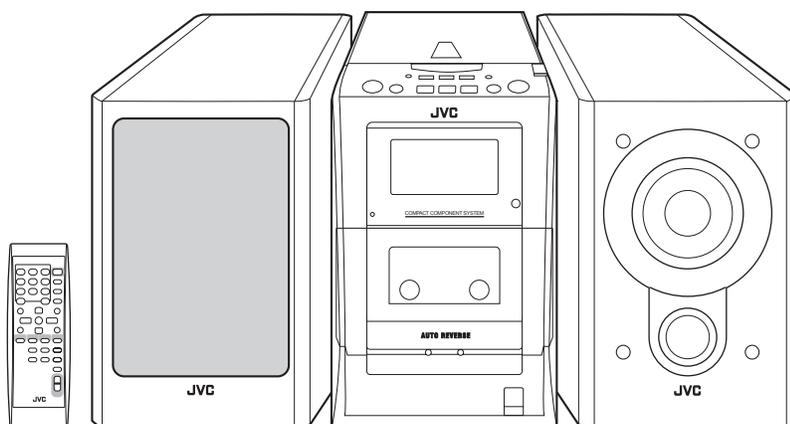


JVC

SERVICE MANUAL

COMPACT COMPONENT SYSTEM

FS-H30



COMPACT
disc
DIGITAL AUDIO

Area Suffix

J ----- U.S.A.
C ----- Canada

TABLE OF CONTENTS

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SPECIFICATION

Amplifier	Output Power		20 W (10 W + 10 W) at 4 Ω (10% THD) 12 W per channel, min. RMS, driven into 4 Ω at from 80 Hz to 15 kHz with no more than 10% total harmonic distortion.
	Audio input sensitivity/Impedance (at 1 kHz)	AUX	500 mV/48.75 k Ω
	Speakers/Impedance		4 Ω
Tuner	FM tuning range		87.5 MHz - 108.0 MHz
	AM tuning range		530 kHz - 1 710 kHz
CD player	Dynamic range		85 dB
	Signal-to-noise ratio		90 dB
	Wow and flutter	Immeasurable	
Cassette deck	Frequency response	Normal (type I)	50 Hz - 15 000 Hz
		Wow and flutter	0.15% (WRMS)
Speaker	Speaker units	Full range	8.0 cm (3 3/16 in.) cone \times 1
		Impedance	4 Ω
		Dimensions (approx.)	135 mm \times 203 mm \times 190 mm (W/H/D) (5 3/8 in. \times 8 in. \times 7 1/2 in.)
	Mass (approx.)		1.7 kg (3.8 lbs) each
General	Power requirement	AC IN	120, 60 Hz
		DC IN	12 V, 4 A
	Power consumption	35 W (at operation) 3.0 W (on standby)	
	Dimensions (approx.)		412 mm \times 208 mm \times 275 mm (W/H/D) (16 1/4 in. \times 8 1/4 in. \times 10 7/8 in.)
	Mass (approx.)		6.5 kg (14.4 lbs)

Design and specifications are subject to change without notice.

SECTION 1

Precautions

1.1 Safety Precautions

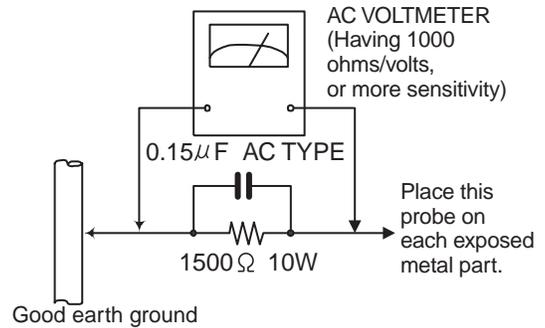
- (1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (Δ) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
- (4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
- (5) Leakage shock hazard testing

After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

 - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
 - Alternate check method
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 Ω per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10W resistor paralleled by a 0.15 μ F AC-type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC

voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 μ mA AC (r.m.s.).



1.2 Warning

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

1.3 Caution

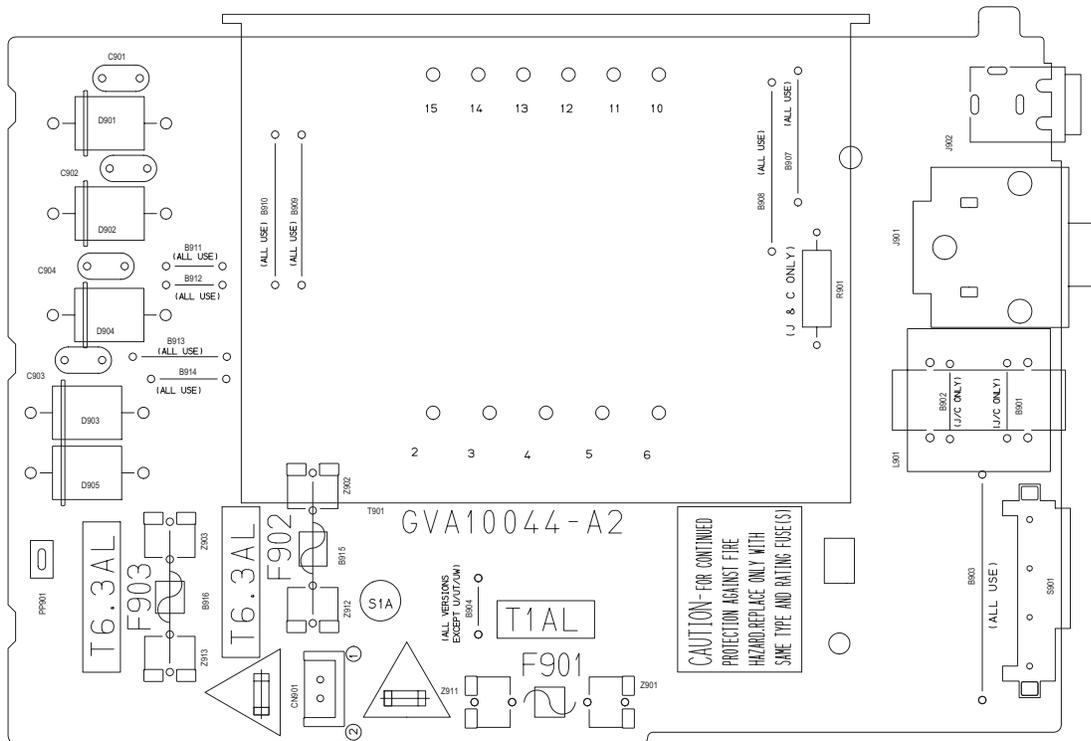
Burrs formed during molding may be left over on some parts of the chassis.

Therefore, pay attention to such burrs in the case of pre-forming repair of this system.

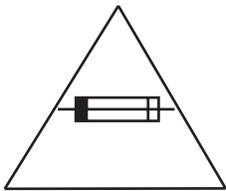
1.4 Critical parts for safety

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (■), diode (■) and ICP (●) or identified by the " Δ " mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer. (This regulation does not Except the J and C version)

1.5 Importance administering point on the safety



For USA and Canada / pour États - Unis d' Amérique et Canada



Caution: For continued protection against risk of fire, replace only with same type 1A/125V for F901, 6.3A/125V for F902 and F903. This symbol specifies type of fast operating fuse.

Précaution: Pour éviter risques de feux, remplacez le fusible de sûreté de F901 comme le même type que 1A/125V, et 6.3A/125V pour F902 et F903. Ce sont des fusibles sûretés qui fonctionnent rapide.

1.6 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.

1.6.1 Grounding to prevent damage by static electricity

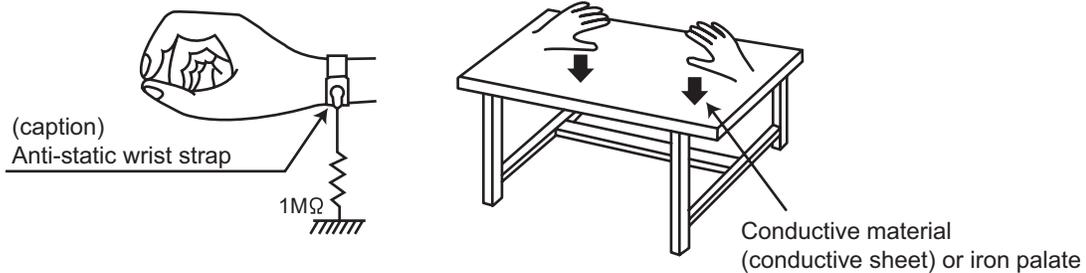
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as CD players. Be careful to use proper grounding in the area where repairs are being performed.

(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.

1.7 Handling the traverse unit (optical pickup)

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

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

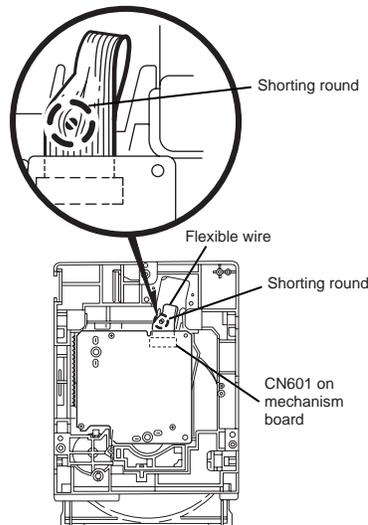
(3) Handle the flexible cable carefully as it may break when subjected to strong force.

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

1.8 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 sections before the flexible wire is disconnected from the connector CN101 on the CD servo board. (If the flexible wire is disconnected without applying solder, the CD pickup may be destroyed by static electricity.)
- In the assembly, be sure to remove solder from the short land sections after connecting the flexible wire.



1.9 Important for laser products

1.CLASS 1 LASER PRODUCT

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

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

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

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

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

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

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen.

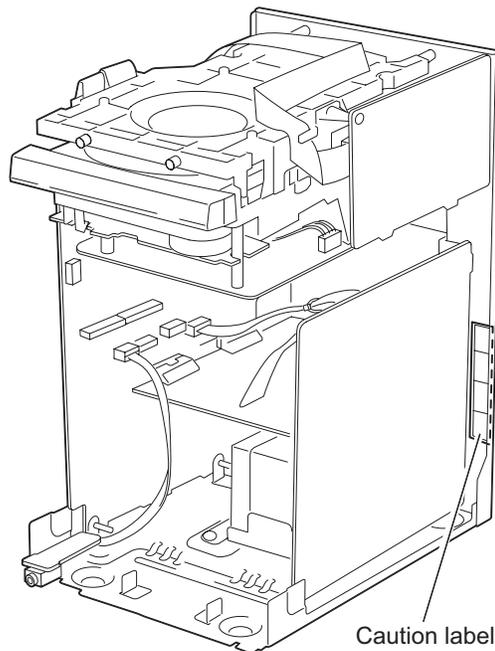
VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

ADVARSEL : Usynlig laserstrålning ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstrålning ved åbning,når sikkerhedsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABEL and PRINT

WARNING LABEL and PRINT



SECTION 2

Disassembly method

2.1 Main body

2.1.1 Removing the rear panel (See Fig.1,2)

- (1) From behind the body, remove the eight screws **A** attaching the rear panel.
- (2) Turning the body upside down, remove the two screws **B** attaching the rear panel, and remove.

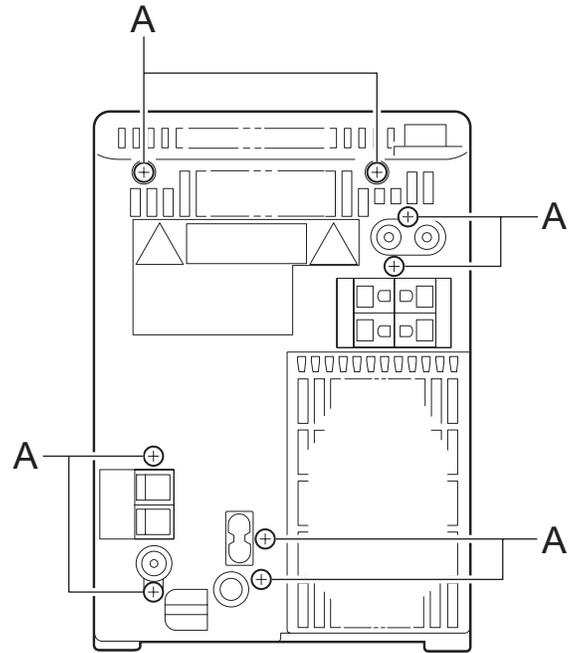


Fig.1

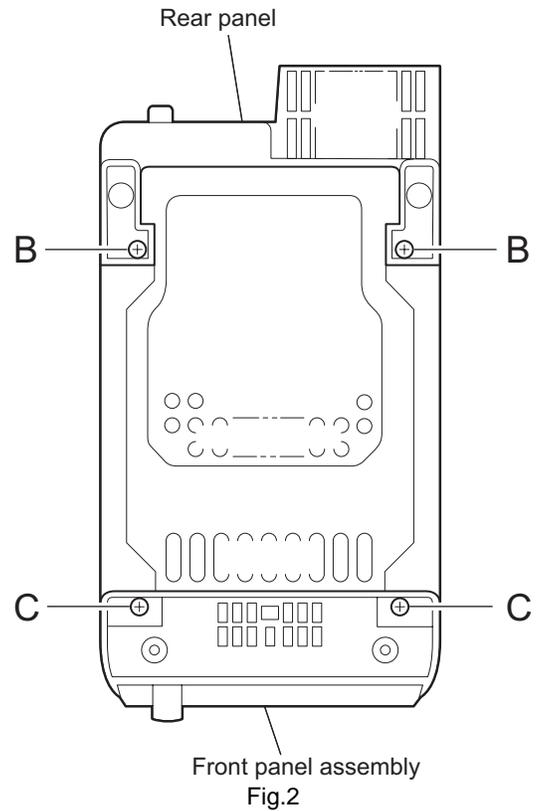


Fig.2

2.1.2 Removing the side panel (L) and (R) (See Fig.2~5)

- Prior to performing the following procedure, remove the rear panel.
 - (1) Turning the body upside down, remove the two screws **C** attaching the front panel assembly.
 - (2) Turning the body initial position, open the CD door while pressing the upper OPEN button.
 - (3) Moving the side panel (L) in the arrow direction, remove the panel from the left side of the body.
 - (4) Moving the side panel (R) in the arrow direction, remove the panel from the right side of the body.

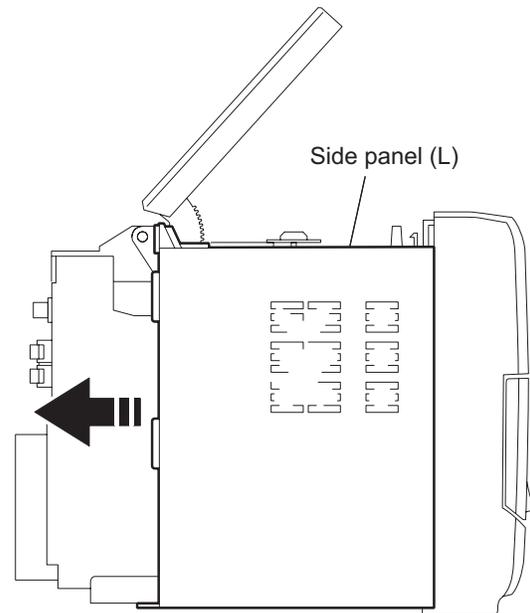
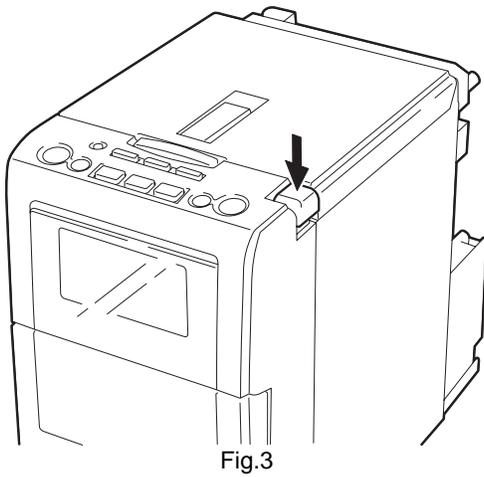


Fig.4

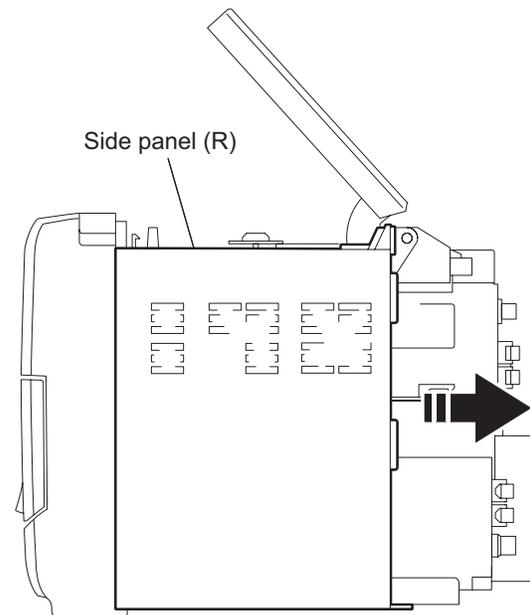


Fig.5

2.1.3 Removing the CD player assembly (See Fig.6,7)

- Prior to performing the following procedure, remove the rear panel and the left and right side panels.
 - (1) Disconnect the card wires from the two connectors CN603 and CN604 on the CD servo control board.
 - (2) Remove the two screws **D** attaching the front panel assembly on the both sides.
 - (3) Release the two joints **a** on the both sides of the front panel assembly.
 - (4) Move the CD player assembly in the direction of the arrow.

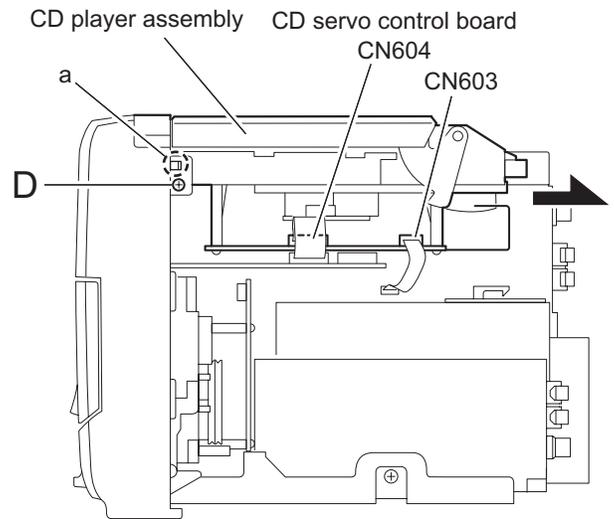


Fig.6

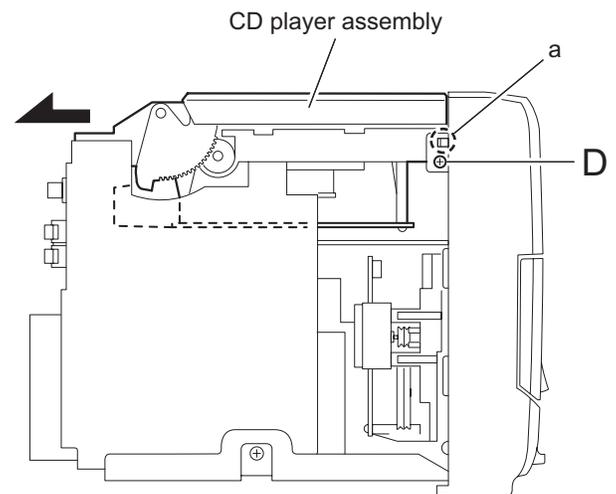


Fig.7

2.1.4 Removing the power amplifier board and heat sink (See Fig.8-10)

- Prior to performing the following procedure, remove the rear panel, the left and right side panels, and the CD player assembly.
 - (1) Remove the five screws **E** and **F** attaching the heat sink.
 - (2) Disconnect the wire from connector CN901 on the power supply board.
 - (3) Disconnect the card wire from connector CN305 on the power amplifier board.
 - (4) Remove the screw **G** attaching the power amplifier board.
 - (5) Disconnect the connector CN301 on the power amplifier board, and release the two joints **b**.

REFERENCE:

Remove the screw **F**, then power amplifier board can be removed without removing heat sink.

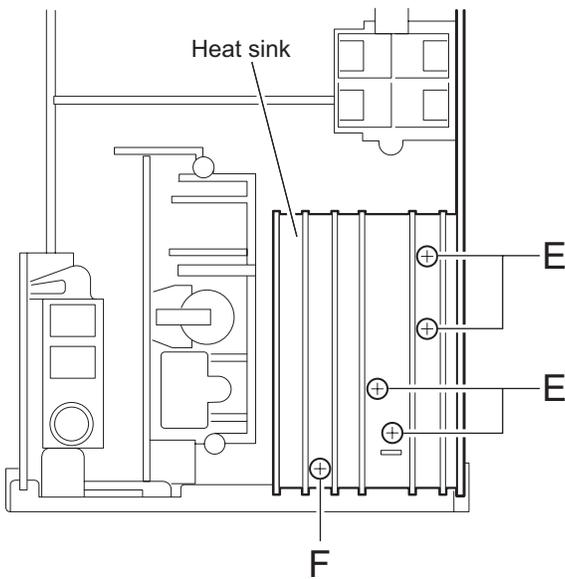


Fig.8

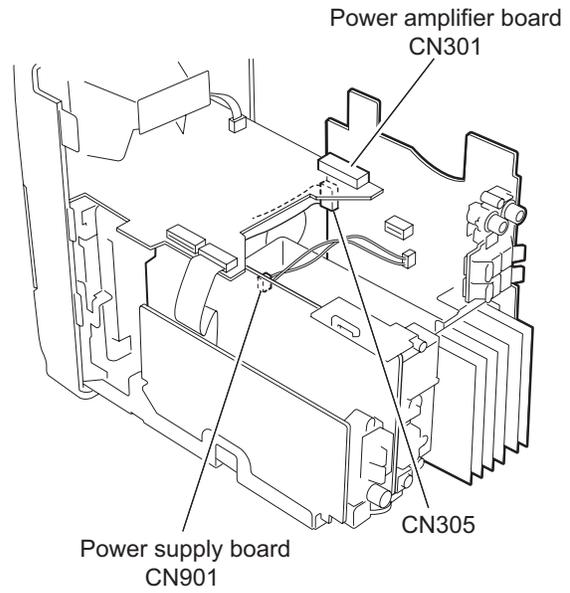


Fig.9

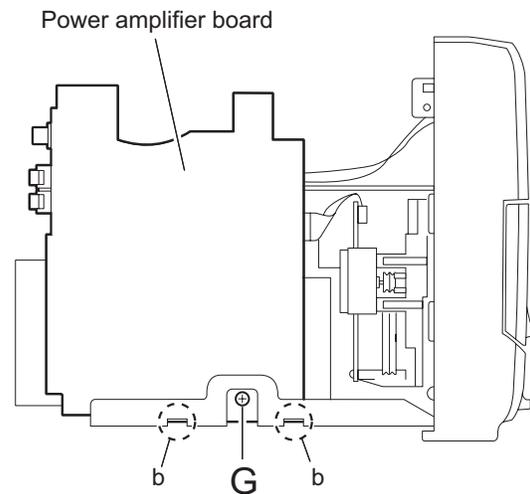


Fig.10

2.1.5 Removing the tuner board (See Fig.11)

- Prior to performing the following procedure, remove the rear panel, the left and right side panels, and the CD player assembly.
 - (1) Remove the screw **H** attaching the tuner board from the right side of the body.
 - (2) Disconnect the card wire from the connector **CN1** on the tuner board.
 - (3) Release the joint **c**, and remove the tuner board backward.

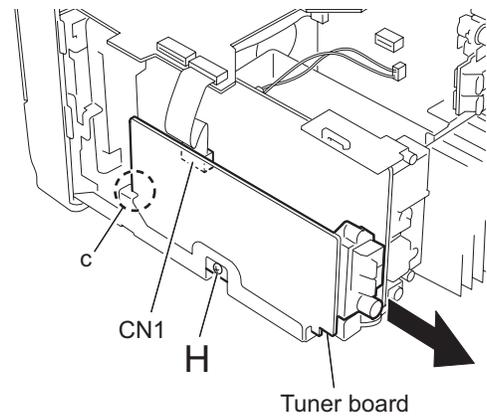


Fig.11

2.1.6 Removing the front panel assembly (See Fig.12,13)

- Prior to performing the following procedure, remove the rear panel, the left and right side panels, the CD player assembly, the power amplifier board.
 - (1) Disconnect the card wire from the connector **CN714** on the LCD system CPU board.
 - (2) Release the joint **d** on the bottom of the front panel assembly using a screwdriver, and remove the front panel assembly toward the front.

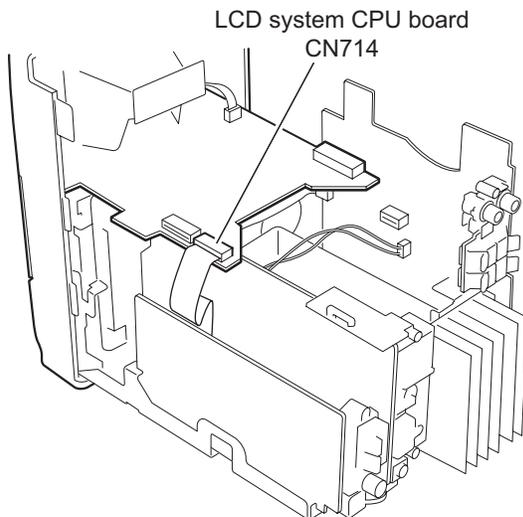


Fig.12

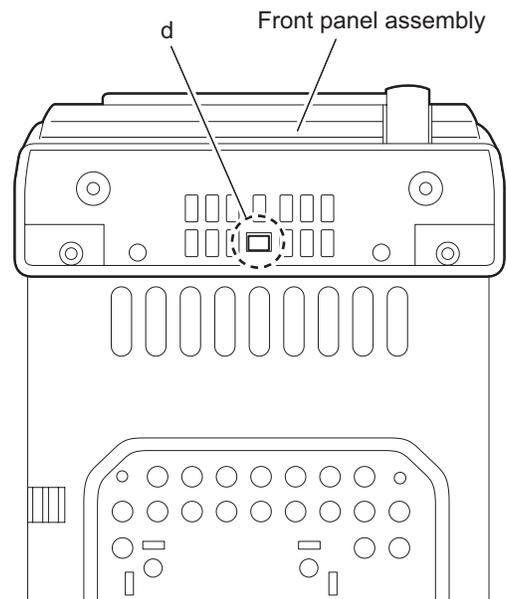


Fig.13

2.1.7 Remove the power transformer and power supply board (See Fig.14,15)

- Prior to performing the following procedure, remove the rear panel, the left and right side panels, the CD player assembly, the power amplifier board and the tuner board.
 - (1) Remove the screw **I** attaching the jack holder and release joint **e**, and then remove jack holder.
 - (2) Remove the four screws **J** attaching the power transformer and power supply board.

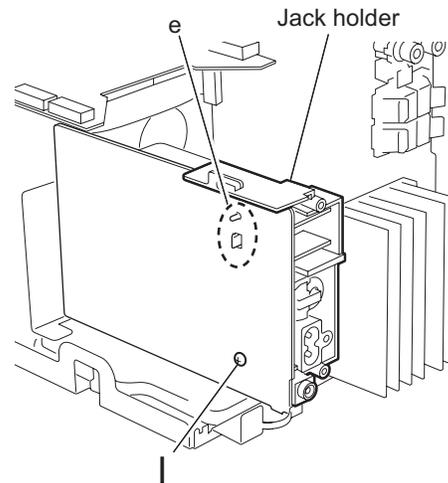


Fig.14

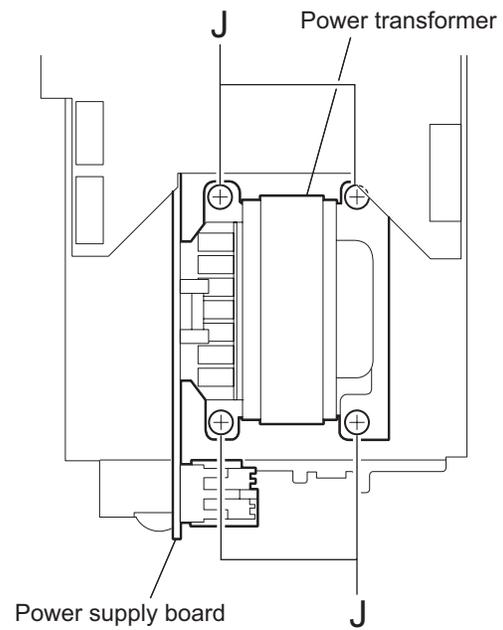
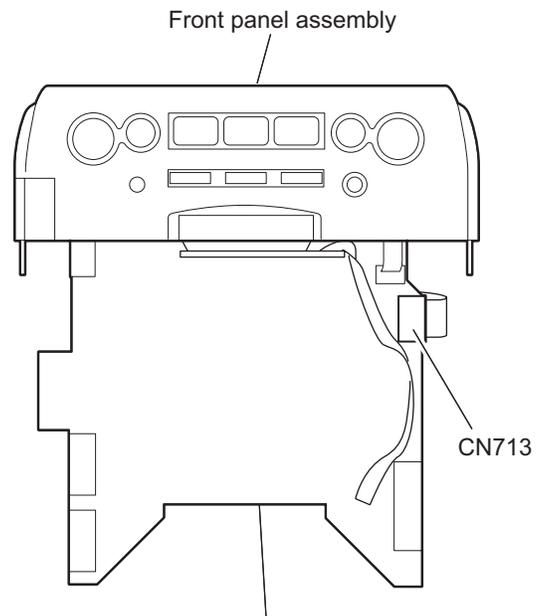


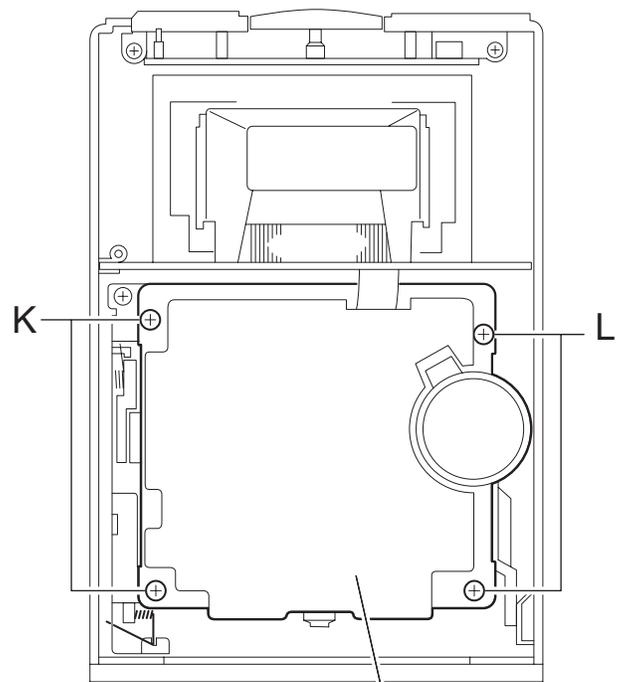
Fig.15

2.1.8 Remove the cassette mechanism assembly (See Fig.16,17)

- Prior to performing the following procedure, remove the front panel assembly.
 - (1) Disconnect the card wire from the connector CN713 on the LCD system CPU board.
 - (2) Remove the four screws **K** and **L** attaching the cassette mechanism assembly, and remove.



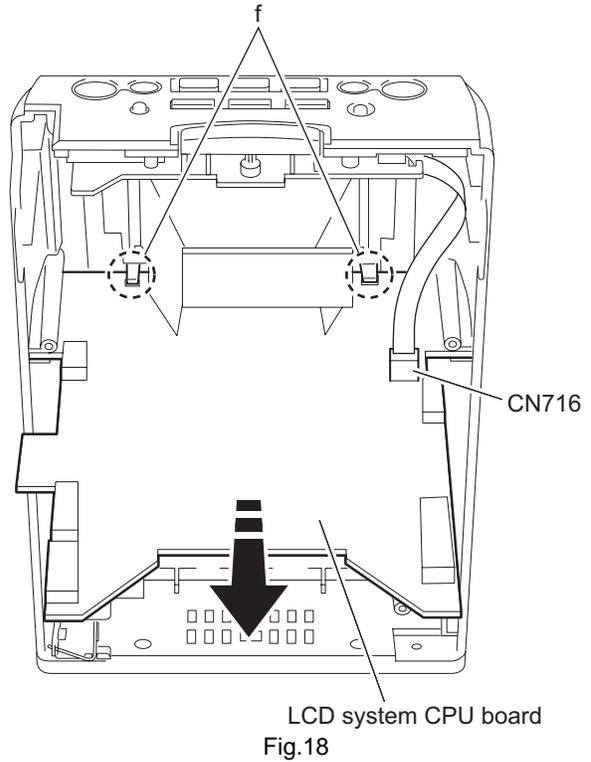
LCD system CPU board
Fig.16



Cassette mechanism assembly
Fig.17

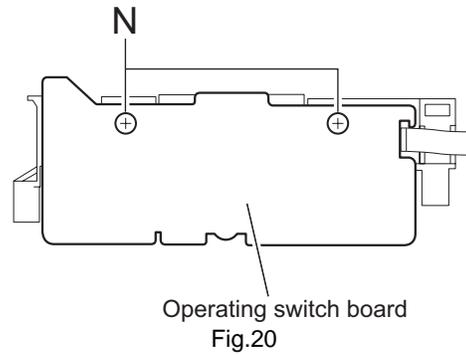
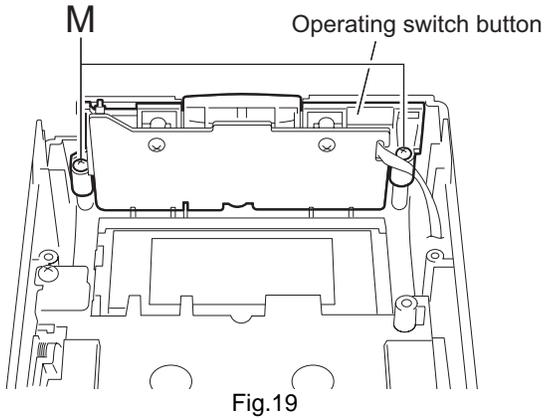
**2.1.9 Remove the LCD system CPU board
(See Fig.18)**

- (1) Disconnect the wire from the connector CN716 on the LCD system CPU board.
- (2) Release the two joints **f** and pull out the LCD system CPU board.



**2.1.10 Removing the operating switch board
(See Fig.19,20)**

- Prior to performing the following procedure, remove the front panel assembly, the cassette mechanism assembly and the LCD system CPU board.
- (1) Remove the two screws **M** attaching the operating switch button.
 - (2) Remove the two screws **N** attaching the operating switch board, and remove.

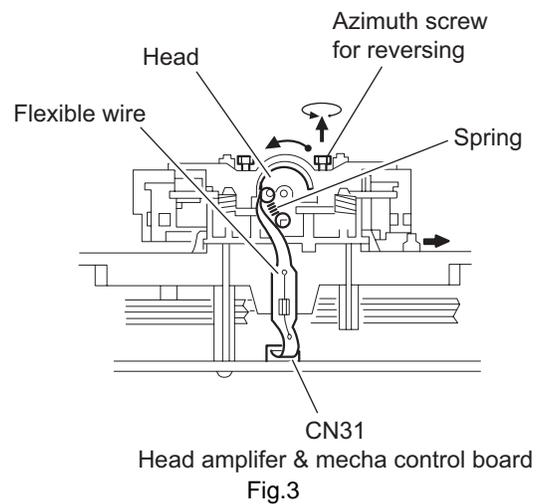
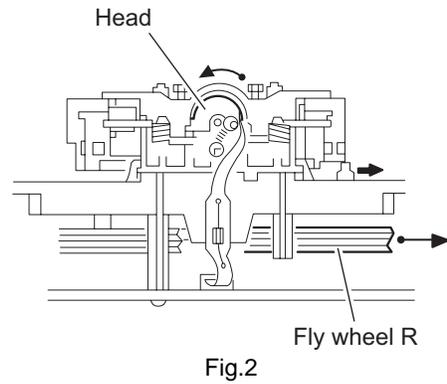
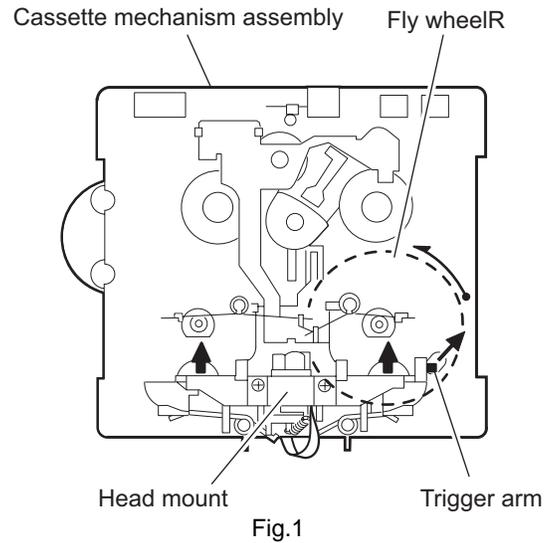


2.2 Cassette mechanism assembly

2.2.1 Removing the Play/Record & Clear head

(See Fig.1~3)

- (1) While moving the trigger arm on the right side of the head mount in the direction of the arrow, turn the flywheel R counterclockwise until the head mount comes ahead and clicks.
- (2) The head turns counterclockwise as you turn the flywheel R counterclockwise (See Fig.2 and 3).
- (3) Disconnect the flexible wire from connector CN31 on the head amplifier & mechanism control board.
- (4) Remove the spring from the back of the head.
- (5) Loosen the azimuth screw for reversing attaching the head.
- (6) Remove the head on the front side of the head mount.



**2.2.2 Removing the head amplifier & mechanism control board
(See Fig.4)**

- (1) Turn over the cassette mechanism assembly and remove the three screws **A** attaching the head amplifier & mechanism control board.
- (2) Disconnect the flexible wire from connector CN31 on the head amplifier & mechanism control board.
- (3) Disconnect connector CN32 of the head amplifier & mechanism control board from connector CN1 on the reel pulse board.

REFERENCE:

If necessary, unsolder the 4-pin wire soldered to the main motor.

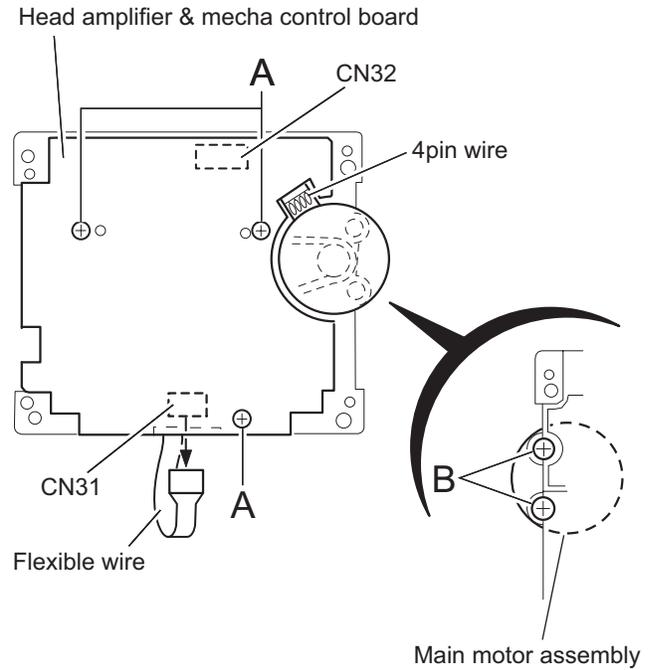


Fig.4

**2.2.3 Removing the main motor
(See Fig.4-7)**

- (1) Remove the two screws **B**.
- (2) Half raise the motor and remove the capstan belt from the motor pulley.

ATTENTION:

Be careful to keep the capstan belt from grease. When reassembling, refer to Fig.6 and 7 for attaching the capstan belt.

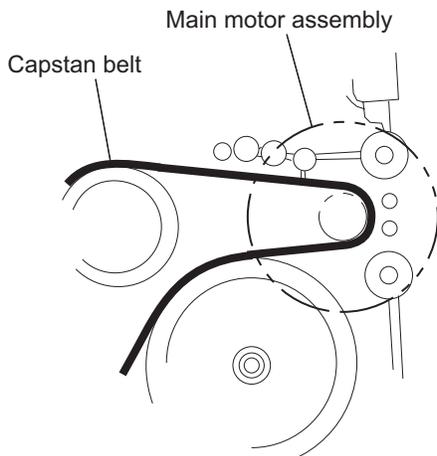


Fig.5

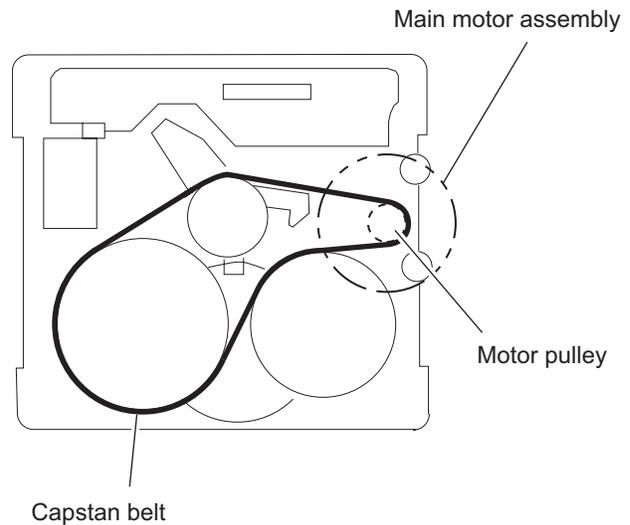


Fig.6

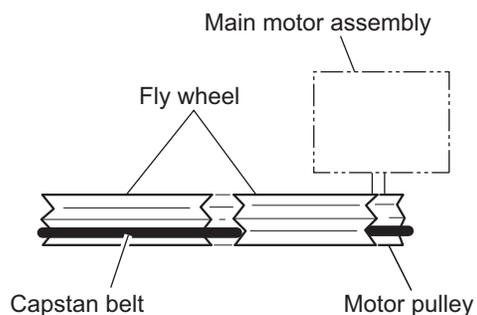
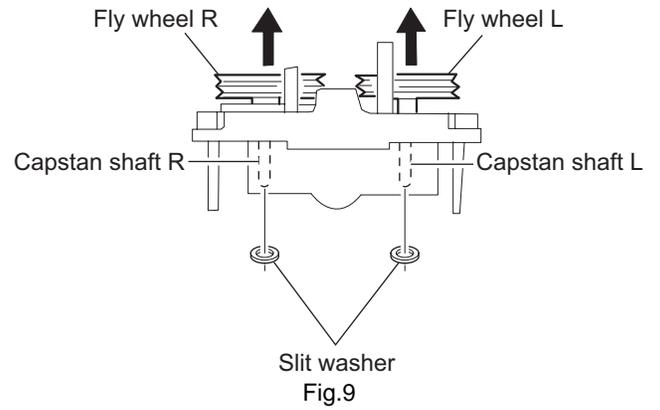
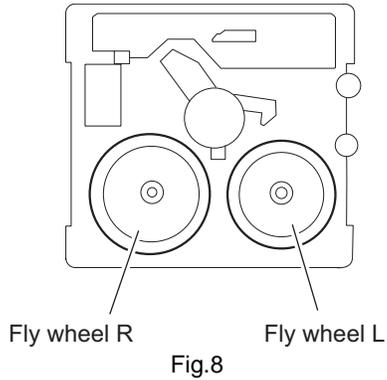


Fig.7

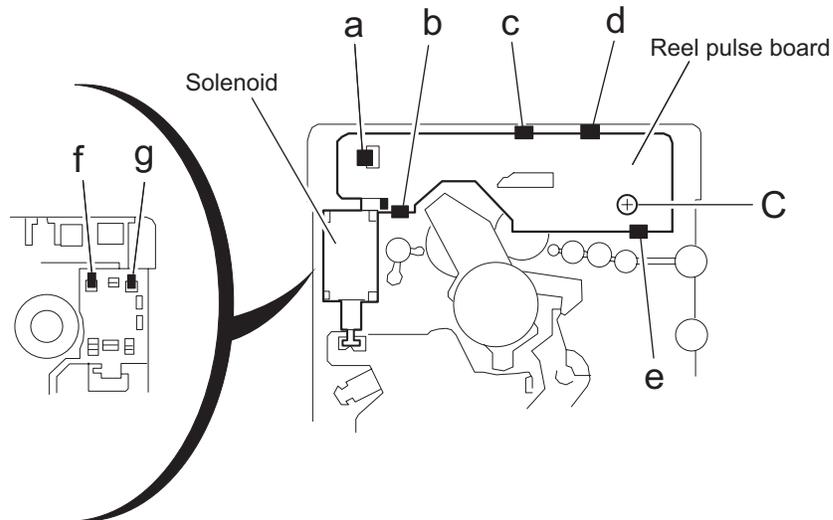
2.2.4 Removing the flywheel (See Fig.8, 9)

- Prior to performing the following procedure, remove the head amplifier & mechanism control board and the main motor assembly.
- (1) From the front side of the cassette mechanism, remove the slit washers attaching the capstan shaft **L** and **R**. Pull out the flywheels backward.



2.2.5 Removing the reel pulse board and solenoid (See Fig.10)

- Prior to performing the following procedure, remove the head amplifier & mechanism control board.
- (1) Remove the screw **C**.
- (2) Release the tab **a**, **b**, **c**, **d** and **e** retaining the reel pulse board.
- (3) Release the tab **f** and **g** attaching the solenoid on the reel pulse board.
- (4) The reel pulse board and the solenoid come off.



**2.2.6 Reattaching the Play/ Record & Clear head
(See Fig.11~13)**

- (1) Reattaching the head mount assembly.
 - a) Change front of the direction cover of the head mount assembly to the left (Turn the head forward).
 - b) Fit the bosses **O'**, **P'**, **Q'**, **U'** and **V'** on the head mount assembly to the holes **P** and **V**, the slots **O**, **U** and **Q** of the mechanism sub assembly (See Fig.11 to 13).

CAUTION:

To remove the head mount assembly, turn the direction cover to the left to disengage the gear. If the gear can not be disengaged easily, push up the boss **Q'** slightly and raise the rear side of the head mounts slightly to return the direction lever to the reversing side.

- (2) Tighten the azimuth screw for reversing.
- (3) Reattach the spring from the back of the Play / Record & Clear head.
- (4) Connect the flexible wire to connector CN31 on the head amplifier & mechanism control board.

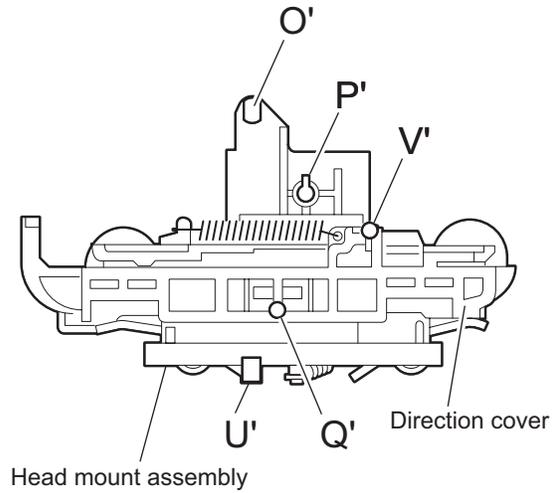


Fig.11

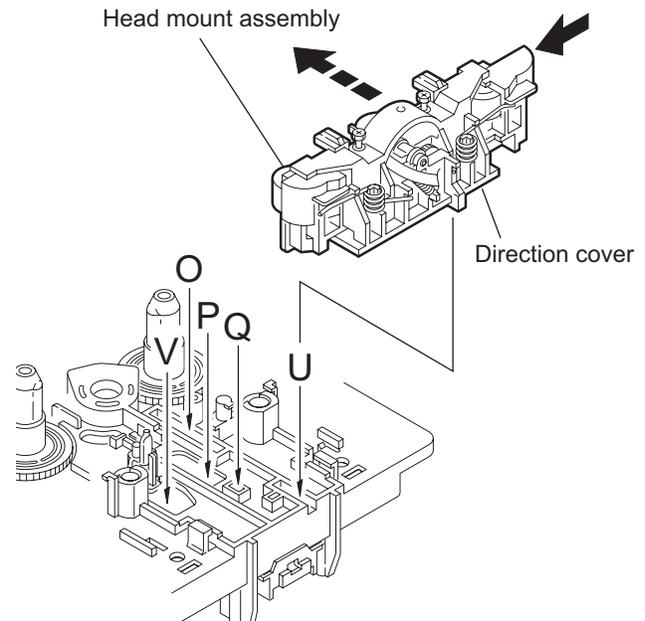


Fig.12

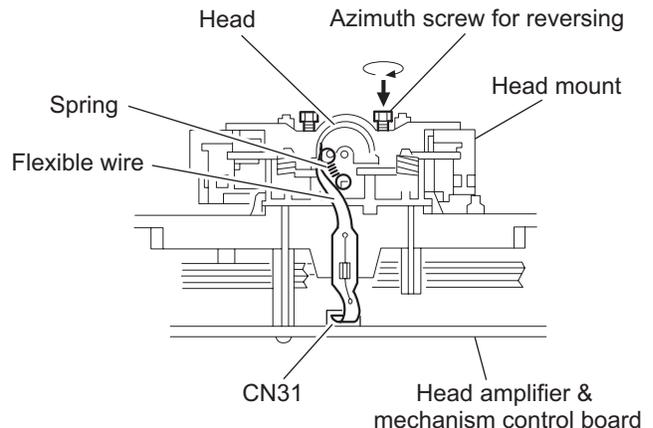
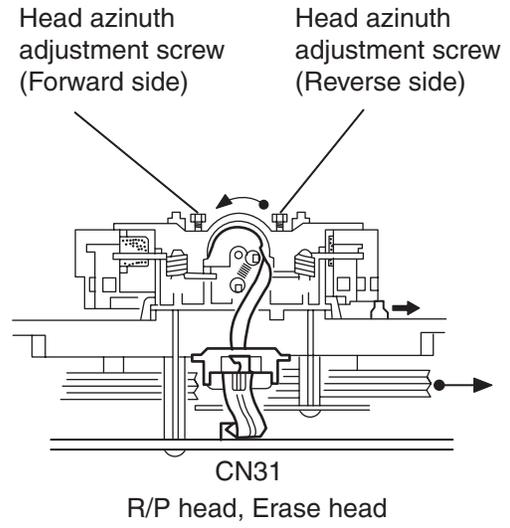
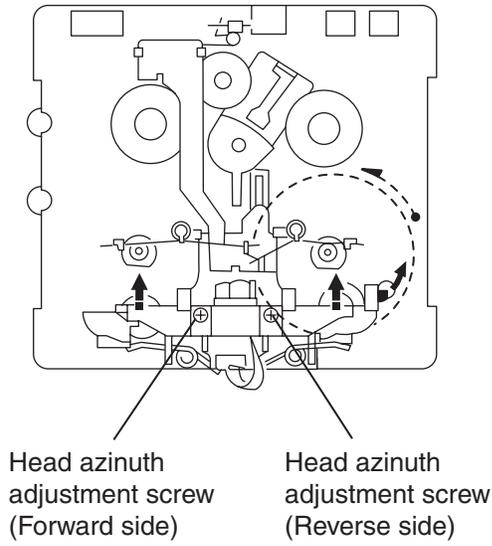
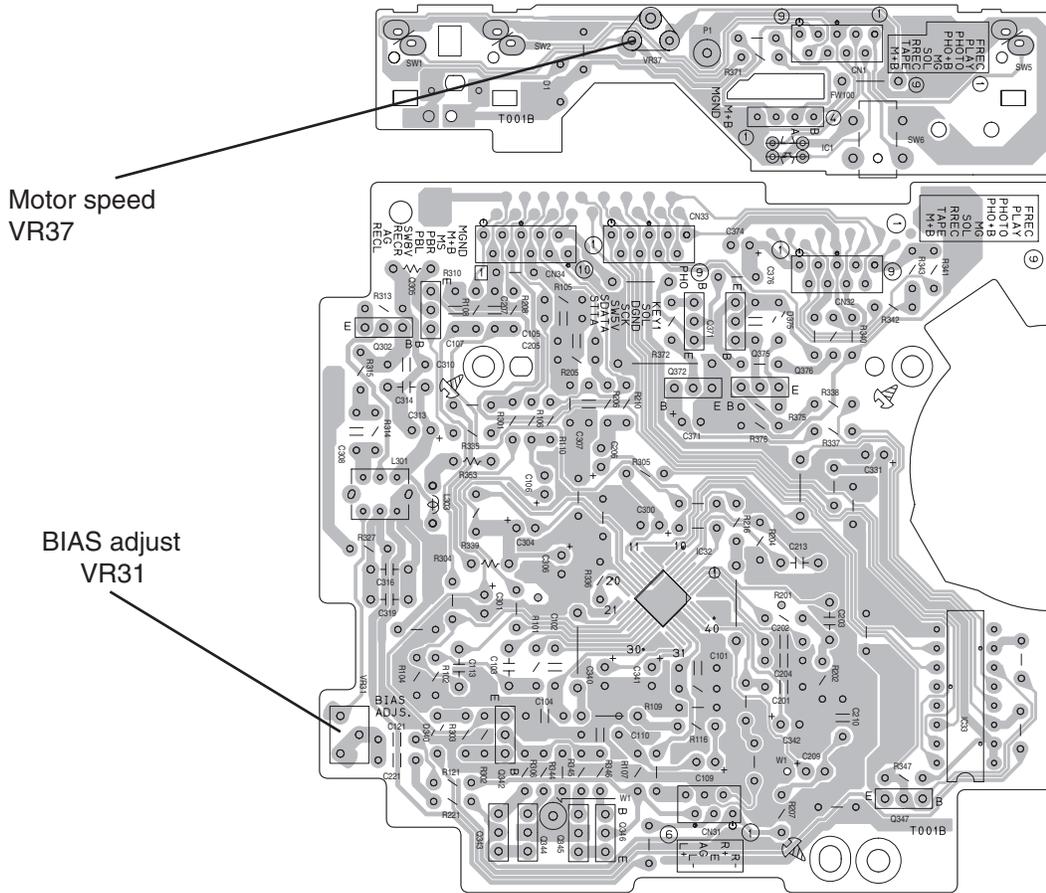


Fig.13

3.2 Cassette mechanism adjustment



Mecha control board



3.2.1 Mechanism section

Item	Condition	Measurement method	Ref.value	Adjustment position
Head azimuth	Test tape : VT703L (8kHz) Output terminal : Speaker out	1.Playback the test tape VT703L (8kHz). 2.Adjust to maximum output level by azimuth adjustment screw for forward side and reverse side. 3.This adjustment is adjust by adjustment screw of forward side and adjustment screw of reverse side.	Maximum output	Only adjust at changed head
Tape speed	Test tap : VT712 (3kHz) Output terminal : Speaker out or Headphone out	Playback the test tape VT712 (3kHz) at end of forward side,adjust to 2,940~3,90Hz indication of frequency counter by VR37.	2,940 ~ 3,090Hz	VR37

Item	Condition	Measurement method	Ref.value	Adjustment position
Tape speed diviation at FWD/REV	Test tape : VT712 (3kHz) Output terminal : Speaker out or Headphone out	Playback the test tape VT712 (3kHz) at end of forward and reverse, tape speed deviation should be less than 6.0Hz.	Leass than 6.0Hz	VR31
Wow & Flutter	Test tape : VT712 (3kHz) Output terminal : Speaker out or Headphone out	Playback the test tape VT712 (3kHz) at start of forward and reverse,Wow & Flutter are should be less than 0.25%(WRMS).	Less than 0.25% (WRMS)	

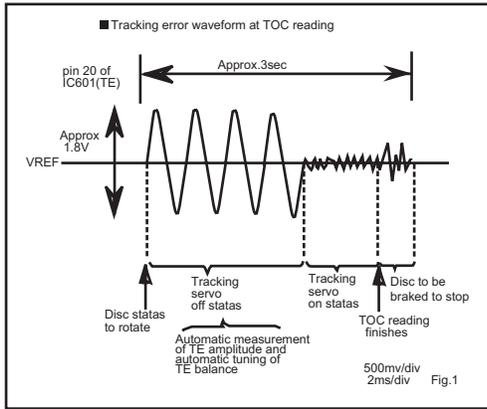
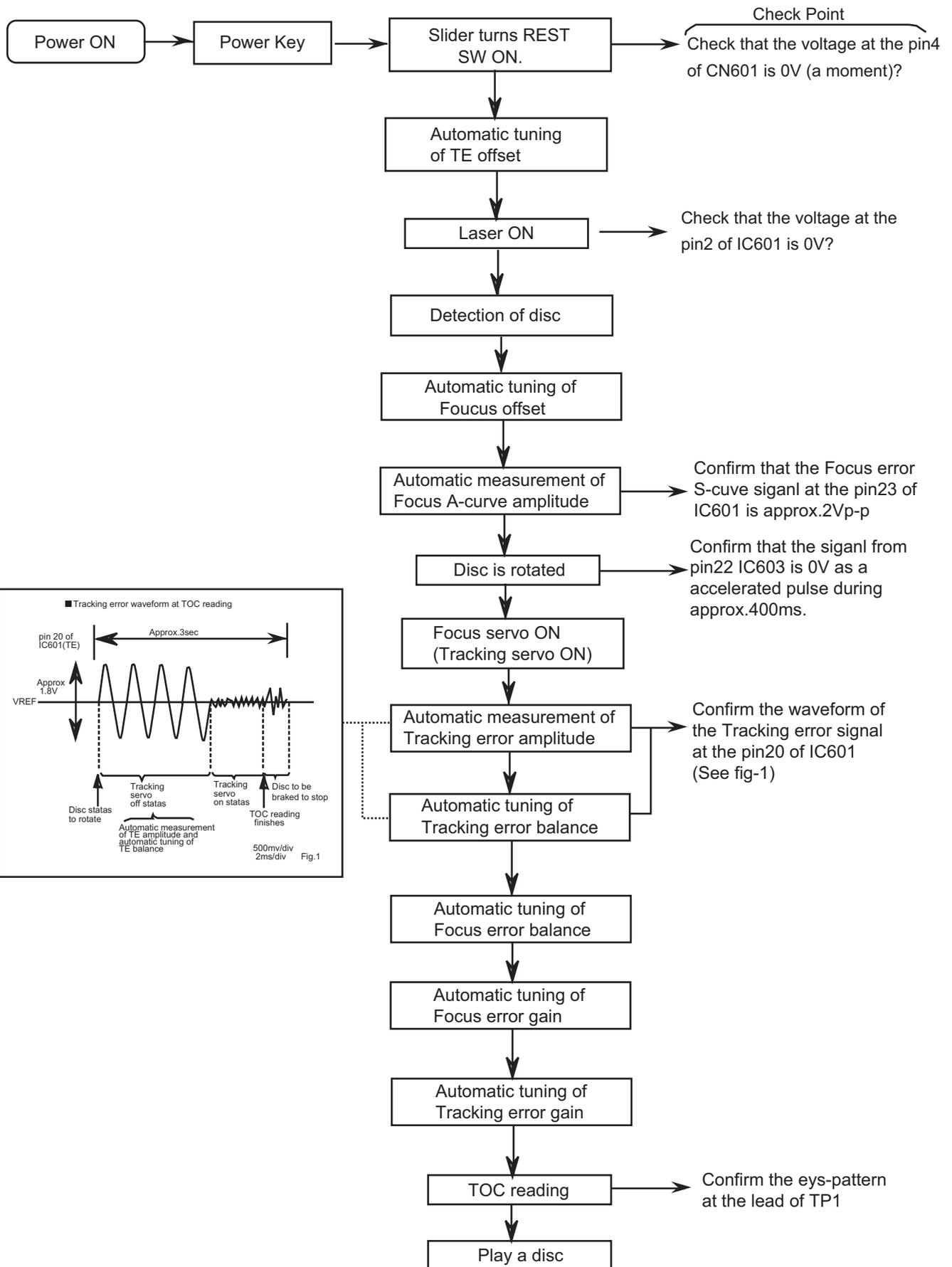
3.2.2 Electrical adjustment

Item	Condition	Measurement method	Ref.value	Adjustment position
Recording BIAS adjustment	<ul style="list-style-type: none"> ▪ Forward or Reverse ▪ Test tape :AC-514 TYPE II :AC-225 TYPE I ▪ Output terminal Recording head 	<ol style="list-style-type: none"> 1.Set the test tape(AC-514 TYPEII and AC-225 TYPEI), then make REC/PAUSE condition. 2.Connect 100 Ω to recording head by series, then connect to VTVM for measurement the current. 3.After setting, start the recording by release the PAUSE, in this time bias current adjust to next fig. by VR31 for Lch and VR32 for Rch. 4.0 μA (TYPE II) and 4.20 μA (TYPE I). 	AC-225 :4.20μA AC-514 :4.0μA	VR31
R/P playback frequency response	<ul style="list-style-type: none"> ▪Reference frequency : 1kHz / 10kHz (Reference: -20dB) ▪Test tape : AC-514 TYPEII ▪Input terminal : OSC IN 	<ol style="list-style-type: none"> 1.Set the test tape (AC-514 TYPE II), then make REC/PAUSE condition. 2.Release the PAUSE, then start recording the 1kHz and 10kHz of reference frequency from oscillator. 3.Playback the recorded position, 1kHz and 10kHz output deviation should -1dB ± 2dB to readjust by VR31 for Lch and VR32 for Rch. 	Output deviation 1kHz/10kHz :-1dB±2dB	VR31

3.2.3 Electrical response confirmation

Item	Condition	Measurement method	Ref.value	Adjustment position
Recording bias current	Forward or Reverse <ul style="list-style-type: none"> ▪Test tape : TYPE II (AC-514) ▪ Measurement terminal : BIAS test point on printed circuit board 	<ol style="list-style-type: none"> 1.Change BIAS1 and 2, confirm the frequency should be change. 2.Set the test tape (AC-514 TYPEII), then make REC/PAUSE condition. 3.Confirm the frequency should 100Hz± 6kHz at BIAS test point on printed circuit board. 	100 kHz ± 6 kHz	
Erase current (reference value)	Forward or Reverse <ul style="list-style-type: none"> ▪Rec condition ▪Test tape : AC-514 TYPEII : AC-225 TYPEI ▪ Measurement terminal : Both side of Erase head 	<ol style="list-style-type: none"> 1.Set the test tape (AC-514 TYPE II and AC-225 TYPE I), then make REC/PAUSE condition. 2.Release the PAUSE to REC condition, connect 1W to ERASE head by series, then confirm the erase current at both side of erase head. 	TYPE II : 120 mA TYPE I : 75 mA	

3.3 Flow of functional operation until TOC read (CD)



3.4 Maintenance of laser pickup (CD)

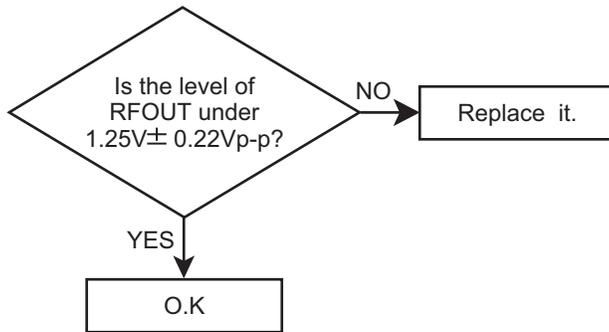
(1) Cleaning the pick up lens

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.

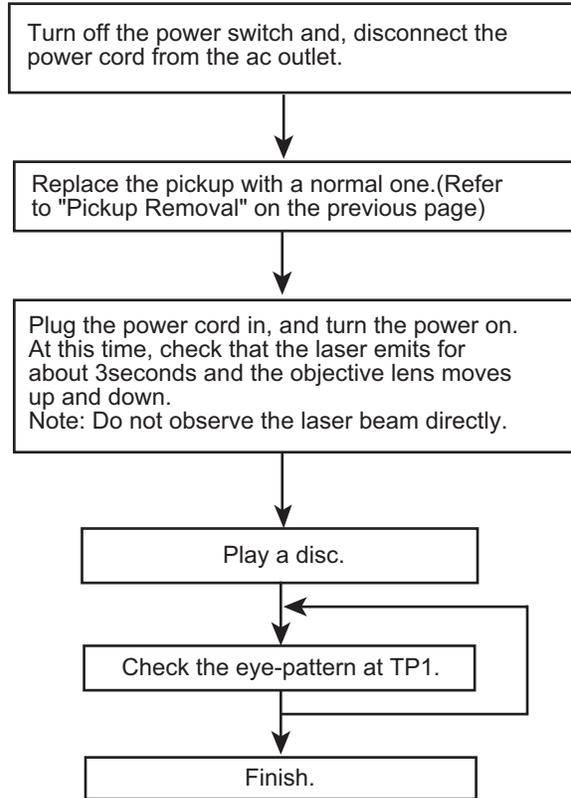
- The level of RF output (EFM output : amplitude of eye pattern) will below.



(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.

3.5 Replacement of laser pickup (CD)



SECTION 4

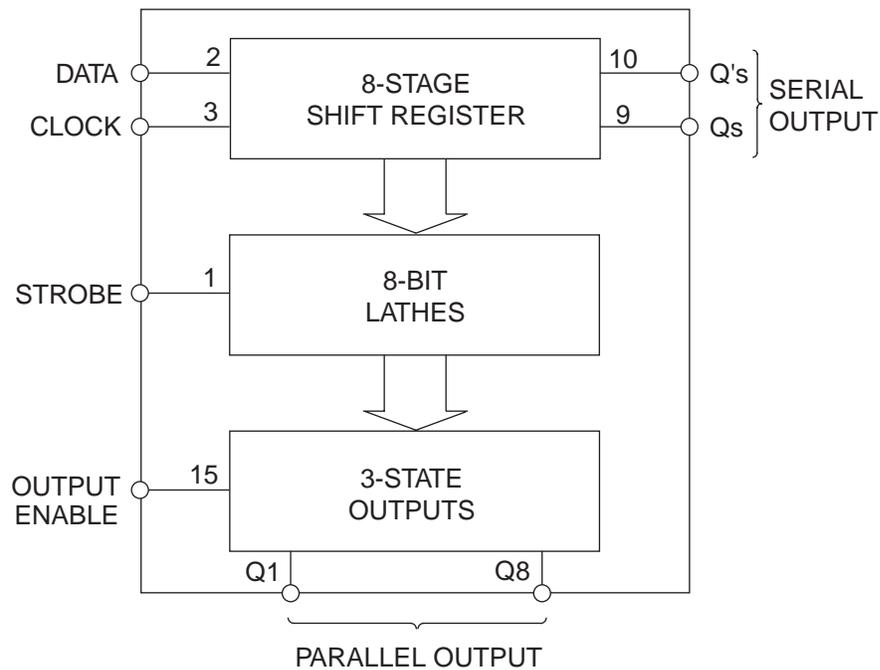
Description of major ICs

4.1 CD4094BC (IC33) : Serial to parallel port extension

- Pin layout

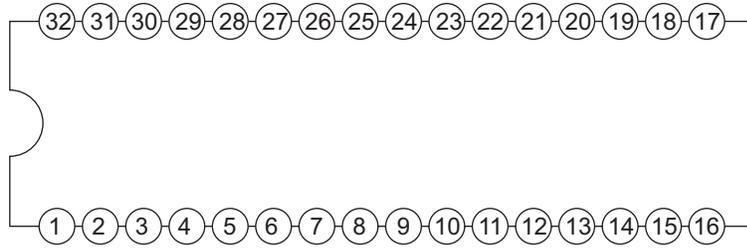
STROBE	1	16	Vdd
DATA	2	15	OUTPUT ENABLE
CLOCK	3	14	Q5
Q1	4	13	Q6
Q2	5	12	Q7
Q3	6	11	Q8
Q4	7	10	Q's
Vss	8	9	Qs

- Block diagram

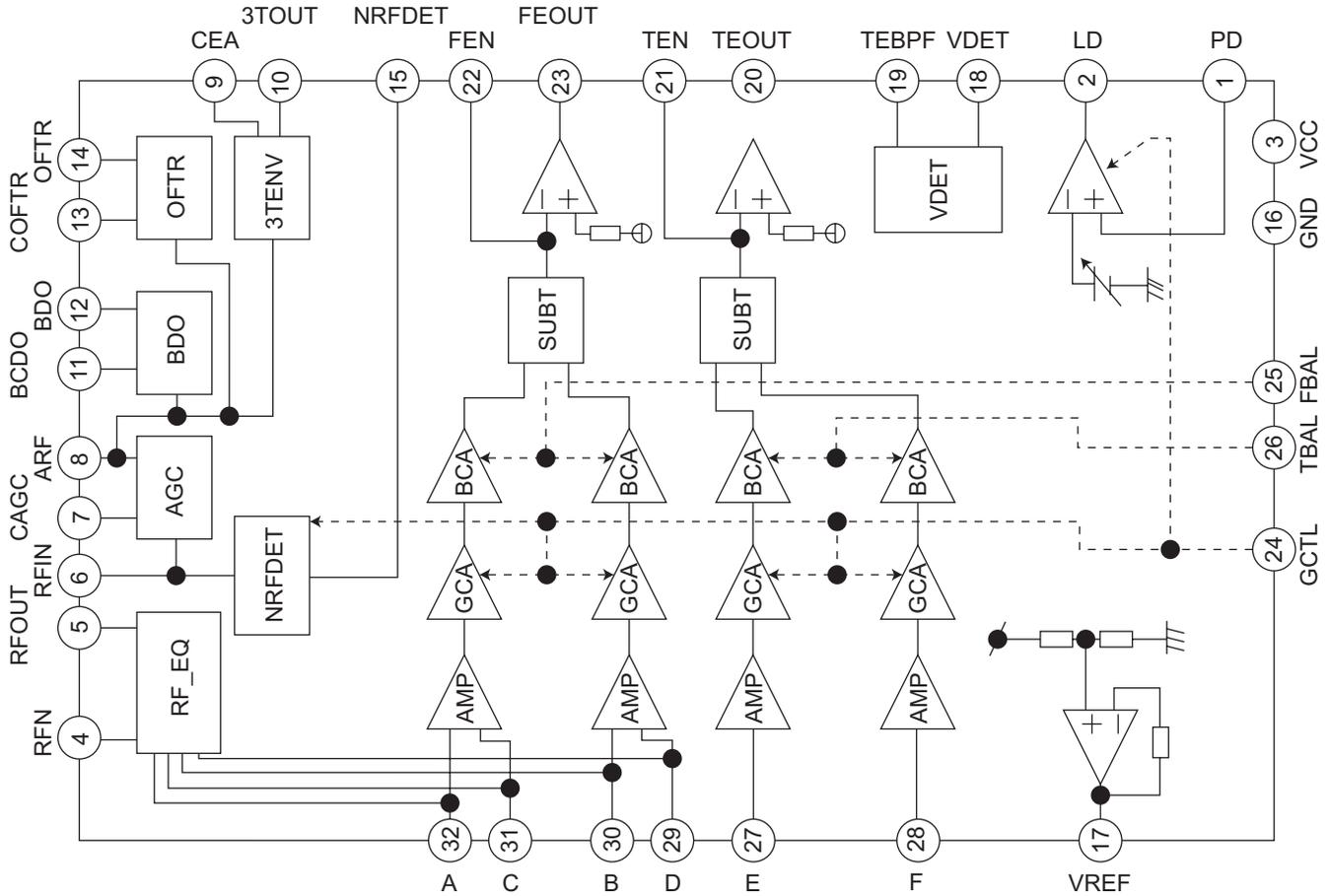


4.2 AN22000A-W (IC601) : RF & SERVO AMP

- Terminal layout



- Block diagram



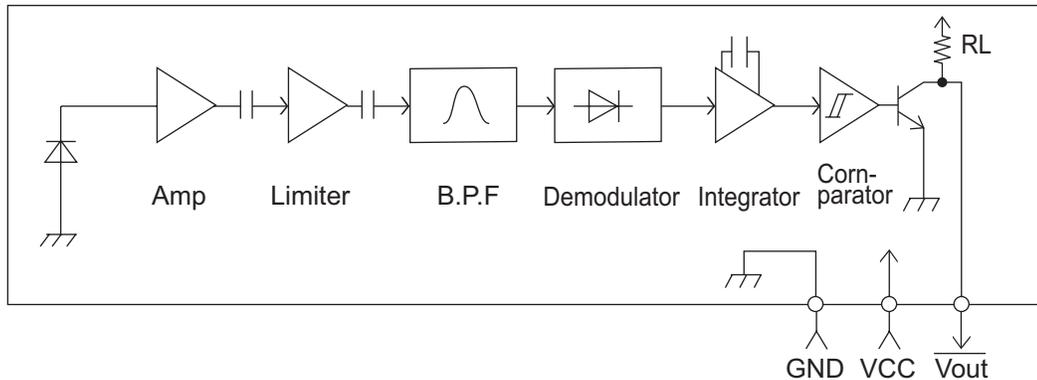
- Pin function

Pin No.	Symbol	I/O	Function
1	PD	I	APC Amp. input terminal
2	LD	O	APC Amp. output terminal
3	VCC	-	Power supply terminal
4	RFN	I	RF adder Amp. inverting input terminal
5	RFOUT	O	RF adder Amp. output terminal
6	RFIN	I	AGC input terminal
7	CAGC	I	Input terminal for AGC loop filter capacitor
8	ARF	O	AGC output terminal
9	CEA	I	Capacitor connecting terminal for HPF-Amp.
10	3TOUT	O	3 TENV output terminal
11	CBDO	I	Capacitor connecting terminal for envelope detection on the darkness side
12	BDO	O	BDO output terminal
13	COFTR	I	Capacitor connecting terminal for envelope detection on the light side
14	OFTR	O	OFTR output terminal
15	NRFDET	O	NRFDET output terminal

Pin No.	Symbol	I/O	Function
16	GND	-	Ground
17	VREF	O	VREF output terminal
18	VDET	O	VDET output terminal
19	TEBPF	I	VDET output terminal
20	TEOUT	O	TE Amp. output terminal
21	TEN	I	TE Amp. inverting input terminal
22	FEN	I	FE Amp. inverting input terminal
23	FEOUT	O	FE Amp. output terminal
24	GCTL	O	GCTL & APC terminal
25	FBAL	O	FBAL control terminal
26	TBAL	O	TBAL control terminal
27	E	I	Tracking signal input terminal 1
28	F	I	Tracking signal input terminal 2
29	D	I	Focus signal input terminal 4
30	B	I	Focus signal input terminal 3
31	C	I	Focus signal input terminal 2
32	A	I	Focus signal input terminal 1

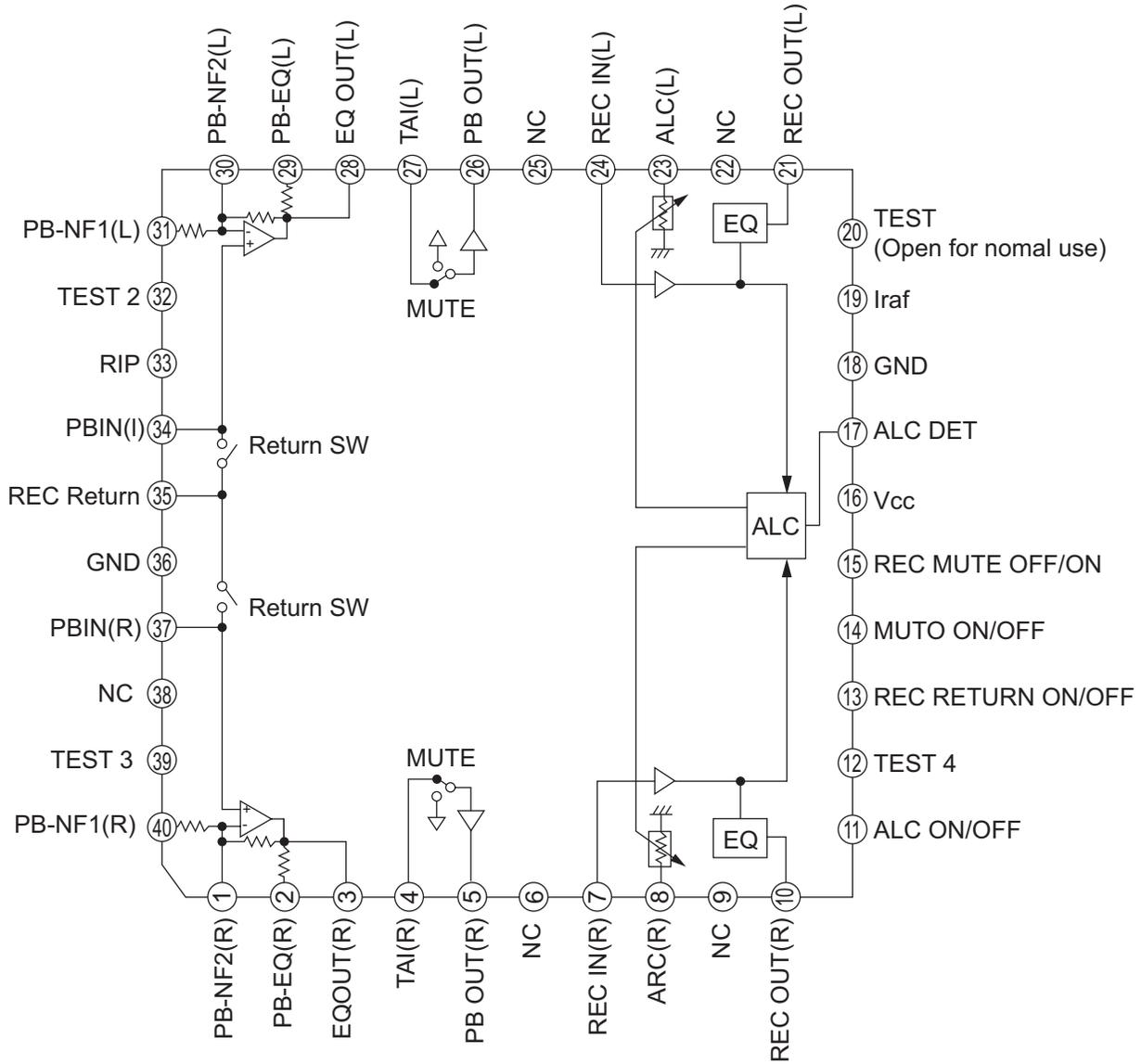
4.3 GP101UM281YK (IC750) : Remocon receiver

- Block diagram



4.4 HA12238F (IC32) : R/P Equalizer

- Pin layout

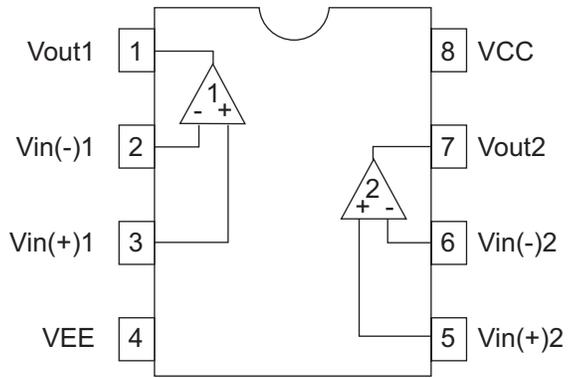


- Pin function

Pin No.	Symbol	Function
1	PB-NF2(R)	PB EQ feed back
2	PB-EQ(R)	NAB output
3	EQOUT(R)	EQ output
4	TAI(R)	Tape input
5	PBOUT(R)	PB output
6	NC	NC pin
7	REC IN(R)	REC-EQ input
8	ALC(R)	ALC(R) signal out put
9	NC	NC pin
10	REC OUT(R)	REC output
11	ALC ON/OFF	Mode control input
12	TEST4	TEST pin
13	REC Return ON/OFF	Mode control input
14	MUTE ON/OFF	Mode control input
15	REC Return ON/OFF	Mode control input
16	Vcc	Vcc Pin
17	ALC DET	ALC detection signal out put
18	GND	GND pin
19	I REF	Equalizer reference current input
20	Test mode	Test modepin
21	REC OUT(L)	REC output
22	NC	NC pin
23	ALC(L)	ALC(L) signal out put
24	REC IN(L)	REC-EQ input
25	NC	NC pin
26	PBOUT(L)	PB output
27	TAI(L)	Tape input
28	EQOUT(L)	EQ output
29	PB-EQ(L)	NAB output
30	PB-NF2(L)	PB EQ feed back
31	PB-NF1(L)	PB EQ feed back
32	TEST2	TEST pin
33	RIP	Ripple fillter
34	PBIN(L)	PB input
35	REC-RETURN	REC Return
36	GND	GND pin
37	PBIN(R)	PB input
38	NC	NC pin
39	TEST3	TEST pin
40	PB-NF1(R)	PB EQ feed back

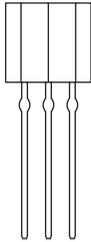
4.5 HA17758A (IC301) : Dual operational amp

- Pin layout

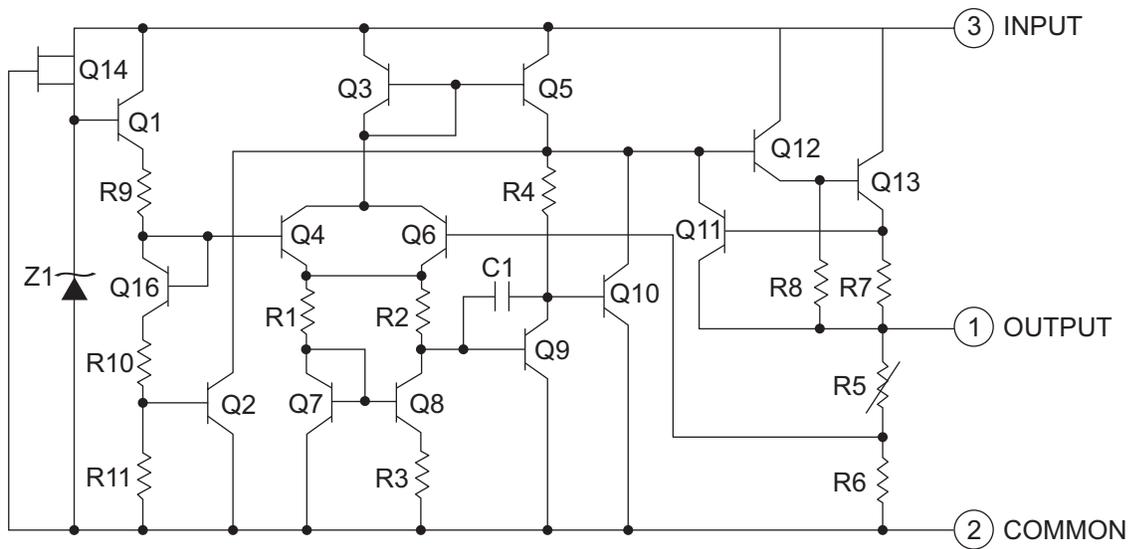


4.6 KIA78S05P-T (IC604) : Regulator

- Pin layout

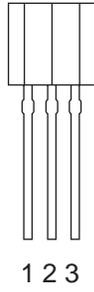


- Block diagram

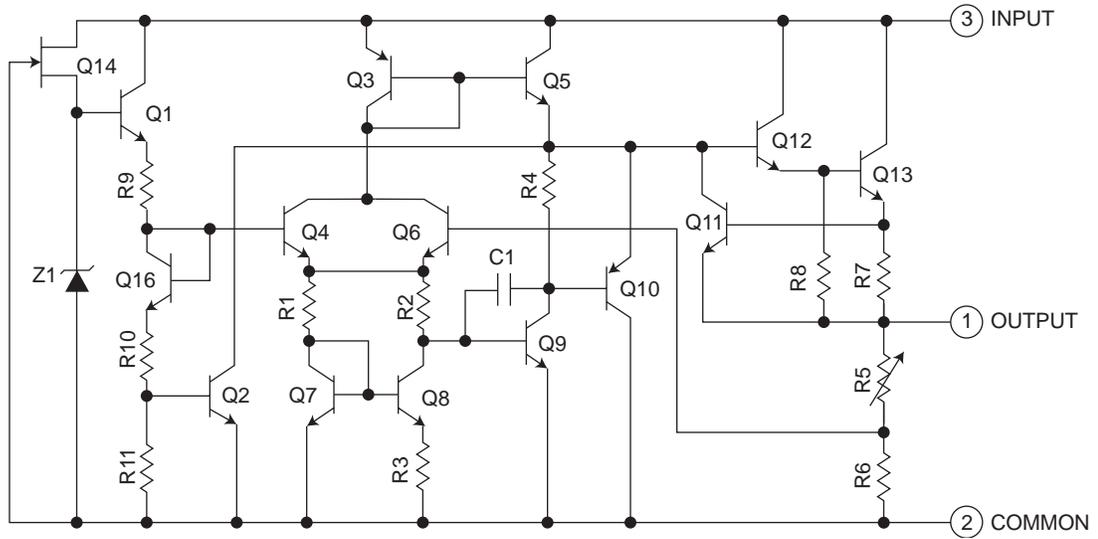


4.7 KIA78S06P-T (IC932) : Regulator

- Pin layout

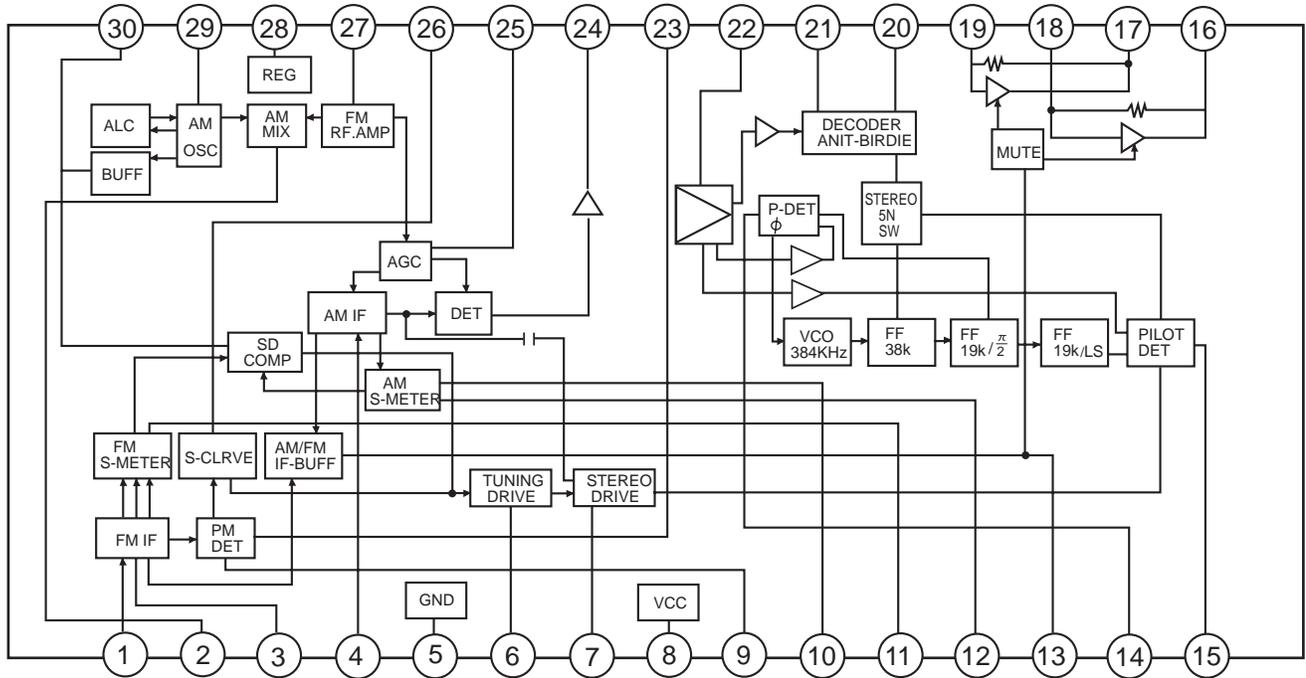


- Block diagram



4.8 LA1838 (IC1): FM AM IF amp & Detector, FM MPX decoder

• Block Diagram

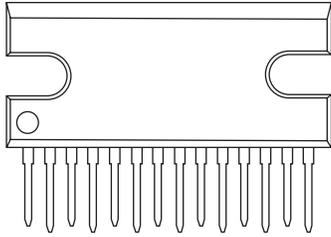


• Pin Function

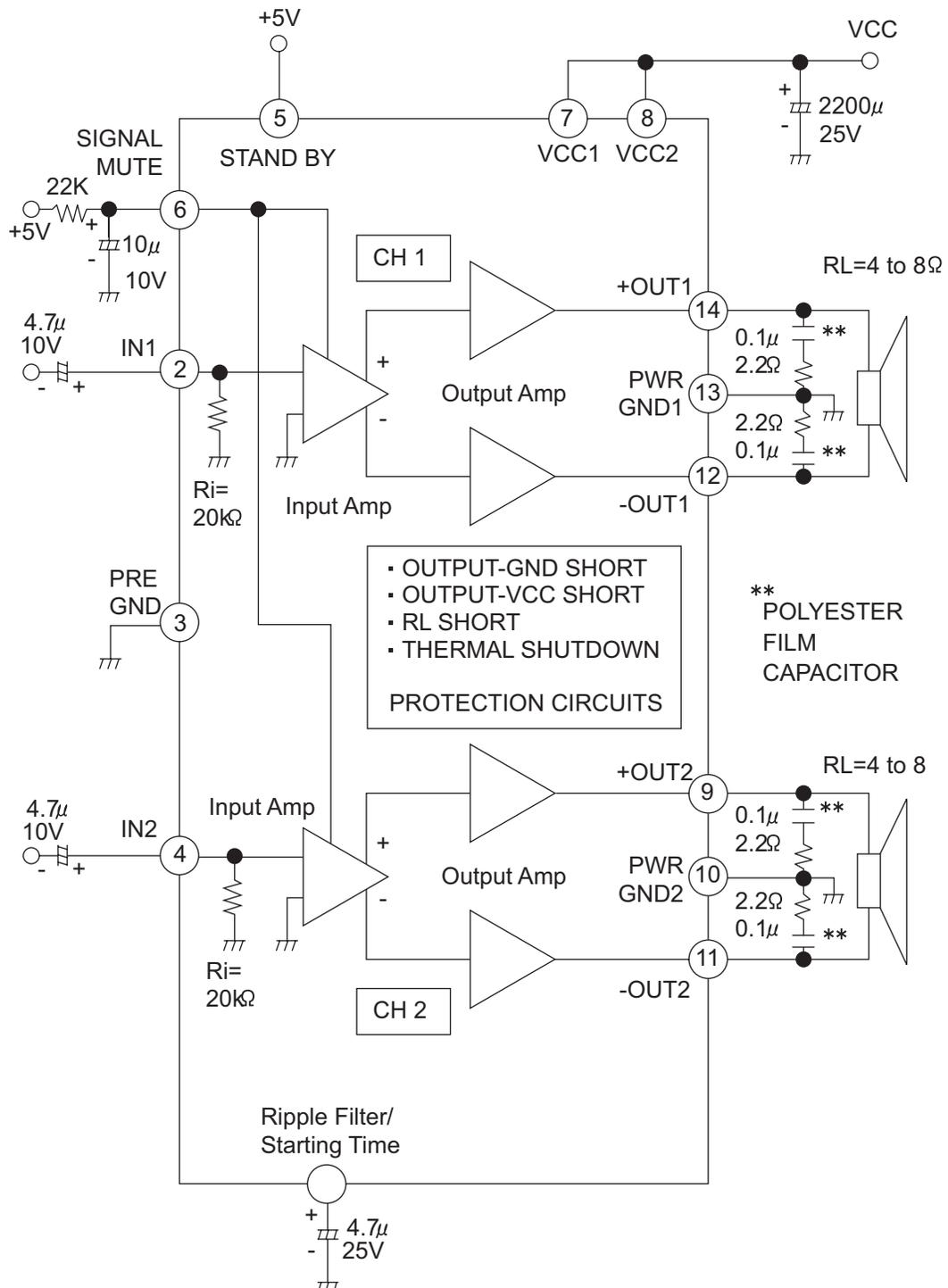
Pin No.	Symbol	I/O	Function
1	FM IN	I	This is an input terminal of FM IF signal.
2	AM MIX	O	This is an out put terminal for AM mixer.
3	FM IF	I	Bypass of FM IF
4	AM IF	I	Input of AM IF Signal.
5	GND	-	This is the device ground terminal.
6	TUNED	O	When the set is tuning, this terminal becomes "L".
7	STEREO	O	Stereo indicator output. Stereo "L", Mono: "H"
8	VCC	-	This is the power supply terminal.
9	FM DET	-	FM detect transformer.
10	AM SD	-	This is a terminal of AM ceramic filter.
11	FM VSM	O	Adjust FM SD sensitivity.
12	AM VSM	O	Adjust AM SD sensitivity.
13	MUTE	I/O	When the signal of IF REQ of IC121(LC72131) appear, the signal of FM/AM IF output. //Muting control input.
14	FM/AM	I	Change over the FM/AM input. "H" :FM, "L" : AM
15	MONO/ST	O	Stereo : "H", Mono: "L"
16	L OUT	O	Left channel signal output.
17	R OUT	O	Right channel signal output.
18	L IN	I	Input terminal of the Left channel post AMP.
19	R IN	I	Input terminal of the Right channel post AMP.
20	RO	O	Mpx Right channel signal output.
21	LO	O	Mpx Left channel signal output.
22	MPX IN	I	Mpx input terminal
23	FM OUT	O	FM detection output.
24	AM DET	O	AM detection output.
25	AM AGC	I	This is an AGC voltage input terminal for AM
26	AFC	-	This is an output terminal of voltage for FM-AFC.
27	AM RF	I	AM RF signal input.
28	REG	O	Register value between pin 26 and pin28 besides the frequency width of the input signal.
29	AM OSC	-	This is a terminal of AM Local oscillation circuit.
30	OSC BUFFER	O	AM Local oscillation Signal output.

4.9 LA4663 (IC300) : 2ch power amp

- Pin layout

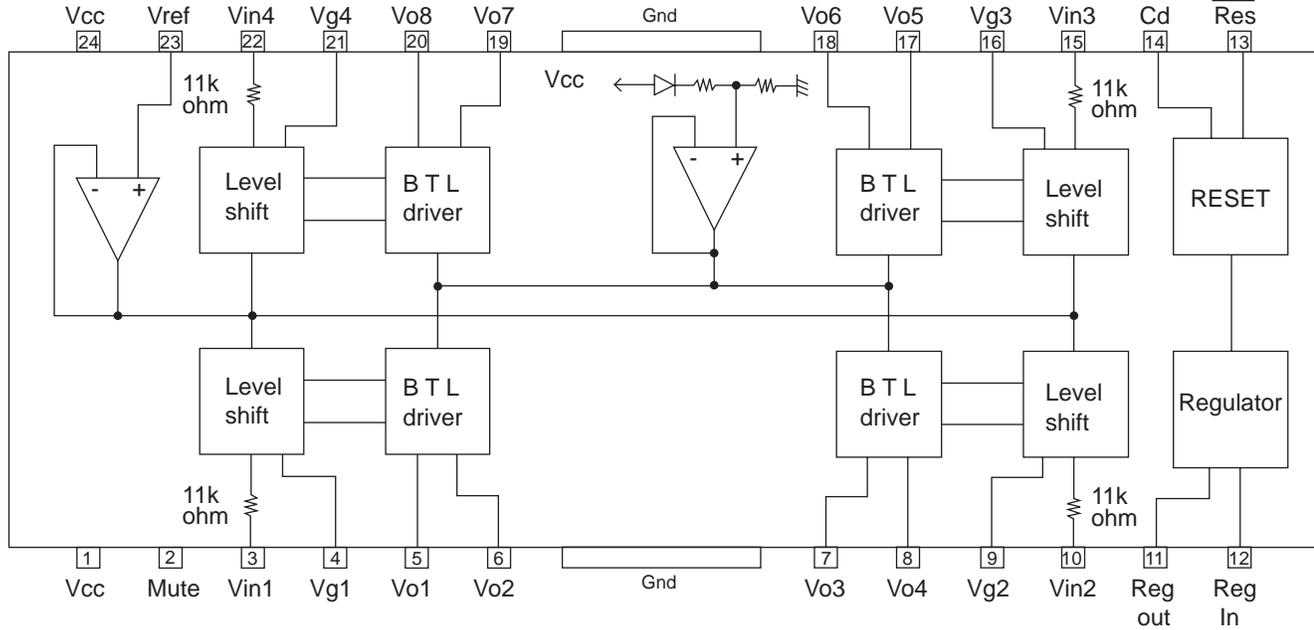


- Block diagram



4.10 LA6541-X (IC801) : Servo driver

- Pin layout & Block diagram

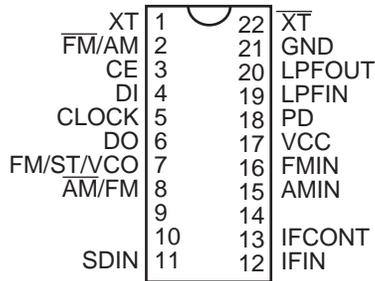


- Pin function

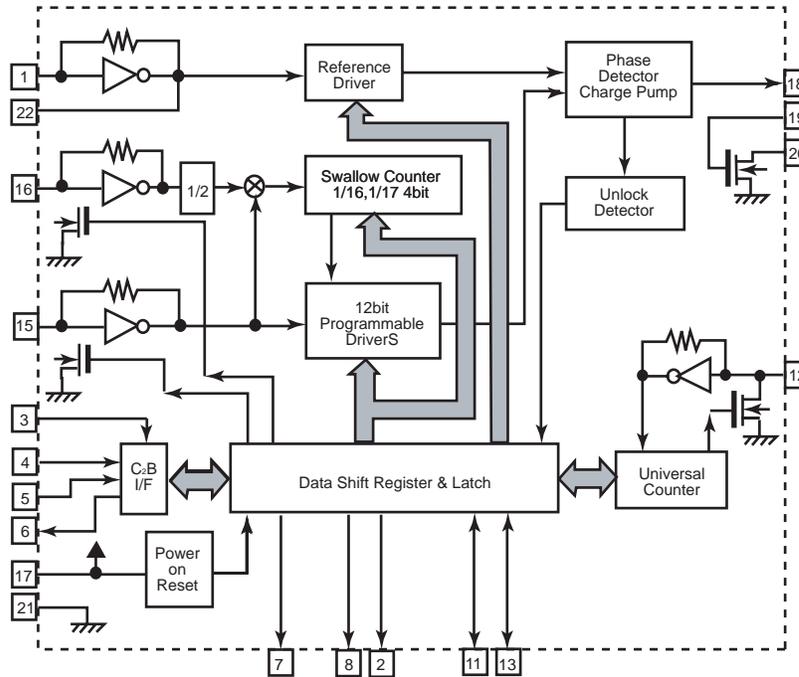
Pin No.	Symbol	Description
1	Vcc	Power supply (Shorted to pin 24)
2	Mute	All BTL amplifier outputs ON/OFF
3	Vin1	BTL AMP 1 input pin
4	Vg1	BTL AMP 1 input pin (For gain adjustment)
5	Vo1	BTL AMP 1 input pin (Non inverting side)
6	Vo2	BTL AMP 1 input pin (Inverting side)
7	Vo3	BTL AMP 2 input pin (Inverting side)
8	Vo4	BTL AMP 2 input pin (Non inverting side)
9	Vg2	BTL AMP 2 input pin (For gain adjustment)
10	Vin2	BTL AMP 2 input pin
11	Reg Out	External transistor collector (PNP) connection. 5V power supply output
12	Reg In	External transistor (PNP) base connection
13	Res	Reset output
14	Cd	Reset output delay time setting (Capacitor connected externally)
15	Vin3	BTL AMP 3 input pin
16	Vg3	BTL AMP 3 input pin (For gain adjustment)
17	Vo5	BTL AMP 3 output pin (Non inverting side)
18	Vo6	BTL AMP 3 output pin (Inverting side)
19	Vo7	BTL AMP 4 output pin (Inverting side)
20	Vo8	BTL AMP 4 output pin (Non inverting side)
21	Vg4	BTL AMP 4 output pin (For gain adjustment)
22	Vin4	BTL AMP 4 output pin
23	Vref	Level shift circuit's reference voltage application
24	Vcc	Power supply (Shorted to pin 1)

4.11 LC72136N (IC2) : PLL frequency synthesizer

- Pin layout



- Block diagram



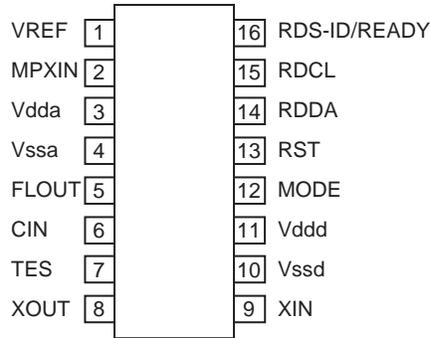
- Pin function

Pin No.	Symbol	I/O	Function
1	XT	I	X'tal oscillator connect (75kHz)
2	FM/AM	O	LOW:FM mode
3	CE	I	When data output/input for 4pin (input) and 6pin (output): H
4	DI	I	Input for receive the serial data from controller
5	CLOCK	I	Sync signal input use
6	DO	O	Data output for Controller Output port
7	FM/ST/VCO	O	Low: MW mode
8	AM/FM	O	Open state after the power on reset
9	LW	I/O	Input/output port
10	MW	I/O	Input/output port
11	SDIN	I/O	Data input/output
12	IFIN	I	IF counter signal input

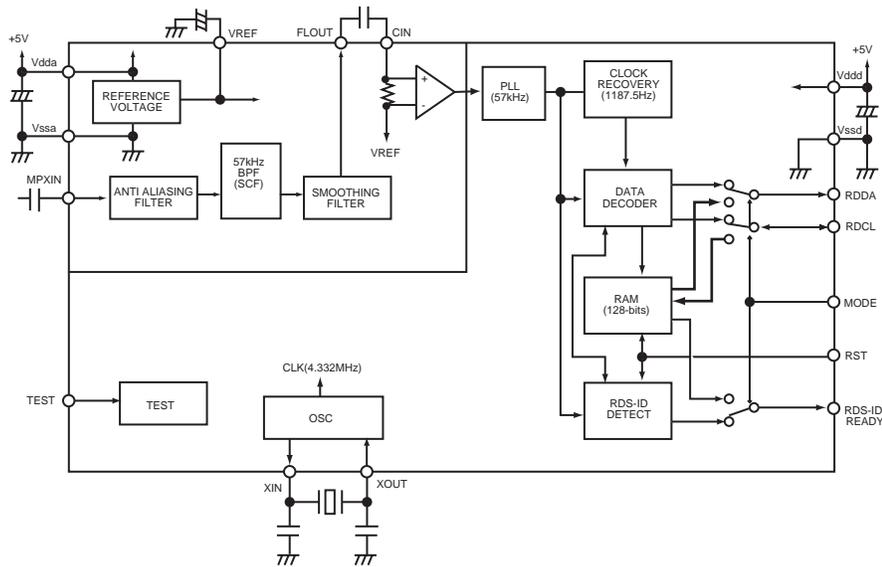
Pin No.	Symbol	I/O	Function
13	IFCONT	O	IF signal output
14		-	Not use
15	AMIN	I	AM Local OSC signal output
16	FMIN	I	FM Local OSC signal input
17	VCC	-	Power suply (VDD=4.5-5.5V) When power ON:Reset circuit move
18	PD	O	PLL charge pump output (H: Local OSC frequency Height than Reference frequency. L: Low Agreement: Height impedance)
19	LPFIN	I	Input for active lowpassfilter of PLL
20	LPFOUT	O	Output for active lowpassfilter of PLL
21	GND	-	Connected to GND
22	XT	I	X'tal oscillator (75KHz)

4.12 LC72723(IC3): RDS demodulation

- Pin layout



- Block Diagram

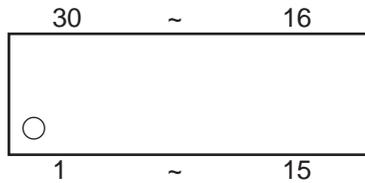


- Pin functions

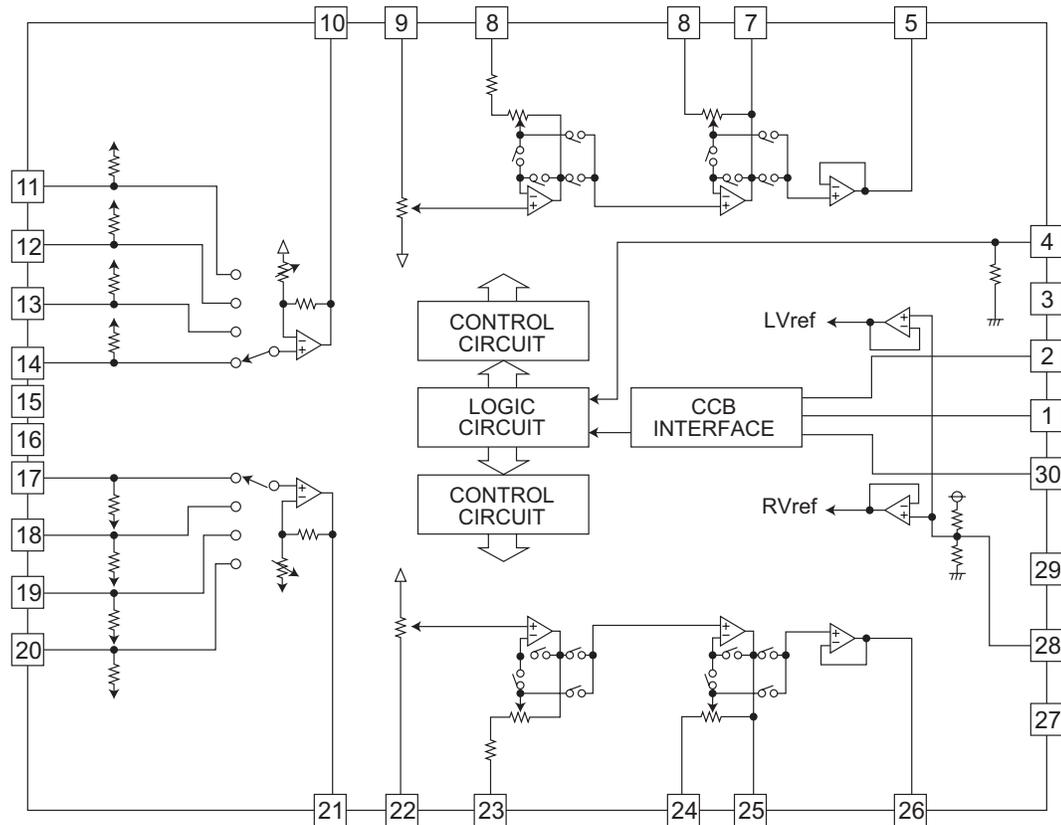
Pin No.	Symbol	I/O	Function
1	VREF	O	Reference voltage output ($V_{dda}/2$)
2	MPXIN	I	Baseband (multiplexed) signal input
3	Vdda	-	Analog power supply (+5V)
4	Vssa	-	Analog ground
5	FLOUT	O	Subcarrier input (filter output)
6	CIN	I	Subcarrier input (comparator input)
7	TEST	I	Test input
8	XOUT	O	Crystal oscillator output (4.332MHz)
9	XIN	I	Crystal oscillator input (external reference input)
10	Vssd	-	Digital ground
11	Vddd	-	Digital power supply
12	MODE	I	Read mode setting (0:master, 1:slave)
13	RST	I	RDS-ID/RAM reset (positive polarity)
14	RDDA	O	RDS data output
15	RDCL	I/O	RDS clock output (master mode)/RDS clock input (slave mode)
16	RDS-ID/READY	O	RDS-ID/READY output (negative polarity)

4.13 LC75342 (IC302) : E. volume

- Terminal layout



- Block diagram



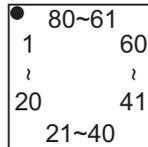
- Pin function

Pin No.	Symbol	Function
1	DI	Serial data and clock input for IC control
2	CE	Chip enable
3	VSS	GND
4	TEST	Electric volume connection for test
5	LOUT	Volume control and equalizer input
6	LBASS2	Connection for resistor and capacitor that from the bass band filter
7	LBASS1	Connection for resistor and capacitor that from the bass band filter
8	LTRE	Connection for capacitor that from the treble band filter
9	LIN	Volume control and equalizer input
10	LSEL0	Input selector output
11	L4	Not used
12	L3	Input signal connections, not used
13	L2	Input signal connections
14	L1	Input signal connections
15	NC	GND

Pin No.	Symbol	Function
16	NC	GND
17	R1	Input signal connections
18	R2	Input signal connections
19	R3	Input signal connections, not used
20	R4	Not used
21	RSEL0	Input selector output
22	RIN	Volume control and equalizer input
23	RTRE	Connection for capacitor that from the treble band filter
24	RBASS1	Connection for resistor and capacitor that from the bass band filter
25	RBASS2	Connection for resistor and capacitor that from the bass band filter
26	ROUT	Volume control and equalizer input
27	NC	Not used
28	VREF	Connection to the 0.5X VDD voltage generator circuit used as the analog signal ground
29	VDD	Power supply
30	CL	Serial data and clock input for IC control

4.14 MN662748RPMFA (IC603) : Digital servo & Digital signal processor

- Pin layout



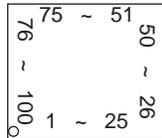
- Pin function

Pin No.	Symbol	I/O	Function
1	BCLK	-	Not use
2	LRCK	-	Not use
3	SRDATA	-	Not use
4	DVDDI	-	Power supply for digital circuit
5	DVSSI	-	GND for digital circuit
6	TX	-	Not use
7	MCLK	I	Micro computer command clock signal input
8	MDATA	I	Micro computer command data input
9	MLD	I	Micro computer command load signal input (L: Load)
10	SENSE	-	Not use connect to TP716
11	FLOCK	-	Not use connect to TP717
12	TLOCK	-	Not use connect to TP718
13	BLKCK	O	Sub code block clock signal output
14	SQCK	I	External clock input for sub code Q register input
15	SUBQ	O	Sub code Q data output
16	DMUTE	-	Not use connect to TP719
17	STAT	O	Status signal input
18	RST	I	Reset signal input (L: Reset)
19	SMCK	-	Not use
20	PMCK	-	Not use connect to TP720
21	TRV	O	Traverse enforced output
22	TVD	O	Traverse drive output
23	PC	-	Not used
24	ECM	O	Spindle motor drive signal (Enforced mode output)
25	ECS	O	Spindle motor drive signal (Servo error signal output)
26	KICK	O	Kick pulse output
27	TRD	O	Tracking drive output
28	FOD	O	Focus drive output
29	VREF	I	Reference voltage for D/A output block
30	FBAL	O	Focus balance adjust signal output
31	TBAL	O	Tracking balance adjust signal output
32	FE	I	Focus error signal input (Analog input)
33	TE	I	Tracking error signal input (Analog input)
34	RFENV	I	RF envelope signal input (Analog input)
35	VDET	I	Vibration detect signal input (H:Detect)
36	OFT	I	Off track signal input (H:Off track)
37	TRCRS	I	Track cross signal input
38	/RFDET	I	RF detect signal input (L:Detect)
39	BDO	I	Drop out signal input (H:Drop out)
40	LDON	O	Laser on signal output
41	PLL2	-	Not use
42	TOFS	-	Not use
43	WVEL	-	Not use

Pin No.	Symbol	I/O	Function
44	ARF	I	RF signal input
45	IREF	I	Reference current input
46	DRF	I	Bias pin for DSL
47	DSL2	I/O	Loop filter pin for DSL
48	PLL2	I/O	Loop filter pin for PLL
49	VCOF	I/O	Loop filter pin for VCO
50	AVDD2	-	Power supply for analog circuit
51	AVSS2	-	GND for analog circuit
52	EFM	-	Not use connect to TP724
53	PCK	O	Clock output for PLL
54	VCOF2	I/O	Loop filter pin for Digital servo VCO
55	SUBC	-	Not use
56	SBCK	-	Not use
57	VSS	-	GND for crystal oscillation circuit
58	X1	I	Input for crystal oscillation circuit (f=16.9344MHz)
59	X2	O	Output for crystal oscillation circuit (f=16.9344MHz)
60	VDD	-	Power supply for crystal oscillation circuit
61	BYTCK/ TRVSTP	-	Not use
62	CLDCK	O	Sub code frame clock signal output
63	FCLK	-	Not used
64	IPFLAG	O	Interpolation flag signal output Connect to TP721
65	FLAG	O	Flag signal output Connect to TP722
66	CLVS	-	Not use
67	CRC	-	Not use
68	DEMPH	O	De-emphasis detect signal output Connect to TP723
69	RESY	-	Not use
70	IOSEL	I	Mode select pin Connect to DVDD1 (H fix)
71	/TEST	I	Test pin Connect to DVDD1 (H fix)
72	AVDD1	-	Power supply for analog circuit
73	OUTL	O	L-channel audio output
74	AVSS1	-	GND for analog circuit
75	OUTR	O	R-channel audio output
76	RSEL	I	RF signal polarity setting pin Connect to DVDD1 (H fix)
77	CSEL	I	Oscillation frequency setting pin Connect to GND (L fix)
78	PSEL	I	IOSEL=H Test pin Connect to GND (L fix)
79	MSEL	I	IOSEL=H SMCK output Frequency select pin
80	SSEL	I	IOSEL=H SMCK output SUBQ output mode select pin

4.15 MN101C57CEW (IC931) : System micon

- Pin layout



- Pin function

Pin No.	Symbol	I/O	Description
1~3	VLC1~VLC3	-	LCD BIAS VOLTAGE
4,5		-	Not use
6	REEL	I	Tape End Detection
7	_MPX	I	FM Stereo Detection ('L'=STEREO)
8	PERIOD	O	Tuner PLL Strobe
9	F_TU	O	Tuner Function ('H'=TUNER)
10	AHB	O	Active Hyper Bass('L'=ON)
11	VSS	-	GROUND
12,13	OSC1,OSC2	-	MAIN OSC
14	MMOD	-	GROUND
15,16	X1,X0	-	SUB OSC
17	VDD	-	5V
18	_RST	I/O	Micon Reset
19	VDD	O	5V
20	SDATA	O	Serial Data (Tuner PLL / Tape IC)
21	DIMCTL	O	LCD DIM control. DIMMER ON =L
22	SCK	I	Serial Clock (Tuner PLL / Tape IC)
23	STTA	O	Tape IC Strobe
24	QRIN	O	Q-code data input port
25	SQCK	I	Q-code serial clock
26	F_CD	O	CD Function ('H'=CD)
27	STAT	I	CD status input port
28	MUTE	O	BTL mute control port (MUTE ON = 'L')
29	RST/CLOSE	O	Door close detection
30	VOLCE	I	Volumn Chip Enable
31	BCTL	I	Switched 5V control('H'=5V/off)
32	BUP	I	Back up power detect('H'=BACKUP)
33	_REM	I	Remote control input
34	RDCK	I	RDS clock
35	BLKCK	-	Block clock input port
36	FLAG	-	Error Correction Count
37,38		-	Not use
39	VDD	O	5V
40	VREF+	O	5V
41	_XRST	O	CD reset
42	MCLK	O	CD data clock
43	MDATA	I	CD data input port
44	MLD	I	CD command ready signal
45,46	KEY0,KEY1	I	Unit Key input 0,1
47	DOOR_RST	-	REST/CLOSE switch detect port
48	CDSAFETY	O	CD safety voltage detect port
49	VREF-	O	GROUND
50	P_OUT	O	Power On/Off ('H'=Power On)
51,52	TAPE0,TAPE1	O	Tape Switch 0Tape Switch 1
53~55	SAFETY2,0,1	O	Irregular voltage detection 201
56	_SMUTE	O	System mute (MUTE on = 'L')
57~96	S39~S0	O	SEGMENT OUTPUT
97~100	COM3~COM0	-	LCD BIAS GROUND



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AV & MULTIMEDIA COMPANY AUDIO/VIDEO SYSTEMS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.22062)



Printed in Japan
WPC

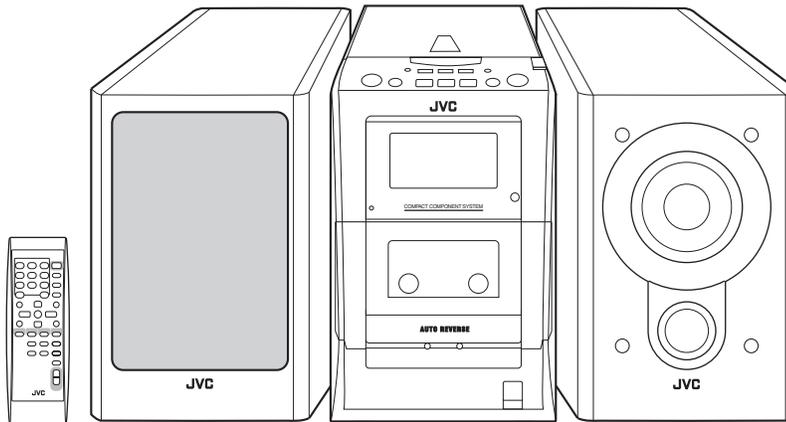
JVC

SCHEMATIC DIAGRAMS

COMPACT COMPONENT SYSTEM

FS-H30

CD-ROM No.SML200305



COMPACT
disc
DIGITAL AUDIO

Area Suffix

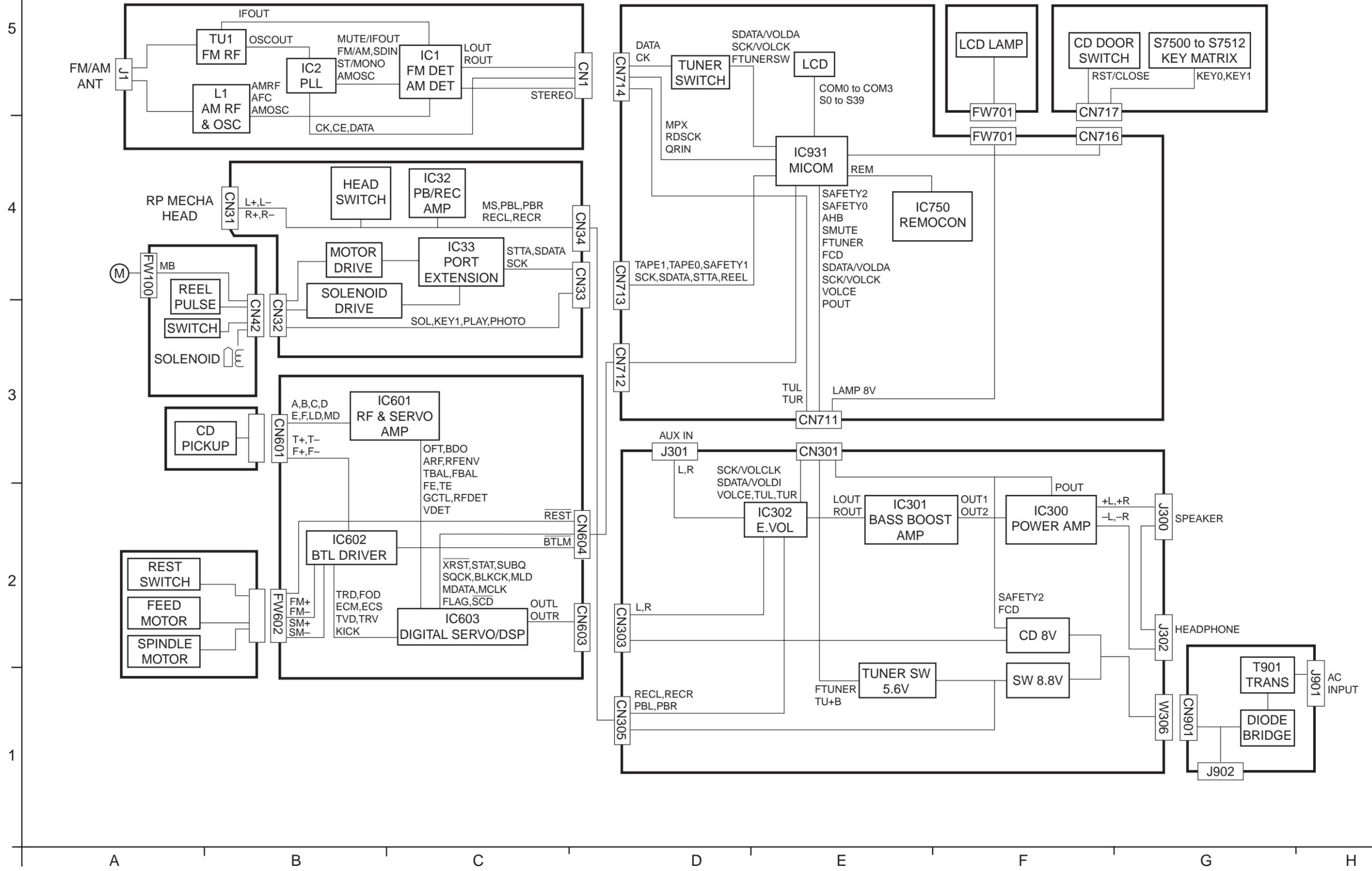
J ----- U.S.A.
C ----- Canada

Contents

Block diagram	2-1
Standard schematic diagrams	2-2
Printed circuit boards	2-8~10

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (■), diode (▣) and ICP (●) or identified by the "⚠" mark nearby are critical for safety.

Block diagram

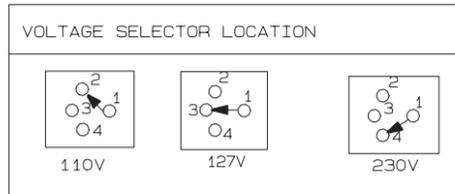


Standard schematic diagrams

Primary section

MODEL : FS/UX-H30/H33/H35		
SHEET No.	MODEL NUMBERS TO BE APPLIED	CIRCUITS DESCRIPTION
1/7	FS/UX-H30/H33/H35	. PRIMARY WITH MAINS TRANSFORMER
2/7	FS/UX-H30/H33/H35	. DC REGULATOR, AUDIO OUTPUT . EXTERNAL INPUT, SOURCE SELECTOR SWITCH
3/7	FS/UX-H30/H33/H35	. LCD DISPLAY/SYSTEM CONTROL/USERS KEY CONTROL.
4/7	FS/UX-H30/H33/H35	. CD SERVO AND CD SYSTEM CONTROL
5/7	FS/UX-H30/H33/H35	. TAPE DECK MECHANISM CONTROL . TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS.
6/7	FS/UX-H30/H33/H35	. TUNER RF/IF/FM MULTIPLEX (A/UF/E GROUPS)
7/7	FS/UX-H30/H33/H35	. TUNER RF/IF/FM MULTIPLEX (J/C/U GROUPS)

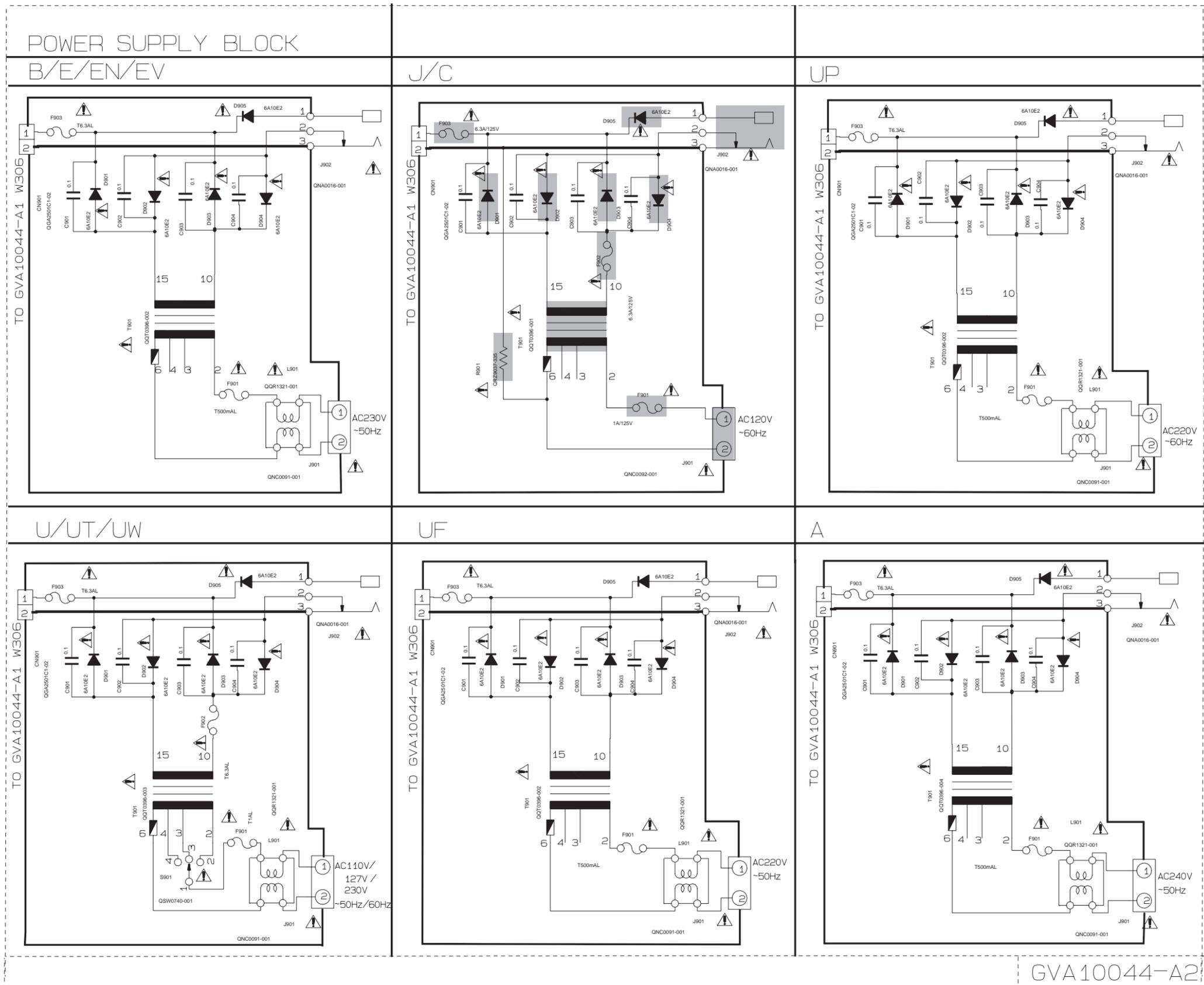
VERSION CODES	
J	: USA
C	: CANADA
A	: AUSTRALIA
B	: U. K
E	: CONTINENTAL EUROPE
EN	: NORDIC COUNTRIES
EV	: EASTERN EUROPE & RUSSIA
UF	: CHINA
UP	: KOREA
UT	: TAIWAN
UW	: SOUTH AMERICA
U	: SINGAPORE AND UNIVERSAL
EXCEPT ALL OF ABOVE	



NOTES

- VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. INSIDE BRACKET VALUES ARE OTHER FUNCTIONS
- UNLESS OTHERWISE SPECIFIED, RESISTOR ARE 1/8W/5% CARBON RESISTOR. ALL RESISTOR VALUES ARE IN OHM.
- ALL CAPACITOR ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
- ALL CAPACITANCE VALUES ARE IN UF(10⁶F).
- ALL INDUCTANCE VALUES ARE IN uH(10⁻⁶H).
- ALL E-CAPACITOR ARE SHOWN IN THE FORM OF CAPACITANCE (UF)/RATED VOLTAGE(V).

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



GVA10044-A2

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A

B

C

2-2

D

E

F

G

H

Amp section

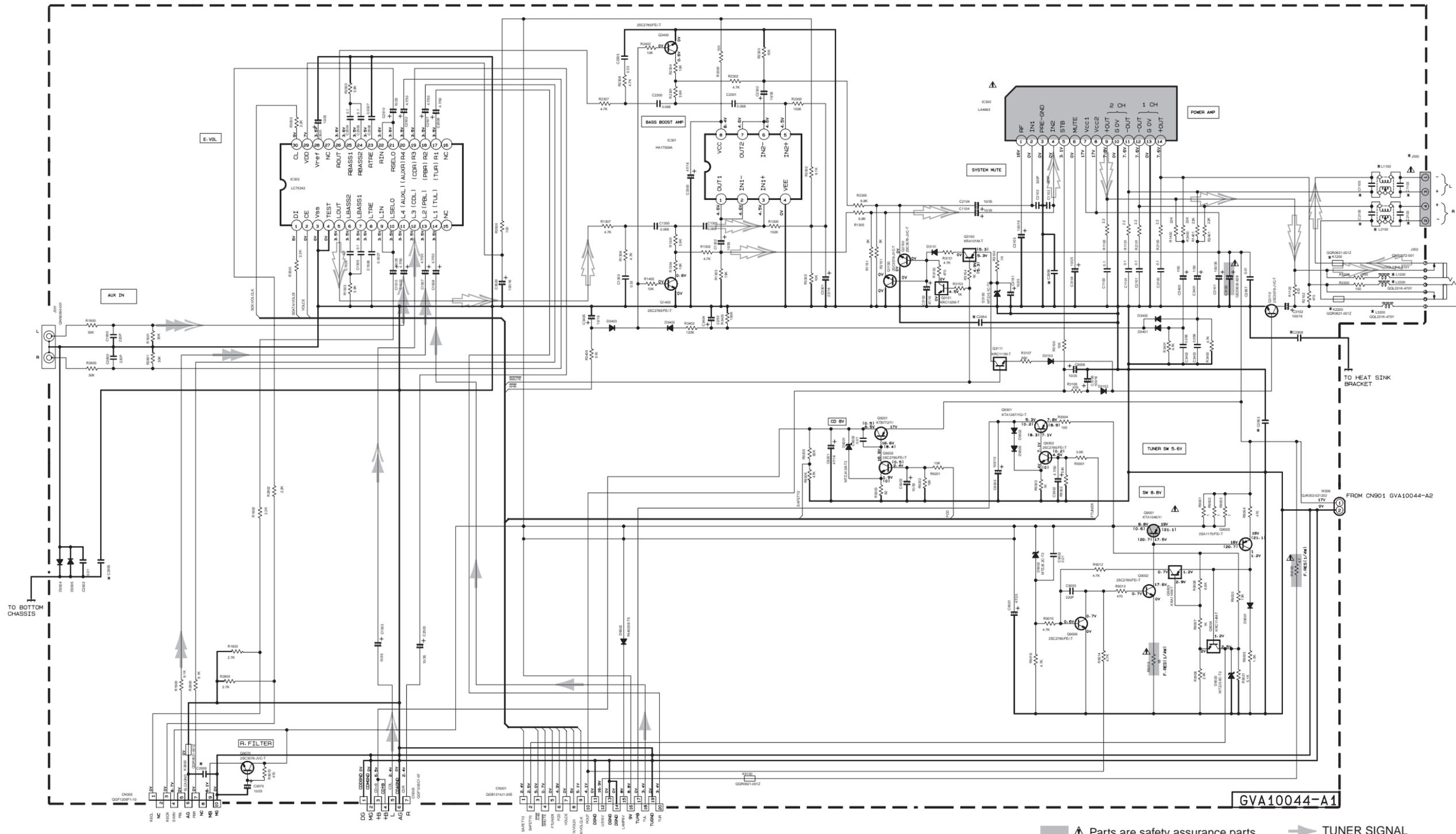
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1



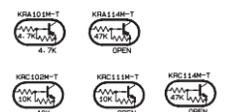
TO CN34 OF SLC-S202M FROM CN63 OF GVA10044-A3 FROM CN71 OF GVA10045-A1

*** PART LIST**

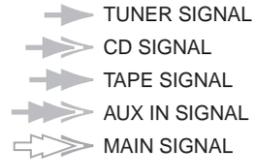
PART	VERSION	L1000/2005/2000	K1000/2000	C1100/2100	L1100	L2100	C1100/2100	J200	CR953/CR954/CR955/CR959	CR956/CR958
J/C		B2029/2030/2031	B2027/2028	-	B7208/7209	B7211/7212	-	QNB0117-002	-	-
B/E/EN/EV		Q2L231K-470Y	Q9R0621-0012	220p	Q9R0787-002	Q9R0787-002	0.0033u	QNB0117-001	0.001	0.01
A/U/AF/AR/AT/AN		Q2L231K-470Y	Q9R0621-0012	220p	Q9R0787-002	Q9R0787-002	0.0033u	QNB0117-001	0.001	0.01

NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
CONDITION: CD STOP MODE
INSIDE BRACKET VALUES ARE OTHER FUNCTIONS
- UNLESS OTHERWISE SPECIFIED - RESISTORS ARE 1/8W ±5% CARBON RESISTOR. ALL RESISTANCE VALUES ARE IN OHM(Ω). ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR. ALL CAPACITANCE VALUES ARE IN pF(pf). ALL INDUCTANCE VALUES ARE IN mH(mH). ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V). ALL DIODES(Diodes) Name: 1S9133-72



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



A B C D E F G H

■ Micon / LCD & Key control section

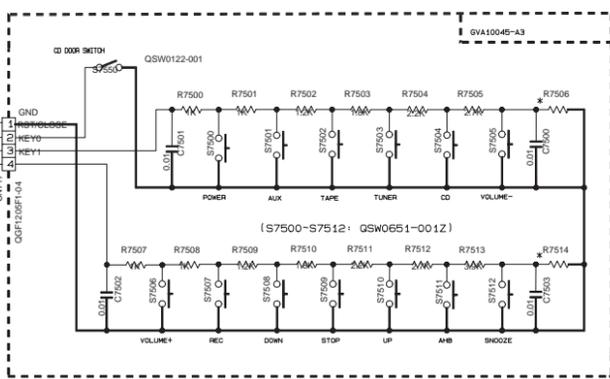
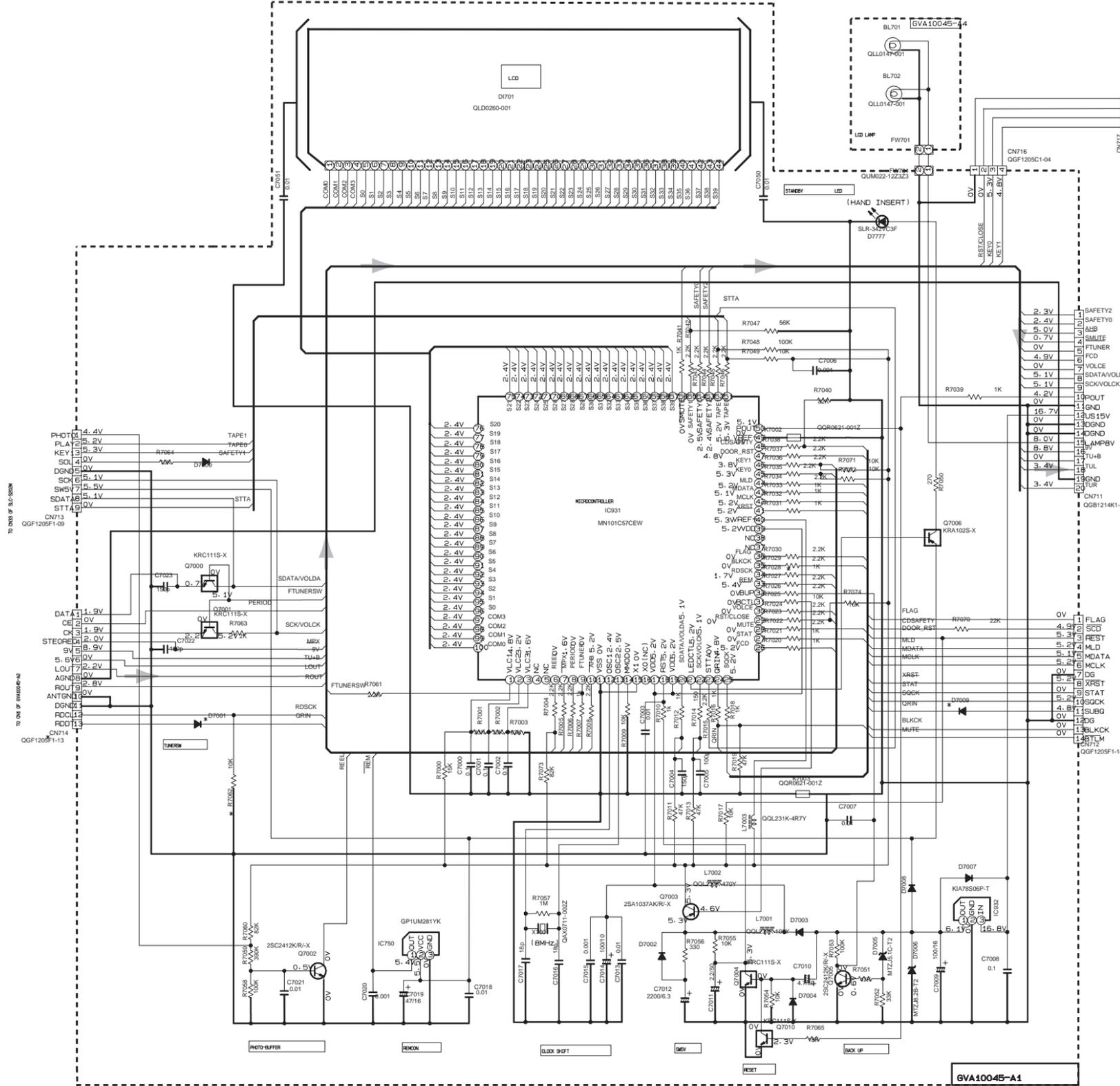
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NOTES:

- 1. VOLTAGES ARE MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE
- WITHOUT INPUT SIGNAL
- CONDITION-- ID STOP MODE
- 2. UNLESS OTHERWISE SPECIFIED:
- ALL RESISTANCE VALUES ARE IN UNIT OHM
- ALL CAPACITANCE VALUES ARE IN UF (OR PF)
- ALL INDUCTANCE VALUES ARE IN UH (OR MH)
- ALL CAPACITANCE ARE SHOWN IN THE FORM OF CAPACITANCE/UF// RATED VOLTAGE (V)
- ALL DIODES ARE 1SS133-T2 UNLESS SPECIFIED

* MARK

VERSION	(J/C)	(U/LP/UT/LW)	(A/UF)	(B/E/EN/EV)
CN714	GGF1205F1-09			GGF1205F1-13
D7009/BW		B7013		D7009
R7506 (VERSION)	-	-	8K	3K
R7514 (VERSION)	8K	3K	-	-
D7001	-	-	-	1SS133-T2
R7062	-	-	-	10K
R702B	-	-	-	1K

➔ TUNER SIGNAL

CD servo control section

GVA10044-A3

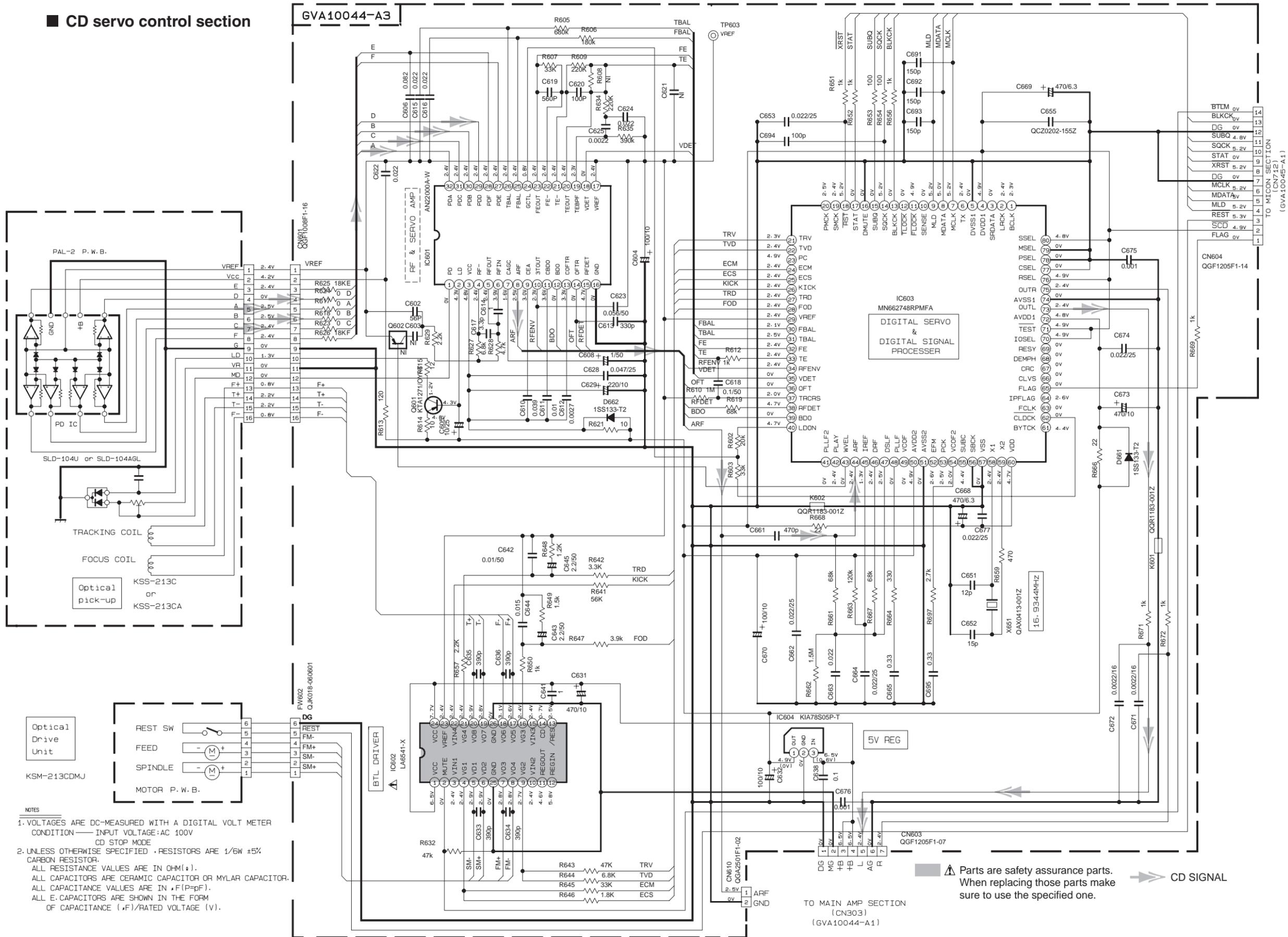
5

4

3

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NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER CONDITION—INPUT VOLTAGE: AC 100V
CD STOP MODE
2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/6W ±5% CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN nF(P=pF).
ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (nF)/RATED VOLTAGE (V).

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

TO MAIN AMP SECTION (CN303) (GVA10044-A1)

TO MICON SECTION (CN712) (GVA10045-A1)

Cassette mechanism control section

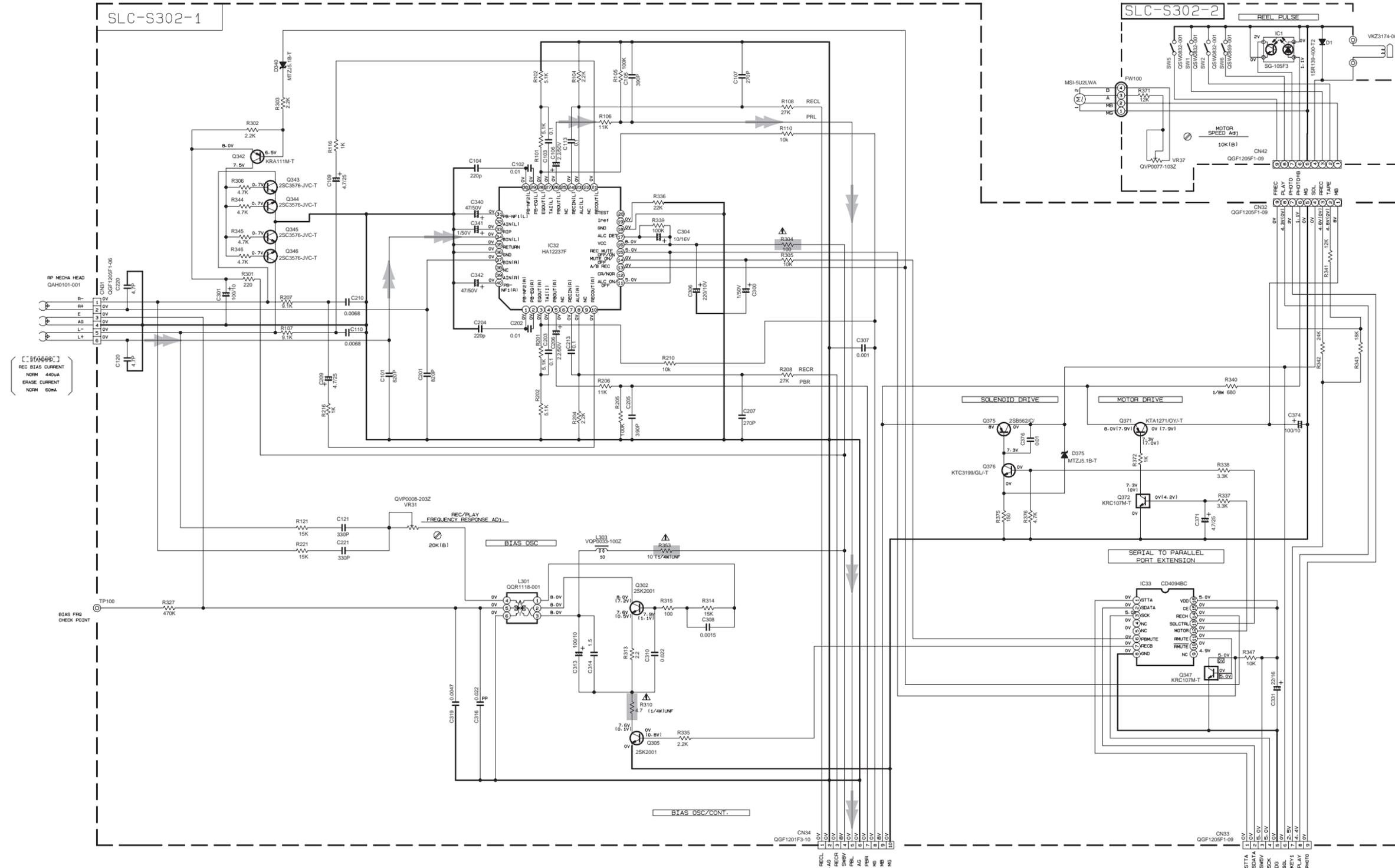
5

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1



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION: MECHA STOP MODE

2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR. ALL RESISTANCE VALUES ARE IN OHM(Ω). ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR. ALL CAPACITANCE VALUES ARE IN pF(pF). ALL INDUCTANCE VALUES ARE IN mH(mH). ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V). POLYPROPYLENE CAPACITOR

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

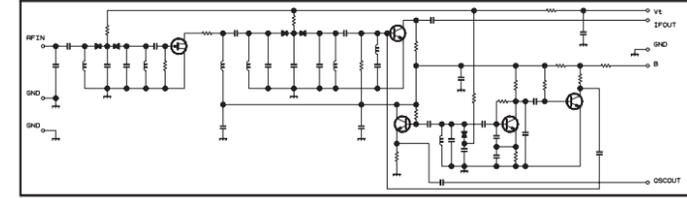
TAPE SIGNAL

■ Tuner section

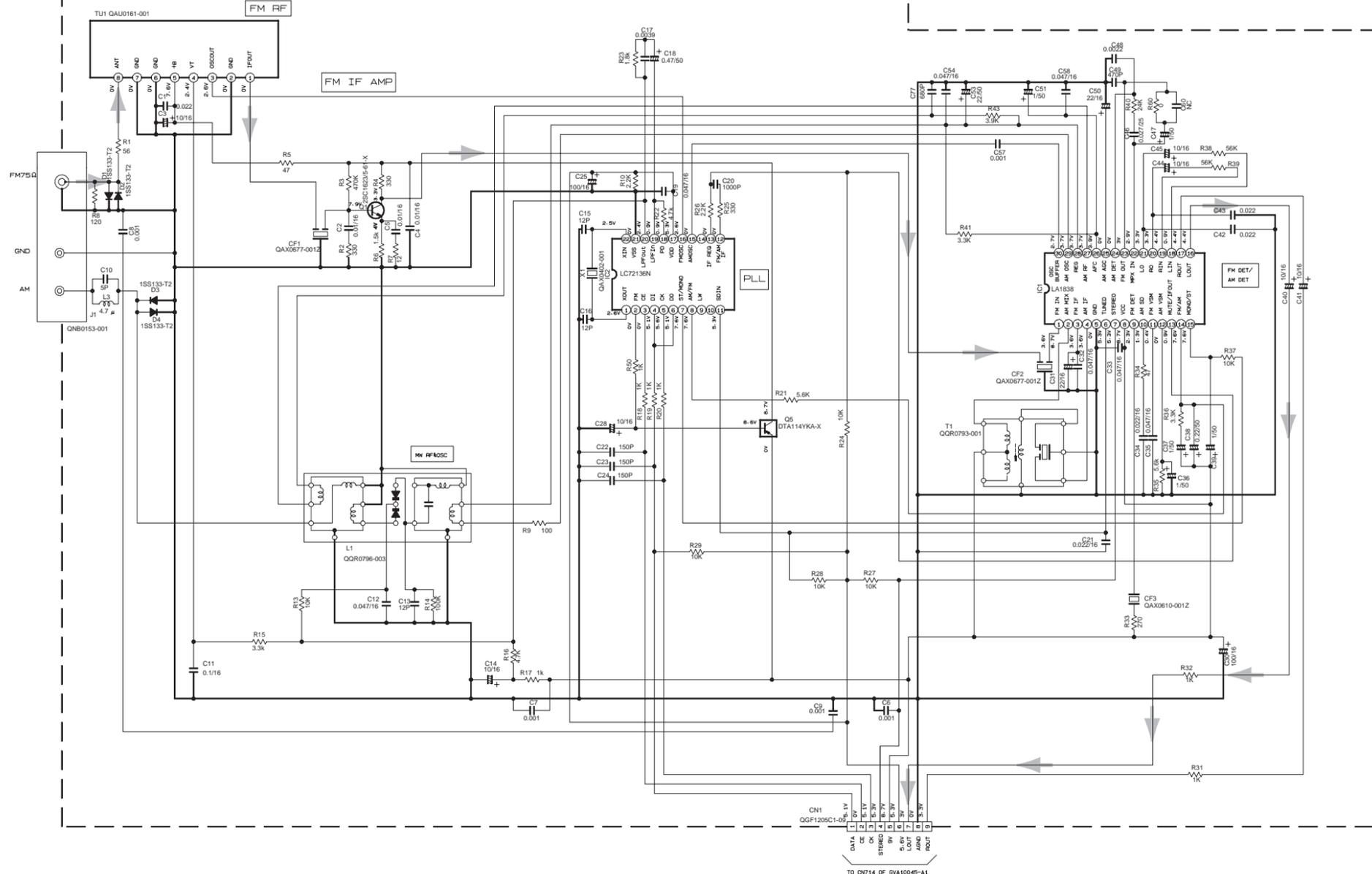
CONDITION	PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
IC1	FM NO SIGNAL	3.6	8.9	3.6	3.6	0	5.0	5.0	8.9	8.9	1.3	0.1	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.5	3.5	3.6	2.7	
	FM 60DB STEREO	3.6	8.9	3.6	3.6	0	5.0	5.0	8.9	8.9	1.3	4.3	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.5	3.5	3.6	2.7	
	AM NO SIGNAL	3.5	9.0	3.5	3.5	0	5.0	5.1	9.0	2.6	1.3	0	0	0.9	4.7	5.5	4.3	4.3	4.3	4.3	3.3	3.2	2.8	3.4	0.7	0.7	3.6	3.6	3.6	2.1	
IC2	FM NO SIGNAL	2.5	0	0	5.0	4.9	5.0	7.9	7.8	3.6	6.1	5.1	0	0	0	2.5	5.1	0.9	0.9	3.8	0	2.3									

Tr. NO.	Q1	Q5
PIN NO.	E C B E C B	E C B
FM 87.5MHz NO SIGNAL	0 7.1 0.85	8.9 8.8 0
AM 52KHz NO SIGNAL	0 0 0 9.0 0 8.9	

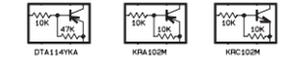
Tr. NO.	Q2	Q3	Q4
PIN NO.	E C B E C B E C B	E C B E C B	E C B
AM 52KHz NO SIGNAL	0 0 0 7.0 0 0 7.0 0 3.6 0 7		
AM 144KHz NO SIGNAL	0 0 0 3.0 0 0 3.0 0 3.6 3.6 3.6		



GVA10045-A2



- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
 2. ALL RESISTORS ARE 1/16W ±5% METAL GLAZE RESISTOR.
 3. ALL RESISTANCE VALUES ARE IN OHM(Ω).
 4. ALL CAPASITANCE VALUES ARE IN P(F=pF).
 5. SI DIODES (D) ARE 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104J.



➔ TUNER SIGNAL

* PART LIST

PART	VERSION	C42/C43
J/C		0.002
U/A/T/W		0.007

5

4

3

2

1

A B C D E F G H

Printed circuit boards

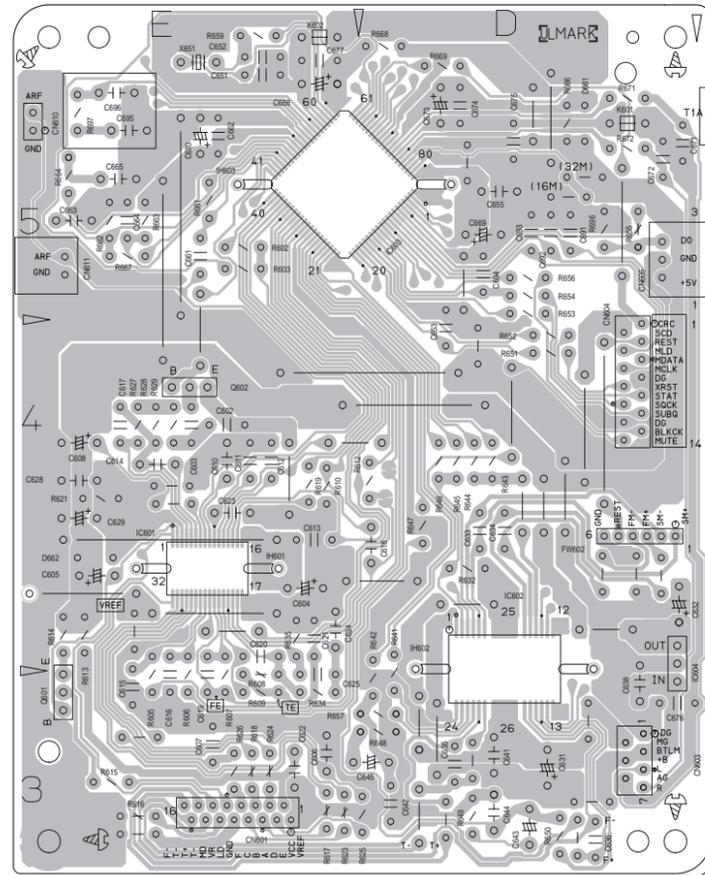
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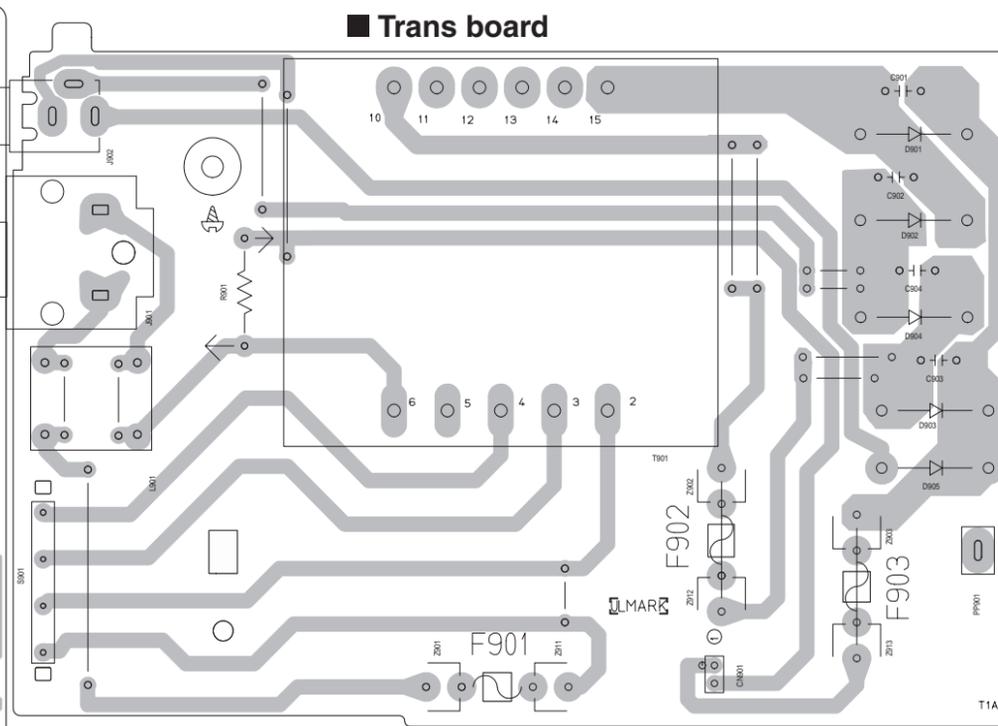
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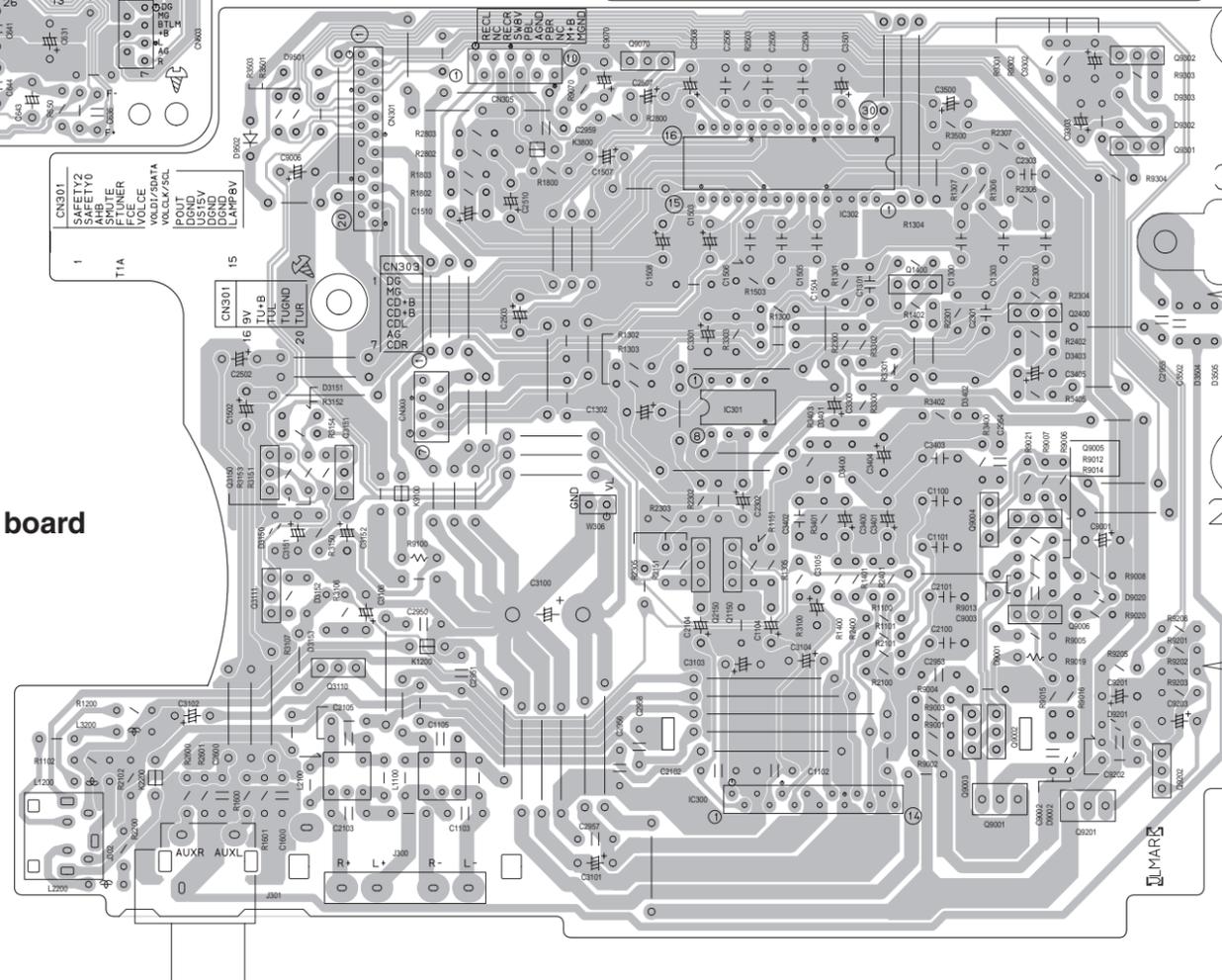
1



■ CD board



■ Trans board



■ Main board

1
T1A
15
CN301
SAFETY2
SAFETY0
SAFE
FTUNER
VOLCE
VOLCLV/SL
VOLCLV/SL
POUT
REAR
DND
LAMPBV

A

B

C

2-8

D

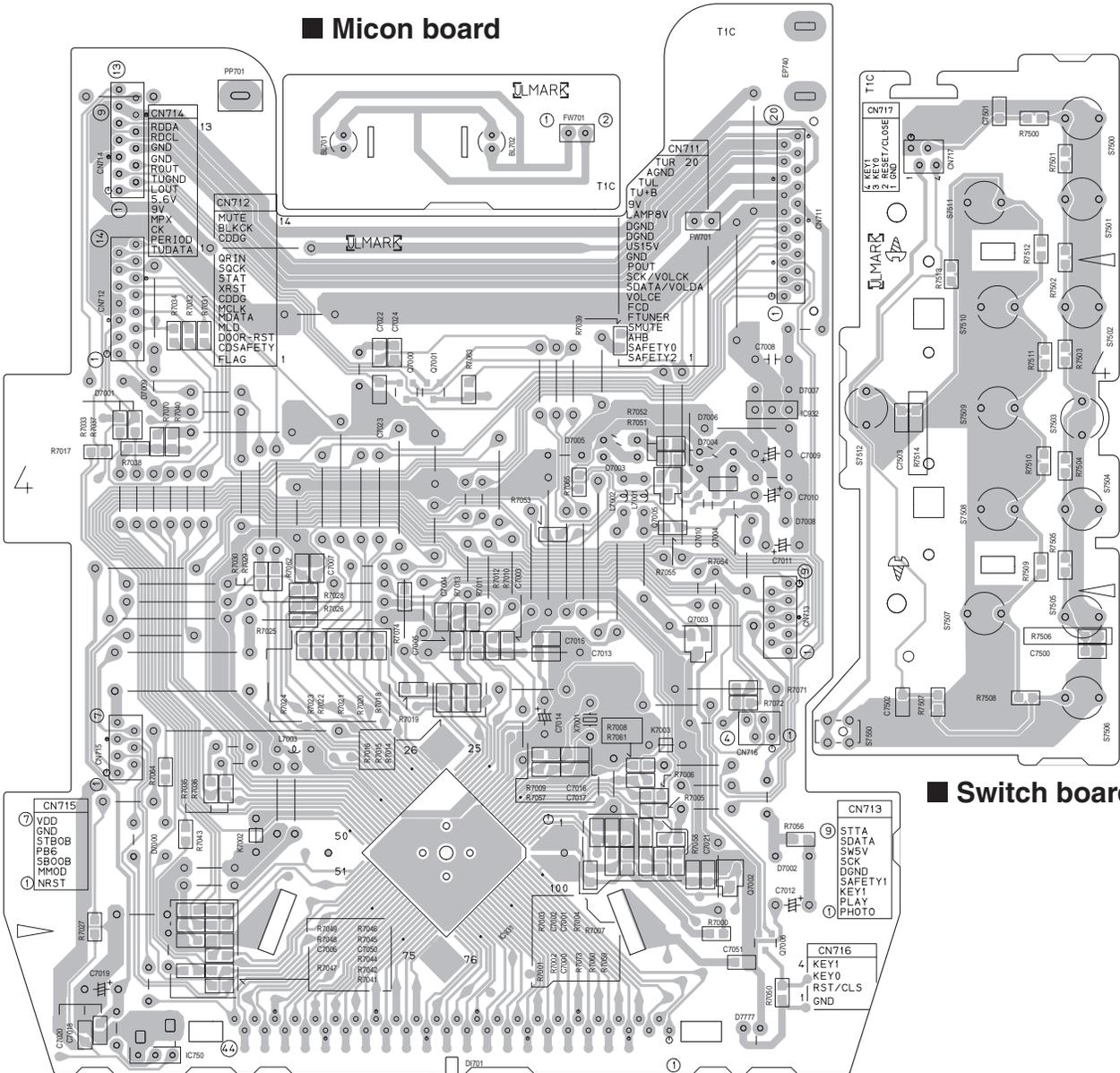
E

F

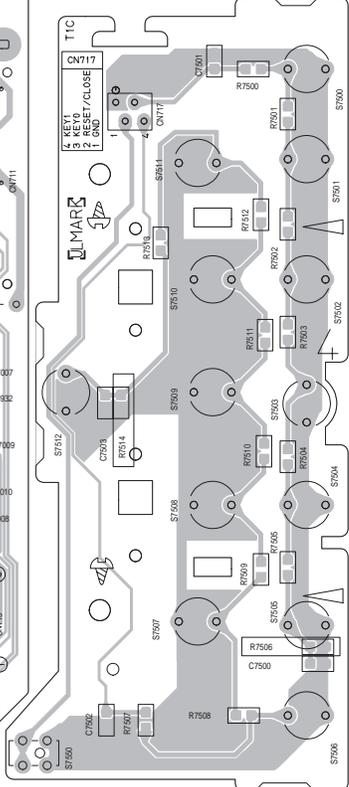
G

H

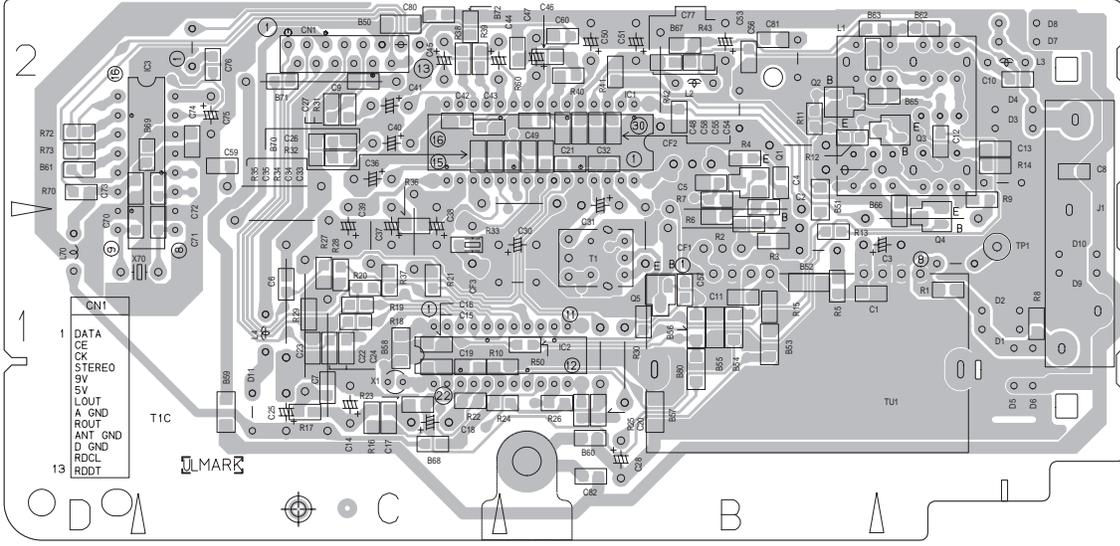
■ Micon board



■ Switch board



■ Tuner board

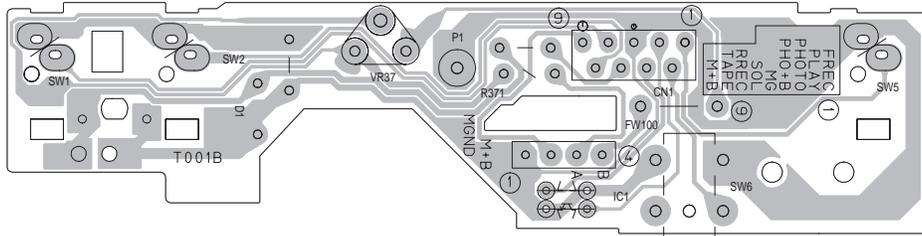


5
4
3
2
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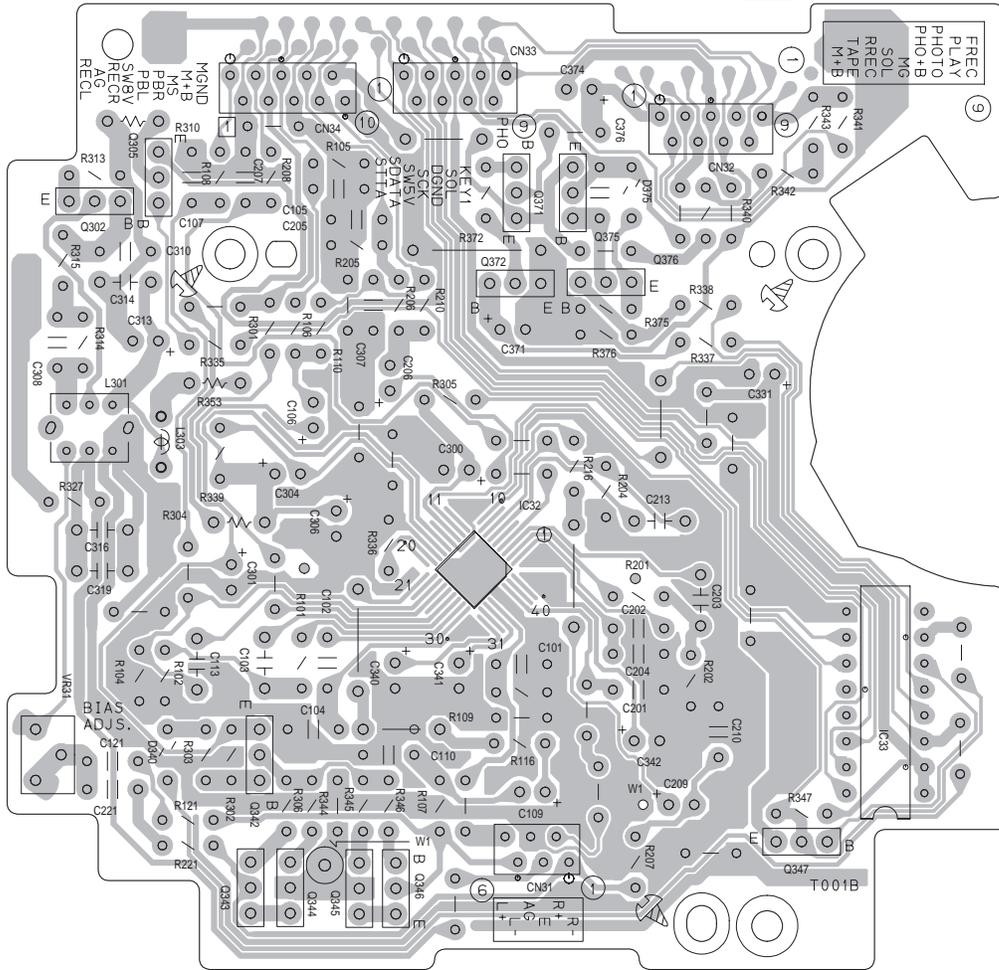
A B C D

5

■ **Cassette (switch) board**



4



3

2

■ **Cassette board**

1

2-10

A

B

C

D

< MEMO >

JVC

VICTOR COMPANY OF JAPAN, LIMITED

AV & MULTIMEDIA COMPANY AUDIO/VIDEO SYSTEM CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

PARTS LIST

[FS-H30]

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

Area suffix	
J	U.S.A.
C	Canada

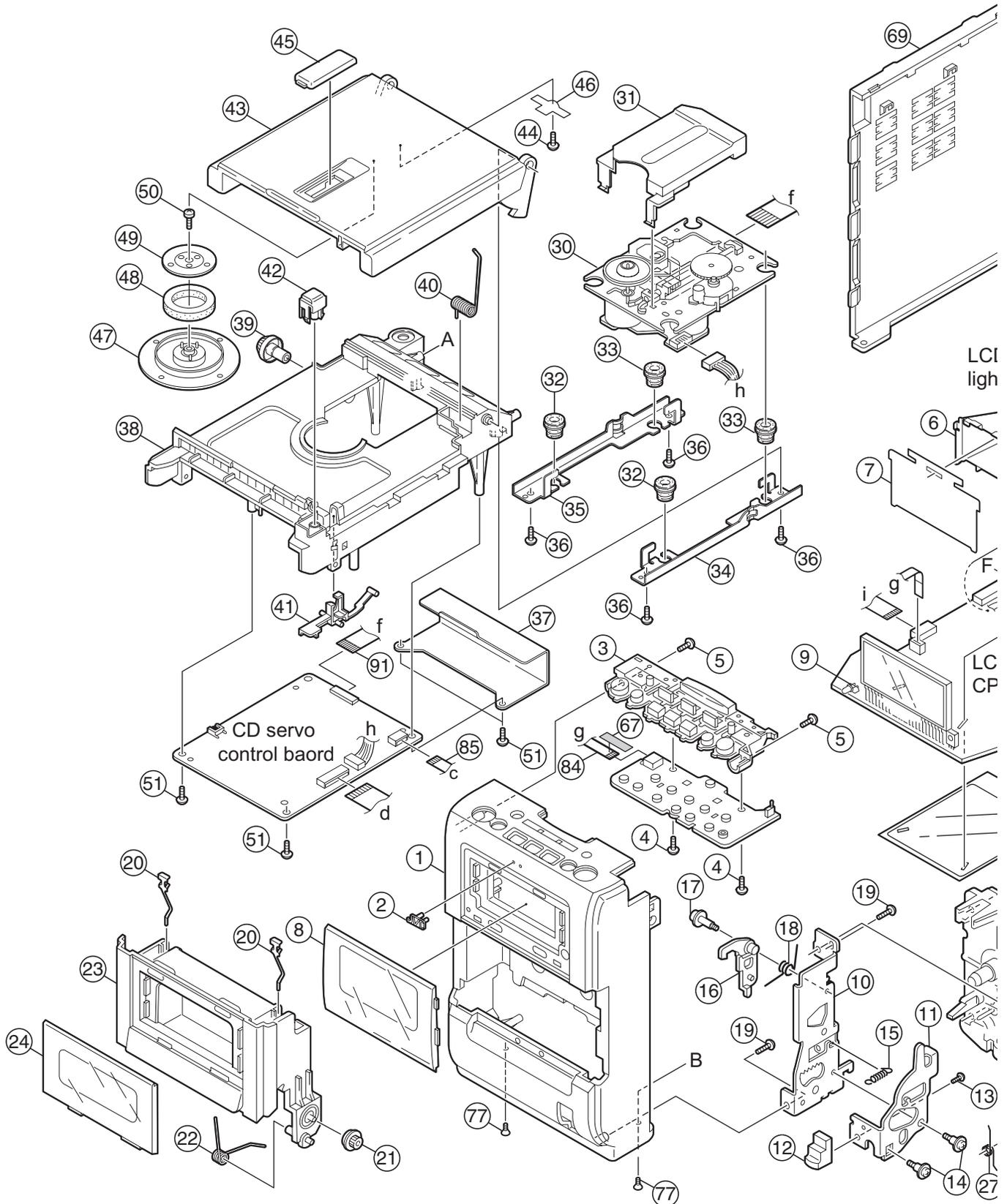
- Contents -

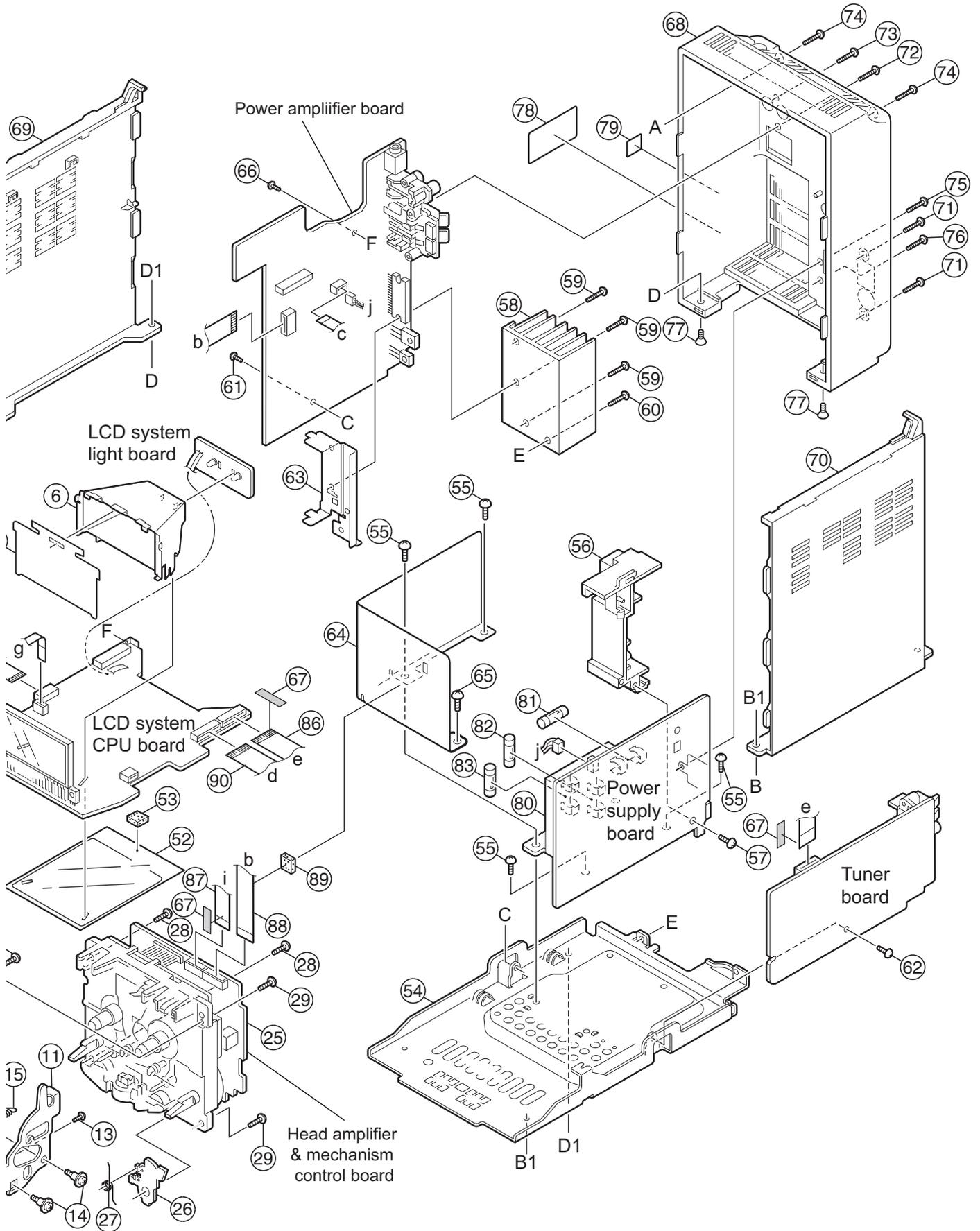
Exploded view of general assembly and parts list (Block No.M1)	3- 2
Speaker assembly and parts list (Block No.M2)	3- 5
Cassette mechanism assembly and parts list (Block No.MP)	3- 6
Electrical parts list (Block No.01~04)	3- 8
Packing materials and accessories parts list (Block No.M3)	3-14

Exploded view of general assembly and parts list

Block No.

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





General assembly

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

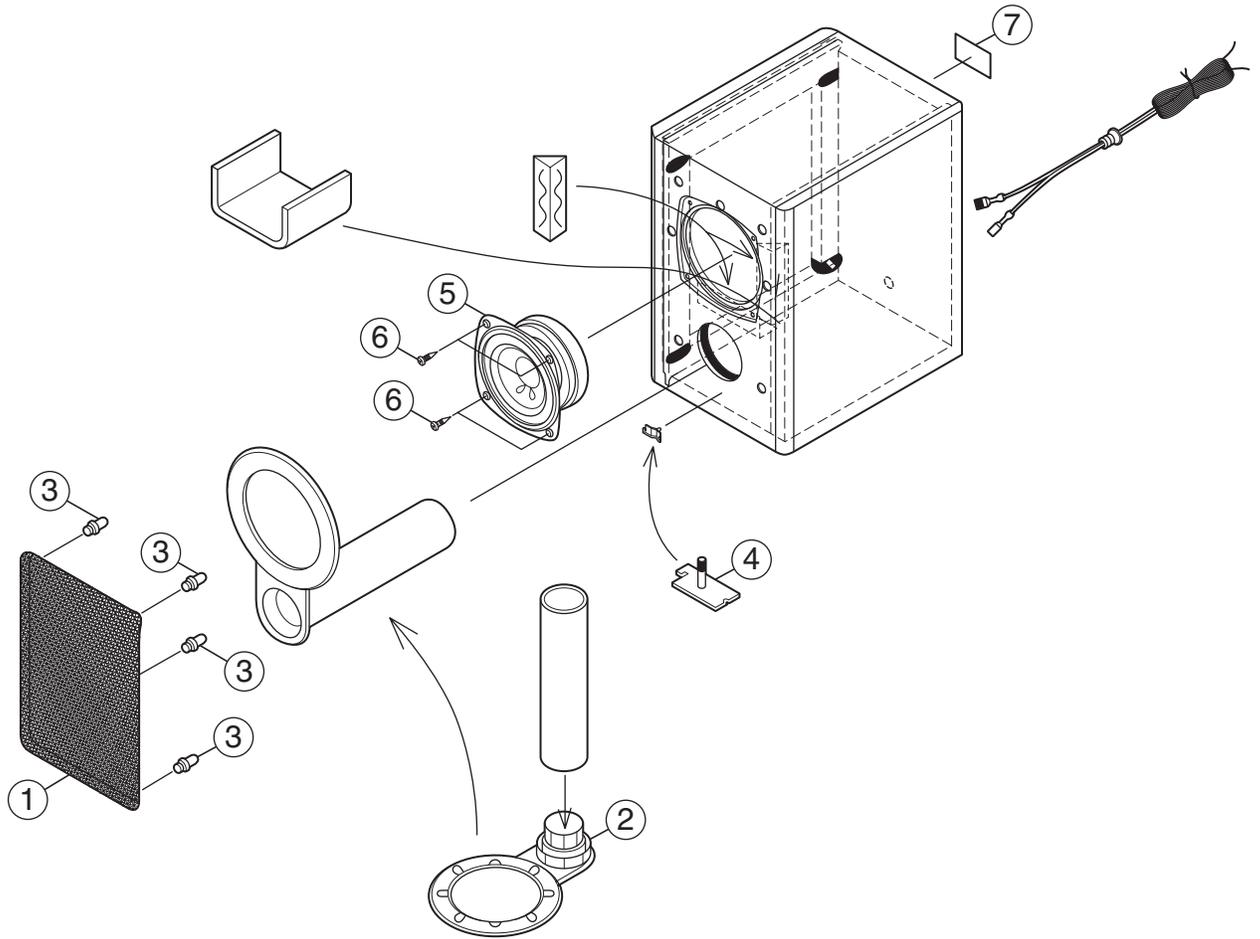
Symbol No.	Part No.	Part Name	Description	Local
1	GV10127-002A	FRONT PANEL		
2	GV40077-002A	JVC BADGE		
3	GV20202-001A	PUSH BUTTON		
4	QYSBSF2608Z	TAP SCREW	2.6mm x 8mm(x2)	
5	QYSBSF2608Z	TAP SCREW	2.6mm x 8mm(x2)	
6	GV30423-001A	LAMP CASE		
7	GV40384-002A	LCD FILTER		
8	GV30402-004A	LCD LENS		
9	GV30349-009A	SPACER		
10	GV30424-001A	DOOR HOLDER		
11	GV40393-001A	EJECT LEVER		
12	GV40377-003A	EJECT KNOB		
13	QYSBSF2608Z	TAP SCREW	2.6mm x 8mm	
14	VKZ4323-202	SCREW	(x2)	
15	GV30421-001A	TENSION SPRING		
16	GV40394-002A	EJECT ARM		
17	VKZ4341-205	SPECIAL SCREW		
18	GV40385-001A	TORSION SPRING		
19	QYSBSF3010Z	TAP SCREW	3mm x 10mm(x2)	
20	VKY4180-401	CASSETTE SPRING	(x2)	
21	VYH5601-001	GEAR		
22	GV40386-001A	DOOR SPRING		
23	GV20198-003A	CASSETTE HOLDER		
24	GV30403-001A	DOOR LENS		
25	-----	C.MECHA ASSY		
26	VKL7850-002	EJECT SAFTY(R)		
27	VKW5258-003	TORSION SPRING		
28	QYSBSF3012Z	TAP SCREW	3mm x 12mm(x2)	
29	QYSBST3008Z	TH.TAP. SCREW	3mm x 8mm(x2)	
30	KSM-213CCMJ	CD MECHA ASSY.		
31	GV30412-001A	PICK COVER		
32	LV42763-001A	INSULATOR	(x2)	
33	LV42763-002A	INSULATOR	(x2)	
34	GV40379-001A	CD M.HOLDER(L)		
35	GV40379-002A	CD M.HOLDER(R)		
36	QYSBSF3010Z	TAP SCREW	3mm x 10mm(x4)	
37	GV40390-001A	SHIELD		
38	GV10134-002A	CD CASE		
39	VYH4769-002SS	GEAR		
40	GV40391-001A	CD DOOR SPRING		
41	GV40395-002A	LOCK LEVER		
42	GV40396-001A	CD EJECT KNOB		
43	GV20199-001A	CD DOOR		
44	QYSDSF2006Z	SCREW	2mm x 6mm	
45	GV40378-001A	CD LENS		
46	GV40423-002A	CLAMPER BRACKET		
47	LV33270-001A	CLAMPER		
48	VYH7313-005	P.C.MAGNET		
49	VKL7757-001	YOKE		
50	LV41741-001A	SPECIAL SCREW		
51	QYSBSF3010Z	TAP SCREW	3mm x 10mm(x4)	
52	GV40392-002A	SHIELD		
53	E3400-431	SPACER		
54	GV10133-001A	BOTTOM CHASSIS		
55	QYSBST4006Z	SCREW	4mm x 6mm(x4)	
56	GV30404-001A	JACK HOLDER		
57	QYSBSF2608Z	TAP SCREW	2.6mm x 8mm	
58	GV30405-002A	RADIATION		
59	QYSBST3012Z	SCREW	3mm x 12mm(x3)	
60	QYSBST3006Z	TAP SCREW	3mm x 6mm	
61	QYSBST3006Z	TAP SCREW	3mm x 6mm	
62	QYSBST3006Z	TAP SCREW	3mm x 6mm	
63	GV30408-001A	IC HOLDER		
64	GV30422-001A	SHIELD		
65	QYSBST4006Z	SCREW	4mm x 6mm	
66	QYSBSG3006Z	TAPPING SCREW	3mm x 6mm	
67	LV30225-011A	SPACER	(x4)	
68	GV10128-002A	REAR PANEL		
69	GV20221-002A	SIDE PANEL(L)		
70	GV20218-002A	SIDE PANEL(R)		
71	QYSBSF3010Z	TAP SCREW	3mm x 10mm(x2)	
72	QYSBSF3010Z	TAP SCREW	3mm x 10mm	
73	QYSBSF3010Z	TAP SCREW	3mm x 10mm	
74	QYSBSF3010Z	TAP SCREW	3mm x 10mm(x2)	

Symbol No.	Part No.	Part Name	Description	Local
75	QYSBSF3010Z	TAP SCREW	3mm x 10mm	
76	QYSBSF3010Z	TAP SCREW	3mm x 10mm	
77	QYSSST3008Z	SCREW	3mm x 8mm(x4)	
78	GV30406-002A	NAME PLATE		
79	VND5008-001	FCC LABEL(4)		
△ 80	QQT0396-001	POWER TRANSF	T 901	
△ 81	QMF51U1-1R0-J8	FUSE	F 901 1A AC125V	
△ 82	QMF51U1-6R3-J8	FUSE	F 902 6.3A AC125V	
△ 83	QMF51U1-6R3-J8	FUSE	F 903 6.3A AC125V	
84	QUQH12-0411BJ	FFC WIRE		
85	QUQH12-0714AJ	FFC WIRE		
86	QUQH12-0909BJ	CARD WIRE		
87	QUQH12-0913BJ	FFC WIRE		
88	QUQH12-1022BJ	FFC WIRE		
89	E3400-431	SPACER		
90	QUQH12-1406BJ	FFC WIRE		
91	QUQ110-1607AJ	FFC WIRE		

Speaker assembly and parts list

(SP-UXH30)

Block No. M 2 M M



Speaker

Block No. M2MM

! Symbol No.	Part No.	Part Name	Description	Local
1	J201XH3000B10	SPEAKER FRAME	(x2)	
2	J200XH3000B00	FRONT PANEL	(x2)	
3	J282XH3000B00	LATCH	(x8)	
4	21302UXP510	JVC MARK	(x2)	
5	305J0XH300800	WOOFER	(x2)	
6	411B84012AB1	SCREW	(x8)	
7	6000XH30J00	RATING LABEL	(x2)	

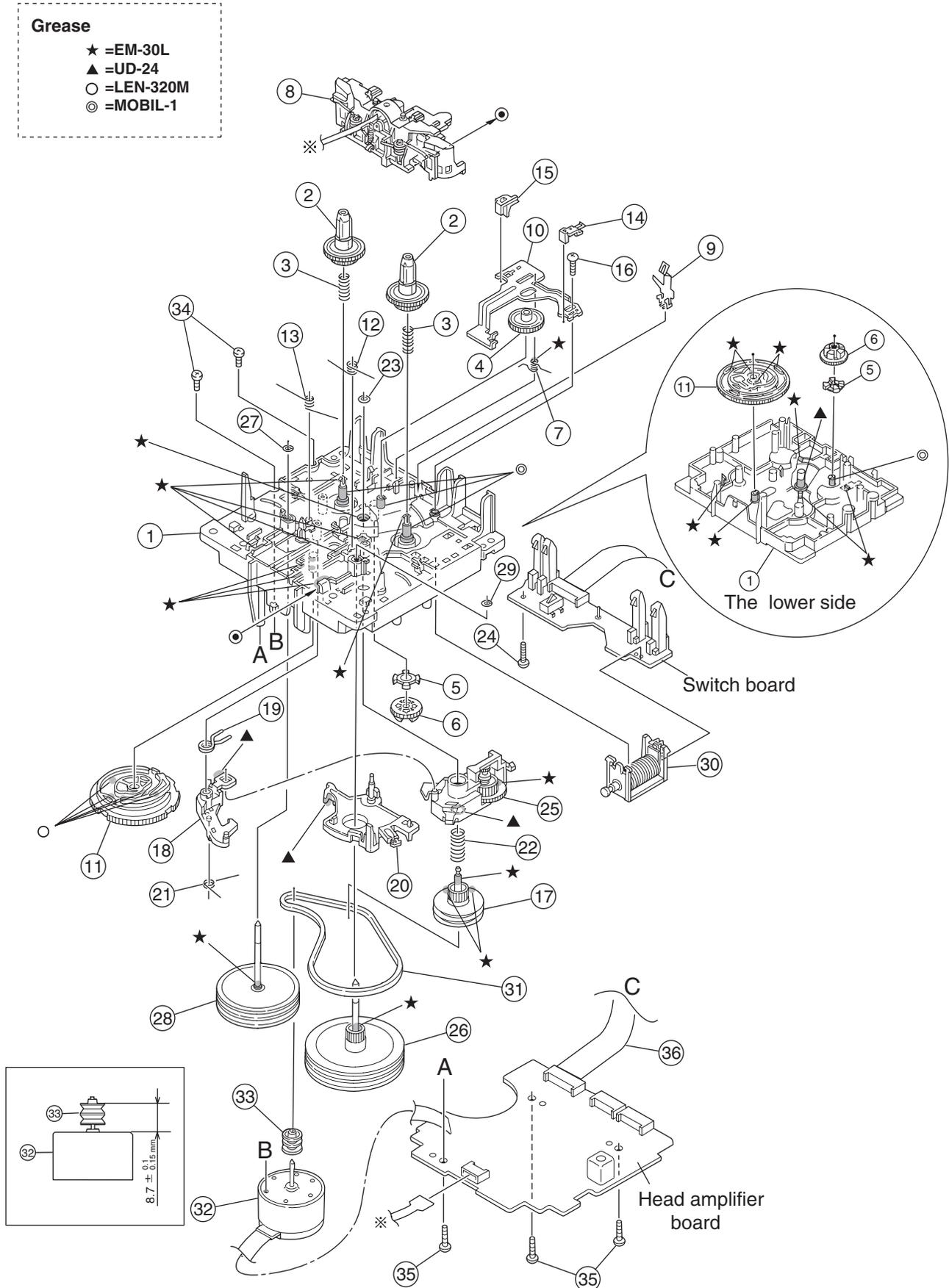
Cassette mechanism assembly and parts list

Block No. M P M M

SLC-S302M

Grease

- ★ =EM-30L
- ▲ =UD-24
- =LEN-320M
- ◎ =MOBIL-1



Cassette mechanism

Block No. [M][P][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
1	VKS1165-00L	CHASSIS B. ASSY		
2	VKS2274-002	REEL GEAR	(x2)	
3	VKW5286-002	B.T. SPRING	(x2)	
4	VKS5559-001	PLAY IDLE GEAR		
5	VKS5595-002	BLIND		
6	VKS5560-003	FR IDLE GEAR		
7	LV42013-001A	EARTH SPRING		
8	SLC-RP3SVM	HEAD MOUNT ASSY		
9	VKY3149-002	CASSETTE SP.		
10	LV31786-001A	PLAY LEVER		
11	VKS1166-004	CONTROL CAM		
12	VKW5279-002	HEAD BASE SP(R)		
13	VKW5280-001	HEAD BASE SP(L)		
14	LV41584-001A	BRAKE(R)		
15	LV41585-003A	BRAKE(L)		
16	QYSBSF2005Z	SCREW	2mm x 5mm	
17	VKS5603-00G	MAIN PULLEY ASS		
18	VKS3785-001MM	FR ARM		
19	VKW5284-002	SWING SPRING		
20	VKS2278-003	TRIGGER ARM		
21	VKW5301-001	FR SPRING		
22	VKW5266-001	ELEVATOR SPRING		
23	WDL214025	WASHER		
24	QYSBSF2005Z	SCREW	2mm x 5mm	
25	VKS3786-00G	CLUTCH ASSY		
26	VKF3205-00B	F.WHEEL ASSY(R)		
27	WDL183425	SLIT WASHER		
28	VKF3207-00C	F.WHEEL ASSY(L)		
29	WDL173525-6	SLIT WASHER		
30	VKZ3174-00B	DC SOLENOID		
31	LV42836-001A	CAPSTAN BELT		
32	MSI-5U2LWA	D.C.MOTOR		
33	VKR4761-003	MOTOR PULLEY		
34	QYSPSP2604Z	SCREW	2.6mm x 4mm(x2)	
35	QYSBSF2608Z	TAPPING SCREW	2.6mm x 8mm(x3)	
36	QUQH12-0906BF	WIRE		

Electrical parts list

Main board

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

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
△ IC300	LA4663	POWER IC			C624	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J	
IC301	HA17558A	IC			C625	QDXB1CM-222Y	C CAPACITOR	2200pF 16V M	
IC302	LC75342	IC			C628	QDX31EM-473Z	C CAPACITOR	0.047uF 25V M	
IC601	AN22000A-W	IC			C629	QETN1AM-227Z	E CAPACITOR	220uF 10V M	
△ IC602	LA6541-X	IC			C631	QETN1AM-477Z	E CAPACITOR	470uF 10V M	
IC603	MN662748RPMFA	IC			C632	QKCC1AM-107Z	E CAPACITOR	100uF 10V M	
IC604	KIA78S05P-T	IC			C633	QCBB1HK-391Y	C CAPACITOR	390pF 50V K	
					C634	QCBB1HK-391Y	C CAPACITOR	390pF 50V K	
					C635	QCBB1HK-391Y	C CAPACITOR	390pF 50V K	
					C636	QCBB1HK-391Y	C CAPACITOR	390pF 50V K	
					C638	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
Q601	KTA1271/OY-T	TRANSISTOR			C641	QCZ0313-105Z	C CAPACITOR	1uF 25V Z	
Q1150	2SC3576-JVC-T	TRANSISTOR			C642	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
Q1400	2SC2785/FE-T	TRANSISTOR			C643	QEQ61HM-225Z	E CAPACITOR	2.2uF 50V M	
Q2150	2SC3576-JVC-T	TRANSISTOR			C644	QFN31HJ-153Z	M CAPACITOR	0.015uF 50V J	
Q2400	2SC2785/FE-T	TRANSISTOR			C645	QEQ61HM-225Z	E CAPACITOR	2.2uF 50V M	
Q3110	2SC3576-JVC-T	TRANSISTOR			C651	QCSB1HJ-120Y	C CAPACITOR	12pF 50V J	
Q3111	KRC111M-T	TRANSISTOR			C652	QCSB1HJ-150Y	C CAPACITOR	15pF 50V J	
Q3150	KRA101M-T	TRANSISTOR			C653	QDVB1EZ-223Y	C CAPACITOR	0.022uF 25V Z	
Q3151	KRC102M-T	DIGI TRANSISTOR			C655	QCZ0202-155Z	C CAPACITOR	1.5uF 25V Z	
△ Q9001	KTA1046/Y/	TRANSISTOR			C661	QCBB1HK-471Y	C CAPACITOR	470pF 50V K	
Q9002	2SC2785/FE-T	TRANSISTOR			C662	QDVB1EZ-223Y	C CAPACITOR	0.022uF 25V Z	
Q9003	2SA1175/FE-T	TRANSISTOR			C663	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J	
Q9004	KRC114M-T	TRANSISTOR			C664	QDVB1EZ-223Y	C CAPACITOR	0.022uF 25V Z	
Q9005	KRA114M-T	TRANSISTOR			C665	QFVF1HJ-334Z	MF CAPACITOR	0.33uF 50V J	
Q9006	2SC2785/FE-T	TRANSISTOR			C668	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
Q9070	2SC3576-JVC-T	TRANSISTOR			C669	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M	
Q9201	KTB772/Y/	SI TRANSISTOR			C670	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
Q9202	2SC2785/FE-T	TRANSISTOR			C671	QDXB1CM-222Y	C CAPACITOR	2200pF 16V M	
Q9301	KTA1267/YG-T	TRANSISTOR			C672	QDXB1CM-222Y	C CAPACITOR	2200pF 16V M	
Q9302	2SC2785/FE-T	TRANSISTOR			C673	QETN1AM-477Z	E CAPACITOR	470uF 10V M	
					C674	QDVB1EZ-223Y	C CAPACITOR	0.022uF 25V Z	
D661	1SS133-T2	DIODE			C675	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
D662	1SS133-T2	DIODE			C676	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
△ D901	6A10E2	SI DIODE			C677	QDVB1EZ-223Y	C CAPACITOR	0.022uF 25V Z	
△ D902	6A10E2	SI DIODE			C691	QCBB1HK-151Y	C CAPACITOR	150pF 50V K	
△ D903	6A10E2	SI DIODE			C692	QCBB1HK-151Y	C CAPACITOR	150pF 50V K	
△ D904	6A10E2	SI DIODE			C693	QCBB1HK-151Y	C CAPACITOR	150pF 50V K	
△ D905	6A10E2	SI DIODE			C694	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
D3150	MTZJ5.1C-T2	Z DIODE			C695	QFVF1HJ-334Z	MF CAPACITOR	0.33uF 50V J	
D3151	1SS133-T2	DIODE			C901	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
D3153	1SS133-T2	DIODE			C902	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
D3400	1SS133-T2	DIODE			C903	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
D3401	1SS133-T2	DIODE			C904	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
D3402	1SS133-T2	DIODE			C1100	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
D3403	1SS133-T2	DIODE			C1101	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
D3504	1SS133-T2	DIODE			C1102	QCBB1HK-331Y	C CAPACITOR	330pF 50V K	
D3505	1SS133-T2	DIODE			C1104	QTE1V06-106Z	E CAPACITOR	10uF 35V	
D9001	1SS133-T2	DIODE			C1300	QFLC1HJ-683Z	M CAPACITOR	0.068uF 50V J	
D9002	MTZJ8.2C-T2	Z DIODE			C1301	QFLC1HJ-683Z	M CAPACITOR	0.068uF 50V J	
D9020	MTZJ5.6C-T2	Z DIODE			C1302	QTE1V06-106Z	E CAPACITOR	10uF 35V	
D9201	MTZJ4.3B-T2	Z DIODE			C1303	QFVJ1HJ-334Z	MF CAPACITOR	0.33uF 50V J	
D9302	1SS133-T2	DIODE			C1502	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
D9303	1SS133-T2	DIODE			C1503	QTE1V06-106Z	E CAPACITOR	10uF 35V	
D9501	1SS133-T2	DIODE			C1504	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
D9502	1N4003S-T5	SI DIODE			C1505	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
					C1506	QFLC1HJ-272Z	M CAPACITOR	2700pF 50V J	
C602	QCSB1HJ-560Y	C CAPACITOR	56pF 50V J		C1507	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C604	QKCC1AM-107Z	E CAPACITOR	100uF 10V M		C1508	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C605	QETN1EM-106Z	E CAPACITOR	10uF 25V M		C1510	QETN1EM-106Z	E CAPACITOR	10uF 25V M	
C606	QFVF1HJ-823Z	MF CAPACITOR	0.082uF 50V J		C1600	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C608	QETN1HM-105Z	E CAPACITOR	1uF 50V M		C2100	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C610	QFVF1HJ-393Z	MF CAPACITOR	0.039uF 50V J		C2101	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C611	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K		C2102	QCBB1HK-331Y	C CAPACITOR	330pF 50V K	
C612	QDXB1CM-272Y	C CAPACITOR	2700pF 16V M		C2104	QTE1V06-106Z	E CAPACITOR	10uF 35V	
C613	QCBB1HK-331Y	C CAPACITOR	330pF 50V K		C2300	QFLC1HJ-683Z	M CAPACITOR	0.068uF 50V J	
C614	QCZ0313-105Z	C CAPACITOR	1uF 25V Z		C2301	QFLC1HJ-683Z	M CAPACITOR	0.068uF 50V J	
C615	QDVB1EZ-223Y	C CAPACITOR	0.022uF 25V Z		C2302	QTE1V06-106Z	E CAPACITOR	10uF 35V	
C616	QDVB1EZ-223Y	C CAPACITOR	0.022uF 25V Z		C2303	QFVJ1HJ-334Z	MF CAPACITOR	0.33uF 50V J	
C617	QCSB1HK-3R3Y	C CAPACITOR	3.3pF 50V K		C2502	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M	
C618	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J		C2503	QTE1V06-106Z	E CAPACITOR	10uF 35V	
C619	QCBB1HK-561Y	C CAPACITOR	560pF 50V K		C2504	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
C620	QCBB1HK-101Y	C CAPACITOR	100pF 50V K		C2505	QFVF1HJ-104Z	MF CAPACITOR	0.1uF 50V J	
C622	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J		C2506	QFLC1HJ-272Z	M CAPACITOR	2700pF 50V J	
C623	QFVF1HJ-563Z	MF CAPACITOR	0.056uF 50V J						

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C2507	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M		R668	QRE141J-220Y	C RESISTOR	22Ω 1/4W J	
C2508	QETN1HM-475Z	E CAPACITOR	4.7uF 50V M		R669	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
C2510	QETN1EM-106Z	E CAPACITOR	10uF 25V M		R671	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
C2600	QCBB1HK-221Y	C CAPACITOR	220pF 50V K		R672	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
C2957	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K		R697	QRE141J-272Y	C RESISTOR	2.7kΩ 1/4W J	
△ C3100	QEZO635-828	E CAPACITOR	8200uF		△ R901	QRZ9037-335	COMP RESISTOR	3.3MΩ 1/2W K	
C3101	QTE1V28-107Z	E CAPACITOR	100uF 35V		R1100	QRE141J-2R2Y	C RESISTOR	2.2Ω 1/4W J	
C3102	QEKC1CM-107Z	E CAPACITOR	100uF 16V M		R1101	QRE141J-2R2Y	C RESISTOR	2.2Ω 1/4W J	
C3103	QETN1EM-476Z	E CAPACITOR	47uF 25V M		R1102	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
C3104	QETN1EM-106Z	E CAPACITOR	10uF 25V M		R1151	QRE141J-302Y	C RESISTOR	3kΩ 1/4W J	
C3151	QETN1EM-106Z	E CAPACITOR	10uF 25V M		R1200	QRE141J-151Y	C RESISTOR	150Ω 1/4W J	
C3152	QETN1AM-476Z	E CAPACITOR	47uF 10V M		R1300	QRE141J-154Y	C RESISTOR	150kΩ 1/4W J	
C3300	QETN1CM-476Z	E CAPACITOR	47uF 16V M		R1301	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J	
C3301	QTE1C06-226Z	E CAPACITOR	22uF 16V		R1302	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
C3400	QETN1HM-105Z	E CAPACITOR	1uF 50V M		R1303	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
C3401	QETN1HM-105Z	E CAPACITOR	1uF 50V M		R1304	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
C3402	QFLC1HJ-563Z	M CAPACITOR	0.056uF 50V J		R1305	QRE141J-682Y	C RESISTOR	6.8kΩ 1/4W J	
C3403	QFLC1HJ-563Z	M CAPACITOR	0.056uF 50V J		R1306	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
C3404	QETN1HM-226Z	E CAPACITOR	22uF 50V M		R1307	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
C3405	QETN1CM-106Z	E CAPACITOR	10uF 16V M		R1400	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
C3500	QETN1CM-107Z	E CAPACITOR	100uF 16V M		R1401	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
C3501	QETN1EM-106Z	E CAPACITOR	10uF 25V M		R1402	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
C3502	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M		R1503	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J	
C9001	QETN1EM-476Z	E CAPACITOR	47uF 25V M		R1600	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
C9002	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M		R1601	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
C9003	QCBB1HK-221Y	C CAPACITOR	220pF 50V K		R1800	QRE141J-912Y	C RESISTOR	9.1kΩ 1/4W J	
C9006	QETN1EM-106Z	E CAPACITOR	10uF 25V M		R1802	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
C9070	QETN1EM-106Z	E CAPACITOR	10uF 25V M		R1803	QRE141J-272Y	C RESISTOR	2.7kΩ 1/4W J	
C9201	QETN1CM-476Z	E CAPACITOR	47uF 16V M		R2100	QRE141J-2R2Y	C RESISTOR	2.2Ω 1/4W J	
C9202	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M		R2101	QRE141J-2R2Y	C RESISTOR	2.2Ω 1/4W J	
C9203	QTE1V06-106Z	E CAPACITOR	10uF 35V		R2102	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
C9302	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		R2151	QRE141J-302Y	C RESISTOR	3kΩ 1/4W J	
C9303	QEKC1AM-107Z	E CAPACITOR	100uF 10V M		R2200	QRE141J-151Y	C RESISTOR	150Ω 1/4W J	
					R2300	QRE141J-154Y	C RESISTOR	150kΩ 1/4W J	
R602	QRE141J-203Y	C RESISTOR	20kΩ 1/4W J		R2301	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J	
R603	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J		R2302	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R605	QRE141J-684Y	C RESISTOR	680kΩ 1/4W J		R2303	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R606	QRE141J-184Y	C RESISTOR	180kΩ 1/4W J		R2304	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R607	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J		R2305	QRE141J-682Y	C RESISTOR	6.8kΩ 1/4W J	
R609	QRE141J-224Y	C RESISTOR	220kΩ 1/4W J		R2306	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R610	QRE141J-105Y	C RESISTOR	1MΩ 1/4W J		R2307	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R612	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R2400	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R613	QRE141J-121Y	C RESISTOR	120Ω 1/4W J		R2401	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R614	QRE141J-100Y	C RESISTOR	10Ω 1/4W J		R2402	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R615	QRE141J-120Y	C RESISTOR	12Ω 1/4W J		R2503	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J	
R619	QRE141J-683Y	C RESISTOR	68kΩ 1/4W J		R2600	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
R621	QRE141J-100Y	C RESISTOR	10Ω 1/4W J		R2601	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
R625	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J		R2800	QRE141J-912Y	C RESISTOR	9.1kΩ 1/4W J	
R626	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J		R2802	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R627	QRE141J-682Y	C RESISTOR	6.8kΩ 1/4W J		R2803	QRE141J-272Y	C RESISTOR	2.7kΩ 1/4W J	
R628	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J		△ R3100	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R629	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		R3107	QRE141J-681Y	C RESISTOR	680Ω 1/4W J	
R632	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J		R3110	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R634	QRE141J-224Y	C RESISTOR	220kΩ 1/4W J		R3150	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R635	QRE141J-394Y	C RESISTOR	390kΩ 1/4W J		R3151	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R641	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J		R3152	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
R642	QRE141J-332Y	C RESISTOR	3.3kΩ 1/4W J		R3153	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R643	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J		R3154	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R644	QRE141J-682Y	C RESISTOR	6.8kΩ 1/4W J		R3300	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R645	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J		R3302	QRE141J-912Y	C RESISTOR	9.1kΩ 1/4W J	
R646	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J		R3303	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R647	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J		R3400	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R648	QRE141J-122Y	C RESISTOR	1.2kΩ 1/4W J		R3401	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R649	QRE141J-152Y	C RESISTOR	1.5kΩ 1/4W J		R3402	QRE141J-124Y	C RESISTOR	120kΩ 1/4W J	
R650	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J		R3403	QRE141J-154Y	C RESISTOR	150kΩ 1/4W J	
R651	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R3405	QRE141J-513Y	C RESISTOR	51kΩ 1/4W J	
R652	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R3500	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R653	QRE141J-101Y	C RESISTOR	100Ω 1/4W J		R3501	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R654	QRE141J-101Y	C RESISTOR	100Ω 1/4W J		R3503	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R656	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R9001	QRE141J-1R0Y	C RESISTOR	1Ω 1/4W J	
R657	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		R9002	QRE141J-1R0Y	C RESISTOR	1Ω 1/4W J	
R659	QRE141J-471Y	C RESISTOR	470Ω 1/4W J		R9003	QRE141J-1R0Y	C RESISTOR	1Ω 1/4W J	
R661	QRE141J-683Y	C RESISTOR	68kΩ 1/4W J		R9004	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
R662	QRE141J-155Y	C RESISTOR	1.5MΩ 1/4W J		R9005	QRE141J-152Y	C RESISTOR	1.5kΩ 1/4W J	
R663	QRE141J-124Y	C RESISTOR	120kΩ 1/4W J		R9006	QRE141J-242Y	C RESISTOR	2.4kΩ 1/4W J	
R664	QRE141J-331Y	C RESISTOR	330Ω 1/4W J		R9007	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R666	QRE141J-220Y	C RESISTOR	22Ω 1/4W J		R9008	QRE141J-682Y	C RESISTOR	6.8kΩ 1/4W J	
R667	QRE141J-683Y	C RESISTOR	68kΩ 1/4W J		R9012	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	

△ Symbol No.	Part No.	Part Name	Description	Local
R9013	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
R9014	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R9015	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R9016	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
△ R9019	QRZ9005-680X	F.RESISTOR	68Ω	
R9020	QRE141J-133Y	C RESISTOR	13kΩ 1/4W J	
R9021	QRE141J-512Y	C RESISTOR	5.1kΩ 1/4W J	
R9070	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
△ R9100	QRZ9006-4R7X	F.RESISTOR	4.7Ω 1/4W J	
R9201	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R9202	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R9203	QRE141J-820Y	C RESISTOR	82Ω 1/4W J	
R9205	QRE141J-823Y	C RESISTOR	82kΩ 1/4W J	
R9206	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R9301	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J	
R9302	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
R9303	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R9304	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
CN301	QGB1214J1-20S	CONNECTOR	B-B (1-20)	
CN303	QGF1205C1-07	CONNECTOR	FFC/FPC (1-7)	
CN305	QGF1205F1-10	CONNECTOR	FFC/FPC (1-10)	
CN601	QGF1008F1-16	CONNECTOR	FFC/FPC (1-16)	
CN603	QGF1205F1-07	CONNECTOR	FFC/FPC (1-7)	
CN604	QGF1205F1-14	CONNECTOR	FFC/FPC (1-14)	
CN610	QGA2501C1-02	CONNECTOR	W-B (1-2)	
CN901	QGA2501C1-02	CONNECTOR	W-B (1-2)	
FW602	QJK018-060601	SIN CR C-B WIRE		
IH601	VYH7237-004	IC HOLDER		
IH602	VYH7237-001MM	IC HOLDER		
IH603	VYH7237-003	IC HOLDER		
△ J300	QNB0117-002	SPK TERMINAL		
J301	QNN0090-001	PIN JACK		
J302	QNS0072-001	HEADPHONE JACK		
△ J901	QNC0092-001	AC INLET		
△ J902	QNA0016-001	DC JACK		
K601	QQR0621-001Z	COIL		
K602	QQR0621-001Z	COIL		
K3800	QQR0621-001Z	COIL		
K9100	QQR0621-001Z	COIL		
PP901	QZW0038-001	WIRE CLAMP		
X651	QAX0413-001Z	CRYSTAL	16.9344MHz	
Z901	QNG0020-001Z	FUSE CLIP		
Z902	QNG0020-001Z	FUSE CLIP		
Z903	QNG0020-001Z	FUSE CLIP		
Z911	QNG0020-001Z	FUSE CLIP		
Z912	QNG0020-001Z	FUSE CLIP		
Z913	QNG0020-001Z	FUSE CLIP		

Micon board

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△ Symbol No.	Part No.	Part Name	Description	Local
IC1	LA1838	IC		
IC2	LC72136N	IC		
IC750	GP1UM281YK	IC	38kHz	
IC931	MN101C57CEW	MASK MICON		
IC932	KIA78S06P-T	IC		
Q1	2SC1623/5-6/-X	TRANSISTOR		
Q5	DTA114YKA-X	TRANSISTOR		
Q7000	KRC111S-X	TRANSISTOR		
Q7001	KRC111S-X	TRANSISTOR		
Q7002	2SC2412K/R/-X	TRANSISTOR		
Q7003	2SA1037AK/R/-X	TRANSISTOR		
Q7004	KRC111S-X	TRANSISTOR		
Q7005	2SC2412K/R/-X	TRANSISTOR		
Q7006	KRA102S-X	DIGI TRANSISTOR		
Q7010	KRC111S-X	TRANSISTOR		
D1	1SS133-T2	DIODE		
D2	1SS133-T2	DIODE		
D3	1SS133-T2	DIODE		

△ Symbol No.	Part No.	Part Name	Description	Local
D4	1SS133-T2	DIODE		
D7000	1SS133-T2	DIODE		
D7002	1SS133-T2	DIODE		
D7003	1SS133-T2	DIODE		
D7004	1SS133-T2	DIODE		
D7005	MTZJ5.1C-T2	Z DIODE		
D7006	MTZJ8.2B-T2	Z DIODE		
D7007	1SS133-T2	DIODE		
D7008	1SS133-T2	DIODE		
D7777	SLR-342VC3F	LED		
C1	NCB31CK-223X	C CAPACITOR	0.022uF 16V K	
C2	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C3	QEK1C1M-106Z	E CAPACITOR	10uF 16V M	
C4	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C5	NCB31CK-103X	C CAPACITOR	0.01uF 16V K	
C6	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C7	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C8	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C9	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C10	NDC31HJ-5R0X	C CAPACITOR	5pF 50V J	
C11	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C12	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C13	NCS31HJ-100X	C CAPACITOR	10pF 50V J	
C14	QEK1C1M-106Z	E CAPACITOR	10uF 16V M	
C15	NCS31HJ-120X	C CAPACITOR	12pF 50V J	
C16	NCS31HJ-120X	C CAPACITOR	12pF 50V J	
C17	NCB31HK-392X	C CAPACITOR	3900pF 50V K	
C18	QEK1HM-474Z	E CAPACITOR	0.47uF 50V M	
C19	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C20	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C21	NCB31CK-223X	C CAPACITOR	0.022uF 16V K	
C22	NCS31HJ-151X	C CAPACITOR	150pF 50V J	
C23	NCS31HJ-151X	C CAPACITOR	150pF 50V J	
C24	NCS31HJ-151X	C CAPACITOR	150pF 50V J	
C25	QEK1C1M-107Z	E CAPACITOR	100uF 16V M	
C28	QEK1C1M-106Z	E CAPACITOR	10uF 16V M	
C30	QEK1C1M-107Z	E CAPACITOR	100uF 16V M	
C31	QEK1C1M-226Z	E CAPACITOR	22uF 16V M	
C32	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C33	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C34	NCB31CK-223X	C CAPACITOR	0.022uF 16V K	
C35	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C36	QEK1HM-105Z	E CAPACITOR	1uF 50V M	
C37	QEK1HM-105Z	E CAPACITOR	1uF 50V M	
C38	QEK1HM-224Z	E CAPACITOR	0.22uF 50V M	
C39	QEK1HM-105Z	E CAPACITOR	1uF 50V M	
C40	QEK1C1M-106Z	E CAPACITOR	10uF 16V M	
C41	QEK1C1M-106Z	E CAPACITOR	10uF 16V M	
C42	NCB31CK-223X	C CAPACITOR	0.022uF 16V K	
C43	NCB31CK-223X	C CAPACITOR	0.022uF 16V K	
C44	QEK1C1M-106Z	E CAPACITOR	10uF 16V M	
C45	QEK1C1M-106Z	E CAPACITOR	10uF 16V M	
C46	NCB31CK-273X	C CAPACITOR	0.027uF 16V K	
C47	QEK1HM-105Z	E CAPACITOR	1uF 50V M	
C48	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C49	NCB31HK-471X	C CAPACITOR	470pF 50V K	
C50	QEK1C1M-226Z	E CAPACITOR	22uF 16V M	
C51	QEK1HM-105Z	E CAPACITOR	1uF 50V M	
C53	QEK1C1M-226Z	E CAPACITOR	22uF 16V M	
C54	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C57	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C58	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C77	NCB31HK-681X	C CAPACITOR	680pF 50V K	
C7000	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7001	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7002	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C7003	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C7004	NDC31HJ-151X	C CAPACITOR	150pF 50V J	
C7005	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C7006	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C7007	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C7008	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C7009	QEK1C1M-107Z	E CAPACITOR	100uF 16V M	
C7010	QEK1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7011	QEK1HM-225Z	E CAPACITOR	2.2uF 50V M	
C7012	EETB0JM-228JC	E CAPACITOR		
C7013	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C7014	QETN1AM-107Z	E CAPACITOR	100uF 10V M		R7020	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7015	NCB31HK-102X	C CAPACITOR	1000pF 50V K		R7021	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7016	NDC31HJ-180X	C CAPACITOR	18pF 50V J		R7022	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C7017	NDC31HJ-180X	C CAPACITOR	18pF 50V J		R7023	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C7018	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R7024	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C7019	QETN1CM-476Z	E CAPACITOR	47uF 16V M		R7025	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C7020	NCB31HK-102X	C CAPACITOR	1000pF 50V K		R7026	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C7021	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R7027	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C7022	NDC31HJ-151X	C CAPACITOR	150pF 50V J		R7029	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C7023	NDC31HJ-151X	C CAPACITOR	150pF 50V J		R7030	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C7050	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R7031	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7051	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R7032	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7500	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R7033	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7501	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R7034	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C7502	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R7035	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C7503	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R7036	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R1	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J		R7037	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R2	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J		R7038	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R3	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J		R7039	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R4	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J		R7040	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R5	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R7041	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R7042	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R7	NRSA63J-120X	MG RESISTOR	12Ω 1/16W J		R7043	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R8	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J		R7044	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R9	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R7045	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R10	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R7046	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R13	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7047	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R14	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R7048	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R15	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R7049	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R16	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R7050	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R17	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7051	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R18	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7052	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
R19	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7053	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R20	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7054	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R21	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		R7055	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R22	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R7056	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R23	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J		R7057	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R24	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7058	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R25	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J		R7059	NRSA63J-394X	MG RESISTOR	390kΩ 1/16W J	
R26	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R7060	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R27	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7061	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R28	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7063	NRSA63J-202X	MG RESISTOR	2kΩ 1/16W J	
R29	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7064	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R31	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7065	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R32	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7070	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R33	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J		R7071	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R34	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J		R7072	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R35	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		R7073	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R36	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R7074	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R37	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R7500	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R38	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J		R7501	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R39	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J		R7502	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R40	NRSA63J-243X	MG RESISTOR	24kΩ 1/16W J		R7503	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R41	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R7504	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R43	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J		R7505	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R50	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7507	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R60	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7508	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R7000	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J		R7509	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R7001	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R7510	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R7002	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R7511	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R7003	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J		R7512	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R7004	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R7513	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R7005	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		R7514	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R7006	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		L1	QQR0796-003	COIL BLOCK		
R7007	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		L3	QQL231K-4R7Y	COIL	4.7uH K	
R7008	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		L7001	QQL231K-100Y	COIL	10uH K	
R7009	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		L7002	QQL231K-470Y	COIL	47uH K	
R7010	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		L7003	QQL231K-4R7Y	COIL	4.7uH K	
R7011	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		T1	QQR0793-001	IFT		
R7012	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		BL701	QLL0147-001	LAMP		
R7013	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		BL702	QLL0147-001	LAMP		
R7014	NRSA63J-151X	MG RESISTOR	150Ω 1/16W J		CF1	QAX0677-001Z	C FILTER	10.700MHz	
R7015	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		CF2	QAX0677-001Z	C FILTER	10.700MHz	
R7016	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		CF3	QAX0610-001Z	C FILTER	10.700MHz	
R7017	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		CN1	QGF1205F1-09	CONNECTOR	FFC/FPC (1-9)	
R7018	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		CN711	QGB1214K1-20S	CONNECTOR	B-B (1-20)	
R7019	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J						

Symbol No.	Part No.	Part Name	Description	Local
CN712	QGF1205F1-14	CONNECTOR	FFC/FPC (1-14)	
CN713	QGF1205F1-09	CONNECTOR	FFC/FPC (1-9)	
CN714	QGF1205F1-09	CONNECTOR	FFC/FPC (1-9)	
CN716	QGF1205C1-04	CONNECTOR	FFC/FPC (1-4)	
CN717	QGF1205F1-04	CONNECTOR	FFC/FPC (1-4)	
D1701	QLD0260-001	LCD MODULE		
EP740	E409182-001SM	GRAND TERMINAL		
FW701	QUM022-12Z3Z3	FLAT WIRE		
J1	QNB0153-002	ANT TERMINAL		
K7002	QQR0621-001Z	COIL		
K7003	QQR0621-001Z	COIL		
PP701	QZW0038-001	WIRE CLAMP		
S7500	QSW0651-001Z	TACT SWITCH		
S7501	QSW0651-001Z	TACT SWITCH		
S7502	QSW0651-001Z	TACT SWITCH		
S7503	QSW0651-001Z	TACT SWITCH		
S7504	QSW0651-001Z	TACT SWITCH		
S7505	QSW0651-001Z	TACT SWITCH		
S7506	QSW0651-001Z	TACT SWITCH		
S7507	QSW0651-001Z	TACT SWITCH		
S7508	QSW0651-001Z	TACT SWITCH		
S7509	QSW0651-001Z	TACT SWITCH		
S7510	QSW0651-001Z	TACT SWITCH		
S7511	QSW0651-001Z	TACT SWITCH		
S7512	QSW0651-001Z	TACT SWITCH		
S7550	QSW0122-001	PUSH SWITCH		
TU1	QAU0161-001	FRONT END		
X1	QAX0402-001	CRYSTAL	75.0kHz	
X7001	QAX0711-002Z	CRYSTAL	8.000000MHz	

Symbol No.	Part No.	Part Name	Description	Local
C101	QDGB1HK-821Y	C CAPACITOR	820pF 50V K	
C102	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C103	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C104	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C105	QCBB1HK-391Y	C CAPACITOR	390pF 50V K	
C106	QERF1HM-225Z	E CAPACITOR	2.2uF 50V M	
C107	QCBB1HK-271Y	C CAPACITOR	270pF 50V K	
C109	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C110	QDYB1CM-682Y	C CAPACITOR	6800pF 16V M	
C113	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C120	QCSB1HK-4R7Y	C CAPACITOR	4.7pF 50V K	
C121	QCBB1HK-331Y	C CAPACITOR	330pF 50V K	
C201	QDGB1HK-821Y	C CAPACITOR	820pF 50V K	
C202	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C203	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C204	QCBB1HK-221Y	C CAPACITOR	220pF 50V K	
C205	QCBB1HK-391Y	C CAPACITOR	390pF 50V K	
C206	QERF1HM-225Z	E CAPACITOR	2.2uF 50V M	
C207	QCBB1HK-271Y	C CAPACITOR	270pF 50V K	
C209	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C210	QDYB1CM-682Y	C CAPACITOR	6800pF 16V M	
C213	QFLA1HJ-104Z	M CAPACITOR	0.1uF 50V J	
C220	QCSB1HK-4R7Y	C CAPACITOR	4.7pF 50V K	
C221	QCBB1HK-331Y	C CAPACITOR	330pF 50V K	
C300	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C301	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C304	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C306	QETJ1AM-227Z	E CAPACITOR		
C307	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
C308	QDXB1CM-152Y	C CAPACITOR	1500pF 16V M	
C310	QCBB1HK-223Y	C CAPACITOR	0.022uF 50V K	
C313	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C314	QCFB1HZ-105Y	C CAPACITOR	1uF 50V Z	
C316	QFG32AJ-223Z	PP CAPACITOR	0.022uF 100V J	
C319	QFLC1HJ-472Z	M CAPACITOR	4700pF 50V J	
C331	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C340	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C341	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C342	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C371	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
C374	QEKJ1AM-107Z	E CAPACITOR	100uF 10V M	
C376	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	

Head amplifier board

Block No. [0][3][0][0]

Symbol No.	Part No.	Part Name	Description	Local
IC1	SG-105F3-BB,C	PHOTO SENSOR		
D1	1SR139-400-T2	SI DIODE		
CN1	QGF1205F1-09	CONNECTOR	FFC/FPC (1-9)	
P1	QNZ0104-001	POST PIN		
SW1	QSW0832-001	CASS.SWITCH		
SW2	QSW0832-001	CASS.SWITCH		
SW5	QSW0832-001	CASS.SWITCH		
SW6	QSW0859-001	DETECT SWITCH		

Cassette switch board

Block No. [0][4][0][0]

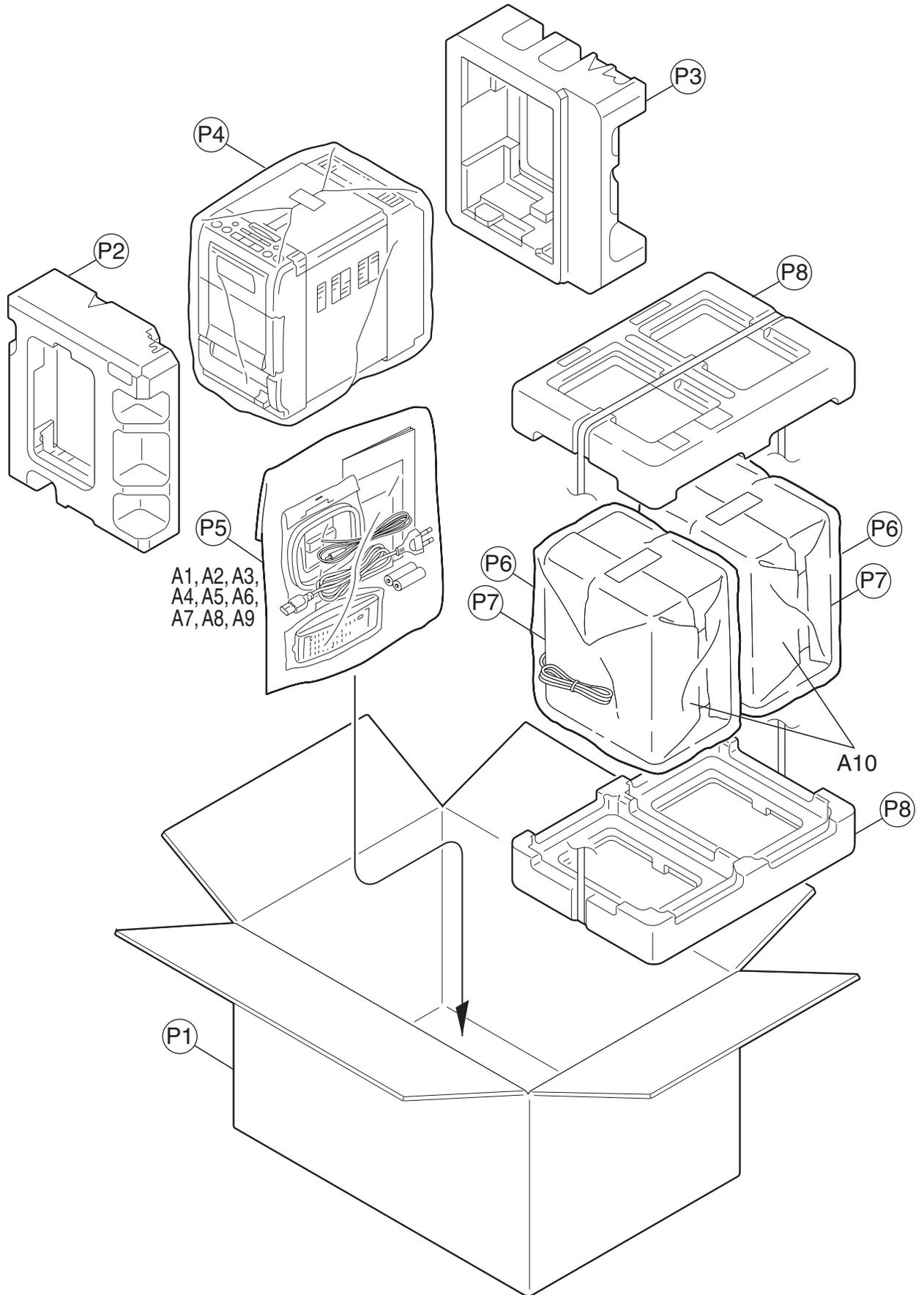
Symbol No.	Part No.	Part Name	Description	Local
IC32	HA12238F	IC		
IC33	CD4094BC	IC		
Q302	2SC2001/K/-T	TRANSISTOR		
Q305	2SC2001/K/-T	TRANSISTOR		
Q342	KRA111M-T	DIGI TRANSISTOR		
Q343	2SC3576-JVC-T	TRANSISTOR		
Q344	2SC3576-JVC-T	TRANSISTOR		
Q345	2SC3576-JVC-T	TRANSISTOR		
Q346	2SC3576-JVC-T	TRANSISTOR		
Q347	KRC107M-T	TRANSISTOR		
Q371	KTA1271/OY/-T	TRANSISTOR		
Q372	KRC107M-T	TRANSISTOR		
Q375	2SB562/C/-T	TRANSISTOR		
Q376	KTC3199/GLJ-T	TRANSISTOR		
D340	MTZJ5.1B-T2	Z DIODE		
D375	MTZJ5.1B-T2	Z DIODE		

R101	QRE141J-512Y	C RESISTOR	5.1kΩ 1/4W J	
R102	QRE141J-512Y	C RESISTOR	5.1kΩ 1/4W J	
R104	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R105	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R106	QRE141J-113Y	C RESISTOR	11kΩ 1/4W J	
R107	QRE141J-912Y	C RESISTOR	9.1kΩ 1/4W J	
R108	QRE141J-273Y	C RESISTOR	27kΩ 1/4W J	
R110	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R116	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R121	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R201	QRE141J-512Y	C RESISTOR	5.1kΩ 1/4W J	
R202	QRE141J-512Y	C RESISTOR	5.1kΩ 1/4W J	
R204	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R205	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R206	QRE141J-113Y	C RESISTOR	11kΩ 1/4W J	
R207	QRE141J-912Y	C RESISTOR	9.1kΩ 1/4W J	
R208	QRE141J-273Y	C RESISTOR	27kΩ 1/4W J	
R210	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R216	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R221	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R301	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
R302	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R303	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
△R304	QRJ146J-101X	UNF C RESISTOR	100Ω 1/4W J	
R305	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R306	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
△R310	QRJ146J-4R7X	UNF C RESISTOR	4.7Ω 1/4W J	
R313	QRE141J-2R2Y	C RESISTOR	2.2Ω 1/4W J	
R314	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J	
R315	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R327	QRE141J-474Y	C RESISTOR	470kΩ 1/4W J	
R335	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R336	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J	
R337	QRE141J-332Y	C RESISTOR	3.3kΩ 1/4W J	
R338	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J	

△ Symbol No.	Part No.	Part Name	Description	Local
R339	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R340	QRE141J-681Y	C RESISTOR	680Ω 1/4W J	
R341	QRE141J-123Y	C RESISTOR	12kΩ 1/4W J	
R342	QRE141J-243Y	C RESISTOR	24kΩ 1/4W J	
R343	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J	
R344	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R345	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R346	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R347	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
△ R353	QRZ9005-100X	F.RESISTOR	10Ω	
R371	QRE141J-123Y	C RESISTOR	12kΩ 1/4W J	
R372	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R375	QRE141J-151Y	C RESISTOR	150Ω 1/4W J	
R376	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
VR31	QVP0008-203Z	TRIM RESISTOR	20kΩ	
VR37	QVP0077-103Z	TRIM RESISTOR	10kΩ	
L301	QQR1118-002	OSC COIL(BIAS)		
L303	QQL244K-100Z	COIL	10uH K	
CN31	QGF1205F1-06	CONNECTOR	FFC/FPC (1-6)	
CN32	QGF1205F1-09	CONNECTOR	FFC/FPC (1-9)	
CN33	QGF1205F1-09	CONNECTOR	FFC/FPC (1-9)	
CN34	QGF1201F3-10	CONNECTOR	FFC/FPC (1-10)	
FW100	QUM024-07A2Z3	PARA RIBON WIRE		
H32	GV40397-001A	IC HOLDER		

Packing materials and accessories parts list

Block No. M 3 M M



Packing and accessories

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

△ Symbol No.	Part No.	Part Name	Description	Local
A 1	GVT0101-001B	INST BOOK	ENG	H30J
A 1	GVT0101-002C	INST BOOK	ENG,FRE	H30C
△ A 2	QMPE180-183-JN	POWER CORD(US/CA)	1.83m BLACK	
A 3	RM-SFSH30J	REMOCON UNIT		
A 4	-----	BATTERY	(x2)	
A 5	BT-51028-2	J=REGIST CARD		H30J
A 6	YU20333	SAFETY INST.		
A 7	QAL0457-001	ANT.WIRE		
A 8	QAL0014-001	AM LOOP ANT		
A 9	BT-52006-2	WARRANTY CARD		H30C
A 10	FSH30E-SPBOX	SPK WITH BOX	(x2)	
P 1	GV30407-005A	CARTON ASSY.		
P 2	GV20200-001A	CUSHION FRONT		
P 3	GV20200-002A	CUSHION REAR		
P 4	QPC04504515P	POLY BAG	45cm x 45cm	
P 5	QPC02503515P	POLY BAG	25cm x 35cm	
P 6	70012006210	HOPE BAG	(x2)	
P 7	71525007400	PACKING SHEET	(x2)	
P 8	7200UXH3000	CUSHION	(x2)	