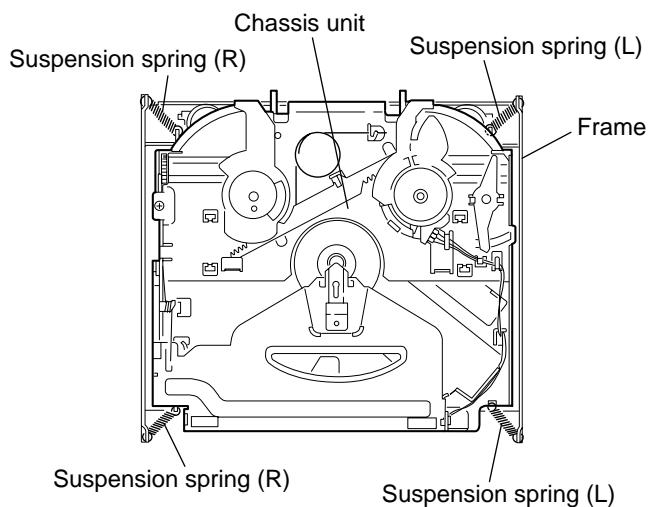


Fig.7

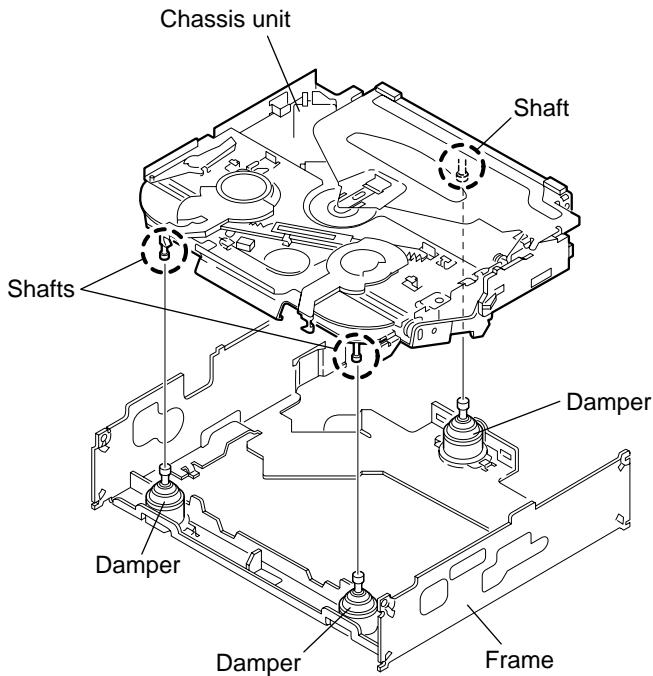


Fig.8

■Removing the clamper assembly (See Fig.9 and 10)

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

- Remove the clamper arm spring.
- Move the clamper assembly in the direction of the arrow to release the two joints **d**.

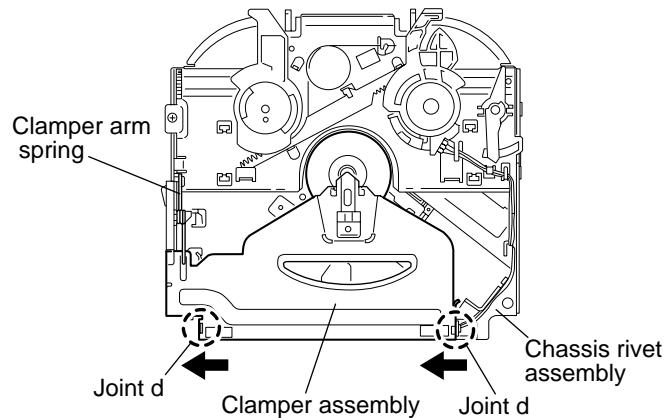


Fig.9

■Removing the loading / feed motor assembly (See Fig.11 and 12)

- Prior to performing the following procedure, remove the top cover, the connector board and the chassis unit.

- Remove the screw **C** and move the loading / feed motor assembly in the direction of the arrow to remove it from the chassis rivet assembly.
- Disconnect the wire from the loading / feed motor assembly if necessary.

CAUTION: When reassembling, connect the wire from the loading / feed motor assembly to the flame as shown in Fig.11.

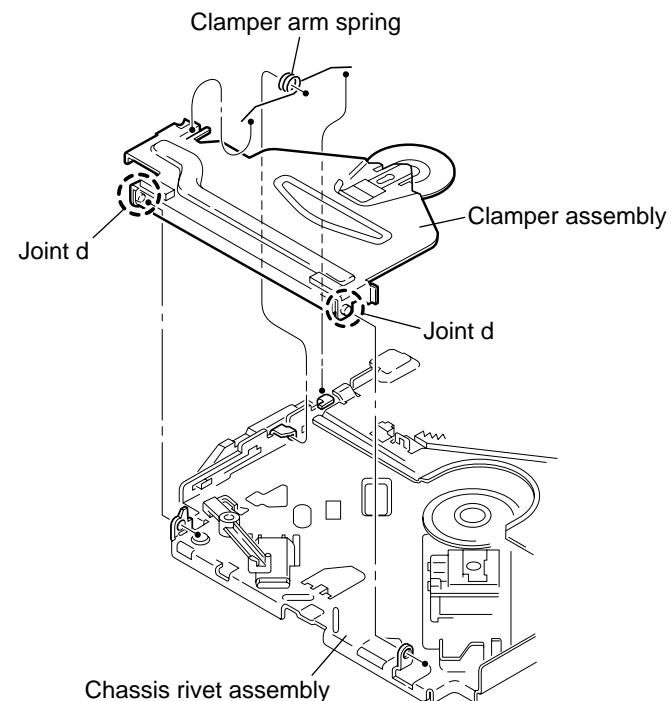
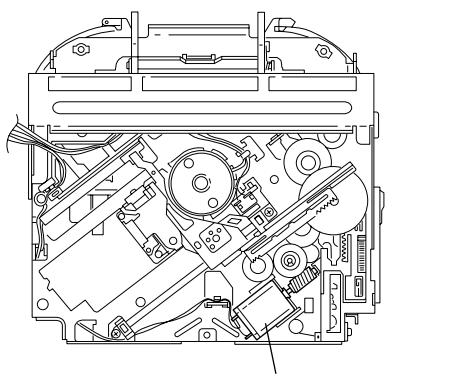


Fig.10



Loading / feed motor assembly

Fig.11

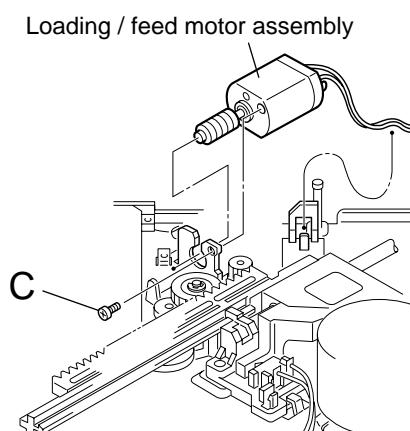


Fig.12

■ Removing the pickup unit

(See Fig.13 to 17)

- Prior to performing the following procedure, remove the top cover, the connector board and the chassis unit.

1. Remove the screw **D** and pull out the pu. shaft holder from the shaft.
2. Remove the screw **E** attaching the feed sw. holder.
3. Move the part **e** of the pickup unit upward with the shaft and the feed sw. holder, then release the joint **f** of the feed sw. holder in the direction of the arrow. The joint **g** of the pickup unit and the feed rack is released, and the feed sw. holder comes off.
4. Remove the shaft from the pickup unit.
5. Remove the screw **F** attaching the feed rack to the pickup unit.

■ Reattaching the pickup unit

(See Fig.13 to 16)

1. Reattach the feed rack to the pickup unit using the screw **F**.
2. Reattach the feed sw. holder to the feed rack while setting the joint tab **g** to the slot of the feed rack and setting the part **f** of the feed rack to the switch of the feed sw. holder correctly.
3. As the feed sw. holder is temporarily attached to the pickup unit, set to the gear of the joint **g** and to the bending part of the chassis (joint **h**) at a time.

CAUTION: Make sure that the part **i** on the underside of the feed rack is certainly inserted to the slot **j** of the change lock lever.

4. Reattach the feed sw. holder using the screw **E**.
5. Reattach the shaft to the pickup unit. Reattach the pu. shaft holder to the shaft using the screw **D**.

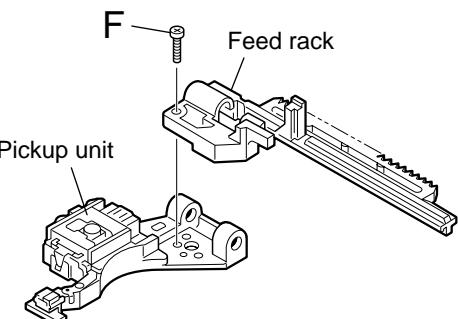


Fig.16

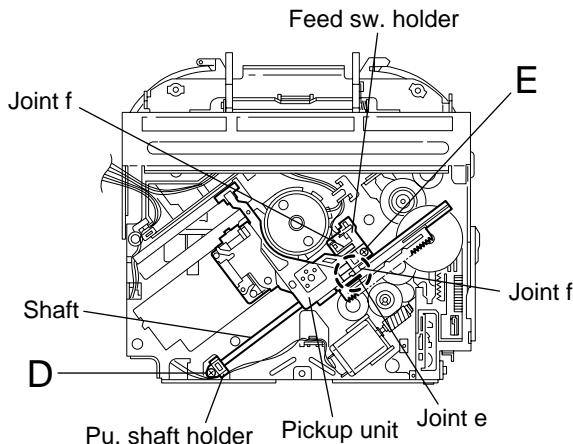


Fig.13

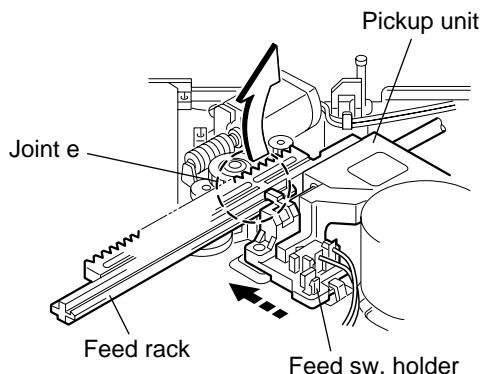


Fig.14

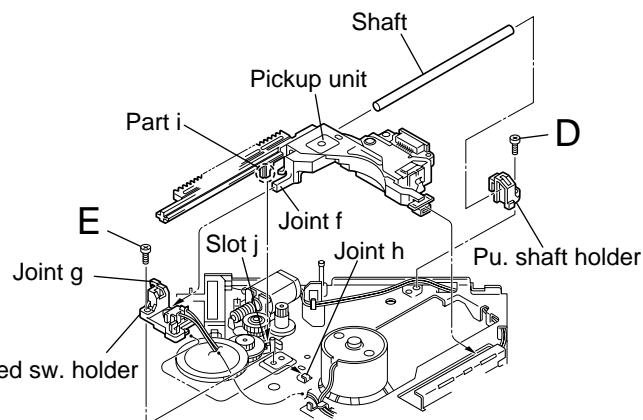


Fig.15

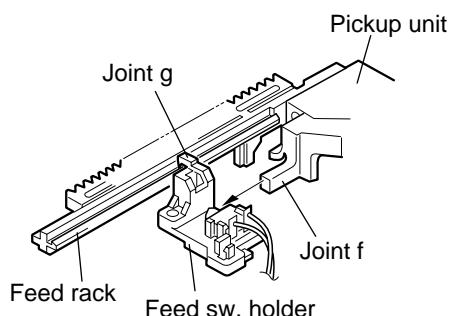


Fig.17

■ Removing the trigger arm

(See Fig.18 and 19)

- Prior to performing the following procedure, remove the top cover, the connector board and the clamper unit.

- Turn the trigger arm in the direction of the arrow to release the joint **k** and pull out upward.

CAUTION: When reassembling, insert the part **I** and **m** of the trigger arm into the part **n** and **o** at the slot of the chassis rivet assembly respectively and join the joint **k** at a time.

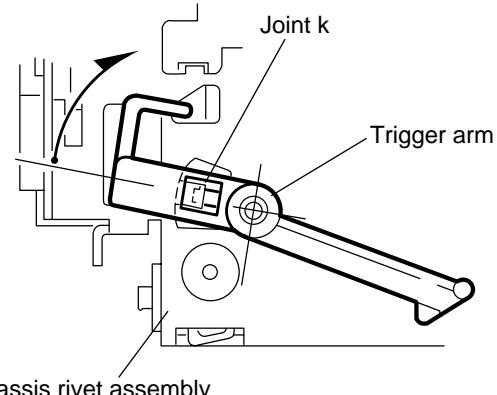


Fig.18

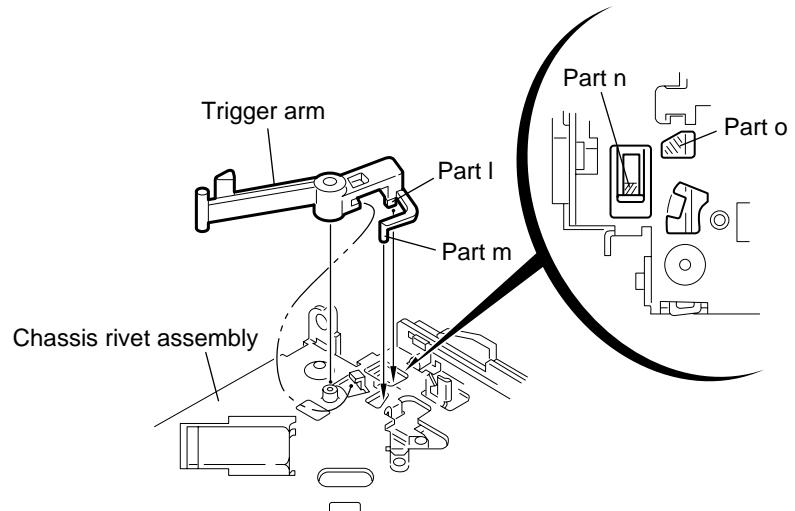


Fig.19

■ Removing the top plate assembly

(See Fig.20)

- Prior to performing the following procedure, remove the top cover, the connector board, the chassis unit, and the clamper assembly.

- Remove the screw **H**.

- Move the top plate assembly in the direction of the arrow to release the two joints **p**.

- Unsolder the wire marked **q** if necessary.

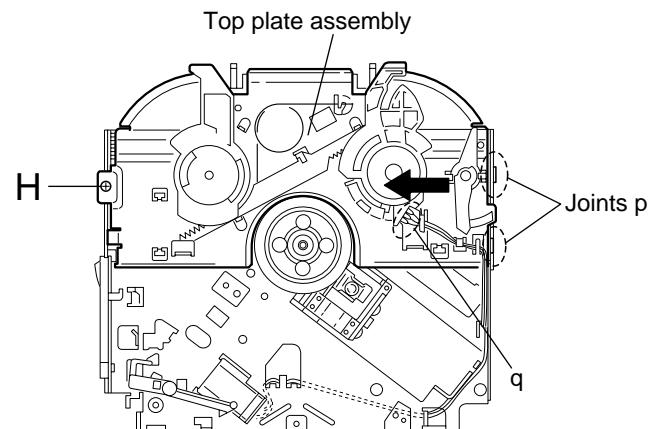


Fig.20

■ Removing the select arm (L) / select lock arm (See Fig.21 and 22)

- Prior to performing the following procedure, remove the top plate assembly.

- Bring up the select arm (L) to release from the link plate (joint r) and turn in the direction of the arrow to release the joint s.
- Unsolder the wire of the select arm (L) marked q if necessary.
- Turn the select lock arm in the direction of the arrow to release the two joints t.

The select lock arm spring comes off the select lock arm at the same time.

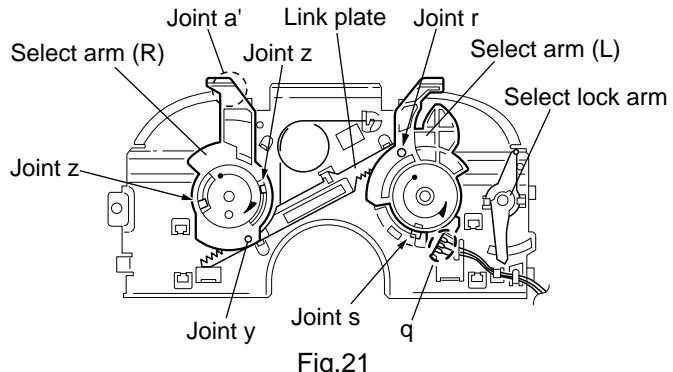


Fig.21

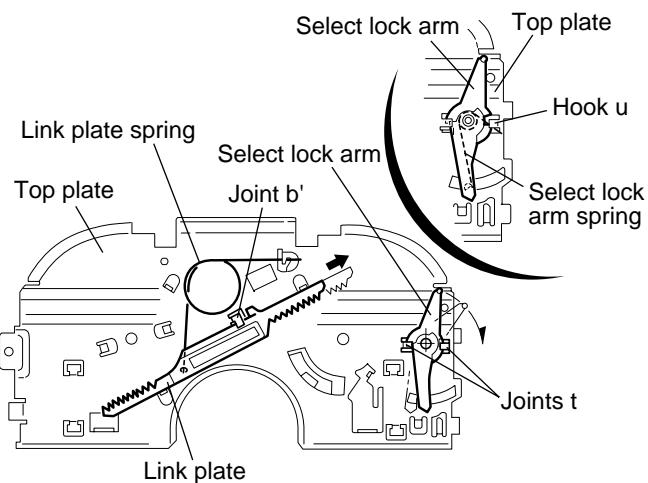


Fig.22

■ Reassembling the select arm (L) / select lock arm (See Fig.23 to 25)

REFERENCE: Reverse the above removing procedure.

- Reattach the select lock arm spring to the top plate and set the shorter end of the select lock arm spring to the hook u on the top plate.
- Set the other longer end of the select lock arm spring to the boss v on the underside of the select lock arm, and join the select lock arm to the slots (joint t). Turn the select lock arm as shown in the figure.
- Reattach the select arm (L) while setting the part r to the first peak of the link plate gear, and join the joint s.

CAUTION: When reattaching the select arm (L), check if the points w and x are correctly fitted and if each part operates properly.

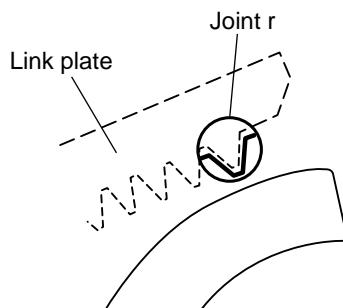


Fig.24

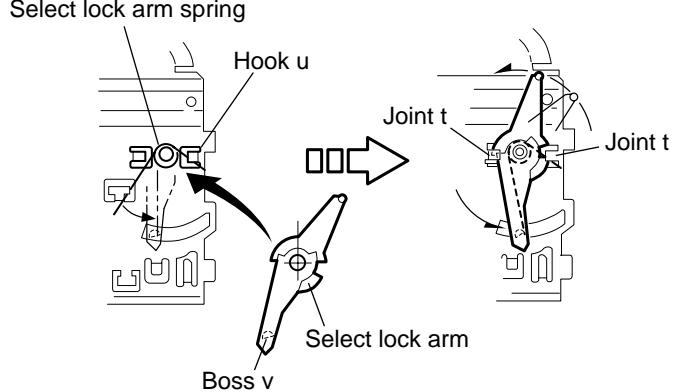


Fig.23

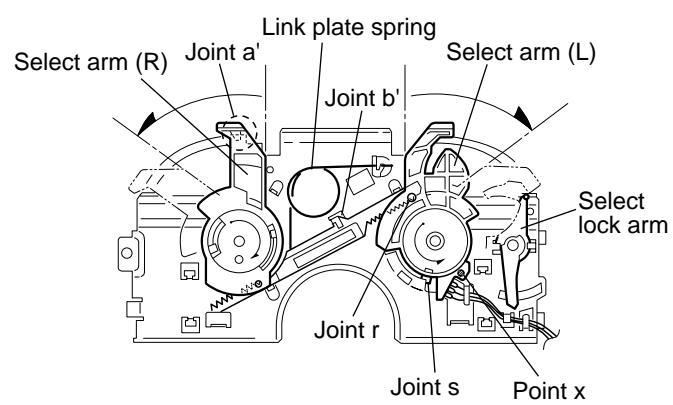
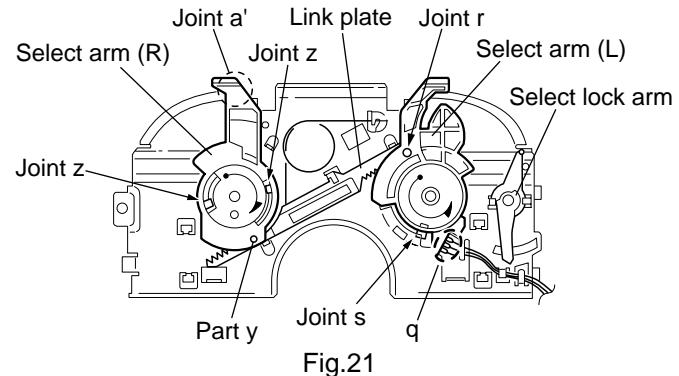


Fig.25

■Removing the select arm (R) / link plate (See Fig.21 and 22)

- Prior to performing the following procedure, remove the top plate assembly.
- Bring up the select arm (R) to release from the link plate (joint y) and turn as shown in the figure to release the two joints z and joint a'.
 - Move the link plate in the direction of the arrow to release the joint b'. Remove the link plate spring at the same time.

REFERENCE: Before removing the link plate, remove the select arm (L).

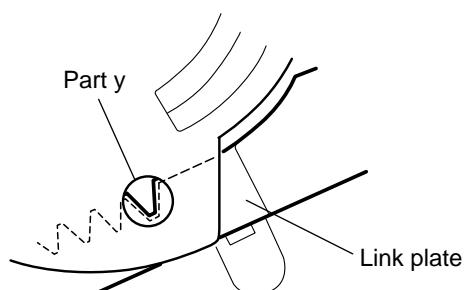
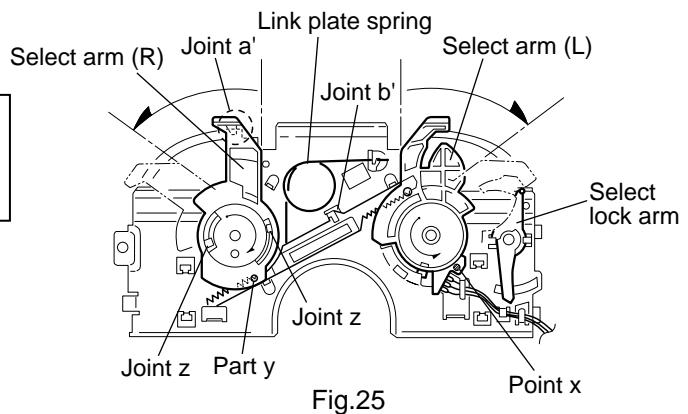
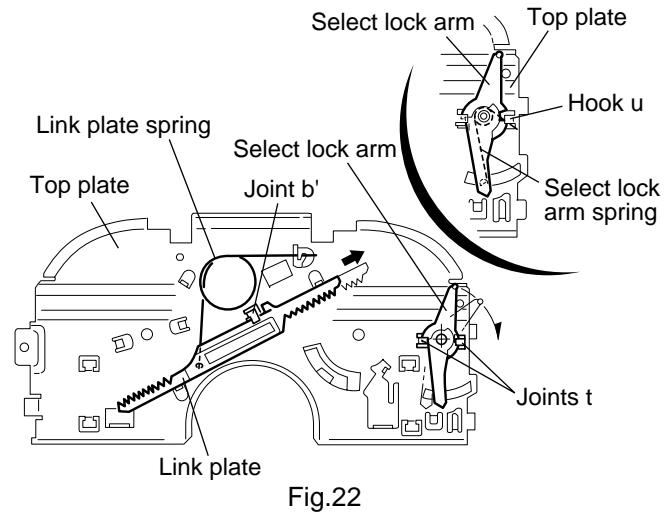


■Reattaching the Select arm (R) / link plate (See Fig.25 and 26)

REFERENCE: Reverse the above removing procedure.

- Reattach the link plate spring.
- Reattach the link plate to the link plate spring while joining them at joint b'.
- Reattach the part y of the select arm (R) to the first peak of the link plate while joining the two joints z with the slots. Then turn the select arm (R) as shown in the figure. The top plate is joined to the joint a'.

CAUTION: When reattaching the select arm (R), check if the part c' is correctly fitted and if each part operates properly.



■ Removing the loading roller assembly (See Fig.27 to 29)

- Prior to performing the following procedure, remove the clamper assembly and the top plate assembly.

1. Push inward the loading roller assembly on the gear side and detach it upward from the slot of the joint **d'** of the lock arm rivet assembly.

Detach the loading roller assembly from the slot of the joint **e'** of the lock arm rivet assembly.

The roller guide comes off the gear section of the loading roller assembly.

Remove the roller guide and the washer from the shaft of the loading roller assembly.

2. Remove the screw **I** attaching the lock arm rivet assembly.

3. Push the shaft at the joint **f'** of the lock arm rivet assembly inward to release the lock arm rivet assembly from the slot of the slide plate. Extend the lock arm rivet assembly outward and release the joint **g'** from the boss of the chassis rivet assembly. The roller guide springs on both sides come off.

CAUTION: When reassembling, reattach the left and right roller guide springs to the lock arm rivet assembly before reattaching the lock arm rivet assembly to the chassis rivet assembly. Make sure to fit the part **h'** of the roller guide spring (L) inside of the roller guide (Refer to Fig.30).

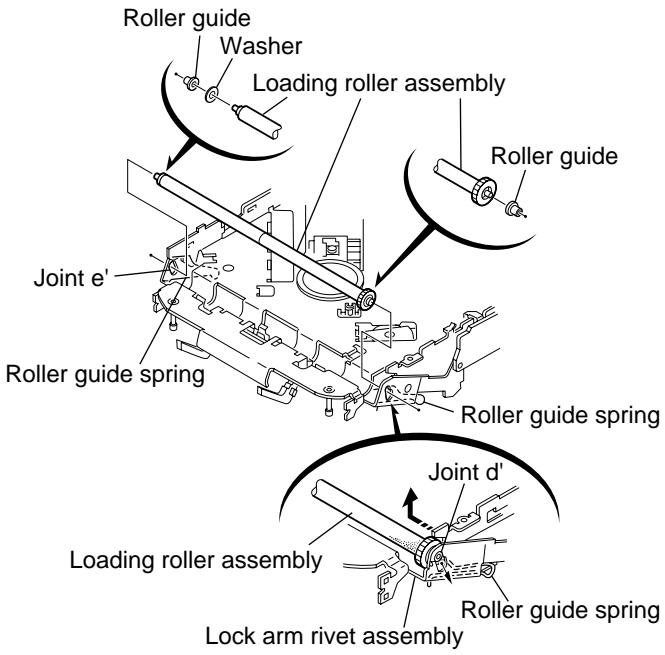


Fig.27

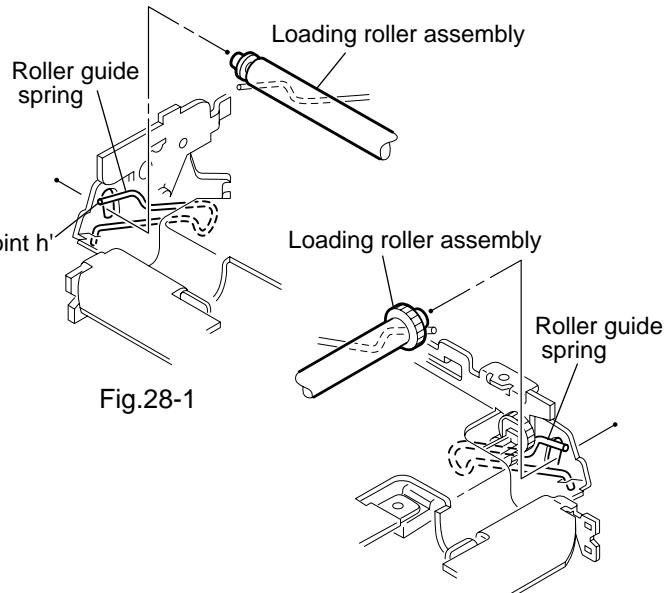


Fig.28-1

Fig.28-2

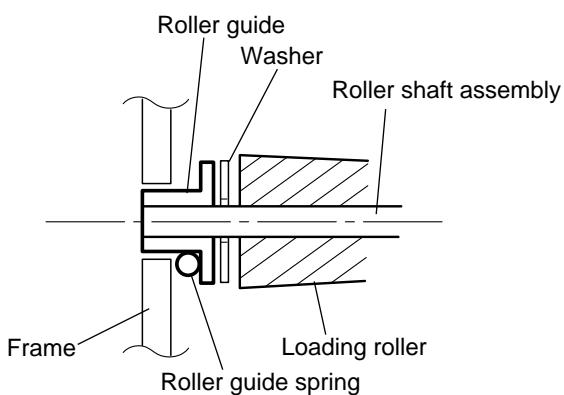


Fig.30

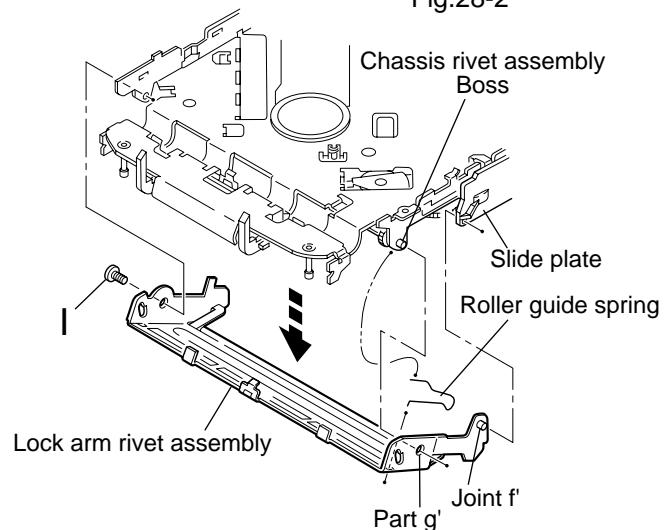


Fig.29

■Removing the loading gear (5), (6) and (7) (See Fig.31 and 32)

- Prior to performing the following procedure, remove the top cover, the chassis unit and the top plate assembly.

1. Remove the screw **J** attaching the loading gear bracket. The loading gear (6) and (7) come off the loading gear bracket.
2. Pull out the loading gear (5).

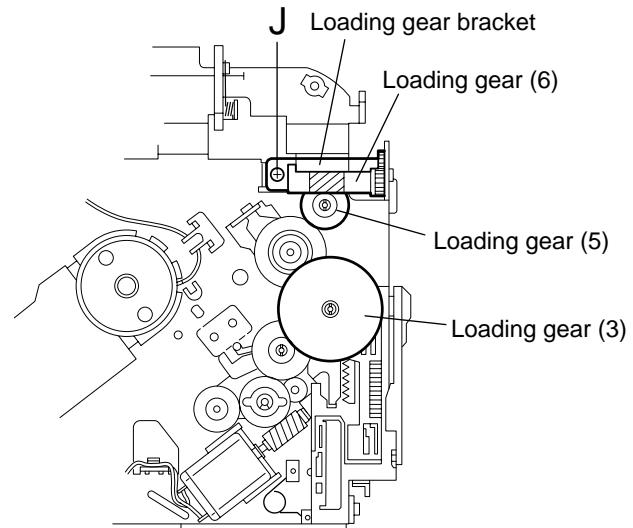


Fig.31

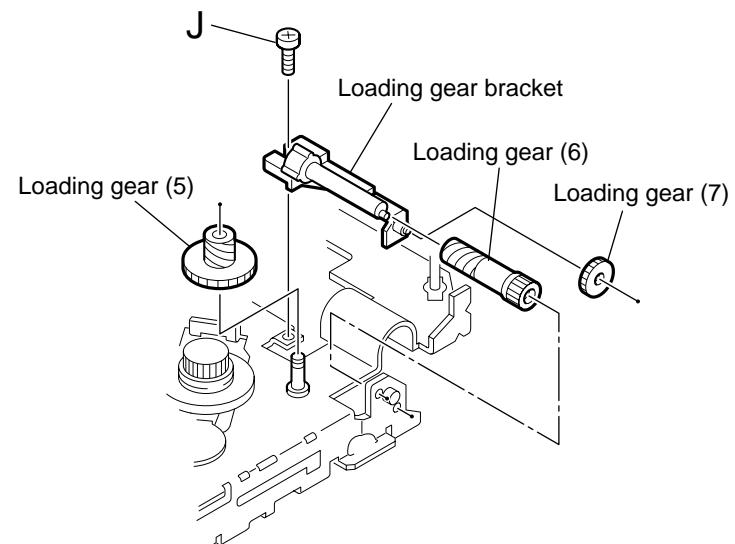


Fig.32

■ Removing the gears (See Fig.33 to 36)

- Prior to performing the following procedure, remove the top cover, the chassis unit, the top plate assembly and the pickup unit.

- Pull out the feed gear.
- Move the loading plate assembly in the direction of the arrow to release the slide plate from the two slots 'j' of the chassis rivet assembly.
- Detach the loading plate assembly upward from the chassis rivet assembly while releasing the joint k'. Remove the slide hook and the loading plate spring from the loading plate assembly.
- Pull out the loading gear (2) and remove the change lock lever.
- Remove the E-washer and the washer attaching the changer gear (2).
- The changer gear (2), the changer gear spring and the adjusting washer come off.
- Remove the loading gear (1).
- Move the hang plate rivet assembly in the direction of the arrow to release from the three shafts of the chassis rivet assembly upward.
- Detach the loading gear plate rivet assembly from the shaft of the chassis rivet assembly upward while releasing the joint l'.
- Pull out the loading gear (4).

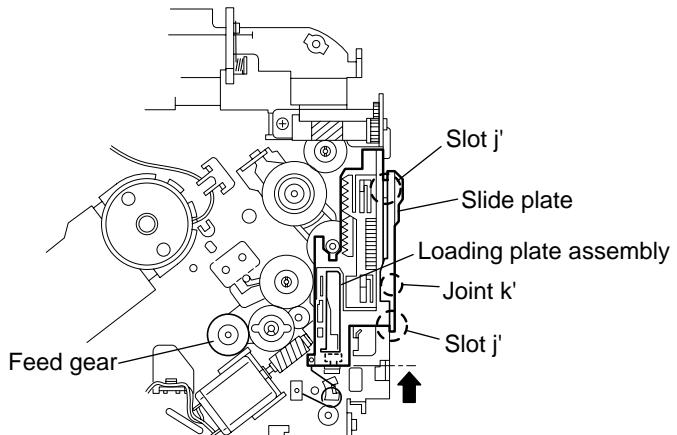


Fig.33

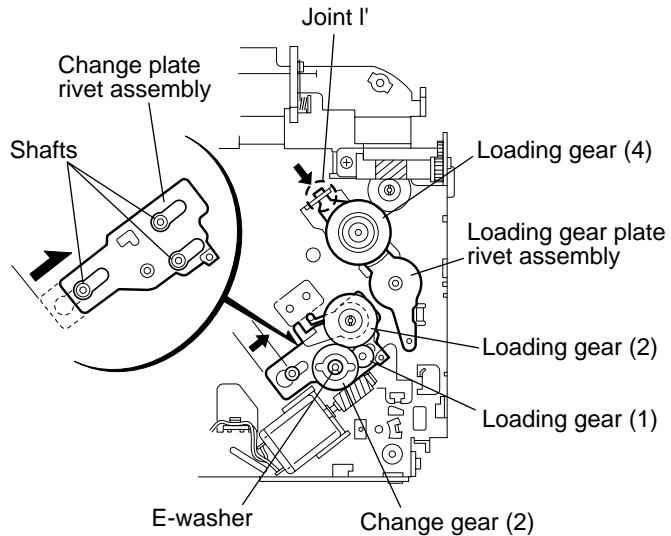


Fig.34

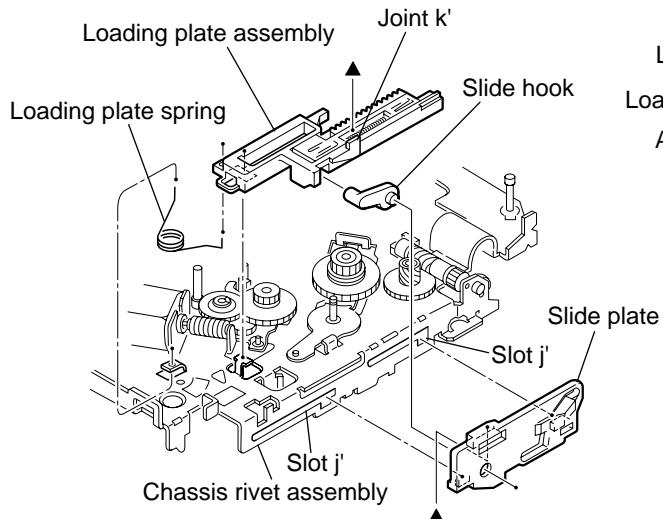


Fig.35

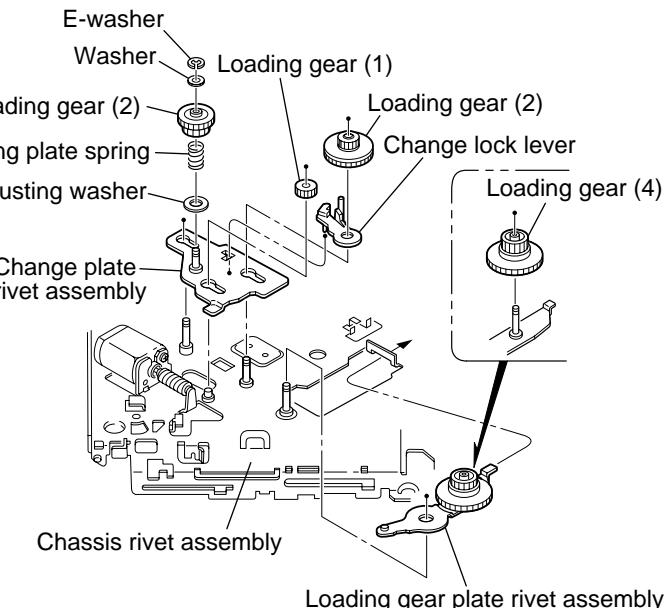


Fig.36

■Removing the turn table / spindle motor (See Fig.37 and 38)

- Prior to performing the following procedure, remove the top cover, the connector assembly and the chassis / clamper assembly.
- Remove the two screws **K** attaching the spindle motor assembly through the slot of the turn table on top of the body.
 - Unsolder the wire on the connector board if necessary.

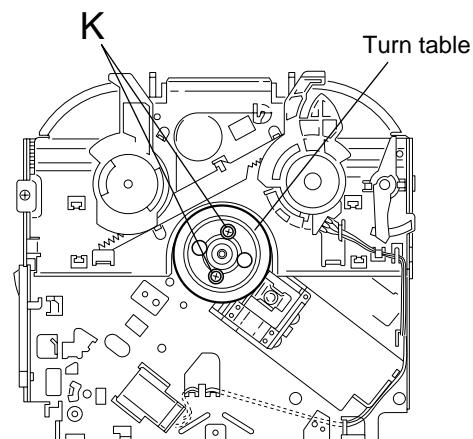


Fig.37

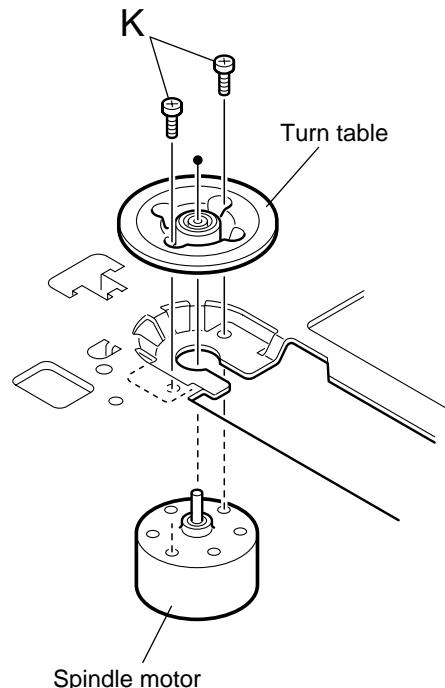


Fig.38

Adjustment method

■ Test instruments required for adjustment

1. Digital oscilloscope (100MHz)
2. AM Standard signal generator
3. FM Standard signal generator
4. Stereo modulator
5. Electric voltmeter
6. Digital tester
7. Tracking offset meter
8. Test Disc JVC :CTS-1000
9. Extension cable for check
EXTSH002-22P×1

■ Standard volume position

Balance and Bass &Treble volume : Indication "0"

S.BASS : O

EQ : FLAT

■ Frequency Band

FM 87.5MHz ~ 108.0MHz

AM (MW) 522kHz ~ 1620 kHz

(LW) 144kHz ~ 279 kHz

■ Dummy load

Exclusive dummy load should be used for AM, and FM. For FM dummy load, there is a loss of 6dB between SSG output and antenna input. The loss of 6dB need not be considered since direct reading of figures are applied in this working standard.

■ Standard measuring conditions

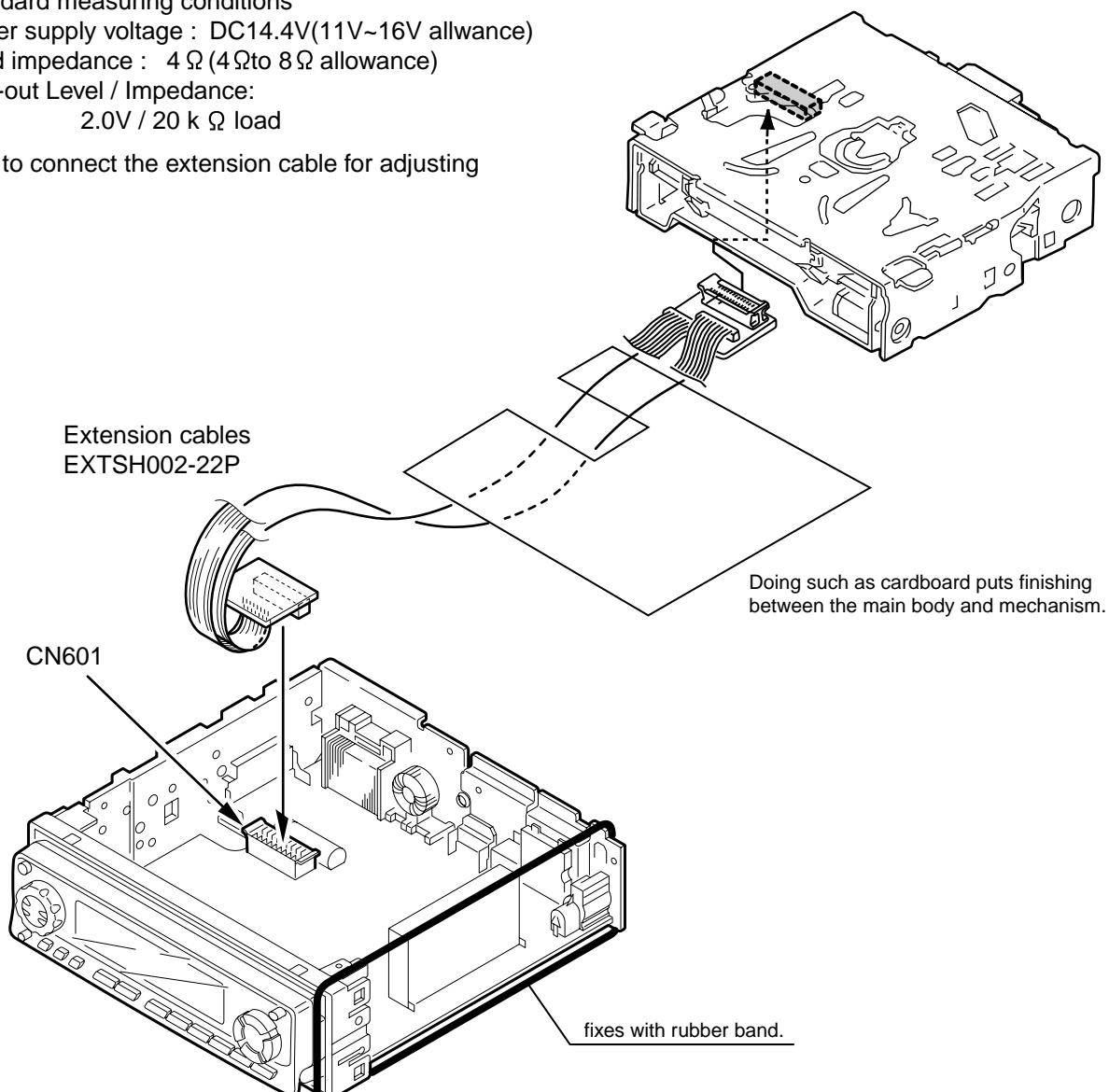
Power supply voltage : DC14.4V(11V~16V allowance)

Load impedance : 4 Ω (4Ωto 8Ω allowance)

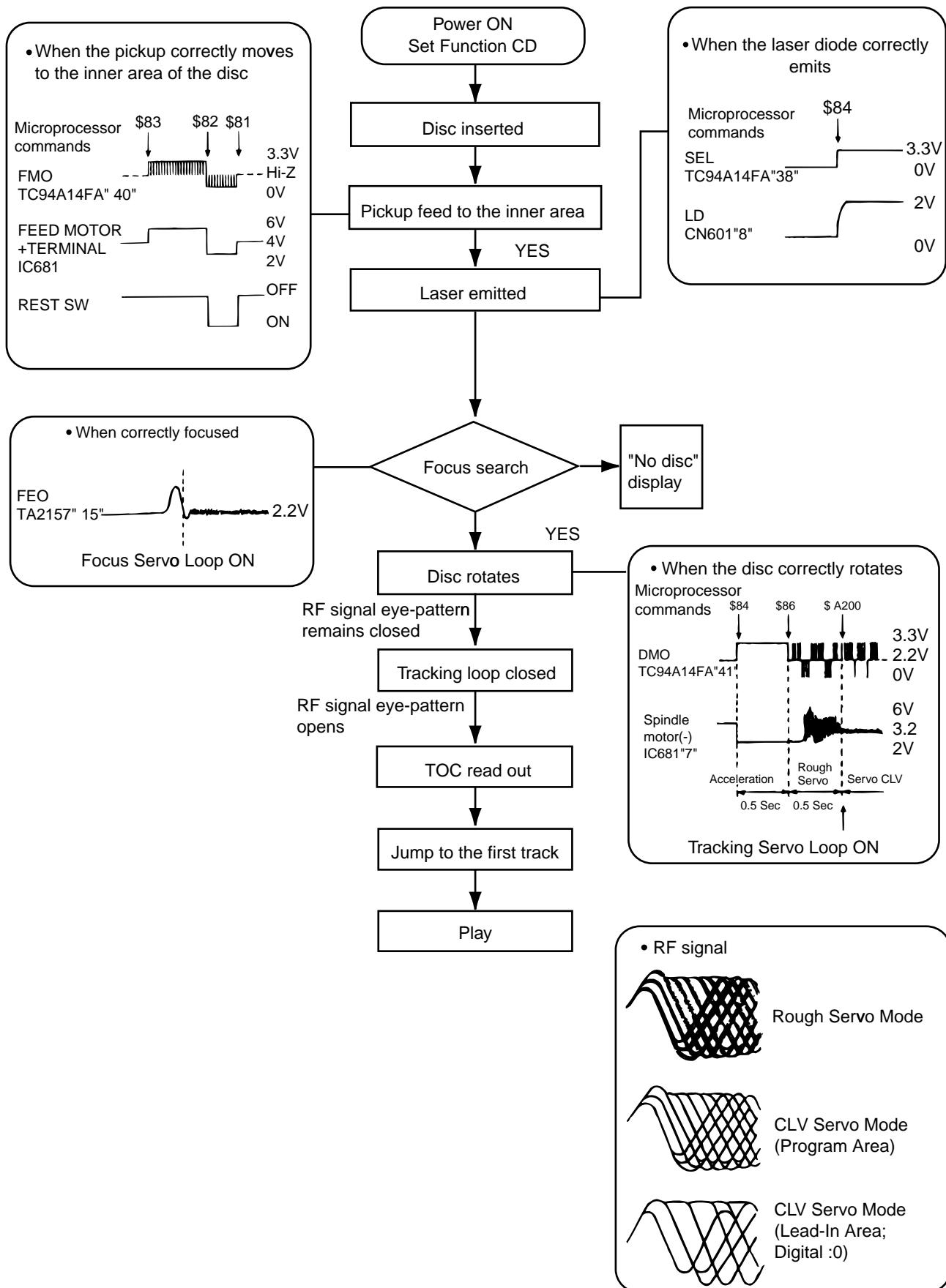
Line-out Level / Impedance:

2.0V / 20 k Ω load

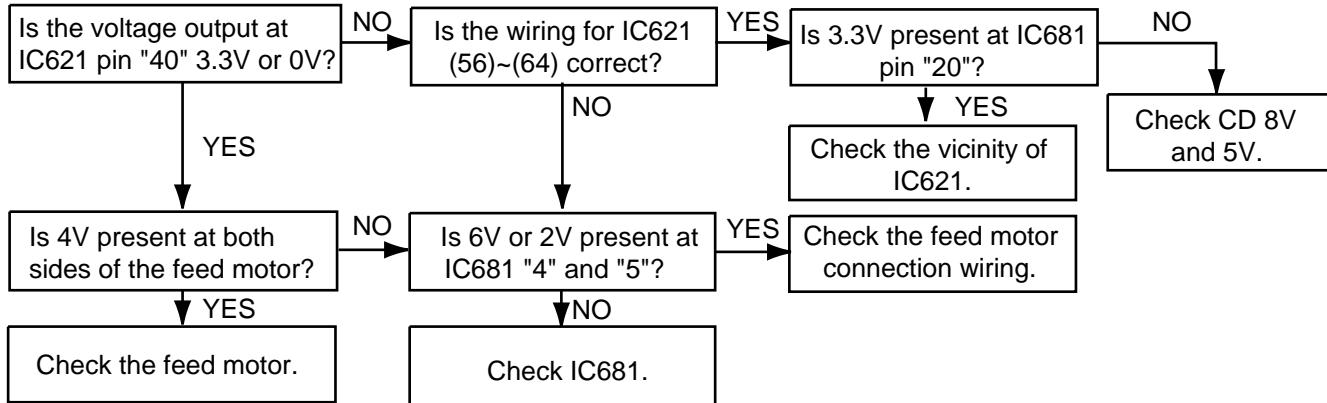
■ How to connect the extension cable for adjusting



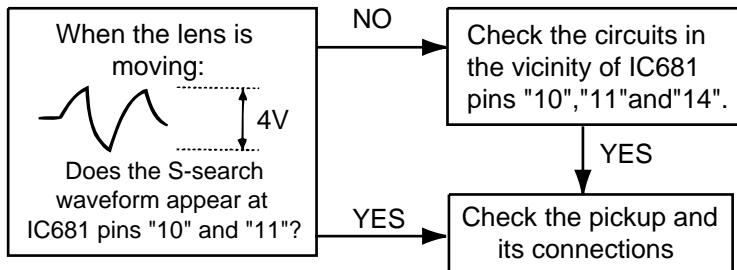
Flow of functional operation unit TOC read



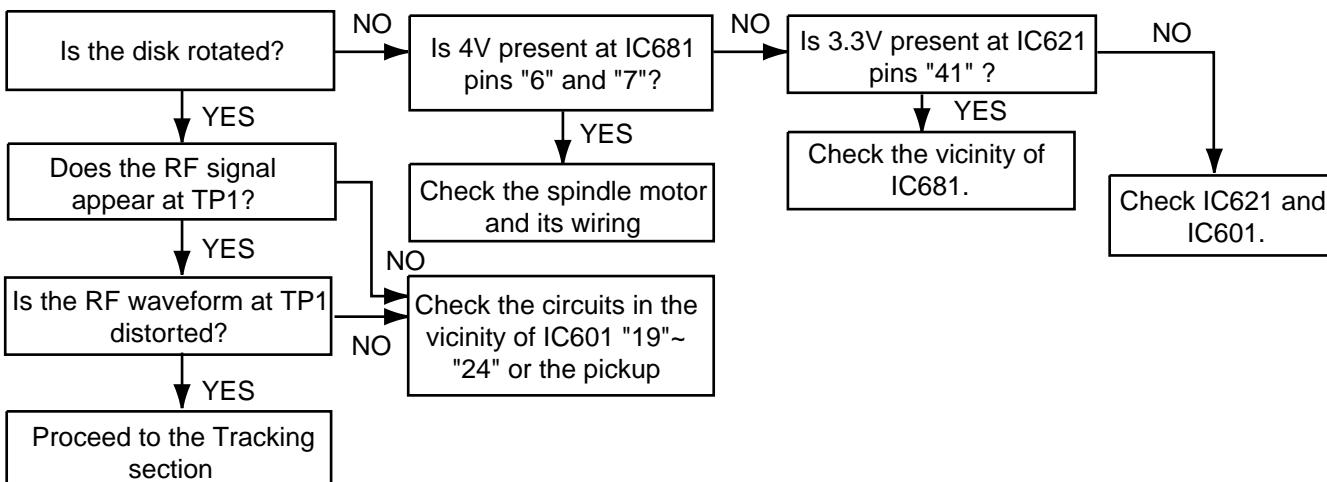
■ Feed section



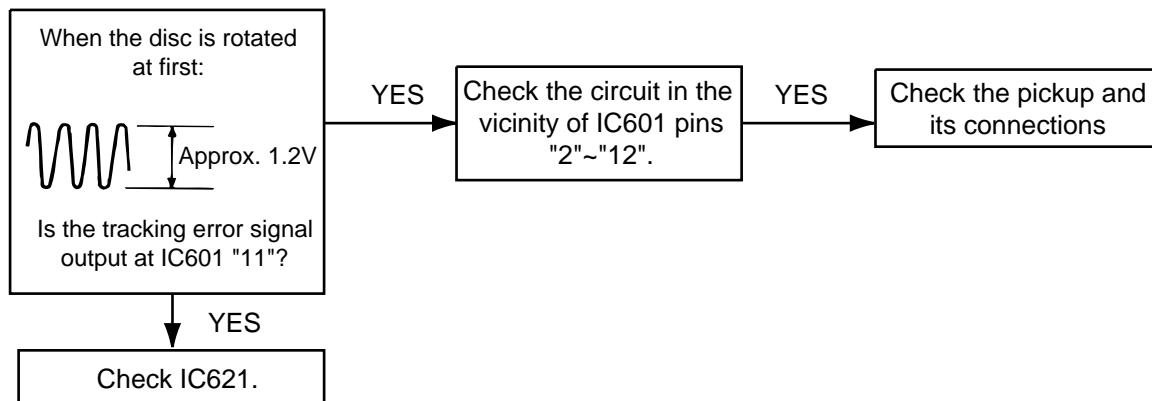
■ Focus section



■ Spindle section



■ Tracking section



Maintenance of laser pickup

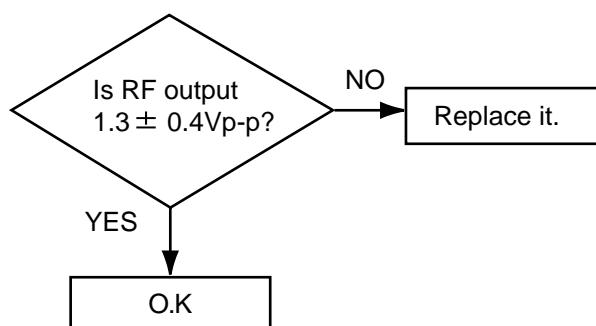
(1) Cleaning the pickup lens

Before you replace the pickup, 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 be low.



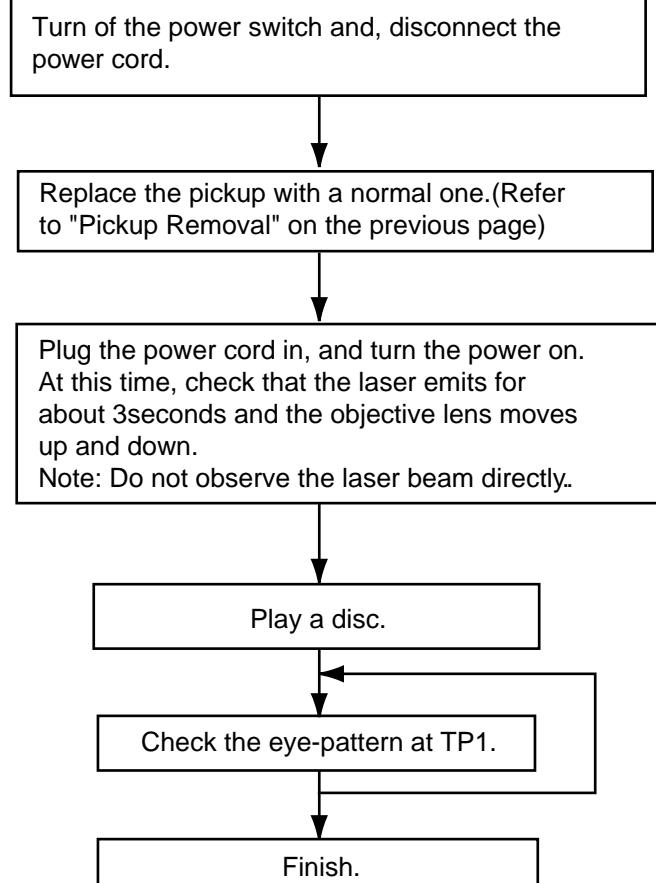
Replacement of laser pickup

(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.

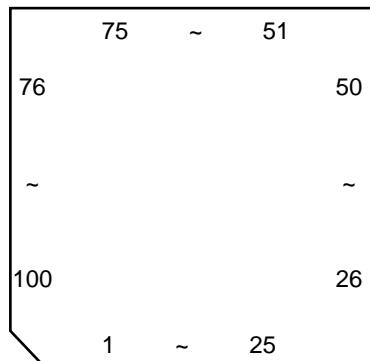
If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.



Description of major ICs

■ UPD784215AGC179 (IC701) : CPU

1. Pin layout



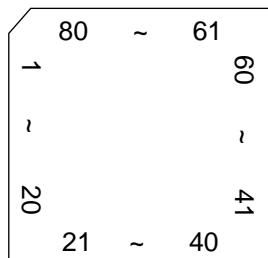
2. Pin function

Pin NO.	Symbol	I/O	Function
1~7	NC	-	-
8	ANT CONT	O	Antenna remote control
9	VDD	I	Maicon power supply
10	X2	I	
11	X1	O	
12	VSS	I	GND
13	XT2	I	
14	XT1	O	
15	RESET	I	SYSTEM RESET
16	NC	-	-
17	BUS-INT	I	J-BUS INT
18	PS2	I	Power save2, H means STOP mode
19	CD-REQ	I	CD REQ INPUT
20	RDS-SCK	I	RDS clock input
21	RDS DA	I	RDS data input
22	KEY DATA	I	KEY DATA
23	AVDD	I	A/D converter power supply
24	AVREF0	O	A/D reference voltage
25	VOL1	I	Volume encoder pulse input 1
26	VOL2	I	Volume encoder pulse input 2
27	KEY1	I	Handle remocon input 1
28	KEY2	I	Handle remocon input 2
29	NC	-	-
30	MRC	I	MRC input
31	SQ	I	S.Quality level input
32	SM	I	S.METER input
33	AVSS	I	GND
34	NC	-	-
35	STAGE3	I	Feature selection H:2000 L:1000
36	AVREF	I	
37	BUS-SI	I	J-BUS data input
38	BUS-SO	O	J-BUS data output
39	BUS-SCK	I/O	J-BUS clock input / output
40	BUS-I/O	O	J-BUS I/O selection output:H, input:L
41~43	NC	-	-
44	BUZZER	O	Buzzer output
45	E2PROM-DI	I	I2C data input
46	E2PROM-DO	O	I2C data output
47	E2PROM-CLK	O	I2C clock output
48	OPEN	I	DOOR OPEN SW
49~52	NC	-	-
53	SD/ST	I	Station detector or streo indicator input ; H means a station is there. L means the program is stereo.

Pin NO.	Symbol	I/O	Function
54~56	NC	-	-
57	DISP SCK	O	DISPLAY SCK
58	DISP DA	O	DISPLAY DATA
59	DISP CE	O	DISPLAY CE
60	NC	-	-
61	DETACH	I	Detach detect input ; H means detaching
62	AFCK	O	AF check output
63	SEEK/STOP	O	Auto seek and stop selecting output ; H means seeking, L means receiving.
64	CF SEL	O	Wide & Narrow
65	FM/AM	O	FM, AM band selecting output ; H = FM,L= AM
66	PLL-CE	O	CE output for PLL IC
67	PLL-DO	O	Data output for PLL IC
68	PLL-CLK	O	Clock output for PLL IC
69	PLL-DI	I	Data input from PLL IC
70	TEL-MUTING	I	Telephone muting detection input ; Active level can be selected H or L in PSM
71	DIM-OUT	O	Dimmer detector output
72	VSS	I	GND
73	DIM-IN	I	Dimmer detector input L=dimmer on
74	PS1	I	POWER SAVE1 L= ACC off
75	POWER	O	POWER ON/OFF control output H=power on
76	NC	-	-
77	MUTING	O	Muting output L=muting on
78	CD MUTING	I	CD MUTE INPUT L=MUTE ON
79	CD RESET	O	CD RESETCONTROL OUT H=RESET ON
80	NC	-	-
81	VDD	I	Maicon power supply
82	NC	-	-
83	VOL-DA	O	Data output for e-vol IC
84	VOL-CLK	O	Clock output for e-vol IC
85	NC	-	-
86	SUB MUTING	O	Muting control output for subwoofer
87	LPF 1	O	LPF CONTROL 1
88	LPF 2	O	LPF CONTROL 2
89	STAGE2	I	Feature selection H:R or Do L:J or U
90	STAGE1	I	Feature selection H:R or U L:J or Do
91~93	NC	-	-
94	TEST	I/O	For rewriting flash memory
95~98	NC	-	-
99	DISC SEL	O	8cmCD SELECT L=NO USE H=USE
100	NC	-	-

■ UPD784225GK-626 (IC501) : CPU

1.Pin layout



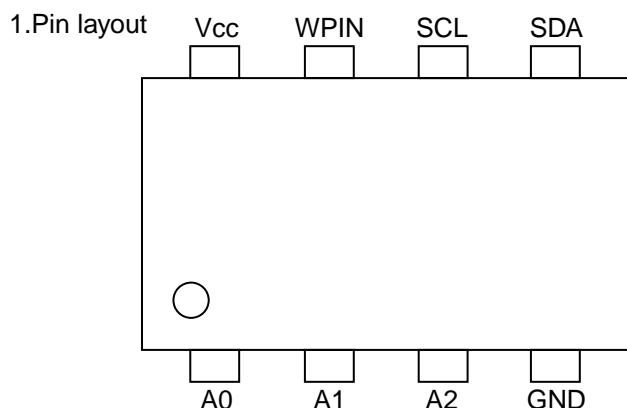
2.Pin function

Pin no.	Symbol	I/O	Function	Pin no.	Symbol	I/O	Function
1	TEMP	I	Connect to TEMP detector	41	NC	-	Non use
2	GND	-	Connect to GND	42	NC	-	Non use
3	GND	-	Connect to GND	43	NC	-	Non use
4	AVSS	-	Connect to GND	44	DACML	O	DAC mode control latch
5	ADCONT	-	No use	45	DACMC	O	DAC mode control clock
6	NC	-	No use	46	DACMD	O	DAC mode control data
7	AVREF1	-	Analog reference voltage	47	DACCS	I	DA convertor chip select
8	EPROMDI	I	Data input terminal from EEPROM	48	NC	-	No use
9	EPROMDO	O	Data output terminal from EEPROM	49	NC	-	No use
10	EPROMCK	I/O	Clock signal I/O terminal with EEPROM	50	NC	-	No use
11	LCDCE/SO	-	No use	51	NC	-	No use
12	LCDDA/SI	-	No use	52	DISCSEL	O	Initial setting
13	LCDCK	-	No use	53	DACSEL	O	DA convertor select
14	/BUSIO	I/O	J-BUS data I/O terminal	54	NC	-	No use
15	BUSIO	I/O	J-BUS data I/O terminal	55	TEST MODE	-	Connect to GND
16	BUSSI	I	J-BUS data input	56	MP3SEL	O	MP3/CD-DA switch SW L:CD H:MP3
17	BUSSO	O	J-BUS data output	57	8VDET	I	8V detection
18	BUSCK	I/O	J-BUS clock I/O	58	REST	I	System reset signal input
19	BUSOUT	-	No use	59	SW2	I	Detection switch of CD mechanism
20	CDON	O	The CD power supply control signal output. At CD:H	60	RESET		Reset detection terminal
21	CDREQ	I	CD request	61	SW1	I	Detection switch of CD mechanism
22	CDMUTE	O	CD Mute	62	B.DET	I	Panel switch detection
23	NC	-	No use	63	P.DET	I	Power switch detection
24	DSPRESET	O	DSP reset	64	BUSINT	I	J-BUS signal interrupt input
25	CCE	O	CE output for data communication with CDLSI	65	MP3REQ	O	MP3 request
26	BUCK	O	Clock output for data communication with CDLSI	66	NC	-	No use
27	BUS3	I/O	Data communication input output port 3 with CDLSI	67	VSS0	-	Connect to ground
28	BUS2	I/O	Data communication input output port 2 with CDLSI	68	VDD1	-	Reference voltage terminal
29	BUS1	I/O	Data communication input output port 1 with CDLSI	69	X2	-	No use
30	BUS0	I/O	Data communication input output port 0 with CDLSI	70	X1	I	Connect to X'tal osc.
31	2XPLAY	-	No use	71	VPP	I	Test terminal
32	RWSEL	I	CD RW select	72	XT2	-	No use
33	VSS1	-	Connect to GND	73	XT1	-	Connect to ground
34	LOAD	O	Loading signal	74	VDD0	-	Connect to ground
35	LD/FE	O	LDFLE switching signal	75	AVDD	-	Reference voltage terminal
36	MP3DI	I	MP3 data input	76	IOP	I/O	Laser signal input output
37	MP3DO	O	MP3 data output	77	KEY0	I	Key control signal input 0
38	MP3CK	O	MP3 data clock	78	KEY1	I	Key control signal input 0
39	MP3RESET	O	MP3 data reset	79	KEY2	I	Key control signal input 0
40	MPSSTB	I	MP3 data standby	80	KEY3	I	Key control signal input 0

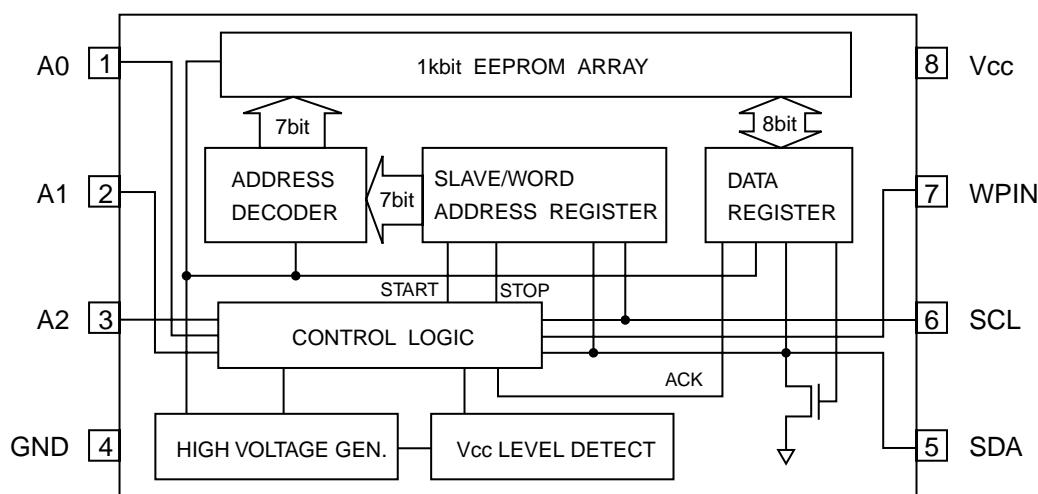
2.Pin functions (2/2)

Pin No.	Symbol	I/O	Function
47	DAC CS	O	DAC chip select terminal
48~51	-	-	No use
52	DISC SEL	I	8cm disc correspondence mode select terminal (responce:L)
53	DAC SEL	I	DAC select mode input terminal
54	-	-	-
55	TEST MODE	I	LCD/AD key/Remocon invalid select mode input terminal L:invalid
56	MP3 SEL	I	MP3 select mode input terminal
57	8V DET	I	CD mechanism power supply detection terminal (L:8V on)
58	REST	I	CD mechanism rest switch input terminal
59	SW2	I	CD mechanism SW2 input terminal
60	RESET	I	Riset signal input terminal
61	SW1	I	CD mechanism SW1 input terminal
62	B.DET	I	Backup power supply detection input terminal (H:Stop mode)
63	P.DET	I	Main power off detection input terminal (H:HALT mode)
64	BUS INT	I	JVC BUS communication start squeeze input terminal
65	MP3 REQ	I	CD MP3 request signal input terminal
66	-	-	-
67	VSS0	-	Connect to GND
68	VDD1	-	Connect to 3.3V
69	X2	O	Oscillator (6MHz)
70	X1	I	Oscillator (6MHz)
71	VPP	-	Connect to GND
72	XT2	O	Open
73	XT1	I	Connect to GND
74	VDD0	-	Connect to 3.3V
75	AVDD	-	Connect to ADCONT
76	IOP	I	Pickup IOP measurement input terminal
77	KEY0	I	Key input 0 (8bit A/D input) terminal
78	KEY1	I	Key input 1 (8bit A/D input) terminal
79	KEY2	I	Key input 2 (8bit A/D input) terminal
80	KET3	I	Key input 3 (8bit A/D input) terminal

■ BR24C01AFV-W (IC502) : EEPROM



2. Block diagram



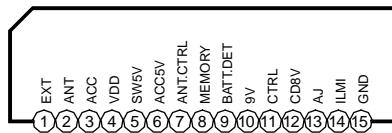
3. Pin function

Pin name	I/O	Function
Vcc	-	Power supply
GND	-	Ground (0v)
A0,A1,A2	IN	Slave address set
SCL	IN	Serial clock input
SDA	IN / OUT	Slave and word address, serial data input, serial data output *1
WPIN	IN	Write protect input

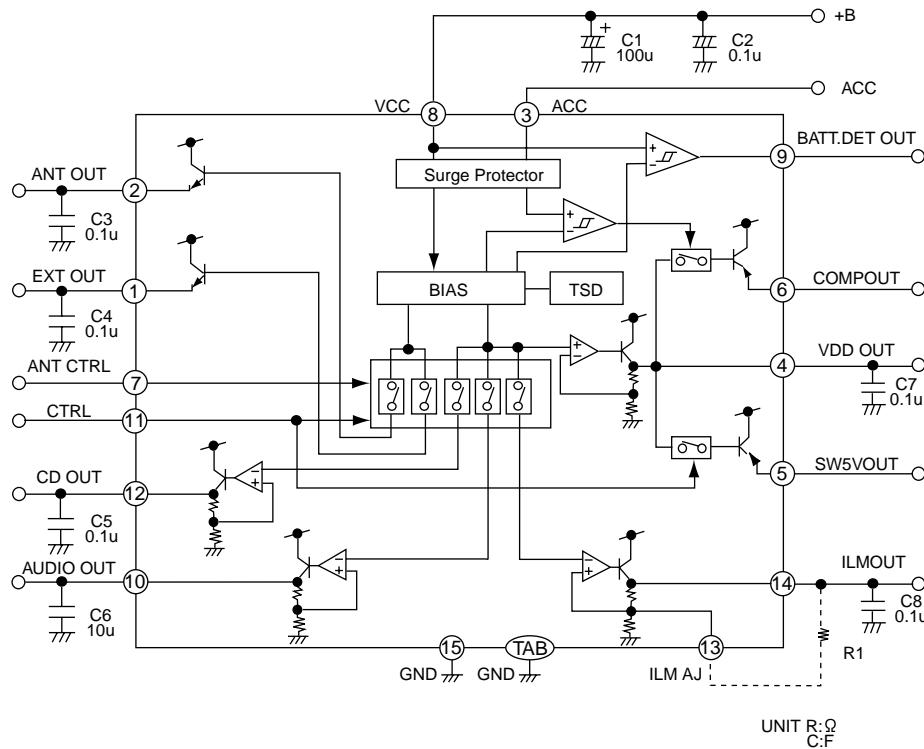
*1 An open drain output requires a pull-up resistor.

■ HA13164A (IC901) : Regulator

1.Terminol layout



2.Block diagram



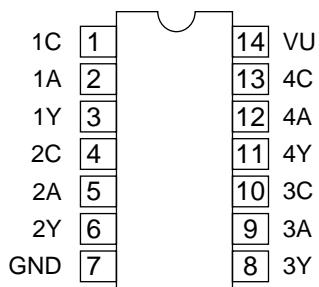
note1) TAB (header of IC)
connected to GND

3.Pin function

Pin No.	Symbol	Function
1	EXT	Output voltage is VCC-1 V when M or H level applied to CTRL pin.
2	ANT	Output voltage is VCC-1 V when M or H level to CTRL pin and H level to ANT-CTRL.
3	ACC	Connected to ACC.
4	VDD	Regular 5.7V.
5	SW5V	Output voltage is 5V when M or H level applied to CTRL pin.
6	COMP	Output for ACC detector.
7	ANT CTRL	L:ANT output OFF , H:ANT output ON
8	MEMORY	Connected to VCC.
9	BATT DET	Low battery detect.
10	9V	Output voltage is 9V when M or H level applied to CTRL pin.
11	CTRL	L:BIAS OFF, M:BIAS ON, H:CD ON
12	CD8V	Output voltage is 8V when H level applied to CTRL pin.
13	AJ	Adjustment pin for ILM output voltage.
14	ILMI	Output voltage is 10V when M or H level applied to CTRL pin.
15	GND	Connected to GND.

■ HD74HC126FP-X (IC781) : Buffer

1.Terminal layout

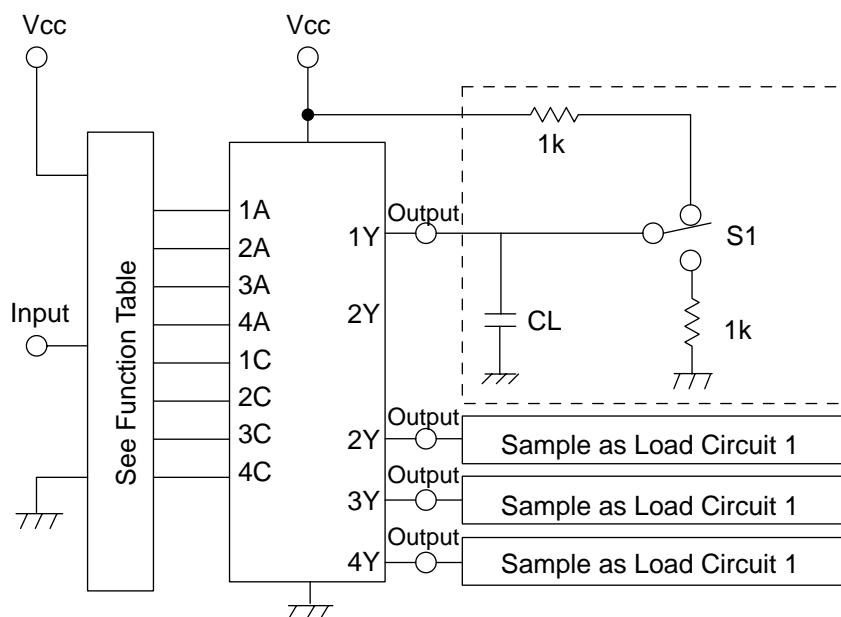


3.Pin function

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

Note) H:High level
L:Low level
X:Irrelevant
Z:Off(High-impedance)
State a 3-state input

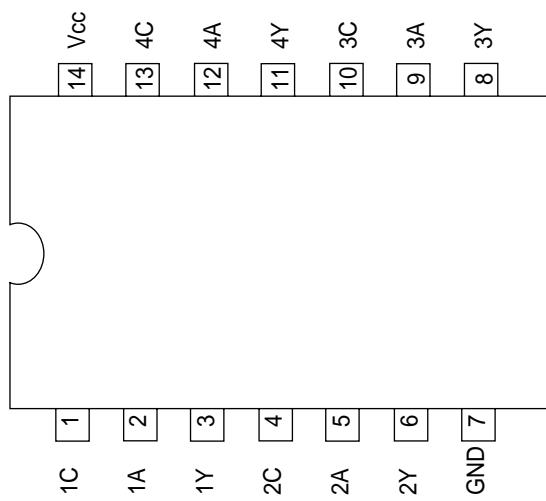
2.Block diagram



Note) CL includes probe and jig capacitance

■ HD74HCT126T : (IC503) Buffer

1.Terminal layout



3.Pin function

INPUT		OUTPUT
C	A	Y
L	X	Z
H	L	H
H	H	L

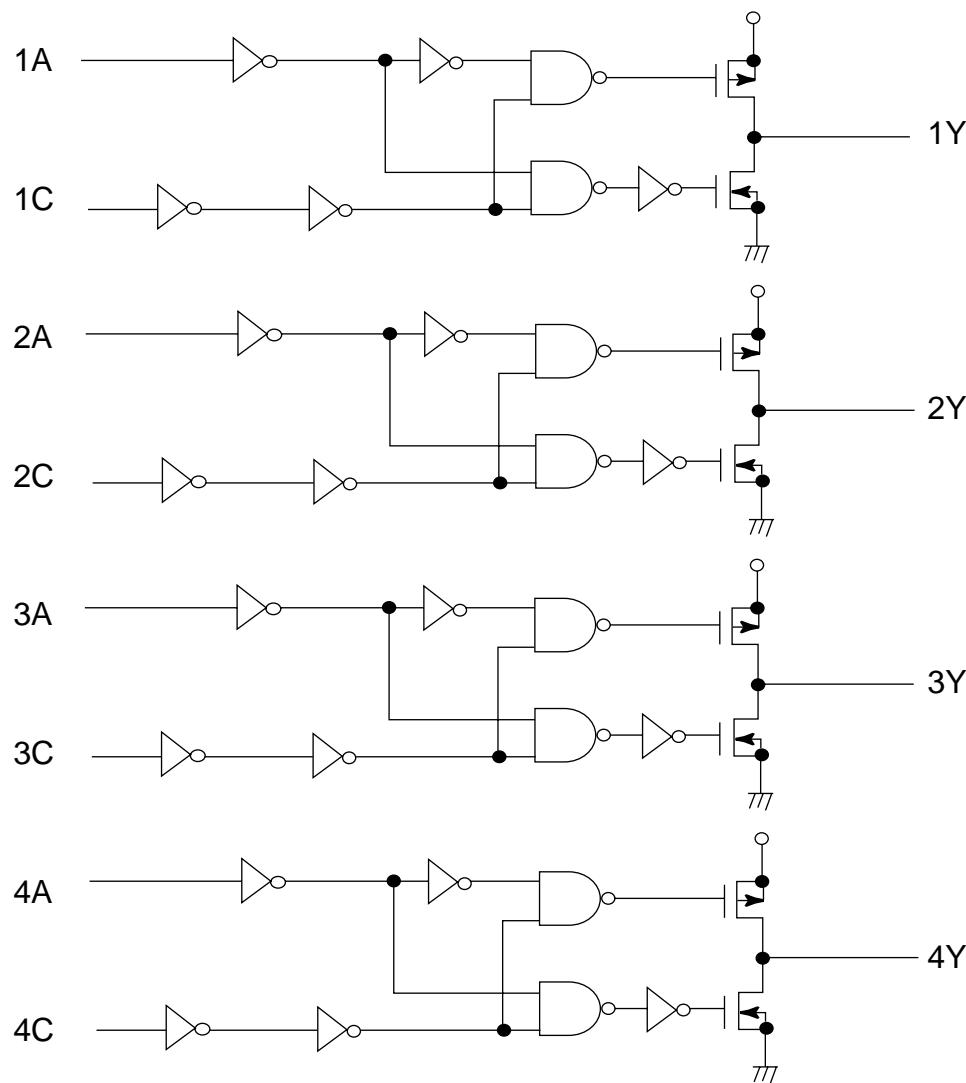
H : High level

L : Low level

X : Irrelevant

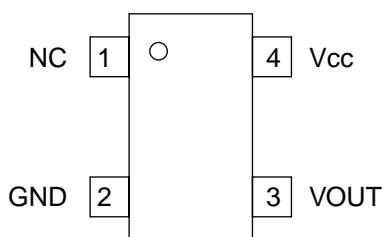
Z : Off (High-impedance) state of a 3-stage output

2.Block diagram

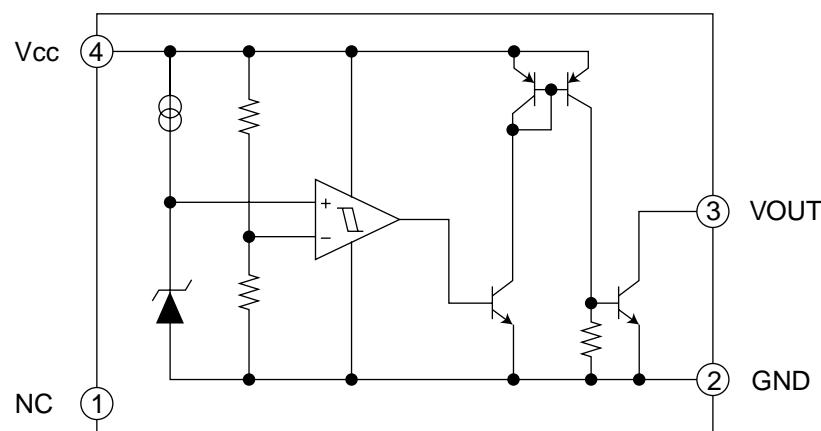


■ IC-PST9322U-X (IC803) : Regulator

1. Pin layout



2. Block diagram

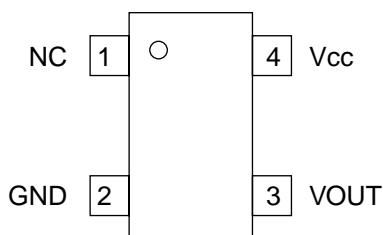


3. Pin function

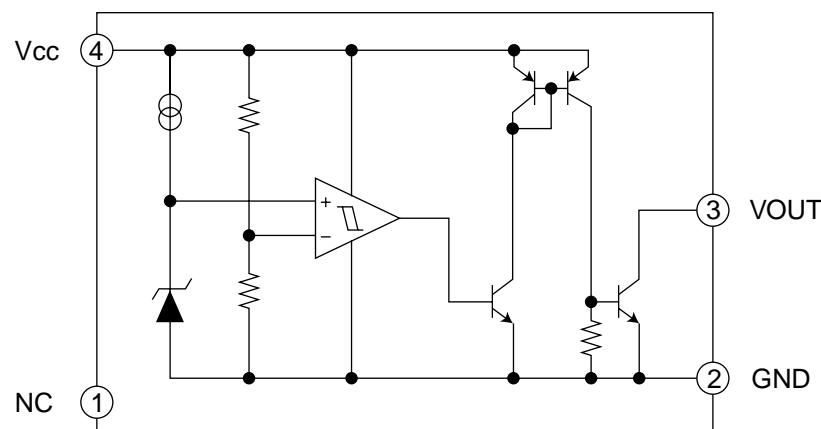
Pin No.	Symbol	Function
1	NC	Non connect
2	GND	GND terminal
3	VOUT	Reset signal output terminal
4	Vcc	Vcc terminal/Voltage detect terminal

■ IC-PST9333U-X (IC702) : Regulator

1. Pin layout



2. Block diagram

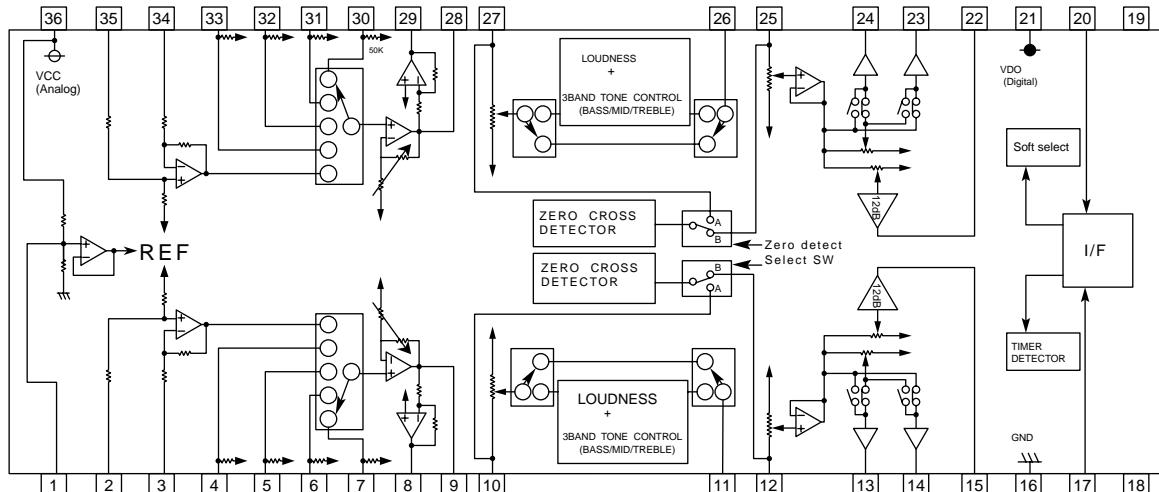


3. Pin function

Pin No.	Symbol	Function
1	NC	Non connect
2	GND	GND terminal
3	VOUT	Reset signal output terminal
4	Vcc	Vcc terminal/Voltage detect terminal

■ M61508FP-X (IC111) : E. volume

1. Pin layout & Block diagram

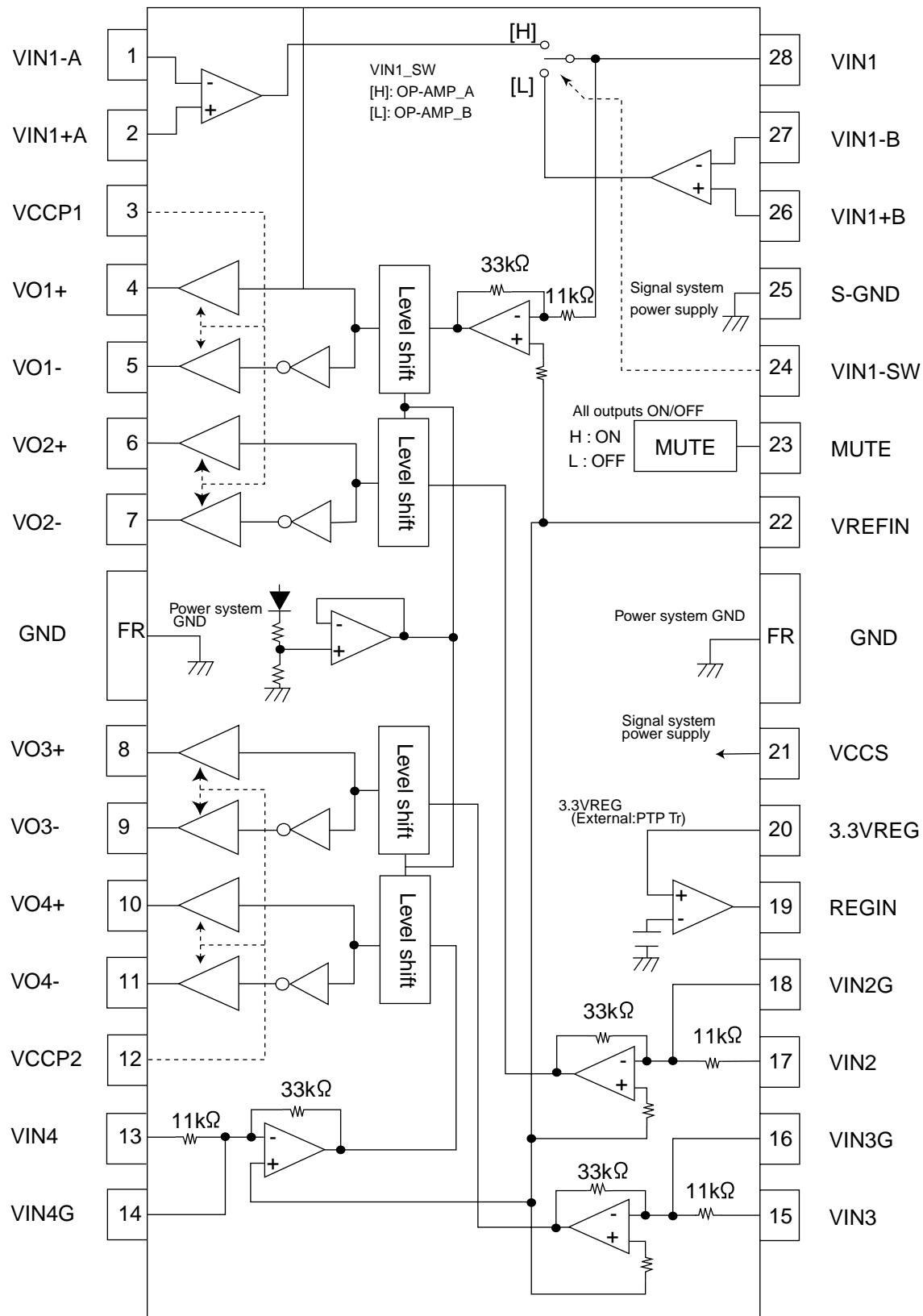


2. Pin function

Pin No.	Symbol	Function
1	REF	Ground for IC signal
2	DEFN IN1	Differential motion amp. Positive terminal
3	DEFN IN1	Differential motion amp. Negative terminal
4	INA1	Input terminal of input selector switch channel 1
5	INB1	Input terminal of input selector switch channel 1
6	INC1	Input terminal of input selector switch channel 1
7	IND1	Input terminal of input selector switch channel 1
8	DEFN OUT1	Differential output terminal (-)
9	SEL OUT1	Input selector output terminal
10	VOL IN1	Volume 1 input terminal
11	TONE OUT1	Tone output terminal
12	FADER IN1	Volume 2 input terminal
13	REAR OUT1	Fader volume control (Rear) output terminal
14	FRONT OUT1	Fader volume control (Front) output terminal
15	NonFader OUT1	Non fader volume output terminal
16	GND	GND terminal
17	DATA	Control data input terminal
18	VDDOUT1	Test terminal
19	VDDOUT2	Test terminal
20	CLOCK	Clock input terminal for serial data transport
21	VDD	Power supply terminal for digital
22	NonFader OUT2	Non fader volume control output terminal
23	FRONT OUT2	Fader volume (Front) output terminal
24	REAR OUT2	Fader volume (Rear) output terminal
25	FADER IN2	Volume 2 input terminal
26	TONE OUT2	Tone output terminal
27	VOL IN2	Volume 1 input terminal
28	SEL OUT2	Input selector output terminal
29	DEFN OUT2	
30	IND2	Input terminal of input selector switch channel 2
31	INC2	Input terminal of input selector switch channel 2
32	INB2	Input terminal of input selector switch channel 2
33	INA2	Input terminal of input selector switch channel 2
34	DEFN IN2	
35	DEFP IN2	
36	VCC	Power supply terminal

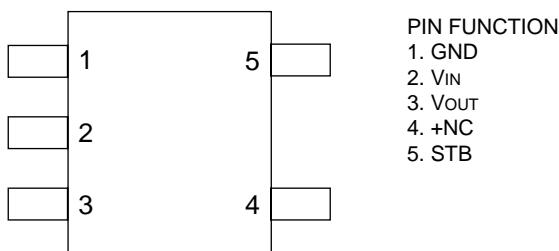
■ LA6579H-X (IC681) : 4-Channel bridge driver

1. Pin layout & Block diagram



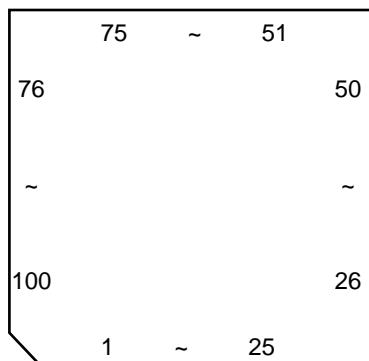
3.Pin function

Pin No.	Symbol	Function
1	VIN1-A	CH1 input AMP_inverted input
2	VIN1+A	CH1 input AMP_non-inverted input
3	VCCP1	CH1 and CH2 power stage power supply
4	VO1+	Output pin(+)for channel 1
5	VO1-	CH1 output pin (-) for channel 1
6	VO2+	Output pin(+)for channel 2
7	VO2-	Output pin(-)for channel 2
8	VO3+	Output pin(+)for channel 3
9	VO3-	Output pin(-)for channel 3
10	VO4+	Output pin(+)for channel 4
11	VO4-	Output pin(-)for channel 4
12	VCCP2	CH3 and CH4 power stage power supply
13	VIN4	Input pin for channel 4
14	VIN4G	Input pin for channel 4(for gain adjustment)
15	VIN3	Input pin for channel 3
16	VIN3G	Input pin for channel 3(for gain adjustment)
17	VIN2	Input pin for channel 2
18	VIN2G	Input pin for channel 2(for gain adjustment)
19	REGIN	External PNP transistor, base connection
20	3.3VREG	3.3VREG output pin, external PNP transistor,collector connection
21	VCCS	Signal system GND
22	VREFIN	Reference voltage application pin
23	MUTE	Output ON/OFF pin
24	VIN1_SW	CH1 input OP AMP_changeover pin
25	S_GND	Signal system GND
26	VIN1+B	CH1 AMP_B non-inverted input pin
27	VIN1-B	CH1 AMP_B inverted input pin
28	VIN1	CH1 input pin, input OP_AMP output pin

■ NJU7241F33-X (IC804,IC504) : Voltage regulator

■ MN102H60KCC (IC801) : CPU

1. Pin layout



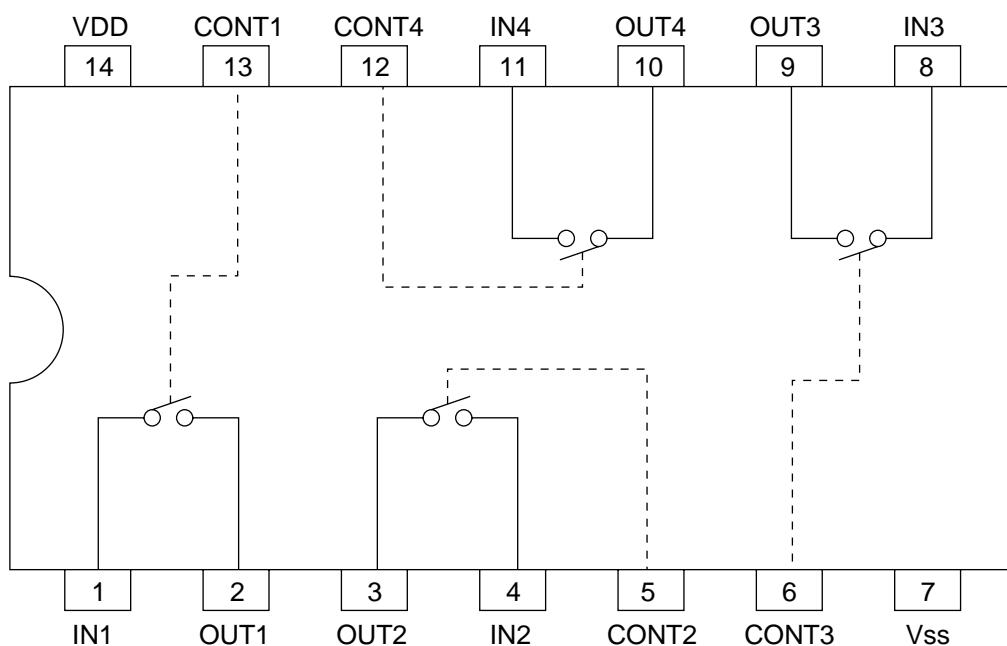
2. Pin function

Pin NO.	Name	I/O	Function
1	RES	O	LED reset input terminal
2	RE	O	Redoinabl output terminal for enhancing memory
3	NC	O	No connected
4	NC	O	No connected
5	NC	O	No connected
6	CS0	O	Chip selection 0 output terminal for enhancing memory
7	SWLED7	O	Output for SW_LED Flushing 7 (LED for cross key cover)
8	SWLED4	O	Output for SW_LED Flushing 4 (LED for [PRESET4-6] key)
9	SWLED5	O	Output for SW_LED Flushing 5 (LED for [SEEKUP]+[SEEKDOWN] key)
10	SWLED6	O	Output for SW_LED Flushing 6 (LED for [DISKUP]+[DISKDOWN] key)
11	NC	O	No connected
12	/WORD	I	Setting of width of bus of enhancing memory (H : 8bit)
13~16	A0~A3	O	Enhancing memory output terminal 0~3
17	VDD	-	Power supply terminal
18	NC	O	Base clock output terminal
19	VSS	-	GND
20	XI	I	Connects with GND
21	XO	O	Opening
22	VDD	-	Power supply terminal
23	OSCI	I	Crystal connection terminal (12.5MHz)
24	OSCO	O	Crystal connection terminal (12.5MHz)
25	MODE	I	Mode set input terminal, pull-up (H : Memory extension mode)
26~33	A4~A11	O	Enhancing memory output terminal 4~11
34	AVDD	-	Analog power supply terminal
35~42	A12~A19	O	Enhancing memory output terminal 12~19
43	AGND	-	Analog, standard power supply terminal, connects with GND
44	ANA	I	Audio level input for speana
45	Thermal	I	Temperature fuse input
46	STOP	O	Stop state output terminal (At stop "H")
47	WDOUT	O	Watch dock timer overflow output terminal (At overflow "H")
48	PON	O	Power supply on output terminal
49	RD	O	LCD redostororb output terminal
50	LCDCLK	O	LCD clock output for driver (180MHz)
51	WR	O	LCD raitostororb output terminal
52	COLOR1	O	PWM output for color LED 1
53	COLOR2	O	PWM output for color LED 2
54	AVDD	-	Analog, standard power supply terminal, connects with GND
55	RS	O	LCD resist selection output terminal
56	CS	O	LCD chip selection output terminal
57	COLOR3	O	PWM output for color LED 3
58	VOL1	I	Rotary encoder input 1
59	VOL2	I	Rotary encoder input 2
60	SWLED3	O	Output for SW_LED Flushing 3 (LED for [PRESET1-3] key)

Pin NO.	Name	I/O	Function
61	AGND	-	Analog terminal GND
62	KEY0	I	KEY0 input AD terminal
63	KEY1	I	KEY1 input AD terminal
64	KEY2	I	KEY2 input AD terminal
65	KEY3	I	KEY3 input AD terminal
66	VDD	-	
67	SWLED0	O	Output for SW_LED Flushing 0 (LED for [VOL] key)
68	SWLED1	O	Output for SW_LED Flushing 1 (LED for [MODE]+[DISP]+[EQ] key)
69	SWLED2	O	Output for SW_LED Flushing 2 (LED for [CD / CD-CH]+[FM / AM] key)
70	DISPCLK	I	Clock input for serial communications
71	DISPDATA	I	Display data input (Cereal)
72	KEYDATA	O	Key code data output (Cereal)
73	SIFDA	I/O	Onboard cereal writing data I/O terminal, Pull-up
74	SIFCK	I	Onboard cereal writing clock input terminal, Pull-up
75	GND	I	
76	DISPCE	I	Tippinabl input for serial communications
77	GND	O	
78	PSAVE2	I	POWER SAVE 2 (Memory power supply OFF) detection input
79	REMOTE	I	Remote control input by codes terminal
80	KEY_IN	I	Key interrupt input
81	ADSEP	I	Address data separation / common mode set terminal (H : Separation mode)
82	RST	I	Reset input terminal ("L" resets by the input)
83	VDD	-	Power supply terminal
84~91	D0~D7	I	Enhancing memory input terminal 0~7
92	VSS	-	GND
93~100	LCDDBO~LCDBB7	I/O	LCD data bus I/O terminal 0~7

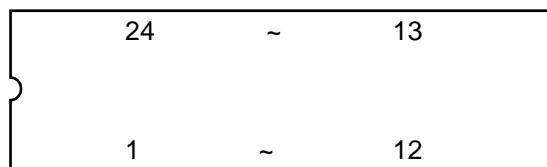
■BU4066BCFV (IC131) : Quad analog switch

1. Pin layout & Block diagram

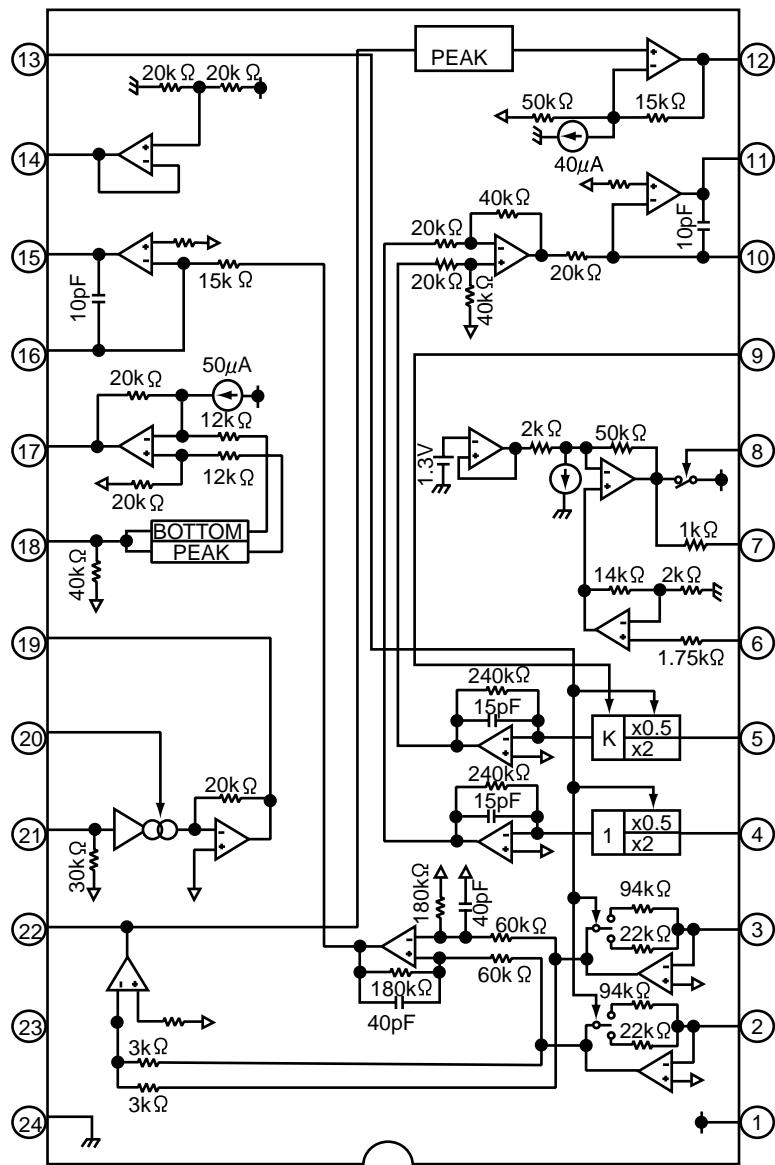


■ TA2157FN-X(IC601):RF amp

1.Terminal layout



2.Block diagram



PIN VCTRLPIN	SEL (APC SW)	TEB (TE BAL)	RFGC (AGC Gain)	TEB (TE BAL)
VCC	APC ON	-50%	+12dB	Normal mode (0dB)
HiZ	APC ON	0%	+6dB	Normal mode (0dB)
GND	APC OFF (LDO=H)	+50%	0dB	CD-RW mode (+12dB)

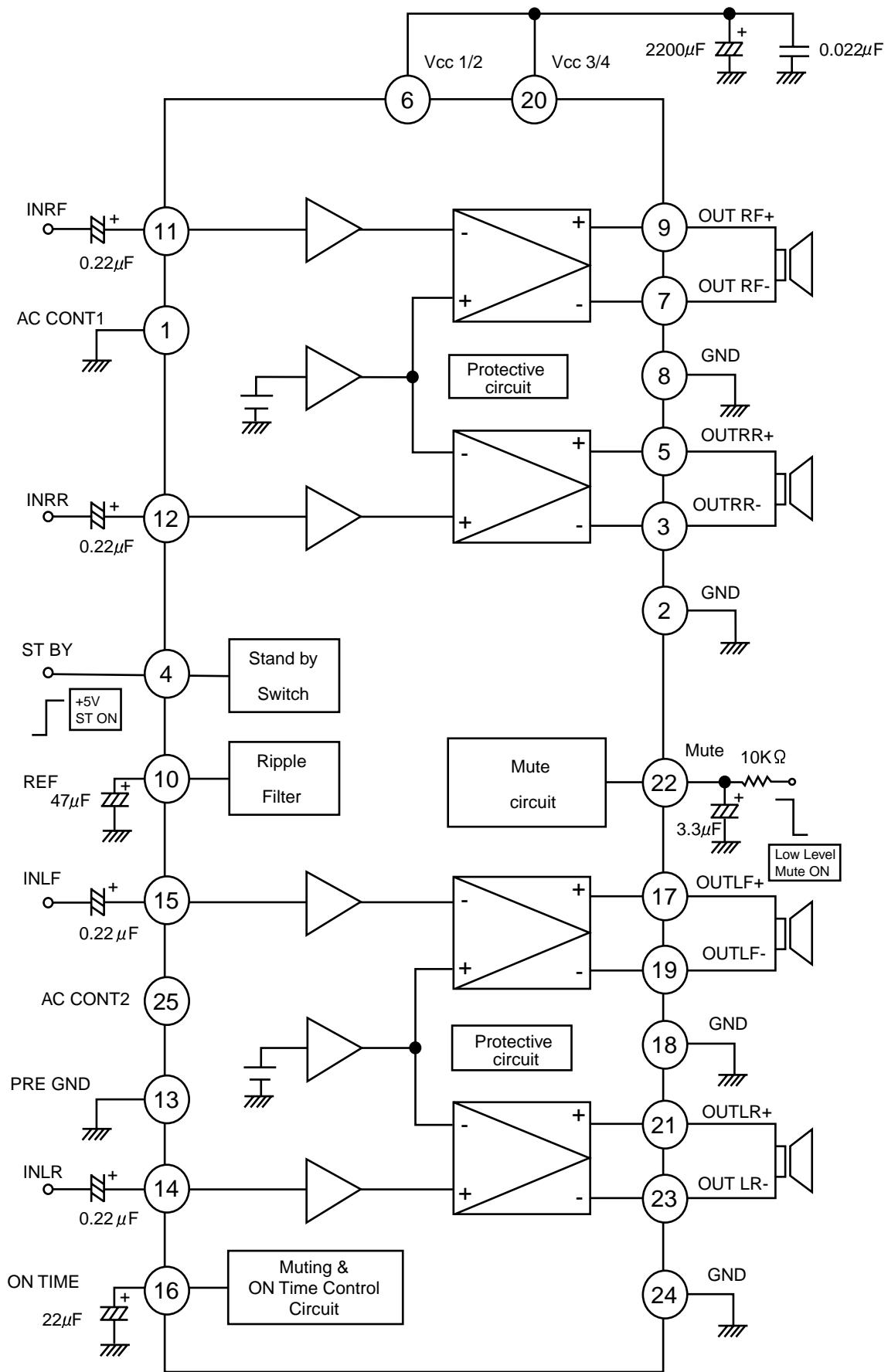
3.Pin function

TA2175FN-X

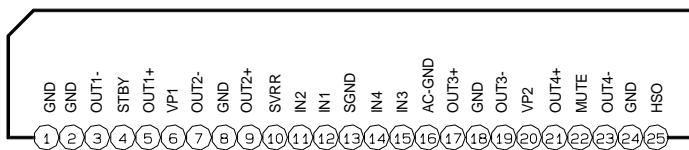
Pin No.	Symbol	I/O	Function												
1	VCC	-	3.3V power supply pin												
2	FNI	I	Main-beam amp input pin												
3	FPI	I	Main-beam amp input pin												
4	TPI	I	Sub-beam amp input pin												
5	TNI	I	Sub-beam amp input pin												
6	MDI	I	Monitor photo diode amp input pin												
7	LDO	O	Laser diode amp output pin												
8	SEL	I	APC circuit ON/OFF control signal, laser diode (LDO) control signal input or bottom/peak detection frequency change pin. <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>SEL</td> <td>APC circuit</td> <td>LDO</td> </tr> <tr> <td>GND</td> <td>OFF</td> <td>Connected VCC through 1kΩ resistor</td> </tr> <tr> <td>Hiz</td> <td>ON</td> <td>Control signal output</td> </tr> <tr> <td>VCC</td> <td>ON</td> <td>Control signal output</td> </tr> </table>	SEL	APC circuit	LDO	GND	OFF	Connected VCC through 1kΩ resistor	Hiz	ON	Control signal output	VCC	ON	Control signal output
SEL	APC circuit	LDO													
GND	OFF	Connected VCC through 1kΩ resistor													
Hiz	ON	Control signal output													
VCC	ON	Control signal output													
9	TEB	I	Tracking error balance adjustment signal input pin Adjusts TE signal balance by eliminating carrier component from PWM signal (3-state output,PWM carrier = 88.2kHz) output from TC94A14F/FA TEBC pin using RC-LPF and inputting DC. TEBC input voltage:GND~VCC												
10	TEN	I	Tracking error signal generation amp negative-phase input pin												
11	TEO	O	Tracking error signal generation amp output pin. Combining TEO signal RFRP signal with TC94A14F/FA configures tracking search system.												
12	RFDC	O	RF signal peak detection output pin												
13	GVSW	I	AGC/FE/TE amp gain change pin <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>GVSW</td> <td>Mode</td> </tr> <tr> <td>GND</td> <td>CD-RW</td> </tr> <tr> <td>Hiz</td> <td>Normal</td> </tr> <tr> <td>VCC</td> <td></td> </tr> </table>	GVSW	Mode	GND	CD-RW	Hiz	Normal	VCC					
GVSW	Mode														
GND	CD-RW														
Hiz	Normal														
VCC															
14	VRO	O	Reference voltage (VRO) output pin *VRO=1/2VCC When VCC=3.3V												
15	FEO	O	Focus error signal generation amp output pin												
16	FEN	I	Focus error signal generation amp negative-phase input pin												
17	RFRP	O	Signal amp output pin for track count Combining RFRP signal and TEO signal with TC94A14F/FA configures tracking search system.												
18	REIS	I	RF signal amplitude adjustment amp output pin												
19	RFGO	O	RF amplitude adjustment control signal input pin Adjusts RF signal amplitude by eliminating carrier component from PWM signal (3-state output,PWM carrier=88.2kHz)output from TC94A14F/14FA RFGC pin using RC-LPF and inputting DC. * RFGC input voltage:GND~VCC												
20	RGFC	I	RF signal amplitude adjustment amp input pin												
21	AGCIN	I	RF signal generation amp output pin												
22	RFO	O	RF signal generation amp input pin												
23	RFI	I	GND pin												
24	GND	-	GND pin												

■TA8273H(IC951):Power AMP

1. Block diagram



2.Terminal layout



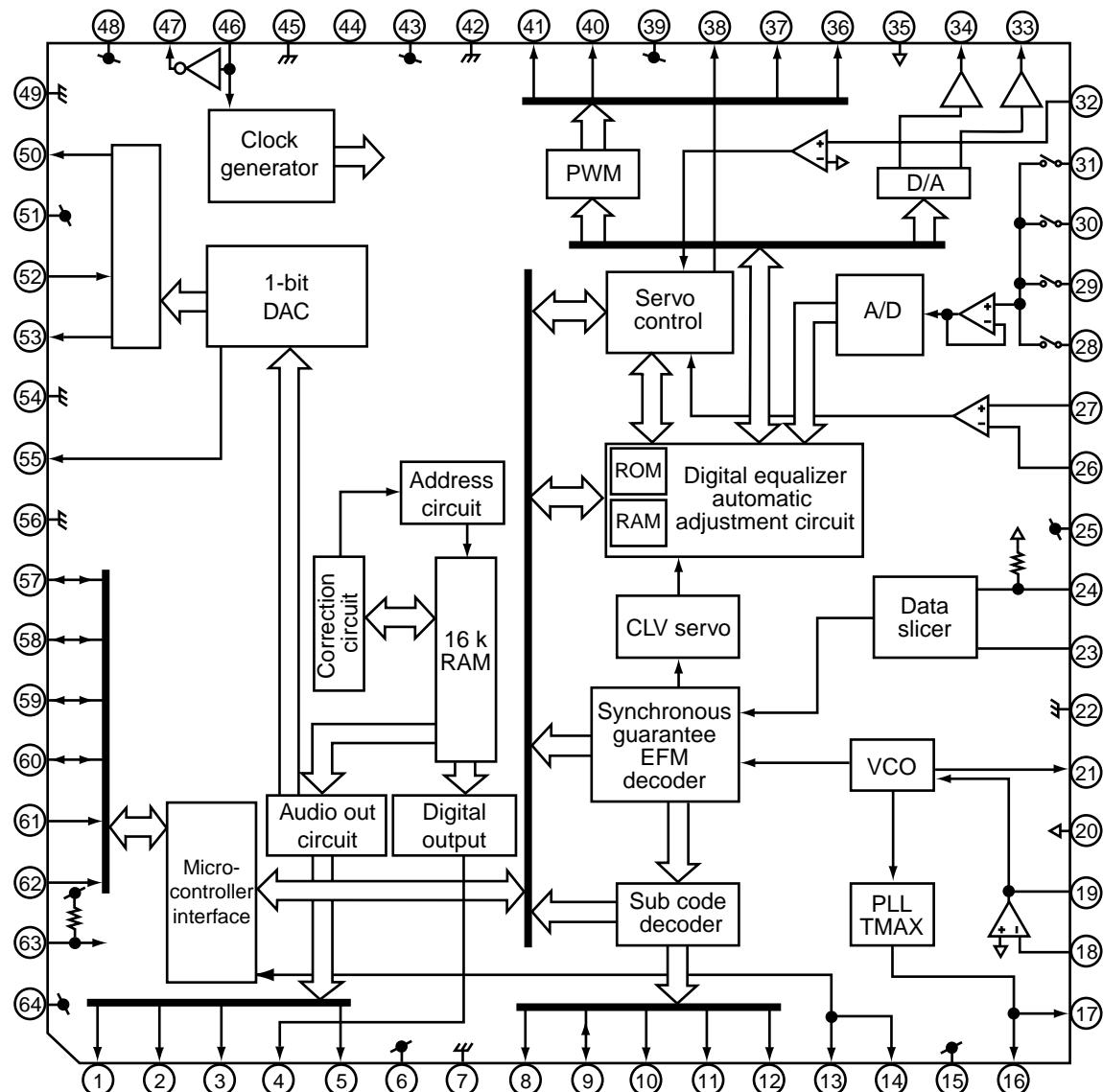
3.Pin function

TA8273H

Pin No.	Symbol	Function
1	GND	Header of IC
2	GND	Power GND
3	OUT1-	Output(-) for Rear Rch
4	STBY	Stand by input
5	OUT1+	Output (+) for Rear Rch
6	VP1	Power input
7	OUT2-	Output (-) for Front Rch
8	GND	Power GND
9	OUT2+	Output (+) for Front Rch
10	SVRR	Ripple filter
11	IN2	Front Rch input
12	IN1	Rear Rch input
13	SGND	Signal GND
14	IN4	Rear Lch input
15	IN3	Front Lch input
16	AUX	Power on time control
17	OUT3+	Output (+) for Front Lch
18	GND	Power GND
19	OUT3-	Output (-) for Front Lch
20	VP2	Power input
21	OUT4+	Output (+) for Rear Lch
22	MUTE	Muting control input
23	OUT4-	Output (-) for Rear Lch
24	GND	Power GND
25	HSO	Header of IC

■ TC94A14FA (IC621) : D.SURVO & DSP

1.Terminal layout & block diagram



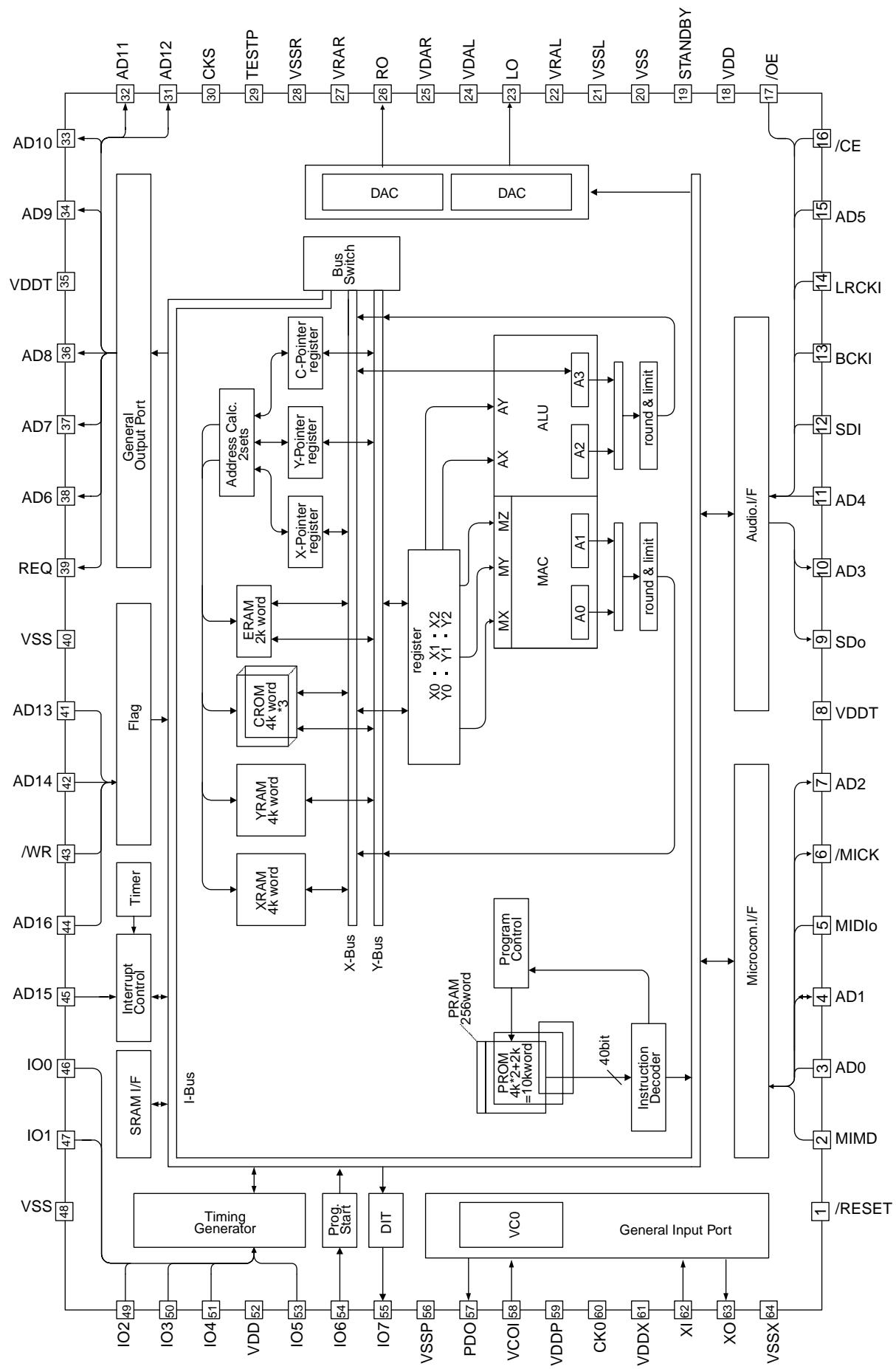
2.Pin function

Pin No	Symbol	I/O	Description
1	BCK	O	Bit clock output pin.32fs,48fs,or 64fs selectable by command.
2	LRCK	O	L/R channel clock output pin."L" for L channel and "H" for R channel. Output polarity can be inverted by command.
3	AOUT	O	Audio data output pin. MSB-first or LSB-first selectable by command.
4	DOUT	O	Digital data output pin.Outputs up to double-speed playback.
5	IPF	O	Correction flag output pin. When set to "H", AOUT output cannot be corrected by C2 correction processing.
6	VDD3	-	Digital 3.3V power supply voltage pin.
7	Vss3	-	Digital GND pin.
8	SBOK	O	Sub code Q data CRCC result output pin. "H" level when result is OK.
9	CLK	O	Sub code P-W data read I/O pin. I/O polarity selectable by command.
10	DATA	O	Sub code P-W data output pin.
11	SFSY	O	Playback frame sync signal output pin.
12	SBSY	O	Sub code block sync signal output pin. "H" level at S1 when sub code sync is detected.
13	HSO	I/O	General-purpose input / output pins. Input port at reset.
14	UHSO	-	
15	PVDD3	-	PLL-only 3.3V power supply voltage pin.

TC94A14FA

Pin No	Symbol	I/O	Description								
16	PDO	O	EFM and PLCK phase difference signal output pin.								
17	TMAX	O	TMAX detection result output pin. <table border="1" data-bbox="481 285 1068 411"> <tr> <td>TMAX Detection Result</td><td>TMAX Output</td></tr> <tr> <td>Longer than fixed period</td><td>"PVDD3"</td></tr> <tr> <td>Within fixed period</td><td>"HiZ"</td></tr> <tr> <td>Shorter than fixed period</td><td>"AVSS3"</td></tr> </table>	TMAX Detection Result	TMAX Output	Longer than fixed period	"PVDD3"	Within fixed period	"HiZ"	Shorter than fixed period	"AVSS3"
TMAX Detection Result	TMAX Output										
Longer than fixed period	"PVDD3"										
Within fixed period	"HiZ"										
Shorter than fixed period	"AVSS3"										
18	LPFN	I	Inverted input pin for PLL LPF amp.								
19	LPFO	O	Output pin for PLL LPF amp.								
20	PVREF	-	PLL-only VREF pin.								
21	VCOF	O	VCO filter pin.								
22	AVSS3	-	Analog GND pin.								
23	SLCO	O	DAC output pin for data slice level generation.								
24	RFI	I	RF signal input pin. Zin selectable by command.								
25	AVDD3	-	Analog 3.3V power supply voltage pin.								
26	RFCT	I	RFRP signal center level input pin.								
27	RFZI	I	RFRP signal zero-cross input pin.								
28	RFRP	I	RF ripple signal input pin.								
29	FEI	I	Focus error signal input pin.								
30	SBAD	I	Sub-beam adder signal input pin.								
31	TEI	I	Tracking error input pin. Inputs when tracking servo is on.								
32	TEZI	I	Tracking error signal zero-cross input pin.								
33	FOO	O	Focus equalizer output pin.								
34	TRO	O	Tracking equalizer output pin.								
35	VREF	-	Analog reference power supply voltage pin.								
36	RFGC	O	RF amplitude adjustment control signal output pin.								
37	TEBC	O	Tracking balance control signal output pin.								
38	SEL	O	APC circuit ON/OFF signal output pin. At laser on, high impedance with UHS="L", H output with UHS="H".								
39	AVDD3	-	Analog 3.3V power supply voltage pin.								
40	FMO	O	Feed equalizer output pin.								
41	DMO	O	Disc equalizer output pin.								
42	VSS3	-	Digital GND pin.								
43	VDD3	-	Digital 3.3V power supply voltage pin.								
44	TESIN	I	Test input pin. Normally, fixed to "L".								
45	XVSS3	-	System clock oscillator GND pin.								
46	XI	I	System clock oscillator input pin.								
47	XO	O	System clock oscillator output pin.								
48	XVDD3	-	System clock oscillator 3.3V power supply voltage pin.								
49	DVSS3R	-	DA converter GND pin.								
50	RO	O	R-channel data forward output pin.								
51	DVDD3	-	DA converter 3.3V power supply pin.								
52	DVR	-	Reference voltage pin.								
53	LO	O	L-channel data forward output pin.								
54	DVSS3L	-	DA converter GND pin.								
55	ZDET	O	1 bit DA converter zero detection flag output pin.								
56	VSS5	-	Microcontroller interface GND pin.								
57	BUS0										
58	BUS1	I/O	Microcontroller interface data I/O pins.								
59	BUS2										
60	BUS3										
61	BUCK	I	Microcontroller interface clock input pin.								
62	/CCE	I	Microcontroller interface chip enable signal input pin. At "L", BUS0 to BUS3 are active.								
63	/RST	I	Reset signal input pin. At reset, "L".								
64	VDD5	-	Microcontroller interface 5V power supply pin.								

■ TC94A02F-005 (IC652) : MP3 DEC



3.Pin function(1/2)

TC94A02F-005

Pin No.	Symbol	I/O	Function
1	/RESET	I	Hard reset input terminal(H:Normal operation L: Reset)
2	MIMD	I	Micon I/F mode select input terminal
3	AD0	O	External SRAM address output 0 terminal
4	AD1	O	External SRAM address output 1 terminal
5	MIDIO	I/O	Micon I/F data input/output terminal
6	/MICK	I	Micon I/F clock input terminal
7	AD2	O	External SRAM address output 2 terminal
8	VDDT	-	Digital power supply (3.3V)
9	SDO	O	Data output terminal
10	AD3	O	External SRAM address output 3 terminal
11	AD4	O	External SRAM address output 4 terminal
12	SDI	I	Data input terminal 0
13	BCKI	I	Bit clock input terminal A
14	LRCKI	I	LR clock input terminal A
15	AD5	O	External SRAM address output 5 terminal
16	CE	O	External SRAM chip enable terminal
17	OE	O	External SRAM output enable terminal
18	VDD	-	Digital power supply (2.5V)
19	STANBY	I	Standby mode control terminal
20	VSS	-	Digital GND
21	VSSL	-	DAC Lch GND
22	VRAL	-	DAC Lch reference voltage terminal
23	LO	O	DAC Lch output terminal
24	VDAL	-	DAC Rch power supply terminal(2.5V)
25	VDAR	-	DAC Lch power supply terminal(2.5V)
26	RO	O	DAC Rch output terminal
27	VRAR	-	DAC Rch reference voltage terminal
28	VSSR	-	DAC Rch GND
29	TESTP	I	Test terminal
30	CKS	I	VCO select terminal
31	AD12	O	External SRAM address output 12 terminal
32	AD11	O	External SRAM address output 11 terminal
33	AD10	O	External SRAM address output 10 terminal
34	AD9	O	External SRAM address output 9 terminal
35	VDDT	-	Digital power supply terminal (3.3V)
36	AD8	O	External SRAM address output 8 terminal
37	AD7	O	External SRAM address output 7 terminal
38	AD6	O	External SRAM address output 6 terminal
39	REQ	O	Squeeze request terminal to host
40	VSS	-	Digital GND
41	AD13	O	External SRAM address output 13 terminal
42	AD14	O	External SRAM address output 14 terminal
43	WR	O	External SRAM write signal
44	AD16	O	External SRAM address output 16 terminal
45	AD15	O	External SRAM address output 15 terminal
46	IO0	I/O	External SRAM data input/output 0 terminal
47	IO1	I/O	External SRAM data input/output 1 terminal
48	VSS	-	Digital GND
49	IO2	I/O	External SRAM data input/output 2 terminal
50	IO3	I/O	External SRAM data input/output 3 terminal

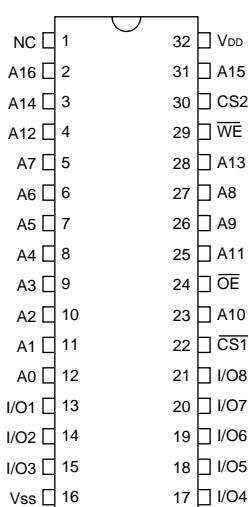
3.Pin function(2/2)

TC94A02F-005

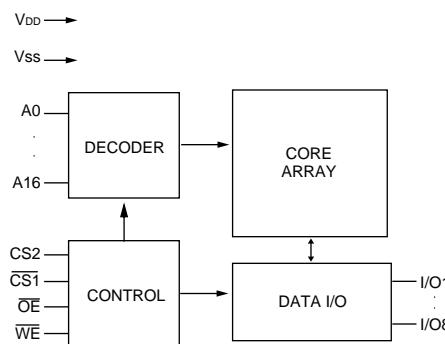
Pin No.	Symbol	I/O	Function
51	IO4	I/O	External SRAM data input/output 4 terminal
52	VDD	-	Digital power supply (2.5V) terminal
53	IO5	I/O	External SRAM data input/output 5 terminal
54	IO6	I/O	External SRAM data input/output 6 terminal
55	IO7	I/O	External SRAM data input/output 7 terminal
56	VSSP	-	VCO GND
57	PDO	O	PLL phase error detection signal output terminal
58	VCOI	I	VCO control voltage input terminal
59	VDDP	-	VCO power supply
60	CKO	O	16.934 MHz clock output terminal
61	VDDX	-	Power supply (2.5V) terminal for oscillator
62	XI	I	Connection terminal for oscillator(input)
63	XO	O	Connection terminal for oscillator(output)
64	VSSX	-	GND for oscillator

■LP61L1024S-12-X (IC653) : SRAM

1. Pin layout



2. Block diagram



3. Pin function

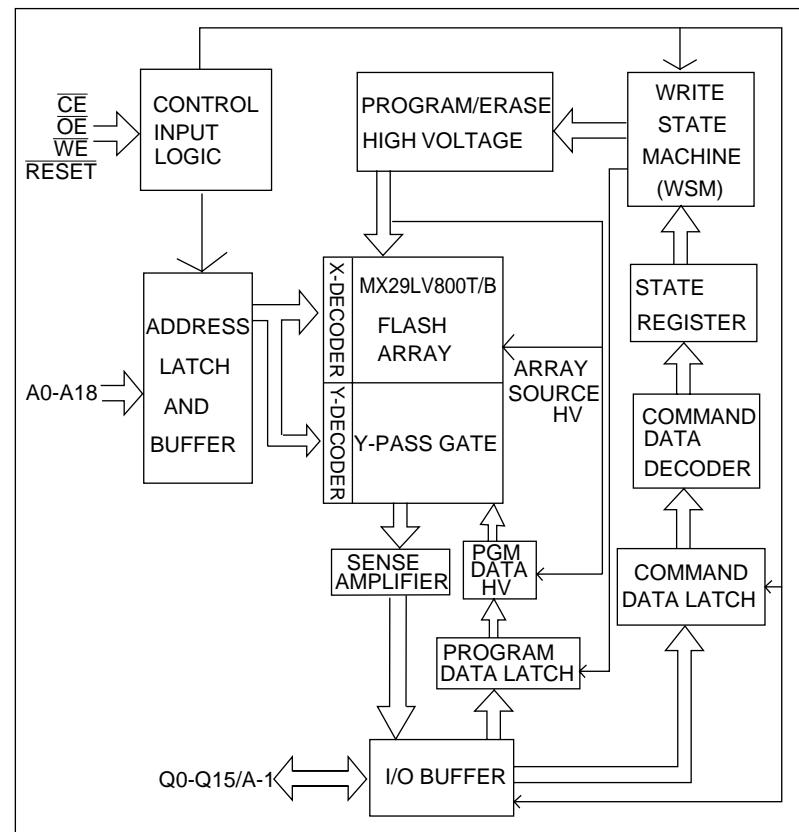
SYMBOL	DESCRIPTION
A0 - A16	Address Input
I/O1 - I/O8	Data Input/Output
CS1, CS2	Chip Select Inputs
WE	Write Enable Input
OE	Output Enable Input
VDD	Power Supply
Vss	Ground
NC	No Connection

■ MX23L8103-90 (IC802) : ROM

1. Pin layout

A15	1		A16	48
A14	2		BYTE	47
A13	3		GND	46
A12	4		Q15/A-1	45
A11	5		Q7	44
A10	6		Q14	43
A9	7		Q6	42
A8	8		Q13	41
NC	9		Q5	40
NC	10		Q12	39
WE	11		Q4	38
RESET	12		VCC	37
NC	13		Q11	36
NC	14		Q3	35
RY/BY	15		Q10	34
A18	16		Q2	33
A17	17		Q9	32
A7	18		Q1	31
A6	19		Q8	30
A5	20		Q0	29
A4	21		OE	28
A3	22		GND	27
A2	23		CE	26
A1	24		A0	25

2. Block diagram

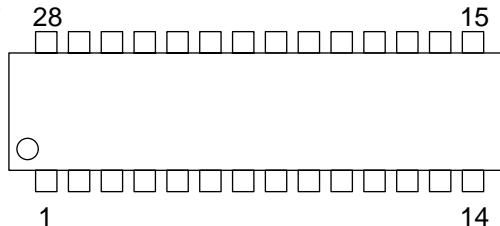


3. Pin function

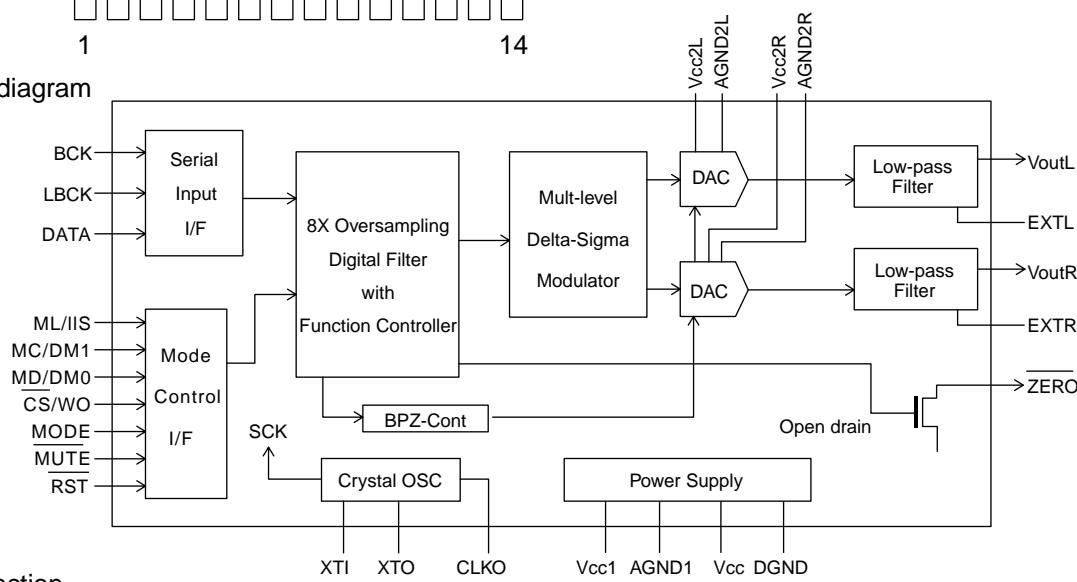
Pin NO.	Name	Function	Pin NO.	Name	Function
1~8	A15~A8	Address input	34	Q10	Data input / output
9, 10	NC		35	Q3	Data input / output
11	WE	Write enable input	36	Q11	Data input / output
12	RESET	Hardware reset pin	37	VCC	Data input / output
13, 14	NC		38	Q4	Data input / output
15	RY / BY	Ready / busy output	39	Q12	Data input / output
16, 17	A18, A17	Address input	40	Q5	Data input / output
18~25	A7~A0	Address input	41	Q13	Data input / output
26	CE	Chip enable input	42	Q6	Data input / output
27	GND	Ground pin	43	Q14	Data input / output
28	OE	Output enable input	44	Q7	Data input / output
29	Q0	Data input / output	45	Q15 / A-1	Q15 (Word mode) / LSB addr (Byte mode)
30	Q8	Data input / output	46	GND	Ground pin
31	Q1	Data input / output	47	BYTE	Word / byte selection input
32	Q9	Data input / output	48	A16	Address input
33	Q2	Data input / output			

■ PCM1716E (IC571) : D/A converter

1. Pin layout



2. Block diagram

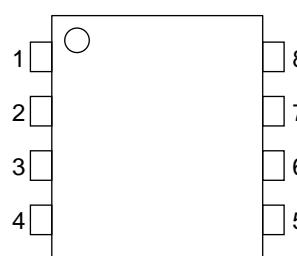


3. Pin function

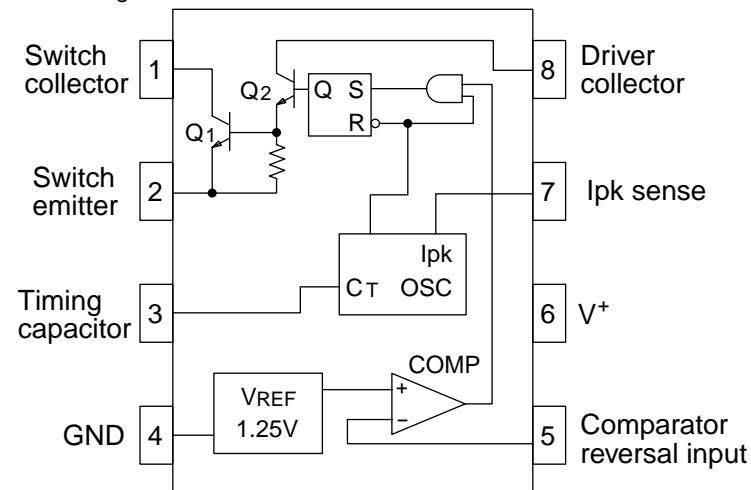
Pin No.	Symbol	I/O	Function
1	LRCK	I	LRCK clock input
2	DATA	I	Serial audio data input
3	BCK	I	Bit clock input for serial audio data
4	CLKO	O	Buffered output of system clock
5	XTI	I	Oscillator input / External clock input
6	XTO	O	Oscillator output
7	DGND	-	Digital ground
8	VDD	-	Digital power +5V
9	VDD2R	-	Analog power +5V
10	AGND2R	-	Analog ground
11	EXTR	O	Rch common pin of analog output amp
12	NC	-	Non connection
13	VOUTR	O	Rch analog voltage output of audio signal
14	AGND1	-	Analog ground
15	Vcc1	-	Analog power +5V
16	VOUTL	O	Lch analog voltage output of audio signal
17	NC	-	Non connection
18	EXTL	O	Lch common pin of analog output amp
19	AGND2L	-	Analog ground
20	Vcc2L	-	Analog power +5V
21	ZERO	O	Zero data flag
22	RST	I	Reset
23	CS/IWO	I	Chip select / Input format selection
24	MODE	I	Mode control select
25	MUTE	I	Mute control
26	MD/DM0	I	Mode control, Data / De-emphasis selection 1
27	MC/DM1	I	Mode control, BCK / De-emphasis selection 2
28	ML/IIS	I	Mode control, WDCK / Input format selection

■ NJM2360M (IC921) : DC-DC convertor

1. Pin layout

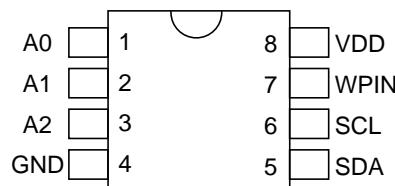


2. Block diagram



■ HN58X2432FPI (IC703) : EEPROM

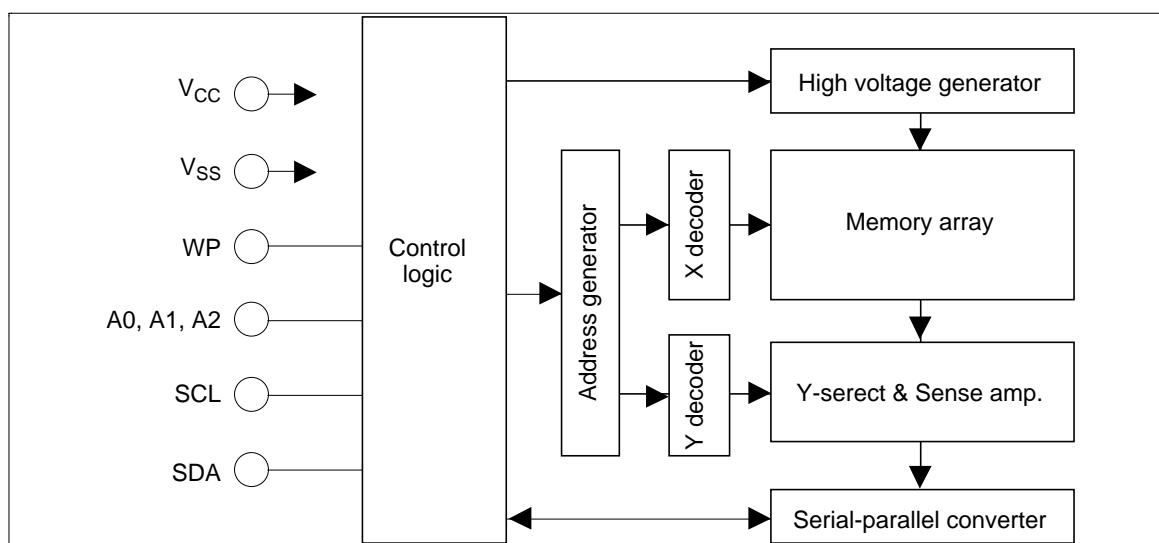
1. Terminal layout



2. Pin function

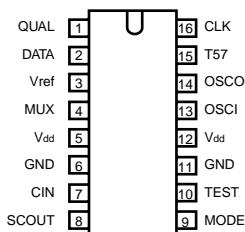
Pin name	Function
A0 to A2	Device address
SCL	Serial clock input
SDA	Serial data input/output
WPIN	Write protect
VDD	Power supply
CND	Ground

3. Block diagram

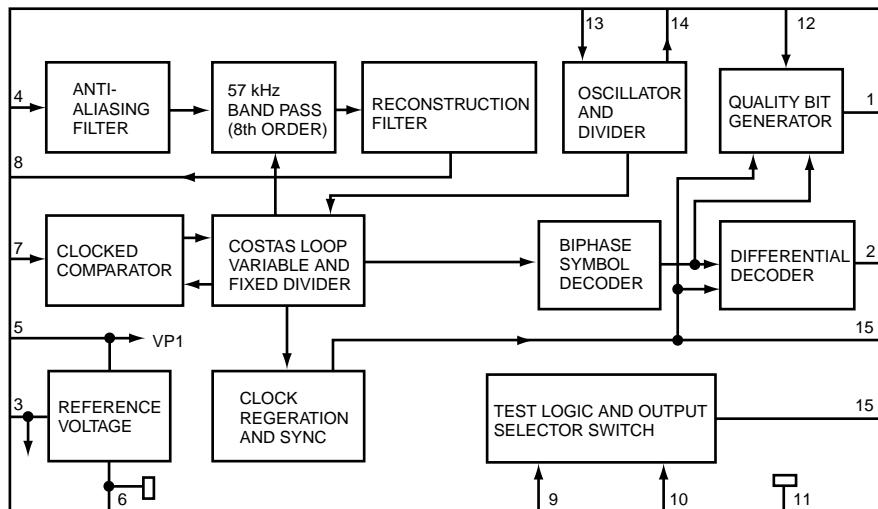


■ SAA6579T-X(IC51):RDS detector

1.Pin layout



2.Block diagram

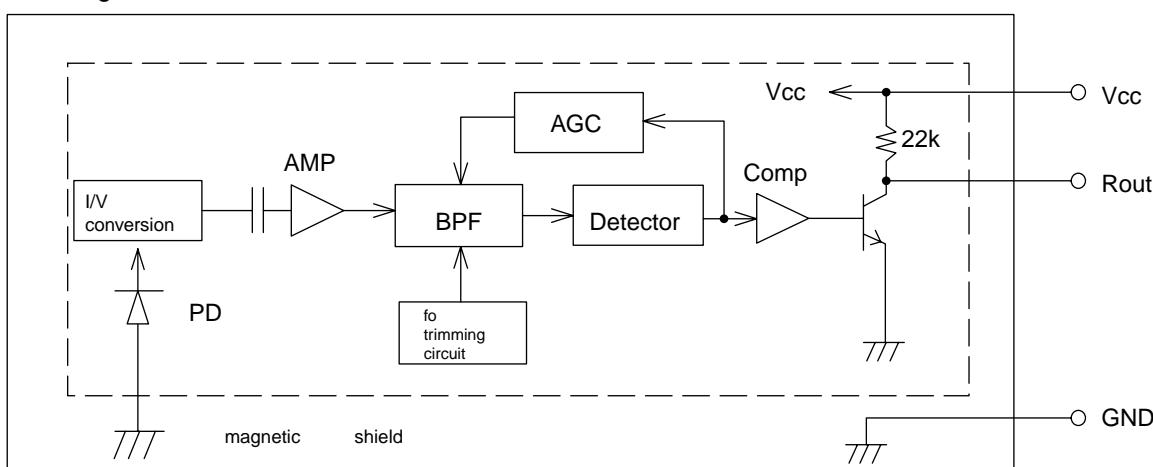


3.Pin function

Pin No.	Symbol	Description
1	QUAL	Quality indication output
2	DATA	RDS data output
3	Vref	Reference voltage output (0.5VDDA)
4	MUX	Multiolex signal input
5	Vdd	+5V supply voltage for analog part
6	GND	Ground for analog part (0V)
7	CIN	Sub carrier input to comparator
8	SCOUT	Sub carrier output of reconstruction filter
9	MODE	Oscillator mode / test control input
10	TEST	Test enable input
11	GND	Ground for digital part (0V)
12	Vdd	+5V supply voltage for digital part
13	OSCI	Oscillator input
14	OSCO	Oscillator output
15	T57	57 kHz clock signal output
16	CLK	RDS clock output

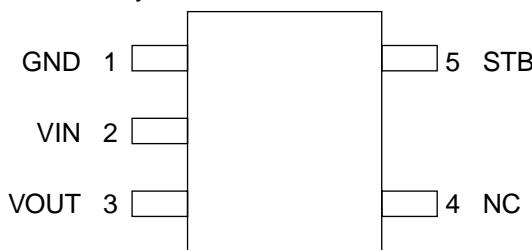
■ RPM6938-SV4 (IC805) : Remote sensor

1. Block diagram

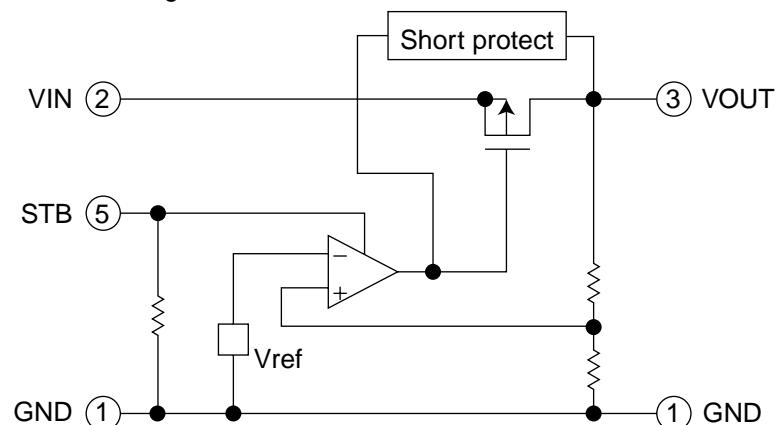


■ NJU7241F25 (IC651) : Regulator

1. Pin layout

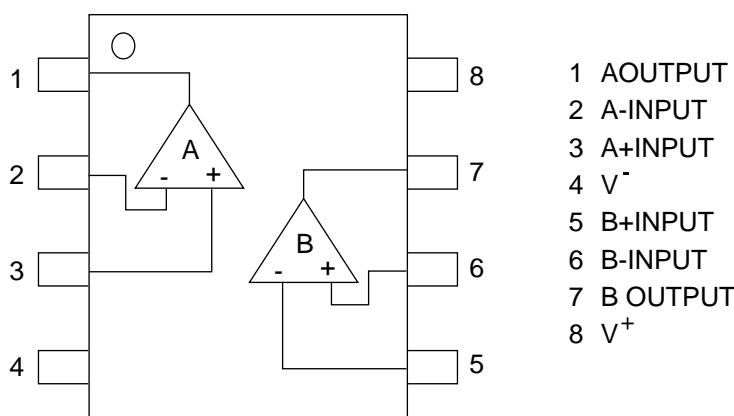


2. Block diagram

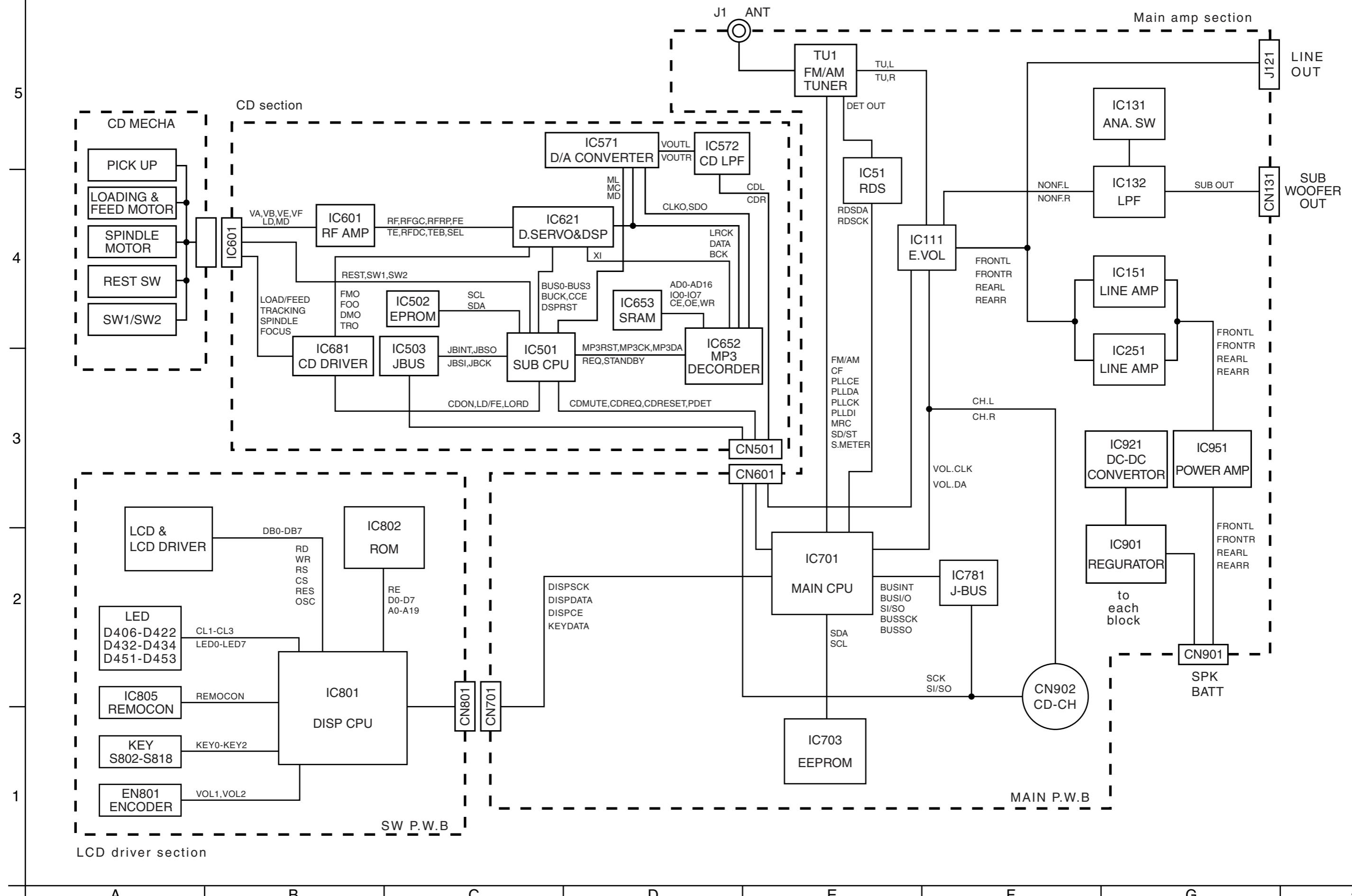


■ NJM4565V (IC132,IC151,IC251,IC572) : Dual ope amp

1. Terminal layout & Pin function

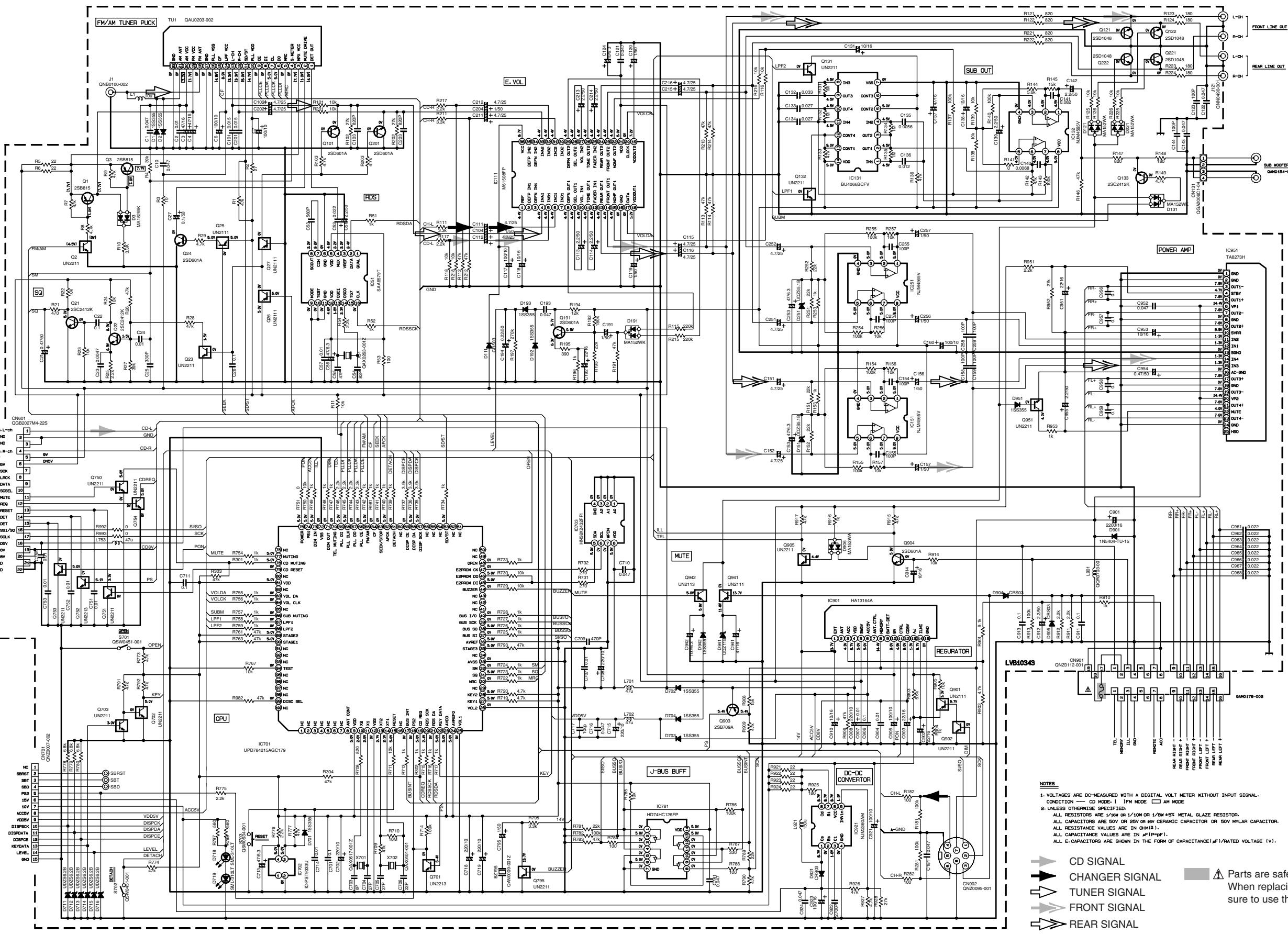


Block diagram



Standard schematic diagrams

■ Receiver & System control section



A

B

C

2-3

D

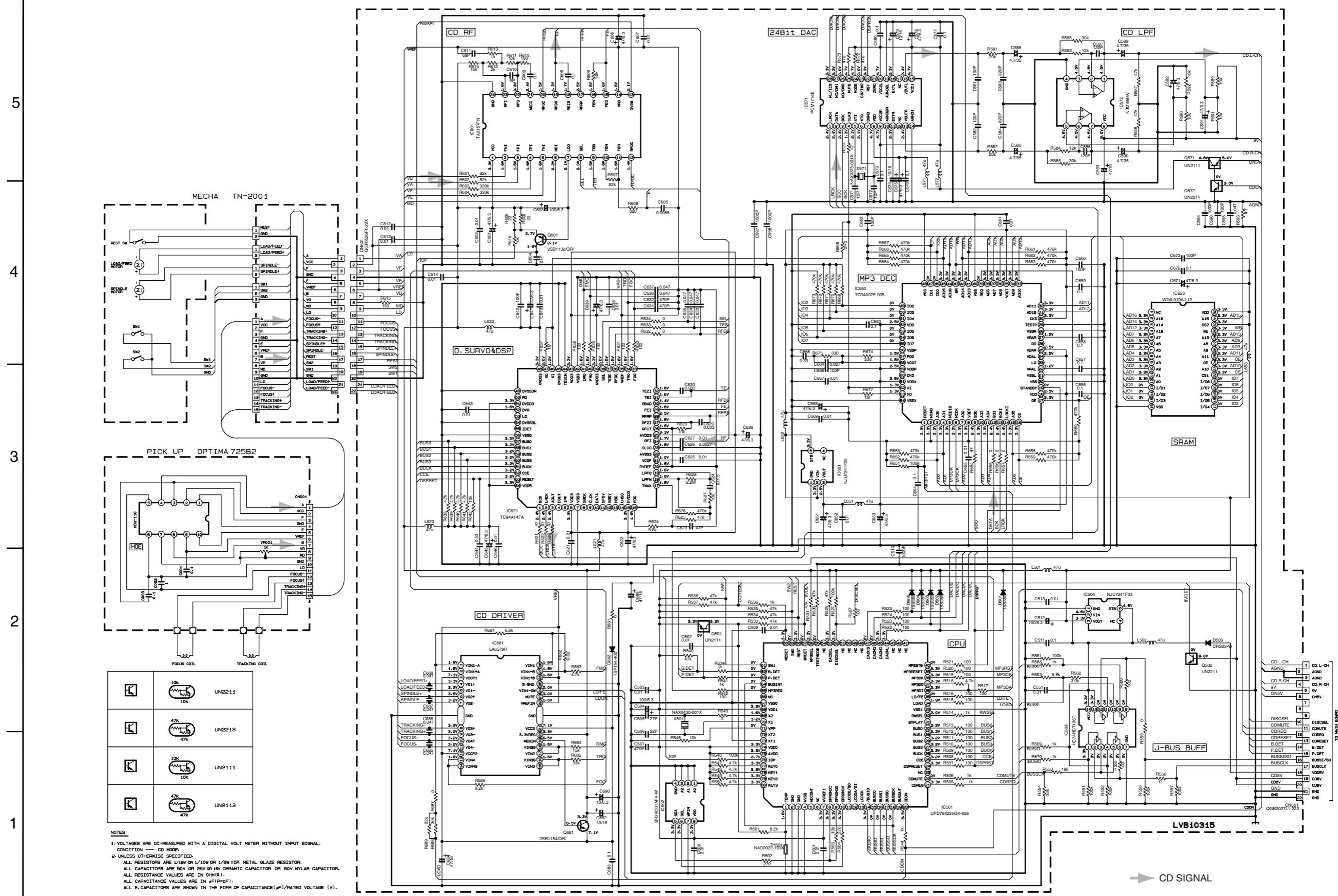
E

F

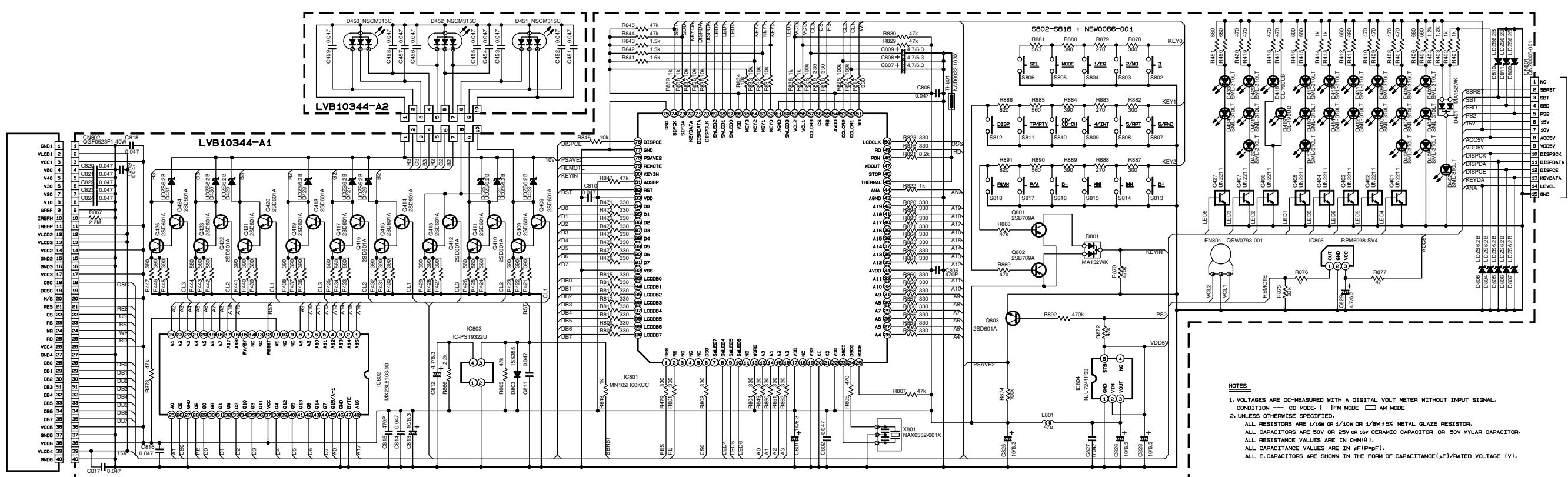
G

H

■ Mecha control circuit section



■ LCD driver & Operation switch section



A

B

C

2-5

D

E

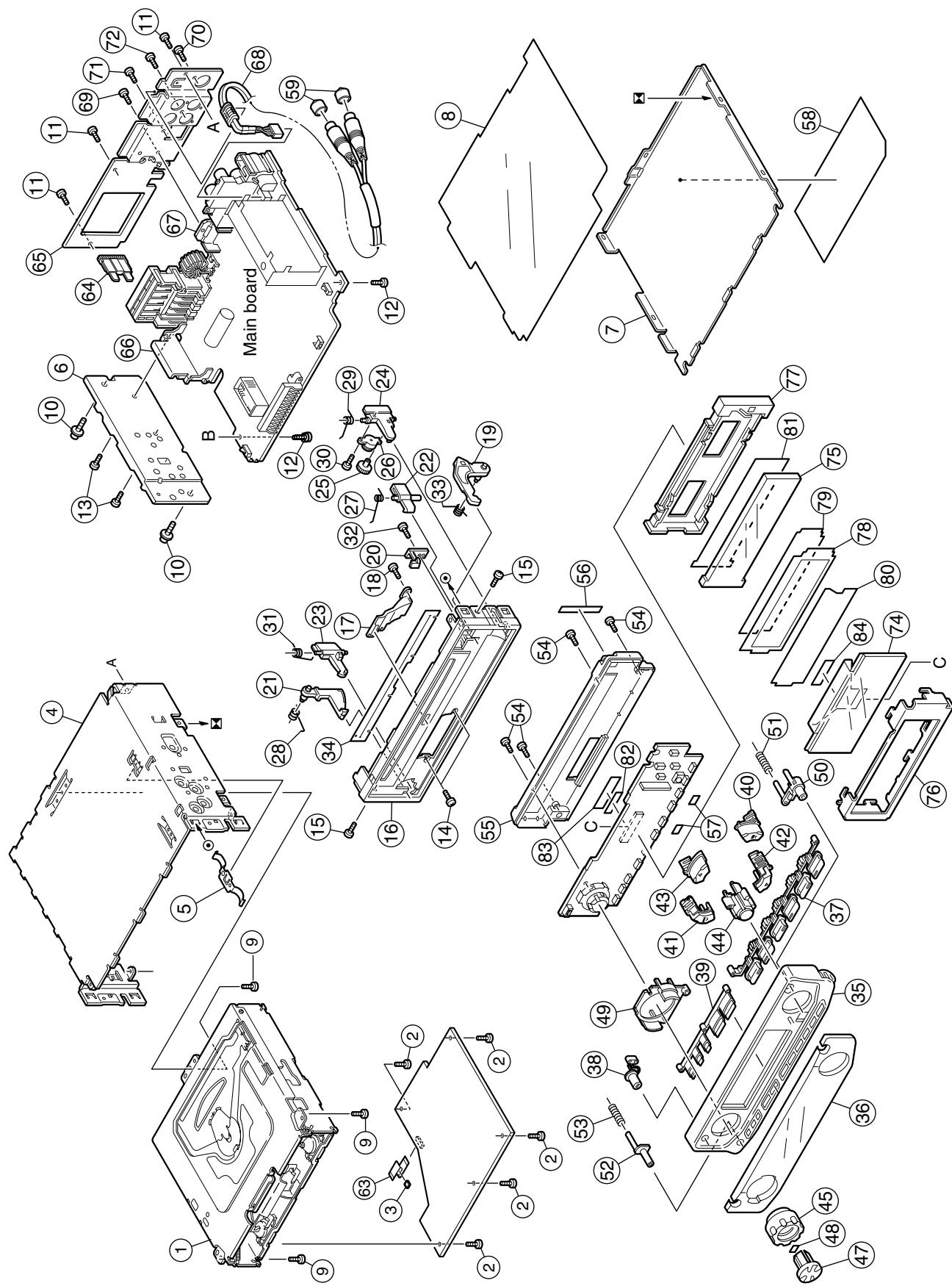
F

G

H

Exploded view of general assembly and parts list

Block No. M 1 M M



■ Parts list (General assembly)

Block No. M1MM

Item	Parts number	Parts name	Q'ty	Description	Area
1	-----	CD MECHA	1		
2	QYSDST2004Z	SCREW	5	C.M.PWB+CD MECHA	
3	VYSH101-009	SPACER	1		
4	GE10043-001A	TOP CHASSIS	1		
5	GE40135-001A	EARTH PLATE	1		
6	GE30568-002A	HEAT SINK	1		
7	GE30393-001A	BOTTOM COVER	1		
8	FSMA3005-001	INSULATOR	1		
9	QYSDST2604Z	SCREW	3	CHASSIS+CD MECHA	
10	FSKZ4005-001	SCREW	2	CHASSIS+SIDE HEA	
11	QYSDST2606Z	SCREW	3	CHASSIS+REAR BKT	
12	QYSDST2606Z	SCREW	2	CHASSIS+MAIN PWB	
13	QYSDST2612Z	SCREW	2	SIDE PANEL+IC BKT	
14	QYSDSF2006M	SCREW	2	F.CHASSIS+CONEC	
15	QYSDST2004M	SCREW	2		
16	GE10049-003A	FRONT CHASSIS	1		
17	GE30381-001A	LIGHT LENS	1		
18	VKZ4777-001	MINI SCREW	1	L.LENS+F.CHASSIS	
19	GE30378-001A	OPEN LEVER	1		
20	FSKS3015-001	LOCK LEVER(O.L)	1		
21	VKS3798-002	RELEASE LEVER	1		
22	GE30379-001A	LOCK LEVER(TOP)	1		
23	VKS3794-003	LOCK LEVER(L)	1		
24	VKS3795-002	LOCK LEVER(R)	1		
25	VKS5563-001	GEAR	1		
26	VKZ4786-002	OIL DAMPER	1		
27	FSKW4012-001	T.SPRING	1	FOR L.LEVER(TOP)	
28	GE40144-001A	T.SPRING	1	FOR RELEASE LEVER	
29	VKW5262-001	T.SPRING	1	FOR L.LEVER(R)	
30	QYSDSF2006M	SCREW	1	DAMPER+L.LEVER(R)	
31	VKW5263-002	T.SPRING	1	FOR L.LEVER(L)	
32	VKZ4777-001	MINI SCREW	1	LOCK LEVER(O.L)	
33	FSKW4013-002	T.SPRING	1	FOR OPEN LEVER	
34	GE40140-001A	BLIND	1		
35	GE10044-010A	FRONT PANEL	1		
36	GE30384-009A	FINDER ASS'Y	1		
37	GE20129-001A	PRESET BUTTON	1	1-6(2COLOR)	
38	GE30537-001A	POWER BUTTON	1	1/2/3/4/5/6	
39	GE20124-001A	D.FUNC BUTTON	1	SND+D.FUNCT	
40	GE30388-001A	NAV UP BUT	1		
41	GE30541-001A	NAV DN BUT	1		
42	GE30536-001A	NAV(L)BUT	1		
43	GE30542-001A	NAV(R)BUT	1		
44	GE40138-001A	NAV GUIDE	1		
45	GE40132-001A	VOL KNOB	1		
47	GE30539-001A	SEL BUTTON	1		
48	FSYH4036-032	SHEET	1	FOR SEL BUTTON	
49	GE30387-001A	RIM LENS	1		

■ Parts list (General assembly)

Block No. M1MM

Item	Parts number	Parts name	Q'ty	Description	Area
50	GE30538-002A	EJECT BUTTON	1		
51	VKW3001-330	COMP.SPRING	1	FOR EJECT BUTTON	
52	GE30547-001A	DETACH BUTTON	1		
53	VKW3001-330	COMP.SPRING	1	FOR DETACH BUTTON	
54	VKZ4777-001	MINI SCREW	4	FRONT+REAR	
55	GE10045-001A	REAR COVER	1		
56	FSYH4036-035	SHEET	1	FOR REAR COVER	
57	FSYH4036-069	SHEET	2		
58	LV33446-001A	NAME PLATE	1		
59	GE40101-001A	PIN CAP	2		
63	QUQ105-2207AE	FFC WIRE	1	CD MECHA-PWB	
64	QMFZ047-150-T	FUSE	1		
65	GE30382-004A	REAR BRACKET	1		
66	GE40136-001A	IC BRACKET	1		
67	GE40124-001A	REG BRACKET	1		
68	QAM0419-001	SUB-CABLE	1		
69	QYSDST2606Z	SCREW	1	REAR BKT+REG.BKT	
70	QYSDST2606Z	SCREW	1	REAR BKT+ANT JACK	
71	QYSDST2606Z	SCREW	1	REAR BKT+CD IN JACK	
72	QYSDSF2606Z	SCREW	1	REAR BKT+PIN JACK	
74	QLD0232-001	LCD MODULE	1		
75	LV42850-001A	LCD LENS	1		
76	LV33403-003A	LCD CASE	1		
77	LV33404-001A	LIGHTING CASE	1		
78	LV42884-001A	LCD FILTER	1		
79	LV42995-001A	LCD FILTER	1		
80	LV42894-001A	BRIGHT SHEET	1		
81	LV42955-002A	LENS SHEET	1		E
	LV42955-001A	LENS SHEET	1		EX
82	LV43084-001A	DOUBLE FACE	1		
83	LV40848-034A	SPACER(P)	1		
84	LV40846-036A	SPACER(F)	1		

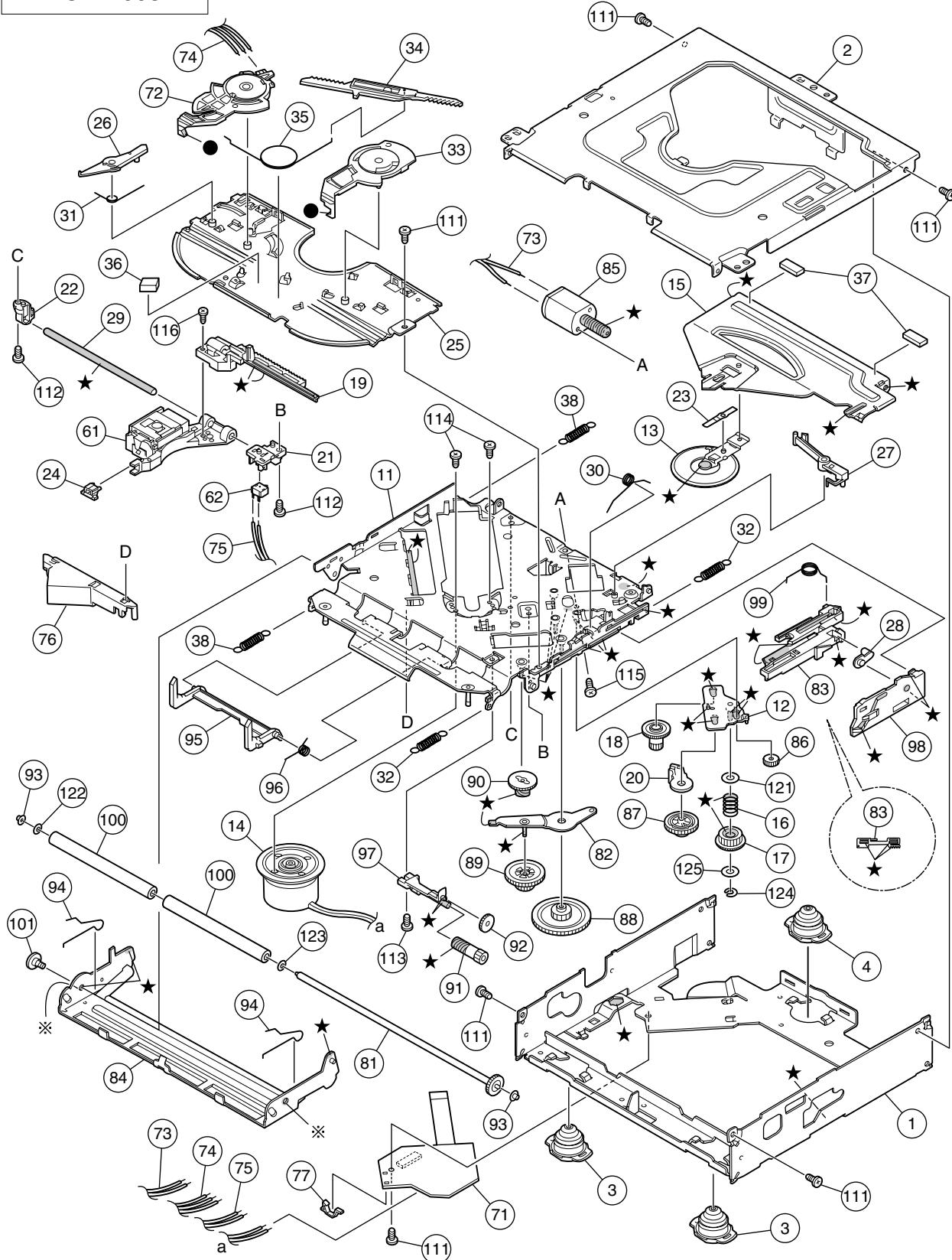
CD mechanism assembly and parts list

Block No. M B M M

Grease

- ★ TNG-87
- ※ GP-501MK
- CFD-005H

TN-2001-1003



■ Parts list (CD mechanism)

Block No. MBMM

Item	Parts number	Parts name	Q'ty	Description	Area
1	30320101T	FRAME	1		
2	30320102T	TOP COVER	1		
3	30320109T	DAMPER F	2		
4	30320110T	DAMPER R	1		
11	303205501T	CHASSIS RIVET A	1		
12	303205503T	CHANGE P.RVT A	1		
13	303205301T	CLAMPER ASS'Y	1		
14	303205304T	SPINDLE MOTOR A	1	MDN1AL3RHCS	
15	30320502T	CLAMPER ARM	1		
16	30320503T	CHANGE GEAR SPG	1		
17	30320505T	CHANGE GEAR 2	1		
18	30320506T	FEED GEAR	1		
19	30320507T	FEED RACK	1		
20	30320509T	CHANGE LOCK RAR	1		
21	30320510T	FEED SW HOLDER	1		
22	30320511T	PU SHAFT HOLDER	1		
23	30320513T	CLAMPER SUB SPG	1		
24	30320514T	FD SUB HOLDER	1		
25	30320518T	TOP PLATE	1		
26	30320519T	SELECT LOCK ARM	1		
27	30320520T	TRIGGER ARM	1		
28	30320521T	SLIDE HOOK	1		
29	30320522T	PU SHAFT	1		
30	30320525T	CLAMPER ARM SPG	1		
31	30320526T	SELECT L ARM SP	1		
32	30320527T	SUSPENSION SPG	2		
33	30320529T	SELECT ARM R	1		
34	30320530T	LINK PLATE	1		
35	30320531T	LINK PLATE SPG	1		
36	30320523T	CUSHION F	1		
37	30320524T	CUSHION R	2		
38	30320528T	SUSPENSION SPGL	2		
61	69011614T	PICKUP OPT-725	1		
62	64180406T	DET SW ESE22	1	ESE22MH56	
71	303210302T	CONN PWB ASS'Y	1	MP3 CONN	
72	30321002T	MODE SW	1	MMS000690ZMB0	
73	30321003T	LOAD MOTOR WIRE	1		
74	30321005T	MODE SW WIRE	1		
75	30321009T	SL WIRE	1		
76	30321011T	WIRE HOLDER	1		
77	19501403T	WIRE CLAMPER	1		
81	303211301T	ROLLER SHAFT AS	1		
82	303211501T	L GEAR PLATE RV	1		
83	303211302T	LOADING PLATE A	1		
84	303211502T	LOCK ARM RV ASS	1		
85	303211303T	L/F MOTOR ASS'Y	1	FF030PK-10180	
86	30321101T	LOADING GEAR 1	1		
87	30321102T	LOADING GEAR 2	1		

■ Parts list (CD mechanism)**Block No. MBMM**

▲	Item	Parts number	Parts name	Q'ty	Description	Area
	88	30321103T	LOADING GEAR 3	1		
	89	30321104T	LOADING GEAR 4	1		
	90	30321105T	LOADING GEAR 5	1		
	91	30321106T	LOADING GEAR 6	1		
	92	30321107T	LOADING GEAR 7	1		
	93	30321111T	ROLLER GUIDE	2		
	94	30321114T	ROLLER GUIDE SP	2		
	95	30321116T	DISC STOPPER AR	1		
	96	30321117T	DISC ST ARM SPG	1		
	97	30321118T	LD GEAR BRACKET	1		
	98	30321125T	L SIDE PLATE	1		
	99	30321131T	LOAD PLATE SPG	1		
	100	30321133T	LDG ROLLER	2		
	101	18211223T	COLLAR SCREW	1		
	111	9P0420031T	SCREW M2X3	6	TAP 2X3	
	112	9P0420041T	SCREW(M2 X 4)	2	TAP 2X4	
	113	9B0320041T	SCREW(M2 X 4)	1	BIND 2X4	
	114	9C0117183T	SCREW	2	SCR M1.7X1.8	
	115	9C0120203T	SCREW	1	SCR M2X2	
	116	9C0317503T	SCREW	1	T SCR M1.5X5	
	121	9W0130170T	PW 3.5X8X0.3	1		
	122	9W0513060T	HL WASHER	1	HLW1.85X5X0.13	
	123	9W0710070T	L WASHER	1	LW3.1X6X0.1	
	124	9E0100152T	E RING	1	S 1.5	
	125	9W0113020T	PW 2.1X4X0.13	1		

■ Electrical parts list (Main board)

Block No. 01

▲	Item	Parts number	Parts name	Remarks	Area	▲	Item	Parts number	Parts name	Remarks	Area
	C 922	NCB31HK-272X	C CAPACITOR				IC132	NJM4565V-X	IC		
	C 923	QERF1CM-107Z	E CAPACITOR	100MF 20% 16V			IC151	NJM4565V-X	IC		
	C 924	NCB31EK-473X	C CAPACITOR				IC251	NJM4565V-X	IC		
	C 941	QERF1CM-476Z	E CAPACITOR	47MF 20% 16V			IC701	UPD784215AGC179	IC		
	C 942	QERF0JM-107Z	E CAPACITOR	100MF 20% 6.3V			IC702	IC-PST9333U-X	IC		
	C 951	QERF1CM-226Z	E CAPACITOR	22MF 20% 16V			IC703	HN58X2432FPI-X	IC(EEPROM)		
	C 952	NCB31EK-473X	C CAPACITOR				IC781	HD74HC126FP-X	IC		
	C 953	QERF1CM-106Z	E CAPACITOR	10MF 20% 16V			IC901	HA13164A	IC		
	C 954	QERF1HM-474Z	E CAPACITOR	.47MF 20% 50V			IC921	NJM2360AM-X	IC		
	C 955	QERF1HM-225Z	E CAPACITOR	2.2MF 20% 50V			IC951	TA8273H	IC		
	C 956	NCB31CK-104X	C CAPACITOR				J 1	QNB0100-002	ANT TERMINAL		
	C 957	NCB31CK-104X	C CAPACITOR				J 121	QNN0490-001	PIN JACK		
	C 958	NCB31CK-104X	C CAPACITOR				L 1	NQL114K-100X	INDUCTOR		
	C 959	NCB31CK-104X	C CAPACITOR				L 701	NQL114K-470X	INDUCTOR		
	C 961	NCB31EK-223X	C CAPACITOR				L 702	NQL114K-470X	INDUCTOR		
	C 962	NCB31EK-223X	C CAPACITOR				L 753	NQL114K-470X	INDUCTOR		
	C 963	NCB31EK-223X	C CAPACITOR				L 901	QQR0703-001	CHOKE COIL		
	C 964	NCB31EK-223X	C CAPACITOR				L 921	NQL007-151X	INDUCTOR		
	C 965	NCB31EK-223X	C CAPACITOR				Q 1	2SB815/7-X	TRANSISTOR		
	C 966	NCB31EK-223X	C CAPACITOR				Q 2	UN2211-X	TRANSISTOR		
	C 967	NCB31EK-223X	C CAPACITOR				Q 3	2SB815/7-X	TRANSISTOR		
	C 968	NCB31EK-223X	C CAPACITOR				Q 21	2SC2412K/RS/-X	CHIP TRANSISTOR		
	CN131	QGA2006C1-04	CONNECTOR				Q 22	2SC2412K/RS/-X	CHIP TRANSISTOR		
	CN601	QGB2027M4-22S	CONNECTOR				Q 23	UN2211-X	TRANSISTOR		
	CN701	QNZ007-002	CAR CONNECTOR				Q 24	2SD601A/QR/-X	TRANSISTOR		
	CN702	QGF0501F1-06X	CONNECTOR				Q 25	UN2111-X	TRANSISTOR		
	CN901	QNZ0112-001	CAR CONNECTOR				Q 26	UN2111-X	TRANSISTOR		
	CN902	QNZ0095-001	CONNECTOR				Q 27	UN2111-X	TRANSISTOR		
D 1	1SS355-X	DIODE					Q 101	2SD601A/QR/-X	TRANSISTOR		
D 2	1SS355-X	DIODE					Q 121	2SD1048/6-7/-X	TRANSISTOR		
D 3	MA152WK-X	SI DIODE					Q 122	2SD1048/6-7/-X	TRANSISTOR		
D 111	CRS03-W	SB DIODE					Q 131	UN2211-X	TRANSISTOR		
D 121	MA152WA-X	DIODE					Q 132	UN2211-X	TRANSISTOR		
D 131	MA152WK-X	SI DIODE					Q 133	2SC2412K/RS/-X	CHIP TRANSISTOR		
D 151	UDZS5.1B-X	ZENER DIODE					Q 191	2SD601A/QR/-X	TRANSISTOR		
D 191	MA152WK-X	SI DIODE					Q 201	2SD601A/QR/-X	TRANSISTOR		
D 192	1SS355-X	DIODE					Q 221	2SD1048/6-7/-X	TRANSISTOR		
D 193	1SS355-X	DIODE					Q 222	2SD1048/6-7/-X	TRANSISTOR		
D 221	MA152WA-X	DIODE					Q 701	UN2213-X	TRANSISTOR		
D 251	UDZS5.1B-X	ZENER DIODE					Q 702	UN2211-X	TRANSISTOR		
D 701	1SS355-X	DIODE					Q 703	UN2211-X	TRANSISTOR		
D 702	1SS355-X	DIODE					Q 750	UN2211-X	TRANSISTOR		
D 703	1SS355-X	DIODE					Q 751	UN2211-X	TRANSISTOR		
D 704	1SS355-X	DIODE					Q 752	UN2213-X	TRANSISTOR		
D 711	UDZS6.2B-X	SI DIODE					Q 753	UN2211-X	TRANSISTOR		
D 712	UDZS6.2B-X	SI DIODE					Q 754	UN2211-X	TRANSISTOR		
D 713	UDZS6.2B-X	SI DIODE					Q 795	UN2211-X	TRANSISTOR		
D 714	UDZS6.2B-X	SI DIODE					Q 901	UN2111-X	TRANSISTOR		
D 715	UDZS6.2B-X	SI DIODE					Q 902	UN2211-X	TRANSISTOR		
D 716	UDZS6.2B-X	SI DIODE					Q 903	2SB709A/QR/-X	TRANSISTOR		
D 718	SML-310LT/MN/-X	LED					Q 904	2SD601A/QR/-X	TRANSISTOR		
D 719	SML-310LT/MN/-X	LED					Q 905	UN2211-X	TRANSISTOR		
D 901	1N5404-TU-15	DIODE					Q 941	UN2111-X	TRANSISTOR		
D 904	CRS03-W	SB DIODE					Q 942	UN2113-X	TRANSISTOR		
D 905	CRS03-W	SB DIODE					Q 951	UN2211-X	TRANSISTOR		
D 906	MA152WA-X	DIODE					R 1	NRSA63J-473X	MG RESISTOR		
D 921	CRS03-W	SB DIODE					R 2	NRSA63J-270X	MG RESISTOR		
D 941	UDZ11B-X	ZENER DIODE					R 3	NRSA63J-100X	MG RESISTOR		
D 942	1SS355-X	DIODE					R 4	NRSA63J-393X	MG RESISTOR		
D 951	1SS355-X	DIODE					R 5	NRSA63J-220X	MG RESISTOR		
IC 51	SAA6579T-X	IC					R 6	NRSA63J-220X	MG RESISTOR		
IC111	M61508FP-X	IC					R 7	NRSA63J-473X	MG RESISTOR		
IC131	BU4066BCFV-X	IC					R 8	NRSA63J-472X	MG RESISTOR		

■ Electrical parts list (Main board)

Block No. 01

▲	Item	Parts number	Parts name	Remarks	Area	▲	Item	Parts number	Parts name	Remarks	Area
	R 9	NRSA63J-473X	MG RESISTOR				R 193	NRSA63J-223X	MG RESISTOR		
	R 10	NRSA63J-332X	MG RESISTOR				R 194	NRSA63J-123X	MG RESISTOR		
	R 11	NRSA63J-103X	MG RESISTOR				R 195	NRSA63J-391X	MG RESISTOR		
	R 21	NRSA63J-471X	MG RESISTOR				R 196	NRSA63J-102X	MG RESISTOR		
	R 22	NRSA63J-103X	MG RESISTOR				R 197	NRSA63J-274X	MG RESISTOR		
	R 23	NRSA63J-103X	MG RESISTOR				R 201	NRSA63J-103X	MG RESISTOR		
	R 24	NRSA63J-103X	MG RESISTOR				R 202	NRSA63J-273X	MG RESISTOR		
	R 25	NRSA63J-222X	MG RESISTOR				R 203	NRSA63J-472X	MG RESISTOR		
	R 26	NRSA63J-473X	MG RESISTOR				R 211	NRSA63J-332X	MG RESISTOR		
	R 27	NRSA63J-393X	MG RESISTOR				R 212	NRSA63J-473X	MG RESISTOR		
	R 28	NRSA63J-473X	MG RESISTOR				R 213	NRSA63J-473X	MG RESISTOR		
	R 29	NRSA63J-472X	MG RESISTOR				R 214	NRSA63J-473X	MG RESISTOR		
	R 51	NRSA63J-102X	MG RESISTOR				R 215	NRSA63J-224X	MG RESISTOR		
	R 52	NRSA63J-102X	MG RESISTOR				R 216	NRSA63J-103X	MG RESISTOR		
	R 53	NRSA63J-101X	MG RESISTOR				R 217	NRSA63J-222X	MG RESISTOR		
	R 54	NRSA63J-222X	MG RESISTOR				R 218	NRSA63J-103X	MG RESISTOR		
	R 101	NRSA63J-103X	MG RESISTOR				R 221	NRSA63J-821X	MG RESISTOR		
	R 102	NRSA63J-273X	MG RESISTOR				R 222	NRSA63J-821X	MG RESISTOR		
	R 103	NRSA63J-472X	MG RESISTOR				R 223	NRSA63J-181X	MG RESISTOR		
	R 111	NRSA63J-332X	MG RESISTOR				R 224	NRSA63J-181X	MG RESISTOR		
	R 112	NRSA63J-473X	MG RESISTOR				R 225	NRSA63J-103X	MG RESISTOR		
	R 113	NRSA63J-473X	MG RESISTOR				R 226	NRSA63J-103X	MG RESISTOR		
	R 114	NRSA63J-473X	MG RESISTOR				R 251	NRSA63J-223X	MG RESISTOR		
	R 115	NRSA63J-224X	MG RESISTOR				R 252	NRSA63J-223X	MG RESISTOR		
	R 116	NRSA63J-103X	MG RESISTOR				R 253	NRSA63J-102X	MG RESISTOR		
	R 117	NRSA63J-222X	MG RESISTOR				R 254	NRSA63J-104X	MG RESISTOR		
	R 118	NRSA63J-103X	MG RESISTOR				R 255	NRSA63J-104X	MG RESISTOR		
	R 121	NRSA63J-821X	MG RESISTOR				R 256	NRSA63J-103X	MG RESISTOR		
	R 122	NRSA63J-821X	MG RESISTOR				R 257	NRSA63J-103X	MG RESISTOR		
	R 123	NRSA63J-181X	MG RESISTOR				R 281	NRSA63J-104X	MG RESISTOR		
	R 124	NRSA63J-181X	MG RESISTOR				R 282	NRSA63J-101X	MG RESISTOR		
	R 125	NRSA63J-103X	MG RESISTOR				R 301	NRSA63J-102X	MG RESISTOR		
	R 126	NRSA63J-103X	MG RESISTOR				R 302	NRSA63J-102X	MG RESISTOR		
	R 131	NRSA63J-105X	MG RESISTOR				R 303	NRSA63J-473X	MG RESISTOR		
	R 132	NRSA63J-105X	MG RESISTOR				R 304	NRSA63J-473X	MG RESISTOR		
	R 133	NRSA63J-473X	MG RESISTOR				R 708	NRSA63J-821X	MG RESISTOR		
	R 134	NRSA63J-105X	MG RESISTOR				R 709	NRSA63J-473X	MG RESISTOR		
	R 135	NRSA63J-105X	MG RESISTOR				R 710	NRSA63J-106X	MG RESISTOR		
	R 136	NRSA63J-473X	MG RESISTOR				R 711	NRSA63J-103X	MG RESISTOR		
	R 137	NRSA63J-104X	MG RESISTOR				R 713	NRSA63J-102X	MG RESISTOR		
	R 138	NRSA63J-103X	MG RESISTOR				R 714	NRSA63J-104X	MG RESISTOR		
	R 139	NRSA63J-103X	MG RESISTOR				R 715	NRSA63J-102X	MG RESISTOR		
	R 140	NRSA63J-104X	MG RESISTOR				R 716	NRSA63J-102X	MG RESISTOR		
	R 141	NRSA63J-0R0X	MG RESISTOR				R 717	NRSA63J-102X	MG RESISTOR		
	R 142	NRSA63J-473X	MG RESISTOR				R 719	NRSA63J-472X	MG RESISTOR		
	R 143	NRSA63J-104X	MG RESISTOR				R 720	NRSA63J-472X	MG RESISTOR		
	R 144	NRSA63J-562X	MG RESISTOR				R 722	NRSA63J-102X	MG RESISTOR		
	R 145	NRSA63J-153X	MG RESISTOR				R 723	NRSA63J-102X	MG RESISTOR		
	R 146	NRSA63J-473X	MG RESISTOR				R 724	NRSA63J-102X	MG RESISTOR		
	R 147	NRSA63J-821X	MG RESISTOR				R 725	NRSA63J-102X	MG RESISTOR		
	R 148	NRSA63J-181X	MG RESISTOR				R 726	NRSA63J-102X	MG RESISTOR		
	R 149	NRSA63J-472X	MG RESISTOR				R 727	NRSA63J-102X	MG RESISTOR		
	R 151	NRSA63J-223X	MG RESISTOR				R 728	NRSA63J-102X	MG RESISTOR		
	R 152	NRSA63J-223X	MG RESISTOR				R 729	NRSA63J-103X	MG RESISTOR		
	R 153	NRSA63J-102X	MG RESISTOR				R 730	NRSA63J-103X	MG RESISTOR		
	R 154	NRSA63J-104X	MG RESISTOR				R 731	NRSA63J-271X	MG RESISTOR		
	R 155	NRSA63J-104X	MG RESISTOR				R 732	NRSA63J-271X	MG RESISTOR		
	R 156	NRSA63J-103X	MG RESISTOR				R 733	NRSA63J-102X	MG RESISTOR		
	R 157	NRSA63J-103X	MG RESISTOR				R 734	NRSA63J-102X	MG RESISTOR		
	R 181	NRSA63J-104X	MG RESISTOR				R 735	NRSA63J-392X	MG RESISTOR		
	R 182	NRSA63J-101X	MG RESISTOR				R 736	NRSA63J-392X	MG RESISTOR		
	R 191	NRSA63J-473X	MG RESISTOR				R 737	NRSA63J-392X	MG RESISTOR		
	R 192	NRSA63J-184X	MG RESISTOR				R 739	NRSA63J-102X	MG RESISTOR		

■ Electrical parts list (Main board)

Block No. 01

▲	Item	Parts number	Parts name	Remarks	Area	▲	Item	Parts number	Parts name	Remarks	Area
	R 740	NRSA63J-102X	MG RESISTOR				R 923	NRSA63J-220X	MG RESISTOR		
	R 741	NRSA63J-102X	MG RESISTOR				R 924	NRSA63J-220X	MG RESISTOR		
	R 742	NRSA63J-102X	MG RESISTOR				R 925	NRSA63J-181X	MG RESISTOR		
	R 743	NRSA63J-222X	MG RESISTOR				R 926	NRSA63D-473X	MG RESISTOR		
	R 744	NRSA63J-222X	MG RESISTOR				R 927	NRSA63D-472X	MG RESISTOR		
	R 745	NRSA63J-222X	MG RESISTOR				R 928	NRSA63D-273X	MG RESISTOR		
	R 746	NRSA63J-222X	MG RESISTOR				R 951	NRSA63J-222X	MG RESISTOR		
	R 747	NRSA63J-102X	MG RESISTOR				R 952	NRSA63J-273X	MG RESISTOR		
	R 748	NRSA63J-102X	MG RESISTOR				R 953	NRSA63J-102X	MG RESISTOR		
	R 749	NRSA63J-102X	MG RESISTOR				R 981	NRSA63J-102X	MG RESISTOR		
	R 750	NRSA63J-103X	MG RESISTOR				R 982	NRSA63J-473X	MG RESISTOR		
	R 751	NRSA63J-0R0X	MG RESISTOR				R 992	NRSA63J-0R0X	MG RESISTOR		
	R 754	NRSA63J-102X	MG RESISTOR				R 993	NRSA63J-0R0X	MG RESISTOR		
	R 755	NRSA63J-102X	MG RESISTOR				R 997	NRSA63J-0R0X	MG RESISTOR		
	R 756	NRSA63J-102X	MG RESISTOR				R 998	NRSA63J-0R0X	MG RESISTOR		
	R 757	NRSA63J-102X	MG RESISTOR				R 999	NRSA63J-0R0X	MG RESISTOR		
	R 758	NRSA63J-102X	MG RESISTOR				S 701	QSW0451-001	DETECT SWITCH		
	R 759	NRSA63J-102X	MG RESISTOR				S 702	QSW0451-001	DETECT SWITCH		
	R 761	NRSA63J-473X	MG RESISTOR				S 703	QSW0534-001	TACT SWITCH		
	R 763	NRSA63J-473X	MG RESISTOR				TU 1	QAU0203-002	TUNER		
	R 767	NRSA63J-103X	MG RESISTOR				X 51	QAX0263-001Z	CRYSTAL		
	R 773	NRSA63J-473X	MG RESISTOR				X 701	QAX0617-001Z	CRYSTAL		
	R 774	NRSA63J-473X	MG RESISTOR				X 702	QAX0401-001	CRYSTAL		
	R 775	NRSA63J-222X	MG RESISTOR								
	R 776	NRSA63J-222X	MG RESISTOR								
	R 777	NRSA63J-473X	MG RESISTOR								
	R 778	NRSA63J-682X	MG RESISTOR								
	R 779	NRSA63J-682X	MG RESISTOR								
	R 780	NRSA63J-682X	MG RESISTOR								
	R 781	NRSA63J-223X	MG RESISTOR								
	R 782	NRSA63J-104X	MG RESISTOR								
	R 783	NRSA63J-473X	MG RESISTOR								
	R 784	NRSA63J-101X	MG RESISTOR								
	R 785	NRSA63J-103X	MG RESISTOR								
	R 786	NRSA63J-104X	MG RESISTOR								
	R 787	NRSA63J-331X	MG RESISTOR								
	R 788	NRSA63J-101X	MG RESISTOR								
	R 789	NRSA63J-223X	MG RESISTOR								
	R 790	NRSA63J-473X	MG RESISTOR								
	R 791	NRSA63J-473X	MG RESISTOR								
	R 792	NRSA63J-473X	MG RESISTOR								
	R 793	NRSA63J-473X	MG RESISTOR								
	R 795	NRSA63J-332X	MG RESISTOR								
	R 797	NRSA63J-561X	MG RESISTOR								
	R 798	NRSA63J-561X	MG RESISTOR								
	R 901	NRSA63J-912X	MG RESISTOR								
	R 902	NRSA63J-472X	MG RESISTOR								
	R 903	NRSA63J-562X	MG RESISTOR								
	R 904	NRSA63J-102X	MG RESISTOR								
	R 905	NRSA63J-103X	MG RESISTOR								
	R 906	NRSA63J-473X	MG RESISTOR								
	R 908	NRSA63J-153X	MG RESISTOR								
	R 909	NRSA63J-473X	MG RESISTOR								
	R 910	QRE142J-102X	C RESISTOR	1.0K 5% 1/4W							
	R 911	NRSA63J-222X	MG RESISTOR								
	R 912	NRSA63J-222X	MG RESISTOR								
	R 913	NRSA63J-104X	MG RESISTOR								
	R 914	NRSA63J-103X	MG RESISTOR								
	R 915	NRSA63J-473X	MG RESISTOR								
	R 916	NRSA63J-102X	MG RESISTOR								
	R 917	NRSA63J-473X	MG RESISTOR								
	R 921	NRSA63J-220X	MG RESISTOR								
	R 922	NRSA63J-220X	MG RESISTOR								

■ Electrical parts list (Front board)

Block No. 02

▲	Item	Parts number	Parts name	Remarks	Area	▲	Item	Parts number	Parts name	Remarks	Area
	C 451	NCB31EK-473X	C CAPACITOR				D 426	UDZS6.2B-X	SI DIODE		
	C 452	NCB31EK-473X	C CAPACITOR				D 427	UDZS6.2B-X	SI DIODE		
	C 453	NCB31EK-473X	C CAPACITOR				D 428	UDZS6.2B-X	SI DIODE		
	C 454	NCB31EK-473X	C CAPACITOR				D 429	UDZS6.2B-X	SI DIODE		
	C 455	NCB31EK-473X	C CAPACITOR				D 430	UDZS6.2B-X	SI DIODE		
	C 456	NCB31EK-473X	C CAPACITOR				D 431	UDZS6.2B-X	SI DIODE		
	C 457	NCB31EK-473X	C CAPACITOR				D 433	SML-310LT/MN/-X	LED		
	C 458	NCB31EK-473X	C CAPACITOR				D 434	SML-310LT/MN/-X	LED		
	C 459	NCB31CK-473X	C CAPACITOR				D 451	NSCM315C-W	LED		
	C 801	NBE20JM-106X	TS E CAP SVB20J				D 452	NSCM315C-W	LED		
	C 802	NCB31EK-473X	C CAPACITOR				D 453	NSCM315C-W	LED		
	C 805	NCS31HJ-471X	C CAPACITOR				D 801	MA152WK-X	SI DIODE		
	C 806	NCB31EK-473X	C CAPACITOR				D 803	1SS355-X	DIODE		
	C 807	NBE20JM-475X	TS E CAPACITOR				D 804	UDZS6.2B-X	SI DIODE		
	C 808	NBE20JM-475X	TS E CAPACITOR				D 805	UDZS6.2B-X	SI DIODE		
	C 809	NBE20JM-475X	TS E CAPACITOR				D 806	UDZS6.2B-X	SI DIODE		
	C 810	NCB31EK-473X	C CAPACITOR				D 807	UDZS6.2B-X	SI DIODE		
	C 811	NCB31EK-473X	C CAPACITOR				D 808	UDZS6.2B-X	SI DIODE		
	C 812	NBE20JM-475X	TS E CAPACITOR				D 809	UDZS6.2B-X	SI DIODE		
	C 813	NBE20JM-106X	TS E CAP SVB20J				D 810	UDZS6.2B-X	SI DIODE		
	C 814	NCB31EK-473X	C CAPACITOR				D 811	UDZS6.2B-X	SI DIODE		
	C 815	NCS31HJ-471X	C CAPACITOR				EN801	QSW0863-002	ROTARY ENCODER		
	C 816	NCB31EK-473X	C CAPACITOR				IC801	MN102H60KCC	IC		
	C 817	NCB31EK-473X	C CAPACITOR				IC802	MX23L8103-90-M1	IC		
	C 818	NCB31EK-473X	C CAPACITOR				IC803	IC-PST9322U-X	IC		
	C 819	NCB31EK-473X	C CAPACITOR				IC804	NJU7241F33-X	IC		
	C 820	NCB31EK-473X	C CAPACITOR				IC805	RPM6938-SV4	IC		
	C 821	NCB31EK-473X	C CAPACITOR				L 801	NQL114K-470X	INDUCTOR		
	C 822	NCB31EK-473X	C CAPACITOR				Q 401	UN2211-X	TRANSISTOR		
	C 823	NCB31EK-473X	C CAPACITOR				Q 402	UN2211-X	TRANSISTOR		
	C 824	NCB31EK-473X	C CAPACITOR				Q 403	UN2211-X	TRANSISTOR		
	C 825	NBE20JM-106X	TS E CAP SVB20J				Q 404	UN2211-X	TRANSISTOR		
	C 826	NBE20JM-106X	TS E CAP SVB20J				Q 405	UN2211-X	TRANSISTOR		
	C 827	NCB31EK-473X	C CAPACITOR				Q 406	UN2211-X	TRANSISTOR		
	C 828	NBE20JM-106X	TS E CAP SVB20J				Q 407	UN2211-X	TRANSISTOR		
	C 829	NBE20JM-475X	TS E CAPACITOR				Q 408	2SD601A/QR/-X	TRANSISTOR		
	CN801	QN2006-001	CAR CONNECTOR				Q 409	2SD601A/QR/-X	TRANSISTOR		
	CN802	QGF0523F1-40W	FFC CONNECTOR				Q 410	2SD601A/QR/-X	TRANSISTOR		
	D 401	MA152WK-X	SI DIODE				Q 411	2SD601A/QR/-X	TRANSISTOR		
	D 402	SML-310LT/MN/-X	LED				Q 412	2SD601A/QR/-X	TRANSISTOR		
	D 403	SML-310LT/MN/-X	LED				Q 413	2SD601A/QR/-X	TRANSISTOR		
	D 404	SML-310LT/MN/-X	LED				Q 414	2SD601A/QR/-X	TRANSISTOR		
	D 405	SML-310LT/MN/-X	LED				Q 415	2SD601A/QR/-X	TRANSISTOR		
	D 406	SML-310LT/MN/-X	LED				Q 416	2SD601A/QR/-X	TRANSISTOR		
	D 407	SML-310LT/MN/-X	LED				Q 417	2SD601A/QR/-X	TRANSISTOR		
	D 408	SML-310LT/MN/-X	LED				Q 418	2SD601A/QR/-X	TRANSISTOR		
	D 409	SML-310LT/MN/-X	LED				Q 419	2SD601A/QR/-X	TRANSISTOR		
	D 410	SML-310LT/MN/-X	LED				Q 420	2SD601A/QR/-X	TRANSISTOR		
	D 411	SML-310LT/MN/-X	LED				Q 421	2SD601A/QR/-X	TRANSISTOR		
	D 412	SML-310LT/MN/-X	LED				Q 422	2SD601A/QR/-X	TRANSISTOR		
	D 413	SML-310LT/MN/-X	LED				Q 423	2SD601A/QR/-X	TRANSISTOR		
	D 414	SML-310LT/MN/-X	LED				Q 424	2SD601A/QR/-X	TRANSISTOR		
	D 415	SML-310LT/MN/-X	LED				Q 425	2SD601A/QR/-X	TRANSISTOR		
	D 416	SML-310LT/MN/-X	LED				Q 427	UN2211-X	TRANSISTOR		
	D 417	SML-310LT/MN/-X	LED				Q 801	2SB709A/QR/-X	TRANSISTOR		
	D 418	CL-190UB-X-X	LED				Q 802	2SB709A/QR/-X	TRANSISTOR		
	D 419	CL-190UB-X-X	LED				Q 803	2SD601A/QR/-X	TRANSISTOR		
	D 420	SML-310LT/MN/-X	LED				R 401	NRSA63J-102X	MG RESISTOR		
	D 421	SML-310LT/MN/-X	LED				R 402	NRSA63J-102X	MG RESISTOR		
	D 422	SML-310LT/MN/-X	LED				R 403	NRSA63J-122X	MG RESISTOR		
	D 423	UDZS6.2B-X	SI DIODE				R 404	NRSA63J-122X	MG RESISTOR		
	D 424	UDZS6.2B-X	SI DIODE				R 405	NRSA63J-681X	MG RESISTOR		
	D 425	UDZS6.2B-X	SI DIODE				R 406	NRSA63J-681X	MG RESISTOR		

■ Electrical parts list (Front board)

Block No. 02

▲	Item	Parts number	Parts name	Remarks	Area	▲	Item	Parts number	Parts name	Remarks	Area
	R 407	NRSA63J-471X	MG RESISTOR				R 814	NRSA63J-331X	MG RESISTOR		
	R 408	NRSA63J-471X	MG RESISTOR				R 815	NRSA63J-331X	MG RESISTOR		
	R 409	NRSA63J-471X	MG RESISTOR				R 816	NRSA63J-331X	MG RESISTOR		
	R 410	NRSA63J-471X	MG RESISTOR				R 817	NRSA63J-331X	MG RESISTOR		
	R 411	NRSA63J-681X	MG RESISTOR				R 818	NRSA63J-331X	MG RESISTOR		
	R 412	NRSA63J-681X	MG RESISTOR				R 819	NRSA63J-331X	MG RESISTOR		
	R 413	NRSA63J-102X	MG RESISTOR				R 820	NRSA63J-331X	MG RESISTOR		
	R 414	NRSA63J-102X	MG RESISTOR				R 821	NRSA63J-822X	MG RESISTOR		
	R 415	NRSA63J-681X	MG RESISTOR				R 822	NRSA63J-102X	MG RESISTOR		
	R 416	NRSA63J-681X	MG RESISTOR				R 823	NRSA63J-331X	MG RESISTOR		
	R 417	NRSA63J-471X	MG RESISTOR				R 824	NRSA63J-104X	MG RESISTOR		
	R 418	NRSA63J-471X	MG RESISTOR				R 825	NRSA63J-104X	MG RESISTOR		
	R 419	NRSA63J-471X	MG RESISTOR				R 826	NRSA63J-104X	MG RESISTOR		
	R 420	NRSA63J-471X	MG RESISTOR				R 827	NRSA63J-102X	MG RESISTOR		
	R 421	NRSA63J-391X	MG RESISTOR				R 828	NRSA63J-102X	MG RESISTOR		
	R 422	NRSA63J-391X	MG RESISTOR				R 829	NRSA63J-473X	MG RESISTOR		
	R 423	NRSA63J-391X	MG RESISTOR				R 830	NRSA63J-473X	MG RESISTOR		
	R 424	NRSA63J-561X	MG RESISTOR				R 831	NRSA63J-103X	MG RESISTOR		
	R 425	NRSA63J-561X	MG RESISTOR				R 832	NRSA63J-103X	MG RESISTOR		
	R 426	NRSA63J-561X	MG RESISTOR				R 833	NRSA63J-103X	MG RESISTOR		
	R 427	NRSA63J-391X	MG RESISTOR				R 834	NRSA63J-103X	MG RESISTOR		
	R 428	NRSA63J-391X	MG RESISTOR				R 835	NRSA63J-103X	MG RESISTOR		
	R 429	NRSA63J-391X	MG RESISTOR				R 836	NRSA63J-103X	MG RESISTOR		
	R 430	NRSA63J-391X	MG RESISTOR				R 837	NRSA63J-103X	MG RESISTOR		
	R 431	NRSA63J-391X	MG RESISTOR				R 838	NRSA63J-102X	MG RESISTOR		
	R 432	NRSA63J-391X	MG RESISTOR				R 839	NRSA63J-102X	MG RESISTOR		
	R 433	NRSA63J-561X	MG RESISTOR				R 841	NRSA63J-152X	MG RESISTOR		
	R 434	NRSA63J-561X	MG RESISTOR				R 842	NRSA63J-152X	MG RESISTOR		
	R 435	NRSA63J-561X	MG RESISTOR				R 843	NRSA63J-152X	MG RESISTOR		
	R 436	NRSA63J-391X	MG RESISTOR				R 844	NRSA63J-473X	MG RESISTOR		
	R 437	NRSA63J-391X	MG RESISTOR				R 845	NRSA63J-473X	MG RESISTOR		
	R 438	NRSA63J-391X	MG RESISTOR				R 846	NRSA63J-103X	MG RESISTOR		
	R 439	NRSA63J-391X	MG RESISTOR				R 847	NRSA63J-473X	MG RESISTOR		
	R 440	NRSA63J-391X	MG RESISTOR				R 848	NRSA63J-102X	MG RESISTOR		
	R 441	NRSA63J-391X	MG RESISTOR				R 849	NRSA63J-331X	MG RESISTOR		
	R 442	NRSA63J-561X	MG RESISTOR				R 850	NRSA63J-331X	MG RESISTOR		
	R 443	NRSA63J-561X	MG RESISTOR				R 851	NRSA63J-331X	MG RESISTOR		
	R 444	NRSA63J-561X	MG RESISTOR				R 852	NRSA63J-331X	MG RESISTOR		
	R 445	NRSA63J-391X	MG RESISTOR				R 853	NRSA63J-331X	MG RESISTOR		
	R 446	NRSA63J-391X	MG RESISTOR				R 854	NRSA63J-331X	MG RESISTOR		
	R 447	NRSA63J-391X	MG RESISTOR				R 855	NRSA63J-331X	MG RESISTOR		
	R 450	NRSA63J-681X	MG RESISTOR				R 856	NRSA63J-331X	MG RESISTOR		
	R 451	NRSA63J-681X	MG RESISTOR				R 857	NRSA63J-331X	MG RESISTOR		
	R 471	NRSA63J-331X	MG RESISTOR				R 858	NRSA63J-331X	MG RESISTOR		
	R 472	NRSA63J-331X	MG RESISTOR				R 859	NRSA63J-331X	MG RESISTOR		
	R 473	NRSA63J-331X	MG RESISTOR				R 860	NRSA63J-331X	MG RESISTOR		
	R 474	NRSA63J-331X	MG RESISTOR				R 861	NRSA63J-331X	MG RESISTOR		
	R 475	NRSA63J-331X	MG RESISTOR				R 862	NRSA63J-331X	MG RESISTOR		
	R 476	NRSA63J-331X	MG RESISTOR				R 863	NRSA63J-331X	MG RESISTOR		
	R 477	NRSA63J-331X	MG RESISTOR				R 864	NRSA63J-331X	MG RESISTOR		
	R 478	NRSA63J-331X	MG RESISTOR				R 865	NRSA63J-473X	MG RESISTOR		
	R 479	NRSA63J-331X	MG RESISTOR				R 866	NRSA63J-222X	MG RESISTOR		
	R 801	NRSA63J-331X	MG RESISTOR				R 867	NRSA63J-225X	MG RESISTOR		
	R 803	NRSA63J-331X	MG RESISTOR				R 868	NRSA63J-473X	MG RESISTOR		
	R 804	NRSA63J-331X	MG RESISTOR				R 869	NRSA63J-473X	MG RESISTOR		
	R 805	NRSA63J-471X	MG RESISTOR				R 870	NRSA63J-474X	MG RESISTOR		
	R 807	NRSA63J-473X	MG RESISTOR				R 871	NRSA63J-331X	MG RESISTOR		
	R 808	NRSA63J-331X	MG RESISTOR				R 872	NRSA63J-473X	MG RESISTOR		
	R 809	NRSA63J-331X	MG RESISTOR				R 873	NRSA63J-473X	MG RESISTOR		
	R 810	NRSA63J-331X	MG RESISTOR				R 874	NRSA63J-104X	MG RESISTOR		
	R 811	NRSA63J-331X	MG RESISTOR				R 875	NRSA63J-333X	MG RESISTOR		
	R 812	NRSA63J-331X	MG RESISTOR				R 876	NRSA63J-0R0X	MG RESISTOR		
	R 813	NRSA63J-331X	MG RESISTOR				R 877	NRSA63J-470X	MG RESISTOR		

■ Electrical parts list (Front board)

Block No. 02

▲	Item	Parts number	Parts name	Remarks	Area
	R 878	NRSA63J-301X	MG RESISTOR		
	R 879	NRSA63J-271X	MG RESISTOR		
	R 880	NRSA63J-391X	MG RESISTOR		
	R 881	NRSA63J-561X	MG RESISTOR		
	R 882	NRSA63J-301X	MG RESISTOR		
	R 883	NRSA63J-271X	MG RESISTOR		
	R 884	NRSA63J-391X	MG RESISTOR		
	R 885	NRSA63J-561X	MG RESISTOR		
	R 886	NRSA63J-821X	MG RESISTOR		
	R 887	NRSA63J-301X	MG RESISTOR		
	R 888	NRSA63J-271X	MG RESISTOR		
	R 889	NRSA63J-391X	MG RESISTOR		
	R 890	NRSA63J-561X	MG RESISTOR		
	R 891	NRSA63J-821X	MG RESISTOR		
	R 892	NRSA63J-474X	MG RESISTOR		
	R 893	NRSA63J-331X	MG RESISTOR		
	R 894	NRSA63J-331X	MG RESISTOR		
	S 802	NSW0066-001X	TACT SWITCH		
	S 803	NSW0066-001X	TACT SWITCH		
	S 804	NSW0066-001X	TACT SWITCH		
	S 805	NSW0066-001X	TACT SWITCH		
	S 806	NSW0066-001X	TACT SWITCH		
	S 807	NSW0066-001X	TACT SWITCH		
	S 808	NSW0066-001X	TACT SWITCH		
	S 809	NSW0066-001X	TACT SWITCH		
	S 810	NSW0066-001X	TACT SWITCH		
	S 811	NSW0066-001X	TACT SWITCH		
	S 812	NSW0066-001X	TACT SWITCH		
	S 813	NSW0066-001X	TACT SWITCH		
	S 814	NSW0066-001X	TACT SWITCH		
	S 815	NSW0066-001X	TACT SWITCH		
	S 816	NSW0066-001X	TACT SWITCH		
	S 817	NSW0066-001X	TACT SWITCH		
	S 818	NSW0066-001X	TACT SWITCH		
	TH801	NAD0022-103X	N THERMISTOR		
	X 801	NAX0552-001X	RESONATOR		

■ Electrical parts list (Mecha control board)

Block No. 03

▲	Item	Parts number	Parts name	Remarks	Area	▲	Item	Parts number	Parts name	Remarks	Area
	C 501	NCB31HK-103X	C CAPACITOR				C 628	NEAD0JM-476X	E CAPACITOR		
	C 502	NCB31HK-103X	C CAPACITOR				C 629	NCB31EK-333X	C CAPACITOR		
	C 503	NCB31HK-103X	C CAPACITOR				C 630	NCB31EK-333X	C CAPACITOR		
	C 504	NEAD0JM-107X	E CAPACITOR				C 631	NCS31HJ-471X	C CAPACITOR		
	C 505	NDC31HJ-270X	C-CAPACITOR				C 632	NCS31HJ-471X	C CAPACITOR		
	C 506	NDC31HJ-220X	C CAPACITOR				C 633	NCB31CK-473X	C CAPACITOR		
	C 507	NCS31HJ-471X	C CAPACITOR				C 634	NCB31CK-473X	C CAPACITOR		
	C 508	NCB31HK-103X	C CAPACITOR				C 635	NCB31CK-473X	C CAPACITOR		
	C 509	NCB31HK-103X	C CAPACITOR				C 636	NCB31CK-473X	C CAPACITOR		
	C 510	NCS31HJ-102X	C CAPACITOR				C 637	NCB31CK-473X	C CAPACITOR		
	C 511	NCB31CK-104X	C CAPACITOR				C 638	NCB31HK-103X	C CAPACITOR		
	C 512	NEAD0JM-107X	E CAPACITOR				C 639	NEAD0JM-476X	E CAPACITOR		
	C 513	NCB31HK-103X	C CAPACITOR				C 640	NCB31HK-103X	C CAPACITOR		
	C 551	NCB31HK-103X	C CAPACITOR				C 641	NEAD0JM-476X	E CAPACITOR		
	C 571	NDC31HJ-100X	C CAPACITOR				C 642	NCS31HJ-101X	C CAPACITOR		
	C 572	NDC31HJ-100X	C CAPACITOR				C 643	NCB31HK-103X	C CAPACITOR		
	C 573	NCB31CK-104X	C CAPACITOR				C 644	NCB31AK-334X	C CAPACITOR		
	C 574	NEAD1CM-106X	E CAPACITOR				C 645	NEAD0JM-476X	E CAPACITOR		
	C 575	NEAD0JM-476X	E CAPACITOR				C 646	NCB31HK-103X	C CAPACITOR		
	C 576	NCB31CK-104X	C CAPACITOR				C 651	NEAD0JM-476X	E CAPACITOR		
	C 577	NCB31CK-104X	C CAPACITOR				C 652	NCB31HK-103X	C CAPACITOR		
	C 578	NEAD0JM-476X	E CAPACITOR				C 653	NEAD0JM-476X	E CAPACITOR		
	C 579	NEAD1CM-106X	E CAPACITOR				C 654	NCB31CK-104X	C CAPACITOR		
	C 580	NCB31CK-104X	C CAPACITOR				C 655	NCB31HK-103X	C CAPACITOR		
	C 581	NCS31HJ-101X	C CAPACITOR				C 656	NCB31CK-104X	C CAPACITOR		
	C 582	NCS31HJ-101X	C CAPACITOR				C 657	NCB31CK-104X	C CAPACITOR		
	C 583	NCS31HJ-821X	C CAPACITOR				C 658	NCB31CK-104X	C CAPACITOR		
	C 584	NCS31HJ-821X	C CAPACITOR				C 659	NCB31CK-104X	C CAPACITOR		
	C 585	NEAD1VM-475X	E CAPACITOR				C 660	NCS31HJ-101X	C CAPACITOR		
	C 586	NEAD1VM-475X	E CAPACITOR				C 661	NCB31HK-103X	C CAPACITOR		
	C 587	NCS31HJ-121X	C CAPACITOR				C 662	NCS31HJ-101X	C CAPACITOR		
	C 588	NCS31HJ-121X	C CAPACITOR				C 663	NCB31CK-104X	C CAPACITOR		
	C 589	NEAD1VM-475X	E CAPACITOR				C 664	NCB31EK-273X	C CAPACITOR		
	C 590	NEAD1VM-475X	E CAPACITOR				C 665	NCB31AK-334X	C CAPACITOR		
	C 591	NEAD0JM-476X	E CAPACITOR				C 666	NCS31HJ-101X	C CAPACITOR		
	C 592	NEAD0JM-476X	E CAPACITOR				C 667	NCB31HK-103X	C CAPACITOR		
	C 593	NEAD1CM-476X	E CAPACITOR				C 668	NEAD0JM-476X	E CAPACITOR		
	C 594	NCS31HJ-102X	C CAPACITOR				C 669	NCB31HK-103X	C CAPACITOR		
	C 595	NCB31CK-473X	C CAPACITOR				C 671	NEAD0JM-476X	E CAPACITOR		
	C 596	NCS31HJ-101X	C CAPACITOR				C 672	NCB31CK-104X	C CAPACITOR		
	C 597	NCS31HJ-102X	C CAPACITOR				C 673	NCS31HJ-101X	C CAPACITOR		
	C 598	NCS31HJ-102X	C CAPACITOR				C 682	NEAD1CM-106X	E CAPACITOR		
	C 601	NEAD0JM-476X	E CAPACITOR				C 683	NCB31CK-104X	C CAPACITOR		
	C 602	NCB31HK-103X	C CAPACITOR				C 684	NEAD1CM-476X	E CAPACITOR		
	C 603	NEAD0JM-107X	E CAPACITOR				C 685	NCB31CK-473X	C CAPACITOR		
	C 604	NCB31HK-103X	C CAPACITOR				C 686	NCB31CK-473X	C CAPACITOR		
	C 605	NCB31HK-682X	C CAPACITOR				C 687	NCB31CK-473X	C CAPACITOR		
	C 606	NEAD0JM-476X	E CAPACITOR				C 688	NCB31CK-473X	C CAPACITOR		
	C 607	NCB31HK-103X	C CAPACITOR				C 689	NEAD1CM-476X	E CAPACITOR		
	C 608	NCB31CK-104X	C CAPACITOR				C 690	NBE20JM-106X	TS E CAP SVB20J		
	C 609	NCB31CK-104X	C CAPACITOR				CN501	QGB2027L1-22X	CONNECTOR		
	C 610	NDC31HJ-5R0X	C CAPACITOR				CN502	QGF0501F1-08X	CONNECTOR		
	C 611	NCS31HJ-680X	C CAPACITOR				CN601	QGF0526F1-22X	FPC CONNE		
	C 612	NCB31HK-103X	C CAPACITOR				D 501	1SS355-X	DIODE		
	C 613	NCB31HK-103X	C CAPACITOR				D 502	1SS355-X	DIODE		
	C 614	NCB31HK-103X	C CAPACITOR				D 503	1SS355-X	DIODE		
	C 621	NCB31HK-103X	C CAPACITOR				D 504	1SS355-X	DIODE		
	C 622	NEAD0JM-476X	E CAPACITOR				D 505	1SS355-X	DIODE		
	C 623	NCS31HJ-470X	C CAPACITOR				D 506	CRS03-W	SB DIODE		
	C 624	NCB31HK-153X	C CAPACITOR				D 682	1SR154-400-X	DIODE		
	C 625	NCB31HK-103X	C CAPACITOR				IC501	UPD784225GK-626	I		
	C 626	NCB31HK-272X	C CAPACITOR				IC502	BR24C01AFV-W-X	I		
	C 627	NCB31HK-103X	C CAPACITOR				IC503	HD74HCT126T-X	I		

■ Electrical parts list (Mecha control board)

Block No. 03

▲	Item	Parts number	Parts name	Remarks	Area	▲	Item	Parts number	Parts name	Remarks	Area
	IC504	NJU7241F33-X	IC				R 542	NRSA63J-101X	MG RESISTOR		
	IC571	PCM1716E-X	IC				R 543	NRSA63J-0R0X	MG RESISTOR		
	IC572	NJM4565V-X	IC				R 544	NRSA63J-102X	MG RESISTOR		
	IC601	TA2157FN-X	IC				R 545	NRSA63J-103X	MG RESISTOR		
	IC621	TC94A14FA	IC				R 546	NRSA63J-104X	MG RESISTOR		
	IC651	NJU7241F25-X	IC				R 547	NRSA63J-472X	MG RESISTOR		
	IC652	TC94A02F-005	IC				R 548	NRSA63J-472X	MG RESISTOR		
	IC653	LP61L1024S-12-X	IC				R 549	NRSA63J-472X	MG RESISTOR		
	IC681	LA6579H-X	IC				R 550	NRSA63J-472X	MG RESISTOR		
L 501		NQL114K-470X	INDUCTOR				R 551	NRSA63J-104X	MG RESISTOR		
L 502		NQL114K-470X	INDUCTOR				R 552	NRSA63J-104X	MG RESISTOR		
L 571		NQL114K-470X	INDUCTOR				R 553	NRSA63J-183X	MG RESISTOR		
L 572		NQL114K-470X	INDUCTOR				R 554	NRSA63J-333X	MG RESISTOR		
L 621		NQL114K-470X	INDUCTOR				R 555	NRSA63J-101X	MG RESISTOR		
L 622		NQL114K-470X	INDUCTOR				R 556	NRSA63J-0R0X	MG RESISTOR		
L 623		NQL114K-470X	INDUCTOR				R 557	NRSA63J-104X	MG RESISTOR		
L 651		NQL114K-470X	INDUCTOR				R 558	NRSA63J-104X	MG RESISTOR		
L 652		NQL114K-470X	INDUCTOR				R 559	NRSA63J-0R0X	MG RESISTOR		
L 653		NQL114K-470X	INDUCTOR				R 560	NRSA63J-101X	MG RESISTOR		
Q 501		UN2111-X	TRANSISTOR				R 561	NRSA63J-104X	MG RESISTOR		
Q 502		UN2211-X	TRANSISTOR				R 562	NRSA63J-392X	MG RESISTOR		
Q 571		UN2111-X	TRANSISTOR				R 563	NRSA63J-682X	MG RESISTOR		
Q 572		UN2211-X	TRANSISTOR				R 567	NRSA63J-101X	MG RESISTOR		
Q 601		2SB1132/QR/-X	TRANSISTOR				R 568	NRSA63J-102X	MG RESISTOR		
Q 681		2SB1184/QR/-X	TRANSISTOR				R 569	NRSA63J-102X	MG RESISTOR		
R 501		NRSA63J-822X	MG RESISTOR				R 570	NRSA63J-102X	MG RESISTOR		
R 502		NRSA63J-271X	MG RESISTOR				R 572	NRSA63J-473X	MG RESISTOR		
R 503		NRSA63J-103X	MG RESISTOR				R 573	NRSA63J-473X	MG RESISTOR		
R 504		NRSA63J-271X	MG RESISTOR				R 574	NRSA63J-470X	MG RESISTOR		
R 505		NRSA63J-102X	MG RESISTOR				R 581	NRSA63J-203X	MG RESISTOR		
R 506		NRSA63J-102X	MG RESISTOR				R 582	NRSA63J-203X	MG RESISTOR		
R 507		NRSA63J-101X	MG RESISTOR				R 583	NRSA63J-123X	MG RESISTOR		
R 508		NRSA63J-101X	MG RESISTOR				R 584	NRSA63J-123X	MG RESISTOR		
R 509		NRSA63J-101X	MG RESISTOR				R 585	NRSA63J-303X	MG RESISTOR		
R 510		NRSA63J-101X	MG RESISTOR				R 586	NRSA63J-303X	MG RESISTOR		
R 511		NRSA63J-101X	MG RESISTOR				R 587	NRSA63J-473X	MG RESISTOR		
R 512		NRSA63J-101X	MG RESISTOR				R 588	NRSA63J-473X	MG RESISTOR		
R 513		NRSA63J-101X	MG RESISTOR				R 589	NRSA63J-103X	MG RESISTOR		
R 514		NRSA63J-102X	MG RESISTOR				R 590	NRSA63J-103X	MG RESISTOR		
R 515		NRSA63J-101X	MG RESISTOR				R 591	NRSA63J-103X	MG RESISTOR		
R 516		NRSA63J-101X	MG RESISTOR				R 592	NRSA63J-103X	MG RESISTOR		
R 517		NRSA63J-101X	MG RESISTOR				R 593	NRSA63J-4R7X	MG RESISTOR		
R 518		NRSA63J-472X	MG RESISTOR				R 601	NRSA63J-823X	MG RESISTOR		
R 519		NRSA63J-101X	MG RESISTOR				R 602	NRSA63J-823X	MG RESISTOR		
R 520		NRSA63J-101X	MG RESISTOR				R 603	NRSA63J-334X	MG RESISTOR		
R 521		NRSA63J-101X	MG RESISTOR				R 604	NRSA63J-334X	MG RESISTOR		
R 522		NRSA63J-101X	MG RESISTOR				R 605	NRSA63J-220X	MG RESISTOR		
R 523		NRSA63J-101X	MG RESISTOR				R 606	NRSA63J-220X	MG RESISTOR		
R 524		NRSA63J-101X	MG RESISTOR				R 607	NRSA63J-823X	MG RESISTOR		
R 525		NRSA63J-101X	MG RESISTOR				R 608	NRSA63J-821X	MG RESISTOR		
R 527		NRSA63J-104X	MG RESISTOR				R 609	NRSA63J-563X	MG RESISTOR		
R 528		NRSA63J-473X	MG RESISTOR				R 610	NRSA63J-101X	MG RESISTOR		
R 530		NRSA63J-473X	MG RESISTOR				R 611	NRSA63J-103X	MG RESISTOR		
R 531		NRSA63J-473X	MG RESISTOR				R 612	NRSA63J-202X	MG RESISTOR		
R 533		NRSA63J-473X	MG RESISTOR				R 613	NRSA63J-102X	MG RESISTOR		
R 534		NRSA63J-473X	MG RESISTOR				R 614	NRSA63J-153X	MG RESISTOR		
R 535		NRSA63J-473X	MG RESISTOR				R 615	NRSA63J-151X	MG RESISTOR		
R 536		NRSA63J-102X	MG RESISTOR				R 616	NRSA63J-103X	MG RESISTOR		
R 537		NRSA63J-473X	MG RESISTOR				R 621	NRSA63J-470X	MG RESISTOR		
R 538		NRSA63J-473X	MG RESISTOR				R 622	NRSA63J-470X	MG RESISTOR		
R 539		NRSA63J-102X	MG RESISTOR				R 623	NRSA63J-470X	MG RESISTOR		
R 540		NRSA63J-473X	MG RESISTOR				R 624	NRSA63J-562X	MG RESISTOR		
R 541		NRSA63J-102X	MG RESISTOR				R 625	NRSA63J-473X	MG RESISTOR		

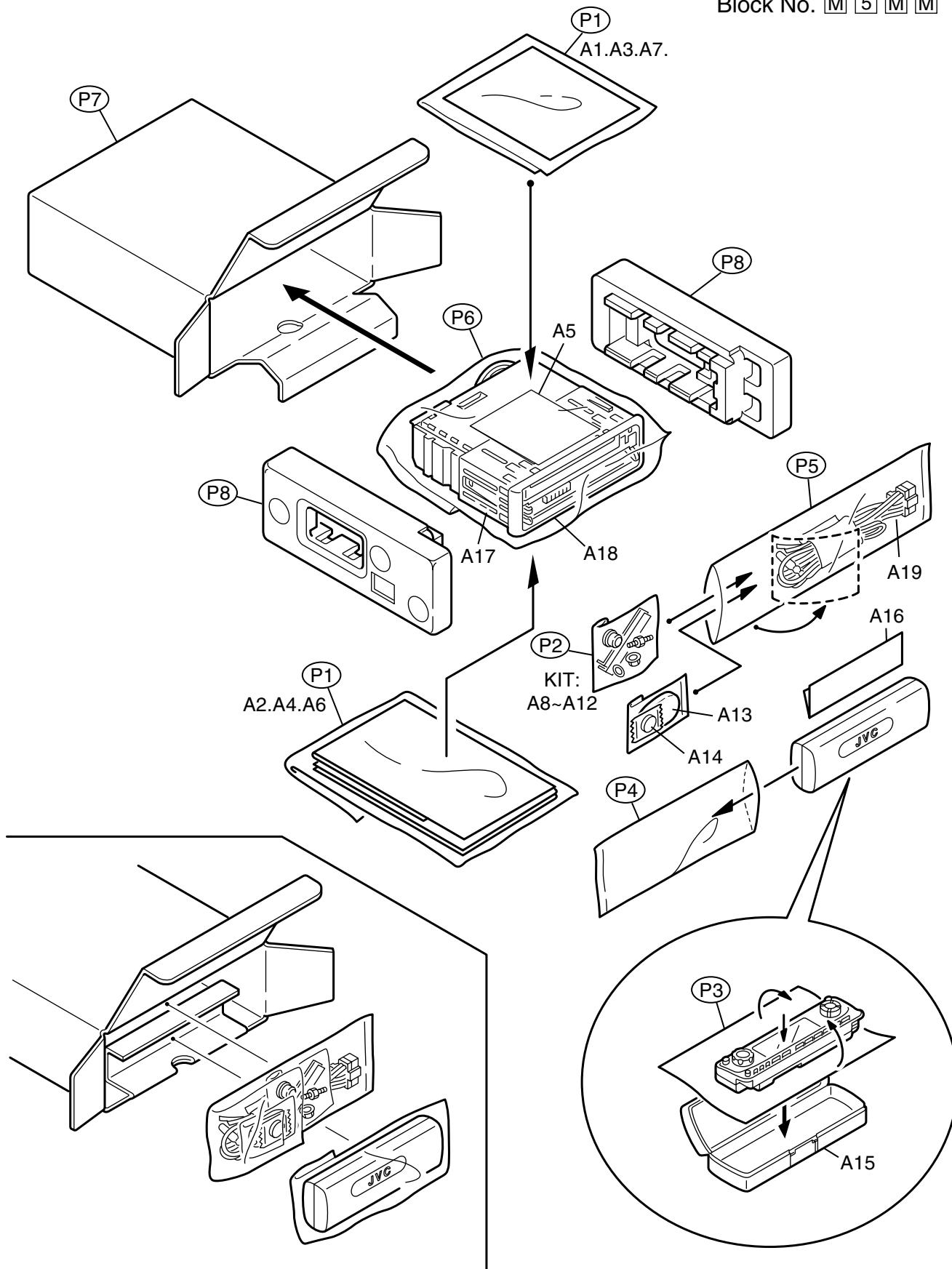
■ Electrical parts list (Mecha control board) Block No. 03

▲	Item	Parts number	Parts name	Remarks	Area
	R 626	NRSA63J-474X	MG RESISTOR		
	R 627	NRSA63J-103X	MG RESISTOR		
	R 628	NRSA63J-225X	MG RESISTOR		
	R 629	NRSA63J-103X	MG RESISTOR		
	R 630	NRSA63J-101X	MG RESISTOR		
	R 631	NRSA63J-101X	MG RESISTOR		
	R 632	NRSA63J-0R0X	MG RESISTOR		
	R 633	NRSA63J-0R0X	MG RESISTOR		
	R 634	NRSA63J-0R0X	MG RESISTOR		
	R 635	NRSA63J-101X	MG RESISTOR		
	R 636	NRSA63J-101X	MG RESISTOR		
	R 637	NRSA63J-105X	MG RESISTOR		
	R 638	NRSA63J-472X	MG RESISTOR		
	R 639	NRSA63J-472X	MG RESISTOR		
	R 640	NRSA63J-472X	MG RESISTOR		
	R 641	NRSA63J-472X	MG RESISTOR		
	R 642	NRSA63J-103X	MG RESISTOR		
	R 651	NRSA63J-104X	MG RESISTOR		
	R 652	NRSA63J-474X	MG RESISTOR		
	R 653	NRSA63J-474X	MG RESISTOR		
	R 654	NRSA63J-470X	MG RESISTOR		
	R 655	NRSA63J-0R0X	MG RESISTOR		
	R 656	NRSA63J-0R0X	MG RESISTOR		
	R 657	NRSA63J-0R0X	MG RESISTOR		
	R 658	NRSA63J-474X	MG RESISTOR		
	R 659	NRSA63J-474X	MG RESISTOR		
	R 660	NRSA63J-474X	MG RESISTOR		
	R 661	NRSA63J-474X	MG RESISTOR		
	R 662	NRSA63J-474X	MG RESISTOR		
	R 663	NRSA63J-474X	MG RESISTOR		
	R 664	NRSA63J-474X	MG RESISTOR		
	R 665	NRSA63J-474X	MG RESISTOR		
	R 666	NRSA63J-474X	MG RESISTOR		
	R 667	NRSA63J-474X	MG RESISTOR		
	R 668	NRSA63J-0R0X	MG RESISTOR		
	R 669	NRSA63J-474X	MG RESISTOR		
	R 670	NRSA63J-474X	MG RESISTOR		
	R 671	NRSA63J-474X	MG RESISTOR		
	R 672	NRSA63J-474X	MG RESISTOR		
	R 673	NRSA63J-474X	MG RESISTOR		
	R 674	NRSA63J-331X	MG RESISTOR		
	R 675	NRSA63J-331X	MG RESISTOR		
	R 677	NRSA63J-105X	MG RESISTOR		
	R 681	NRSA63J-682X	MG RESISTOR		
	R 682	NRSA63J-682X	MG RESISTOR		
	R 683	NRSA63J-472X	MG RESISTOR		
	R 684	NRSA63J-153X	MG RESISTOR		
	R 685	NRSA63J-333X	MG RESISTOR		
	R 686	NRSA63J-822X	MG RESISTOR		
	R 687	NRSA63J-0R0X	MG RESISTOR		
	R 688	NRSA63J-303X	MG RESISTOR		
	R 689	NRSA63J-223X	MG RESISTOR		
	TH501	NAD0022-103X	N THERMISTOR		
	X 501	NAX0430-001X	CRYSTAL		
	X 571	NAX0375-001X	CRYSTAL		

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	FSPG4002-001	POLY BAG	2	FOR INST BOOK	
	P 2	QPA00801205	POLY BAG	1	FOR SCREW KIT	
	P 3	FSYH4036-068	SHEET	1		
	P 4	QPA01003003	POLY BAG	1	FOR HARD CASE	
	P 5	QPA01003003	POLY BAG	1	FOR CAR CABLE	
	P 6	VPE3005-064	POLY BAG	1	FOR SET	
	P 7	LV33450-001A	PACKING CASE	1		
	P 8	GE10036-001A	ESP CUSHION	2		

■ Parts list (Accessories)

Block No. M5MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	LVT0921-001A	INST BOOK	1	ENG, GER, FRE, DUT	
	A 2	LVT0921-002A	INST BOOK	1	SPA, ITA, SWE, RUS	E
	A 3	LVT0857-003A	INST MANUAL	1	ENG, GER, FRE, DUT	
	A 4	LVT0857-004A	INST MANUAL	1	SPA, ITA, SWE, RUS	E
	A 5	LV40978-001A	CAUTION SHEET	1		
	A 6	BT-54013-3	W.CARD	1		
	A 7	LVT0770-002B	MP3 MANUAL	1		
	A 8	VKZ4027-202	PLUG NUT	1		
	A 9	VKH4871-001SS	MOUNT BOLT	1		
	A 10	VKZ4328-001	LOCK NUT	1		
	A 11	WNS5000Z	WASHER	1		
	A 12	GE40130-001A	HOOK	2		
	A 13	RM-RK50	REMOCON	1		
	A 14	-----	LI BATTERY	1		
	A 15	FSJB3001-30C	HARD CASE	1		
	A 16	LV43135-002A	CAUTION SHEET	1		
	A 17	GE20126-001A	MOUNTING SLEEVE	1		
	A 18	GE20127-005A	TRIM PLATE	1		
	A 19	QAM0176-002	CAR CABLE	1		
	KIT	KSFX480K-SCREW1	SCREW PARTS KIT	1	A8~A12	