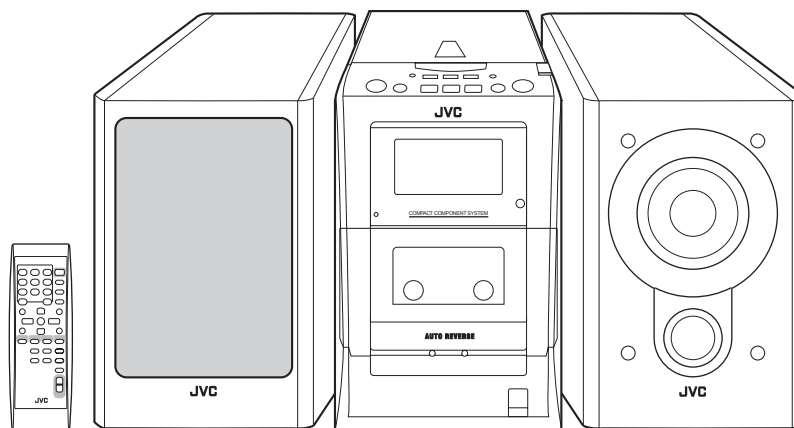


# JVC

## SERVICE MANUAL

### COMPACT COMPONENT SYSTEM

## FS-H35



COMPACT  
disc  
DIGITAL AUDIO

#### Area Suffix

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

### TABLE OF CONTENTS

|   |                                |      |
|---|--------------------------------|------|
| 1 | Precautions .....              | 1-3  |
| 2 | Disassembly method .....       | 1-7  |
| 3 | Adjustment. ....               | 1-19 |
| 4 | Description of major ICs. .... | 1-25 |

## SPECIFICATION

|               |                                              |                                           |                                                                                                                                                                           |
|---------------|----------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Amplifier     | Output Power                                 |                                           | 20 W (10 W + 10 W) at 4 $\Omega$ (10% THD)<br>12 W per channel, min. RMS, driven into 4 $\Omega$ 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 $\Omega$                                                                                                                                                   |
|               | Speakers/Impedance                           |                                           | 4 $\Omega$                                                                                                                                                                |
| 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 $\Omega$                                                                                                                                                                |
|               |                                              | Dimensions (approx.)                      | 135 mm $\times$ 203 mm $\times$ 190 mm (W/H/D)<br>(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)<br>3.0 W (on standby) |                                                                                                                                                                           |
|               | Dimensions (approx.)                         |                                           | 412 mm $\times$ 208 mm $\times$ 275 mm (W/H/D)<br>(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 manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by ( $\Delta$ ) 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.

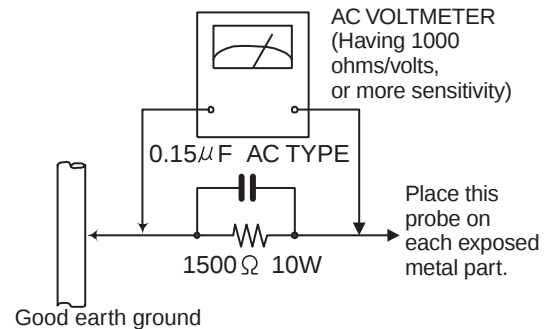
(5) Leakage shock hazard testing

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 parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method  
Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 $\Omega$  per volt or more sensitivity in the following manner. Connect a 1,500 $\Omega$  10W resistor paralleled by a 0.15 $\mu$ 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 $\mu$  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

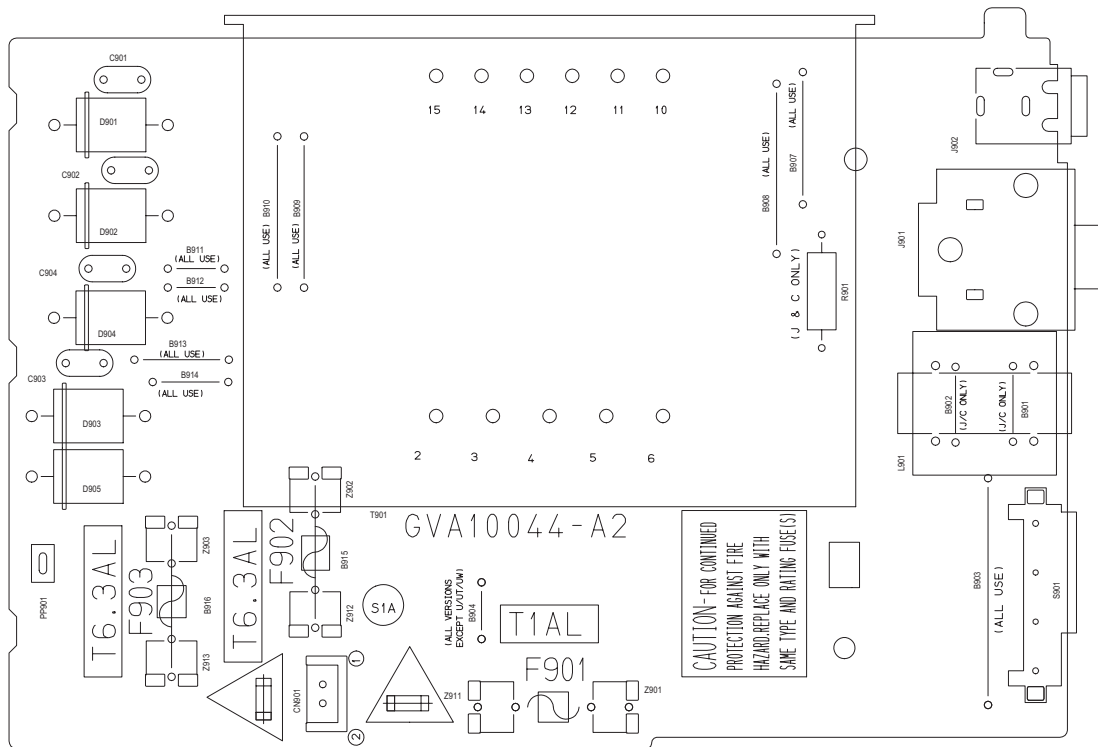
**Burrs formed during molding may be left over on some parts of the chassis.**

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

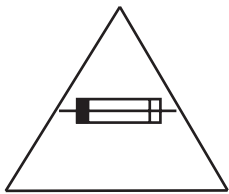
### 1.4 Critical parts for safety

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 " $\Delta$ " 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 dose 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.

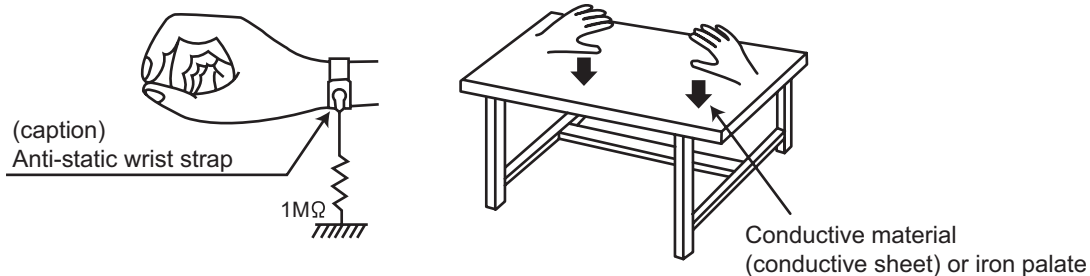
Be careful to use proper grounding in the area where repairs are being performed.

(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.

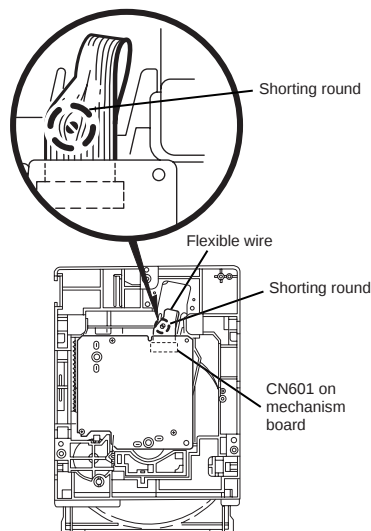
## 1.7 Handling the traverse unit (optical pickup)

- (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 inter lock failed or defeated. Avoid direct exposure to beam.

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

**4.CAUTION :** The compact disc player uses invisible 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.

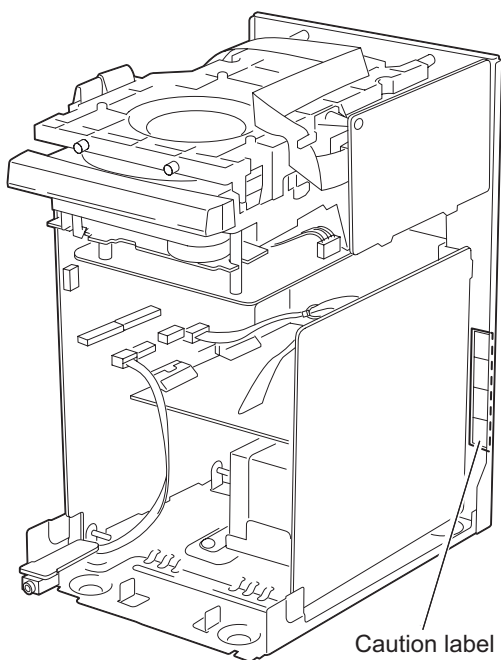
**VARO :** Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

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

**ADVARSEL :** Usynlig laserstråling ved åpning,når sikkerhetsbryteren er avsløtt. 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.

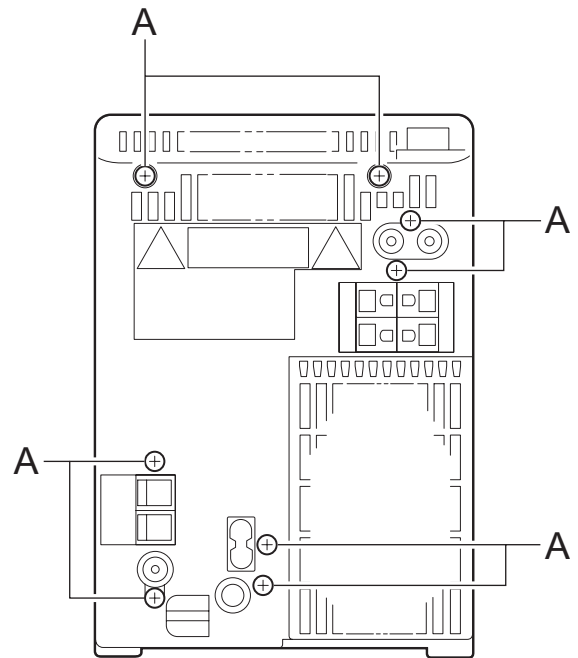
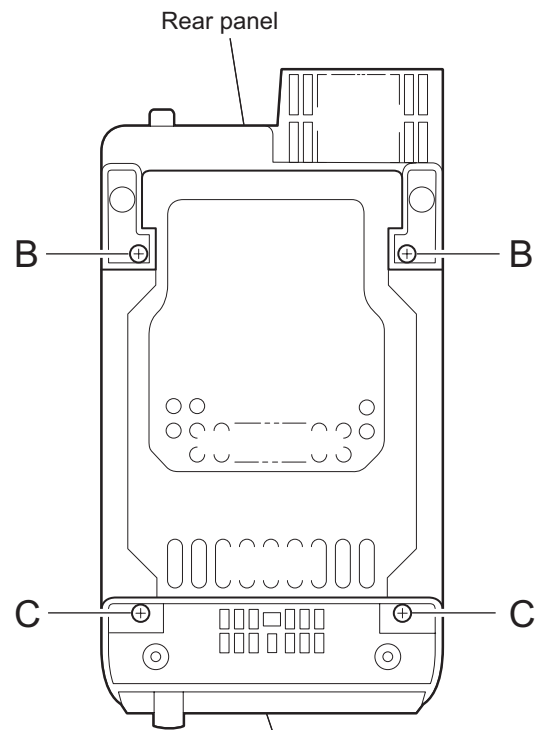


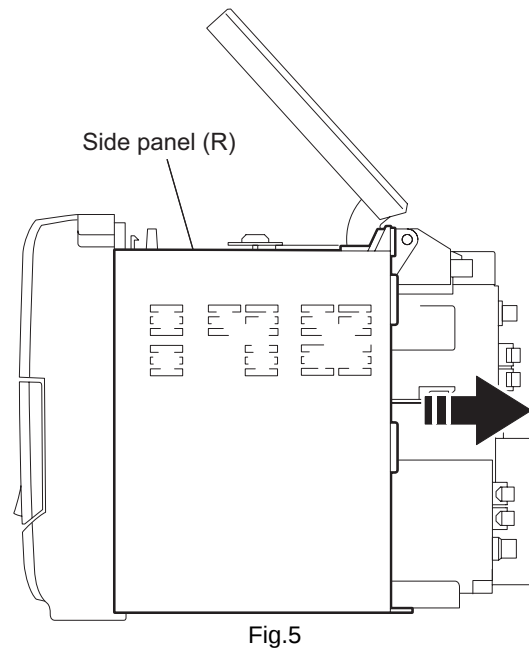
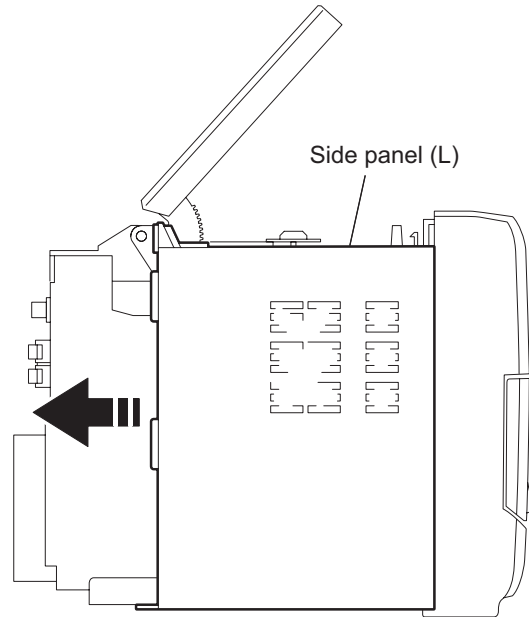
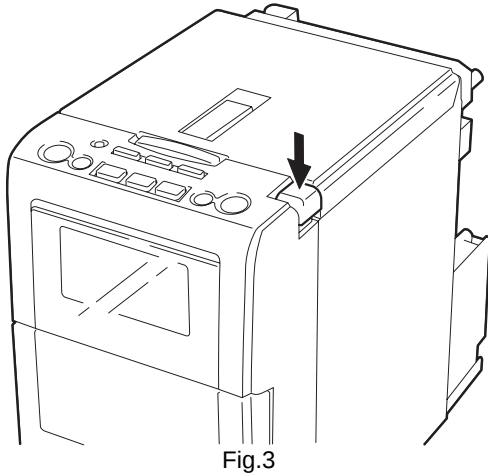
Fig.1



Front panel assembly  
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.



### 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.

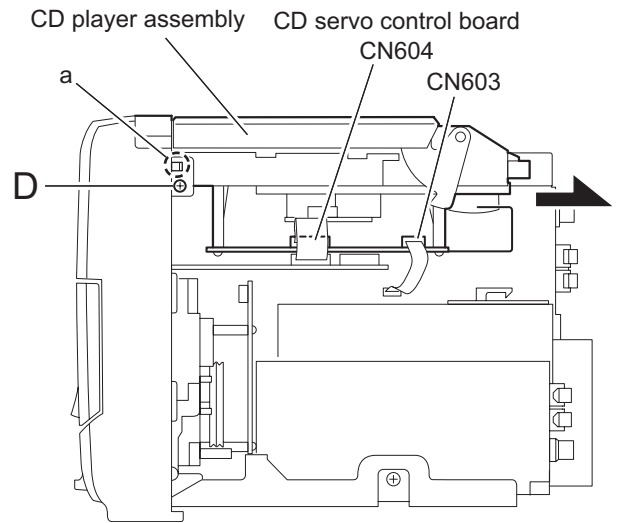


Fig.6

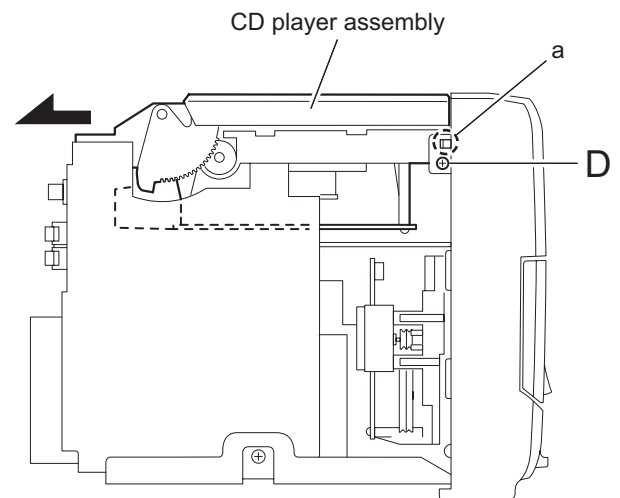


Fig.7

#### 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.

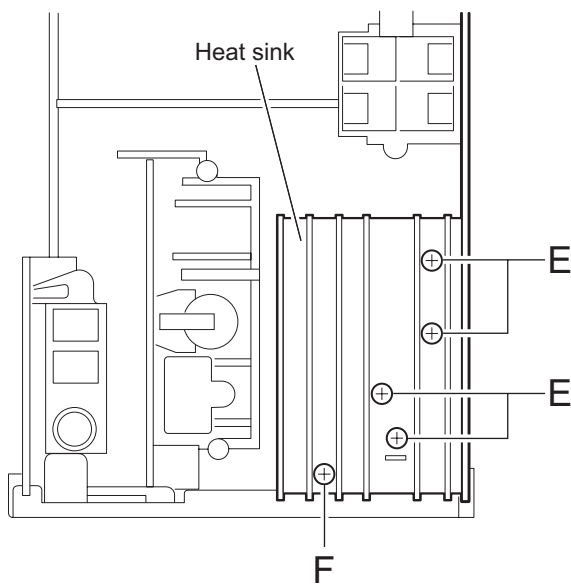


Fig.8

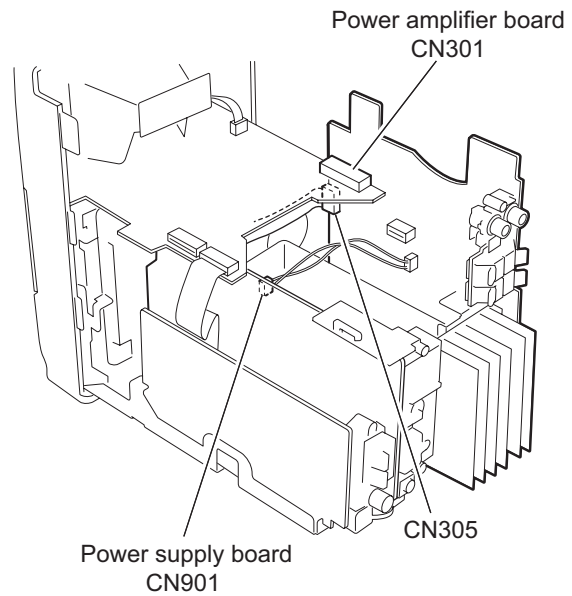


Fig.9

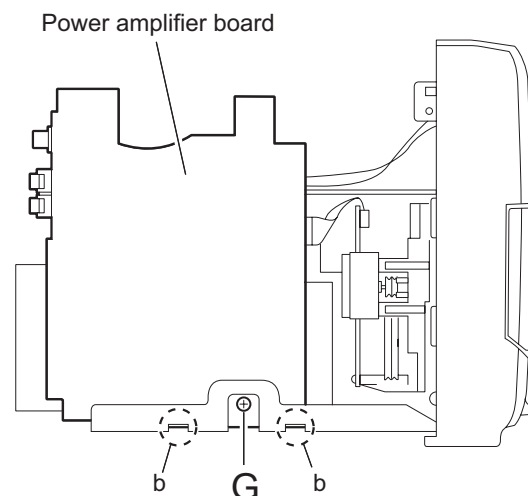


Fig.10

### 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.

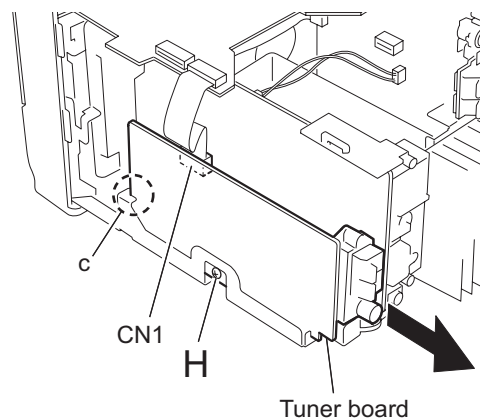


Fig.11

### 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.

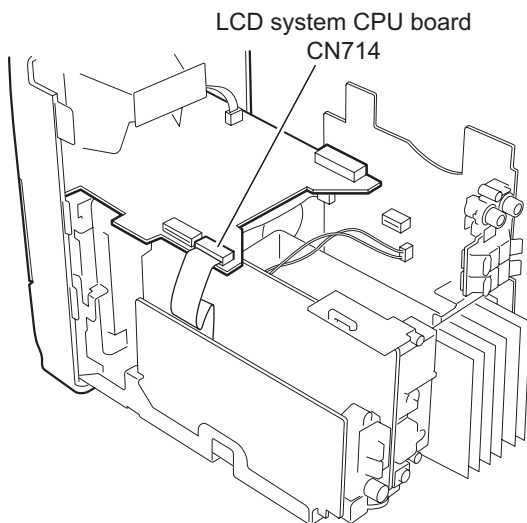


Fig.12

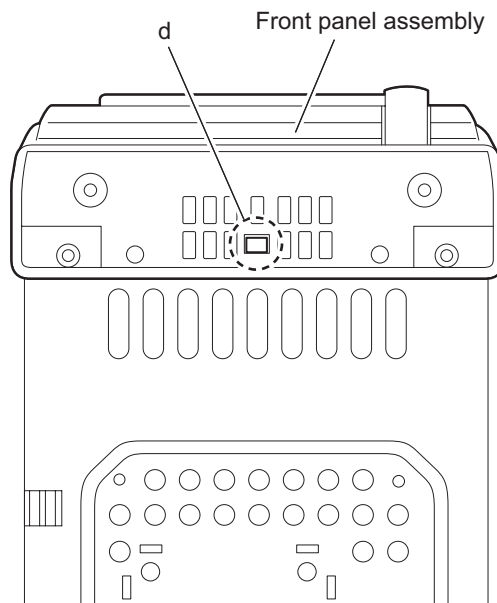


Fig.13

### 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.

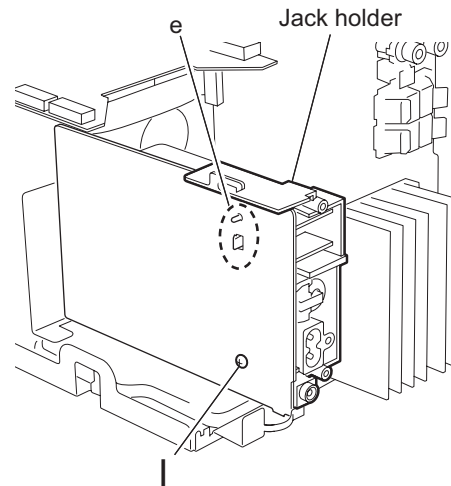


Fig.14

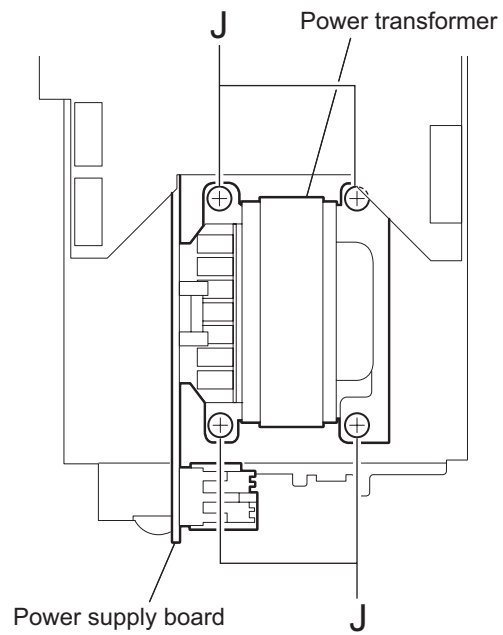
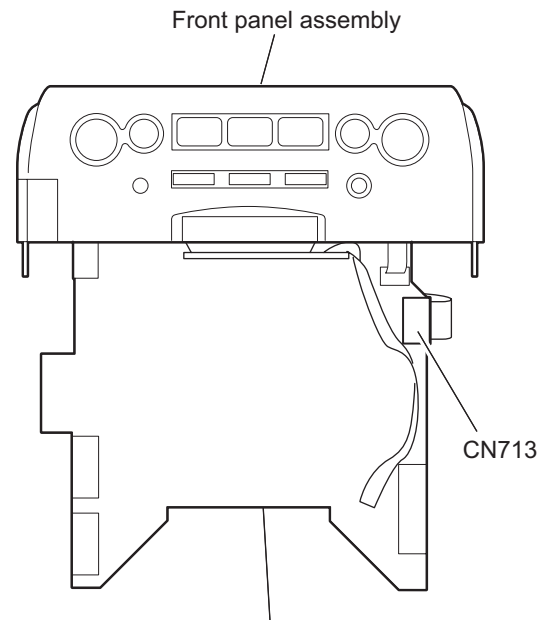


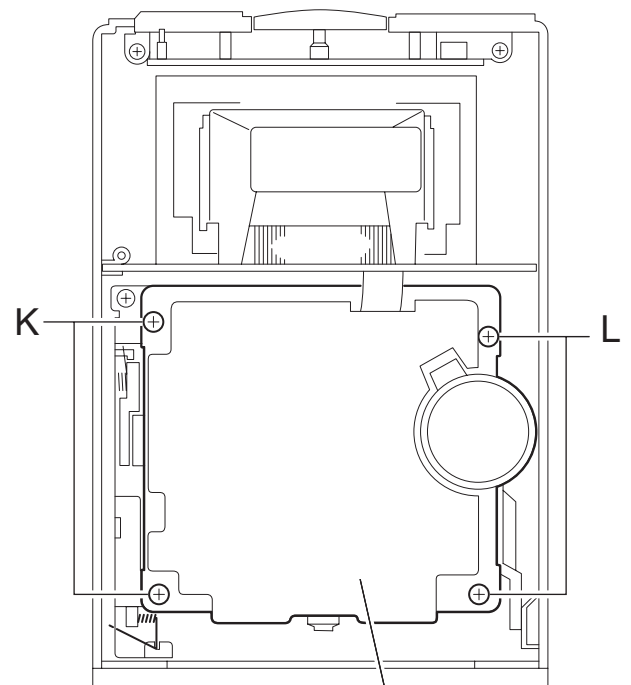
Fig.15

### 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.



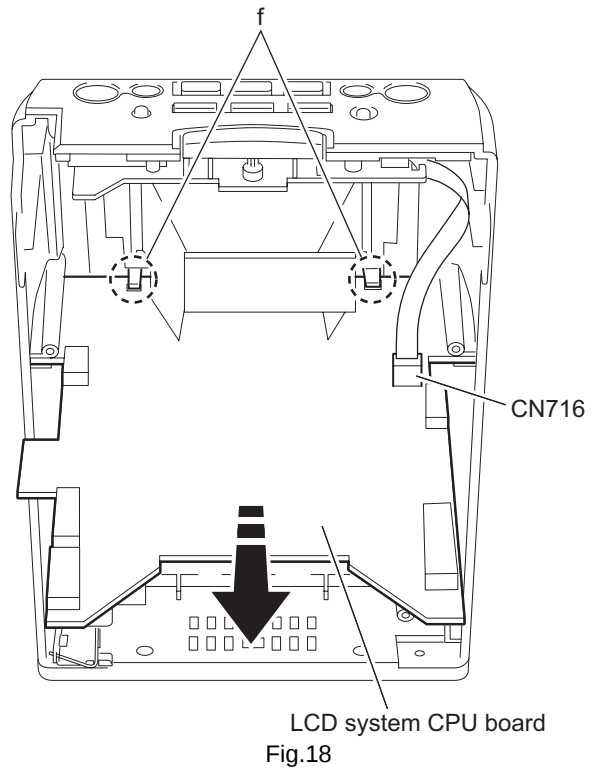
LCD system CPU board  
Fig.16



Cassette mechanism assembly  
Fig.17

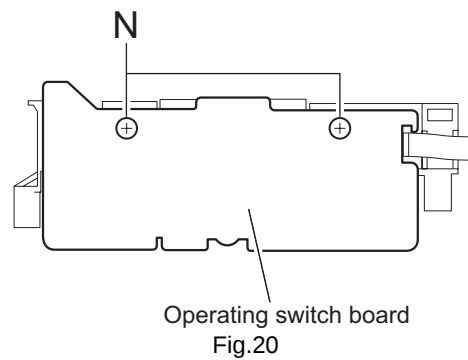
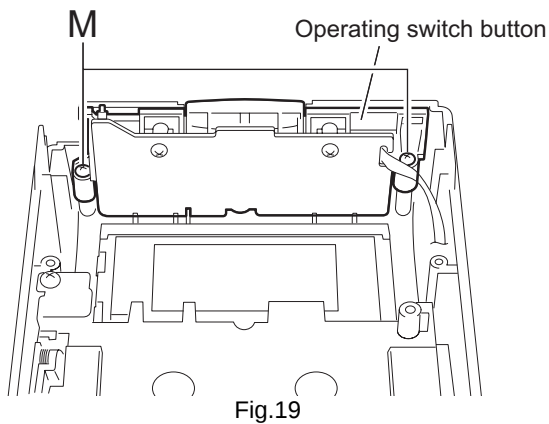
### 2.1.9 Remove the LCD system CPU board (See Fig.18)

- (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.

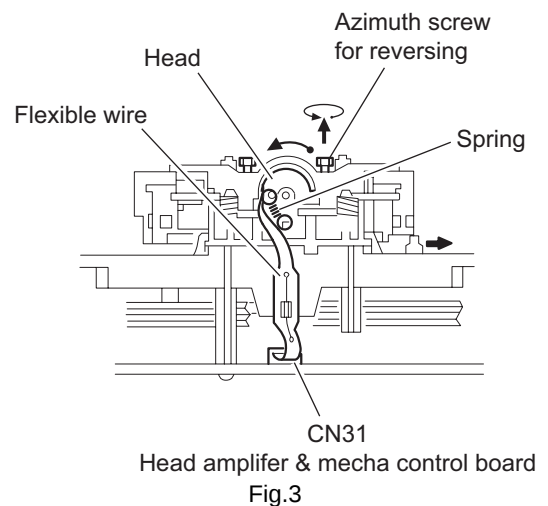
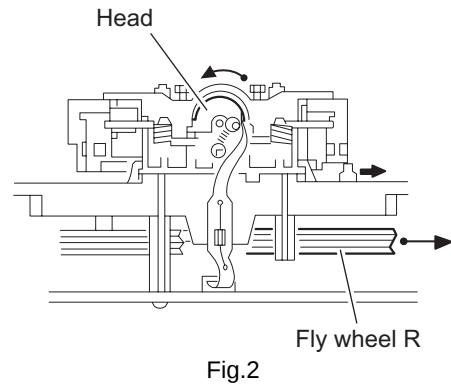
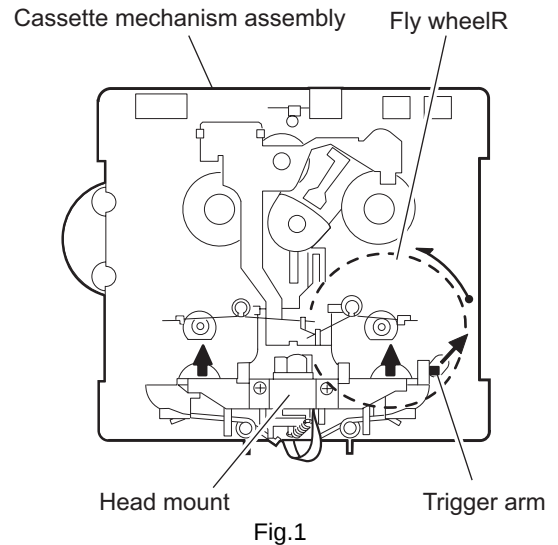


## 2.2 Cassette mechanism assembly

### 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.

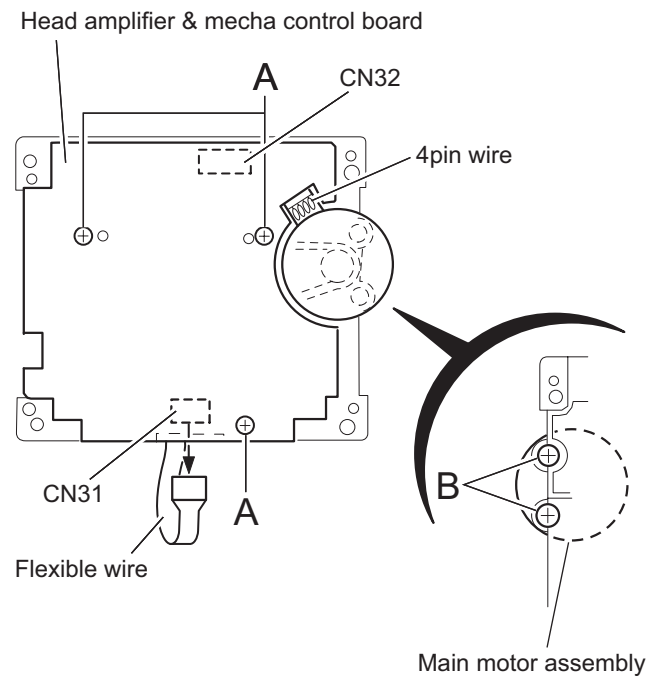


Fig.4

### 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.

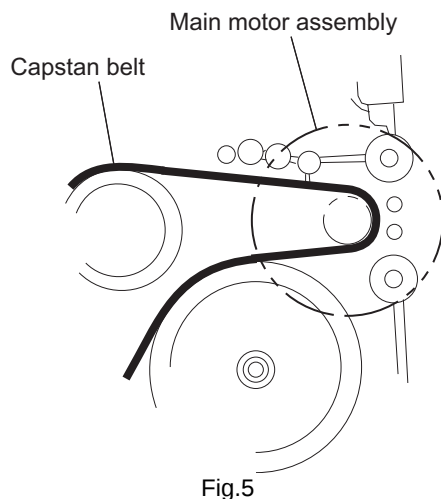


Fig.5

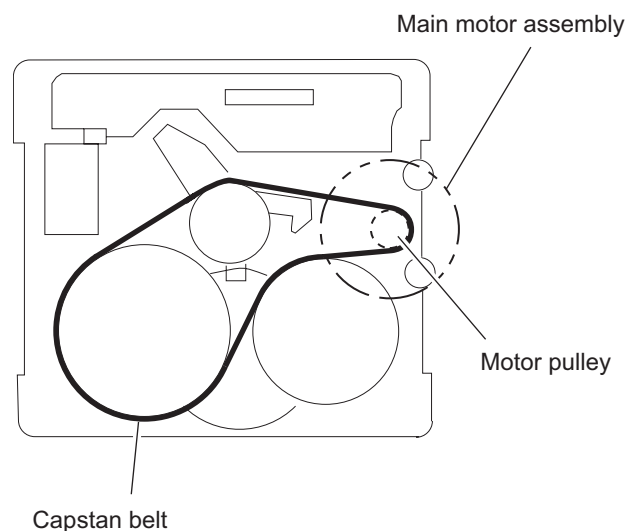


Fig.6

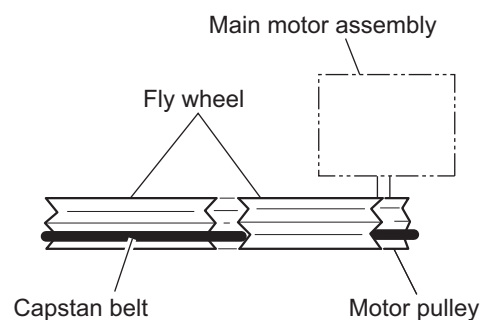


Fig.7

#### 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.

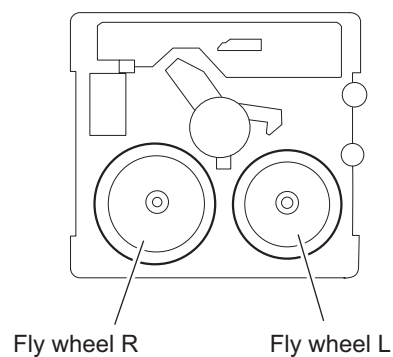


Fig.8

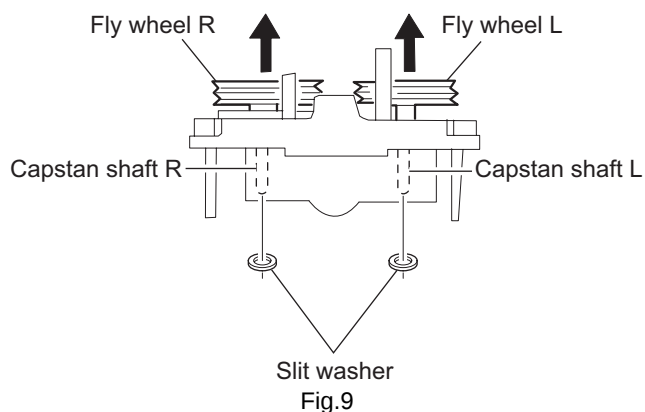


Fig.9

#### 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.

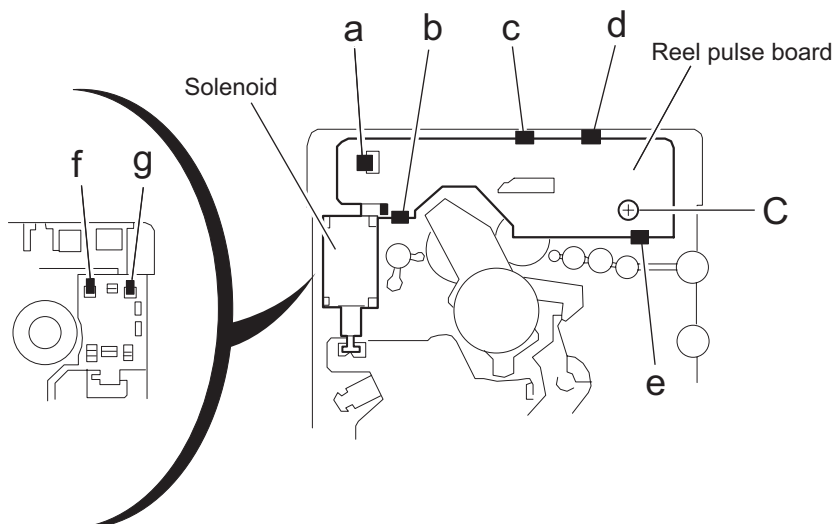


Fig.10

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

(1) Reattaching the head mount assembly.

- Change front of the direction cover of the head mount assembly to the left (Turn the head forward).
- 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.

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

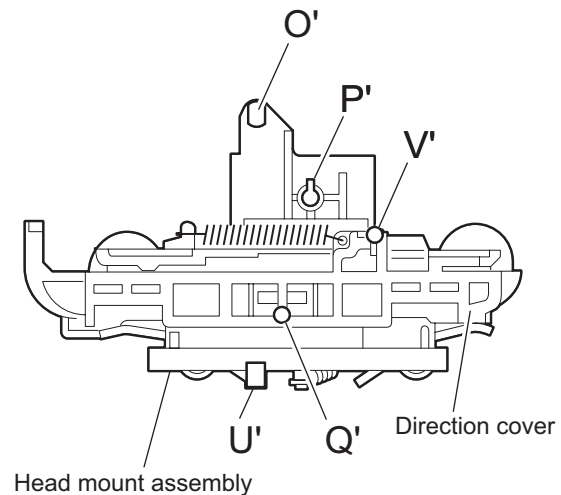


Fig.11

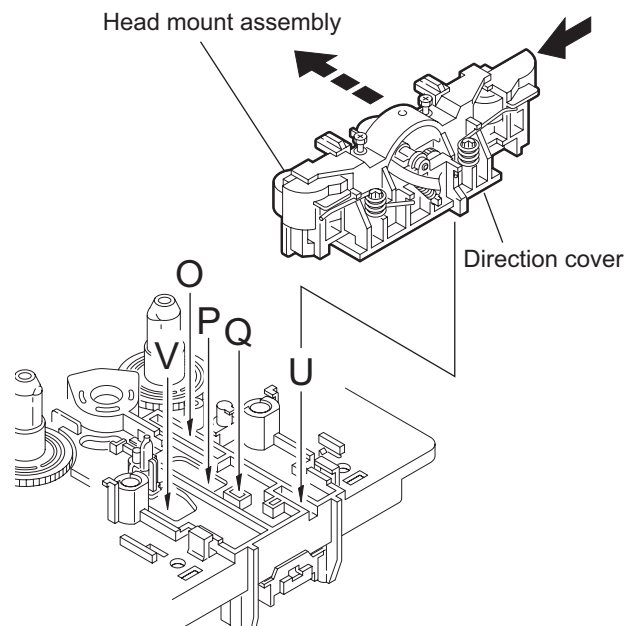


Fig.12

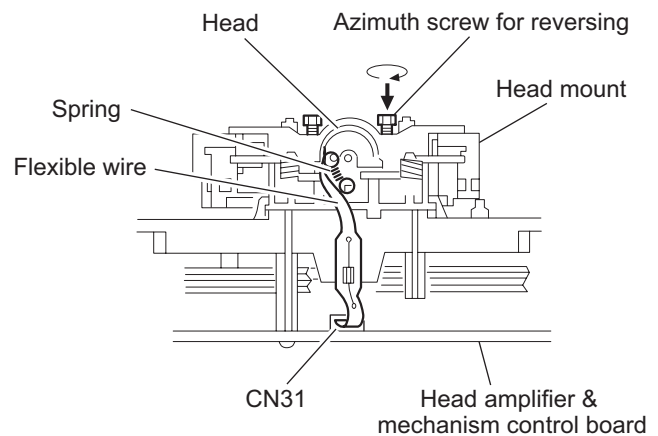
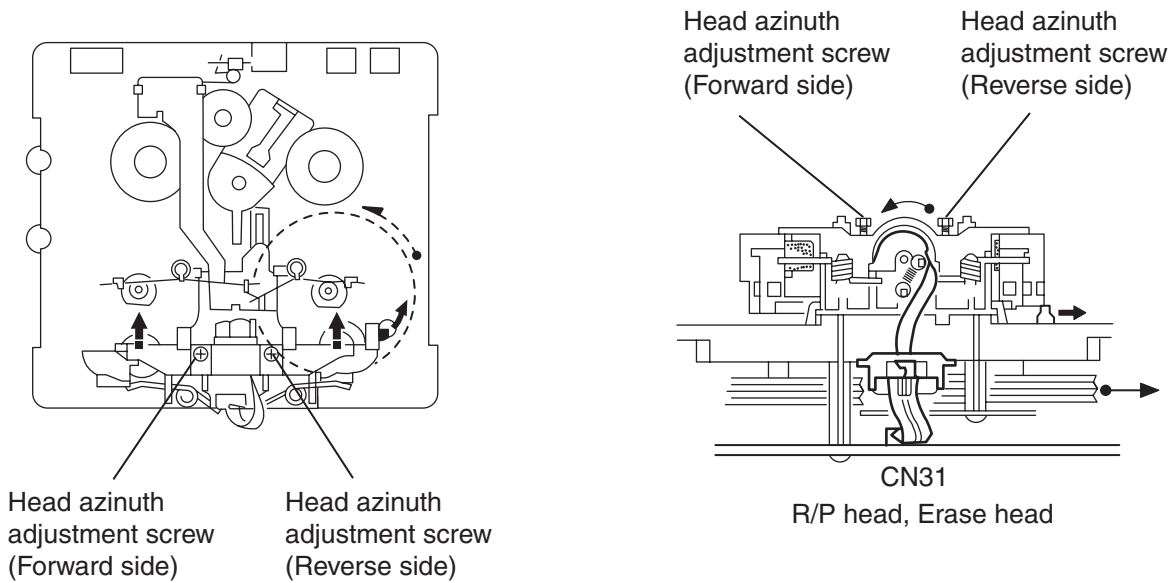


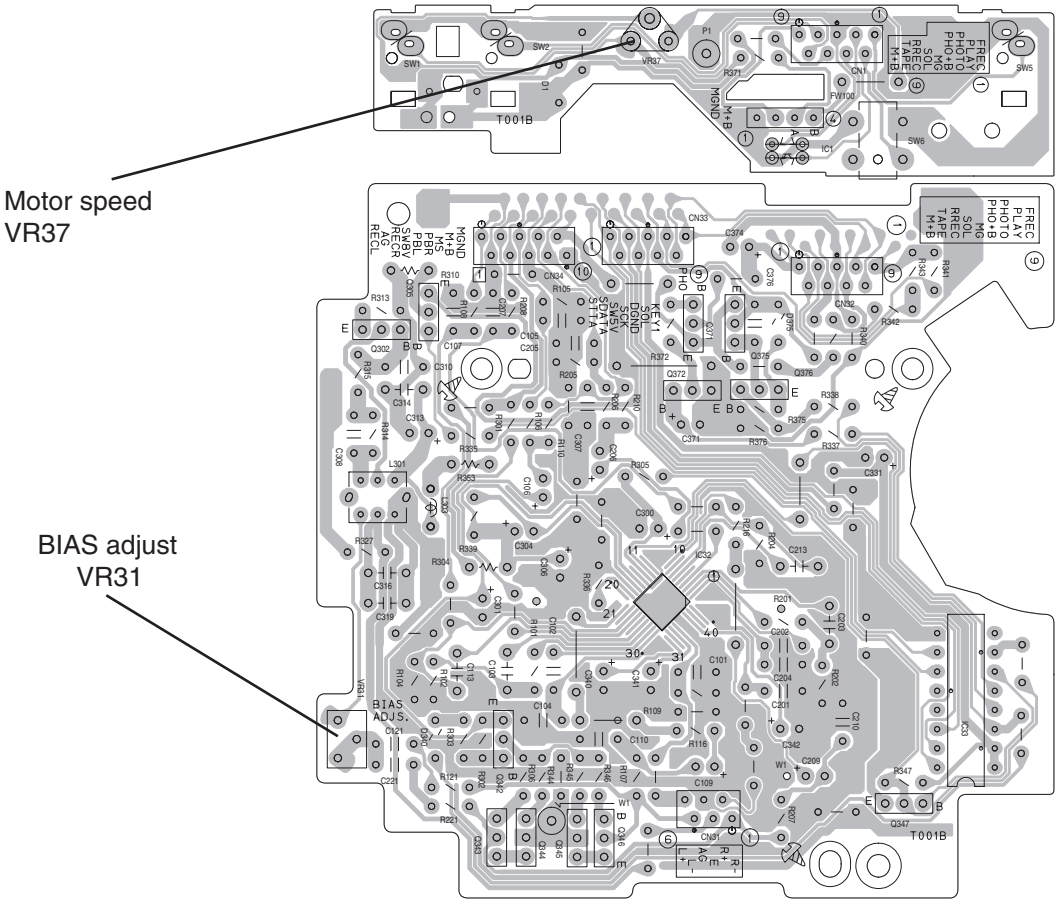
Fig.13



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)<br>Output terminal : Speaker out                | 1.Playback the test tape VT703L (8kHz).<br>2.Adjust to maximum output level by azimuth adjustment screw for forward side and reverse side.<br>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)<br>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)<br>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)<br>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) |                     |

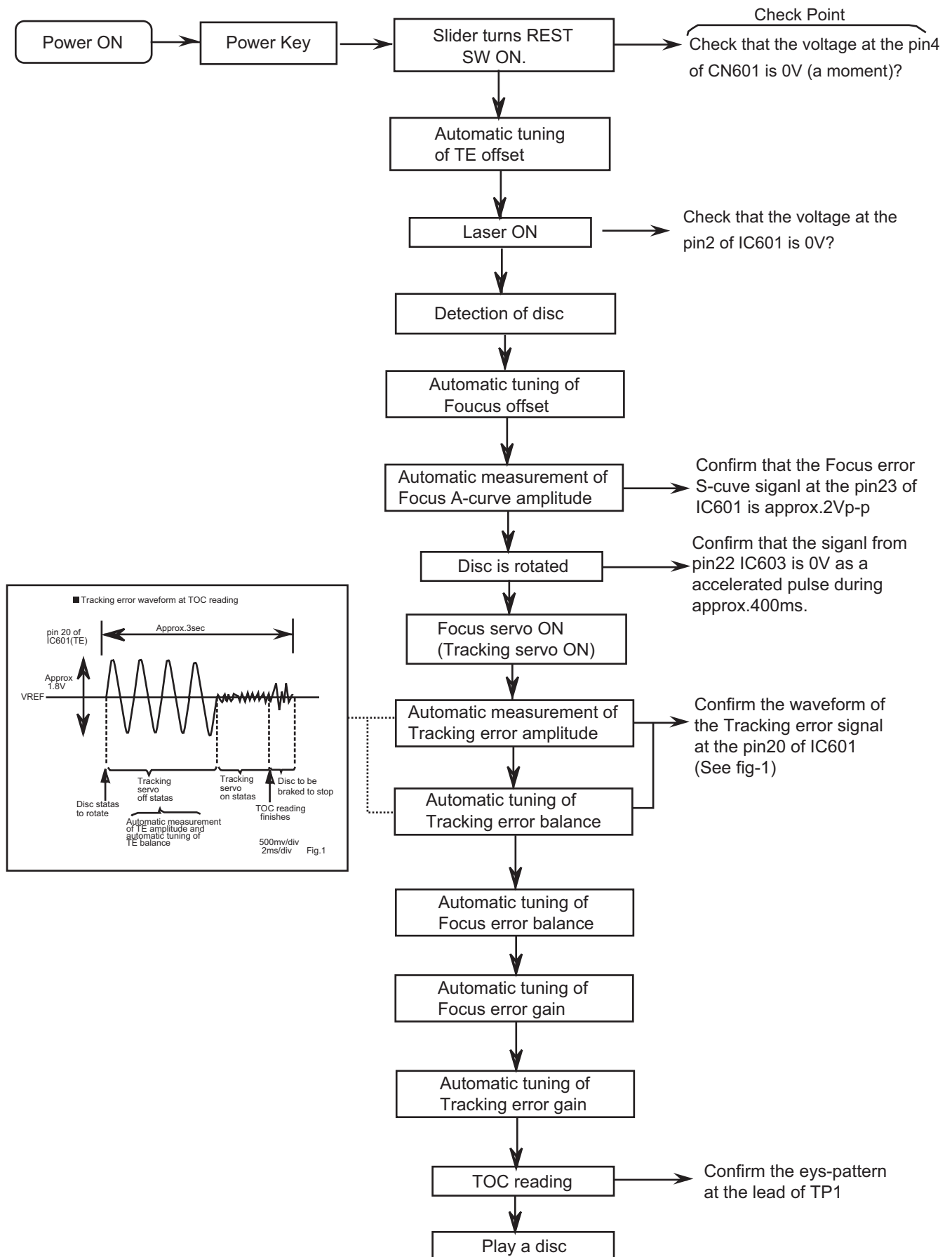
### 3.2.2 Electrical adjustment

| Item                            | Condition                                                                                                                                                                   | Measurement method                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Ref.value                                       | Adjustment position |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------|
| Recording BIAS adjustment       | <ul style="list-style-type: none"> <li>Forward or Reverse</li> <li>Test tape : AC-514 TYPE II<br/>: AC-225 TYPE I</li> <li>Output terminal<br/>Recording head</li> </ul>    | <ol style="list-style-type: none"> <li>Set the test tape(AC-514 TYPEII and AC-225 TYPEI), then make REC/PAUSE condition.</li> <li>Connect 100 <math>\Omega</math> to recording head by series, then connect to VTVM for measurement the current.</li> <li>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.<br/>4.0 <math>\mu</math>A (TYPE II) and 4.20 <math>\mu</math>A (TYPE I).</li> </ol> | AC-225 :4.20 $\mu$ A<br>AC-514 :4.0 $\mu$ A     | VR31                |
| R/P playback frequency response | <ul style="list-style-type: none"> <li>Reference frequency : 1kHz / 10kHz (Reference: -20dB)</li> <li>Test tape : AC-514 TYPEII</li> <li>Input terminal : OSC IN</li> </ul> | <ol style="list-style-type: none"> <li>Set the test tape (AC-514 TYPE II), then make REC/PAUSE condition.</li> <li>Release the PAUSE, then start recording the 1kHz and 10kHz of reference frequency from oscillator.</li> <li>Playback the recorded position, 1kHz and 10kHz output deviation should -1dB <math>\pm</math> 2dB to readjust by VR31 for Lch and VR32 for Rch.</li> </ol>                                                                                               | Output deviation<br>1kHz/10kHz : -1dB $\pm$ 2dB | VR31                |

### 3.2.3 Electrical response confirmation

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

### 3.3 Flow of functional operation until TOC read (CD)



### 3.4 Maintenance of laser pickup (CD)

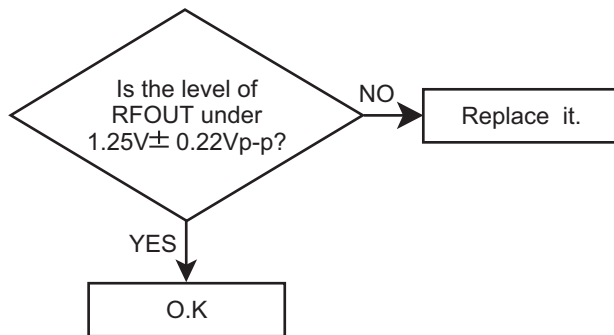
(1) Cleaning the pick up lens

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.

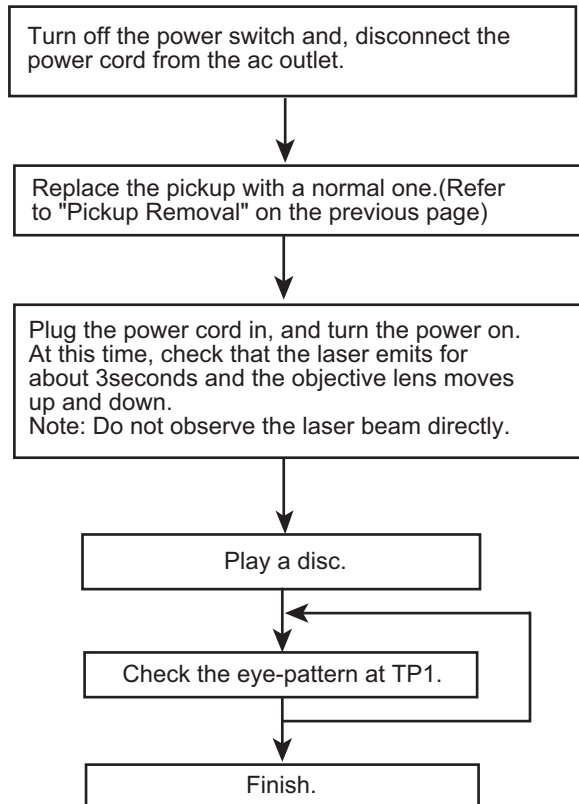
- The level of RF output (EFM output : amplitude of eye pattern) will below.



(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

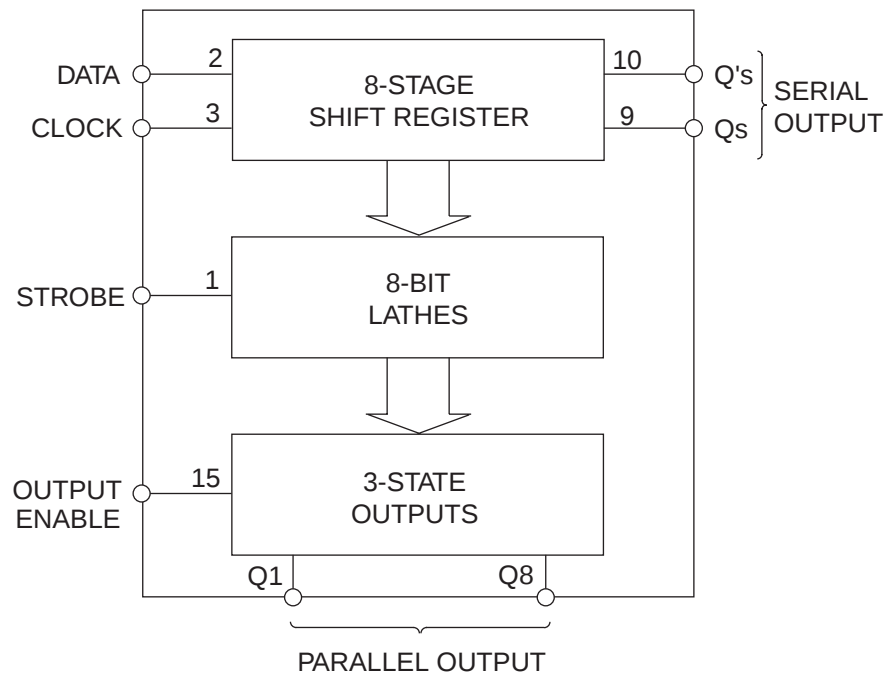
### Description of major ICs

#### 4.1 CD4094BC (IC33) : Serial to parallel port extension

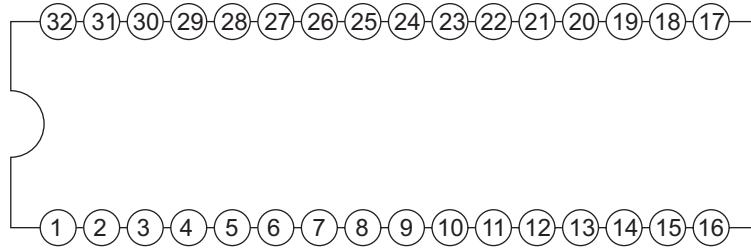
- Pin layout

|        |   |    |               |
|--------|---|----|---------------|
| 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            |

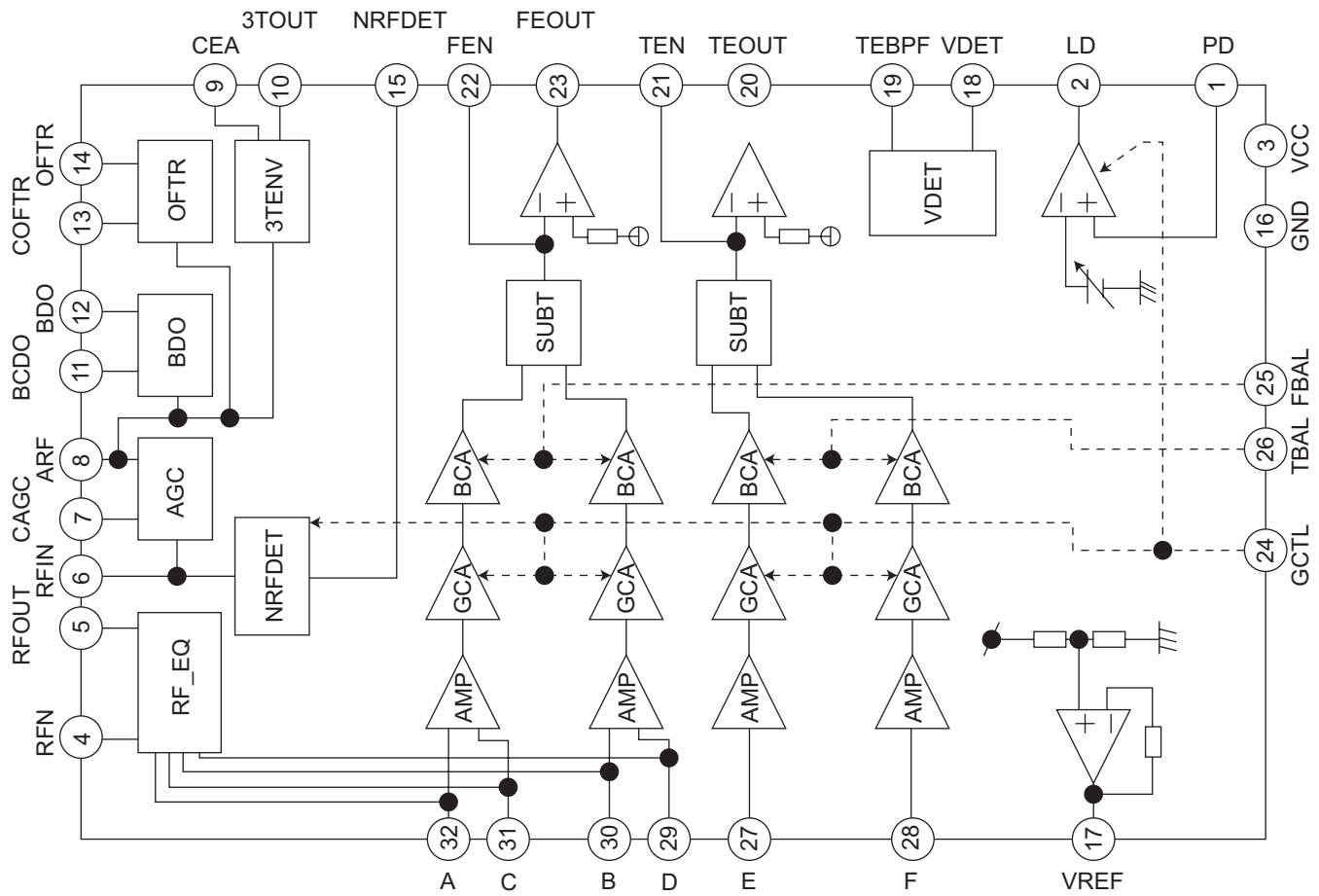
- Block diagram



- Terminal layout



- Block diagram



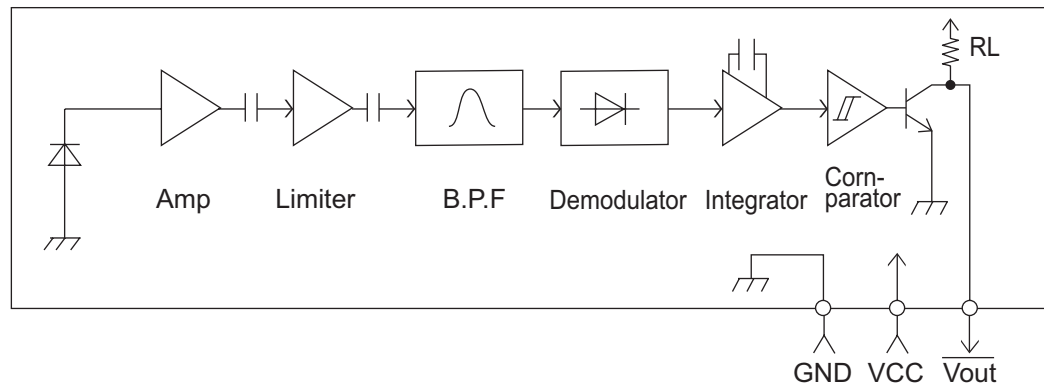
- Pin function

| 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    |

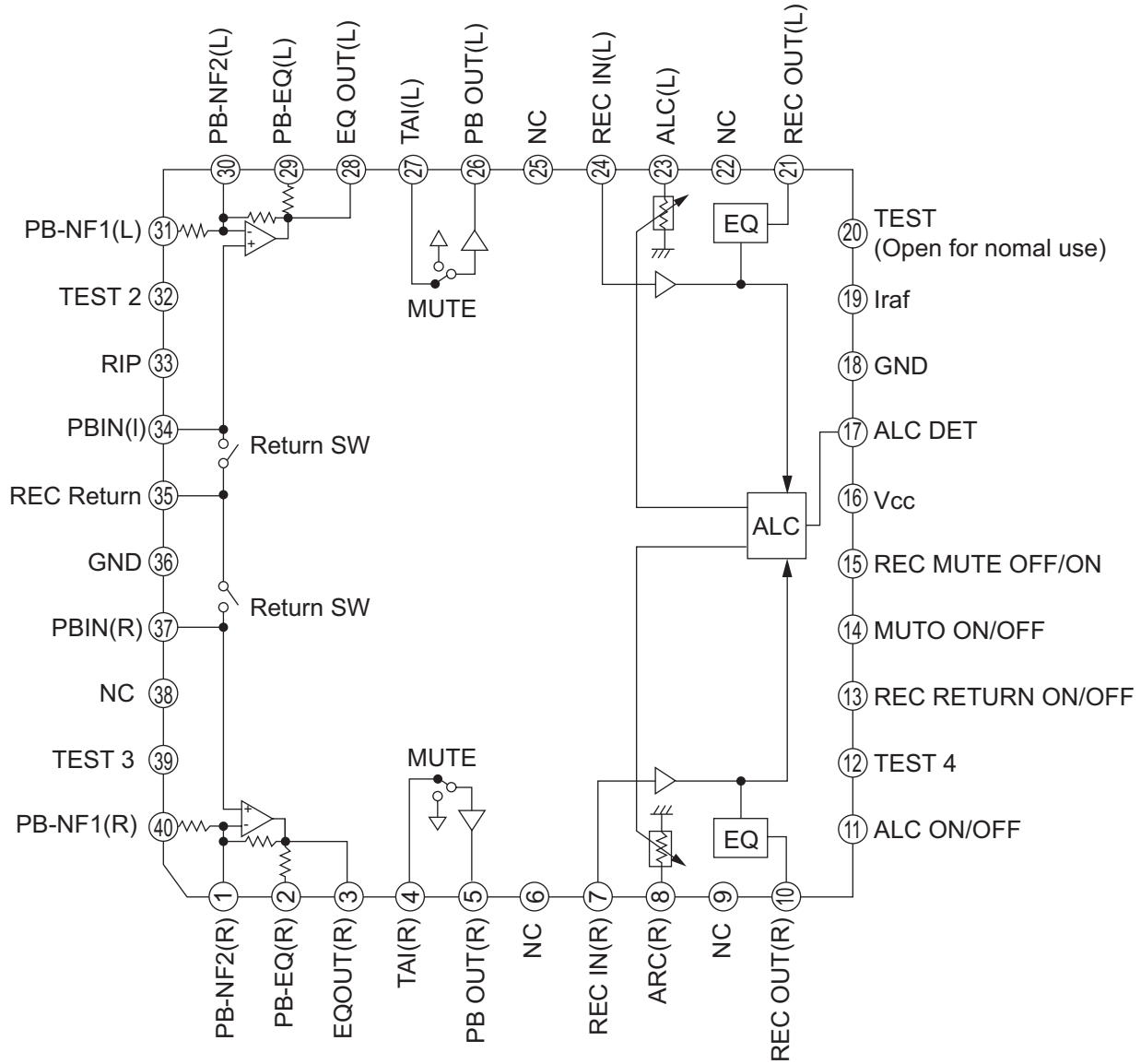
#### 4.3 GP101UM281YK (IC750) : Remocon receiver

- Block diagram



#### 4.4 HA12238F (IC32) : R/P Equalizer

- Pin layout

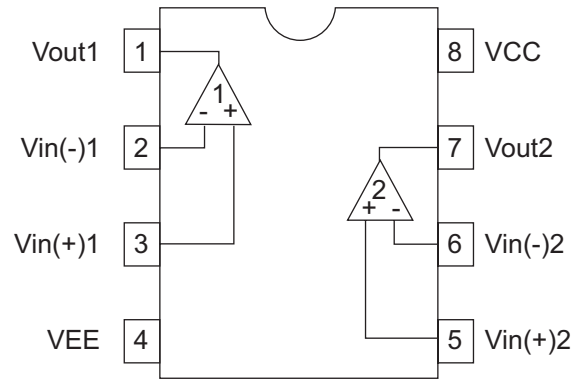


- Pin function

| 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                   |

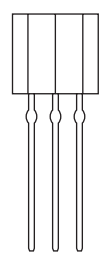
4.5 HA17758A (IC301) : Dual operational amp

- Pin layout

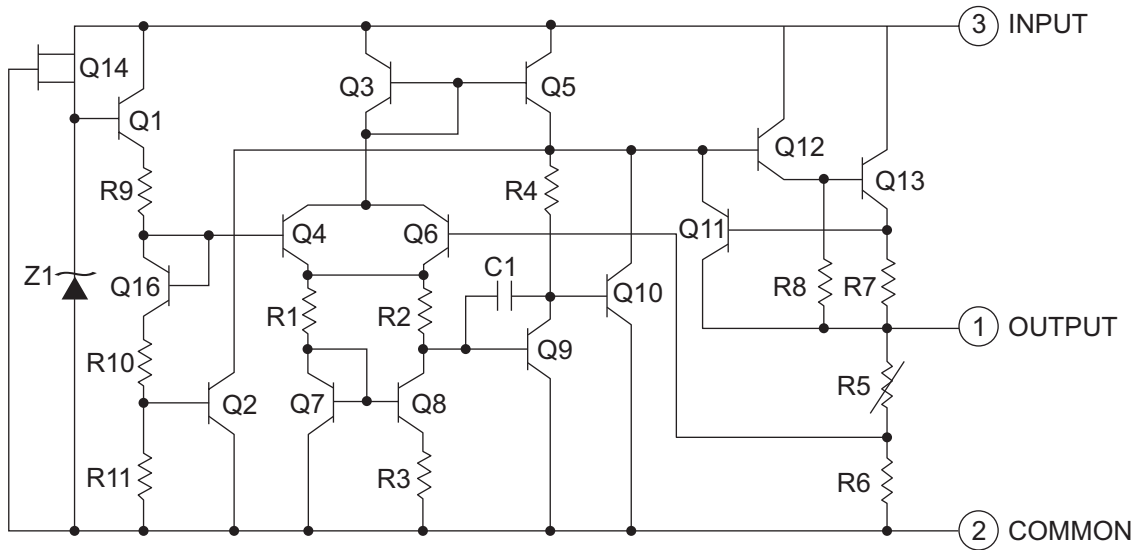


4.6 KIA78S05P-T (IC604) : Regulator

- Pin layout

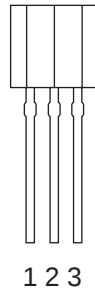


- Block diagram

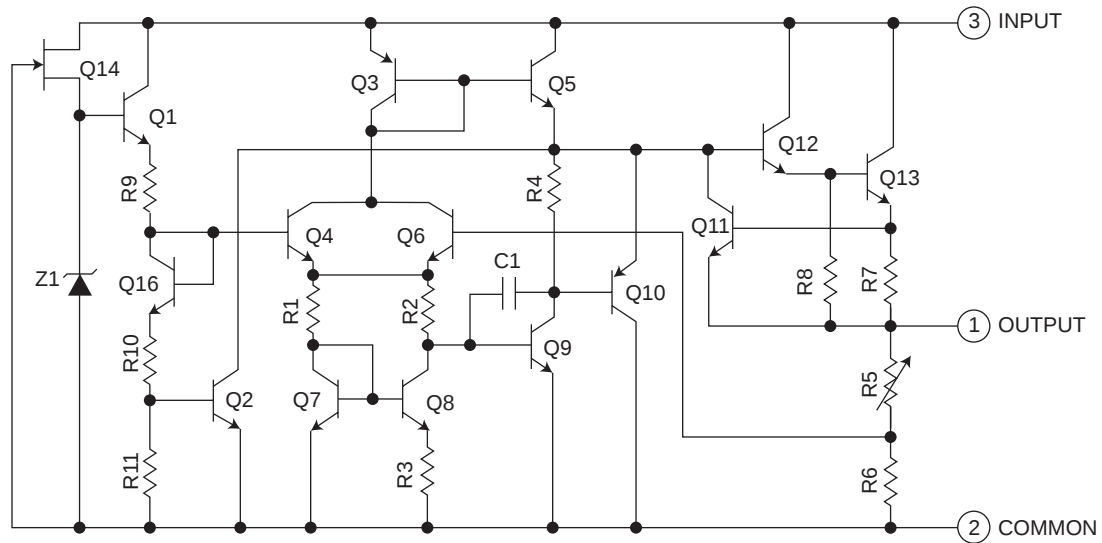


#### 4.7 KIA78S06P-T (IC932) : Regulator

- Pin layout

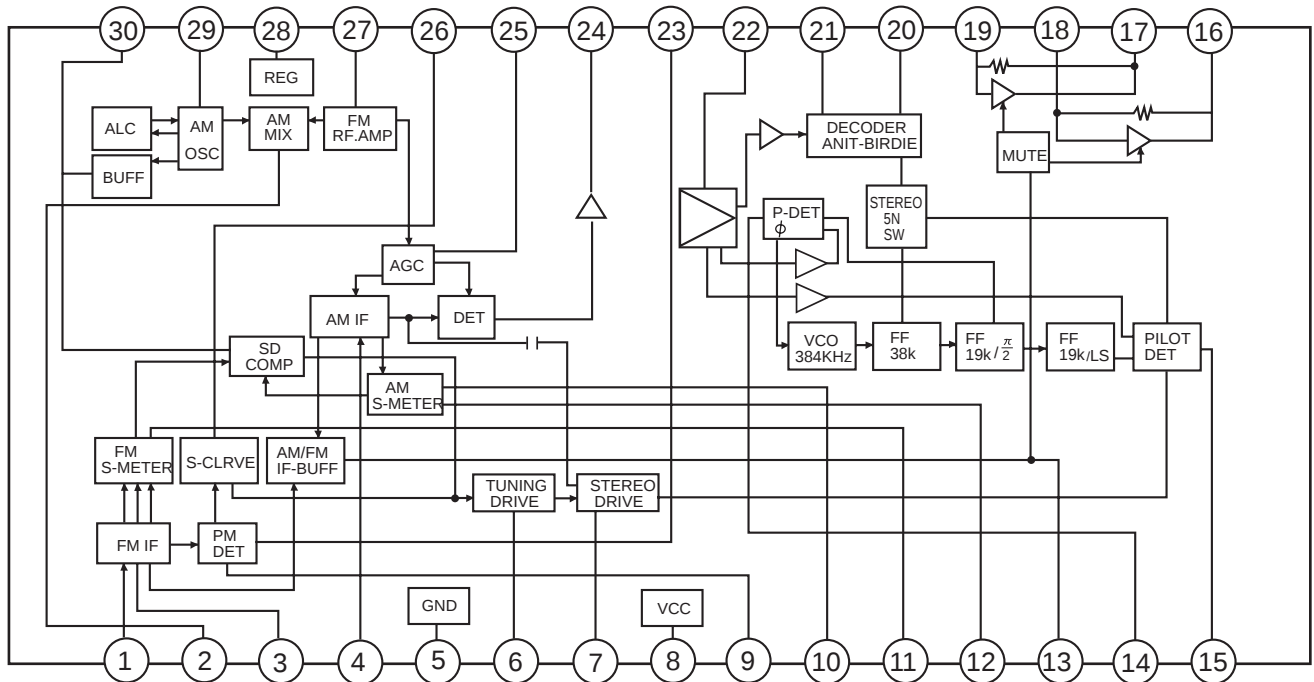


- Block diagram



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

##### • Block Diagram

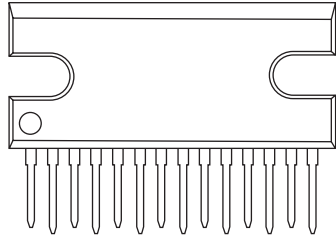


##### • Pin Function

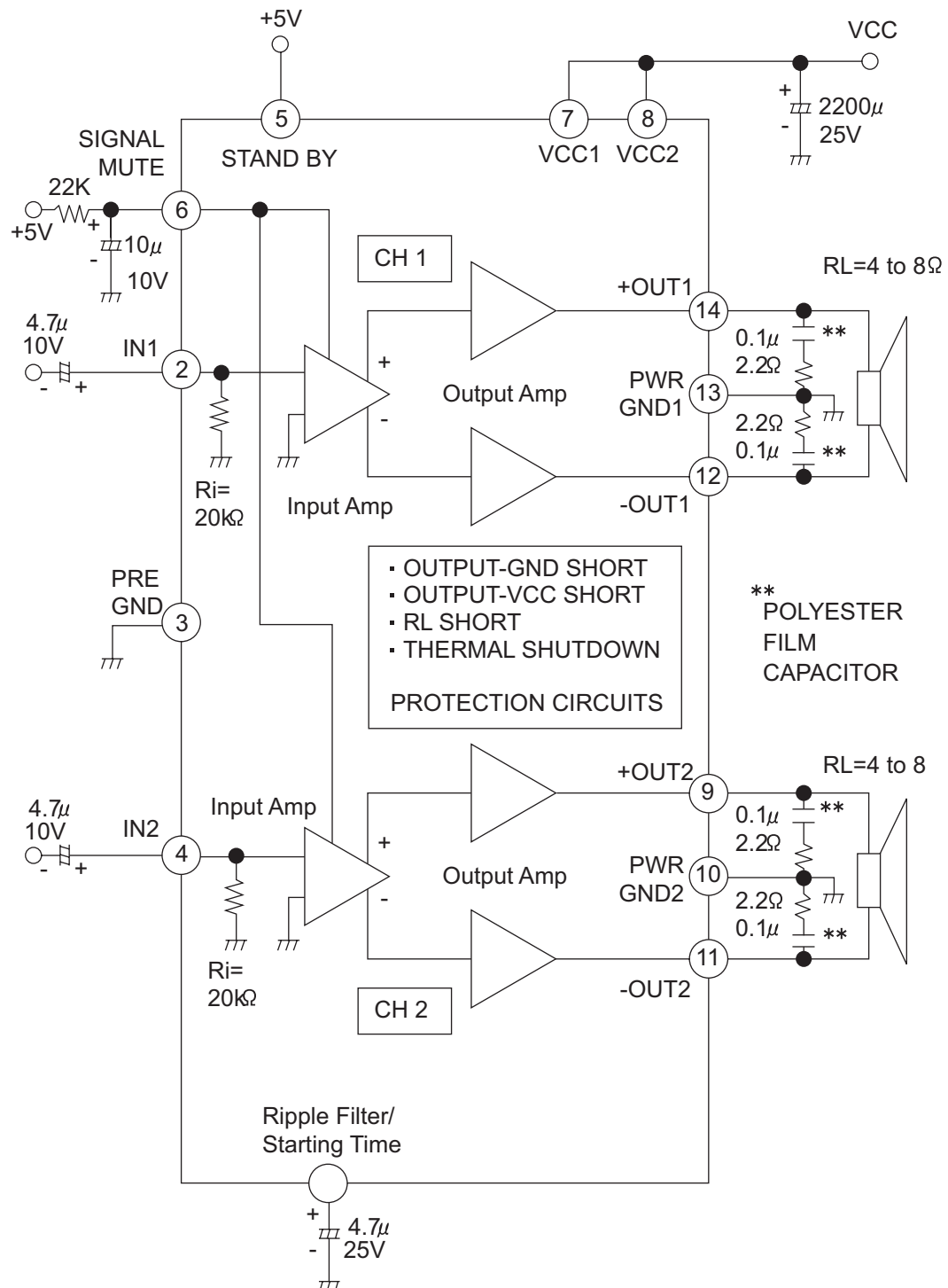
| Pin No. | Symbol     | I/O | Function                                                                                                   |
|---------|------------|-----|------------------------------------------------------------------------------------------------------------|
| 1       | FM IN      | 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

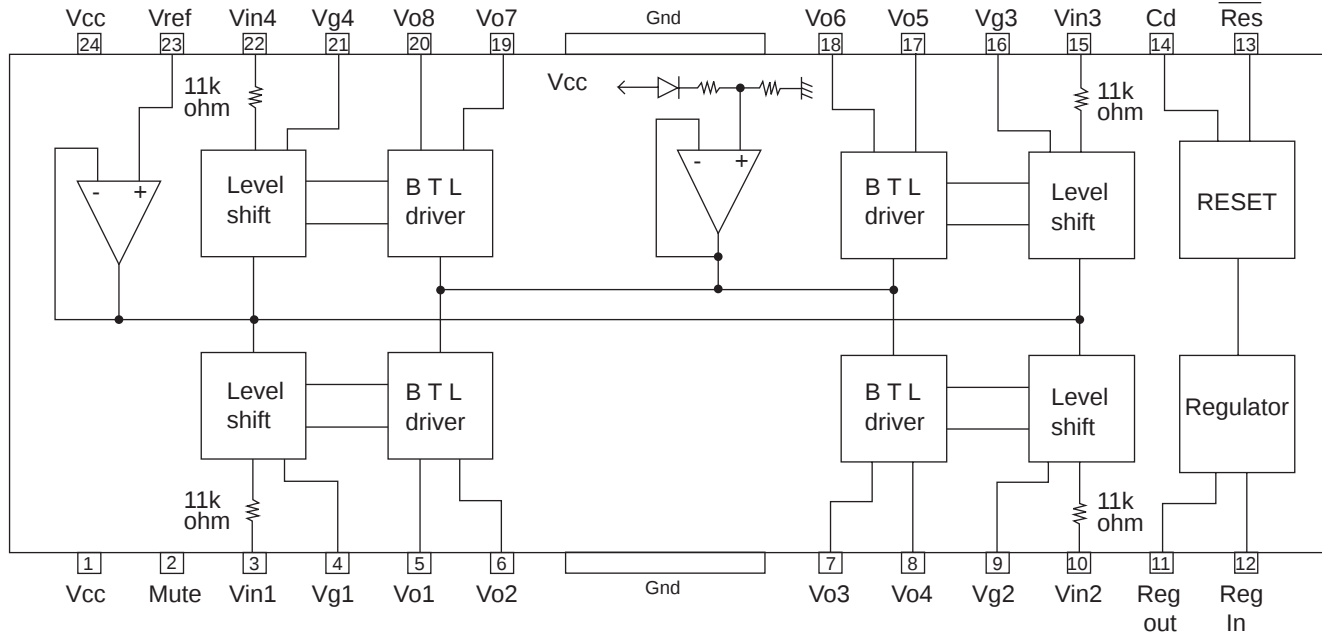


- Block diagram



#### 4.10 LA6541-X (IC801) : Servo driver

- Pin layout & Block diagram



- Pin function

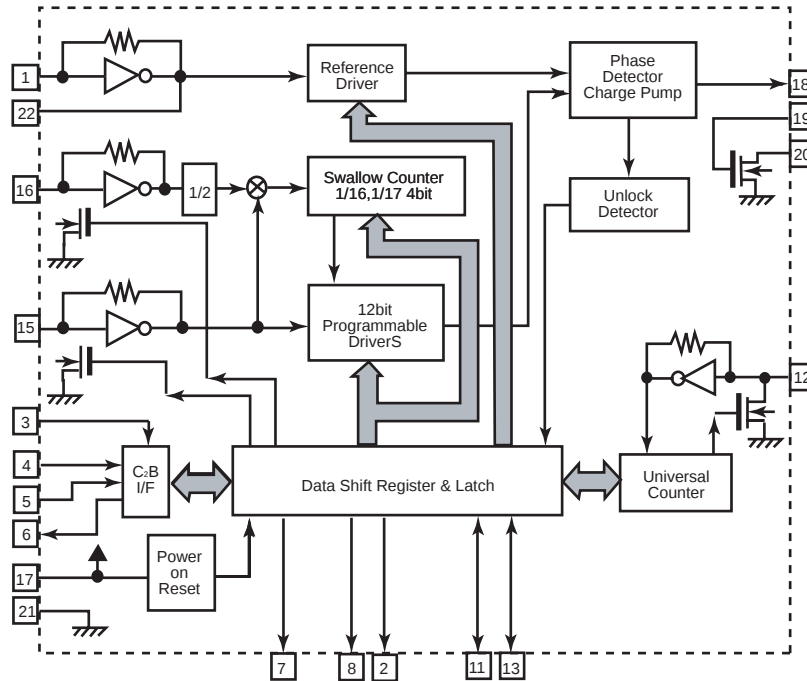
| Pin No. | Symbol  | Description                                                            |
|---------|---------|------------------------------------------------------------------------|
| 1       | Vcc     | Power supply (Shorted to pin 24)                                       |
| 2       | Mute    | 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

|           |    |    |        |
|-----------|----|----|--------|
| XT        | 1  | 22 | XT     |
| FM/AM     | 2  | 21 | GND    |
| CE        | 3  | 20 | LPFOUT |
| DI        | 4  | 19 | LPFIN  |
| CLOCK     | 5  | 18 | PD     |
| DO        | 6  | 17 | VCC    |
| FM/ST/VCO | 7  | 16 | FMIN   |
| AM/FM     | 8  | 15 | AMIN   |
|           | 9  | 14 |        |
|           | 10 | 13 | IFCONT |
| SDIN      | 11 | 12 | IFIN   |

- Block diagram



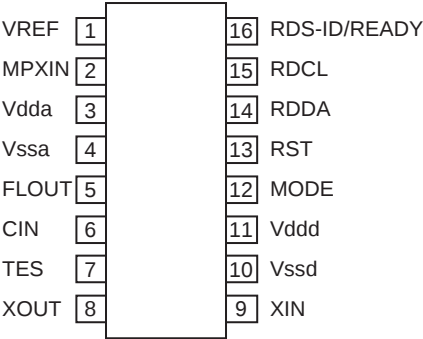
- Pin function

| 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                                      |

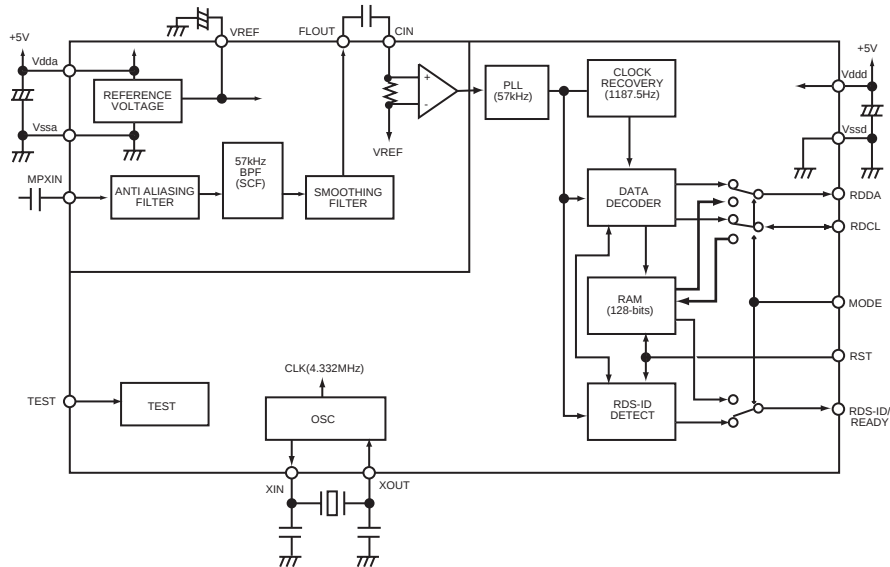
| Pin No. | Symbol | I/O | Function                                                                                                                     |
|---------|--------|-----|------------------------------------------------------------------------------------------------------------------------------|
| 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)<br>When power ON:Reset circuit move                                                               |
| 18      | PD     | O   | PLL charge pump output (H: Local<br>OSC frequency Height than Reference<br>frequency. L: Low Agreement: Height<br>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

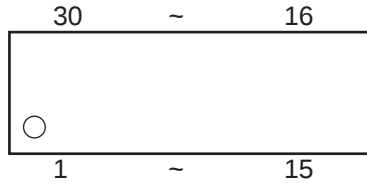


• Pin functions

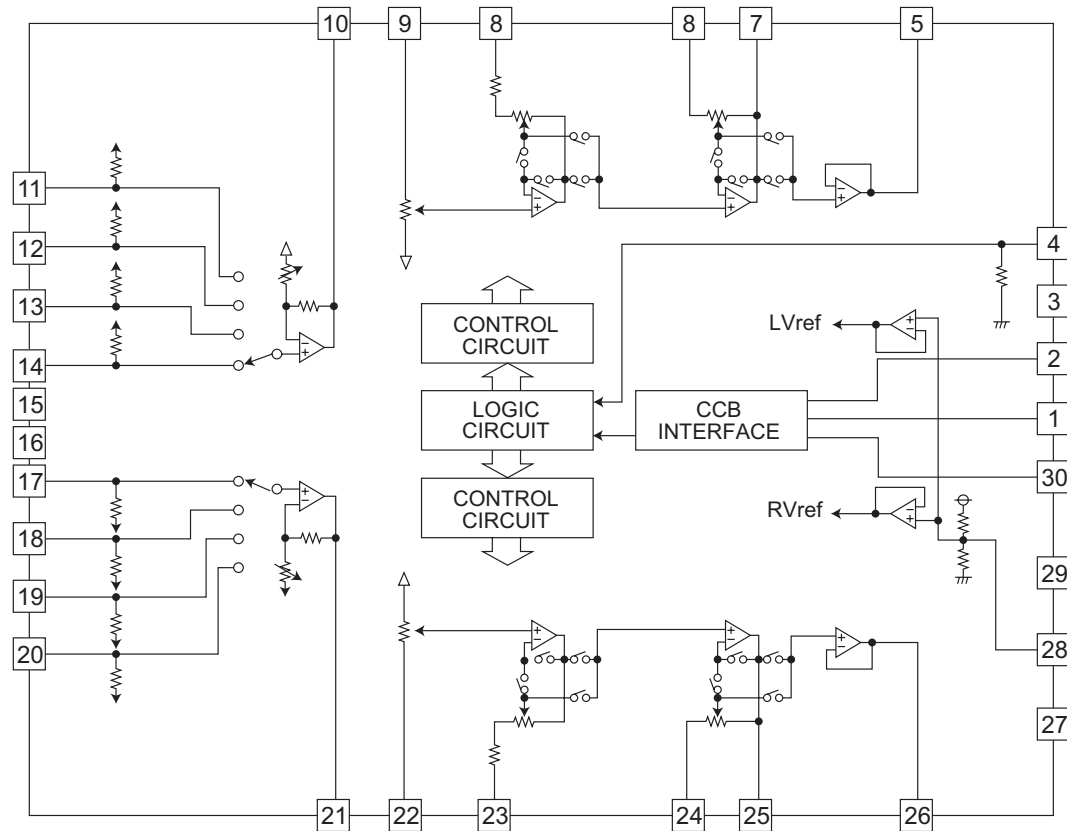
| Pin No. | Symbol       | I/O | Function                                                    |
|---------|--------------|-----|-------------------------------------------------------------|
| 1       | VREF         | O   | Reference voltage output (Vdda/2)                           |
| 2       | MPXIN        | 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 (exeternal 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



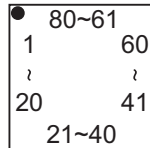
- Pin function

| 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 |                                                                      |
| 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 |                                                                                       |
| 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



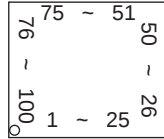
- Pin function

| 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                                                |

| Pin No. | Symbol        | I/O | Function                                                 |
|---------|---------------|-----|----------------------------------------------------------|
| 43      | WVEL          | -   | Not use                                                  |
| 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      | RDSCK       | 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                       |



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

(No.22063)



Printed in Japan  
WPC

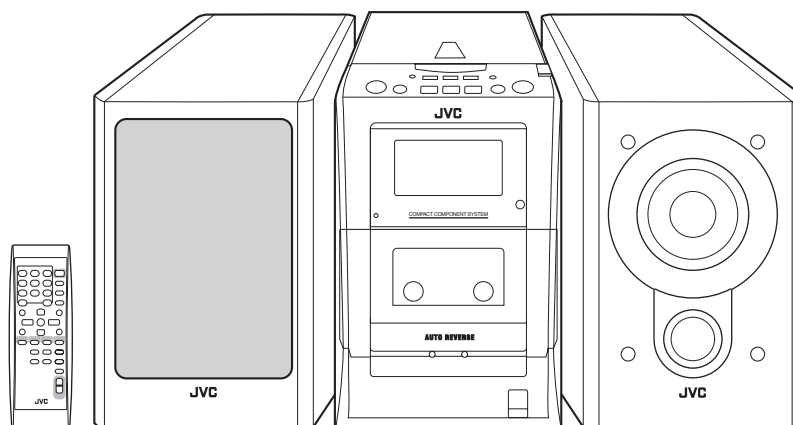
# JVC

# SCHEMATIC DIAGRAMS

## COMPACT COMPONENT SYSTEM

### FS-H35

CD-ROM No.SML200305



COMPACT  
disc  
DIGITAL AUDIO

#### Area Suffix

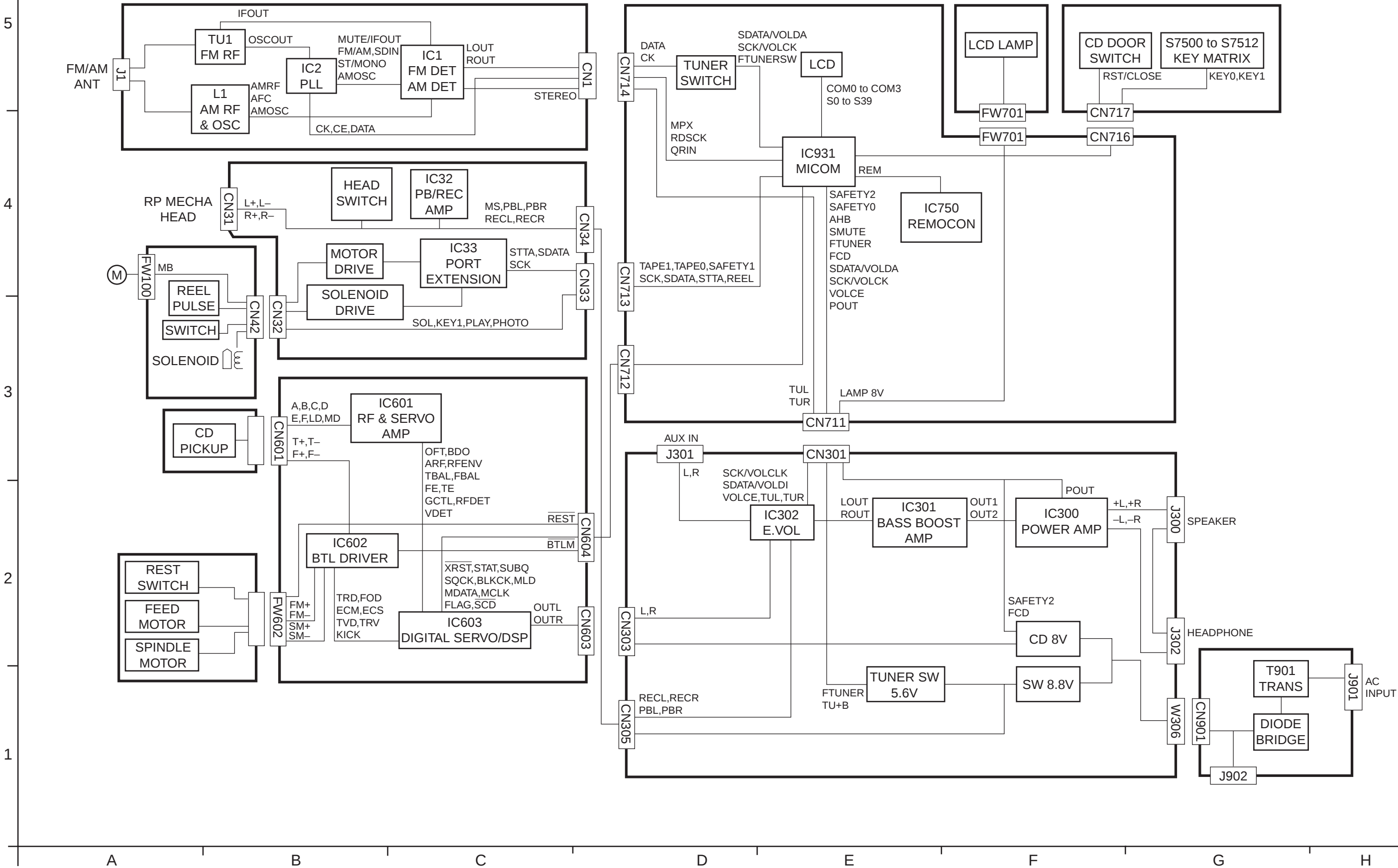
J ----- U.S.A.  
C ----- Canada

### 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



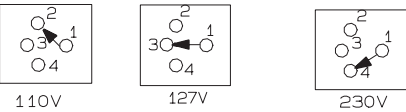
Standard schematic diagrams

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)                              |

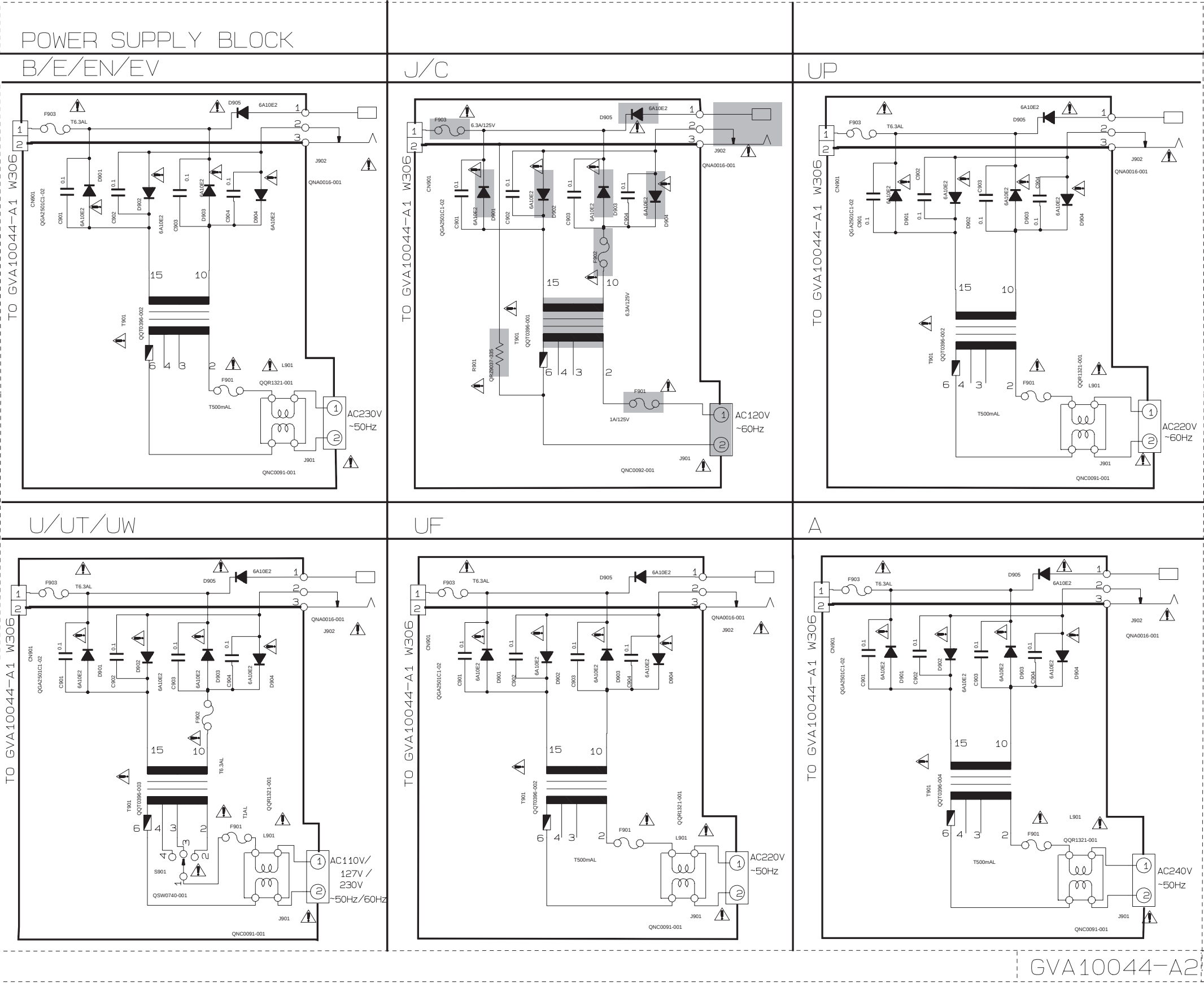
| VERSION CODES       |                          |
|---------------------|--------------------------|
| J                   | :USA                     |
| C                   | :CANADA                  |
| A                   | :AUSTRALIA               |
| B                   | :U.K                     |
| 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 |                          |

VOLTAGE SELECTOR LOCATION

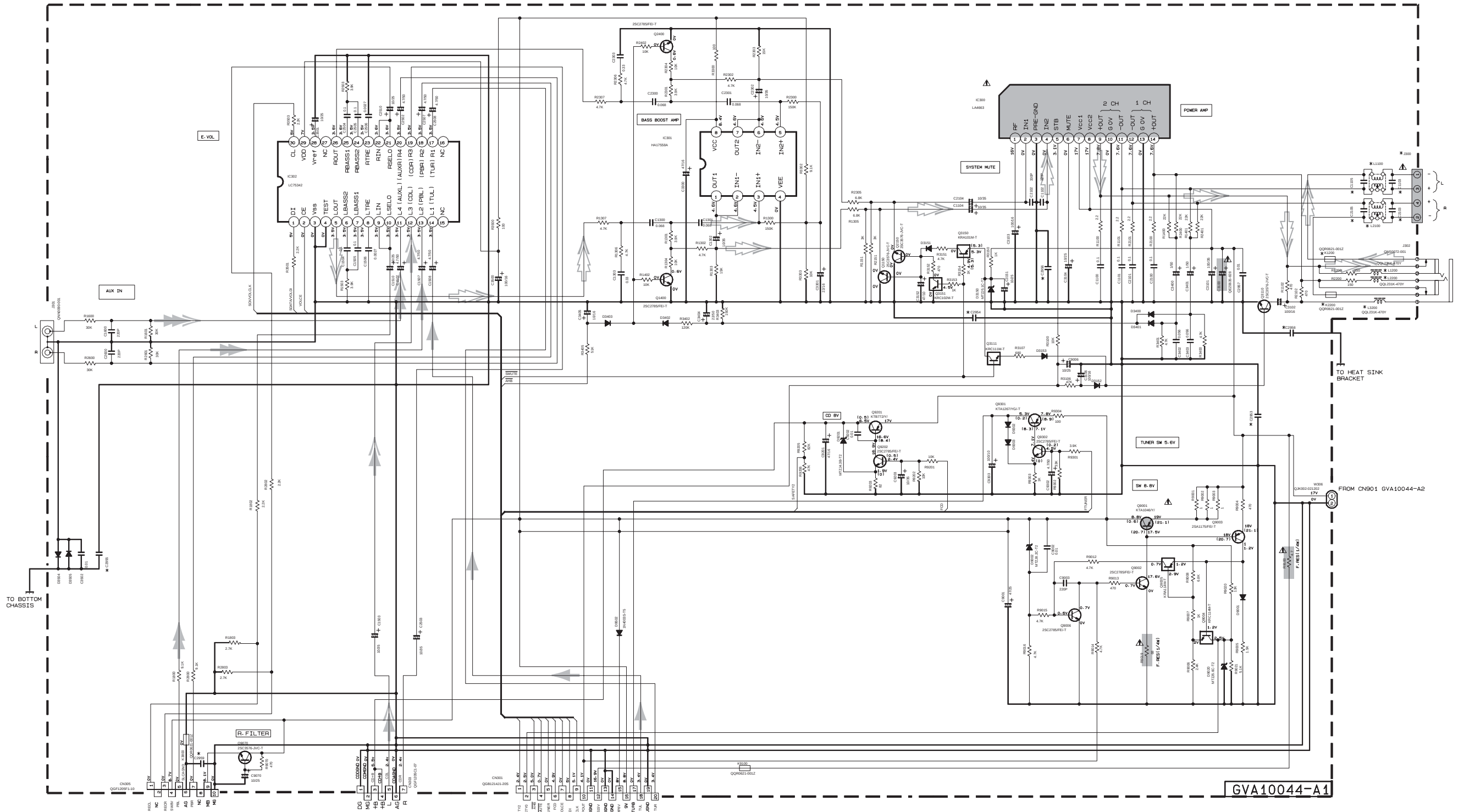


NOTES  
1. VOLTAGE ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.  
INSIDE BRACKET VALUES ARE OTHER FUNCTIONS  
2. UNLESS OTHERWISE SPECIFIED, RESISTOR ARE 1/8W5% CARBON RESISTOR.  
ALL RESISTOR VALUES ARE IN OHM.  
ALL CAPACITOR ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.  
ALL CAPACITANCE VALUES ARE IN (UF/PpF).  
ALL INDUCTANCE VALUES ARE IN (uH/mH).  
ALL E-CAPACITOR ARE SHOWN IN THE FORM OF CAPACITANCE (UF1/RATED VOLTAGE1V).

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



■ Amp section



TO CN34 OF SLC-S202M

FROM CN63 OF GVA10044-A3

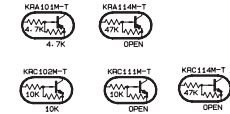
FROM CN711 OF GVA10045-A1

GVA10044-A1

| * PART LIST   |              | L1200/2200/3000 | K1200/2000 | C1105/2105  | L1100      | L2100      | C1103/2103  | J300        | C2953/C2954/C2955/C2956 | C2956/C2958 |
|---------------|--------------|-----------------|------------|-------------|------------|------------|-------------|-------------|-------------------------|-------------|
| PART          | VERSION      | B0209/2030/2031 | B0207/2028 | —           | B7208/7209 | B7211/7212 | —           | QNH0117-002 | —                       | —           |
| B/E/EN/EV     | 00L231K-470Y | 00R0621-0012    | 220P       | 00R0797-002 | 0.0033U    | —          | —           | —           | 0.001                   | 0.01        |
| A/U/U/P/U/T/W | 00L231K-470Y | 00R0621-0012    | 220P       | 00R0797-002 | 0.0033U    | 0.0033U    | QNH0117-001 | —           | 0.001                   | 0.01        |

NOTES

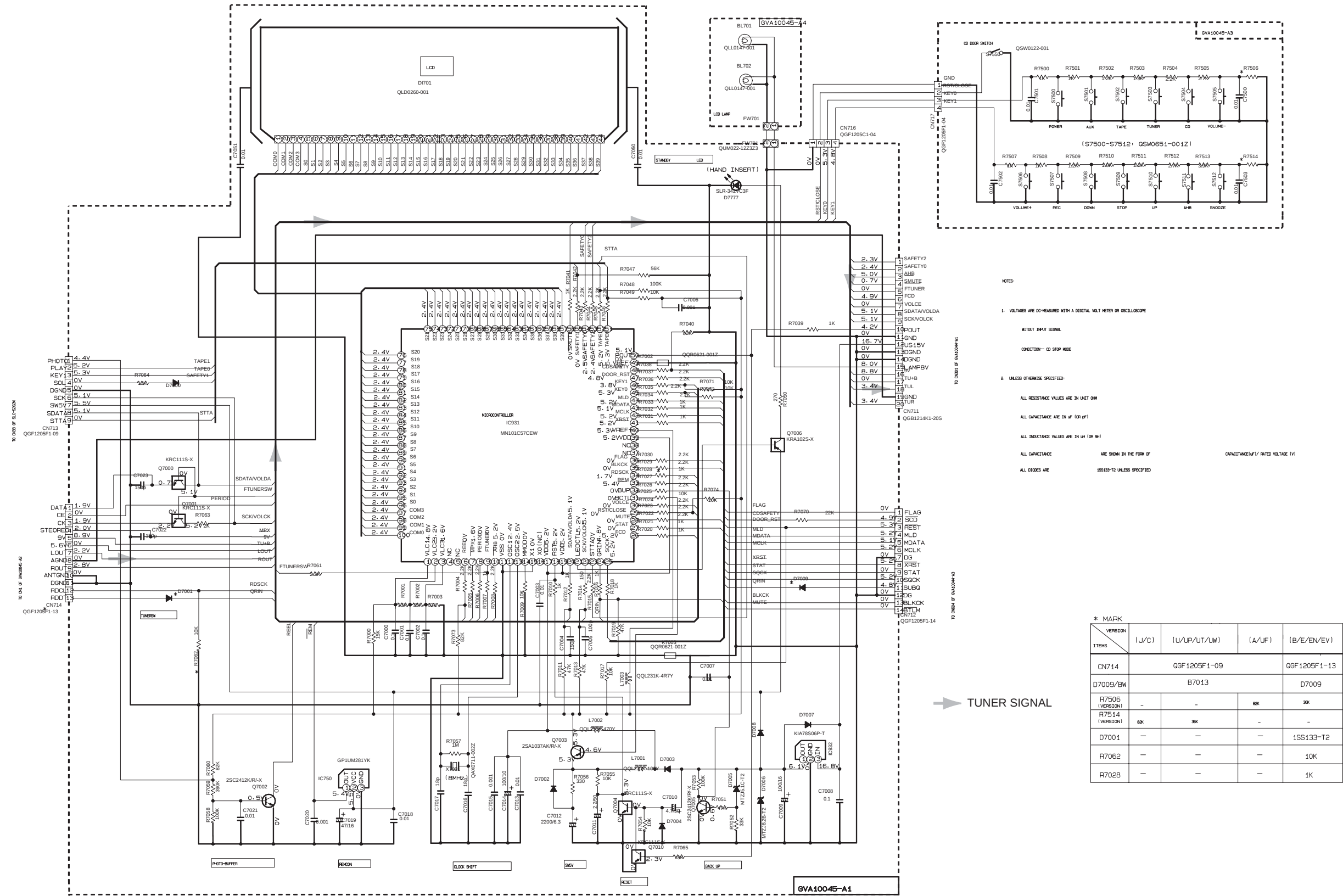
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL-  
CONDITION --- CD STOP MODE  
INSIDE BRACKET VALUES ARE OTHER FUNCTIONS
2. UNLESS OTHERWISE SPECIFIED - RESISTORS ARE 1/6W ± 5% CARBON RESISTOR.  
ALL RESISTANCE VALUES ARE IN OHM(Ω).  
ALL CAPACITANCE VALUES ARE IN nF(pF).  
ALL INDUCTANCE VALUES ARE IN mH(mH).  
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).  
ALL DIODES (Dev. Name: 1SS133-T2)



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

- ➡ TUNER SIGNAL
- ➡ CD SIGNAL
- ➡ TAPE SIGNAL
- ➡ AUX IN SIGNAL
- ➡ MAIN SIGNAL

Micon / LCD & Key control section



NOTES:

1. VOLTAGES ARE MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE

W/OUT INPUT SIGNAL

CONDITION-- (1) STOP MODE

2. UNLESS OTHERWISE SPECIFIED:

ALL RESISTANCE VALUES ARE IN OHM

ALL CAPACITANCE 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<br>ITEMS   | (J/C)        | (U/LP/UT/UW) | (A/U/F) | (B/E/EN/EV)  |
| CN714              | GGF1205F1-09 |              |         | GGF1205F1-13 |
| D7009/BW           | B7013        |              |         | D7009        |
| R7505<br>(VERSION) | -            | -            | 30K     | 30K          |
| R7514<br>(VERSION) | 30K          | 30K          | -       | -            |
| D7001              | —            | —            | —       | 1SS133-T2    |
| R7062              | —            | —            | —       | 10K          |
| R702B              | —            | —            | —       | 1K           |

# CD servo control section

GVA10044-A3

5

4

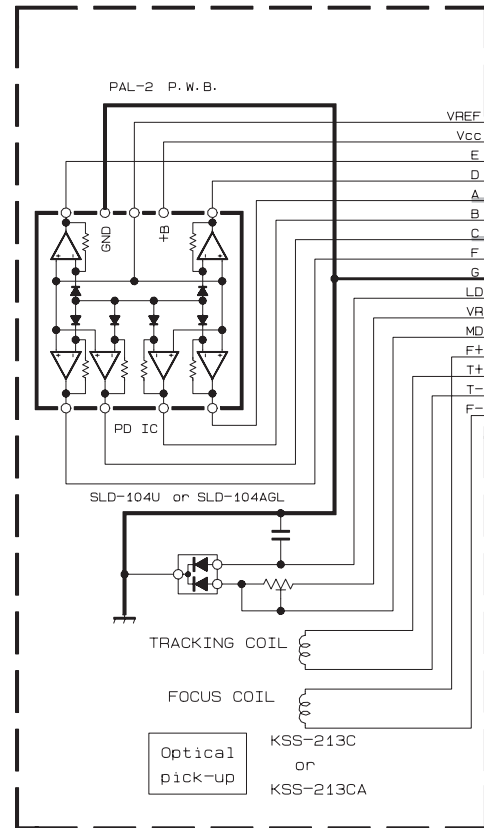
3

2

1

## 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 CAPACITANCE VALUES ARE IN pF(pF).  
ALL CAPACITANCE VALUES ARE IN μF(μF).  
ALL CAPACITORS ARE SHOWN IN THE FORM  
OF CAPACITANCE (μF)/RATED VOLTAGE (V).

FW602  
QW018-060601

DG

REST

FM+

SM-

SM+

FM+

FM-

SM-

SM+

FM+

FM-

SM-

SM+

FM+

FM-

SM-

SM+

FM+

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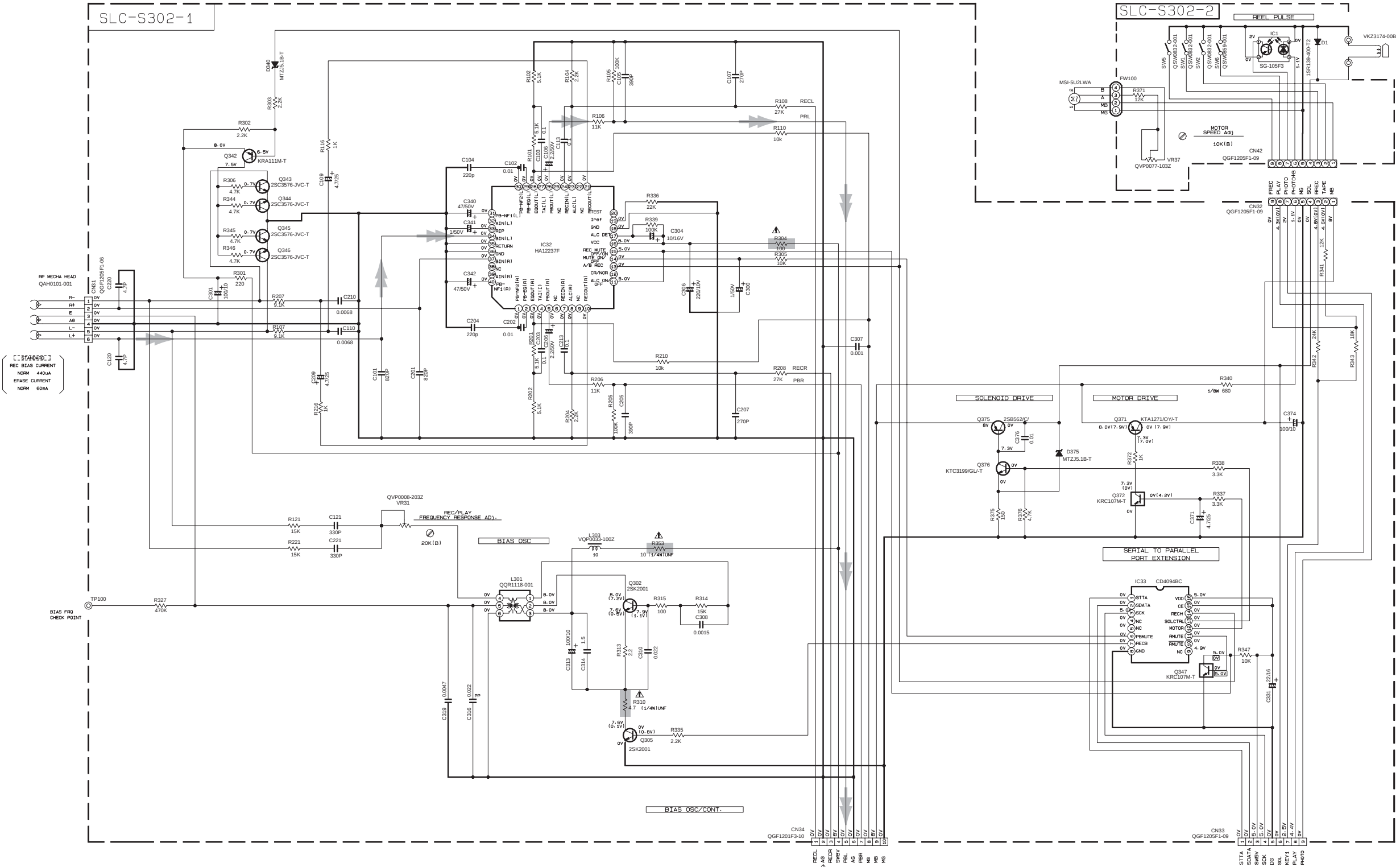
FM+

FM-

SM-

SM+

Cassette mechanism control section



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 nF(10<sup>-9</sup>F).  
ALL INDUCTANCE VALUES ARE IN mH(10<sup>-3</sup>H).  
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).  
POLYPROPYLENE CAPACITOR

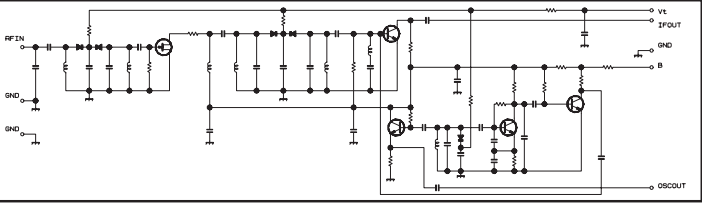
Parts are safety assurance parts.  
When replacing those parts make sure to use the specified one.

TAPE SIGNAL

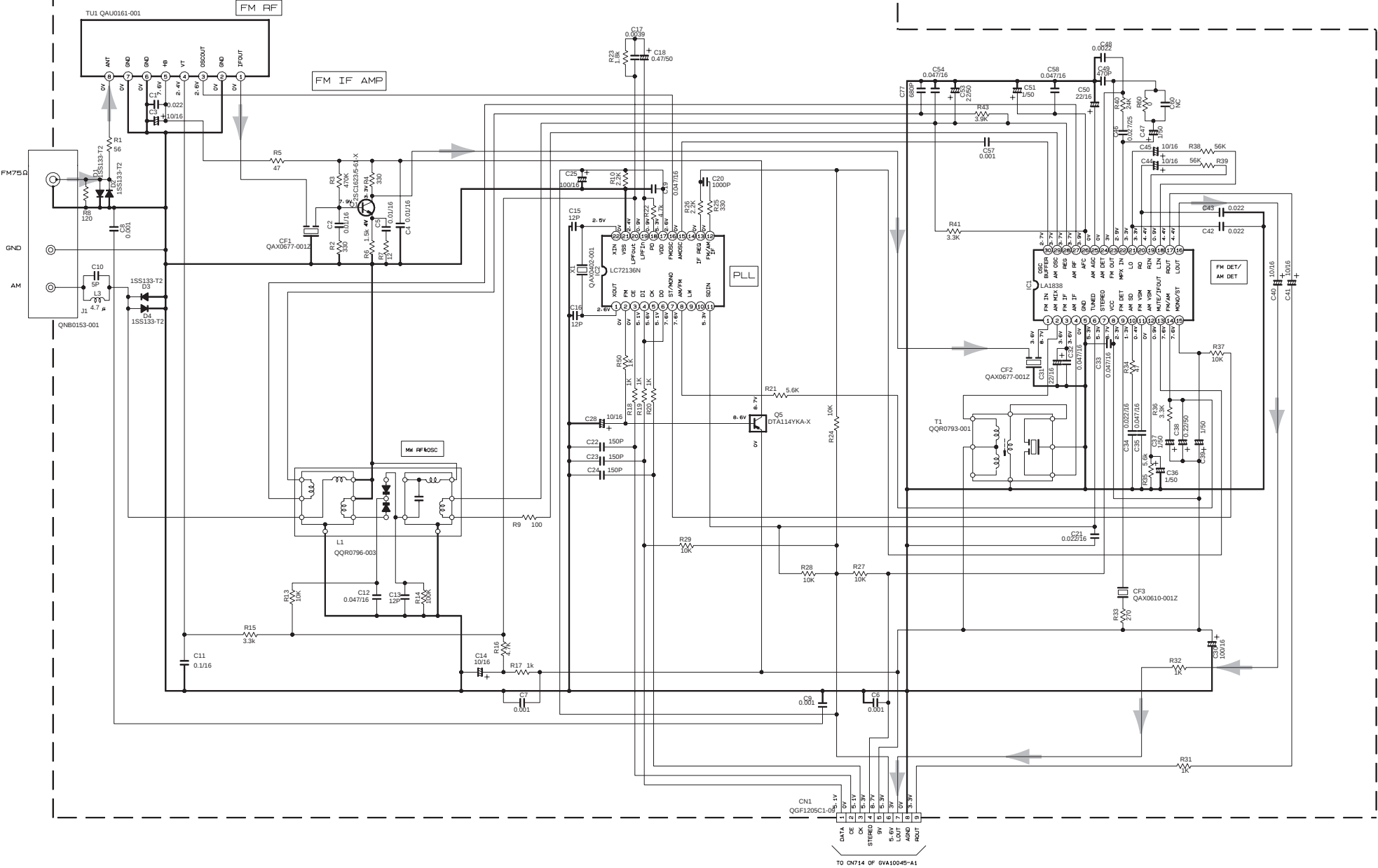
Tuner section

|     | 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 | 3.6 | 2.7 |  |  |  |  |  |  |
|     | FM 60dB STEREO |         | 3.6 | 8.9 | 3.6 | 3.6 | 0   | 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   | 3.6 | 3.6 | 3.6 | 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 | 3.3 | 3.3 | 3.2 | 2.8 | ust | 0.7 | 0.7 | 3.6 | 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   | 0   | 2.5 | 5.1 | 0.9 | 0.9 | 3.8 | 0   | 2.3 |     |     |     |     |     |     |     |     |  |  |  |  |  |  |

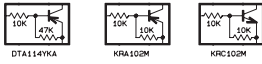
| Tr NO.               | Q1 |     |      | Q5  |     |     |     |     |     |
|----------------------|----|-----|------|-----|-----|-----|-----|-----|-----|
| PIN NO.              | E  | C   | B    | E   | C   | B   |     |     |     |
| FM 87.5MHz NO SIGNAL | 0  | 7.1 | 0.85 | 8.9 | 8.8 | 0   |     |     |     |
| AM 522KHz 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   |
| AM 522KHz NO SIGNAL  | 0  | 0   | 0.7  | 0   | 0   | 0.7 | 0   | 3.6 | 0.7 |
| AM 144KHz NO SIGNAL  | 0  | 0   | 0.3  | 0   | 0.3 | 0.3 | 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 CAPACITANCE VALUES ARE IN \*F(P=pF).
  5. SI DIODES (D) ARE 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104J.



TUNER SIGNAL

| PART   | VERSION | C42/C43 |
|--------|---------|---------|
| J/C    |         | 0.002   |
| U/UT/W |         | 0.007   |

Printed circuit boards

5

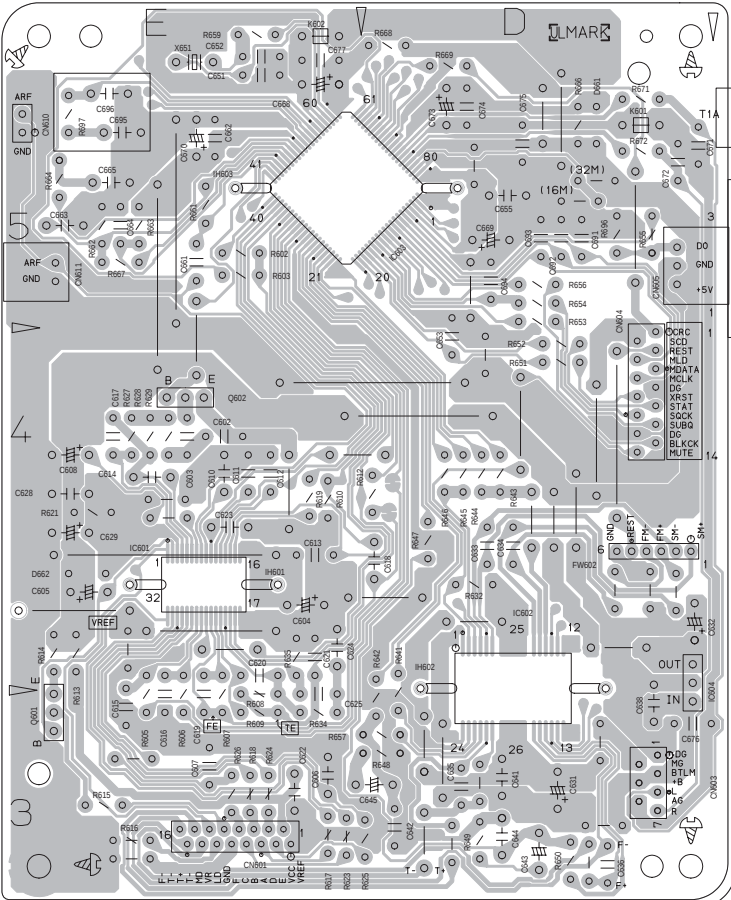
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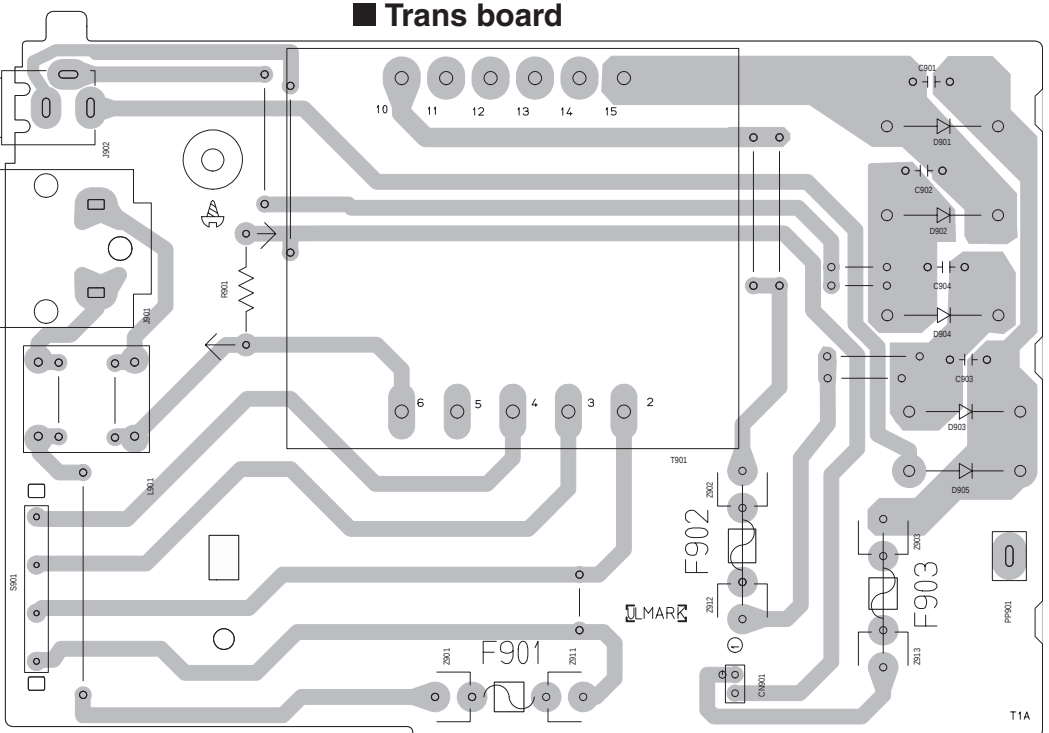
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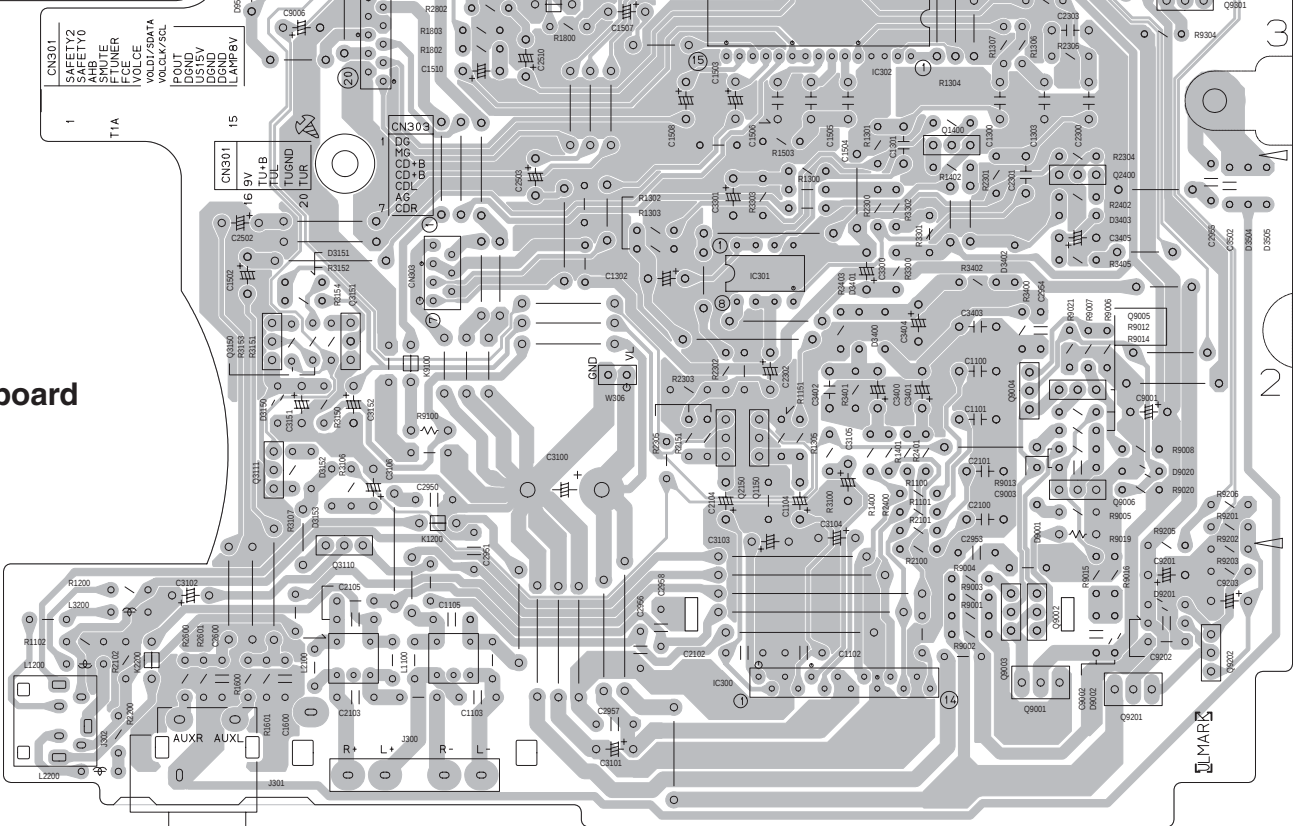
A B C D E F G H



■ CD board

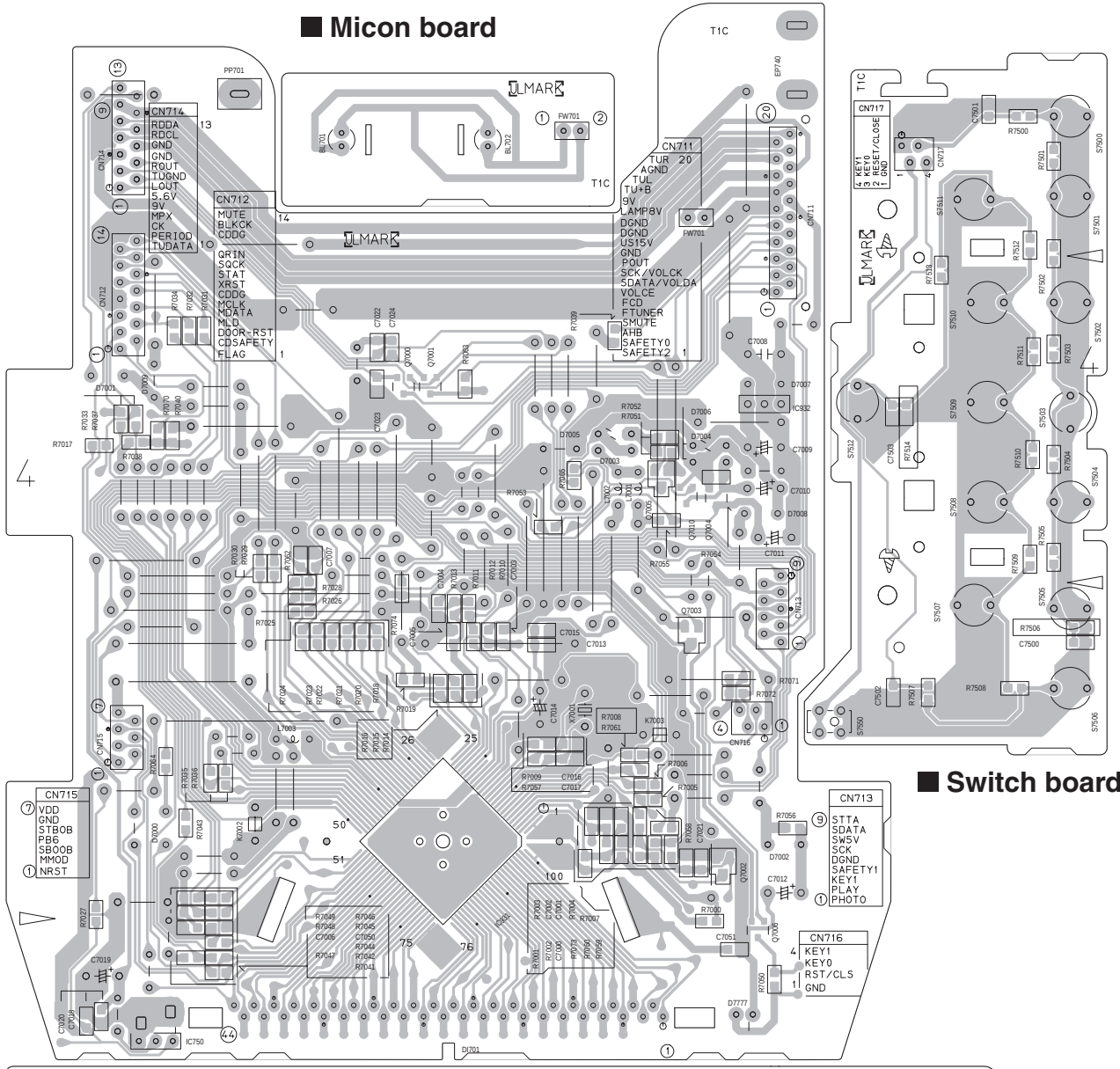


■ Trans board



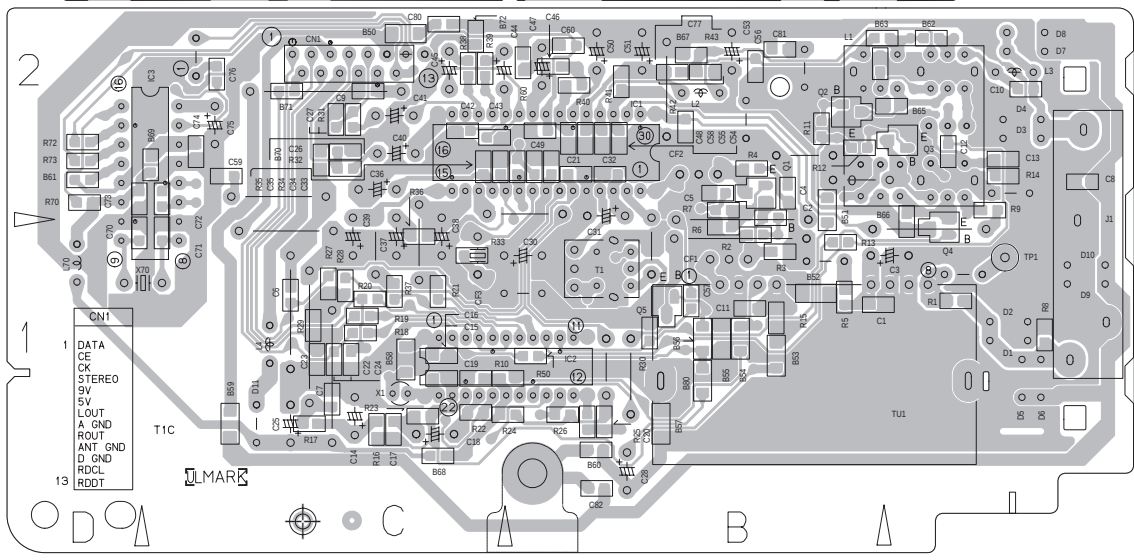
■ Main board

■ Micon board



■ Switch board

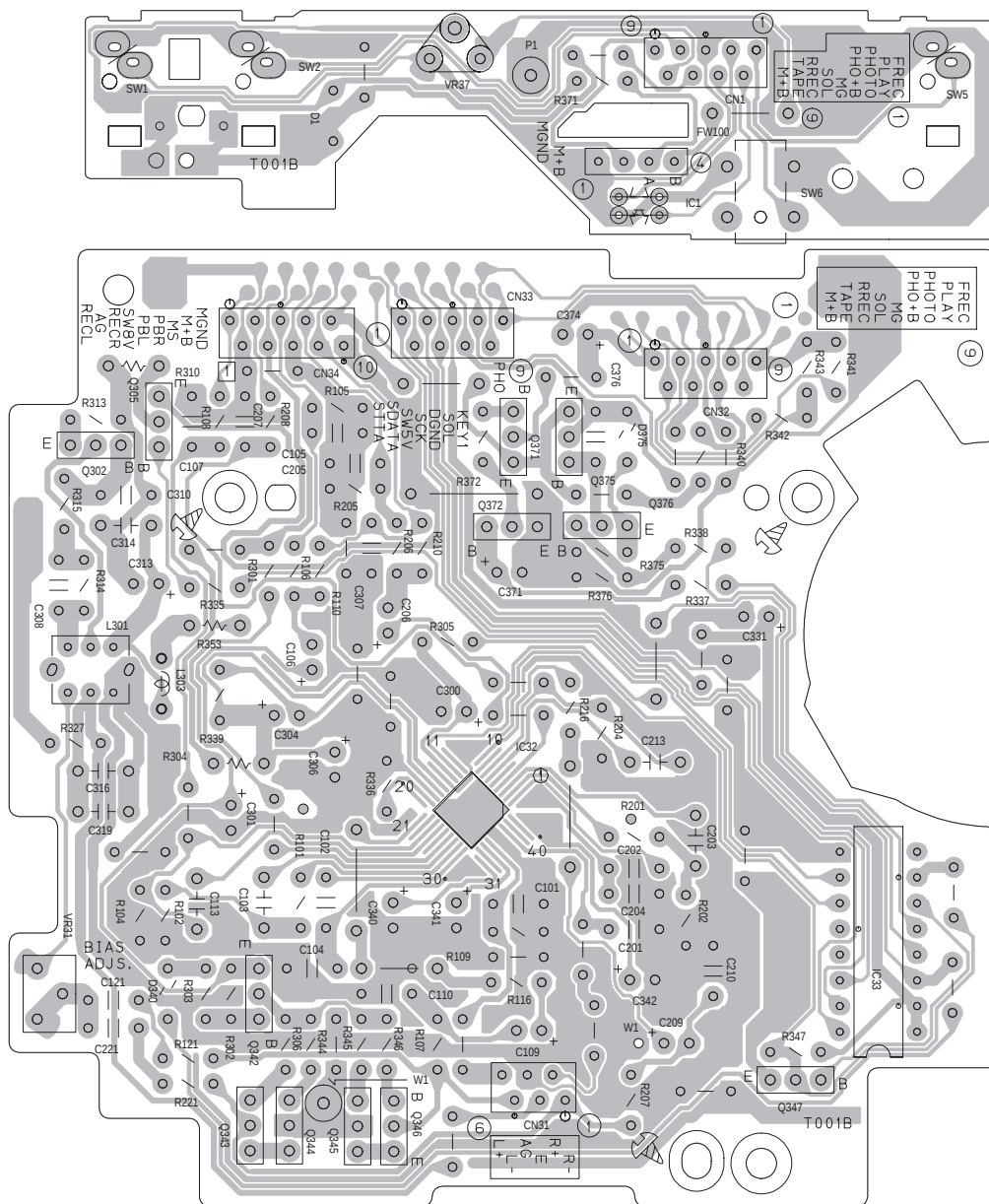
■ Tuner board



5  
4  
3  
2  
1

A B C D

### ■ Cassette board



< M E M O >



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-H35 ]

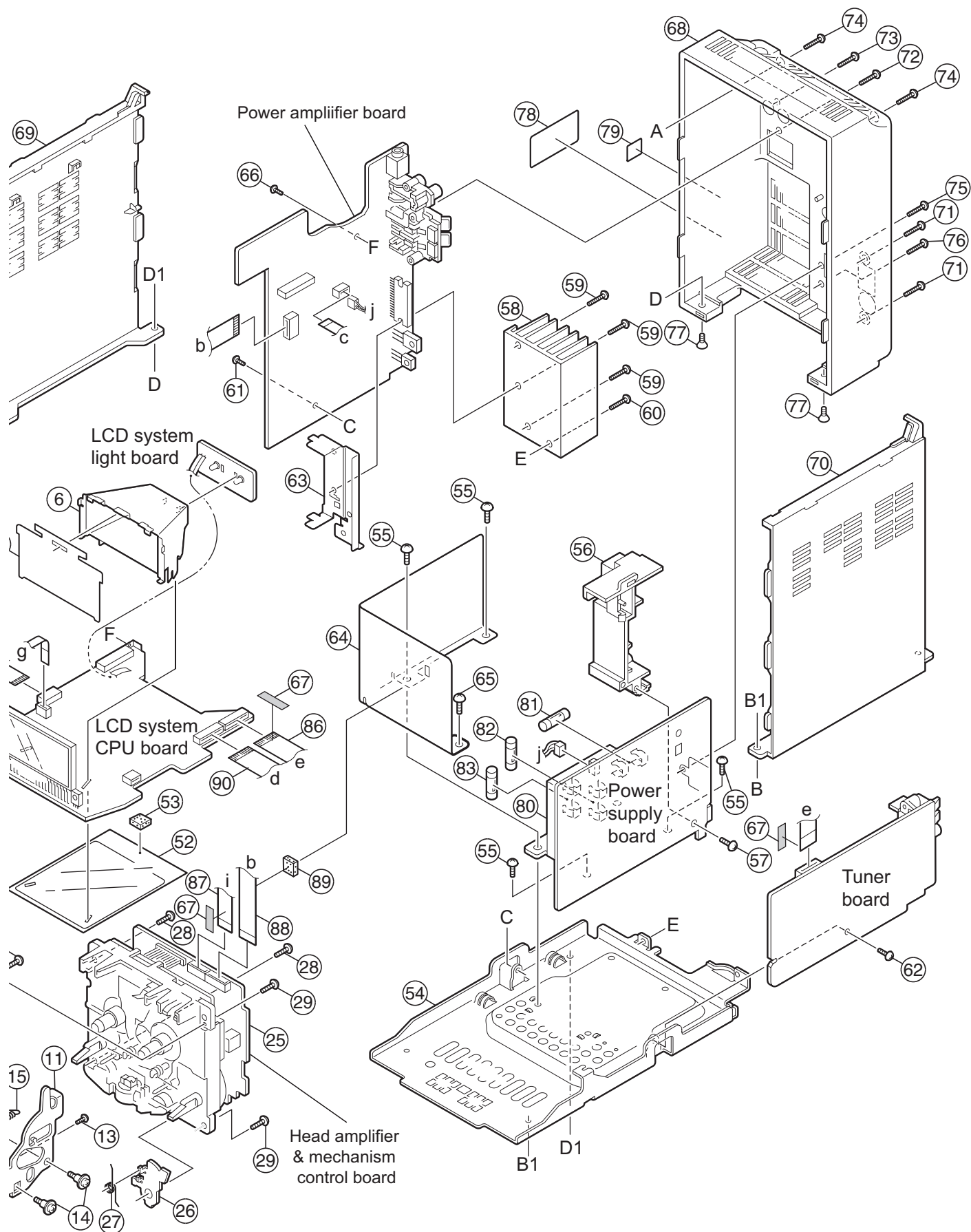
\* All printed circuit boards and its assemblies are not available as service parts.

| 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 |





## General assembly

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

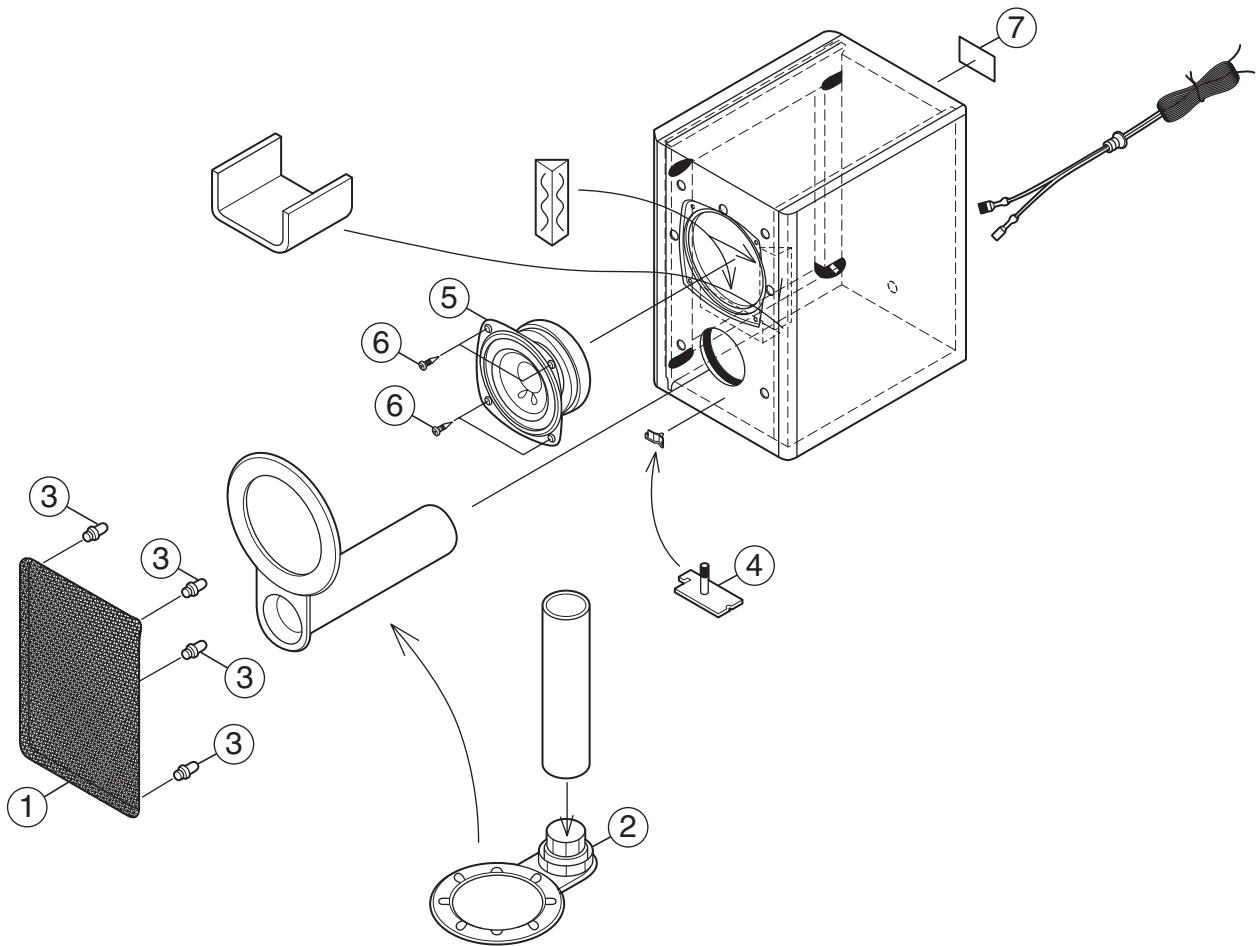
| △ Symbol No. | Part No.      | Part Name       | Description     | Local |
|--------------|---------------|-----------------|-----------------|-------|
| 1            | GV10127-005A  | FRONT PANEL     |                 |       |
| 2            | GV40077-002A  | JVC BADGE       |                 |       |
| 3            | GV20202-002A  | 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            | GV30402-006A  | LCD LENS        |                 |       |
| 9            | GV30349-009A  | SPACER          |                 |       |
| 10           | GV30424-001A  | DOOR HOLDER     |                 |       |
| 11           | GV40393-001A  | EJECT LEVER     |                 |       |
| 12           | GV40377-004A  | 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           | GV20198-004A  | CASSETTE HOLDER |                 |       |
| 24           | GV30403-002A  | 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           | GV10134-004A  | CD CASE         |                 |       |
| 39           | VYH4769-002SS | GEAR            |                 |       |
| 40           | GV40391-001A  | CD DOOR SPRING  |                 |       |
| 41           | GV40395-002A  | LOCK LEVER      |                 |       |
| 42           | GV40396-003A  | CD EJECT KNOB   |                 |       |
| 43           | GV20199-002A  | CD DOOR         |                 |       |
| 44           | QYSDSF2006Z   | SCREW           | 2mm x 6mm       |       |
| 45           | GV40378-002A  | 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           | GV10128-007A  | REAR PANEL      |                 |       |
| 69           | GV20221-004A  | SIDE PANEL(L)   |                 |       |
| 70           | GV20218-004A  | 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           | GV30406-015A   | NAME PLATE   |                      |       |
| 79           | VND5008-001    | FCC LABEL(4) |                      |       |
| △ 80         | QQT0396-001    | POWER TRANSF | T 901                |       |
| △ 81         | QMF51U1-1R0-J8 | FUSE         | F 901 1A<br>AC125V   |       |
| △ 82         | QMF51U1-6R3-J8 | FUSE         | F 902 6.3A<br>AC125V |       |
| △ 83         | QMF51U1-6R3-J8 | FUSE         | F 903 6.3A<br>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. [M][2][M][M]

| △ Symbol No. | Part No.      | Part Name   | Description | Local |
|--------------|---------------|-------------|-------------|-------|
| 1            | J201XH3500B10 | CLOTH 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            | 6000XH35E00   | SPEC LABEL  | (x2)        |       |

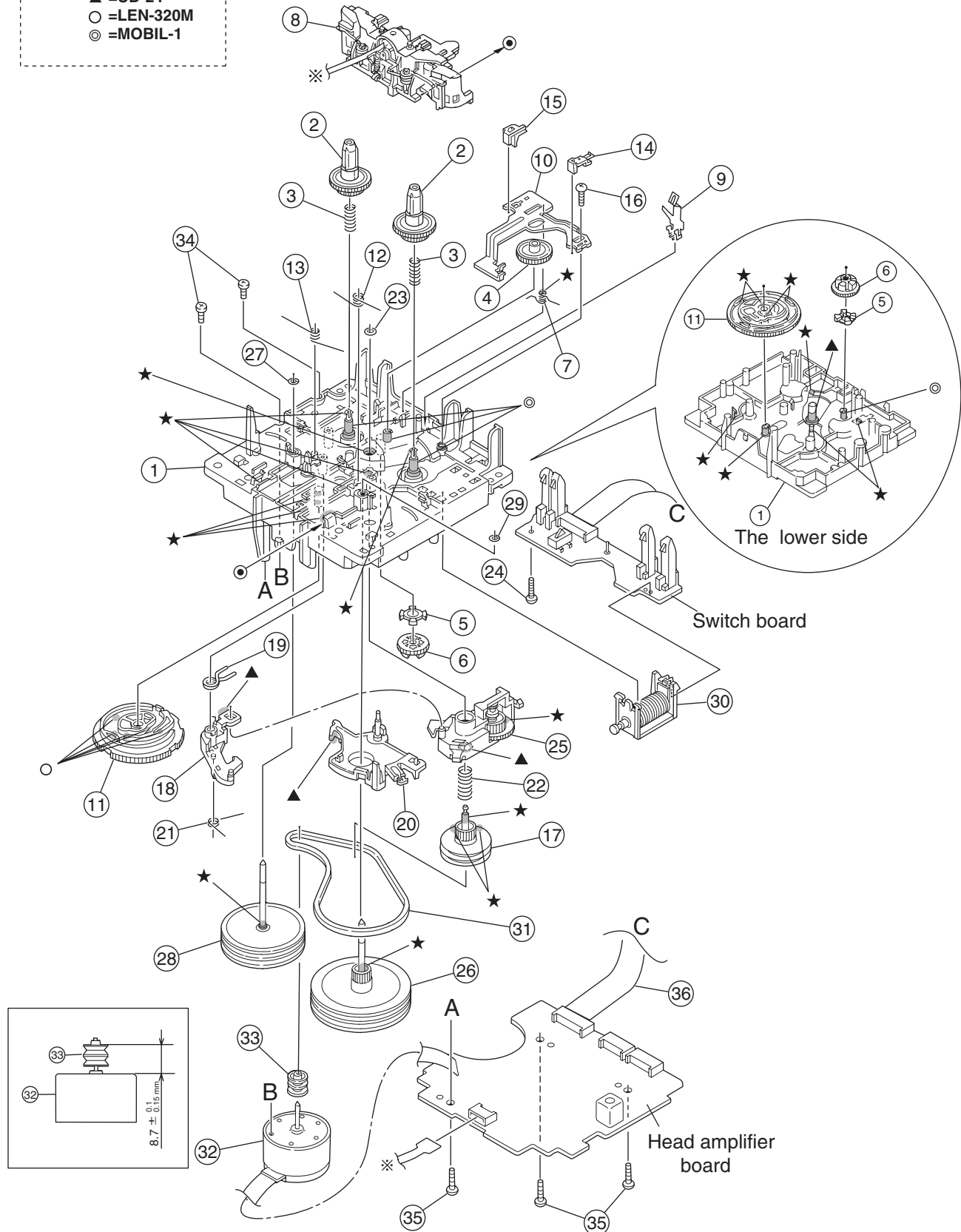
# Cassette mechanism assembly and parts list

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/     | 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      | QEZ0635-828  | 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        | QEK1CM-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        | QEK1CM-475Z  | E CAPACITOR | 4.7uF 50V M   |       | R2151        | QRE141J-302Y | C RESISTOR    | 3kΩ 1/4W J   |       |
| C9303        | QEK1AM-107Z  | E CAPACITOR | 100uF 10V M   |       | R2200        | QRE141J-151Y | C RESISTOR    | 150Ω 1/4W J  |       |
| R602         | QRE141J-203Y | C RESISTOR  | 20kΩ 1/4W J   |       | R2300        | QRE141J-154Y | C RESISTOR    | 150kΩ 1/4W J |       |
| R603         | QRE141J-333Y | C RESISTOR  | 33kΩ 1/4W J   |       | R2301        | QRE141J-392Y | C RESISTOR    | 3.9kΩ 1/4W J |       |
| R605         | QRE141J-684Y | C RESISTOR  | 680kΩ 1/4W J  |       | R2302        | QRE141J-472Y | C RESISTOR    | 4.7kΩ 1/4W J |       |
| R606         | QRE141J-184Y | C RESISTOR  | 180kΩ 1/4W J  |       | R2303        | QRE141J-153Y | C RESISTOR    | 15kΩ 1/4W J  |       |
| R607         | QRE141J-333Y | C RESISTOR  | 33kΩ 1/4W J   |       | R2304        | QRE141J-103Y | C RESISTOR    | 10kΩ 1/4W J  |       |
| R609         | QRE141J-224Y | C RESISTOR  | 220kΩ 1/4W J  |       | R2305        | QRE141J-682Y | C RESISTOR    | 6.8kΩ 1/4W J |       |
| R610         | QRE141J-105Y | C RESISTOR  | 1MΩ 1/4W J    |       | R2306        | QRE141J-472Y | C RESISTOR    | 4.7kΩ 1/4W J |       |
| R612         | QRE141J-102Y | C RESISTOR  | 1kΩ 1/4W J    |       | R2307        | QRE141J-472Y | C RESISTOR    | 4.7kΩ 1/4W J |       |
| R613         | QRE141J-121Y | C RESISTOR  | 120Ω 1/4W J   |       | R2400        | QRE141J-223Y | C RESISTOR    | 22kΩ 1/4W J  |       |
| R614         | QRE141J-100Y | C RESISTOR  | 10Ω 1/4W J    |       | R2401        | QRE141J-223Y | C RESISTOR    | 22kΩ 1/4W J  |       |
| R615         | QRE141J-120Y | C RESISTOR  | 12Ω 1/4W J    |       | R2402        | QRE141J-103Y | C RESISTOR    | 10kΩ 1/4W J  |       |
| R619         | QRE141J-683Y | C RESISTOR  | 68kΩ 1/4W J   |       | R2503        | QRE141J-392Y | C RESISTOR    | 3.9kΩ 1/4W J |       |
| R621         | QRE141J-100Y | C RESISTOR  | 10Ω 1/4W J    |       | R2600        | QRE141J-303Y | C RESISTOR    | 30kΩ 1/4W J  |       |
| R625         | QRE141J-183Y | C RESISTOR  | 18kΩ 1/4W J   |       | R2601        | QRE141J-303Y | C RESISTOR    | 30kΩ 1/4W J  |       |
| R626         | QRE141J-183Y | C RESISTOR  | 18kΩ 1/4W J   |       | R2800        | QRE141J-912Y | C RESISTOR    | 9.1kΩ 1/4W J |       |
| R627         | QRE141J-682Y | C RESISTOR  | 6.8kΩ 1/4W J  |       | R2802        | QRE141J-222Y | C RESISTOR    | 2.2kΩ 1/4W J |       |
| R628         | QRE141J-472Y | C RESISTOR  | 4.7kΩ 1/4W J  |       | R2803        | QRE141J-272Y | C RESISTOR    | 2.7kΩ 1/4W J |       |
| R629         | QRE141J-222Y | C RESISTOR  | 2.2kΩ 1/4W J  |       | R3100        | QRE141J-222Y | C RESISTOR    | 2.2kΩ 1/4W J |       |
| R632         | QRE141J-473Y | C RESISTOR  | 47kΩ 1/4W J   |       | R3107        | QRE141J-681Y | C RESISTOR    | 680Ω 1/4W J  |       |
| R634         | QRE141J-224Y | C RESISTOR  | 220kΩ 1/4W J  |       | R3110        | QRE141J-102Y | C RESISTOR    | 1kΩ 1/4W J   |       |
| R635         | QRE141J-394Y | C RESISTOR  | 390kΩ 1/4W J  |       | R3150        | QRE141J-102Y | C RESISTOR    | 1kΩ 1/4W J   |       |
| R641         | QRE141J-563Y | C RESISTOR  | 56kΩ 1/4W J   |       | R3151        | QRE141J-472Y | C RESISTOR    | 4.7kΩ 1/4W J |       |
| R642         | QRE141J-332Y | C RESISTOR  | 3.3kΩ 1/4W J  |       | R3152        | QRE141J-471Y | C RESISTOR    | 470Ω 1/4W J  |       |
| R643         | QRE141J-473Y | C RESISTOR  | 47kΩ 1/4W J   |       | R3153        | QRE141J-102Y | C RESISTOR    | 1kΩ 1/4W J   |       |
| R644         | QRE141J-682Y | C RESISTOR  | 6.8kΩ 1/4W J  |       | R3154        | QRE141J-102Y | C RESISTOR    | 1kΩ 1/4W J   |       |
| R645         | QRE141J-333Y | C RESISTOR  | 33kΩ 1/4W J   |       | R3300        | QRE141J-101Y | C RESISTOR    | 100Ω 1/4W J  |       |
| R646         | QRE141J-182Y | C RESISTOR  | 1.8kΩ 1/4W J  |       | R3302        | QRE141J-912Y | C RESISTOR    | 9.1kΩ 1/4W J |       |
| R647         | QRE141J-392Y | C RESISTOR  | 3.9kΩ 1/4W J  |       | R3303        | QRE141J-103Y | C RESISTOR    | 10kΩ 1/4W J  |       |
| R648         | QRE141J-122Y | C RESISTOR  | 1.2kΩ 1/4W J  |       | R3400        | QRE141J-472Y | C RESISTOR    | 4.7kΩ 1/4W J |       |
| R649         | QRE141J-152Y | C RESISTOR  | 1.5kΩ 1/4W J  |       | R3401        | QRE141J-472Y | C RESISTOR    | 4.7kΩ 1/4W J |       |
| R650         | QRE141J-182Y | C RESISTOR  | 1.8kΩ 1/4W J  |       | R3402        | QRE141J-124Y | C RESISTOR    | 120kΩ 1/4W J |       |
| R651         | QRE141J-102Y | C RESISTOR  | 1kΩ 1/4W J    |       | R3403        | QRE141J-154Y | C RESISTOR    | 150kΩ 1/4W J |       |
| R652         | QRE141J-102Y | C RESISTOR  | 1kΩ 1/4W J    |       | R3405        | QRE141J-513Y | C RESISTOR    | 51kΩ 1/4W J  |       |
| R653         | QRE141J-101Y | C RESISTOR  | 100Ω 1/4W J   |       | R3500        | QRE141J-101Y | C RESISTOR    | 100Ω 1/4W J  |       |
| R654         | QRE141J-101Y | C RESISTOR  | 100Ω 1/4W J   |       | R3501        | QRE141J-222Y | C RESISTOR    | 2.2kΩ 1/4W J |       |
| R656         | QRE141J-102Y | C RESISTOR  | 1kΩ 1/4W J    |       | R3503        | QRE141J-222Y | C RESISTOR    | 2.2kΩ 1/4W J |       |
| R657         | QRE141J-222Y | C RESISTOR  | 2.2kΩ 1/4W J  |       | R9001        | QRE141J-1R0Y | C RESISTOR    | 1Ω 1/4W J    |       |
| R659         | QRE141J-471Y | C RESISTOR  | 470Ω 1/4W J   |       | R9002        | QRE141J-1R0Y | C RESISTOR    | 1Ω 1/4W J    |       |
| R661         | QRE141J-683Y | C RESISTOR  | 68kΩ 1/4W J   |       | R9003        | QRE141J-1R0Y | C RESISTOR    | 1Ω 1/4W J    |       |
| R662         | QRE141J-155Y | C RESISTOR  | 1.5MΩ 1/4W J  |       | R9004        | QRE141J-471Y | C RESISTOR    | 470Ω 1/4W J  |       |
| R663         | QRE141J-124Y | C RESISTOR  | 120kΩ 1/4W J  |       | R9005        | QRE141J-152Y | C RESISTOR    | 1.5kΩ 1/4W J |       |
| R664         | QRE141J-331Y | C RESISTOR  | 330Ω 1/4W J   |       | R9006        | QRE141J-242Y | C RESISTOR    | 2.4kΩ 1/4W J |       |
| R666         | QRE141J-220Y | C RESISTOR  | 22Ω 1/4W J    |       | R9007        | QRE141J-102Y | C RESISTOR    | 1kΩ 1/4W J   |       |
| R667         | QRE141J-683Y | C RESISTOR  | 68kΩ 1/4W J   |       | R9008        | QRE141J-682Y | C RESISTOR    | 6.8kΩ 1/4W J |       |
|              |              |             |               |       | R9012        | QRE141J-472Y | C RESISTOR    | 4.7kΩ 1/4W J |       |

| △ Symbol No. | Part No.      | Part Name       | Description    | Local | △ Symbol No. | Part No.     | Part Name   | Description   | Local |
|--------------|---------------|-----------------|----------------|-------|--------------|--------------|-------------|---------------|-------|
| R9013        | QRE141J-471Y  | C RESISTOR      | 470Ω 1/4W J    |       | D4           | 1SS133-T2    | DIODE       |               |       |
| R9014        | QRE141J-472Y  | C RESISTOR      | 4.7kΩ 1/4W J   |       | D7000        | 1SS133-T2    | DIODE       |               |       |
| R9015        | QRE141J-472Y  | C RESISTOR      | 4.7kΩ 1/4W J   |       | D7002        | 1SS133-T2    | DIODE       |               |       |
| R9016        | QRE141J-472Y  | C RESISTOR      | 4.7kΩ 1/4W J   |       | D7003        | 1SS133-T2    | DIODE       |               |       |
| R9019        | QRZ9005-680X  | F.RESISTOR      | 68Ω            |       | D7004        | 1SS133-T2    | DIODE       |               |       |
| R9020        | QRE141J-133Y  | C RESISTOR      | 13kΩ 1/4W J    |       | D7005        | MTZJ5.1C-T2  | Z DIODE     |               |       |
| R9021        | QRE141J-512Y  | C RESISTOR      | 5.1kΩ 1/4W J   |       | D7006        | MTZJ8.2B-T2  | Z DIODE     |               |       |
| R9070        | QRE141J-471Y  | C RESISTOR      | 470Ω 1/4W J    |       | D7007        | 1SS133-T2    | DIODE       |               |       |
| R9100        | QRZ9006-4R7X  | F.RESISTOR      | 4.7Ω 1/4W J    |       | D7008        | 1SS133-T2    | DIODE       |               |       |
| R9201        | QRE141J-103Y  | C RESISTOR      | 10kΩ 1/4W J    |       | D7777        | SLR-342VC3F  | LED         |               |       |
| R9202        | QRE141J-103Y  | C RESISTOR      | 10kΩ 1/4W J    |       |              |              |             |               |       |
| R9203        | QRE141J-820Y  | C RESISTOR      | 82Ω 1/4W J     |       | C1           | NCB31CK-223X | C CAPACITOR | 0.022uF 16V K |       |
| R9205        | QRE141J-823Y  | C RESISTOR      | 82kΩ 1/4W J    |       | C2           | NCB31CK-103X | C CAPACITOR | 0.01uF 16V K  |       |
| R9206        | QRE141J-473Y  | C RESISTOR      | 47kΩ 1/4W J    |       | C3           | QEK1CM-106Z  | E CAPACITOR | 10uF 16V M    |       |
| R9301        | QRE141J-392Y  | C RESISTOR      | 3.9kΩ 1/4W J   |       | C4           | NCB31CK-103X | C CAPACITOR | 0.01uF 16V K  |       |
| R9302        | QRE141J-333Y  | C RESISTOR      | 33kΩ 1/4W J    |       | C5           | NCB31CK-103X | C CAPACITOR | 0.01uF 16V K  |       |
| R9303        | QRE141J-102Y  | C RESISTOR      | 1kΩ 1/4W J     |       | C6           | NCB31HK-102X | C CAPACITOR | 1000pF 50V K  |       |
| R9304        | QRE141J-101Y  | C RESISTOR      | 100Ω 1/4W J    |       | C7           | NCB31HK-102X | C CAPACITOR | 1000pF 50V K  |       |
|              |               |                 |                |       | C8           | NCB31HK-102X | C CAPACITOR | 1000pF 50V K  |       |
| CN301        | QGB1214J1-20S | CONNECTOR       | B-B (1-20)     |       | C9           | NCB31HK-102X | C CAPACITOR | 1000pF 50V K  |       |
| CN303        | QGF1205C1-07  | CONNECTOR       | FFC/FPC (1-7)  |       | C10          | NDC31HJ-5R0X | C CAPACITOR | 5pF 50V J     |       |
| CN305        | QGF1205F1-10  | CONNECTOR       | FFC/FPC (1-10) |       | C11          | NCB31CK-104X | C CAPACITOR | 0.1uF 16V K   |       |
| CN601        | QGF1008F1-16  | CONNECTOR       | FFC/FPC (1-16) |       | C12          | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K |       |
| CN603        | QGF1205F1-07  | CONNECTOR       | FFC/FPC (1-7)  |       | C13          | NCS31HJ-100X | C CAPACITOR | 10pF 50V J    |       |
| CN604        | QGF1205F1-14  | CONNECTOR       | FFC/FPC (1-14) |       | C14          | QEK1CM-106Z  | E CAPACITOR | 10uF 16V M    |       |
| CN610        | QGA2501C1-02  | CONNECTOR       | W-B (1-2)      |       | C15          | NCS31HJ-120X | C CAPACITOR | 12pF 50V J    |       |
| CN901        | QGA2501C1-02  | CONNECTOR       | W-B (1-2)      |       | C16          | NCS31HJ-120X | C CAPACITOR | 12pF 50V J    |       |
| FW602        | QJK018-060601 | SIN CR C-B WIRE |                |       | C17          | NCB31HK-392X | C CAPACITOR | 3900pF 50V K  |       |
| IH601        | VYH7237-004   | IC HOLDER       |                |       | C18          | QEK1HM-474Z  | E CAPACITOR | 0.47uF 50V M  |       |
| IH602        | VYH7237-001MM | IC HOLDER       |                |       | C19          | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K |       |
| IH603        | VYH7237-003   | IC HOLDER       |                |       | C20          | NCB31HK-102X | C CAPACITOR | 1000pF 50V K  |       |
| △ J300       | QNB0117-002   | SPK TERMINAL    |                |       | C21          | NCB31CK-223X | C CAPACITOR | 0.022uF 16V K |       |
| J301         | QNN0090-001   | PIN JACK        |                |       | C22          | NCS31HJ-151X | C CAPACITOR | 150pF 50V J   |       |
| J302         | QNS0072-001   | HEADPHONE JACK  |                |       | C23          | NCS31HJ-151X | C CAPACITOR | 150pF 50V J   |       |
| J901         | QNC0092-001   | AC INLET        |                |       | C24          | NCS31HJ-151X | C CAPACITOR | 150pF 50V J   |       |
| J902         | QNA0016-001   | DC JACK         |                |       | C25          | QEK1CM-107Z  | E CAPACITOR | 100uF 16V M   |       |
| K601         | QQR0621-001Z  | COIL            |                |       | C28          | QEK1CM-106Z  | E CAPACITOR | 10uF 16V M    |       |
| K602         | QQR0621-001Z  | COIL            |                |       | C30          | QEK1CM-107Z  | E CAPACITOR | 100uF 16V M   |       |
| K3800        | QQR0621-001Z  | COIL            |                |       | C31          | QEK1CM-226Z  | E CAPACITOR | 22uF 16V M    |       |
| K9100        | QQR0621-001Z  | COIL            |                |       | C32          | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K |       |
| PP901        | QZW0038-001   | WIRE CLAMP      |                |       | C33          | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K |       |
| X651         | QAX0413-001Z  | CRYSTAL         | 16.9344MHz     |       | C34          | NCB31CK-223X | C CAPACITOR | 0.022uF 16V K |       |
| Z901         | QNG0020-001Z  | FUSE CLIP       |                |       | C35          | NCB31CK-473X | C CAPACITOR | 0.047uF 16V K |       |
| Z902         | QNG0020-001Z  | FUSE CLIP       |                |       | C36          | QEK1HM-105Z  | E CAPACITOR | 1uF 50V M     |       |
| Z903         | QNG0020-001Z  | FUSE CLIP       |                |       | C37          | QEK1HM-105Z  | E CAPACITOR | 1uF 50V M     |       |
| Z911         | QNG0020-001Z  | FUSE CLIP       |                |       | C38          | QEK1HM-224Z  | E CAPACITOR | 0.22uF 50V M  |       |
| Z912         | QNG0020-001Z  | FUSE CLIP       |                |       | C39          | QEK1HM-105Z  | E CAPACITOR | 1uF 50V M     |       |
| Z913         | QNG0020-001Z  | FUSE CLIP       |                |       | C40          | QEK1CM-106Z  | E CAPACITOR | 10uF 16V M    |       |

Micon board

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

| △ Symbol No. | Part No.       | Part Name       | Description | Local |
|--------------|----------------|-----------------|-------------|-------|
| IC1          | LA1838         | IC              |             |       |
| IC2          | LC72136N       | IC              |             |       |
| IC750        | GP1UM281YK     | IR DETECT UNIT  | 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           |             |       |

|       |               |             |               |  |
|-------|---------------|-------------|---------------|--|
| C50   | QEK1CM-226Z   | E CAPACITOR | 22uF 16V M    |  |
| C51   | QEK1HM-105Z   | E CAPACITOR | 1uF 50V M     |  |
| C53   | QEK1CM-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 | QEK1CM-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)  |       |
| DI701        | 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    |       |

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/GL/-T | TRANSISTOR      |             |       |
| D340         | MTZJ5.1B-T2   | Z DIODE         |             |       |
| D375         | MTZJ5.1B-T2   | Z DIODE         |             |       |

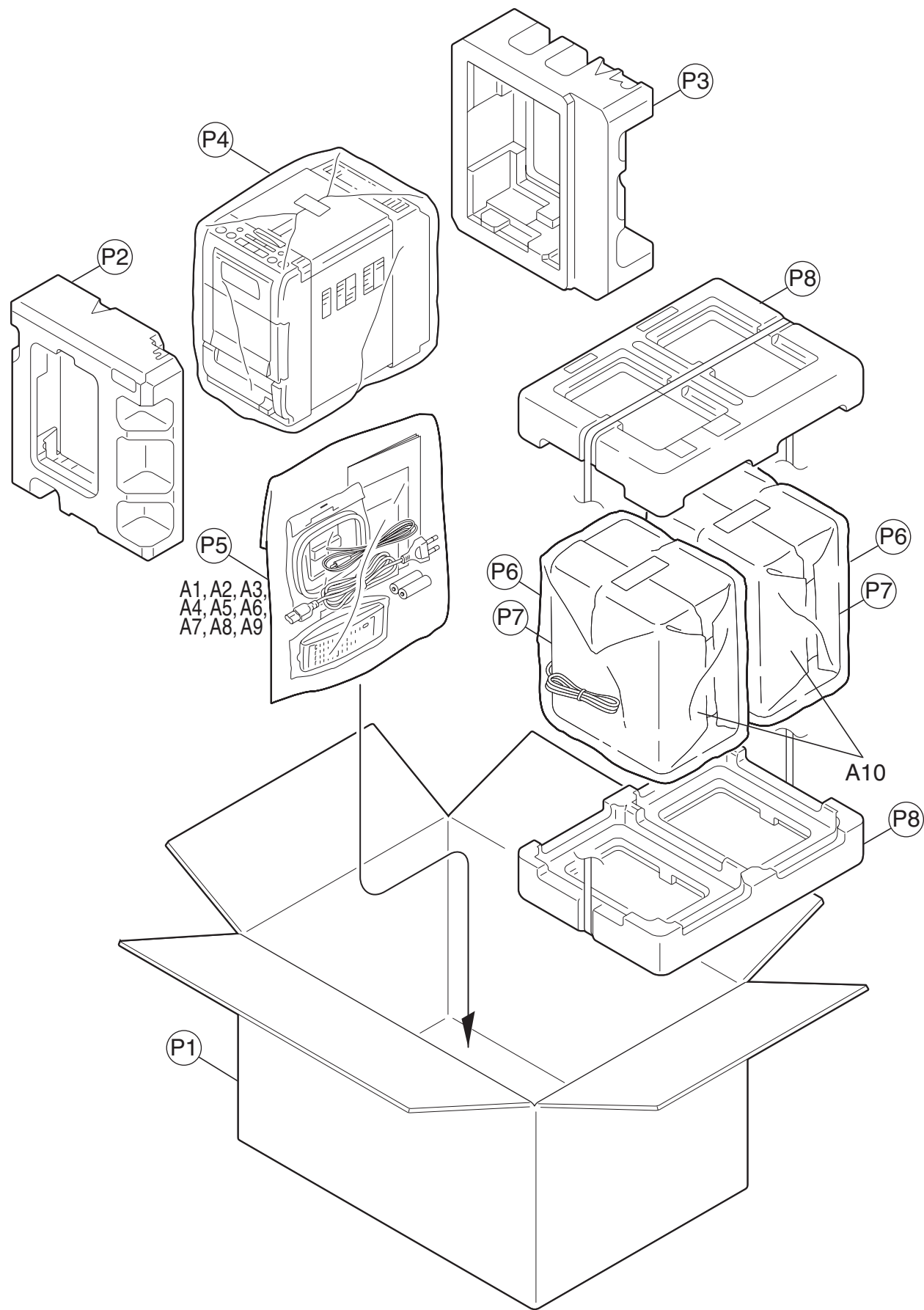
| △ Symbol No. | Part No.     | Part Name      | Description    | Local |
|--------------|--------------|----------------|----------------|-------|
| C101         | QDGB1HK-821Y | C CAPACITOR    | 820pF 50V K    |       |
| C102         | QDYB1CM-103Y | C CAPACITOR    | 0.01uF 16V M   |       |
| C103         | 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   |       |
| 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         | H35J  |
| A 1          | GVT0101-002C   | INST BOOK               | ENG,FRE     | H35C  |
| △ A 2        | QMPE180-183-JN | POWER CORD(US/CA) 1.83m | BLACK       |       |
| A 3          | RM-SFSH35J     | REMOCON UNIT            |             |       |
| A 4          | -----          | BATTERY                 | (x2)        |       |
| A 5          | BT-51028-2     | J=REGIST CARD           |             | H35J  |
| 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           |             | H35C  |
| A 10         | FSH30E-SPBOX   | SPK WITH BOX            |             |       |
| P 1          | GV30426-006A   | 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)        |       |