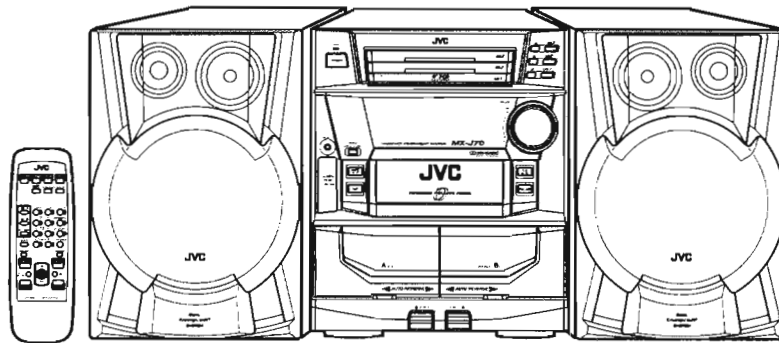


# JVC

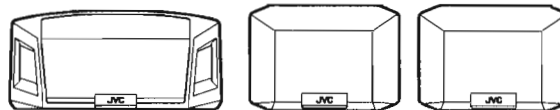
## SERVICE MANUAL

COMPACT COMPONENT SYSTEM

### MX-J70 / MX-J76 / MX-J75R



This Illustration is MX-J70



(SP-DSC99SL)

SP-DS99SL

(SP-DSS99SL)

**Each difference point**

Model	Version	Color	Optical out	RDS	MIC,ECHO
MX-J70	except U type	Light silver	O	X	X
MX-J70	only U type	Light silver	O	X	O
MX-J76	—	Light silver + Gray	X	X	X
MX-J75R	—	Light silver	O	O	X

**Area Suffix(MX-J70)**

- J ----- U.S.A.
- C ----- Canada
- U ----- Other Areas
- US ----- Singapore
- UX ----- Saudi Arabia
- UT ----- Taiwan
- UP ----- Korea
- UY ----- Argentina
- A ----- Australia

**Area Suffix(MX-J76)**

- C ----- Canada

**Area Suffix(MX-J75R)**

- B ----- U.K.
- E -- Continental Europe
- EN ---- Northern Europe
- EV ---- Eastern Europe
- EE ---- Russian Europe



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## Safety Precautions

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

### 5. Leakage current check (Electrical shock hazard testing)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

Do not use a line isolation transformer during this check.

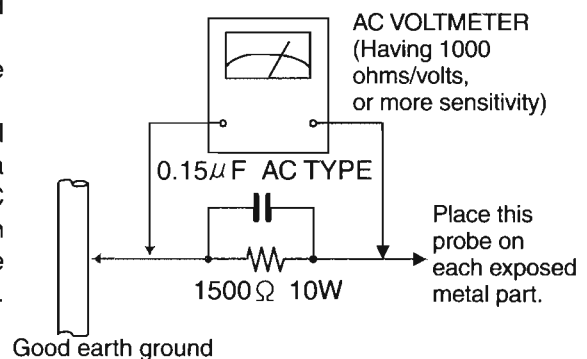
- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.)

- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC voltmeter.

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

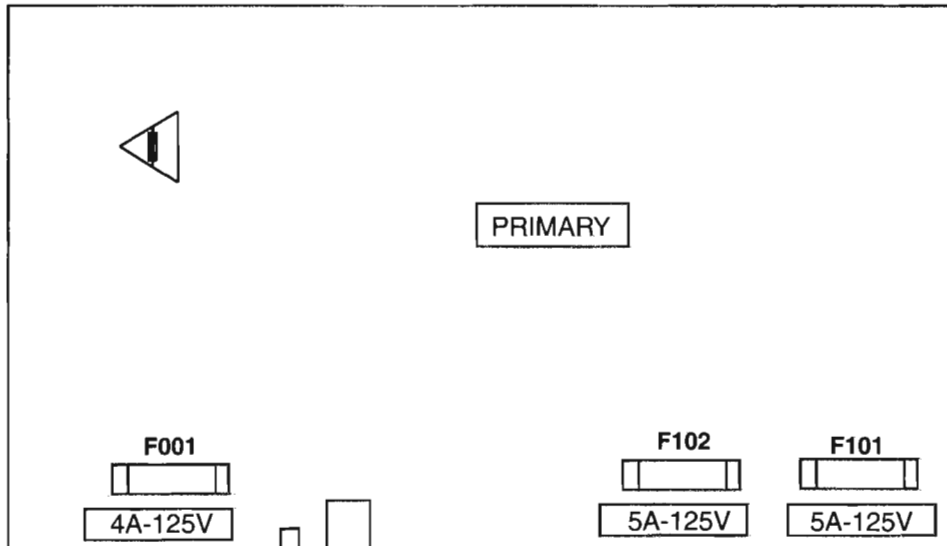


## Warning

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



**⚠ CAUTION** Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

## Importance admistering point on the safety



Power supply board (solder side)

Note : It's means "J" for U.S.A. market model and "C" for canada market model.

<b>MX-J70C/J ONLY</b>	<b>MX-J70C/J SEULEMENT</b>
<p><b>Full Fuse Replacement Marking</b></p> <p>Graphic symbol mark (This symbol means fast blow type fuse.)</p>  <p>should be read as follows ;</p>	<p><b>Marquage Pour Le Remplacement Complet De Fusible</b></p> <p>Le symbole graphique (Ce symbole signifie fusible de type à fusion rapide.)</p>  <p>doit être interprété comme suit ;</p>
<p><b>FUSE CAUTION</b></p>	<p><b>PRECAUTIONS SUR LES FUSIBLES</b></p>
<p><b>FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATING OF FUSES ;</b></p> <p><b>F001 : 4-A, 125-V</b>  <b>F101 : 5- A, 125-V</b>  <b>F102 : 5-A, 125-V</b></p>	<p><b>POUR UNE PROTECTION CONTINUE CONTRE DES RISQUES D'INCENDIE, REMPLACER SEULEMENT PAR UN FUSIBLE DU MEME TYPE ;</b></p> <p><b>F001 : 4-A, 125-V</b>  <b>F101 : 5- A, 125-V</b>  <b>F102 : 5-A, 125-V</b></p>

## Important for laser products

### 1.CLASS 1 LASER PRODUCT

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

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

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

**WARNING :** Osynlig laserstråling är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen.

**VARO :** Avattaessa ja suojalukitus ohitettaessa olet alltiina 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 avslott. unngå utsettelse for stråling.

## REPRODUCTION AND POSITION OF LABELS

### WARNING LABEL

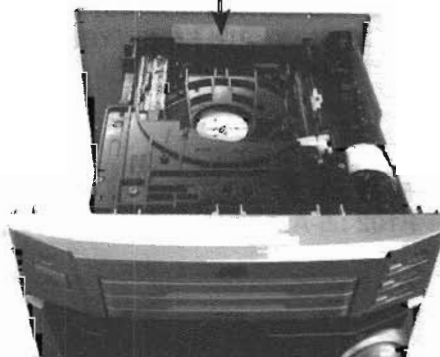
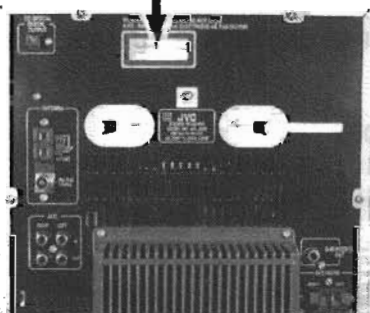
DANGER : Invisible laser radiation when open and interlock or defeated.  
AVOID DIRECT EXPOSURE TO BEAM (e)

VARO : Avattaessa ja suojalukitus ohitettaessa olet alltiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (d)

WARNING : Osynlig laserstråling är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen. (s)

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

CLASS 1  
LASER PRODUCT



# Instructions

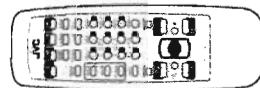
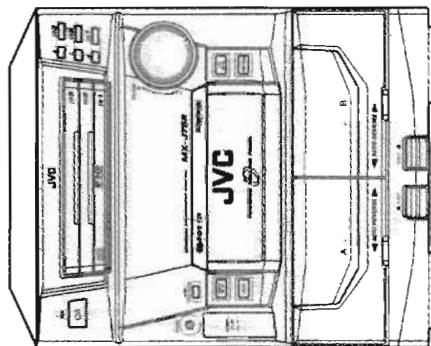
Warnings, Cautions and Others / Warnung, Achtung und sonstige Hinweise / Misses en garde, précautions et indications diverses / Waarschuwingen, voorzorgen en andere mededelingen / Avisos, precauciones y otras notas / Avvertenze e precauzioni da osservare



# JVC

**COMPACT COMPONENT SYSTEM**  
 KOMPAKT-KOMPONENTEN-SYSTEM  
 SYSTEME DE COMPOSANTS COMPACT  
 COMPACTO KOMPONENTEN-SYSTEMEEM  
 SISTEMA DE COMPONENTES COMPACTOS  
 IMPIANTO A COMPONENTI COMPATTO

## CA-MXJ75R



**COMPACT DISC**  
DIGITAL AUDIO

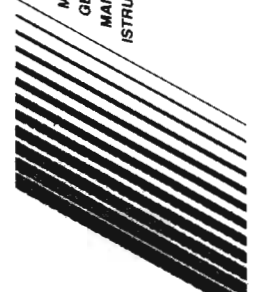
**CD-RDS EON**

**DD DOLBY SURROUND PRO LOGIC**

**INSTRUCTIONS**  
 BEDIENUNGSANLEITUNG  
 MANUEL D'INSTRUCTIONS  
 GEBRUIKSAANWIJZING  
 MANUAL DE INSTRUCCIONES  
 ISTRUZIONI

**For Customer Use:**  
 Enter below the Model No. and Serial No. which are located either on the rear, bottom or side of the cabinet. Retain this information for future reference.  
 Model No.  
 Serial No.

GVT0013-006A  
(E)



**IMPORTANT for the U.K.**  
 DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the country you are visiting, you should use a suitable and approved private safety approved extension lead or consult your dealer.  
**BE SURE** to replace the fuse only with an identical approved type, as originally fitted.  
 If, throughout the main plug, it cut off, contact the user and dealer of the plug immediately, to avoid a possible shock hazard by mechanical connection to the mains supply.  
 If the product is not supplied fitted with a mains plug then follow the instructions given below:  
**IMPORTANT:**  
 DO NOT make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.  
 The wires in the mains lead on this product are coloured in accordance with the following code:  
 Blue : Neutral  
 Brown : Live  
 As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:  
 The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.  
 The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.  
**IF IN DOUBT - CONSULT A COMPETENT ELECTRICIAN.**

**Per l'Italia:**  
 "Si dichiara che il questo prodotto di marca JVC è conforme alle prescrizioni del Decreto Ministeriale n. 548 del 25/09/95 pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana n. 301 del 28/12/95."

**Voorzichtig: Goede ventilatie vereist**  
 Om brand, elektrische schokken en beschadiging te voorkomen, moet u het toestel als volgt opstellen:

- 1 Verontreinigingen, vuil en stof niet toegestaan in de ventilatiezones.
- 2 Geen belemmeringen in de ventilatiezones.
- 3 Onderhoud:

**Caution: Proper Ventilation**  
 To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:

- 1 No obstructions and open spaces in the areas shown by the dimensions below.
- 2 Sides Top/Back.
- 3 Bottom:

**Precaución: ventilación correcta**  
 Para evitar el riesgo de descargas eléctricas e incendio, y prevenir posibles daños, colócale el equipo en un lugar que cumpla los siguientes requisitos:

- 1 Parte frontal:
- 2 Laterales y parte superior:
- 3 Parte inferior:

**Achtung: Ausreichende Belüftung**  
 Zur Vermeidung von elektrischen Schlägen, Feuer und sonstigen Schäden sollte das Gerät unter folgenden Bedingungen aufgestellt werden:

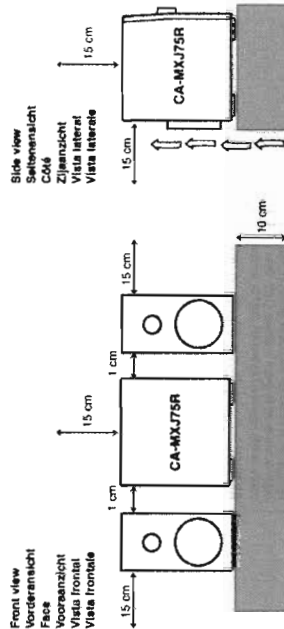
- 1 Vorderseite:
- 2 Seiten und Rückseite:
- 3 Unterseite:

**Attenzione: Per una corretta ventilazione**  
 Per prevenire il rischio di scosse elettriche e di incendio ed evitare possibili danni, collocare l'apparecchiatura nel modo seguente:

- 1 Parte anteriore:
- 2 Laterali e superiore:
- 3 Base:

**Attention: Aération correcte**  
 Pour prévenir tout risque de décharge électrique ou d'incendie et éviter toute détérioration, installez l'appareil de la manière suivante:

- 1 Avant:
- 2 Côtés et partie supérieure:
- 3 Dessous:



**CAUTION**  
 To reduce the risk of electrical shocks, fire, etc.:

1. Do not remove covers, caps or cabinet.
2. Do not expose the appliance to rain or moisture.

**VOORZICHTIG**  
 Ter vermindering van gevaar voor brand, elektrische schokken, enz.:

1. Verwijder geen schroeven, deksels of de behuizing.
2. Stel het toestel niet bloot aan regen of vocht.

**PRECAUCIÓN**  
 Para reducir riesgos de choques eléctricos, incendio, etc.:

1. No arranque los tornillos, los cables ni la caja.
2. No exponga este aparato a la lluvia o a la humedad.

**ATTENZIONE**  
 Per ridurre il rischio di shock elettrici, incendi, ecc.:

1. Non togliete viti, cavi o la scatola.
2. Non esponete l'apparecchio alla pioggia e all'umidità.

**Caution** — ⚠️ **switch!**  
 Disconnect the main plug to shut the power off completely. The ⚠️ switch in any position does not disconnect the mains line. The power can be replete completely.

**Achtung** — ⚠️ **Schalter!**  
 Den Netzstecker aus der Steckdose ziehen, um die Stromversorgung vollständig zu unterbrechen. Der Schalter ⚠️ ist unfähig, die Stellung der Stromversorgung vollkommen. Die Stromversorgung kann mit der Fernbedienung ein- und ausgeschaltet werden.

**Attenzione** — ⚠️ **Comutatore**  
 Disconnetter la linea di accesa per coupere completamente la corrente. Le commutatore ⚠️ ne coupe jamais complètement la ligne de secteur, quelle que soit sa position. La courant peut être réalimenté.

**Voorzichtig** — ⚠️ **schakelaar!**  
 Om de stroomvoorziening geheel uit te schakelen, trek u de stekker uit het stopcontact. Het schakelaar ⚠️ kan de stroomvoorziening niet volledig uitschakelen. Het apparaat ook met de afstandsbediening aan- en uitschakelen.

**Precaución** — ⚠️ **Interruptor**  
 Desconectar el cable de alimentación para desactivar la alimentación eléctrica. El interruptor ⚠️ que sea la posición de ajuste del interruptor ⚠️, la alimentación puede ser completamente reestablecida.

**Attenzione** — ⚠️ **Interruttore**  
 Disconnettere la spina del cavo di alimentazione dalla presa della rete elettrica per disattivare completamente l'alimentazione. L'interruttore ⚠️ in nessuna posizione sblocca la linea di alimentazione elettrica principale. È possibile il completo ripristino dell'alimentazione.



# Introduction

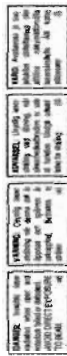
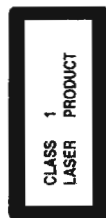
We would like to thank you for purchasing one of our JVC products. Before operating this unit, read this manual carefully and thoroughly to obtain the best possible performance from your unit, and retain this manual for future reference.

English

IMPORTANT FOR LASER PRODUCTS/WICHTIGER HINWEIS FÜR LASER-PRODUKTE / IMPORTANT POUR LES PRODUITS LASER / BELANGRIJKE INFORMATIE VOOR LASER-PRODUCTEN / IMPORTANTE PARA LOS PRODUCTOS LASER / IMPORTANTE PER I PRODOTTI LASER

REPRODUCTION OF LABELS/ABDRUKINGSORDE FÜR LASER-PRODUKTE/REPRODUCTION DES ÉTIQUETTES/VERKLARING VAN DE LABELS/REPRODUZIONE DE ETIQUETAS/RIPRODUZIONE DELLE ETICHETTE

- 1 CLASSIFICATION LABEL, PLACED ON REAR ENCLOSURE
- 2 WARNING LABEL, PLACED INSIDE THE UNIT
- 3 WARNETKETTE IM GERÄTEINNEREN
- 1 ETIQUETTE DE CLASSIFICATION, PLACÉE À L'ARRIÈRE DU COFFRET
- 2 L'APPAREIL
- 3 ETIQUETTE D'AVERTISSEMENT PLACÉE À L'INTÉRIEUR DE L'APPAREIL
- 1 KLASSEKATIELABEL, OP DE ACHTERZIJDE VAN HET APPARAAT
- 2 WAARSCHUWINGSLABEL, IN HET APPARAAT
- 3 WAARSCHUWINGSLABEL, IN HET APPARAAT
- 1 ETIQUETA DE CLASIFICACIÓN, PEGADA EN LA PARTE POSTERIOR DE LA CAJA
- 2 LA UNIDAD
- 3 ETIQUETA DE ADVERTENCIA, PEGADA EN EL INTERIOR DE LA UNIDAD
- 1 ETICHETTA DI CLASSIFICAZIONE, SITUATA SUL RIVESTIMENTO POSTERIORE
- 2 DELL'APPARECCHIO
- 3 DELL'APPARECCHIO



- 1. CLASS 1 LASER PRODUCT
- 2. DANGER: Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- 3. CAUTION: Do not open the top cover. There are no user service-able parts inside the Unit, save at servicing to qualified service personnel.

- 1. LASER-PRODUKT DER KLASSE 1
- 2. GEVAAR: Onzichtbare laserstraling wanneer open en afsluiting niet optreedt of wordt overwonnen. Vermijd direct blootstellen aan de straal.
- 3. VOORZICHTIG: De bovenkap niet openen. Binnenin het toestel bevinden zich delen, die u niet kunt repareren. Het toestel moet onderhouden worden door een gekwalificeerd vakpersoneel.

- 1. PRODOTTO LASER CLASSE 1
- 2. PERICOLO: Radiazione laser invisibile quando l'apparecchio è aperto ed il dispositivo di sicurezza è guasto o disattivato. Evitare l'esposizione diretta al raggio.
- 3. ATTENZIONE: Non aprire l'operchio superiore. Non vi sono parti accessibili dell'utente all'interno di questo apparecchio; lasciare tutti i controlli a personale qualificato.

- 1. KLAS 1 LASER-PRODUKT
- 2. GEVAARLIJK: Onzichtbare laserstraling wanneer open en de beveiliging faalt of uitgeschakeld is. Voorkom het direct blootstellen aan de straal.
- 3. VOORZICHTIG: De bovenkap niet openen. Binnenin het toestel bevinden zich delen, die u niet kunt repareren. Het toestel moet onderhouden worden door een gekwalificeerd vakpersoneel.

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## About This Manual

This manual is organized as follows:

- The manual mainly explains operations using the buttons and controls on the unit. You can also use the similar names (or marks) as those on the unit. If operation using the remote control is different from that using the unit, it is then explained.
- Basic and common information that is the same for many functions is grouped in one place, and is not repeated in each procedure. For instance, we do not repeat the information about turning on/off the unit, setting the volume, changing the sound effects, and others, which are explained in the section "Common Operations" on pages 10 to 12.
- The following marks are used in this manual:



Gives you warnings and cautions to prevent from a damage or risk of fire/electric shock. Also gives you information which is not good for obtaining the best possible performance from the unit.



Gives you information and hints you had better know.

## Power sources

- When unplugging from the wall outlet, always pull the plug, not the AC power cord.



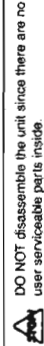
## Moisture condensation

Moisture may condense on the lens inside the unit in the following cases:

- After starting heating in the room
  - In a damp room
  - If the unit is brought directly from a cold to a warm place
- Should this occur, the unit may malfunction. In this case, leave the unit turned on for a few hours until the moisture evaporates, unplug the AC power cord, and then plug it in again.

## Others

- Should any metallic object or liquid fall into the unit, unplug the unit and consult your dealer before operating any further.
- If you are not going to operate the unit for an extended period of time, unplug the AC power cord from the wall outlet.



DO NOT disassemble the unit since there are no user serviceable parts inside. If anything goes wrong, unplug the AC power cord and consult your dealer.

## Precautions

### Installation

- Install in a place which is level, dry and neither too hot nor too cold --- between 5°C (41°F) and 35°C (95°F).
- Install the unit in a location with adequate ventilation to prevent internal heat built-up in the unit.
- Leave sufficient distance between the unit and the TV.
- Keep the speakers away from the TV to avoid interference with TV.



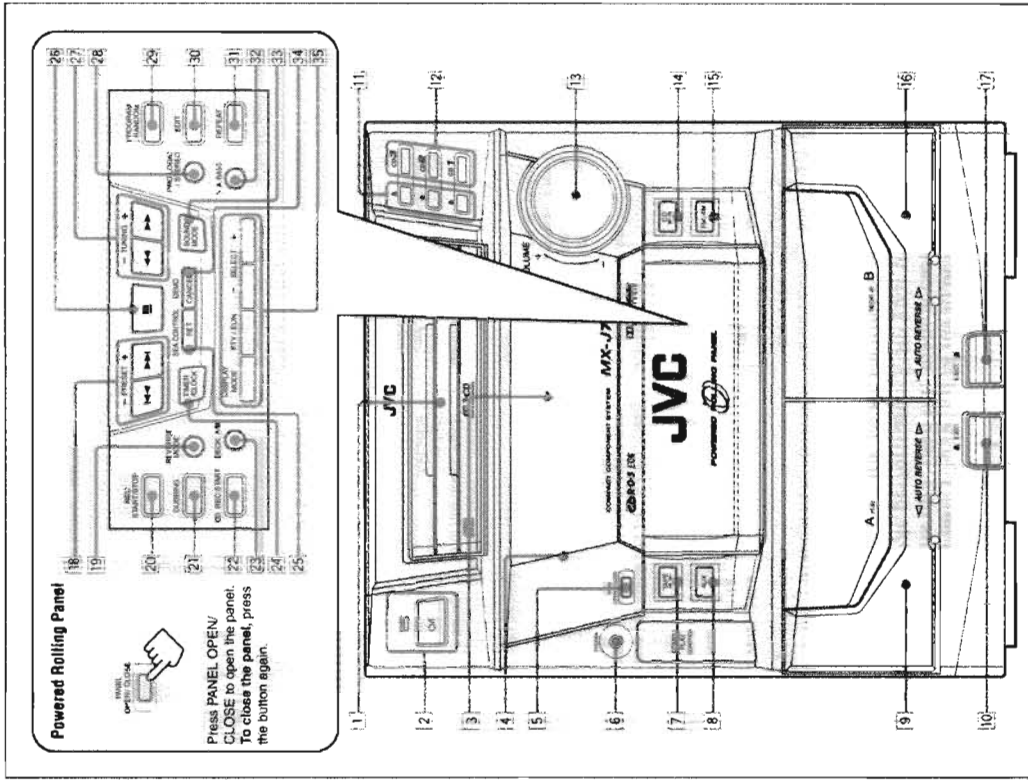
DO NOT install the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust or vibration.

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- Using the Timers ..... 25
  - Using Daily Timer ..... 25
  - Using Recording Timer ..... 26
  - Using Sleep Timer ..... 27
  - Timer Priority ..... 27
- Additional Information ..... 28
- Maintenance ..... 28
- Troubleshooting ..... 29
- Specifications ..... 30

# Location of the Buttons and Controls

Become familiar with the buttons and controls on your unit.



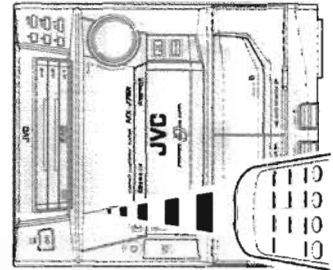
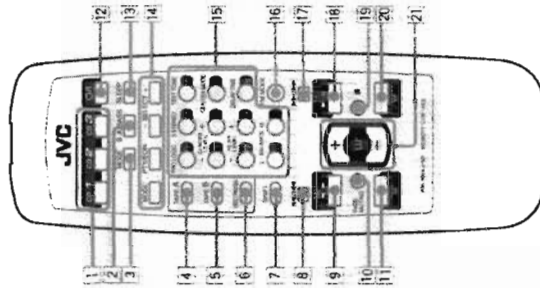




**Remote Control**

11. Disc number buttons (CD 1, CD 2, and CD 3) (16)  
*Pressing one of these buttons also turns on the unit.*
12. S. A. BASS (Signal Adaptive Bass) button (11)
13. SOUND MODE button (11)
14. TAPE A button (19)
15. TAPE B button (19)
16. REC PAUSE button (22)
17. SHIFT button (11, 20)
18. ◀/▶ (fast left/reverse search) button (17 - 19)
19. TAPE ◀▶ button (19)
20. Pressing this button also turns on the unit.
21. PAUSE/MUTING button (11)
22. AUX button (10)
23. Pressing this button also turns on the unit.
24. ON (standby/on) button (10)
25. SLEEP button (27)
26. RDS operation buttons (14)  
• DISPLAY MODE, PTY/EON, and SELECT -/+ buttons
27. Number buttons (13, 17)
28. Sound control buttons (11, 20)
29. FM MODE button (13)
30. ◀▶/▶▶ (forward search/last right) button (17 - 19)
31. CD ▶▶▶ button (16)
32. Pressing this button also turns on the unit.
33. Stop button (16, 19)
34. FM/AM button (13)
35. Pressing this button also turns on the unit.
36. VOLUME; + / - button (11, 21)

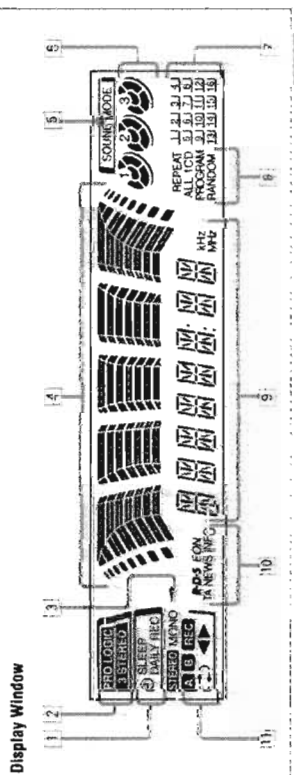
**Remote Control**



When using the remote control, point it at the remote sensor on the front panel.

English English

Continued



See pages in the parentheses, for details.

**Front Panel**

1. Disc trays
2. ON (standby/on) button and STANDBY lamp (10)
3. Display window
4. Remote sensor
5. PANEL OPEN/CLOSE button (10)  
*Pressing this button also turns on the unit.*
6. PHONES jack (11)
7. TAPE ◀▶ button and lamp (19)  
*Pressing this button also turns on the unit.*
8. AUX button and lamp (10)  
*Pressing this button also turns on the unit.*
9. Deck A cassette holder (19)
10. EJECT button for deck A (19)
11. (CD tray open/close) buttons (16)  
*Pressing one of these buttons also turns on the unit.*
12. Disc number buttons and lamps (CD 1, CD 2, and CD 3) (16)  
*Pressing one of these buttons also turns on the unit.*
13. VOLUME control (11)
14. CD ▶▶▶ (play/pause) button and lamp (16)  
*Pressing this button also turns on the unit.*
15. FM/AM button and lamp (13)  
*Pressing this button also turns on the unit.*
16. Deck B cassette holder (19)
17. EJECT button for deck B (19)

**Display window**

1. Tuner indicators  
• SLEEP, REC, and DAILY indicators
2. Surround mode indicators  
• PRO LOGIC and 3 STEREO indicators
3. Tuner operation indicators  
• STEREO and MONO indicators
4. Audio level indicator  
SEA (Sound Effect Amplifier) pattern indicator
5. SOUND MODE indicator
6. Disc indicators
7. CD track number indicators
8. CD play mode indicators  
• REPEAT (ALL/CD/1), PROGRAM, and RANDOM indicators
9. Main display  
• Shows the source name, frequency, etc.
10. RDS operation indicators  
• RDS, EON, and TA/NEWS/INFO indicators
11. Tape operation indicators  
• A/B (operating deck), (REVERSE), (CLOCK) (reverse mode), and (▶▶) (tape direction) indicators

**Powered Rolling Panel**

18. PRESHET -/+ buttons (13)
19. ◀▶/▶▶ (reverse; search/forward search) buttons (10, 12, 17, 24, 25)
20. REVERSE MODE button (19, 23, 24)
21. REC START/STOP button (22, 24)
22. DUBBING button (23)
23. CD REC START button (23, 24)
24. DECK A/B button (19)
25. TIMER/CLOCK button (10, 25)

# Getting Started

## Unpacking

After unpacking, check to be sure that you have all the following items.

The number in the parentheses indicates the quantity of the pieces supplied.

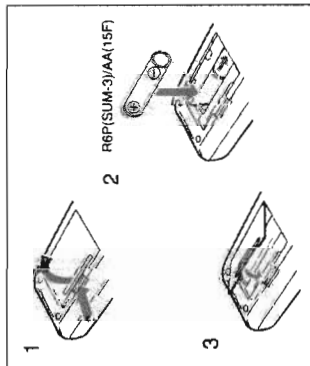
- AM loop antenna (1)
- FM antenna (1)
- Remote control (1)
- Batteries (2)

If any is missing, consult your dealer immediately.

## Putting the Batteries into the Remote Control

Insert the batteries -- R6P(SUM-3)/AA(1.5F) -- into the remote control, by matching the polarity (+ and -) on the batteries with the + and - markings on the battery compartment.

When the remote control can no longer operate the unit, replace both batteries at the same time.



- DO NOT use an old battery together with a new one.
- DO NOT use different types of batteries together.
- DO NOT expose batteries to heat or flame.
- DO NOT leave the batteries in the battery compartment when you are not going to use the remote control for an extended period of time. Otherwise, it will be damaged from battery leakage.

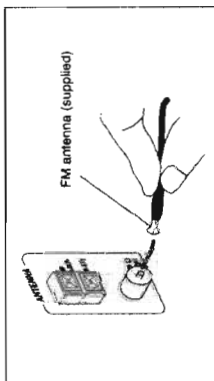
English

English

Continued

## Connecting Antennas

### FM antenna



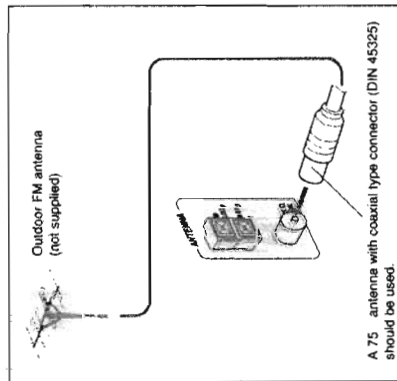
- 1 Attach the FM antenna to the FM 75 COAXIAL terminal.
- 2 Extend the FM antenna.
- 3 Fasten it up in the position which gives you the best reception.



About the supplied FM antenna  
The FM antenna supplied with this unit can be used as temporary measure. If reception is poor, you can connect an outdoor FM antenna.

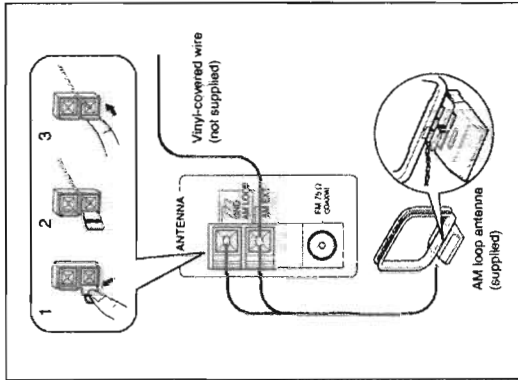
### To connect an outdoor FM antenna

Before connecting it, disconnect the supplied FM antenna.



A 75 antenna with coaxial type connector (DIN 45325) should be used.

### AM (MW/LW) antenna



- 1 Connect the AM loop antenna to the AM I.OOP terminals as illustrated.
- 2 Turn the AM loop antenna until you have the best reception.

### To connect an outdoor AM antenna

When reception is poor, connect a single vinyl-covered wire to the AM EXT terminal and extend it horizontally. (The AM loop antenna must remain connected.)

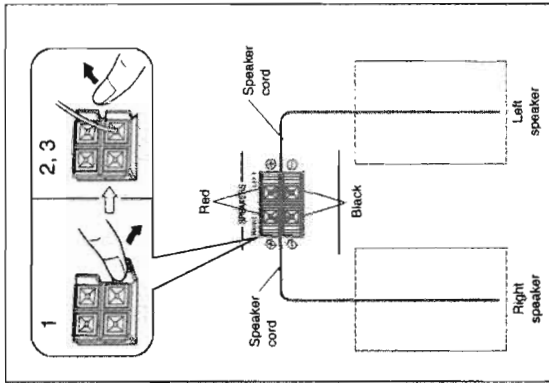


- Make sure the antenna substances do not touch any other terminals and connecting leads.
- Keep the antenna away from metallic parts of the unit, connecting cords, and the AC power cord.

## Connecting Speakers

You can connect a pair of front speakers, one center speaker, a pair of rear speakers, and one subwoofer.

### To connect front speakers



- 1 Press and hold the clamp of the speaker terminal on the rear of the unit.
- 2 Insert the end of the speaker cord into the terminal.  
Match the polarity of the speaker terminals: Red (+) to red (+) and black (-) to black (-).
- 3 Release the finger from the clamp.

**IMPORTANT:** Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the unit.

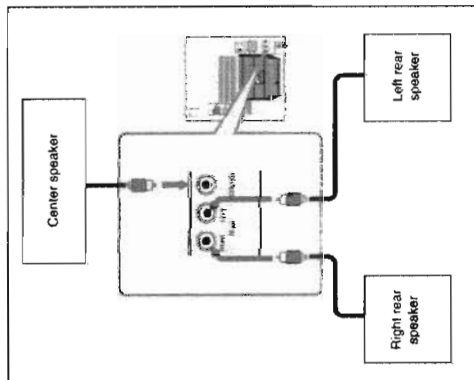
English

English

Continued

**To connect a center speaker and rear speakers**

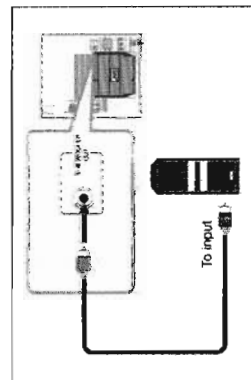
By connecting a center speaker and rear speakers, you can enjoy Dolby Surround equipped with this unit.



- Connect the right rear speaker to the REAR RIGHT jack.
- Connect the left rear speaker to the REAR LEFT jack.
- Connect the center speaker to the CENTER jack.

**To connect a subwoofer**

By connecting a subwoofer, you can enhance the bass.



Connect the input jack of a powered subwoofer to the SUBWOOFER OUT jack, using a monoaural audio cord (not supplied).

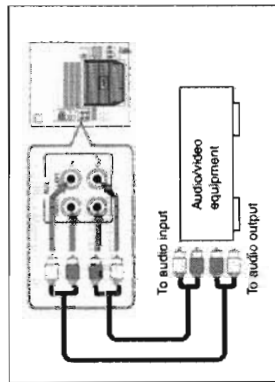
**Connecting Other Equipment**

You can connect both analog and digital equipment.

- **DO NOT** connect any equipment while the power is on.
- **DO NOT** plug in any equipment until all connections are complete.

**To connect an analog component**

Be sure that the plugs of the audio cords are color coded. White plugs and jacks are for left audio signals, and red ones for right audio signals.



By using audio cords (not supplied), connect:

- Between the audio input jacks on the other equipment and AUX OUT jacks. For recording on the other equipment.
- Between the audio output jacks on the other equipment and AUX IN jacks. For playing the other equipment.

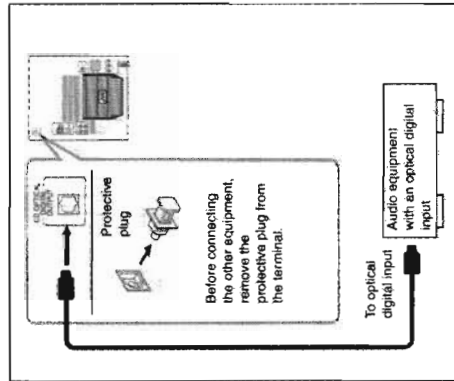


**When connecting a VCR**

Since this unit is not equipped with the video input and output jacks, connect this unit and the VCR only using the audio cords, then connect the VCR and the TV set directly using the video cords.

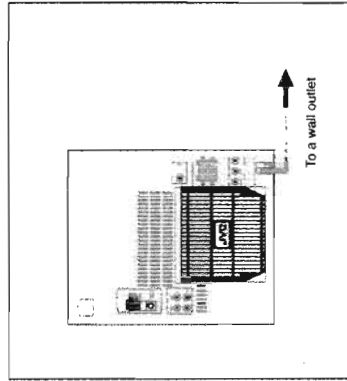
**To connect audio equipment with an optical digital input terminal**

You can record CD sound onto the connected digital equipment.



Connect an optical digital cord (not supplied) between the optical digital input terminal on the other equipment and the CD OPTICAL DIGITAL OUTPUT terminal.

**NOW, you can plug in the unit and other connected equipment FINALLY!**



When connecting the AC power cord into a wall outlet, the unit automatically starts display demonstration.

To stop the display demonstration, press any button on the unit or the remote control.

**To start the display demonstration manually**  
Press and hold DEMO for more than 2 seconds.



To stop the demonstration, press any button.

# Common Operations

## Setting the Clock

Before operating the unit any further, first set the clock built in this unit.

**1 Press PANEL OPEN/CLOSE.**  
The unit is turned on and the Powered Rolling Panel opens automatically.

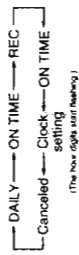
**2 Press TIMER/CLOCK.**  
The hour digits start flashing on the display.

**3 Press ← or → to adjust the hour, then press SET.**  
If you want to correct the hour after pressing SET, press CANCEL. The hour digits start flashing again.

**4 Press ← or → to adjust the minute, then press SET.**  
CLOCK OK

**To adjust the clock again**  
If you have adjusted the clock before, you need to press TIMER/CLOCK repeatedly until the clock setting mode is selected.

Each time you press the button, the timer/clock setting modes change as follows:



(The hour digit start flashing)

If there is a power failure

The clock loses the setting and is reset to "0:00". You need to set the clock again.

English

English

Continued

## Turning On the Power and Selecting the Sources

When you press the play button for a particular source (FM/AM, CD ▶▶, AUX, and TAPE), the unit turns on, and the Powered Rolling Panel opens automatically (and the unit starts playing the source if it is ready - COMPU PLAY CONTROL).

To listen to the FM/AM (MW/LW) broadcasts, press FM/AM. (See pages 13 - 15.)

To play back CDs, press CD ▶▶. (See pages 16 - 18.)

To play back tapes, press TAPE: ▶▶. (See page 19.)

To select the external equipment as the source, press AUX.



To turn on the unit without playing, press ON so that the STANDBY lamp goes off.

WELCOME

The Powered Rolling Panel opens automatically.

To turn off the unit (on standby), press OFF again so that the STANDBY lamp lights up. The Powered Rolling Panel also closes. A little power is always consumed even while the unit is on standby.

To switch off the power supply completely, unplug the AC power cord from the AC outlet.

When you unplug the AC power cord or if a power failure occurs

The clock is reset to "0:00" right away, while the tuner preset stations (see page 13) will be erased in a few days.

## Adjusting the Volume

You can adjust the volume level only while the unit is turned on.

Turn VOLUME clockwise to increase the volume or counterclockwise to decrease it.



When using the remote control, press VOLUME+ to increase the volume or press VOLUME- to decrease it.

For private listening  
Connect a pair of headphones to the PHONES jack. No sound comes out of the speakers. Be sure to turn down the volume before connecting or putting on headphones.

DO NOT turn off (on standby) the unit with the volume set to an extremely high level; otherwise, a sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the unit or start playing any source next time. REMEMBER you cannot adjust the volume level while the unit is on standby.

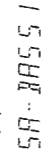
To turn down the volume level temporarily  
Press FADE MUTING on the remote control. The volume level gradually decreases to "0".

To restore the sound, press the button again.

## Reinforcing the Bass Sound

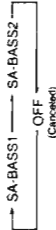
The Signal Adaptive Bass function provided for this unit can enhance the bass sound while listening to any source at low volume.

You can use this function only for playback. To turn on the function, press S. A. BASS repeatedly until "SA-BASS1" or "SA-BASS2" appears on the display.



The S. A. BASS lamp (the button itself) also lights up.

- Each time you press the button, the Signal Adaptive Bass level applied to the playback sound changes as follows:



When you select "SA-BASS2," the bass sound level is enhanced much more than when you select "SA-BASS1."

- While playing back some sources, the level difference between "SA-BASS1" and "SA-BASS2" may not be distinct.

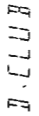
To turn off the function, press the button repeatedly until "OFF" appears on the display.

If you want to check the Signal Adaptive Bass level currently selected  
While the S. A. BASS lamp is lit, press S. A. BASS once so that the current level appears for a while.

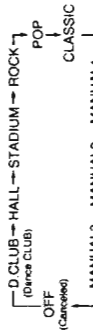
## Selecting the Sound Modes

You can select one of the 6 preset sound modes (3 surround modes and 3 SEA - Spaced Effect Amplifier - modes). The sound modes can be applied only to playback sounds, and cannot be used for recording.

To select the sound modes, press SOUND MODE until the sound mode you want appears on the display. The SOUND MODE indicator also lights up on the display.



Each time you press the button, the sound modes change as follows:



## Adjusting the Front Speaker Output Balance

If the sounds you hear from the front right and left speakers are unequal, you can adjust the speaker output balance.

On the remote control ONLY:

1 Press and hold SHIFT.

2 Press BALANCE L/R button.  
Pressing BALANCE L decreases the right channel output.  
Pressing BALANCE R decreases the left channel output.

3 Release SHIFT.

# Listening to FM and AM (MW/LW) Broadcasts



## Tuning in a Station

### On the unit ONLY:

- 1 Press FM/AM.**  
The unit automatically turns on and tunes in the previously tuned station (either FM or AM - MW/LW). The Powered Rolling Panel automatically opens.  
• Each time you press the button, the band alternates between FM and AM (MW/LW).
- 2 Press and hold TUNING -/+ for more than 1 second.**  
The unit starts searching for stations and stops when a station of sufficient signal strength is tuned in. If a program is broadcast in stereo, the STEREO indicator lights up.  
**To stop during searching, press TUNING -/+.**

**2 Press SET.**

**3 Press PRESET -/+ to select a preset number.**

**4 Press SET again.**

The tuned station in step 1 is stored in the preset number selected in step 3.  
• Storing a new station on a used number erases the previously stored one.

**When you unplug the AC power cord or if a power failure occurs**  
The preset stations will be erased in a few days. If this happens, preset the stations again.

## Tuning in a Preset Station

**1 Press FM/AM.**

The unit automatically turns on and tunes in the previously tuned station (either FM or AM - MW/LW). The Powered Rolling Panel automatically opens.

• Each time you press the button, the band alternates between FM and AM (MW/LW).

**2 Select a preset number.**

**On the unit:**

Press **PRESET -/+**.

**On the remote control:**

Press the number buttons.

For preset number 5, press 5.

For preset number 15, press +10, then 5.

For preset number 20, press +10, then 10.

For preset number 25, press +10, +10, then 5.

English

English

**2 Adjust the SEA pattern.**

- 1) Press **←** or **→** to select the frequency range to adjust (LOW, MID, HIGH).
- 2) Press **←** or **→** to adjust the level (-3 to +3) of the selected frequency range.
- 3) Repeat steps 1) and 2) to adjust the level of the other frequency ranges.

**3 Press SEA CONTROL, again.**

**4 Press ← or → to select one of the MANUAL, 1, 2, and 3 modes into which you want to store the SEA pattern.**

**5 Press SEA CONTROL, again.**



The SOUND MODE indicator also lights up. The SEA pattern you have created are stored into the MANUAL mode selected in the above step.

**To use your own sound mode**

Select MANUAL, 1, 2, or 3 mode when using the sound modes. See "Selecting the Sound Modes" on page 11.

## Surround modes \*

**D.C.LUB:** Increases resonance and bass.

**HALL:** Adds depth and brilliance to the sound.

**STADIUM:** Adds clarity and spreads the sound, like in an outdoor stadium.

**SEA MODES:** Boosts low and high frequency, fixed for acoustic music.

**POP:** Good for vocal music.

**CLASSIC:** Good for classical music.

## Manual modes:

**MANUAL 1/2/3:** Your individual mode stored in memory. See "Creating Your Own Sound Mode" Manual Mode.

**OFF:** Cancels the sound mode.

• Surround elements are added to the SEA elements to create a being there feeling in your room.

When one of these modes is selected, the SOUND MODE indicator lights up as...

**SOUND MODE**

While one of the SEA modes (including manual modes (SEA elements without surround elements)) is selected, it lights up as...

**SOUND MODE**

## Creating Your Own Sound Mode — Manual Mode

You can change SEA pattern to suit your preference. These changed settings can be stored in the MANUAL, 1, 2, and 3 modes.

• There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

• If you want to add the surround elements in your SEA pattern, select one of the surround modes (D.C.LUB, HALL, or STADIUM) before starting the procedure below.

### On the unit ONLY:

**1 Press and hold SEA CONTROL until "SEA CONT" appears on the display.**

**SEA CONT**

**LOW TO**

Current level appears.

**SEA CONT**

**LOW TO**

Current level appears.

**SEA CONT**

**LOW TO**

Current level appears.

**SEA CONT**

**LOW TO**

Current level appears.

**SEA CONT**

**LOW TO**

Current level appears.

**SEA CONT**

**LOW TO**

Current level appears.

**SEA CONT**

**LOW TO**

Current level appears.

**SEA CONT**

**LOW TO**

Current level appears.

**SEA CONT**

**LOW TO**

Current level appears.

**SEA CONT**

**LOW TO**

Current level appears.



## Receiving FM Stations with RDS

RDS allows FM stations to send an additional signal along with their regular program signals. For example, the stations send their station names, as well as information about what type of program they broadcast, such as sports or music, etc.

When tuned to an FM station which provides the RDS service, the RDS indicator lights up on the display.

With the unit, you can receive the following types of RDS signals.

- PS (Program Service):**  
Shows commonly known station names.
- PTY (Program Type):**  
Shows types of broadcast programs.
- RT (Radio Text):**  
Shows text messages the station sends.
- EON (Enhanced Other Networks):**  
Provides the information about the types of the programs sent by other RDS stations.



**More about RDS**

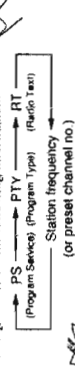
- Some FM stations and AM (MW/WW) stations do not provide RDS signals.
- RDS services vary among FM RDS stations. For details on RDS services in your area, check with local radio stations.
- RDS may not work correctly if the received station is not transmitting the signals properly or if the signal strength is weak.

### Changing the RDS Information

You can see RDS information on the display while listening to an FM station.

#### Press DISPLAY MODE.

Each time you press the button, the display changes to show the following information.



If no PS, PTY, or RT signals are sent by a station "NO PS", "NO PTY", or "NO RT" appears in the main display.



If the unit takes time to show the RDS information received from a station "WAIT PS", "WAIT PTY", or "WAIT RT" may appear on the display.

English

English

Continued

### Searching for Programs by PTY Codes (PTY Search)

One of the advantages of RDS is that you can locate a particular kind of program by specifying the PTY codes.

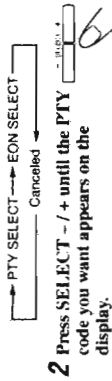
- For details on the PTY codes, see "Additional Information" on page 28.

To search for a program using the PTY codes REMEMBER you must preset FM RDS stations to use the EON function. If not yet done, see page 13.

There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

- Press PTY/EON until "PTY" and "SELECT" alternately appears on the display.

Each time you press the button, RDS operation mode changes as follows:



Each time you press the button, the PTY codes change as follows:

- NEWS
  - AFFAIRS
  - INFO
  - SPORT
  - EDUCATE
  - DRAMA
  - CULTURE
  - SCIENCE
  - VARIED
  - POP M
  - ROCK M
  - M.O.R. M
  - LIGHT M
  - CLASSICS
  - OTHER M
  - WEATHER
  - FINANCE
  - CHILDREN
  - SOCIAL A
  - RELIGION
  - JAZZ
  - PHONES IN
  - TRAVEL
  - LEISURE
  - OLDIES
  - COUNTRY
  - NATIONAL
  - TRAFFIC
  - FOLK M
  - DOCUMENT
  - TRAFFIC
- (back to the beginning)

- Press PTY/EON once again.

While searching, "SEARCH" and the selected PTY code alternate on the display. The unit searches 30 preset FM stations, stops when it finds the one you have selected ("FOUND" appears), and tunes in that station.

If no program is found, "NOT" and "FOUND" alternately appears on the display and the unit returns to the last received station.

To stop searching any time during the process Press PTY/EON while searching.

### Switching to a Program Type of Your Choice Temporarily

By receiving EON data sent by FM RDS stations, the EON function allows the unit to switch temporarily to a broadcast program of your choice (TA, NEWS, and INFO) from a different station.

The EON function only works when you are listening to a preset FM RDS stations providing EON data.

- The EON indicator lights while receiving a station with EON data.

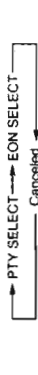
#### To activate the EON function

REMEMBER you must preset FM RDS stations to use the EON function. If not yet done, see page 13.

There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

- Press PTY/EON until "EON" and "SELECT" alternately appears on the display.

Each time you press the button, RDS operation mode changes as follows:

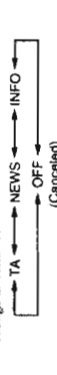


- Press SELECT - / + until the EON data type you want appears on the display.

The selected EON data type indicator also flashes.



Each time you press the button, the EON data types change as follows:



TA: Traffic announcement

NEWS: News

INFO: Program the purpose of which is to impart advice in the widest sense.

OFF: The EON function is canceled. The EON data type indicator (TA, NEWS, INFO) goes off.

- Press PTY/EON once again.

The EON data type indicator stops flashing and remains lit.

Now, the EON function is activated. See "How the EON function actually works."

### How the EON function actually works:

#### CASE 1

If there is no station broadcasting the program you have selected

The unit continues tuning in the current station.

When a station starts broadcasting the program you have selected, the unit automatically switches to the station. The indicator of received PTY code starts flashing.

When the program is over, "EON END" appears in the main display, and the unit goes back to the previously tuned station, but the EON function still remains activated.

#### CASE 2

If there is a station broadcasting the program you have selected

The unit tunes in the program. The indicator of received PTY code starts flashing.

When the program is over, "EON END" appears in the main display, and the unit goes back to the previously tuned station, but the EON function still remains activated.

#### CASE 3

If the FM station you are listening to is broadcasting the program you have selected

The unit continues to receive the station but the indicator of received PTY code starts flashing.

When the program is over, the indicator of received PTY code stops flashing and remains lit, but the EON function still remains activated.



#### More about the EON function

- EON data sent from some stations may not be compatible with this unit. In this case, the EON function may not work correctly.
- While listening to a program tuned in by the EON function, the station does not change even if another network station starts broadcasting a program of the same EON data.
- The EON function is canceled when you change the source to CD, TA/PTI, or AUX, while it is temporarily canceled when you change the source to AM.

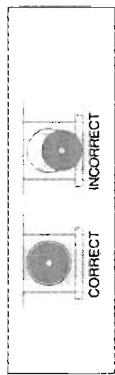
# Playing Back CDs

English English

Continued

## Loading CDs

- Press **▲** for the disc tray (CD 1 to 3) you want to load a CD onto. The unit automatically turns on and the disc tray comes out. The Powered Rolling Panel also opens automatically.
- Place a disc correctly on the circle of the disc tray, with its label side up.



- When using a CD single (8 cm), place it on the inner circle of the disc tray.
- Press the same **▲** you have pressed in step 1. The disc tray closes, and the corresponding disc number indicator (CD 1 to CD 3) lights up on the display.
  - Repeat steps 1 to 3 to place other CDs.

**notes** When loading more than one CD continuously when you press **▲** for the next tray you want to place another CD into, the first disc tray automatically closes, and then the next tray comes out.

**notes** About the disc indicators. Each disc indicator corresponds to the disc tray of the same number.

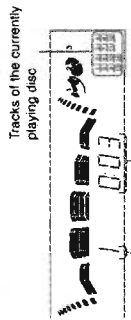


- The disc marker lights up for the disc number you have selected.
- The disc indicator flashes while the corresponding CD is being played.
- The disc indicator goes off when the unit has detected that there is no CD on the corresponding disc tray.

## Playing Back the Entire Disces — Continuous Play

You can play CDs continuously.

- Load CDs.
- Press one of the disc number buttons (CD 1, CD 2, and CD 3) for the disc you want to play. CD play starts from the first track of the selected disc.



- Pressing CD **▶/II** instead of the disc number buttons starts playing back if a CD is on the trays.

To stop during play, press **■**.

To remove the disc, press **▲** for the corresponding disc tray.

**notes** CD playback sequence. When 3 CDs are loaded on the disc trays, they are played in one of the following sequences.

- When CD 1 is pressed: CD 1 → CD 2 → CD 3 (then stops)
- When CD 2 is pressed: CD 2 → CD 1 → CD 1 (then stops)
- When CD 3 is pressed: CD 3 → CD 1 → CD 2 (then stops)
- When only 2 CDs are loaded, they are played in the same order, but the disc tray without a CD is skipped.

## Basic CD Operations

While playing a CD, you can do the following operations.

**To exchange CDs during playback of another**  
Press **▲** corresponding to a CD not playing or selected currently, to eject and exchange the CD. If you exchange CDs during play, the current play will not stop until all CDs you have exchanged are played.

**To stop play for a moment**  
Press CD **▶/II**. While pausing, the elapsed playing time flashes on the display.  
To resume play, press CD **▶/II** again.

**To locate a particular point in a track**  
During play, press and hold **◀◀** or **▶▶**.

- ◀◀**: Fast reverses the disc.
- ▶▶**: Fast forwards the disc.

When using the remote control, press and hold **◀◀/▶▶** or **▶▶/◀◀**.

- Press one of the disc number buttons (CD 1, CD 2, and CD 3) repeatedly before or during playback.
- Press **▶▶** or **◀◀** repeatedly before or during current or previous tracks.
- Press **▶▶** to the beginning of the next or succeeding tracks.

When using the remote control, press **▶▶/▶▶** or **▶▶/▶▶** before playing.

**notes** If you press and hold **▶▶/▶▶** or **▶▶/▶▶** or **▶▶/▶▶** or **▶▶/▶▶** before playing, you can change the tracks continuously.

**To go to another track directly using the number buttons**  
Pressing the number button(s) before or during play allows you to start playing the track number you want.

Ex.: For track number 5, press 5.  
For track number 15, press +10, then 5.  
For track number 20, press +10, then 10.  
For track number 32, press +10, +10, +10, then 2.

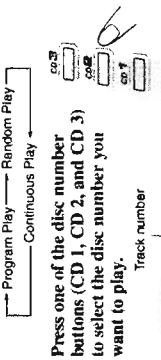
## Programming the Playing Order of the Tracks — Program Play

You can arrange the order in which the tracks play before you start playing. You can program up to 32 tracks.

- To use Repeat play (see page 18) for Program play, press REPEAT after starting Program play.

- Load CDs.
  - If the current playing source is not the CD player, press CD **▶/II**, then **■** before going to the next step.
- Press PROGRAM/RANDOM repeatedly until "PROGRAM" appears on the display.
  - If a program has been stored in memory, the program is called up.

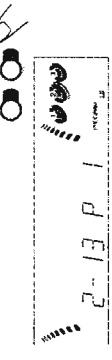
Each time you press the button, CD play mode changes as follows:



- Press one of the disc number buttons (CD 1, CD 2, and CD 3) to select the disc number you want to play.

**4 Select a track from the CD selected in the above step.**  
On the unit, Press **▶▶** or **▶▶** to select the track number, then press SFT.

**On the remote control: Press the number buttons.**  
For how to use the number buttons, see "To go to another track directly using the number buttons," described to the left.



- Program other tracks you want.
  - To program tracks from the same disc, repeat step 4.
  - To program tracks from a different disc, repeat steps 3 and 4.

**6 Press CD ▶/II.**  
The tracks are played in the order you have programmed.

To stop during play, press **■**.

To exit from Program play mode, press PROGRAM/RANDOM repeatedly before or after play so that the unit enters another play mode. (The program you have made is stored in memory until you turn off the unit or erase the program.)

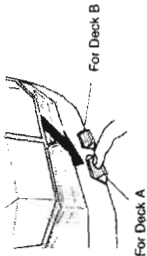


## Playing Back Tapes

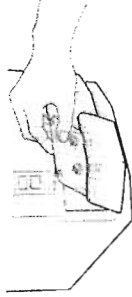
You can play back type I, type II, and type IV tapes without changing any settings.

### Playing Back a Tape

**1 Press EJECT (▲) for the deck you want to use.**



**2 Put a cassette in, with the exposed part of the tape down.**



English

To exit from **Random play mode**, press PROGRAM/RANDOM repeatedly again before or after play so that the unit enters another play mode.

**Notes** Even if you press ◀ or ▶ on the remote control, you cannot go back to the previous tracks during Random play.

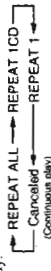
- If you press ▶▶▶ (or ◀◀◀) on the remote control, you can go to next random tracks.

### Repeating Tracks or CDs — Repeat Play

You can have all the CDs, the program or the individual track currently playing repeat as many times as you like.

To repeat play, press REPEAT during or before playing. To use Repeat play for Program play and Random play, press the button after starting playback.

- Each time you press the button, Repeat play mode changes as follows, and the following indicator lights up on the display:



**REPEAT ALL:** Repeats all the tracks on all the CDs (continuously or at random), or all the tracks in the program.

**REPEAT 1CD\*** Repeats all the tracks on one CD.

**REPEAT 1:** Repeats one track on one CD.

**REPEAT 1CD is not used for Program play and Random play.**

To cancel Repeat play, press REPEAT repeatedly until the REPEAT indicator REPEAT ALL, REPEAT 1CD, or REPEAT 1 goes off from the display.

- Repeat play is also cancelled when you select Program play or Random play.

### Prohibiting Disc Ejection — Tray Lock

You can prohibit CD ejection from the unit and can lock discs.

- This operation is possible only using the buttons on the unit.

To prohibit disc ejection, press ▲ for any disc tray while holding ■ (if there is any disc tray opened, close it first). "LOCKED" appears for a while, and the loaded CDs are locked.

To cancel the prohibition and unlock the CDs, press ▲ for any disc tray while holding ■. "UNLOCKED" appears for a while, and the loaded CDs are unlocked.

**Notes** If you try to eject CDs "LOCKED" appears to inform you that the Tray Lock is in use.

To check the program contents Before play, you can check the program contents by pressing ◀◀/▶▶ or ▶▶/◀◀ on the remote control.

- ▶▶/▶▶: Shows the programmed tracks in the programmed order.
- ◀◀/▶▶: Shows them in the reverse order.

### To modify the program

Before play, you can erase the programmed tracks shown on the display by pressing CANCEL.

- Each time you press the button, the programmed track shown on the display is erased from the program.

To add tracks in the program before play, simply select the track numbers you want to add by following step 4 of the programming procedure on page 17.

To erase the entire program before or after play, press ■.

"PROGRAM" appears on the display.

- Ejecting a CD will also erase the track numbers programmed from the ejected CD.

**Notes** If you try to program a 3rd step "FULL" will appear on the display.

**Notes** If your entry is ignored With have tried to program a track from an empty tray, or a track number that does not exist on the CD (for example, selecting track 14 on a CD that only has 12 tracks). Such entries are ignored.

### Playing at Random — Random Play

The tracks of all loaded CDs will play at random.

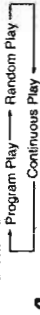
- To use Repeat play for Random play, press REPEAT after starting Random play.

### 1 Prepare CDs.

- If the current playing source is not the CD player, press CD▶/■, then ■ before going to the next step.

**2 Press PROGRAM/RANDOM repeatedly until "RANDOM" appears on the display.**

Each time you press the button, CD play mode changes as follows:



### 3 Press CD▶/■.

The tracks are played at random. Random play ends when all the tracks are played once.

To stop during play, press ■.

- Random play also stops when one of the disc trays is opened.

To play both sides repeatedly — Reverse Mode Reverse Mode works for both decks at the same time. When it is in use, the tape automatically reverses at the end of a side and the unit starts playing the other side of the tape, and repeats the same process.

To use Reverse Mode, press REVERSE MODE so that the Reverse Mode indicator on the display lights up like --- (◀▶).

To cancel Reverse Mode, press the button again so that the Reverse Mode indicator on the display lights up like --- (▶◀).

**Notes** When Reverse Mode is on with cassettes in both decks After the reverse (▶) side of the tape finishes playing, the tape in the other deck starts playing.

### Locating the Beginning of a Song — Music Scan

You can use Music Scan to locate the beginning of a song. Music Scan searches for blank portions that usually separate recorded songs, then plays the next song.

### To find the beginning of the current song

During play, press ◀◀/▶▶ (◀◀/▶▶ or ▶▶/◀◀) on the remote control in the opposite direction to the tape play.

The tape direction indicator of the opposite direction to the tape play starts flashing slowly and quickly alternately.

Searching stops automatically at the beginning of the current song, and the current song starts automatically.

### To find the beginning of the next song

During play, press ▶▶/◀◀ (▶▶/◀◀ or ◀◀/▶▶) on the remote control in the same direction as the tape play.

The tape direction indicator of the same direction as the tape play starts flashing slowly and quickly alternately. Searching stops automatically at the beginning of the next song, and the next song starts automatically.

**Notes** Music Scan works by detecting a 4-second long blank between each song, so it will not work well in the following cases

- No blank at the beginning of a song.
- Noise (often caused by much use or poor quality dubbings) which fills the blank.
- Long, very soft passages or pauses in a song.


**Notes** The use of the C-120 or thinner tape is not recommended, since characteristic deterioration may occur and this tape easily jams in the pinch-rollers and the capstans.

English



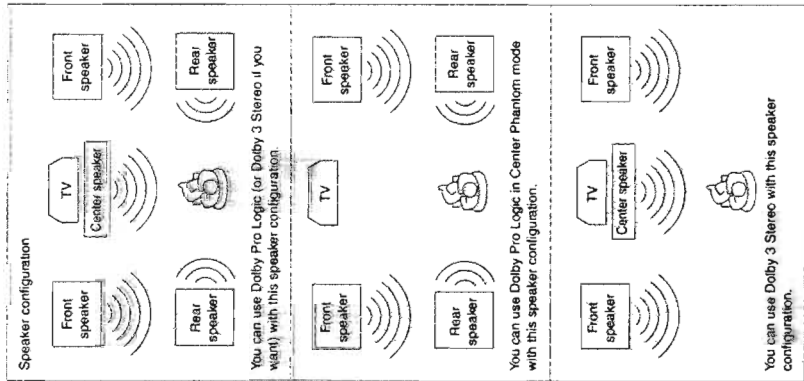


## Using Dolby Surround

Dolby Surround has been developed to reproduce the important elements of the acoustic surround at home. To listen to the sound of video software bearing the mark  3 which includes the same encoded surround information as found in Dolby Stereo films, the unit can provide you with Dolby Surround decoder.

This unit features two ways to decode a Dolby Surround encoded signal, **Dolby Pro Logic** and **Dolby 3 Stereo**. **Dolby Pro Logic** can be used when the front speakers and rear speakers are connected to this unit (regardless of the center speaker connection).

**Dolby 3 Stereo** can be used when left, center, and right speakers are connected, but no rear speaker is used.



English

English

Continued

### Preparing for Dolby Surround

Once you have finished adjustments for Dolby Surround, you can use the same adjustments every time you want to use each Dolby Surround mode. • Dolby Pro Logic and Dolby 3 Stereo.

#### On the remote control ONLY:

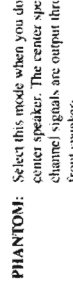
- 1 Press and hold **SHIFT** until the following procedure is finished.
- 2 Press **PRO LOGIC** or **3 STEREO** whichever you want to use.
  - The PRO LOGIC or 3 STEREO indicator lights up on the display.
  - Each time you press the button, the indicator turns on and off. (Respective Dolby Surround also turns on and off.)



- When Dolby Surround is activated, the sound mode is canceled temporarily.

#### 3 Press CENTER MODE: repeatedly to select the proper center mode.

- Each time you press the button, the center mode changes as follows.



**PHANTOM:** Select this mode when you do not use a center speaker. The center speaker channel signals are output through the front speakers.

**NORMAL:** Select this mode when the center speaker cannot reproduce the bass better than the front speakers. The bass portions of the center channel signals are output through the front speakers. Select this mode when the center speaker can reproduce the bass better than the front speakers. All signals of the center channel are output through the center speaker. Select this mode when shut off the center channel signals.

**WIDE:**

**OFF:**

\* Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY, the double-D symbol, and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

#### 4 ONLY FOR "PRO LOGIC"

Press **DELAY TIME** repeatedly to select the proper delay time of the rear speaker output.

- Each time you press the button, the delay time changes as follows.



**DELAY1:** Select this when the distance from you to your rear speakers is greater than that to the front speakers.

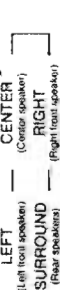
**DELAY2:** Select this when the distance from you to your rear speakers is almost equal to that to the front speakers.

**DELAY3:** Select this when the distance from you to your rear speakers is less than that to the front speakers.

**DELAY4:** Select this when the distance from you to your rear speakers is much less than that to the front speakers.

#### 5 Press TEST TONE to check the speaker output balance.

A test tone comes out of the speakers in the following order:



- "CENTER" does not appear when selecting "PHANTOM" or "OFF" for the center mode, and no test tone comes out of the center speaker.

#### 6 Press VOLUME +/- to adjust the test tone volume to a proper level.

If necessary, adjust the speaker output balance so that the output level from center and rear speakers is almost equal to that from the front speakers:

To adjust the center speaker output level (from -10 to +10), press **CENTER LEVEL** +/-.

You cannot adjust the center speaker output level when you select "PHANTOM" or "OFF" for the center mode.

To adjust the rear speaker output level (from -10 to +10), press **REAR LEVEL** +/-.

- You cannot adjust the right and left speaker output levels separately.
- You cannot adjust the rear speaker output level when using Dolby 3 Stereo.

#### 8 Press TEST TONE again to stop the test tone.

#### 9 Release SHIFT.

#### Enjoying Playback with Dolby Surround

You can use the settings you have already stored in memory.

#### On the unit:

#### 1 Press PRO LOGIC / 3 STEREO to select the Dolby Surround mode you want.

The PRO LOGIC or 3 STEREO indicator lights up on the display.

- Each time you press the button, the Dolby Surround mode changes as follows:



- When Dolby Surround is activated, the sound mode is canceled temporarily.

#### 2 Select and play a sound source encoded with Dolby Surround (with the mark).

To cancel the Dolby Surround mode, press **PRO LOGIC / 3 STEREO** repeatedly until neither PRO LOGIC nor 3 STEREO indicator remains lit on the display.

#### On the remote control:

#### 1 Press and hold SHIFT until the following procedure is finished.

#### 2 Press PRO LOGIC or 3 STEREO whichever you want to use.

The PRO LOGIC or 3 STEREO indicator lights up on the display.

- When Dolby Surround is activated, the sound mode is canceled temporarily.

#### 3 Select and play a sound source encoded with Dolby Surround (with the mark).

To cancel the Dolby Surround mode, press **PRO LOGIC** or **3 STEREO** (the same button you have pressed to activate Dolby Surround in step 1 above) so that neither PRO LOGIC nor 3 STEREO indicator remains lit on the display.

# Recording

Continued

## IMPORTANT:

- It may be unlawful to record or play back copyrighted material without the consent of the copyright owner.
- The recording level is automatically set correctly, so it is not affected by the VOLUME control. Thus, during recording you can adjust the sound you are actually listening to without affecting the recording level.
- While recording, you can hear sound mikes and/or the Signal Adaptive Bass effect through the speakers or headphones. However, the sound is recorded without these effects (see page 11).
- If recordings you have made have excessive noise or static, the unit may be too close to a TV. Increase the distance between the TV and the unit.
- You can use type I and II tapes for recording.

### To protect your recording

Cassettes have two small tabs on the back to protect unexpected erasure or re-recording. To protect your recording, remove these tabs. To re-record on a protected tape, cover the holes with adhesive tape.



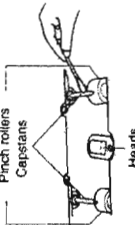
When using type II tape, be careful not to cover the holes used to detect the tape type.

### To keep the best recording and playback sound quality

- If the heads, capstans, and pinch rollers of the cassette decks become dirty, the following will occur:
  - Impaired sound quality
  - Discontinuous sound
  - Fading
  - Incomplete erasure
  - Difficulty in recording

### To clean the heads, capstans, and pinch rollers

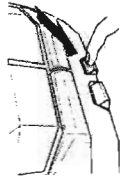
Use a cotton swab moistened with alcohol.



**To demagnetize the heads**  
Turn off the unit, and use a head demagnetizer (available at electronics and record shops).

## Recording Tapes on Deck B

1 Press EJECT for the deck B.



2 Put in a recordable cassette, with the exposed part of the tape down.

3 Close the cassette holder gently.

4 Check the tape direction of deck B.

- If the tape direction is not correct, press TAPE twice then to change the tape direction.

5 Start playing the source — FM, AM\*, CD player, deck A, or auxiliary equipment connected to AUX jacks.

- When the source is CD, you can also use CD Direct Recording (see page 23) and Auto Edit Recording (see page 24).
- When the source is deck A, you can also use the dubbing method. (See "Dubbing Tapes" on page 23.)
- See "To record an AM (MW/LW) station — Beat Cut" on page 23.

6 Start recording.

**On the unit:**  
Press REC START/STOP.



The indicator lights up on the display and recording starts.

**On the remote control:**



1) Press REC PAUSE.

The indicator starts flashing on the display.



2) Press TAPE.

The indicator stops flashing and remains lit, and recording starts.

To stop during recording, press REC START/STOP again (or on the remote control).

To stop recording temporarily (except when the playback source is deck A), press REC PAUSE on the remote control.

To resume recording, press TAPE for deck B.

To record on both sides — Reverse Mode

Press REVERSE MODE so that the Reverse Mode indicator lights up as.

- When using the Reverse Mode for recording, start recording in the forward direction first. Otherwise, recording will stop when recording is done only on one side (reverse) of the tape.

To cancel Reverse Mode, press the button again so that the Reverse Mode indicator lights up as.

To record an AM (MW/LW) station — Beat Cut

While recording an AM (MW/LW) broadcast, beats may be heard (which are never heard when listening to the broadcast without recording it).

If this occurs, press PROGRAM/RANDOM repeatedly, while recording, until the beats are reduced.

- Each time you press the button, the display changes to show the following:



## Dubbing Tapes

It is preferable that the tape type (type I or II) you record from be the same as the tape type you record onto when dubbing tapes.

- Press TAPE, then.
- Put the source cassette in deck A, and a recordable cassette into deck B.

- Put the cassettes in both decks so that the tapes will run in the forward direction.

3 Press DUBBING.



To stop during dubbing, press.

To remove the cassette, press EJECT for deck A and EJECT for deck B.

To record on both sides — Reverse Mode

Press REVERSE MODE so that the Reverse Mode indicator lights up as.

To cancel Reverse Mode, press the button again so that the Reverse Mode indicator lights up as.

## CD Direct Recording

Everything on the CD goes onto the tape in the order it is on the CD, or according to the order you have made for Program play.

- Put a recordable cassette into deck B.
- Place a disc correctly on the circle of the disc tray, with its label side up.
- Press one of the disc number buttons (CD 1 to CD 3) to select the disc, then.



4 Press CD REC START.

"CD REC" appears, and the indicator lights up on the display.

Deck B starts recording and the CD player starts playing.

When the recording is done, "CD REC FINISHED" appears on the display, and the CD player and deck B stop.

To stop during CD Direct Recording, press.

To remove the cassette, press EJECT for deck B.

To record on both sides — Reverse Mode

Press REVERSE MODE so that the Reverse Mode indicator lights up as.

- When using the Reverse Mode for CD Direct Recording, start recording in the forward direction first. When the tape reaches its end while recording a song in the forward direction, the last song will be recorded at the beginning of the reverse side.

If you start recording on the reverse side, recording will stop when recording is done only on one side (reverse) of the tape.

To cancel Reverse Mode, press the button again so that the Reverse Mode indicator lights up as.

## Using the Timers

There are three timers available: Recording Timer, Daily Timer, and Sleep Timer. Before using the timers, you need to set the clock built in the unit. (See page 10.)

### Using Daily Timer

With Daily Timer, you can wake to your favorite music or radio program.

#### How Daily Timer actually works

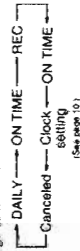
The unit automatically turns on, sets the volume level to the preset level, and starts playing the specified source when the on-time comes (the indicator flashes just before the on-time, and continues flashing while the timer is operating). Then, when the off-time comes ("OFF" flashes just before the off-time), the unit automatically turns off (stands by). The timer setting remains in memory until you change it. There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

- If you have made a mistake while setting timer, press CANCEL. (However, this does not always work. If CANCEL does not work, press TIMER/CLOCK repeatedly and start from step 1 again.)

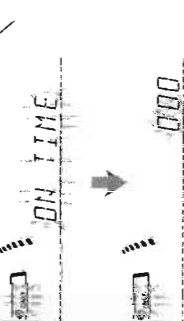
#### On the unit ONLY:

- 1 Press TIMER/CLOCK until "DAILY" appears on the display.

The DAILY indicator also starts flashing on the display. Each time you press the button, the timer setting mode change as follows:



- 2 Press TIMER/CLOCK again. "ON TIME" appears for 2 seconds, then the unit enters on-time setting mode.



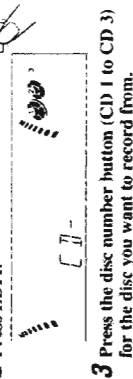
### Auto Edit Recording

By using Auto Edit Recording, you can record the CD tracks to fit the tape. Auto Edit Recording makes a program by selecting the CD tracks in numerical order. However, to prevent the end of the last track on the front side from being cut off, the last track is selected so as to fit on the remaining tape length.

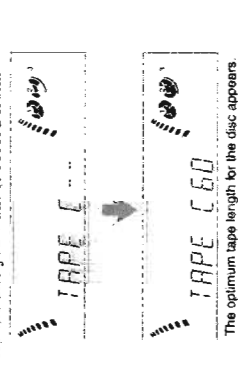
#### On the unit ONLY:

- 1 Place a disc correctly on the circle of the disc tray, with its label side up.
  - If the current playing source is not the CD player, press CD > then before going to the next step.

- 2 Press EDIT.



- 3 Press the disc number button (CD 1 to CD 3) for the disc you want to record from.

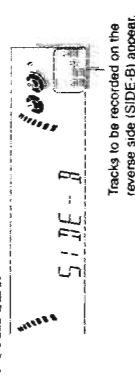


The optimum tape length for the disc appears.

#### To change the tape length manually

If the tape length selected is not satisfactory, you can change the tape length by pressing or . You can select the tape length among the following — 40, 46, 50, 54, 60, 64, 70, 74, 80, 84, and 90.

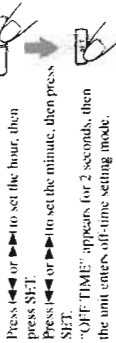
- 4 Press SET.



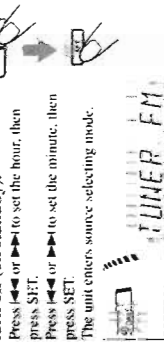
Tracks to be recorded on the reverse side (SIDE-B) appear.

- Each time you press the button, the tracks to be recorded on the front side (SIDE-A) and on the reverse side (SIDE-B) alternate.

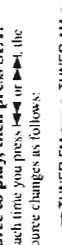
- 3 Set the on-time you want the unit to turn on.
  - 1) Press or to set the hour, then press SET.
  - 2) Press or to set the minute, then press SET.



- 4 Set the off-time you want the unit to turn off (on standby).
  - 1) Press or to set the hour, then press SET.
  - 2) Press or to set the minute, then press SET.



- 5 Press or to select the source to play, then press SET.
  - Each time you press or , the source changes as follows:



TUNER FM: tunes into a specified preset FM station. → go to step 6.  
 TUNER AM: tunes into a specified preset AM (MW/LW) station. → go to step 6.  
 - CD ---: plays a disc from a specified track of a specified disc. → go to step 6.

TAPE: Make sure there is a CD on the selected disc number/tray.  
 plays a tape in deck A or B. → go to step 7.

AUX: Make sure that a tape is in the deck whose deck indicator (A or B) is lit on the display.  
 Make sure that the tape direction is correct.  
 plays an external source. → go to step 7.

• To use this setting, the external component has to be equipped with the timer function.

English

English



- 5 Put a recordable cassette of appropriate length into deck B.

- 6 Press REVERSE MODE so that the Reverse Mode indicator lights up as .
  - Without turning on the Reverse Mode (CD), recording will stop when the front side of the tape is recorded.

The indicator lights up on the display. Deck B starts recording then, about 10 seconds later, the CD player starts playing. When the recording is done, "CD REC FINISHED" appears on the display, and the CD player and deck B stop.

- If a tape has not been rewound, deck B will rewind the tape before it starts recording.
- A 10-second blank portion is automatically created at the beginning of each side of the tape.

To stop during Auto Edit Recording, Press or REC START/STOP so that a 4-second blank portion is created on the recorded tape. (Remember a 4-second blank is important when using Music Scan — see page 19.)

To cancel Auto Edit Recording, Press PROGRAM/RANDOM before or after play. (The unit enters Program, Random, or Continuous Play mode.)

- Press for the disc you have selected.

To remove the cassette, press EJECT for deck B.

**Using Recording Timer**

With Recording Timer, you can make a tape of a radio broadcast automatically.

**How Recording Timer actually works**

The unit automatically turns on, tunes into the specified station, sets the volume level to "1", and starts recording when the on-time comes (the indicator flashes just before the on-time, and continues flashing while the timer is operating). Then, when the off-time comes ("OFF" appears just before the off-time), the unit automatically turns off (stands by).  
 • The timer setting remains in memory until you change it.  
 • There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.  
 • If you have made a mistake while setting the timer, press CANCEL. (However, this does not always work. If CANCEL does not work, press TIMER/CLOCK repeatedly and start from step 1 again.)

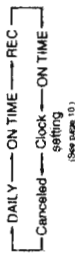
**On the unit ONLY:**

**1 Put a recordable cassette into deck B.**

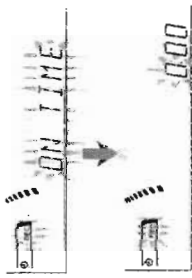
**2 Press TIMER/CLOCK until "REC" appears on the display.**  
 The REC indicator also starts flashing on the display.



• Each time you press the button, the timer setting modes change as follows:



**3 Press TIMER/CLOCK again.**  
 "ON TIME" appears for 2 seconds, then the unit enters on-time setting mode.



**6 When selecting "CD" or "FM" or "TUNER AM"**

- Press or to select the disc number, then press SET.
- Press or to set the track number, then press SET.

The unit enters volume setting mode.

**When selecting "TUNER FM" or "TUNER AM"**

Press or to select the preset station number, then press SET.

The unit enters volume setting mode.

**7 Press or to set the volume level.**

• You can select the volume level from among four levels. If you select "VOL ----", the volume is set to the last level when the unit has been turned off.



**8 Press SET to complete the Daily Timer setting.**

The DAILY indicator stops flashing and remains lit. The settings you have done are shown on the display in sequence.

**9 Press to turn off the unit (on standby) if you have set the Daily Timer with the unit turned on.**

To turn on or off Daily Timer after its setting is done

- Press TIMER/CLOCK repeatedly until "DAILY" appears on the display.
- To turn off the Daily Timer, press CANCEL. The DAILY indicator goes off from the display. The Daily Timer is canceled, but the setting for the Daily Timer remains in memory.
- To turn on the Daily Timer, press SET. The DAILY indicator lights up on the display. The settings you have done are shown on the display in sequence for your confirmation.

If the unit is turned on when the timer-on time comes Daily Timer does not work.

**Using Sleep Timer**

With Sleep Timer, you can fall asleep to music. You can set Sleep Timer when the unit is turned on.

**How Sleep Timer actually works**

The unit automatically turns off after the specified time length passes.

**On the remote control ONLY:**

- Press SLEEP.**  
 The time length until the shut-off time appears and the SLEEP indicator starts flashing on the display.  
 • Each time you press the button, the time length changes as follows:  
 10 → 20 → 30 → 40 → 50 → 60 → 90 → 120

**2 Wait for about 5 seconds after specifying the time length.**

The SLEEP indicator stops flashing and remains lit.

To check the remaining time until the shut-off time, press SLEEP once so that the remaining time until the shut-off time appears for about 5 seconds.

To change the shut-off time, press SLEEP repeatedly until the desired time length appears on the display.

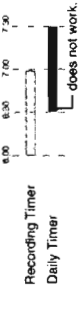
To cancel the setting, press SLEEP repeatedly so that the SLEEP indicator goes off.  
 • Sleep Timer is also canceled when you turn off the unit.

**Timer Priority**

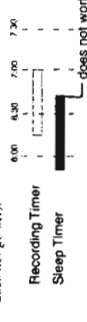
Since each timer can be set separately, you may wonder what happens if the setting for these timers overlaps. Here are examples.

- Recording Timer has priority over Daily Timer and Sleep Timer.

If Daily Timer is set to come on while Recording Timer is operating, Daily Timer will not come on at all.



If Recording Timer is set to come on while Sleep Timer is operating, Sleep Timer will not work (the SLEEP indicator does not go off).



## Additional Information

### Description of the PTY codes:

<b>NEWS:</b>	News
<b>AFFAIRS:</b>	Typical program expanding or enlarging upon the news - debate or analysis.
<b>INFO:</b>	Program the purpose of which is to impart advice in the widest sense.
<b>SPORT:</b>	Program concerned with any aspect of sports.
<b>EDUCATE:</b>	Educational programs.
<b>DRAMA:</b>	All radio plays and serials.
<b>CULTURE:</b>	Programs concerning any aspect of national or world culture, art, literature, drama, etc.
<b>SCIENCE:</b>	Programs about natural sciences and technology.
<b>VARIED:</b>	Used for mainly speech-based programs like quizzes, panel games and personality interviews.
<b>POP M:</b>	Edutainment music of current popular appeal.
<b>ROCK M:</b>	Rock music.
<b>M.O.R. M:</b>	Current contemporary music considered to be "easy listening".
<b>LIGHT M:</b>	Instrumental music, and vocal or choral works.
<b>CLASSICS:</b>	Performances of major orchestral works, symphonies, chamber music, etc.
<b>OTHER M:</b>	Music not fitting into any of the other categories.
<b>WEATHER:</b>	Weather reports and forecasts.

## Maintenance

To get the best performance of the unit, keep your discs, tapes, and mechanism clean.

### Handling discs

- Remove the disc from its case by holding it at the edge while pressing the center hole lightly.
- Do not touch the shiny surface of the disc, or bend the disc.
- Put the disc back in its case after use to prevent warping.

- Be careful not to scratch the surface of the disc when placing it back in its case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.

### To clean the disc

Wipe the disc with a soft cloth in a straight line from center to edge.



**DO NOT use any solvent — such as conventional record cleaner, spray, thinner, or benzine — to clean the disc.**

English

English



<b>FINANCE:</b>	Stock Market reports, consumer spending etc.
<b>CHILDREN:</b>	Programs targeted at a young audience.
<b>SOCIAL A:</b>	Programs about sociology, history, geography, psychology and society.
<b>RELIGION:</b>	Religious programs.
<b>PHONE IN:</b>	Invoking members of the public expressing their views, either by phone or at a public hearing.
<b>TRAVEL:</b>	Travel information.
<b>LEISURE:</b>	Programs about recreational activities.
<b>JAZZ:</b>	Jazz music.
<b>COUNTRY:</b>	Songs which originate from, or continue the musical tradition of the American Southern States.
<b>NATIONAL:</b>	Current popular music of the nation or region in that country's language.
<b>OLDIES:</b>	Music from the so-called "golden age" of popular music.
<b>P.B.K. M:</b>	Music which has its roots in the musical culture of a particular nation.
<b>DOCUMENT:</b>	Program concerning factual matters, presented in an investigative style.
<b>TRAFFIC:</b>	Traffic announcement.

**Classification of the PTY codes for some FM stations may be different from the above list.**



## Troubleshooting

If you are having a problem with your unit, check this list for a possible solution before calling for service. If you cannot solve the problem from the hints given here, or the unit has been physically damaged, call a qualified person, such as your dealer, for service.

Symptom	Cause	Action
No sound is heard.	Connections are incorrect or loose.	Check all connections and make sure they are correct. (See pages 6 to 9.)
Hard to listen to broadcast because of noise.	Antennas are disconnected.	Reconnect the antennas correctly and securely.
	The AM loop antenna is too close to the unit.	Change the position and direction of the AM loop antenna.
	The FM antenna is not properly extended and positioned.	Extend the FM antenna at the best position.
The disc sound is discontinuous.	The disc is scratched or dirty.	Clean or replace the disc. (See page 28.)
The disc may does not open or close.	The AC power cord is not plugged in.	Plug the AC power cord.
	Trays are locked.	Unlock the trays. (See page 18.)
The disc does not play.	The disc is placed upside down.	Place the disc with the label side up.
The cassette holders cannot be opened.	Power supply from the AC power cord has been cut off while the tape was running.	Turn on the unit.
Impossible to rewind.	Small tabs on the back of the cassette are removed.	Cover the holes with adhesive tape.
Operations are disabled.	The built-in microprocessor may malfunction due to external electrical interference.	Unplug the AC power cord and then plug it back in.
Unable to operate the unit from the remote control unit.	The path between the remote control unit and the remote receiver on the unit is blocked.	Remove the obstruction.
	The batteries are exhausted.	Replace the batteries.

### Handling cassette tapes

- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotating.
- If the tape is loose, it may get stretched, cut, or caught in the cassette.

- Be careful not to touch the tape surface.

- Avoid the following places to store the tape:
  - In dusty places
  - In direct sunlight or heat
  - In moist areas
  - Near a magnet





EN, GE, FR, NL, SP, IT



English



# Specifications

## Amplifier

### Output Power (IEC 268-3/DIN)

Front: 75 watts per channel, min. RMS, both channels driven into 6 ohms at 1 kHz with no more than 0.9% total harmonic distortion.  
Center: 25 watts, min. RMS, driven into 8 ohms at 1 kHz with no more than 0.9% total harmonic distortion.  
Rear: 12.5 watts per channel, min. RMS, both channels driven into 16 ohms at 1 kHz with no more than 0.9% total harmonic distortion.  
Audio input sensitivity/impedance (at 1 kHz)  
AUX: 400 mV/50 kohms

### Audio output level:

AUX: 270 mV

### Digital output, CD/OPTICAL, DIGITAL OUTPUT

Signal wave length: 660 nm

Output level: -21 to -15 dBm

### Speakers/Impedance:

Front: 6 - 16 ohms

Center: 8 - 16 ohms

Rear: 16 - 32 ohms

## Tuner

FM tuning range: 87.50 - 108.00 MHz

AM tuning range: MW: 532 - 1,629 kHz

LW: 144 - 288 kHz

## CD player

CD Capacity: 3 CDs

Dynamic range: 85 dB

Signal-to-noise ratio: 90 dB

Wow and flutter: Inmeasurable

## Cassette deck

### Frequency response

Normal (Type I): 50 - 14,000 Hz

CrO<sub>2</sub> (Type II): 50 - 14,000 Hz

Metal (Type IV): 50 - 14,000 Hz (only for playback)

Wow and flutter: 0.15% (WRMS)

## General

Power requirement: AC 230V ~, 50 Hz

Power consumption: 140 watts (at operation)

14 watts (at standby mode)

Dimensions (approx.): 265 x 315 x 341 mm (W/H/D)

(10 3/8 x 12 1/8 x 13 3/8 in.)

Mass (approx.): 9.5 kg (20.9 lbs)

## Supplied accessories

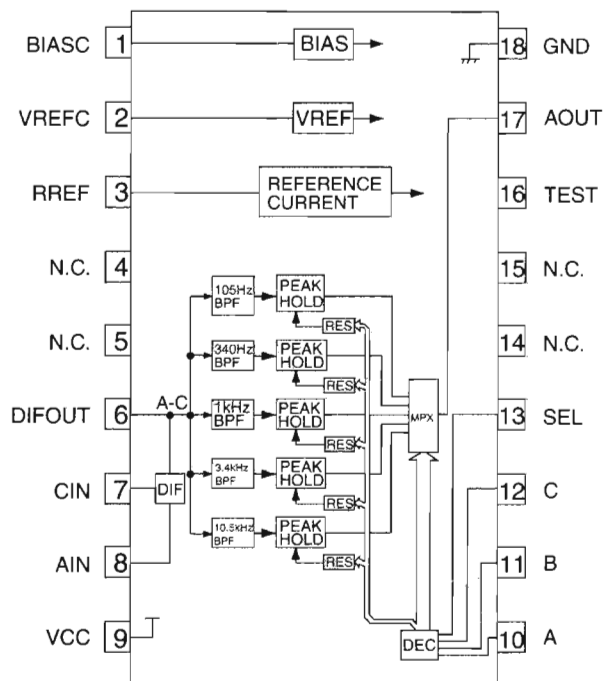
See page 6.

Design and specifications are subject to change without notice.

# Description of Major IC's

## ■ BA3835S (IC542) : SPI BPF

### 1. Block Diagram



### 2. Pin Function

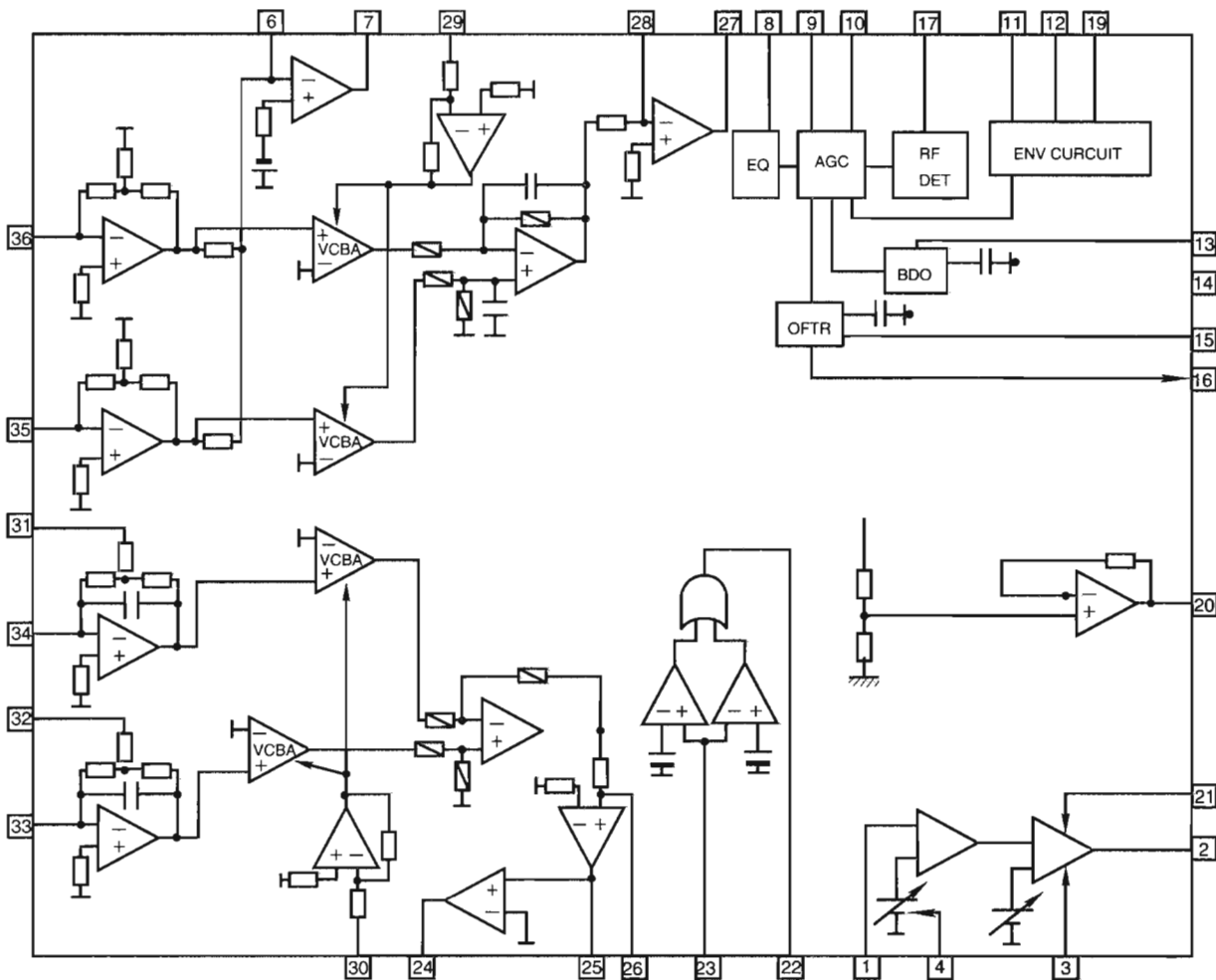
No.	Symbol	I/O	Function
1	BIASC	-	Decoupling condenser connection terminal.
2	VREFC	-	Decoupling condenser connection terminal.
3	RREF	-	Reference resistance connection terminal.
4	NC	-	Non connect.
5	NC	-	Connected to GND of audio system through a condenser.
6	DIF OUT	-	Non connect.
7	CIN	-	Connected to GND of audio system through a condenser.
8	AIN	I	Inputs the audio signal through a condenser.
9	VCC	-	Power supply terminal.
10	SPI-A	O	Output selection control terminal.
11	SPI-B	O	Output selection control terminal.
12	SPI-C	O	Output selection control terminal.
13	SPICSB	O	Output selection control terminal.
14	NC	-	Non connect.
15	NC	-	Non connect.
16	TEST	-	Connected to GND upon normal use.
17	AOUT	O	Multi-plexor output terminal.
18	GND	-	Connect to GND.

■ AN8806SB (IC601) : RF & Servo AMP

1. Terminal Layout

PD	1	36	PDAC
LD	2	35	PDBD
LDON	3	34	PDF
LDP	4	33	PDE
VCC	5	32	PDER
RF-	6	31	PDFR
RF OUT	7	30	TBAL
RF IN	8	29	FBAL
C.AGC	9	28	EF-
ARF	10	27	EF OUT
C.ENV	11	26	TE-
C.EA	12	25	TE OUT
CS BDO	13	24	CROSS
BDO	14	23	TE BPF
CS BRT	15	22	VDET
OFTR	16	21	LD OFF
/NRFDET	17	20	VREF
GND	18	19	ENV

2. Block Diagram





## 3. Functions

Pin No.	Symbol	I/O	Functions and operations
1	PD	I	APC amp input terminal
2	LD	O	APC amp output terminal
3	LD ON	I	APC ON/OFF control terminal
4	LDP	-	Connect to ground
5	VCC	-	Power supply
6	RF-	I	Inverse input pin for RF amp
7	RF OUT	O	RFamp output
8	RF IN	I	RF input
9	C.AGC	I/O	Connecting pin of AGC loop filter
10	ARF	O	RF output
11	C.ENV	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
12	C.EA	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
13	CS BDO	I/O	A capacitor is connected to detect the lower envelope of RF signal
14	BDO	O	BDO output pin
15	CS BRT	I/O	A capacitor is connected to detect the lower envelope of RF signal
16	OFTR	O	Of-track status signal output
17	/NRFDET	O	RF detection signal output
18	GND	-	Ground
19	ENV	O	Envelope output
20	VREF	O	Reference voltage output
21	LD OFF	-	Connect to ground
22	VDET	O	Vibration detection signal output
23	TE BPF	I	Input pin of tracking error through BPF
24	CROSS	O	Tracking error cross output
25	TE OUT	O	Tracking error signal output
26	TE-	I	Inverse input pin for tracking error amp
27	FE OUT	O	Output pin of focus error
28	FE-	I	Inverse input pin for focus error amp
29	FBAL	I	Focus balance control
30	TBAL	I	Tracking balance control
31	PDFR	I/O	F I-V amp gain control
32	PDER	I/O	E I-V amp gain control
33	PDF	I	I-V amp input
34	PDE	I	I-V amp input
35	PD BD	I	I-V amp input
36	PD AC	I	I-V amp input

### ■ MN101C23DBP3 (IC810) : System Controller

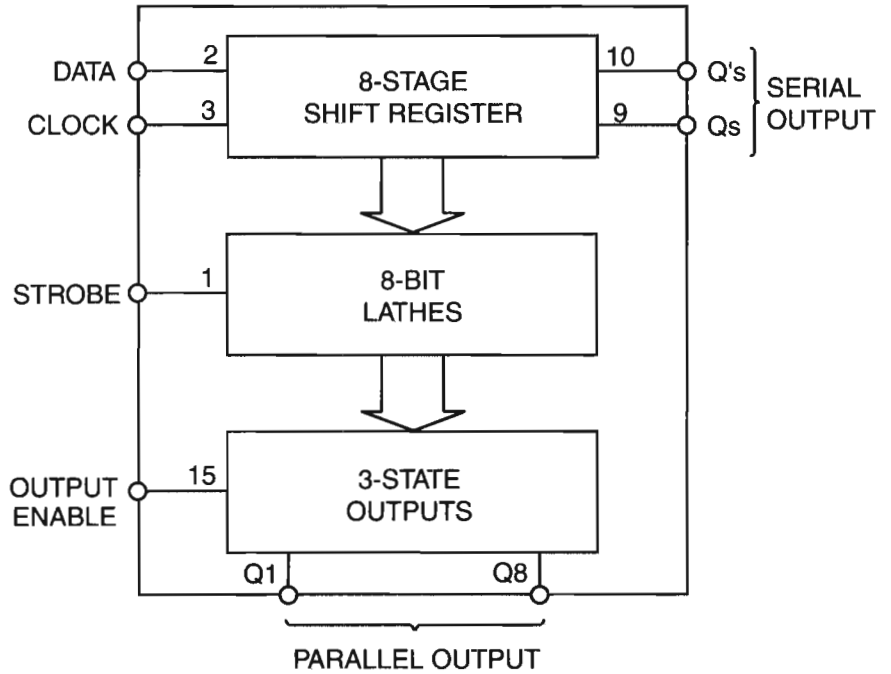
Pin No.	Symbol	I/O	Descriptions
1	KCMND	O	VC3 Serial data output
2	MSTAT	I	VC3 Status data input
3	KCLK	I	VC3 Serial clock input
4	DATAOUT	O	SLC/TUNER data output
5	DATAIN	I	SLC/TUNER data input
6	CK	O	SLC/TUNER clock signal output
7	BEAT	O	BEAT Cut signal output of TUNER
8	VDD	-	Power supply +5V
9,10	OSC2,1	I/O	Oscillation terminal (8MHz)
11	VSS	-	Connect to GND
12,13	XI,XO	I/O	Sub clock (32.768kHz)
14	MMOD	-	Connect to GND
15	VREF-	-	Connect to GND
16~19	KEY1~4	I	Key matrix input 1~4
20	SLCKEY1	I	Tape A playback detect switch
21	SLCKEY2	I	Tape B playback detect switch
22	SLCKEY3	I	Tape B playback/recording detect switch
23	SPIDTI	I	SPI data input
24	VREF+	-	Power supply +5V
25	MRDY	I	VC3 ready input
26	RESET	I	Reset signal input
27	PANEL OP	I	Moving panel open detection signal input
28	PANEL CL	I	Moving panel close detection signal input
29	LOAD DET	I	Overload detect signal input
30	MSI	I	MS Detector signal input
31	PROSACK	O	Clock signal output to IC406
32	PROSADA	I	Data input from IC406
33	REMIN	I	Remote control signal input
34	PHOTOA	I	Tape A mechanism running detection signal input
35	PHOTOB	I	Tape B mechanism running detection signal input
36	INH	I	Inhibit signal input
37	RDSCLK	I	Clock signal input from IC4
38	PRT	I	Protector input
39	RDS DATA	I	RDS data input from IC4
40	SPICSB	O	SPI Chip select signal output
41	OSDCLK	-	Not used
42~44	SPIC~A	O	SPI-C~A Data output to IC542
45,46	VOL+/-	I	Volume rotary encoder input (+/-)
47	MPX	I	Stereo detect
48	FVOLDA	O	Front volume data output
49	SLCCE	O	SLC Chip enable signal output to IC303,IC304
50	RVOLDA	O	Rear volume data output
51~59	G9~1	O	FL grid control signal output
60~89	P1~30	O	FL segment control signal output
90	SABCE	O	SA BASS Chip enable signal output
91	PROCE	O	ProLogic Chip enable signal output
92	DSPCE	O	DSP Chip enable signal output
93	EXTCE	O	EXT Chip enable signal output
94	VOLCK	O	Clock signal output to IC401
95	SMUTE	O	System mute control signal output
96	OSDCE	-	Not used
97	POUT	O	Power ON/OFF
98	TUCE	O	TUNER Chip enable signal output
99	VC3RESET	O	VC3 Reset output
100	VPP	-	Power supply

■ BU4094BCF (IC304,IC303) : Serial to Parallel Port Extension

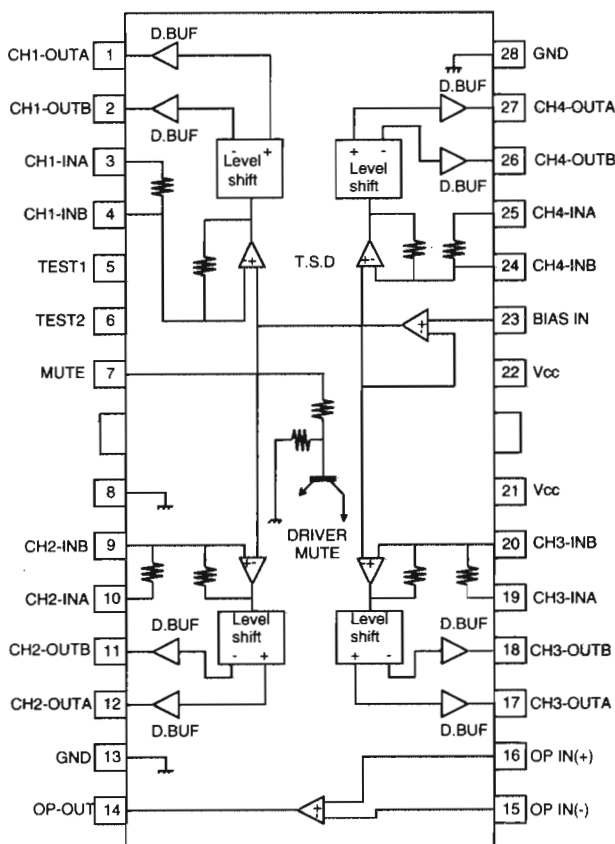
1. Terminal Layout

STOROBE	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

2. Block Diagram

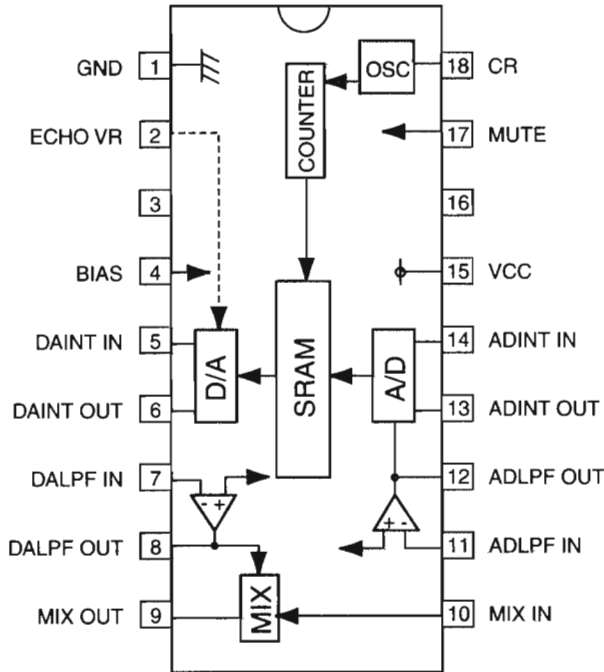


■ BA6897FP (IC801) : 4channel Driver



■ BU9253AS (IC902) : LPF & Echo Mix.

1. Terminal Layout

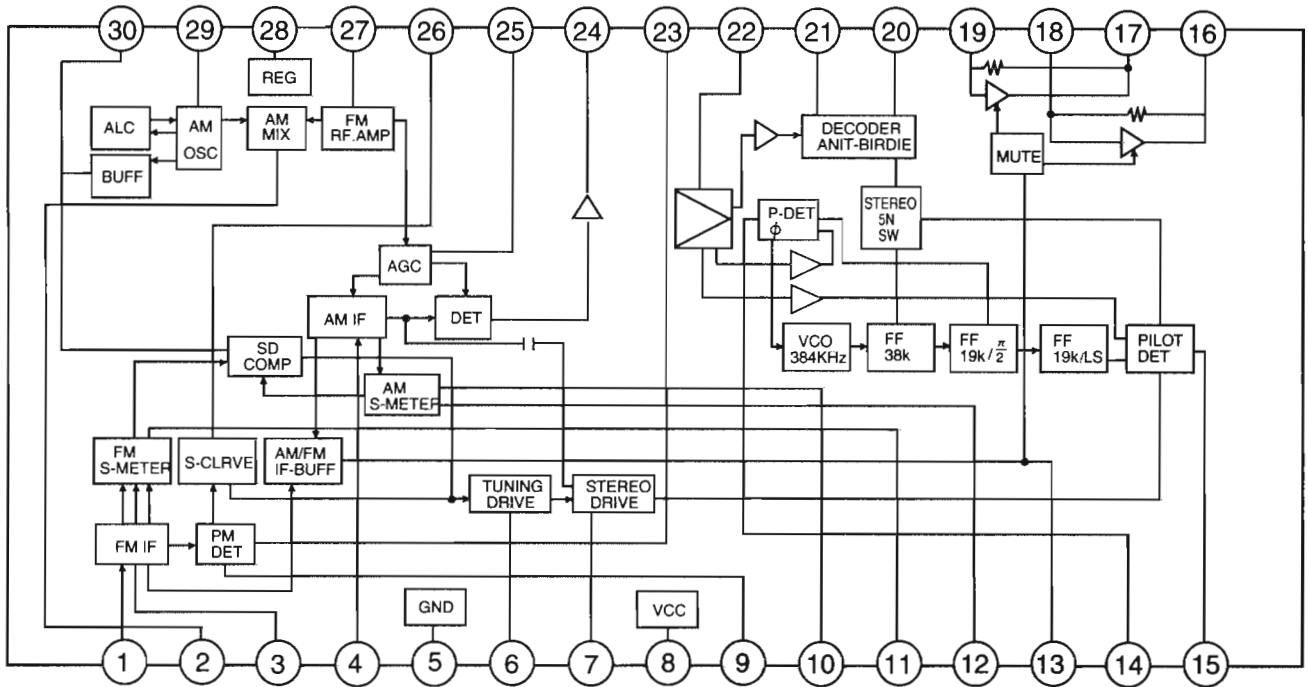


2. Pin Function

Pin No.	Symbol	I/O	Descriptions
1	GND	-	Connect GND
2	ECHO VR	I	Echo level control
3		-	Non connect
4	BIAS	-	Analog part DC bias
5	DAINT IN	I	DA side integrator input
6	DAINT OUT	O	DA side integrator output
7	DALPF IN	I	DA side LPF input
8	DALPF OUT	O	DA side LPF output
9	MIX OUT	O	Mix AMP output for original tone& echo tone
10	MIX IN	I	Mix AMP input pin for original tone
11	ADLPF IN	I	AD side LPF input
12	ADLPF OUT	O	AD side LPF output
13	ADINT OUT	O	AD side integrator output
14	ADINT IN	I	AD side integrator input
15	VCC	-	Power supply
16	NC2	-	Non connect
17	MUTE	I	Mute control signal input
18	CR	-	CR pin for oscillator

■ LA1838 (IC1) : FM/AM IF AMP & Detector, FM MPX Decoder

1. Block Diagram



3. Pin Function

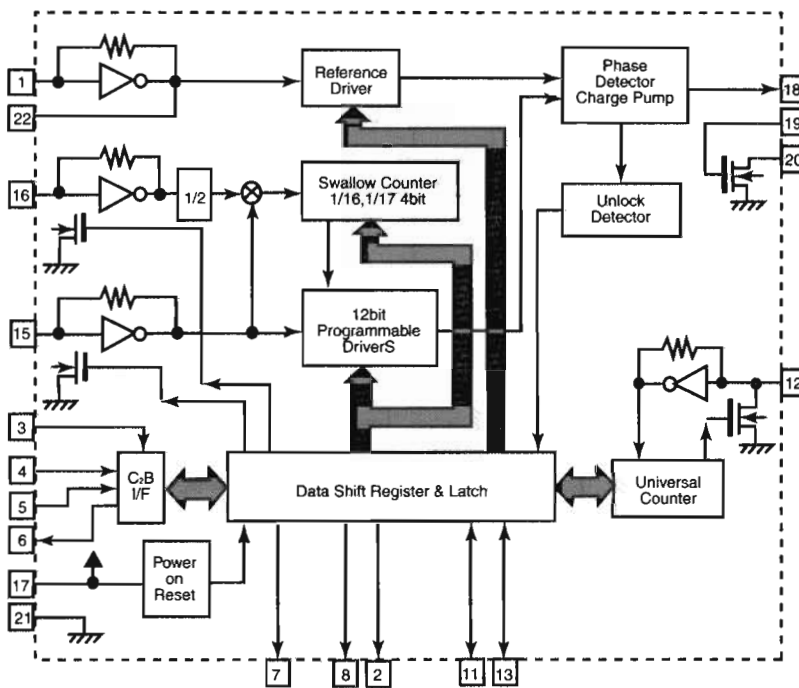
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	FM IN	I	This is an input terminal of FM IF signal.	16	R OUT	O	Right channel signal output.
2	AM MIX	O	This is an out put terminal for AM mixer.	17	L OUT	O	Left channel signal output.
3	FM IF	I	Bypass of FM IF	18	R IN	I	Input terminal of the Right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

**LC72136N (IC2) : PLL Frequency Synthesizer**

1. 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

2. Block

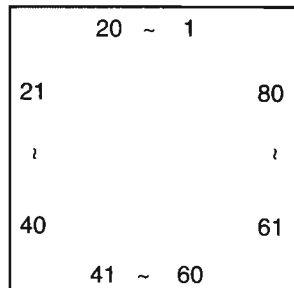


3. Function

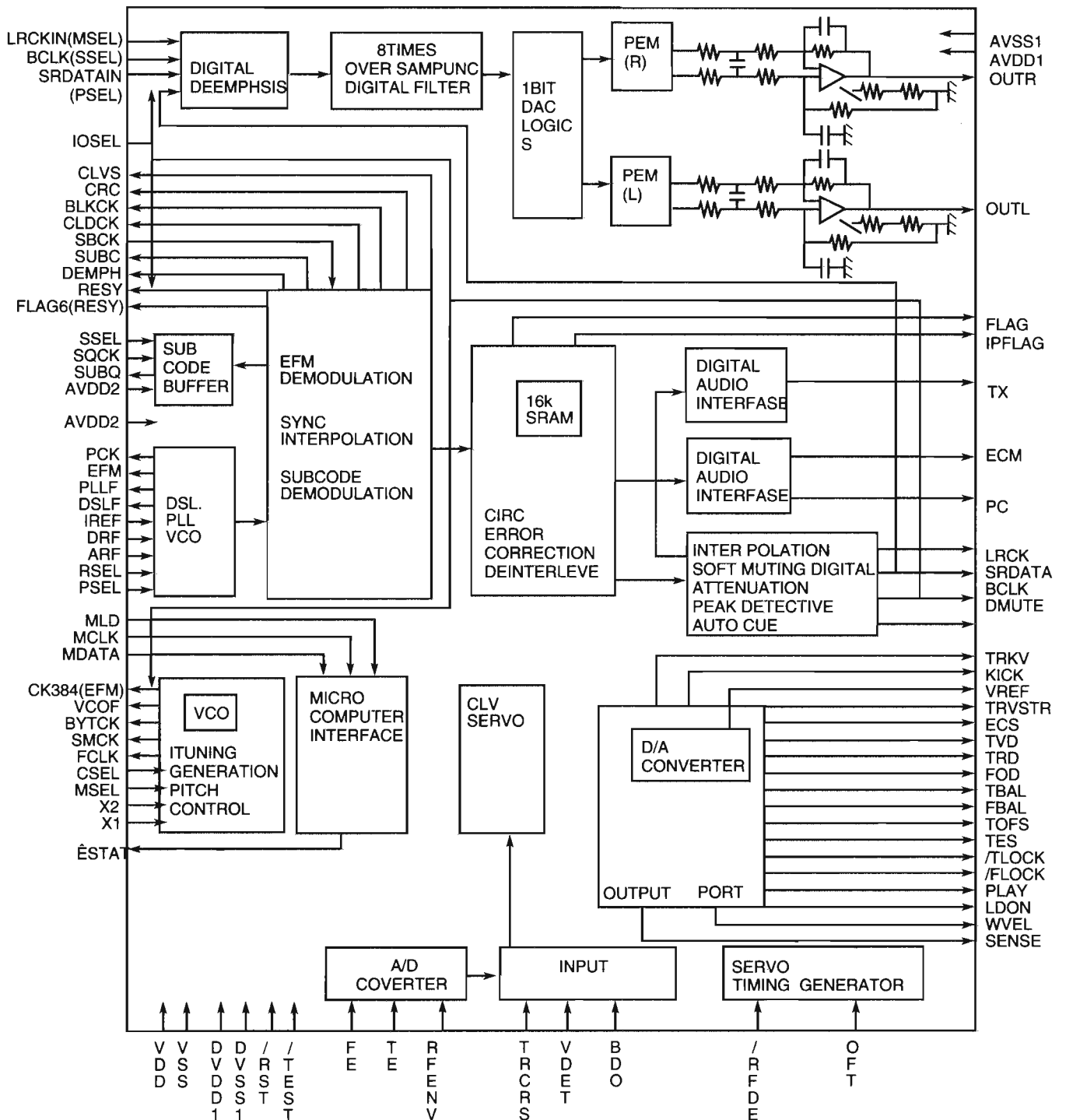
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XT	I	X'tal oscillator connect (75kHz)	12	IFIN	I	IF counter signal input
2	FM/AM	O	LOW:FM mode	13	IFCONT	O	IF signal output
3	CE	I	When data output/input for 4pin(input) and 6pin(output): H	14	-	-	Not use
4	DI	I	Input for receive the serial data from controller	15	AMIN	I	AM Local OSC signal output
5	CLOCK	I	Sync signal input use	16	FMIN	I	FM Local OSC signal input
6	DO	O	Data output for Controller Output port	17	VCC	-	Power supply(VDD=4.5-5.5V) When power ON:Reset circuit move
7	FM/ST/VCO	O	"Low": MW mode	18	PD	O	PLL charge pump output(H: Local OSC frequency Height than Reference frequency. L: Low Agreement: Height impedance)
8	AM/FM	O	Open state after the power on reset	19	LPFIN	I	Input for active lowpassfilter of PLL
9	LW	I/O	Input/output port	20	LPFOUT	O	Output for active lowpassfilter of PLL
10	MW	I/O	Input/output port	21	GND	-	Connected to GND
11	SDIN	I/O	Data input/output	22	XT	I	X'tal oscillator(75KHz)

**MN35510 (IC651) : Digital Servo & Digital Signal Processor**

1. Terminal Layout



2. Block Diagram



# MX-J70/MX-J76/MX-J75R

## 3. Description

Pin No.	symbol	I/O	Description	Pin No.	symbol	I/O	Description
1	BCLK	O	Not used	41	TES	O	Tracking error shunt signal output(H:shunt)
2	LRCK	O	Not used	42	PLAY	-	Not used
3	SRDATA	O	Not used	43	WVEL	-	Not used
4	DVDD1	-	Power supply (Digital)	44	ARF	I	RF signal input
5	DVSS1	-	Connected to GND	45	IREF	I	Reference current input pin
6	TX	O	Digital audio interface output	46	DRF	I	Bias pin for DSL
7	MCLK	I	$\mu$ com command clock signal input (Data is latched at signal's rising point)	47	DSL F	I/O	Loop filter pin for DSL
8	M DATA	I	$\mu$ com command data input	48	PLL F	I/O	Loop filter pin for PLL
9	MLD	I	$\mu$ com command load signal input	49	VCOF	-	Not used
10	SENSE	O	Sence signal output	50	AVDD2	-	Power supply(Analog)
11	FLOCK	O	Focus lock signal output Active :Low	51	AVSS2	-	Connected to GND(Analog)
12	TLOCK	O	Tracking lock signal output Active :Low	52	EFM	-	Not used
13	BLKCK	O	sub-code*block*clock signal output	53	PCK	-	Not used
14	SQCK	I	Outside clock for sub-code Q resister input	54	PDO	-	Not used
15	SUBQ	O	Sub-code Q -code output	55	SUBC	-	Not used
16	DMUTE	-	Connected to GND	56	SBCK	-	Not used
17	STATUS	O	Status signal (CRC,CUE,CLVS,TTSTOP,ECLV,SQOK)	57	VSS	-	Connected to GND(for X'tal oscillation circuit)
18	RST	I	Reset signal input (L:Reset)	58	XI	I	Input of 16.9344MHz X'tal oscillation circuit
19	SMCK	-	Not used	59	X2	O	Output of X'tal oscillation circuit
20	PMCK	-	Not used	60	VDD	-	Power supply(for X'tal cscillation circuit)
21	TRV	O	Traverse enforced output	61	BYTCK	-	Not used
22	TVD	O	Traverse drive output	62	CLDCK	-	Not used
23	PC	-	Not used	63	FLAG	-	Not used
24	ECM	O	Spindle motor drive signal (Enforced mode output) 3-State	64	IPPLAG	-	Not used
25	ECS	O	Spindle motor drive signal (Servo error signal output)	65	FLAG	-	Not used
26	KICK	O	Kick pulse output	66	CLVS	-	Not used
27	TRD	O	Tracking drive output	67	CRC	-	Not used
28	FOD	O	Focus drive output	68	DEMPH	-	Not used
29	VREF	I	Reference voltage input pin for D/A output block (TVD,FOD,FBA,TBAL)	69	RESY	-	Not used
30	FBAL	O	Focus Balance adjust signal output	70	IOSEL	-	pull up
31	TBAL	O	Tracking Balance adjust signal output	71	TEST	-	pull up
32	FE	I	Focus error signal input(Analog input)	72	AVDD1	-	Power supply(Digital)
33	TE	I	Tracking error signal input(Analog input)	73	OUT L	O	Lch audio output
34	RF ENV	I	RF envelope signal input(Analog input)	74	AVSS1	-	Connected to GND
35	VDET	I	Vibration detect signal input(H:detect)	75	OUT R	O	Rch audio output
36	OFT	I	Off track signal input(H:off track)	76	RSEL	-	pull up
37	TRCRS	I	Track cross signal input	77	CSEL	-	Connected to GND
38	RFDET	I	RF detect signal input(L:detect)	78	PSEL	-	Connected to GND
39	BDO	I	BDO input pin(L:detect)	79	MSEL	-	Connected to GND
40	LDON	O	Laser ON signal output(H:on)	80	SSEL	-	Pull up

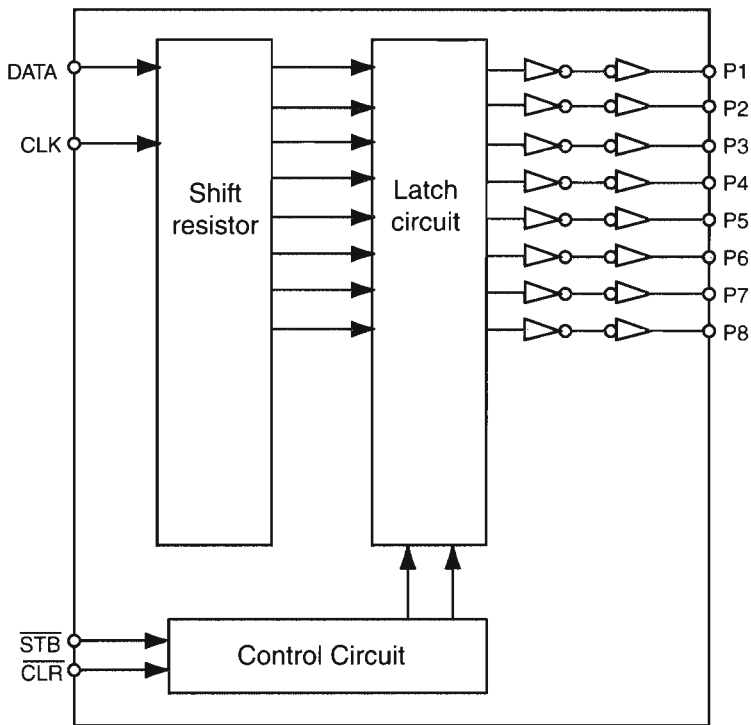


■ NJU3711D (IC854) : Mute & Rolling Panel Motor Control

1. Terminal Layout

DOROP	1	14	VDD
DORCL	2	13	CONTB
AUXMUTE	3	12	CONTA
VSS	4	11	CLR
TU+B	5	10	STB
PBMUTE	6	9	CLK
ECHO	7	8	DATA

2. Block Diagram



3. Pin Function

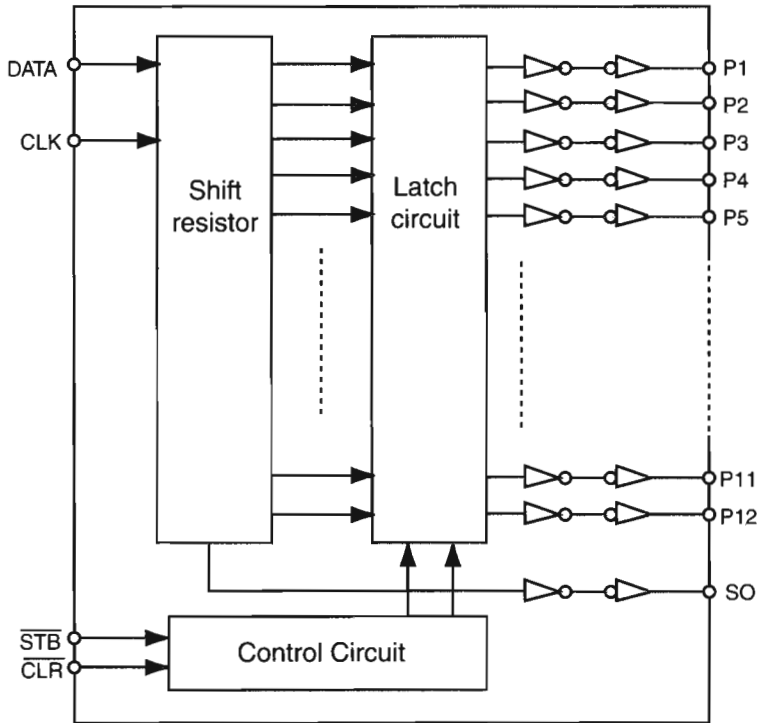
PIN No.	I/O	Symbol	Function
1~3	O	DOROP/DORCL/AUXMUTE	Parallel conversion data output terminal.
4	-	VSS	Connect to GND.
5~7	O	TU+B/PBMUTE/ECHO	Parallel conversion data output terminal.
8	I	DATA	Serial data input terminal.
9	I	CLK	Clock signal input terminal.
10	I	STB	Strobe signal input terminal.
11	I	CLR	Clear signal input terminal.
12.13	O	CONTA/CONTB	Parallel conversion data output terminal
14	-	VDD	Power supply.

■ NJU3714D (IC811) : L.E.D.Driver

1. Terminal Layout

RELAY2	1	20	VDD
RELAY1	2	19	CD
DISC1	3	18	TAPE
DISC2	4	17	FM/AM
VSS	5	16	AUX
DISC3	6	15	VSS
SABASS	7	14	CLR
	8	13	STB
DSPRESET	9	12	CLK
SO	10	11	DATA

2. Block Diagram

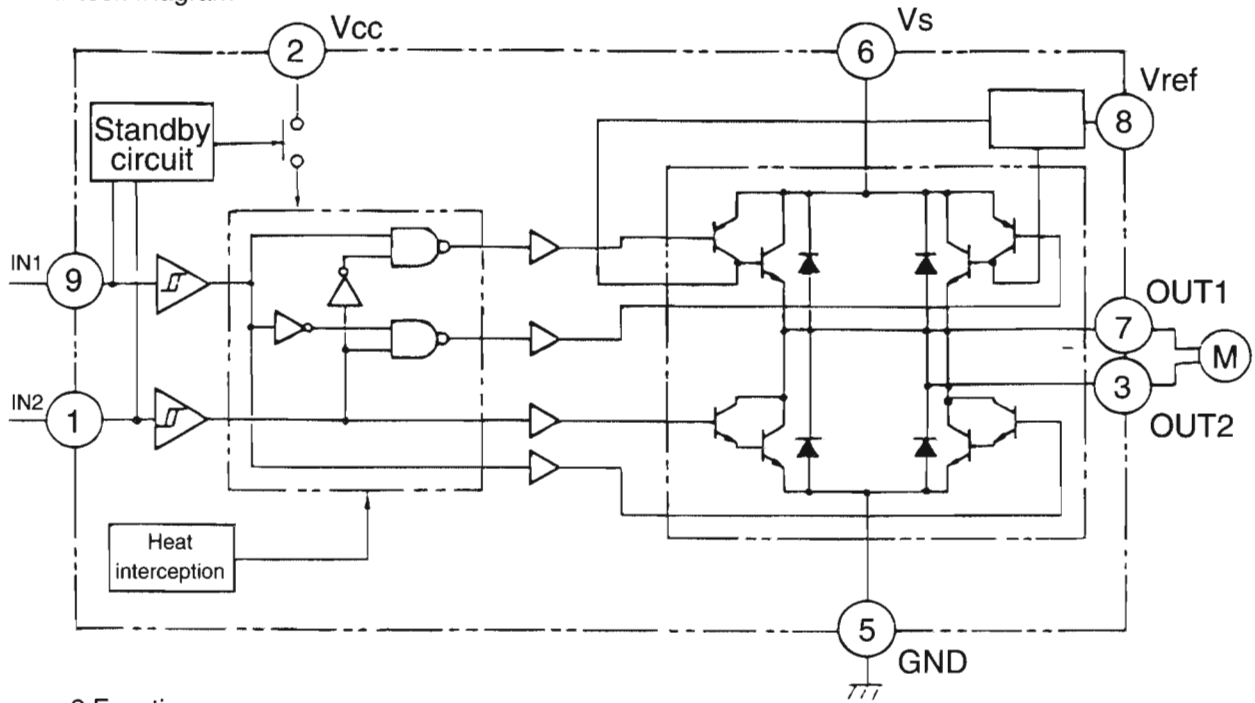


3. Pin Function

PIN No.	I/O	Symbol	Function
1~4	O	RELAY1.2/DISC1.2	Parallel conversion data output terminal.
5	-	VSS	Connect to GND.
6~9	O	DISC3/SABASS/DSPRESET	Parallel conversion data output terminal.
10	O	SO	Serial data output terminal.
11	I	DATA	Serial data input terminal.
12	I	CLK	Clock signal input terminal.
13	I	STB	Strobe signal input terminal.
14	I	CLR	Clear signal input terminal.
15	-	VSS	Connect to GND.
16~19	O	AUX/FM/AM/TAPE/CD	Parallel conversion data output terminal
20	-	VDD	Power supply.

■ TA8409S (IC851, IC852, IC853) : Motor Driver

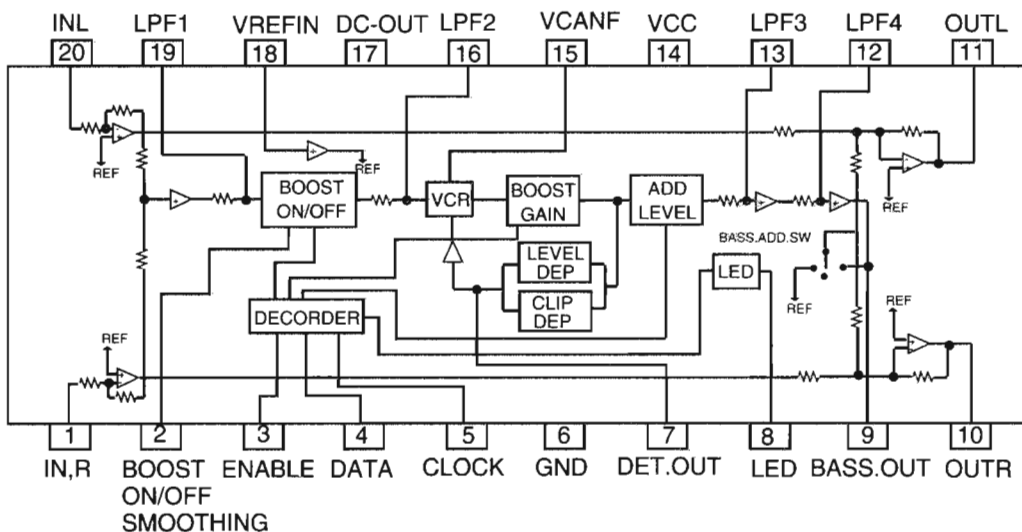
1. Block Diagram



2. Function

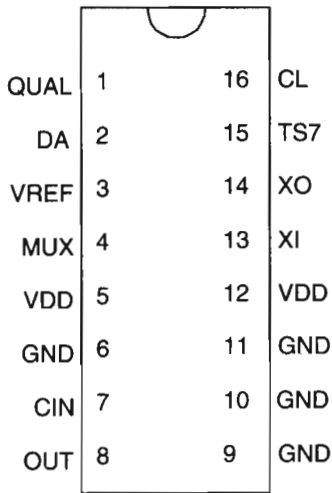
INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	MOTOR
0	0	∞	∞	STOP
1	0	H	L	CW/CCW
0	1	L	H	CCW/CW
1	1	L	L	BRAKE

■ LA2650 (IC406) : SA BASS



■ BU1923(IC4) : RDS Detector

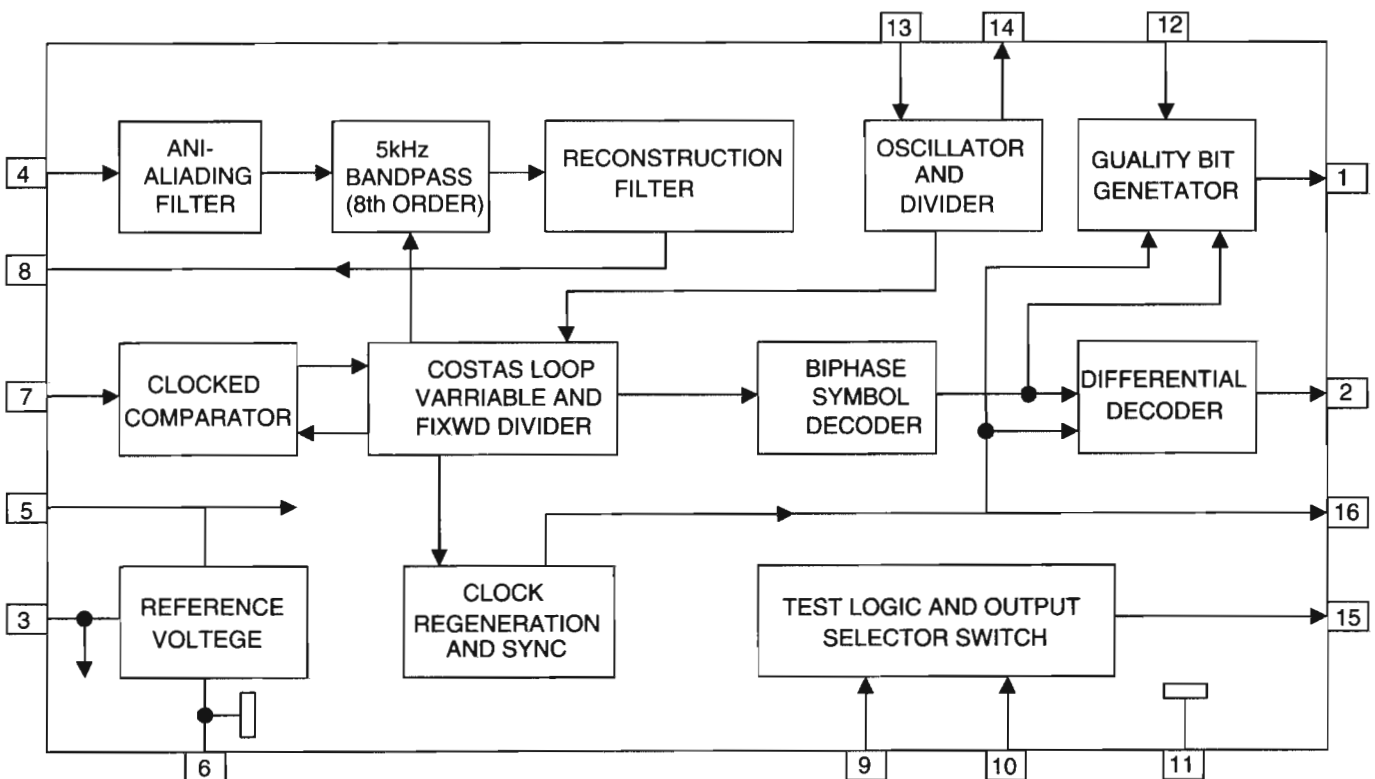
1.Terminal Layout



2.Pin Function

Pin No	Symbol	I/O	Function
1	QUAL	--	Non connection
2	DA	O	RDS data output
3	VREF	O	Reference voltage output
4	MUX	I	Multiplex signal input
5	VDD	--	+5Vsupply voltage for analog
6	GND	--	Ground for analog part(0V)
7	CIN	I	Subcarrier outputof reconstruction filter
8	OUT	O	Ground for digital part(0V)
9	GND	--	Ground for digital part(0V)
10	GND	--	Ground for digital part(0V)
11	GND	--	Ground for digital part(0V)
12	VDD	--	+5Vsupply voltage for digital part
13	XI	I	Oscilator input
14	XO	O	Oscilator output
15	TS7	--	Non connection
16	CL	O	RDS clock output

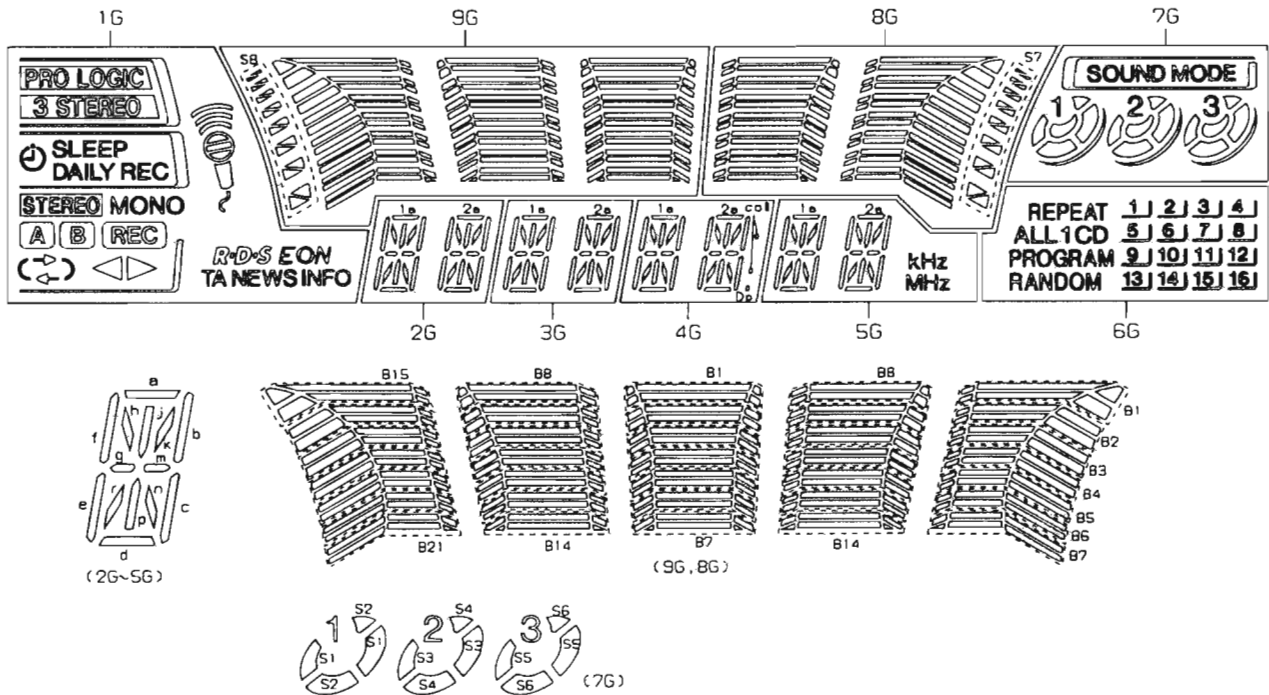
3.Block Diagram



# Internal connections for FL display tube

## ■ QLF0059-001 (FL801)

### 1. Grid assignment



### 2. Pin connection

PIN NO.	1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5		
CONNECTION	F	F	N	N	N	N	3	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	N	N	N	N	N	N	N	N	1	1	P	P	P	P	P	P	P	P	P	N	1

PIN NO.	5	5	5	5	5	5	5	5	6	6	6	
CONNECTION	2	3	4	5	6	7	8	9	N	N	F	F

NOTE 1) F1, F2 --- Filament  
 2) NP ----- No pin  
 3) NC ----- No connection  
 4) DL ----- Datum Line  
 5) 1G~9G --- Grid

3. Anode connection

	1G	2G, 3G	4G	5G	6G	7G	8G	9G
P1		2a	2a	2a	-		S7	S8
P2	PRO LOGIC	2h	2h	2h	-	SOUND MODE	B1	B1
P3	3 STEREO	2j	2j	2j	REPEAT	1	B2	B2
P4	SLEEP	2k	2k	2k	ALL	S1	B3	B3
P5	DAILY	2b	2b	2b	(ALL) 1	S2	B4	B4
P6	REC	2f	2f	2f	CD	(1)	B5	B5
P7		2m	2m	2m	PROGRAM	(1)	B6	B6
P8		2g	2g	2g	RANDOM	2	B7	B7
P9		2c	2c	2c	1	S3	-	-
P10	STEREO	2e	2e	2e	2	S4	-	-
P11	MONO	2r	2r	2r	3	(2)	-	-
P12	A	2p	2p	2p	4	(2)	-	-
P13	B	2n	2n	2n	5	3	-	-
P14	REC	2d	2d	2d	6	S5	-	-
P15		-	col	KHz	7	S6	-	-
P16	( )	-	Dp	MHz	8	(3)	-	-
P17		1a	1a	1a	9	(3)	B8	B8
P18		1h	1h	1h	10	-	B9	B9
P19		1j	1j	1j	11	-	B10	B10
P20	R·D·S	1k	1k	1k	12	-	B11	B11
P21	EON	1b	1b	1b	13	-	B12	B12
P22	TA	1f	1f	1f	14	-	B13	B13
P23	NEWS	1m	1m	1m	15	-	B14	B14
P24	INFO	1g	1g	1g	16	-	-	B15
P25	-	1c	1c	1c	-	-	-	B16
P26	-	1e	1e	1e	-	-	-	B17
P27	-	1r	1r	1r	-	-	-	B18
P28	-	1p	1p	1p	-	-	-	B19
P29	-	1n	1n	1n	-	-	-	B20
P30	-	1d	1d	1d	-	-	-	B21

## Disassembly method

### < Main body >

#### ■ Removing the Metal Cover (See Fig.1 to 3)

1. Remove the six A screws attaching the metal cover on the back of the body.
2. Remove the two B screws attaching the metal cover on both sides of the body.
3. Lift the metal cover on the back of the body and remove it from the body.

CAUTION: DO NOT break the front panel tab fitted to the metal cover.

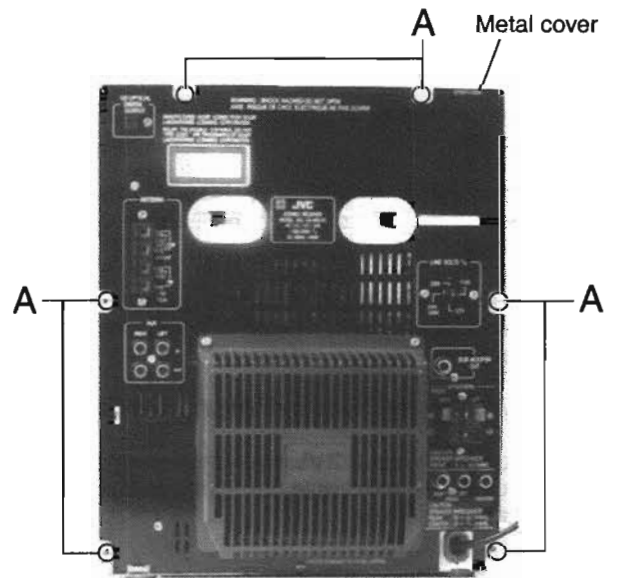


Fig.1

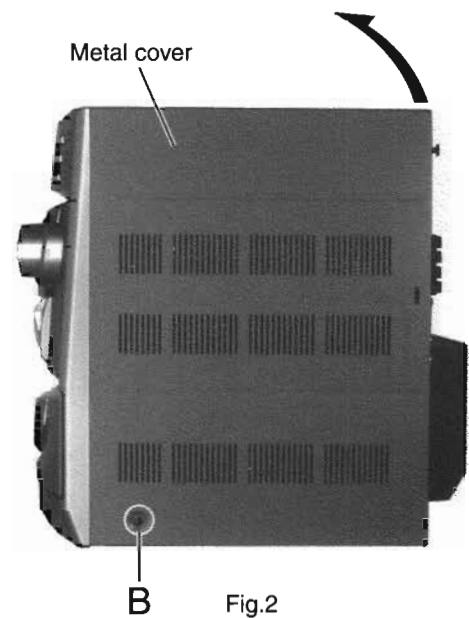


Fig.2



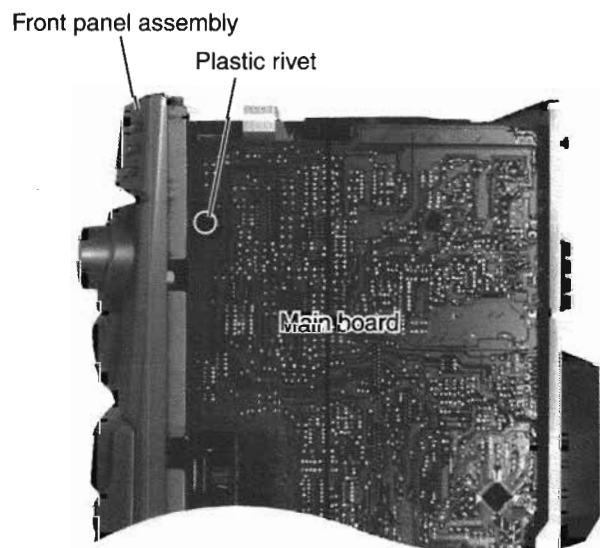
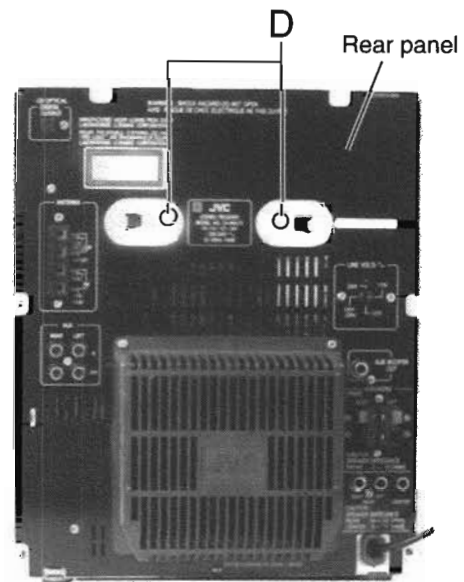
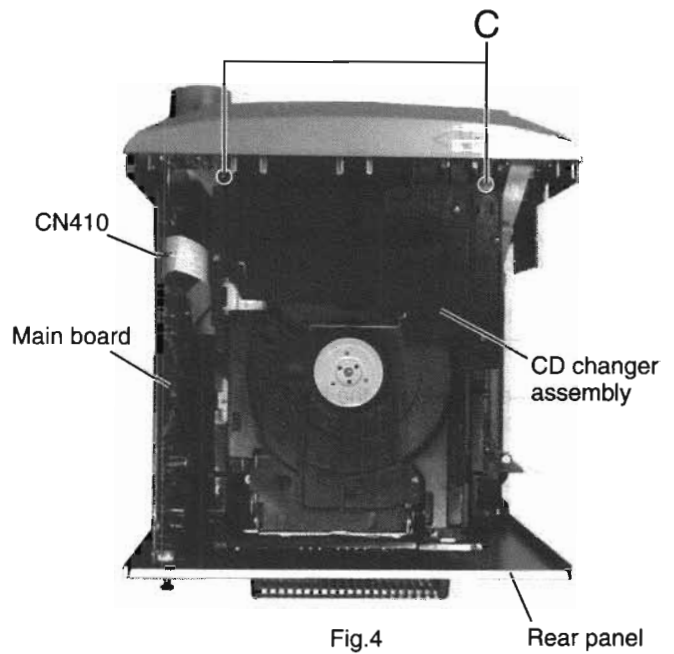
Fig.3

■ **Removing the CD Changer Mechanism Assembly**  
(See Fig.4 to 6)

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

1. Disconnect the connector CN410 of the card wire connecting the CD changer mechanism board to the main board.
2. Remove the two C screws on the upper side of the CD changer assembly and the two D screws on the back of the rear panel.
3. Remove the plastic rivet attaching the main board.
4. Lift and remove the CD changer mechanism assembly on the back of the body while pulling the rear panel and the front panel assembly.

\* To prevent damage to the CD fitting, be sure to pull the rear panel and the front panel assembly enough to remove the CD changer mechanism.





< Front Assembly >

■ Removing the Front Panel Assembly  
(See Fig.7 to 9)

· Prior to performing the following procedure, remove the metal cover and CD changer mechanism assembly.

1. Disconnect the card wires from connector CN411, CN412 and CN413 on the main board.
2. Disconnect the flat wire from connector CN703 on the amplifier board.
3. Remove the four E screws attaching the front panel assembly on the bottom of the body.
4. Release the two joints(a) and (b) on the lower left and right sides of the body using a screwdriver, and remove the front panel assembly toward the front.

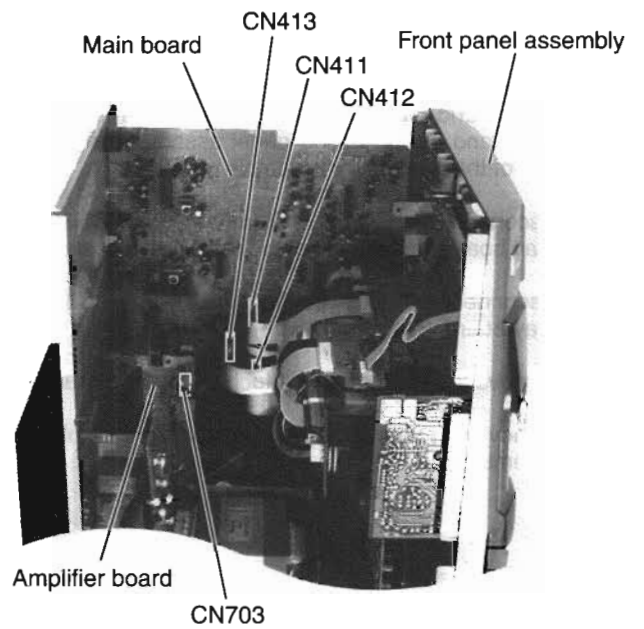


Fig.7

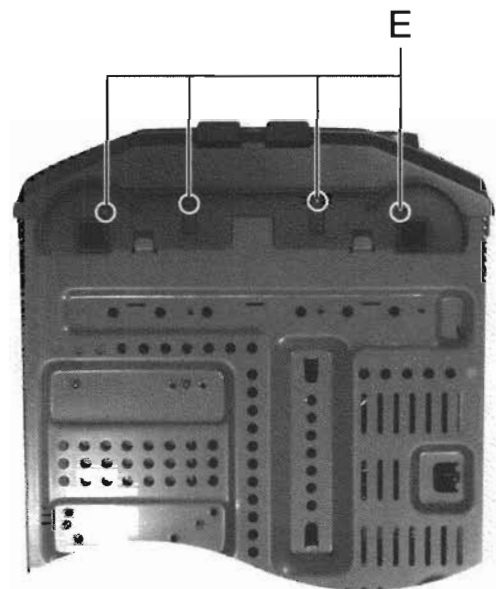
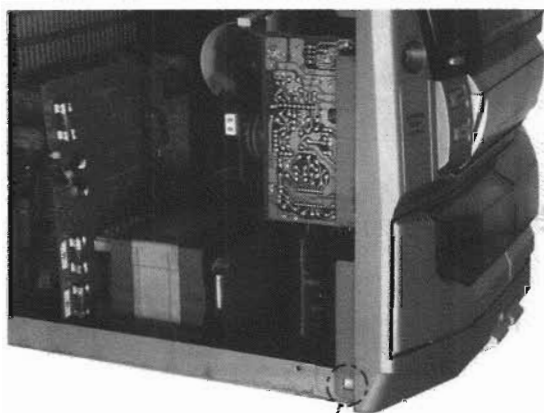
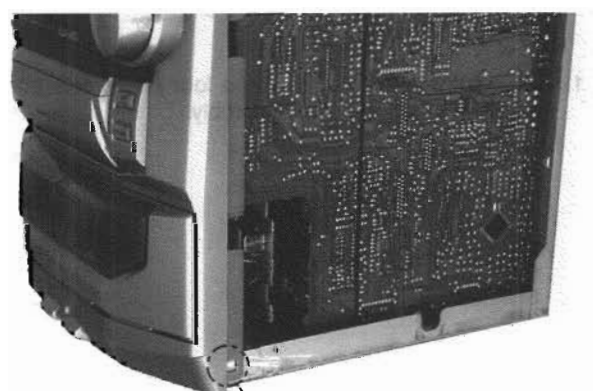


Fig.8



Joint(a)  
Fig.9a



Joint(b)  
Fig.9b

**■ Removing the Rolling Panel assembly**  
(See Fig.10 and 11)

1. Disconnect the card wires from connector CN817, CN812, CN951 and CN816 on the upper system control & FL board and on the rolling panel assembly on the reverse side of the front panel assembly
2. Disconnect the card wire from connector CN859 on the relay board on the back of the rolling panel assembly.
3. Disconnect the flat wire from connector CN858 on the relay board. (Only Ver.U type)
4. Remove the six F screws attaching the stay bracket.
5. Remove the four G screws attaching the rolling panel assembly.

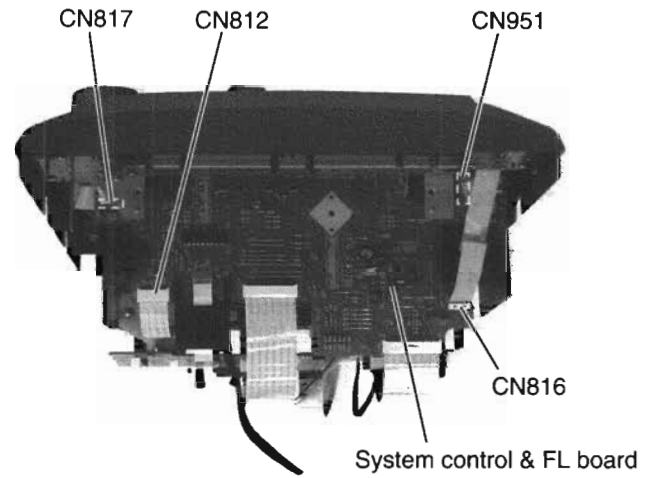


Fig.10

\* Disconnect the flat wire extending from the phones board through the slit of the rolling panel assembly.

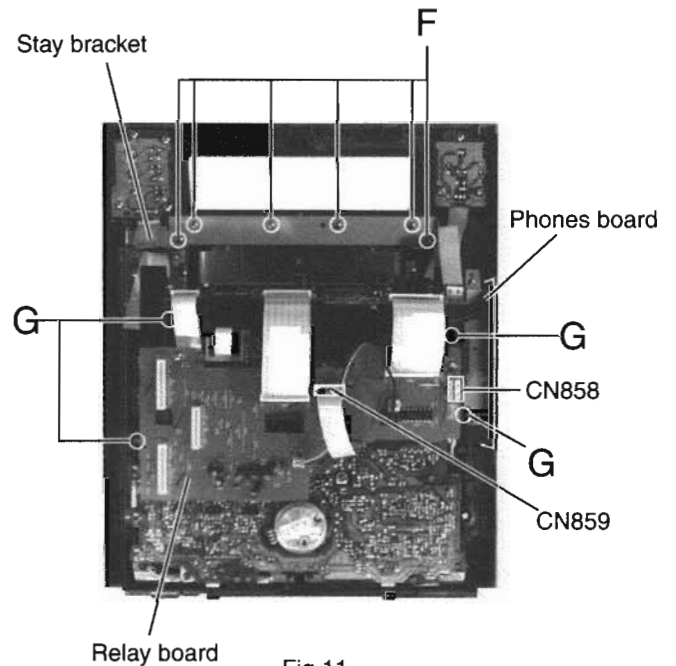


Fig.11

**■ Removing the Cassette Mechanism Assembly**  
(See Fig.12)

- Prior to performing the following procedure, remove the rolling panel assembly.
1. Remove the four H screws and four H1 screws attaching the cassette mechanism assembly.

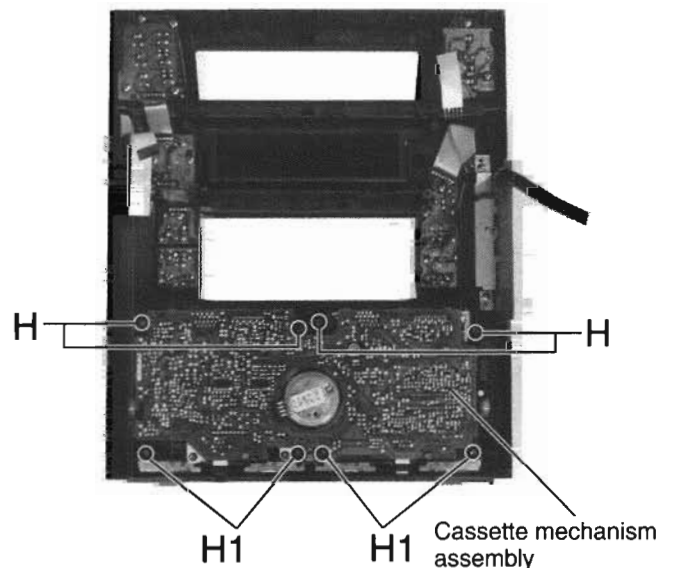


Fig.12

■ **Removing the System Control & FL Board**  
(See Fig.13 and 14)

1. Disconnect the card wires and flat wires from connector CN812, CN817, CN816, CN951, CN813, CN810 and CN811 on the system control & FL board respectively.
2. Disconnect the flat wire from connector D851 on the relay board.
3. Remove the six F screws attaching the stay bracket.
4. Remove the two I screws attaching the system control & FL board.

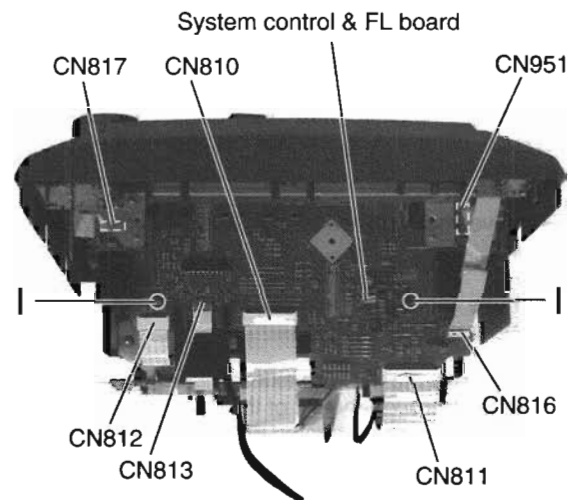


Fig.13

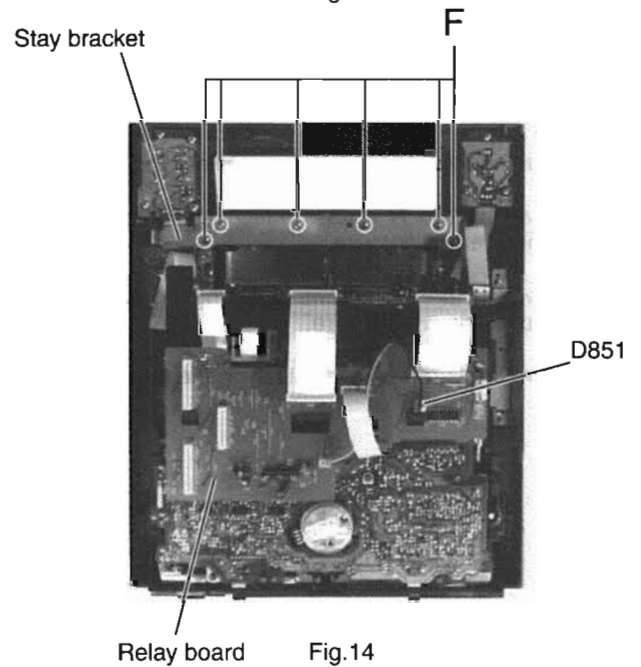


Fig.14

■ **Removing the Relay Board** (See Fig.15)

1. Disconnect the card wires, the 2P harness and the flat wires from connector CN856, CN857, CN859, CN863, CN858 (Only Ver.U type) and D851 on the relay board respectively.
2. Remove the one screw J attaching the relay board.
3. Release the five c tabs fitted to the relay board.

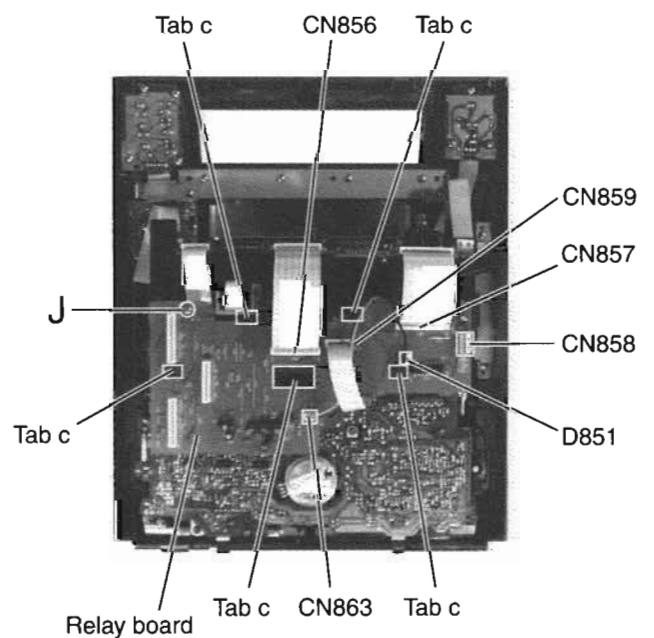


Fig.15

**■ Removing Each Board of the Front Panel Assembly** (See Fig.16 and 17)

1. Disconnect the flat wire from connector CN816 on the system control & FL board on top of the rolling panel assembly.
2. Remove the three K screws attaching the power switch board.
3. Remove the two L screws attaching the phones board together with bracket.
  - \* Remove the flat wire extending from the phones board through the slit of the rolling panel assembly.
  - \* The flat wire connected with CN858 is removed for U version.
  - \* The screw H1 is removed and the earth wire is removed for U version.
4. Remove the four M screws attaching the CD eject board and unsolder the flat wire.
  - Remove the rolling panel assembly.
5. Pull out the volume knob and nut toward the front.
6. Remove the two N screws attaching the volume board and unsolder the flat wire.
7. Remove the three O screws attaching the function board 1 and unsolder the flat wire.
8. Remove the four P screws attaching the function board 2.

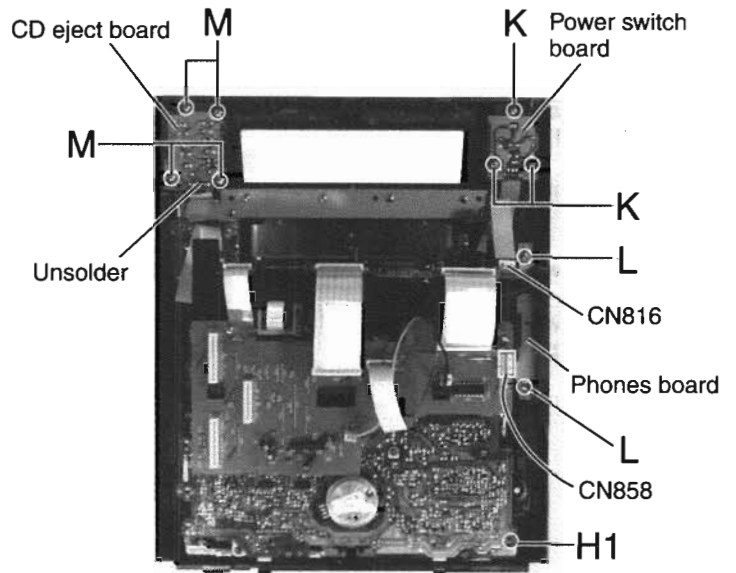


Fig.16

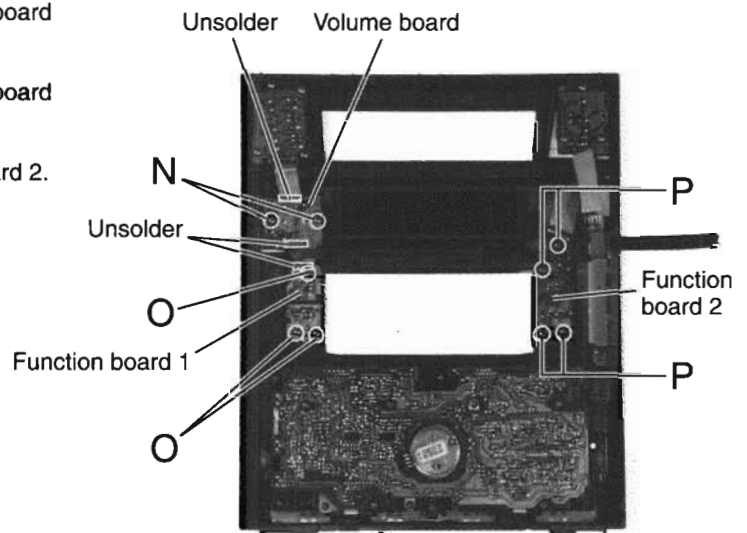


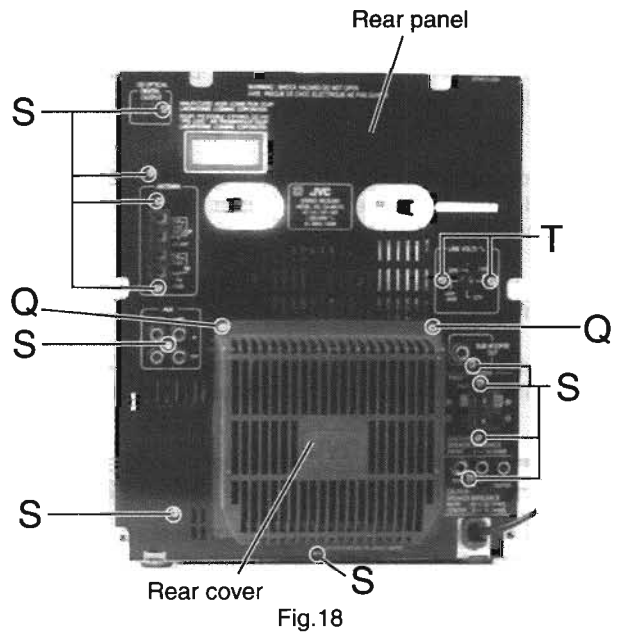
Fig.17

< Rear Panel Assembly >

- Prior to performing the following procedure, remove the metal cover and the CD changer mechanism assembly.
- The following procedure can be performed even if the front panel assembly is attached.

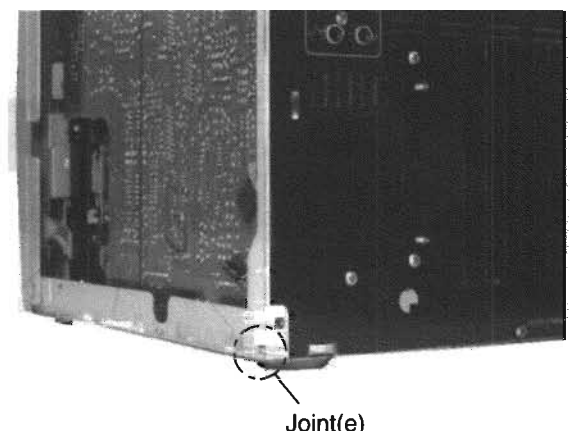
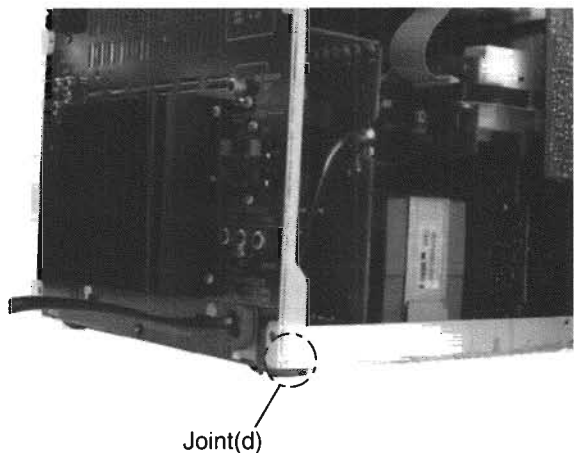
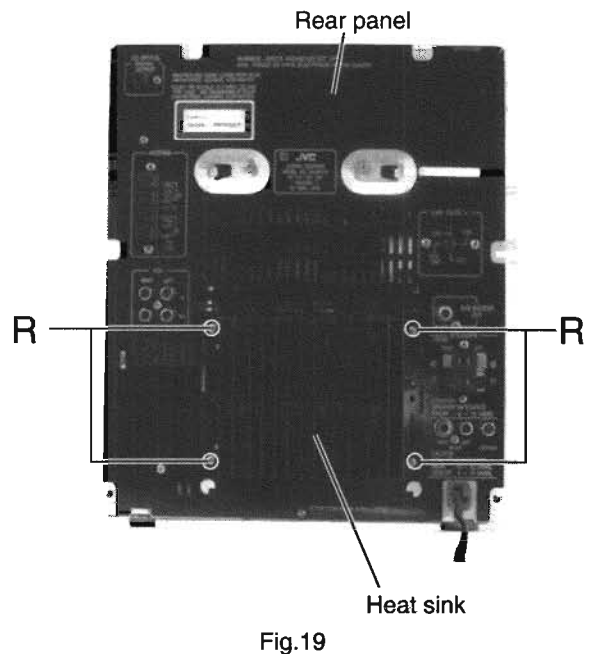
■ Removing the Rear Cover (See Fig.18)

1. Remove the two Q screws attaching the rear cover on the back of the body.



■ Removing the Rear Panel (See Fig.18 to 21)

- Prior to performing the following procedure, remove the rear cover.
1. Remove the four R screws attaching the heat sink and the rear panel.
  2. Remove the eleven S screws attaching the rear panel.
  3. Remove the two T screws attaching the voltage selector and the rear panel. (Only Ver.U type)
  4. Release the two joints(d) and (e) on the lower part of the rear panel using a screwdriver, and remove the rear panel toward the rear side.



■ **Removing the Main Board** (See Fig.22 and 23)

· Prior to performing the following procedure, remove the metal cover, the CD changer mechanism assembly and the rear panel.

1. Disconnect the card wires from connector CN411, CN412 and CN413 on the main board and the flat wire from connectors CN414 and CN415.
2. Remove the screw U attaching the main board on the right side of the body.
3. Disconnect connector CN416 and CN417 under the main board, and remove the main board upward.

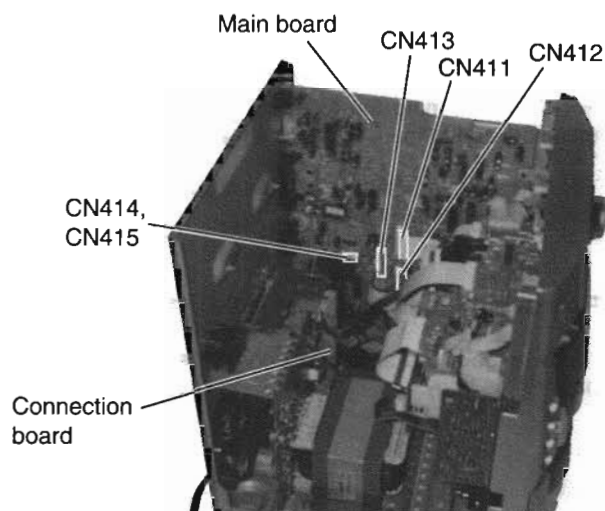


Fig.22

■ **Removing the Rated Voltage Board and Power Amplifier Board** (See Fig.22, 24 and 25)

· Prior to performing the following procedure, remove the metal cover, the CD changer mechanism assembly and the rear panel.

· The following procedure can be performed even if the front panel assembly is attached.

1. Remove the connection board from connectors CN703 on the power amplifier board and CN704 on the rear/center power amplifier board.
2. Disconnect the flat wire from connector CN414, CN415 on the main board.
3. Pull out the rated voltage board and the power amplifier board and the rear/center power amplifier board upward from connectors CN102, CN103 and CN104 on the power board respectively.
4. Remove the two V screws, one V' screw and two W screws attaching the heat sink together with the heat sink bracket.

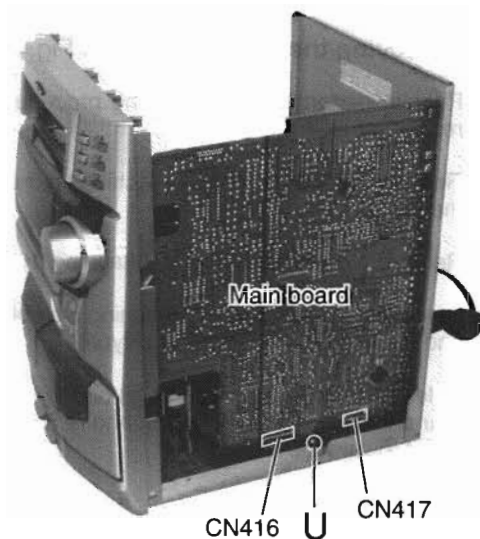


Fig.23

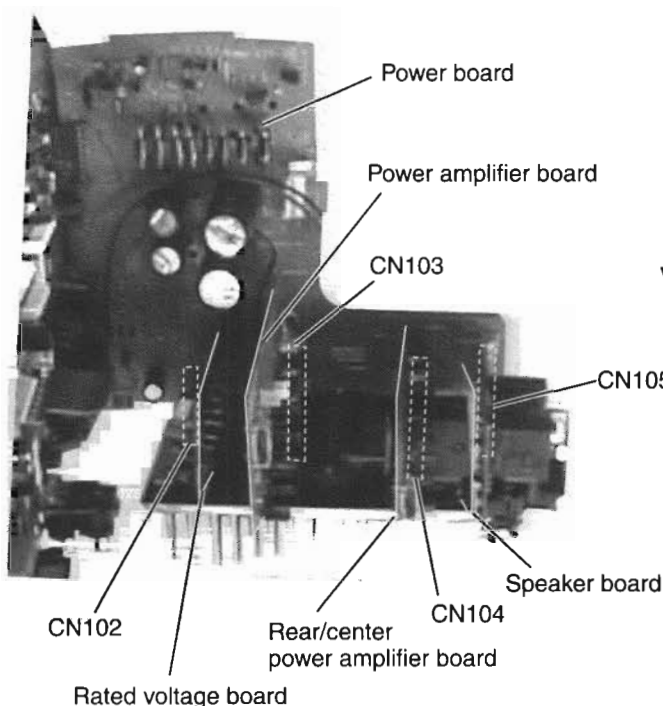


Fig.24

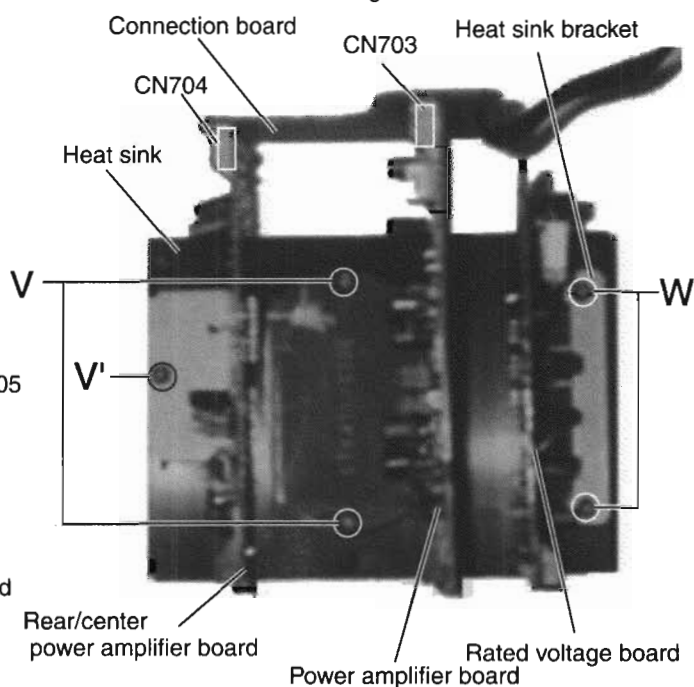


Fig.25

■ **Removing the Speaker Board (See Fig.24)**

- Prior to performing the following procedure, remove the metal cover, the CD changer mechanism assembly and the rear panel.
  - The following procedure can be performed even if the front panel assembly is attached.
1. Pull out the speaker board upward from connector CN105 on the power board.

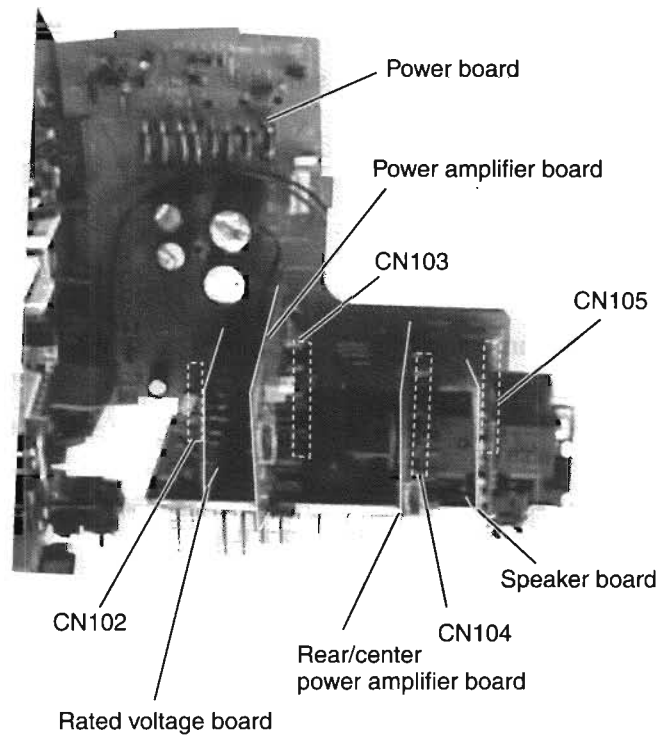


Fig.24

■ **Removing the Power Transformer Board (See Fig.26)**

- Prior to performing the following procedure, remove the metal cover, the CD changer mechanism assembly and the rear panel.
1. Disconnect the 5P harness and the flat wire from connector CN109 and CN111 on the power board.
  2. Remove the four X screws attaching the power transformer assembly.
  3. Push the cord stopper upward to remove it.

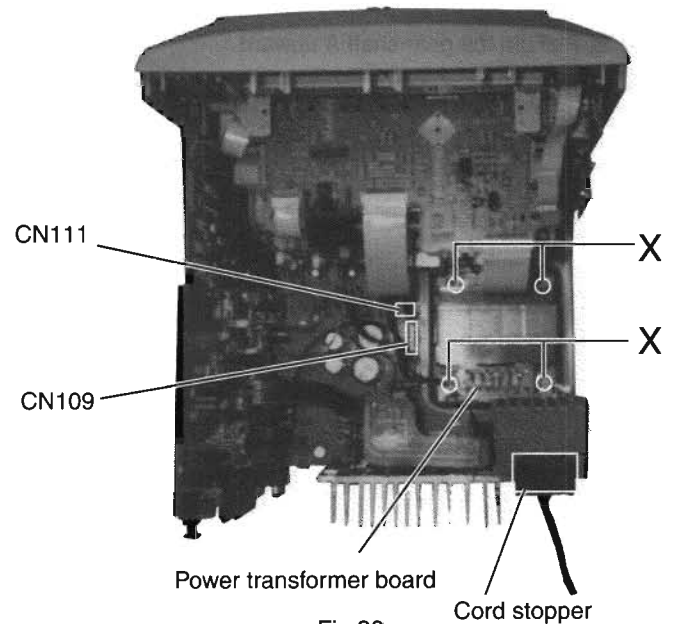


Fig.26

■ Removing the rolling Panel Assembly

(See Fig.27)

1. Remove the two Y screws attaching the rolling panel assembly.
2. Remove the rolling panel assembly while pulling outward the left and right hooks attaching the rolling panel assembly.

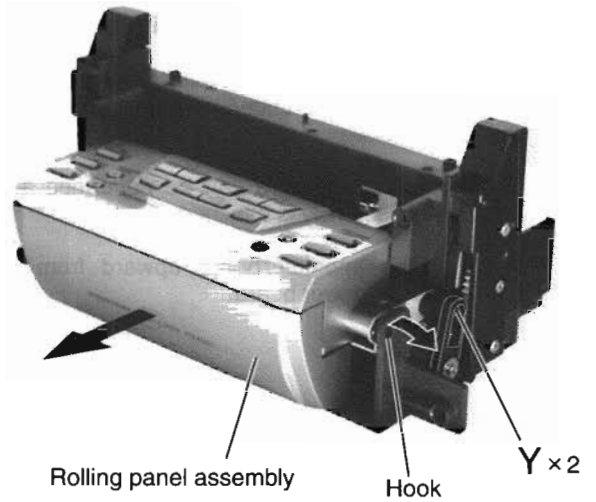


Fig.27

■ Removing the operation switch Board

(See Fig.28 and 29)

1. Remove the six Z screws attaching the cover and the bracket.
2. Release the two f tabs fitted to the bracket, and pull out the left and right panel holders.
3. Remove the two A screws attaching the operation switch board.

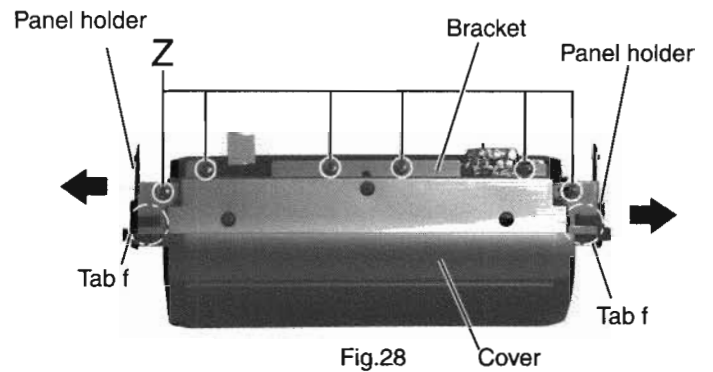


Fig.28

■ Removing the Drive Motor (See Fig.30 and 31)

1. Remove the two B screws and the two C screw attaching
2. Pull out the gear shaft A upward.
3. Remove the motor belt.

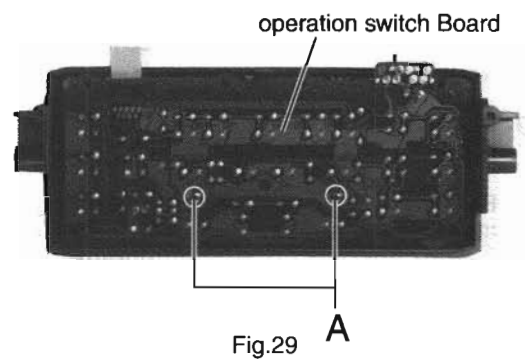


Fig.29

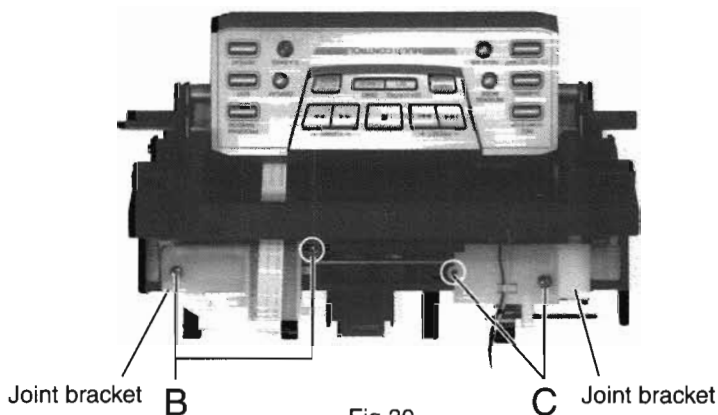


Fig.30

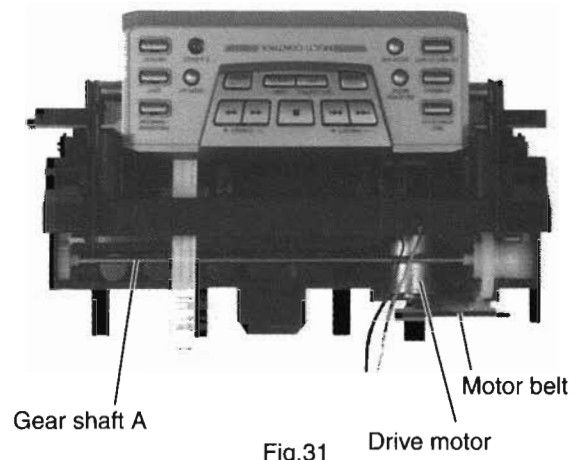


Fig.31



«CD Changer Mechanism Type:VC3 Section»

**■ Removing the CD Servo control board  
(See Fig.1)**

- 1.Remove the metal cover.
- 2.Remove the CD changer mechanism assembly.
- 3.From bottom side the CD changer mechanism assembly, remove the two screws 1 retaining the CD servo control board.
- 4.Absorb the four soldered positions "M" of the right and left motors with a soldering absorber.
- 5.Pull out the earth wire on the CD changer mechanism assembly.
- 6.The two screws A is removed and C.B.holder is detached.
- 7.Disconnect the connector CN854 on the CD servo control board.
- 8.Disconnect the card wire CN601 and the connector CN801 on the CD servo control board.

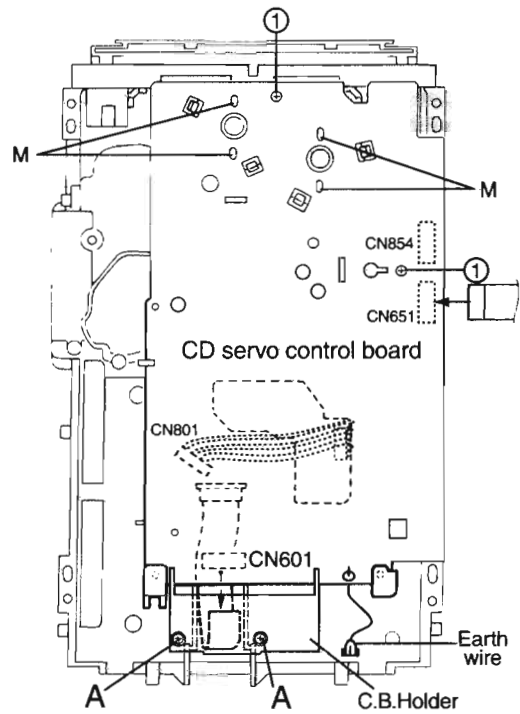


Fig.1

**■ Removing the CD tray assembly  
(See Fig.2~4)**

1. Remove the front panel assembly.
2. Remove the CD changer mechanism assembly.
3. Remove the CD Servo control board.
4. From the T.bracket section "B" and clamber base section "C", remove both of the edges fixing the rod(See Fig.2 and 3).
5. Remove the screw 2 retaining the Disc stopper (See Fig.3).
6. Remove the three screws 3 retaining the T.bracket (See Fig.3).
7. Remove the screws 4 retaining the clamber assembly (See Fig.3).
8. From the left side face of the chassis assembly, remove the one screw 5 retaining both of the return spring and lock lever(See Fig. 4).
9. By removing the pawl at the section "D" fixing the return spring, dismount the return spring(See Fig.4).
10. Remove the three lock levers(See Fig.4).

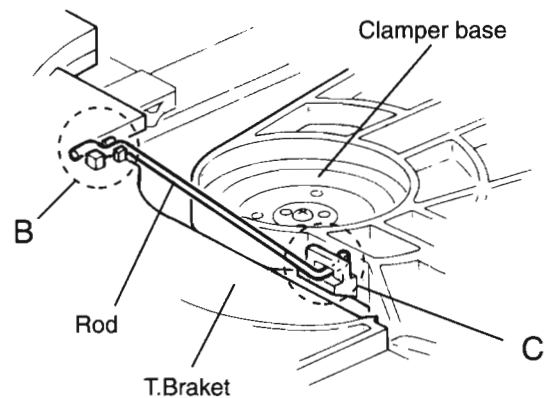


Fig.2

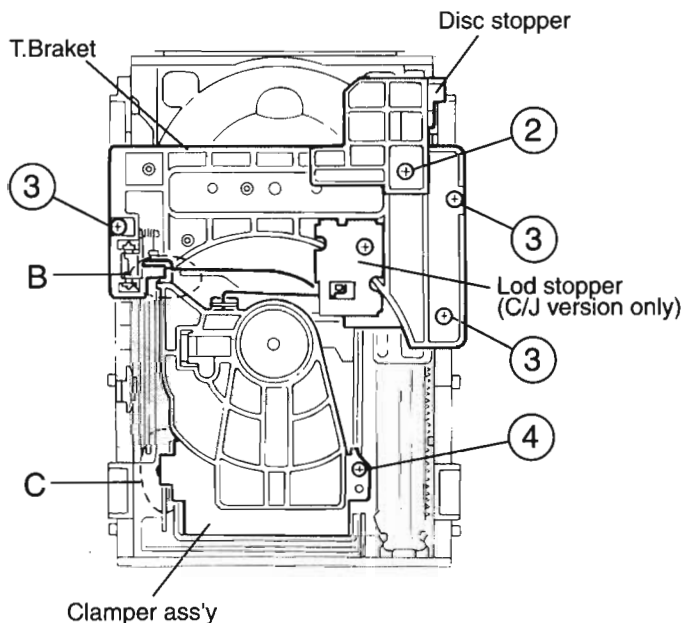


Fig.3

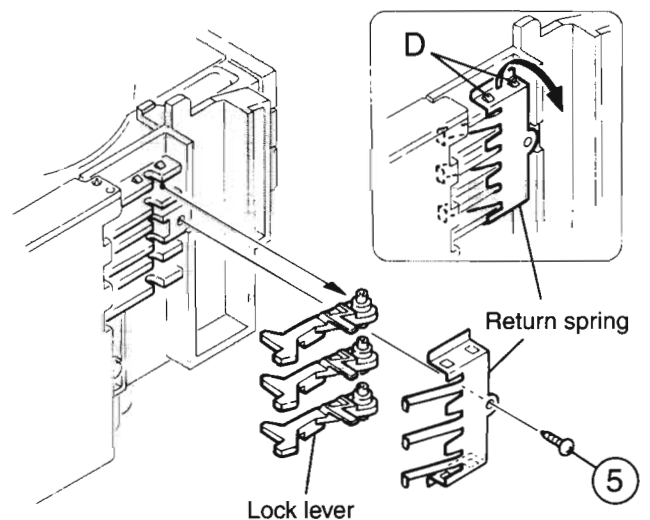


Fig.4

11. Check whether the lifter unit stopper has been caught into the hole at the section "E" of CD tray assembly as shown in Fig.5.
12. Make sure that the driver unit elevator is positioned as shown in Fig.6 from to the second or fifth hole on the left side face of the CD changer mechanism assembly.

**[Caution]** In case the driver unit elevator is not at above position, set the elevator to the position as shown in Fig.7 by manually turning the pulley gear as shown in Fig.8.

13. Manually turn the motor pulley in the clockwise direction until the lifter unit stopper is lowered from the section "E" of CD tray assembly(See Fig.8).
14. Pull out all of the three stages of CD tray assembly in the arrow direction "F" until these stages stop (See Fig.6).
15. At the position where the CD tray assembly has stopped, pull out the CD tray assembly while pressing the two pawls "G and G'" on the back side of CD tray assembly(See Fig.9). In this case, it is easy to pull out the assembly when it is pulled out first from the stage CD tray assembly.

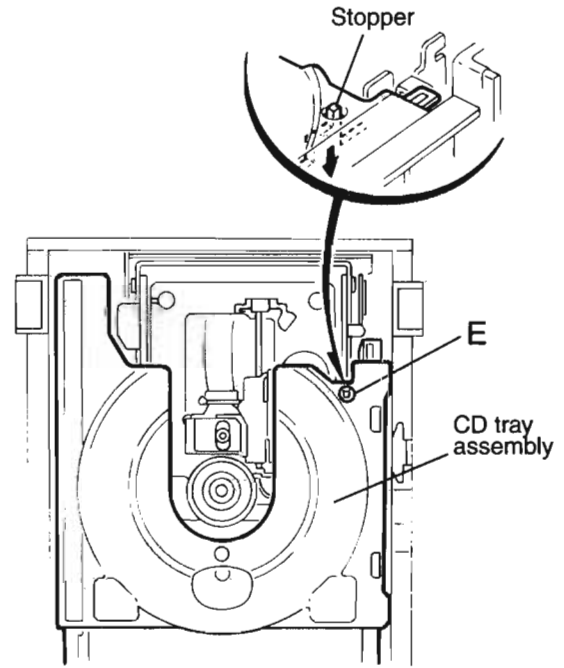


Fig.5

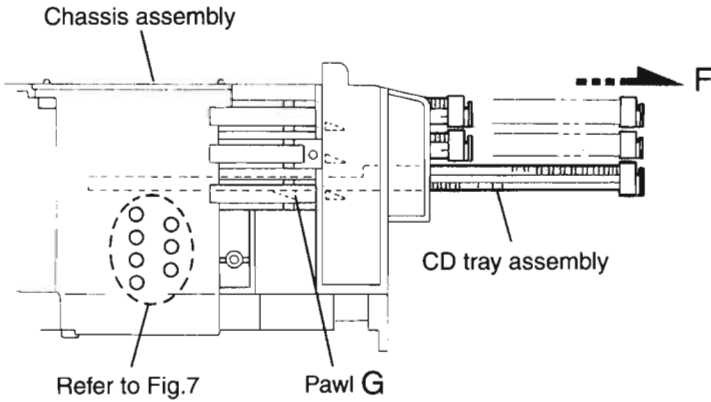


Fig.6

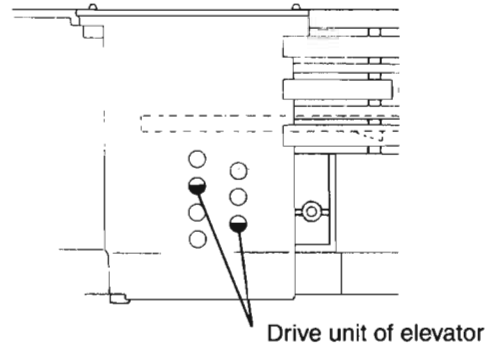


Fig.7

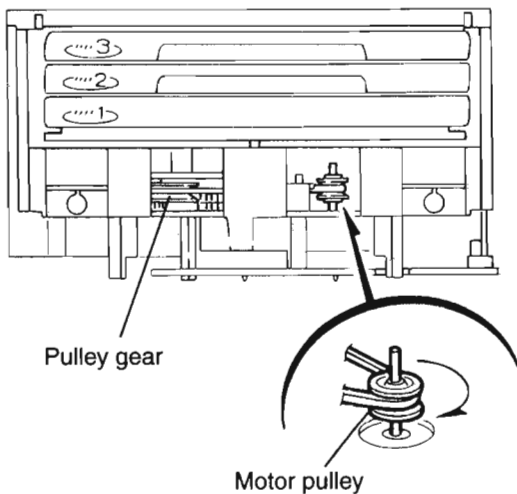


Fig.8

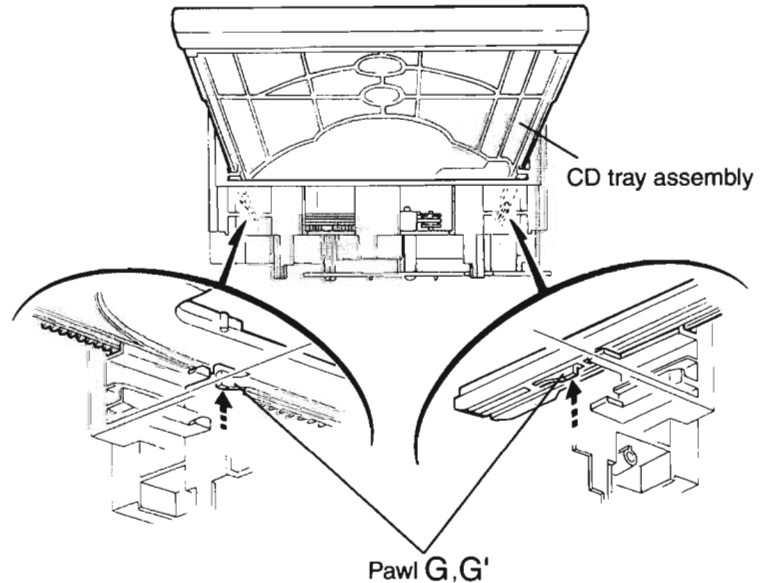


Fig.9

**Removing the CD loading mechanism assembly(See Fig.10)**

1. While turning the cams R1 and R2 assembly in the arrow direction "H" , align the shaft "I" of the CD loading mechanism assembly to the position shown in 2. Fig.10.
2. Remove the four screws 6 retaining the CD loading mechanism assembly.

**Removing the CD traverse mechanism (See Fig.11 and 12 )**

1. For dismantling only the CD traverse mechanism without removing the CD loading mechanism assembly, align the shaft "J" of the CD loading mechanism assembly to the position shown Fig.11 while turning the cam R1 and R2 assembly in the arrow direction "K" .
2. By raising the CD loading mechanism assembly in the arrow direction "L" , remove the assembly from the lifter unit

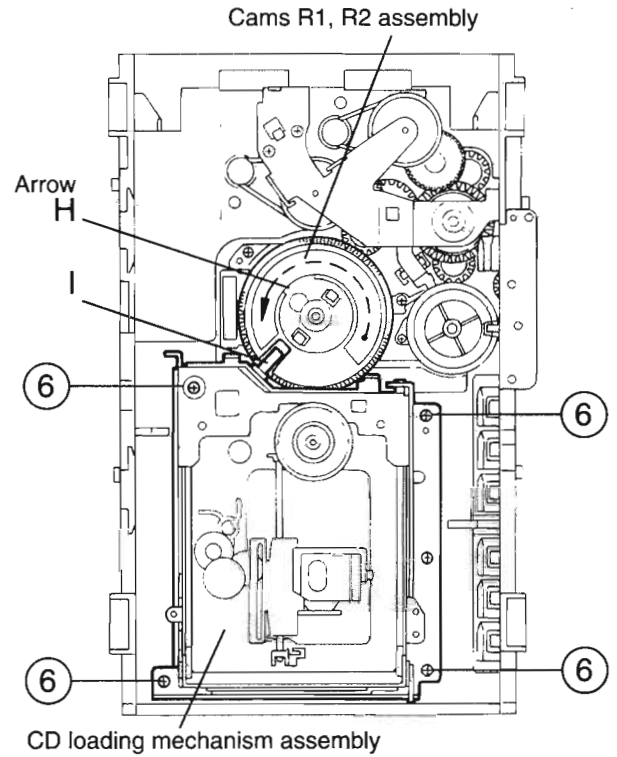


Fig.10

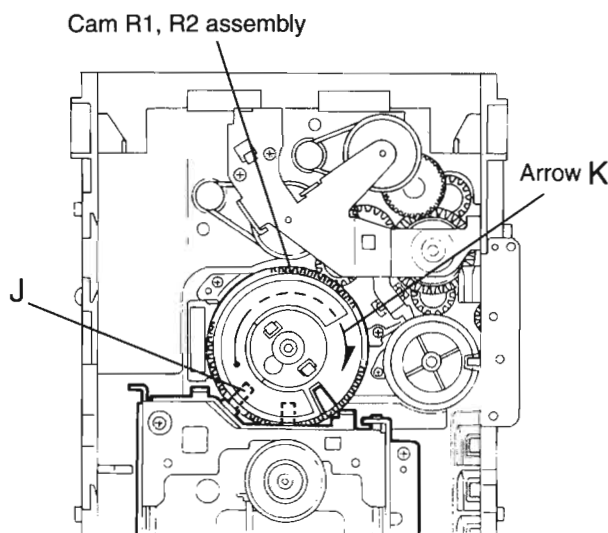


Fig.11

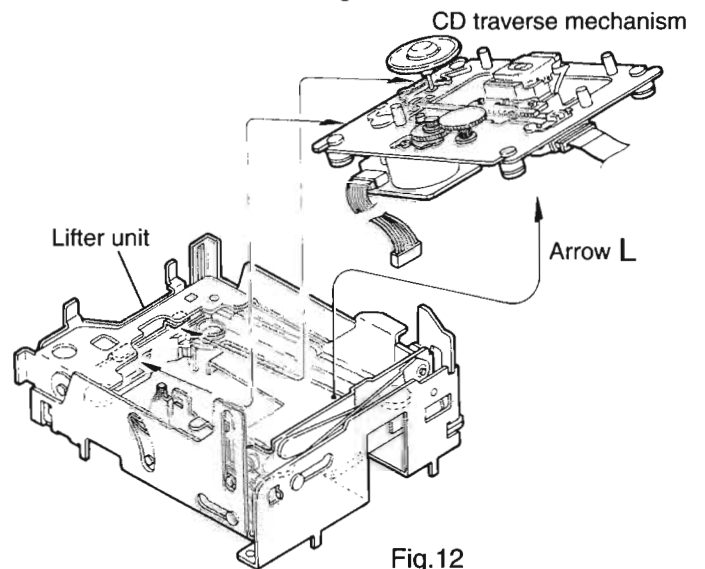


Fig.12

**Removing the CD pick unit (See Fig.13 )**

1. Move the cam gear in the arrow direction a . Then, the CD pickup unit will be moved in the arrow direction b .
2. According to the above step, shift the CD pickup unit to the center position.
3. While pressing the stopper retaining the shaft in the arrow direction c , pull out the shaft in the arrow direction d .
4. After dismantling the shaft from the CD pickup unit, remove the CD pickup unit

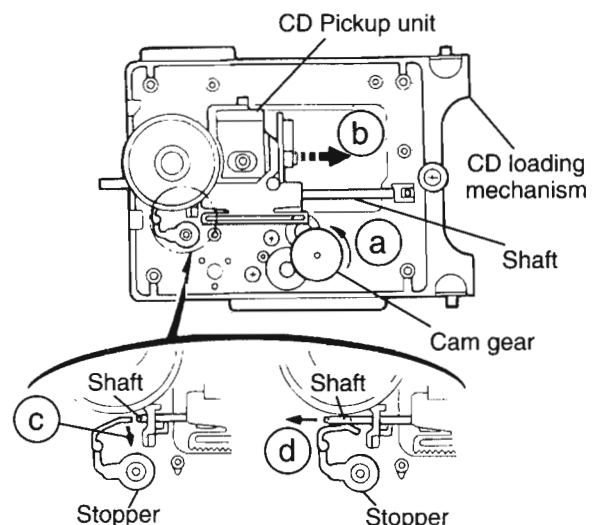


Fig.13

■ Removing the cam unit

(See Fig.14 ~17 )

1. Remove the CD loading mechanism assembly.
2. While turning the cam gear L, align the pawl "N" position of the drive unit to the notch position(Fig.16) on the cam gear L.
3. Pull out the drive unit and cylinder gear(See Fig.17).
4. While turning the cam gear L, align the pawl "O" position of the select lever to the notch position(Fig.18) on the cam gear L.
5. Remove the four screws 9 retaining the cam unit(cam gear L and cams R1/R2 assembly)(See Fig.18).

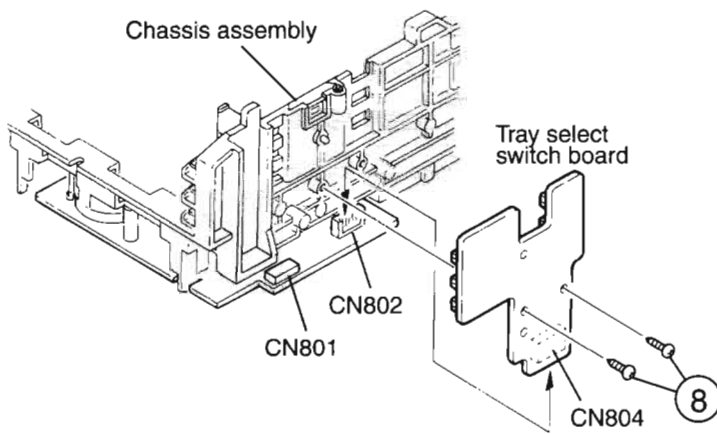


Fig.14

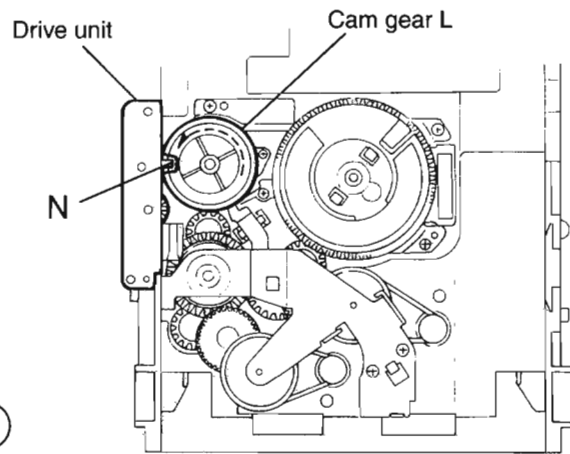


Fig.15

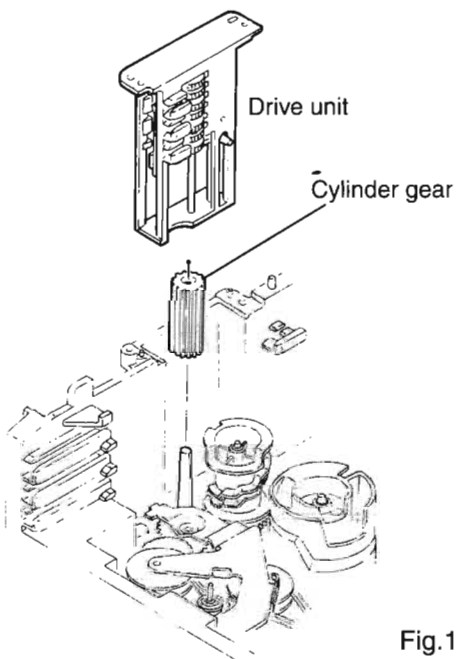


Fig.16

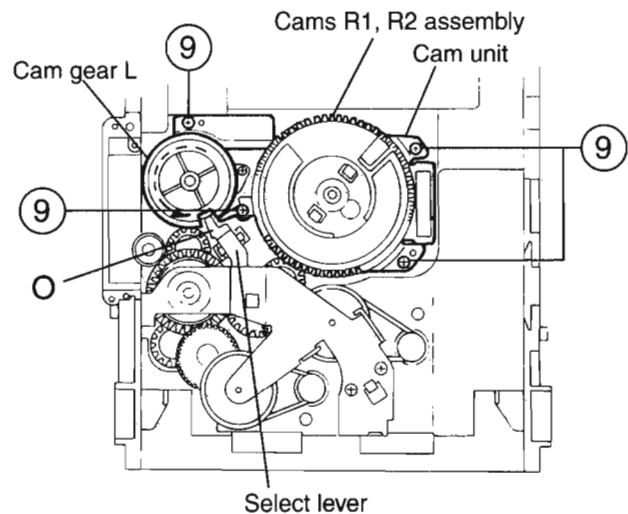


Fig.17

**■Removing the actuator motor and belt  
(See Fig.18~21)**

1. Remove the two screws 10 retaining the gear bracket  
(See Fig.19).
2. While pressing the pawl "P" fixing the gear bracket in the arrow direction, remove the gear bracket  
(See Fig.19).
3. From the notch "Q section" on the chassis assembly fixing the edge of gear bracket, remove and take out the gear bracket(See Fig. 20).
4. Remove the belts respectively from the right and left actuator motor pulleys and pulley gears(See Fig. 19).
5. After turning over the chassis assembly, remove the actuator motor while spreading the four pawls "R" fixing the right and left actuator motors in the arrow direction(See Fig. 21).

**[Note]** When the chassis assembly is turned over under the conditions wherein the gear bracket and belt have been removed, then the pulley gear as well as the gear, etc. constituting the gear unit can possibly be separated to pieces. In such a case, assemble these parts by referring to the assembly and configuration diagram in Fig. 22.

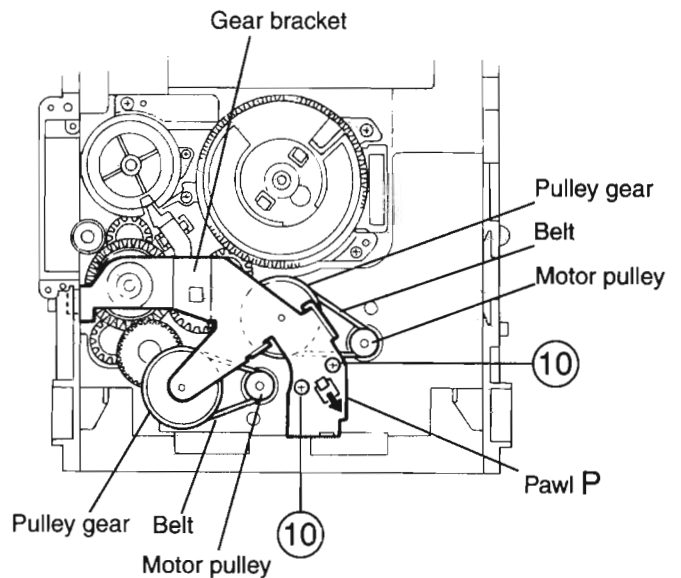


Fig.18

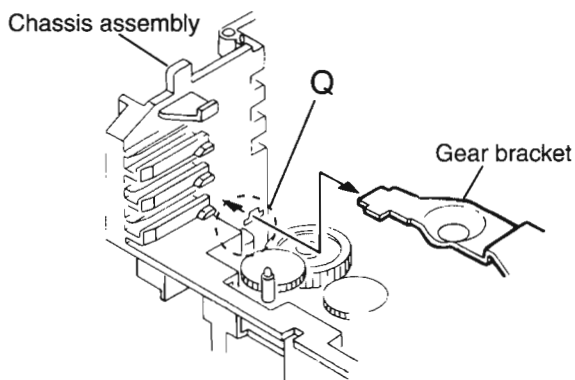


Fig.19

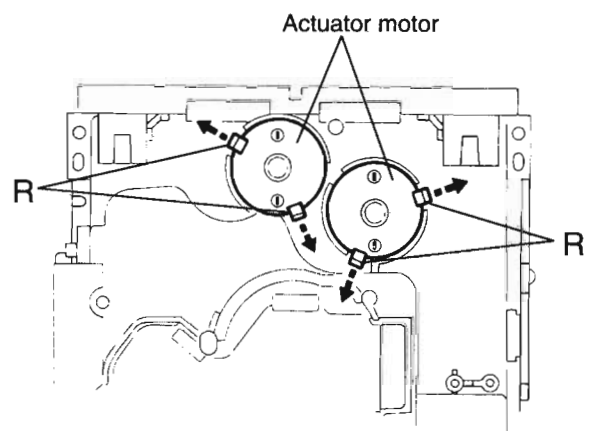


Fig.20

**Assembly and Configuration Diagram**

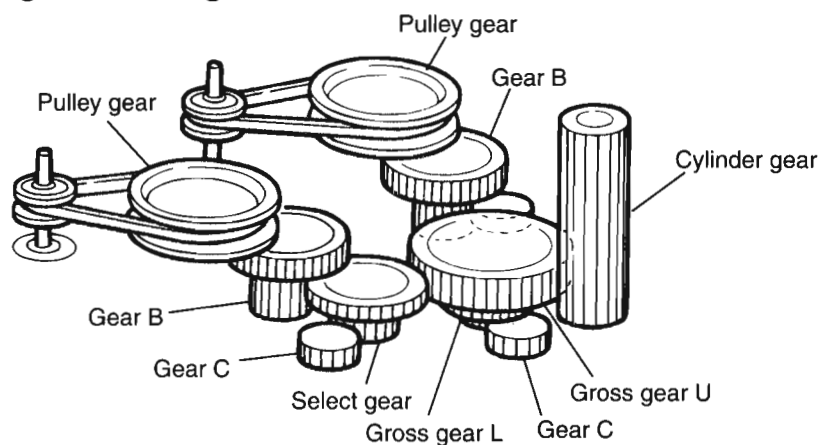


Fig.21

**■ Removing the cams R1/R2 assembly and cam gear L(See Fig.22)**

1. Remove the slit washer fixing the cams R1 and R2 assembly.
2. By removing the two pawls "S" fixing the cam R1, separate R2 from R1.
3. Remove the slit washer fixing the cam gear L.
4. Pull out the cam gear L from the C.G. base assembly.

**■ Removing the C.G. base assembly (See Fig.22 and 23)**

Remove the three screws 11 retaining the C.G. base assembly.

**[Caution]** To reassemble the cylinder gear, etc.with the cam unit (cam gear and cans R1/R2 assembly), gear unit and drive unit, align the position of the pawl "N" on the drive unit to that of the notch on the cam gear L. Then, make sure that the gear unit is engaged by turning the cam gear L (See Fig. 24).

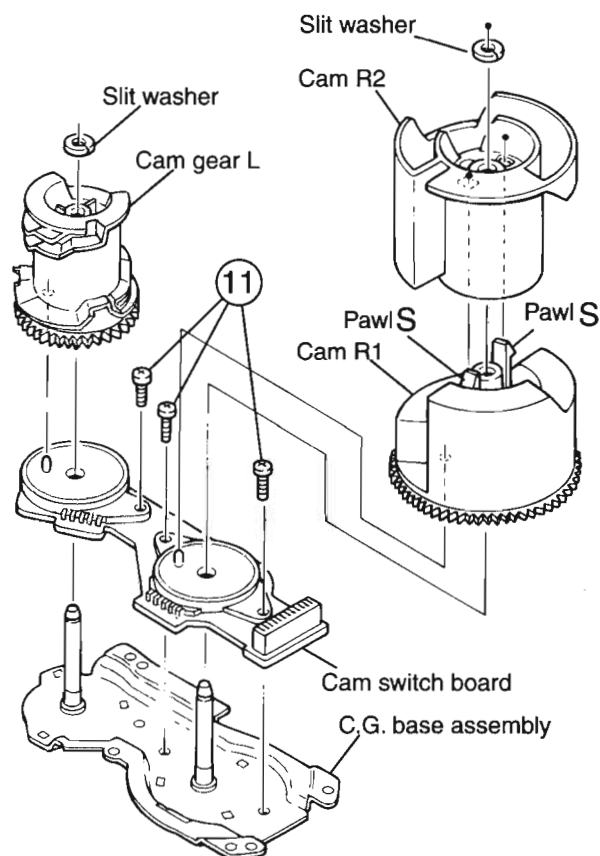


Fig.22

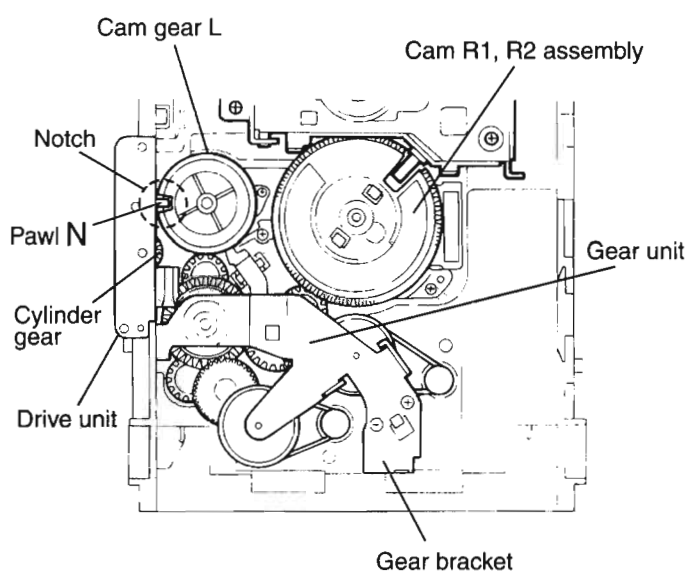


Fig.23

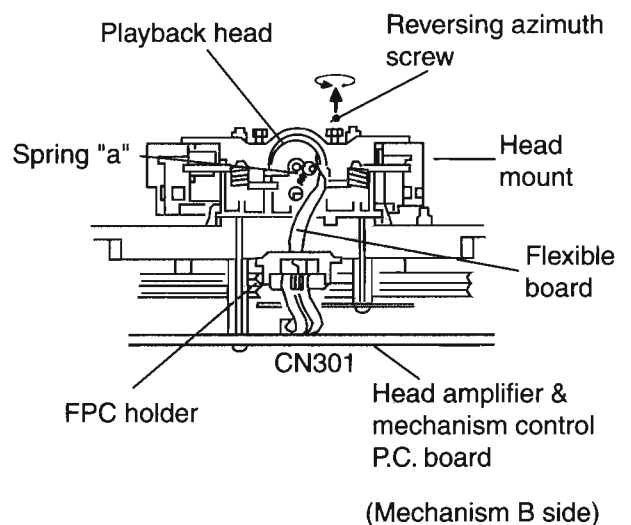
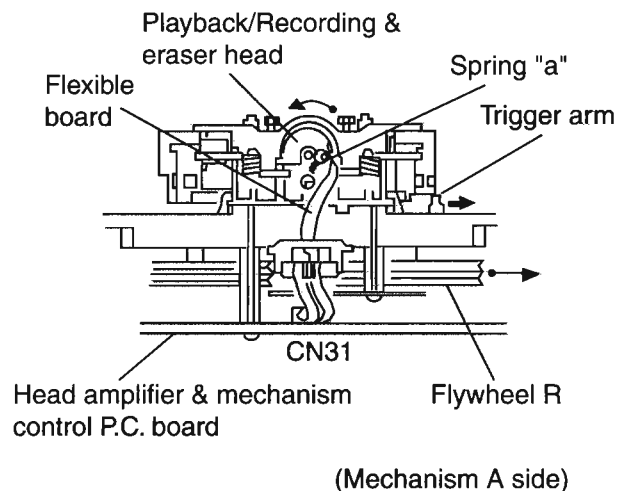
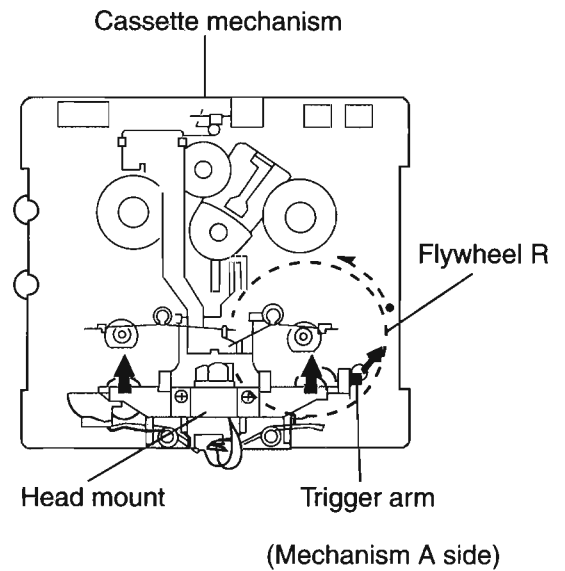
## < Cassette Mechanism Section >

### ■ Removing the Playback, Recording and Eraser Heads

1. While shifting the trigger arms seen on the right side of the head mount in the arrow direction, turn the flywheel R in counterclockwise direction until the head mount has gone out with a click (See Fig 1).
2. When the flywheel R is rotated in counterclockwise direction, the playback head will be turned in counterclockwise direction from the position in Fig 2 to that in Fig 3.
3. At this position, disconnect the flexible P.C.board (outgoing from the playback head) from the connector CN301 on the head amp. and mechanism control P.C. board.
4. After dismantling the FPC holder, remove the flexible P.C.board.
5. Remove the flexible P.C.board from the chassis base.
6. Remove the spring "a" from behind the playback head.
7. Loosen the reversing azimuth screw retaining the playback head.
8. Take out the playback head from the front of the head mount.
9. The recording and eraser heads should also be removed similarly according to Steps 1~8 above.

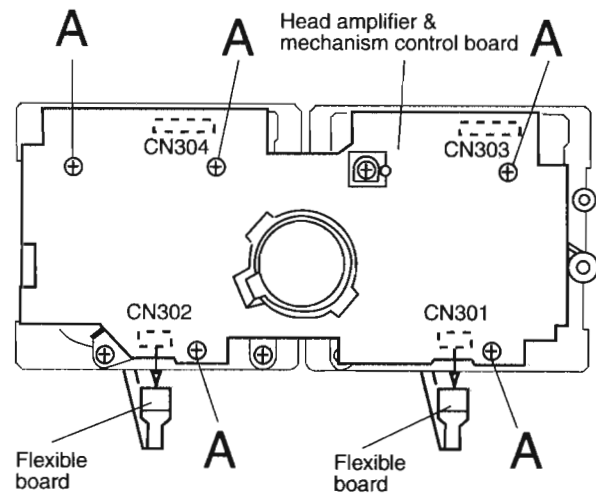
### ● Reassembling the Playback, Recording and Eraser Heads

1. Reassemble the playback head from the front of the head mount to the position as shown in Fig 3.
2. Fix the reversing azimuth screw.
3. Set the spring a from behind the playback head.
4. Attach the flexible P.C.board to the chassis base, and fix it with the FPC holder as shown in Fig 3.
5. The recording and eraser heads should also be reassembled similarly according to Steps 1~4 above.



### ■ Removing the head Amp. and Mechanism Control P.C. Board (See Fig 4)

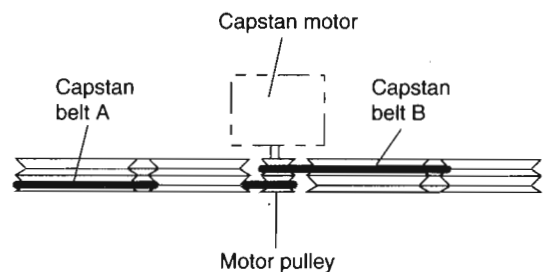
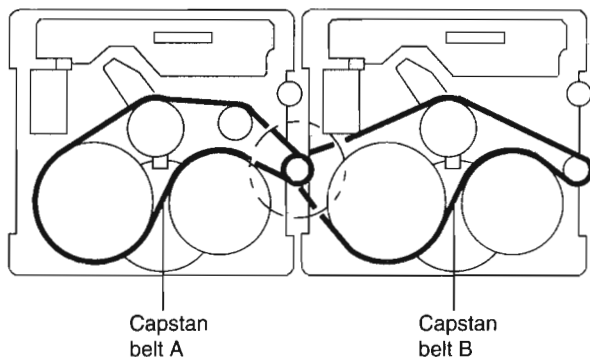
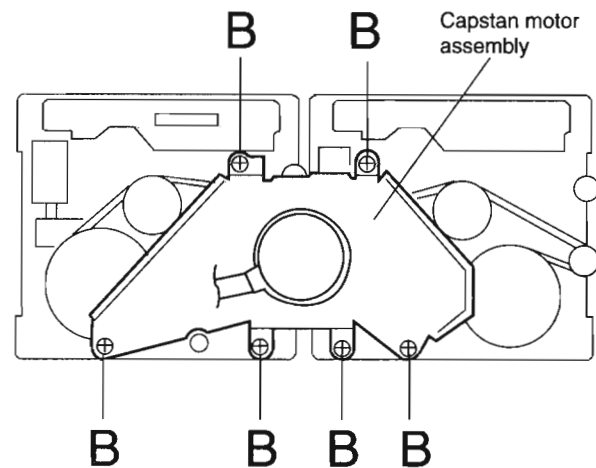
1. Remove the cassette mechanism assembly.
2. After turning over the cassette mechanism assembly, remove the five screws "A" retaining the head amp. and mechanism control P.C. board
3. Disconnect the connectors CN303 and CN304 on the P.C. Board and the connectors CN1 on both the right and left side reel pulse P.C. Boards.
4. When necessary, remove the 4pin parallel wire soldered to the main motor



### ■ Removing the Capstan Motor Assembly

1. Remove the six screws "B" retaining capstan motor assembly (See Fig 5).
2. While raising the capstan motor, remove the capstan belts A and B respectively from the motor pulley (See Fig 6).

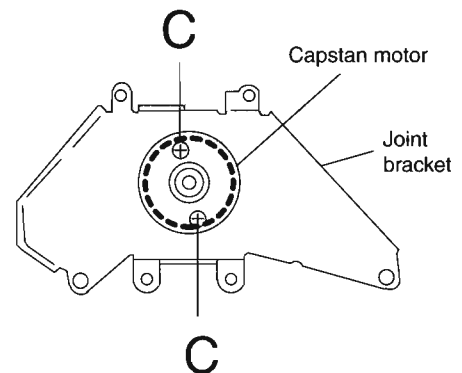
**Caution 1:** Be sure to handle the capstan belts so carefully that these belts will not be stained by grease and other foreign matter. Moreover, these belts should be hand while referring to the capstan belt hanging method.





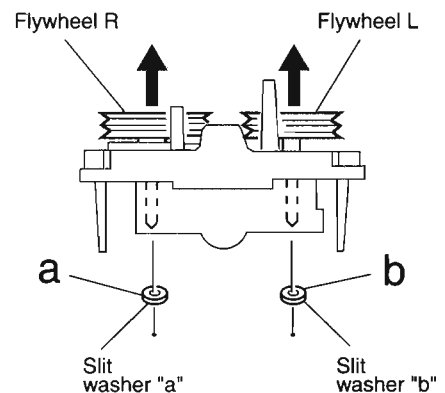
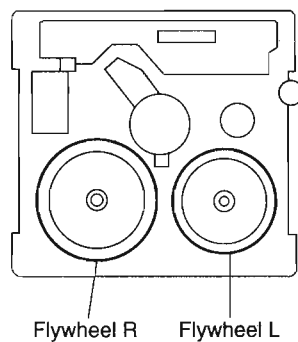
■ **Removing the Capstan Motor (See Fig 8)**

From the joint bracket, remove the two screws "C" retaining the capstan motor.



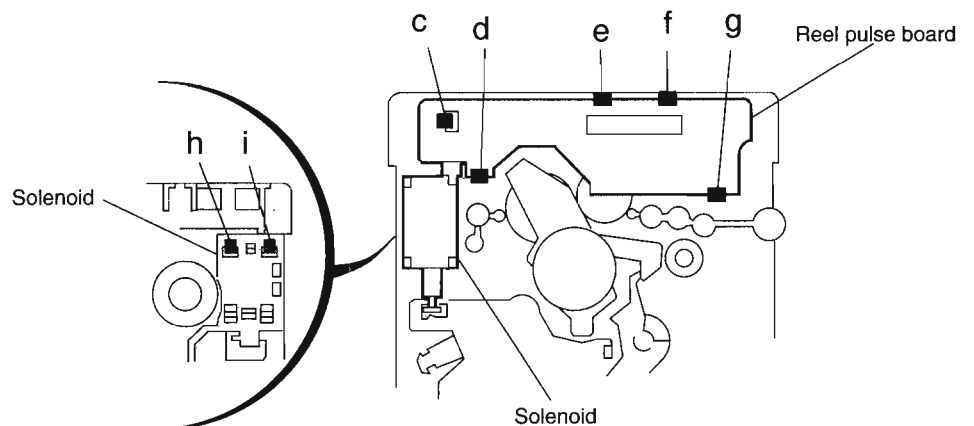
■ **Removing the Flywheel (See Fig 9.10)**

1. Remove the head amp. and mechanism control P.C.Board.
2. Remove the capstan motor assembly.
3. After turning over the cassette mechanism, remove the slit washers "a" and "b" fixing the capstan shafts R and L, and pull out the flywheels R and L respectively from behind the cassette mechanism.

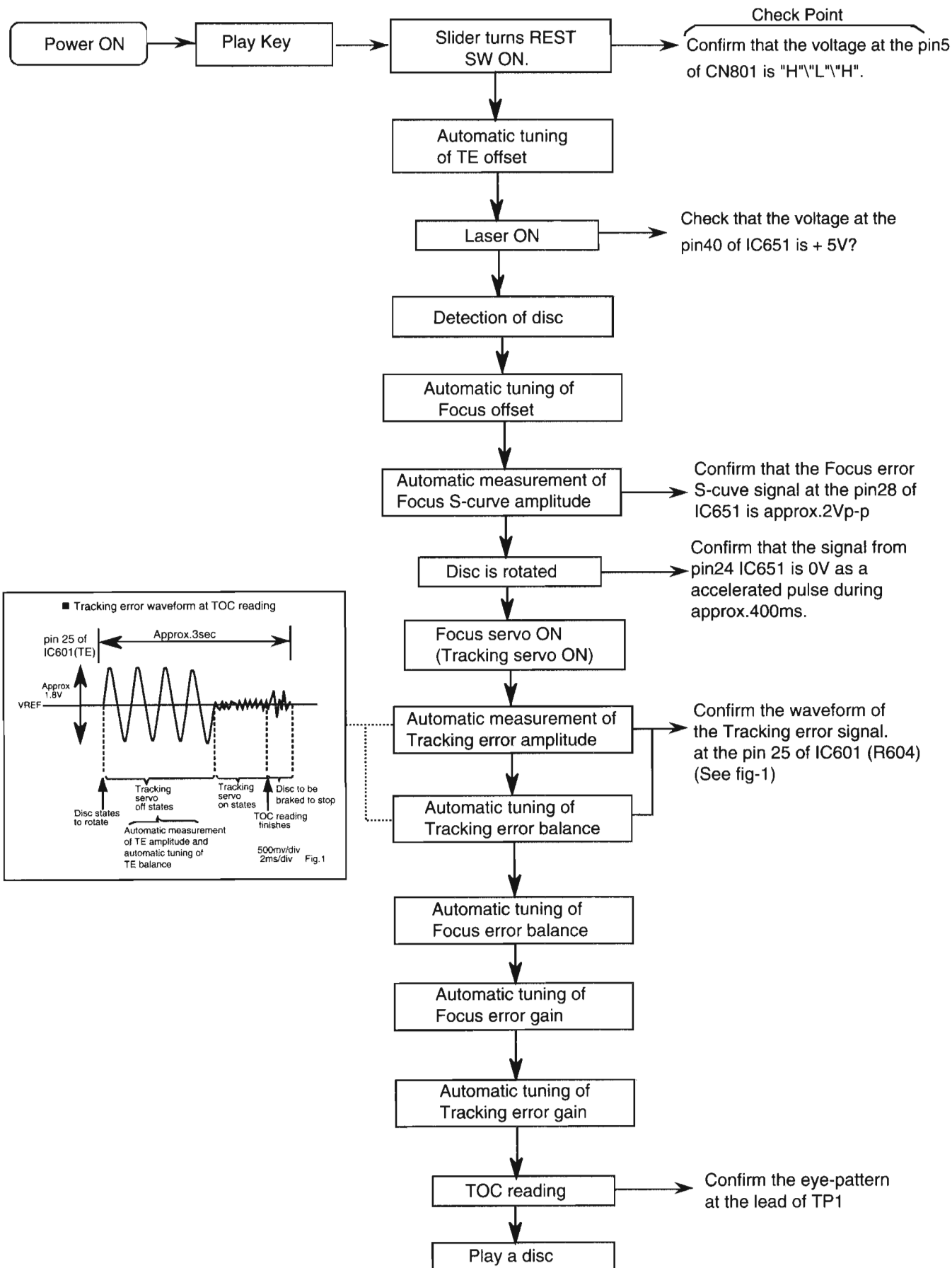


■ **Removing the Reel Pulse P.C.Board and Solenoid (See Fig 11)**

1. Remove the five pawls (c,d,e,f,g) retaining the reel pulse P.C.Board.
2. From the surface of the reel pulse P.C.Board parts, remove the two pawls "h" and "i" retaining the solenoid.

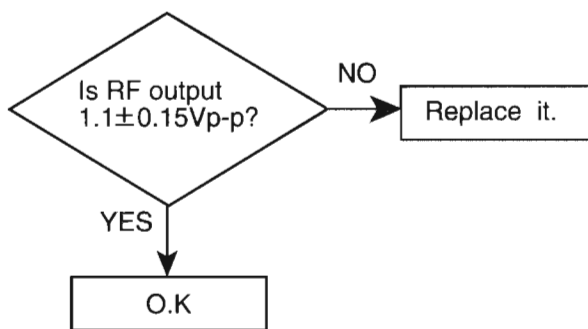


## Flow of functional operation until TOC read

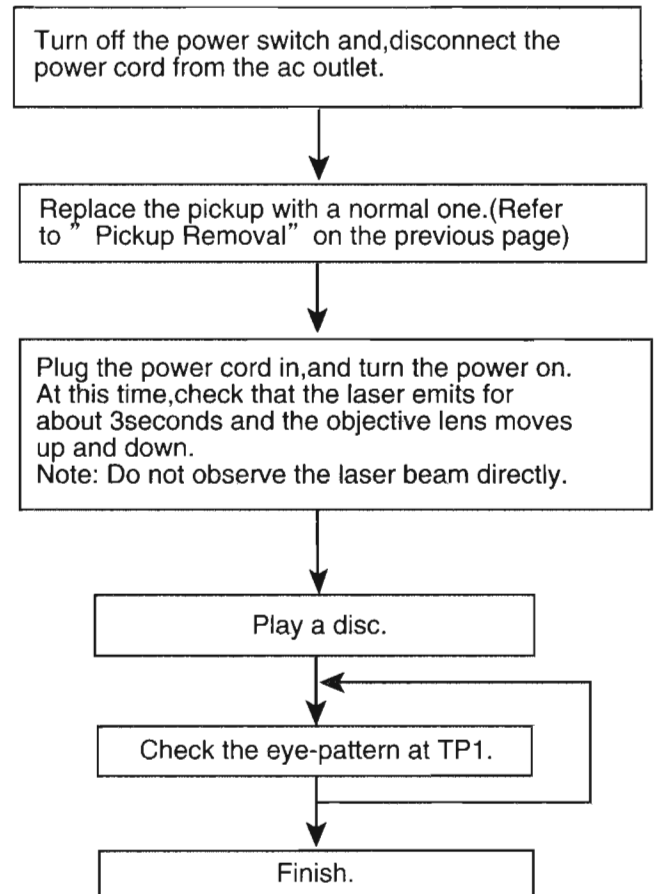


## Maintenance of laser pickup

- (1) Cleaning the pick up lens  
Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.
- (2) Life of the laser diode  
When the life of the laser diode has expired, the following symptoms will appear.
  - (1) The level of RF output (EFM output: amplitude of eye pattern) will below.



## Replacement of laser pickup



- (3) Semi-fixed resistor on the APC PC board The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.  
If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced.  
If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

## Adjustment method

### Measurement Instruments Required for Adjustment

1. Low frequency oscillator,  
This oscillator should have a capacity to output 0dBs to 600Ω at an oscillation frequency of 50Hz-20kHz.
2. Attenuator impedance : 600Ω
3. Electronic voltmeter
4. Frequency counter
5. Wow flutter meter
6. Test tape  
VTT712 : For Tape speed and wow flutter ( 3kHz)  
VTT724 : For Reference level (1kHz)  
TMT7036 : For Head angle(10kHz),Play back frequency characteristics(1kHz),and dubbing frequency characteristics(63,1,10kHz)  
Because of frequency-mixed tape with 63,1k,10k and 14kHz(250nWb/m -24dB).  
Use this tape together with a filter.
7. Blank tape  
TAPE I : AC-225, TAPE II : AC-514
8. Torque gauge : For play and back tension  
Forward ; TW2111A, Reverse ; TW2121A  
Fast Forward and Rewind ; TW2231A
9. Test disc  
: CTS-1000(12cm),GRG-1211(8cm)  
GMT-9900(CD-G),MMCD-VCD01(VIDEO-CD)
10. Jitter meter

### Measurement Conditions

Power supply voltage  
AC110/127/220/230-240V(50Hz) : Ver.U,US,UX,UT,UY  
AC220V(60Hz) : Ver.UP  
AC120V(60Hz) : Ver.J,C  
AC240V(50Hz) : Ver.A  
AC230V(50Hz) : Ver.B,E,EN,EE,EV

Measurement  
output terminal : Speaker out  
:TP101(Mesuring for TUNER/DECK/CD)  
:Dummy load 6Ω

### Radio input signal

AM modulation frequency : 400Hz  
Modulation factor : 30%  
FM modulation frequency : 400Hz  
Frequency displacement : 22.5kHz

### Frequency Range

MW	530kHz~1710kHz	J,C
	531kHz~1710kHz	except J,C,A,B,E,EN,EV,EE,UX
	530kHz~1602kHz	only UX
LW	522kHz~1629kHz	A,B,E,EN,EV,EE
	144kHz~288kHz	only MX-J75R
FM	65MHz~74MHz /	
	87.5MHz~108MHz	only EE
	87.5MHz~108MHz	except EE

### Standard measurement positions of volume and switch

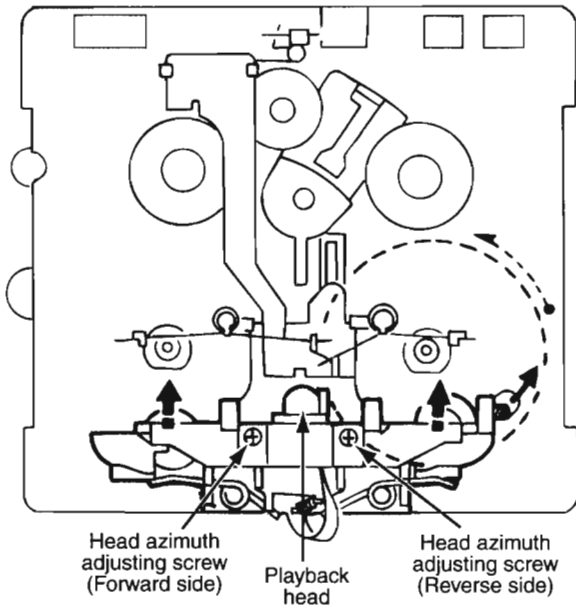
Power : Standby (Light STANDBY Indicator)  
SA-Bass : OFF  
Sound mode : OFF  
Main VOL. : 0 Minimum  
Travers mecha set position : Disc 1  
Mic MIX VOL : MAX  
KARAOKE/ECHO : OFF (only U type)

### Precautions for Measurement

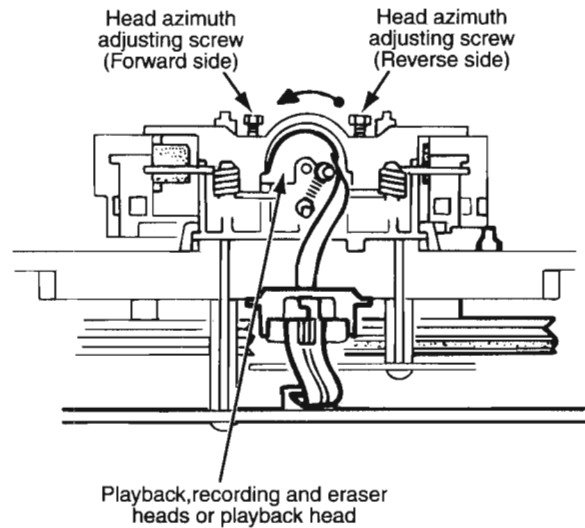
1. Apply 30pF and 33kΩ to the IF sweeper output side and 0.082 μF and 100kΩ in series to the sweeper input side.
2. The IF sweeper output level should be made as low as possible within the adjustable range.
3. Since the IF sweeper is a fixed device, there is no need to adjust this sweeper.
4. Since a ceramic oscillator is used, there is no need to perform any MPX adjustment.
5. Since a fixed coil is used, there is no need to adjust the FM tracking.
6. The input and output earth systems are separated.  
In case of simultaneously measuring the voltage in both of the input and output systems with an electronic voltmeter for two channels, therefore, the earth should be connected particularly.
7. In the case of BTL connection amplifier, the minus terminal of speaker is not for earthing. Therefore, be sure not to connect any other earth terminal to this terminal. This system is of an OTL system.

■ Arrangement of Adjusting Positions

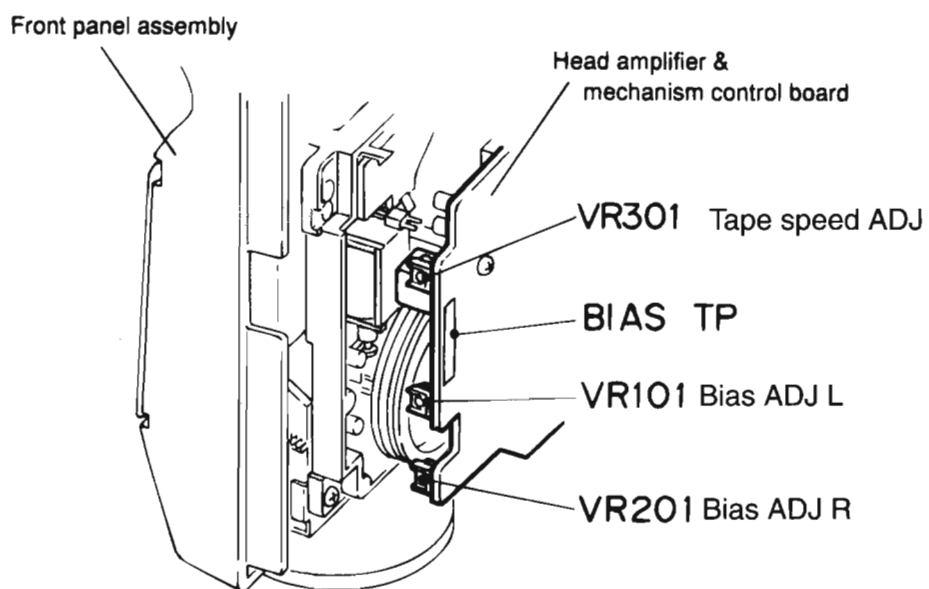
Cassette mechanism section (Mechanism A section)



Cassette mechanism section (Back side)



Cassette Mechanism Unit Section



■ **Tape Recorder Section**

Items	Measurement conditions	Measurement method	Standard values	Adjusting positions
Confirmation of head angle	Test tape :TMT7036(10kHz) Measurement output terminal :Speaker terminal Speaker R (Load resistor:3Ω) :Headphone terminal	1.Playback the test tape TMT7036(10kHz). 2.With the playback mechanism or recording & playback mechanism, adjust the head azimuth screw so that the forward and reverse output levels become maximum.After adjustment,lock the head azimuth at least by half a turn. 3.In either case,this adjustment should be performed in both the forward and reverse directions with the head azimuth screw.	Maximum output	Adjust the head azimuth screw only when the head has been changed.
Confirmation of tape speed	Test tape :VTT712(3kHz) or TMT7036(3kHz) Measurement output terminal :Headphone terminal	<Constant speed> Adjust VR301 so that the frequency counter reading becomes 3,000Hz±60Hz when playing back the test tape VTT712(3kHz)with the playback mechanism or playback and recording mechanism after ending forward winding of the tape.	Tape speed of decks (A and B) :3,000Hz ±60Hz	VR301

■ **Reference Values for Confirmation items**

Items	Measurement conditions	Measurement method	Standard values	Adjusting positions
Double tape speed	Test tape :TMT7036(10kHz) Measurement output terminal :Speaker terminal Speaker R (Load resistance:3Ω) measurement output terminal :Headphone terminal	After setting to the double speed motor, confirm that the frequency counter reading becomes 4,800+400/-300Hz when the test tape VTT712 (3kHz) has been play back with the playback mechanism.	4,800+400/-300Hz	Playback mechanism side
Difference between the forward and reverse speed. P.mecha and R/P mecha speed		When the test tape VTT712(3kHz) has been played back with the playback mechanism or recording and playback mechanism at the beginning of forward winding, the frequency counter reading of the difference between both of the mechanisms should be 6.0Hz or less.	60Hz or less	Both the playback and recording & playback mechanism
Wow & flutter	Test tape :TMT7036(10kHz) Measurement output terminal :Headphone terminal	When the test tape VTT712(3kHz) has been played back with the playback mechanism or recording and playback mechanism at the beginning of forward winding the frequency counter reading of wow & flutter should be 0.25% or less(WRMS).	with in 0.25% JIS(WTD)	Both the playback and recording & playback mechanism

## ■ Electrical Performance

Items	Measurement conditions	Measurement method	Standard values	Adjusting positions
Adjustment of recording bias current (Reference value)	*Mode : Forward or reverse mode *Recording mode *Test tape : AC-514 and AC-225 Measurement output terminal : Both recording and headphone terminals	1. With the recording and playback mechanism, load the test tapes (AC-514 to TYP II and AC-225 to TYP I), and set the mechanism to the recording and pausing conditions in advance. 2. After connecting $100\Omega$ in series to the recorder head, measure the bias current with a valve voltmeter at both of the terminals. 3. After resetting the [PAUSE] mode, start recording. At this time, adjust VR101 for LcH and VR201 for RcH so that the recording bias current values become $4.0\mu\text{A}$ (TYP I) and $4.20\mu\text{A}$ (TYP II).	AC-225 : $4.20\mu\text{A}$ AC-514 : $4.0\mu\text{A}$	LcH : VR101 RcH : VR201
Adjustment of recording and playback frequency characteristics	Reference frequency : 1kHz and 10kHz (REF: -20dB) Test tape : TYP II AC-514 Measurement input terminal : OSC IN	1. With the recording and playback mechanism, load the test tape (AC-514 to TYP II), and set the mechanism to the recording and pausing condition in advance. 2. While repetitively inputting the reference frequency signal of 1kHz and 10kHz from OSC IN, record and playback the test tape. 3. While recording and playing back the test tape in TYP II, adjust VR101 for LcH and VR201 for RcH so that the output deviation between 1kHz and 10kHz becomes $-1\text{dB}\pm 2\text{dB}$ .	Output deviation between 1kHz and 10kHz : $-1\text{dB}\pm 2\text{dB}$	LcH : VR101 RcH : VR201

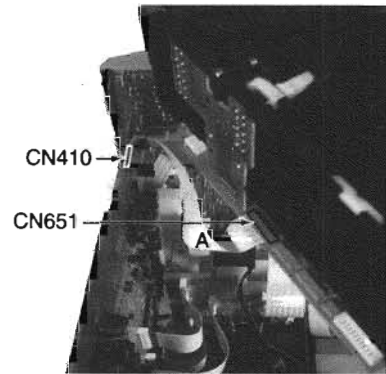
## ■ Reference Values for Electrical Function Confirmation Items

Items	Measurement conditions	Measurement method	Standard values	Adjusting positions
Recording bias frequency	*Recording and playback side forward or reverse *Test tape : TYP II AC-514 *Measurement terminal BIAS TP on P.C. board	1. While changing over to and from BIAS 1 and 2, confirm that the frequency is changed. 2. With the recording and playback mechanism, load the test tape (AC-514 to TYP II), and set the mechanism to the recording and pausing conditions in advance. 3. Confirm that the BIAS TP frequency on the P.C. board is $100\text{kHz}\pm 6\text{kHz}$ .	100kHz +9kHz -7kHz	
Eraser current (Reference value)	*Recording and playback side forward or reverse *Recording mode *Test tape : AC-514 and AC-225 Measurement terminal Both of the eraser head	1. With the recording and playback mechanism, load the test tapes (AC-514 to TYP II and AC-225 to TYP I), and set the mechanism to the recording and pausing condition in advance. 2. After setting to the recording conditions, connect $1\text{M}\Omega$ in series to the eraser head on the recording and playback mechanism side, and measure the eraser current from both of the eraser terminal.	TYP II : 120mA TYP I : 75mA	

## Diagnosis which uses extension wire method

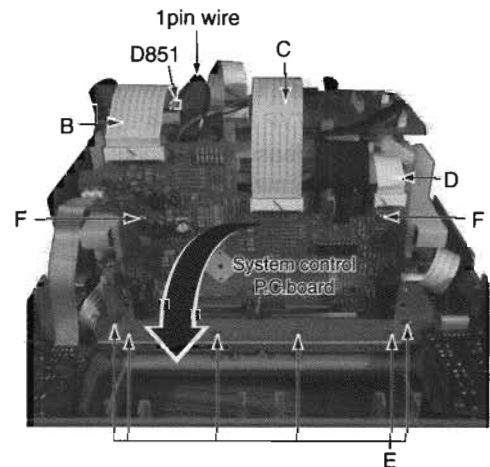
### CD Changer mechanism

1. Remove the top cover and CD changer mechanism.
2. The extension wire "A" is connected with CN651 and CN410.



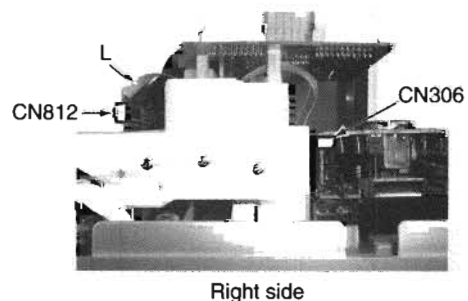
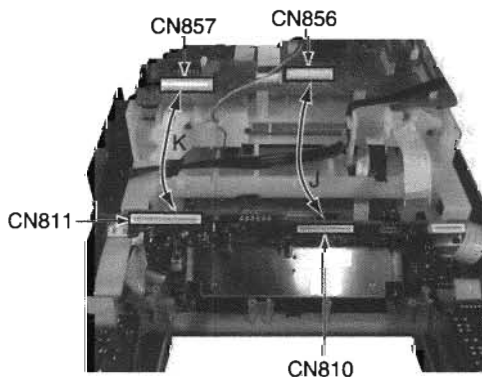
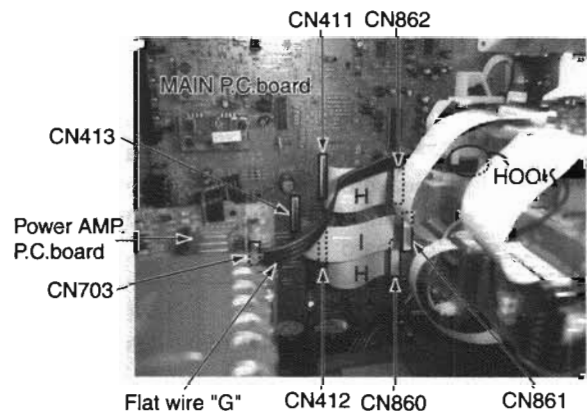
### System control P.C.board

1. Remove the top cover and CD changer mechanism.
2. Remove the front panel assembly.
3. Disconnect the card wire "B", "C", "D".
4. The 1pin wire is removed from D851
5. Six screws "E" are removed, and the bracket is removed.
6. Two screws "F" on the system control P.C.board are removed, and the system control P.C.board is knocked down forward.
7. The flat wire "G" is connected with CN703 on the Power AMP.P.C.board while remove flat wire "G" from the hook, and extended.
8. Two extension wires "H" are connected with CN860, CN412, and CN862, CN411 respectively.
9. The extension wire "I" is connected with CN861 and CN413.
10. The extension wire "J" is connected with CN856 and CN810.
11. The extension wire "K" is connected with CN857 and CN811.
12. The extension wire "L" is connected with CN306 and CN812.



### Extension wire parts No.

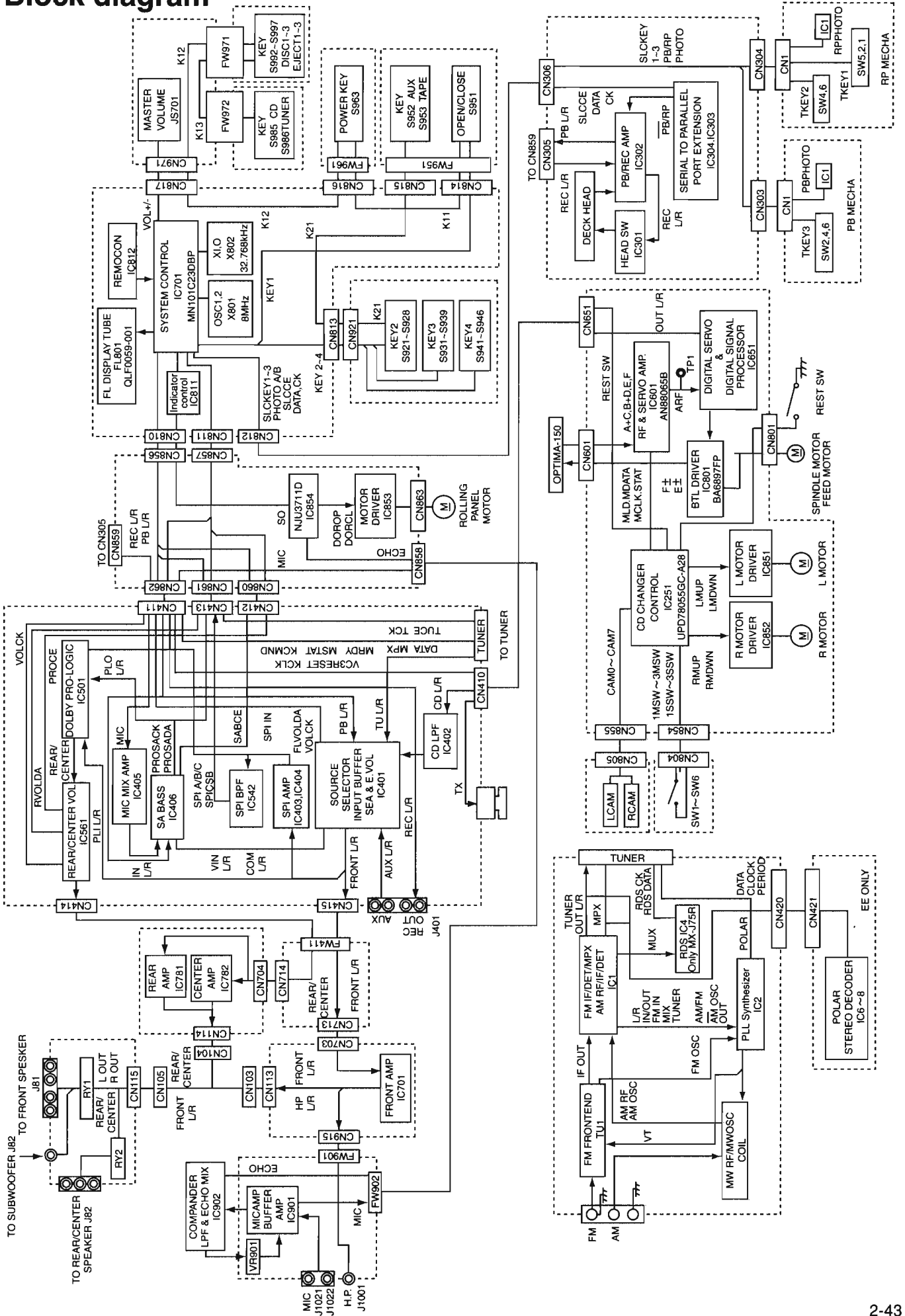
- A : VWF1019-45TTA
- H : QUQ412-2140CJ
- I : QUQ412-1738CJ
- J : QUQ412-2120CJ
- K : VWF1223-30TTB
- L : VWF1211-28TTB





# Block diagram

MX-J70/MX-J76/MX-J75R



MX-J70/MX-J76/MX-J75R

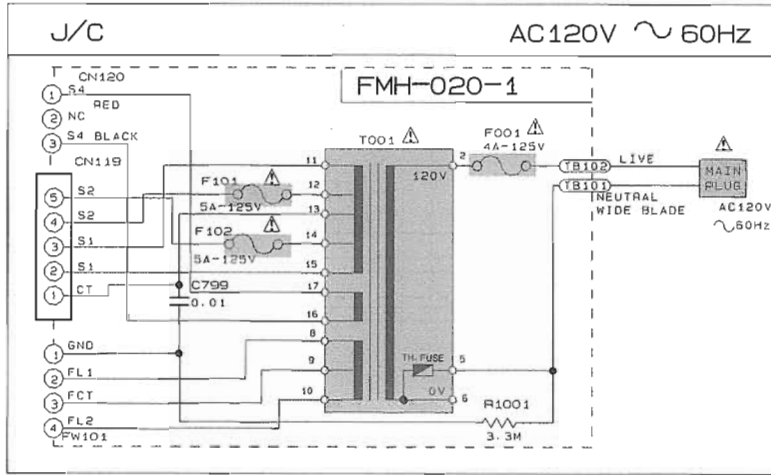
<< M E M O >>



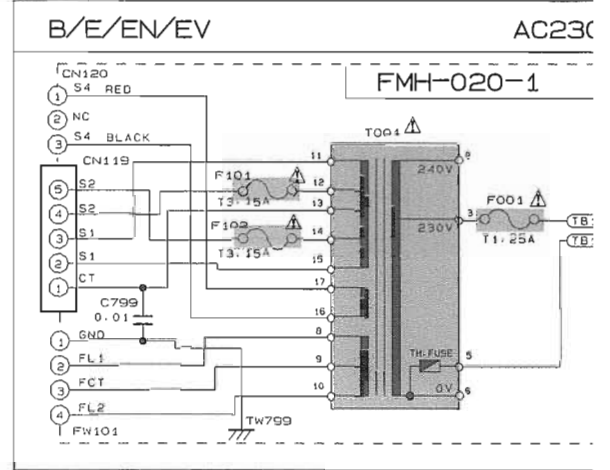
# Standard Schematic Diagrams

## Power Transformer Section

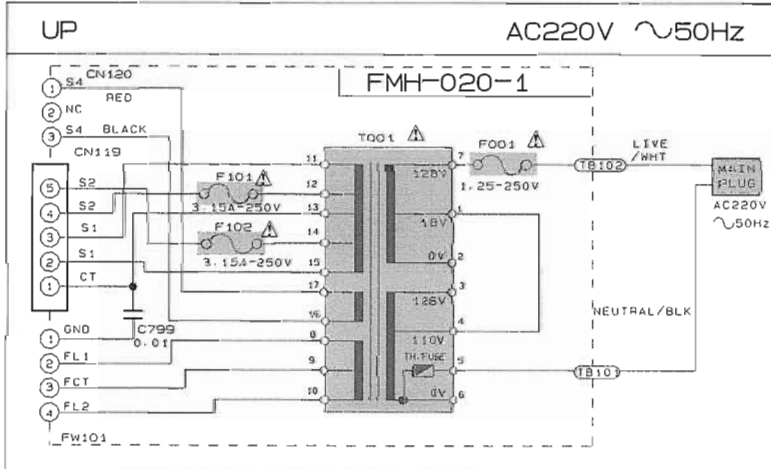
POWER SUPPLY BLOCK



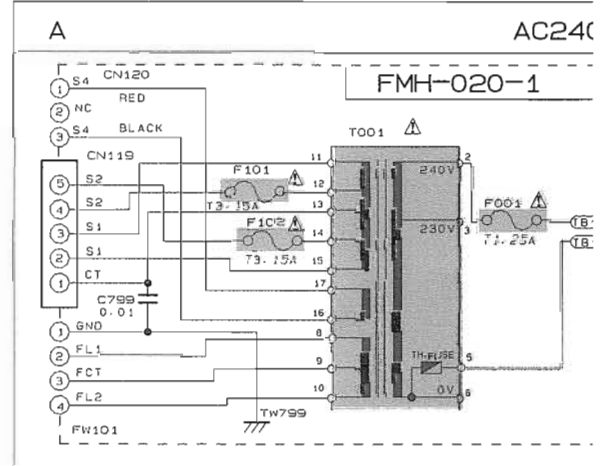
POWER SUPPLY BLOCK



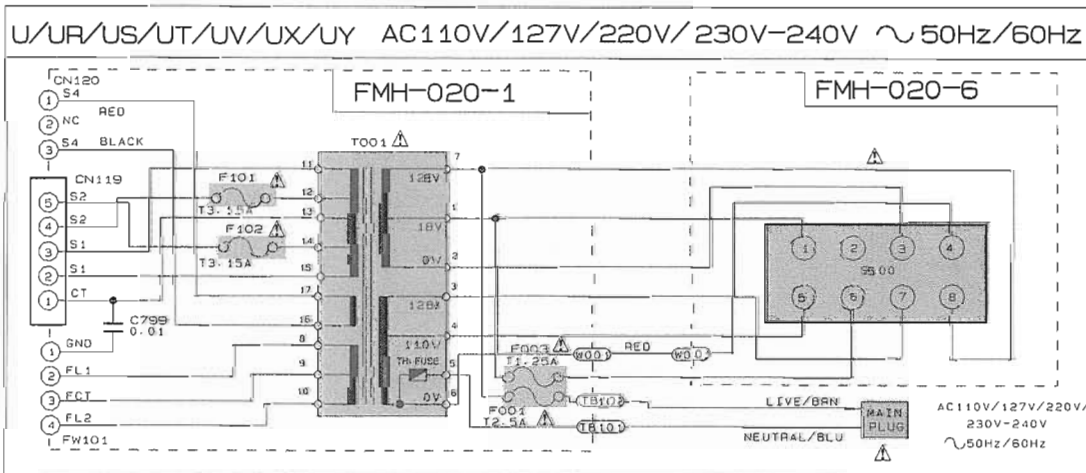
POWER SUPPLY BLOCK



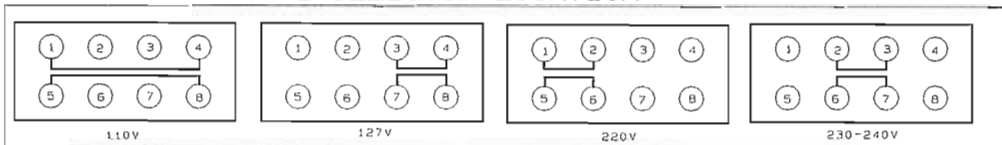
POWER SUPPLY BLOCK



POWER SUPPLY BLOCK



VOLTAGE SELECTOR LOCATION



VERSION CODES	
J	U.S.A.
C	CANADA
B	U.K.
E	CONTINENTAL EUROPE
EE	RUSSIA
EN	NORDIC COUNTRIES
EV	EASTERN EUROPE
A	AUSTRALIA
U	UNIVERSAL EXCEPT A
UP	KOREA
UR	BRAZIL
US	SINGAPORE
UT	TAIWAN
UV	VIETNAM
UX	SAUDI ARABIA
UY	ARGENTINA

MODEL CA-MXJ70/CA-MXJ75R  
MX-J70/MX-J75R/MX-

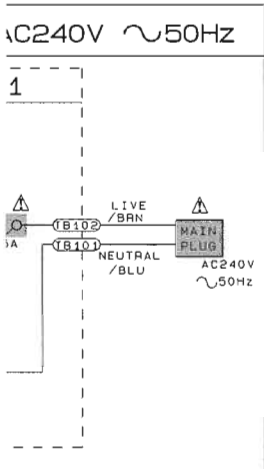
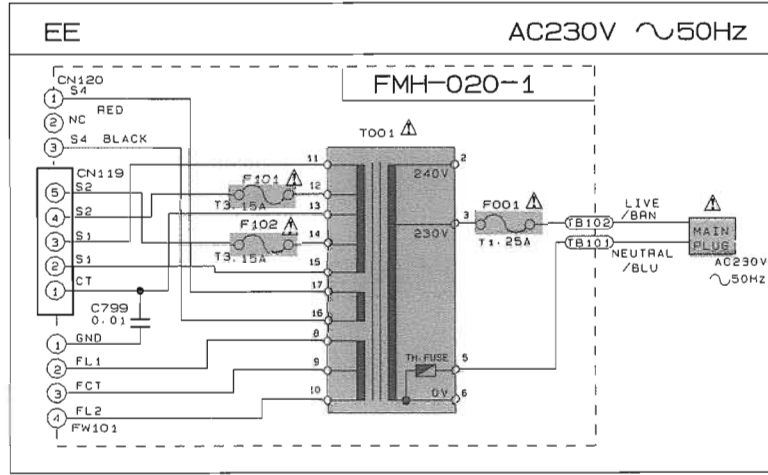
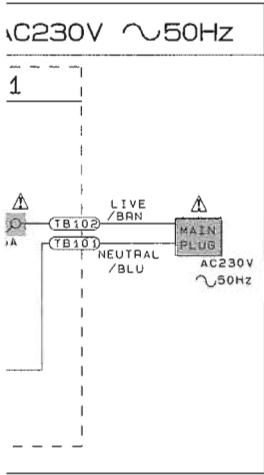
A

B

C

D

POWER SUPPLY BLOCK



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

SHEET NUMBER	MODEL NUMBERS TO BE APPLIED	CIRCUITS DESCRIPTION
1/11	CA-MXJ70/CA-MXJ75R MX-J70/MX-J75R/MX-J76	PRIMARY WITH MAINS TRANSFORMER
2/11	CA-MXJ70/CA-MX-J75R MX-J70/MX-J75R/MX-J76	DC REGULATORS/AUDIO OUTPUT
3/11	CA-MXJ70/CA-MX-J75R MX-J70/MX-J75R/MX-J76	EXTERNAL INPUT SOURCE SELECTOR SWITCH
4/11	CA-MXJ70/MX-J70	TUNER RF/IF/FM MULTIPLEX (ONLY FOR J. C. U. UP. US. UR. UT. UX. UY)
5/11	CA-MXJ75R	TUNER RF/IF/FM MULTIPLEX (ONLY FOR B. E. EN. EV)
6/11	MX-J75R	TUNER RF/IF/FM MULTIPLEX (ONLY FOR EE)
7/11	MX-J75R	POLAR STEREO MULTIPLEX (ONLY FOR EE)
8/11	CA-MXJ70/CA-MX-J75R MX-J70/MX-J75R/MX-J76	FL DISPLAY, SYSTEM CONTROL LSI, USER CONTROL KEYS
9/11	CA-MXJ70	MIC AMP, ECHO CIRCUIT (ONLY FOR U. UP. US. UR. UT. UV. UX. UY)
10/11	CA-MXJ70/CA-MX-J75R MX-J70/MX-J75R/MX-J76	TAPE DECK MECHANISM CONTROL TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS
11/11	CA-MXJ70/CA-MX-J75R MX-J70/MX-J75R/MX-J76	CD SERVO AND CD SYSTEM CONTROL CD CHANGER MECHANISM CONTROL

NOTES: MARK [\*] IS TO SHOW DEVIATION IN VERSIONS.  
DETAILS ARE EXPLAINED NEAR THE MARK.

EUROPE  
FRANCE  
JAPAN  
EXCEPT ALL OF ABOVE

CA-MXJ75R  
75R/MX-J76

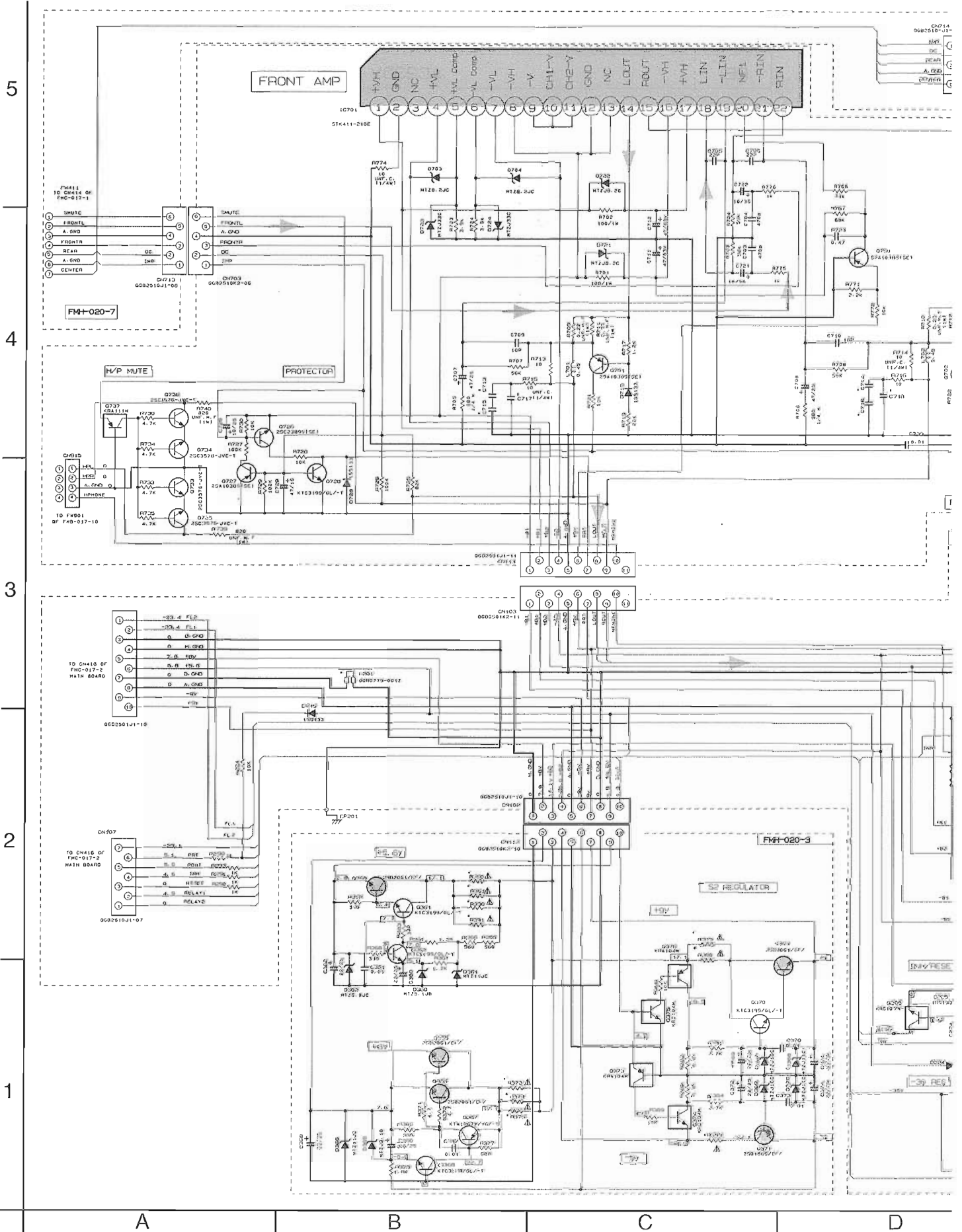
SHEET  
1 / 11

E

F

G

Power Amplifier & Regulator Section

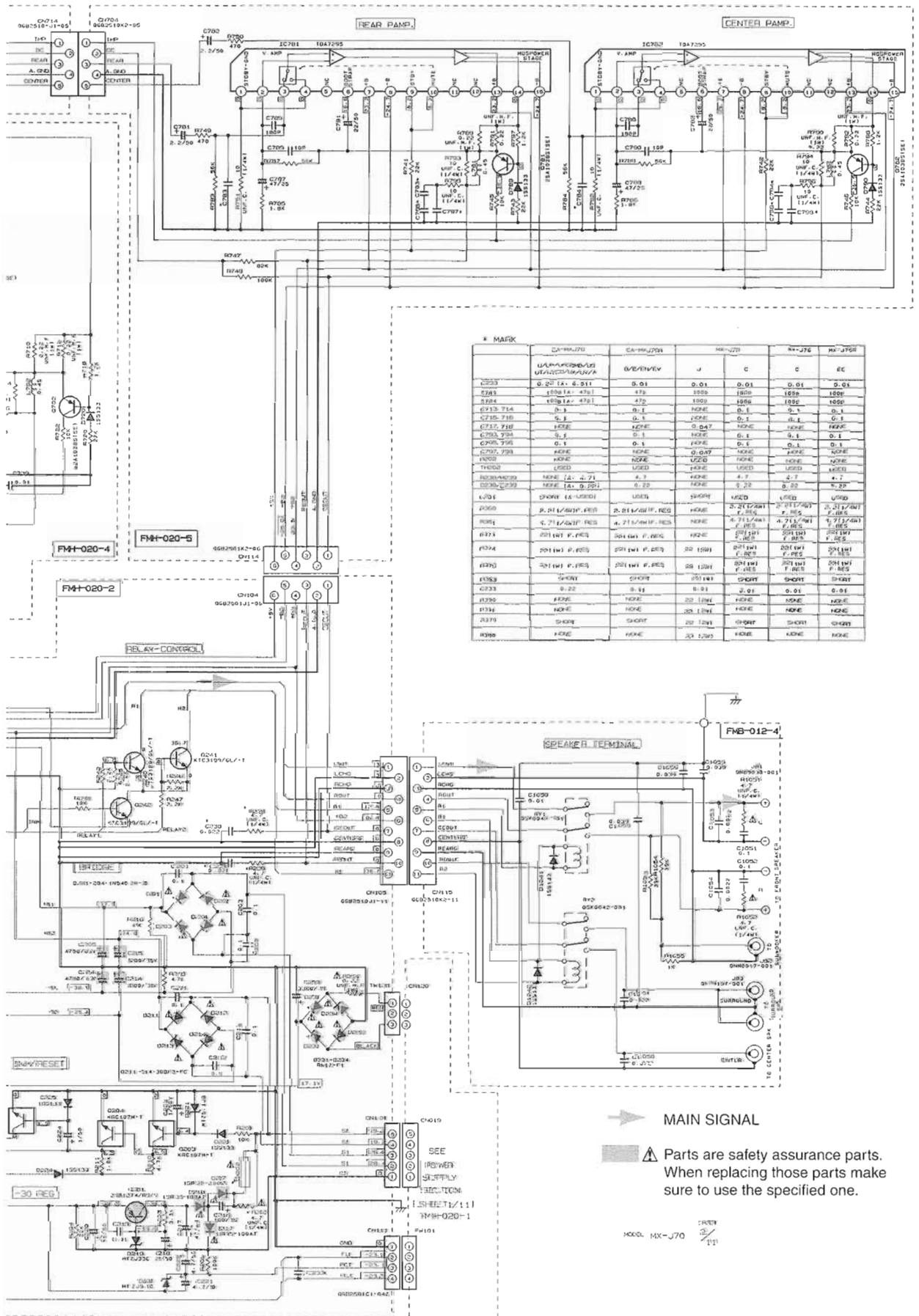


### REAR PAMP.

### CENTER PAMP.

**\* MARK**

	CA-7702	CA-7704	HA-7701	HA-7702	HA-7704	HA-7705
0053	0.22 (A, G, 511)	0.01	0.01	0.01	0.01	0.01
0088	1000 (A, 470)	470	1000	1000	1000	1000
0094	1000 (A, 470)	470	1000	1000	1000	1000
0110	1000 (A, 470)	470	1000	1000	1000	1000
0111	0.1	0.1	NONE	0.1	0.1	0.1
0112	0.1	0.1	NONE	0.1	0.1	0.1
0113	0.1	0.1	NONE	0.1	0.1	0.1
0114	0.1	0.1	NONE	0.1	0.1	0.1
0115	0.1	0.1	NONE	0.1	0.1	0.1
0116	0.1	0.1	NONE	0.1	0.1	0.1
0117	0.1	0.1	NONE	0.1	0.1	0.1
0118	0.1	0.1	NONE	0.1	0.1	0.1
0119	0.1	0.1	NONE	0.1	0.1	0.1
0120	0.1	0.1	NONE	0.1	0.1	0.1
0121	0.1	0.1	NONE	0.1	0.1	0.1
0122	0.1	0.1	NONE	0.1	0.1	0.1
0123	0.1	0.1	NONE	0.1	0.1	0.1
0124	0.1	0.1	NONE	0.1	0.1	0.1
0125	0.1	0.1	NONE	0.1	0.1	0.1
0126	0.1	0.1	NONE	0.1	0.1	0.1
0127	0.1	0.1	NONE	0.1	0.1	0.1
0128	0.1	0.1	NONE	0.1	0.1	0.1
0129	0.1	0.1	NONE	0.1	0.1	0.1
0130	0.1	0.1	NONE	0.1	0.1	0.1
0131	0.1	0.1	NONE	0.1	0.1	0.1
0132	0.1	0.1	NONE	0.1	0.1	0.1
0133	0.1	0.1	NONE	0.1	0.1	0.1
0134	0.1	0.1	NONE	0.1	0.1	0.1
0135	0.1	0.1	NONE	0.1	0.1	0.1
0136	0.1	0.1	NONE	0.1	0.1	0.1
0137	0.1	0.1	NONE	0.1	0.1	0.1
0138	0.1	0.1	NONE	0.1	0.1	0.1
0139	0.1	0.1	NONE	0.1	0.1	0.1
0140	0.1	0.1	NONE	0.1	0.1	0.1
0141	0.1	0.1	NONE	0.1	0.1	0.1
0142	0.1	0.1	NONE	0.1	0.1	0.1
0143	0.1	0.1	NONE	0.1	0.1	0.1
0144	0.1	0.1	NONE	0.1	0.1	0.1
0145	0.1	0.1	NONE	0.1	0.1	0.1
0146	0.1	0.1	NONE	0.1	0.1	0.1
0147	0.1	0.1	NONE	0.1	0.1	0.1
0148	0.1	0.1	NONE	0.1	0.1	0.1
0149	0.1	0.1	NONE	0.1	0.1	0.1
0150	0.1	0.1	NONE	0.1	0.1	0.1
0151	0.1	0.1	NONE	0.1	0.1	0.1
0152	0.1	0.1	NONE	0.1	0.1	0.1
0153	0.1	0.1	NONE	0.1	0.1	0.1
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0155	0.1	0.1	NONE	0.1	0.1	0.1
0156	0.1	0.1	NONE	0.1	0.1	0.1
0157	0.1	0.1	NONE	0.1	0.1	0.1
0158	0.1	0.1	NONE	0.1	0.1	0.1
0159	0.1	0.1	NONE	0.1	0.1	0.1
0160	0.1	0.1	NONE	0.1	0.1	0.1
0161	0.1	0.1	NONE	0.1	0.1	0.1
0162	0.1	0.1	NONE	0.1	0.1	0.1
0163	0.1	0.1	NONE	0.1	0.1	0.1
0164	0.1	0.1	NONE	0.1	0.1	0.1
0165	0.1	0.1	NONE	0.1	0.1	0.1
0166	0.1	0.1	NONE	0.1	0.1	0.1
0167	0.1	0.1	NONE	0.1	0.1	0.1
0168	0.1	0.1	NONE	0.1	0.1	0.1
0169	0.1	0.1	NONE	0.1	0.1	0.1
0170	0.1	0.1	NONE	0.1	0.1	0.1
0171	0.1	0.1	NONE	0.1	0.1	0.1
0172	0.1	0.1	NONE	0.1	0.1	0.1
0173	0.1	0.1	NONE	0.1	0.1	0.1
0174	0.1	0.1	NONE	0.1	0.1	0.1
0175	0.1	0.1	NONE	0.1	0.1	0.1
0176	0.1	0.1	NONE	0.1	0.1	0.1
0177	0.1	0.1	NONE	0.1	0.1	0.1
0178	0.1	0.1	NONE	0.1	0.1	0.1
0179	0.1	0.1	NONE	0.1	0.1	0.1
0180	0.1	0.1	NONE	0.1	0.1	0.1



➔ MAIN SIGNAL

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

MODEL MX-J70

PROTR  
411

# Function & Main Amplifier Section

TO C4051 OF CD CIRCUIT (SHEET 11/11)

TO C4050 OF FM-017-2 19-REV 8/11

TO C4051 OF FM-017-2 (SHEET 6/11)

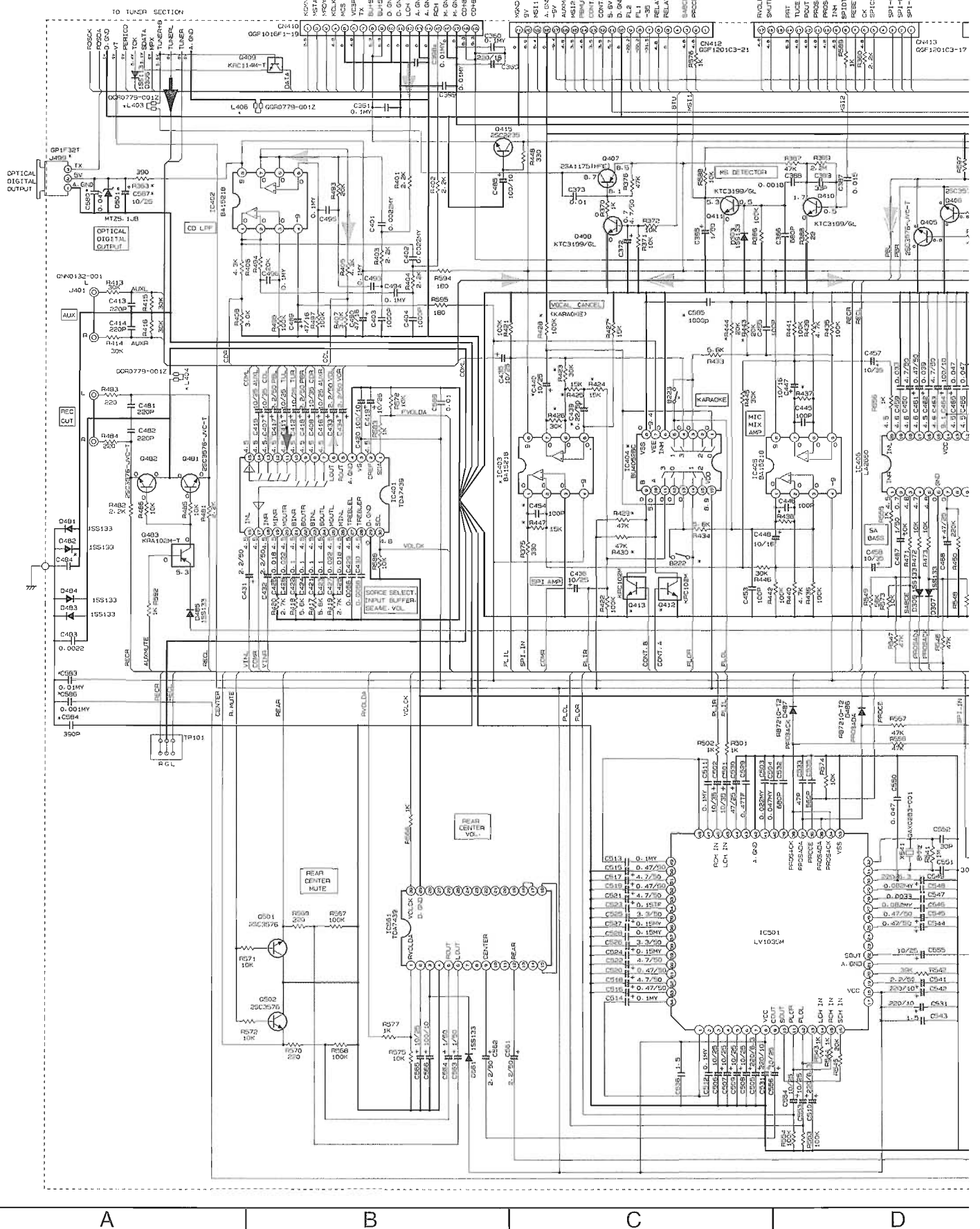
5

4

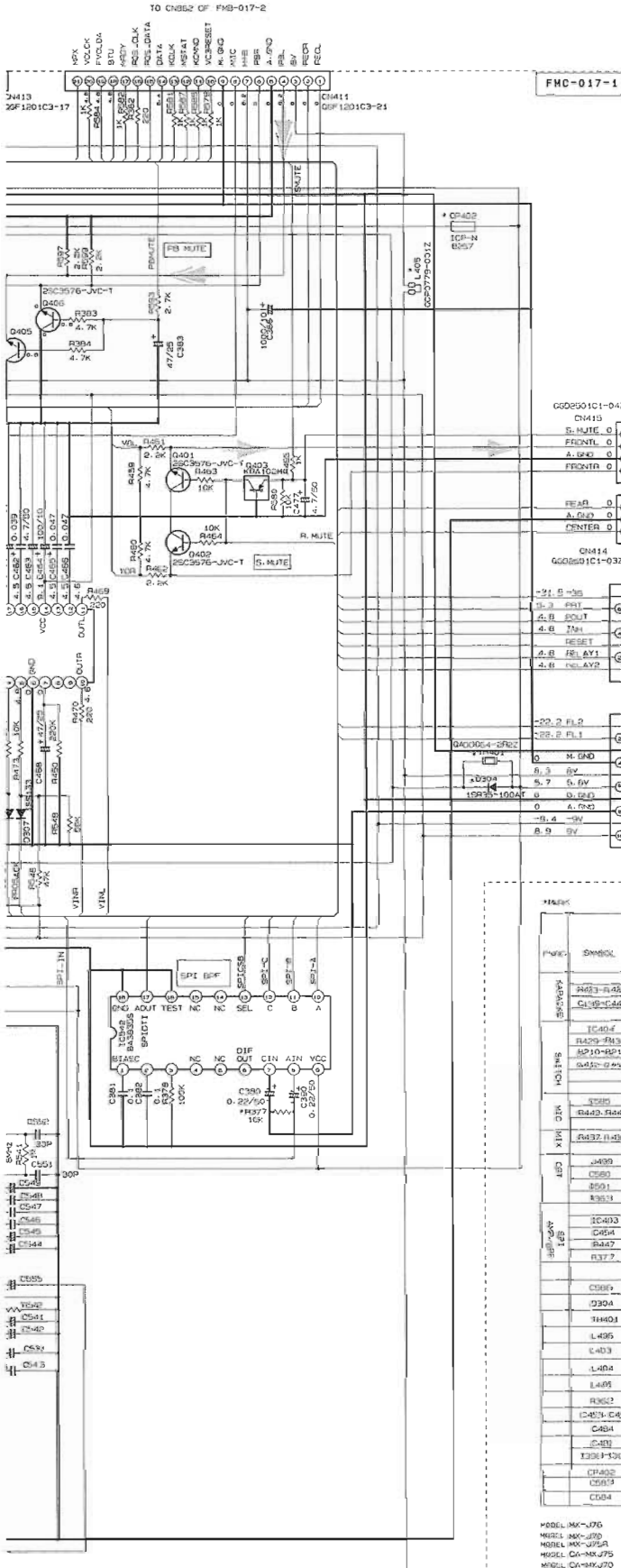
3

2

1







CD/MAIN SIGNAL  
 TUNER SIGNAL  
 TAPE P.B. SIGNAL

TO FHC-017-1  
 TO FHC-020-7 CONNECTOR BOARD (SHEET 2/11)  
 TO FHC-020-8 POWER BOARD (SHEET 2/11)  
 TO FHC-020-9 POWER AMP BOARD (SHEET 2/11)

MARKS D: USED X: NONE

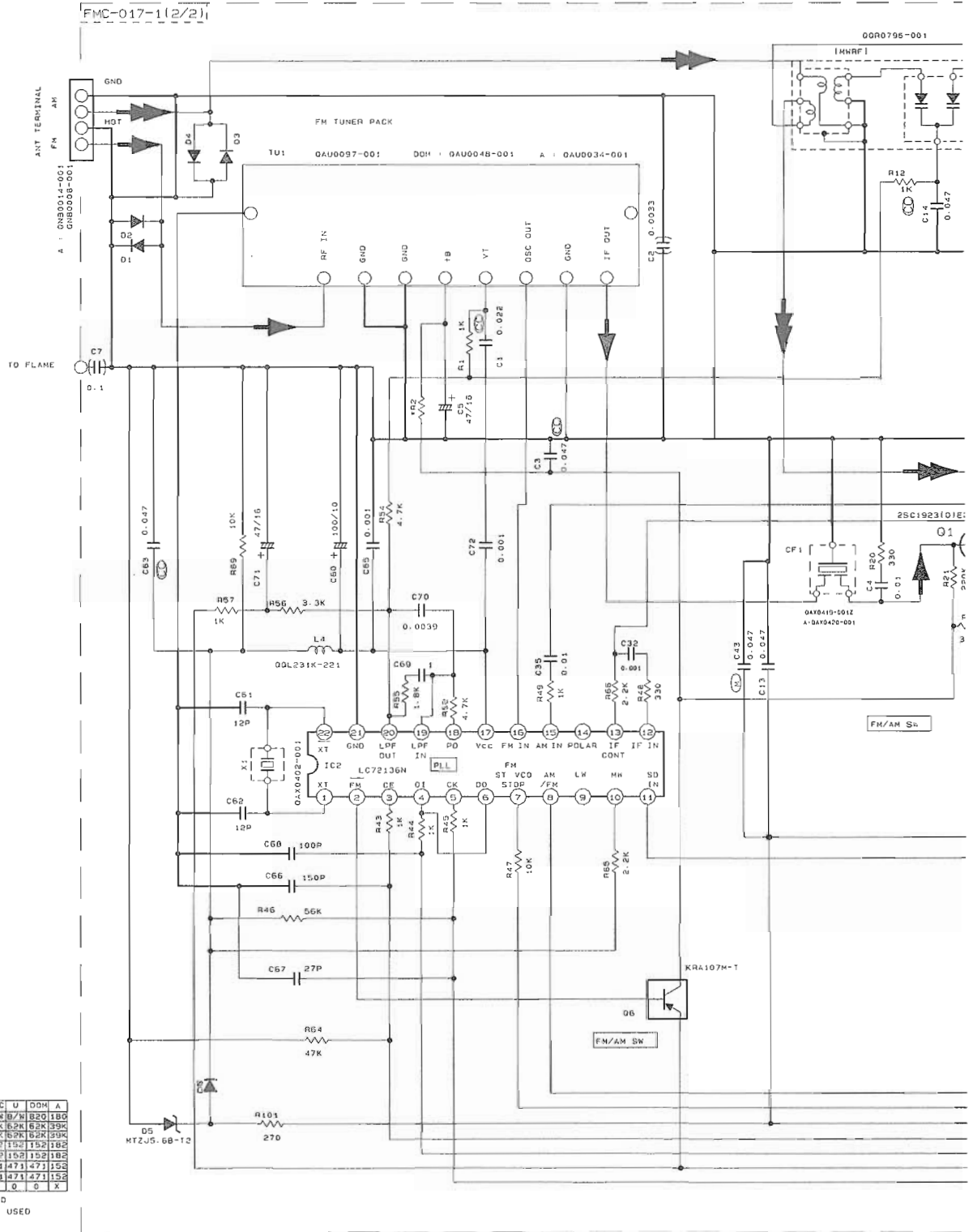
MARK	SYMBOL	MX-J70	MX-J76	CA-MXJ70	CA-MXJ70	CA-MXJ75R	MX-J75R	MX-J76
RESISTOR	R403-R406	X	X	D	X	X	X	X
RESISTOR	C149-C148	X	X	D	X	X	X	X
RESISTOR	IC40-F	X	X	D	X	X	X	X
RESISTOR	FL40-FM30	X	X	D	X	X	X	X
RESISTOR	SP10-SP11	D	D	D	D	D	D	D
RESISTOR	R437-R438	X	X	D	X	X	X	X
RESISTOR	R439	D	D	D	D	D	D	X
RESISTOR	C560	X	X	D	X	X	X	X
RESISTOR	R501	D	D	D	D	D	D	X
RESISTOR	R353	D	D	D	D	D	D	X
RESISTOR	IC403	X	X	D	X	X	X	X
RESISTOR	C454	X	X	D	X	X	X	X
RESISTOR	R447	SHORT	SHORT	D	SHORT	SHORT	SHORT	SHORT
RESISTOR	R377	X	X	D	X	X	X	X
RESISTOR	C385	X	X	D	D	D	X	X
RESISTOR	C304	D	X	X	X	X	X	X
RESISTOR	R440	X	D	D	D	D	D	D
RESISTOR	L436	SHORT	SHORT	SHORT	D	D	SHORT	SHORT
RESISTOR	L403	SHORT	SHORT	SHORT	D	D	SHORT	SHORT
RESISTOR	L404	SHORT	SHORT	SHORT	D	D	SHORT	SHORT
RESISTOR	L405	SHORT	SHORT	SHORT	D	D	SHORT	SHORT
RESISTOR	R362	X	X	X	D	D	D	X
RESISTOR	C403-C405	X	X	X	D	D	D	X
RESISTOR	C484	100P	100P	100PP	0.0022	0.0022	100P	100P
RESISTOR	C481	100P	100P	0.0022	0.0022	0.0022	100P	100P
RESISTOR	IC403-IC404	D	D	D	D	D	X	D
RESISTOR	C1403	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT
RESISTOR	C563	X	X	X	D	D	X	X
RESISTOR	C564	X	X	X	D	D	X	X

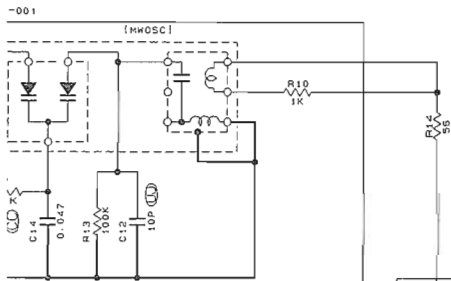
MODEL: MX-J70  
 MODEL: MX-J76  
 MODEL: MX-J75R  
 MODEL: CA-MXJ75  
 MODEL: CA-MXJ70

SHEET  
 3 / 11

■ Tuner Section (For Ver. J, C, A, U)

5  
4  
3  
2  
1

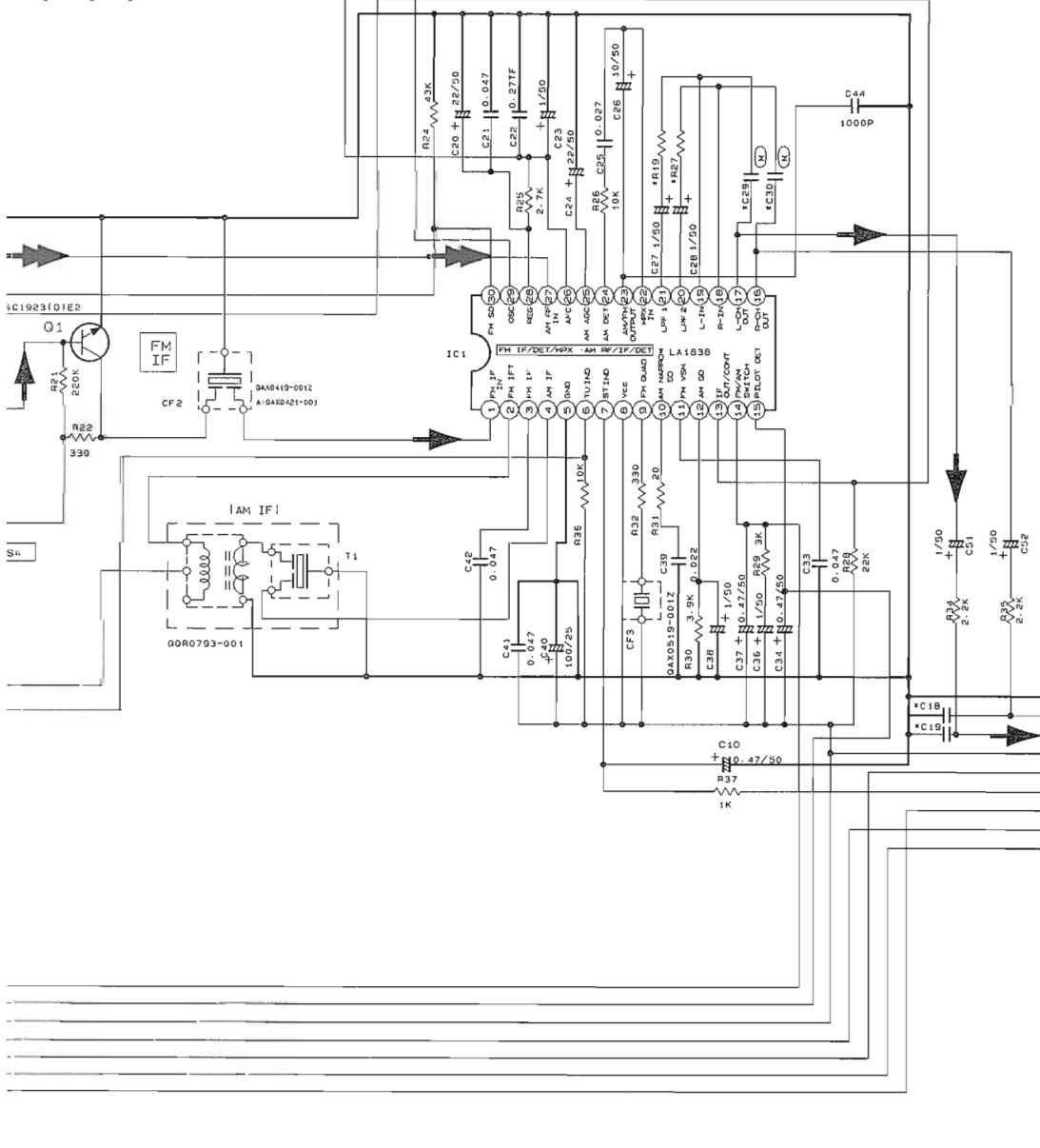
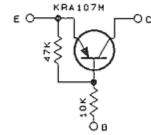




NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
2. ALL RESISTORS ARE 1/6W 5% CARBON RESISTOR.
3. ALL RESISTANCE VALUES ARE IN OHM( $\Omega$ ).
4. ALL CAPASITANCE VALUES ARE IN  $\mu$ FIP-pF1.
5. ALL E. CAPASITORS ARE SHOWN IN THE FORM OF CAPASITANCE ( $\mu$ F1/RATED VOLTAGE (V1).
6. SI. DIODES ARE ALL 1SS133T

8. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.



TUNER GND  
 TUNER R  
 TUNER L  
 TUNER +9V  
 DATA  
 MPX  
 CLOCK  
 TUCE  
 VL/FH1B

FROM EXTERNAL INPUT SOURCE

28	29	30
3-6	3-6	2-3
3-6	3-6	2-3
3-3	3-3	2-1

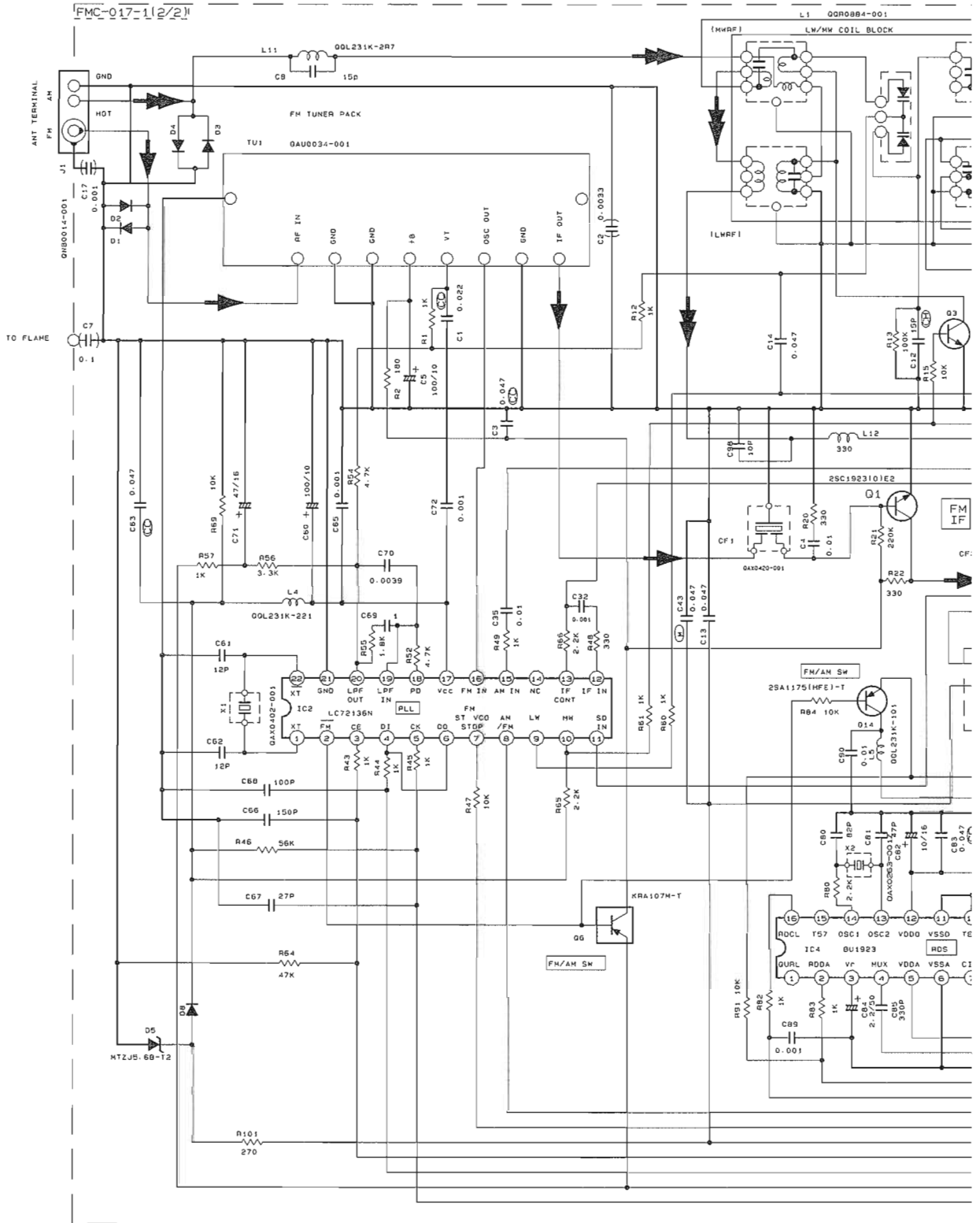
TR NO.	Q1			Q6					
PIN NO.	E	C	B	E	C	B			
FM 87.5MHZ NO SIGNAL	0	7.4	0.0	B.4	B.3	0			
AM 522KHZ NO SIGNAL	0	0	0	B.5	0	B.4			
TR NO.	Q2			Q3			Q4		
PIN NO.	E	C	B	E	C	B	E	C	B
AM 522KHZ NO SIGNAL	3.5	3.5	0.3	0	0	0.7	0	0	0.7
AM 144KHZ NO SIGNAL	3.5	3.5	3.5	0	0	0.1	0	0	0.1

FM/TUNER MAIN SIGNAL  
 AM SIGNAL

A/C/V/U  
 MODEL CA-MX-J70  
 MX-J76

SHEET  
 4 / 11

# ■ Tuner Section (For Ver. B, E, EN, EV)



5  
4  
3  
2  
1

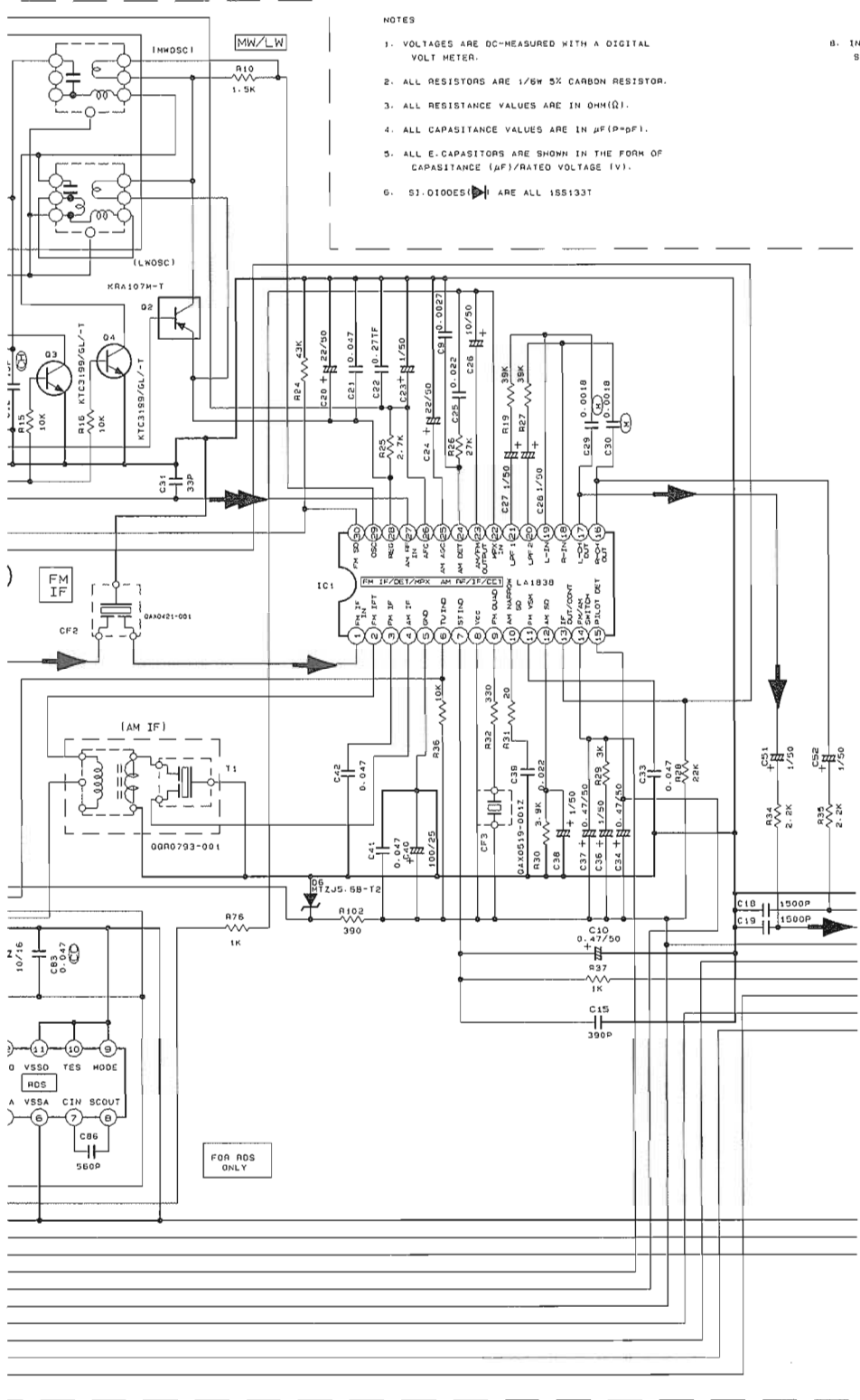
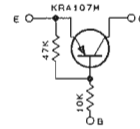
CONDITION	PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
IC1	FM NO SIGNAL	3.5	9.1	3.5	3.5	0.4	7.0	6.4	9.1	0	1.3	0.3	0.5	0.8	B	8	4.3	4.3	4.3	4.3	3.2	3.2	2.8	3.5	0	0	3.4	3.4	3.6	3.6	2.3
	FM 500B STEREO	3.5	9.1	3.5	3.5	0	0	0.2	9.1	2.3	1.3	4.3	0	0.8	B	8.1	4.3	4.3	4.3	4.3	3.2	3.2	2.8	3.1	0	0	3.6	3.6	3.6	3.6	2.3
IC2	AM NO SIGNAL	3.5	9.1	3.5	3.5	0	9.1	6.4	9.1	2.7	1.3	0	0	0.8	0.1	5.6	4.2	4.2	4.2	4.2	3.2	3.2	2.8	2.9	0.6	0.5	3.5	3.5	3.5	3.5	2.1
	FM NO SIGNAL	2.4	0	0	5.6	4.9	5.6	8	8	3.6	3.8	8.4	0	0	0	0	2.4	4.9	0.7	0.7	7.2	0	2.6								

A B C D

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
2. ALL RESISTORS ARE 1/8W 5% CARBON RESISTOR.
3. ALL RESISTANCE VALUES ARE IN OHM(Ω).
4. ALL CAPASITANCE VALUES ARE IN μF(P=μF).
5. ALL E-CAPASITORS ARE SHOWN IN THE FORM OF CAPASITANCE (μF)/RATED VOLTAGE (V).
6. S1.0100ES ARE ALL 1SS133T

B. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.

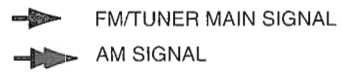


TUNER GND  
 TUNER R  
 TUNER L  
 TUNER +9V FROM EXTERNAL INPUT SOURCE  
 DATA  
 MPX  
 CLOCK  
 TUCE  
 VL/FH1B

D. GND FROM EXTERNAL INPUT SOURCE  
 RDS: DATA  
 RDS: CK

FOR RDS ONLY

Tr NO.	Q1			Q2			Q3			Q4		
PIN NO.	E	C	B	E	C	B	E	C	B	E	C	B
FM 87.5KHZ NO SIGNAL	0	7.4	0.8	0.4	0.3	0						
AM 52KHZ NO SIGNAL	0	0	0	0.5	0	0.4						
Tr NO.	Q1			Q2			Q3			Q4		
PIN NO.	E	C	B	E	C	B	E	C	B	E	C	B
AM 52KHZ NO SIGNAL	3.5	3.5	0.3	0	0	0.7	0	0	0.7			
AM 14.4KHZ NO SIGNAL	3.5	3.5	3.5	0	0	0.1	0	0	0	0	0	0.1



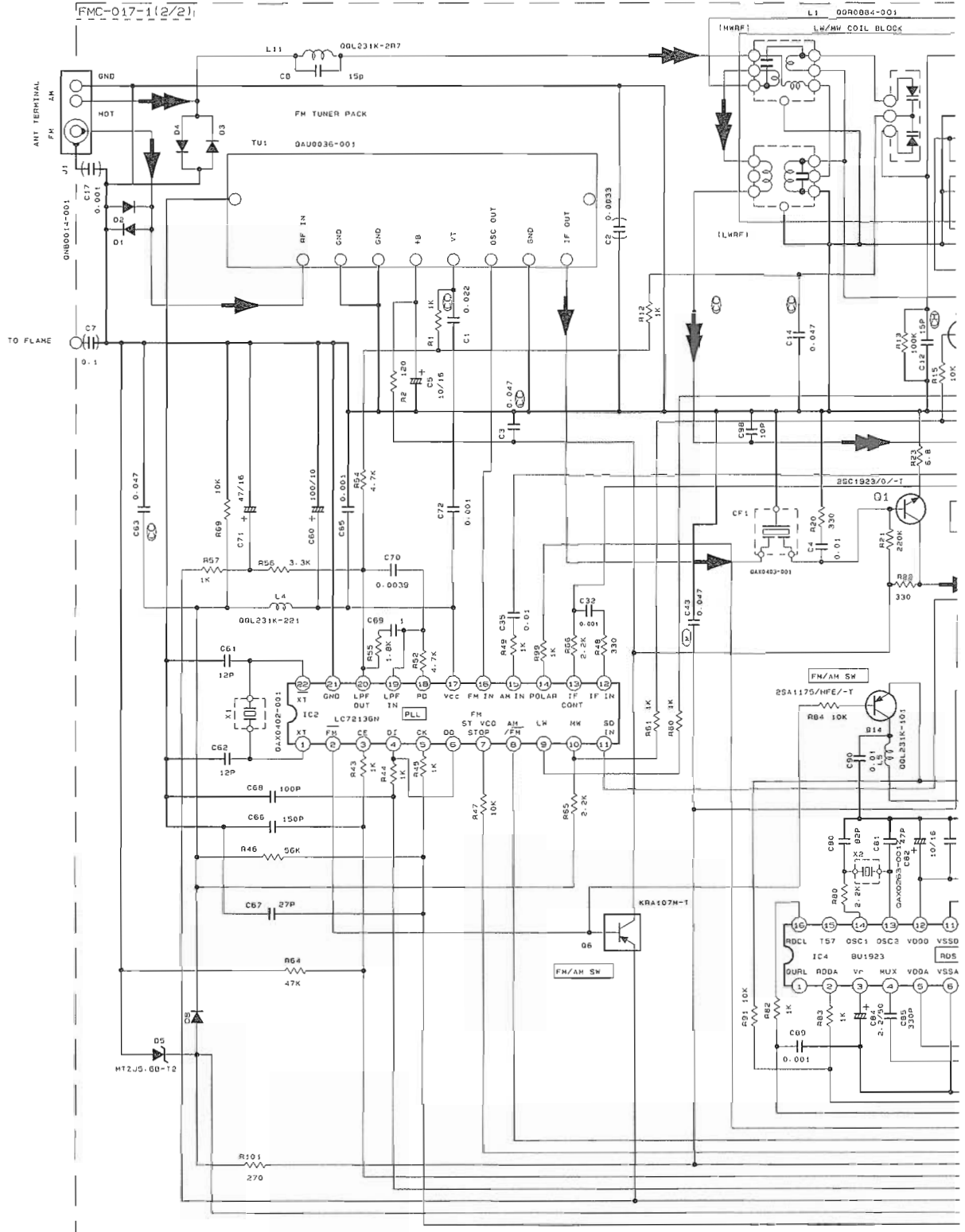
B/E/EN/EV SHEET 5/11  
 CA-MXJ75R

E

F

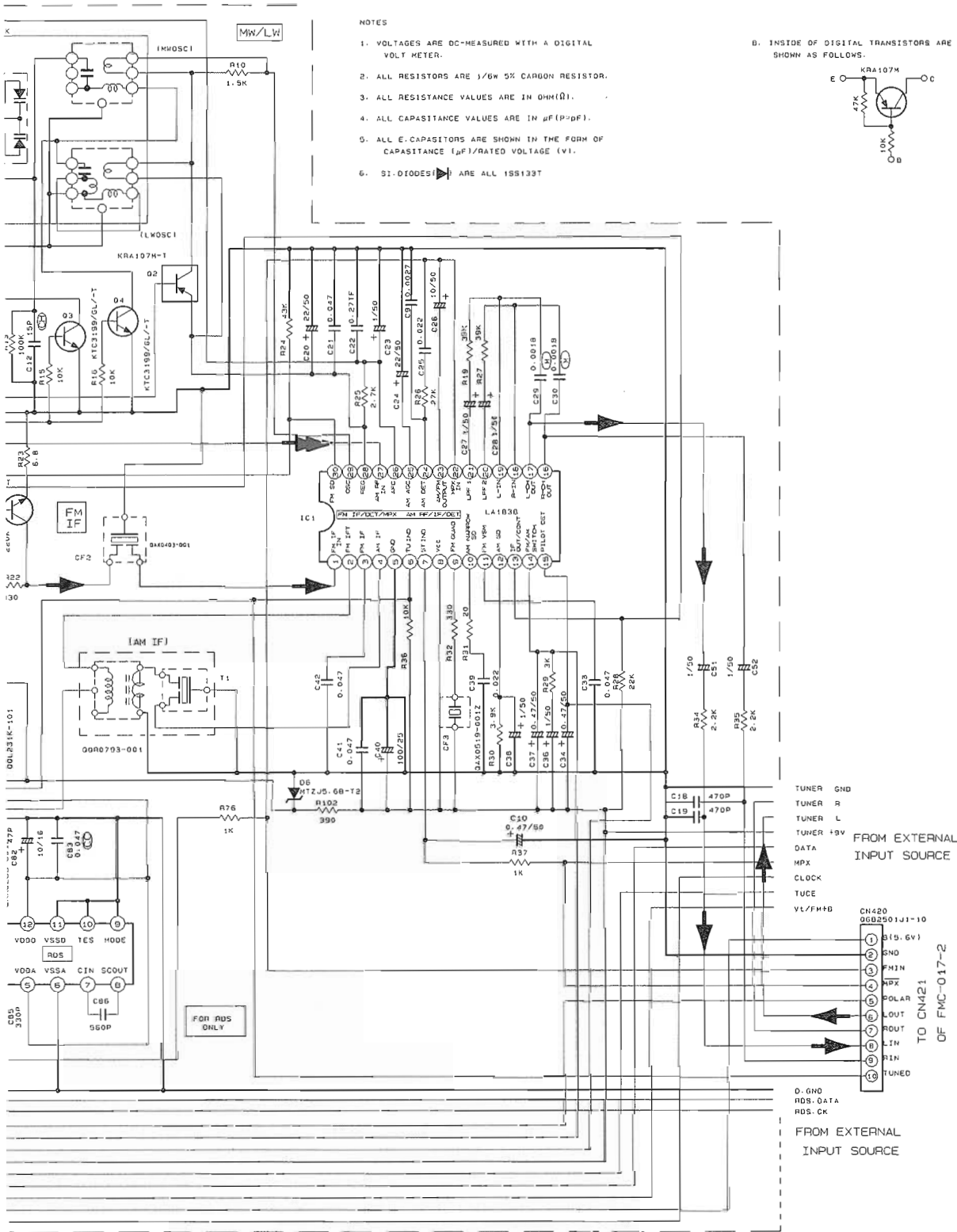
G

■ Tuner Section (For Ver. EE)



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	3.5	9.1	3.5	3.5	0.4	7.0	6.4	9.1	0	1.3	0.3	0.5	0.6	8	8	4.3	4.3	4.3	4.3	3.2	3.2	2.8	3.5	0	0	3.4	3.4	3.6	2.3	
	FM GOOD STEREO	3.5	9.1	3.5	3.5	0	0	0.2	9.1	2.3	1.3	4.3	0	0.6	8	8.1	4.3	4.3	4.3	4.3	3.2	3.2	2.8	3.1	0	0	3.6	3.6	3.6	2.3	
	AM NO SIGNAL	3.5	9.1	3.5	3.5	0	9.3	6.4	9.1	2.7	1.3	0	0	0.8	0.1	5.6	4.2	4.2	4.2	4.2	3.2	3.2	2.8	2.9	0.6	0.5	3.5	3.5	3.5	2.1	
IC2	FM NO SIGNAL	2.4	0	0	5.6	4.9	5.6	0	6	3.6	3.6	8.4	0	0	0	0	2.4	4.9	0.7	0.7	7.2	0	2.6								

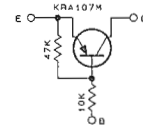
A B C D



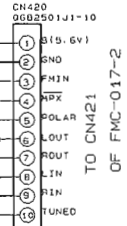
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
2. ALL RESISTORS ARE 1/6W 5% CARBON RESISTOR.
3. ALL RESISTANCE VALUES ARE IN OHM(Ω).
4. ALL CAPACITANCE VALUES ARE IN μF(μF).
5. ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
6. DIODES ARE ALL 15S133T

B. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.



TUNER GND  
TUNER R  
TUNER L  
TUNER +5V  
FROM EXTERNAL INPUT SOURCE  
DATA  
MPX  
CLOCK  
TUNE  
VL/FM+D

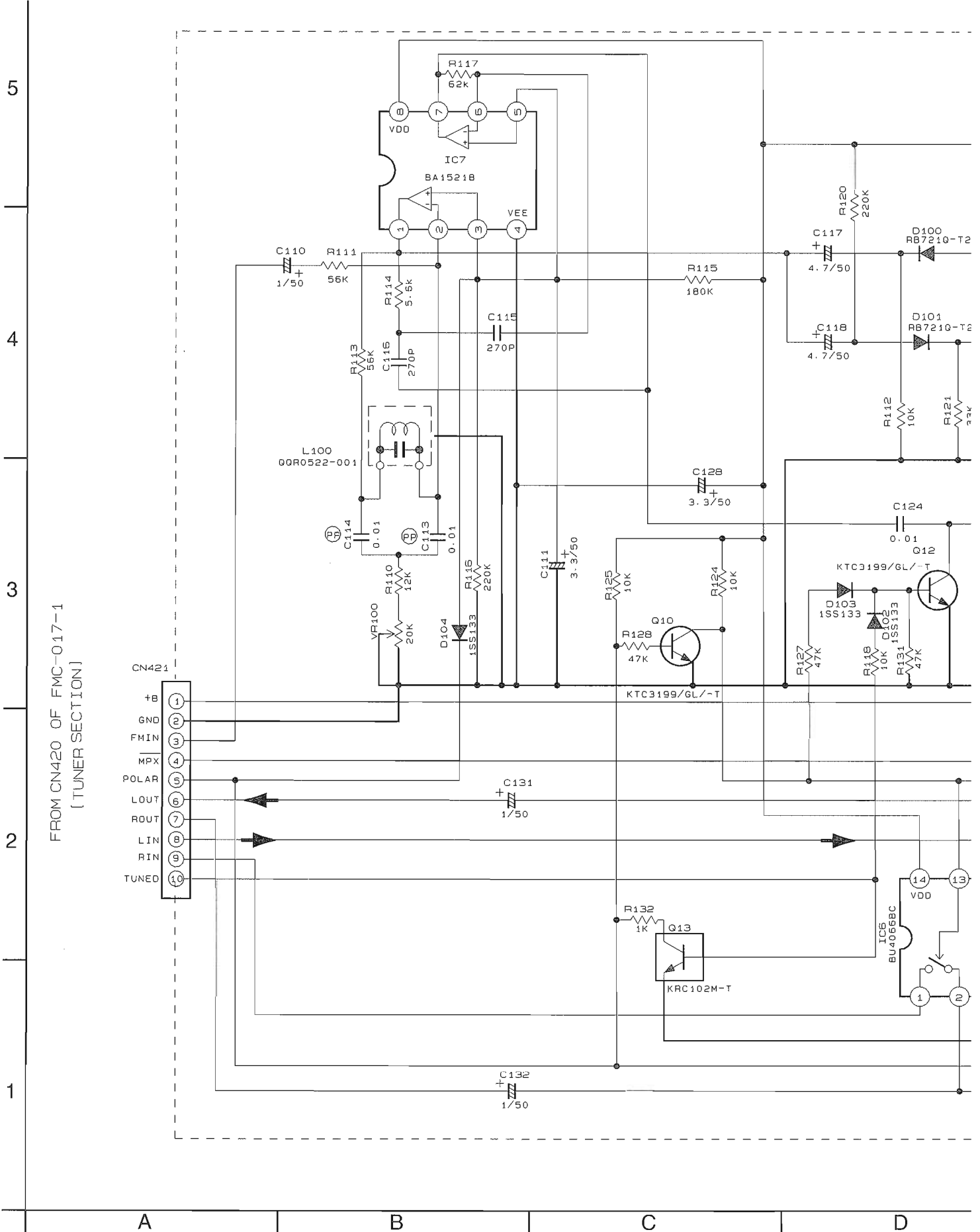


D. GND  
RDS. DATA  
RDS. CK  
FROM EXTERNAL INPUT SOURCE

TR. NO.	D1	D2	D3	D4
FM 87.5MHz NO SIGNAL	0	7.4	0.8	0.3
AM 522KHz NO SIGNAL	0	0	0	0
TR. NO.	D1	D2	D3	D4
FM 87.5MHz NO SIGNAL	3.5	3.5	0.3	0
AM 522KHz NO SIGNAL	3.5	3.5	0.3	0
AM 144KHz NO SIGNAL	3.5	3.5	0.3	0

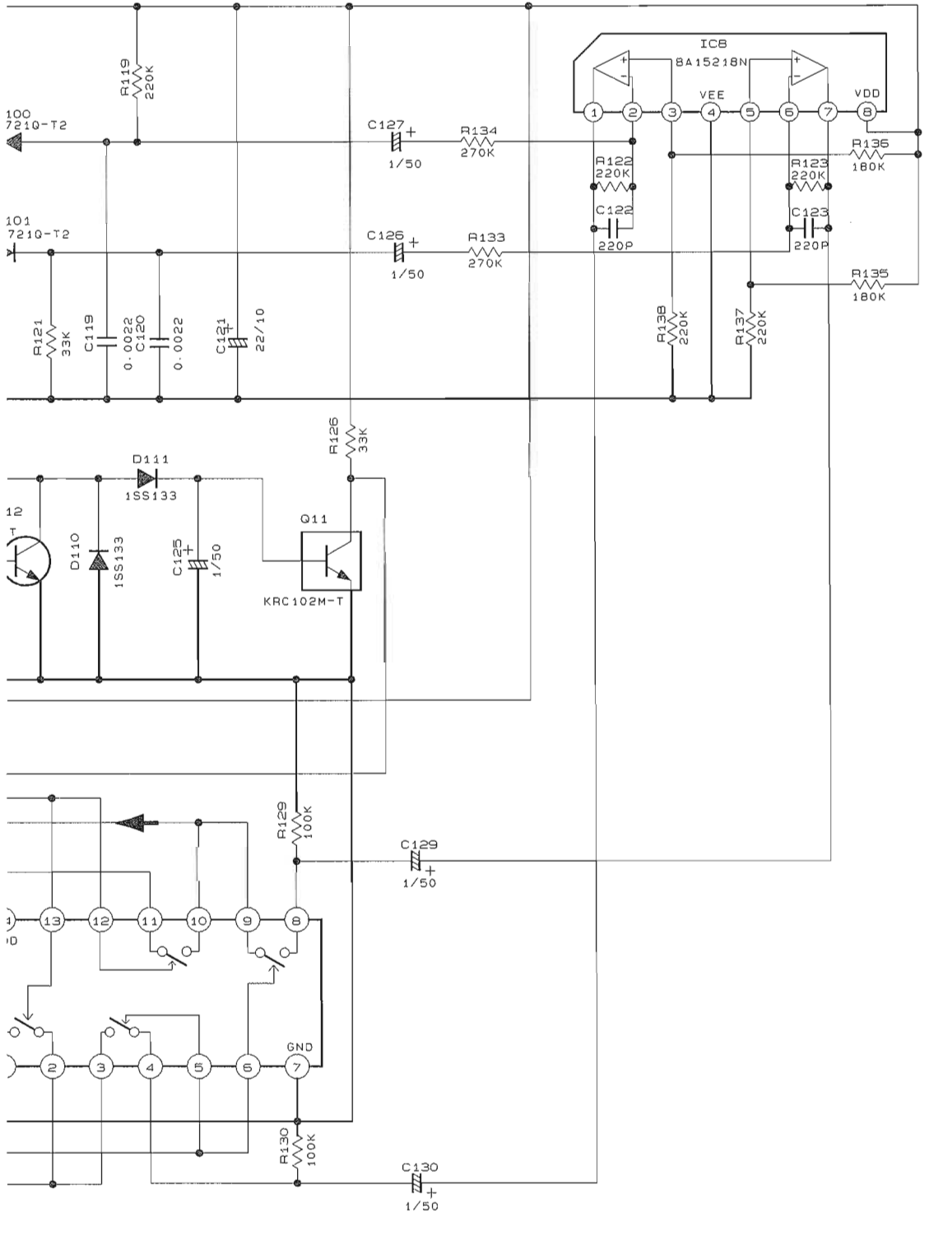
➡ FM/TUNER MAIN SIGNAL  
➡ AM SIGNAL

# ■ Tuner Section (For Ver. EE)





FMC-Q17-21



➔ TUNER MAIN SIGNAL

EE  
MX-J75R

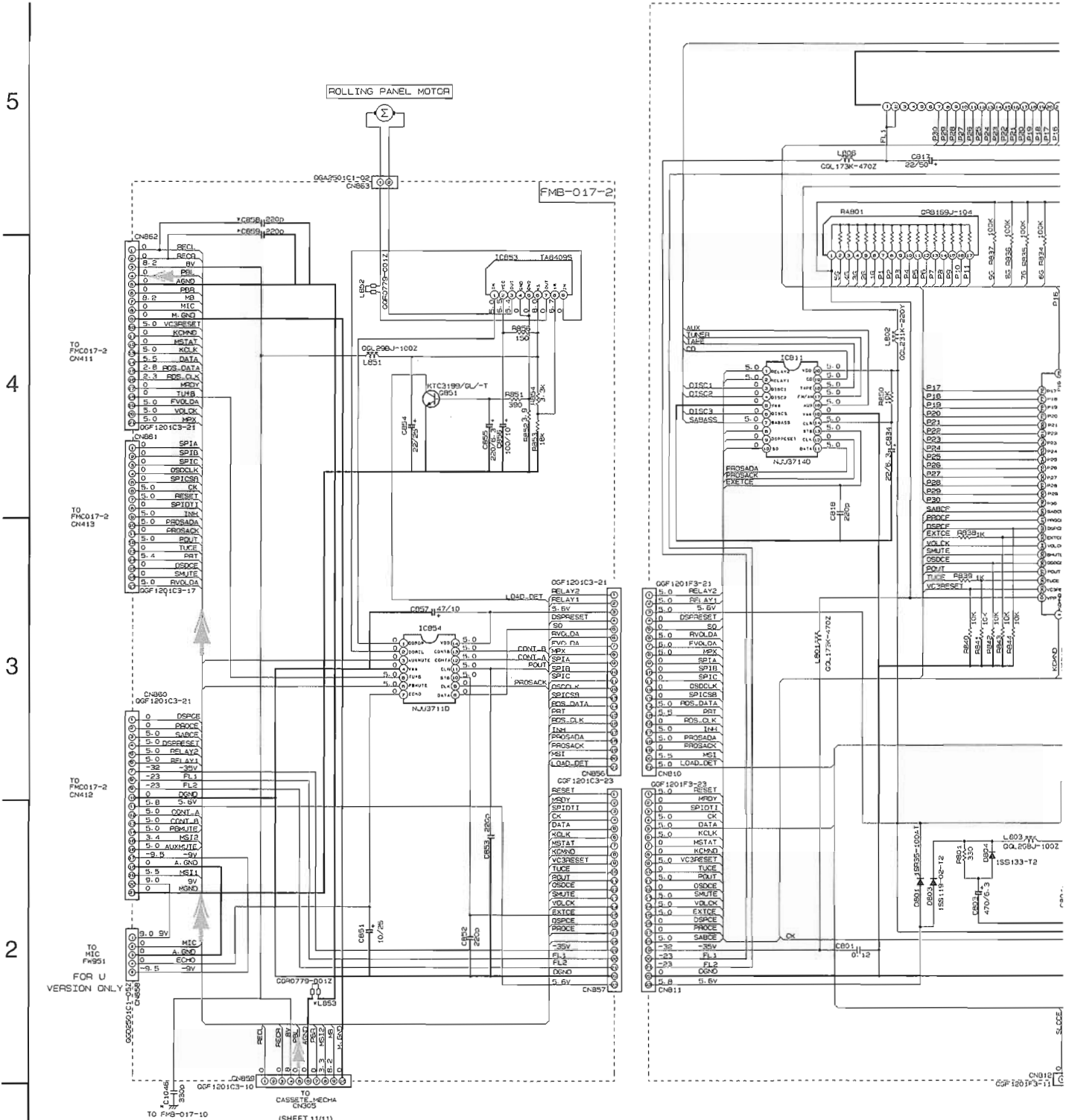
SHEET  
7/11

E

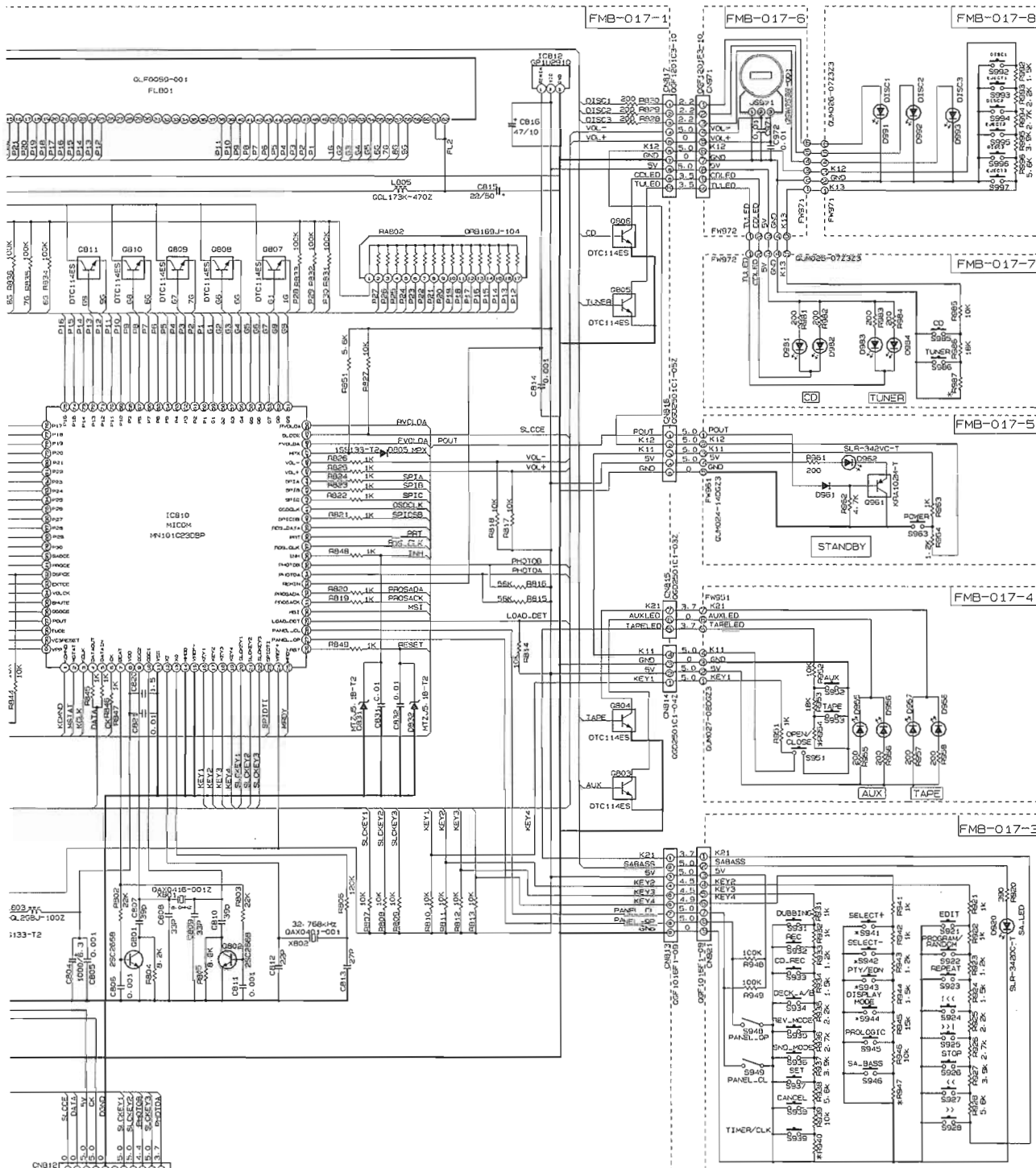
F

G

FL Display & System Controller Section



MARK	MODEL	J50-SERIES							J70-SERIES							
		MX-55 MX-56	MX-50	CA-MX-50	CA-MX-50R	MX-55R	MX-70 MX-75	CA-MX-70	CA-MX-75R	MX-70R						
ITEM	VERSION	J/C	U/UP/US/UT/UW	LR/UY	UX	A	DCM	B/E/EN/EV	EE	J/C	U/UP/US/UT/UW	LR/UY	UX	A	B/E/EN/EV	EE
S941		X	X	X	X	X	X	0	0	X	X	X	X	X	X	0
S942		X	X	X	X	X	X	0	0	X	X	X	X	X	X	0
S943		X	X	X	X	X	X	0	0	X	X	X	X	X	X	0
S944		X	X	X	X	X	X	0	0	X	X	X	X	X	X	0
R940	56K		56K	X	10K	X	X	56K	X	56K	56K	X	10K	X	56K	56K
R947	56K		X	10K	X	X	X	X	56K	56K	X	10K	X	X	X	X
R954	56K		56K	X	X	56K	X	X	X	56K	56K	X	X	X	56K	X
R987		X	X	X	X	X	X	X	X	56K	56K	56K	56K	56K	56K	56K
L853	SHORT		SHORT	SHORT	SHORT	0	SHORT	0	SHORT	SHORT	SHORT	SHORT	SHORT	0	0	0
C859		X	X	X	X	0	X	0	X	X	X	X	X	0	0	0
C859		X	X	X	X	0	X	0	X	X	X	X	X	0	0	0
C1045		X	X	X	X	0	X	0	X	X	X	X	X	0	0	0



TO CASSETTE MECHA  
CN306  
(SHEET 11/11)

J75R	MX-J75R
✓EV	EE
0	0
0	0
0	0
0	0
X	X
X	50K
X	50K
X	50K
X	50K
X	50K
X	50K
X	50K
X	50K
X	50K
X	50K

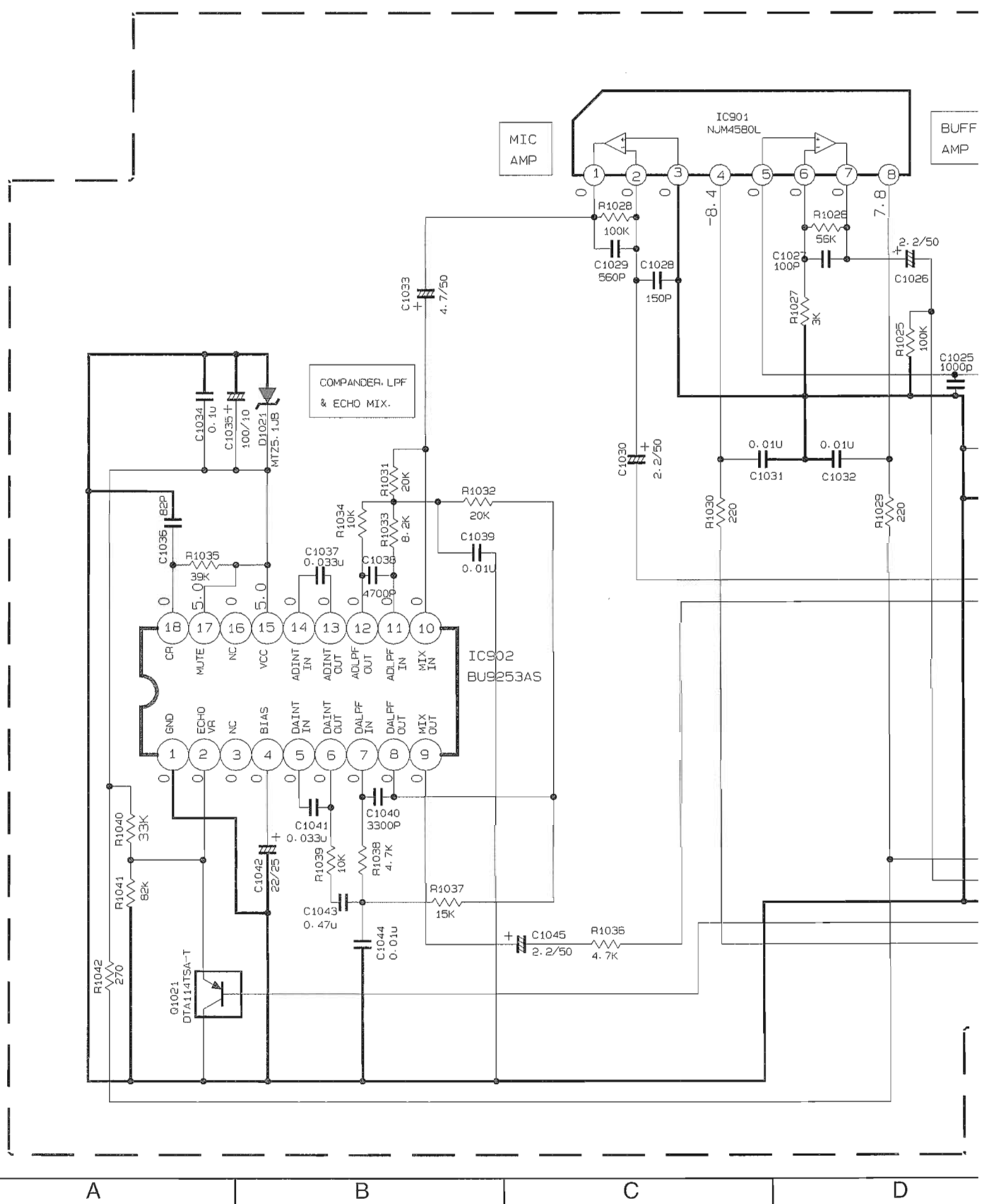
➔ TAPE P.B. SIGNAL

MX-J70 5-EE1  
MODEL MX-J50 B/11

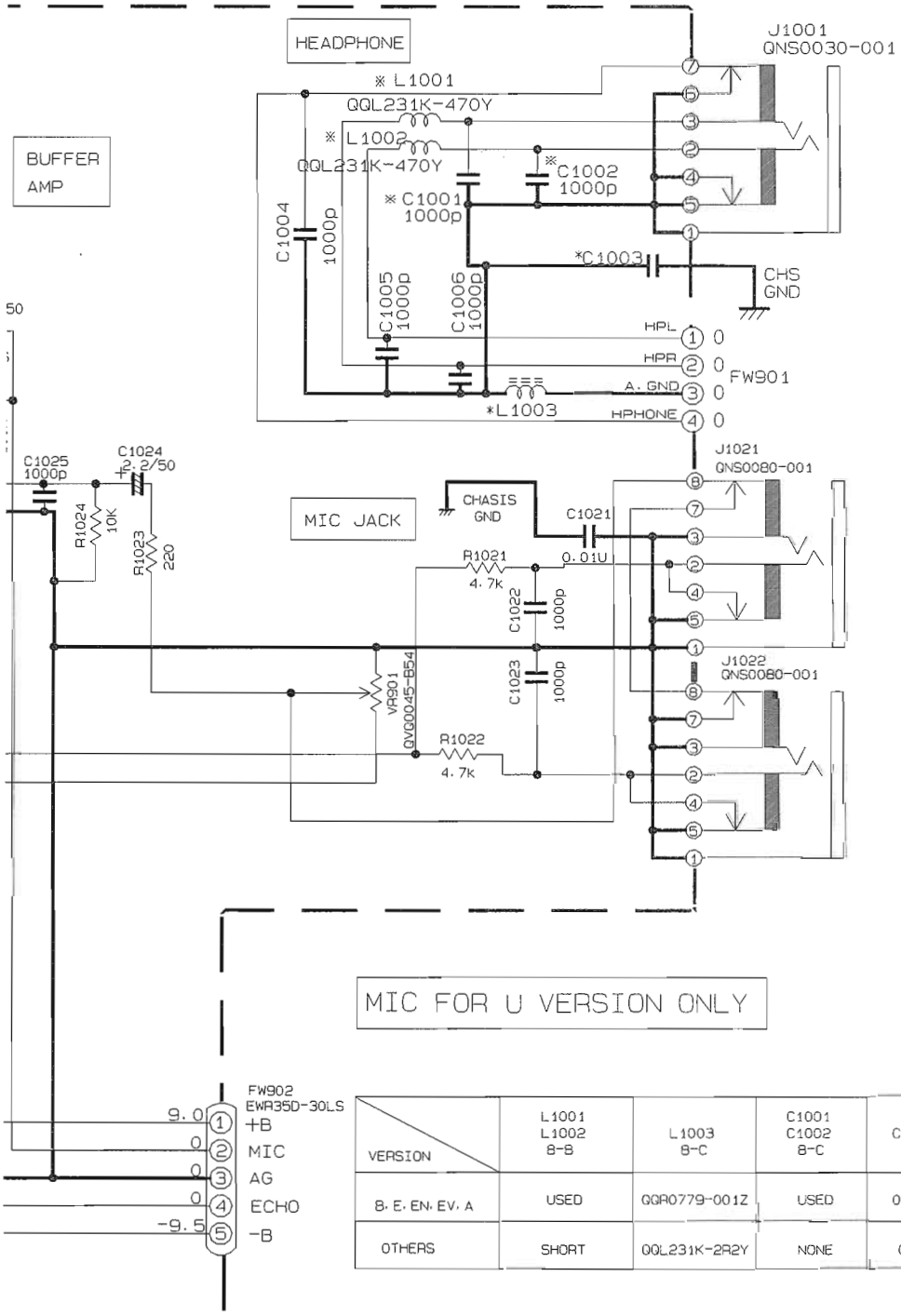
- NOTES
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION — TAPE TO MODE.
  - UNLESS OTHERWISE SPECIFIED:  
RESISTORS ARE 1/4W ± 5% CARBON RESISTOR.  
ALL RESISTANCE VALUES ARE IN OHMS.  
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MICA CAPACITOR.  
ALL CAPACITANCE VALUES ARE IN nF (pF).  
ALL DIMENSIONAL VALUES ARE IN MILLIMETERS.  
ALL ELECTRICAL VALUES ARE IN THE FORM OF CAPACITANCE (UNLIMITED VOLTAGE DC).  
ALL DIMENSIONS ARE IN MILLIMETERS.
  - ALL FACT SKETCHES ARE 1:2000 ± 0.02 UNLESS OTHERWISE SPECIFIED.
  - ALL LEADS ARE SLP-340X-T UNLESS OTHERWISE SPECIFIED.

# MIC & Headphone Section

5  
4  
3  
2  
1



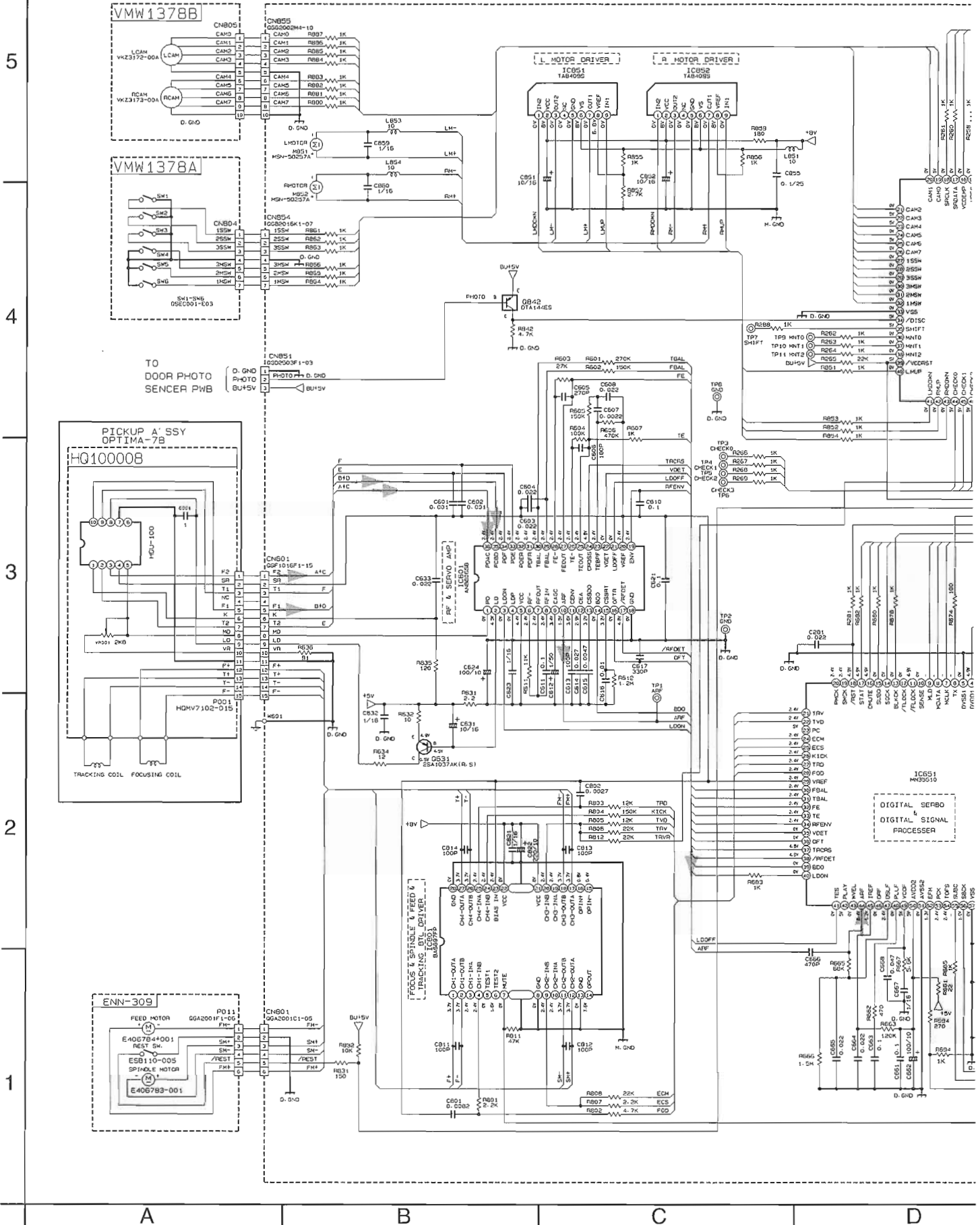
A B C D

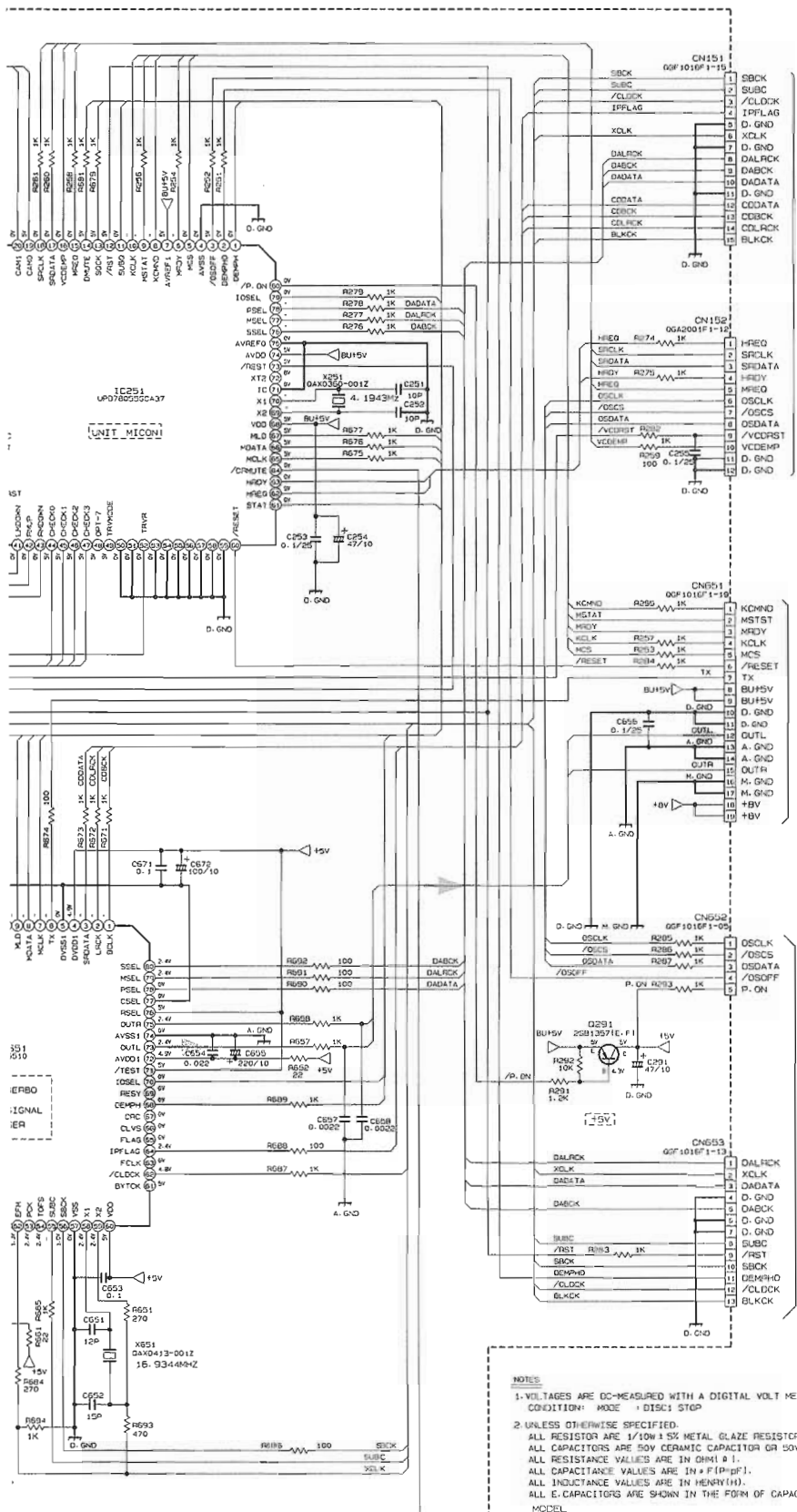


VERSION	L1001 L1002 8-B	L1003 8-C	C1001 C1002 8-C	C1003 9-C
B. E. EN. EV. A	USED	GGR0779-001Z	USED	0.001u
OTHERS	SHORT	00L231K-2R2Y	NONE	0.01u

MX-J50 SHEET 9/11  
MODEL MX-J70

CD Servo & CD Mechanism Control Section





NOT USED

TO AMP  
(SHEET 3/11)

NOT USED

- NOTES**
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER  
CONDITION: MODE = DIS1 STOP
  2. UNLESS OTHERWISE SPECIFIED:  
ALL RESISTORS ARE 1/10W ± 5% METAL GLAZE RESISTOR.  
ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.  
ALL RESISTANCE VALUES ARE IN OHM Ω.  
ALL CAPACITANCE VALUES ARE IN PICO-F.  
ALL INDUCTANCE VALUES ARE IN HENRY (H).  
ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE/F/RATED VOLTAGE (V).

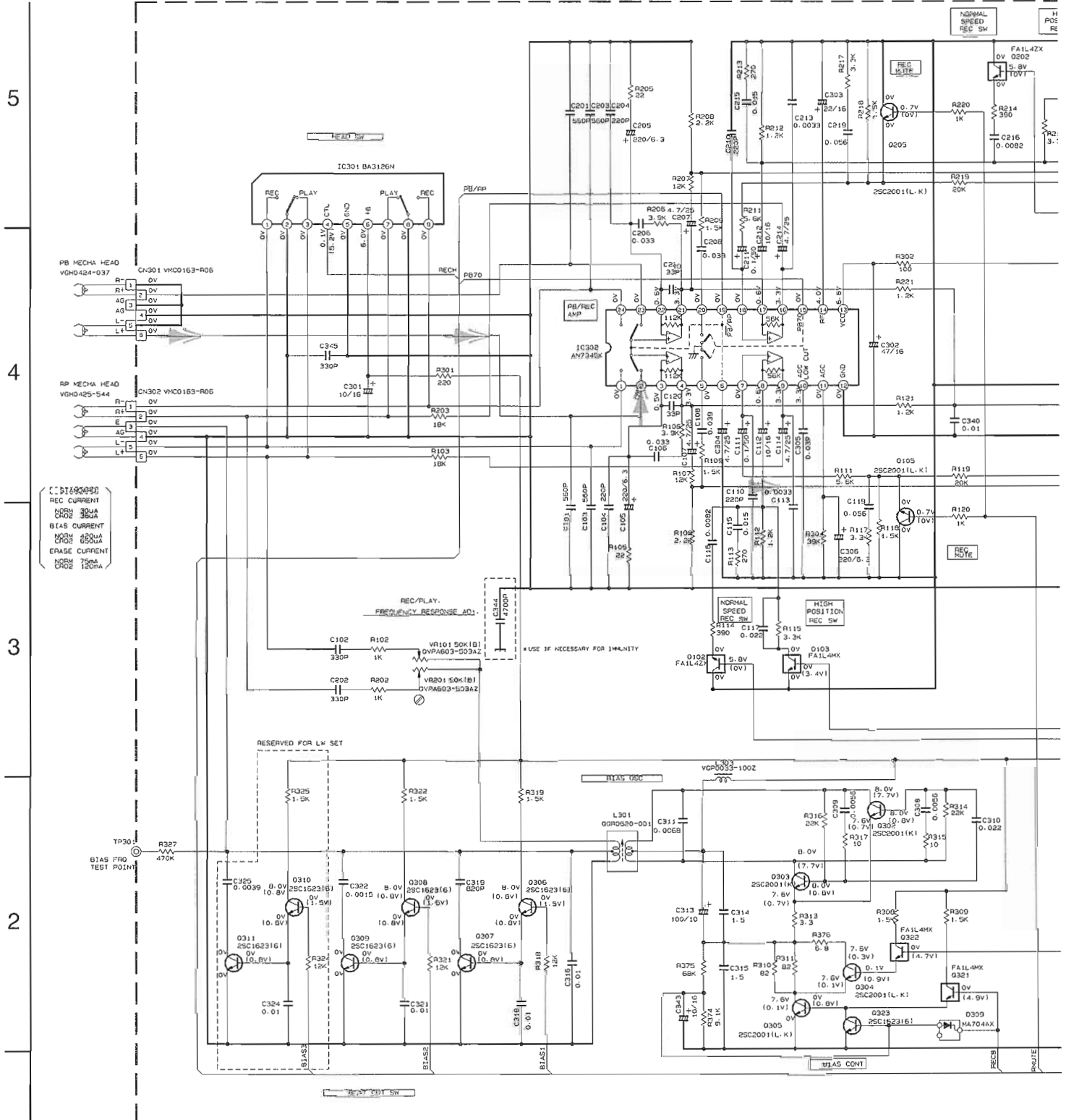
MODEL  
VC3-21  
VDH1040-201CV

SHEET  
10/11

EMW10729

CD SIGNAL

# Head Amplifier & Mechanism Control Section



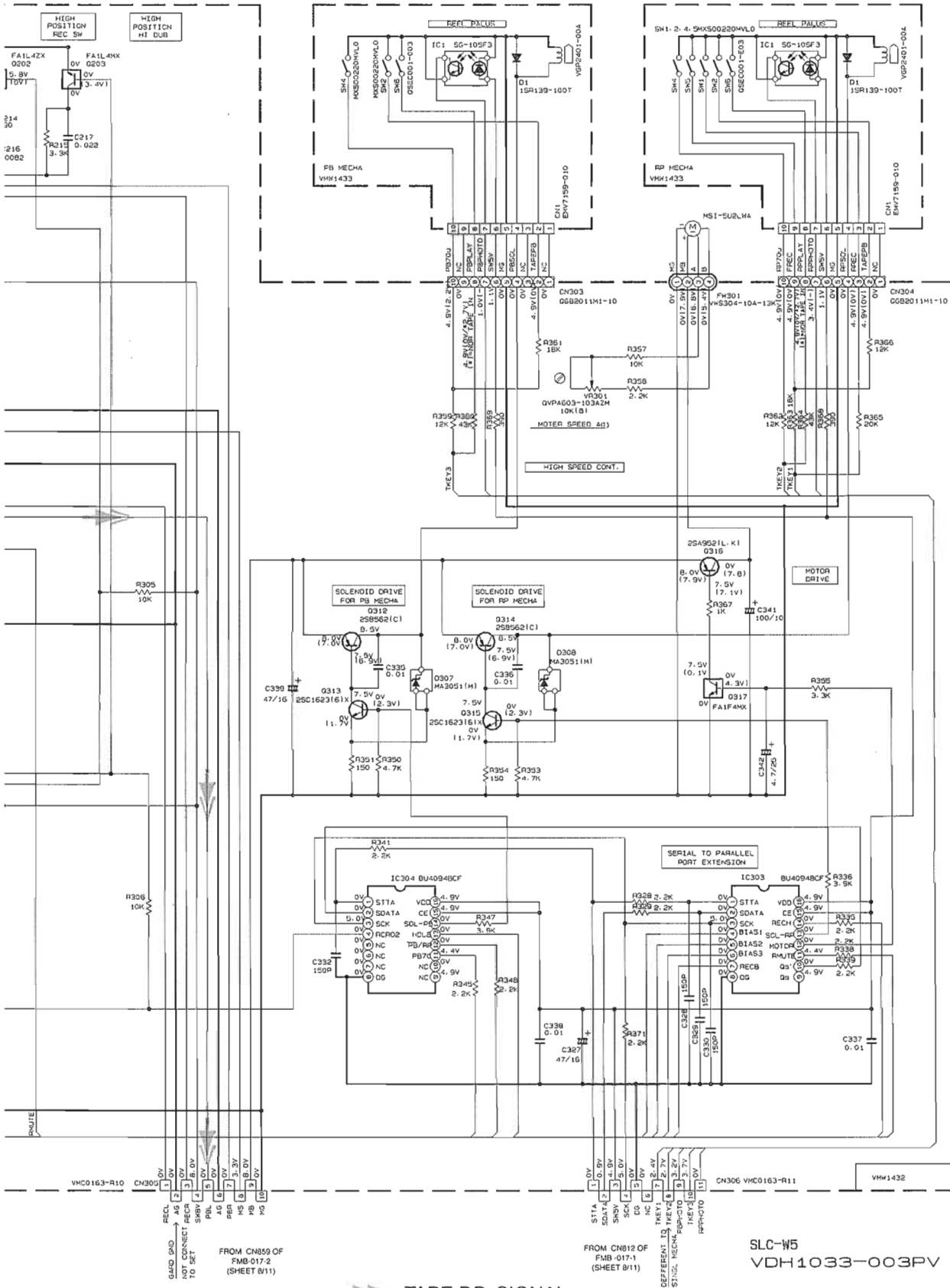
### NOTES

- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. IN INVERT MODE
- RESISTORS OTHERWISE SPECIFIED
- ALL RESISTANCE VALUES ARE IN OHMS UNLESS OTHERWISE SPECIFIED
- ALL CAPACITANCE VALUES ARE IN PICO-FARADS UNLESS OTHERWISE SPECIFIED
- ALL INDUCTANCE VALUES ARE IN MILLI-HENRIES UNLESS OTHERWISE SPECIFIED
- ALL CAPACITORS ARE SHOWN IN THE CIRCUIT OF CAPACITANCE (P) / RATED VOLTAGE (V).
- PLYPHYLENE CAPACITOR

TABLE 1: DIGITAL TR LIST

PART-NO	DESCRIPTION	REF-NO
FA1F4M	22K 20K	Q317
FA1L4M	47K 47K	Q103/Q303
FA1L4Z	47K 47K	Q102/Q202





TAPE P.B. SIGNAL

SLC-W5  
VDH1033-003PV

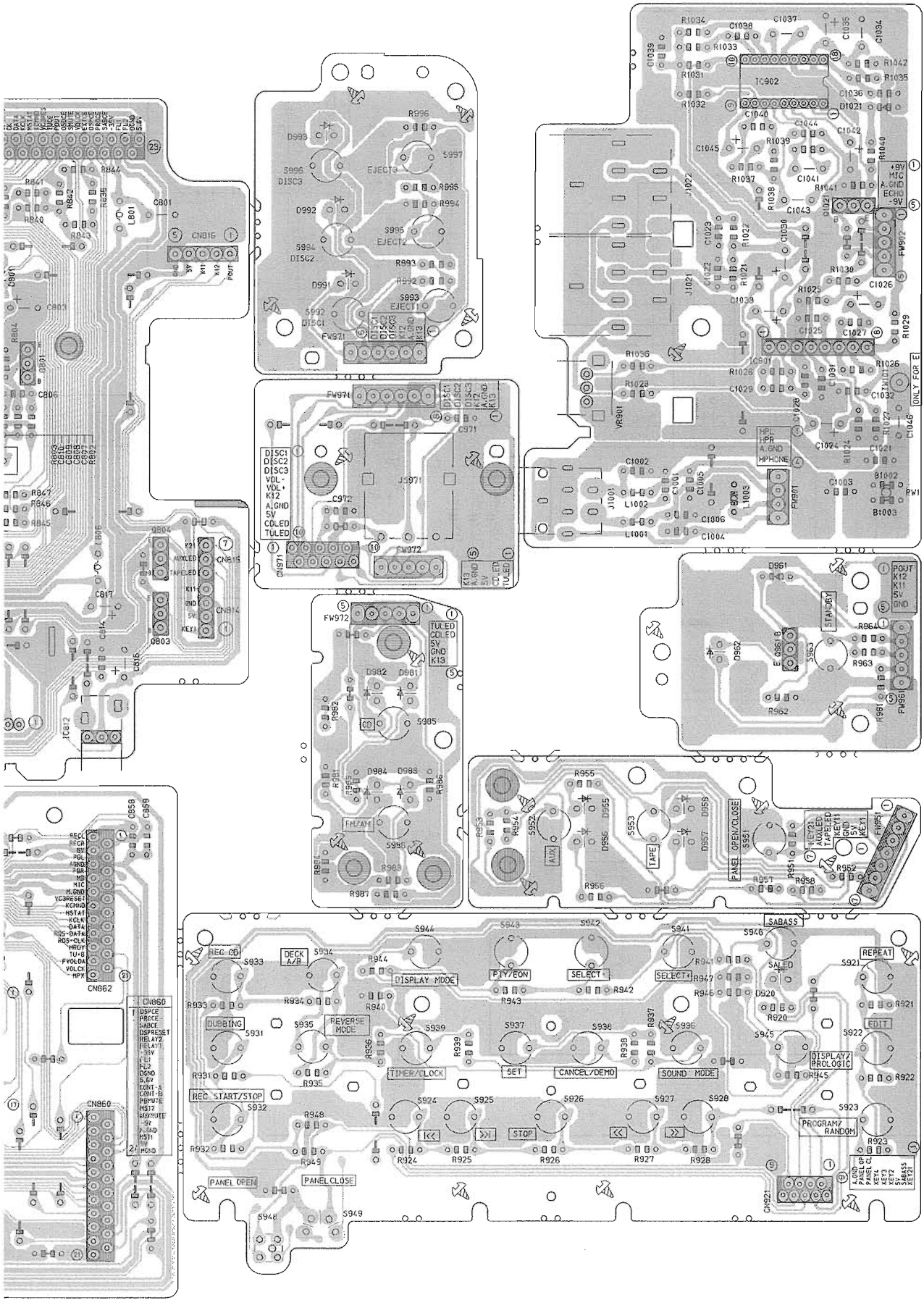
SHEET  
11/11

E

F

G





# Function, Tuner, Main Boards

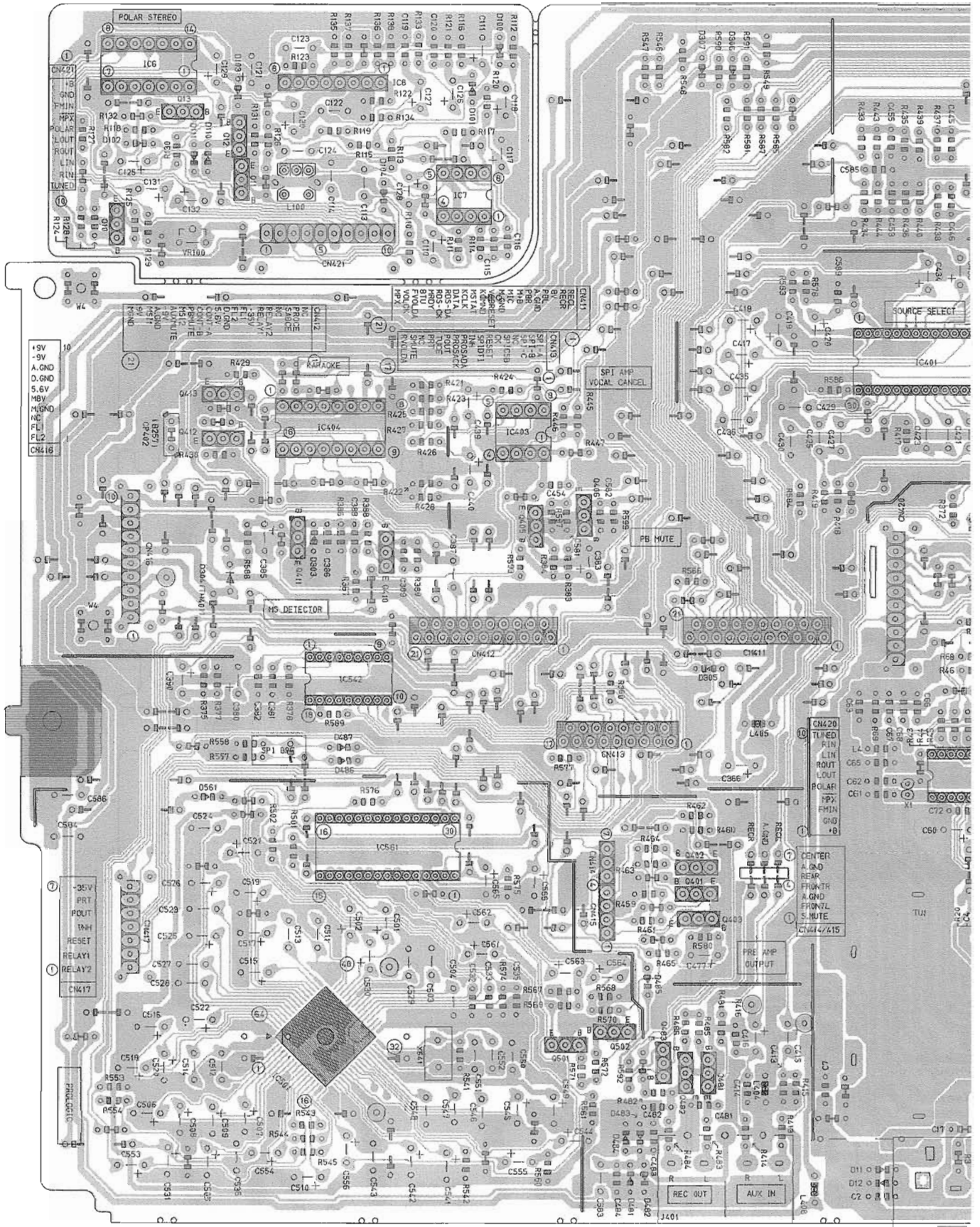
5

4

3

2

1

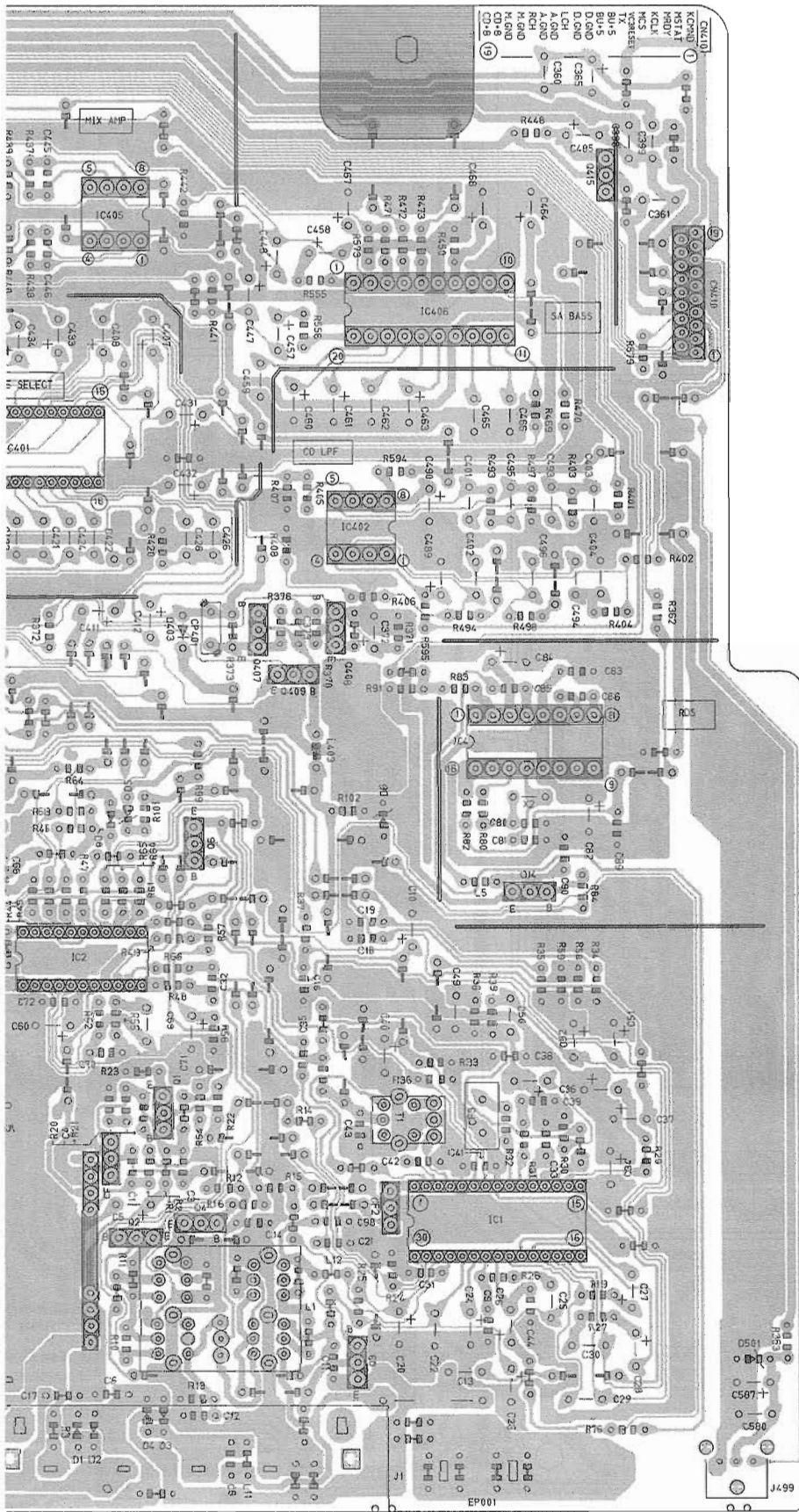


A

B

C

D



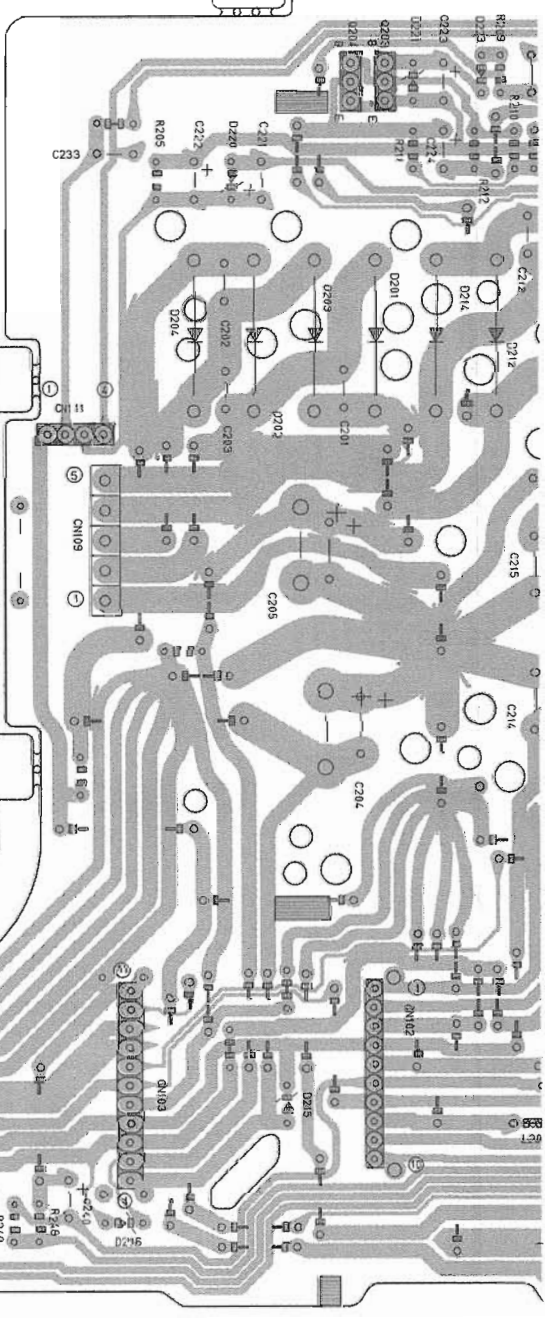
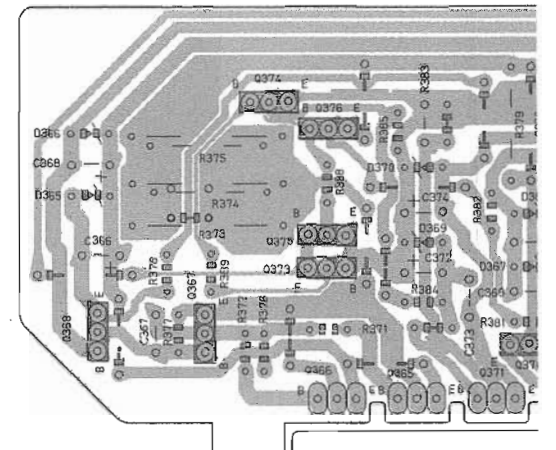
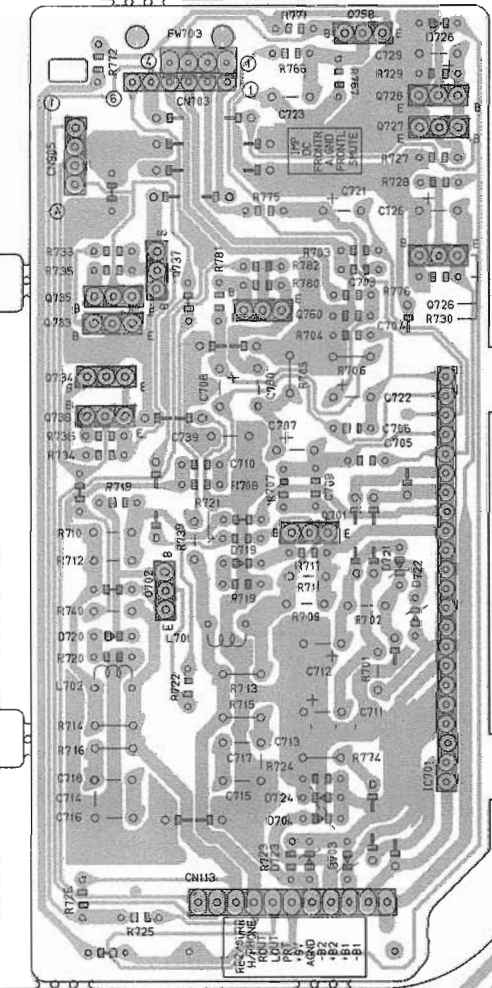
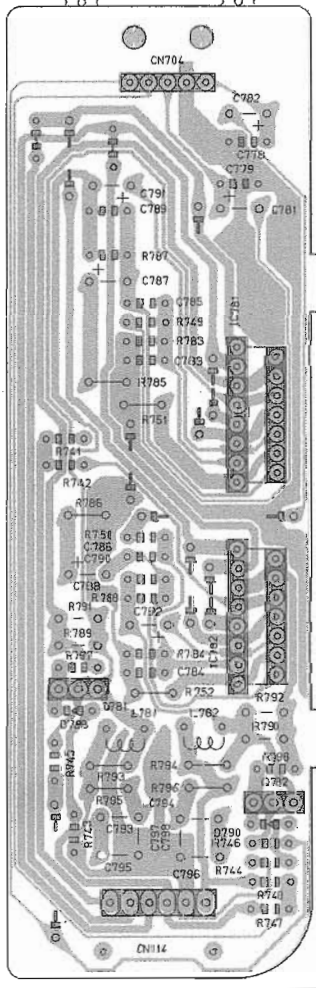
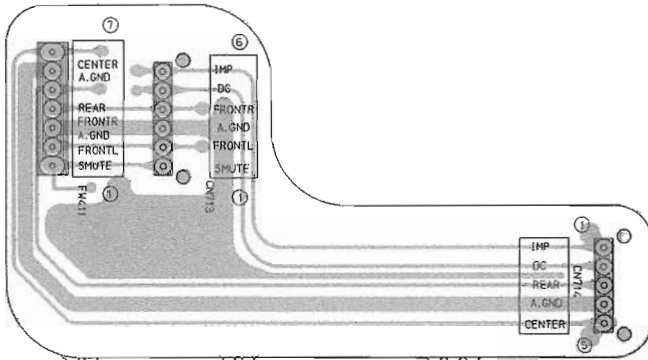
E

F

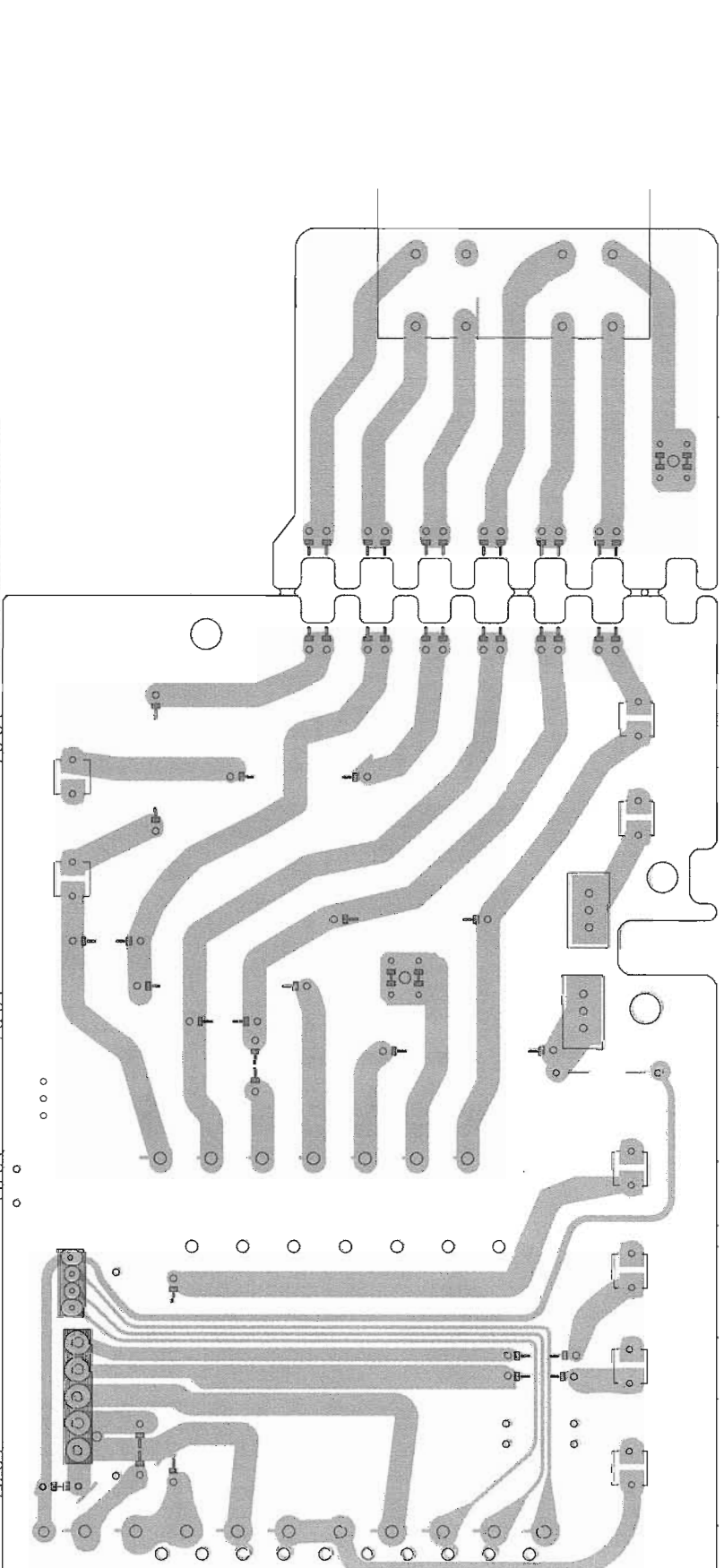
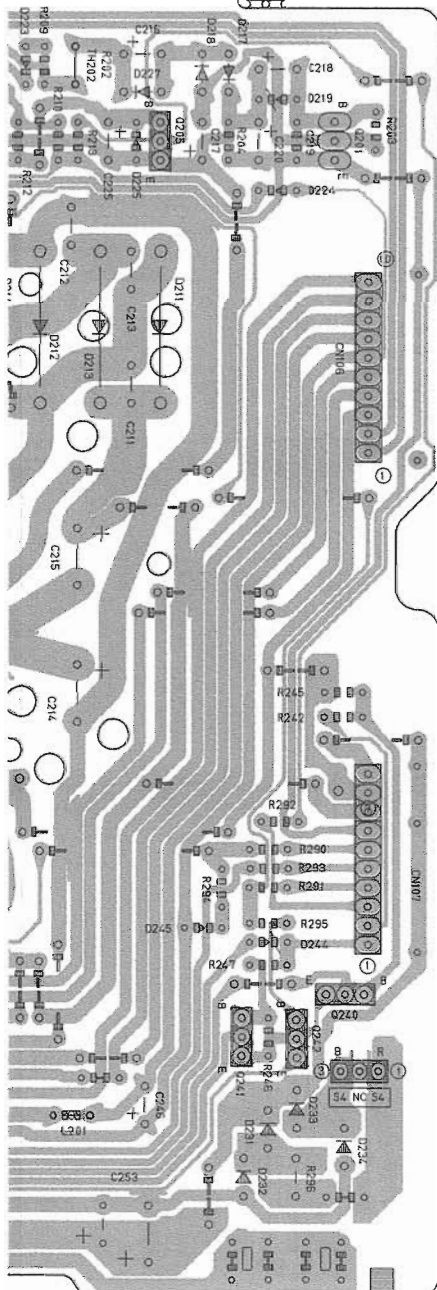
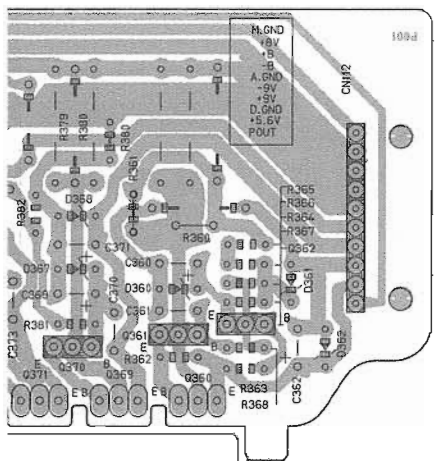
G

■ Regulator & Power Amplifier Boards

5  
4  
3  
2  
1



A B C D

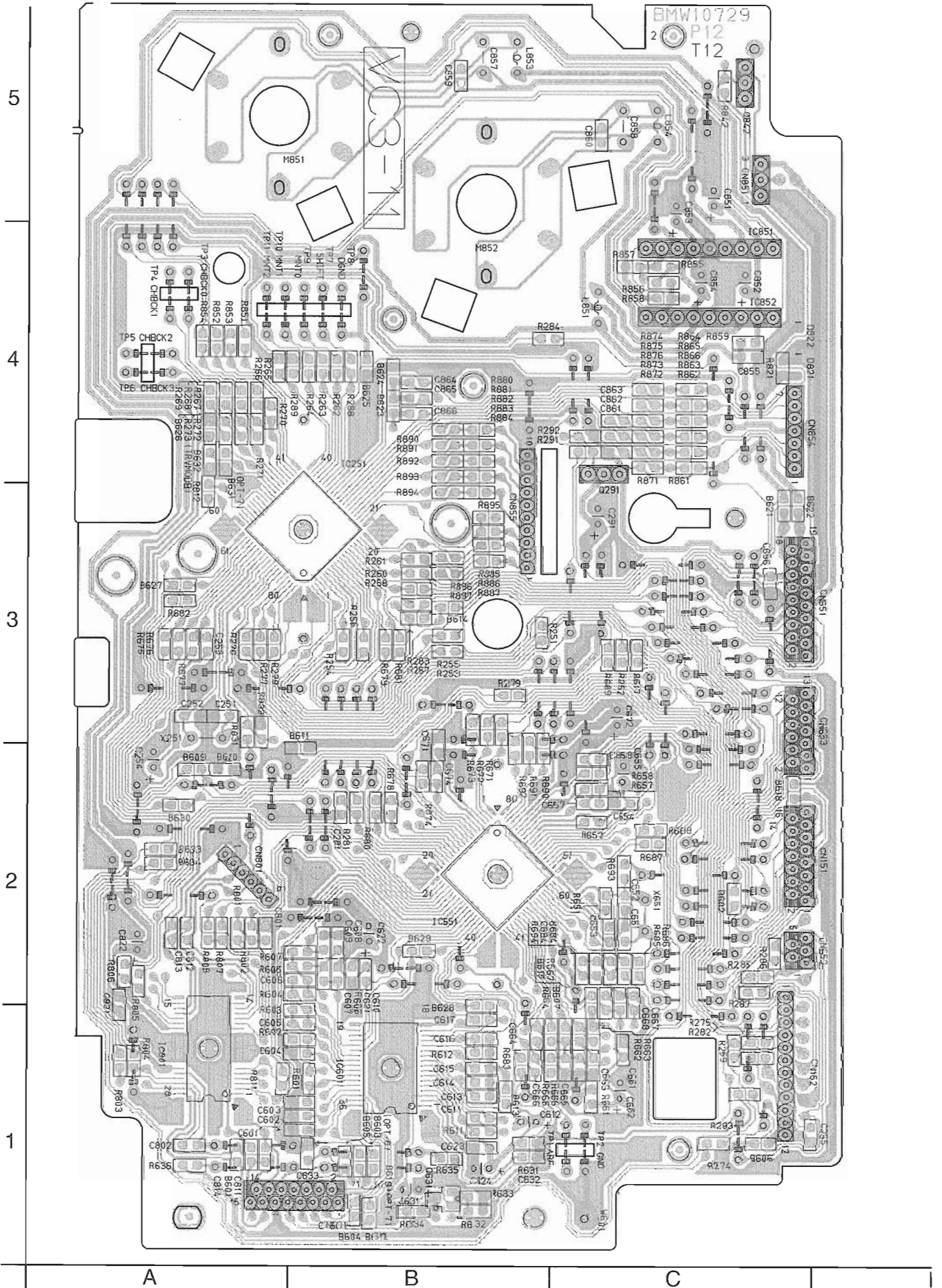


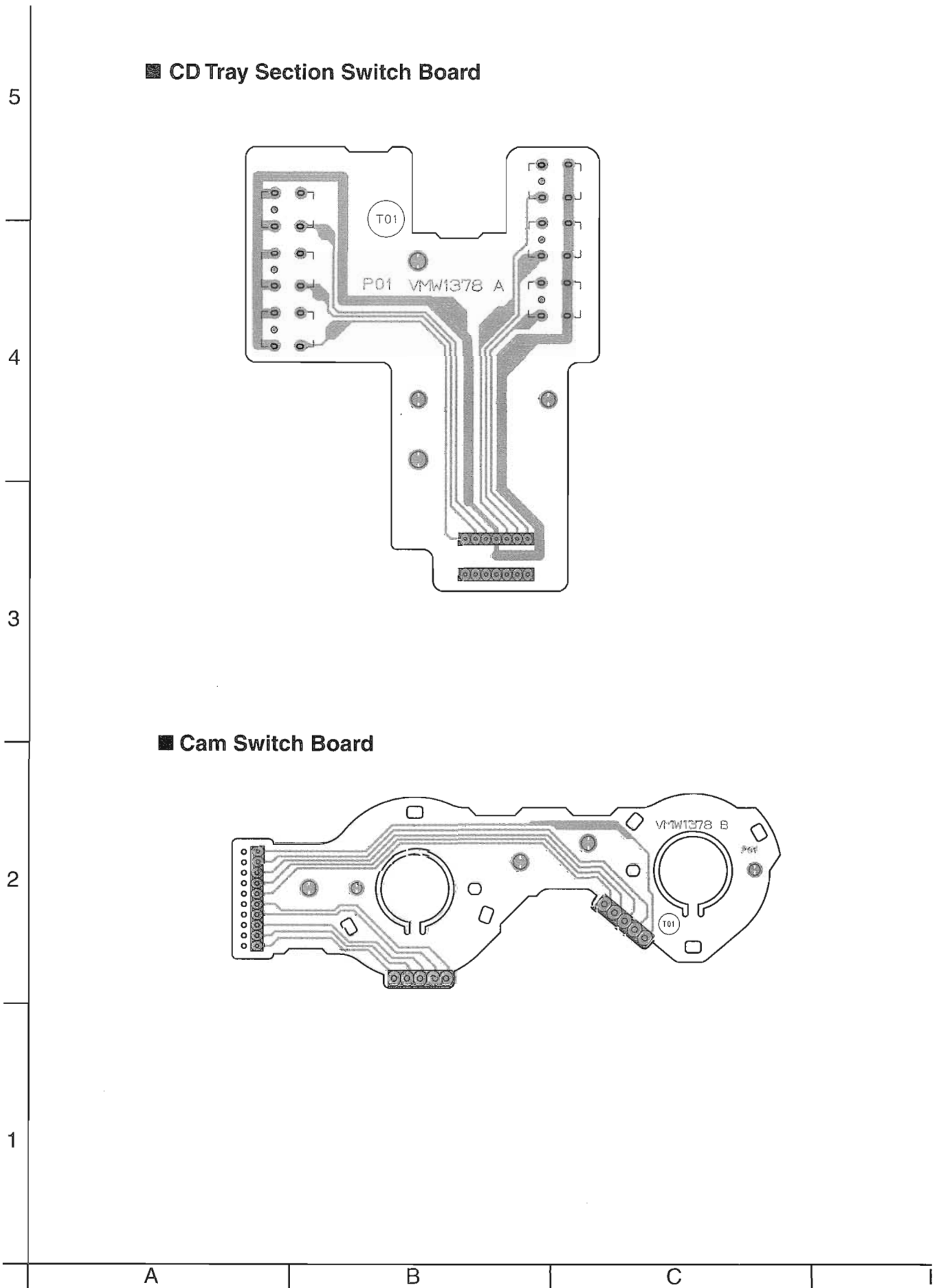
D E F G



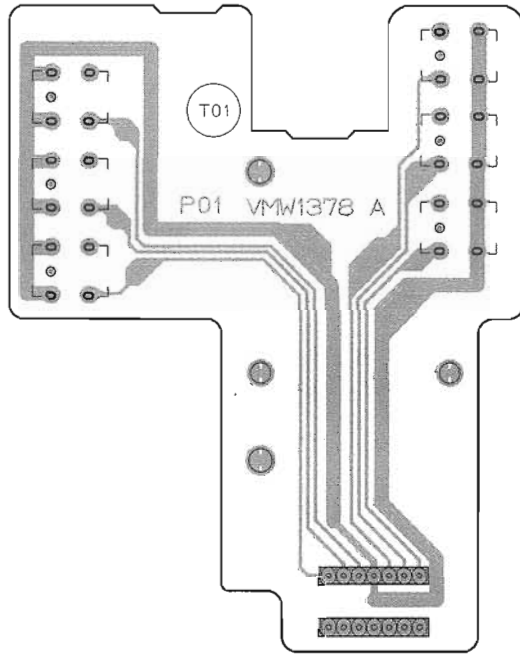


■ CD Servo Control Board

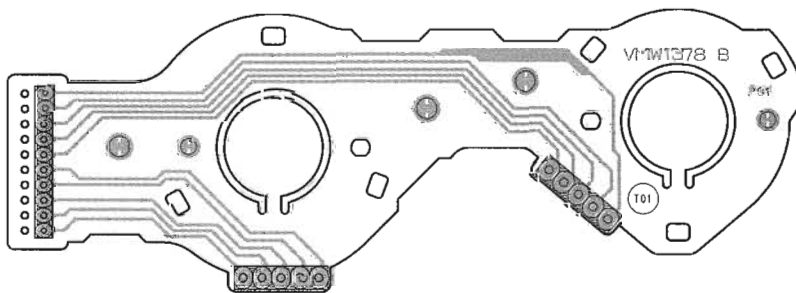




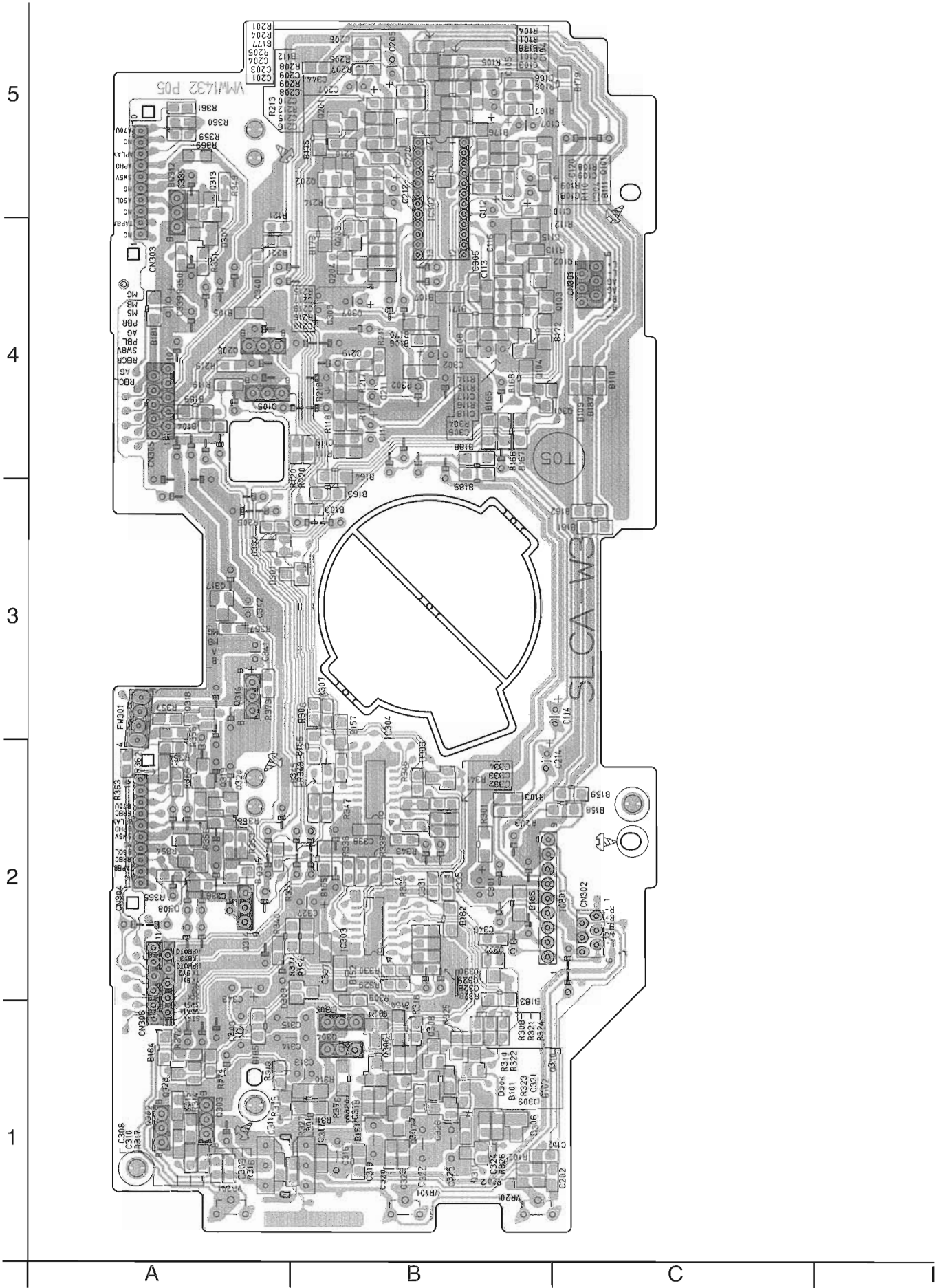
■ CD Tray Section Switch Board



■ Cam Switch Board



■ Cassette Mechanism Board



MX-J70/MX-J76/MX-J75R

<< M E M O >>

# PARTS LIST

- [ CA-MXJ70 ]
- [ MX-J70 ]
- [ CA-MXJ75R ]
- [ MX-J75R ]
- [ MX-J76 ]

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

<b>Area Suffix(CA-MXJ70)</b>	
A -----	Australia
UP -----	Korea
US -----	Singapore
UT -----	Taiwan
UY -----	Argentina
UX -----	Saudi Arabia
U -----	Other Areas

<b>Area Suffix(CA-MXJ75R)</b>	
B -----	U.K.
E -----	Continental Europe
EN -----	Northern Europe
EV -----	Eastern Europe

<b>Area Suffix(MX-J75R)</b>	
EE -----	Russian Federation

<b>Area Suffix(MX-J70)</b>	
J -----	U.S.A.
C -----	Canada

<b>Area Suffix(MX-J76)</b>	
C -----	Canada

- Contents -

Exploded View of General Assembly and Parts List .....	3-2
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CD Mechanism Ass'y and Parts List .....	3-9
Cassette Mechanism Ass'y and Parts List .....	3-10
Electrical Parts List .....	3-12
Packing Materials and Accessories Parts List .....	3-29

■ PARTS LIST (General Assembly)

BLOCK NO M1MM

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	1	GV10010-016A	FRONT PANEL	1	MX-J70	J C
		GV10010-017A	FRONT PANEL	1	CA-MXJ70	U US UT UP UX UY
		GV10010-018A	FRONT PANEL	1	MX-J76	C
		GV10010-018A	FRONT PANEL	1	MX-J75R	EE
		GV10010-018A	FRONT PANEL	1	CA-MXJ75R	B E EN EV
		GV10010-018A	FRONT PANEL	1	CA-MXJ70	A
	2	E75896-001	SPACER	2		
	3	VJD5429-001	JVC MARK	1		
	4	GV40016-001A	STANDBY INDICATOR	1		
	5	GV30047-008A	CD BUTTON ASSY	1		
	6	GV30029-006A	POWER BUTTON	1	CA-MXJ70	U US UT UP UX UY A
		GV30029-006A	POWER BUTTON	1	CA-MXJ75R	B E EN EV
		GV30029-006A	POWER BUTTON	1	MX-J75R	EE
		GV30029-007A	POWER BUTTON	1	MX-J70	J C
		GV30029-007A	POWER BUTTON	1	MX-J76	C
	7	GV30045-004A	PUSH BUTTON	1		
	8	GV20033-001A	SOURCE BUTTON (A)	1		
	9	GV20034-001A	SOURCE BUTTON (B)	1		
	10	QYSDSF2608Z	SCREW	3		
	11	QYSDSF2608Z	SCREW	4		
	12	QYSDSF2608Z	SCREW	6		
	13	GV30030-001A	STAY BRACKET	1		
	14	GV40030-001A	PHONE BRACKET	1		
	15	FMYH4004-001	RIVET	1		
	16	QYSDSF2608Z	SCREW	2		
	17	QYSBST3006Z	TH TAP SCREW	1		
	18	QYSDSF2608Z	SCREW	4		
	19	QYSDSF2608Z	SCREW	2		
	20	QYSDSF2608Z	SCREW	3		
	21	GV40043-001A	VOLUME SHEET	1		
	22	GV20022-004A	CASSETTE HOLDER	1		
	23	GV20023-004A	CASSETTE HOLDER	1		
	24	GV20024-001A	CASSETTE LENS	1		
	25	GV20025-001A	CASSETTE LENS	1		
	26	GV30026-004A	EJECT BUTTON	1		
	27	GV30027-004A	EJECT BUTTON	1		
	28	FMKW4009-001	HOLDER SPRING (A)	1		
	29	FMKW4010-001	HOLDER SPRING (B)	1		
	30	FMKW4011-001	LEVER SPRING	1		
	31	FMKS3002-003	EJECT LEVER (A)	1		
	32	FMKS3003-003	EJECT LEVER (B)	1		
	33	GV40034-001A	DAMPER	2		
	34	VKY4180-401	CASSETTE SPRING	4		
	35	GV10014-003A	MOVING CASE	1		
	36	GV30039-004A	MOVING PANEL (A)	1	CA-MXJ70	U US UT UP UX UY A
		GV30039-004A	MOVING PANEL (A)	1	MX-J75	EE
		GV30039-004A	MOVING PANEL (A)	1	MX-J70	J C
		GV30039-004A	MOVING PANEL (A)	1	CA-MXJ75R	B E EN EV
		GV30039-006A	MOVING PANEL (A)	1	MX-J76	C
	37	GV30040-015A	CONTROL SHEET	1	CA-MXJ70	U US UT UP UX UY A
		GV30040-015A	CONTROL SHEET	1	MX-J70	J C
		GV30040-018A	CONTROL SHEET	1	CA-MXJ75R	B E EN EV

PARTS LIST (General Assembly)

BLOCK NO M1MM

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	37	GV30040-018A	CONTROL SHEET	1	MX-J75	EE
		GV30040-015A	CONTROL SHEET	1	MX-J76	C
	38	GV30041-005A	CONTROL BUTTON ASSY	1	CA-MXJ70	U US UT UP UX UY A
		GV30041-005A	CONTROL BUTTON ASSY	1	MX-J70	J C
		GV30041-007A	CONTROL BUTTON ASSY	1	CA-MXJ75R	B E EN EV
		GV30041-007A	CONTROL BUTTON ASSY	1	MX-J75	EE
		GV30041-005A	CONTROL BUTTON ASSY	1	MX-J76	C
	39	QYSDSF2608Z	SCREW	2		
	40	GV30042-002A	PANEL BRACKET	1		
	41	GV40028-001A	PANEL HOLDER (L)	1		
	42	GV40028-002A	PANEL HOLDER (R)	1		
	43	QYSDSF2608Z	SCREW	6		
	45	QYSBST2606Z	T.SCREW	3		
	46	GV30043-004A	MOVING PANEL (B)	1	CA-MXJ70	U US UT UP UX UY A
		GV30043-004A	MOVING PANEL (B)	1	MX-J70	J C
		GV30043-004A	MOVING PANEL (B)	1	CA-MXJ75R	B E EN EV
		GV30043-004A	MOVING PANEL (B)	1	MX-J75	EE
		GV30043-005A	MOVING PANEL (B)	1	MX-J76	C
	47	VKZ4341-204	SPECIAL SCREW	2		
	48	QYSDSF2608Z	SCREW	2		
	49	QYSDSF2608Z	SCREW	1		
	50	GV30054-001A	P.W.BOARD HOLDER	1		
	51	QYSSSF3012Z	TAPPING SCREW	4		
	52	-----	CASSETTE MECHA	1		
	53	FMKL4012-004	EJECT SAFETY(A)	1		
	54	FMKL4013-001	EJECT SAFETY(B)	1		
	55	FMKW4007-001	SPRING A	1		
	56	FMKW4008-001	SPRING B	1		
	57	GV20030-001A	HOLDER BRACKET	1		
	58	QYSBSG3010E	T.SCREW	2		
	59	QYSBSG3010E	T.SCREW	2		
	60	QYSBSG3010Z	T.SCREW	4		
	61	QYSBSF3010Z	SCREW	4		
	62	-----	CD CHANGER	1		
	63	E309662-001	DISC STOPPER	1		
	64	QYSBSF3008Z	SCREW	1		
	65	FMKL4008-001	LOD STOPPER	1	MX-J70	J C
		FMKL4008-001	LOD STOPPER	1	MX-J76	C
	66	QYSBSF3008Z	SCREW	1	MX-J70	J C
		QYSBSF3008Z	SCREW	1	MX-J76	C
	67	GV10011-001A	CHASSIS BASE	1		
	68	E75896-006	FELT SPACER	2		
	69	GV30044-002A	HEAT SINK	1		
	70	QYSBSG3014E	T.SCREW	3		
	71	QYSBSG3020E	TAPPING SCREW	2		
	72	GV40029-001A	LEAF SPRING	1		
	73	QYSDSTL4008Z	SPECIAL SCREW	4		
	74	LE30469-001A	SHIELD PLATE	1		
	75	QYSBSGG3008E	T.SCREW	1		
△	76	EMP7000-200	POWER CORD	1	CA-MXJ70	UP
△		QMPD220-200-JD	POWER CORD	1	MX-J70	J C
△		QMPD220-200-JD	POWER CORD	1	MX-J76	C


MX-J70/MX-J76/MX-J75R

■ PARTS LIST (General Assembly)

BLOCK NO M1MM

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
△	76	QMPG020-244-JC	POWER CORD	1	CA-MXJ70	A
△		QMPK090-205-JN	POWER CORD	1	CA-MXJ75R	E EN EV
△		QMPK090-205-JN	POWER CORD	1	MX-J75R	EE
△		QMPK090-205-JN	POWER CORD	1	CA-MXJ70	U US
△		QMPN090-200-JC	POWER CORD	1	CA-MXJ75R	B
△		QMPR110-200-JN	POWER CORD	1	CA-MXJ70	UT UX
△		QMPR160-200-JC	POWER CORD	1	CA-MXJ70	UY
△	77	QZW0033-001	CORD STOPPER	1		
	78	VKZ4001-110S	WIRE HOLDER	1		
△	79	NQT0250-003	POWER TRANSFORMER	1	CA-MXJ70	U UP US UT UX UY
△		QQT0250-001	POWER TRANSFORMER	1	MX-J70	J C
△		QQT0250-002	POWER TRANSFORMER	1	CA-MXJ70	A
△		QQT0250-002	POWER TRANSFORMER	1	CA-MXJ75R	E EN EV B
△		QQT0250-002	POWER TRANSFORMER	1	MX-J75R	EE
△		QQT0250-001	POWER TRANSFORMER	1	MX-J76	C
△	80	QMF51E2-1R25-J1	FUSE (F001)	1	CA-MXJ70	A UP
△		QMF51E2-1R25-J1	FUSE (F001)	1	CA-MXJ75R	B E EN EV
△		QMF51E2-1R25-J1	FUSE (F001)	1	MX-J75R	EE
△		QMF51E2-2R5-J1	FUSE (F001)	1	CA-MXJ70	U US UT UX UY
△		QMF51U1-4R0-J1	FUSE (F001)	1	MX-J70	J C
△		QMF51U1-4R0-J1	FUSE (F001)	1	MX-J76	C
△	81	QMF51E2-1R25-J1	FUSE (F003)	1	CA-MXJ70	U US UT UX UY
△	82	QMF51E2-3R15-J1	FUSE (F101)	1	CA-MXJ70	U US UT UX UY UP A
△		QMF51U1-5R0-J1	FUSE (F101)	1	MX-J70	J C
△		QMF51U1-5R0-J1	FUSE (F101)	1	MX-J76	C
△		QMF51E2-3R15-J1	FUSE (F101)	1	MX-J75R	EE
△		QMF51E2-2R15-J1	FUSE (F101)	1	CA-MXJ75R	B E EN EV
△	83	QMF51E2-3R15-J1	FUSE (F102)	1	CA-MXJ70	U US UT UX UY UP A
△		QMF51E2-3R15-J1	FUSE (F102)	1	CA-MXJ75R	E EN EV B
△		QMF51U1-5R0-J1	FUSE (F102)	1	MX-J70	J C
△		QMF51E2-3R15-J1	FUSE (F102)	1	MX-J75R	EE
△		QMF51U1-5R0-J1	FUSE (F102)	1	MX-J76	C
	84	QUQ412-1014CJ	FLAT WIRE	1		
	85	QUQ412-1115DJ	FLAT WIRE	1		
	86	QUQ110-0915BJ	FLAT WIRE	1		
	87	QUQ412-1012CJ	FLAT WIRE	1		
	88	QUQ412-2109CJ	FLAT WIRE	1		
	89	QUQ412-2109CJ	FLAT WIRE	1		
	90	QUQ412-1712CJ	FLAT WIRE	1		
	91	QUQ110-1916BJ	FLAT WIRE	1		
	92	QUQ412-2112CJ	FLAT WIRE	1		
	93	QUQ412-2308CJ	FLAT WIRE	1		
	94	GV10013-052A	REAR PANEL	1	MX-J70	C
		GV10013-024A	REAR PANEL	1	MX-J70	J
		GV10013-025A	REAR PANEL	1	CA-MXJ70	U US UX UY
		GV10013-026A	REAR PANEL	1	CA-MXJ70	A
		GV10013-028A	REAR PANEL	1	CA-MXJ70	UP
		GV10013-030A	REAR PANEL	1	CA-MXJ75R	B E EN EV
		GV10013-032A	REAR PANEL	1	CA-MXJ75R	EE
		GV10013-042A	REAR PANEL	1	CA-MXJ70	UT
		GV10013-053A	REAR PANEL	1	MX-J76	C
	95	E207356-002SM	REAR COVER	1		



 PARTS LIST (General Assembly)

BLOCK NO M1MM

Item	Parts Number	Parts Name	Q'ty	Description	Area
96	QYSBSG3008Z	T.SCREW	2		
97	QYSBSGY3008E	SPECIAL SCREW	1		
98	QYSBSGY3008E	SPECIAL SCREW	1		
99	QYSBSGY3008E	SPECIAL SCREW	1		
100	QYSBSGY3008E	SPECIAL SCREW	4		
101	QYSBSGY3008E	SPECIAL SCREW	2		
102	QYSBSGY3008E	SPECIAL SCREW	2		
103	QYSBSGY3008E	SPECIAL SCREW	2		
104	QYSBSGY3008E	SPECIAL SCREW	2		
105	QYSBSGY3008E	SPECIAL SCREW	2	CA-MXJ70	U US UT UX UY
106	QYSBSGY3008E	SPECIAL SCREW	1		
107	QYSBSGY3008E	SPECIAL SCREW	1		
108	QYSBSGY3008E	SPECIAL SCREW	1	CA-MXJ70	U US UT UX UY UP A
	QYSBSGY3008E	SPECIAL SCREW	1	MX-J70	J C
	QYSBSGY3008E	SPECIAL SCREW	1	CA-MXJ75R	B E EN EV
	QYSBSGY3008E	SPECIAL SCREW	1	MX-J75R	EE
109	GV10012-001A/S/	METAL COVER	1		
110	QYSDSG3006M	TAPPING SCREW	2		
111	QYSBSGY3008E	SPECIAL SCREW	6		
112	GV30033-003A	CD FITTING	1	CA-MXJ70	U US UT UX UY UP A
	GV30033-003A	CD FITTING	1	MX-J70	J C
	GV30033-003A	CD FITTING	1	CA-MXJ75R	B E EN EV
	GV30033-003A	CD FITTING	1	MX-J75R	EE
	GV30033-004A	CD FITTING	1	MX-J76	C
113	GV30034-002A	CD FITTING	1	CA-MXJ70	U US UT UX UY UP A
	GV30034-002A	CD FITTING	1	MX-J70	J C
	GV30034-002A	CD FITTING	1	CA-MXJ75R	B E EN EV
	GV30034-002A	CD FITTING	1	MX-J75R	EE
	GV30034-003A	CD FITTING	1	MX-J76	C
114	GV30035-003A	CD FITTING	1	CA-MXJ70	U US UT UX UY UP A
	GV30035-003A	CD FITTING	1	MX-J70	J C
	GV30035-003A	CD FITTING	1	CA-MXJ75R	B E EN EV
	GV30035-003A	CD FITTING	1	MX-J75R	EE
	GV30035-004A	CD FITTING	1	MX-J76	C
115	GV30028-004A	VOLUME KNOB	1		
116	GV20026-007A	WINDOW SCREEN	1	CA-MXJ70	U US UT UX UY UP A
	GV20026-007A	WINDOW SCREEN	1	MX-J70	J C
	GV20026-008A	WINDOW SCREEN	1	MX-J75R	EE
	GV20026-008A	WINDOW SCREEN	1	CA-MXJ75R	B E EN EV
	GV20026-009A	WINDOW SCREEN	1	MX-J76	C
117	GV40017-003A	MIC VOLUME KNOB	1	CA-MXJ70	U US UT UX UY UP
120	GV40048-001A	PROTECT SHEET	1	CA-MXJ70	U US UT UX UY UP A
	GV40048-001A	PROTECT SHEET	1	MX-J70	J C
	GV40048-001A	PROTECT SHEET	1	CA-MXJ75R	B E EN EV
	GV40048-001A	PROTECT SHEET	1	MX-J75R	EE
	GV40048-001A	PROTECT SHEET	1	MX-J76	C
121	GV40049-001A	PROTECT SHEET	1	MX-J70	J C
	GV40049-001A	PROTECT SHEET	1	MX-J76	C
122	FMYSH103-003	SPACER	1		
123	FMKL4007-001	HEAT SINK BRACKET	1		
124	FMPK4003-001T	MICA SHEET	1		
125	QYSBSGY3008E	SPECIAL SCREW	1		

MX-J70/MX-J76/MX-J75R

■ PARTS LIST (General Assembly)

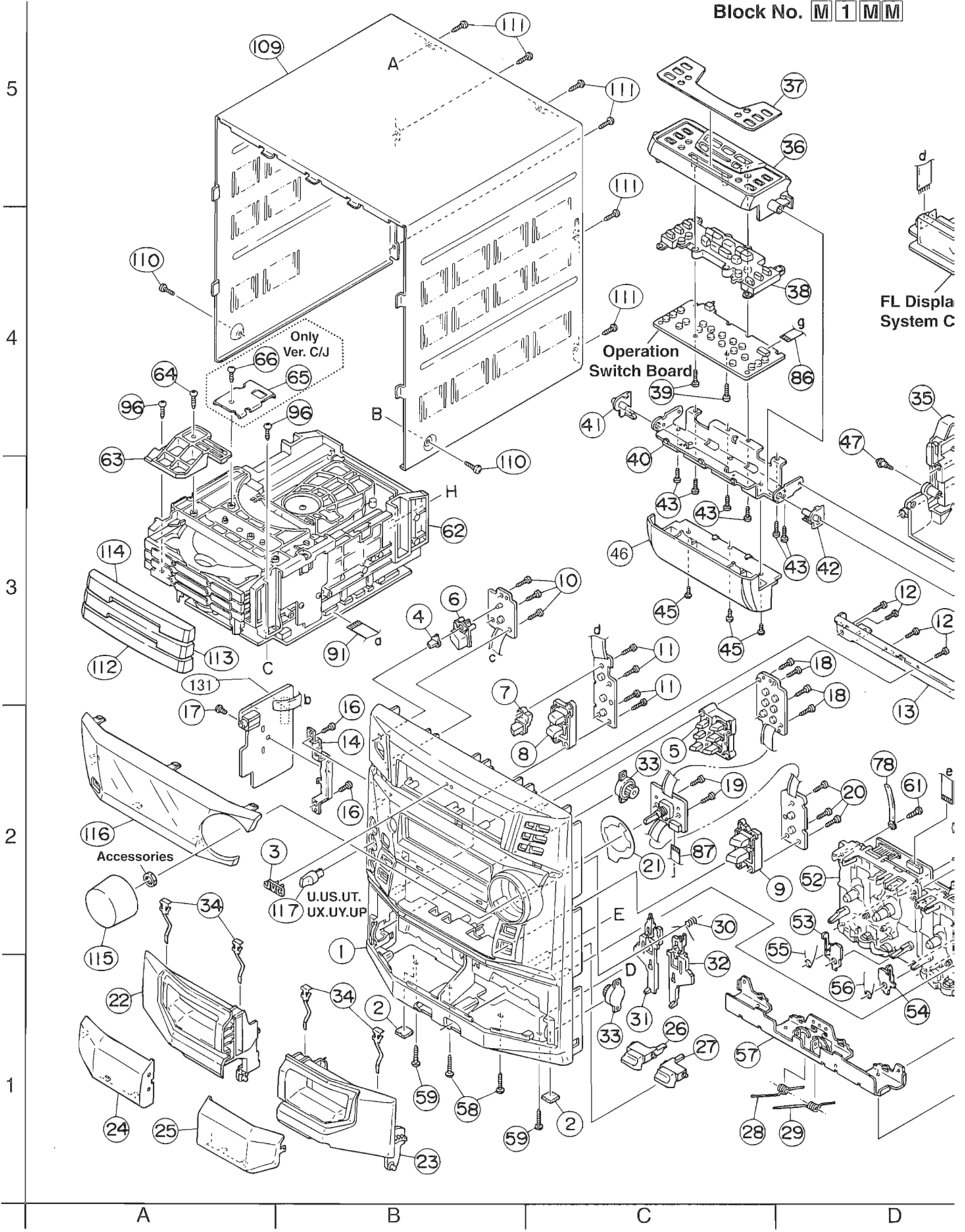
BLOCK NO M1MM

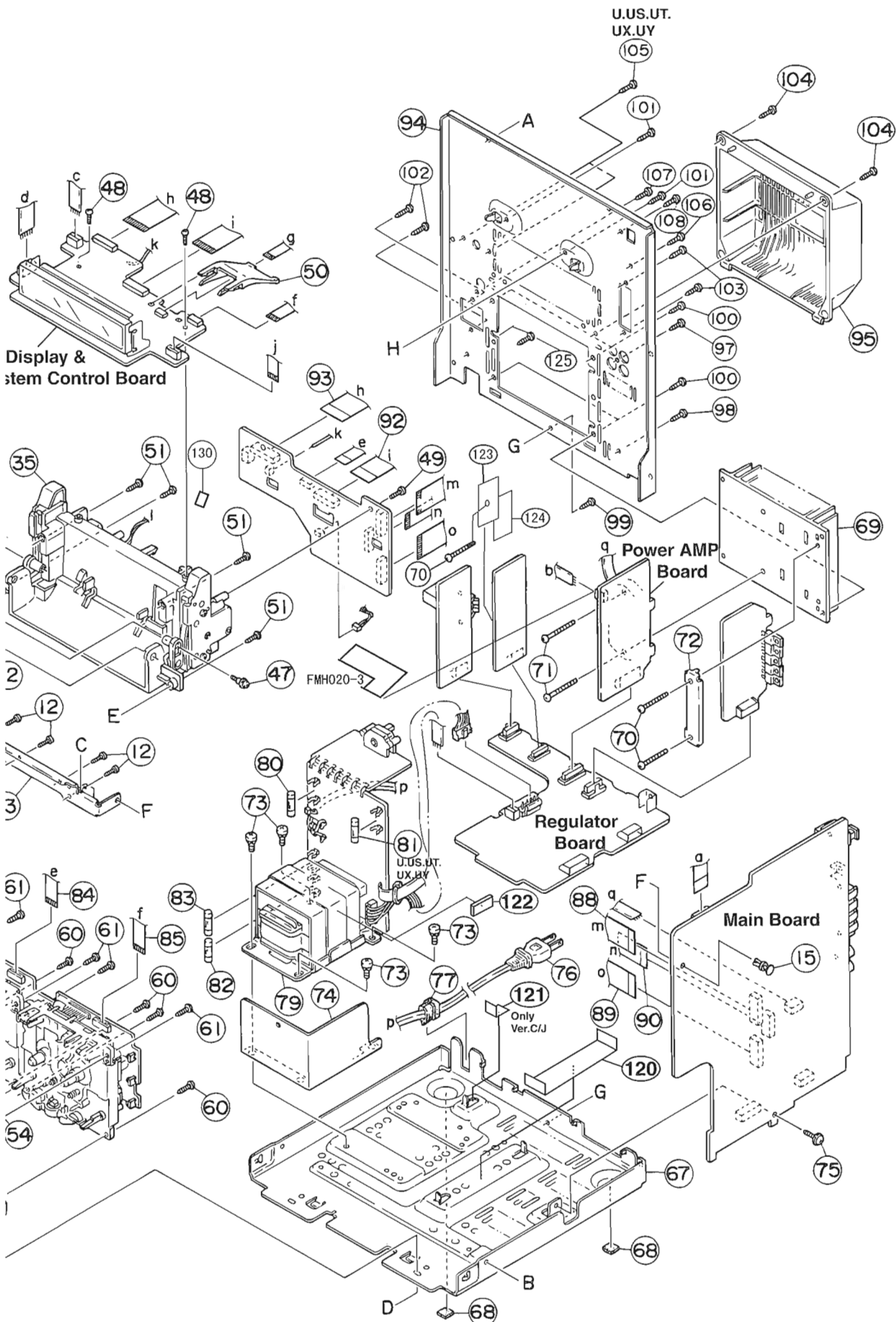
△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	130	GV40059-001A	SPACER	1	#201~#7200	MX-J70 J
		GV40059-001A	SPACER	1	#201~#1200	MX-J70 C
		GV40059-001A	SPACER	1	#201~#3200	CA-MXJ70 U
		GV40059-001A	SPACER	1	#201~#1200	MX-J70 C
		GV40059-001A	SPACER	1	#201~#3700	CA-MXJ75R B
		GV40059-001A	SPACER	1	#201~#5800	CA-MXJ75R E
		GV40059-001A	SPACER	1	#201~#700	CA-MXJ75R EN
		131	FMYSH103-004	SPACER	1	CA-MXJ70



# Exploded View of General Assembly and Parts List

Block No. **M 1 M M**





E

F

G

■ Parts List (CD Changer )

BLOCK NO. M2MM      

△ REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	VKS1144-003	CHASSIS		1		
2	VKS3698-003	TRAY GUIDE		2		
3	VKS5532-003	PULLEY GEAR		2		
4	VKB3000-164	BELT		2		
5	VKS5505-003	GEAR B		2		
6	VKS5506-002	GEAR C		3		
7	VKS5507-002	CROSS GEAR U		1		
8	VKS5508-002	CROSS GEAR L		1		
9	VKS5510-003	SELECT LEVER		1		
10	VKH5769-001	S.G.SHAFT		1		
11	VKS5511-002	SELECT GEAR		1		
12	VKW5155-003	COMP.SPRING	FOR SELECT GEAR	1		
13	VKM3846-002	GEAR BRACKET		1		
14	VKS5509-002MM	CYLINDER GEAR		1		
15	MSN5D257A-SA2	D.C.MOTOR ASS'Y		2		
16	QYSPSPD2616Z	SCREW	FOR MOTOR	2		
17	LV40612-001A	COMP.SPRING		1		
18	VKM3825-00AMM	C.G.BASE ASS'Y		1		
19	VKZ3172-00ASS	CAM SW. R ASS'Y		1		
20	VKZ3173-00ASS	CAM SW. L ASS'Y		1		
21	QYSPST2606Z	SCREW		4		
22	VKS2263-002MM	CAM R1		1		
23	VKS2264-002MM	CAM R2		1		
24	VKS2265-002MM	CAM GEAR L		1		
25	WDL316050MM	SLIT WASHER		2		
27	QYSBSF2608Z	T.SCREW		16		
28	VKS3702-00FMM	DRIVE UNIT		1		
29	VKS2247-004	MECHA HOLDER A		1		
30	VKL7767-00B	BRACKET ASS'Y		1		
31	QYSBSF2606Z	SCREW	FOR BRACKET	2		
32	VKM3860-00A	M.HOLDER B AS'Y		1		
33	VKL7802-00C	M.HOLDER C AS'Y		1		
34	QYSDST2604Z	SCREW		3		
35	VKL7810-00A	LIFTER ASS'Y R		1		
36	VKL7811-00A	LIFTER ASS'Y L		1		
37	VKL7812-00A	LIFTER ASS'Y H		1		
38	VKL2732-002	LIFTER BASE		1		
39	VKM3857-001	LIFTER BRACKET		1		
41	WDL266035-2	SLIT WASHER		1		
43	VKS5514-002MM	LOCK LEVER		3		
44	VKY3133-002MM	RETURN SPRING		1		
46	VKY3134-003MM	CLICK SPRING		1		
47	VKS2252-00E	TRAY ASS'Y		3		
48	VKS2250-003	TOP BRACKET		1		
49	VKS5515-002	S.TRAY STOPPER		1		
50	VKW5156-004	TORSION SPRING		1		
51	VKS3703-00F	CLAMPER ASS'Y		1		
62	LV40761-003A	INSULATOR		4		
65	-----	CD MECHA		1		
69	QGB2012J1-10	CONNECTOR		1		
71	VKW5187-001	ROD		1		
72	VYSA1R2-033	SPACER		1		
73	LE30611-001A	C.B HOLDER	FOR CD CB	1		
74	QYSBSF3008Z	SCREW	FOR HOLDER	2		
75	QUQ610-1509AJ	FLAT WIRE	TRAVERSE 15	1		
76	EWS176-008	FLAT WIRE	TRAVERSE 6	1		

# CD Changer Mechanism Ass'y and Parts List

VC3-21M

Block No. **M 2 M M**

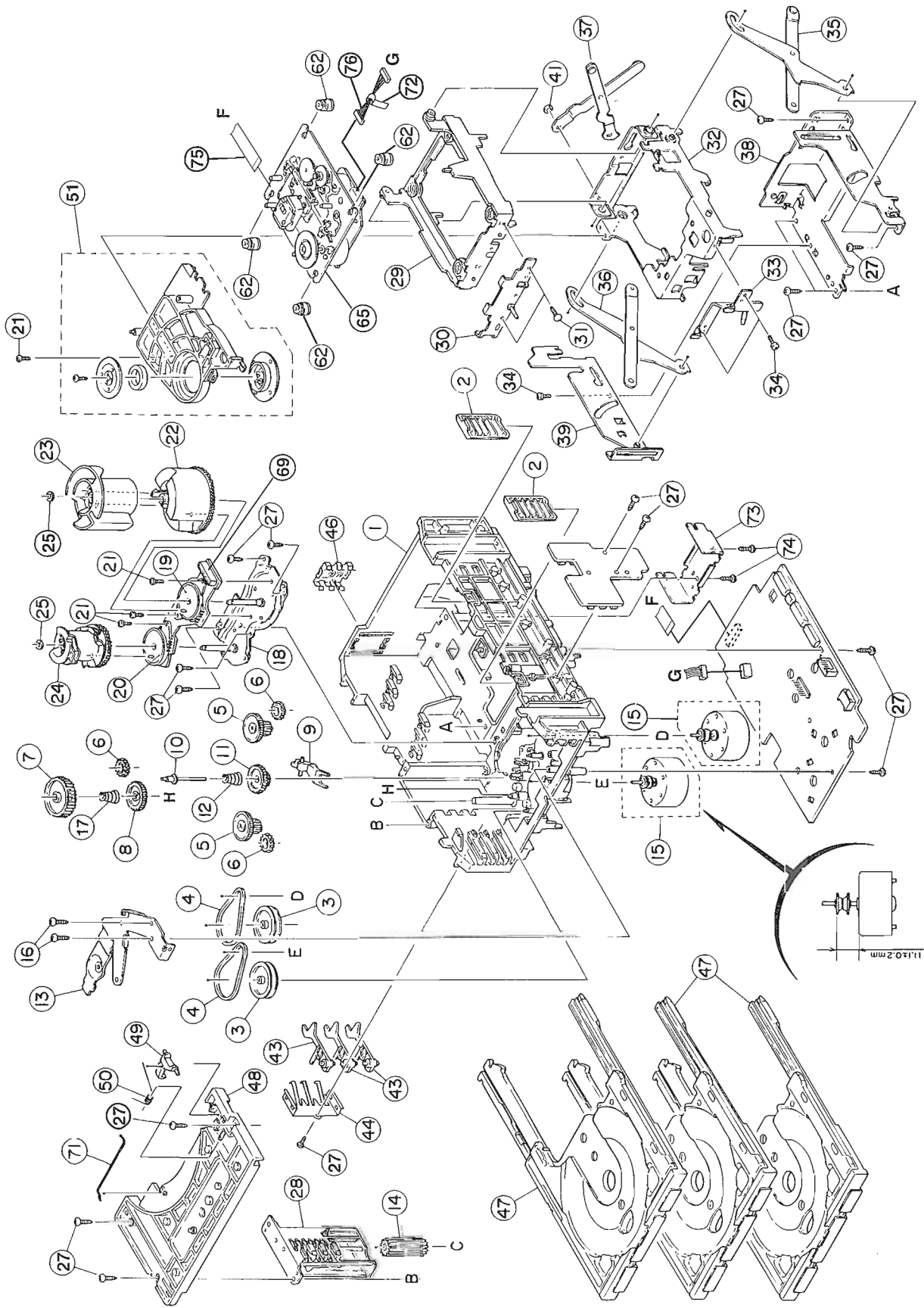
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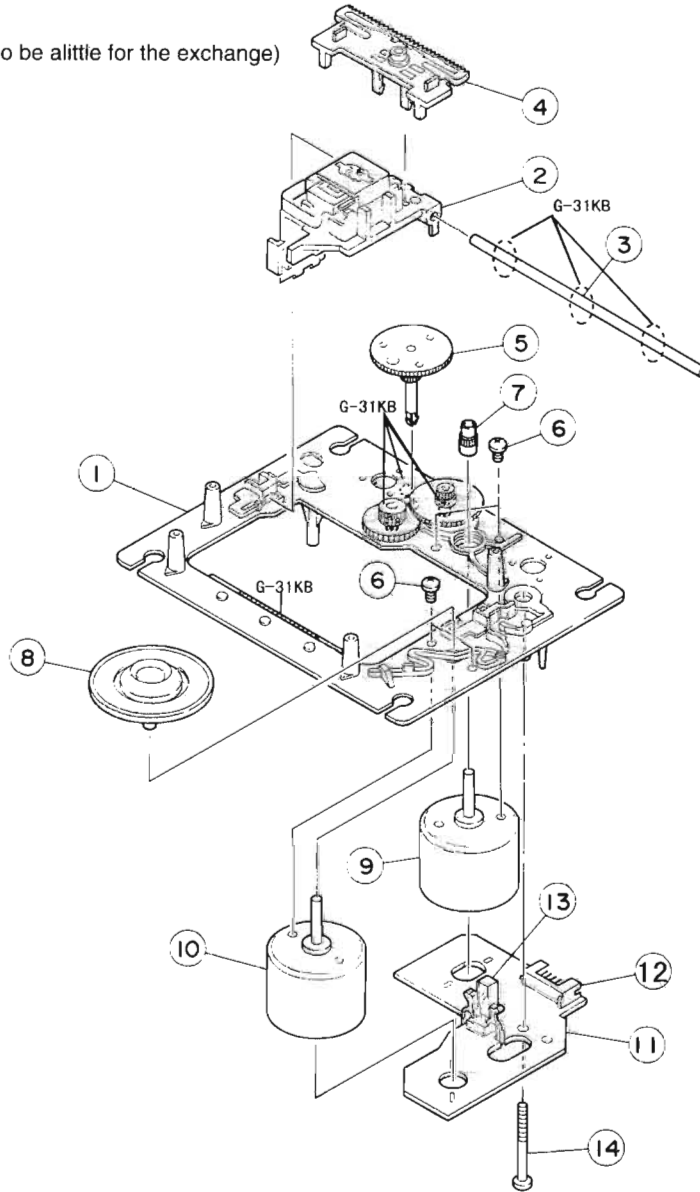
# CD Mechanism Ass'y and Parts List

Block No. **M 3 M M**

No. EXL-M7TB

## ■ Grease Point

G-31KB  
(Grease to apply have to be a little for the exchange)



## ■ CD Mechanism Assembly Parts List

Item	Parts Number	Parts Name	Q'ty	Description	Area
1	E102731-221SMKP	MECHA. BASE ASSY	1		
2	OPT1MA-7B	OPTICAL PICK UP	1		
3	E406777-002SMKP	CD SHAFT	1		
4	HQN300031-001PK	CD RACK	1		
5	E307745-441SMKP	MECHA GEAR	1		
6	QYSDSP2003N	SCREW	4		
7	E406750-441SM	PINION GEAR	1		
8	EPB309173PKA	TURN TABLE	1		
9	E406784-001	FEED MOTOR	1		
10	E406783-001	SPPINDLE MOTOR	1		
11	EMW10190-441	P. C. BOARD	1		
12	QGA2001F1-06	6P PLUG ASSY	1		
13	QSW0506-001	LEAF SWITCH	1		
14	E75832-221SS	SCREW	1		

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# Cassette Mechanism Ass'y and Parts List

Block No. **M 4 M M**

SLC-W5M

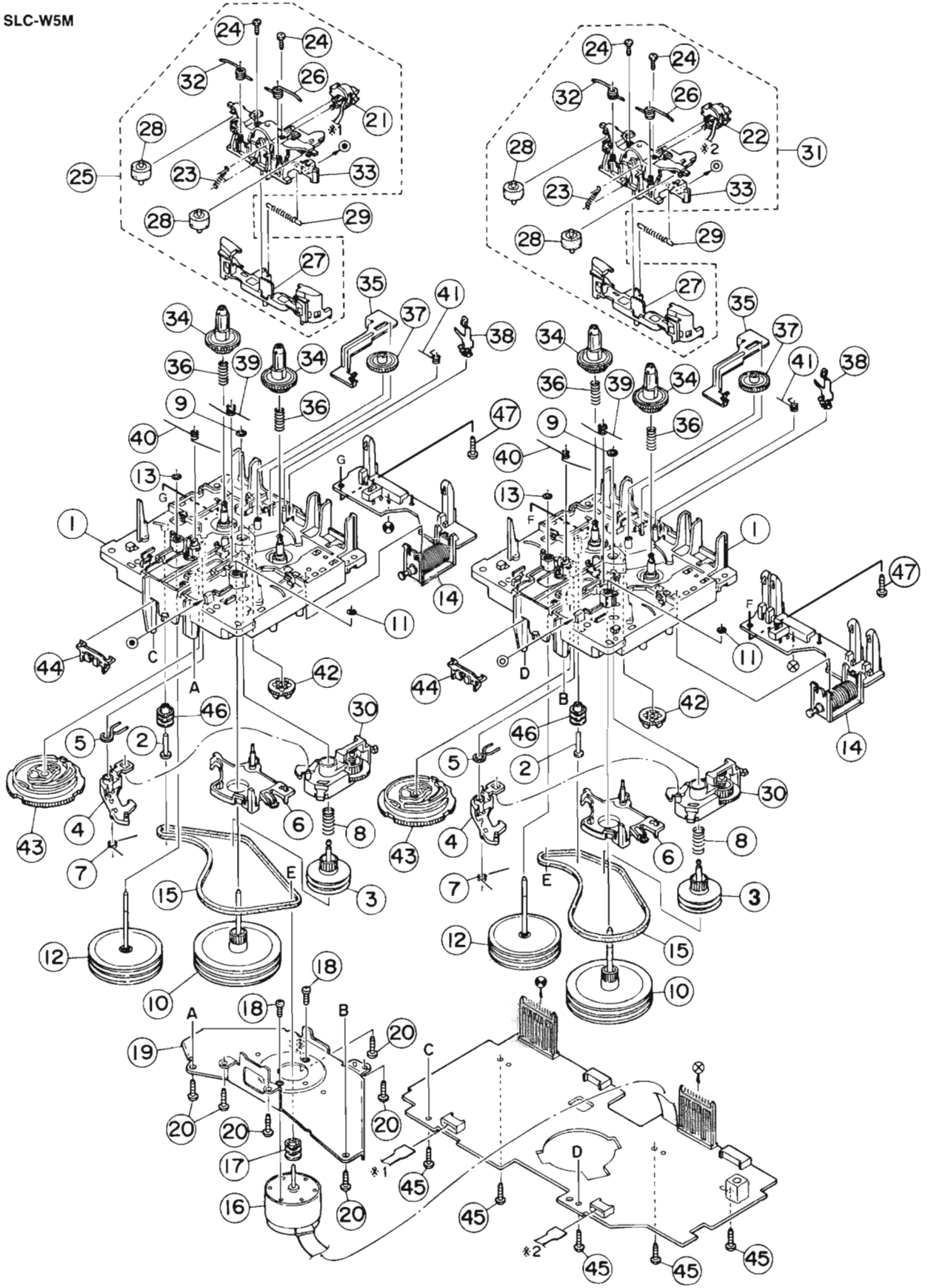
5

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C

### ■ Parts List (Cassette Mechanism)

BLOCK NO. **1477**

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	VKS1165-00H	CHASSIS B.ASS'Y		2		
2	VKH5786-002	SHAFT		2		
3	VKS5603-00D	MAIN PULLEY ASY		2		
4	VKS3785-001MM	FR ARM		2		
5	VKW5284-002	SWING SPRING		2		
6	VKS2278-003	TRIGGER ARM		2		
7	VKW5301-001	FR SPRING		2		
8	VKW5266-001	ELEVATOR SPRING		2		
9	WDL214025	WASHER		2		
10	VKF3205-00B	F.WHEEL ASSY(R)		2		
11	WDL183425	SLIT WASHER		2		
12	VKF3207-00B	F.WHEEL ASSY(L)		2		
13	WDL173525-6	SLIT WASHER		2		
14	VKZ3174-00A	DC SOLENOID		2		
15	VKB3000-182	CAPSTAN BELT(B)		2		
16	MSI-5U2LWA	D.C.MOTOR ASS'Y		1		
17	VKR4761-001	MOTOR PULLEY		1		
18	QYSPSP2604Z	SCREW		2		
19	VKM3907-001	JOINT BRACKET		1		
20	QYSBSF2608Z	T.SCREW		6		
21	VGHO424-037	P.B.HEAD		1		
22	VGHO425-544	R/P&E HEAD		1		
23	VKW5302-001	HEAD SPRING		2		
24	VKZ4730-001	SPECIAL SCREW		4		
25	VKS2279-00C	HEAD MOUNT ASSY		1		
26	VKW5299-002	PIN ROL.SP.(R)		2		
27	VKS2277-005	DIRECTION LEVER		2		
28	VKP4233-00A	PINCH ROL. ASSY		4		
29	VKW5285-001	RETURN SPRING		2		
30	VKS3786-00G	CLUTCH ASS'Y		2		
31	VKS2275-00C	HEAD MOUNT ASSY		1		
32	VKW5300-002	PIN ROL.SP.(L)		2		
33	VKS1167-001	HEAD MOUNT BASE		2		
34	VKS2274-002	REEL GEAR		4		
35	VKM3906-003	PLAY SW LEVER		2		
36	VKW5286-002	B.T. SPRING		4		
37	VKS5559-001	PLAY IDLE GEAR		2		
38	VKY3149-002	CASSETTE SP.		2		
39	VKW5279-001	HEAD BASE SP(R)		2		
40	VKW5280-001	HEAD BASE SP(L)		2		
41	VKW5296-001	EARTH SPRING		2		
42	VKS5597-00A	FR GEAR ASS'Y		2		
43	VKS1166-003	CONTROL CAM		2		
44	VKS5577-001	FPC HOLDER		2		
45	QYSBSF2608Z	T.SCREW	FOR P.W.B.	5		
46	VKR4749-001	IDLE PULLEY		2		
47	QYSBSF2006Z	SCREW		2		

# Electrical Parts List

■ Electrical Parts List(Power Amp Board)

BLOCK NO 01

Item	Parts Number	Description	Area
I.C.S			
IC701	STK411-210E	I.C(HYBRID)	
IC781	TDA7295	I.C(M)	
IC782	TDA7295	I.C(M)	
DIODES			
D201	1N5402M-20	DIODE	
D202	1N5402M-20	DIODE	
D203	1N5402M-20	DIODE	
D204	1N5402M-20	DIODE	
D211	30DF2-FC	DIODE	
D212	30DF2-FC	DIODE	
D213	30DF2-FC	DIODE	
D214	30DF2-FC	DIODE	
D217	1SR35-100A-T5	SI DIODE	
D218	1SR35-100A-T5	SI DIODE	
D219	MTZJ33C-T2	Z DIODE I M	
D220	MTZJ9.1C-T2	ZENER DIODE	
D221	MTZJ5.1B-T2	ZENER DIODE	
D223	1SS133-T2	SI DIODE	
D224	1SS133-T2	SI DIODE	
D225	1SS133-T2	SI DIODE	
D227	1SR35-100A-T5	SI DIODE	
D231	RN1Z-F1	SI DIODE	
D232	RN1Z-F1	SI DIODE	
D233	RN1Z-F1	SI DIODE	
D234	RN1Z-F1	SI DIODE	
D360	MTZJ5.1B-T2	ZENER DIODE	
D361	MTZJ11C-T2	ZENER DIODE	
D362	MTZJ6.8C-T2	ZENER DIODE	
D365	MTZJ9.1B-T2	ZENER DIODE	
D366	MTZJ11C-T2	ZENER DIODE	
D367	MTZJ10C-T2	ZENER DIODE	
D368	MTZJ11C-T2	ZENER DIODE	
D369	MTZJ10C-T2	ZENER DIODE	
D370	MTZJ11C-T2	ZENER DIODE	
D703	MTZJ8.2C-T2	ZENER DIODE	
D704	MTZJ8.2C-T2	ZENER DIODE	
D719	1SS133-T2	SI DIODE	
D720	1SS133-T2	SI DIODE	
D721	MTZJ8.2C-T2	ZENER DIODE	
D722	MTZJ8.2C-T2	ZENER DIODE	
D723	MTZJ33C-T2	Z DIODE I M	
D724	MTZJ33C-T2	Z DIODE I M	
D728	1SS133-T2	SI DIODE	
D789	1SS133-T2	SI DIODE	
D790	1SS133-T2	SI DIODE	
TRANSISTORS			
Q201	2SB1274/RS/	TRANSISTOR	
Q203	KRC107M-T	DIGITAL TRANSISTOR	
Q204	KRC107M-T	DIGITAL TRANSISTOR	
Q205	KRC107M-T	DIGITAL TRANSISTOR	
Q240	KTC3199/GL/-T	TRANSISTOR	
Q241	KTC3199/GL/-T	TRANSISTOR	
Q242	KTC3199/GL/-T	TRANSISTOR	
Q360	2SD2061/EF/	SI TRANSISTOR	
Q361	KTC3199/GL/-T	TRANSISTOR	
Q362	KTC3199/GL/-T	TRANSISTOR	
Q365	2SD2061/EF/	SI TRANSISTOR	
Q366	2SD2061/EF/	SI TRANSISTOR	
Q367	KTA1267/YG/-T	TRANSISTOR	
Q368	KTC3199/GL/-T	TRANSISTOR	
Q369	2SD2061/EF/	SI TRANSISTOR	
Q370	KTC3199/GL/-T	TRANSISTOR	
Q371	2SB1565/EF/	SI TRANSISTOR	
Q373	KRA104M-T	DIGITAL TRANSISTOR	
Q374	KRC104M-T	DIGITAL TRANSISTOR	
Q375	KRC104M-T	DIGITAL TRANSISTOR	

Item	Parts Number	Description	Area
Q376	KRA104M-T	DIGITAL TRANSISTOR	
Q701	2SA1038S/SE/-T	SI TRANSISTOR	
Q702	2SA1038S/SE/-T	SI TRANSISTOR	
Q726	2SC2389S/SE/-T	SI TRANSISTOR	
Q727	2SA1038S/SE/-T	SI TRANSISTOR	
Q728	KTC3199/GL/-T	TRANSISTOR	
Q733	2SC3576-JVC-T	SI TRANSISTOR	
Q734	2SC3576-JVC-T	SI TRANSISTOR	
Q735	2SC3576-JVC-T	SI TRANSISTOR	
Q736	2SC3576-JVC-T	SI TRANSISTOR	
Q737	KRA111M-T	DIGITAL TRANSISTOR	
Q758	2SA1038S/S/-T	TRANSISTOR	
Q781	2SA1038S/SE/-T	SI TRANSISTOR	
Q782	2SA1038S/SE/-T	SI TRANSISTOR	
CAPACITORS			
C201	QFV82AJ-104	0.1MF 100V THIN FILM CA	
C202	QFV82AJ-104	0.1MF 100V THIN FILM CA	
C203	QFV82AJ-104	0.1MF 100V THIN FILM CA	
C204	QEZ0461-478	4700MF E CAP.	
C205	QEZ0461-478	4700MF E CAP.	
C211	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
C212	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
C213	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
C214	QETM1VM-228J7	2200MF 35V E.CAP.	
C215	QETM1VM-228J7	2200MF 35V E.CAP.	
C216	QETN1VM-107Z	100MF 50V E.CAP.	
C217	QETN1JM-476Z	47MF 63V E.CAP.	
C218	EETC1HM-226ZJ	22MF 50V E.CAP.	
C219	QDYB1CM-103Y	0.01MF 16V CER.CAP.	
C220	EETC1HM-226ZJ	22MF 50V E.CAP.	
C221	EETB1HM-475E	4.7MF 50V E.CAP.	
C222	EETB1HM-475E	4.7MF 50V E.CAP.	
C223	QETC1HM-225ZM	2.2MF 50V E.CAP.	
C224	EETB1HM-105E	1MF 50V E.CAP.	
C233	QFLM1HJ-103Z	0.01MF 50V M CAP.	A B C E EE EN EV J
	QFVJ1HJ-224Z	0.22MF 50V CAP.	U UP US UT UX UY
C238	QFLM1HJ-223Z	0.022MF 50V M CAP.	B E EE EN EV
C239	QFLM1HJ-223Z	0.022MF 50V M CAP.	B E EE EN EV
C253	QETM1EM-108	1000MF 25V E CAP.	
C360	EETC1EM-226ZE	22MF 25V E.CAP.	
C361	QCF31HZ-103Z	0.01MF 50V C CAP.	
C362	EETC1EM-226ZE	22MF 25V E.CAP.	
C366	EETC1EM-226ZE	22MF 25V E.CAP.	
C367	QCF31HZ-103Z	0.01MF 50V C CAP.	
C368	EETC1EM-226ZE	22MF 25V E.CAP.	
C369	EETC1EM-226ZE	22MF 25V E.CAP.	
C370	QCF31HZ-103Z	0.01MF 50V C CAP.	
C371	EETC1EM-226ZE	22MF 25V E.CAP.	
C372	EETC1EM-226ZE	22MF 25V E.CAP.	
C373	QCF31HZ-103Z	0.01MF 50V C CAP.	
C374	EETC1EM-226ZE	22MF 25V E.CAP.	
C703	QCB1HK-471Y	470PF 50V CER.CAP.	
C704	QCB1HK-471Y	470PF 50V CER.CAP.	
C705	QCSB1HJ-220	22PF 50V CER.CAP.	
C706	QCSB1HJ-220	22PF 50V CER.CAP.	
C707	QTE1E28-476Z	E.CAP.	
C708	QTE1E28-476Z	E.CAP.	
C709	QCSB1HJ-100Y	10PF 50V CER.CAP.	
C710	QCSB1HJ-100Y	10PF 50V CER.CAP.	
C711	QETN1HM-107Z	100MF 50V AL E.CAP.	
C712	QETN1HM-107Z	100MF 50V AL E.CAP.	
C713	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	A B C E EE EN EV
	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	U UP US UT UX UY
C714	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	A B C E EE EN EV
	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	U UP US UT UX UY
C715	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	A B C E EE EN EV
	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	U UP US UT UX UY

■ Electrical Parts List(Power Amp Board)

BLOCK NO 01

±	Item	Parts Number	Description	Area
	C716	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	A B C E EE EN EV
		QFVJ1HJ-104Z	0.1MF 50V TF CAP.	U UP US UT UX UY
	C717	QFLM1HJ-473Z	0.047MF 50V M CAP.	J
	C718	QFLM1HJ-473Z	0.047MF 50V M CAP.	J
	C721	QTE1V06-106Z	AL E.CAP.	
	C722	QTE1V06-106Z	AL E.CAP.	
	C723	EETB1HM-475E	4.7MF 50V E.CAP.	
	C726	EETB1EM-106E	10MF 25V E.CAP.	
	C729	EETB1CM-476	47MF 16V E.CAP.	
	C739	QFLM1HJ-103Z	0.01MF 50V M CAP.	
	C781	QETC1HM-225ZM	2.2MF 50V E.CAP.	
	C782	QETC1HM-225ZM	2.2MF 50V E.CAP.	
	C785	QCBB1HK-181Y	180PF 50V CER.CAP.	
	C786	QCBB1HK-181Y	180PF 50V CER.CAP.	
	C787	QETC1EM-476ZM	47MF 25V E.CAP.	
	C788	QETC1EM-476ZM	47MF 25V E.CAP.	
	C789	QCSB1HJ-100Y	10PF 50V CER.CAP.	
	C790	QCSB1HJ-100Y	10PF 50V CER.CAP.	
	C791	EETC1HM-226ZJC	22MF 50V E.CAP.	
	C792	EETC1HM-226ZJC	22MF 50V E.CAP.	
	C793	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	A B C E EE EN EV
		QFVJ1HJ-104Z	0.1MF 50V TF CAP.	U UP US UT UX UY
	C794	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	A B C E EE EN EV
		QFVJ1HJ-104Z	0.1MF 50V TF CAP.	U UP US UT UX UY
	C795	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	A B C E EE EN EV
		QFVJ1HJ-104Z	0.1MF 50V TF CAP.	U UP US UT UX UY
	C796	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	A B C E EE EN EV
		QFVJ1HJ-104Z	0.1MF 50V TF CAP.	U UP US UT UX UY
	C797	QFLM1HJ-473Z	0.047MF 50V M CAP.	J
	C798	QFLM1HJ-473Z	0.047MF 50V M CAP.	J
	C799	QDYB1CM-103Y	0.01MF 16V CER.CAP.	U UP US UT
		QDYB1CM-103Y	0.01MF 16V CER.CAP.	UX UY C EE J
		QFLM1HJ-103Z	0.01MF 50V M CAP.	A B E EN EV
	RESISTORS			
±	R202	QRJ146J-4R7X	4.7 1/4W UNF.CARBON R	J
	R203	QRE141J-332Y	3.3K 1/4W C RES.	
	R204	QRE141J-223Y	22K 1/4W C RES.	
	R205	QRE141J-104Y	100K 1/4W C RES.	
	R209	QRE141J-103Y	10K 1/4W CARBON RES.	
	R210	QRE141J-472Y	4.7K 1/4W C RES.	
	R211	QRE141J-182Y	1.8K 1/4W C RES.	
	R238	QRJ146J-4R7X	4.7 1/4W UNF.CARBON R	B E EE EN EV
	R239	QRJ146J-4R7X	4.7 1/4W UNF.CARBON R	B E EE EN EV
	R242	QRE141J-222Y	2.2K 1/4W C RES.	
	R245	QRE141J-222Y	2.2K 1/4W C RES.	
	R246	QRE141J-222Y	2.2K 1/4W C RES.	
	R247	QRE141J-222Y	2.2K 1/4W C RES.	
	R290	QRE141J-102Y	1K 1/4W C RES.	
	R291	QRE141J-102Y	1K 1/4W C RES.	
	R292	QRE141J-102Y	1K 1/4W C RES.	
	R293	QRE141J-102Y	1K 1/4W C RES.	
	R294	QRE141J-103Y	10K 1/4W CARBON RES.	
	R295	QRE141J-183Y	18K 1/4W CARBON RES.	
	R299	QRL012J-332	3.3K 1W UNF.OMF.RES.	
±	R360	QRL01DJ-220X	22 1W OMF.RES.	J ONLY
±		QRZ9006-4R7X	4.7 F RES.	A B E EE EN EV C
±		QRZ9006-4R7X	4.7 F RES.	U UP US UT UX UY
±	R361	QRL01DJ-220X	22 1W OMF.RES.	J ONLY
±		QRZ9006-4R7X	4.7 F RES.	A B E EE EN EV C
±		QRZ9006-4R7X	4.7 F RES.	U UP US UT UX UY
	R362	QRE141J-331Y	330 1/4W C RES.	
	R363	QRE141J-331Y	330 1/4W C RES.	
	R364	QRE141J-122Y	1.2K 1/4W C RES.	
	R365	QRE141J-561Y	560 1/4W C RES.	
	R366	QRE141J-561Y	560 1/4W C RES.	
	R367	QRE141J-122Y	1.2K 1/4W C RES.	
	R368	QRE141J-331Y	330 1/4W C RES.	

±	Item	Parts Number	Description	Area
	R371	QRE141J-4R7Y	4.7 1/4W C RES.	
	R372	QRE141J-4R7Y	4.7 1/4W C RES.	
±	R373	QRZ9021-220	22 FUSIBLE RES.	A B C E EE EN EV
±		QRZ9021-220	22 FUSIBLE RES.	U UP US UT UX UY
±	R374	QRL022J-220	22 2W OXIDE METAL	J
±		QRZ9021-220	22 FUSIBLE RES.	A B C E EE EN EV
±		QRZ9021-220	22 FUSIBLE RES.	U UP US UT UX UY
±	R375	QRL022J-220	22 2W OXIDE METAL	J
±		QRZ9021-220	22 FUSIBLE RES.	A B C E EE EN EV
±		QRZ9021-220	22 FUSIBLE RES.	U UP US UT UX UY
	R376	QRE141J-221Y	220 1/4W C RES.	
	R377	QRE141J-681Y	680 1/4W CARBON RES.	
	R378	QRE141J-182Y	1.8K 1/4W C RES.	
	R381	QRE141J-272Y	2.7K 1/4W C RES.	
	R382	QRE141J-562Y	5.6K 1/4W C RES.	
±	R383	QRL01DJ-150X	15 1W OMF.RES.	J
	R384	QRE141J-272Y	2.7K 1/4W C RES.	
	R385	QRE141J-562Y	5.6K 1/4W C RES.	
	R388	QRE141J-103Y	10K 1/4W CARBON RES.	
	R389	QRE141J-103Y	10K 1/4W CARBON RES.	
	R701	QRL01DJ-331X	330 1W UNF.OMF.RES.	
	R702	QRL01DJ-331X	330 1W UNF.OMF.RES.	
	R703	QRE141J-563Y	56K 1/4W C RES.	
	R704	QRE141J-563Y	56K 1/4W C RES.	
	R705	QRJ146J-681X	680 1/4W UNF C RES I/	
	R706	QRJ146J-681X	680 1/4W UNF C RES I/	
	R707	QRE141J-563Y	56K 1/4W C RES.	
	R708	QRE141J-563Y	56K 1/4W C RES.	
	R709	QRT01DJ-R22X	0.22 1W UNF.MF.RES.I	
	R710	QRT01DJ-R22X	0.22 1W UNF.MF.RES.I	
	R711	QRT01DJ-R22X	0.22 1W UNF.MF.RES.I	
	R712	QRT01DJ-R22X	0.22 1W UNF.MF.RES.I	
	R713	QRJ146J-100X	10 1/4W UNF.CARBON R	
	R714	QRJ146J-100X	10 1/4W UNF.CARBON R	
	R715	QRJ146J-100X	10 1/4W UNF.CARBON R	
	R716	QRJ146J-100X	10 1/4W UNF.CARBON R	
	R717	QRE141J-122Y	1.2K 1/4W C RES.	
	R718	QRE141J-122Y	1.2K 1/4W C RES.	
	R719	QRE141J-223Y	22K 1/4W C RES.	
	R720	QRE141J-223Y	22K 1/4W C RES.	
	R721	QRE141J-103Y	10K 1/4W CARBON RES.	
	R722	QRE141J-103Y	10K 1/4W CARBON RES.	
	R723	QRE141J-392Y	3.9K 1/4W C RES.	
	R724	QRE141J-392Y	3.9K 1/4W C RES.	
	R725	QRE141J-823Y	82K 1/4W C RES.	
	R726	QRE141J-104Y	100K 1/4W C RES.	
	R727	QRE141J-104Y	100K 1/4W C RES.	
	R728	QRE141J-103Y	10K 1/4W CARBON RES.	
	R729	QRE141J-104Y	100K 1/4W C RES.	
	R730	QRE141J-103Y	10K 1/4W CARBON RES.	
	R733	QRE141J-473Y	47K 1/4W C RES.	
	R734	QRE141J-473Y	47K 1/4W C RES.	
	R735	QRE141J-473Y	47K 1/4W C RES.	
	R736	QRE141J-473Y	47K 1/4W C RES.	
	R739	QRL01DJ-821X	820 1W OMF.RES.	
	R740	QRL01DJ-821X	820 1W OMF.RES.	
	R741	QRE141J-223Y	22K 1/4W C RES.	
	R742	QRE141J-223Y	22K 1/4W C RES.	
	R743	QRE141J-223Y	22K 1/4W C RES.	
	R744	QRE141J-223Y	22K 1/4W C RES.	
	R745	QRE141J-103Y	10K 1/4W CARBON RES.	
	R746	QRE141J-103Y	10K 1/4W CARBON RES.	
	R747	QRE141J-823Y	82K 1/4W C RES.	
	R748	QRE141J-104Y	100K 1/4W C RES.	
	R749	QRE141J-471Y	470 1/4W C RES.	
	R750	QRE141J-471Y	470 1/4W C RES.	
	R751	QRJ146J-100X	10 1/4W UNF.CARBON R	

MX-J70/MX-J76/MX-J75R

■ Electrical Parts List(Power Amp Board)

BLOCK NO 01

Item	Parts Number	Description	Area
R752	QRJ146J-100X	10 1/4W UNF.CARBON R	
R766	QRE141J-333Y	33K 1/4W C RES.	
R767	QRE141J-683Y	68K 1/4W C RES.	
R771	QRE141J-222Y	2.2K 1/4W C RES.	
R772	QRE141J-103Y	10K 1/4W CARBON RES.	
R774	QRJ146J-100X	10 1/4W UNF.CARBON R	
R775	QRE141J-102Y	1K 1/4W C RES.	
R776	QRE141J-102Y	1K 1/4W C RES.	
R783	QRE141J-563Y	56K 1/4W C RES.	
R784	QRE141J-563Y	56K 1/4W C RES.	
R785	QRE141J-182Y	1.8K 1/4W C RES.	
R786	QRE141J-182Y	1.8K 1/4W C RES.	
R787	QRE141J-563Y	56K 1/4W C RES.	
R788	QRE141J-563Y	56K 1/4W C RES.	
R789	QRT01DJ-R22X	0.22 1W UNF.MF.RES.I	
R790	QRT01DJ-R22X	0.22 1W UNF.MF.RES.I	
R791	QRT01DJ-R22X	0.22 1W UNF.MF.RES.I	
R792	QRT01DJ-R22X	0.22 1W UNF.MF.RES.I	
R793	QRJ146J-100X	10 1/4W UNF.CARBON R	
R794	QRJ146J-100X	10 1/4W UNF.CARBON R	
R795	QRJ146J-100X	10 1/4W UNF.CARBON R	
R796	QRJ146J-100X	10 1/4W UNF.CARBON R	
R797	QRE141J-122Y	1.2K 1/4W C RES.	
R798	QRE141J-122Y	1.2K 1/4W C RES.	
R1001	QRZ9044-335	3.3M COMPOSITION	C J
OTHERS			
L201	QQR0779-001Z	INDUCTOR	B E E N EV
	QQR0779-001Z	INDUCTOR	A E E C
L701	QQLZ005-R45	INDUCTOR	
L702	QQLZ005-R45	INDUCTOR	
L781	QQLZ005-R45	INDUCTOR	
L782	QQLZ005-R45	INDUCTOR	
S500	QSW0812-001	VOLTAGE SWITCH	U US UT UX UY
CN102	QGB2510J1-10	CONNECT TERMINAL	
CN103	QGB2501J1-11	CONNECT TERMINAL	
CN104	QGB2501J1-06	B TO B CONNE	
CN105	QGB2510J1-11	CONNECT TERMINAL	
CN106	QGB2501K2-10	CONNECT TERMINAL	
CN107	QGB2501K2-07	CONNECT TERMINAL	
CN109	QGA3901C1-05	5P CONNECTOR	
CN111	QGD2501C1-04Z	SOCKET ASSY	
CN112	QGB2510K2-10	CONNECTOR	
CN113	QGB2501K2-11	CONNECT TERMINAL	
CN114	QGB2501K2-06	FLAT WIRE	
CN119	EWS285-202V	CONNECTOR WIRE ASSY	
CN703	QGB2510K2-06	CONNECTOR	
CN704	QGB2510K2-05	CONNECTOR	
CN713	QGB2510J1-06	CONNECTOR	
CN714	QGB2510J1-05	CONNECT TERMINAL	
CN915	QGD2501C1-04Z	SOCKET ASSY	
EP201	E409182-001SM	EARTH TERMINAL	
FT111	QNG0020-001Z	FUSE CLIP	
FT112	QNG0020-001Z	FUSE CLIP	
FT131	QNG0020-001Z	FUSE CLIP	U US UT UX UY
FT132	QNG0020-001Z	FUSE CLIP	U US UT UX UY
FT511	QNG0020-001Z	FUSE CLIP	
FT512	QNG0020-001Z	FUSE CLIP	
FT521	QNG0020-001Z	FUSE CLIP	
FT522	QNG0020-001Z	FUSE CLIP	
FW101	QUM134-16DGZ4	FLAT WIRE	
FW411	QUM137-13DGZ4	FLAT WIRE	
TB101	QNZ0079-001Z	TAB I.M	
TB102	QNZ0079-001Z	TAB I.M	
TH202	QAD0095-4R7Z	POSITIVE THERMISTOR	A B C E EE EN EV
	QAD0095-4R7Z	POSITIVE THERMISTOR	U UP US UT UX UY
TW799	QUB230-06EMHP		A B E EN EV C EE

■ Electrical Parts List(Function, Tuner, Main board)

BLOCK NO 02

↓	Item	Parts Number	Description	Area
		I.C.S		
	IC 1	LA1838	I.C(M)	
	IC 2	LC72136N	I.C(M)	
	IC 4	BU1923	I.C(M)	B E EE EN EV
	IC 6	BU4066BC	I.C(DIGI-MOS)	EE
	IC 7	BA15218	I.C(MONO-ANALOG)	EE
	IC 8	BA15218N	I.C(MONO-ANALOG)	EE
	IC401	TDA7439	I.C(M)	
	IC402	BA15218	I.C(MONO-ANALOG)	
	IC403	BA15218	I.C(MONO-ANALOG)	U UP US UT UX UY
	IC404	BU4052BC	I.C(M)	U UP US UT UX UY
	IC405	BA15218	I.C(MONO-ANALOG)	
	IC406	LA2650	I.C(MONO-ANALOG)	
	IC501	LV1035M	I.C(M)	
	IC542	BA3835S	I.C(M)	
	IC561	TDA7439	I.C(M)	
		DIODES		
	D 1	1SS133-T2	SI.DIODE	
	D 2	1SS133-T2	SI.DIODE	
	D 3	1SS133-T2	SI.DIODE	
	D 4	1SS133-T2	SI.DIODE	
	D 5	MTZJ5.6B-T2	ZENER DIODE	
	D 6	MTZJ5.6B-T2	ZENER DIODE	B E EE EN EV
	D 8	1SS133-T2	SI.DIODE	
	D100	RB721Q-T2	SI.DIODE	EE
	D101	RB721Q-T2	SI.DIODE	EE
	D102	1SS133-T2	SI.DIODE	EE
	D103	1SS133-T2	SI.DIODE	EE
	D104	1SS133-T2	SI.DIODE	EE
	D110	1SS133-T2	SI.DIODE	EE
	D111	1SS133-T2	SI.DIODE	EE
	D303	1SS133-T2	SI.DIODE	
	D305	1SS133-T2	SI.DIODE	
	D306	1SS133-T2	SI.DIODE	
	D307	1SS133-T2	SI.DIODE	
	D481	1SS133-T2	SI.DIODE	
	D482	1SS133-T2	SI.DIODE	
	D483	1SS133-T2	SI.DIODE	
	D484	1SS133-T2	SI.DIODE	
	D485	1SS133-T2	SI.DIODE	
	D501	MTZJ5.1B-T2	ZENER DIODE	
	D561	1SS133-T2	SI.DIODE	
		TRANSISTORS		
	Q 1	2SC1923/O/-T	TR TAPE	
	Q 2	KRA107M-T	DIGITAL TRANSISTOR	B E EE EN EV
	Q 3	KTC3199/GL/-T	TRANSISTOR	B E EE EN EV
	Q 4	KTC3199/GL/-T	TRANSISTOR	B E EE EN EV
	Q 6	KRA107M-T	DIGITAL TRANSISTOR	
	Q 14	2SA1175/HFE/-T	TRANSISTOR	B E EE EN EV
	Q401	2SC3576-JVC-T	SI.TRANSISTOR	
	Q402	2SC3576-JVC-T	SI.TRANSISTOR	
	Q403	KRA102M-T	DIGITAL TRANSISTOR	
	Q405	2SC3576-JVC-T	SI.TRANSISTOR	
	Q406	2SC3576-JVC-T	SI.TRANSISTOR	
	Q407	2SA1175/HFE/-T	TRANSISTOR	
	Q408	KTC3199/GL/-T	TRANSISTOR	
	Q409	KRC114M-T	SI.TRANSISTOR	
	Q410	KTC3199/GL/-T	TRANSISTOR	
	Q411	KTC3199/GL/-T	TRANSISTOR	
	Q412	KRC102M-T	DIGITAL TRANSISTOR	U UP US UT UX UY
	Q413	KRC102M-T	DIGITAL TRANSISTOR	U UP US UT UX UY
		2SC2235/OY/-T	TRANSISTOR	
	Q481	2SC3576-JVC-T	SI.TRANSISTOR	
	Q482	2SC3576-JVC-T	SI.TRANSISTOR	
	Q483	KRA102M-T	DIGITAL TRANSISTOR	
	Q501	2SC3576-JVC-T	SI.TRANSISTOR	
	Q502	2SC3576-JVC-T	SI.TRANSISTOR	

↓	Item	Parts Number	Description	Area
		CAPACITORS		
	C 1	QCBB1HK-223Y	0.022MF 50V CER.CAP.	
	C 3	QCBB1HK-473Y	0.047MF 50V CER.CAP.	
	C 4	QDYB1CM-103Y	0.01MF 16V CER.CAP.	
	C 5	EETB1CM-476	47MF 16V E.CAP.	C J U UP
		EETB1CM-476	47MF 16V E.CAP.	US UT UX UY
		EETC1CM-106ZJC	10MF 16V AL E.CAP.	EE
		QETN1AM-107Z	100MF 10V AL E.CAP.	A B E EN EV
	C 8	QCSB1HJ-150Y	15PF 50V CER.CAP.	B E EE EN EV
	C 9	QCB31HK-272Z	2700PF 50V C.CAP.	B E EE EN EV
	C 10	QETB1HM-474N	0.47MF 50V E.CAP.	
	C 12	QCSB1HJ-100Y	10PF 50V CER.CAP.	A C J U UP
		QCSB1HJ-100Y	10PF 50V CER.CAP.	US UT UX UY
		QCSB1HJ-150Y	15PF 50V CER.CAP.	B E EE EN EV
	C 13	QFLM1HJ-473Z	0.047MF 50V M CAP.	A B C E EN EV J
		QFLM1HJ-473Z	0.047MF 50V M CAP.	U UP US UT UX UY
	C 14	QCBB1HK-473Y	0.047MF 50V CER.CAP.	
	C 18	QCBB1HK-471Y	470PF 50V CER.CAP.	C EE J U
		QCBB1HK-471Y	470PF 50V CER.CAP.	UP US UT UX UY
		QDXB1CM-152Y	1500PF 16V C CAP.	A B E EN EV
	C 19	QCBB1HK-471Y	470PF 50V CER.CAP.	C EE J U UP
		QCBB1HK-471Y	470PF 50V CER.CAP.	US UT UX UY
		QDXB1CM-152Y	1500PF 16V C CAP.	A B E EN EV
	C 20	EETC1HM-226ZJC	22MF 50V E.RES.	
	C 21	QCBB1HK-473Y	0.047MF 50V CER.CAP.	
	C 22	QFV1HJ-274Z	0.27MF 50V CAP.	
	C 23	EETB1HM-105E	1MF 50V E.CAP.	
	C 24	EETC1HM-226ZJC	22MF 50V E.RES.	
	C 25	QDYB1CM-103Y	0.01MF 16V CER.CAP.	
		QFLM1HJ-223Z	0.022MF 50V M CAP.	B E EE EN EV
		QFLM1HJ-273Z	0.027MF 50V M CAP.	A C J U UP
		QFLM1HJ-273Z	0.027MF 50V M CAP.	US UT UX UY
	C 26	EETB1EM-106E	10MF 25V E.CAP.	
	C 27	EETB1HM-105E	1MF 50V E.CAP.	
	C 28	EETB1HM-105E	1MF 50V E.CAP.	
	C 29	QFLM1HJ-152Z	1500PF 50V MYLAR CAP.	
		QFLM1HJ-182Z	1800PF 50V MYLAR CAP.	A B E EE EN EV
		QFLM1HJ-222Z	2200PF 50V MYLAR CAP.	C J
	C 30	QFLM1HJ-152Z	1500PF 50V MYLAR CAP.	
		QFLM1HJ-182Z	1800PF 50V MYLAR CAP.	A B E EE EN EV
		QFLM1HJ-222Z	2200PF 50V MYLAR CAP.	C J
	C 31	QCSB1HJ-330Y	33PF 50V CER.CAP.	B E EN EV
		QCSB1HJ-560Y	56PF 50V CER.CAP.	
	C 32	QCGB1HK-102	1000PF 50V CER.CAP.	
	C 33	QCBB1HK-473Y	0.047MF 50V CER.CAP.	
	C 34	QETB1HM-474N	0.47MF 50V E.CAP.	
	C 35	QDYB1CM-103Y	0.01MF 16V CER.CAP.	
	C 36	EETB1HM-105E	1MF 50V E.CAP.	
	C 37	QETB1HM-474N	0.47MF 50V E.CAP.	
	C 38	EETB1HM-105E	1MF 50V E.CAP.	
	C 39	QCBB1HK-223Y	0.022MF 50V CER.CAP.	
	C 40	QETC1EM-107Z	100MF 25V AL E.CAP.	
	C 41	QCBB1HK-473Y	0.047MF 50V CER.CAP.	
	C 42	QCBB1HK-473Y	0.047MF 50V CER.CAP.	
	C 43	QCBB1HK-473Y	0.047MF 50V CER.CAP.	
	C 44	QCGB1HK-102	1000PF 50V CER.CAP.	C J U
		QCGB1HK-102	1000PF 50V CER.CAP.	UP US UT UX UY
	C 51	EETB1HM-105E	1MF 50V E.CAP.	
		QENC1HM-105Z	1MF 50V NP E.CAP.	EE
	C 52	EETB1HM-105E	1MF 50V E.CAP.	
		QENC1HM-105Z	1MF 50V NP E.CAP.	EE
	C 60	QEK1AM-107Z	100MF 10V E.CAP.	
	C 61	QCSB1HJ-120Y	12PF 50V CER.CAP.	
	C 62	QCSB1HJ-120Y	12PF 50V CER.CAP.	
	C 63	QCBB1HK-473Y	0.047MF 50V CER.CAP.	
	C 65	QCGB1HK-102	1000PF 50V CER.CAP.	
	C 66	QCBB1HK-151	150PF 50V CER.CAP.	

MX-J70/MX-J76/MX-J75R

■ Electrical Parts List(Function, Tuner, Main board)

BLOCK NO 02

±	Item	Parts Number	Description	Area
	C 67	QCBB1HK-151	150PF 50V CER.CAP.	
	C 68	QCBB1HK-101Y	100PF 50V CER.CAP.	
	C 69	QFVJ1HJ-105Z	1MF 50V TF.CAP.	
	C 70	QDXB1CM-392Y	3900PF 16V C CAP.	
	C 71	EETB1CM-476	47MF 16V E.CAP.	
	C 72	QCGB1HK-102	1000PF 50V CER.CAP.	
	C 80	QCBB1HK-820Y	82PF 50V CER.CAP.	B E EE EN EV
	C 81	QCSB1HJ-470	47PF 50V CER.CAP.	B E EE EN EV
	C 82	EETC1CM-106ZJC	10MF 16V AL E.CAP.	B E EE EN EV
	C 83	QCBB1HK-473Y	0.047MF 50V CER.CAP.	B E EE EN EV
	C 84	QETC1HM-225ZM	2.2MF 50V E.CAP.	B E EE EN EV
	C 85	QCBB1HK-331Y	330PF 50V CER.CAP.	B E EE EN EV
	C 86	QCBB1HK-561Y	560PF 50V CER.CAP.	B E EE EN EV
	C 89	QCGB1HK-102	1000PF 50V CER.CAP.	B E EE EN EV
	C 90	QDYB1CM-103Y	0.01MF 16V CER.CAP.	B E EE EN EV
	C 98	QCSB1HJ-100Y	10PF 50V CER.CAP.	B E EE EN EV
	C110	EETB1HM-105E	1MF 50V E.CAP.	EE
	C111	EETC1HM-335ZJC	3.3MF 50V E.CAP.	EE
	C113	QFP32AJ-103Z	0.01MF 100V PP CAP.	EE
	C114	QFP32AJ-103Z	0.01MF 100V PP CAP.	EE
	C115	QCBB1HK-271Y	270PF 50V CER.CAP.	EE
	C116	QCBB1HK-271Y	270PF 50V CER.CAP.	EE
	C117	EETB1HM-475E	4.7MF 50V E.CAP.	EE
	C118	EETB1HM-475E	4.7MF 50V E.CAP.	EE
	C119	QDXB1CM-222Y	2200PF 16V C CAP.	EE
	C120	QDXB1CM-222Y	2200PF 16V C CAP.	EE
	C121	QETN1AM-226Z	22MF 10V E CAP.	EE
	C122	QCS21HJ-221	220PF 50V CER.CAP.	EE
	C123	QCS21HJ-221	220PF 50V CER.CAP.	EE
	C124	QFLM1HJ-103Z	0.01MF 50V M CAP.	EE
	C125	EETB1HM-105E	1MF 50V E.CAP.	EE
	C126	EETB1HM-105E	1MF 50V E.CAP.	EE
	C127	EETB1HM-105E	1MF 50V E.CAP.	EE
	C128	EETC1HM-335ZJC	3.3MF 50V E.CAP.	EE
	C129	EETB1HM-105E	1MF 50V E.CAP.	EE
	C130	EETB1HM-105E	1MF 50V E.CAP.	EE
	C131	EETB1HM-105E	1MF 50V E.CAP.	EE
	C132	EETB1HM-105E	1MF 50V E.CAP.	EE
	C360	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C361	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C365	QETN1CM-227ZS	220MF 16V E.CAP.	
	C366	QETN1AM-108Z	1000MF 10V AL E.CAP.	
	C372	EETB1HM-475E	4.7MF 50V E.CAP.	
	C373	QDYB1CM-103Y	0.01MF 16V CER.CAP.	
	C380	QETC1HM-224Z	0.22MF 50V AL E.CAP.	
	C381	QCFB1HZ-104Y	0.1MF 50V CER.CAP.	
	C382	QCFB1HZ-104Y	0.1MF 50V CER.CAP.	
	C383	QETC1EM-476ZM	47MF 25V E.CAP.	
	C385	EETB1HM-105E	1MF 50V E.CAP.	
	C386	QDGB1HK-681Y	680PF 50V C CAP.	
	C387	QFLM1HJ-153Z	0.015MF 50V M CAP.	
	C388	QDXB1CM-182Y	1800PF 16V C CAP.	
	C389	QCSB1HJ-330Y	33PF 50V CER.CAP.	
	C390	QETC1HM-224Z	0.22MF 50V AL E.CAP.	
	C398	QFLM1HJ-103Z	0.01MF 50V M CAP.	A B C E EN EV J
		QFLM1HJ-103Z	0.01MF 50V M CAP.	U UP US UT UX UY
		QFVJ1HJ-103Z	0.01MF 50V TF CAP.	
	C399	QFLM1HJ-103Z	0.01MF 50V M CAP.	A B C E EN EV J
		QFLM1HJ-103Z	0.01MF 50V M CAP.	U UP US UT UX UY
		QFVJ1HJ-103Z	0.01MF 50V TF CAP.	
±	C401	QFLM1HJ-392Z	3900PF 50V MYLAR CAP.	
±	C402	QFLM1HJ-392Z	3900PF 50V MYLAR CAP.	
	C403	QFLM1HJ-102Z	1000PF 50V MYLAR CAP.	
	C404	QFLM1HJ-102Z	1000PF 50V MYLAR CAP.	
	C407	QTE1V06-106Z	AL E.CAP.	
	C408	QTE1V06-106Z	AL E.CAP.	
	C411	EETB1EM-106E	10MF 25V E.CAP.	

±	Item	Parts Number	Description	Area
	C412	EETB1EM-106E	10MF 25V E.CAP.	
	C413	QCBB1HK-221Y	220PF 50V CER.CAP.	
	C414	QCBB1HK-221Y	220PF 50V CER.CAP.	
	C415	EETB1EM-106E	10MF 25V E.CAP.	
	C416	EETB1EM-106E	10MF 25V E.CAP.	
±	C417	QETC1HM-225ZM	2.2MF 50V E.CAP.	
±	C418	QETC1HM-225ZM	2.2MF 50V E.CAP.	
	C419	EETB1EM-106E	10MF 25V E.CAP.	
	C420	QETN1AM-107Z	100MF 10V AL E.CAP.	
	C421	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C422	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C423	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C424	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C425	QFLM1HJ-183Z	0.018MF 50V M CAP.	
	C426	QFLM1HJ-183Z	0.018MF 50V M CAP.	
	C427	QFLM1HJ-223Z	0.022MF 50V M CAP.	
	C428	QFLM1HJ-223Z	0.022MF 50V M CAP.	
	C429	QFLM1HJ-562Z	5600PF 50V MYLAR CAP.	
	C430	QFLM1HJ-562Z	5600PF 50V MYLAR CAP.	
	C431	QETC1HM-225ZM	2.2MF 50V E.CAP.	
	C432	QETC1HM-225ZM	2.2MF 50V E.CAP.	
±	C433	QETC1HM-225ZM	2.2MF 50V E.CAP.	
±	C434	QETC1HM-225ZM	2.2MF 50V E.CAP.	
±	C435	EETB1EM-106E	10MF 25V E.CAP.	
±	C436	EETB1EM-106E	10MF 25V E.CAP.	
	C439	QETC1HM-224Z	0.22MF 50V AL E.CAP.	U UP US UT UX UY
	C440	EETB1EM-106E	10MF 25V E.CAP.	U UP US UT UX UY
	C445	QCBB1HK-101Y	100PF 50V CER.CAP.	
	C446	QCBB1HK-101Y	100PF 50V CER.CAP.	
±	C447	EETB1EM-106E	10MF 25V E.CAP.	
±	C448	EETB1EM-106E	10MF 25V E.CAP.	
	C453	QCBB1HK-101Y	100PF 50V CER.CAP.	B E EN EV
	C454	QCBB1HK-101Y	100PF 50V CER.CAP.	U UP US UT UX UY
	C455	QCBB1HK-101Y	100PF 50V CER.CAP.	B E EN EV
±	C457	QTE1V06-106Z	10MF 25V E.CAP.	
±	C458	QTE1V06-106Z	10MF 25V E.CAP.	
	C459	QFLM1HJ-333Z	0.033MF 50V MYLAR CAP.	
	C460	EETB1HM-475E	4.7MF 50V E.CAP.	
	C461	QETB1HM-474N	0.47MF 50V E.CAP.	
	C462	QFLM1HJ-393Z	0.039MF 50V M CAP.	
	C463	EETB1HM-475E	4.7MF 50V E.CAP.	
	C464	QETN1AM-107Z	100MF 10V AL E.CAP.	
	C465	QFLM1HJ-473Z	0.047MF 50V M CAP.	
	C466	QFLM1HJ-473Z	0.047MF 50V M CAP.	
	C467	EETB1HM-105E	1MF 50V E.CAP.	
	C468	QETC1EM-476ZM	47MF 25V E.CAP.	
	C477	EETB1HM-475E	4.7MF 50V E.CAP.	
	C481	QCBB1HK-221Y	220PF 50V CER.CAP.	
	C482	QCBB1HK-221Y	220PF 50V CER.CAP.	
	C483	QCBB1HK-101Y	100PF 50V CER.CAP.	A C J
		QDXB1CM-222Y	2200PF 16V C CAP.	B E EE EN EV
		QDXB1CM-222Y	2200PF 16V C CAP.	U UP US UT UX UY
	C484	QCBB1HK-101Y	100PF 50V CER.CAP.	A C EE J
		QCGB1HK-102	1000PF 50V CER.CAP.	U UP US UT UX UY
		QDXB1CM-222Y	2200PF 16V C CAP.	B E EN EV
±	C485	QETN1AM-107Z		
	C489	EETB1CM-476	47MF 16V E.CAP.	
	C490	EETB1CM-476	47MF 16V E.CAP.	
	C493	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C494	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C495	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C496	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
±	C501	EETB1EM-106E	10MF 25V E.CAP.	
±	C502	EETB1EM-106E	10MF 25V E.CAP.	
	C503	QFLM1HJ-223Z	0.022MF 50V M CAP.	
	C504	QFLM1HJ-473Z	0.047MF 50V M CAP.	
	C505	QETB0JM-227	220MF 6.3V E.CAP.	



■ Electrical Parts List(Function, Tuner, Main board)

BLOCK NO 02

↓	Item	Parts Number	Description	Area
	C506	EETB1EM-106E	10MF 25V E.CAP.	
	C507	EETB1EM-106E	10MF 25V E.CAP.	
	C508	EETB1EM-106E	10MF 25V E.CAP.	
	C509	EETB1EM-106E	10MF 25V E.CAP.	
	C510	QETB0JM-227	220MF 6.3V E.CAP.	
	C511	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C512	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C513	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C514	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
↓	C515	QEK1HM-474Z	0.47MF 50V E.CAP.	
	C516	QETB1HM-474N	0.47MF 50V E.CAP.	
	C517	EETB1HM-475E	4.7MF 50V E.CAP.	
	C518	EETB1HM-475E	4.7MF 50V E.CAP.	
	C519	QETB1HM-474N	0.47MF 50V E.CAP.	
	C520	QETB1HM-474N	0.47MF 50V E.CAP.	
	C521	EETB1HM-475E	4.7MF 50V E.CAP.	
	C522	EETB1HM-475E	4.7MF 50V E.CAP.	
	C523	QFVJ1HJ-154Z	0.15MF 50V TF CAP.	
	C524	QFVJ1HJ-154Z	0.15MF 50V TF CAP.	
	C525	QETN1HM-335Z	3.3MF 50V AL E.CAP.	
	C526	QETN1HM-335Z	3.3MF 50V AL E.CAP.	
	C527	QFVJ1HJ-154Z	0.15MF 50V TF CAP.	
	C528	QFVJ1HJ-154Z	0.15MF 50V TF CAP.	
	C529	QFVJ1HJ-474Z	0.47MF 50V CAP.	
	C530	QETC1EM-476ZM	47MF 25V E.CAP.	
	C531	QETN1AM-227Z	220MF 10V E.CAP.	
	C532	QDGB1HK-681Y	680PF 50V C CAP.	
	C533	QCSB1HJ-470	47PF 50V CER.CAP.	
	C535	QCBB1HK-561Y	560PF 50V CER.CAP.	
	C536	QCZ0205-155Z		
	C541	QETC1HM-225ZM	2.2MF 50V E.CAP.	
	C542	QETN1AM-227Z	220MF 10V E.CAP.	
↓	C543	QCZ0205-155Z	0.047MF 50V C CAP.	
	C544	QETB1HM-474N	0.47MF 50V E.CAP.	
	C545	QETB1HM-474N	0.47MF 50V E.CAP.	
	C546	QFLM1HJ-823Z	0.082MF 50V MYLAR CAP.	
	C547	QCSB1HK-332Z	3300PF 50V C CAP.	
	C548	QFLM1HJ-823Z	0.082MF 50V MYLAR CAP.	
	C549	QETB0JM-227	220MF 6.3V E.CAP.	
	C550	QCF31HZ-473Z	0.047MF 50V C CAP.	
	C551	QCS21HJ-300	30PF 50V CER.CAP.	
	C552	QCS21HJ-300	30PF 50V CER.CAP.	
↓	C553	EETB1EM-106E	10MF 25V E.CAP.	
↓	C554	EETB1EM-106E	10MF 25V E.CAP.	
	C555	EETB1EM-106E	10MF 25V E.CAP.	
	C556	EETB1EM-106E	10MF 25V E.CAP.	
	C561	QETC1HM-225ZM	2.2MF 50V E.CAP.	
	C562	QETC1HM-225ZM	2.2MF 50V E.CAP.	
	C563	EETB1HM-105E	1MF 50V E.CAP.	
	C564	EETB1HM-105E	1MF 50V E.CAP.	
	C565	EETB1EM-106E	10MF 25V E.CAP.	
	C566	QETN1AM-107Z	100MF 10V AL E.CAP.	
	C580	QDX31EM-473Z	0.047MF 25V C CAP.	
↓	C581	QDYB1CM-103Y	0.01MF 16V CER.CAP.	B E EN
↓	C582	QDYB1CM-103Y	0.01MF 16V CER.CAP.	EV A
	C583	QFLM1HJ-103Z	0.01MF 50V M CAP.	B E EN EV
↓	C584	QCS31HJ-391Z	0.01MF 50V C CAP.	B E EN EV
	C585	QCGB1HK-102	1000PF 50V CER.CAP.	U UP US UT UX UY
↓	C586	QFLM1HJ-102Z		B E EN EV A
	C587	EETB1EM-106E	10MF 25V E.CAP.	
	C589	QDYB1CM-103Y	0.01MF 16V CER.CAP.	
RESISTORS				
	R 1	QRE141J-102Y	1K 1/4W C RES.	
	R 2	QRE141J-121Y	120 1/4W C RES.	EE
		QRE141J-181Y	180 1/4W C RES.	A B E EN EV
	R 10	QRE141J-102Y	1K 1/4W C RES.	A C J U
		QRE141J-102Y	1K 1/4W C RES.	US UT UX UY

↓	Item	Parts Number	Description	Area
	R 10	QRE141J-152Y	1.5K 1/4W CARBON RE	B E EE EN EV
	R 12	QRE141J-102Y	1K 1/4W C RES.	
	R 13	QRE141J-104Y	100K 1/4W C RES.	
	R 14	QRE141J-560Y	56 1/4W C RES.	A C J U UP
		QRE141J-560Y	56 1/4W C RES.	US UT UX UY
	R 15	QRE141J-103Y	10K 1/4W CARBON RE	B E EE EN EV
	R 16	QRE141J-103Y	10K 1/4W CARBON RE	B E EE EN EV
	R 19	QRE141J-333Y	33K 1/4W C RES.	
		QRE141J-393Y	39K 1/4W C RES.	A B E EE EN EV
		QRE141J-623Y	62K 1/4W C RES.	C J U UP
		QRE141J-623Y	62K 1/4W C RES.	US UT UX UY
	R 20	QRE141J-331Y	330 1/4W C RES.	
	R 21	QRE141J-224Y	220K 1/4W C RES.	
	R 22	QRE141J-331Y	330 1/4W C RES.	
	R 23	QRE141J-6R8Y	6.8 1/4W C RES.	EE
	R 24	QRE141J-433Y	43K 1/4W C RES.	
	R 25	QRE141J-272Y	2.7K 1/4W C RES.	
	R 26	QRE141J-103Y	10K 1/4W CARBON RE	A C J U UP
		QRE141J-103Y	10K 1/4W CARBON RE	US UT UX UY
		QRE141J-183Y	18K 1/4W CARBON RE	
		QRE141J-273Y	27K 1/4W CARBON RE	B E EE EN EV
	R 27	QRE141J-333Y	33K 1/4W C RES.	
		QRE141J-393Y	39K 1/4W C RES.	A B E EE EN EV
		QRE141J-623Y	62K 1/4W C RES.	C J
		QRE141J-623Y	62K 1/4W C RES.	U UP US UT UX UY
	R 28	QRE141J-223Y	22K 1/4W C RES.	
	R 29	QRE141J-302Y	3K 1/4W C RES.	
	R 30	QRE141J-392Y	3.9K 1/4W C RES.	
	R 31	QRE141J-200Y	20 1/4W C RES.	
	R 32	QRE141J-331Y	330 1/4W C RES.	
	R 33	QRE141J-103Y	10K 1/4W CARBON RE	
	R 34	QRE141J-222Y	2.2K 1/4W C RES.	
	R 35	QRE141J-222Y	2.2K 1/4W C RES.	
	R 36	QRE141J-103Y	10K 1/4W CARBON RE	
	R 37	QRE141J-102Y	1K 1/4W C RES.	
	R 43	QRE141J-102Y	1K 1/4W C RES.	
	R 44	QRE141J-102Y	1K 1/4W C RES.	
	R 45	QRE141J-102Y	1K 1/4W C RES.	
	R 46	QRE141J-563Y	56K 1/4W C RES.	
	R 47	QRE141J-103Y	10K 1/4W CARBON RE	
	R 48	QRE141J-331Y	330 1/4W C RES.	
	R 49	QRE141J-102Y	1K 1/4W C RES.	
	R 52	QRE141J-472Y	4.7K 1/4W C RES.	
	R 54	QRE141J-472Y	4.7K 1/4W C RES.	
	R 55	QRE141J-182Y	1.8K 1/4W C RES.	
	R 56	QRE141J-332Y	3.3K 1/4W C RES.	
	R 57	QRE141J-102Y	1K 1/4W C RES.	
	R 60	QRE141J-102Y	1K 1/4W C RES.	B E EE EN EV
	R 61	QRE141J-102Y	1K 1/4W C RES.	B E EE EN EV
	R 64	QRE141J-473Y	47K 1/4W C RES.	
	R 65	QRE141J-222Y	2.2K 1/4W C RES.	
	R 66	QRE141J-222Y	2.2K 1/4W C RES.	
	R 69	QRE141J-222Y	10K 1/4W CARBON RE	
	R 76	QRE141J-102Y	1K 1/4W C RES.	B E EE EN EV
	R 80	QRE141J-222Y	2.2K 1/4W C RES.	B E EE EN EV
	R 82	QRE141J-102Y	1K 1/4W C RES.	B E EE EN EV
	R 83	QRE141J-102Y	1K 1/4W C RES.	B E EE EN EV
	R 84	QRE141J-103Y	10K 1/4W CARBON RE	B E EE EN EV
	R 91	QRE141J-103Y	10K 1/4W CARBON RE	B E EE EN EV
	R 99	QRE141J-102Y	1K 1/4W C RES.	EE
	R101	QRE141J-561Y	560 1/4W C RES.	
	R102	QRE141J-561Y	560 1/4W C RES.	B E EE EN EV
	R110	QRE141J-123Y	12K 1/4W C RES.	EE
	R111	QRE141J-563Y	56K 1/4W C RES.	EE
	R112	QRE141J-103Y	10K 1/4W CARBON RE	EE
	R113	QRE141J-563Y	56K 1/4W C RES.	EE
	R114	QRE141J-562Y	5.6K 1/4W C RES.	EE

■ Electrical Parts List(Function, Tuner, Main board)

BLOCK NO 02

Item	Parts Number	Description	Area
R115	QRE141J-184Y	180K 1/4W C RES.	EE
R116	QRE141J-224Y	220K 1/4W C RES.	EE
R117	QRE141J-623Y	62K 1/4W C RES.	EE
R118	QRE141J-103Y	10K 1/4W CARBON RE	EE
R119	QRE141J-224Y	220K 1/4W C RES.	EE
R120	QRE141J-224Y	220K 1/4W C RES.	EE
R121	QRE141J-333Y	33K 1/4W C RES.	EE
R122	QRE141J-224Y	220K 1/4W C RES.	EE
R123	QRE141J-224Y	220K 1/4W C RES.	EE
R124	QRE141J-103Y	10K 1/4W CARBON RE	EE
R125	QRE141J-103Y	10K 1/4W CARBON RE	EE
R126	QRE141J-333Y	33K 1/4W C RES.	EE
R127	QRE141J-473Y	47K 1/4W C RES.	EE
R128	QRE141J-473Y	47K 1/4W C RES.	EE
R129	QRE141J-104Y	100K 1/4W C RES.	EE
R130	QRE141J-104Y	100K 1/4W C RES.	EE
R131	QRE141J-473Y	47K 1/4W C RES.	EE
R132	QRE141J-102Y	1K 1/4W C RES.	EE
R133	QRE141J-274Y	270K 1/4W C RES.	EE
R134	QRE141J-274Y	270K 1/4W C RES.	EE
R135	QRE141J-184Y	180K 1/4W C RES.	EE
R136	QRE141J-184Y	180K 1/4W C RES.	EE
R137	QRE141J-224Y	220K 1/4W C RES.	EE
R138	QRE141J-224Y	220K 1/4W C RES.	EE
R360	QRE141J-222Y	2.2K 1/4W C RES.	
R362	QRE141J-221Y	220 1/4W C RES.	B E EE EN EV
R363	QRE141J-391Y	390 1/4W C RES.	
R370	QRE141J-102Y	1K 1/4W C RES.	
R371	QRE141J-103Y	10K 1/4W CARBON RE	
R372	QRE141J-103Y	10K 1/4W CARBON RE	
R375	QRE141J-331Y	330 1/4W C RES.	
R376	QRE141J-473Y	47K 1/4W C RES.	
R377	QRE141J-103Y	10K 1/4W CARBON RE	U UP US UT UX UY
R378	QRE141J-104Y	100K 1/4W C RES.	
R383	QRE141J-472Y	4.7K 1/4W C RES.	
R384	QRE141J-472Y	4.7K 1/4W C RES.	
R386	QRE141J-104Y	100K 1/4W C RES.	
R387	QRE141J-473Y	47K 1/4W C RES.	
R388	QRE141J-220Y	22 1/4W CARBON RE	
R389	QRE141J-225Y	2.2M 1/4W C RES.	
R401	QRE141J-222Y	2.2K 1/4W C RES.	
R402	QRE141J-222Y	2.2K 1/4W C RES.	
R403	QRE141J-222Y	2.2K 1/4W C RES.	
R404	QRE141J-222Y	2.2K 1/4W C RES.	
R405	QRE141J-432Y	4.3K 1/4W C RES.	
R406	QRE141J-432Y	4.3K 1/4W C RES.	
R407	QRE141J-302Y	3K 1/4W C RES.	
R408	QRE141J-302Y	3K 1/4W C RES.	
R413	QRE141J-303Y	30K 1/4W C RES.	
R414	QRE141J-303Y	30K 1/4W C RES.	
R415	QRE141J-303Y	30K 1/4W C RES.	
R416	QRE141J-303Y	30K 1/4W C RES.	
R417	QRE141J-562Y	5.6K 1/4W C RES.	
R418	QRE141J-562Y	5.6K 1/4W C RES.	
R419	QRE141J-272Y	2.7K 1/4W C RES.	
R420	QRE141J-272Y	2.7K 1/4W C RES.	
R421	QRE141J-104Y	100K 1/4W C RES.	
R422	QRE141J-104Y	100K 1/4W C RES.	
R423	QRE141J-303Y	30K 1/4W C RES.	U UP US UT UX UY
R424	QRE141J-153Y	15K 1/4W C RES.	U UP US UT UX UY
R425	QRE141J-153Y	15K 1/4W C RES.	U UP US UT UX UY
R426	QRE141J-303Y	30K 1/4W C RES.	U UP US UT UX UY
R427	QRE141J-153Y	15K 1/4W C RES.	U UP US UT UX UY
R428	QRE141J-104Y	100K 1/4W C RES.	U UP US UT UX UY
R429	QRE141J-473Y	47K 1/4W C RES.	U UP US UT UX UY
R430	QRE141J-473Y	47K 1/4W C RES.	U UP US UT UX UY
R433	QRE141J-562Y	5.6K 1/4W C RES.	

Item	Parts Number	Description	Area
R434	QRE141J-562Y	5.6K 1/4W C RES.	
R435	QRE141J-104Y	100K 1/4W C RES.	
R436	QRE141J-104Y	100K 1/4W C RES.	
R437	QRE141J-472Y	4.7K 1/4W C RES.	A B C E EE EN EV
	QRE141J-682Y	6.8K 1/4W C RES.	U UP US UT UX UY
R438	QRE141J-472Y	4.7K 1/4W C RES.	A B C E EE EN EV
	QRE141J-682Y	6.8K 1/4W C RES.	U UP US UT UX UY
R439	QRE141J-472Y	4.7K 1/4W C RES.	
R440	QRE141J-472Y	4.7K 1/4W C RES.	
R441	QRE141J-104Y	100K 1/4W C RES.	
R442	QRE141J-104Y	100K 1/4W C RES.	
R443	QRE141J-203Y	20K 1/4W C RES.	U UP US UT UX UY
R444	QRE141J-203Y	20K 1/4W C RES.	U UP US UT UX UY
R445	QRE141J-303Y	30K 1/4W C RES.	
R446	QRE141J-303Y	30K 1/4W C RES.	
R447	QRE141J-153Y	15K 1/4W C RES.	U UP US UT UX UY
R448	QRE141J-331Y		
R450	QRE141J-224Y	220K 1/4W C RES.	
R459	QRE141J-472Y	4.7K 1/4W C RES.	
R460	QRE141J-472Y	4.7K 1/4W C RES.	
R461	QRE141J-222Y	2.2K 1/4W C RES.	
R462	QRE141J-222Y	2.2K 1/4W C RES.	
R463	QRE141J-103Y	10K 1/4W CARBON RE	
R464	QRE141J-103Y	10K 1/4W CARBON RE	
R465	QRE141J-102Y	1K 1/4W C RES.	
R469	QRE141J-221Y	220 1/4W C RES.	
R470	QRE141J-221Y	220 1/4W C RES.	
R471	QRE141J-103Y	10K 1/4W CARBON RE	
R472	QRE141J-103Y	10K 1/4W CARBON RE	
R473	QRE141J-103Y	10K 1/4W CARBON RE	
R481	QRE141J-222Y	2.2K 1/4W C RES.	
R482	QRE141J-222Y	2.2K 1/4W C RES.	
R483	QRE141J-221Y	220 1/4W C RES.	
R484	QRE141J-221Y	220 1/4W C RES.	
R485	QRE141J-103Y	10K 1/4W CARBON RE	
R486	QRE141J-103Y	10K 1/4W CARBON RE	
R493	QRE141J-183Y	18K 1/4W CARBON RE	
R494	QRE141J-183Y	18K 1/4W CARBON RE	
R497	QRE141J-104Y	100K 1/4W C RES.	
R498	QRE141J-104Y	100K 1/4W C RES.	
R501	QRE141J-102Y	1K 1/4W C RES.	
R502	QRE141J-102Y	1K 1/4W C RES.	
R541	QRE141J-105Y	1M 1/4W C RES.	
R542	QRE141J-393Y	39K 1/4W C RES.	
R543	QRE141J-102Y	1K 1/4W C RES.	
R544	QRE141J-102Y	1K 1/4W C RES.	
R545	QRE141J-203Y	20K 1/4W C RES.	
R546	QRE141J-473Y	47K 1/4W C RES.	
R547	QRE141J-473Y	47K 1/4W C RES.	
R548	QRE141J-563Y	56K 1/4W C RES.	
R549	QRE141J-563Y	56K 1/4W C RES.	
R553	QRE141J-104Y	100K 1/4W C RES.	
R554	QRE141J-104Y	100K 1/4W C RES.	
R555	QRE141J-102Y	1K 1/4W C RES.	
R556	QRE141J-102Y	1K 1/4W C RES.	
R566	QRE141J-102Y	1K 1/4W C RES.	
R567	QRE141J-104Y	100K 1/4W C RES.	
R568	QRE141J-104Y	100K 1/4W C RES.	
R569	QRE141J-221Y	220 1/4W C RES.	
R570	QRE141J-221Y	220 1/4W C RES.	
R571	QRE141J-103Y	10K 1/4W CARBON RE	
R572	QRE141J-103Y	10K 1/4W CARBON RE	
R573	QRE141J-103Y	10K 1/4W CARBON RE	
R574	QRE141J-103Y	10K 1/4W CARBON RE	
R575	QRE141J-103Y	10K 1/4W CARBON RE	
R576	QRE141J-102Y	1K 1/4W C RES.	
R577	QRE141J-102Y	1K 1/4W C RES.	

■ Electrical Parts List(Function, Tuner, Main board)

BLOCK NO 02

J	Item	Parts Number	Description	Area
	R578	QRE141J-103Y	10K 1/4W CARBON RE.	
	R579	QRE141J-102Y	1K 1/4W C RES.	
	R580	QRE141J-103Y	10K 1/4W CARBON RE.	
	R581	QRE141J-102Y	1K 1/4W C RES.	
	R582	QRE141J-102Y	1K 1/4W C RES.	
	R583	QRE141J-102Y	1K 1/4W C RES.	
	R584	QRE141J-102Y	1K 1/4W C RES.	
	R585	QRE141J-102Y	1K 1/4W C RES.	
	R586	QRE141J-103Y	10K 1/4W CARBON RE.	
	R587	QRE141J-102Y	1K 1/4W C RES.	
	R588	QRE141J-103Y	10K 1/4W CARBON RE.	
	R589	QRE141J-102Y	1K 1/4W C RES.	
	R590	QRE141J-223Y	22K 1/4W C RES.	
	R591	QRE141J-223Y	22K 1/4W C RES.	
	R592	QRE141J-102Y	1K 1/4W C RES.	
	R593	QRE141J-272Y	2.7K 1/4W C RES.	
	R594	QRE141J-181Y	180 1/4W C RES.	
	R595	QRE141J-181Y	180 1/4W C RES.	
	R597	QRE141J-222Y	2.2K 1/4W C RES.	
	R599	QRE141J-222Y	2.2K 1/4W C RES.	
	VR100	QVP0004-203Z	20K V.RES. I.M	EE
		OTHERS		
J	J 1	QNB0008-001	ANT TERMINAL	C J
		QNB0008-001	ANT TERMINAL	U UP US UT UX UY
		QNB0014-001	ANT TERMINAL	A B E EE EN EV
	J401	QNN0132-001	PIN JACK	
	J499	GP1F32T	OPTICAL JACK	
L	L 1	QQR0796-001	COIL BLOCK	A C J
		QQR0796-001	COIL BLOCK	U UP US UT UX UY
		QQR0884-001	COIL BLOCK	B E EE EN EV
	L 4	QQL231K-221Y	INDUCTOR	
	L 5	QQL231K-101Y	INDUCTOR	B E EE EN EV
	L 11	QQL231K-2R7Y	INDUCTOR	B E EE EN EV
	L 12	QQL231K-330Y	INDUCTOR	B E EN EV
	L100	QQR0522-001	NOISE FILTER	EE
	L403	QQR0779-001Z	INDUCTOR	B E EN EV
	L404	QQR0779-001Z	INDUCTOR	B E EN EV
	L405	QQR0779-001Z	INDUCTOR	B E EN EV
	L406	QQR0779-001Z	INDUCTOR	B E EN EV
	T 1	QQR0793-001	IFT	
	X 1	QAX0402-001	CRYSTAL	
	X 2	QAX0283-001Z	CRYSTAL	B E EE EN EV
	X541	QAX0283-001Z	RESONATOR I.M	
CF	CF 1	QAX0403-001	CERAMIC FILTER	EE
		QAX0419-001Z	C FILTER	C J
		QAX0419-001Z	C FILTER	U UP US UT UX UY
		QAX0420-001	C FILTER	A B E EN EV
	CF 2	QAX0403-001	CERAMIC FILTER	EE
		QAX0419-001Z	C FILTER	C J
		QAX0419-001Z	C FILTER	U UP US UT UX UY
		QAX0421-001	C FILTER	A B E EN EV
	CF 3	QAX0519-001Z	CERAMIC FILTER	
	CN410	QGF1016F1-19	CONNECTOR	
	CN411	QGF1201C3-21	CONNECT TERMINAL	
	CN412	QGF1201C3-21	CONNECT TERMINAL	
	CN413	QGF1201C3-17	CONNECT TERMINAL	
	CN414	QGD2501C1-03Z	SOCKET ASSY	
	CN415	QGD2501C1-04Z	SOCKET ASSY	
	CN416	QGB2501J1-10	CONNECT TERMINAL	
	CN417	QGB2501J1-07	CONNECT TERMINAL	
	CN420	QGB2501J1-10	CONNECT TERMINAL	EE
	CN421	QGB2501K2-10	CONNECT TERMINAL	EE
	EP001	E409182-001SM	EARTH TERMINAL	
	SP 3	VYSA1R4-100		
	SP 4	VYSA1R4-100		
	SP553	E3400-431	FELT SPACER	
	TH401	QAD0064-2R2Z	POSISTOR I.M	B C E EE EN EV

J	Item	Parts Number	Description	Area
	TH401	QAD0064-2R2Z	POSISTOR I.M	U UP US UT UX UY J
	TU 1	QAU0034-001	FM FRONT END	A B E EN EV
		QAU0036-001	FM FRONT END	EE
		QAU0097-001	FRONT END	U UP US UT UX UY
		QAU0097-001	FRONT END	C J

■ Electrical Parts List(System control switch board)

BLOCK NO 03

±	Item	Parts Number	Description	Area
	I.C.S			
	IC810	MN101C23DBP	I.C(M)	
	IC811	NJU3714D	I.C(M)	
	IC812	GP1U291Q	I.C(M)	
	IC853	TA8409S	I.C(MONO-ANALOG)	
	IC854	NJU3711D	I.C(MONO-ANALOG)	
	IC901	NJM4580L	I.C(MONO-ANALOG)	U UP US UT UX UY
	IC902	BU9253AS	I.C(M)	U UP US UT UX UY
	DIODES			
	D801	1SR35-100A-T5	SI DIODE	
	D803	1SS119-02-T2	SI DIODE	
	D804	1SS133-T2	SI DIODE	
	D920	SLR-342DC-T	L.E.D.	
	D831	MTZJ5.1B-T2		
	D832	MTZJ5.1B-T2		
	D955	SLR-342MC-T	LED I.M	
	D956	SLR-342MC-T	LED I.M	
	D957	SLR-342MC-T	LED I.M	
	D958	SLR-342MC-T	LED I.M	
	D961	1SS133-T2	SI DIODE	
	D962	SLR-342VC-T	L.E.D.	
	D981	SLR-342MC-T	LED I.M	
	D982	SLR-342MC-T	LED I.M	
	D983	SLR-342MC-T	LED I.M	
	D984	SLR-342MC-T	LED I.M	
	D991	SLR-342MC-T	LED I.M	
	D992	SLR-342MC-T	LED I.M	
	D993	SLR-342MC-T	LED I.M	
	D1021	MTZJ5.1B-T2	ZENER DIODE	U UP US UT UX UY
	D1041	1SS133-T2	SI DIODE	
	D1042	1SS133-T2	SI DIODE	
	TRANSISTORS			
	Q801	2SC2668/O-T	TRANSISTOR TAPE	
	Q802	2SC2668/O-T	TRANSISTOR TAPE	
	Q803	DTC114ES	DIGITAL TRANSISTOR	
	Q804	DTC114ES	DIGITAL TRANSISTOR	
	Q805	DTC114ES	DIGITAL TRANSISTOR	
	Q806	DTC114ES	DIGITAL TRANSISTOR	
	Q807	DTC114ES	DIGITAL TRANSISTOR	
	Q808	DTC114ES	DIGITAL TRANSISTOR	
	Q809	DTC114ES	DIGITAL TRANSISTOR	
	Q810	DTC114ES	DIGITAL TRANSISTOR	
	Q811	DTC114ES	DIGITAL TRANSISTOR	
	Q851	KTC3199/GLU-T	TRANSISTOR	
	Q961	KRA102M-T	DIGITAL TRANSISTOR	
	Q1021	DTA114TS	DIGITAL TRANSISTOR	U UP US UT UX UY
	CAPACITORS			
	C801	QFVJ1HJ-124Z	0.12MF 50V TF CAP.	
	C803	QETC0JM-477ZM	470MF 6.3V E.CAP.	
	C804	QETN0JM-108Z	1000MF 6.3V AL E.CAP.	
	C805	QCGB1HK-102	1000PF 50V CER.CAP.	
	C806	QCGB1HK-102	1000PF 50V CER.CAP.	
	C807	QCSB1HJ-390Y	39PF 50V CER.CAP.	
	C808	QCSB1HJ-330Y	33PF 50V CER.CAP.	
	C809	QCSB1HJ-330Y	33PF 50V CER.CAP.	
	C810	QCSB1HJ-390Y	39PF 50V CER.CAP.	
	C811	QCGB1HK-102	1000PF 50V CER.CAP.	
	C812	QCSB1HJ-220	22PF 50V CER.CAP.	
	C813	QCSB1HJ-270Y	27PF 50V CER.CAP.	
	C814	QCGB1HK-102	1000PF 50V CER.CAP.	
	C815	EETC1HM-226ZJC	22MF 50V E.CAP.	
	C816	EETB1CM-476	47MF 16V E.CAP.	
	C817	EETC1HM-226ZJC	22MF 50V E.CAP.	
	C818	QCBB1HK-221Y	220PF 50V CER.CAP.	
	C819	QCBB1HK-221Y	220PF 50V CER.CAP.	
	C820	QCZ0205-155	1.5MF 25V C.CAP.	
	C821	QDYB1CM-103Y	0.01MF 16V CER.CAP.	

±	Item	Parts Number	Description	Area
	C831	QDYB1CM-103Z		
	C832	QDYB1CM-103Z		
	C835	QCBB1HK-102Z		U UP US UT UX UY
	C851	EETB1EM-106E	10MF 25V E.CAP.	
	C852	QCBB1HK-221Y	220PF 50V CER.CAP.	
	C853	QCBB1HK-221Y	220PF 50V CER.CAP.	
	C854	EETC1EM-226ZE	22MF 25V E.CAP.	
	C855	QETB0JM-227	220MF 6.3V E.CAP.	
	C856	QETN1AM-107Z	100MF 10V AL E.CAP.	
	C971	QDYB1CM-103Y	0.01MF 16V CER.CAP.	
	C972	QDYB1CM-103Y	0.01MF 16V CER.CAP.	
	C1001	QCGB1HK-102	1000PF 50V CER.CAP.	A B E EN EV
	C1002	QCGB1HK-102	1000PF 50V CER.CAP.	A B E EN EV
	C1003	QDGB1HK-102Y	0.01MF 50V	B E EN EV A
		QDGB1HK-103Y	0.01MF 50V	U UP US UT UX UY
		QDGB1HK-103Y	0.01MF 50V	EE C J
	C1004	QCGB1HK-102	1000PF 50V CER.CAP.	
	C1005	QCGB1HK-102	1000PF 50V CER.CAP.	
	C1006	QCGB1HK-102	1000PF 50V CER.CAP.	
	C1021	QDYB1CM-103Y	0.01MF 16V CER.CAP.	U UP US UT UX UY
	C1022	QCGB1HK-102	1000PF 50V CER.CAP.	U UP US UT UX UY
	C1023	QCGB1HK-102	1000PF 50V CER.CAP.	U UP US UT UX UY
	C1024	QETC1HM-225ZM	2.2MF 50V E.CAP.	U UP US UT UX UY
	C1025	QCGB1HK-102	1000PF 50V CER.CAP.	U UP US UT UX UY
	C1026	QETC1HM-225ZM	2.2MF 50V E.CAP.	U UP US UT UX UY
	C1027	QCBB1HK-101Y	100PF 50V CER.CAP.	U UP US UT UX UY
	C1028	QCBB1HK-151	150PF 50V CER.CAP.	U UP US UT UX UY
	C1029	QCBB1HK-561Y	560PF 50V CER.CAP.	U UP US UT UX UY
	C1030	QETC1HM-225ZM	2.2MF 50V E.CAP.	U UP US UT UX UY
	C1031	QDYB1CM-103Y	0.01MF 16V CER.CAP.	U UP US UT UX UY
	C1032	QDYB1CM-103Y	0.01MF 16V CER.CAP.	U UP US UT UX UY
	C1033	EETB1HM-475E	4.7MF 50V E.CAP.	U UP US UT UX UY
	C1034	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	U UP US UT UX UY
	C1035	EETB1AM-107E	100MF 10V E.CAP.	U UP US UT UX UY
	C1036	QCBB1HK-820Y	82PF 50V CER.CAP.	U UP US UT UX UY
	C1037	QFVJ1HJ-333Z	0.033MF 50V CAP.	U UP US UT UX UY
	C1038	QDXB1CM-472Y	4700PF 16V C.CAP.	U UP US UT UX UY
	C1039	QDYB1CM-103Y	0.01MF 16V CER.CAP.	U UP US UT UX UY
	C1040	QDXB1CM-332Y	3300PF 16V C CAP.	U UP US UT UX UY
	C1041	QFVJ1HJ-333Z	0.033MF 50V CAP.	U UP US UT UX UY
	C1042	EETC1EM-226ZE	22MF 25V E.CAP.	U UP US UT UX UY
	C1043	QFVJ1HJ-474Z	0.47MF 50V CAP.	U UP US UT UX UY
	C1044	QDYB1CM-103Y	0.01MF 16V CER.CAP.	U UP US UT UX UY
	C1045	QETC1HM-225ZM	2.2MF 50V E.CAP.	U UP US UT UX UY
	C1050	QDYB1CM-103Y	0.01MF 16V CER.CAP.	
	C1051	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C1052	QFVJ1HJ-104Z	0.1MF 50V TF CAP.	
	C1053	QDXB1CM-222Y	2200PF 16V C CAP.	
	C1054	QDXB1CM-222Y	2200PF 16V C CAP.	
	C1055	QFLM1HJ-393Z	0.039MF 50V M CAP.	
	C1056	QFLM1HJ-393Z	0.039MF 50V M CAP.	
	C1057	QDVB1EZ-223Y	0.022MF 25V C CAP.	
	C1058	QDVB1EZ-223Y	0.022MF 25V C CAP.	
	C1059	QFLM1HJ-393Z	0.039MF 50V M CAP.	
	RESISTORS			
	R801	QRE141J-331Y	330 1/4W C RES.	
	R802	QRE141J-223Y	22K 1/4W C RES.	
	R803	QRE141J-223Y	22K 1/4W C RES.	
	R804	QRE141J-822Y	8.2K 1/4W C RES.	
	R805	QRE141J-822Y	8.2K 1/4W C RES.	
	R806	QRE141J-124Y	120K 1/4W C RES.	
	R807	QRE141J-103Y	10K 1/4W CARBON RE	
	R808	QRE141J-103Y	10K 1/4W CARBON RE	
	R809	QRE141J-103Y	10K 1/4W CARBON RE	
	R810	QRE141J-103Y	10K 1/4W CARBON RE	
	R811	QRE141J-103Y	10K 1/4W CARBON RE	
	R812	QRE141J-103Y	10K 1/4W CARBON RE	

■ Electrical Parts List(System control switch board)

BLOCK NO 03

△	Item	Parts Number	Description	Area
	R813	QRE141J-103Y	10K 1/4W CARBON RE	
	R814	QRE141J-103Y	10K 1/4W CARBON RE	
	R815	QRE141J-563Y	56K 1/4W C RES.	
	R816	QRE141J-563Y	56K 1/4W C RES.	
	R817	QRE141J-103Y	10K 1/4W CARBON RE	
	R818	QRE141J-103Y	10K 1/4W CARBON RE	
	R819	QRE141J-102Y	1K 1/4W C RES.	
	R820	QRE141J-102Y	1K 1/4W C RES.	
	R821	QRE141J-102Y	1K 1/4W C RES.	
	R822	QRE141J-102Y	1K 1/4W C RES.	
	R823	QRE141J-102Y	1K 1/4W C RES.	
	R824	QRE141J-102Y	1K 1/4W C RES.	
	R825	QRE141J-102Y	1K 1/4W C RES.	
	R826	QRE141J-102Y	1K 1/4W C RES.	
	R827	QRE141J-103Y	10K 1/4W CARBON RE	
	R828	QRE141J-201Y	200 1/4W C.RES.	
	R829	QRE141J-201Y	200 1/4W C.RES.	
	R830	QRE141J-201Y	200 1/4W C.RES.	
	R831	QRE141J-104Y	100K 1/4W C RES.	
	R832	QRE141J-104Y	100K 1/4W C RES.	
	R833	QRE141J-104Y	100K 1/4W C RES.	
	R834	QRE141J-104Y	100K 1/4W C RES.	
	R835	QRE141J-104Y	100K 1/4W C RES.	
	R836	QRE141J-104Y	100K 1/4W C RES.	
	R837	QRE141J-104Y	100K 1/4W C RES.	
	R838	QRE141J-102Y	1K 1/4W C RES.	
	R839	QRE141J-102Y	1K 1/4W C RES.	
	R840	QRE141J-103Y	10K 1/4W CARBON RE	
	R841	QRE141J-103Y	10K 1/4W CARBON RE	
	R842	QRE141J-103Y	10K 1/4W CARBON RE	
	R843	QRE141J-103Y	10K 1/4W CARBON RE	
	R844	QRE141J-103Y	10K 1/4W CARBON RE	
	R845	QRE141J-102Y	1K 1/4W C RES.	
	R846	QRE141J-102Y	1K 1/4W C RES.	
	R847	QRE141J-102Y	1K 1/4W C RES.	
	R848	QRE141J-102Y	1K 1/4W C RES.	
	R849	QRE141J-102Y	1K 1/4W C RES.	
	R851	QRE141J-562Y	390 1/4W C RES.	
	R852	QRE141J-3R9Y	3.9 1/4W C RES.	
	R853	QRE141J-183Y	18K 1/4W CARBON RE	
	R854	QRE141J-332Y	3.3K 1/4W C RES.	
	R856	QRE141J-151Y	150 1/4W C RES.	
	R857	QRE141J-391Y		
	R920	QRE141J-201Y	200 1/4W C.RES.	
	R921	QRE141J-102Y	1K 1/4W C RES.	
	R922	QRE141J-102Y	1K 1/4W C RES.	
	R923	QRE141J-122Y	1.2K 1/4W C RES.	
	R924	QRE141J-152Y	1.5K 1/4W CARBON RE	
	R925	QRE141J-222Y	2.2K 1/4W C RES.	
	R926	QRE141J-272Y	2.7K 1/4W C RES.	
	R927	QRE141J-392Y	3.9K 1/4W C RES.	
	R928	QRE141J-562Y	5.6K 1/4W C RES.	
	R931	QRE141J-102Y	1K 1/4W C RES.	
	R932	QRE141J-102Y	1K 1/4W C RES.	
	R933	QRE141J-122Y	1.2K 1/4W C RES.	
	R934	QRE141J-152Y	1.5K 1/4W CARBON RE	
	R935	QRE141J-222Y	2.2K 1/4W C RES.	
	R936	QRE141J-272Y	2.7K 1/4W C RES.	
	R937	QRE141J-392Y	3.9K 1/4W C RES.	
	R938	QRE141J-562Y	5.6K 1/4W C RES.	
	R939	QRE141J-103Y	10K 1/4W CARBON RE	
	R940	QRE141J-183Y	18K 1/4W CARBON RE	UX
		QRE141J-563Y	56K 1/4W C RES.	B C E EN EV
		QRE141J-563Y	56K 1/4W C RES.	J U P US UT
	R941	QRE141J-102Y	1K 1/4W C RES.	
	R942	QRE141J-102Y	1K 1/4W C RES.	
	R943	QRE141J-122Y	1.2K 1/4W C RES.	

△	Item	Parts Number	Description	Area	
	R944	QRE141J-152Y	1.5K 1/4W CARBON RE		
	R945	QRE141J-153Y	15K 1/4W C RES.		
	R946	QRE141J-103Y	10K 1/4W CARBON RE		
	R947	QRE141J-183Y	18K 1/4W CARBON RE	UY	
		QRE141J-563Y	56K 1/4W C RES.	C EE J	
	R948	QRE141J-104Y	100K 1/4W C RES.		
	R949	QRE141J-104Y	100K 1/4W C RES.		
	R951	QRE141J-102Y	1K 1/4W C RES.		
	R952	QRE141J-103Y	10K 1/4W CARBON RE		
	R953	QRE141J-183Y	18K 1/4W CARBON RE		
	R954	QRE141J-563Y	56K 1/4W C RES.	A C J U P US UT	
	R955	QRE141J-201Y	200 1/4W C.RES.		
	R956	QRE141J-201Y	200 1/4W C.RES.		
	R957	QRE141J-201Y	200 1/4W C.RES.		
	R958	QRE141J-201Y	200 1/4W C.RES.		
	R961	QRE141J-201Y	200 1/4W C.RES. I.M		
	R962	QRE141J-472Y	4.7K 1/4W C RES.		
	R963	QRE141J-102Y	1K 1/4W C RES.		
	R964	QRE141J-122Y	1.2K 1/4W C RES.		
	R981	QRE141J-201Y	200 1/4W C.RES.		
	R982	QRE141J-201Y	200 1/4W C.RES.		
	R983	QRE141J-201Y	200 1/4W C.RES.		
	R984	QRE141J-201Y	200 1/4W C.RES.		
	R985	QRE141J-103Y	10K 1/4W CARBON RE		
	R986	QRE141J-183Y	18K 1/4W CARBON RE		
	R987	QRE141J-563Y	56K 1/4W C RES.		
	R992	QRE141J-152Y	1.5K 1/4W CARBON RE		
	R993	QRE141J-222Y	2.2K 1/4W C RES.		
	R994	QRE141J-272Y	2.7K 1/4W C RES.		
	R995	QRE141J-392Y	3.9K 1/4W C RES.		
	R996	QRE141J-562Y	5.6K 1/4W C RES.		
	RA801	QRB169J-104	100K 1/10WRES. ARR		
	RA802	QRB169J-104	100K 1/10WRES. ARR		
	R1021	QRE141J-472Y	4.7K 1/4W C RES.	U P US UT UX UY	
	R1022	QRE141J-472Y	4.7K 1/4W C RES.	U P US UT UX UY	
	R1023	QRE141J-221Y	220 1/4W C RES.	U P US UT UX UY	
	R1024	QRE141J-103Y	10K 1/4W CARBON RE	U P US UT UX UY	
	R1025	QRE141J-104Y	100K 1/4W C RES.	U P US UT UX UY	
	R1026	QRE141J-563	56K 1/4W C RES.	U P US UT UX UY	
	R1027	QRE141J-302Y	3K 1/4W C RES.	U P US UT UX UY	
	R1028	QRE141J-104Y	100K 1/4W C RES.	U P US UT UX UY	
	R1029	QRE141J-221Y	220 1/4W C RES.	U P US UT UX UY	
	R1030	QRE141J-221Y	220 1/4W C RES.	U P US UT UX UY	
	R1031	QRE141J-203Y	20K 1/4W C RES.	U P US UT UX UY	
	R1032	QRE141J-203Y	20K 1/4W C RES.	U P US UT UX UY	
	R1033	QRE141J-822Y	8.2K 1/4W C RES.	U P US UT UX UY	
	R1034	QRE141J-103Y	10K 1/4W CARBON RE	U P US UT UX UY	
	R1035	QRE141J-393Y	39K 1/4W C RES.	U P US UT UX UY	
	R1036	QRE141J-472Y	4.7K 1/4W C RES.	U P US UT UX UY	
	R1037	QRE141J-153Y	15K 1/4W C RES.	U P US UT UX UY	
	R1038	QRE141J-472Y	4.7K 1/4W C RES.	U P US UT UX UY	
	R1039	QRE141J-103Y	10K 1/4W CARBON RE	U P US UT UX UY	
	R1040	QRE141J-333Y	33K 1/4W C RES.	U P US UT UX UY	
	R1041	QRE141J-823Y	82K 1/4W C RES.	U P US UT UX UY	
	R1042	QRE141J-271Y	270 1/4W C RES.	U P US UT UX UY	
	R1051	QRJ146J-4R7X	4.7 1/4W UNF.CARBON		
	R1052	QRJ146J-4R7X	4.7 1/4W UNF.CARBON		
	R1053	QRE141J-393Y	39K 1/4W C RES.		
	R1054	QRE141J-393Y	39K 1/4W C RES.		
	R1055	QRE141J-102Y	1K 1/4W C RES.		
	VR901	QVQ0045-B54	50K VARIABLE R	U P US UT UX UY	
	OTHERS				
		E3400-439	FELT SPACER		
	J 81	QNB0038-001	SPK.TERMINAL	C EE J U P	
		QNB0038-001	SPK.TERMINAL	US UT UX UY	
		QNB0088-001	SPEAKER TERMINAL	B E EN EV A	
	J 82	QNN0017-001	PIN-JACK		

■ Electrical Parts List(System control switch board)

BLOCK NO 03

Item	Parts Number	Description	Area	Item	Parts Number	Description	Area
J 83	QNN0197-001	PIN JACK		CN921	QGF1016F1-09	CONNECT TERMINAL	
L801	QQL173K-470Z	INDUCTOR		CN971	QGF1201F3-10	CONNECTOR	
L802	QQL231K-220Y	INDUCTOR		FL801	QLF0059-001	FLUORESCENT DISPLAY TUB	
L803	QQL29BJ-100Z	INDUCTOR		FW901	QUM134-27DGZ4	FLAT WIRE	U UP US UT UX UY
L804	QQR0779-001Z	INDUCTOR			QUM134-24DGZ	FLAT WIRE	A B E EN EV
L805	QQL173K-470Z	INDUCTOR			QUM134-24DGZ	FLAT WIRE	EE C J
L806	QQL173K-470Z	INDUCTOR		FW902	QUM135-10DGZ4	FLAT WIRE	U UP US UT UX UY
L808	QQR00779-001Z	INDUCTOR	U UP US UT UX UY	FW951	QUM027-08DGZ3	FLAT WIRE	
L851	QQL29BJ-100Z	INDUCTOR		FW961	QUM025-14DGZ3	FLAT WIRE	
L852	QQR0779-001Z	INDUCTOR		FW971	QUM026-07Z3Z3	FLAT WIRE	
S921	QSW0674-001Z	TACT SWITCH		FW972	QUM025-07Z3Z3	FLAT WIRE	
S922	QSW0674-001Z	TACT SWITCH		JS971	QSW0538-001	ROTARY SWITCH	
S923	QSW0674-001Z	TACT SWITCH		J1001	QNS0030-001	JACK	
S924	QSW0674-001Z	TACT SWITCH		J1021	QNS0080-001	MICROPHONE JACK	U UP US UT UX UY
S925	QSW0674-001Z	TACT SWITCH		J1022	QNS0080-001	MICROPHONE JACK	U UP US UT UX UY
S926	QSW0674-001Z	TACT SWITCH		L1001	QQL231K-470Y	INDUCTOR	A B E EN EV
S927	QSW0674-001Z	TACT SWITCH		L1002	QQL231K-470Y	INDUCTOR	A B E EN EV
S928	QSW0674-001Z	TACT SWITCH		L1003	QQL0779-001Z	INDUCTOR I.M	A B E EN EV
S931	QSW0674-001Z	TACT SWITCH		TW101	QUB230-10A6HP		A B E EN EV
S932	QSW0674-001Z	TACT SWITCH		PW 1	QUB110-19DMPP		
S933	QSW0674-001Z	TACT SWITCH		RY 1	QSK0095-001	RELAY	
S934	QSW0674-001Z	TACT SWITCH		RY 2	QSK0095-001	RELAY	
S935	QSW0674-001Z	TACT SWITCH		SP901	VYH7653-001	I.C.PROTECTOR	
S936	QSW0674-001Z	TACT SWITCH					
S937	QSW0674-001Z	TACT SWITCH					
S938	QSW0674-001Z	TACT SWITCH					
S939	QSW0674-001Z	TACT SWITCH					
S941	QSW0674-001Z	TACT SWITCH	B E EN EV				
S942	QSW0674-001Z	TACT SWITCH	B E EN EV				
S943	QSW0674-001Z	TACT SWITCH	B E EN EV				
S944	QSW0674-001Z	TACT SWITCH	B E EN EV				
S945	QSW0674-001Z	TACT SWITCH					
S946	QSW0674-001Z	TACT SWITCH					
S948	QSW0518-001	PUSH SWITCH					
S949	QSW0518-001	PUSH SWITCH					
S951	QSW0674-001Z	TACT SWITCH					
S952	QSW0674-001Z	TACT SWITCH					
S953	QSW0674-001Z	TACT SWITCH					
S963	QSW0674-001Z	TACT SWITCH					
S985	QSW0674-001Z	TACT SWITCH					
S986	QSW0674-001Z	TACT SWITCH					
S992	QSW0674-001Z	TACT SWITCH					
S993	QSW0674-001Z	TACT SWITCH					
S994	QSW0674-001Z	TACT SWITCH					
S995	QSW0674-001Z	TACT SWITCH					
S996	QSW0674-001Z	TACT SWITCH					
S997	QSW0674-001Z	TACT SWITCH					
X801	QAX0418-001Z	CERA LOCK					
X802	QAX0401-001	CRYSTAL					
CN115	QGB2510K2-11	CONNECTOR					
CN810	QGF1201F3-21	VMC0332-R21					
CN811	QGF1201F3-23	CONNECTOR					
CN812	QGF1201F3-11	CONNECTOR					
CN813	QGF1016F1-09	CONNECT TERMINAL					
CN814	QGD2501C1-04Z	SOCKET ASSY					
CN815	QGD2501C1-03Z	SOCKET ASSY					
CN816	QGD2501C1-05Z	SOCKET ASSY					
CN817	QGF1201C3-10	CONNECTOR					
CN856	QGF1201C3-21	CONNECT TERMINAL					
CN857	QGF1201C3-23	CONNECTOR					
CN858	QGD2501C1-05Z	SOCKET ASSY	U UP US UT UX UY				
	QGD2501C1-05Z	SOCKET ASSY	A B E EN EV				
CN859	QGF1201C3-10	CONNECTOR					
CN860	QGF1201C3-21	CONNECT TERMINAL					
CN861	QGF1201C3-17	CONNECT TERMINAL					
CN862	QGF1201C3-21	CONNECT TERMINAL					
CN863	QGA2501C1-02	2P CONNECTOR					

CD Servo Control P.C.B.

BLOCK NO. 04				BLOCK NO. 04					
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 251	NCS21HJ-100X	C CAPACITOR	10PF 5X 50V		C 851	GER41CM-106	E CAPACITOR	10MF 20X 16V	
C 252	NCS21HJ-100X	C CAPACITOR	10PF 5X 50V		C 852	GER41CM-106	E CAPACITOR	10MF 20X 16V	
C 253	NCB21EK-104X	C CAPACITOR	.10MF 10X 25V		C 855	NCB21EK-104X	C CAPACITOR	.10MF 10X 25V	
C 254	GERF1AM-476Z	E CAPACITOR	47MF 20X 10V		C 860	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20X	
C 255	NCB21EK-104X	C CAPACITOR	.10MF 10X 25V		C 860	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20X	
C 281	NCB21HK-223X	C CAPACITOR	.022MF 10X 50V		CM151	GGF1016F1-15	15FFC CONNECTOR	VIDEO CD	
C 291	GERF1AM-476Z	E CAPACITOR	47MF 20X 10V		CM152	GGF2001F1-12	12P CM RIG	VIDEO CD	
C 601	NCB21HK-102X	C CAPACITOR	1000PF 10X 50V		CM601	GGF1016F1-15	15FFC CONNECTOR	TRAVERSE	
C 602	NCB21HK-102X	C CAPACITOR	1000PF 10X 50V		CM651	GGF1016F1-19	CONNECTOR	MAIN	
C 603	NCB21HK-223X	C CAPACITOR	.022MF 10X 50V		CM652	GGF1016F1-05	CONNECTOR	OSD	
C 604	NCB21HK-223X	C CAPACITOR	.022MF 10X 50V		CM653	GGF1016F1-13	CONNECTOR	CD TEXT	
C 605	NCS21HJ-271X	C CAPACITOR	270PF 5X 50V		CM801	GG2500C1-06	6P PLUG ASSY	TRAVERSE	
C 606	NCS21HJ-271X	C CAPACITOR	180PF 5X 50V		CM851	GG2503F1-03	SOCKET	DISC DETECTION	
C 607	NCS21HJ-222X	C CAPACITOR	2200PF 10X 50V		CM854	GG25016K1-07	CONNECTOR	TRAY SWITCH	
C 608	NCB21HK-223X	C CAPACITOR	.022MF 10X 50V		CM855	GG25016K2-10	CONNECTOR	CAM SWITCH	
C 610	NCB21EK-104X	C CAPACITOR	.10MF 10X 25V		IC251	UPD78055GCA37	IC	MICOM	
C 611	NCB21EK-104X	C CAPACITOR	.10MF 10X 25V		IC601	AN88068B-W	IC	RF AMP	
C 612	GER41AM-105	E CAPACITOR	1.0MF 20X 50V		IC651	MN35510	IC	DSP & DAC	
C 613	NCS21HJ-101X	C CAPACITOR	100PF 5X 50V		IC801	BA6897FP-W	IC	PU DRIVE	
C 614	NCB21HK-223X	C CAPACITOR	.022MF 10X 50V		IC851	TAB4095	IC	L MOTOR DRIVE	
C 615	NCB21HK-472X	C CAPACITOR	4700PF 10X 50V		IC852	TAB4095	IC	R MOTOR DRIVE	
C 616	NCB21HK-103X	C CAPACITOR	.010MF 10X 50V		L 851	QGL01BK-100Z	INDUCTOR	VS DE-COUPLE	
C 617	NCS21HJ-251X	C CAPACITOR	330PF 5X 50V		L 853	QGL01BK-100Z	INDUCTOR	L MOTOR	
C 621	NCB21EK-104X	C CAPACITOR	.10MF 10X 25V		L 854	QGL01BK-100Z	INDUCTOR	R MOTOR	
C 623	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20X		Q 291	Z5B1357EF7-T	TRANSISTOR	/P.OM	
C 624	GER41AM-107	E CAPACITOR	100PF 20X 10V		Q 631	Z5A1037AK/RS7-X	TRANSISTOR	APC	
C 632	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20X		Q 842	DTA144ES-T	TRANSISTOR	/DISC	
C 633	NCB21HK-223X	C CAPACITOR	.022MF 10X 50V		R 251	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 651	NCS21HJ-120X	C CAPACITOR	12PF 5X 50V		R 252	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 652	NCS21HJ-150X	C CAPACITOR	15PF 5X 50V		R 253	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 653	NCB21EK-104X	C CAPACITOR	.10MF 10X 25V		R 254	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 654	NCB21HK-223X	C CAPACITOR	.022MF 10X 50V		R 255	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 655	GER41AM-227	E CAPACITOR	220MF 20X 10V		R 259	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 656	NCB21EK-104X	C CAPACITOR	.10MF 10X 25V		R 261	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 657	NCB21HK-222X	C CAPACITOR	2200PF 10X 50V		R 262	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 658	NCB21HK-222X	C CAPACITOR	2200PF 10X 50V		R 263	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 661	NCB21EK-104X	C CAPACITOR	.10MF 10X 25V		R 265	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 662	GER41AM-107	E CAPACITOR	100MF 20X 10V		R 266	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 663	NCB21EK-104X	C CAPACITOR	.10MF 10X 25V		R 267	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 665	NCB21HK-223X	C CAPACITOR	.022MF 10X 50V		R 268	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 666	NCS21HJ-471X	C CAPACITOR	470PF 5X 50V		R 269	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 667	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20X		R 274	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 668	NCB21HK-473X	C CAPACITOR	.067MF 10X 50V		R 275	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 671	NCB21EK-104X	C CAPACITOR	.10MF 10X 25V		R 276	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 672	GER41AM-107	E CAPACITOR	100MF 20X 10V		R 277	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 801	NCB21HK-422X	C CAPACITOR	8200PF 10X 50V		R 278	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 802	NCB21HK-152X	C CAPACITOR	1500PF 10X 50V		R 279	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 811	NCS21HJ-221X	C CAPACITOR	220PF 5X 50V		R 281	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 812	NCS21HJ-221X	C CAPACITOR	220PF 5X 50V		R 282	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 813	NCS21HJ-221X	C CAPACITOR	220PF 5X 50V		R 283	NRS402J-102X	MG RESISTOR	1.0K 5X 1/10W	
C 821	NCF21CZ-105X	C CAPACITOR	1.0MF +80:-20X						
C 822	GER41AM-227	E CAPACITOR	220MF 20X 10V						

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 284	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 285	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 286	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 287	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 288	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 291	NRSA02J-122X	MG RESISTOR	1.2K 5X 1/10W	
R 292	NRSA02J-103X	MG RESISTOR	1.0K 5X 1/10W	
R 293	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 601	NRSA02J-274X	MG RESISTOR	270K 5X 1/10W	
R 602	NRSA02J-154X	MG RESISTOR	150K 5X 1/10W	
R 603	NRSA02J-273X	MG RESISTOR	27K 5X 1/10W	
R 604	NRSA02J-104X	MG RESISTOR	100K 5X 1/10W	
R 605	NRSA02J-153X	MG RESISTOR	150K 5X 1/10W	
R 606	NRSA02J-47X	MG RESISTOR	47K 5X 1/10W	
R 607	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 611	NRSA02J-112X	MG RESISTOR	11K 5X 1/10W	
R 612	NRSA02J-125X	MG RESISTOR	1.2K 5X 1/10W	
R 631	NRSA02J-2R2X	MG RESISTOR	2.2 5X 1/10W	
R 632	NRSA02J-100X	MG RESISTOR	10 5X 1/10W	
R 634	NRSA02J-120X	MG RESISTOR	12 5X 1/10W	
R 635	NRSA02J-121X	MG RESISTOR	120 5X 1/10W	
R 636	NRSA02J-910X	MG RESISTOR	91 5X 1/10W	
R 651	NRSA02J-271X	MG RESISTOR	270 5X 1/10W	
R 652	NRSA02J-220X	MG RESISTOR	22 5X 1/10W	
R 657	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 658	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 661	NRSA02J-220X	MG RESISTOR	22 5X 1/10W	
R 662	NRSA02J-471X	MG RESISTOR	470 5X 1/10W	
R 663	NRSA02J-124X	MG RESISTOR	120K 5X 1/10W	
R 665	NRSA02J-683X	MG RESISTOR	68K 5X 1/10W	
R 666	NRSA02J-153X	MG RESISTOR	1.5K 5X 1/10W	
R 667	NRSA02J-562X	MG RESISTOR	5.6K 5X 1/10W	
R 671	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 672	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 673	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 674	NRSA02J-101X	MG RESISTOR	100 5X 1/10W	
R 675	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 676	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 677	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 679	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 680	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 681	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 682	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 683	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 684	NRSA02J-271X	MG RESISTOR	270 5X 1/10W	
R 685	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 686	NRSA02J-101X	MG RESISTOR	100 5X 1/10W	
R 687	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 688	NRSA02J-102X	MG RESISTOR	100 5X 1/10W	
R 689	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 690	NRSA02J-101X	MG RESISTOR	100 5X 1/10W	
R 691	NRSA02J-101X	MG RESISTOR	100 5X 1/10W	
R 692	NRSA02J-101X	MG RESISTOR	100 5X 1/10W	
R 693	NRSA02J-471X	MG RESISTOR	470 5X 1/10W	

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 694	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 801	NRSA02J-222X	MG RESISTOR	2.2K 5X 1/10W	
R 802	NRSA02J-472X	MG RESISTOR	4.7K 5X 1/10W	
R 803	NRSA02J-123X	MG RESISTOR	12K 5X 1/10W	
R 804	NRSA02J-154X	MG RESISTOR	150K 5X 1/10W	
R 805	NRSA02J-123X	MG RESISTOR	12K 5X 1/10W	
R 806	NRSA02J-223X	MG RESISTOR	22K 5X 1/10W	
R 807	NRSA02J-222X	MG RESISTOR	2.2K 5X 1/10W	
R 808	NRSA02J-223X	MG RESISTOR	22K 5X 1/10W	
R 811	NRSA02J-473X	MG RESISTOR	4.7K 5X 1/10W	
R 812	NRSA02J-223X	MG RESISTOR	22K 5X 1/10W	
R 831	NRSA02J-151X	MG RESISTOR	150 5X 1/10W	
R 832	NRSA02J-103X	MG RESISTOR	10K 5X 1/10W	
R 842	NRSA02J-472X	MG RESISTOR	4.7K 5X 1/10W	
R 851	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 852	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 853	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 854	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 855	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 856	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 857	NRSA02J-272X	MG RESISTOR	2.7K 5X 1/10W	
R 859	NRSA02J-181X	MG RESISTOR	180 5X 1/10W	
R 861	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 862	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 863	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 864	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 865	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 866	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 880	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 882	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 883	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 884	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 885	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 886	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
R 887	NRSA02J-102X	MG RESISTOR	1.0K 5X 1/10W	
W 601	GUB220-07HPDT	SIN TWIST WIRE	D.GND	
X 251	9AK0360-0012	CRYSTAL	FOR IC251	
X 651	9AK0413-0012	CRYSTAL	FOR IC651	



■ CD Changer Mechanism Switch P.C.B.

REF.	PARTS NO.	PARTS NAME.	REMARKS	SUFFIX
CN804	GG82016J1-07	CONNECTOR		
SW 1	6SM0507-001	LEVER SWITCH		
SW 2	6SM0507-001	LEVER SWITCH		
SW 3	6SM0507-001	LEVER SWITCH		
SW 4	6SM0507-001	LEVER SWITCH		
SW 5	6SM0507-001	LEVER SWITCH		
SW 6	6SM0507-001	LEVER SWITCH		

**Cassette Mechanism Control P.C.B.**

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 101	NCS21HJ-561X	C CAPACITOR	560PF 5% 50V	
C 102	NCS21HJ-331X	C CAPACITOR	330PF 5% 50V	
C 103	NCS21HJ-561X	C CAPACITOR	560PF 5% 50V	
C 104	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
C 105	QEK40JM-227	E CAPACITOR	220MF 20% 6.3V	
C 106	NCS21HJ-333X	C CAPACITOR	.033MF 10% 50V	
C 107	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
C 108	NCS21HJ-393X	C CAPACITOR	.039MF 10% 50V	
C 110	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
C 111	QEK41CM-106	E CAPACITOR	.10MF 20% 50V	
C 112	QEK41CM-104	E CAPACITOR	10MF 20% 16V	
C 113	NCS21HJ-333X	C CAPACITOR	330PF 10% 50V	
C 114	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
C 115	NCS21HJ-153X	C CAPACITOR	.015MF 10% 50V	
C 116	NCS21HJ-823X	C CAPACITOR	820PF 10% 50V	
C 117	NCS21HJ-562X	C CAPACITOR	.056MF 10% 50V	
C 119	NCS21HJ-563X	C CAPACITOR	.056MF 10% 50V	
C 120	NCS21HJ-330X	C CAPACITOR	33PF 5% 50V	
C 201	NCS21HJ-561X	C CAPACITOR	560PF 5% 50V	
C 202	NCS21HJ-331X	C CAPACITOR	330PF 5% 50V	
C 203	NCS21HJ-561X	C CAPACITOR	560PF 5% 50V	
C 204	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
C 205	QEK40JM-227	E CAPACITOR	220MF 20% 6.3V	
C 206	NCS21HJ-333X	C CAPACITOR	.033MF 10% 50V	
C 207	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
C 208	NCS21HJ-393X	C CAPACITOR	.039MF 10% 50V	
C 210	NCS21HJ-221X	C CAPACITOR	220PF 5% 50V	
C 211	QEK41CM-104	E CAPACITOR	.10MF 20% 50V	
C 212	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
C 213	NCS21HJ-332X	C CAPACITOR	330PF 10% 50V	
C 214	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
C 215	NCS21HJ-153X	C CAPACITOR	.015MF 10% 50V	
C 216	NCS21HJ-823X	C CAPACITOR	820PF 10% 50V	
C 217	NCS21HJ-223X	C CAPACITOR	.022MF 10% 50V	
C 219	NCS21HJ-563X	C CAPACITOR	.056MF 10% 50V	
C 220	NCS21HJ-330X	C CAPACITOR	33PF 5% 50V	
C 301	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
C 302	QEK41CM-476	E CAPACITOR	4.7MF 20% 16V	
C 303	QEK41CM-226	E CAPACITOR	22MF 20% 16V	
C 304	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
C 305	NCS21HJ-393X	C CAPACITOR	.039MF 10% 50V	
C 306	QEK40JM-227	E CAPACITOR	220MF 20% 6.3V	
C 308	NCS21HJ-562X	C CAPACITOR	560PF 10% 50V	
C 309	NCS21HJ-562X	C CAPACITOR	560PF 10% 50V	
C 310	NCS21HJ-223X	C CAPACITOR	.022MF 10% 50V	
C 311	NCS21HJ-682X	C CAPACITOR	680PF 10% 50V	
C 313	QEK41EM-1072	E CAPACITOR	100MF 20% 10V	
C 314	QEK41EM-1552	ML C CAPACITOR	1.5MF	
C 315	QEK41EM-1552	ML C CAPACITOR	1.5MF	
C 316	QEK41EM-1032	PP CAPACITOR	.010MF 5% 100V	
C 318	NCS21HJ-103X	C CAPACITOR	.010MF 10% 50V	
C 319	QEK41EM-1072	E CAPACITOR	100MF 20% 10V	
C 321	NCS21HJ-103X	C CAPACITOR	.010MF 10% 50V	
C 322	QEK41EM-1522	M CAPACITOR	1500PF 5% 100V	
C 327	QEK41CM-476	E CAPACITOR	4.7MF 20% 16V	

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 328	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
C 329	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
C 330	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
C 332	NCS21HJ-151X	C CAPACITOR	150PF 5% 50V	
C 333	NCS21HJ-103X	C CAPACITOR	.010MF 10% 50V	
C 335	NCS21HJ-103X	C CAPACITOR	.010MF 10% 50V	
C 337	NCS21HJ-103X	C CAPACITOR	.010MF 10% 50V	
C 338	NCS21HJ-103X	C CAPACITOR	.010MF 10% 50V	
C 339	QEK41CM-476	E CAPACITOR	4.7MF 20% 16V	
C 340	NCS21HJ-103X	C CAPACITOR	.010MF 10% 50V	
C 341	QEK41EM-1072	E CAPACITOR	100MF 20% 10V	
C 342	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
C 343	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
C 344	NCS21HJ-472X	E CAPACITOR	4700PF 10% 50V	
C 345	NCS21HJ-331X	C CAPACITOR	330PF 5% 50V	
CM301	GGF1205F1-06	CONNECTOR		
CM302	GGF1205F1-06	CONNECTOR		
CM303	QGB2011M1-10	PWB CONNECTOR		
CM304	QGB2011M1-10	PWB CONNECTOR		
CM305	GGF1205F1-10	CONNECTOR		
CM306	GGF1205F1-11	CONNECTOR		
D 307	HZMS-1N82-X	CHIP Z DIODE		
D 308	HZMS-1N82-X	CHIP Z DIODE		
D 309	MA704A-X	S-K.DIODE		
IC201	BA3126A	IC		
IC202	AN7425X	IC		
IC303	BU40948CF-X	IC		
IC304	BU40948CF-X	IC		
L 301	GR0620-001	OSC COIL (BIAS)		
L 303	GL01BK-100Z	INDUCTOR		
Q 102	DTC1447KA-X	TRANSISTOR		
Q 103	DTC1444EKA-X	TRANSISTOR		
Q 105	2SC2001K/-T	TRANSISTOR		
Q 202	DTC1447KA-X	TRANSISTOR		
Q 203	DTC1444EKA-X	TRANSISTOR		
Q 205	2SC3576-JVC-T	TRANSISTOR		
Q 302	2SC2001K/-T	TRANSISTOR		
Q 303	2SC2001K/-T	TRANSISTOR		
Q 304	2SC3576-JVC-T	TRANSISTOR		
Q 305	2SC3576-JVC-T	TRANSISTOR		
Q 306	2SC2412K/RS/-X	CHIP TRANSISTOR		
Q 307	2SC2412K/RS/-X	CHIP TRANSISTOR		
Q 308	2SC2412K/RS/-X	CHIP TRANSISTOR		
Q 309	2SC2412K/RS/-X	CHIP TRANSISTOR		
Q 312	2SB562/CA-T	TRANSISTOR		
Q 313	2SC2412K/RS/-X	CHIP TRANSISTOR		
Q 314	2SB562/CA-T	TRANSISTOR		
Q 315	2SC2412K/RS/-X	CHIP TRANSISTOR		
Q 316	2SA6521K/T	TRANSISTOR		
Q 317	DTC1444EKA-X	TRANSISTOR		
Q 321	DTC1444EKA-X	TRANSISTOR		
Q 323	2SC2412K/RS/-X	CHIP TRANSISTOR		
R 102	NRS402J-102X	MG RESISTOR	1.0K 5% 1/10W	
R 103	NRS402J-183X	MG RESISTOR	18K 5% 1/10W	

BLOCK NO. 05		BLOCK NO. 05		BLOCK NO. 05	
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	
R 335	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W		
R 336	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W		
R 338	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W		
R 339	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W		
R 341	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W		
R 343	NRSA02J-OR0X	MG RESISTOR	5% 1/10W		
R 345	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W		
R 346	NRSA02J-OR0X	MG RESISTOR	5% 1/10W		
R 347	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W		
R 348	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W		
R 350	NRSA02J-472X	MG RESISTOR	4.7K 5% 1/10W		
R 351	NRSA02J-151X	MG RESISTOR	150 5% 1/10W		
R 353	NRSA02J-472X	MG RESISTOR	4.7K 5% 1/10W		
R 354	NRSA02J-151X	MG RESISTOR	150 5% 1/10W		
R 355	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W		
R 357	NRSA02J-102X	MG RESISTOR	10K 5% 1/10W		
R 358	NRSA02J-102X	MG RESISTOR	2.2K 5% 1/10W		
R 359	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W		
R 360	NRSA02J-453X	MG RESISTOR	45K 5% 1/10W		
R 361	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W		
R 362	NRSA02J-153X	MG RESISTOR	15K 5% 1/10W		
R 363	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W		
R 364	NRSA02J-453X	MG RESISTOR	45K 5% 1/10W		
R 365	NRSA02J-203X	MG RESISTOR	20K 5% 1/10W		
R 366	NRSA02J-123X	MG RESISTOR	12K 5% 1/10W		
R 367	NRSA02J-102X	MG RESISTOR	1.0K 5% 1/10W		
R 368	NRSA02J-391X	MG RESISTOR	390 5% 1/10W		
R 369	NRSA02J-391X	MG RESISTOR	390 5% 1/10W		
R 371	NRS181J-222X	MG RESISTOR	2.2K 5% 1/8W		
R 374	NRSA02J-912X	MG RESISTOR	9.1K 5% 1/10W		
R 375	NRSA02J-683X	MG RESISTOR	68K 5% 1/10W		
R 376	NRS181J-688X	MG RESISTOR	6.8 5% 1/8W		
VR101	QVPO008-503Z	SEMI V RESISTOR			
VR201	QVPO008-503Z	SEMI V RESISTOR			
VR301	QVPO008-103Z	SEMI V RESISTOR			
WIRE	VWS304-10A13K	FLAT WIRE			

BLOCK NO. 05		BLOCK NO. 05		BLOCK NO. 05	
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	
R 105	NRSA02J-220X	MG RESISTOR	22 5% 1/10W		
R 106	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W		
R 107	NRSA02J-122X	MG RESISTOR	12K 5% 1/10W		
R 108	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W		
R 109	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W		
R 111	NRSA02J-562X	MG RESISTOR	5.6K 5% 1/10W		
R 112	NRSA02J-122X	MG RESISTOR	1.2K 5% 1/10W		
R 113	NRSA02J-271X	MG RESISTOR	270 5% 1/10W		
R 114	NRSA02J-391X	MG RESISTOR	390 5% 1/10W		
R 115	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W		
R 117	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W		
R 118	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W		
R 119	NRSA02J-203X	MG RESISTOR	20K 5% 1/10W		
R 120	NRSA02J-102X	MG RESISTOR	1.0K 5% 1/10W		
R 121	NRSA02J-122X	MG RESISTOR	1.2K 5% 1/10W		
R 202	NRSA02J-102X	MG RESISTOR	1.0K 5% 1/10W		
R 203	NRSA02J-183X	MG RESISTOR	18K 5% 1/10W		
R 205	NRSA02J-222X	MG RESISTOR	22 5% 1/10W		
R 204	NRSA02J-392X	MG RESISTOR	3.9K 5% 1/10W		
R 207	NRSA02J-122X	MG RESISTOR	12K 5% 1/10W		
R 208	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W		
R 209	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W		
R 211	NRSA02J-562X	MG RESISTOR	5.6K 5% 1/10W		
R 212	NRSA02J-122X	MG RESISTOR	1.2K 5% 1/10W		
R 213	NRSA02J-271X	MG RESISTOR	270 5% 1/10W		
R 214	NRSA02J-391X	MG RESISTOR	390 5% 1/10W		
R 215	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W		
R 217	NRSA02J-332X	MG RESISTOR	3.3K 5% 1/10W		
R 218	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W		
R 219	NRSA02J-203X	MG RESISTOR	20K 5% 1/10W		
R 220	NRSA02J-102X	MG RESISTOR	1.0K 5% 1/10W		
R 221	NRSA02J-122X	MG RESISTOR	1.2K 5% 1/10W		
R 301	NRS181J-221X	MG RESISTOR	220 5% 1/8W		
R 302	NRS181J-101X	MG RESISTOR	100 5% 1/8W		
R 304	NRSA02J-393X	MG RESISTOR	39K 5% 1/10W		
R 305	NRSA02J-103X	MG RESISTOR	10K 5% 1/10W		
R 306	NRSA02J-103X	MG RESISTOR	10K 5% 1/10W		
R 307	NRSA02J-103X	MG RESISTOR	10K 5% 1/10W		
R 308	NRSA02J-153X	MG RESISTOR	1.5K 5% 1/10W		
R 309	NRSA02J-153X	MG RESISTOR	1.5K 5% 1/10W		
R 310	NRS181J-820X	MG RESISTOR	82 5% 1/8W		
R 311	NRS181J-820X	MG RESISTOR	82 5% 1/8W		
R 313	NRSA02J-393X	MG RESISTOR	39 5% 1/10W		
R 314	NRSA02J-222X	MG RESISTOR	22K 5% 1/10W		
R 315	NRSA02J-102X	MG RESISTOR	10 5% 1/10W		
R 316	NRSA02J-222X	MG RESISTOR	22K 5% 1/10W		
R 317	NRSA02J-100X	MG RESISTOR	10 5% 1/10W		
R 318	NRSA02J-123X	MG RESISTOR	12K 5% 1/10W		
R 319	NRSA02J-152X	MG RESISTOR	1.5K 5% 1/10W		
R 321	NRSA02J-123X	MG RESISTOR	12K 5% 1/10W		
R 322	NRSA02J-153X	MG RESISTOR	1.5K 5% 1/10W		
R 327	NRSA02J-474X	MG RESISTOR	470K 5% 1/10W		
R 328	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W		
R 329	NRSA02J-222X	MG RESISTOR	2.2K 5% 1/10W		
R 330	NRSA02J-OR0X	MG RESISTOR	5% 1/10W		

■ Cassette Mechanism Switch P.C.B.

BLOCK NO. 08		REMARKS	SUFFIX
A	REF.	PARTS NO.	PARTS NAME
	CN 1	QGBZ0111-10	TOP PLUG ASSY
	D 1	1SR139-100-T2	SI DIODE
	IC 1	SG-105F3-BB/C	PHOTO SENSER
	P 1	GN20104-001	POST PIN
	SW 1	QSW0832-001	CASSETTE SWITCH R.REC
	SW 2	QSW0832-001	CASSETTE SWITCH TAPE
	SW 4	QSW0832-001	CASSETTE SWITCH 70U
	SW 5	QSW0832-001	CASSETTE SWITCH 70U
	SW 6	QSW0507-001	CASSETTE SWITCH F.REC

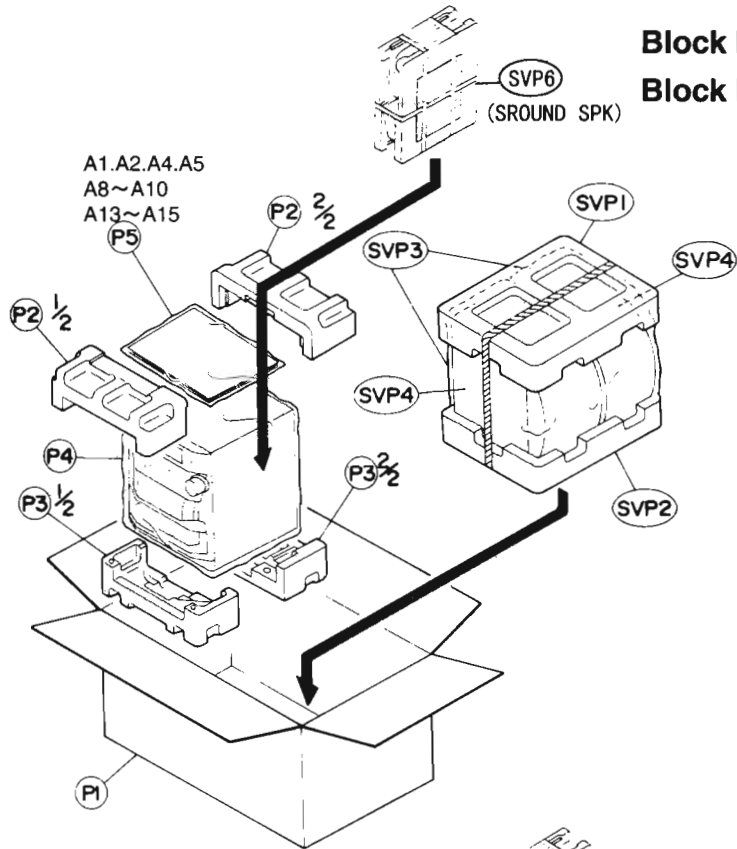
BLOCK NO. 07		REMARKS	SUFFIX
A	REF.	PARTS NO.	PARTS NAME
	CN 1	QGBZ0111-10	TOP PLUG ASSY
	D 1	1SR139-100-T2	SI DIODE
	IC 1	SG-105F3-BB/C	PHOTO SENSER
	P 1	GN20104-001	POST PIN
	SW 2	QSW0832-001	CASSETTE SWITCH TAPE
	SW 4	QSW0832-001	CASSETTE SWITCH 70U
	SW 6	QSW0507-001	SWITCH

# Packing Materials and Accessories Parts List

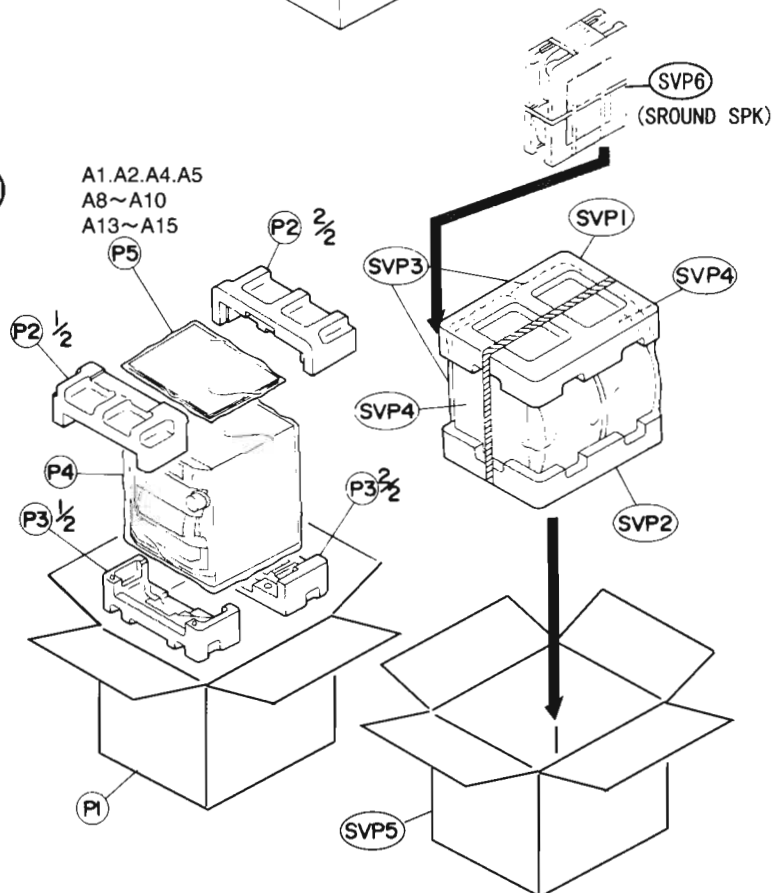
(MX-J70)  
(MX-J75R)  
(MX-J76)

Block No. **M 5 M M**

Block No. **M 6 M M**



(CA-MXJ70)  
(CA-MXJ75R)



MX-J70/MX-J76/MX-J75R

■ Packing Parts List

BLOCK NO M5MM

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	P 1	GV20037-004A	PACKING CASE	1	MX-J70	J C
		GV20037-005A	PACKING CASE	1	MX-J76	C
		GV20042-004A	PACKING CASE	1	CA-MXJ70	A
		GV20042-005A	PACKING CASE	1	CA-MXJ70	U UP US UT
		GV20037-006A	PACKING CASE	1	MX-J75R	EE
		GV20042-005A	PACKING CASE	1	CA-MXJ70	UX UY
		GV20042-006A	PACKING CASE	1	CA-MXJ75R	
		P 2	GV10016-003A	UPPER CUSHION	2	MX-J75R/MX-J70/MX-J76
	GV10018-002A		UPPER CUSHION	2	CA-MXJ75R/CA-MXJ70	
	P 3	GV10017-002A	BOTTOM CUSHION	2	MX-J75R/MX-J70/MX-J76	
		GV10019-002A	BOTTOM CUSHION	2	CA-MXJ75R/CA-MXJ70	
	P 4	QPC06506515P	POLY BAG	1		
	P 5	QPC02503515P	POLY BAG	1		
	SVP1	720-TMXJ70-00	SPEAKER CUSHION (UPPER)	1		
	SVP2	720-BMXJ70-00	SPEAKER CUSHION (BOTTOM)	1		
	SVP3	700-120034-20	POLY BAG	1		
	SVP5	GV20037-007A	SPEAKER PACKING CASE	1	CA-MXJ70	
		GV20037-008A	SPEAKER PACKING CASE	1	CA-MXJ75R	

■ Accessories Parts List

BLOCK NO M6MM

Item	Parts Number	Parts Name	Q'ty	Description	Area
A 1	GVT0013-001A	INST BOOK MX-J70	1	ENG FRE	J
	GVT0013-002A	INST BOOK MX-J76	1	ENG FRE	C
	GVT0013-002A	INST BOOK MX-J70	1	ENG	C
	GVT0013-003A	INST BOOK CA-MXJ70	1	ENG SPA CHI POR	U
	GVT0013-003A	INST BOOK CA-MXJ70	1	ENG CHI	US
	GVT0013-003A	INST BOOK CA-MXJ70	1	CHI	UT
	GVT0013-003A	INST BOOK CA-MXJ70	1	ARA	UX
	GVT0013-003A	INST BOOK CA-MXJ70	1	SPA	UY
	GVT0013-004A	INST BOOK CA-MXJ70	1	KOR	UP
	GVT0013-005A	INST BOOK CA-MXJ70	1	ENG	A
	GVT0013-006A	INST BOOK CA-MXJ75R	1	ENG GER FRE DUT SPA ITA	E
	GVT0013-007A	INST BOOK CA-MXJ75R	1	GER FRE DUT SWE FIN DAN	EN
	GVT0013-008A	INST BOOK CA-MXJ75R	1	ENG	B
	GVT0013-009A	INST BOOK CA-MXJ75R	1	ENG POL HUN CZE	EV
GVT0013-010A	INST BOOK CA-MXJ75R	1	RUS	EE	
A 2	BT-20044G	SAFETY SHEET	1	MX-J70/MX-J76	C
	BT-20044G	SAFETY SHEET	1	MX-J70/MX-J76	J
	E43486-340A	SAFETY SHEET	1	CA-MXJ75R	B
A 4	BT-52002-1	WARRANTY CARD	1	MX-J70/MX-J76	C
	BT-54008-2	WARRANTY CARD	1	CA-MXJ75R	B E EN
	BT-54012-1	WARRANTY CARD	1	MX-J75R	EE
	BT-54012-1	WARRANTY CARD	1	CA-MXJ75R	EV
	BT-56001-2	WARRANTY CARD	1	CA-MXJ70	A
BT-56004-5	WARRANTY CARD	1	CA-MXJ70	UP	
A 5	BT-51020-1	J=REGIST CARD	1	MX-J70	J
	VNA3000-202	REGISTER CARD	1	CA-MXJ75R	B
A 8	BT-20071B	SVC CENTER LIST	1	MX-J70/MX-J76	C
	BT-56002-2	SVC CENTER LIST	1	CA-MXJ70	A
A 9	EWP201-011	ANTENNA WIRE	1	MX-J70/MX-J76	
	EWP201-011	ANTENNA WIRE	1	CA-MXJ70	U US UT UP
	EWP201-011	ANTENNA WIRE	1	CA-MXJ70	UX UY
	EWP503-001	ANTENNA WIRE	1	CA-MXJ70	A
	EWP503-001	ANTENNA WIRE	1	CA-MXJ75R	
A 10	QAL0014-001	LOOP ANTENNA	1		
A 13	RM-SMXJ70E	WIRE-LESS REMOTE CONTROL	1	CA-MXJ70	A
	RM-SMXJ70J	WIRE-LESS REMOTE CONTROL	1	MX-J70/MX-J76	
	RM-SMXJ70U	WIRE-LESS REMOTE CONTROL	1	CA-MXJ70	U UP US UT
	RM-SMXJ70U	WIRE-LESS REMOTE CONTROL	1	CA-MXJ70	UX UY
	RM-SMXJ75R	WIRE-LESS REMOTE CONTROL	1	CA-MXJ75R/MX-J75R	
A 14	-----	BATTERY	2		
A 15	QAM0112-001	AC PLUG ADAPTER	1	CA-MXJ70	U US
	VMZ0139-001	CONNECT PLUG	1	CA-MXJ70	UT UX
SVP4	MXJ56K-SPBOX-L	SPEAKER BOX L	1	MX-J76	
	MXJ56K-SPBOX-R	SPEAKER BOX R	1	MX-J76	
	MXJ70K-SPBOX-L	SPEAKER BOX L	1	CA-MXJ70 / CA-MXJ75R	
	MXJ70K-SPBOX-R	SPEAKER BOX R	1	CA-MXJ70 / CA-MXJ75R	
	MXJ70K-SPBOX-L	SPEAKER BOX L	1	MX-J70 / MX-J75R	
	MXJ70K-SPBOX-R	SPEAKER BOX R	1	MX-J70 / MX-J75R	
SVP6	SP-DSS99SL	SROUND SPEAKER BOX	2	CA-MXJ70/J75R MX-J70/J75R	
	SP-DSC99SL	SROUND SPEAKER BOX	1	CA-MXJ70/J75R MX-J70/J75R	
	SP-DSS99GY	SROUND SPEAKER BOX	2	MX-J76	
	SP-DSC99GY	SROUND SPEAKER BOX	1	MX-J76	

**MX-J70/MX-J76/MX-J75R**

**JVC**

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