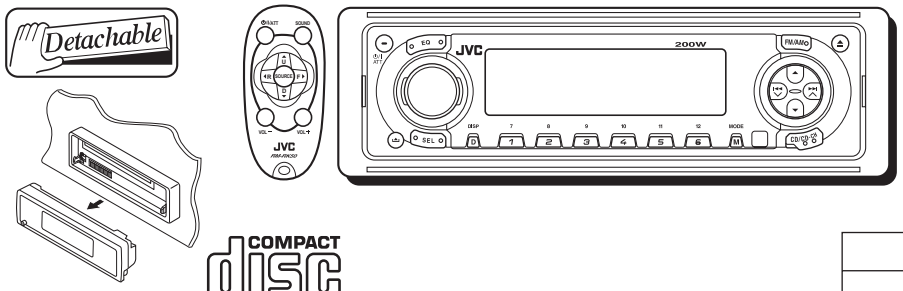
JVC

SERVICE MANUAL

CD RECEIVER

KD-LH1150,KD-LH1100



COMPACT disc DIGITAL AUDIO TEXT

CD-RW PLAYBACK

KD-LH1150
Area Suffix
J ---------- U.S.A.
C ---------- CANADA

	KD-LH1150J	KD-LH1150C	KD-LH1100J
ARSENAL rogo	○	×	×
S.WOOFER out	○	○	×
WARRANTY	2 YEAR	1 YEAR	1 YEAR

KD-LH1100
Area Suffix
J ---------- U.S.A.

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No.49817
2003/04

1.2 Preventing static electricity

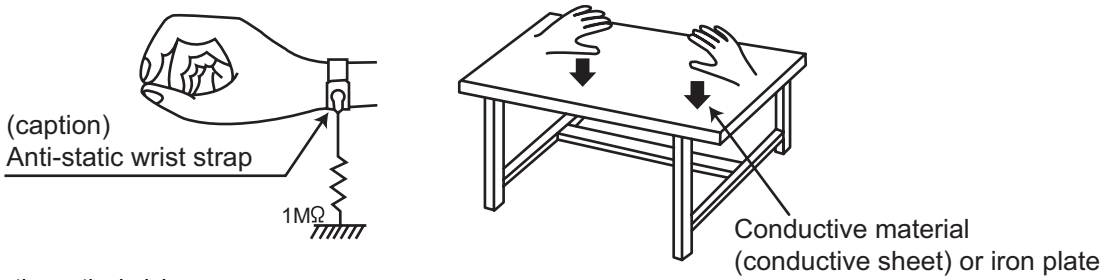
Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.2.1 Grounding to prevent damage by static electricity

Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as DVD players. Be careful to use proper grounding in the area where repairs are being performed.

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

(2) Ground yourself
Use an anti-static wrist strap to release any static electricity built up in your body.



(3) Handling the optical pickup
- In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
- Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

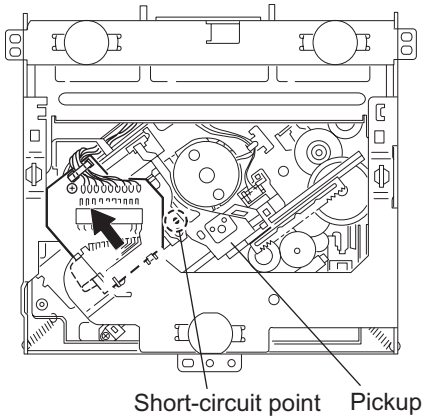
1.3 Handling the traverse unit (optical pickup)

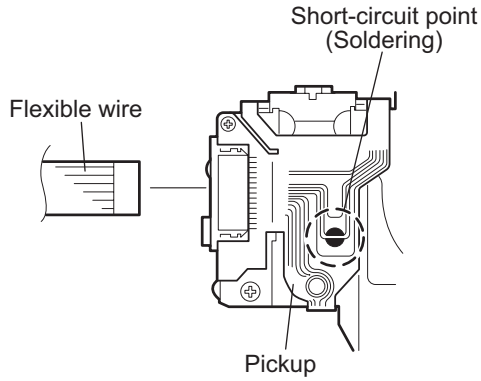
(1) Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
(2) Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
(3) Handle the flexible cable carefully as it may break when subjected to strong force.
(4) I t is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.4 Attention when traverse unit is decomposed

***Please refer to "Disassembly method" in the text for the CD pickup unit.**

- Apply solder to the short land before the flexible wire is disconnected from the connector on the CD pickup unit. (If the flexible wire is disconnected without applying solder, the CDpickup may be destroyed by static electricity.)
- In the assembly, be sure to remove solder from the short land after connecting the flexible wire.





SECTION 2
Disassembly method

2.1 Main body

2.1.1 Removing the front panel assembly (See Fig.1)

(1) Push the detach button in the lower left part of the front panel assembly and remove the front panel assembly in the direction of the arrow.

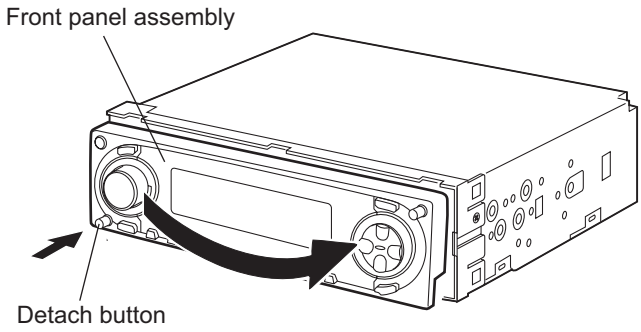


Fig.1

2.1.2 Removing the front chassis assembly (See Figs.2 to 4)

- Prior to performing the following procedures, remove the front panel assembly.

(1) Remove the two screws **A** on the both sides of the main body. (See Fig.2.)
(2) Remove the two screws **B** on the front side of the main body. (See Fig.3.)
(3) Release the two joints **a** and two joints **b** on the both sides of the main body. (See Fig.2.)
(4) Release the two joints **c** on the bottom side of the main body and remove the front chassis assembly in the direction of the arrow. (See Fig.4.)

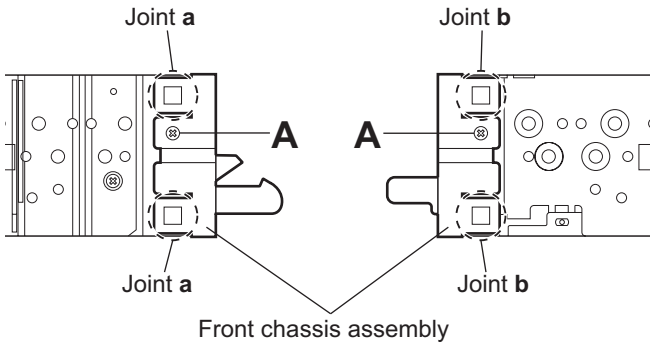


Fig.2

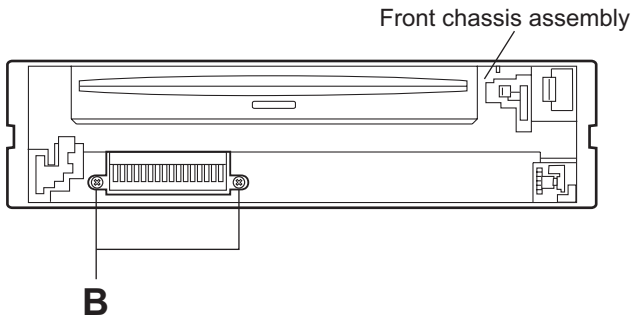


Fig.3

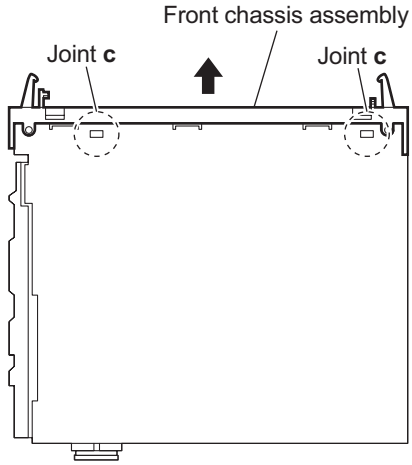


Fig.4

2.1.3 Removing the heat sink (See Fig.5)

(1) Remove the two screws **C** and two screws **D** on the left side of the main body.

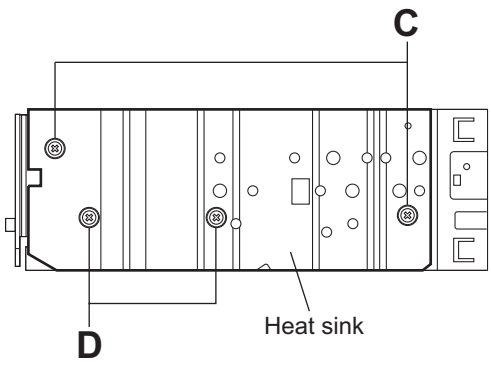


Fig.5

2.1.4 Removing the bottom cover (See Figs.6 and 7)

- Prior to performing the following procedures, remove the front panel assembly, front chassis assembly and heat sink.

(1) Turn over the main body and release the two joints **d**, two joints **e** and joint **f**.

CAUTION:

Do not damage the main board when releasing the joint **f** using a screwdriver. (See Figs.6 and 7)

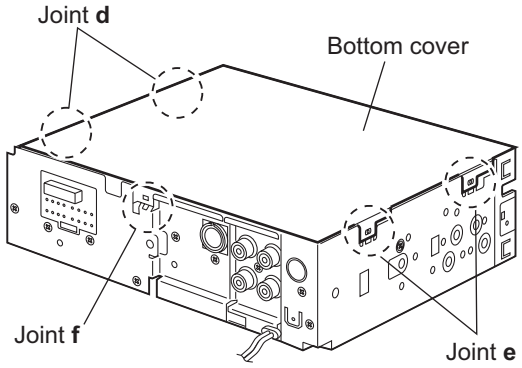


Fig.6

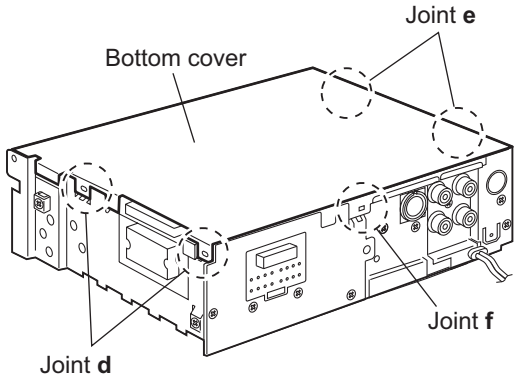


Fig.7

2.1.5 Removing the rear bracket (See Fig.8)

- Prior to performing the following procedures, remove the front panel assembly, front chassis assembly, heat sink and bottom cover.
  (1) Remove the three screws **E**, three screws **F** and three screws **G** on the back side of the main body.
  (2) Remove the rear bracket.

Reference:

During reassembly, before fixing the rear bracket onto the main body, insert the subwoofer cable into the slot. (KD-LH1150 only)

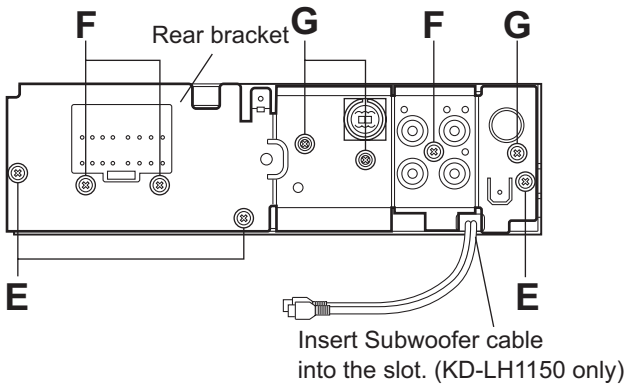


Fig.8

2.1.6 Removing the main board (See Fig.9)

- Prior to performing the following procedures, remove the front panel assembly, front chassis assembly, heat sink, bottom cover and rear bracket.
  (1) Remove the two screws **H** attaching the main board.
  (2) Disconnect the connector CN601 and remove the main board in an upward direction.

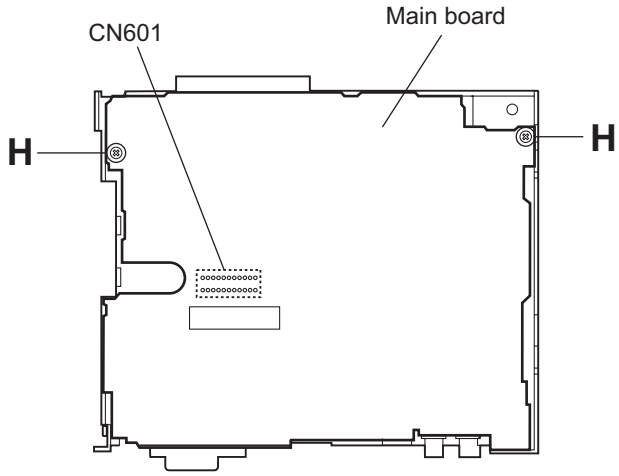


Fig.9

2.1.7 Removing the CD mechanism assembly (See Fig. 10)

- Prior to performing the following procedures, remove the front panel assembly, front chassis assembly, heat sink, bottom cover, rear bracket and main board.
  (1) Remove the three screws **J** attaching the CD mechanism assembly.

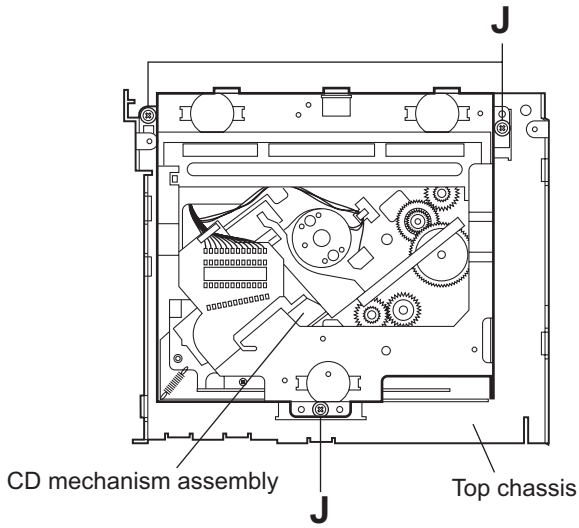


Fig.10

2.1.8 Removing the front board (See Figs. 11 to 13)

- Prior to performing the following procedures, remove the front panel assembly.
  (1) Remove the five screws **K** on the back side of the front panel assembly.
  (2) Release the eight joints **g**.
  (3) Take out the front board.

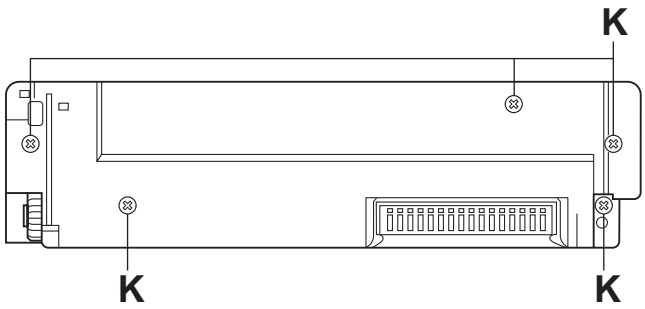


Fig.11

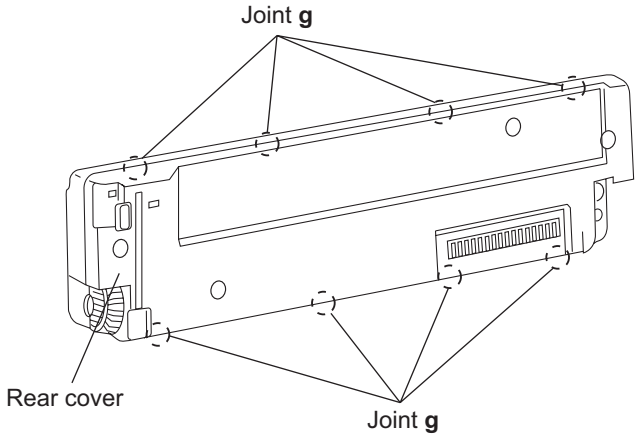


Fig.12

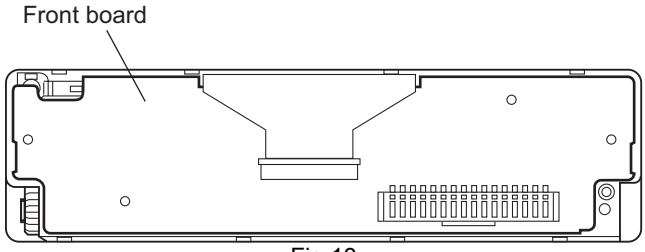


Fig.13

2.2 CD Mechanism Assembly

2.2.1 Removing the top cover (See Figs.1 and 2)

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

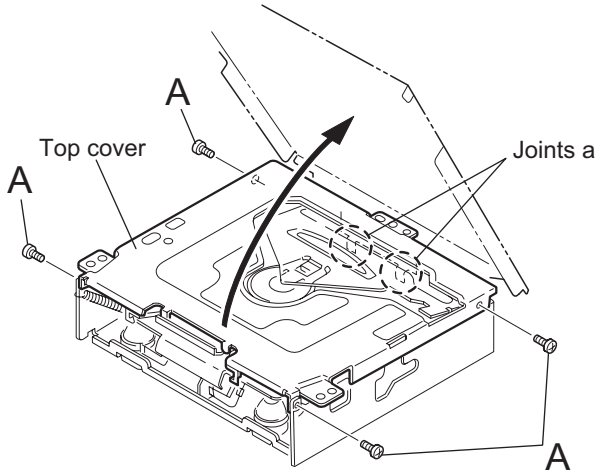


Fig.1

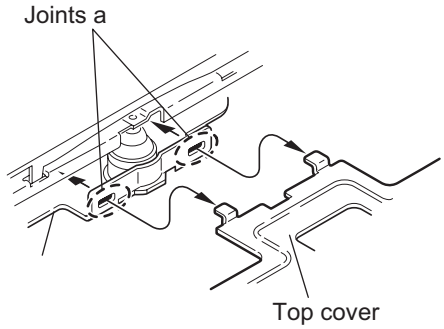


Fig.2

2.2.2 Removing the connector board (See Figs.3 to 5)

CAUTION:

Before disconnecting the flexible wire from the pickup, solder the short-circuit point on the pickup. No observance of this instruction may cause damage of the pickup.

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

CAUTION:

Unsolder the short-circuit point after reassembling.

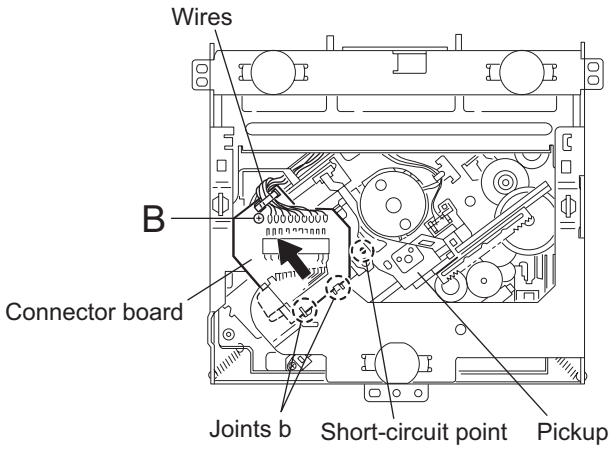


Fig.3

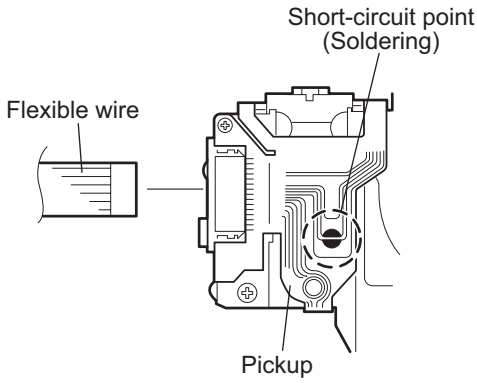


Fig.4

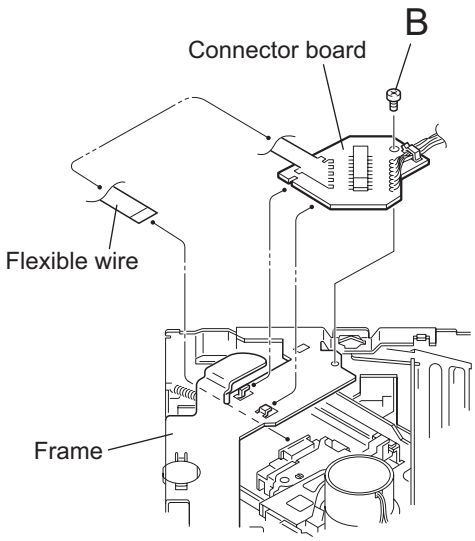


Fig.5

2.2.3 Removing the DET switch (See Figs.6 and 7)

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

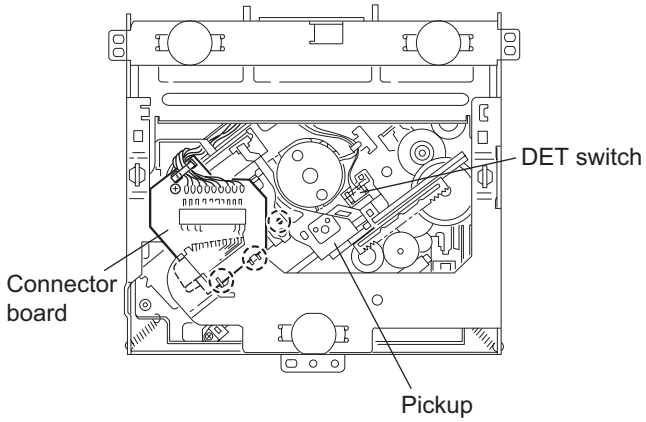


Fig.6

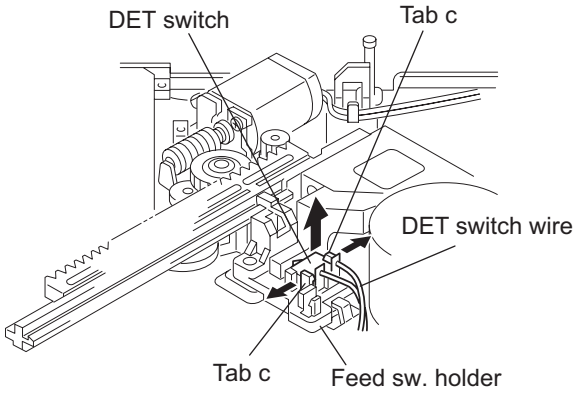


Fig.7

2.2.4 Removing the chassis unit (See Figs.8 and 9)

- Prior to performing the following procedure, remove the top cover and 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.
  - When reassembling, make sure that the three shafts on the underside of the chassis unit are inserted to the dampers certainly.

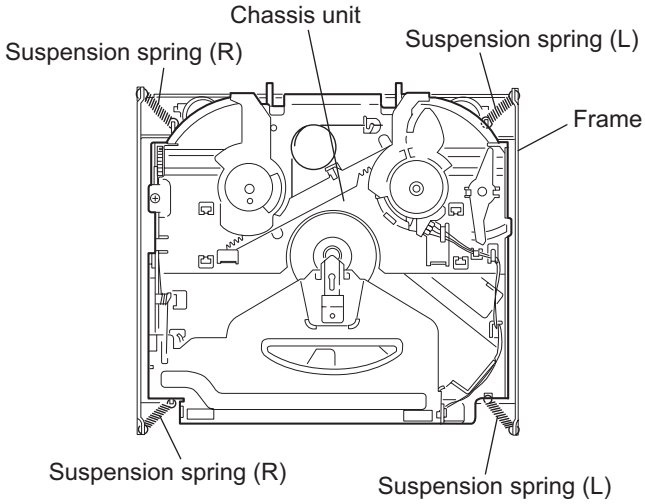


Fig.8

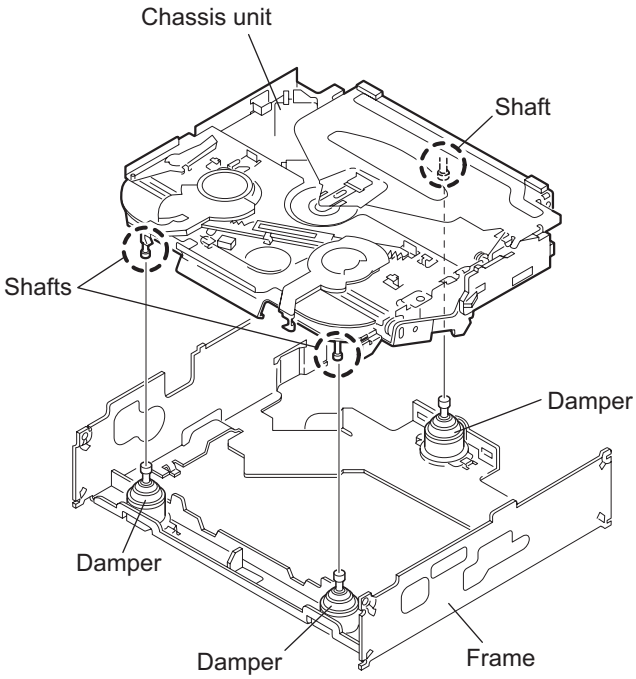


Fig.9

2.2.5 Removing the clamper assembly (See Figs.10 and 11)

- Prior to performing the following procedure, remove the top cover.
  (1) Remove the clamper arm spring.
  (2) Move the clamper assembly in the direction of the arrow to release the two joints **d**.

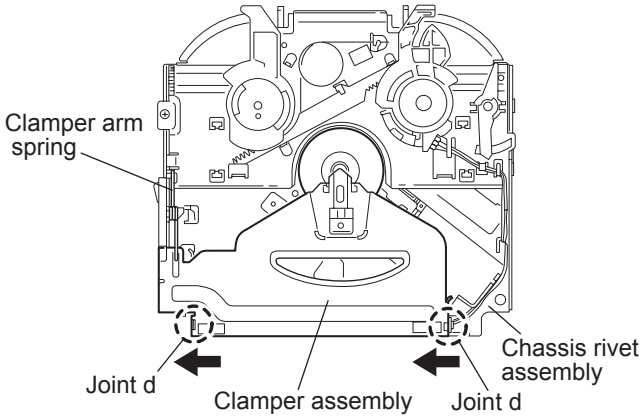


Fig.10

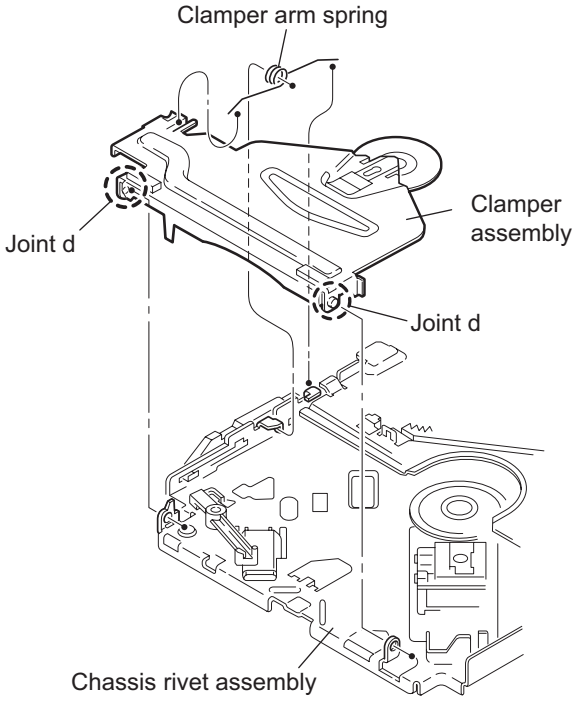


Fig.11

2.2.6 Removing the loading / feed motor assembly (See Figs.12 and 13)

- Prior to performing the following procedure, remove the top cover, connector board and chassis unit.
  (1) 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.
  (2) 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.12.

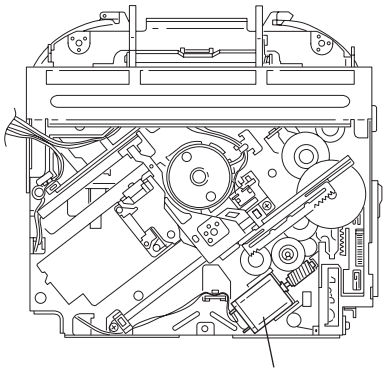


Fig.12

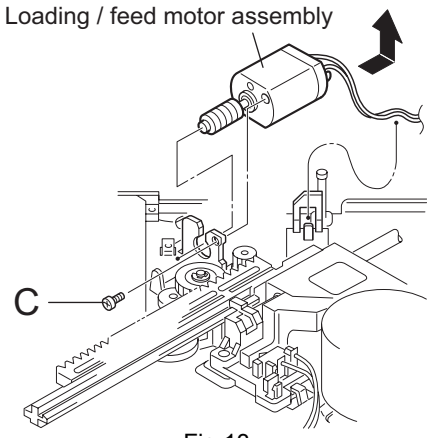


Fig.13

2.2.7 Removing the pickup unit (See Figs.14 to 18)

- Prior to performing the following procedure, remove the top cover, connector board and chassis unit.
  (1) Remove the screw **D** and pull out the pu. shaft holder from the pu. shaft.
  (2) Remove the screw **E** attaching the feed sw. holder.
  (3) Move the part **e** of the pickup unit upward with the pu. 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 pu. shaft from the pickup unit.
  (5) Remove the screw **F** attaching the feed rack to the pickup unit.

2.2.8 Reattaching the pickup unit (See Figs.14 to 17)

(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 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 pu. shaft to the pickup unit. Reattach the pu. shaft holder to the pu. shaft using the screw **D**.

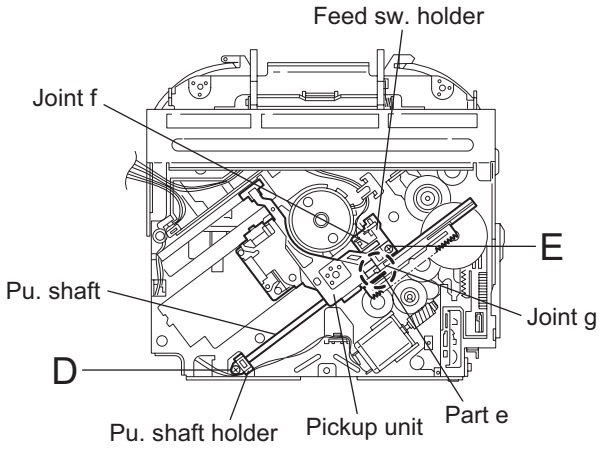


Fig.14

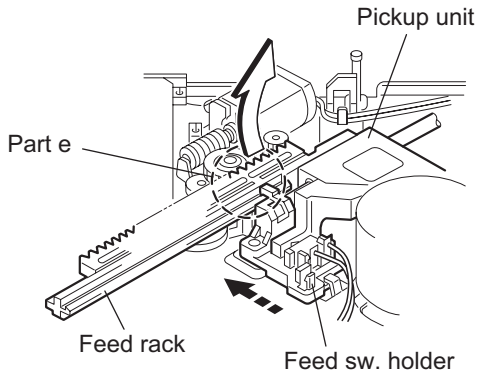


Fig.15

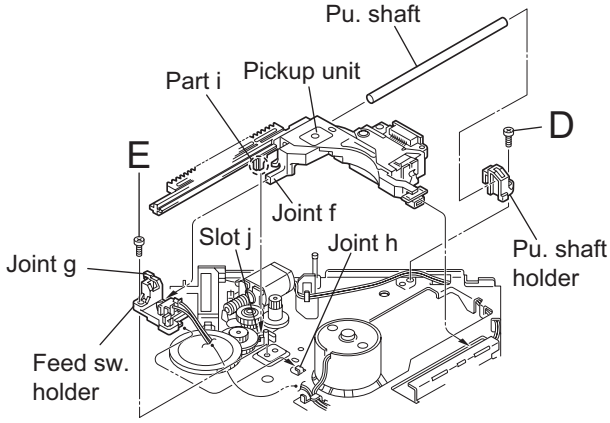


Fig.16

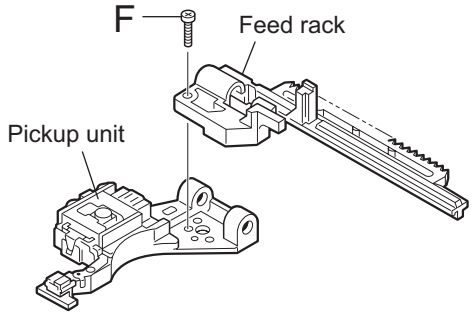


Fig.17

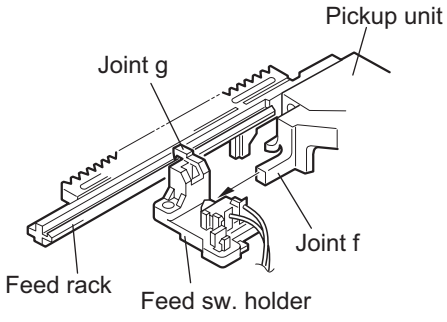


Fig.18

2.2.9 Removing the trigger arm (See Figs.19 and 20)

- Prior to performing the following procedure, remove the top cover, connector board and clamper unit.
  (1) 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 m and n of the trigger arm into the part p and q at the slot of the chassis rivet assembly respectively and join the joint k at a time.

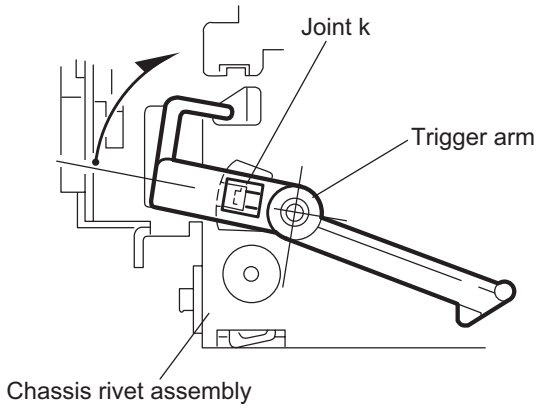


Fig.19

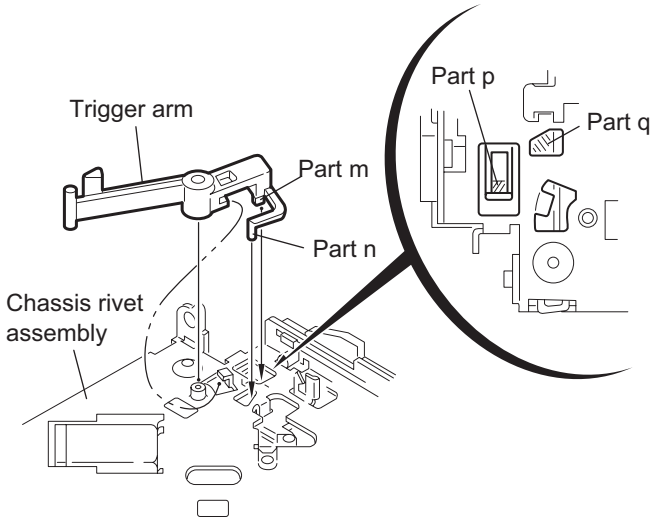


Fig.20

2.2.10 Removing the top plate assembly (See Fig.21)

- Prior to performing the following procedure, remove the top cover, connector board, chassis unit, and clamper assembly.
  (1) Remove the screw **H**.
  (2) Move the top plate assembly in the direction of the arrow to release the two joints r.
  (3) Unsolder the wire marked s if necessary.

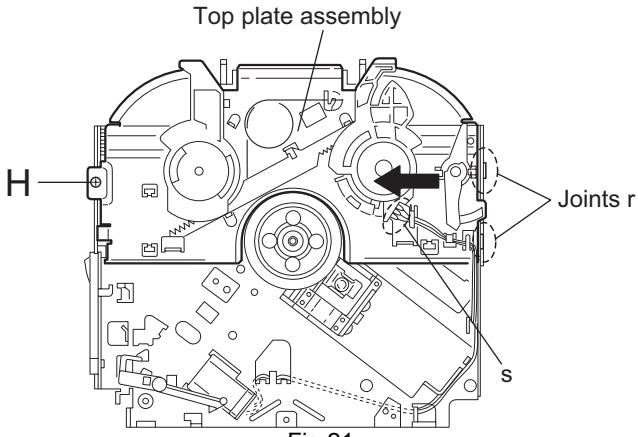


Fig.21

2.2.11 Removing the mode sw. / select lock arm (See Figs.22 and 23)

- Prior to performing the following procedure, remove the top plate assembly.
  (1) Bring up the mode sw. to release from the link plate (joint **t**) and turn in the direction of the arrow to release the joint **u**.
  (2) Unsolder the wire of the mode sw. marked s if necessary.
  (3) Turn the select lock arm in the direction of the arrow to release the two joints **v**.
  (4) The select lock arm spring comes off the select lock arm at the same time.

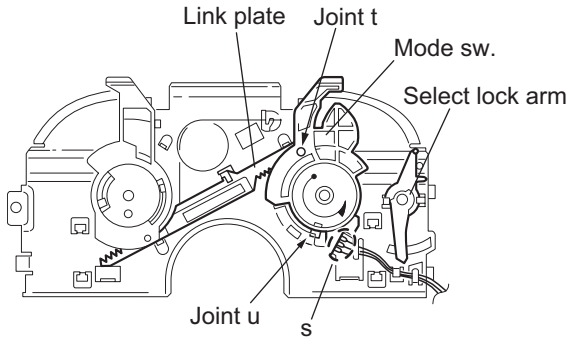


Fig.22

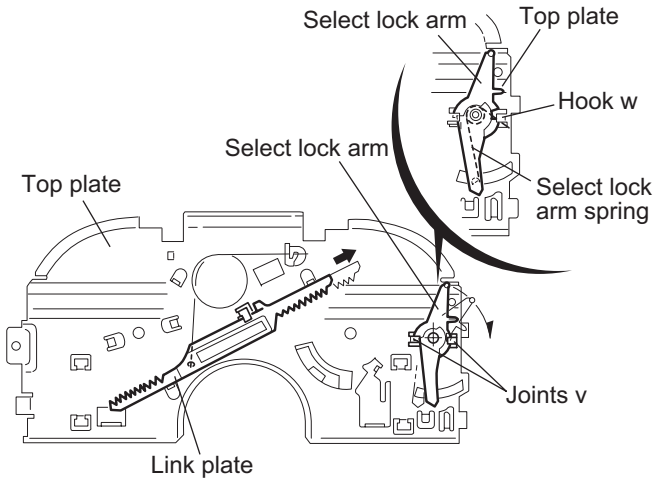


Fig.23

2.2.12 Reassembling the mode sw. / select lock arm (See Figs.24 to 26)

REFERENCE:

Reverse the above removing procedure.

(1) Reattach the select lock arm spring to the top plate and set the shorter end of the select lock arm spring to the hook w on the top plate.

(2) Set the other longer end of the select lock arm spring to the boss x on the underside of the select lock arm, and join the select lock arm to the slots (joint **v**). Turn the select lock arm as shown in the figure.

(3) Reattach the mode sw. while setting the part t to the first peak of the link plate gear, and join the joint **u**.

CAUTION:

When reattaching the mode sw., check if the points y and z are correctly fitted and if each part operates properly.

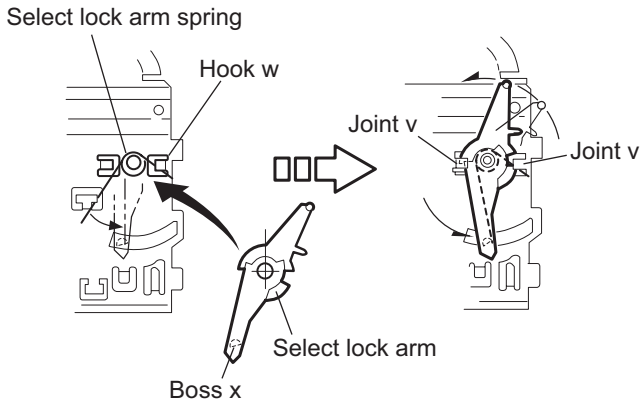


Fig.24

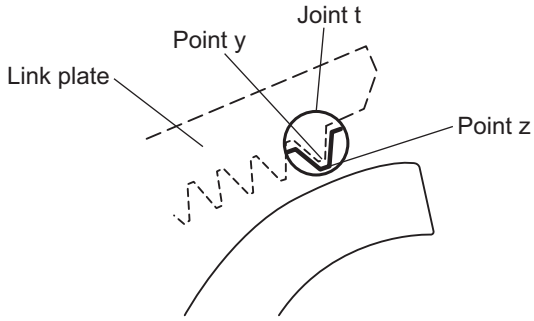


Fig.25

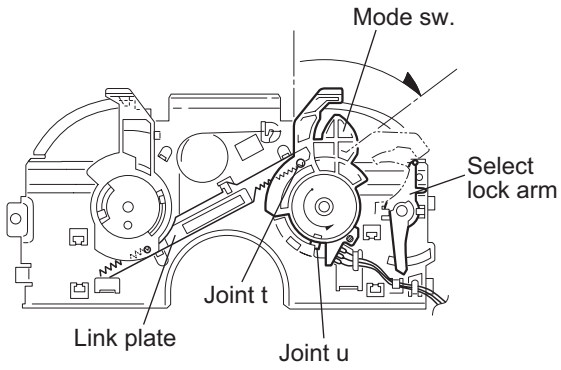


Fig.26

2.2.13 Removing the select arm R / link plate (See Figs.27 and 28)

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

REFERENCE:

Before removing the link plate, remove the mode sw..

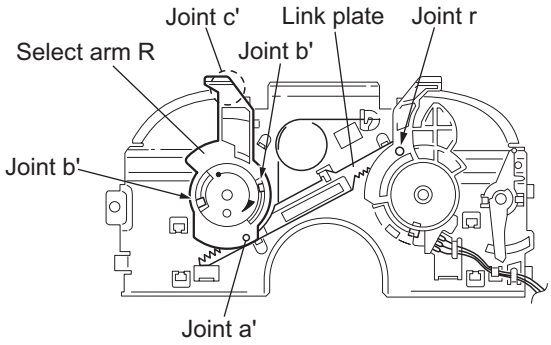


Fig.27

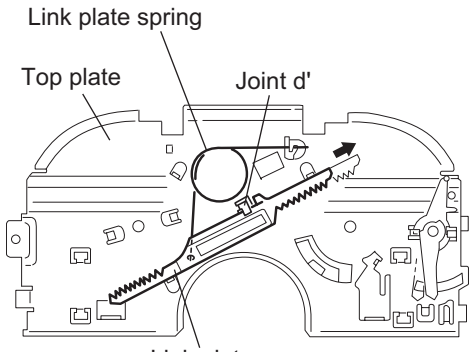


Fig.28

2.2.14 Reattaching the Select arm R / link plate (See Figs.29 and 30)

REFERENCE:

Reverse the above removing procedure.

(1) Reattach the link plate spring.
(2) Reattach the link plate to the link plate spring while joining them at joint **d'**.
(3) Reattach the joint a' of the select arm R to the first peak of the link plate while joining the two joints b' with the slots. Then turn the select arm R as shown in the figure. The top plate is joined to the joint **c'**.

CAUTION:

When reattaching the select arm R, check if the points **e'** and **f'** are correctly fitted and if each part operates properly.

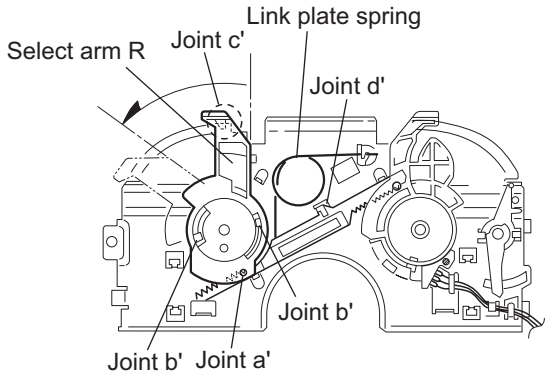


Fig.29

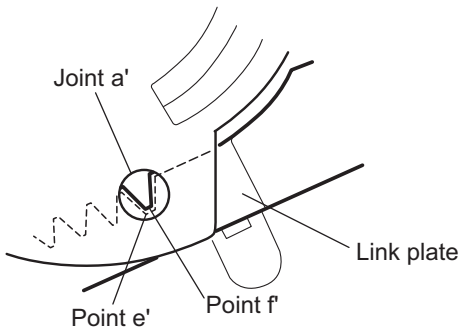


Fig.30

2.2.15 Removing the loading roller assembly (See Figs.31 to 33)

- Prior to performing the following procedure, remove the clamper assembly and top plate assembly.
  (1) Push inward the loading roller assembly on the gear side and detach it upward from the slot of the joint **g'** of the lock arm rivet assembly.
  (2) Detach the loading roller assembly from the slot of the joint **h'** 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 HL washer from the shaft of the loading roller assembly.
  (3) Remove the screw **J** attaching the lock arm rivet assembly.
  (4) Push the shaft at the joint **i'** of the lock arm rivet assembly inward to release the lock arm rivet assembly from the slot of the L side plate.
  (5) Extend the lock arm rivet assembly outward and release the joint **j'** from the boss of the chassis rivet assembly. The roller guide springs on both sides come off at the same time.

      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 k' of the roller guide spring inside of the roller guide. (Refer to Fig.34.)

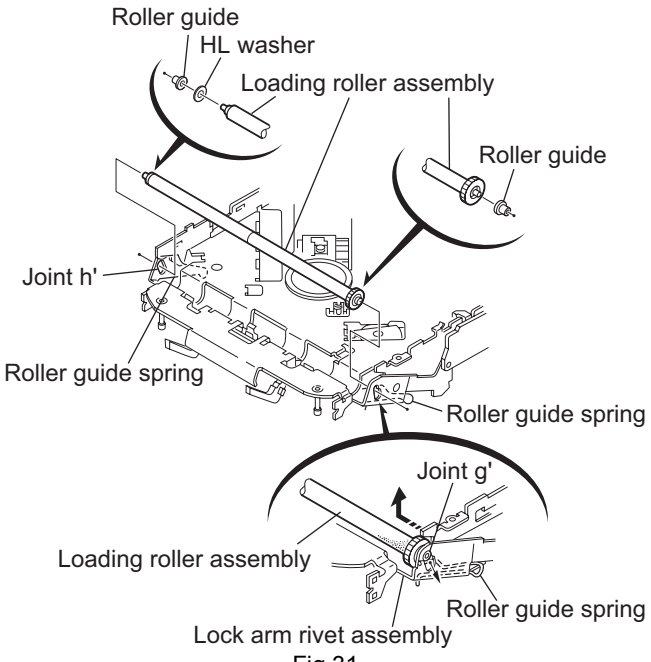


Fig.31

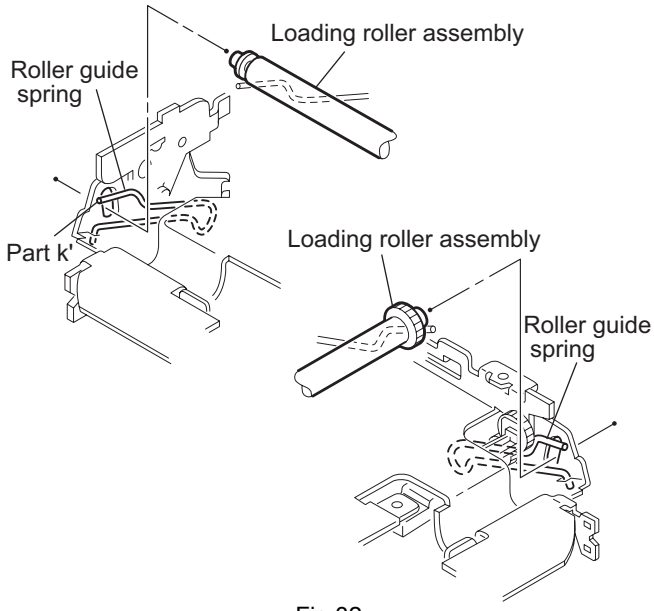


Fig.32

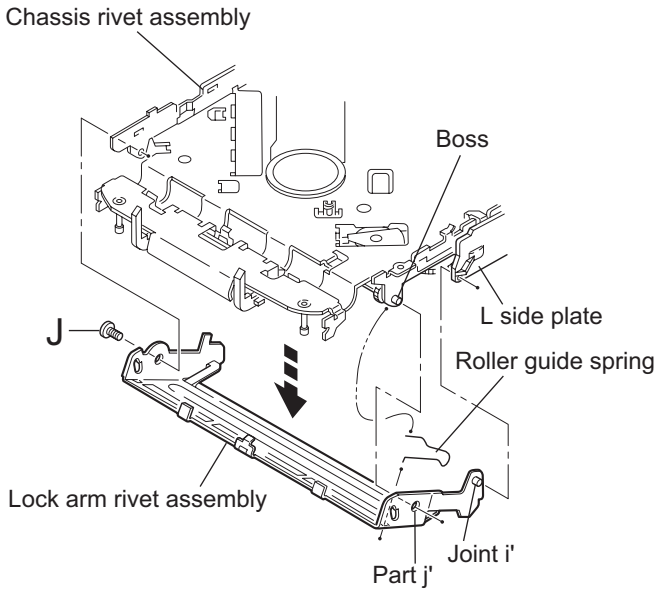


Fig.33

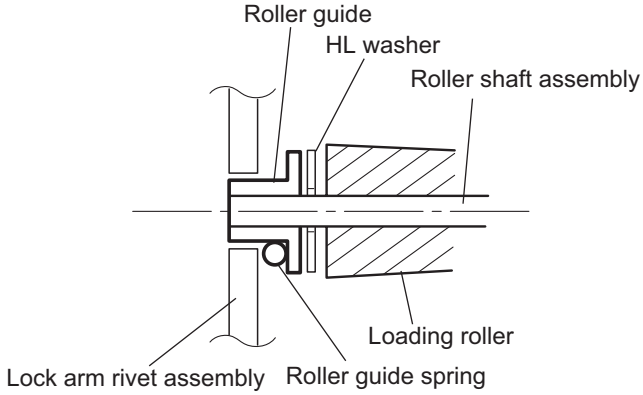


Fig.34

2.2.16 Removing the loading gear 5, 6 and 7 (See Figs.35 and 36)

- Prior to performing the following procedure, remove the top cover, chassis unit, pickup unit and top plate assembly.
  (1) Remove the screw **K** attaching the loading gear bracket. The loading gear 6 and 7 come off the loading gear bracket.
  (2) Pull out the loading gear 5.

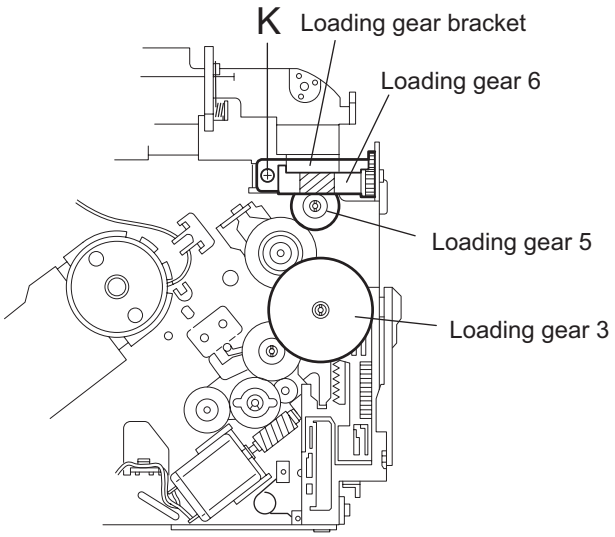


Fig.35

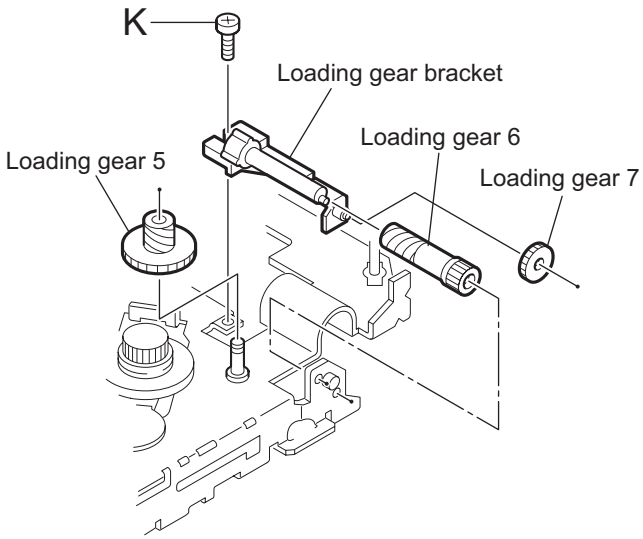


Fig.36

2.2.17 Removing the gears (See Figs.37 to 40)

- Prior to performing the following procedure, remove the top cover, chassis unit, top plate assembly and pickup unit.
- Pull out the loading gear 3. (See Fig.35.)

(1) Pull out the feed gear.
(2) Move the loading plate assembly in the direction of the arrow to release the L side plate from the two slots m' of the chassis rivet assembly. (See Fig.37.)
(3) Detach the loading plate assembly upward from the chassis rivet assembly while releasing the joint **n'**. Remove the slide hook and loading plate spring from the loading plate assembly.
(4) Pull out the loading gear 2 and remove the change lock lever.
(5) Remove the E ring and washer attaching the changer gear 2.
(6) The changer gear 2, change gear spring and adjusting washer come off.
(7) Remove the loading gear 1.
(8) Move the change plate rivet assembly in the direction of the arrow to release from the three shafts of the chassis rivet assembly upward. (See Fig.38.)
(9) Detach the loading gear plate rivet assembly from the shaft of the chassis rivet assembly upward while releasing the joint p'. (See Figs.38 and 40.)
(10) Pull out the loading gear 4.

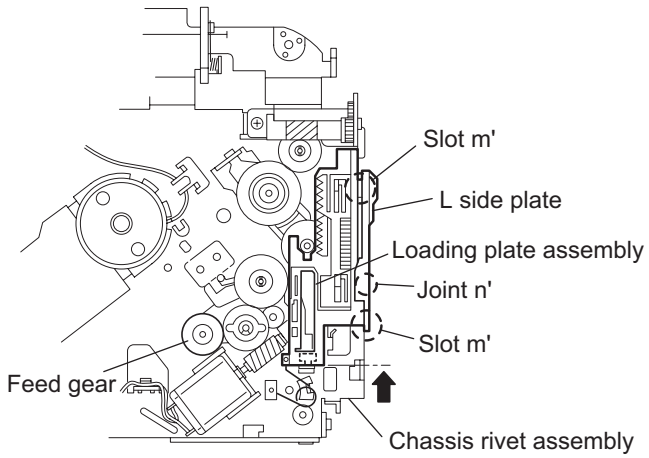


Fig.37

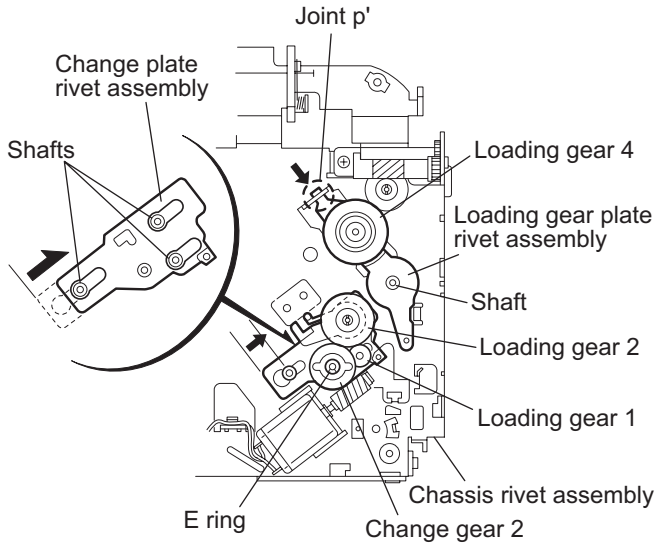


Fig.38

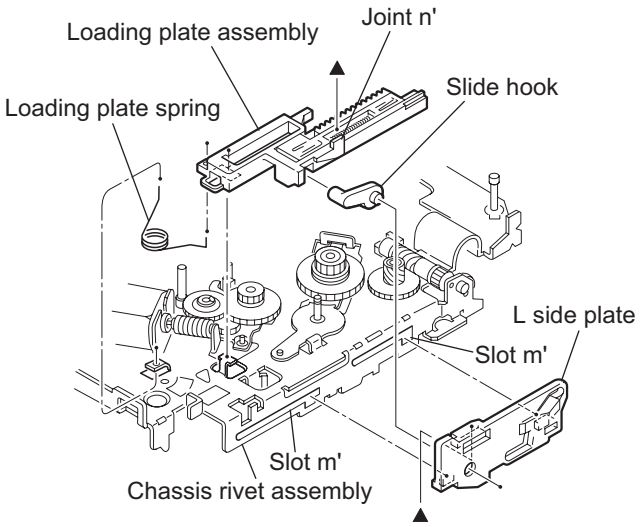


Fig.39

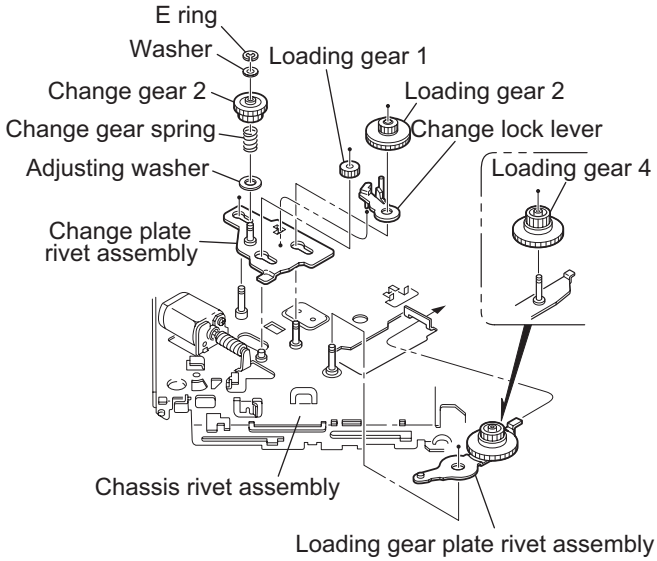


Fig.40

2.2.18 Removing the turn table / spindle motor (See Figs.41 and 42)

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

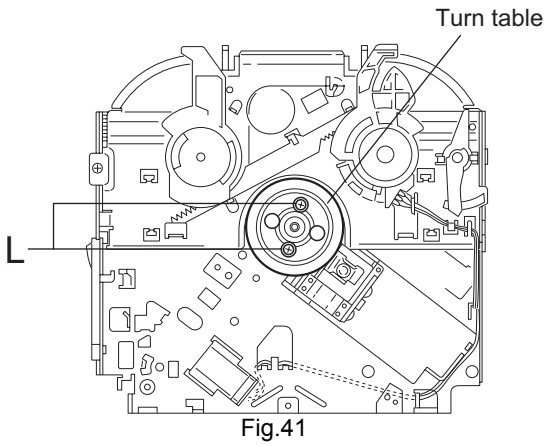


Fig.41

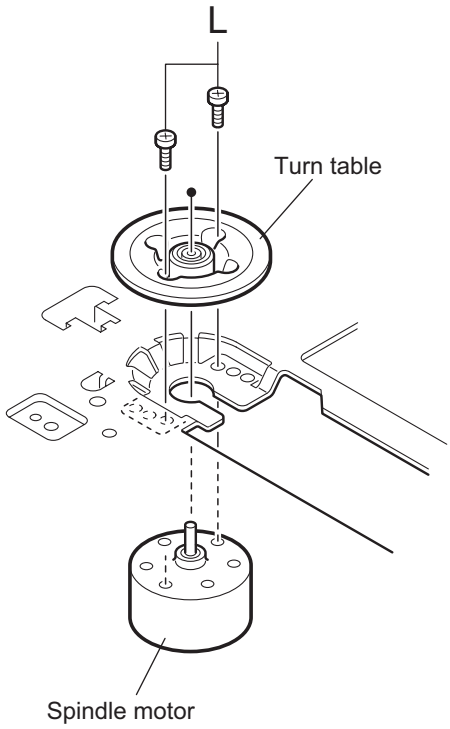


Fig.42

SECTION 3
Adjustment

3.1 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"
Loudness : OFF

■ Frequency Band
FM 87.5MHz ~ 107.9MHz
AM 530kHz ~ 1710 kHz

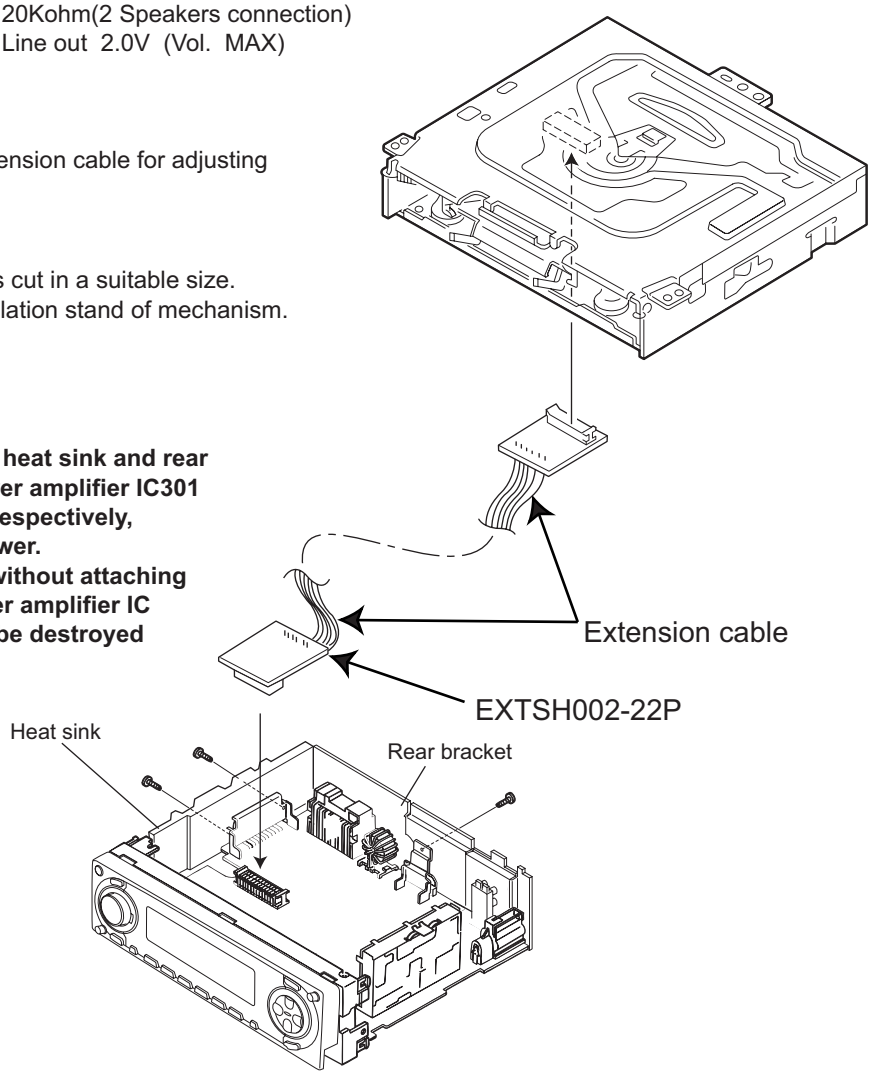
■ Dummy load
Exclusive dummy load should be used for AM,and FM. For FM dummy load,there is a loss of 6dB between SSG output and antenna input.The loss of 6dB need not be considered since direct reading of figures are applied in this working standard.

■ Standard measuring conditions

Power supply voltage	DC14.4V(10.5~16V)
Load impedance	20Kohm(2 Speakers connection)
Output Level	Line out 2.0V (Vol. MAX)

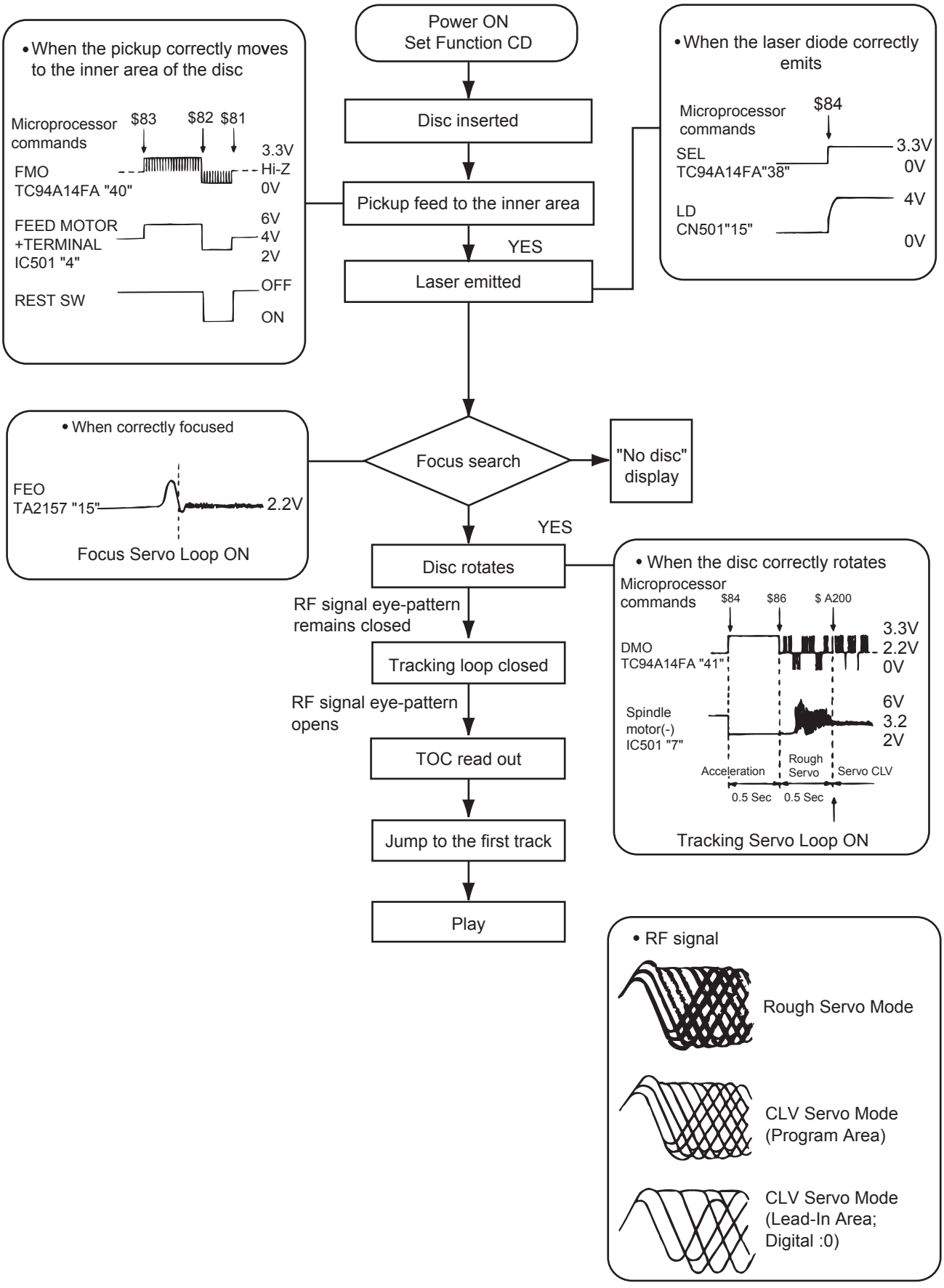
■ How to connect the extension cable for adjusting

* The cardboard is cut in a suitable size.
uses for the insulation stand of mechanism.

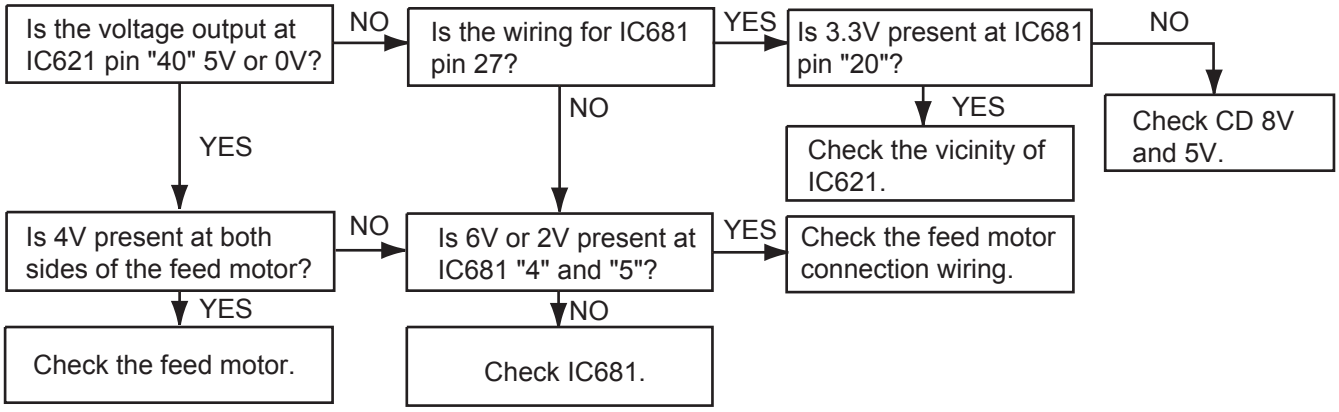


Caution:
Be sure to attach the heat sink and rear bracket onto the power amplifier IC301 and regulator IC901 respectively, before supply the power.
If voltage is applied without attaching these parts, the power amplifier IC and regulator IC will be destroyed by heat.

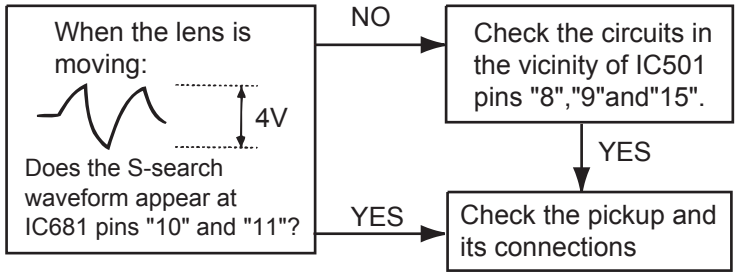
3.2 Flow of functional operation unit TOC read



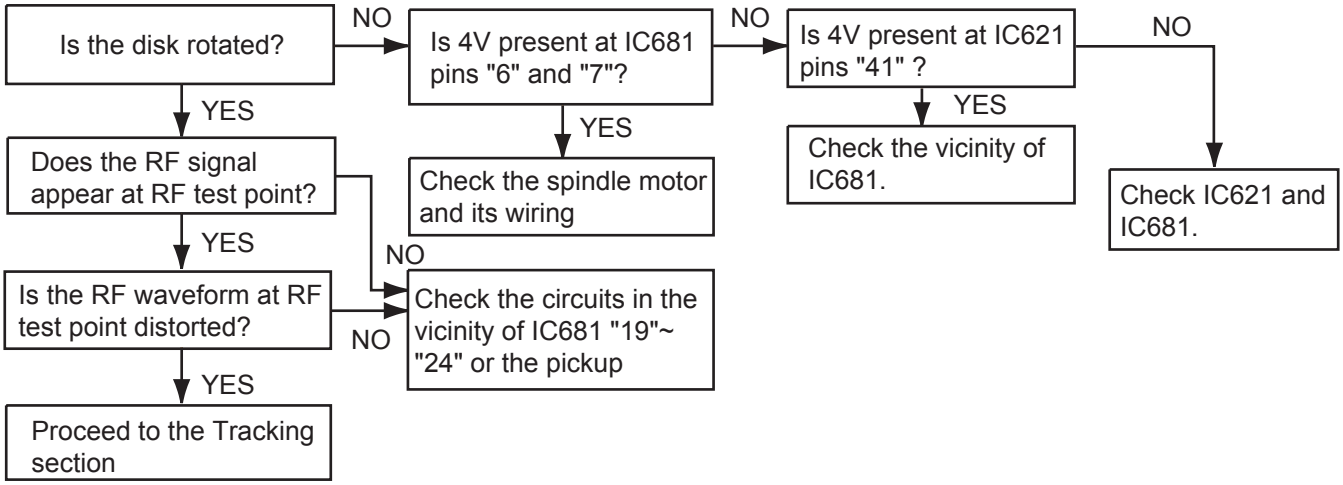
3.2.1 Feed section



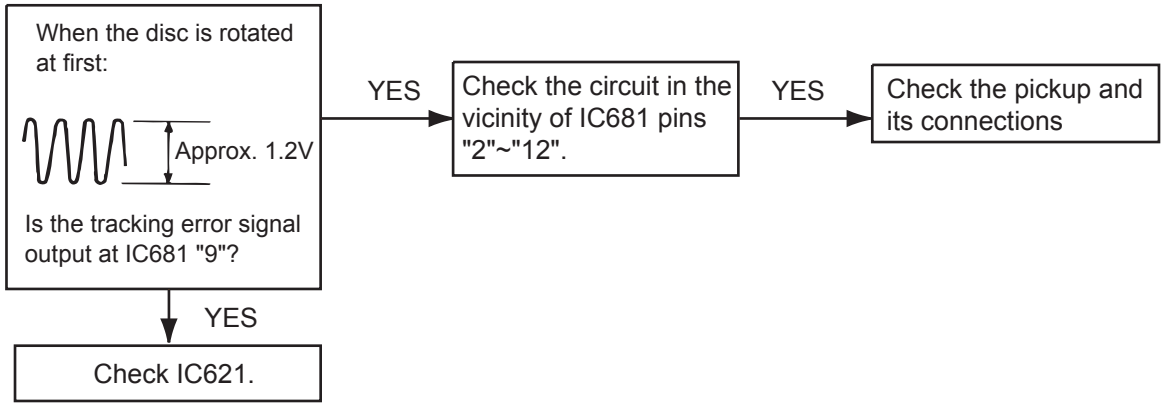
3.2.2 Focus section



3.2.3 Spindle section



3.2.4 Tracking section

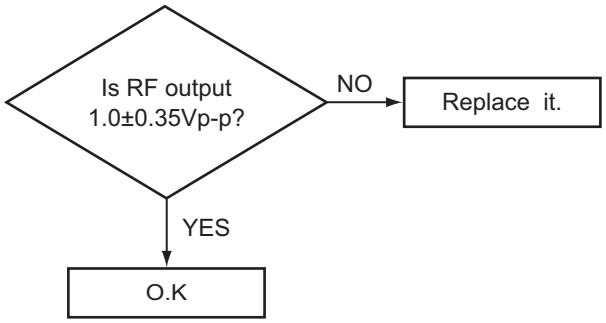


3.3 Maintenance of laser pickup

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

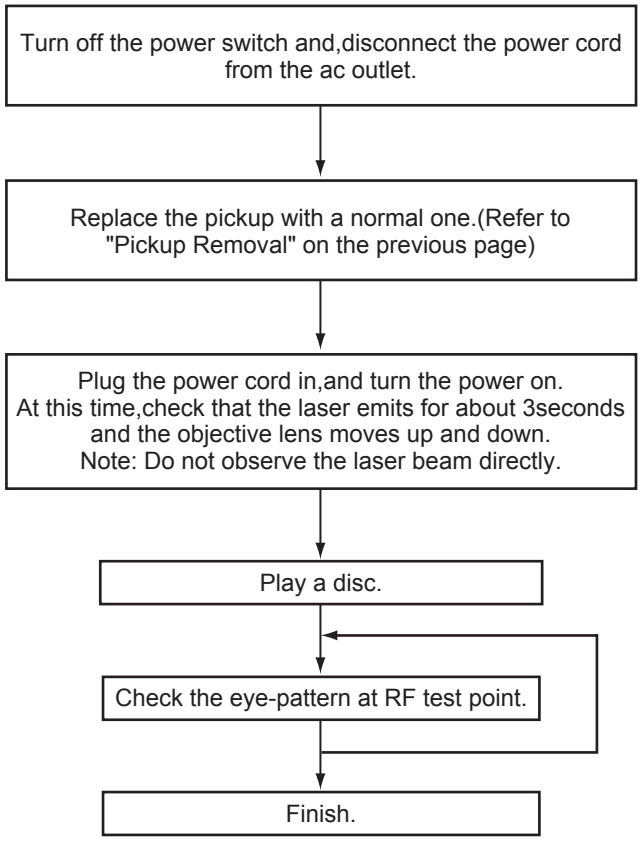
(2) Life of the laser diode
When the life of the laser diode has expired, the following symptoms will appear.

- The level of RF output (EFM output:ampli tude of eye pattern) will be low.



(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.

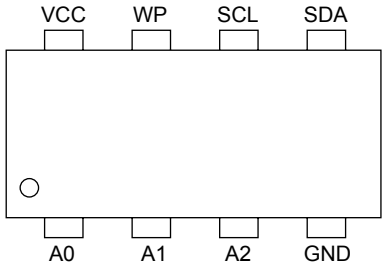
3.4 Replacement of laser pickup



SECTION 4
Description of major ICs

4.1 BR24C16F-X (IC703) : EEPROM

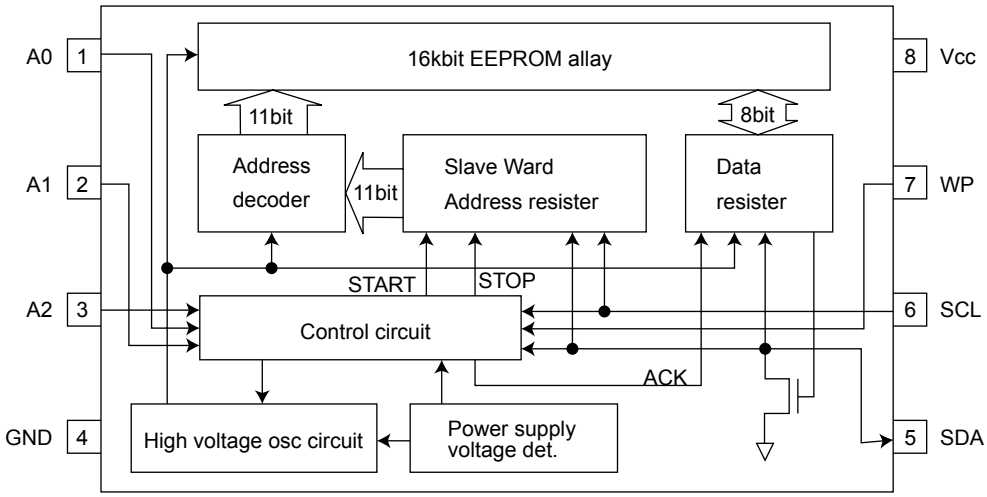
• Pin layout



• Pin function

Symbol	I/O	Function
VCC	-	Power supply.
GND	-	GND
A0,A1,A2	I	No use connect to GND.
SCL	I	Serial clock input.
SDA	I/O	Serial data I/O of slave and ward address.
WP	I	Write protect terminal.

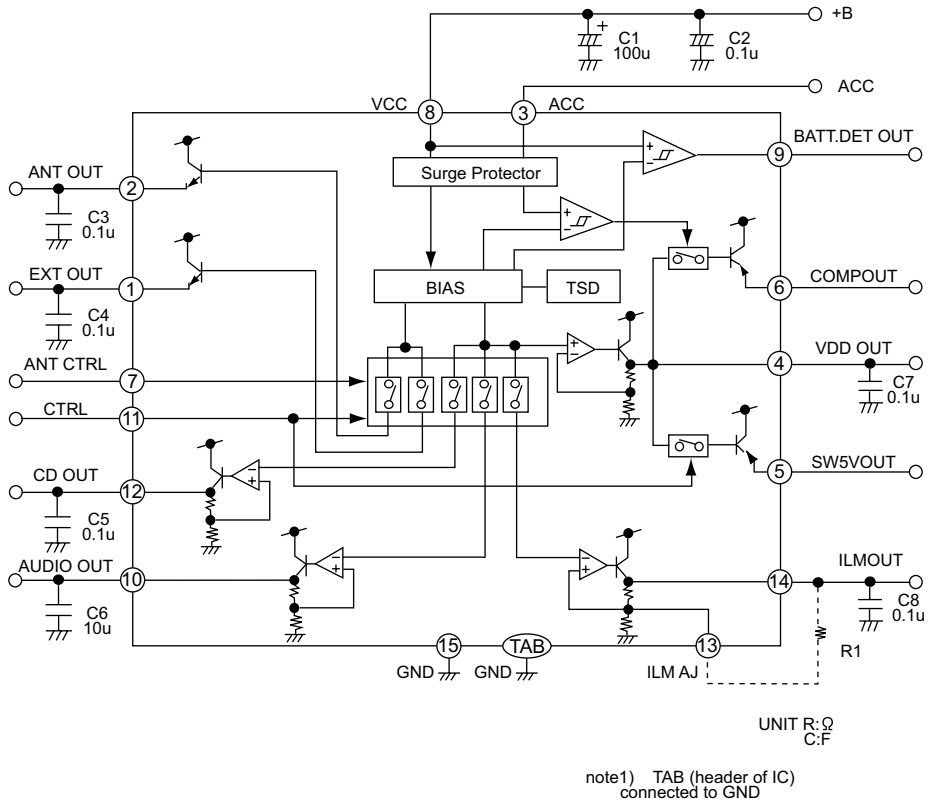
• Block diagram



4.2 HA13164A (IC901) : Regulator

• Terminal layout

• Block diagram

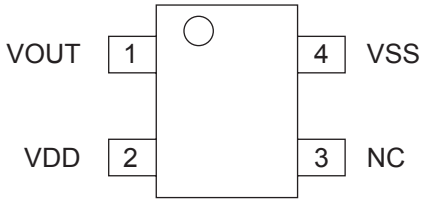


• Pin function

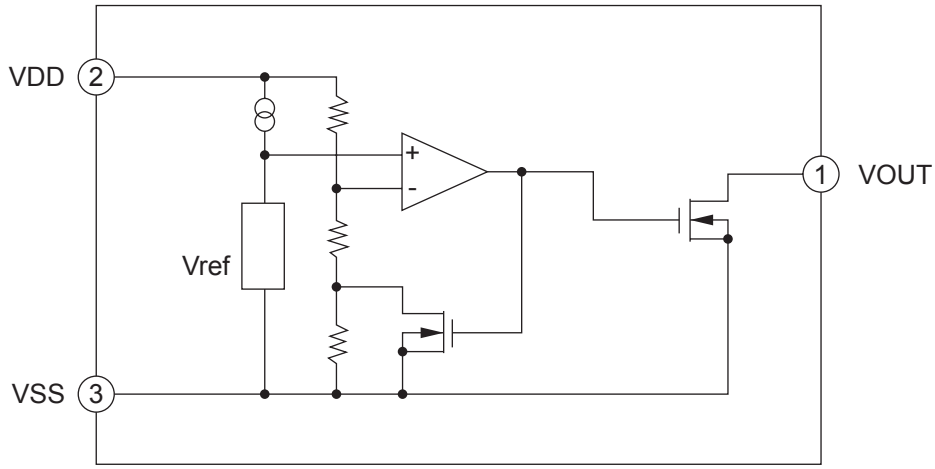
Pin No.	Symbol	Function
1	EXTOUT	Output voltage is VCC-1 V when M or H level applied to CTRL pin.
2	ANTOUT	Output voltage is VCC-1 V when M or H level to CTRL pin and H level to ANT-CTRL.
3	ACCIN	Connected to ACC.
4	VDDOUT	Regular 5.7V.
5	SW5VOUT	Output voltage is 5V when M or H level applied to CTRL pin.
6	COMPOUT	Output for ACC detector.
7	ANT CTRL	L:ANT output OFF H:ANT output ON
8	VCC	Connected to VCC.
9	BATT DET	Low battery detect.
10	AUDIO OUT	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	CD OUT	Output voltage is 8V when H level applied to CTRL pin.
13	ILM AJ	Adjustment pin for ILM output voltage.
14	ILM OUT	Output voltage is 10V when M or H level applied to CTRL pin.
15	GND	Connected to GND.

4.3 IC-PST3424U-X (IC803) : Reset

• Pin layout



• Block diagram

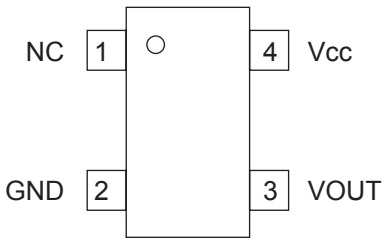


• Pin function

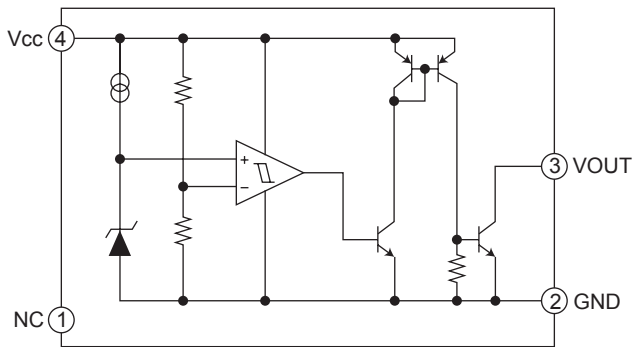
No.	Pin Name	Function
1	Vout	Reset Signal Output PIN
2	VDD	VDD PIN / Voltage Detect PIN
3	NC	Non connect
4	VSS	VSS PIN

4.4 IC-PST9333U-X (IC702) : Regulator

• Pin layout



• Block diagram

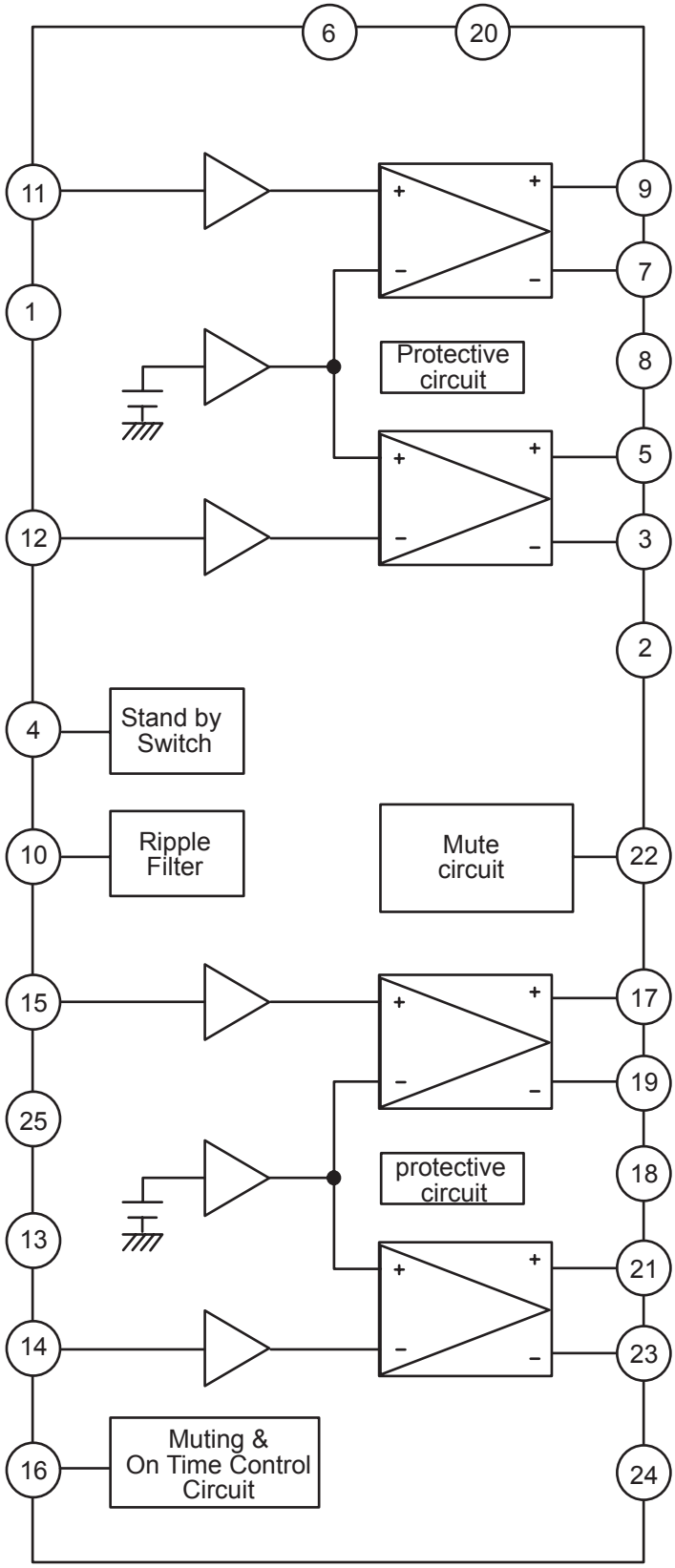


• Pin function

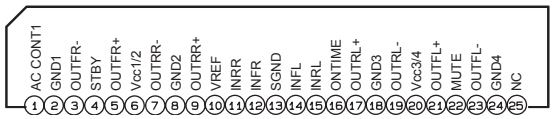
Pin No.	Symbol	Function
1	NC	Non connect
2	GND	GND terminal
3	VOUT	Reset signal output terminal
4	Vcc	Vcc terminal/Voltage detect terminal

4.5 LA47505 (IC951) : Power amp.

• Terminal layout



• Terminal layout

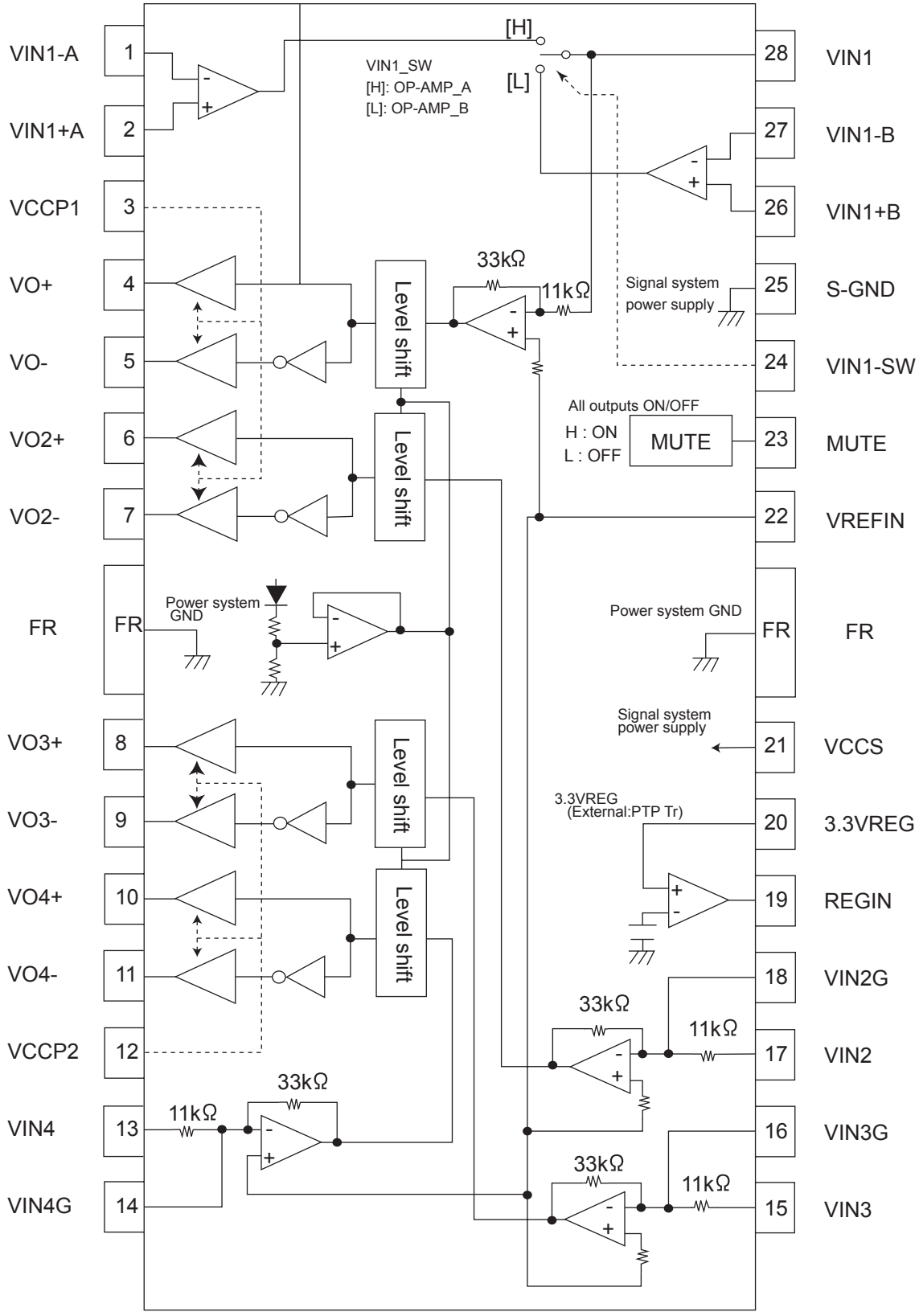


• Pin function

Pin No.	Symbol	Function
1	AC CONT1	Header of IC
2	GND1	Power GND
3	OUTFR-	Outpur(-) for front Rch
4	STBY	Stand by input
5	OUTFR+	Output (+) for front Rch
6	Vcc1/2	Power input
7	OUTRR-	Output (-) for rear Rch
8	GND2	Power GND
9	OUTRR+	Output (+) for rear Rch
10	VREF	Ripple filter
11	INRR	Rear Rch input
12	INFR	Front Rch input
13	SGND	Signal GND
14	INFL	Front Lch input
15	INRL	Rear Lch input
16	ONTIME	Power on time control
17	OUTRL+	Output (+) for rear Lch
18	GND3	Power GND
19	OUTRL-	Output (-) for rear Lch
20	Vcc3/4	Power input
21	OUTFL+	Output (+) for front
22	MUTE	Muting control input
23	OUTFL-	Output (-) for front
24	GND4	Power GND
25	NC	No connection

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

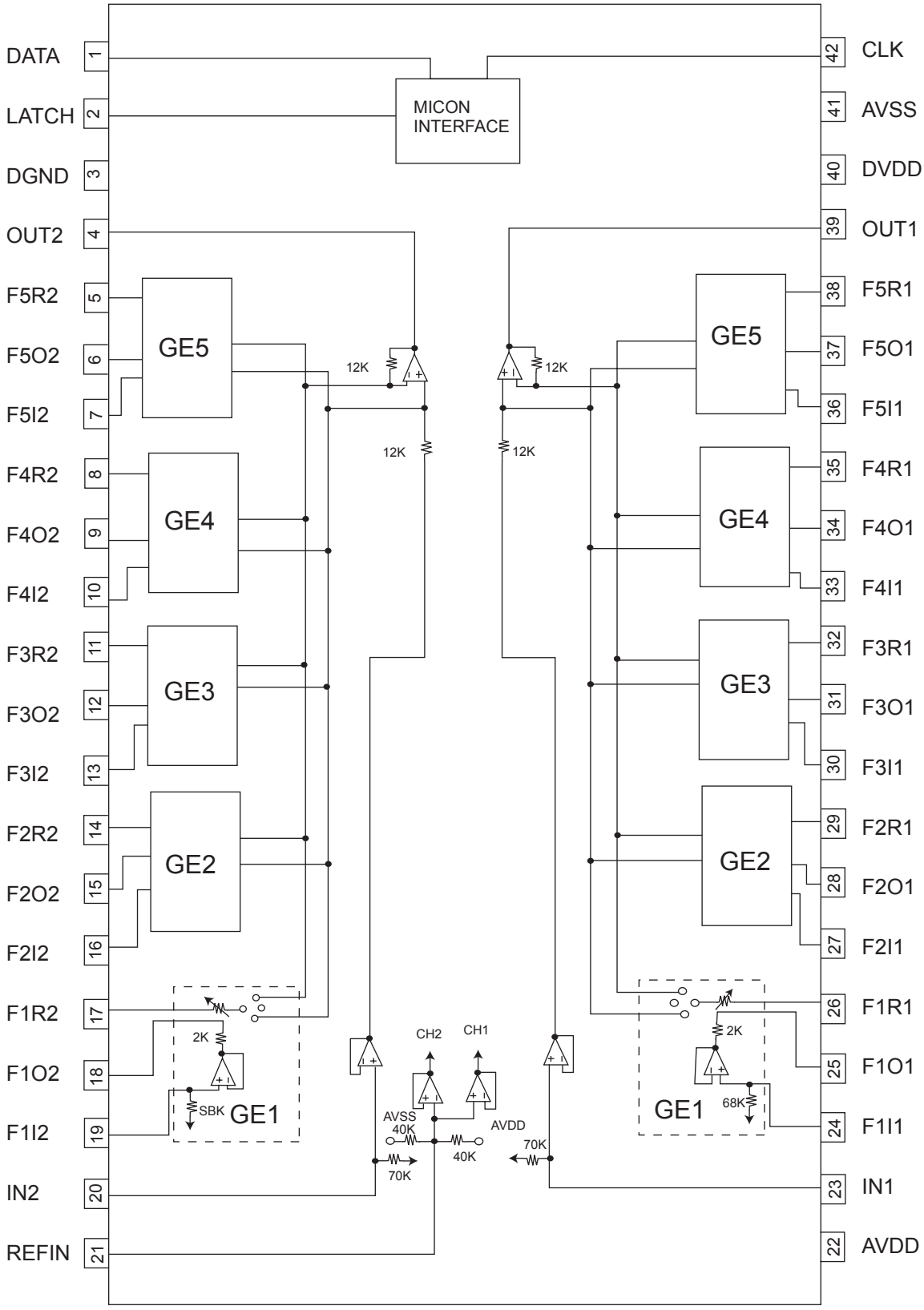
• Pin layout & Block diagram



• Pin function

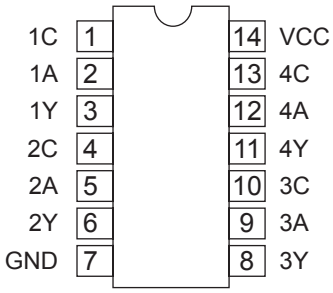
Pin No.	Symbol	Function
1	VIN1-A	CH1 input AMP_inverted input
2	VIN1+A	CH1 input AMP_non-inverted input
3	VCCP1	CH1 and CH2 power stage power supply
4	VO1+	Output pin(+)for channel 1
5	VO1-	CH1 output pin (-) for channel 1
6	VO2+	Output pin(+)for channel 2
7	VO2-	Output pin(-)for channel 2
8	VO3+	Output 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 powr 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

4.7 M62449FP-X (IC912) : Equalizer



4.8 HD74HC126FP-X (IC781) : Buffer

• Pin layout

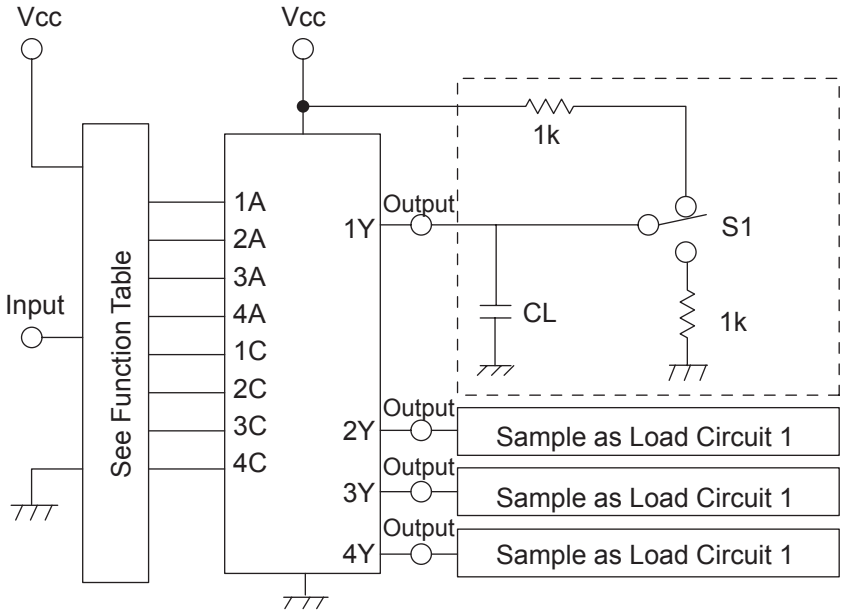


• Pin function

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

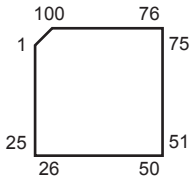
• Block diagram



Note:
CL includes probe and jig capacitance

4.9 MN102H60KCH (IC801) : LCD display sub CPU

• Pin Layout



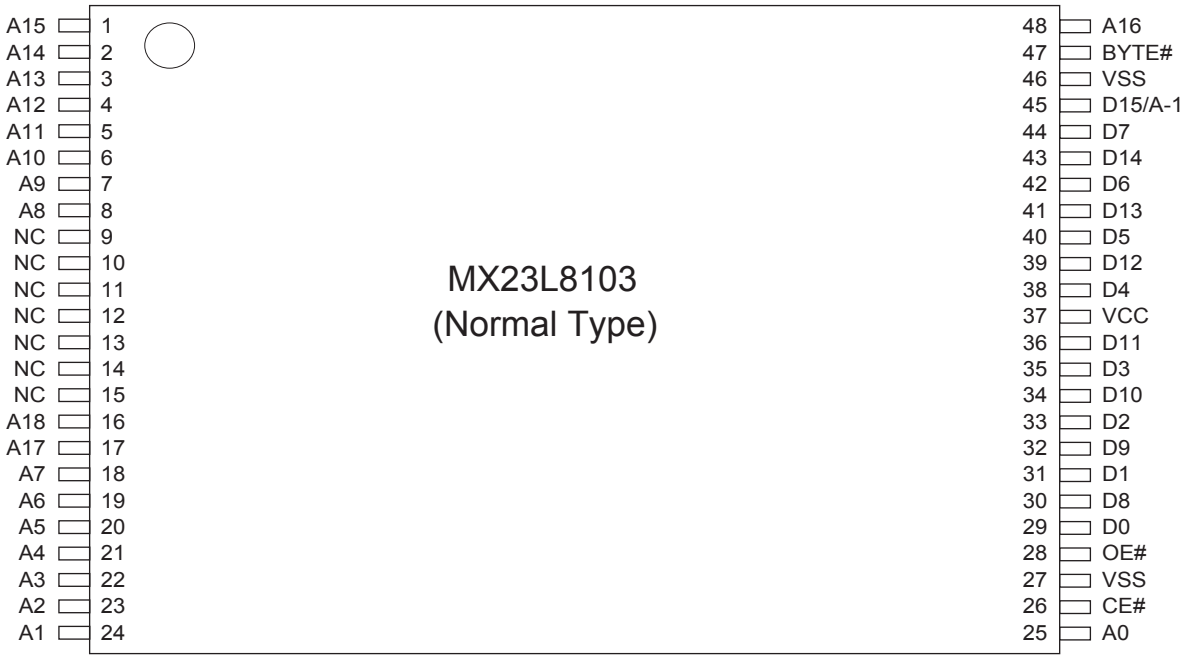
• Pin function

Pin No.	Symbol	I/O	Function
1	RES	O	LCD reset output
2	RE	O	Read enable output for extension memory
3	WE	O	Write enable output for extension memory
4	VccWCNT	O	Writing voltage control for external ROM
5	RY/BY	I	Read/Busy input for extension memory
6	CS1	O	Chip select1 output for extension memory
7	NC	O	Not use
8	SWLED4	O	SW_LED flashing output 4 for [PRESET1-6] key LED
9	SWLED5	O	SW_LED flashing output 5 for [SEEKUP]+[SEEKDOWN] key LED
10	SWLED6	O	SW_LED flashing output 6 for [DISCUP]+[DISCDOWN] key LED
11	NC	O	Not use
12	/WORD	I	Bus width setting for extension memory (H: 8-bit width)
13 to 16	A0 to A3	O	Extension memory output 0 to 3
17	VDD	-	Power supply
18	NC	O	Base clock output
19	GND	-	Ground
20	XI	I	Connect to ground
21	NC	O	Not connect
22	VDD	-	Power supply
23	OSCI	I	Crystal connecting terminal (25MHz)
24	OSCO	O	Crystal connecting terminal (25MHz)
25	MODE	I	Mode setting input, pull up (H: memory extension mode)
26 to 33	A4 to A11	O	Extension memory output 4 to 11
34	AVDD	-	Analog power supply
35 to 42	A12 to A19	O	Extension memory output 12 to 19
43	VREF-	-	Analog reference power supply, connect to ground
44	A20	O	Extension memory output 20
45	Thermal	I	Thermal fuse input
46	ANA	I	Audio level input for spectrum analyzer
47	WDOUT	O	Watch dog timer over flow output (H: over flow)
48	PON	O	Power on output
49	RD	O	LCD read strobe output
50	LCDCLK	O	LCD driver clock output (300kHz)
51	WR	O	LCD write strobe output
52,53	NC	-	Not use
54	VREF+	-	Analog reference power supply, connect to AVDD
55	RS	O	LCD regist select output
56	CS	O	LCD chip select output

Pin No.	Symbol	I/O	Function
57	NC	O	Not use
58	VOL1	I	Rotary encoder input 1
59	VOL2	I	Rotary encoder input 2
60	NC	-	Not use
61	AGND	-	Analog ground
62 to 65	KEY0 to KEY3	I	Key 0 to 3 input AD terminal
66	VDD	-	Power supply
67	SWLED0	O	SW_LED flashing output 0 for [VOL] key LED
68	SWLED1	O	SW_LED flashing output 1 for [SEL] key LED
69	SWLED2	O	SW_LED flashing output 2 for [DISP] key LED
70	DISPCLK	I	Serial communication clock input
71	DISPDATA	I	Displaying data input (Serial)
72	KEYDATA	O	Key code data output (Serial)
73	SIFDA	I/O	On board serial writing data input/output, pull up
74	SIFCK	I	On board serial writing clock input, pull up
75	NMI	I	NMI (H fix)
76	DISPCE	I	Chip enable input for serial communication
77		-	Ground
78	PSAVE2	I	POWER SAVE2 (Memory power supply off) detecting input
79	NC	-	Not use
80	KEY_IN	I	Key interrupt input
81	ADSEP	I	Address data separate/common mode setting terminal
			H: separate mode
82	RESET	I	Reset input (L: reset)
83	VDD	-	Power supply terminal
84 to 91	D0 to D7	I	Extension memory input 0 to 7
92	GND	-	Ground
93 to 100	P10 to P17	I	LCD data bus input/output 0 to 7

4.10 MX23L8103-90-M2 (IC802) : ROM

• Pin Layout



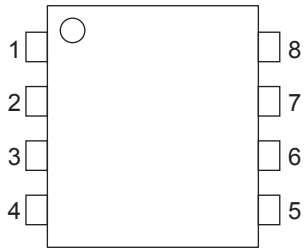
• Pin function

Pin No.	Name	Function
1 to 8	A15 to A8	Address inputs
9 to 15	NC	No connection
16, 17	A18, A17	Address inputs
18 to 25	A7 to A0	Address inputs
26	CE#	Chip enable input
27	VSS	Ground
28	OE#	Output enable input
29	D0	Data output
30	D8	Data output
31	D1	Data output
32	D9	Data output
33	D2	Data output
34	D10	Data output
35	D3	Data output

Pin No.	Name	Function
36	D11	Data output
37	VCC	Power supply
38	D4	Data output
39	D12	Data output
40	D5	Data output
41	D13	Data output
42	D6	Data output
43	D14	Data output
44	D7	Data output
45	D15/A-1	D15 (Word mode)/ LSB address (Byte mode)
46	VSS	Ground
47	BYTE#	Word/Byte mode selection
48	A16	Address input

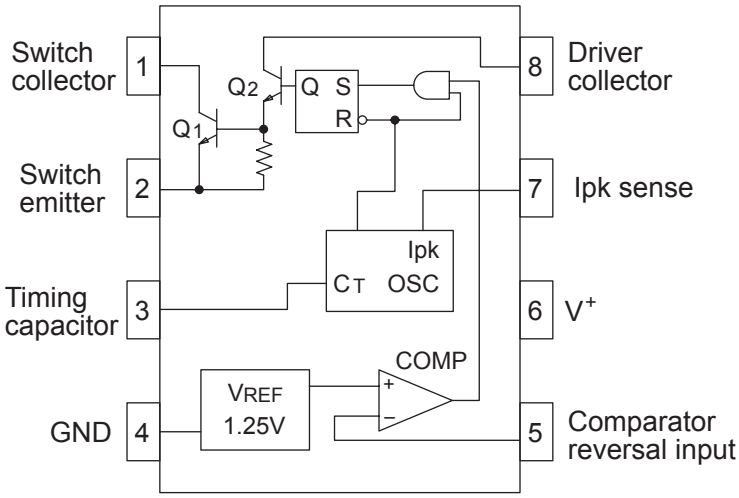
4.11 NJM2360AM-X (IC921) : DC-DC convertor

• Pin layout



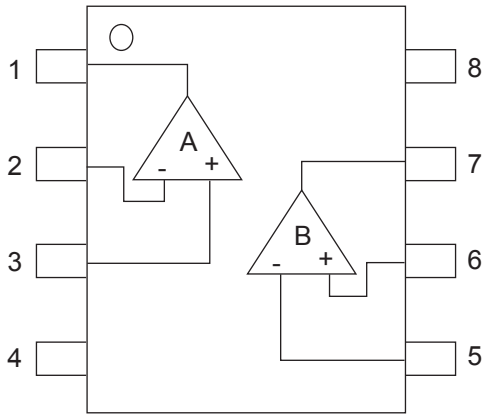
1. Cs
2. Es
3. C_T
4. GND
5. INV_{IN}
6. Vcc
7. S_I
8. C_D

• Block diagram



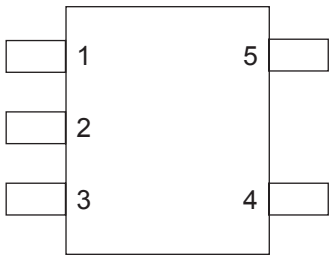
4.12 NJM4565V-X (IC132,IC171) : Dual ope amp

• Terminal layout & Pin function



1 AOUTPUT
2 A-INPUT
3 A+INPUT
4 V^-
5 B+INPUT
6 B-INPUT
7 B OUTPUT
8 V^+

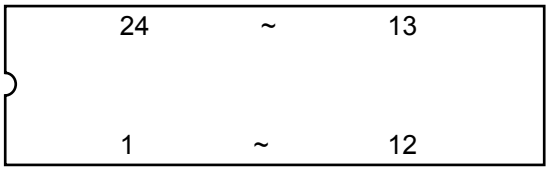
4.13 NJU7241F33-X (IC804) : Voltage regulator



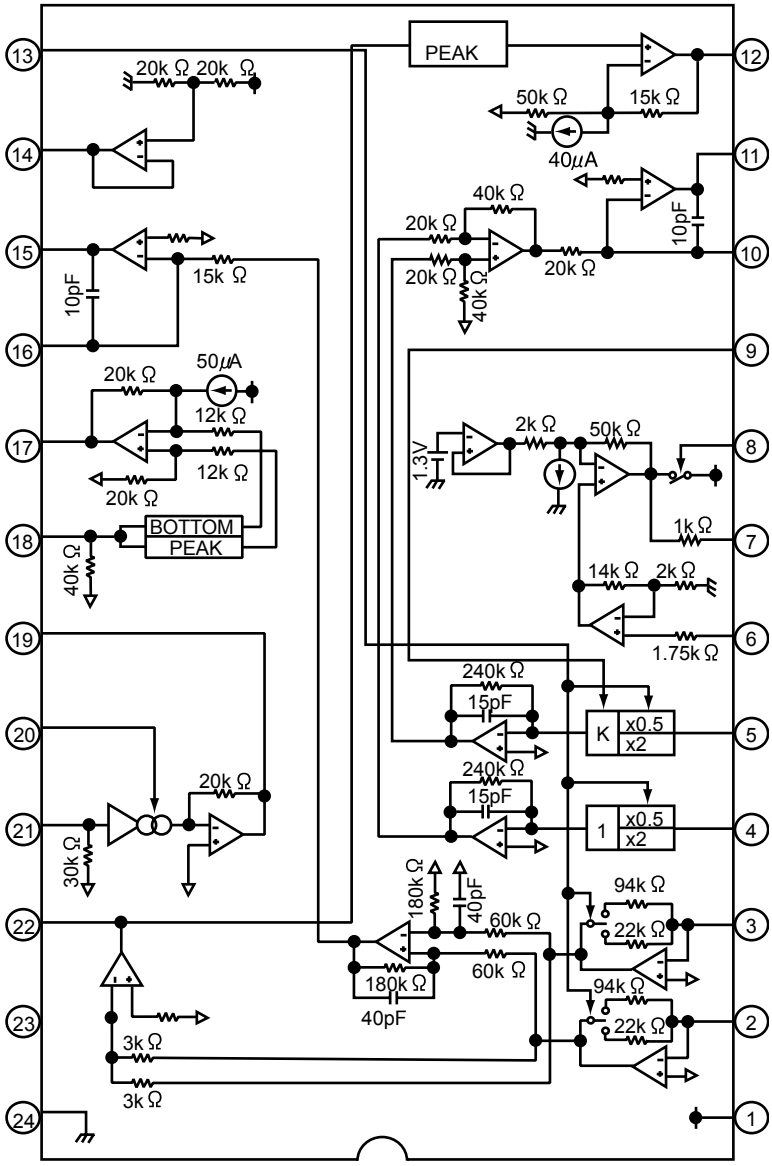
PIN FUNCTION
1. GND
2. V_{IN}
3. V_{OUT}
4. +NC
5. STB

4.14 TA2157FN-X (IC601):RF amp

- Terminal layout



- Block diagram



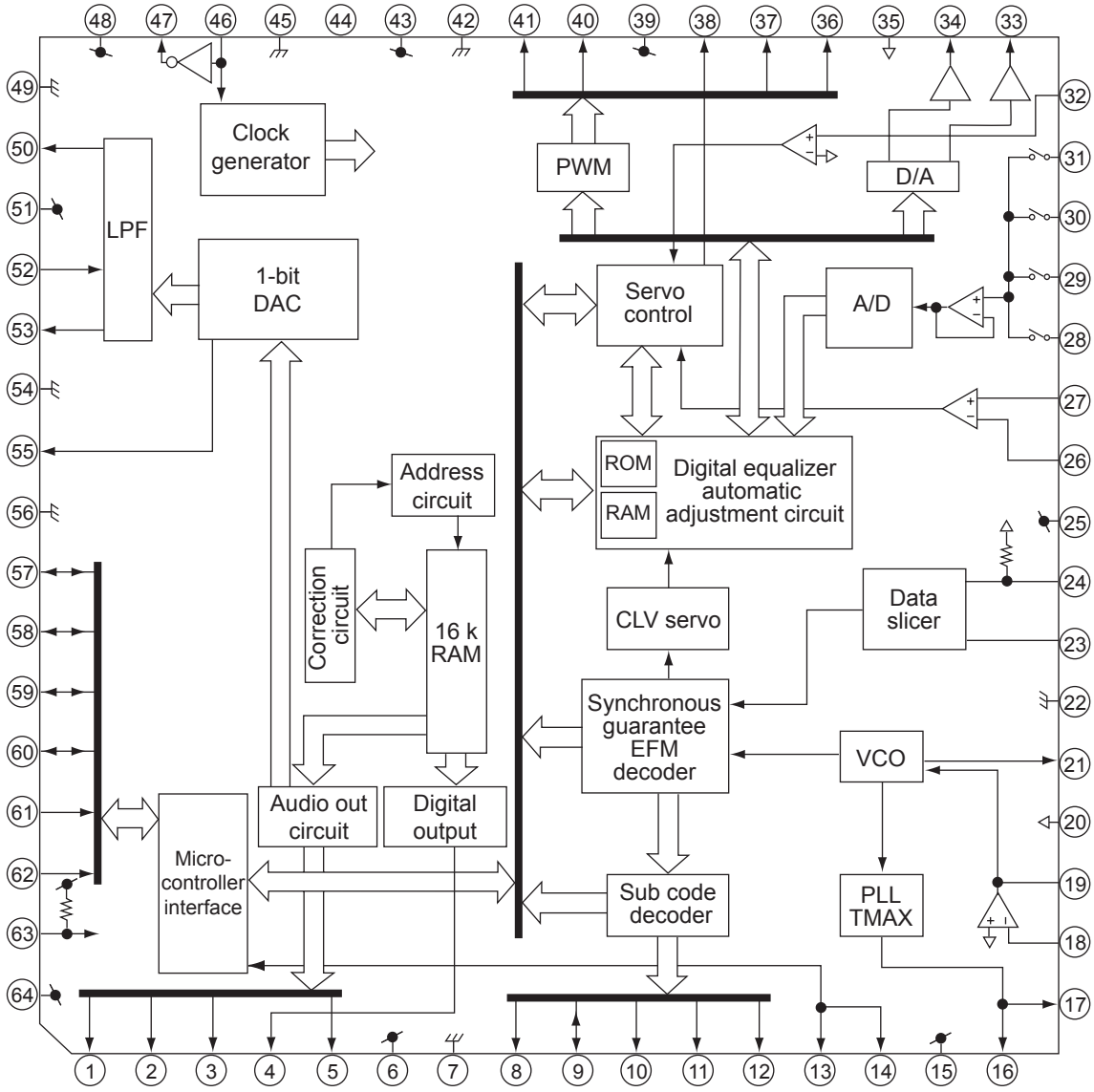
PIN VCTRLPIN	SEL (APC SW)	TEB (TE BAL)	RFGC (AGC Gian)	TEB (TE BAL)
VCC	APC ON	-50%	+12dB	Normal mode (0dB)
HiZ	APC ON	0%	+6dB	Normal mode (0dB)
GND	APC OFF (LDO=H)	50%	0dB	CD-RW mode (+12dB)

• Pin function

<table>
<tr><th>Pin No.</th><th>Symbol</th><th>I/O</th><th>Function</th></tr>
<tr><td>1</td><td>VCC</td><td>-</td><td>3.3V power supply pin</td></tr>
<tr><td>2</td><td>FNI</td><td>I</td><td>Main-beam amp input pin</td></tr>
<tr><td>3</td><td>FPI</td><td>I</td><td>Main-beam amp input pin</td></tr>
<tr><td>4</td><td>TPI</td><td>I</td><td>Sub-beam amp input pin</td></tr>
<tr><td>5</td><td>TNI</td><td>I</td><td>Sub-beam amp input pin</td></tr>
<tr><td>6</td><td>MDI</td><td>I</td><td>Monitor photo diode amp input pin</td></tr>
<tr><td>7</td><td>LDO</td><td>O</td><td>Laser diode amp output pin</td></tr>
<tr><td>8</td><td>SEL</td><td>I</td><td>APC circuit ON/OFF control signal, laser diode (LDO) control signal input
or bottom/peak detection frequency change pin.
<table>
<tr><th>SEL</th><th>APC circuit</th><th>LDO</th></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></td></tr>
<tr><td>9</td><td>TEB</td><td>I</td><td>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</td></tr>
<tr><td>10</td><td>TEN</td><td>I</td><td>Tracking error signal generation amp negative-phase input pin</td></tr>
<tr><td>11</td><td>TEO</td><td>O</td><td>Tracking error signal generation amp output pin.
Combining TEO signal RFRP signal with TC94A14F/FA configures tracking search system.</td></tr>
<tr><td>12</td><td>RFDC</td><td>O</td><td>RF signal peak detection output pin</td></tr>
<tr><td>13</td><td>GVSW</td><td>I</td><td>AGC/FE/TE amp gain change pin
<table>
<tr><th>GVSW</th><th>Mode</th></tr>
<tr><td>GND</td><td>CD-RW</td></tr>
<tr><td>Hiz</td><td rowspan="2">Normal</td></tr>
<tr><td>VCC</td></tr>
</table></td></tr>
<tr><td>14</td><td>VRO</td><td>O</td><td>Reference voltage (VRO) output pin
*VRO=1/2VCC When VCC=3.3V</td></tr>
<tr><td>15</td><td>FEO</td><td>O</td><td>Focus error signal generation amp output pin</td></tr>
<tr><td>16</td><td>FEN</td><td>I</td><td>Focus error signal generation amp negative-phase input pin</td></tr>
<tr><td>17</td><td>RFRP</td><td>O</td><td>Signal amp output pin for track count
Combining RFRP signal and TEO signal with TC94A14F/FA configures tracking search system.</td></tr>
<tr><td>18
19
20</td><td>REIS
RFGO
RFGC</td><td>I
O
I</td><td>
RF signal amplitude adjustment amp output pin
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 fromTC94A14F/14FA *RFGC pin using RC-LPF and inputting DC.
*RFGC input voltage:GND~VCC</td></tr>
<tr><td>21</td><td>AGCIN</td><td>I</td><td>RF signal amplitude adjustment amp input pin</td></tr>
<tr><td>22</td><td>RFO</td><td>O</td><td>RF signal generation amp output pin</td></tr>
<tr><td>23</td><td>RFI</td><td>I</td><td>RF signal generation amp input pin</td></tr>
<tr><td>24</td><td>GND</td><td>-</td><td>GND pin</td></tr>
</table>

4.15 TC94A14FA (IC621) : DSP & DAC

• Terminal layout & block daiagram



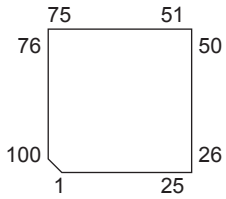
• Pin function

Pin No	Symbol	I/O	Descroption
1	BCK	O	Bit clock output pin.32fs48fsor 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	V_{DD3}	-	Digital 3.3V power supply voltage pin.
7	V_{SS3}	-	Digital GND pin.
8	SBOK	O	Subcode Q data CRCC result output pin. "H" level when result is OK.
9	CLCK	O	Subcode P-W data read I/O pin. I/O polarity selectable by command.
10	DATA	O	Subcode P-W data output pin.
11	SFSY	O	Playback frame sync signal output pin.
12	SBSY	O	Subcode block sync signal output pin. "H" level at S1 when subcode sync is detected.
13 14	HSO UHSO	I/O	General-purpose input / output pins.Input port at reset.
15	PV_{DD3}	-	PLL-only 3.3V power supply voltage pin.
16	PDO	O	EFM and PLCK phase difference signal output pin.

Pin No	Symbol	I/O	Descroption
17	TMAX	O	TMAX detection result output pin. TMAX Detection Result / TMAX Output Longer than fixed period / "PV_{DD3}" Within fixed period / "HiZ" Shorter than fixed period / "AV_{SS3}"
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	AV_{SS3}	-	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	AV_{DD3}	-	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	AV_{DD3}	-	Analog 3.3V power supply voltage pin.
40	FMO	O	Feed equalizer output pin.
41	DMO	O	Disc equalizer output pin.
42	V_{SS3}	-	Digital GND pin.
43	V_{DD3}	-	Digital 3.3V power supply voltage pin.
44	TESIN	I	Test input pin. Normally, fixed to "L".
45	XV_{SS3}	-	System clock oscillator GND pin.
46	XI	I	System clock oscillator input pin.
47	XO	O	System clock oscillator output pin.
48	XV_{DD3}	-	System clock oscillator 3.3V power supply voltage pin.
49	$DV_{SS3}R$	-	DA converter GND pin.
50	RO	O	R-channel data forward output pin.
51	DV_{DD3}	-	DA converter 3.3V power supply pin.
52	DVR	-	Reference voltage pin.
53	LO	O	L-channel data forward output pin.
54	$DV_{SS3}L$	-	DA converter GND pin.
55	ZDET	O	1 bit DA converter zero detection flag output pin.
56	V_{SS5}	-	Microcontroller interface GND pin.
57	BUS0	I/O	Microcontroller interface data I/O pins.
58	BUS1		
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	V_{DD5}	-	Microcontroller interface 5V power supply pin.

4.16 UPD784217AGC204 (IC701) : CPU

• Pin Layout



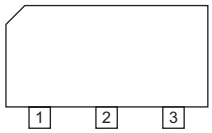
• Pin function

Pin No	Symbol	I/O	Function
1,2	NC	-	Not use
3	NC	O	Not use, SW2 (1100series)
4	NC	O	Not use, PSW (1100series)
5	NC	O	Not use, LM (1100series)
6	NC	O	Not use, MOTOR SEL (1100series)
7	NC	-	Not use
8	ANT CONT	O	Antenna remote control
9	VDD	-	Power supply
10	X2	-	
11	X1	-	
12	VSS	-	Ground
13	XT2	-	
14	XT1	-	
15	RESET	I	System reset
16	REMOCON	I	Remocon input
17	BUS-INT	I	J-BUS INT
18	PS2	I	Power save2, H means STOP mode
19	CD-REQ	I	CD REQ INPUT, SW1 (1100series)
20	RDS-SCK	I	RDS clock input (J version: not use)
21	STEERING REMOCON	I	Steering remocon input
22	KEY DATA	I	KEY DATA
23	AVDD	-	A/D converter power supply
24	AVREF0	-	A/D reference voltage
25	VOL1	I	Volume encoder pulse input 1
26	VOL2	I	Volume encoder pulse input 2
27,28	NC	-	Input L
29	IOP	I	IOP, not use (3100series)
30	MRC	I	MRC input
31	SQ	I	S-Quality level input (J version: not use)
32	SM	I	S.METER input
33	AVSS	-	Ground
34	NC	-	Not use
35	STAGE3	I	Feature selection, pull down H: 3100series, L: 1100series
36	AVREF	-	
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	DISP DA	O	DISPLAY DATA output
42	DISP SCK	O	DISPLAY SCK
43	DISP CE	O	DISPLAY CE
44	BUZZER	O	Buzzer output
45	E2PROM-DI	I	I2C data input

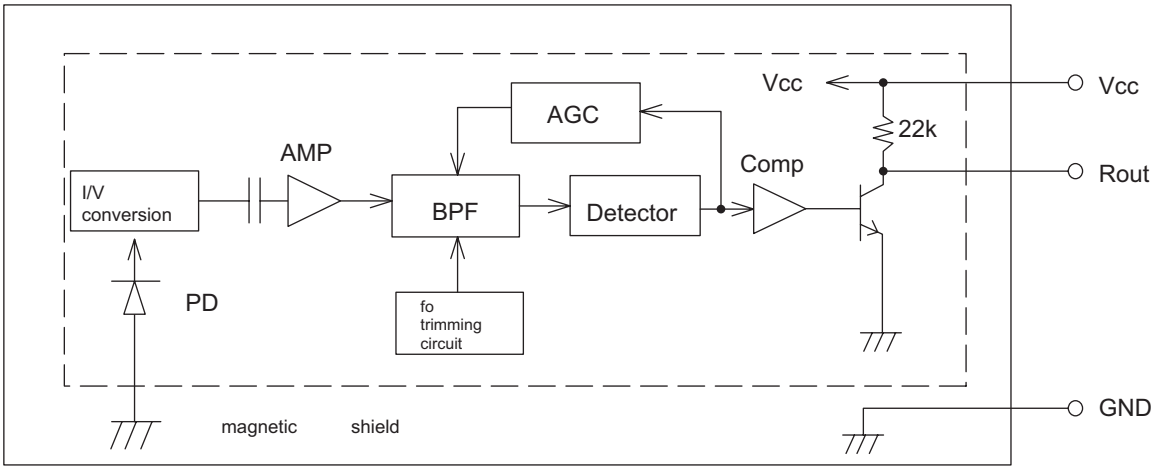
Pin No	Symbol	I/O	Function
46	E2PROM-DO	O	I2C data output
47	E2PROM-CLK	O	I2C clock output
48	OPEN	I	DOOR OPEN SW
49	DETACH	I	Detach detect input; H means detaching
50	NC	O	Output L
51 to 53	NC	-	Not use
54	EQ-CLK	O	Clock output for e-EQ IC
55	EQ-DA	O	Data output for e-EQ IC
56	EQ-LA	O	Latch output for e-EQ IC
57 to 59	NC	-	Not use
60	RDS DA	I	RDS data input (J version: not use)
61	SD/ST	I	Station detector or stereo indicator input; H means a station is there, L means the program is stereo.
62	AFCK	O	AF check output (J version: not use)
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	-	Ground
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	CD-ON	-	CD-ON (1100series), not use (3100series)
77	MUTING	O	Muting output L=muting on
78	CD MUTING	I	CD mute input L=mute on, not use (1100series)
79	CD RESET	O	CD reset control out H=reset on, not use (1100series)
80	LINE SEL	I	Feature selection H: line input (U57:not support), L: support
81	VDD	-	Power supply
82	NC	-	Not use
83	VOL-DA	O	Data output for e-vol IC
84	VOL-CLK	O	Clock output for e-vol IC
85	WOOFER SEL	I	Feature selection H:support L:Not support
86	SUB MUTING	O	Muting control output for subwoofer
87	LPF1	O	LPF control1
88	LPF2	O	LPF control2
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	NC	O	BUCK (1100series), not use (3100series)
92	NC	O	CCE (1100series), not use (3100series)
93	NC	O	RST (1100series), not use (3100series)
94	TEST		For rewriting flash memory
95	NC	O	BUS0 (1100series), not use (3100series)
96	NC	O	BUS1 (1100series), not use (3100series)
97	NC	O	BUS2 (1100series), not use (3100series)
98	NC	O	BUS3 (1100series), not use (3100series)
99	NC	O	DISC SEL (1100series), not use (3100series)
100	NC	O	CD-RW (1100series), not use (3100series)

4.17 RPM6938-SV4 (IC805) : Remote sensor

• Pin diagram

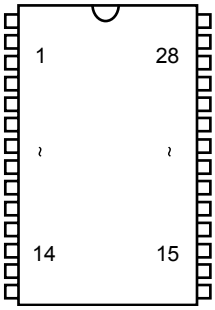


• Block diagram

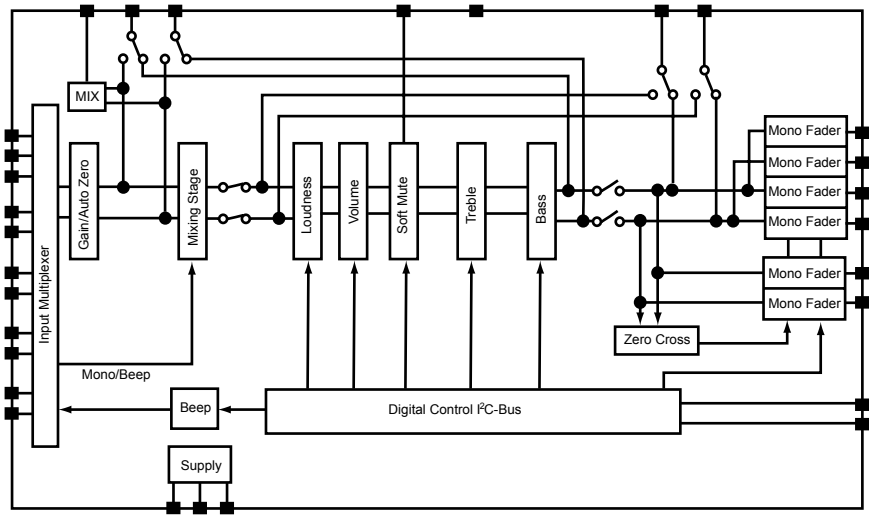


4.18 TDA7404D-X (IC911):Carradio signal processor

• Terminal layout

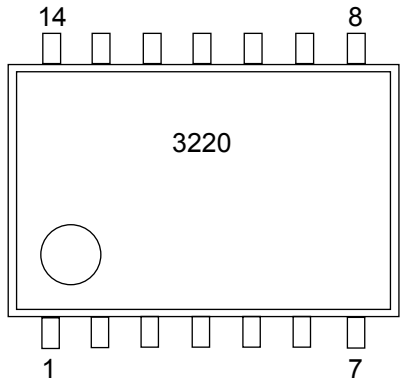


• Block diagram

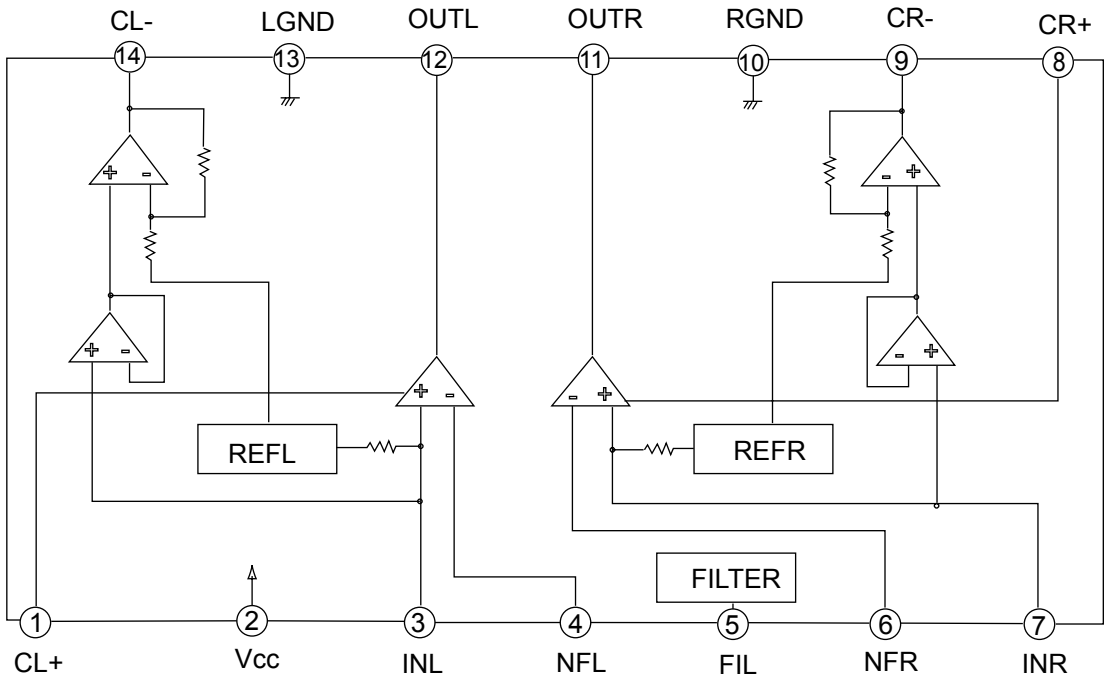


4.19 BA3220FV-X (IC281,IC301) : Line out amp

- Pin layout

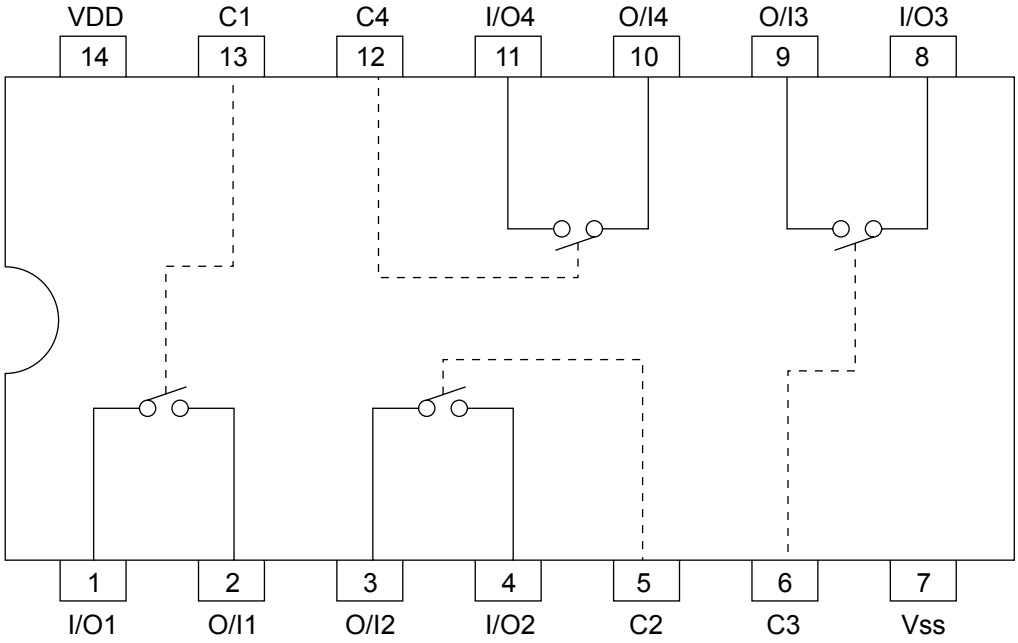


- Block diagram

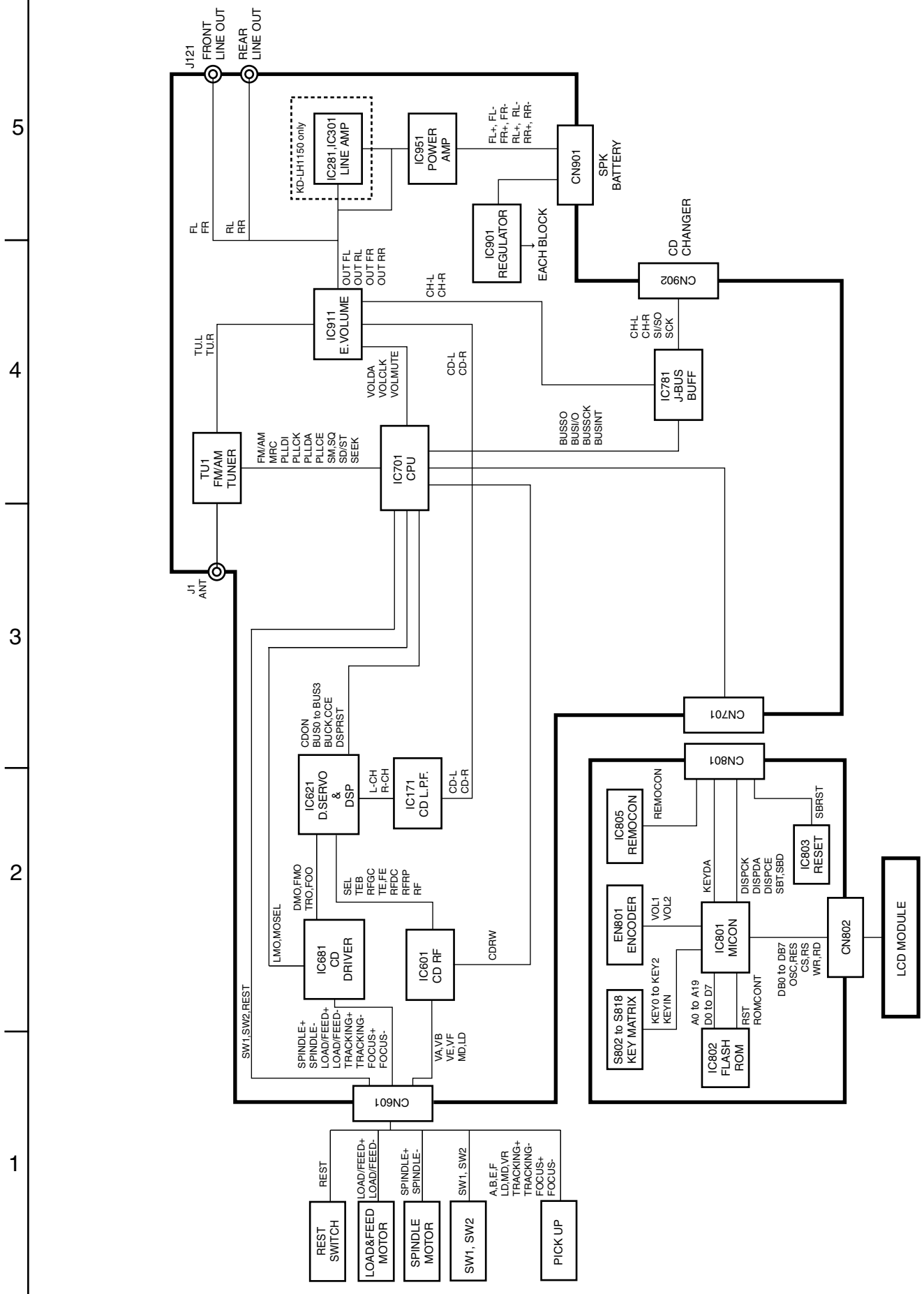


4.20 BU4066BCFV-X (IC131) : Quad analog switch

• Pin layout & Block diagram

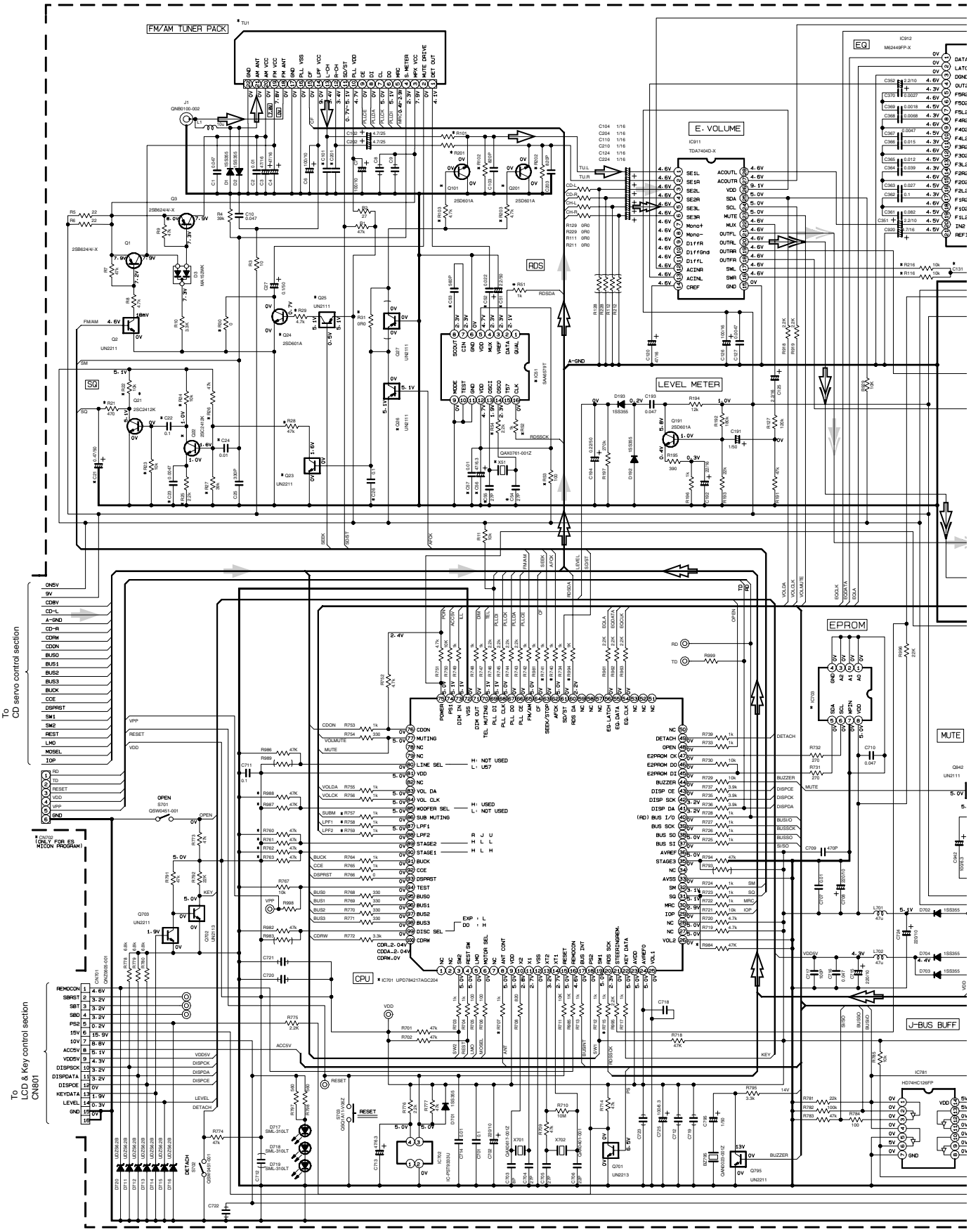


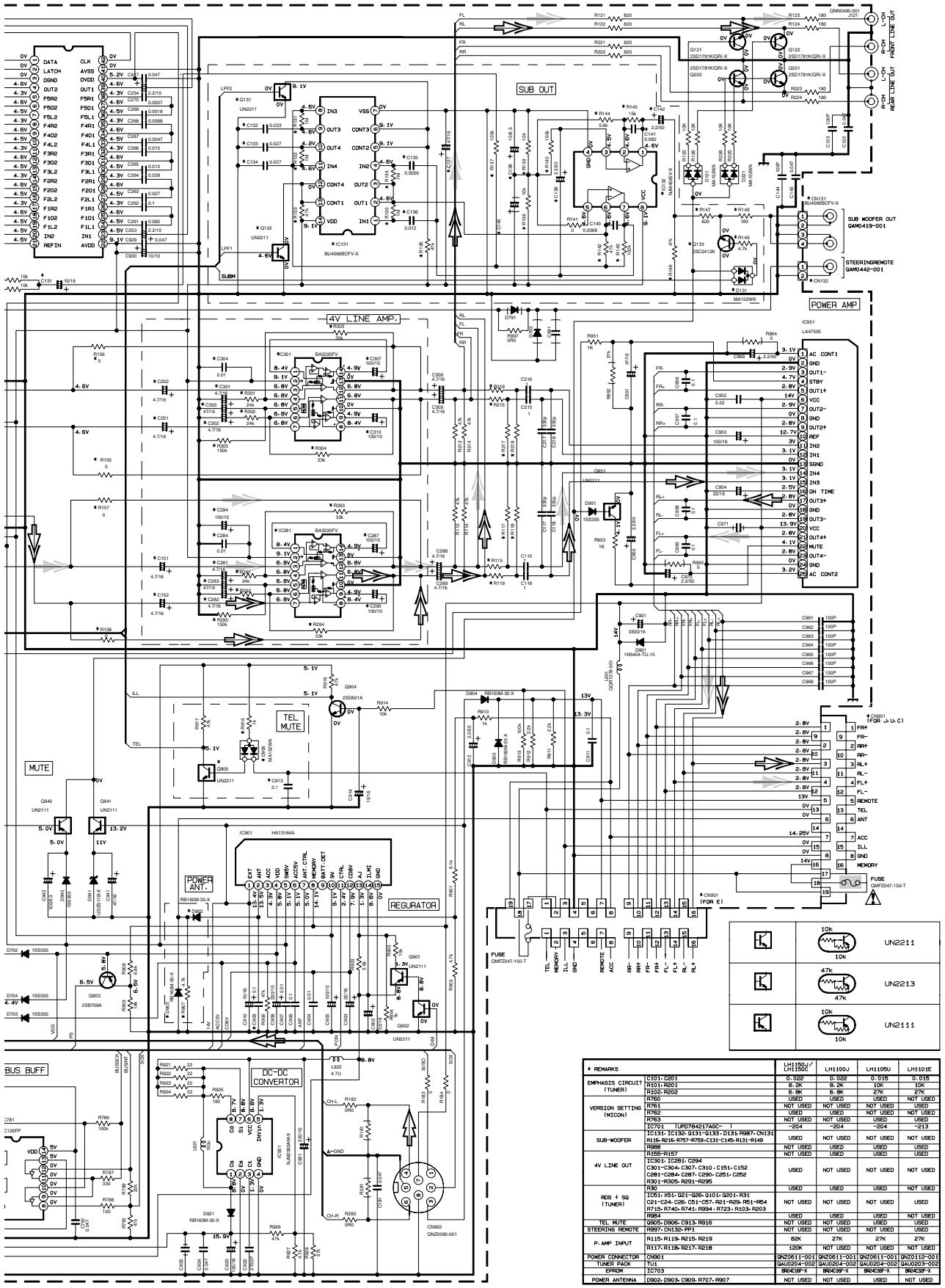
Block diagram



Standard schematic diagrams

■ Main amplifier section





	10k 10k	UN2211
	47k 47k	UN2213
	10k 10k	UN2111

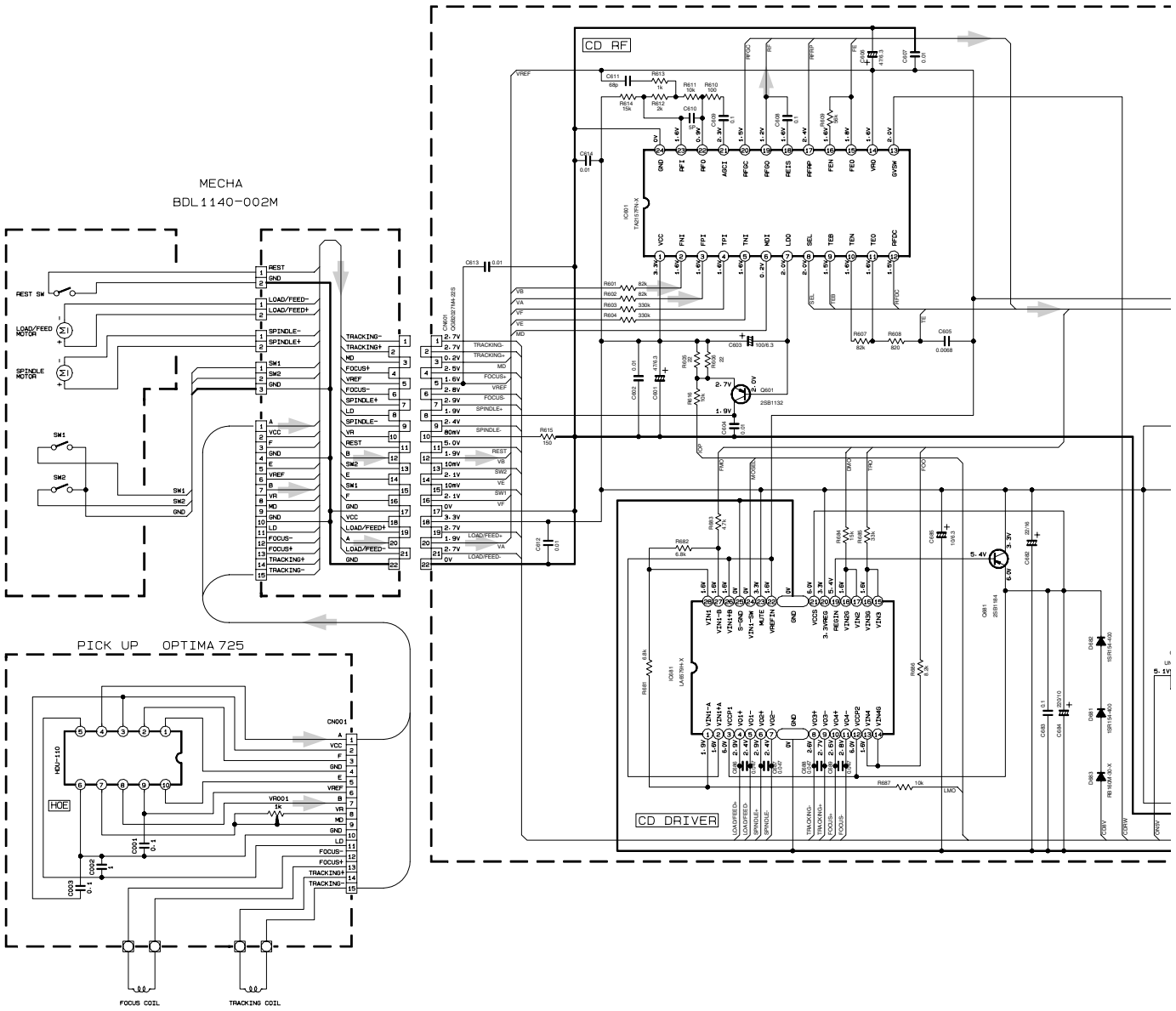
* REMARKS		LH1150J/ LH1150C	LH1100J	LH1105U	LH1101E
EMPHASIS CIRCUIT (TUNER)	C101-C201	0.022	0.022	0.015	0.015
	R101-R201	8.2K	8.2K	10K	10K
	R102-R202	6.8K	6.8K	27K	27K
VERSION SETTING (MICON)	R760	USED	USED	USED	NOT USED
	R761	NOT USED	NOT USED	NOT USED	USED
	R762	USED	USED	NOT USED	NOT USED
	R763	NOT USED	NOT USED	USED	USED
	IC701 (UPD784217AGC-)	-204	-204	-204	-213
SUB-WOOFER	IC131・IC132・Q131-Q133・D131・R987・CN131 R116・R216・R757-R759・C131・C145・R131-R149	USED	NOT USED	NOT USED	NOT USED
	R988	NOT USED	USED	USED	USED
4V LINE OUT	R155-R157	NOT USED	USED	USED	USED
	IC301・IC281・C294 C301-C304・C307・C310・C151・C152 C281-C284・C287・C290・C251・C252 C201-R305・R291-R295	USED	NOT USED	NOT USED	NOT USED
RDS + SQ (TUNER)	R30	USED	USED	USED	NOT USED
	IC51・X51・Q21-Q25・Q101・Q201・R31 C21-C24・C25・C51-C57・R21-R29・R51-R54 R715・R740・R741・R994・R723・R103・R203	NOT USED	NOT USED	NOT USED	USED
	R984	USED	USED	USED	NOT USED
TEL MUTE	Q905・D906・C913・R916	NOT USED	NOT USED	USED	USED
STEERING REMOTE	R997・CN132・PP1	NOT USED	NOT USED	NOT USED	USED
P.AMP INPUT	R115・R119・R215・R219	82K	27K	27K	27K
	R117・R118・R217・R218	120K	NOT USED	NOT USED	NOT USED
POWER CONNECTOR	CN901	QNZ0611-001	QNZ0611-001	QNZ0611-001	QNZ0112-001
TUNER PACK	TU1	QAU0204-002	QAU0204-002	QAU0204-002	QAU0203-002
EPROM	IC703	BR24G8F-X	BR24G8F-X	BR24G8F-X	BR24G8F-X
POWER ANTENNA	D902・D903・C909・R707・R907	NOT USED	NOT USED	USED	NOT USED

Front signal
Rear signal
CD changer signal

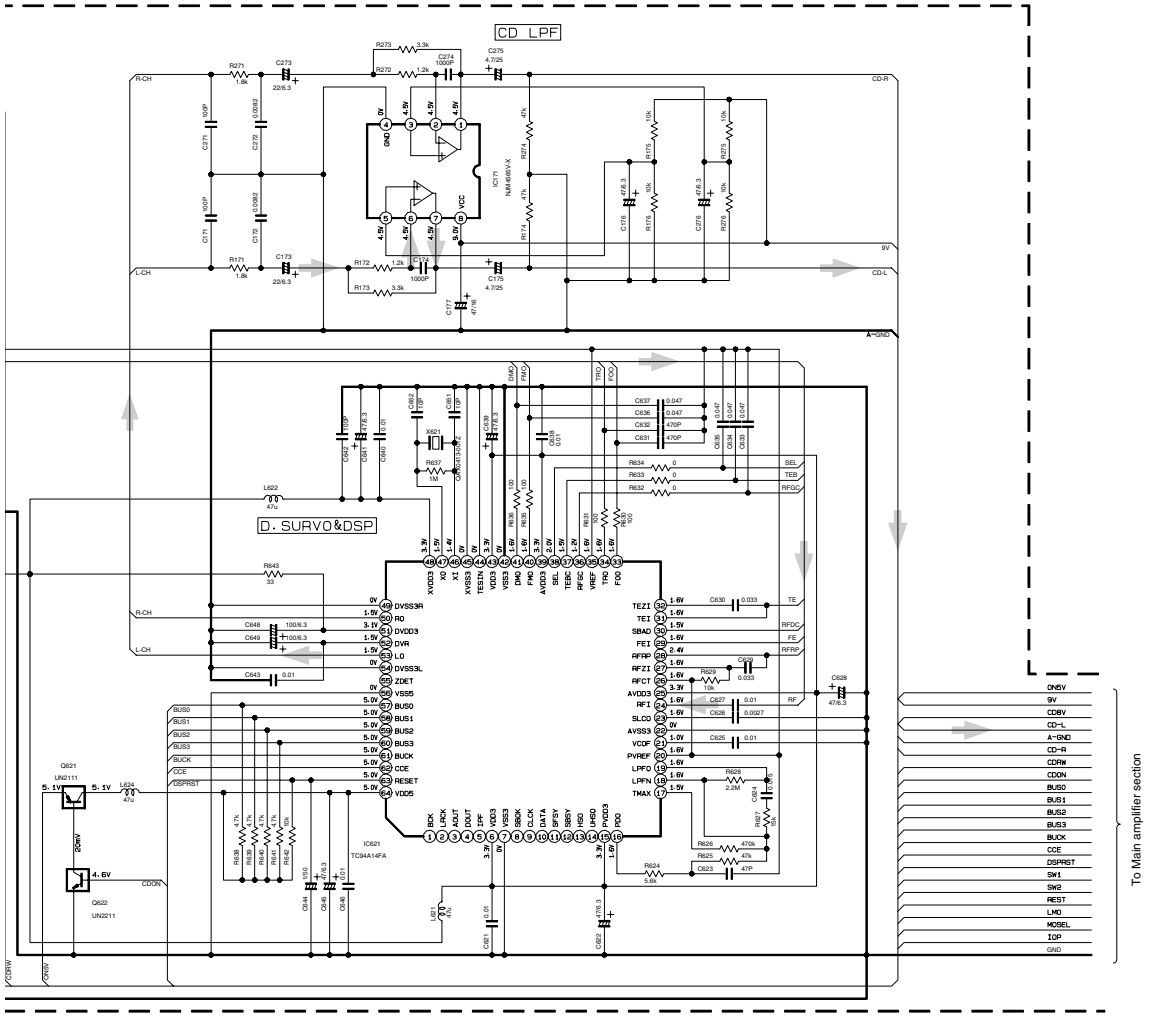
PWB: GEB10070-001AI1 (J/U/C)
GEB10077-001AI1 (E)

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

■ CD servo control section



A B C D



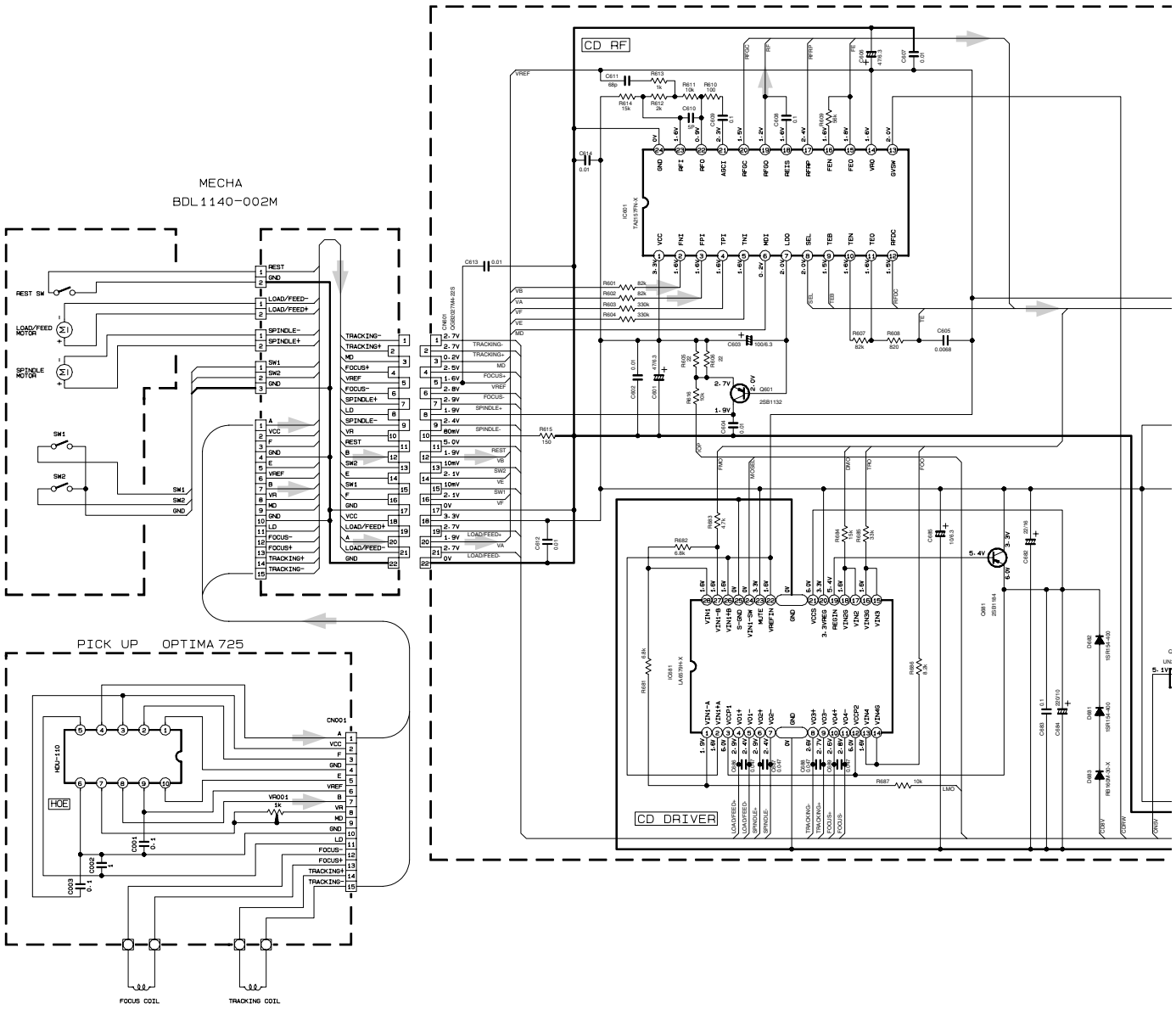
CD signal

	10k / 10k	UN2211
	47k / 47k	UN2213
	10k / 10k	UN2111

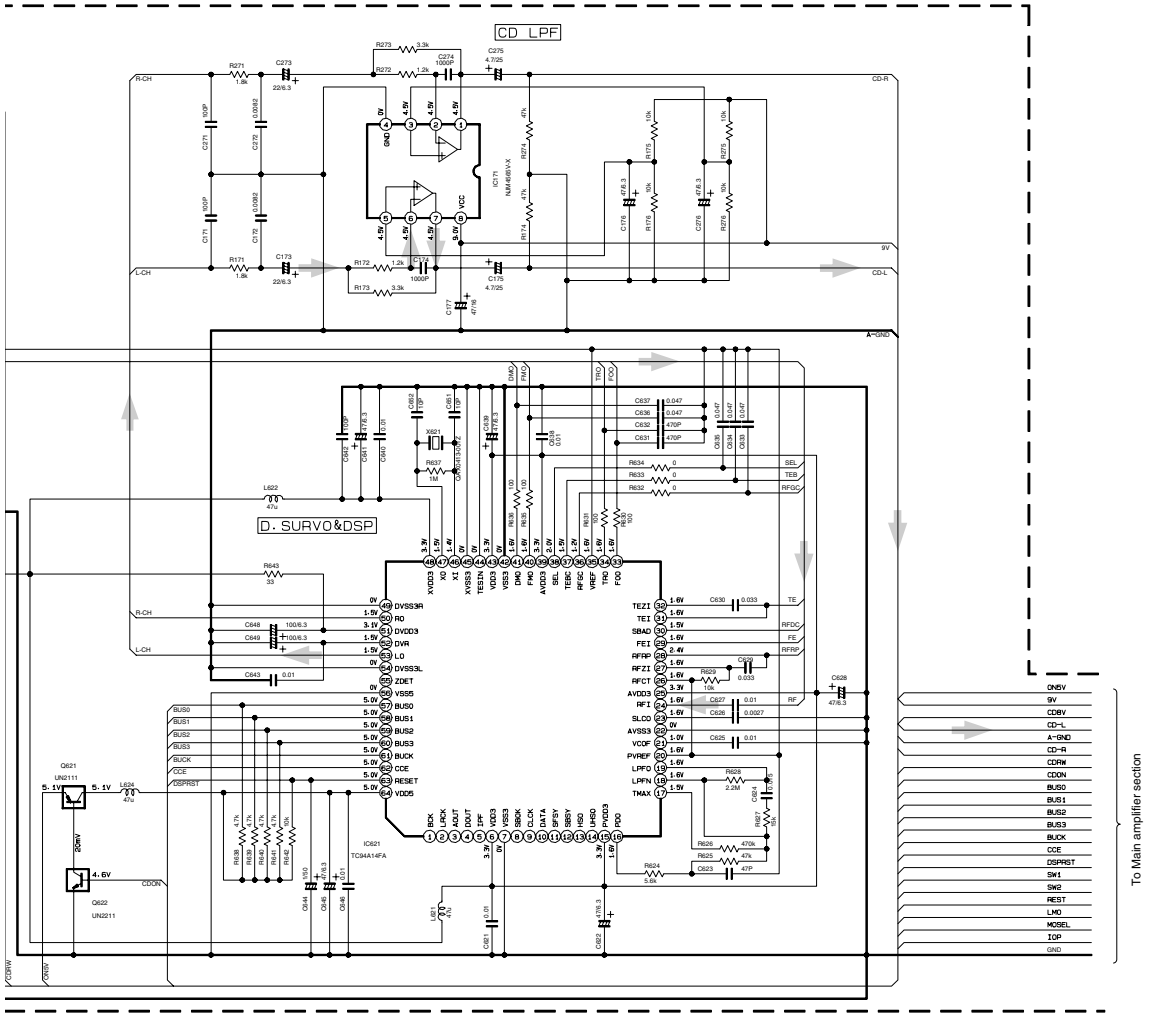
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION --- CD MODE.
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/16W OR 1/10W OR 1/8W ±5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V OR 25V OR 16V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).

■ CD servo control section



A B C D



CD signal

	10k / 10k	UN2211
	47k / 47k	UN2213
	10k / 10k	UN2111

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION --- CD MODE.
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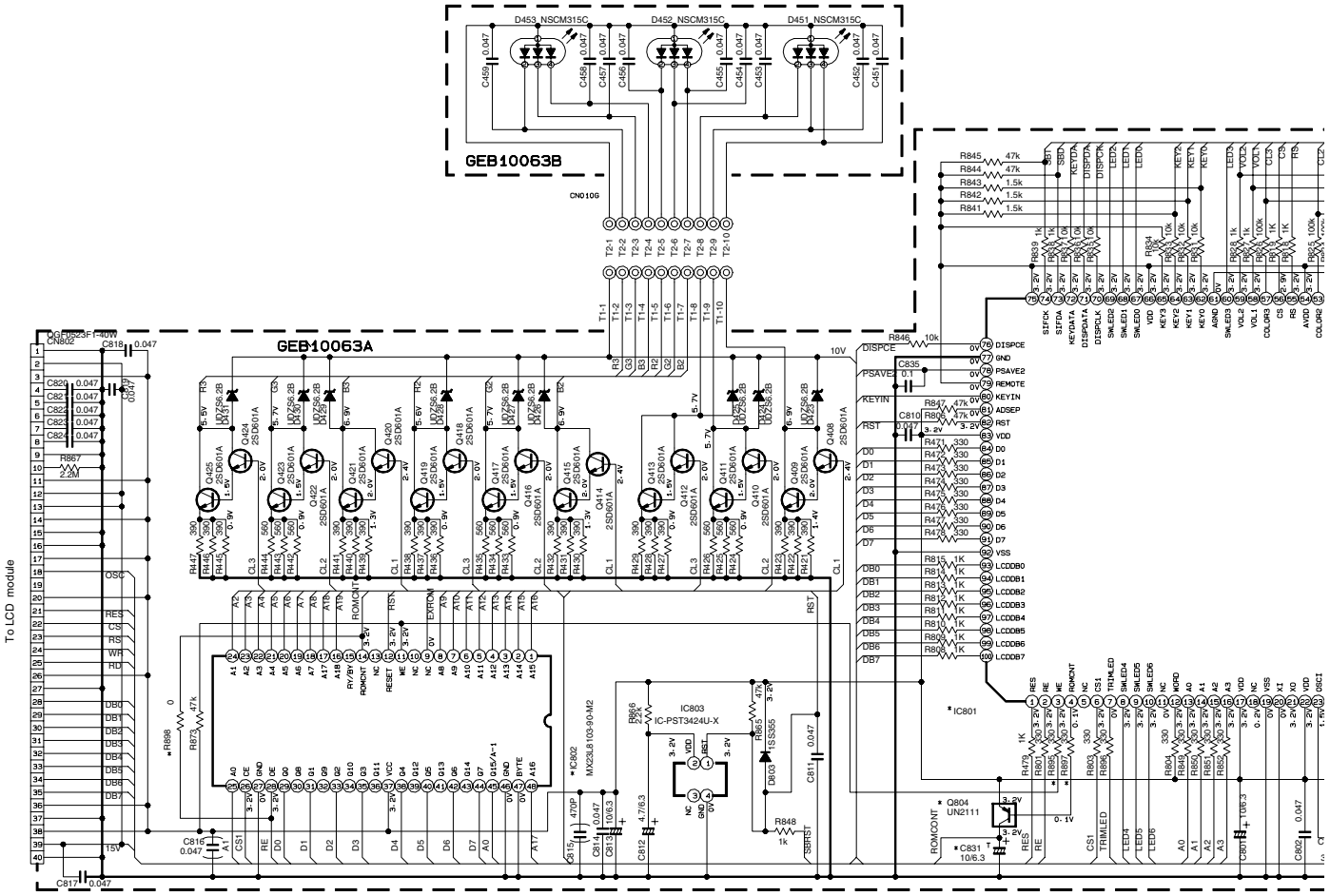
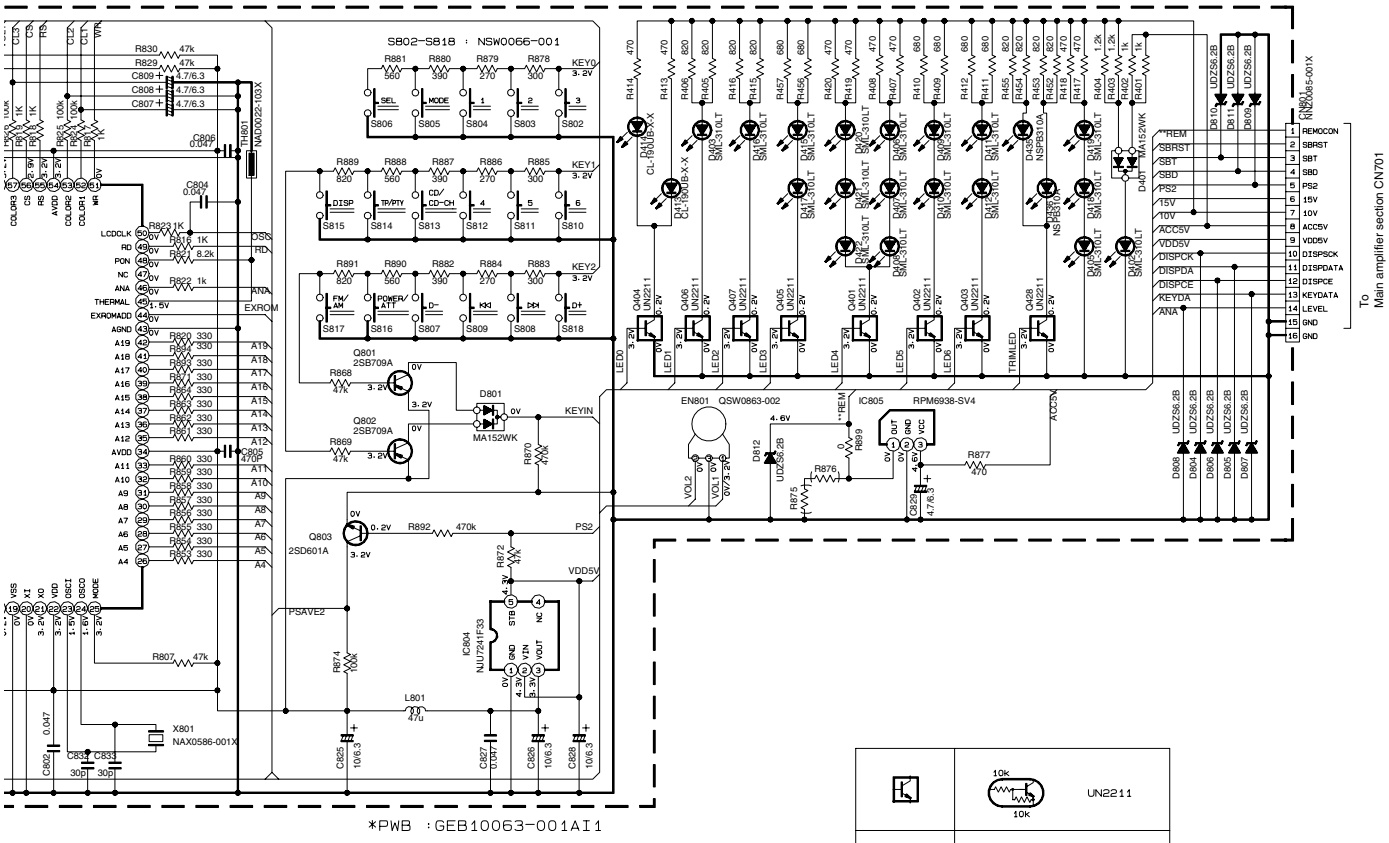
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).

■ LCD & Key control section





*REMARKS		KD-LH1150J/ LH1101E SERIES/ KD-LH1100J/ LH1101U SERIES	KD-LH3150J/ LH3101E SERIES/ KD-LH3100J/ LH3101U SERIES
FLASH ROM	IC802	MX23LB103-90-M2	LH28F160BJHET92
	Q804	NO USED	USED
	C831	NO USED	USED
	R895	NO USED	USED
	R987	NO USED	USED
	R988	NO USED	USED
MICON	IC801	MN102H60KCH	MN102H60KCG

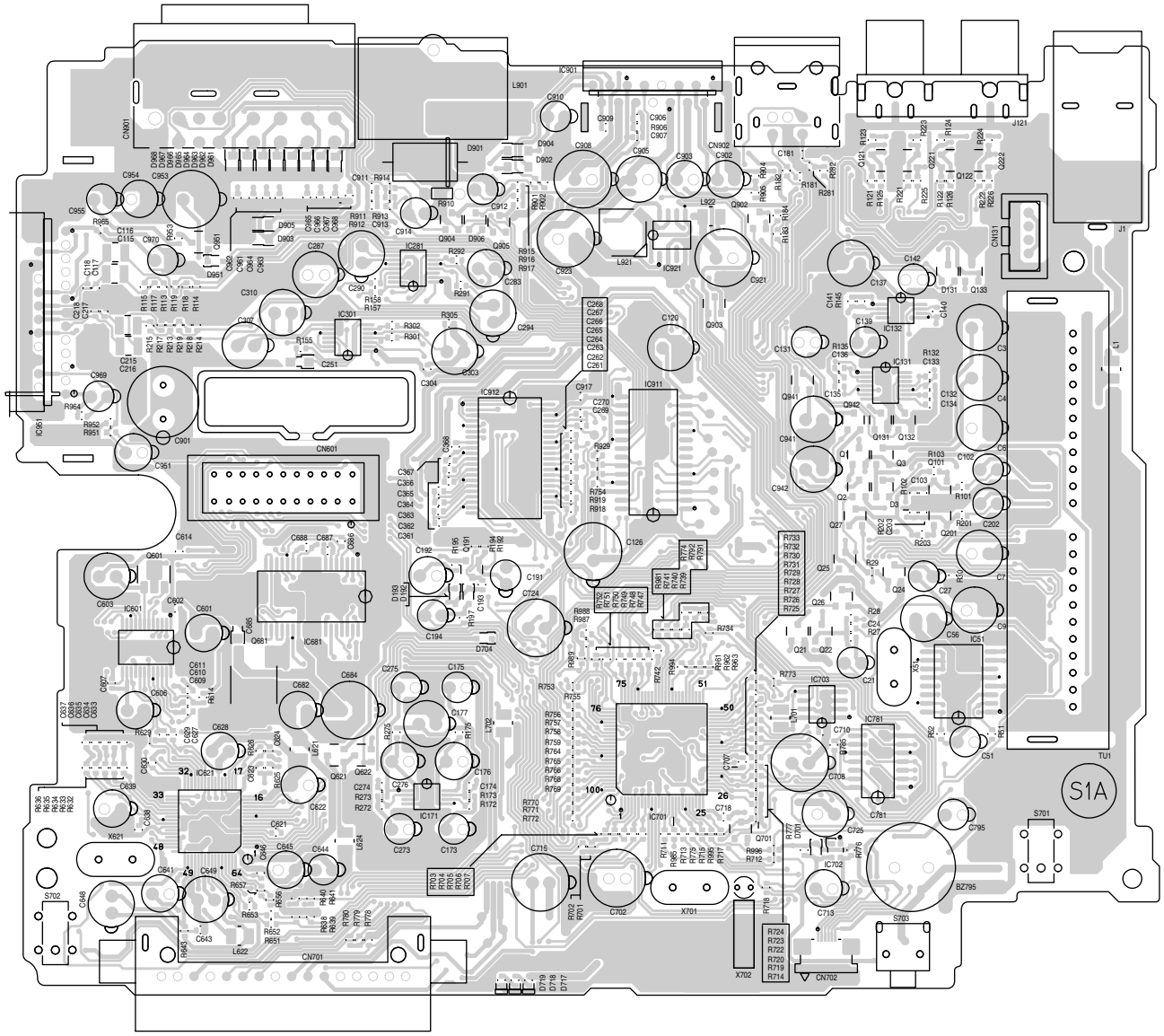
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL.
   CONDITION --- CD MODE.
2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/16W OR 1/10W OR 1/8W ±5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE 50V OR 25V OR 16V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).

Printed circuit boards

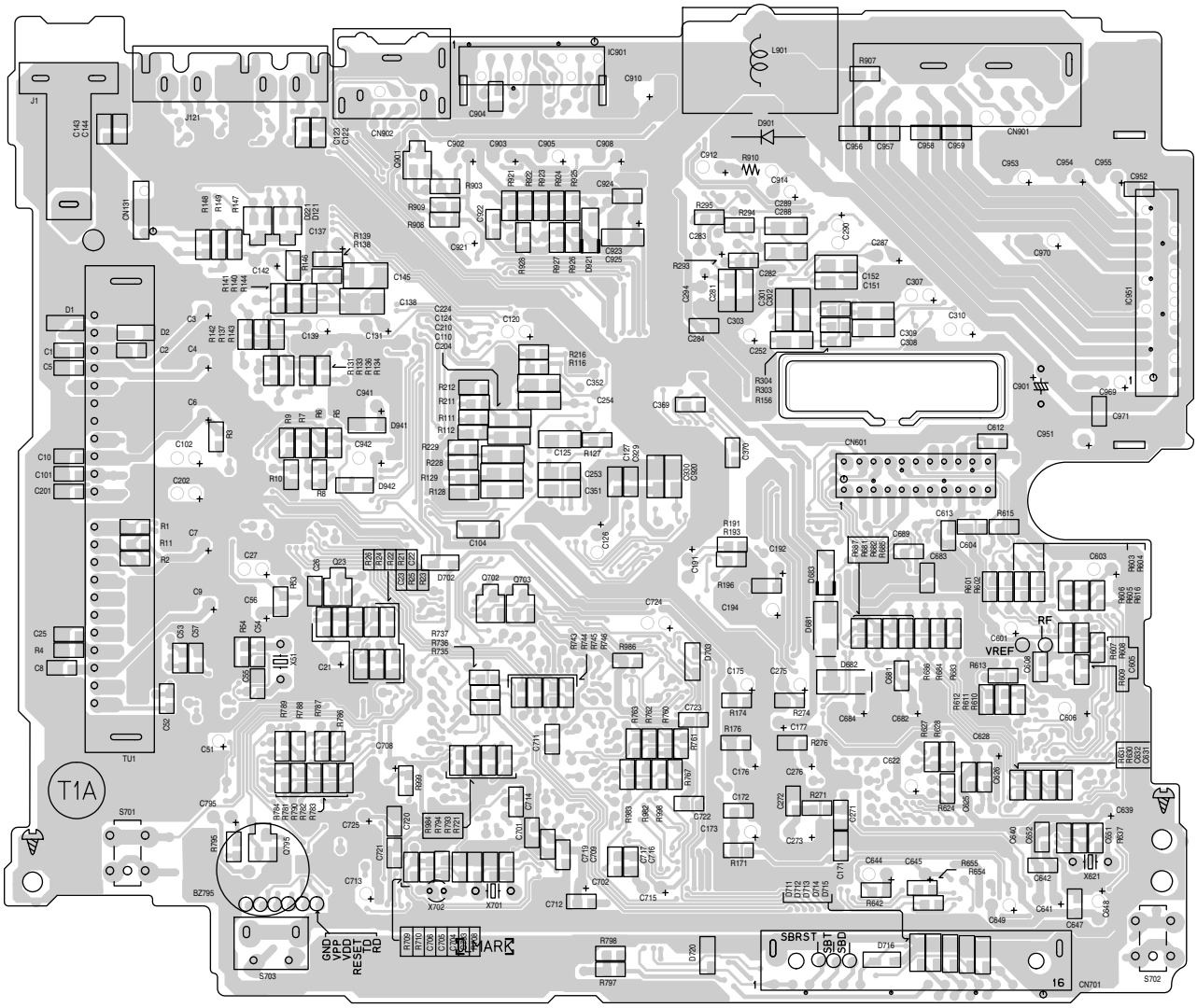
■ Main board

Forward side



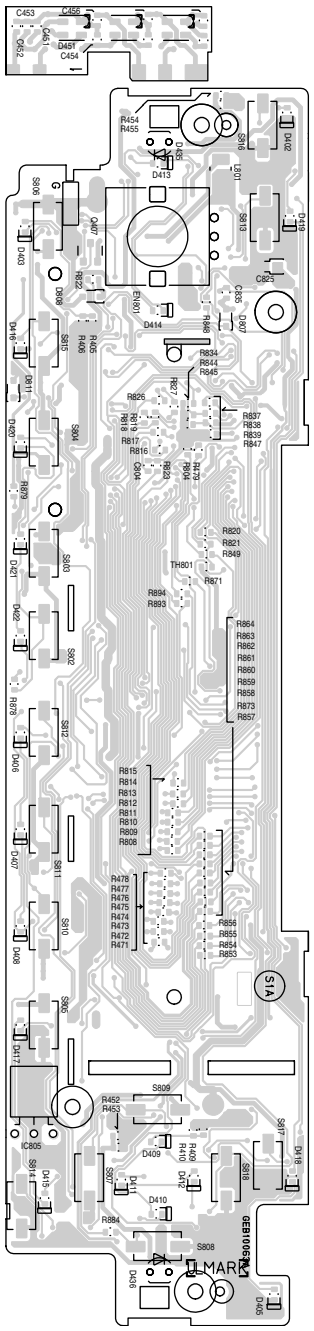
■ Main board

Reverse side

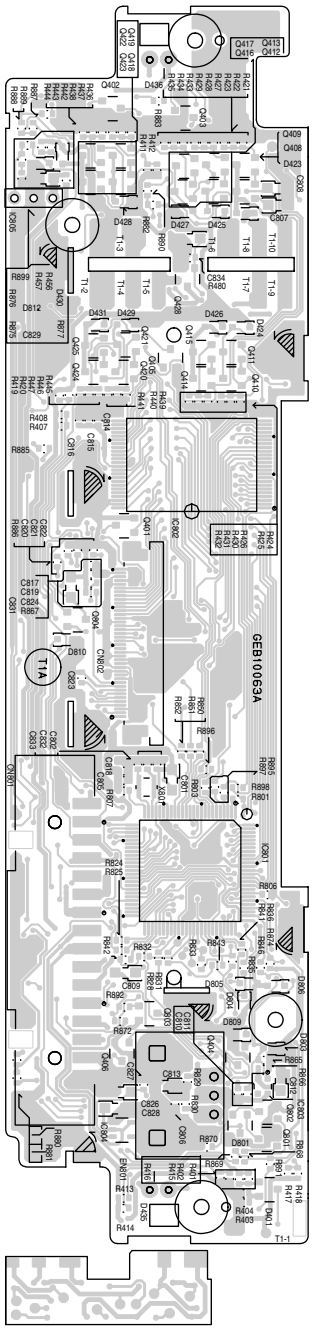


■ Front board

Forward side

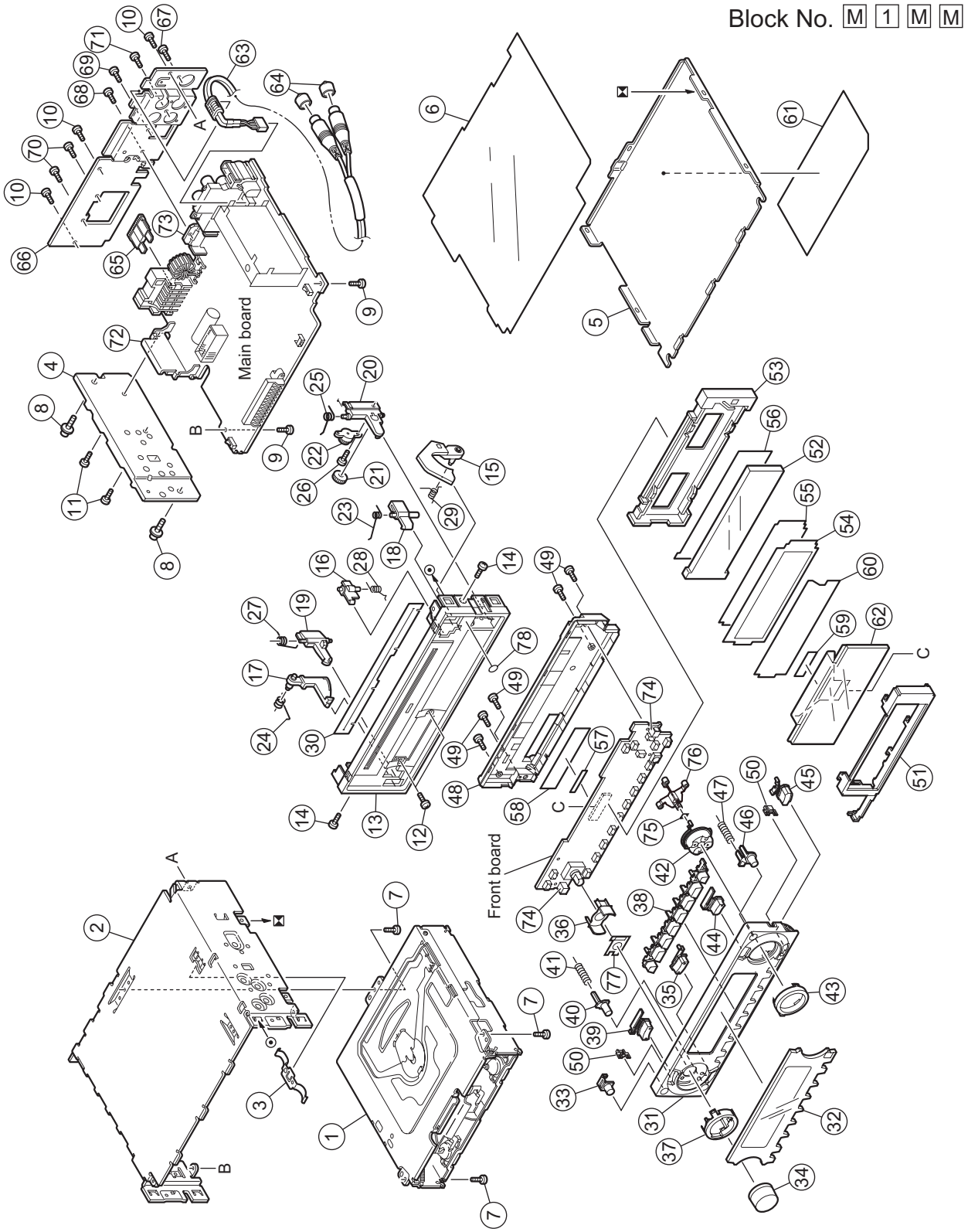


Reverse side



Exploded view of general assembly and parts list

Block No. M 1 M M



General assembly

Block No. [M][1][M][M]

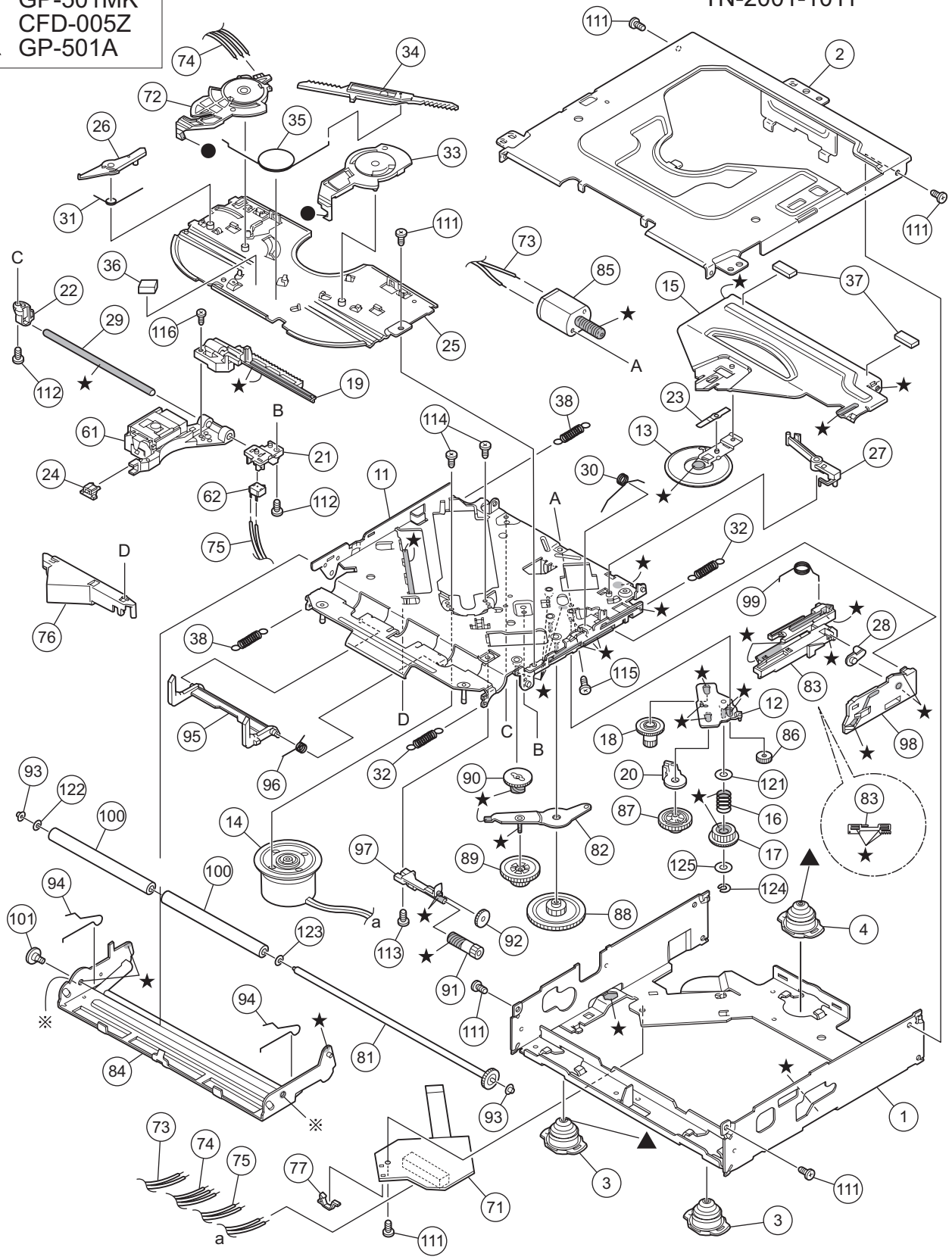
⚠ Symbol No.	Part No.	Part Name	Description	Local
1	----------	CD MECHA		
2	GE10043-210A	TOP CHASSIS		
3	GE40135-001A	EARTH PLATE		
4	GE30568-006A	HEAT SINK		LH1100JD, LH1150CD
4	GE30938-003A	HEAT SINK		LH1150JD
5	GE30393-002A	BOTTOM COVER		
6	FSMA3005-001	INSULATOR		
7	QYSDST2604Z	SCREW	2.6mm x 4mm(x3)	
8	FSKZ4005-001	SCREW	(x2)	
9	QYSDST2606Z	SCREW	2.6mm x 6mm(x2)	
10	QYSDST2604Z	SCREW	2.6mm x 4mm(x3)	
11	QYSDST2612Z	SCREW	2.6mm x 12mm(x2)	LH1100JD, LH1150JD
11	QYSDST2612Z	SCREW	2.6mm x 12mm	LH1150CD
12	QYSDSF2006M	SCREW	2mm x 6mm(x2)	
13	GE30823-002A	FRONT CHASSIS ASSY		
14	QYSDST2004M	MINI SCREW	2mm x 4mm(x2)	
15	GE30827-001A	OPEN LEVER		
16	GE30824-002A	LOCK LEVER(O.L)		
17	GE30826-001A	RELEASE LEVER		
18	GE30829-001A	LOCK LEVER(TOP)		
19	GE30825-001A	LOCK LEVER(L)		
20	GE30828-001A	LOCK LEVER(R)		
21	GE40154-001A	GEAR		
22	QZW0108-002	OIL DAMPER		
23	FSKW4012-002	T.SPRING		
24	VKW5264-005	T.SPRING		
25	GE40155-001A	T.SPRING		
26	QYSDSF2006M	SCREW	2mm x 6mm	
27	VKW5263-002	T.SPRING		
28	GE40157-001A	T.SPRING		
29	GE40153-001A	T.SPRING		
30	GE40156-001A	BLIND		
31	GE10061-003A	FRONT PANEL		
32	GE30917-004A	FINDER ASSY		LH1100JD
32	GE30917-010A	FINDER ASSY		LH1150CD
32	GE30917-003A	FINDER ASSY		LH1150JD
33	GE30832-001A	POWER BUTTON		
34	GE30856-001A	KNOB		
35	GE30859-001A	SEL BUTTON		
36	GE30834-001A	RIM LENS		
37	GE30836-001A	RIM COVER(L)		
38	GE20152-001A	PRESET BUTTON		
39	GE30838-004A	PUSH BUTTON		
40	GE30934-001A	DETACH BUTTON		
41	VKW3001-330	COMP.SPRING		
42	GE30835-001A	NAV BUTTON		
43	GE30858-001A	RIM COVER(R)		
44	GE30860-001A	FM/AM BUTTON		
45	GE30861-002A	EQ BUTTON		
46	GE30914-002A	EJECT BUTTON		
47	VKW3001-330	COMP.SPRING		
48	GE10062-002A	REAR COVER		
49	VKZ4777-001	MINI SCREW	(x5)	
50	GE40158-001A	SIDE LENS	(x2)	
51	GE30837-001A	LCD CASE		
52	LV42850-002A	L.C.D.LENS		
53	LV33404-001A	LENS CASE		
54	LV42884-001A	LCD FILTER		
55	LV42995-001A	LCD FILTER		
56	LV42955-002A	LENS SHEET		
57	LV43084-001A	DOUBLE FACE		
58	LV40848-034A	SPACER(P)		
59	LV40846-036A	SPACER(F)		
60	LV42894-001A	BRIGHT SHEET		
61	GE30780-001A	NAME PLATE		LH1100JD
61	GE30786-001A	NAME PLATE		LH1150CD, LH1150JD
62	QLD0232-001	LCD MODULE		
63	QAM0419-001	SUB-CABLE		LH1150CD, LH1150JD
64	VYTA500-001	PIN CAP	(x2)	LH1150CD, LH1150JD
⚠ 65	QMFZ047-150-T	FUSE	15A	
66	GE30912-006A	REAR BRACKET		
67	QYSDST2606Z	SCREW	2.6mm x 6mm	
68	QYSDST2606Z	SCREW	2.6mm x 6mm	
69	QYSDST2606Z	SCREW	2.6mm x 6mm	
70	QYSDSF2606Z	SCREW	2.6mm x 6mm(x2)	
71	QYSDSF2606Z	SCREW	2.6mm x 6mm	
72	GE40136-001A	IC BRACKET		
73	GE40124-001A	REG BRACKET		
74	GE30857-001A	LED HOLDER	(x2)	
75	FSYH4036-013	SHEET		
76	GE30937-002A	NAVI BASE		
77	GE40174-001A	INSULATOR		
78	FSYH4036-046	SHEET		

CD mechanism assembly and parts list

Grease
★ TNG-87
※ GP-501MK
● CFD-005Z
▲ GP-501A

Block No. M B M M

TN-2001-1011



CD mechanism

Block No. [M][B][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
1	30320101T	FRAME		
2	30320102T	TOP COVER		
3	30320115T	DANPER F		
4	30320116T	DANPER R		
11	303205505T	CHASSIS RIVET		
12	303205503T	CHANGE P. RVT A		
13	303205301T	CLAMPER ASS'Y		
14	303205304T	SPINDLE MOTOR A		
15	30320502T	CLAMPER ARM		
16	30320503T	CHANGE GEAR SPG		
17	30320505T	CHANGE GEAR 2		
18	30320506T	FEED GEAR		
19	30320507T	FEED RACK		
20	30320509T	CHANGE LOCK RAR		
21	30320510T	FEED SW HOLDER		
22	30320511T	PU SHAFT HOLDER		
23	30320513T	CLAMPER SUB SPG		
24	30320514T	FD SUB HOLDER		
25	30320518T	TOP PLATE		
26	30320519T	SELECT LOCK ARM		
27	30320520T	TRIGGER ARM		
28	30320521T	SLIDE HOOK		
29	30320522T	PU SHAFT		
30	30320525T	CLAMPER ARM SPG		
31	30320526T	SELECT L ARM SP		
32	30320538T	SUSPENSION SP R		
33	30320529T	SELECT ARM R		
34	30320530T	LINK PLATE		
35	30320531T	LINK PLATE SPG		
36	30320523T	CUSHION F		
37	30320524T	CUSHION R		
38	30320539T	SUSPENSION SP L		
61	69011614T	PICKUP OPT-725		
62	64180406T	DET SW ESE22		
71	303210301T	CONN PWB ASS'Y		
72	30321002T	MODE SW		
73	30321003T	LOAD MOTOR WIRE		
74	30321005T	MODE SW WIRE		
75	30321009T	SL WIRE		
76	30321011T	WIRE HOLDER		
77	19501403T	WIRE CLUMPER		
81	303211301T	ROLLER SHAFT AS		
82	303211501T	L GEAR PLATE RV		
83	303211302T	LOADING PLATE A		
84	303211502T	LOCK ARM RV ASS		
85	303211303T	L/F MOTOR ASS'Y		
86	30321101T	LOADING GEAR 1		
87	30321102T	LOADING GEAR 2		
88	30321103T	LOADING GEAR 3		
89	30321104T	LOADING GEAR 4		
90	30321105T	LOADING GEAR 5		
91	30321106T	LOADING GEAR 6		
92	30321107T	LOADING GEAR 7		
93	30321111T	ROLLER GUIDE		
94	30321114T	ROLLER GUIDE SP		
95	30321116T	DISC STOPPER AR		
96	30321117T	DISC ST ARM SPG		
97	30321118T	LD GEAR BRACKET		
98	30321125T	L SIDE PLATE		
99	30321131T	LOAD PLATE SPG		
100	30321133T	LDG ROLLER		
101	18211223T	COLLAR SCREW		
111	9P0420031T	SCREW		
112	9P0420041T	TAP.SCREW		
113	9B0320041T	SCREW		
114	9C0117183T	SCREW		
115	9C0120203T	SCREW		
116	9C0317503T	SCREW		
121	9W0130170T	PW 3.5X8X0.3		
122	9W0513060T	HL WASHER		
123	9W0710070T	L WASHER		
124	9E0100152T	E RING		
125	9W0113020T	PW 2.1X4X0.13		

Electrical parts list

Main board

Block No. [0][1][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC131	BU4066BCFV-X	IC		LH1150CD, LH1150JD
IC132	NJM4565V-X	IC		LH1150CD, LH1150JD
IC171	NJM4565V-X	IC		
IC281	BA3220FV-X	IC		LH1150CD, LH1150JD
IC301	BA3220FV-X	IC		LH1150CD, LH1150JD
IC601	TA2157FN-X	RF AMP IC		
IC621	TC94A14FA	CD LSI IC		
IC681	LA6579H-X	BTL DRIVER IC		
IC701	UPD784217AGC204	IC		
IC702	IC-PST9333U-X	IC		
IC703	BR24L16F-W-X	IC		
IC781	HD74HC126FP-X	IC		
IC901	HA13164A	IC		
IC911	TDA7404D-X	IC		
IC912	M62449FP-X	IC		
IC921	NJM2360AM-X	IC.C.M		
IC951	LA47505	IC		
Q1	2SB624/4/-X	TRANSISTOR		
Q2	UN2211-X	TRANSISTOR		
Q3	2SB624/4/-X	TRANSISTOR		
Q121	2SD1781K/QR/-X	TRANSISTOR		
Q122	2SD1781K/QR/-X	TRANSISTOR		
Q131	UN2211-X	TRANSISTOR		LH1150CD, LH1150JD
Q132	UN2211-X	TRANSISTOR		LH1150CD, LH1150JD
Q133	2SC2412K/RS/-X	TRANSISTOR		LH1150CD, LH1150JD
Q191	2SD601A/R/-X	TRANSISTOR		
Q221	2SD1781K/QR/-X	TRANSISTOR		
Q222	2SD1781K/QR/-X	TRANSISTOR		
Q601	2SB1132/QR/-W	CHIP TR. C.M.		
Q621	UN2111-X	TRANSISTOR		
Q622	UN2211-X	TRANSISTOR		
Q681	2SB1184/QR/-X	TRANSISTOR		
Q701	UN2213-X	DIGI TRANSISTOR		
Q702	UN2214-X	TRANSISTOR		
Q703	UN2211-X	TRANSISTOR		
Q795	UN2211-X	TRANSISTOR		
Q901	UN2111-X	TRANSISTOR		
Q902	UN2211-X	TRANSISTOR		
Q903	2SB709A/QR/-X	TRANSISTOR		
Q904	2SD601A/R/-X	TRANSISTOR		
Q941	UN2111-X	TRANSISTOR		
Q942	UN2111-X	TRANSISTOR		
Q951	UN2211-X	TRANSISTOR		
D1	1SS355-X	SI DIODE		
D2	1SS355-X	SI DIODE		
D3	MA152WK-X	DIODE		
D121	MA152WA-X	DIODE		
D131	MA152WK-X	DIODE		LH1150CD, LH1150JD
D192	1SS355-X	SI DIODE		
D193	1SS355-X	SI DIODE		
D221	MA152WA-X	DIODE		
D681	1SR154-400-X	DIODE		
D682	1SR154-400-X	DIODE		
D683	RB160M-30-X	SB DIODE		
D701	1SS355-X	SI DIODE		
D702	1SS355-X	SI DIODE		
D703	1SS355-X	SI DIODE		
D704	1SS355-X	SI DIODE		
D711	UDZS6.2B-X	Z DIODE		
D712	UDZS6.2B-X	Z DIODE		
D713	UDZS6.2B-X	Z DIODE		
D714	UDZS6.2B-X	Z DIODE		
D715	UDZS6.2B-X	Z DIODE		
D716	UDZS6.2B-X	Z DIODE		
D717	SML-310LT/MN/-X	LED		
D718	SML-310LT/MN/-X	LED		
D719	SML-310LT/MN/-X	LED		
D720	UDZS6.2B-X	Z DIODE		
D901	1N5404-TU-15	DIODE		
D904	RB160M-30-X	SB DIODE		
D905	RB160M-30-X	SB DIODE		
D921	RB160M-30-X	SB DIODE		
D941	UDZS11B-X	Z DIODE		
D942	1SS355-X	SI DIODE		
D951	1SS355-X	SI DIODE		
C1	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C2	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C3	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C4	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C6	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	LH1100JD
C6	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C7	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	LH1100JD
C7	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C10	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C25	NCS31HJ-331X	C CAPACITOR	330pF 50V J	
C27	QEKJ1HM-104Z	E CAPACITOR	0.1uF 50V M	
C101	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C102	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C103	NCS31HJ-821X	C CAPACITOR	820pF 50V J	
C104	NBE21CM-105X	TA E CAPACITOR	1uF 16V M	
C110	NBE21CM-105X	TA E CAPACITOR	1uF 16V M	
C115	NFV81CM-105X	TS E. CAPACITOR	1uF 16V M	
C116	NFV81CM-105X	TS E. CAPACITOR	1uF 16V M	
C117	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C118	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C120	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C122	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C123	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C124	NBE21CM-105X	TA E CAPACITOR	1uF 16V M	
C125	NBE21CM-225X	TA E CAPACITOR	2.2uF 16V M	
C126	QERF1CM-107Z	E CAPACITOR	100uF 16V M	
C127	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C131	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	LH1150CD, LH1150JD
C132	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	LH1150CD, LH1150JD
C133	NCB31EK-273X	C CAPACITOR	0.027uF 25V K	LH1150CD, LH1150JD
C134	NCB31EK-273X	C CAPACITOR	0.027uF 25V K	LH1150CD, LH1150JD
C135	NCB31HK-562X	C CAPACITOR	5600pF 50V K	LH1150CD, LH1150JD
C136	NCB31EK-123X	C CAPACITOR	0.012uF 25V K	LH1150CD, LH1150JD
C137	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	LH1150CD, LH1150JD
C138	NBE40JM-106X	TA E CAPACITOR	10uF 6.3V M	LH1150CD, LH1150JD
C139	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	LH1150CD, LH1150JD
C140	NCB31HK-682X	C CAPACITOR	6800pF 50V K	LH1150CD, LH1150JD
C141	NCB31EK-823X	C CAPACITOR	0.082uF 25V K	LH1150CD, LH1150JD
C142	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	LH1150CD, LH1150JD
C143	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	LH1150CD, LH1150JD
C144	NCS31HJ-101X	C CAPACITOR	100pF 50V J	LH1150CD, LH1150JD
C151	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	LH1150CD, LH1150JD
C152	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	LH1150CD, LH1150JD
C171	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C172	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C173	QERF0JM-226Z	E CAPACITOR	22uF 6.3V M	
C174	NCB31HK-102X	C CAPACITOR	1000pF 50V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C175	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C176	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C177	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C181	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C191	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C192	QERF1CM-226Z	E CAPACITOR	22uF 16V M	
C193	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C194	QERF1HM-224Z	E CAPACITOR	0.22uF 50V M	
C201	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C202	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C203	NCS31HJ-821X	C CAPACITOR	820pF 50V J	
C204	NBE21CM-105X	TA E CAPACITOR	1uF 16V M	
C210	NBE21CM-105X	TA E CAPACITOR	1uF 16V M	
C215	NFV81CM-105X	TS E. CAPACITOR	1uF 16V M	
C216	NFV81CM-105X	TS E. CAPACITOR	1uF 16V M	
C217	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C218	NCB31HK-331X	C CAPACITOR	330pF 50V K	
C224	NBE21CM-105X	TA E CAPACITOR	1uF 16V M	
C251	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	LH1150CD, LH1150JD
C252	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	LH1150CD, LH1150JD
C253	NBE21CM-225X	TA E CAPACITOR	2.2uF 16V M	
C254	NBE21CM-225X	TA E CAPACITOR	2.2uF 16V M	
C261	NCB31CK-823X	C CAPACITOR	0.082uF 16V K	
C262	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C263	NCB31EK-273X	C CAPACITOR	0.027uF 25V K	
C264	NCB31CK-393X	C CAPACITOR	0.039uF 16V K	
C265	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C266	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	
C267	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C268	NCB31HK-682X	C CAPACITOR	6800pF 50V K	
C269	NCB31HK-182X	C CAPACITOR	1800pF 50V K	
C270	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C271	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C272	NCB31HK-822X	C CAPACITOR	8200pF 50V K	
C273	QERF0JM-226Z	E CAPACITOR	22uF 6.3V M	
C274	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C275	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C276	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C281	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	LH1150CD, LH1150JD
C282	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	LH1150CD, LH1150JD
C283	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	LH1150CD, LH1150JD
C284	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	LH1150CD, LH1150JD
C287	QERF1AM-107Z	E CAPACITOR	100uF 10V M	LH1150CD, LH1150JD
C288	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	
C289	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	
C290	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	LH1150CD, LH1150JD
C294	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	LH1150CD, LH1150JD
C301	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	LH1150CD, LH1150JD
C302	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	LH1150CD, LH1150JD
C303	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	LH1150CD, LH1150JD
C304	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	LH1150CD, LH1150JD
C307	QERF1AM-107Z	E CAPACITOR	100uF 10V M	LH1150CD, LH1150JD
C308	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	
C309	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	
C310	QERF1AM-107Z	E CAPACITOR	100uF 10V M	LH1150CD, LH1150JD
C351	NBE21CM-225X	TA E CAPACITOR	2.2uF 16V M	
C352	NBE21CM-225X	TA E CAPACITOR	2.2uF 16V M	
C361	NCB31CK-823X	C CAPACITOR	0.082uF 16V K	
C362	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C363	NCB31EK-273X	C CAPACITOR	0.027uF 25V K	
C364	NCB31CK-393X	C CAPACITOR	0.039uF 16V K	
C365	NCB31HK-123X	C CAPACITOR	0.012uF 50V K	
C366	NCB31HK-153X	C CAPACITOR	0.015uF 50V K	
C367	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C368	NCB31HK-682X	C CAPACITOR	6800pF 50V K	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C369	NCB31HK-182X	C CAPACITOR	1800pF 50V K	
C370	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C601	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C602	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C603	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C604	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C605	NCB31HK-682X	C CAPACITOR	6800pF 50V K	
C606	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C607	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C608	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C609	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C610	NCS31HJ-5R0X	C CAPACITOR	5pF 50V J	
C611	NCS31HJ-680X	C CAPACITOR	68pF 50V J	
C612	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C613	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C614	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C621	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C622	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C623	NCS31HJ-470X	C CAPACITOR	47pF 50V J	
C624	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	
C625	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C626	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C627	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C628	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C629	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C630	NCB31EK-333X	C CAPACITOR	0.033uF 25V K	
C631	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C632	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C633	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C634	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C635	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C636	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C637	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C638	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C639	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C640	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C641	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C642	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C643	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C644	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C645	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C646	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C647	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C648	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C649	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C651	NCS31HJ-100X	C CAPACITOR	10pF 50V J	
C652	NCS31HJ-100X	C CAPACITOR	10pF 50V J	
C682	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C683	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C684	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C685	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C686	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C687	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C688	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C689	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C701	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C702	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C703	NCS31HJ-8R0X	C CAPACITOR	8pF 50V J	
C704	NCS31HJ-270X	C CAPACITOR	27pF 50V J	
C705	NCS31HJ-270X	C CAPACITOR	27pF 50V J	
C706	NCS31HJ-220X	C CAPACITOR	22pF 50V J	
C707	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C708	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C709	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C710	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C711	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C713	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C714	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C715	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C716	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C717	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C724	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C725	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C768	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C769	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C781	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C795	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C901	QEZ0625-338	E CAPACITOR	3300uF	

⚠ Symbol No.	Part No.	Part Name	Description	Local
C902	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C903	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C904	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C905	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	LH1100JD
C905	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C906	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C907	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C908	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C910	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C911	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C912	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C914	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C917	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C920	NBE21CM-475X	TA E CAPACITOR	4.7uF 16V M	
C921	QERF1AM-107Z	E CAPACITOR	100uF 10V M	LH1100JD
C921	QEKJ1AM-227Z	E CAPACITOR	220uF 10V M	
C922	NCB31HK-272X	C CAPACITOR	2700pF 50V K	
C923	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C924	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C929	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C930	NBE21AM-106X	TA E CAPACITOR	10uF 10V M	
C941	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C942	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C945	NCB31CK-104X	C CAPACITOR	0.01uF 16V K	LH1100JD
C945	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	LH1150CD, LH1150JD
C951	QERF1CM-476Z	E CAPACITOR	47uF 16V M	
C952	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C953	QEKJ1CM-107Z	E CAPACITOR	100uF 16V M	
C954	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C955	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C956	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C957	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C958	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C959	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
C961	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C962	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C963	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C964	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C965	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C966	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C967	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C968	NCS31HJ-101X	C CAPACITOR	100pF 50V J	
C969	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C970	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
R1	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R2	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R3	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R4	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R5	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R6	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R7	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R8	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R9	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R10	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R11	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R30	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R101	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R102	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R111	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R113	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R114	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R115	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	LH1100JD
R115	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	LH1150CD, LH1150JD
R116	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	LH1150CD, LH1150JD
R117	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	LH1150CD, LH1150JD
R118	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	LH1150CD, LH1150JD
R119	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	LH1100JD
R119	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	LH1150CD, LH1150JD
R121	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R122	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R123	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R124	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R125	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R126	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R127	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	
R129	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R131	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	LH1150CD, LH1150JD
R132	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	LH1150CD, LH1150JD
R133	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	LH1150CD, LH1150JD
R134	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	LH1150CD, LH1150JD
R135	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	LH1150CD, LH1150JD
R136	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	LH1150CD, LH1150JD
R137	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	LH1150CD, LH1150JD
R138	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	LH1150CD, LH1150JD
R139	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	LH1150CD, LH1150JD
R140	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	LH1150CD, LH1150JD
R141	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	LH1150CD, LH1150JD
R142	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	LH1150CD, LH1150JD
R143	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	LH1150CD, LH1150JD
R144	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	LH1150CD, LH1150JD
R145	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	LH1150CD, LH1150JD
R146	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	LH1150CD, LH1150JD
R147	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	LH1150CD, LH1150JD
R148	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	LH1150CD, LH1150JD
R149	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	LH1150CD, LH1150JD
R171	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R172	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R173	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R174	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R175	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R176	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R182	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R183	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R184	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R191	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R192	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J	
R193	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R194	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R195	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R196	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R197	NRSA63J-274X	MG RESISTOR	270kΩ 1/16W J	
R201	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R202	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R211	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R213	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R214	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R215	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	LH1100JD
R215	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	LH1150CD, LH1150JD
R216	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	LH1150CD, LH1150JD
R217	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	LH1150CD, LH1150JD
R218	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	LH1150CD, LH1150JD
R219	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	LH1100JD
R219	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	LH1150CD, LH1150JD
R221	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R222	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R223	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R224	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R225	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R226	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R229	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R271	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R272	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R273	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R274	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R275	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R276	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R282	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R291	NRSA63J-243X	MG RESISTOR	24kΩ 1/16W J	LH1150CD, LH1150JD
R292	NRSA63J-243X	MG RESISTOR	24kΩ 1/16W J	LH1150CD, LH1150JD
R293	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	LH1150CD, LH1150JD
R294	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	LH1150CD, LH1150JD
R295	NRSA63J-154X	MG RESISTOR	150kΩ 1/16W J	LH1150CD, LH1150JD
R301	NRSA63J-243X	MG RESISTOR	24kΩ 1/16W J	LH1150CD, LH1150JD
R302	NRSA63J-243X	MG RESISTOR	24kΩ 1/16W J	LH1150CD, LH1150JD
R303	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	LH1150CD, LH1150JD
R304	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	LH1150CD, LH1150JD
R305	NRSA63J-154X	MG RESISTOR	150kΩ 1/16W J	LH1150CD, LH1150JD
R601	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R602	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R603	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R604	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R605	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R606	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R607	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R608	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R609	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R610	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R611	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R612	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R613	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R614	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R615	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J	
R616	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R624	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R625	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R626	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R627	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R628	NRSA63J-155X	MG RESISTOR	1.5MΩ 1/16W J	
R629	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R630	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R631	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R632	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R633	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R634	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R635	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R636	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R637	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R638	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R639	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R640	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R641	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R642	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R643	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J	
R651	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R652	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R653	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R654	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R655	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R656	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R657	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R681	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R682	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R683	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R684	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R685	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R686	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R687	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R701	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R702	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R703	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R704	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R705	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R706	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R708	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R709	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R710	NRSA63J-106X	MG RESISTOR	10MΩ 1/16W J	
R711	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R712	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R713	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R714	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R717	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R718	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R719	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R720	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R721	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R722	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R724	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R725	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R726	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R727	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R728	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R729	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R730	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R731	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R732	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R733	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R734	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R735	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R736	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R737	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R739	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R742	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R743	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R744	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R745	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R746	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R747	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R748	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R749	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R750	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R751	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R752	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R753	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R754	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R755	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R756	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R757	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	LH1150CD, LH1150JD
R758	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	LH1150CD, LH1150JD
R759	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	LH1150CD, LH1150JD
R760	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R762	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R764	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R765	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R766	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R767	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R768	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R769	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R770	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R771	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R772	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R773	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R774	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R775	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R776	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R777	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R778	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R779	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R780	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R781	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R782	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R783	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R784	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R785	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R786	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R787	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R788	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R789	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R790	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R791	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R792	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R794	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R795	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R797	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R798	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R901	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J	
R902	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R903	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R904	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R905	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R906	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R908	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
R909	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R910	QRE142J-102X	C RESISTOR	1kΩ 1/4W J	
R911	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R912	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R913	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R914	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R915	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R917	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R918	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R919	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R921	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R922	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R923	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R924	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R925	NRSA63J-181X	MG RESISTOR	180Ω 1/16W J	
R926	NRSA63D-473X	MG RESISTOR	47kΩ 1/16W D	
R927	NRSA63D-472X	MG RESISTOR	4.7kΩ 1/16W D	
R928	NRSA63D-273X	MG RESISTOR	27kΩ 1/16W D	
R929	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R951	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R953	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R954	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R955	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R961	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R962	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R963	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R981	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R982	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R984	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R985	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R986	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R987	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	LH1150CD, LH1150JD
R995	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R996	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R998	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R999	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L1	NQL114K-100X	COIL	10uH K	
L621	NQL114K-470X	INDUCITOR	47uH K	
L622	NQL114K-470X	INDUCITOR	47uH K	
L624	NQL114K-470X	INDUCITOR	47uH K	
L701	NQL114K-470X	INDUCITOR	47uH K	
L702	NQL114K-470X	INDUCITOR	47uH K	
L901	QQR1378-001	CHOKE COIL		
L921	NQLZ007-151X	COIL	150uH	
L922	NQL114M-4R7X	COIL	4.7uH M	
BZ795	QAN0023-001Z	BUZZER		
CN131	QGA2006C1-04	CONNECTOR	W-B (1-4)	LH1150CD, LH1150JD
CN601	QGB2027M4-22S	CONNECTOR	B-B (1-22)	
CN701	QNZ0605-001	CAR CONNECTOR		
CN901	QNZ0611-001	16P CONNECTOR		
CN902	QNZ0095-001	CONNECTOR		
J1	QNB0100-002	CAR ANT JACK		
J121	QNN0490-001	PIN JACK		
S701	QSW0451-001	DETECT SW		
S702	QSW0451-001	DETECT SW		
S703	QSQ1A11-V06Z	TACT SW I/M		
S703	QSQ1A11-V06Z	TACT SW I/M		LH1100JD,LH1150JD

⚠ Symbol No.	Part No.	Part Name	Description	Local
TU1	QAU0204-002	TUNER		
X621	QAX0413-001Z	CRYSTAL		
X701	QAX0617-001Z	CRYSTAL		
X702	QAX0401-001	CRYSTAL		

Front board

Block No. [0][2][0][0]

⚠ Symbol No.	Part No.	Part Name	Description	Local
IC801	MN102H60KCH1	IC		
IC802	MX23L8103-90-M2	IC		
IC803	IC-PST3424U-X	IC		
IC804	NJU7241F33-X	IC		
IC805	RPM6938-SV4	REMOCON RCV		
Q401	UN2211-X	TRANSISTOR		
Q402	UN2211-X	TRANSISTOR		
Q403	UN2211-X	TRANSISTOR		
Q404	UN2211-X	TRANSISTOR		
Q405	UN2211-X	TRANSISTOR		
Q406	UN2211-X	TRANSISTOR		
Q407	UN2211-X	TRANSISTOR		
Q408	2SD601A/R/-X	TRANSISTOR		
Q409	2SD601A/R/-X	TRANSISTOR		
Q410	2SD601A/R/-X	TRANSISTOR		
Q411	2SD601A/R/-X	TRANSISTOR		
Q412	2SD601A/R/-X	TRANSISTOR		
Q413	2SD601A/R/-X	TRANSISTOR		
Q414	2SD601A/R/-X	TRANSISTOR		
Q415	2SD601A/R/-X	TRANSISTOR		
Q416	2SD601A/R/-X	TRANSISTOR		
Q417	2SD601A/R/-X	TRANSISTOR		
Q418	2SD601A/R/-X	TRANSISTOR		
Q419	2SD601A/R/-X	TRANSISTOR		
Q420	2SD601A/R/-X	TRANSISTOR		
Q421	2SD601A/R/-X	TRANSISTOR		
Q422	2SD601A/R/-X	TRANSISTOR		
Q423	2SD601A/R/-X	TRANSISTOR		
Q424	2SD601A/R/-X	TRANSISTOR		
Q425	2SD601A/R/-X	TRANSISTOR		
Q428	2SD601A/R/-X	TRANSISTOR		
Q801	2SB709A/QR/-X	TRANSISTOR		
Q802	2SB709A/QR/-X	TRANSISTOR		
Q803	2SD601A/R/-X	TRANSISTOR		
D401	MA152WK-X	DIODE		
D402	SML-310LT/MN/-X	LED		
D403	SML-310LT/MN/-X	LED		
D405	SML-310LT/MN/-X	LED		
D406	SML-310LT/MN/-X	LED		
D407	SML-310LT/MN/-X	LED		
D408	SML-310LT/MN/-X	LED		
D409	SML-310LT/MN/-X	LED		
D410	SML-310LT/MN/-X	LED		
D411	SML-310LT/MN/-X	LED		
D412	SML-310LT/MN/-X	LED		
D413	SML310BAT/JKL-X	LED		
D414	SML310BAT/JKL-X	LED		
D415	SML-310LT/MN/-X	LED		
D416	SML-310LT/MN/-X	LED		
D417	SML-310LT/MN/-X	LED		
D418	SML-310LT/MN/-X	LED		
D419	SML-310LT/MN/-X	LED		
D420	SML-310LT/MN/-X	LED		
D421	SML-310LT/MN/-X	LED		
D422	SML-310LT/MN/-X	LED		
D423	UDZS6.2B-X	Z DIODE		
D424	UDZS6.2B-X	Z DIODE		
D425	UDZS6.2B-X	Z DIODE		
D426	UDZS6.2B-X	Z DIODE		
D427	UDZS6.2B-X	Z DIODE		
D428	UDZS6.2B-X	Z DIODE		
D429	UDZS6.2B-X	Z DIODE		

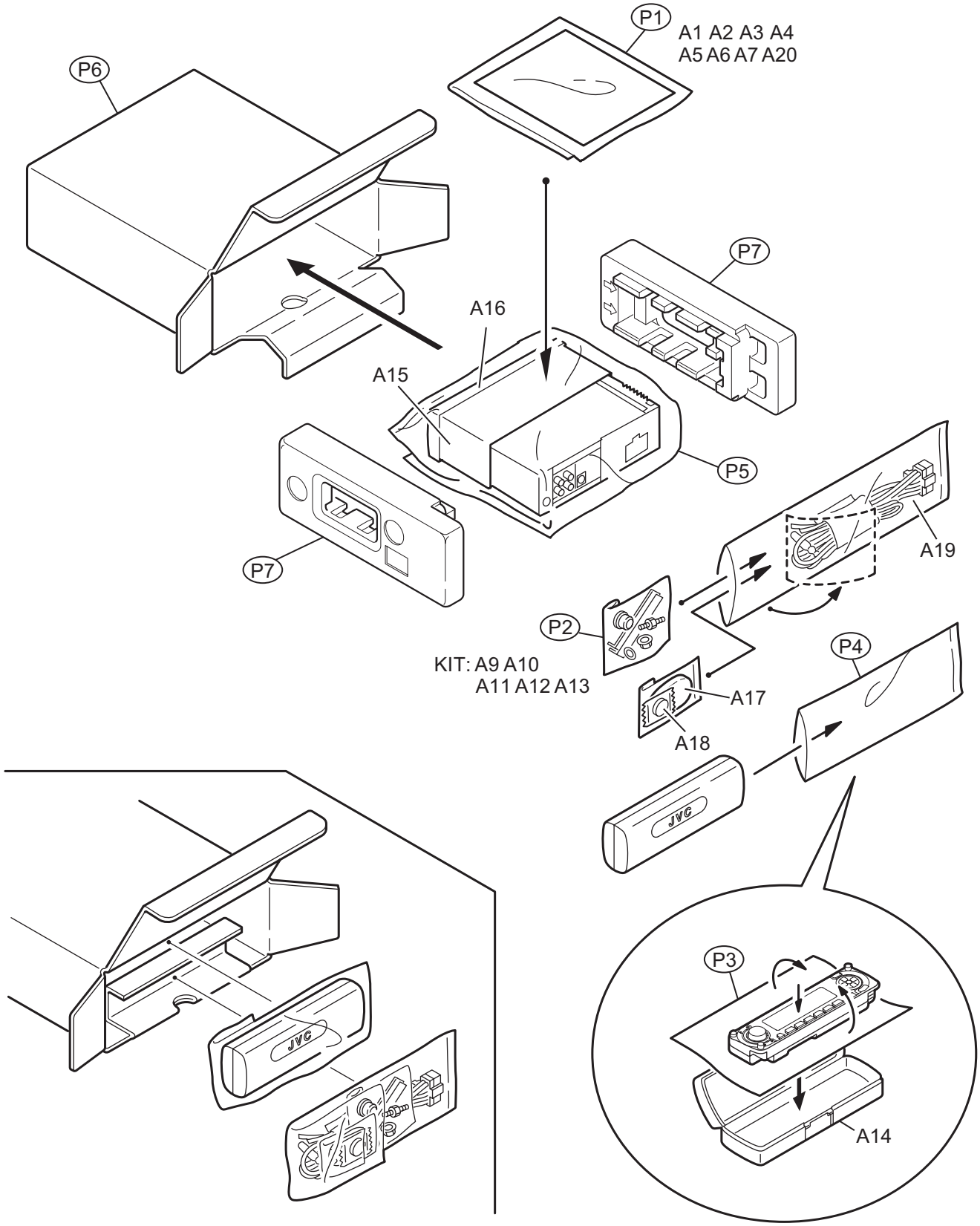
⚠ Symbol No.	Part No.	Part Name	Description	Local
D430	UDZS6.2B-X	Z DIODE		
D431	UDZS6.2B-X	Z DIODE		
D435	NSPB310A/WRST/	LED		
D436	NSPB310A/WRST/	LED		
D451	NSCM315C-W	LED		
D452	NSCM315C-W	LED		
D453	NSCM315C-W	LED		
D801	MA152WK-X	DIODE		
D803	1SS355-X	SI DIODE		
D804	UDZS6.2B-X	Z DIODE		
D805	UDZS6.2B-X	Z DIODE		
D806	UDZS6.2B-X	Z DIODE		
D807	UDZS6.2B-X	Z DIODE		
D808	UDZS6.2B-X	Z DIODE		
D809	UDZS6.2B-X	Z DIODE		
D810	UDZS6.2B-X	Z DIODE		
D811	UDZS6.2B-X	Z DIODE		
D812	UDZS6.2B-X	Z DIODE		
C451	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C452	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C453	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C454	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C455	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C456	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C457	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C458	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C459	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C801	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C802	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C804	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C805	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C806	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C807	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C808	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C809	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C810	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C811	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C812	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C813	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C814	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C815	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C816	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
C817	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C818	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C819	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C820	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C821	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C822	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C823	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C824	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C825	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C826	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C827	NCB31EK-473X	C CAPACITOR	0.047uF 25V K	
C828	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C829	NBE20JM-475X	TA E CAPACITOR	4.7uF 6.3V M	
C832	NDC31HJ-300X	C CAPACITOR	30pF 50V J	
C833	NDC31HJ-300X	C CAPACITOR	30pF 50V J	
C834	NBE21CM-105X	TA E CAPACITOR	1uF 16V M	
C835	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	
R401	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R402	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R403	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R404	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R405	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R406	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R407	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R408	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R409	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R410	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R411	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R412	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R413	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R414	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R415	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R416	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R417	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R418	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R419	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R420	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R421	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R422	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R423	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R424	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R425	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R426	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R427	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R428	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R429	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R430	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R431	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R432	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R433	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R434	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R435	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R436	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R437	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R438	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R439	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R440	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R441	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R442	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R443	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R444	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R445	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R446	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R447	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R452	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R453	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R454	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R455	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R456	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R457	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
R471	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R472	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R473	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R474	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R475	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R476	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R477	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R478	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R479	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R801	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R803	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R804	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R806	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R807	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R808	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R809	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R810	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R811	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R812	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R813	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R814	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R815	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R816	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R817	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R818	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R819	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R820	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R821	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R822	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R823	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R824	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R825	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R826	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R827	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R828	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R829	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R830	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R831	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R832	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R833	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R834	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R835	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

⚠ Symbol No.	Part No.	Part Name	Description	Local
R836	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R837	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R838	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R839	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R841	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R842	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R843	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R844	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R845	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R846	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R847	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R848	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R849	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R850	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R851	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R852	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R853	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R854	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R855	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R856	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R857	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R858	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R859	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R860	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R861	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R862	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R863	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R864	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R865	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R866	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R867	NRSA63J-225X	MG RESISTOR	2.2MΩ 1/16W J	
R868	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R869	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R870	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R871	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R872	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R873	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R874	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R877	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R878	NRSA63J-301X	MG RESISTOR	300Ω 1/16W J	
R879	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R880	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R881	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R882	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R883	NRSA63J-301X	MG RESISTOR	300Ω 1/16W J	
R884	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R885	NRSA63J-301X	MG RESISTOR	300Ω 1/16W J	
R886	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R887	NRSA63J-391X	MG RESISTOR	390Ω 1/16W J	
R888	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R889	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R890	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	
R891	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	
R892	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R893	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R894	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R896	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R899	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
L801	NQL114K-470X	INDUCITOR	47uH K	
CN801	NNZ0087-001	CAR CONNECTOR		
CN802	QGF0523F1-40W	CONNECTOR	FFC/FPC (1-40)	
EN801	QSW0976-001	ROTARY ENCODER		
S802	NSW0066-001X	TACT SW		
S803	NSW0066-001X	TACT SW		
S804	NSW0066-001X	TACT SW		
S805	NSW0066-001X	TACT SW		
S806	NSW0066-001X	TACT SW		
S807	NSW0066-001X	TACT SW		
S808	NSW0066-001X	TACT SW		
S809	NSW0066-001X	TACT SW		
S810	NSW0066-001X	TACT SW		
S811	NSW0066-001X	TACT SW		
S812	NSW0066-001X	TACT SW		
S813	NSW0066-001X	TACT SW		
S814	NSW0066-001X	TACT SW		
S815	NSW0066-001X	TACT SW		
S816	NSW0066-001X	TACT SW		
S817	NSW0066-001X	TACT SW		
S818	NSW0066-001X	TACT SW		
TH801	NAD0022-103X	N THERMISTOR	10kΩ	
X801	NAX0586-001X	RESONATOR		

Packing materials and accessories parts list

Block No. M 3 M M

Block No. M 5 M M



Packing

Block No. [M][3][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
P1	FSPG4002-001	POLY BAG		
P2	QPA00801205	POLY BAG	8cm x 12cm	
P3	FSYH4036-068	SHEET		
P4	QPA01003003	POLY BAG	10cm x 30cm	
P5	QPC03004315P	POLY BAG	30cm x 43cm	
P6	GE30781-002A	CARTON		LH1100JD
P6	GE30926-001A	CARTON		LH1150CD
P6	GE30787-002A	CARTON		LH1150JD
P7	GE10070-001A	EPS CUSHON		

Accessories

Block No. [M][5][M][M]

⚠ Symbol No.	Part No.	Part Name	Description	Local
A1	GET0148-001A	INST.BOOK	ENG FRE SPA	
A2	GET0147-002A	INSTALL MANUAL	ENG FRE SPA	
A3	GET0155-001A	CAUTION SHEET		
A4	LVT0717-001B	TROUBLE SHEET(C		
A5	BT-51018-3	WARRANTY CARD		LH1100JD
A5	BT-51029-1	WARRANTY CARD		LH1150JD
A6	BT-52006-2	WARRANTY CARD		
A7	BT-51028-2	J=REGIST CARD		LH1100JD, LH1150JD
A9	VKZ4027-202	PLUG NUT		
A10	VKH4871-001SS	MOUNT BOLT		
A11	VKZ4328-001	LOCK NUT		
A12	WNS5000Z	WASHER		
A13	GE40130-001A	HOOK	(x2)	
A14	FSJB3002-00C	HARD CASE		
A15	GE20137-003A	MOUNTING SLEEVE		
A16	GE20150-001A	TRIM PLATE ASSY		
A17	RM-RK50	REMOCON		
A18	----------	BATTERY		
A19	QAM0306-001	16P CORD ASSY		
A20	GET0165-001A	DEMO MODE SHEET		
KIT	KSFX480K-SCREW1	SCREW PARTS KIT	A9 to A13	