

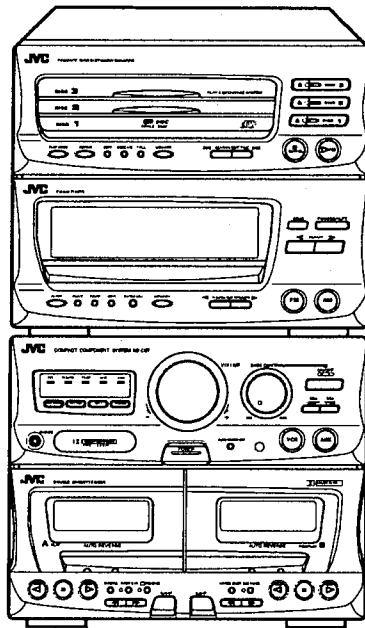
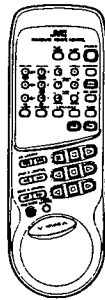
JVC

SERVICE MANUAL

COMPACT COMPONENT SYSTEM

CA-D8T

COMPACT
disc
DIGITAL AUDIO



Pick up	OPTIMA-6
CD signal processor	MN35510

Area Suffix

A	.....	Australia
BS	.....	the U.K.
C	.....	Canada
EF	.....	Continental Europe Except Germany and Italy
EN	.....	Nordic Countris
G	.....	Germany
GI	.....	Italy
J	.....	the U.S.A.
VX	.....	East Europe
US	.....	Singapore
UT	.....	Taiwan
UC	.....	China
UP	.....	Korea
UB	.....	Hong Kong
U	.....	Other Area

NOTE

Only for operation check in DX-D8T, press the test switch S999 on ENB-231-1.
Discharge the backup condenser C903 after the service.

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Safety Precautions

1. The 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 authorised in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits.
2. Any unauthorised design alterations or additions will void the manufacturer's guarantee ; furthermore the manufacturer cannot accept responsibility for personal injury or property damage resulting therefrom.
3. Essential safety critical components are identified by (\triangle) on the Parts List and by shading on the schematics ,and must never be replaced by parts other than those listed in the manual. Please note however that many electrical and mechanical parts in the product have special safety related characteristics . These characteristics are often not evident from visual inspection . Parts other than specified by the manufacturer may not have the same safety characteristics as the recommended replacement parts shown in the Parts List of the service manual and 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.

Warning

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

Important for Laser Products

1. **CLASS 1 LASER PRODUCT**
2. **DANGER** : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION** : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.
4. **CAUTION** : The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.
5. **CAUTION** : If safety switches malfunction, the laser is able to function.
6. **CAUTION** : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

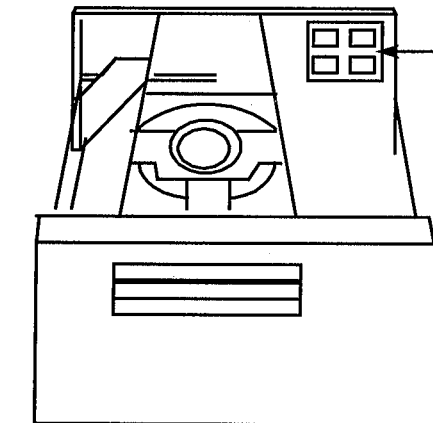
WARNING : Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

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

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

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

REPRODUCTION AND POSITION OF LABELS



WARNING LABEL

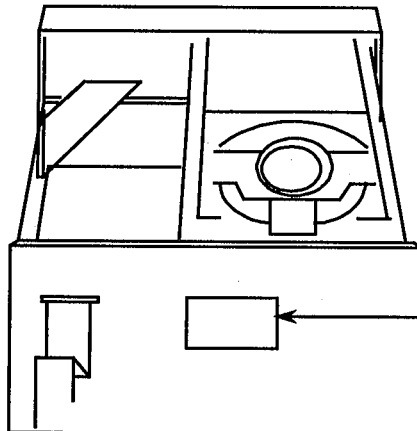
(Except for the U. S. A.)

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

WARNING: Osynlig laserstrålning när denna del ä öppnad och spärren är urkopplad. Betrakta ej stålen. (s)

ADVARSEL: Usynlig laserstrålning ved åbning, når sikkerhedsafbrydere er ude at funktion. Undgåudsættelse for stråling. (d)

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



**CLASS 1
LASER PRODUCT**

CLASSIFICATION LABEL

(Except for the U. S. A. and Canada)

Accessories

Check that you have all of the following items, which are supplied with the CA-D8T.

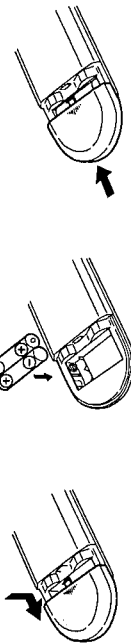
- AM Loop Antenna (1)
- Remote Control (1)
- Batteries (2)
- FM Wire Antenna (1)
- External Wire (1)

If any of these items is missing, contact your dealer immediately.

How To Put Batteries In the Remote Control

Match the polarity (+ and -) on the batteries with the + and - markings in the battery compartment.

R03 (UM-4)/AAA (24F)



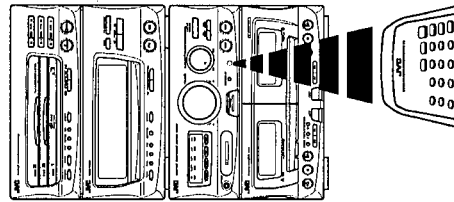
CAUTION: Handle batteries properly.

To avoid battery leakage or explosion:

- Remove batteries when the Remote Control will not be used for a long time.
- When you need to replace the batteries, replace both batteries at the same time with new ones.
- Don't use an old battery with a new one.
- Don't use different types of batteries together.

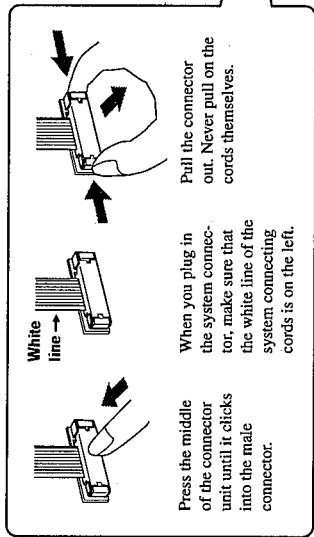
Using the Remote Control

The Remote Control makes it easy to use many of the functions of the CA-D8T from a distance of up to 7m (23 feet) away. You need to point the Remote Control at the remote sensor on the CA-D8T's front panel.

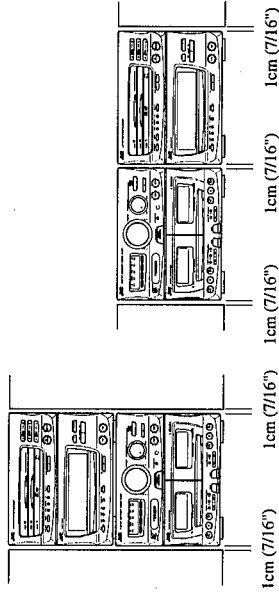


CAUTION: Make all connections before plugging the Unit into an AC power outlet. Connecting the System Control Cord

Connect the components exactly as illustrated below.



Laying Out the System

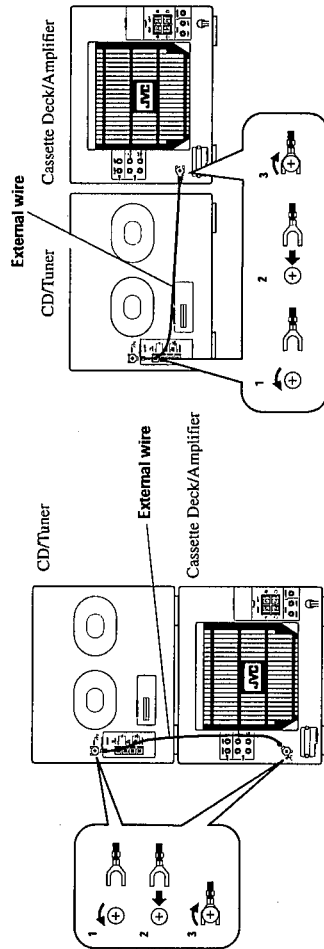


There are two ways to lay out the system, as shown left:

- Leave a space of at least 1 cm (7/16") on both sides of the Unit and at least 10 cm (3-15/16") at the back, for ventilation.
- If the system does not work or needs repairing, please take all the components with you to the nearest agent.

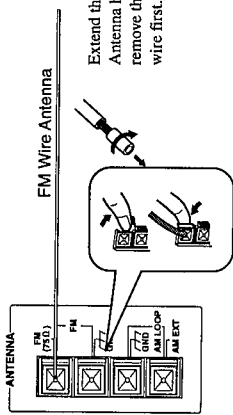
Connecting the External Wire

CAUTION: To prevent malfunction, connect the supplied wire as illustrated below.



CAUTION: Make all connections before plugging the Unit into an AC power outlet.
Connecting the FM Antenna

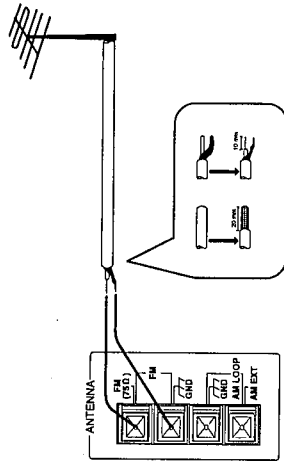
Using the Supplied Feeder Antenna



Extend the supplied FM Wire Antenna horizontally. (Be sure to remove the insulation at the end of wire first.)

Using an FM 75-Ohm Antenna Cable (Not Supplied)

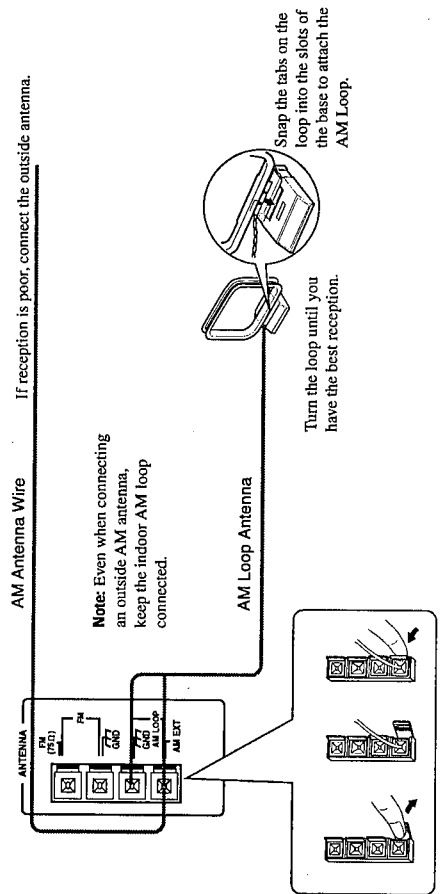
If reception is poor, connect the outside antenna.



Before attaching a 75 ohm coaxial lead (the kind with a round wire going to an outside antenna), disconnect the supplied FM Wire Antenna.

CAUTION: To avoid noise, keep antennas away from metallic parts of the CA-D8T, connecting cord and the AC power cord.

Connecting the AM Antenna



Note: Even when connecting an outside AM antenna, keep the indoor AM loop connected.

Turn the loop until you have the best reception.
 Snap the tabs on the loop into the slots of the base to attach the AM Loop.

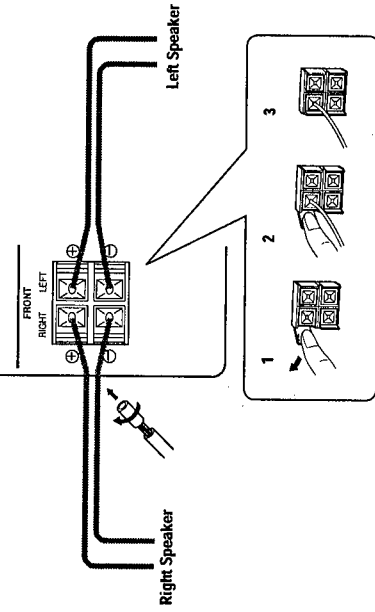
CAUTION: Make all connections before plugging the Unit into an AC power outlet.

Connecting the Speakers (Please refer to instructions for speakers as well when you connect speakers.)

Connecting the Front Speakers

For each speaker, connect one end of the speaker wire to the speaker terminal on the back of the CA-D8T and the other end to the speaker.

1. Open each of the terminals and insert the speaker wires firmly, be sure to remove the insulation at the end of each wire first, then close the terminals.
2. Connect the red (+) and black (-) terminals of the right side speaker to the red (+) and black (-) terminals marked RIGHT on the CA-D8T.
 Connect the red (+) and black (-) terminals of the left side speaker to the red (+) and black (-) terminals marked LEFT on the CA-D8T.

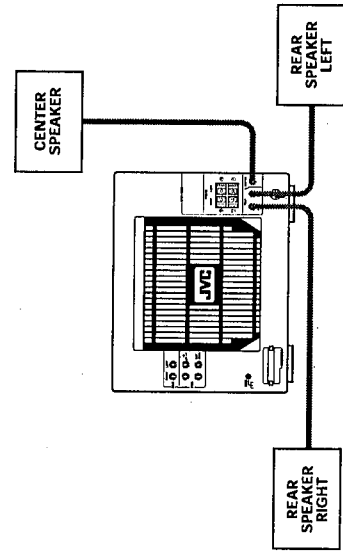


IMPORTANT: Use speakers with the correct impedance only. The correct impedance is indicated on the back panel.

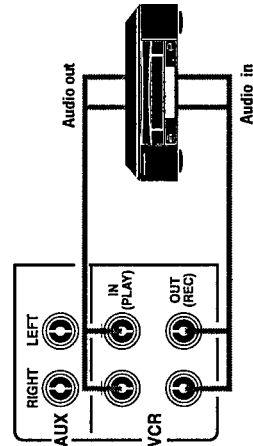
CAUTION: If a TV is installed near speakers, the TV may display irregular colors. In this case, set the speakers away from the TV.

Connecting the Optional Speakers

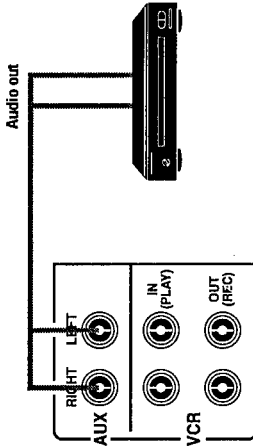
Connect the optional center speaker and rear speakers.



1 Connecting Auxiliary Equipment



VCR
To listen to these sources, press the VCR button.



Video Disc Player or other equipment
To listen to these sources, press the AUX button.

Now you can plug the AC power cord into the wall outlet, and your CA-D8T is at your command!

DEMO Mode

When the CA-D8T is connected to an AC power outlet, a DEMO mode displaying some of the system's features automatically starts.

The DEMO display cycles through the following items repeatedly.

- Scrolling display of "JVC DEMO START"
- Scrolling display of "TRIPLE CD CHANGER"
- Demo of continuous play from DISC-1 to DISC-3.
- Demo of a CD program.
- Scrolling display of "CD RANDOM PLAY"
- Scrolling display of "TUNER RANDOM 40CH PRESET"
- Demo of S.E.A. settings.
- Demo of the Surround Processor settings.

The DEMO display stops automatically when the power is turned on.



Turning the DEMO Display On and Off
To turn the DEMO display off, press the DEMO button while in DEMO mode. The DEMO display stops, and "DEMO OFF" appears briefly on the display.

DEMO OFF

To turn the DEMO display on, press the DEMO button. The display changes from the clock display to the DEMO display.

Note: The DEMO display automatically starts when the power cord is inserted into a wall outlet. To stop the DEMO display when the power cord is inserted into the wall outlet, press the DEMO button to turn the DEMO display off.

COMPU PLAY

COMPU PLAY is JVC's feature that lets you control the most frequently used functions of the CA-D8T with a single touch.

One Touch Operation starts playing a CD, turns on the radio, plays a tape, etc. with a single press of the play button for that function. What One Touch Operation does for you is to turn the power on, then start the function you have specified. If the Unit is not ready, such as no CD or tape in place, the Unit still powers on so you can insert a CD or tape.

How One Touch Operation works in each case is explained in the section dealing with that function.

The COMPU PLAY buttons are:

On the Unit
CD Player
DISC 1 - DISC 3 buttons
DISC 1 - DISC 3 buttons
▶▶▶ All button

Tuner
FM button
AM button

Amplifier
AUX button
VCR button

Cassette Deck
Play-◀ / ▶- button

On the Remote Control
TUNER button
AUX button
VCR button
CD control button
DECK A control and DECK B control buttons
Orange 1-3 buttons
▶▶▶ after pressing the CD CHANGER button
▶▶▶ after pressing the CD CHANGER button j

Adjusting the Brightness of the Display

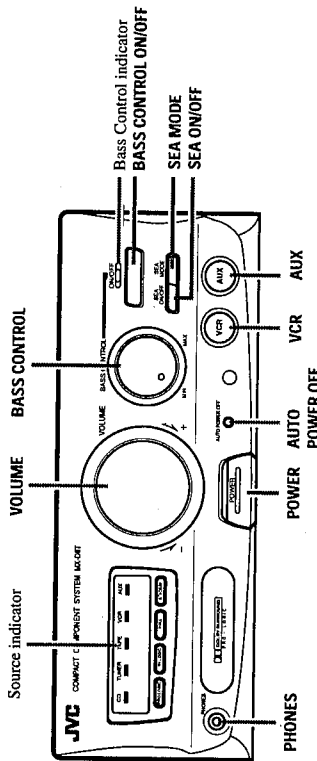


In Standby mode, you can adjust the brightness of the clock display.

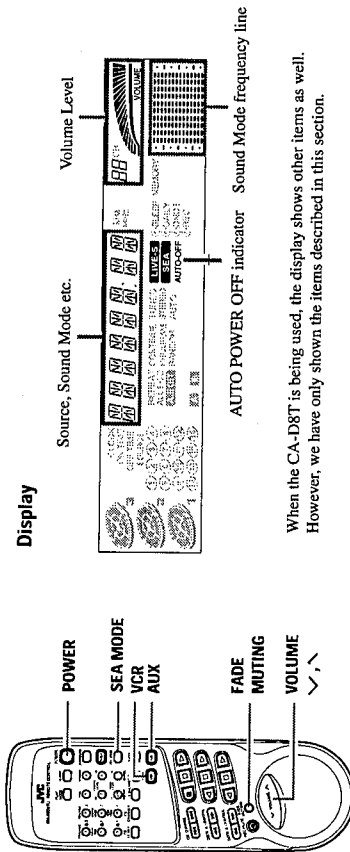
Pressing the TUNING/TIMER/DIMMER > button makes the display brighter.

Pressing the TUNING/TIMER/DIMMER < button makes the display dimmer.

Using the Amplifier



Standby indicator
The POWER button includes a Standby indicator. When the power cord is plugged in, the Standby indicator light is red, indicating that the Unit is in Standby mode. When the POWER button is pressed to turn the Unit on, the Standby indicator light colour changes from red to orange.



When the CA-D8T is being used, the display shows other items as well. However, we have only shown the items described in this section.

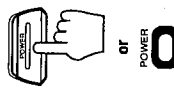
Turning the Power On and Off

Turning the CA-D8T On
Press the POWER button.

- The display comes on and the Standby indicator light color changes from red to orange.
- The CA-D8T comes on ready to continue in the mode it was in when the power was last turned off.
- If the last thing you were doing was listening to a tape in Deck B, you are now ready to listen to a tape again in Deck B, or you can change to another source.
- If you were listening to the Tuner last, the Tuner comes on playing the station it was last set to.

Turning the CA-D8T Off
Press the POWER button again.

- The Standby indicator light color changes from orange to red and the display is blank.
- Some power (20 watts) is always consumed even though power is turned off (called Standby Mode).
- To switch off the Unit completely, unplug the AC power cord from the AC outlet. When you unplug the AC power cord, the clock will be reset to AM 12:00 immediately, and preset Tuner stations will be erased after a few days.



Adjusting the Volume

- Turn the VOLUME control clockwise to increase the volume or counterclockwise to decrease it. Turning the VOLUME control quickly also adjusts the volume level quickly.
- When using the Remote Control, press the VOLUME \blacktriangledown button to increase the volume or press the VOLUME \blacktriangleright button to decrease it.
- Display when the volume level is set to 0
 - Display when the volume level is set to 20
 - Display when the volume level is set to its maximum level
- When the CA-D8T is turned on from Standby mode, the volume is set to 0 and automatically increases to the previous volume level. To stop this automatic volume adjustment, turn the VOLUME control slightly or press the VOLUME button on the Remote Control.

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.

FADE MUTING Function

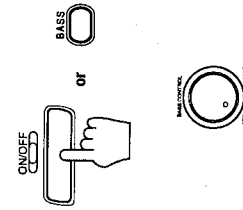
Set the Volume Level to 0 by pressing the FADE MUTING button on the Remote Control. Press this button again to restore the Volume Level to its previous level.

Balance adjustment

Use the BALANCE L or R button to adjust the sound balance of the front speakers. Press the buttons to move the pointer in the display. If the pointer is moved to the left of the center position, the sound level from the right speaker is reduced. If the pointer is moved to the right of the center position, the sound level from the left speaker is reduced.

- Display when set for no sound from the right speaker.
- Display when set for no sound from the left speaker.
- The balance is normally set to the center position.

Bass Control



Use the BASS CONTROL function to control the richness and fullness of the bass sound.

1. Press the BASS CONTROL ON/OFF button to turn Bass Control on.

- When using the Remote Control, press the BASS button.
- The indicator light comes on and "BASS ON" appears on the display.

BASS ON

2. Turn the BASS CONTROL knob.

Turn the knob in the MAX direction to increase the bass sound and in the MIN direction to decrease the bass sound. The default setting is MIN.

To turn BASS CONTROL off, press the BASS CONTROL ON/OFF button again. The indicator light goes out and "OFF" appears on the display.

OFF

- Bass Control effects are not recorded when you record.

The CA-D8T has some preset sound effects that give you control of the way your music sounds, so you can tailor it for your room and for the quality of the source. We can give you some idea of how each one affects the music, but the only way to really tell is to try them yourself.

You can use only one effect at a time, selecting from the S.E.A. Modes is only possible for playback mode.

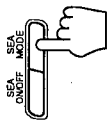
Preset S.E.A. (Sound Effect Amplifier) Effects

Adjustments of frequency range levels have been preset as three S.E.A. effects.

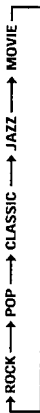
- ROCK** Boosts low and high frequencies.
- POP** Good for vocal music.
- CLASSIC** Set for wide and dynamic sound stereo systems.
- JAZZ** Gives a feeling of a live atmosphere. Good for acoustic music.
- MOVIE** Adds breadth to sounds so you feel like you're in a movie theater.

To get an effect, press the SEA MODE button repeatedly until the SEA Mode you want appears in the display. The "SEA" indicator light comes on.

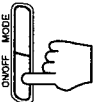
Each time you press the SEA MODE button on the Unit, the display changes as shown below:



or



Each time you press the SEA MODE button on the Remote Control, the display changes as shown below:



When playing either a tape or a CD, Auto Power Off will shut the Unit off when the tape or CD comes to an end. Although Auto Power Off is very useful for shutting off the CA-D8T at night, you can also use it if you think you might forget to turn the Unit off when leaving the house or your room at other times of the day.



To Use Auto Power Off

Press the AUTO POWER OFF button so that the "AUTO-OFF" indicator lights up on the display.

To Cancel Auto Power Off

Press the AUTO POWER OFF button again so that the "AUTO-OFF" indicator disappears from the display.

Important Information On Using Auto Power Off

- The end of CD musical performance varies depending on the play mode of the CD Player. If the play mode is "CONTINUE" or "RANDOM", when all tracks on the disc set in the CD player end, the power is automatically turned off. If the play mode is "PROGRAM", the power is automatically turned off when the last track you programmed ends.
- Auto Power Off will still work even if you press the REPEAT button.
- Repeat Mode ("REPEAT ALL" indicator lights up on the display): This automatically turns off the power after all the tracks on the CDs in the CD Player have been played.
- Repeat Mode ("REPEAT 1 CD" indicator appears on the display): This automatically turns the power off after all of the tracks on the CD have been played.
- Repeat 1 Mode ("REPEAT 1" indicator lights up on the display): This automatically turns off the power after the selected track has been played.
 - If you press the AUTO POWER OFF button while the tape is playing:
 - If Reverse Mode is off (the REVERSE indicator is not lit), the Unit turns off when the current side finishes.
 - If Reverse Mode is on (the REVERSE indicator is lit), the Unit will turn off when the tape finishes playing in the ◀ direction.

Listening To Optional Equipment

By playing the sound from VCR or auxiliary equipment through the CA-D8T, you can gain control over how the music or program sounds. Once the connected equipment is playing through the CA-D8T, you can apply the sound effects.

- First make sure that the optional equipment is properly connected to the CA-D8T. (See page 7).
- 1. Set the VOLUME control to 0.
- 2. Press the VCR or AUX button. When CA-D8T is in Standby mode, the Unit is automatically turned on and "VCR" or "AUX" appears on the display.
- 3. Start playing the selected equipment.
- 4. Adjust the VOLUME control to the desired listening level.
- 5. Select a sound effect mode, if you wish.

VCR or AUX



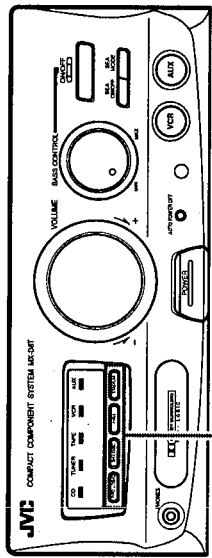
or



To Cancel the Setting

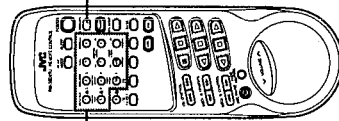
- Change the source by starting any one of the CA-D8T's built-in sound sources, such as the Tuner or CD Player.
- You can record sound from one of the sources on the CA-D8T onto a VCR. For details, refer to the instruction manual of your VCR.

Surround Processor



Surround buttons

Accessing the Surround Processor Functions
 Press the number keys with blue labels on the Remote Control to use the surround processor functions. To use the function marked in blue, press the SURROUND button first, then press the desired number key.



Number keys

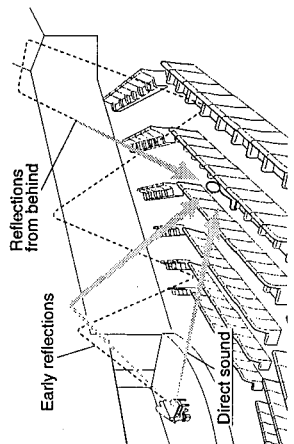
SURROUND button

The built-in surround processor provides four types of sound programs—Dolby Pro Logic, Dolby 3 Channel Logic, JVC's Hall Surround and Stadium Surround.

- You need to connect the optional center speaker and rear speakers to use the sound processor functions.


What is surround?

The sound heard in a concert hall or a movie theater consists of direct sound and indirect sound: early reflections and reflections from behind. The reflected sounds are always delayed by the distances of the ceiling and walls from the listener. There reflections are some of the most important elements of the acoustic surround.



Dolby Surround

The Dolby Surround has been also developed to reproduce the important elements of the acoustic surround at home.

To watch the sound tracks of video software bearing the mark  (Dolby Surround) which includes the same encoded surround information as found in Dolby Stereo film, the CA-D8T can provide you with 2 Dolby Surround programs (Dolby Pro Logic and Dolby 3ch Logic).

Dolby Pro Logic: Select this mode when the optional rear speakers are connected.

Dolby 3ch Logic: Select this mode when no rear speakers are connected.

Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under Canadian patent number 1,037,877. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

JVC's Hall Surround and Stadium Surround

In order to reproduce a more realistic sound field in your listening room while playing an ordinary stereo source, Hall Surround has been designed to give you clear vocals and to create the feeling of a concert hall. Stadium Surround has been designed to create the feeling of an open-air concert in a stadium. The sound is reproduced through the front speakers and rear speakers.

Note: The surround processor effects will not be correct for monaural sources.

Preparing the Surround Processor

To use the surround processor effects, you need to prepare the various surround processor settings. These settings are set using the Remote Control.

The settings that are required, varies according to the type of surround processor effect selected. Adjust the settings for each of the surround processor effects you want to use.

The Surround Processor settings are:

Center Speaker Mode

Center Speaker mode contains the following four settings.

- PHANTOM:** Select this setting if you have not connected a center speaker. The left and right front speakers project the sound to give the effect of a center speaker.
- NORMAL:** Select this setting if you are using a small center speaker. Since the center speaker cannot boost the low tones effectively, this setting uses the front speakers to boost the low tones from the center speaker.
- WIDE:** Select this setting if you are using a center speaker that is similar in power to the front speakers.
- OFF:** Select this setting to turn off the output for the center speaker.

Delay Time Mode

Delay Time mode contains the following four settings.

- DELAY-1:** Select this setting if the rear speakers are further away from your listening position than the front speakers. (Delay time: 15 msec.)
- DELAY-2:** Select this setting if the rear speakers and front speakers are about the same distance way from your listening position. (Delay time: 20 msec.)
- DELAY-3:** Select this setting if the rear speakers are nearer to your listening position than the front speakers. (Delay time: 25 msec.)
- DELAY-4:** Select this setting if the rear speakers are very close to your listening position compared to the front speakers. (Delay time: 30 msec.)

Adjusting the level of the Center Speaker

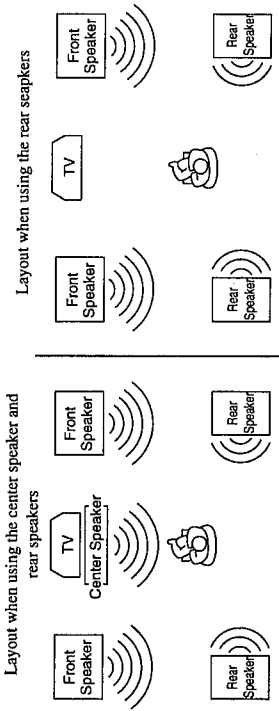
Adjust the level of the center speaker between +10 and -10. Set the level so that it is about the same as the level from the front speakers.

Adjusting the level of the Rear Speakers

Adjust the level of the rear speakers between +10 and -10. Set the level so that it is about the same as the level from the front speakers.

- You cannot adjust the levels of the left and right rear speakers independently.

Speaker arrangements for Dolby Pro Logic



Setting-up Dolby Pro Logic

1. Press the PRO LOGIC button.
When using the Remote Control, press the SURROUND button then press the PRO LOGIC button. The PRO LOGIC button lights up and "DOLBY PRO LOGIC" appears in red on the display window above the Dolby Pro Logic buttons on the Unit. "PRO LOGIC" appears on the main display.

PRO LOGIC

- Perform the steps below using the buttons on the Remote Control.
- 2. Select the desired Center Speaker mode.
Press the SURROUND button on the Remote Control then press the CENTER MODE button. The display changes with each press of the button, as shown below.

→ NORMAL → WIDE → OFF → PHANTOM

- 3. Select the Delay time.
Press the DELAY TIME button. The display changes with each press of the button, as shown below.

→ DELAY.1 → DELAY.2 → DELAY.3 → DELAY.4

- 4. Set the volume to the level you normally use.

- 5. Press the TEST TONE button.
A test tone is emitted in the order shown below.

→ LEFT → CENTER → RIGHT → REAR

- When "PHANTOM" is selected for Center Speaker mode, the test tone for the center speaker is projected by the front speakers.
- When "OFF" is selected for Center Speaker mode, no test tone is output from the center speaker.

- 6. Adjust the level for the center speaker.
Press the CENTER LEVEL + or - button. Set the level so that it is about the same as the level from the front speakers.

CENTER 10

- You cannot adjust the level for the center speaker if "PHANTOM" or "OFF" is selected for Center Speaker mode.

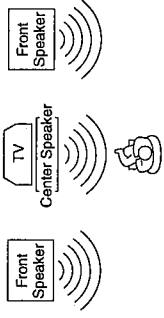
- 7. Adjust the level for the rear speakers.
Press the REAR LEVEL + or - button. Set the level so that it is about the same as the level from the front speakers.

REAR 10

- 8. To cancel Test Tone mode.
Press the TEST TONE button again.

This completes the preparations required for using Dolby Pro Logic.

Speaker arrangements for Dolby 3 Channel Logic



Setting-up Dolby 3 Channel Logic

1. Press the 3CH LOGIC button.
When using the Remote Control, press the SURROUND button then press the 3CH LOGIC button. The 3CH LOGIC button lights up and "DOLBY PRO LOGIC" appears in red on the display window above the Dolby Pro Logic buttons on the Unit. "3CH LOGIC" appears on the main display.

3CH LOGIC

- Perform the steps below using the buttons on the Remote Control.
- 2. Select the desired Center Speaker mode.
Press the SURROUND button on the Remote Control then press the CENTER MODE button. The display changes with each press of the button, as shown below.

→ NORMAL → WIDE → OFF

- 3. Set the volume to the level you normally use.

- 4. Press TEST TONE button.
A test tone is emitted in the order shown below.

→ LEFT → CENTER → RIGHT

- When "OFF" is selected for Center Speaker mode, no test tone is output from the center speaker.
- 5. Adjust the level for the center speaker.
Press the CENTER LEVEL + or - button. Set the level so that it is about the same as the level from the front speakers.

CENTER 10

- You cannot adjust the level for the center speaker if "OFF" is selected for Center Speaker mode.

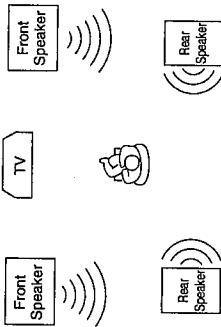
- 6. To cancel Test Tone mode.
Press the TEST TONE button again.

This completes the preparations required for using Dolby 3 Channel Logic.

- You cannot adjust the Delay Time or rear speaker levels in Dolby 3 Channel Logic mode.

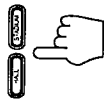
Getting Ready To Use Hall Surround and Stadium Surround

Speaker arrangements for Hall Surround and Stadium Surround



Setting-up Hall Surround and Stadium Surround

1. Press the **HALL** or **STADIUM** button.
When using the Remote Control, press the **SURROUND** button then press the **HALL** or **STADIUM** button.
The button lights up and "HALL" or "STADIUM" appears on the display. The "LIVE-S" indicator lights come on.

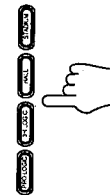


HALL or STADIUM

2. Start playback from the desired source.
 3. Adjust the level for the rear speakers.
Press the **REAR LEVEL** + or - button. Set the level so that it is about the same as the level from the front speakers.
- REAR LEVEL
- Adjust the rear speakers level for both **HALL** and **STADIUM** mode separately.
 - You cannot adjust the Center Speaker mode, center speaker level, or Delay time for Hall Surround or Stadium Surround.



Using the Surround Processor

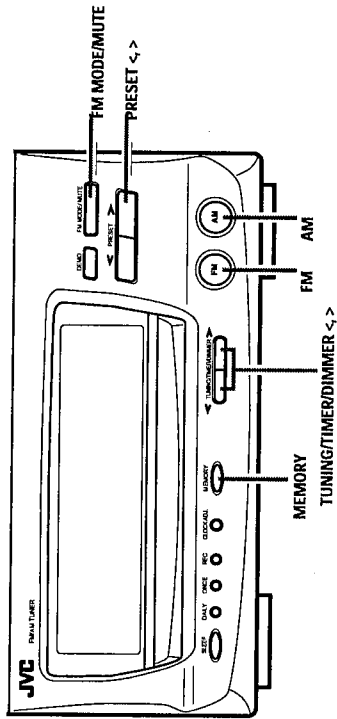


1. Press the desired Surround button.
When using the Remote Control, press the **SURROUND** button then the desired Surround button.
2. Start playback from the desired source.
Enjoy the great sound of the surround processor.

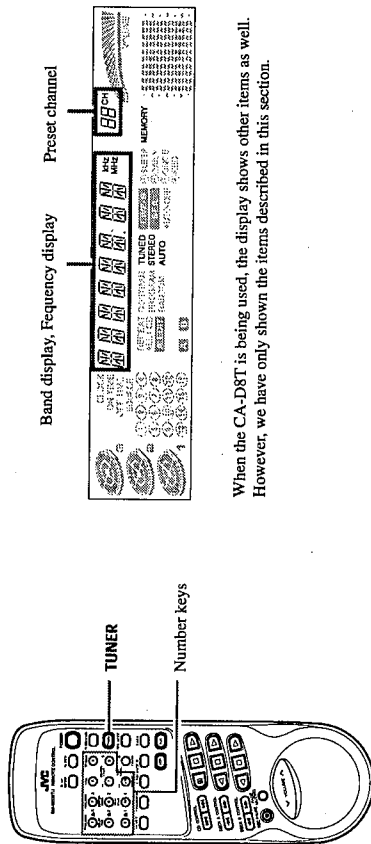
- When **PRO LOGIC** or **3CH LOGIC** are selected, use recording that have the **DOLBY SURROUND** logo.
- PRO LOGIC** and **3CH LOGIC** can used with **SEA Mode**. Select the **SEA Mode** you wish to add to the source.
To cancel the surround processor effects, press the **SURROUND** button again. When using the Remote Control, press the **SURROUND** button, then the selected Surround Processor button.

To cancel the surround processor effects, press the **SURROUND** button again. When using the Remote Control, press the **SURROUND** button, then the selected Surround Processor button.

Using the Tuner



Display



When the CA-D8T is being used, the display shows other items as well. However, we have only shown the items described in this section.

You can listen to both **FM** and **AM** stations. Stations can be tuned in manually, automatically, or from preset memory storage.

- Before listening to the radio:
 - Check that both the **FM** and **AM** antennas are firmly connected. (See page 5).

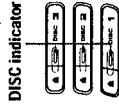
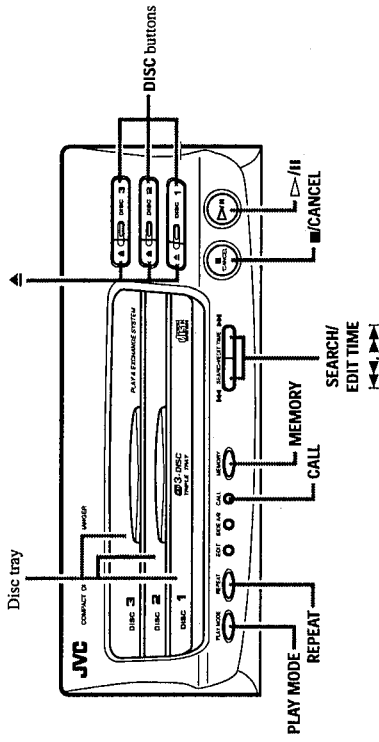
One Touch Radio

Just press the **FM** button to turn on the Unit and start playing the most recent **FM** station tuned in, or press the **AM** button to listen to the most recent **AM** station tuned in.

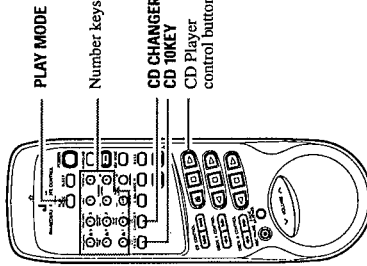
- You can switch from any other sound source to the radio by pressing either the **FM** or **AM** button.



Using the CD Player



DISC indicator
Each Disc button has a disc indicator. This indicator is off when the CD Player is checking that there is no disc in the disc tray for the corresponding disc number. Pressing the **▶** button turns the indicator on.



Using the Number Keys

To use the functions assigned to the number keys on the Remote Control, press the CD CHANGER button or the CD TOKEY button before using the number keys.

Using the number keys after pressing CD CHANGER

Perform the functions in orange for the following keys.

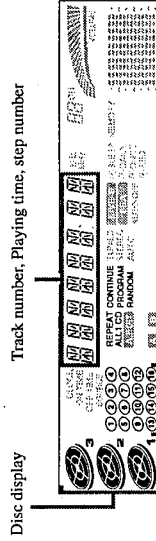
Open/Close (**▲** - **▶**), Disc Buttons (1 to 3), PLAY MODE

Using the number keys after pressing CD TOKEY

Perform the functions in white for the following keys.

1 - 10 (for track selection)

Display



Track number, Playing time, step number

All track numbers of the loaded CD

Disc display

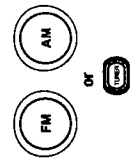
A red marker lights on the disc display for the disc number you have selected. This disc display blinks while a CD is being played.

The center of the disc display is not lit while CD Player is checking that there is no disc in the disc tray for the corresponding disc number.

Disc maker

When the CA-D8T is being used, the display shows other items as well. However, we have only shown the items described in this section.

1-12 Tuning In a Station



Press the **FM** or **AM** button (or the **TUNER** button on the Remote Control) to turn on the radio. The display shows the station frequency tuned to.

Three ways to select a station

- Press the **TUNING/TIMER/DIMMER** < or > button repeatedly to move from frequency to frequency until you find the one you want.
- OR
- Hold down the **TUNING/TIMER/DIMMER** < or > button, the frequency starts changing on the display. When a station is tuned in, "TUNED" lights up on the display and the frequency stops changing.

OR

- (Possible only after presetting stations.) Press once and release the **PRESET** < or > button to go to the next preset station, or hold the **PRESET** < or > button to cycle through the preset stations: release the button when the preset station you want shows on the display.

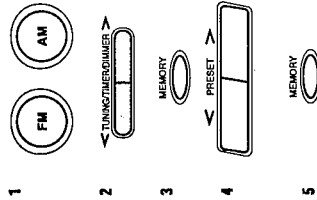
You can also use the Remote Control to tune in preset channels:

1. Press the **TUNER** button so that you can receive the most recent station tuned in.
2. Select the station by entering the preset number in the number keys of the Remote Control.
 - Example: for channel 5, press 5. For channel 15, press +10 then 5. For channel 20, press +10, then 10. For channel 32, press +10 three times, then 2.

Presetting Stations

You can store up to 40 of your favorite radio stations (FM and AM) in memory, giving you quick, easy access to the stations.

Note: In some cases, test frequencies have been already memorized for the tuner since the factory examined the tuner preset function before shipment. This is not a malfunction. You can preset the station you want into memory by following the presetting procedure.



1. Select a band by pressing either the **FM** or **AM** button.

2. Press the **TUNING/TIMER/DIMMER** < or > button to tune in a station.

3. Press the **MEMORY** button on the Tuner.
 - On the display, "MEMORY" will blink for 5 seconds.
 - During these 5 seconds while "MEMORY" is blinking, you can assign a channel number to the station and enter it into the memory.

4. Select a channel number by pressing the **PRESET** < or > button until you find the channel number you want.

5. Press the **MEMORY** button and the station will be assigned to the channel number showing on the display. "MEMORY" appears in the display.

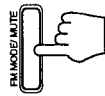
MEMORY

- If a station has been previously stored using the same channel number, this will be erased and the newly selected station will be stored.
- If "MEMORY" in the display goes off, start again from step 3.

6. Repeat steps 1 - 5 for each station you want to store in memory with a preset number.

CAUTION: If the Unit is unplugged or if a power failure occurs, the preset stations stored in memory will be erased after a few days.

To Change the FM Reception Mode



When an FM stereo broadcast is hard to receive or noisy, press the **FM MODE/MUTE** button so that the "AUTO" indicator goes off in the display. Reception improves, but there are no stereo effects. In this monaural mode, noise comes out while tuning in stations (since muting is also canceled).

To restore the stereo effect, press the **FM MODE/MUTE** button so that the "AUTO" indicator lights up. In this stereo mode, no noise comes out while tuning in stations, and you can hear stereo sounds when a program is broadcast in stereo.

The CA-D8T's CD Player has an Automatic Changer with 3 disc trays. You can use Continuous, Random, Program or Repeat Play for the discs in DISC-1, DISC-2 and DISC-3. Repeat Play can repeat all the tracks on all the CD's, the tracks on one of the CD's or one track on one CD.

There is also the Tray Lock function, which safely keeps discs in the trays. Here are the basic things you need to know to play a CD and locate the different selections on it. Each selection is called a track, so when we are talking about locating a track, we are also talking about how you find a certain song or performance.

The Quickest Way To Start a CD Is With the One Touch Operation

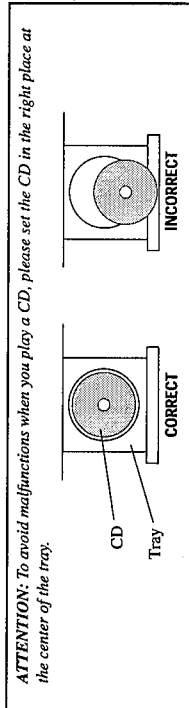
- The power comes on, and operations are done automatically.
Press the [] button (or the [] button on the Remote Control).
If there is a CD in the disc tray of the selected (ft) disc number, playback continues from the track where it was interrupted.
If there is no CD in any of the disc trays, the message "OPEN" appears in the display after a few seconds and the disc tray for the marked disc opens.
Press a DISC button (1 to 3).
If there is a CD in the disc tray for the disc number you have selected, playback begins from the first track of that disc. If there is no CD in the disc tray, the message "OPEN" appears in the display after a few seconds and the disc tray opens.
Press the [] button.
The power turns on, and the tray opens automatically.

Basics of Using the CD Player — Continuous Play

You can play the discs continuously in the DISC 1 to DISC 3 trays.

To Insert Discs

1. Press the [] button on the right of the tray you want to insert the disc into. (When using the Remote Control, press the Open/Close (A1 - A3) buttons after pressing the CD CHANGER button.) The disc tray slides out automatically.
2. Place a CD, with its label side up, onto the tray.



3. Press the [] button (or the Open/Close (A1 - A3) button on the Remote Control) to close the tray.
4. Repeat steps 1 to 3 to insert other discs into other trays.

To continue putting discs into other trays, even if a tray is open, by pressing the [] button of another disc tray, the open tray will close automatically, and the new disc tray will slide out.

- To put an 8 cm CD into a tray, insert it so that it is aligned with the groove in the tray's center.

- "OPEN" appears in the display when a tray opens, and "CLOSE" when a tray closes.

Note: When the CD Player is reading a disc, "..." appears in the display. While this is being displayed, the [] button or DISC button cannot be used. Once the display changes from "..." to another display, the [] button and DISC button can be used.

To Play a Disc

This function plays the disc in the Unit continuously.

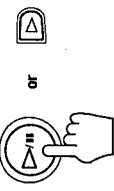
1. Prepare the discs.

2. Press the DISC button (1-3) of the disc you want to play. (When using the Remote Control, press the DISC button (orange 1-3) after pressing the CD CHANGER button.)

The first track of the selected disc will begin playing.

When the selected disc finishes playing, the next disc will begin playing automatically. When the last disc has finished playing, the Unit will stop automatically.

- When a DISC button is pressed while a tray is open, the open tray will close automatically and Continuous Play playback begins from the first track of the disc.



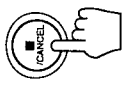
To use Continuous Play from the first track of the disc selected by the disc marker, you do not need to press a DISC button (1-3), just press the [] button (or [] button on the Remote Control).

Playing order of discs

- When playback starts from DISC-1, the playing order is DISC-1 -> DISC-2 -> DISC-3. When DISC-3 has finished, the CD Player selects DISC-1 (the disc marker is on) and stops.
When playback starts from DISC-2, the playing order is DISC-2 -> DISC-3 -> DISC-1. When DISC-1 has finished, the CD Player selects DISC-2 (the disc marker is on) and stops.
When playback starts from DISC-3, the playing order is DISC-3 -> DISC-1 -> DISC-2. When DISC-2 has finished, the CD Player selects DISC-3 (the disc marker is on) and stops.
If any of the disc trays are empty, the CD Player skips that disc tray and continues through the remaining disc trays in the order shown above.

Note: If there is no CD in disc tray for the DISC button you pressed, the message "OPEN" appears in the display and the disc tray automatically opens.

If there is no disc in the disc tray for the selected disc number, when the [] button (or the [] button on the Remote Control) is pressed, playback begins from the next disc.



To stop play the disc, press the [] button (or the [] button on the Remote Control) for the disc number being played. To pause, press the [] button. The Disc display will blink (or the [] button on the Remote Control). To cancel pause, press the [] button again (or the [] button on the Remote Control). Play continues from the point where it was paused.

RESUME

When the [] button (or the [] button on the Remote Control) is pressed during playback, and the source is changed, the track number is memorized even when the power is turned off. The next time the [] button (or the [] button on the Remote Control) is pressed, play resumes from the track where it was interrupted.

- To start playback from the first track, press the DISC button.

To Change Discs While Playing

You can replace a CD in a tray not being used, while another CD is playing.

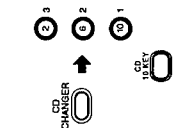
1. Press the [] button (or [] button on the Remote Control) of the tray not being used. The tray opens.
2. Replace the disc in the tray.
3. Press the [] button (or [] button on the Remote Control) to close the tray.

To Select a Disc, Track or Passage Within a Track

1. Press the **DISC** button (1-3) for the disc tray containing the track you want to listen to.
 - Example: for the third disc, press 3.
2. Press the **SEARCH/EDIT TIME** button to select the track.
 - The selected track starts playing.
 - Each time you briefly press and release the **SEARCH/EDIT TIME** button, the track changes by one.
 - Press and release the **SEARCH/EDIT TIME** button to go ahead one track at a time.
 - Press and release the **SEARCH/EDIT TIME** button to go back one track at a time.
 - Holding down the **SEARCH/EDIT TIME** button allows you to change tracks continuously.
 - Holding down the **SEARCH/EDIT TIME** button, during playback, will fast forward/backwards the CD so you can quickly find a particular passage in the selection you are listening to. (The fast forward/backwards function cannot be used from the Remote Control.)



or



Locating a Track With the Remote Control Directly

- Using the number keys on the Remote Control allows you to go directly to the beginning of any track.
1. Press the **CD CHANGER** button.
 2. Press the **DISC** button (orange 1-3) for the disc tray containing the track you want to listen to.
 - Example: for the third disc, press 3.
 3. Press the **CD 10KEY** button.
 4. Enter the number of the track you want to listen to with the number keys.
 - The selected track starts playing.
 - Example: for track 5, press 5. For track 15, press +10 then 5. For track 20, press +10, then 10. For track 32, press +10 three times, then 2.

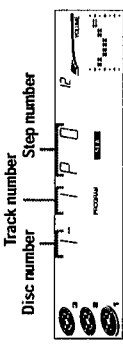
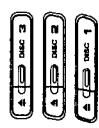
Programming the Playing Order of the Tracks

You can change the order in which the discs and tracks play, and select only the discs and tracks you want from among those loaded in the CD Player.

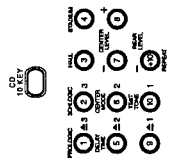
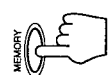
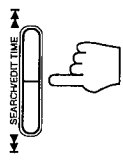
- You can program up to 32 steps in any desired order from among the discs in the CD Player.
- You can only make or change a program when the CD Player is stopped.

Using the Unit

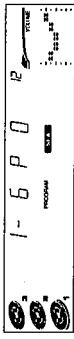
1. Press the **PLAY MODE** button.
 - The message "PROGRAM" appears in the display and the PROGRAM indicator comes on. If a program is already running, the track number blinks.
2. Select a disc with the **DISC** buttons (1 to 3).
 - The display changes with each press of the PLAY MODE button, as shown below. → PROGRAM → RANDOM → CONTINUE (Continuous Play) → (back to the beginning)
2. Select a disc with the **DISC** buttons (1 to 3).
 - The display changes to the Program Entry display and the disc number and track number sections blink for a few seconds.



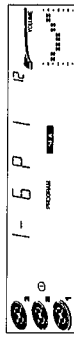
- While the display is blinking, perform the operations in steps 3 to 4. When the blinking display changes to the "PROGRAM" display, repeat the operations in steps 2 to 4.



3. Press the **SEARCH/EDIT TIME** button or **MEMORY** button to select the track to program.
 - The track number appears on the display.



4. Press the **MEMORY** button.
 - The blinking disc number and track number changes to a steady light, and the step number is displayed.

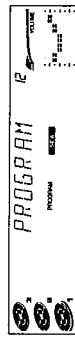


5. Repeat steps 2 to 4 to select the other tracks for the program.

6. Press the **MEMORY** button.
 - The Unit plays the tracks in the order you have programmed them.

Using the Remote Control

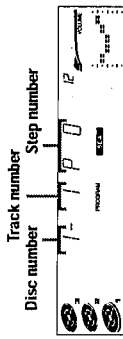
1. Press the **PLAY MODE** button.
 - The message "PROGRAM" appears on the display and the PROGRAM indicator comes on. If a program is already running, the track number blinks.



- The display changes with each press of the PLAY MODE button, as shown below. → PROGRAM → RANDOM → CONTINUE (Continuous Play) → (back to the beginning)

2. Press the **CD CHANGER** button.

3. Select a disc with the **DISC** buttons (orange 1-3).
 - The display changes to the Program Entry display and the disc number and track number sections blink for a few seconds.



- While the display is blinking, perform the operations in steps 4 to 5. When the blinking display changes to the "PROGRAM" display, repeat the operations in steps 3 to 5.

4. Press the **CD 10KEY** button.

5. Press the number keys (1 to 10 and +10) to select the track to program.
 - Example: For track 5, press 5. For track 15, press +10 then 5. For track 20, press +10 then 10. For track 32, press +10 three times, then 2.

The blinking disc number and track number changes to a steady light, and the step number is displayed.



6. Repeat steps 1 to 5 to select the other tracks for the program.

7. Press the **MEMORY** button.
 - The Unit plays the tracks in the order you have programmed them.

Repeating a Selection or the Discs

You can have all the discs, a program or the individual selection currently playing repeat as many times as you like.



Press the **REPEAT** button on the CA-D8T.

The display changes with each press of the button, as shown below.
→ REPEAT ALL → REPEAT 1 CD → REPEAT 1 → blank display → (back to the beginning)

REPEAT ALL: Repeats all the tracks on the CD's in the CD Player, or all the tracks in the program.

REPEAT 1 CD: Repeats all the tracks on one CD.

REPEAT 1: Repeats one track on a CD.

- "REPEAT ALL" and "REPEAT 1" remain on the display even when you change the play mode.
- The three Repeat Modes above can be selected during Continuous Play, however, during Program Play and Random Play, you can only select REPEAT ALL or REPEAT 1.

To exit Repeat mode, press the REPEAT button until the Repeat mode indicators on the display go out.

Tray Lock Function

In order to safely keep the discs in the CD Player, the three trays can be electronically locked in a single operation.

When the electronic lock is on, the trays cannot be opened even if the **▲** button is pressed. This function can only be accessed by using the buttons on the Unit itself.

Locking the Electronic Lock

1. Put the CA-D8T's power into **STANDBY** mode.
If the power is on, press the **POWER** button to light the Standby indicator.
2. While pressing the **■/CANCEL** button, press the **▲** button for **DISC 1's** tray on the Unit. "LOCKED" appears on the display to let you know that the trays have been locked.

LOCKED

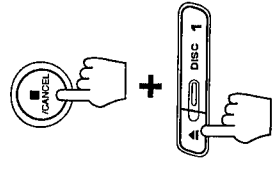
When the CD Player trays are locked, pressing the **▲** buttons displays the message "LOCKED" on the display and the trays do not open. Also, the **▲** button cannot be used to automatically turn on the power.

Unlocking the Electronic Lock

1. Put the CA-D8T's power into **STANDBY** mode.
If the power is on, press the **POWER** button to light the Standby indicator.
2. While pressing the **■/CANCEL** button, press the **▲** button for **DISC 1's** tray on the Unit. When the unlock operation is done, "UNLOCKED" appears in the display to show that the lock has been taken off.

UNLOCKED

The trays can now be opened by pressing the **▲** buttons. The **▲** button can also be used to automatically turn on the power.



- If you try to program a 33rd track, the CA-D8T lets you know that the program is full by displaying the message "FULL" on the display.
- If you try to program an disc tray that is empty, or a track number that does not exist on a disc (for example, selecting track 14 on a disc that only has 12 tracks), the selected disc or track are skipped when the program is played.
- You can skip to a particular program step by pressing the **SEARCH/EDIT TIME** **◀▶** or **▶▶** button (or **◀▶** or **▶▶** button on the Remote Control) during program play.
- To play the programmed tracks over and over, press the **REPEAT** button. The Repeat mode indicators light up in sequence with each press of the **REPEAT** button.

To stop playing, press the **■/CANCEL** button (or the **□** button on the Remote Control) once. **To delete all the tracks in a program,** keep pressing the **■/CANCEL** button on the Unit until all the tracks in the program have been deleted, or press the **▲** button for each disc in the program. (When using the Remote Control, press the **Open/Close** button (**▲** I - **▲** 3) after pressing the **CD CHANGER** button.) **To exit Program Mode,** press the **PLAY MODE** button twice to change to Continuous Play mode. (When using the Remote Control, press the **PLAY MODE** button.)

To Check the Program

Check the contents of a program while the CD Player is stopped.

Using the Unit

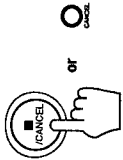
Each time you press the **CALL** button, the program contents are shown on the display in the programmed order.

Using the Remote Control

Each time you press the **▶▶** button, the program contents are shown on the display in the programmed order. Pressing the **◀◀** button displays the previous step in the program.

To Modify the Program

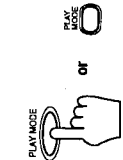
Modify the contents of a program while the CD Player is stopped. Press the **■/CANCEL** button (or **CANCEL** button on the Remote Control), the last track in the program is deleted. This function can only be accessed by using the buttons on the Unit itself. Each time you press the button, the last track listed in the program is deleted from the program. To add a track to the program, use the buttons on the Unit or the Remote Control to change the program. The news tracks are added to the end of the program.



or



Random Play



or



The tracks will play in no special order when you use this mode.

1. Press the **PLAY MODE** button (or the **PLAY MODE** button on the Remote Control) while the CD Player is stopped to change to the **RANDOM** Mode display.



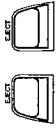
- The display changes with each press of the **PLAY MODE** button, as shown below.
→ PROGRAM → RANDOM → CONTINUE (Continuous Play) → (back to the beginning)
- 2. Press the **▷/H** button (or the **▷** button on the Remote Control). The tracks are played in random order. When all of the tracks have been played, the CD Player stops.

Note: Press the **DISC** buttons (1-3), or the number keys, to cancel Random play and begin play/back in Continuous Play mode.

- Press the **REPEAT** button before or during random play to instruct the CA-D8T to continue with a different random track selection after the last selection is played.

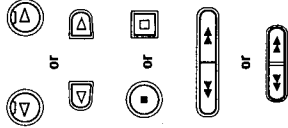
To cancel random play, press the **PLAY MODE** button and select another mode.

Regular Play



When the power is already on, you can use this basic procedure:

1. Press the EJECT button for the deck you want to use.
2. When the cassette carrier opens, put the cassette in, with the exposed part of the tape down, toward the base of the CA-D8T.
 - If the cassette carrier does not open, turn the Unit off, then back on and press the EJECT button again.
3. Close the carrier gently.
4. Press the \blacktriangleleft button (or \blacktriangleright button on the Remote Control) to play the front side, or the \blacktriangleright button (or the \blacktriangleleft button on the Remote Control) to play the reverse side. The indicator on the button flashes and the tape starts playing.



To stop playing, press the \blacksquare button (or \blacksquare button on the Remote Control). To remove the tape, stop the tape, and press the EJECT button.

Fast Left and Fast Right

- While the tape is stopped, press the \blacktriangleleft button and the tape will wind rapidly onto the left side of the cassette without playing.
- While the tape is stopped, press the \blacktriangleright button and the tape will wind rapidly onto the right side of the cassette without playing.
- Fast Left or Fast Right can be used for the tape in Deck A while the tape in Deck B is playing and vice versa.

Music Scan

To find the beginning of a music track during play, use the Music Scan function. Music Scan searches for blank portions that usually separate tracks, then plays the next song.

To Find the Beginning of the Current Song

- Press the \blacktriangleleft or \blacktriangleright button during play.
- Make sure that you press the \blacktriangleleft or \blacktriangleright button in the opposite direction to that in which the tape is playing. Searching stops at the beginning of the current song, and the current song starts automatically.

To Find the Beginning of the Next Song

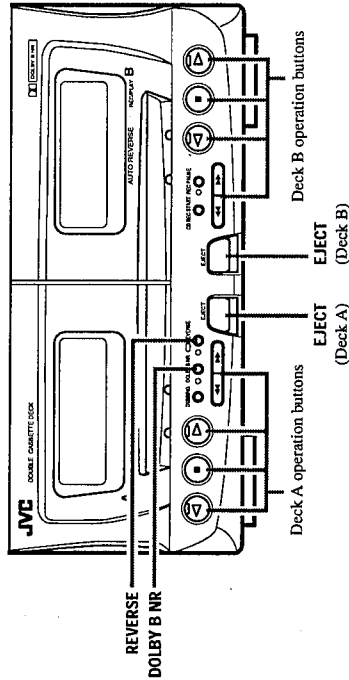
- Press the \blacktriangleleft or \blacktriangleright button during play.
- Make sure that you press the \blacktriangleleft or \blacktriangleright button in the same direction as that in which the tape is playing. Searching stops at the beginning of the next song, and the next song starts automatically.

Music Scan works by detecting a four-second long blank at the beginning of each selection, so it won't work well if your tape has:

- No blank at the beginning of a track
- Noise (often caused by much use or poor quality dubbing) which fills the blank with noise.
- Long, very soft passages or pauses in a selection. The scan will detect these as four-second long blanks. If this happens, just scan again until you reach the selection you want.

Note: Music Scan can not be used with both Deck A and Deck B simultaneously.

Using the Cassette Deck (Listening to a Tape)



Indicator

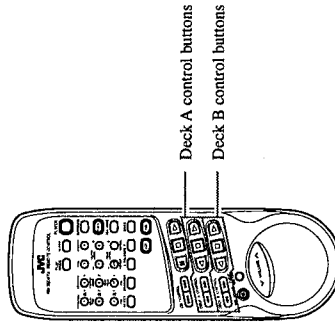


There are indicators on the \blacktriangleleft and \blacktriangleright button of Deck A and Deck B.

These indicators show the direction in which the tape advances during playback.

These indicators flash slowly when playing or recording, and quickly during fast left and fast right.

When doing Music Scan, the indicators flash alternately slowly and quickly.



The Cassette Deck allows you to play, record and dub audio tapes.

- Most tapes are now recorded with the Dolby NR system, so first check which type of the Dolby NR system has been used on the tape. Only Dolby B NR is incorporated into the CA-D8T.
- With Automatic Tape Detection, you can listen to type I or II tapes without changing any settings.

The use of tapes longer than 120 minutes is not recommended, since characteristic deterioration may occur and these tapes easily jam in the pinch-rollers and the capstans.

One Touch Play

By pressing either the \blacktriangleleft or \blacktriangleright button (or the \blacktriangleleft or \blacktriangleright button on the Remote Control) on either Deck A or B, the Unit will come on, "TAPE" appears in the display, and if a tape is in the deck, it will start to play. If no tape is loaded, the Unit will come on and wait for you to insert a tape, or select another function.



Other Useful Features of the Cassette Deck

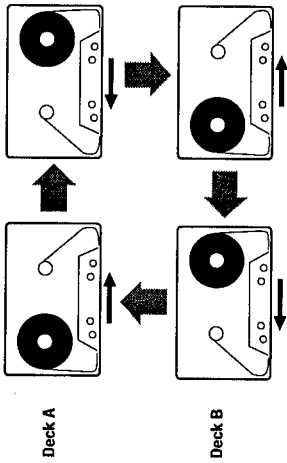


Reverse Mode

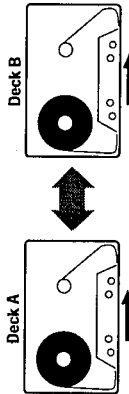
Use Reverse mode to make the tape automatically reverse at the end of a side and start playing the other side. Press the REVERSE button to change from Reverse mode on (when the indicator is lighted) to Reverse mode off, or from off to on.

Continuous Play

Use Continuous Play mode to play the tapes in Both Deck A and Deck B. When Reverse Mode is ON:



When Reverse Mode is OFF:



The tape is rewound while the tape in Deck B is playing.

Note: If the tape in one deck finishes while the tape in the other deck is being rewound, rewinding stops and the tape is played from that point.

- The playback direction for the tape is shown by the tape indicator.

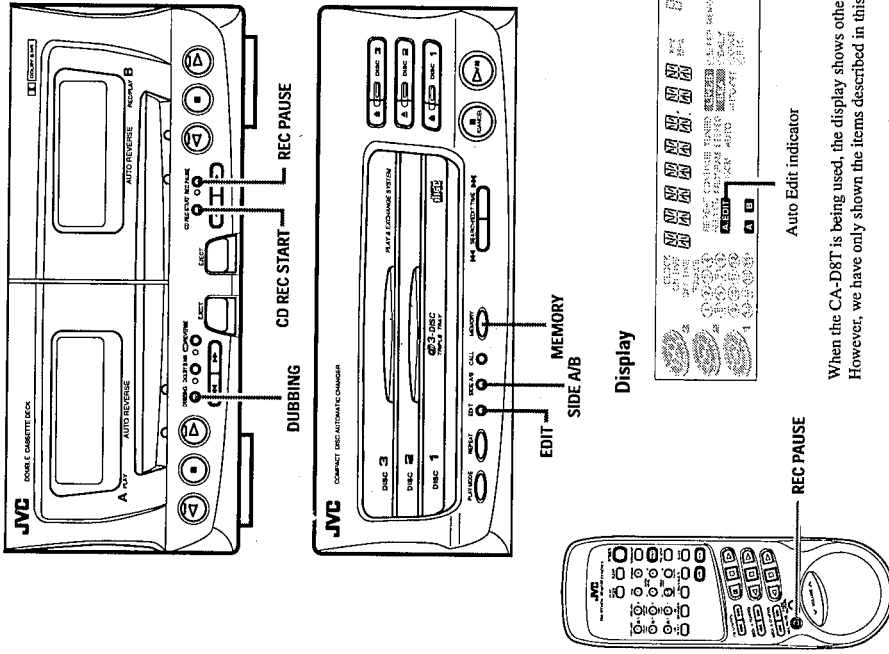


Noise Reduction

Press the DOLBY B NR button to switch Dolby B Noise Reduction on (the indicator lights up) or off (the indicator goes off). If a tape is recorded with the Dolby B NR system, playing it back with the Dolby NR on will reduce tape noise and improve the clarity of the sound.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Using the Cassette Deck (Recording)

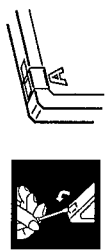


When the CA-D8T is being used, the display shows other items as well. However, we have only shown the items described in this section.

Recording onto a cassette from any of the sound sources is simple. Just place a tape in Deck B, have the source ready, make one or two settings, and you're ready to record. For each source the procedure is a little different and now we'll explain just what to do for each one. If you forget, just come back to the section which has the specific procedures you need. But first, here are a few things to make your recordings better.

Things To Know Before You Start Recording

- It may be unlawful to record or play back copyrighted material without the consent of the copyright owner.
- Press the DOLBY B NR button — the indicator lights up — to reduce tape hiss, except when dubbing tapes, since Dolby NR is inactive in Dubbing Mode regardless of the setting of DOLBY B NR. The dubbed tape automatically contains the same processing as the source tape.
- When you want to record onto both sides of a tape, you can set Reverse mode on to do so. However, recording automatically stops when after recording in the ∇ direction stops in Reverse mode.
- Therefore, make sure that the tape direction is ∇ when recording with Reverse mode on.
- The recording level, which is the volume at which the new tape is being made, is automatically set correctly, so it is not affected by the VOLUME control on the CA-D8T. Thus, during recording you can adjust the sound you are actually listening to without affecting the recording level.
- Two small tabs on the back of the cassette tape, one for side A and one for side B, can be removed to prevent accidental erasure or recording.
- To record on a cassette with the tabs removed, you must cover the holes with adhesive tape first. However, when a type II tape is used, only cover part of the hole as shown, since the other part of the hole is used to detect the tape type.
- When recording, you can hear SEA Mode, Hall Surround and Studiom Surround through the speakers or headphones. However, the sound is recorded without SEA Mode, Hall Surround or Studiom Surround.
- When recording, do not use Dolby Surround.
- Type I and Type II tapes can be used for recording.

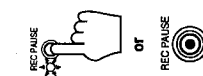


Note: At the start and end of cassette tapes, there is leader tape which cannot be recorded onto. Depending on the recording source, the first part of the recording may be missing because of the leader. When recording CDs or radio broadcasts, to get the beginning of the recording on the tape, first wind on the leader before beginning recording.

CAUTION: If recordings you have made have excessive noise or static, the Unit may be too close to a TV which was on during the recording. Either turn off the TV or increase the distance between the TV and the CA-D8T.

Standard Recording

This is the basic method for recording any source. The CA-D8T also has special ways for recording CD to tape, and tape to tape, which save you time and effort, as well as give you some special effects. However, when you need to add a selection to a tape you have made, or are combining selections from several sources on one tape, use the method described below; just substitute the source you want into this procedure, such as a tape in Deck A, a CD, or the Tuner. You can also record from YCR or an auxiliary source with this procedure.



- To Record Any Sound Source To Tape**
Follow these steps to record from any sound source onto a tape in Deck B.
1. Insert a blank or erasable tape into Deck B.
 2. Press the REC PAUSE button (or REC PAUSE button on the Remote Control).
The REC PAUSE indicator lights up.
 3. Press the REVERSE button if you want to record on both sides of the tape.
The Reverse mode indicator lights up.
 4. Prepare the source, by, for example, tuning in a radio station, loading CDs, or turning on connected equipment.
 5. On Deck B, press either the ∇ button (or the ∇ button on the Remote Control) to record on the front side, or the \triangleleft button (or the \triangleleft button on the Remote Control) to record on the reverse side.
 - When recording with Reverse mode ON, press the ∇ button (or the ∇ button on the Remote Control).

To Pause At Any Time During the Recording Process

Press the REC PAUSE button (or REC PAUSE button on the Remote Control) again. Then press either the \triangleleft or ∇ button (or the \triangleleft or ∇ button on the Remote Control) to restart recording.

To Stop At Any Time During the Recording Process
Press the \blacksquare button on Deck B.

CAUTION: Operations other than using AUTO POWER OFF, the SLEEP timer or changing the CD for the other disc trays, may cause the recording source to be changed.

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 set in a program.

1. Prepare CDs. (See page 21.)

When recording from a disc in the holder, first select the disc by pressing the DISC button (1-3) of the insert to record from, then the \blacksquare /CANCEL button.

2. Insert a cassette in Deck B to record on.

If you want to record on both sides of the tape, press the REVERSE button on the Cassette Deck so that the Reverse mode indicator lights up.

- When recording with Reverse mode ON, make sure that the tape direction is ∇ .

3. Press the CD REC START button on the Cassette Deck.

The Unit plays the CD and starts recording.

At the end of the tape, the CA-D8T automatically goes back to the beginning of the last selection and rerecords it, this time gently fading out at the end. If you selected the Reverse Mode, the reverse side starts with the last selection on the front side and will be faded out at the end again. (A 10 second blank is created at the beginning of the reverse side.)

When the recording is finished, the message "CD REC FINISHED" scrolls by on the display. The CD Player and Cassette Deck stop.

To Stop At Any Time During the Recording Process

Press the \blacksquare button on Deck B.

Notes:

- When the Auto Power Off function is turned on while recording a CD, the power will automatically turn OFF when either the CD or tape finishes. Be careful when the Auto Power Off function is turned on while recording a CD in Repeat Mode, as repeat will be canceled and the power will automatically turn OFF with Repeat Mode ("REPEAT ALL", "REPEAT 1 CD", or "REPEAT 1"). (Page 26)
- When making SLEEP timer settings while doing CD Direct recording, set the time so that there is enough leeway to finish the recording before the power goes off. If the time is set to about the length of the CD, the power may go off before recording finishes.

For CD Direct Recording using more than one disc, use a blank tape. If you use a prerecorded tape, prerecorded material may not be erased between newly-recorded tracks.

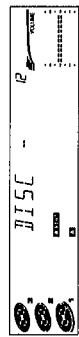
Auto Edit Recording



Using Auto Edit, you can record the CD tracks to fit the tape, so a selection isn't cut off. Auto Edit is one of the best ways to copy all of a CD onto a tape.

Auto Edit programs the CD tracks in numerical order. To prevent the end of the last track on the front side from being cut off, the last track on the front side is selected to fit on the remaining tape length.

1. Prepare CDs. (See page 21.)
2. Press the EDIT button on the Unit.
"DISC-" appears in the display.

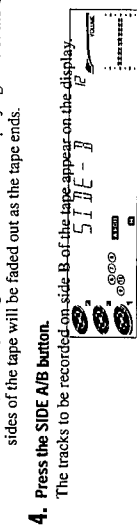


3. Press the DISC button for the disc you want to record.

After "TAPE C-" appears on the display, the optimum tape length for the disc you want to record is displayed.



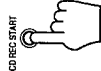
- You can select a different length of tape, depending on the actual size of the tape you are using, from eleven possibilities programmed into the CA-D8T: 40, 46, 50, 54, 60, 64, 70, 74, 80, 84, 90. Cycle through these choices using the SEARCH/EDIT TIME ← or → button until you find the length closest to your tape's actual length.
- If you pick a tape length shorter than the total playing time of the CD, the last tracks on both sides of the tape will be faded out as the tape ends.



4. Press the SIDE A/B button.

The tracks to be recorded on side B of the tape appear on the display.

- To display the tracks that will be recorded on side A of the tape, press the SIDE A/B button again. The Unit switches between Side A and Side B with each press of the SIDE A/B button.
 - To check the tracks that will be recorded, press the ← or → buttons on the Remote Control.
5. Insert a cassette in Deck B to record on.
- When you want to record on both sides of a tape, press the REVERSE to turn Reverse mode on.
6. Press the CD REC START button.
- The Unit plays the CD and starts recording. If the tape has not been rewound, the Unit rewinds the tape before starting to record the CD.



When the tape is ready, to prevent the start of a track being cut, the CA-D8T creates a blank period of 10 seconds before it starts to record the CD. (The CA-D8T also creates a 10 second blank period at the start of side B of the tape.)

When the recording is finished, the message "CD REC FINISHED" scrolls by on the display. The CD Player and Cassette Deck stop.

To stop at any time while recording, press the ■ CANCEL button. The CD Player stops, and then the Cassette Deck stops about four seconds later.

To cancel Auto Edit, press the ▲ button for disc number being recorded, or press the PLAY MODE button while the CD Player is stopped.

Note: When making SLEEP timer settings while doing Auto Edit recording, set the time so that there is enough leeway to finish the recording before the power goes off. If the time is set to about the length of the CD, the power may go off before recording finishes.

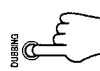
Tape To Tape Recording (Dubbing)

Recording from one tape to another is called dubbing. You can dub tapes simply, with just a single button.

- When dubbing tapes, make sure that the playback direction of Deck A and Deck B are the same.
- When you want to record both sides of a tape, press the REVERSE button to turn Reverse mode on.
- It is preferable that the type of tape (Type I or Type II) you record from be the same as the type you record onto.

How To Use the DUBBING Button

1. Insert the source cassette you want to copy from into Deck A for playback.
2. Insert the blank or erasable cassette you want to copy onto in to Deck B for recording.
3. Press the DUBBING button. Deck A and Deck B will start simultaneously.

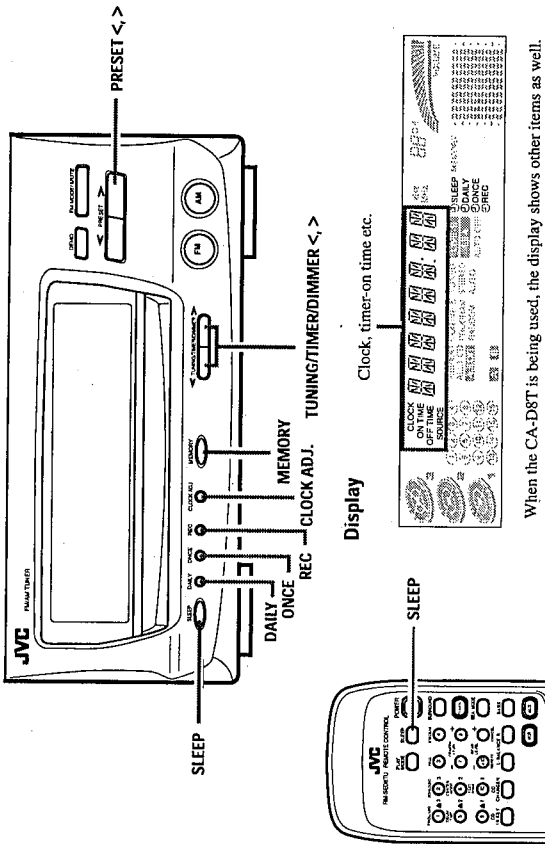


To stop dubbing, press the ■ button for Deck B (or □ button on the Remote Control).

Note: The ■ button for Deck A pauses the recording.

- Dolby NR is inactive in dubbing mode regardless of the setting of DOLBY B NR. The dubbed tape automatically contains the same processing as the source tape.

Using the Timer



When the CA-D8T is being used, the display shows other items as well. However, we have only shown the items described in this section.

The timers lets you control recording and listening functions automatically.

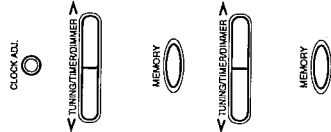
- Four types of timers are available:
- **DAILY Timer** — Use this timer to set wake up everyday to music from any source, instead of an alarm clock.
 - **ONCE Timer** — Use this timer to set a once only setting. Useful if you want to change the Timer setting for one day only.
 - **REC (Recording) Timer** — Unattended recording of radio broadcasts. You can set the starting time and length of the recording.
 - **SLEEP Timer** — Fall asleep and have your CA-D8T turn off automatically after a certain length of time.

Setting the Clock

The timers depend on the clock; the clock must be right for the timers to work as you expect. Note that the clock must be set, or the timers cannot be set.

Setting the Clock

1. Press the CLOCK ADJ. button. The "CLOCK" indicator and the hour digits blink on the display.
2. Set the hour by pressing the TUNING/TIMER/DIMMER < or > button. Pressing the > button increase the hour, and pressing < button decrease it. Holding down these buttons allows you to continuously adjust the hour setting until the button is released.
3. Press the MEMORY button. The minute digits blink on the display.
4. Set the minutes by pressing the TUNING/TIMER/DIMMER < or > button. Pressing the > button increase the minute, and pressing < button decrease it. Holding down these buttons allows you to continuously adjust the minute setting in 10 minute increments until the button is released.
5. Press the MEMORY button. "CLOCK OK" appears on the display, and the clock starts at zero seconds from the set time.



CAUTION: If there is a power failure, the clock loses its setting. The display shows "AM 12:00", and the clock must be reset.

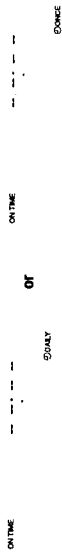
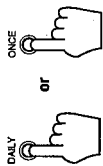
Setting the DAILY or ONCE Timer

With this timer you can wake up to music from a CD, tape, your favorite radio program, or other source.
 You can set the DAILY or ONCE Timer whether the Unit is on or off.

Procedure For Setting the DAILY or ONCE Timer

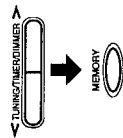
1. Press the **DAILY** or **ONCE** button.

The "ON TIME" indicator and the hour digits blink on the display. When the DAILY timer is selected, the "DAILY" indicator also blinks. When the ONCE timer is selected, the "ONCE" indicator also blinks.

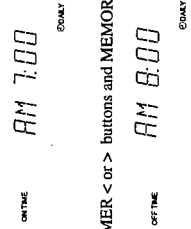


2. Set the **ON** time for the selected timer.

Use the TUNING/TIMER/DIMMER < or > buttons and MEMORY button to set the timer, just as for setting the clock.



3. Set the **OFF** time for the timer.
- Use the TUNING/TIMER/DIMMER < or > buttons and MEMORY button to set the timer, just as for setting the clock.



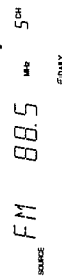
4. Select the source you want to listen to.

To use the Tuner as the source:

1. Press the TUNING/TIMER/DIMMER < or > button until "TUNER" blinks on the display.



2. Press the PRESET < or > button to select the radio station you want to listen to.



3. Press the MEMORY button.

To use a CD as the source:

1. Press the TUNING/TIMER/DIMMER < or > button until "CD" blinks on the display.



2. Press the PRESET < or > button to select the disc tray containing the CD you want to play.



3. Press the MEMORY button.

If you press the MEMORY button without selecting a disc, the last disc played by the CA-D8T will be used.

4. Press the PRESET < or > button, to select the starting track of the CD. You can only select up to 20 tracks.



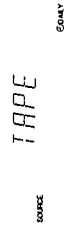
5. Press the MEMORY button.

If you press the MEMORY button without selecting a track, playback will start from the first track on the CD.



To use a Cassette Deck as the source:

1. Press the TUNING/TIMER/DIMMER < or > button until "TAPE" blinks on the display.



2. Press the MEMORY button.

To use another source:

Use this to select a radio station that has not been preset.

1. Press the TUNING/TIMER/DIMMER < or > button until "..." blinks on the display.

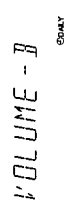


2. Press the MEMORY button.

The last source used is selected.

5. Setting the Volume Level.

Press the TUNING/TIMER/DIMMER < or > to set the volume.



VOLUME - A: Sets the volume level to 5.

VOLUME - B: Sets the volume level to 12.

VOLUME - C: Sets the volume level to 20.

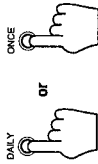
VOLUME - : Sets the volume to the last volume setting used.

6. Press the **DAILY** or **ONCE** button.

Press the button for the selected timer.

The blinking "DAILY" or "ONCE" indicator changes to a continuous display. The settings for ON TIME, OFF TIME, SOURCE, and VOLUME are then displayed.

If the power is on when the timer settings are set, the power is turned off.



- A few seconds before the start for the timer, the CA-D8T automatically turns on the power, and the type of timer blinks on the display. When the set time is reached, playback starts using the selected source. After the finish time for the timer is reached, the power is automatically turned off again.

- If you change the source while in the middle of a timer program, the timer settings will be cancelled.

Before Turning Off the Unit

- If the source is a CD, make sure that there is a CD in the selected disc number.

- If the source is a tape:
 - Check that the tape direction is correct. This is important especially when Reverse Mode is off.
 - Deck B has priority, so if tapes are in both decks, the tape in Deck B plays first.
 - Set Reverse Mode on if you want to play both sides of the tape.

- Select the Sound Mode if you want to listen using a Sound Mode effect.

To change the DAILY or ONCE Timer setting

To change the settings for the DAILY or ONCE Timer, repeat the setting procedure from the beginning.

Turning the DAILY Timer On and Off

Once the DAILY Timer has been set it will be activated at the same time every day until the setting is turned off.

To turn the DAILY Timer off, press the DAILY button once. The "DAILY" indicator light goes out.

To turn the DAILY Timer on again, press the DAILY button twice. The Timer ON TIME, OFF TIME, PLAYBACK SOURCE (including the disc number and track number if a CD source is selected) are displayed on the display.

Turning the ONCE Timer On and Off

After a ONCE Timer setting has been performed, the details of the setting remain stored in the CA-D8T but the Timer status is set to OFF.

To turn the ONCE Timer on again, press the ONCE button twice. The Timer ON TIME, OFF TIME, PLAYBACK SOURCE (including the disc number and track number if a CD source is selected) are displayed on the display.

To cancel the performance of a ONCE Timer setting before it starts, press the ONCE button once. The "ONCE" indicator light goes out.

CAUTION: If the CA-D8T is unplugged, or a power failure occurs, the timer display will be reset to "AMT2:00" and the DAILY and ONCE Timer settings will be lost.

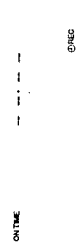
Setting the REC (Recording) Timer

With the Recording Timer you can make a tape of a radio broadcast automatically whether or not you are home. For the timer to work correctly, you need to make sure of the following in addition to setting the time for the Tuner and Cassette Deck to come on:

- You can set the REC Timer whether the Unit is on or off.
The tape you want to record onto must be in Deck B.

Procedure for Setting the REC Time

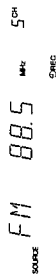
- 1. Press the REC button.
The "ON TIME" and "REC" indicator light and the hour digits blink on the display.



- 2. Set the time you want the radio to come on, and put a tape in Deck B to record on.
Use the TUNING/TIMER/DIMMER button and MEMORY button just like setting the clock.

- 3. Set the time you want the radio to shut off and the tape in Deck B to stop recording.
Use the TUNING/TIMER/DIMMER button and MEMORY button just like setting the clock.

- 4. Press the PRESET < or > button to select the preset number for the radio station you want to record.



- 5. Press the REC button.
The blinking "REC" indicator changes to a continuous display.
If the power is on when the recording settings are set, the power is turned off.

- A few seconds before the start time for the recording, the CA-D8T automatically turns on the power, and "REC TIMER" blinks on the display. When the start time is reached, recording starts using the selected source. After the finish time for the recording is reached, the power is automatically turned off again.

- If a button is pressed when the REC Timer is operating, recording continues but the timer is cancelled.

Before the Timer Starts

- Check that tape direction is correct. This is important especially when Reverse Mode is off.
Set Reverse Mode on if you want to record on both sides of the tape.
The VOLUME control is automatically set to 0 when REC Timer is recording.

It is very easy, and can be very disappointing, to forget to put in a tape, or to accidentally leave a tape in Deck B you don't want recorded over. Although this happens to almost everyone at one time or another, we hope it won't happen to you!

To Change the Recording Timer Setting

To change the settings for the REC Timer, repeat the setting procedure from the beginning.

Turning the REC Timer On and Off

Once the REC Timer has been used to record a source, the setting is maintained but the Timer is set to OFF.

To record at the same time again, press the TIMER button twice. The "REC" indicator light comes on. The ON TIME and OFF TIME are displayed.

To turn the REC Timer off before the timer starts, press the REC button. The "REC" indicator light goes out.

CAUTION: If the CA-D8T is unplugged, or a power failure occurs, the timer display will be reset to "AMT2:00" and the REC Timer setting will be lost.

Setting the SLEEP Timer

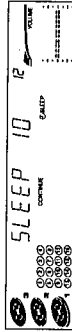
Use the Sleep Timer to turn the Unit off after a certain number of minutes when it is playing. By setting this timer, you can fall asleep to music and know your Unit will turn off by itself rather than play all night.

You can only set the Sleep Timer when the Unit is on and a source is playing.

To set the SLEEP Timer, follow this procedure:

- 1. With the CA-D8T on and a source playing, press the SLEEP button (or the SLEEP button on the Remote Control).

The message "SLEEP" appears in the display.



- 2. Set the length of time you want the source to play before shutting off.

Each time you press this button while the "SLEEP" indicator is blinking, it changes the number of minutes shown on the display in this sequence:

10 -> 20 -> 30 -> 60 -> 90 -> 120 -> Cancelled -> (back to the beginning)

When the number of minutes you want shows on the display, just wait 5 seconds until the indicator stops blinking, and is lighted steadily.

The Unit is now set to turn off after the number of minutes you set.

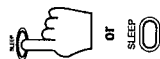
To Change the SLEEP Timer Setting

Press the SLEEP button until the number of minutes you want appears on the display.

To Cancel the SLEEP Timer Setting

Press the SLEEP button until the "SLEEP" indicator goes off on the display.

Turning off the Unit also cancels the SLEEP Timer.

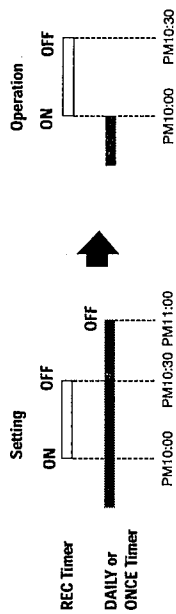


or SLEEP

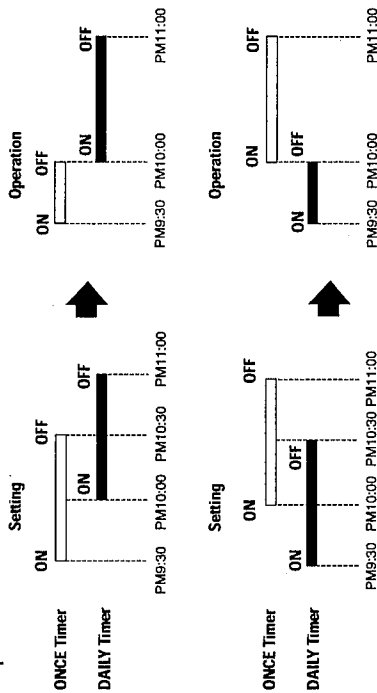
Since each timer can be set independently, you may wonder what happens if the settings overlap. Here are the priorities for each timer:

- The REC Timer always has priority.
 - If another timer is set to come on during a time when the REC Timer is operating, the other timer just won't come on at all, so you will always get the entire program on tape.
 - If the REC Timer is set to come on while another timer is operating, the other timer will shut off 10 seconds before the REC Timer is set to turn on, and the REC Timer will then take over.
- The DAILY Timer and ONCE Timer have equal priority. This means that either timer will come on at the start time regardless of the setting of the other. However, if the operating times overlap, the timer that first comes on will be cancelled and the settings for the other timer will take over. Example 2 shows this relationship in more detail. If the DAILY Timer and ONCE Timer are set to start at the same time, the ONCE Timer has priority.
- The SLEEP Timer has the least priority. This means that if the SLEEP Timer is set while another timer is operating, the other timer settings are cancelled. However, if another timer is set to come on while the SLEEP Timer is operating, the SLEEP Timer setting will be cancelled and the Unit will use the settings from the other timer.

Example 1



Example 2



Care And Maintenance

Compact Discs

Handle your compact discs, cassette tapes, and Cassette Deck carefully, and they will last a long time.

- Remove the CD from the case by holding it at the edges while pressing the center hole lightly.
- Do not touch the shiny surface of the CD, or bend the CD.
- Put the CD back in its case after use to prevent warping.
- Be careful not to scratch the surface of the CD when placing it back in the case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.
- A dirty CD may not play correctly. If a CD does become dirty, wipe it with a soft cloth in a straight line, from center to edge.



CAUTION: Do not use any solvent (for example, conventional record cleaner, spray thinner, benzine, etc.) to clean a CD.

Moisture Condensation

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

- After starting the 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.



General Notes

In general, you will have the best performance by keeping your tapes, CDs, and the mechanism clean.

- Store tapes and CDs in their cases, and keep them in cabinets or on shelves.
- Keep the Cassette Deck's tape doors and the CD trays closed when not in use.

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.
- Do not touch the tape surface.

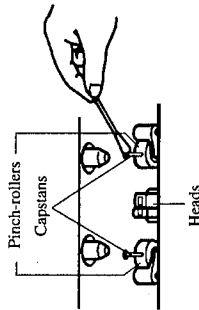
- Do not store the tape:
 - In dusty places
 - In direct sunlight or heat
 - In moist areas
 - On a TV or speaker
 - Near a magnet

Cassette Deck

If the heads, capstans, and pinch-rollers of the Cassette Deck become dirty, the following will occur:

- Loss of sound quality
- Discontinuous sound
- Fading
- Incomplete erasure
- Difficulty recording

- Clean the heads, capstans, and pinch-rollers using a cotton swab moistened with alcohol.



- If the heads become magnetized, the Unit will produce noise or lose high frequencies.
- To demagnetize the heads, turn off the Unit, and use a head demagnetizer (available at electronics and record shops).

Troubleshooting

- If you are having a problem with your CA-D8T, 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	Possible Cause	Action
No sound is heard.	Connections are incorrect, or loose.	Check all connections and make corrections. (See pages 4 - 7.)
Unable to record.	Cassette record protect tabs are removed.	Cover holes on back edge of cassette with tape.
Poor radio reception	<ul style="list-style-type: none"> • The antenna is disconnected. • The AM Loop Antenna is too close to the Unit. • The FM Wire Antenna is not properly extended and positioned. 	<ul style="list-style-type: none"> • Re-connect the antenna securely. • Change the position and direction of the AM Loop Antenna. • Extend FM Wire Antenna to the best reception position.
The CD skips.	The CD is dirty or scratched.	Clean or replace the CD.
Unable to operate the Remote Control.	<ul style="list-style-type: none"> • The path between the Remote Control and the sensor on the Unit is blocked. • The batteries have lost their charge. 	<ul style="list-style-type: none"> • Remove the obstruction. • Replace the batteries.
The CD tray cannot be opened.	The main AC power cord is not plugged in.	Plug in the AC power plug.
The CD does not play.	The CD is upside down.	Put the CD in with the label side up.
Operations are disabled.	The built-in microprocessor has malfunctioned due to external electrical interference.	Unplug the Unit then plug it back in.
The cassette door cannot be opened.	During tape playing, the power cord was unplugged.	Plug in the power cord, press the POWER button, and then the EJECT button.

Specifications

Amplifier/Cassette Deck Section

Amplifier

- Output Power**
Front speakers 70 watts per channel, min RMS, into 6 ohms from 60 Hz to 20 kHz, with no more than 0.9% total harmonic distortion.
30 watts, min RMS, driven, into 8 ohms at 1 kHz, with no more than 0.9% total harmonic distortion.
- Center speaker**
(A1 surround operation) 0.9% total harmonic distortion.
- Rear speakers**
(A1 surround operation) 15 watts per channel, min RMS, both driven, into 16 ohms at 1 kHz, with no more than 0.9% total harmonic distortion.

- Input Sensitivity/Impedance (1 kHz)**
VCR 400 mV/48 kohms
AUX 400 mV/48 kohms

Cassette Deck

- Frequency Response**
Type II (C₇₀): 30 - 16,000 Hz
Type I (NORMAL): 30 - 15,000 Hz
- Wow And Flutter (WRMS)** 0.09%

- Dimensions** 245 x 200 x 342 mm (W/H/D)
(9-11/16 x 7-7/8 x 13-1/2 inches)
- Mass** 6.1 kg (13.5 lbs)

CD Player/Tuner Section

- CD Automatic Changer**
CD Capacity 3 discs
Dynamic Range 94 dB
Signal-To-Noise Ratio 100 dB
Wow And Flutter Unmeasurable

Tuner Section

- FM Tuner** 87.5 - 108.0 MHz
Tuning Range
AM Tuner 530 - 1,710 kHz
Tuning Range
- Dimensions** 245 x 200 x 295 mm (W/H/D)
(9-11/16 x 7-7/8 x 11-11/16 inches)
- Mass** 3.6 kg (8.0 lbs)

Accessories

- AM Loop Antenna (1)
Remote Control (1)
Batteries R03 (UM-4)/AAA (24F) (2)
FM Wire Antenna (1)
External Wire (1)

Power Specifications

- Power Requirements** AC 120 V \sim , 60 Hz
Power Consumption 180 watts, 240 VA
20 watts (in standby mode)

Design and specifications are subject to change without notice.

— MEMO —

DX-D8T

— Contents —

Discription of Major LSIs	2-2
Disassembly Procedures	2-7
Adjustment Procedures	2-16
Block Diagrams	2-19
Printed Circuit Boards	2-21
Schematic Diagrams	2-26

Description of Major LSIs

■ HD4074719A69FS (IC901) : Deck & AMP Controller

1. Terminal layout

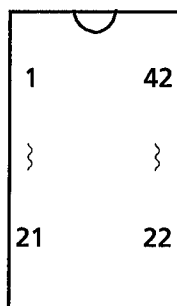
40	~	25
41		24
}		}
64		1
65	~	80

2. Pin Functions

Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	IN6	I	Key in	41	BFR	O	Reel control signal for forward (Deck B)
2	/INH	I	Inhibit signal input	42	BRR	O	Reel control signal for reverse (Deck B)
3	PRT	I	Proector signal input	43	BRC	O	Cam control signal for reverse (Deck B)
4	ADGND	--	Analog GND	44	BFC	O	Cam control signal for forward (Deck B)
5	RESET	I	Reset signal input	45	AFR	O	Reel control signal for forward (Deck A)
6	OSC1	--	Osilation terminal(4.19MHz)	46	ARR	O	Reel control signal for reverse (Deck A)
7	OSC2	--	Osilation terminal(4.19MHz)	47	ARC	O	Cam control signal for reverse (Deck A)
8	GND	--	GND	48	AFC	--	Cam control signal for forward (Deck A)
9	GND	--	GND	49	GND	--	GND
10	NC	--	Non connection	50	ACS2	I	Cam data input
11	TEST	--	+5V pull up	51	ACS1	O	Cam data input
12	VCC	--	power suply	52	ACS0	O	Cam data input
13	AMT	O	It is "H" when Deck A is not playing	53	BCS2	O	Cam data input
14	BMT	O	Dolby ON/OFF control	54	BCS1	O	Cam data input
15	OMT	O	Deck P.B mute control signal	55	BCS0	O	Cam data input
16	RMT	O	Rec. P.B select signal output	56	BPLS	O	B mech. reel pulse input
17	PBEQ	O	Bias current and Playing EQ control	57	APLS	I	A mech. reel pulse input
18	BIAS	O	REC bias ON/OFF control	58	SCK	--	Clock signal for IC501/IC441
19	P.ON	O	Power on/off control	59	SDA1	O	ECHO&SEA data signal for IC441
20	REC	O	It is "H" when recording	60	SDA2	O	REAR & SENTER VR data signal for IC501
21	NRR	O	It is "H" when NR recording	61	RMIN	I	Remort control signal input
22	DCS IN	I	DCS signal input	62	MSIN	I	Music scain input
23	DCS OUT	O	DCS signal output	63	DATA	O	Switch data signal output
24	ACO	O	Power supply control signal	64	STB	O	Switch strobe signal output
25	/CAP	O	Capstan on/off control	65	CLK	O	Switch clock signal output
26	/AHSP	O	Amech. FF/REW control	66	A-CLK	O	Display control clock signal
27	/BHSP	O	Bmech. FF/REW control	67	A-REQ	I	Display control request signal
28	PLST	O	Prologic STB out	68	A-DATA	O	Display control data signal
29	PLCK	O	Prologic CLOCK out	69	JOG1	I	Music jog input 1
30	PLDA	O	Prologic DATA out	70	JOG2	I	Music jog input 2
31	SRDA	O	Serial data signal for IC905	71	R1	O	Spk relay control out
32	SRCK	O	Serial clock signal for IC905	72	SMT	O	Source mute signal output
33	SRSTB	O	Serial strove signal for IC905	73	ECHO2	O	Echo2 control signal output
34	RECLD	O	REC LED Indication control	74	ECHO1	O	Echo1 control signal output
35	REVLCD	O	REV LED Indication control	75	ADVCC	--	+5V
36	NRLED	O	NR LED Indication control	76	IN1	I	Key matrix input signal
37	AFLED	O	Amecha.Fow LED Indication control	77	IN2	I	Key matrix input signal
38	ARLED	O	Amecha.Rev LED Indication control	78	IN3	I	Key matrix input signal
39	BFLED	O	Bmecha.Fow LED Indication control	79	IN4	I	Key matrix input signal
40	BRLED	O	Bmecha.Rev LED Indication control	80	IN5	I	Key matrix input signal

■ LA2786 (IC531) : Dolby Pro Logic Surround Signal Processor

1. Terminal Layout



2. Pin Functions

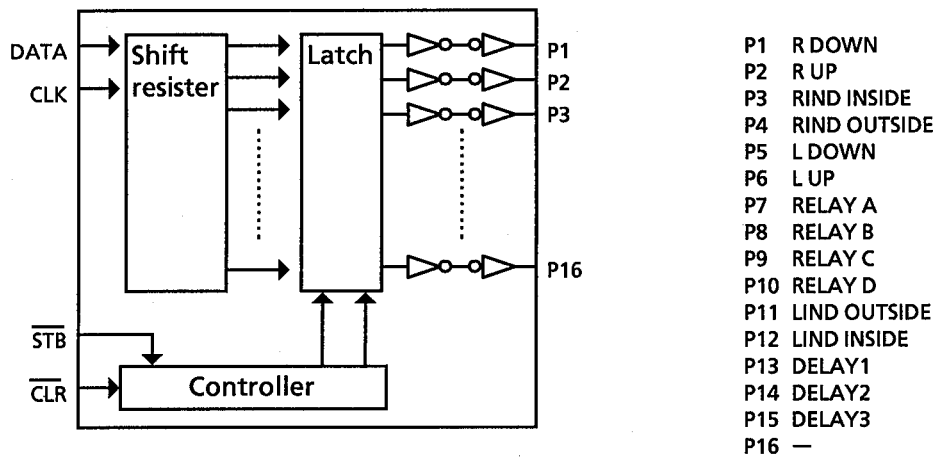
Pin No	Symbol	I/O	Functions	Pin No	Symbol	I/O	Functions
1	NS-BPF1	--	Capacitor for spectrum filter in noise sequencer	22	VCS-1	--	Capacitor for time constant (in log differential area)
2	NS-BPF2	--	Capacitor for spectrum filter in noise sequencer	23	VCS-2	--	Capacitor for time constant (in log differential area)
3	VREF	--	Analog reference voltage	24	VCS-TH	--	Capacitor for time constant (in log differential area)
4	S-DC-OUT	--	Capacitor for DC-cut Sch	25	L+R RECT	--	Capacitor for Center channel detection
5	C-DC-OUT	--	Capacitor for DC-cut Cch	26	DC-CUT	--	Capacitor for DC-cut at detection circuit
6	L-DC-OUT	--	Capacitor for DC-cut Lch	27	L-R RECT	--	Capacitor for Surround channel detection
7	R-DC-OUT	--	Capacitor for DC-cut Rch	28	DC-CUT	--	Capacitor for DC-cut at detection circuit
8	VREF-BUFFER	--	VREF low impedance	29	R-BPF3	--	LPF,HPF for Right channel control circuit
9	L-IN	I	Left channel signal input	30	R-BPF2	--	LPF,HPF for Right channel control circuit
10	R-IN	I	Right channel signal input	31	R-BPF1	--	LPF,HPF for Right channel control circuit
11	GND	--	Ground	32	C-TRIM DC-CUT	--	Capacitor for DC-cut Center channel
12	L-BPF1	--	LPF,HPF for Lch control circuit	33	C-MODE-CAP	--	Capacitor for Center channel output low-pass filter
13	L-BPF2	--	LPF,HPF Left channel control circuit	34	C-OUT	O	Center signal output
14	L-BPF3	--	LPF,HPF Left channel control circuit	35	S-OUT	O	Surround signal output
15	DC-CUT	--	Capacitor for DC-cut at detection circuit	36	R-OUT	O	Right channel signal output
16	R RECT	--	Capacitor for Right channel detection	37	L-OUT	O	Left channel signal output
17	DC-CUT	--	Capacitor for DC-cut at detection circuit	38	VCC	--	power supply
18	L RECT	--	Capacitor for Left channel detection	39	OSC	--	Oscillation for noise sequencer and auto balance
19	VLR-TH	--	Capacitor for time constant (in log differential area)	40	STB	I	Strobe signal input
20	VLR-2	--	Capacitor for time constant (in log differential area)	41	DATA	I	Serial interface data input
21	VLR-1	--	Capacitor for time constant (in log differential area)	42	CLK	I	Serial interface clock

■ NJU3715L (IC905) : 16-BIT Serial-parallel converter

1. Terminal layout

RELAY A	1	22	VDD
RELAY B	2	21	L UP
RELAY C	3	20	L DOWN
RELAY D	4	19	RIND OUTSIDE
LIND OUTSIDE	5	18	RIND INSIDE
VSS	6	17	R UP
LIND INSIDE	7	16	R DOWN
NC	8	15	CLR
NC	9	14	STB
NC	10	13	CLK
NC	11	12	DATA

2. Internal Block Diagram



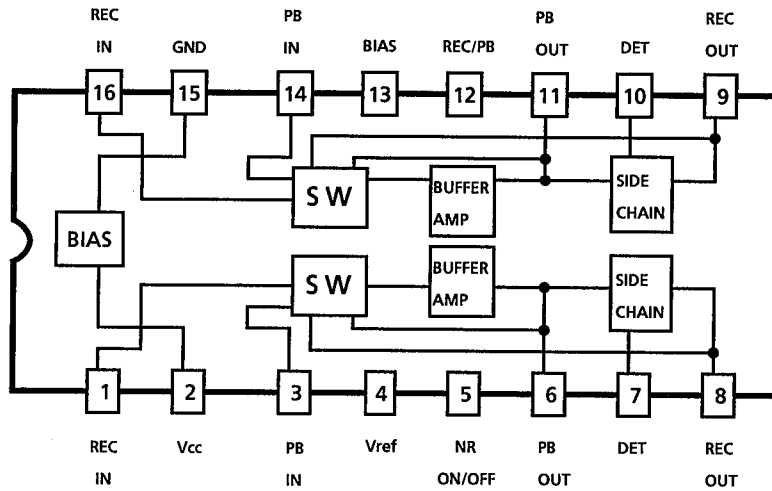
3. Terminal Description

Pin No.	I/O	Function
1~5, 7~11, 16~21	O	Parallel data output
12	I	Serial data input
13	I	Clock input (When this terminal is set low level, all of the output become low.)
14	I	Strobe signal input
15	I	Clear signal input

4. Function

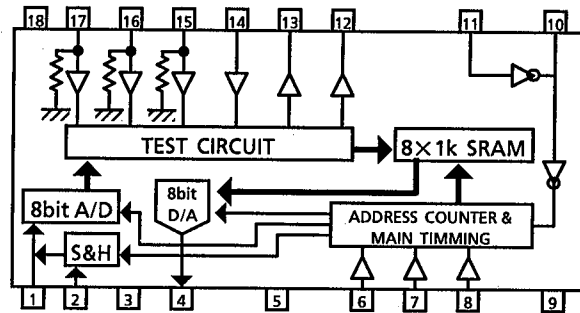
CLK	STB	CLR	Function
X	X	L	All the data stored in the latch circuit are eliminated. (The data in the shift register are not eliminated.)
	H	H	Data are inputted synchronizing the rising edge of the clock.
L	L	H	The data in the shift register are transmitted to the latch circuit. The data outputted from parallel outputs.
	L	H	The data in the shift register are shifted synchronizing the rising edge of the clock. (The data outputted from the latch circuit are changed.)

■ HA12136A (IC911) :
Noise Reduction Amplifier



■ BU9251D (IC915) :
Delay Circuit

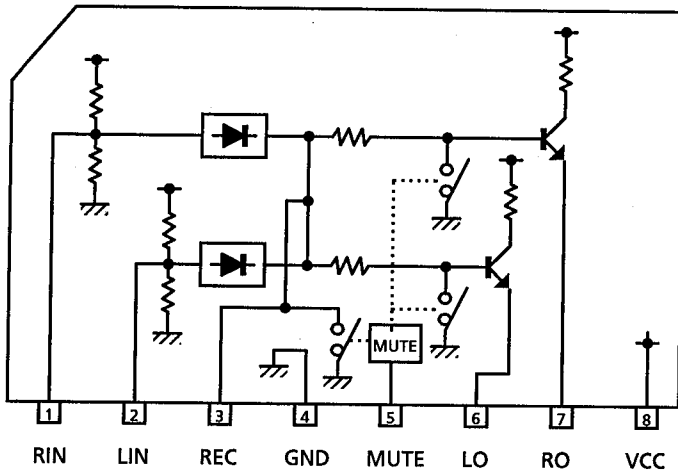
S/H	1	18	VCC
IN	2	17	TST0
GND	3	16	TST1
OUT	4	15	TST2
VDD	5	14	TDIN
DCNT1	6	13	TDO0
DCNT2	7	12	TDO1
DCNT3	8	11	OSC
GND	9	10	OSC



Description

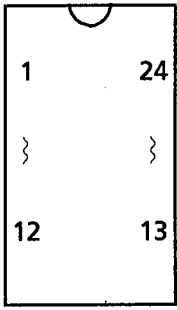
Pin No	Symbol	Function	Pin No	Symbol	Function
1	S&H	A capacitor is connected for sample & hold	10	OSC0	Oscillation terminal
2	AIN	Analog input	11	OSC1	Oscillation terminal
3	GND	GND	12	TDO1	Not used
4	AOUT	Analog output	13	TDO0	Not used
5	VDD	Power supply	14	TDIN	Not used
6	DCNT0	Pull up (+5V)	15	TST2	Not used
7	DCNT1	Pull up (+5V)	16	TST1	Not used
8	DCNT2	Pull up (+5V)	17	TST0	Not used
9	GND	GND	18	VCC	Power supply

■ BA8221AN (IC202) : ALC

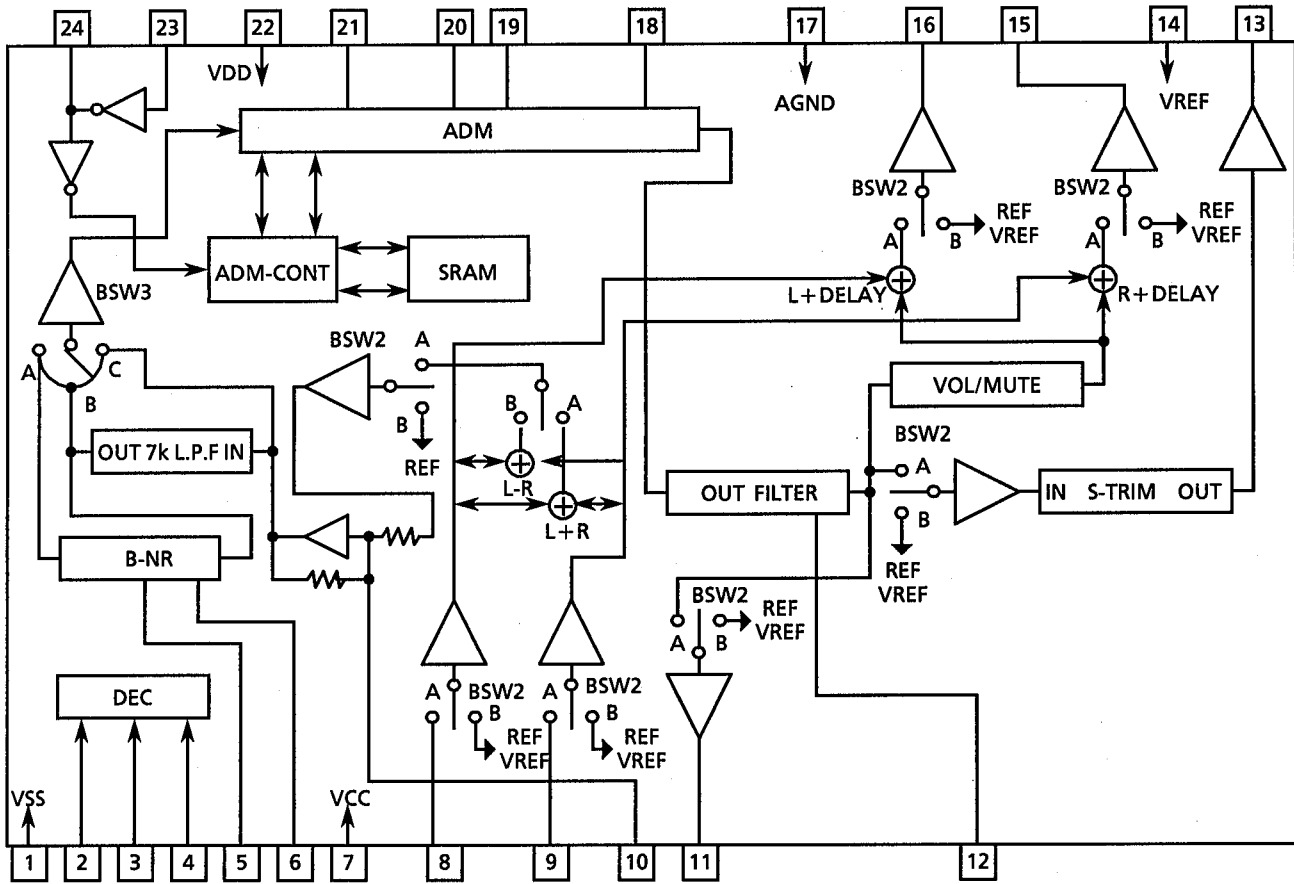


■ LV1015 (IC751) : Dolby Surround Passive Decoder

1. Terminal Layout



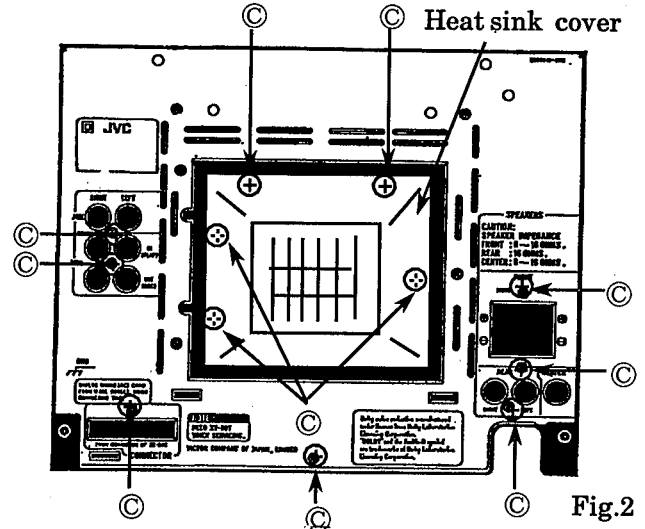
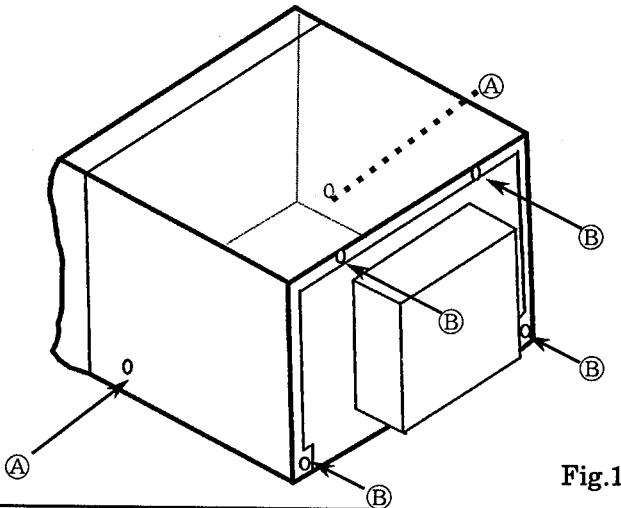
2. Block Diagram



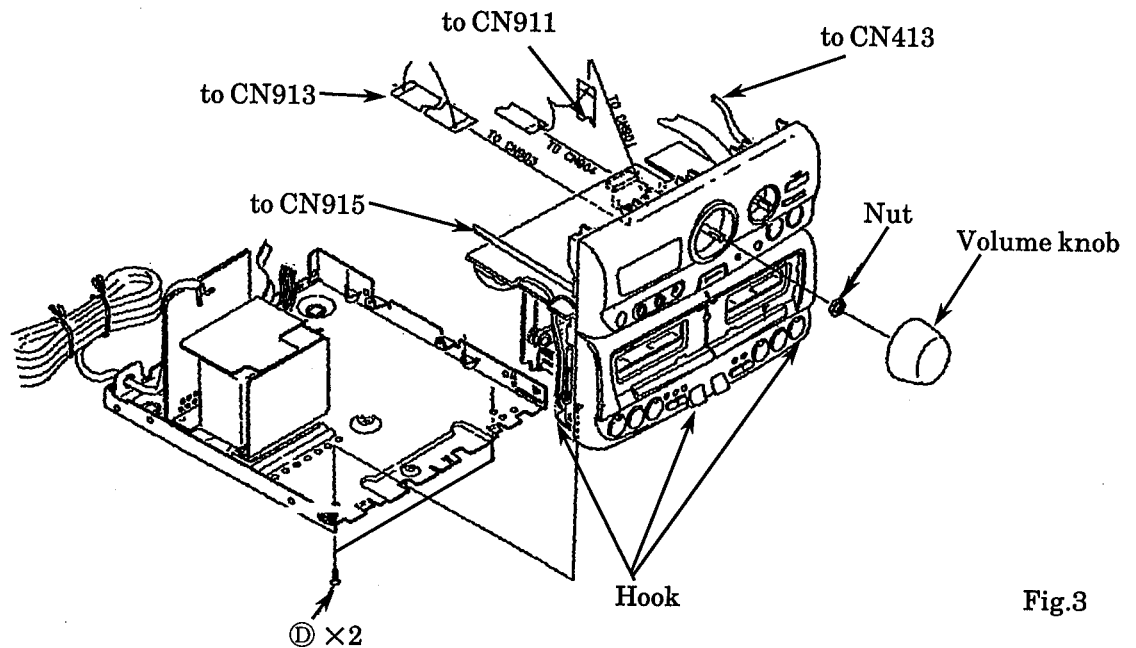
Disassembly Procedures

- (1) Removing the top cover
1. Remove 6 screws (A) and (B) fastening the rear and sides of the top cover to remove the cover.

- (2) Removing the rear panel
1. Remove the top cover. (Refer to Item 1)
 2. Remove 2 screws (C) to remove the heat sink cover.
 3. Remove the heat sink cover.
 4. Remove 10 screws (C) fixing the rear panel to remove it.
- * For U,UB,US and UT 12pcs.



- (3) Removing the Front panel and volume knob assembly
1. Remove the top cover. (Refer to Item 1)
 2. Pull out the main volume knob and remove the nut fixing the main volume.
 3. Disconnect the connectors CN913, CN413, CN915 and CN911
 4. Remove 2 screws (D) and 3 hooks fastening the assembly with chassis to remove the assembly.



- (A) .. SDSG3006M (B) ... GBSG3008CC (C) ... E73273-003 (D) ... SBST3008M

- (4) Removing the circuit boards(ENB-231-5,ENB-231-2,ENB-231-3,ENH-284-4,ENH-284-3,ENH-284-4, ENH-284-1)
1. Disconnect the connector CN017 to disassemble junction circuit board (ENB-231-5)
 2. Remove the junction circuit board (ENB-231-4)
 3. Disconnect the connector CN014 to disassemble junction circuit board (ENB-231-3)

5. Disconnect the connector CN016 and CN018 to disassemble junction circuit board (ENH-2284-2/3) with the heat sink.
6. Disconnect the connector CN009 and CN111, Remove the 3 screws ③ fixing the main circuit board (ENH-284-1) to remove it .

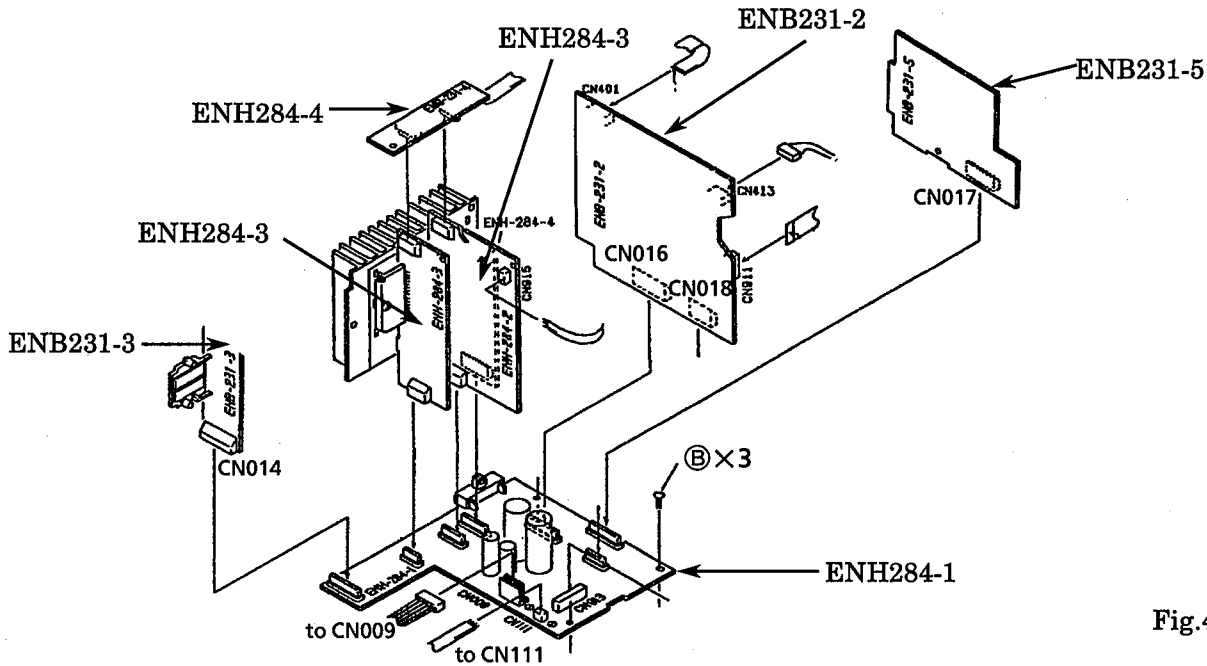


Fig.4

(5) Removing the Power IC

1. Remove the power amp. circuit board (ENH-284-2,ENH-284-3) with the heat sink. (Refer to Item 4)
2. Remove the each 6 screws ⑤ and screw ⑥ fixing both the power amp. ic.
3. Unsolder it.

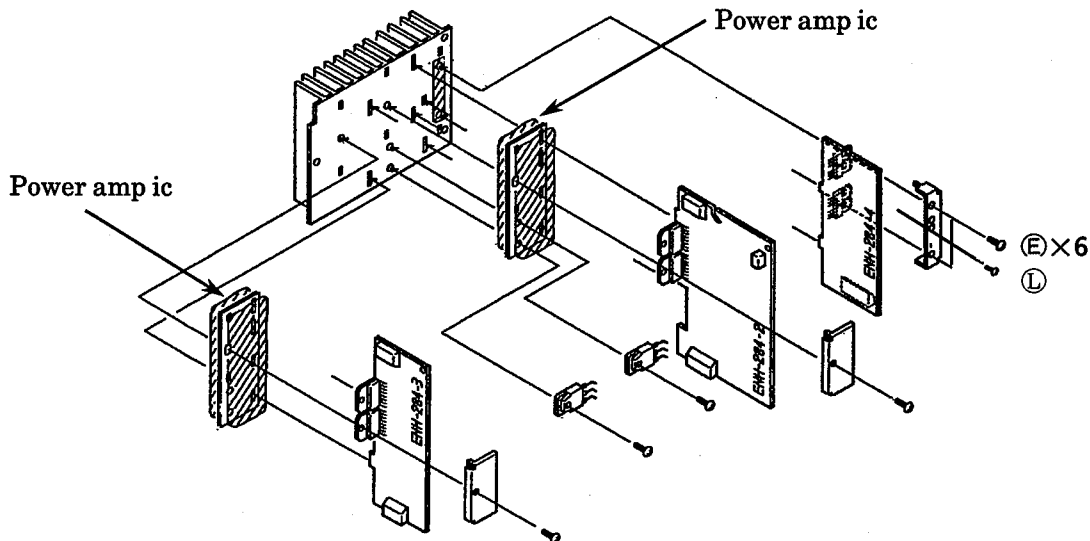


Fig.5

③ GBSG3008CC ⑤ SBSG3014CC ⑥ SBSG3008M

(6) Removing the Deck control circuit board (ENB-231-1)

1. Remove the front panel assembly.
2. Disconnect the connectors CN922 and CN912.
3. Remove the 2 screws ⑥ fixing the circuit board.
4. Remove hook fastening the Deck CB holder circuit board (ENJ-096-1).
5. Remove the Deck control circuit board.

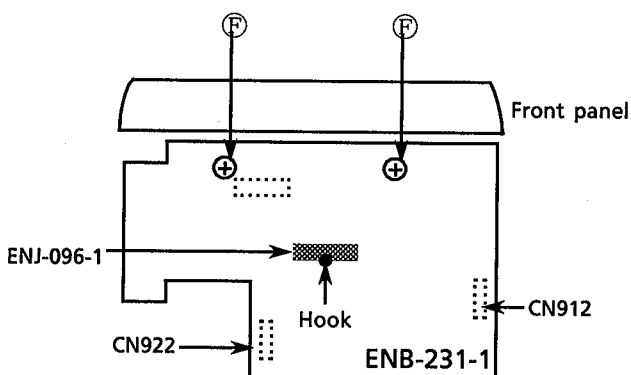


Fig.6

(7) Removing the cassette mechanism assembly

1. Remove the Deck control circuit board. (Refer to Item 6)
2. Remove the 8 screws ⑦ and ⑧ to remove the cassette mech. assembly.

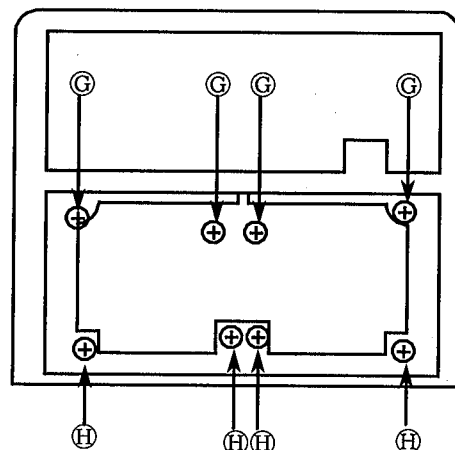


Fig.7

(8) Cassette deck PCB (ENJ-096-1) removal

1. Remove the cassette mech. assembly.
2. Disconnect the CN331 and CN332.
3. Remove the 2 screws ① holding the PCB.
4. Remove the Cassette deck PCB.

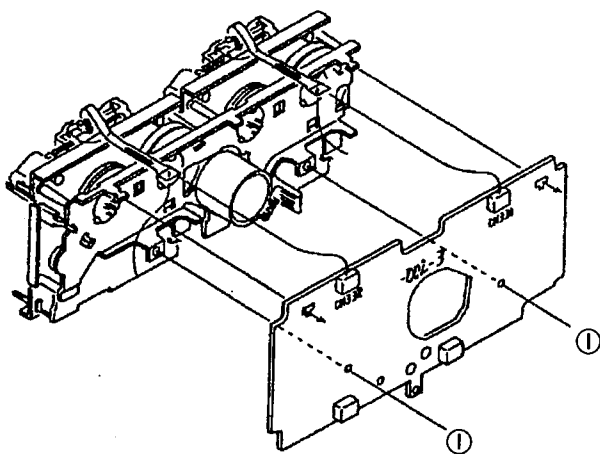


Fig.8

(9) Cassette door lock plate removal

1. Remove the cassette mech. assembly and cassette deck PCB. (Refer Item 7 and 8)
2. Remove the spring.
3. Push up the Elevator as shown in the figure below (Fig. 9) and remove the door lock plate.

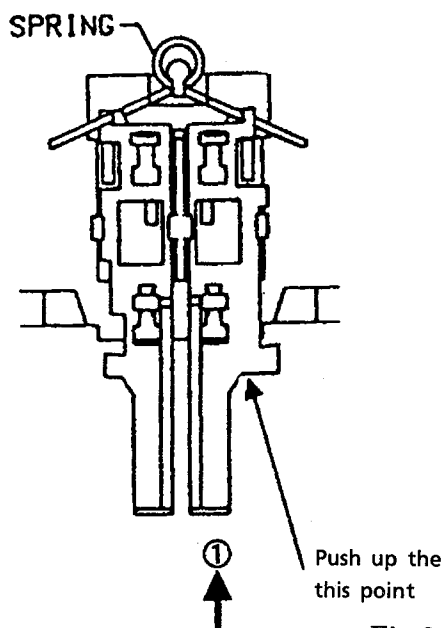


Fig.9

① ... SBST3006Z ⑥ ... SBST2604Z ⑦ ... SBSF3008Z ⑧ ... SBST3006Z

(10) Cassette holder removal

1. Remove the Cassette mechanism assembly.
2. Remove the spring holding the cassette holder.
3. Remove the Cassette holder.

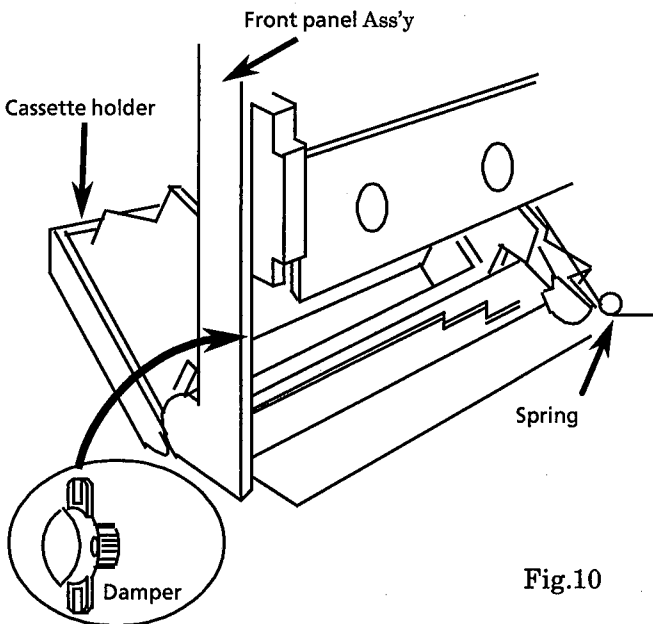


Fig.10

(11) Removing the dumpers

1. Remove the mechanism assembly. (Refer to Item 7)
2. Remove the cassette holder. (Refer to Item 9)
3. Press the hook and release it to remove the dumper. (See an arrow)

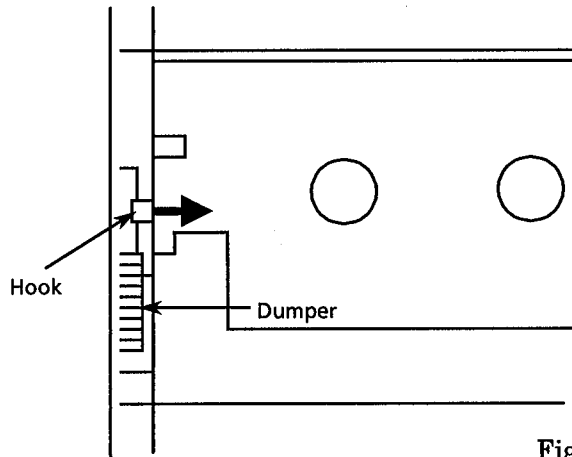


Fig.11

(12) Removing the Front SW circuit board (ENB-205-8)

1. Remove the cassette holders. (Refer to Item 10)
2. Remove the door lock plate assembly. (Refer to Item 9)
3. Remove the 4 screws ① to remove the holder bracket fixing the SW circuit board.
4. Remove 6 screws ② to remove the circuit board.

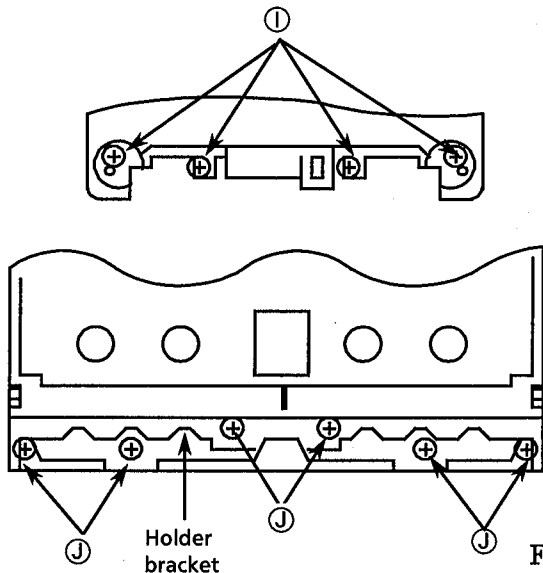


Fig.12

(13) Front PCB (ENJ-092-2) removal.

1. Remove the mechanism assembly. (Refer Item 7)
2. Remove the main volume knob and nut (Refer to Item 3), Remove the Bass control knob.
3. Remove the 8 screws ③ holding the Front PCB.
4. Remove the Front PCB.

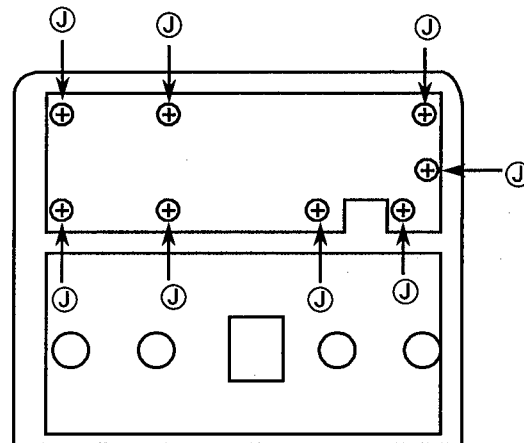


Fig.13

① .. SBST3006Z ② ... SDSF2608Z

Cassette Mech. Ass'y removal

(14) Head assembly removal

1. Remove the Cassette mech. ass'y.
2. Remove the Flexible wire from the cassette deck and remove the 3 screws ① holding the head Ass'y.

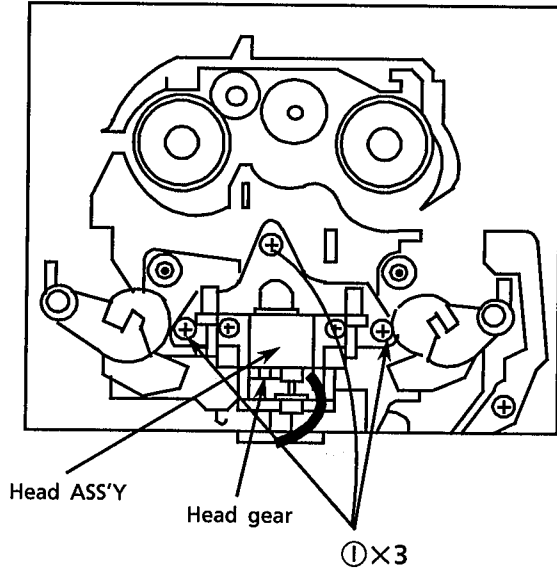


Fig.14 Cassette mech. bottom view

(16) Pinch roller(FWD/REV) removal

1. Remove the cassette mech. assembly.
2. Remove the hook holding the pinch roller.
3. Remove the pinch roller ass'y.

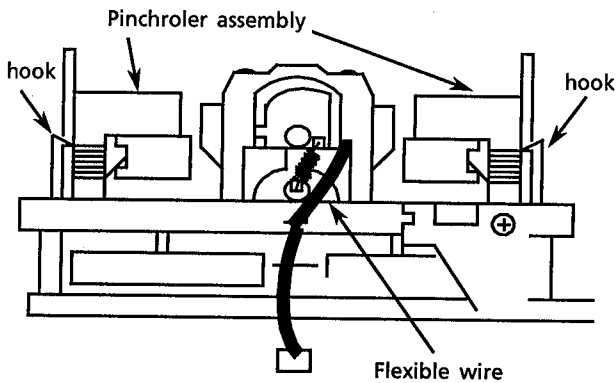


Fig 16 Cassette mechanism bottom view

(15) Head assembly

1. The direction of the head is changed with the direction lever. When servicing, install the direction lever according to the direction of the head assembly.

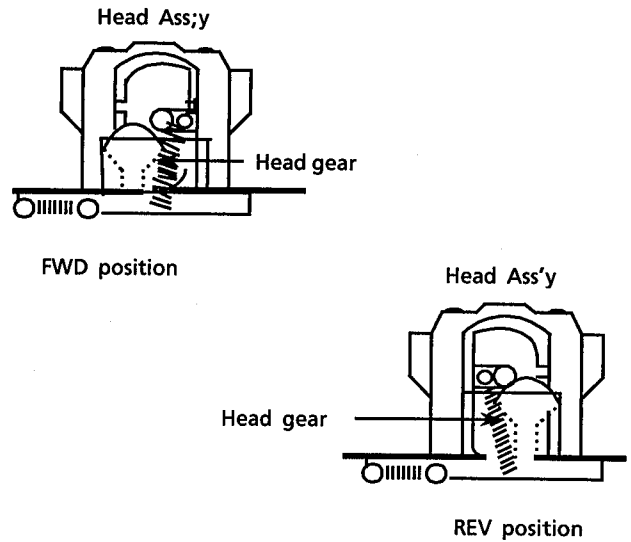


Fig.15-A Head Ass'y side view

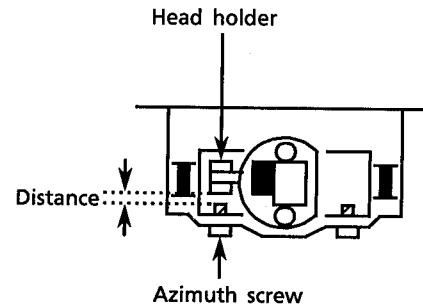


Fig.15-B A distance of between head older and azimuth screw

① .. SDSF2608Z

(17) Capstan motor removal.

1. Remove the cassette mechanism.
2. Remove the cassette deck control PCB.
3. Remove the 6 screws (J) holding the bracket.
4. Remove the hooks (■) of the bracket.
5. Put the cutting on the flywheel A together the bracket's pawl as shown in Fig. 16(Flywheel A) and check that the flywheel B is removed from the bracket's pawl(Fig. 16-Flywheel B).
6. Remove the capstan motor with the bracket.
7. Unsolder the broken flat wire of the capstan motor.
8. Remove the 2 screws fixing the motor and the bracket.

* To remove the bracket, it is easier to remove mech. "B" first.
Vice versa, assembling mech. "A" is easier for reassembly.

8.7±0.05mm

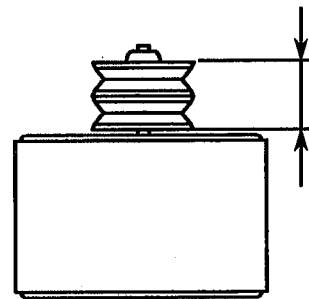


Fig 17 Capstan motor pully installation

(18) Flywheel removal

1. Remove the cassette mechanism assembly.
2. Remove the cassette amp PCB.
3. Remove the 6 screws (J) and the bracket.
4. Remove the 4 hooks of the bracket.
5. Remove the bracket.
6. Remove the flywheels.

*The oil on the capstan must be wiped out after re-assembling.

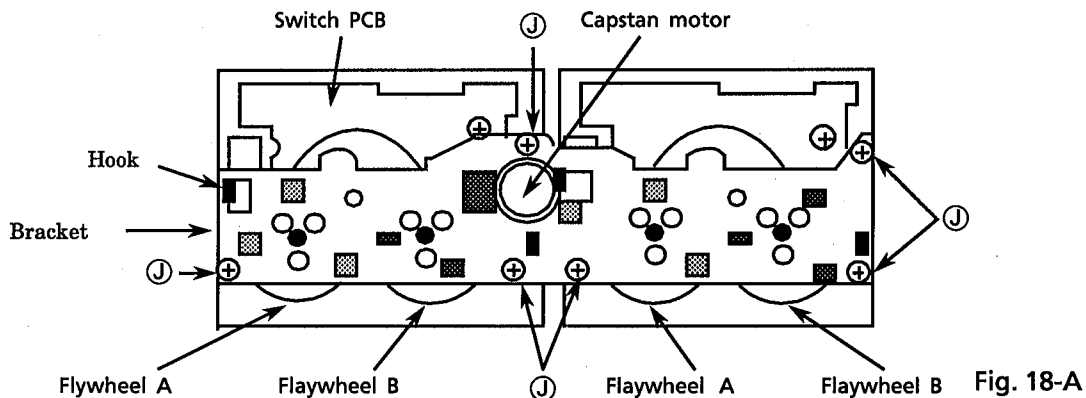


Fig. 18-A

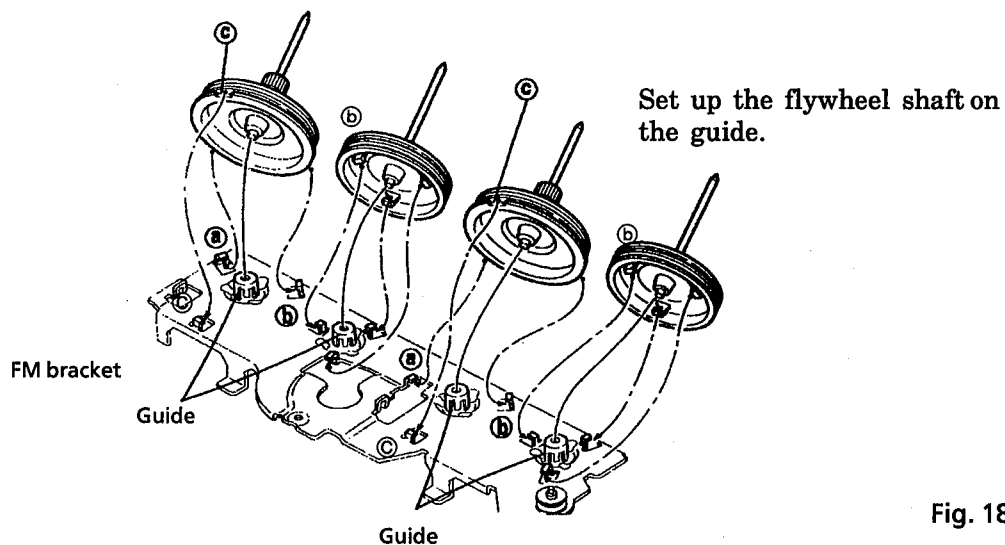


Fig. 18-B

(J) .. SDSF2608Z

(19) How to install the belts

1. Install the flywheels and belts as shown in the figure below. (Fig 19)
When putting the belts, put the long belt first.
2. Install the main reels to put the belts on the flywheels.

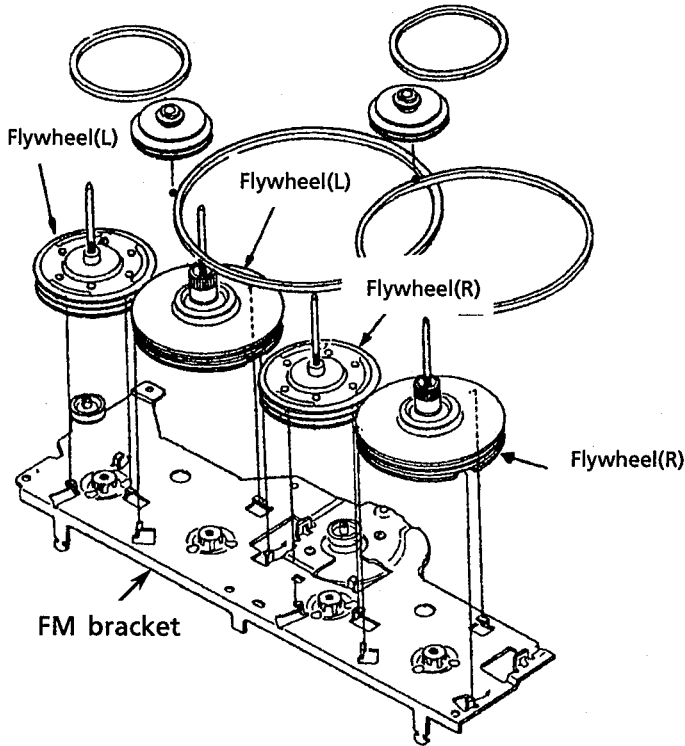


Fig 19-A Install the Braket and flywheels

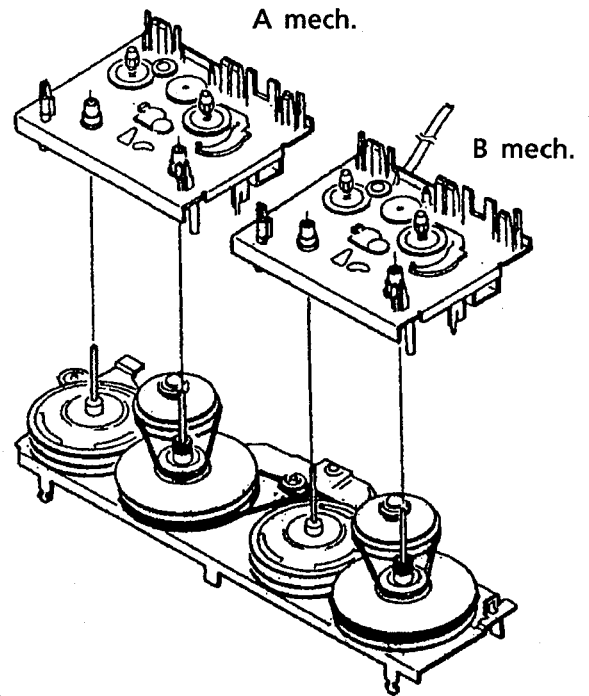
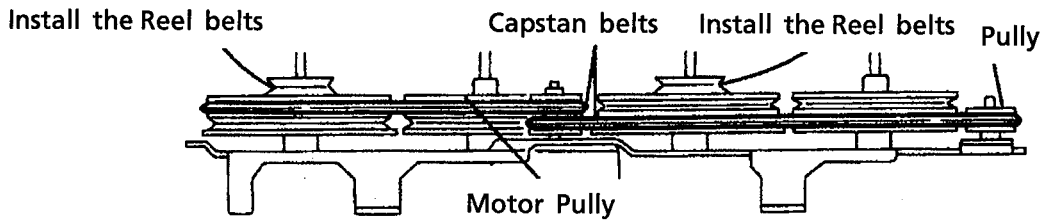


Fig 19-C Insdtall the cassette emch.



REEL BELTS → After hooking reel belts, no twist.

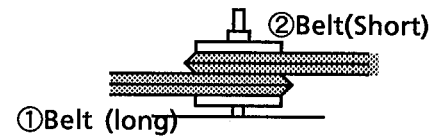


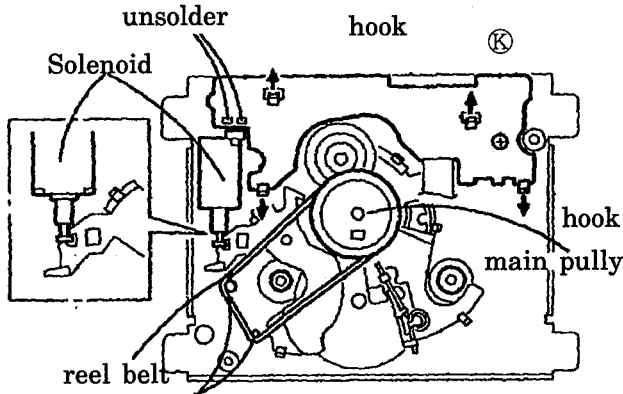
Fig 19-B Install the Belts

②Belt(Short)

①Belt (long)

(20) Switch PCB removal

1. Remove the flywheel.
2. Remove the 1 screw ①.
3. Unsolder the broken solenoid.
4. Release the 4 hooks holding the Switch PCB.
5. Remove it.



When attach the FM bracket,
Install the reel belt on the stud
(See fig 19)

Fig 20

(21) Control cam removal

1. Remove the FM bracket and flywheel.
2. Pull out the main pulley.
3. Remove the trigger arm.
While opening the two tabs ① under the trigger arm, pull out the trigger arm from the shaft.
4. Pull out the elevator ring.
5. Remove the FWD/REV arm assembly.
a. Remove the FWD/REV arm spring.
b. While opening the four FWD/REV arm retaining tabs ② outwards, pull out the FWD/REV arm.
6. Pull out the control cam.
While pulling the shaft stopper section of the control cam in the central direction, pull out the control cam.

When attaching the control cam

While pressing the FWD/REV arm in the direction of the arrow, pull the head the front.

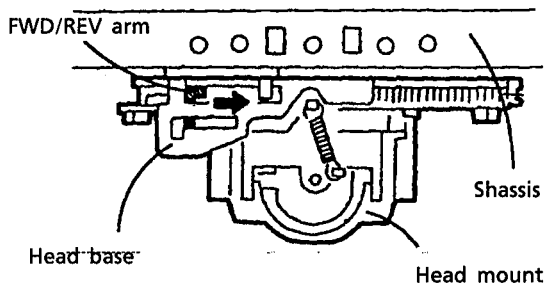
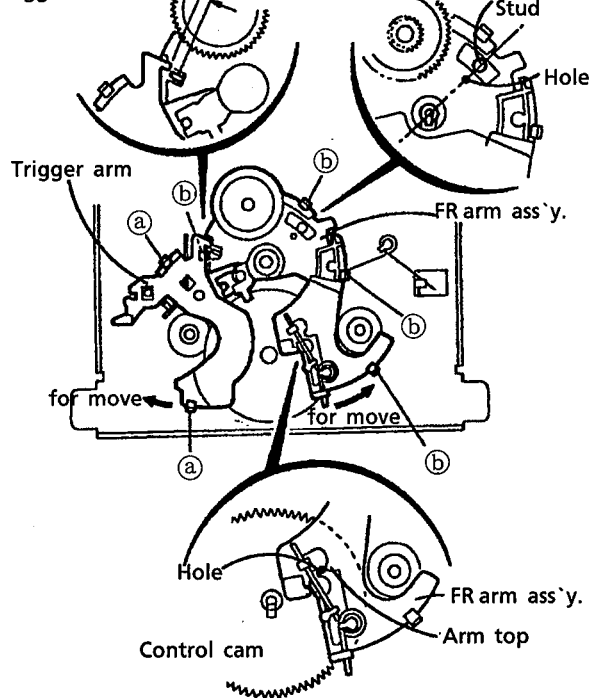


Fig 21-c

Moving area of the trigger arm. Position of the hole and the stud after fixing the FR arm ass'y.



Position of the hole of cam and top of the arm after fixing the FR arm ass'y.

Fig 21-a

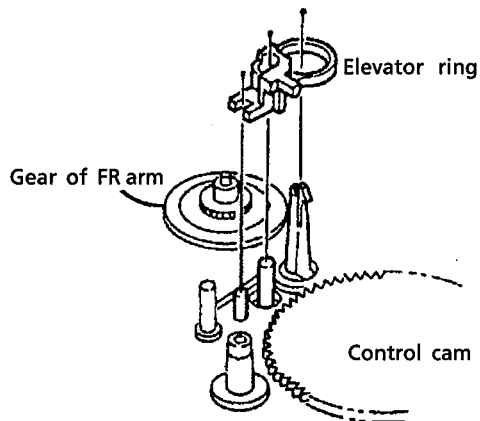


Fig 21-b

After performing the procedure shown above, the studs under the control cam move as shown.

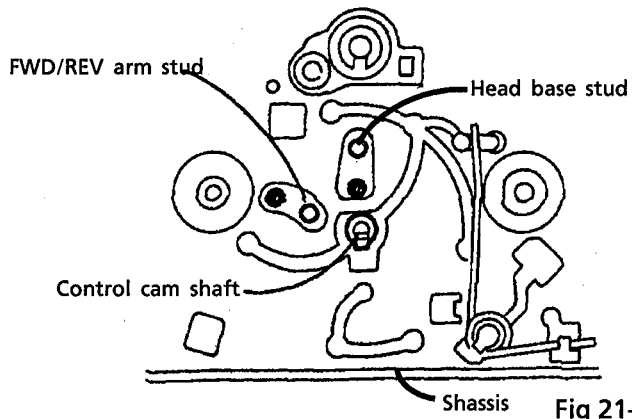
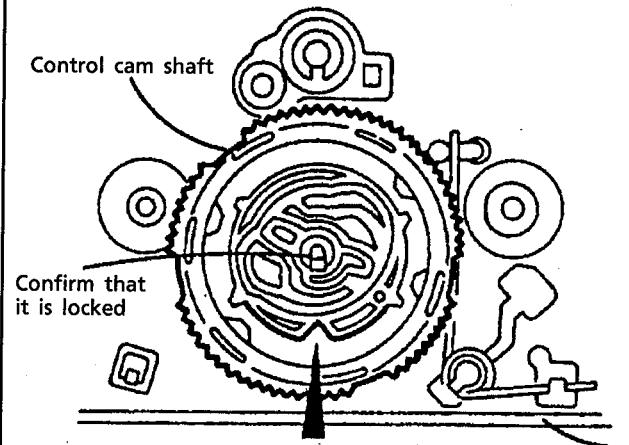


Fig 21-d

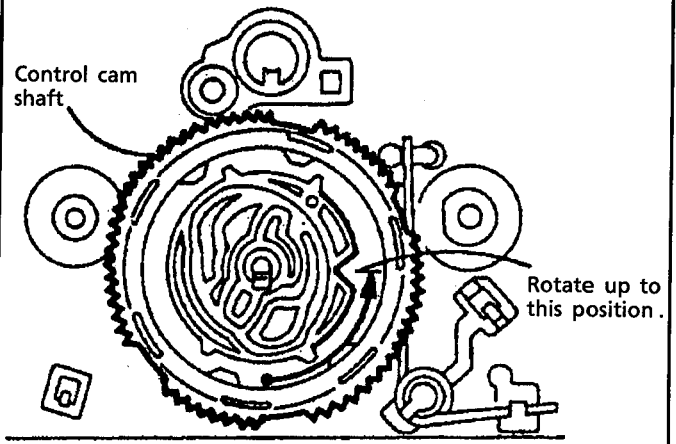
(22) How to assemble

1. Move the FWD/REV arm in the direction of the arrow .
2. In step 1 , pull the head base forward .
3. In step 2 ,after inserting the cam into the shaft , move the head base and FWD/REV aem slightly until the cam is fully inserted and it clicks to infoerm when it has been locked.
4. Rotate the cam counterclockwise to check if the cam rotates smoothly and the spring clicks according to the forward/backward movement of the head base .
5. After checking the rotation of the cam , rotate the cam until the notch section comes to the right so that the FWD/REV arm assembly can be attached .
6. Attach the FWD/REV arm assembly while observing the positioning of:
 - the hole and stud
 - the cam hole and arm edge
 shown in the figure 21-a .
 After attachment , move the FWD/REV arm in the direction of the arrow to check if it moves back to the original position .
7. Attach the elevator ring .
8. Attach the trigger arm .
 After attachment , move the trigger arm in the direction of the arrow to check if it moves back to the original position .

Working confirmation:
 If the control cam rotates counterclockwise ,the assembly was successful: if it does not rotates . It must be reassembled .



Fit the control cam its notch located as shown .
 (Engage with the gear of the control cam while moving the FWD/REV arm and head base slightly .)



Attach the FWD/REV arm with the control cam rotated up to the position shown ..

Adjustment procedures (Deck section)

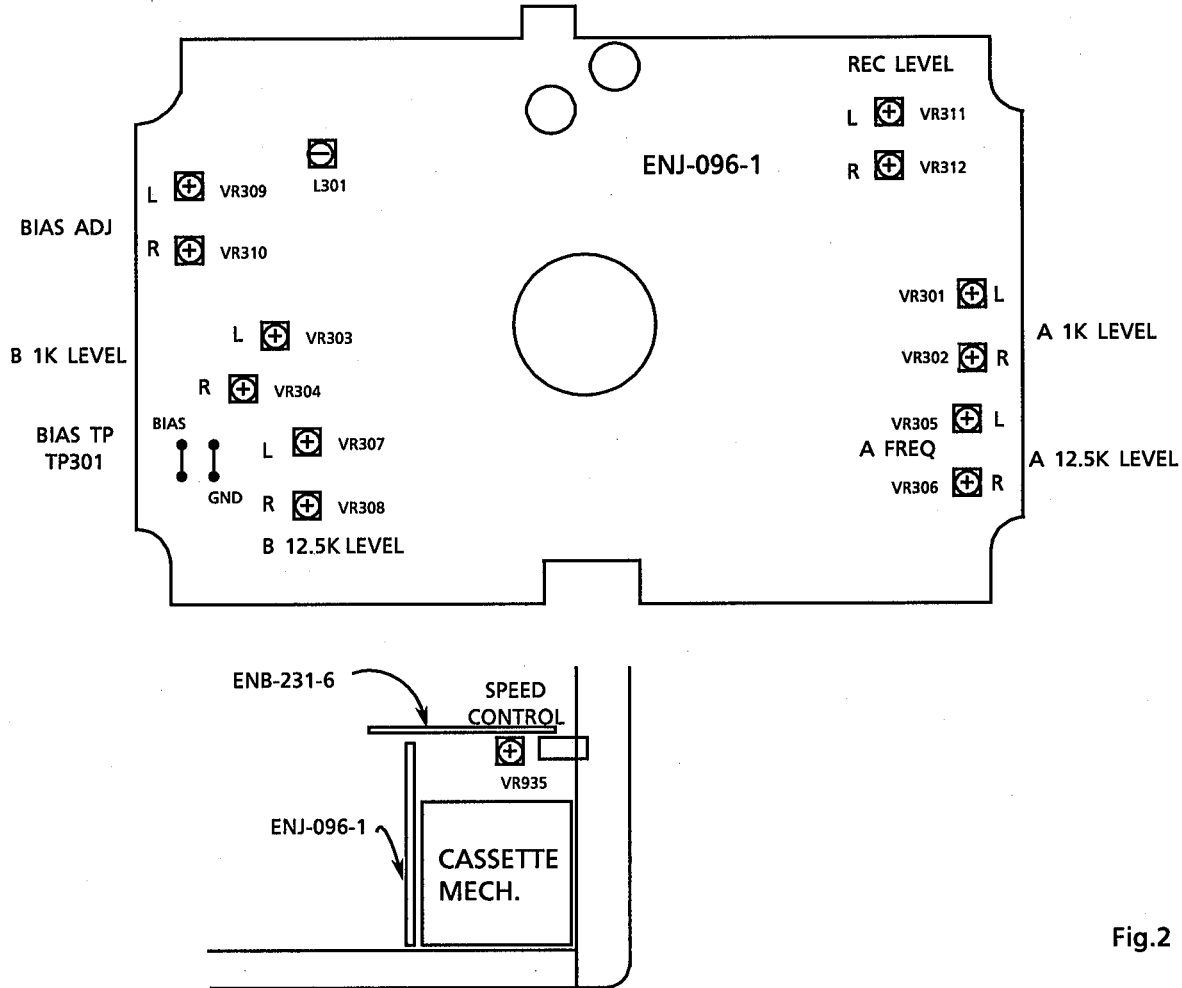


Fig.2

Deck section

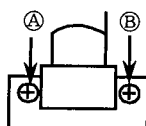
1. Measuring instruments

- Audio frequency signal generator (0dbS output at the 600 ohm output terminal from 50Hz to 20KHz)
- Electronic voltmeter
- Frequency counter
- Wow & Flutter meter
- Distortion Meter with band pass filter.
- Attenuator (600 ohm impedance)
- A resistor with 600Ω

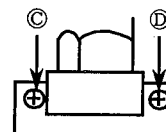
Tape No.	Frequency	Level (Wow & Flutter)	Purpose
VTT-703L	10kHz	-10dBs	Head azimuth , Frequency Response
VTT-712	3000Hz	0dBs 0.025%WRMS	Tape Speed , Wow & Flutter
VTT-724	1kHz	-4dBs	Standard Level
TMT-6447	—	—	Blank Skip
TMT-6247 , TMT-6237	—	—	Music Scan
TMT-7088S	—	—	Recording standard Normal : UR
AC-713	—	—	Recording standard METAL :MA
AC-514	—	—	Recording standard CrO ₂ ,SA
TW-2111, TW-2121	—	—	Forward / reverse play torque measuring
TW-2231	—	—	Feed forward / rewind torque measuring
C-120 Tape	—	—	Confirming the tape running

Adjustment and repairing the mechanism

Item	Adjustment method	Standard value	Remarks
Head azimuth	<p>Deck A</p> <ol style="list-style-type: none"> 1. Connect an electronic voltmeter to the NR TP901 (figure 1) to playback VTT-703L. 2. Adjust screw ① so that the indication of the voltmeter becomes maximum when PLAY (▶) is pressed. 3. Adjust screw ② so that the indication of the voltmeter becomes maximum when PLAY (◀) is pressed. <p>Deck B</p> <ol style="list-style-type: none"> 4. Adjust screw ③ so that the indication of the voltmeter becomes maximum when PLAY (▶) is pressed. 5. Adjust screw ④ so that the indication of the voltmeter becomes maximum when PLAY (◀) is pressed. 6. After making the adjustment, apply screw lock to prevent screws ①, ②, ③ and ④ coming loose. 	Maximum	<ol style="list-style-type: none"> 1. Refer to figure 3. 2. When the specified characteristic cannot be obtained because of head wear, excessive magnetization, etc., replace the head assembly and adjust the head azimuth. Also, perform the electric adjustment. 3. When there is the difference of more than 3 ~ 4 dB between left and right output levels, replace the head assembly to avoid complaints.
Playback torque	1. Measure the torque in the playback mode by the torque meter.	26 ~ 72 g-cm	When the standard torque cannot be obtained, replace the FR arm assembly or motor.
Fast forward torque	1. Measure the torque in the fast forward mode by the torque meter.	75 ~ 175 g-cm	When the standard torque cannot be obtained, replace the FR arm assembly or motor.
Rewind torque	1. Measure the torque in the rewind mode by the torque meter.	75 ~ 175 g-cm	When the standard torque cannot be obtained, replace the FR arm assembly or motor.
Wow & flutter	<ol style="list-style-type: none"> 1. Connect the wow & flutter meter to the DOLBY TP (figure 1) and play back VTT-712. 2. Its reading should be within 0.25% (WTD). 	Less than 0.25%	As a complaint may occur if the wow & flutter fluctuates by 0.1% even though it is allowed in the standard, repairing is required.



Deck A



Deck B

Fig.3

3. Electrical Adjustments (Make the following adjustments after adjusting the head azimuth.)

In principle, the adjustments should be made in the following sequence.

Set the NR switch to OFF and the BEAT CUT switch to "1".

Adjustments marked with an asterisk (*) should always be made after the head is replaced

0dBs=0.775V

Item	Adjustment Method	Adjustment Location	Standard Value	Remarks
Tape Speed	1. Connect a frequency counter to the NR TP 901 (figure 1) and play back VTT-712. 2. Adjust the semi-fixed resistor VR935 on FMH-005 - 1 (figure 1).	VR935	3,000 Hz ±10Hz	Connect a wow & flutter meter with a built-in frequency counter to the speaker terminals.
Standard level (Playback Level)	1. Connect an electronic voltmeter to the NR TP901 (figure 1). Play back VTT-724 (1 kHz : -4dBs) to adjust the semi-fixed resistors.	Deck A L: VR301 R: VR302 Deck B L: VR303 R: VR304	488mV (-4dBs)	1) The playback level varies when the head is replaced so should be adjusted. Use an electronic voltmeter with an impedance of 100 kΩ or more.
Playback Frequency Response	1. Connect an electronic voltmeter to the NR TP 901 (figure 1). 2. Play VTT-703L (10kHz : -10dBs) and adjust semi-fixed resistors to obtain the standard values.	Deck A L: VR305 R: VR306 Deck B L: VR307 R: VR308	245mV (-10dBs)	—
Recording Bias Frequency	1. Connect a frequency counter to the BIAS TP (figure 1), and perform a recording to adjust bias frequency.	L301	105 kHz ±5 kHz	Set the BEAT CUT SWITCH to "1". (BS,EF,EN,G,GI,VX only)
Record / Play Frequency Response (Bias current)	1. Supply 1kHz and 12.5kHz with 30mV signals to AUX terminals respectively to record them. 2. Connect an electronic voltmeter to the NR TP901 (figure 1) to confirm the recorded values. 3. If the values are not satisfied, adjust the semi-fixed resistors and record the signal again to confirm the recorded values.	L: VR309 R: VR310	0±2 dB with 1 kHz as the standard.	Refer to figure 4 below. 1) The recording and playback frequency response of a cassette deck are adjusted by adjusting the bias. 2) Perform the adjustment with normal tape and confirm that the values are within the range for metal tape.

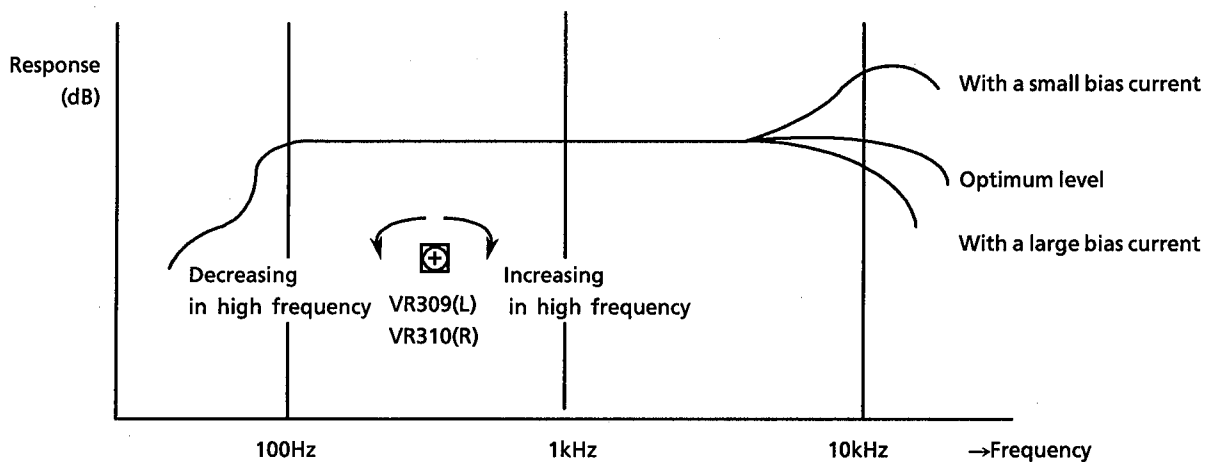
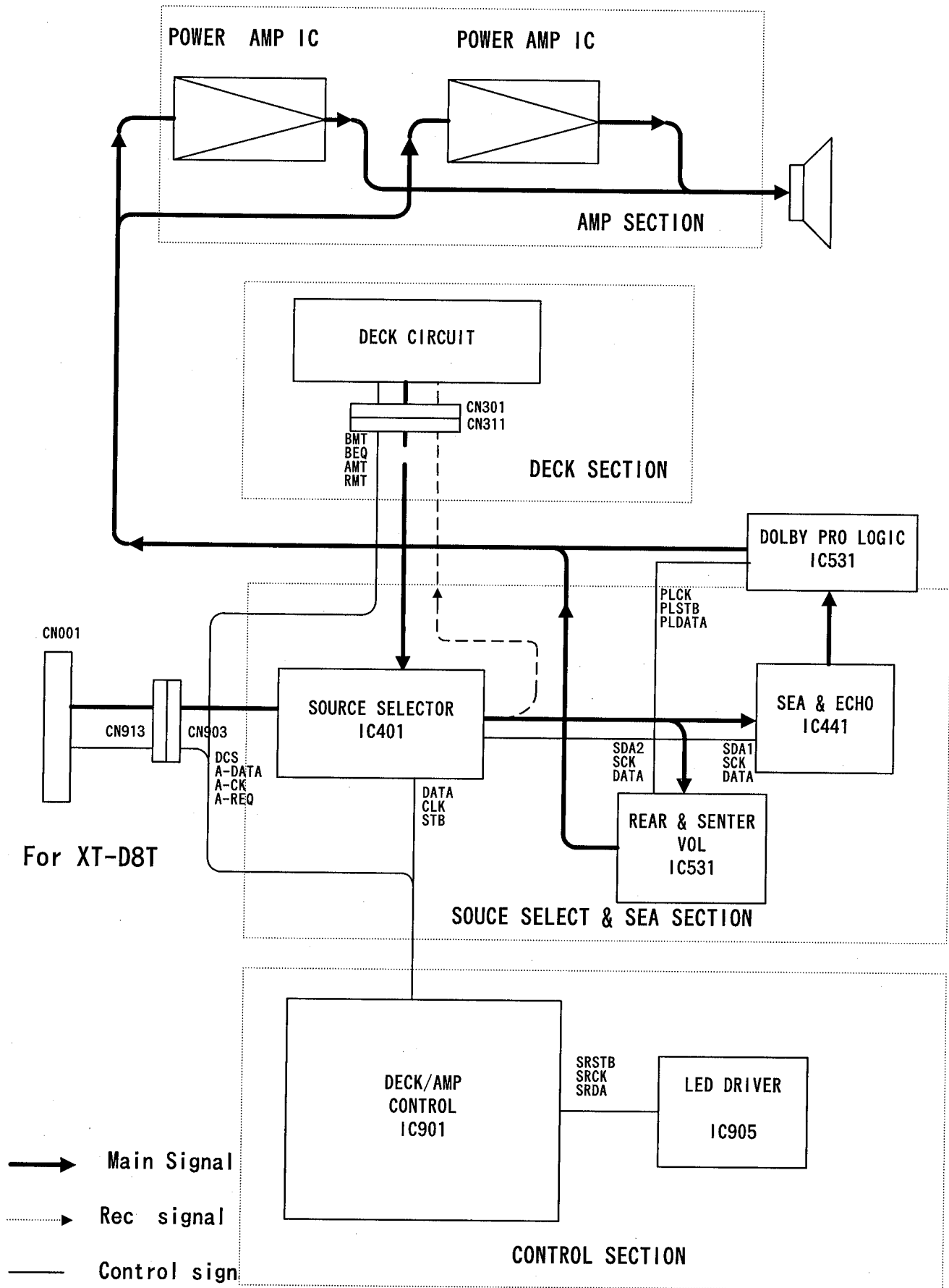
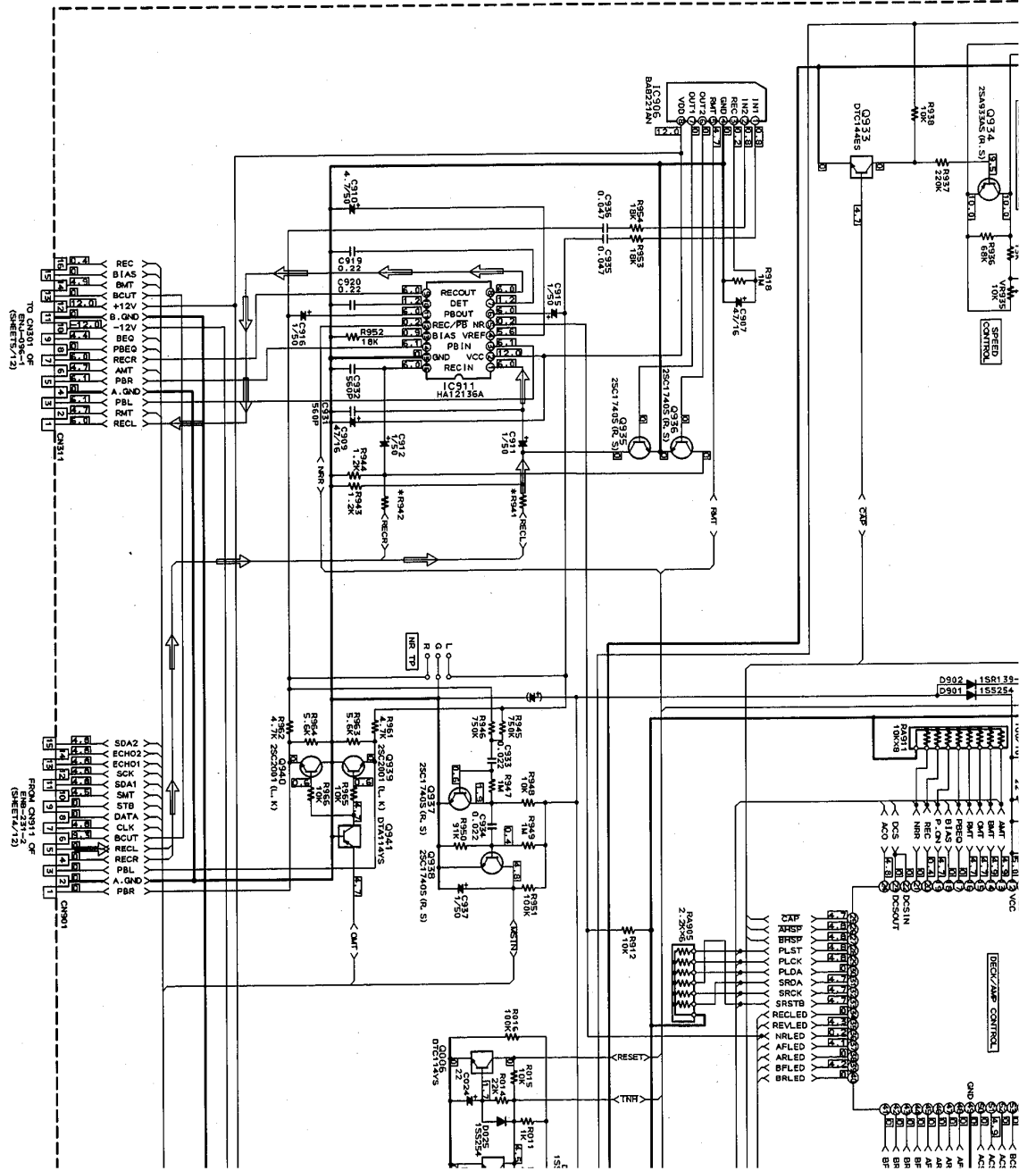


Fig.4

DX-D8T Block Diagram

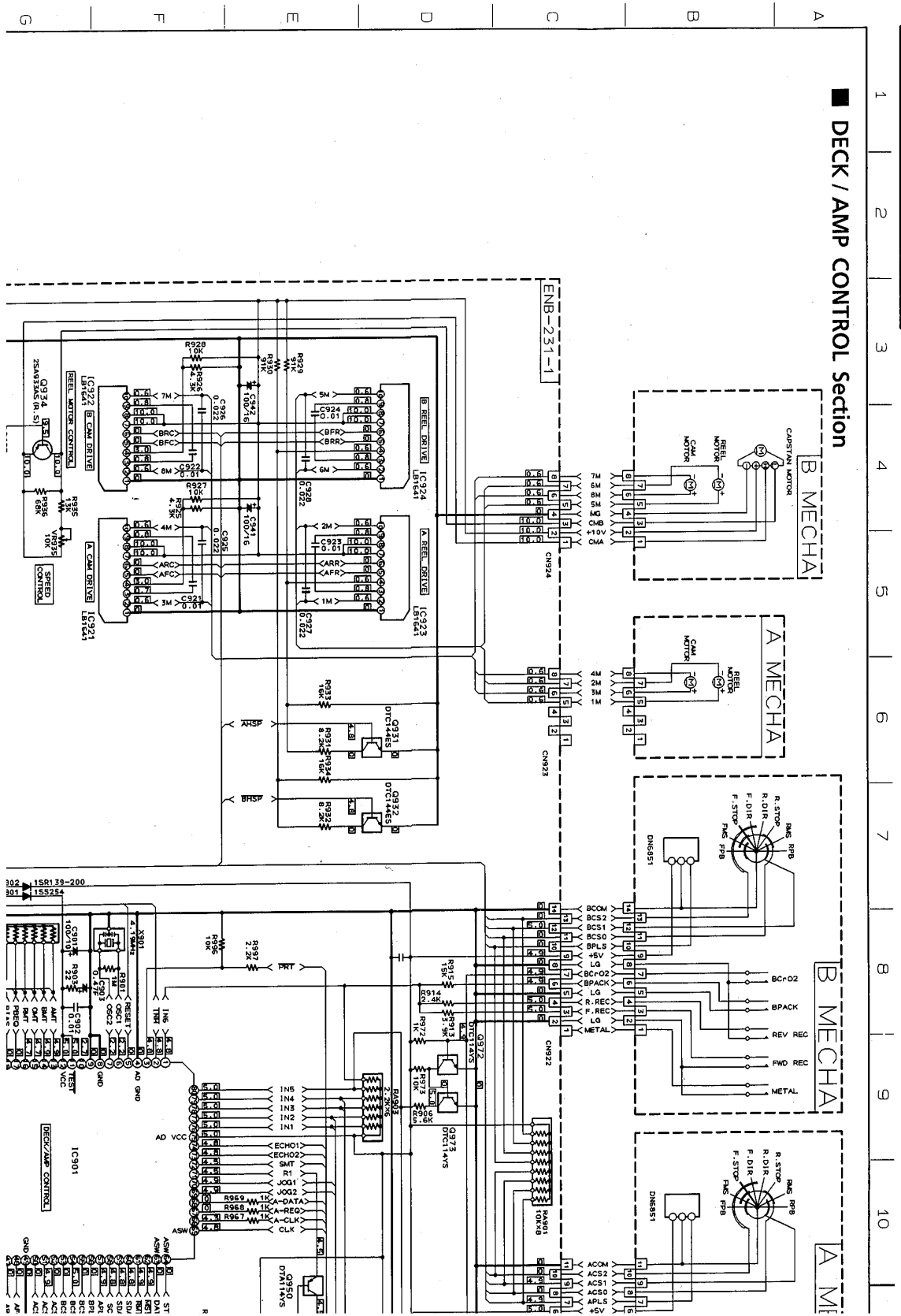


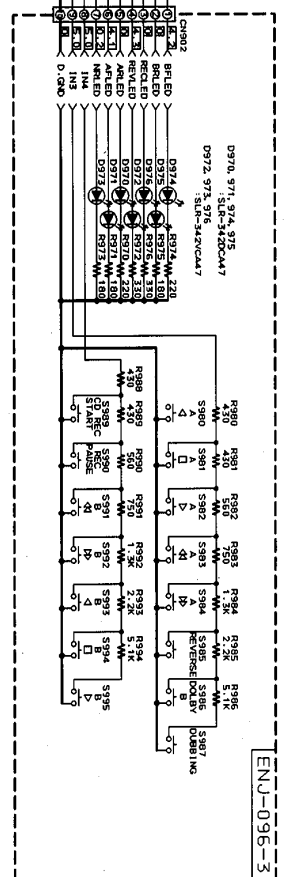
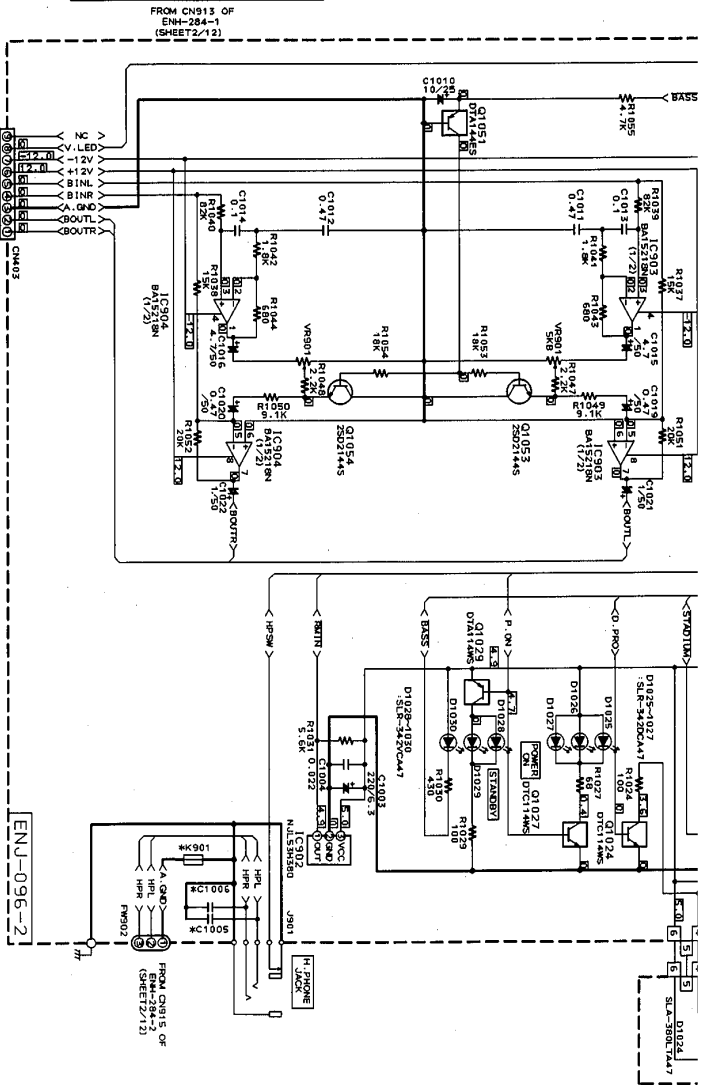
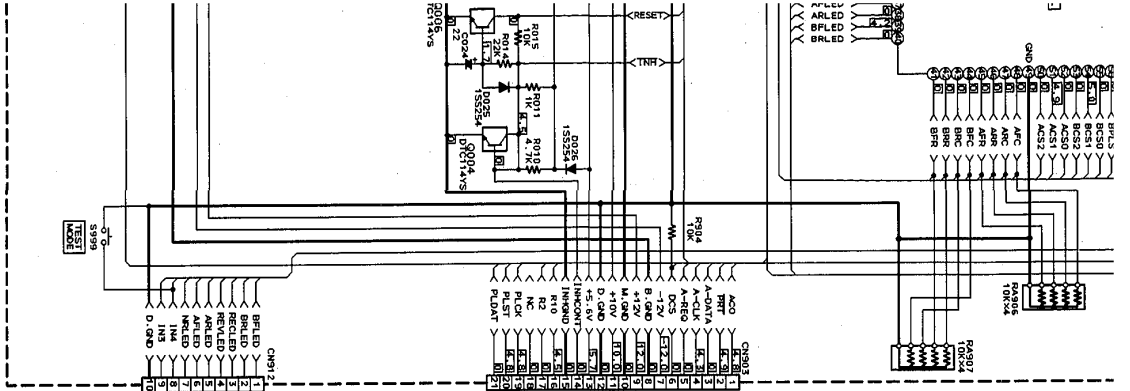
— MEMO —



Schematic Diagrams

DECK / AMP CONTROL Section

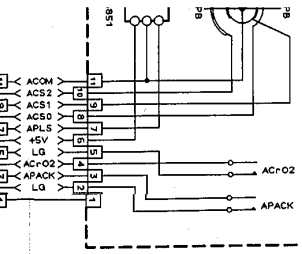




DX-D8T

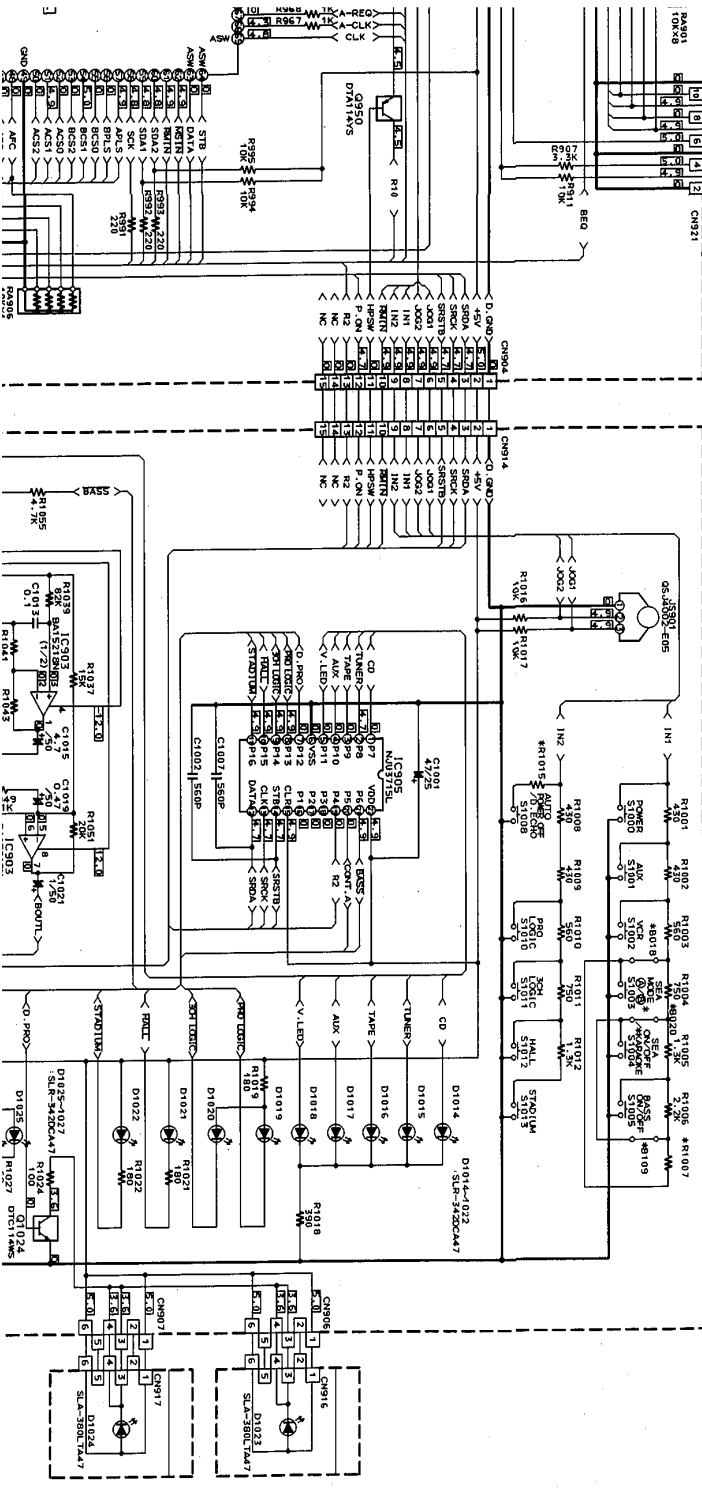
10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20

A MECHA



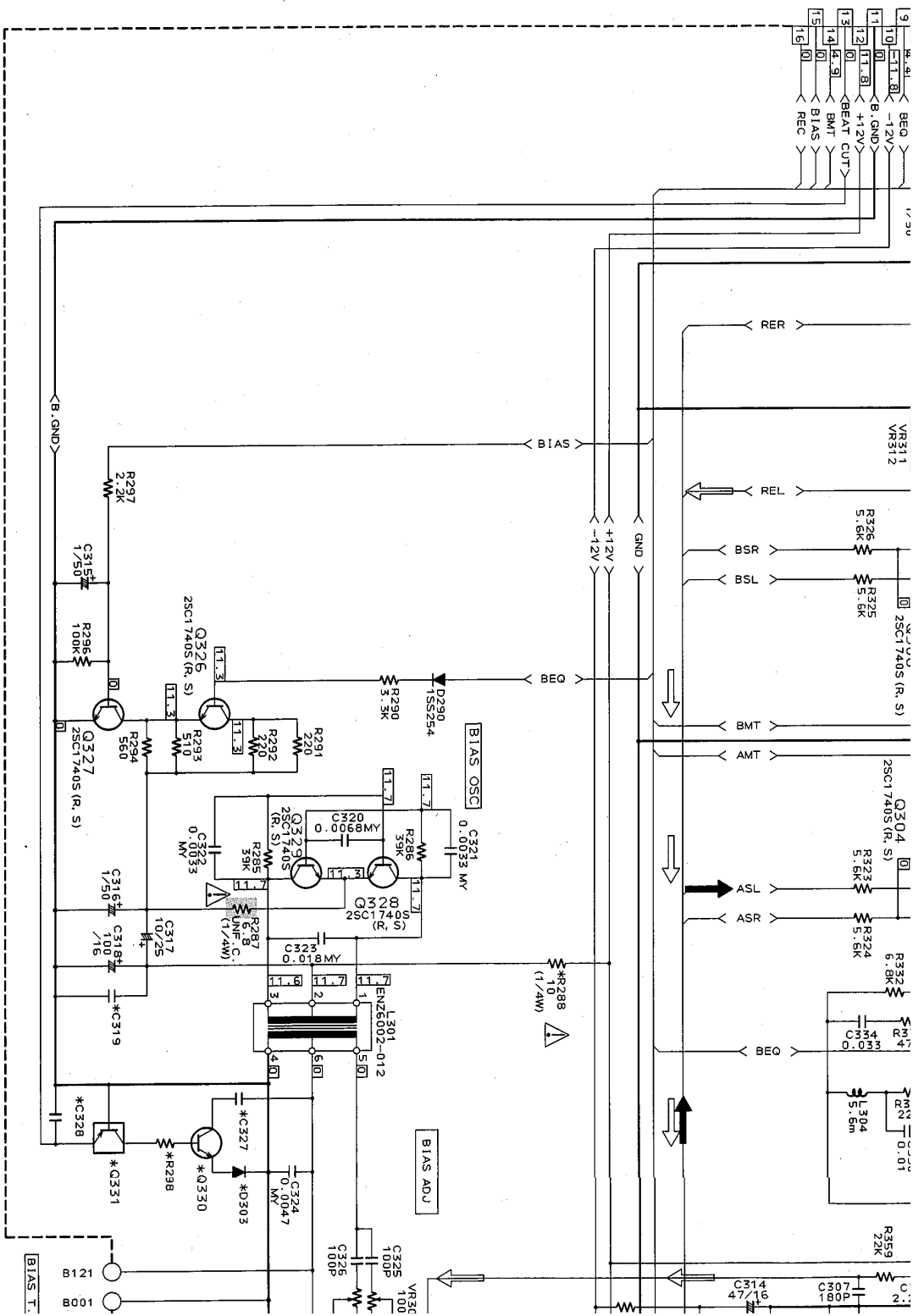
* MARK

MARK	Y	C	U,UA,US	A	EN,EA,EG	BS	EN,EA,EG
B018	USED	USED	NONE	USED	USED	USED	USED
B019	NONE	NONE	NONE	NONE	NONE	NONE	NONE
B020	USED	USED	NONE	USED	USED	USED	USED
C1005,1006	NONE	NONE	NONE	NONE	470P	470P	470P
K001	NONE	NONE	5.1K	NONE	USED	USED	USED
K007	SHORT	SHORT	430	SHORT	SHORT	SHORT	SHORT
R1015	SHORT	SHORT		SHORT	SHORT	SHORT	SHORT



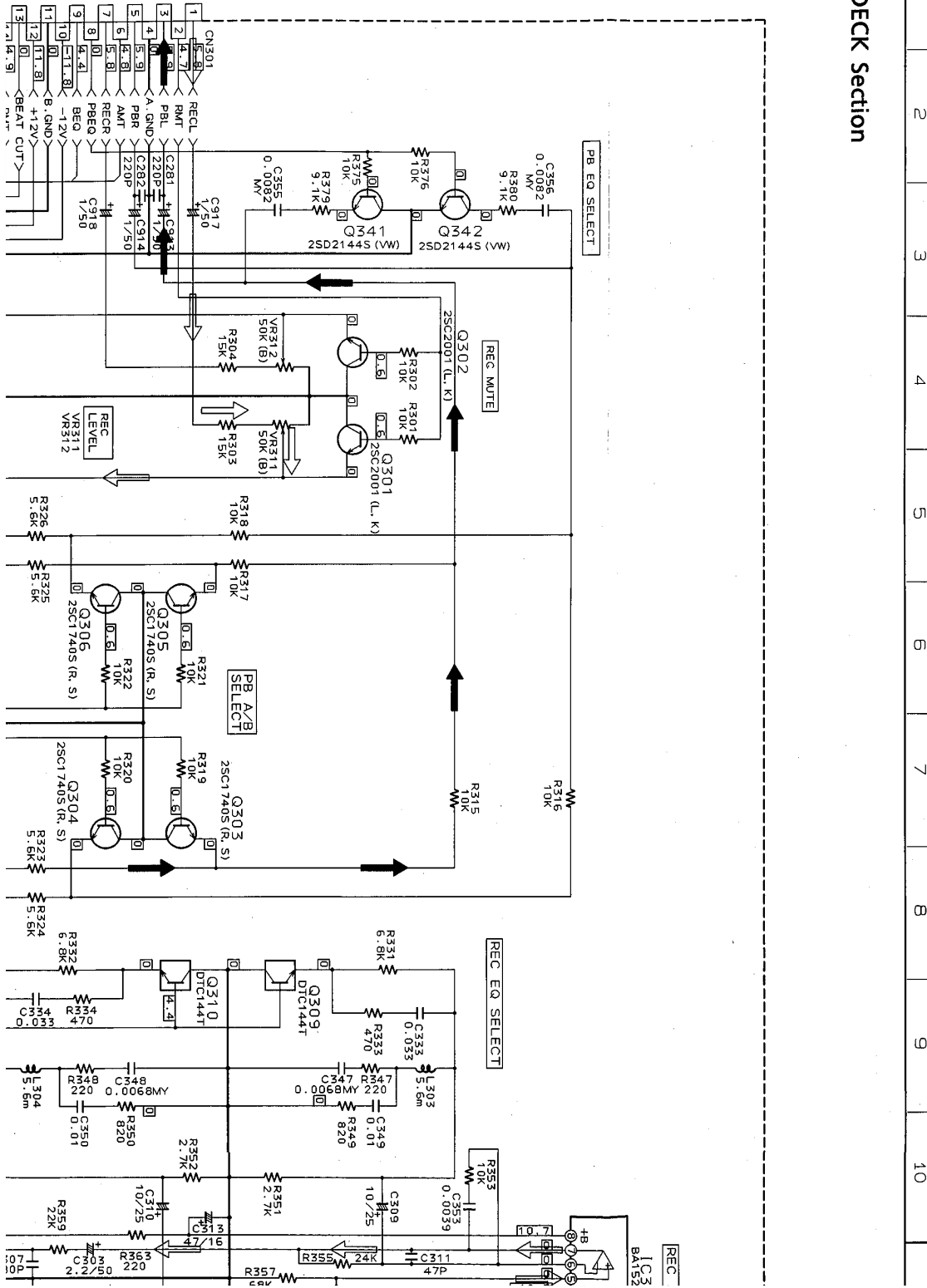
- Note:
1. indicates main signal path.
 2. indicates recording signal path.
 3. When replacing the parts in the shaded area () and those marked with , be sure to use the designated parts to ensure safety.
 4. This is the standard circuit diagram.
 5. The design and contents are subject to change without notice.

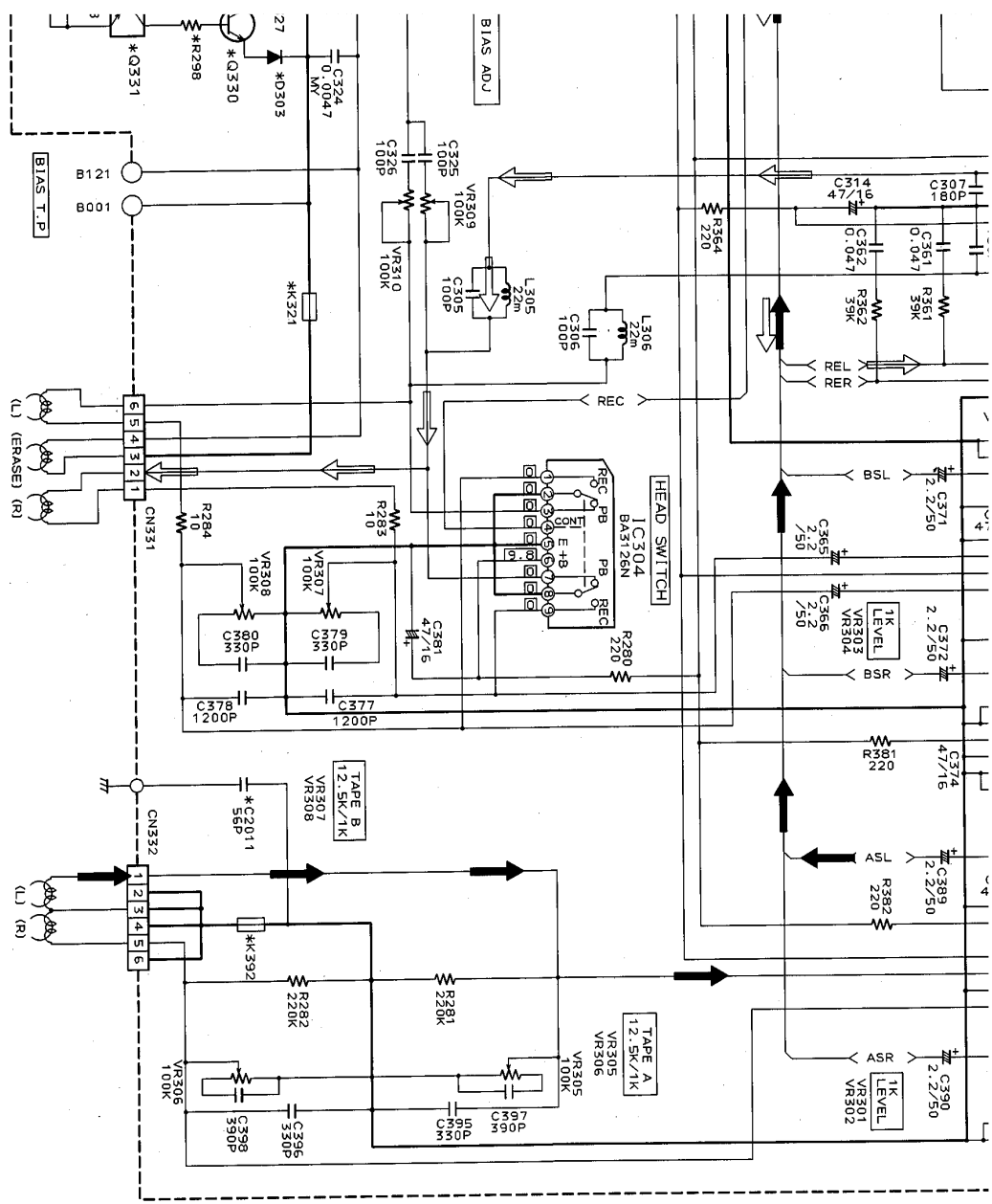
FROM CN311 C
(SHEET)



DECK Section

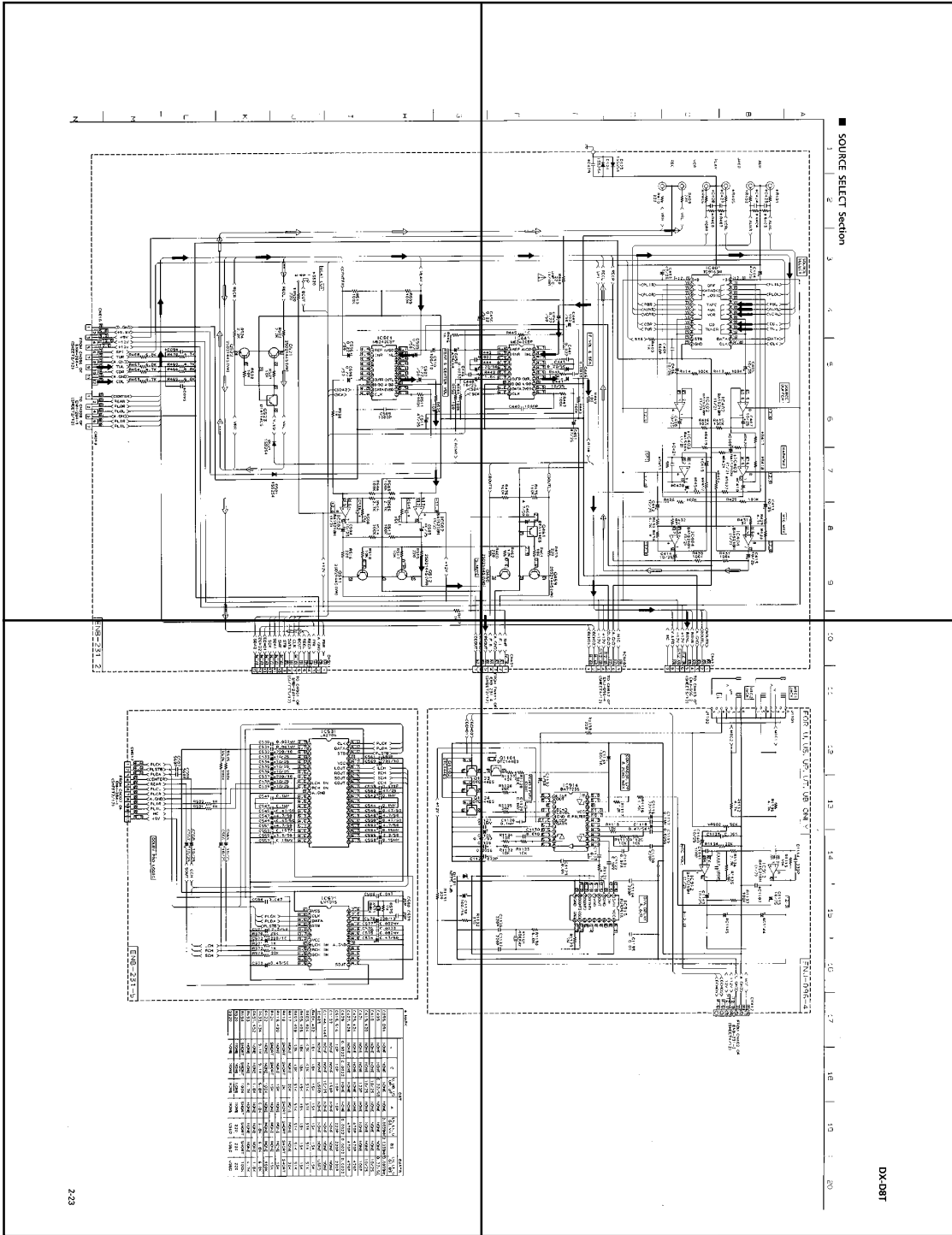
QM CN311 OF ENB-231-1
(SHEET 4/12)





P2-23a

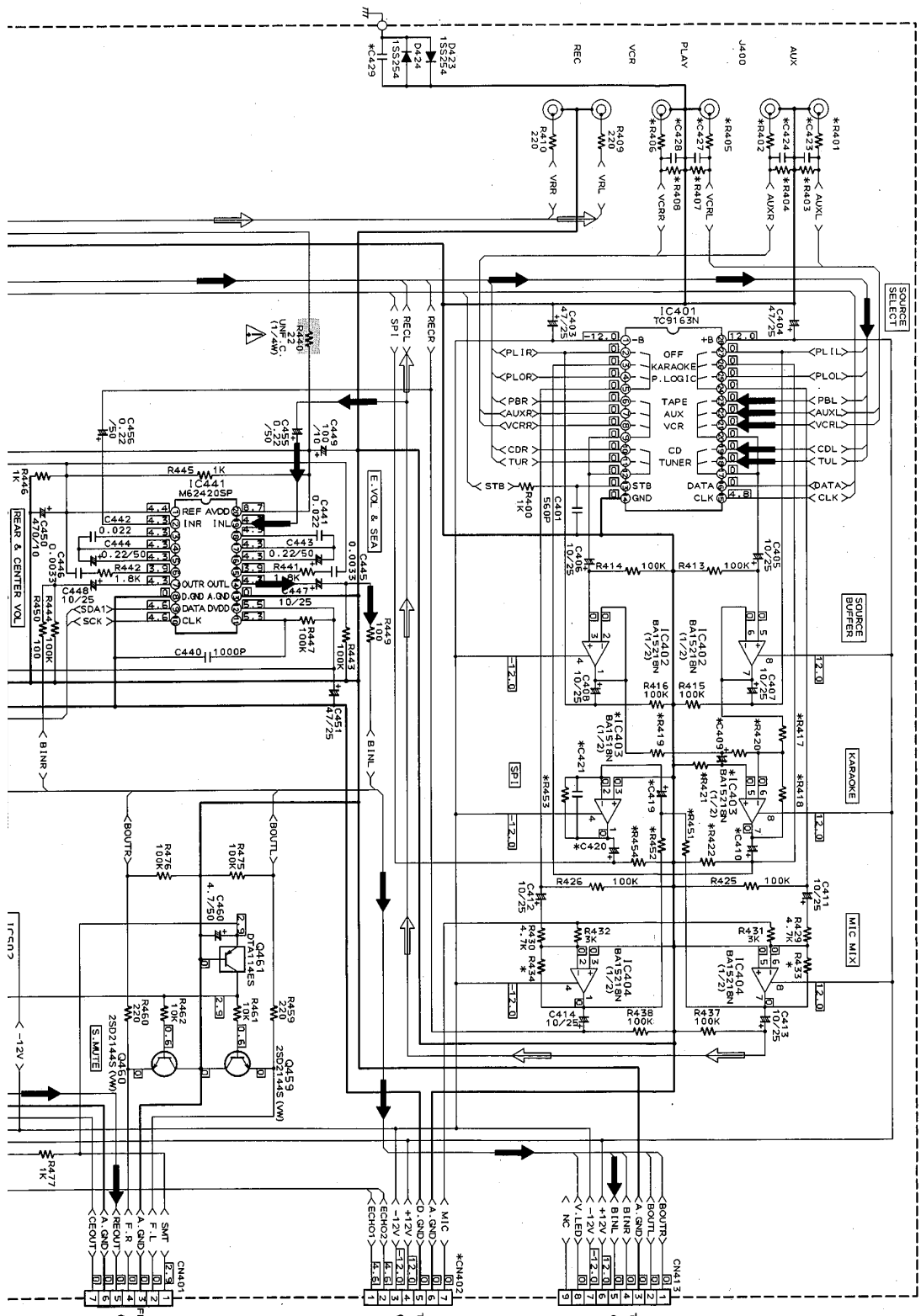
P2-23-b



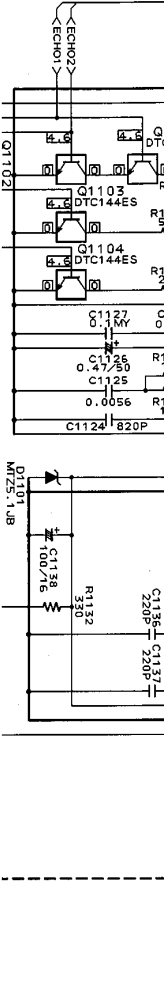
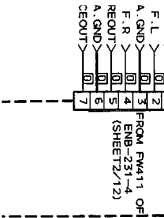
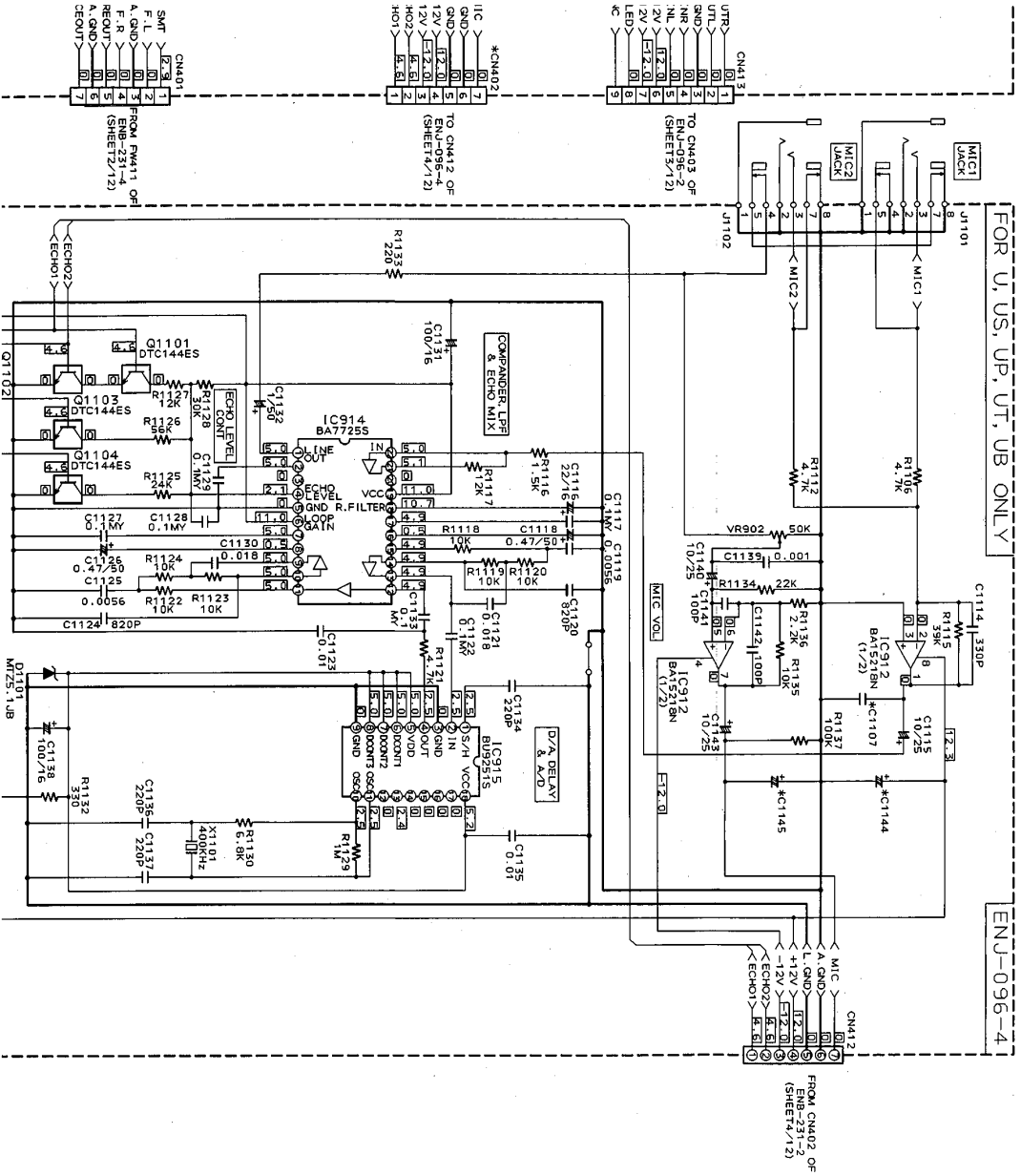
P2-23-c

P2-23-d

SOURCE SELECT Section

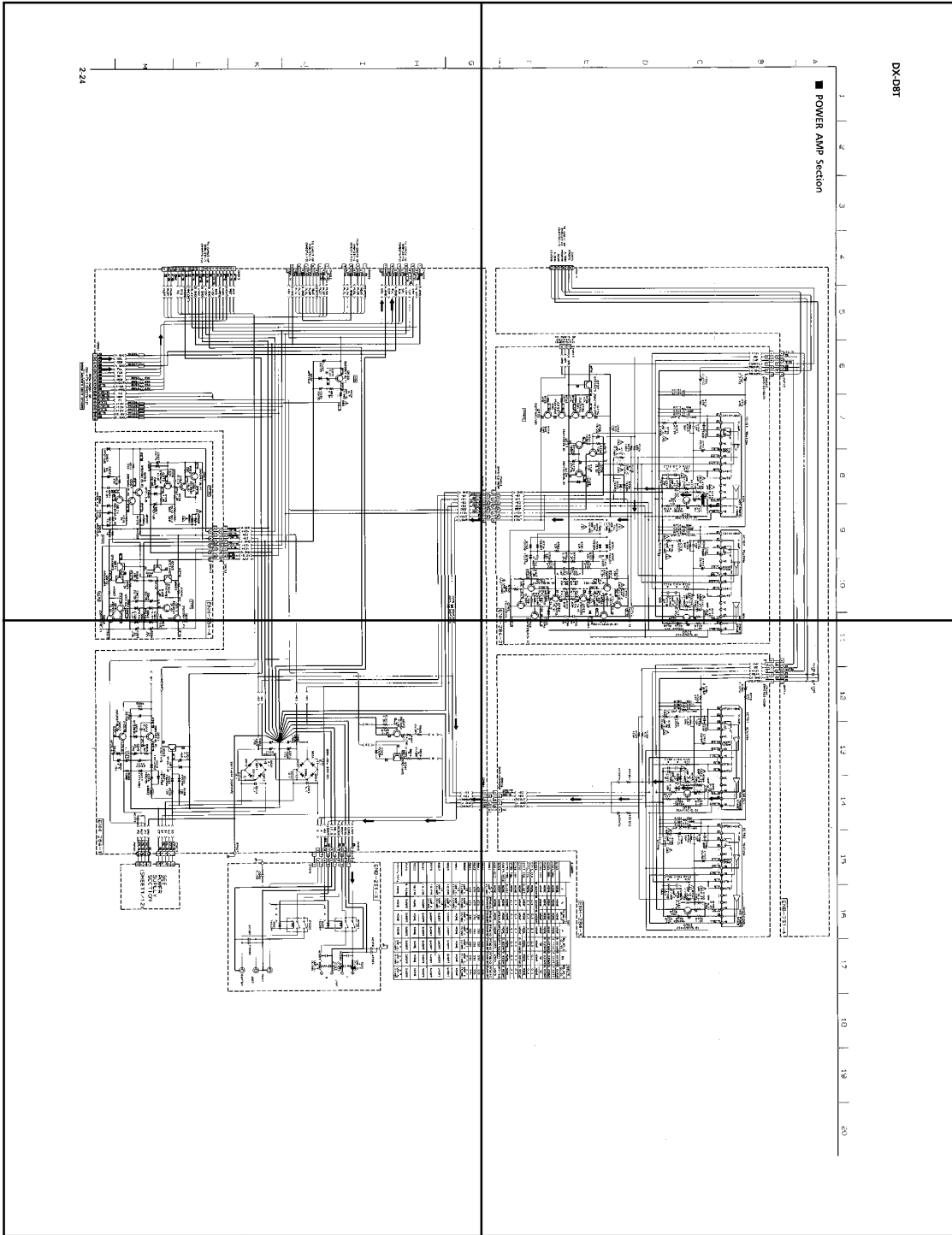


0 11 12 13 14 15 16 17 18 19 20



P2-24a

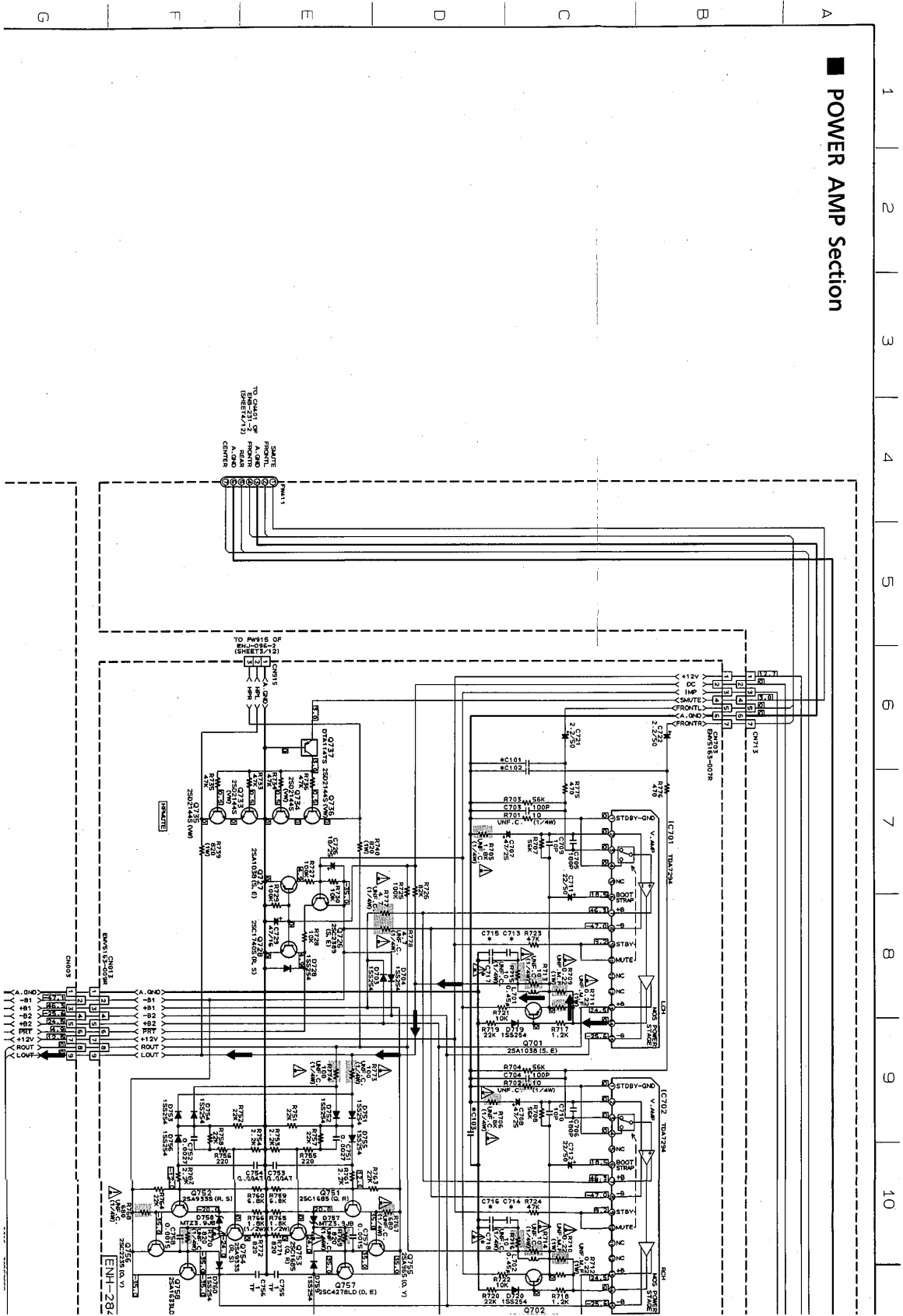
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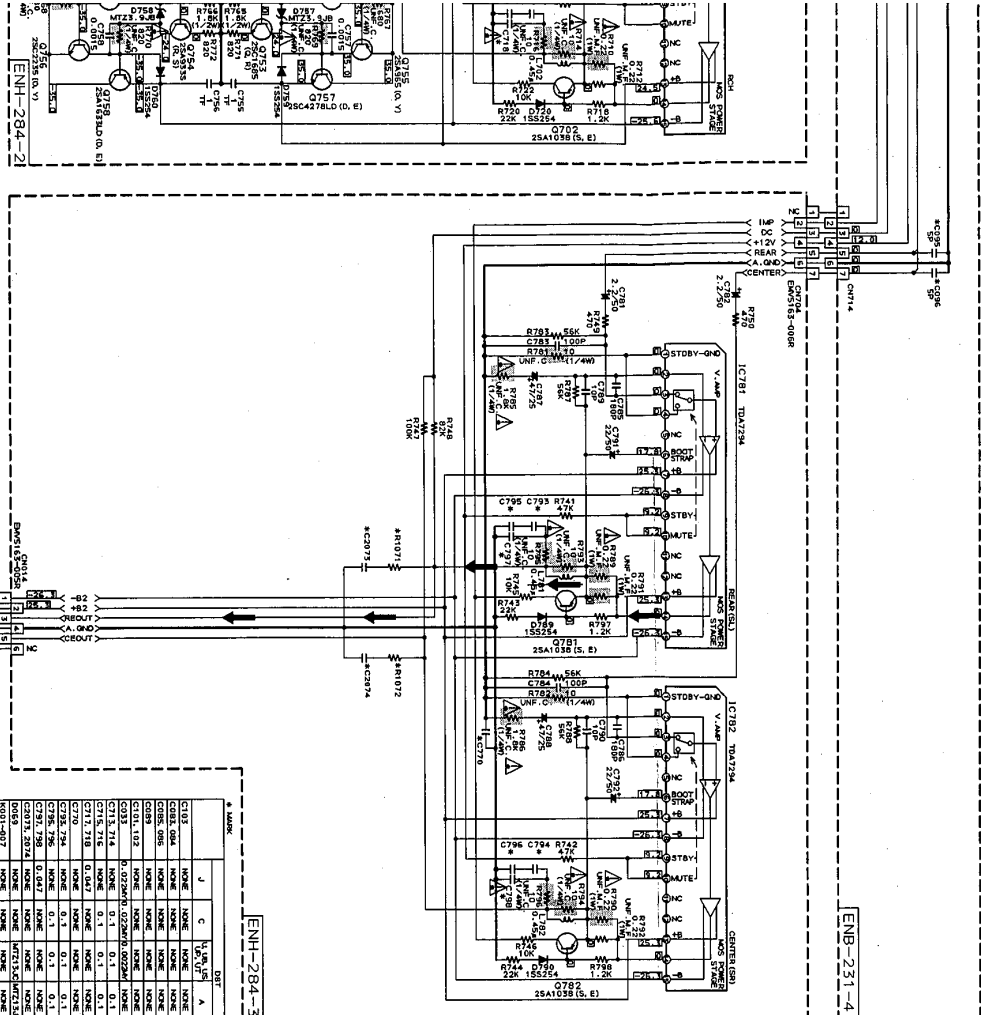
P2-24-c

P2-24-d

POWER AMP Section

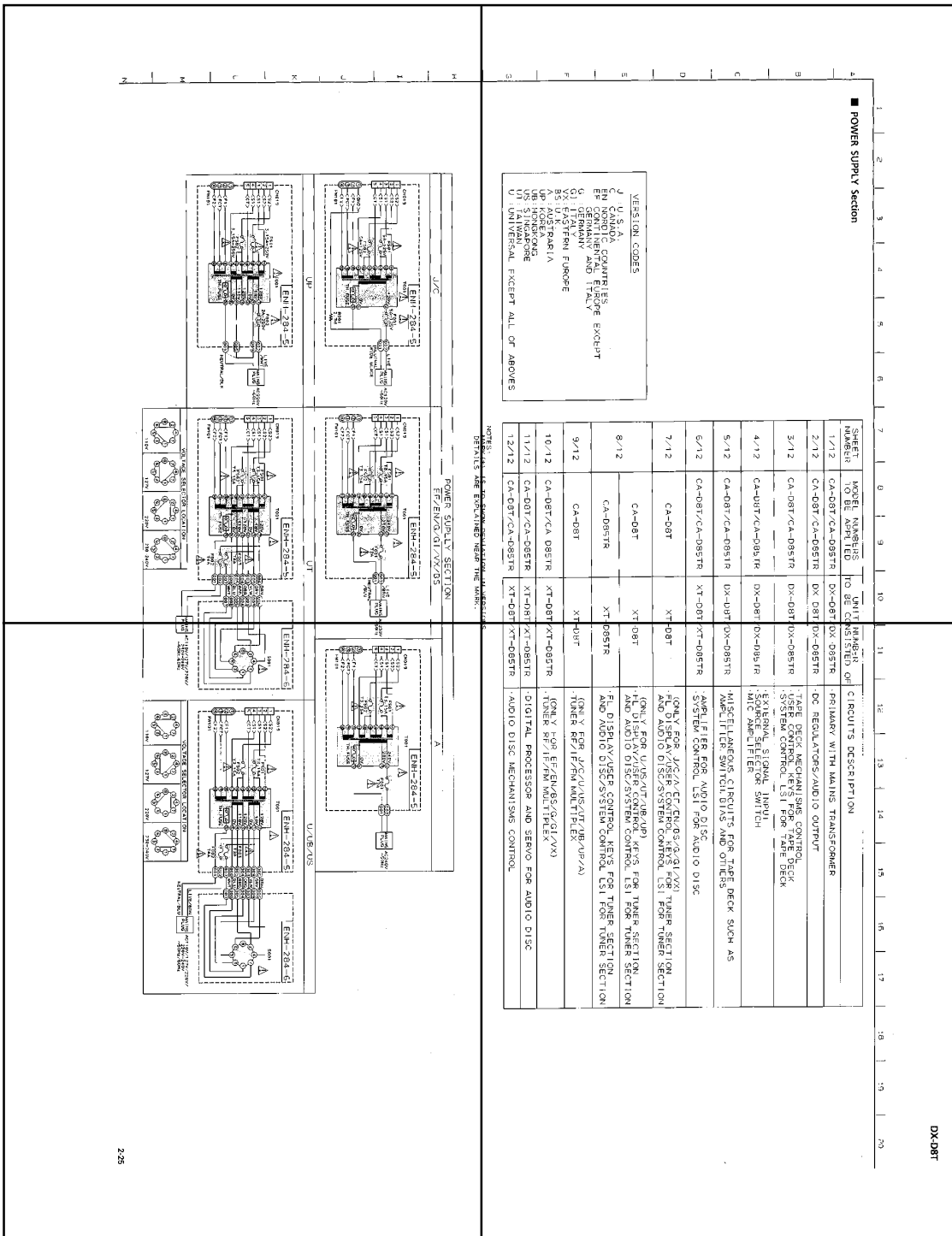


11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20



ENH-284-3

NO.	QTY	DESCRIPTION	UNIT	REF.	QTY	DESCRIPTION	UNIT	REF.
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2	1	IC7805	IC	7805	1	IC7805	IC	7805
3	1	RES	R	781	1	RES	R	781
4	1	RES	R	782	1	RES	R	782
5	1	RES	R	783	1	RES	R	783
6	1	RES	R	784	1	RES	R	784
7	1	RES	R	785	1	RES	R	785
8	1	RES	R	786	1	RES	R	786
9	1	RES	R	787	1	RES	R	787
10	1	RES	R	788	1	RES	R	788
11	1	RES	R	789	1	RES	R	789
12	1	RES	R	790	1	RES	R	790
13	1	RES	R	791	1	RES	R	791
14	1	RES	R	792	1	RES	R	792
15	1	RES	R	793	1	RES	R	793
16	1	RES	R	794	1	RES	R	794
17	1	RES	R	795	1	RES	R	795
18	1	RES	R	796	1	RES	R	796
19	1	RES	R	797	1	RES	R	797
20	1	RES	R	798	1	RES	R	798
21	1	RES	R	799	1	RES	R	799
22	1	RES	R	800	1	RES	R	800
23	1	RES	R	801	1	RES	R	801
24	1	RES	R	802	1	RES	R	802
25	1	RES	R	803	1	RES	R	803
26	1	RES	R	804	1	RES	R	804
27	1	RES	R	805	1	RES	R	805
28	1	RES	R	806	1	RES	R	806
29	1	RES	R	807	1	RES	R	807
30	1	RES	R	808	1	RES	R	808
31	1	RES	R	809	1	RES	R	809
32	1	RES	R	810	1	RES	R	810
33	1	RES	R	811	1	RES	R	811
34	1	RES	R	812	1	RES	R	812
35	1	RES	R	813	1	RES	R	813
36	1	RES	R	814	1	RES	R	814
37	1	RES	R	815	1	RES	R	815
38	1	RES	R	816	1	RES	R	816
39	1	RES	R	817	1	RES	R	817
40	1	RES	R	818	1	RES	R	818
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44	1	RES	R	822	1	RES	R	822
45	1	RES	R	823	1	RES	R	823
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47	1	RES	R	825	1	RES	R	825
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49	1	RES	R	827	1	RES	R	827
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53	1	RES	R	831	1	RES	R	831
54	1	RES	R	832	1	RES	R	832
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57	1	RES	R	835	1	RES	R	835
58	1	RES	R	836	1	RES	R	836
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64	1	RES	R	842	1	RES	R	842
65	1	RES	R	843	1	RES	R	843
66	1	RES	R	844	1	RES	R	844
67	1	RES	R	845	1	RES	R	845
68	1	RES	R	846	1	RES	R	846
69	1	RES	R	847	1	RES	R	847
70	1	RES	R	848	1	RES	R	848
71	1	RES	R	849	1	RES	R	849
72	1	RES	R	850	1	RES	R	850
73	1	RES	R	851	1	RES	R	851
74	1	RES	R	852	1	RES	R	852
75	1	RES	R	853	1	RES	R	853
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77	1	RES	R	855	1	RES	R	855
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84	1	RES	R	862	1	RES	R	862
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92	1	RES	R	870	1	RES	R	870
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94	1	RES	R	872	1	RES	R	872
95	1	RES	R	873	1	RES	R	873
96	1	RES	R	874	1	RES	R	874
97	1	RES	R	875	1	RES	R	875
98	1	RES	R	876	1	RES	R	876
99	1	RES	R	877	1	RES	R	877
100	1	RES	R	878	1	RES	R	878
101	1	RES	R	879	1	RES	R	879
102	1	RES	R	880	1	RES	R	880
103	1	RES	R	881	1	RES	R	881
104	1	RES	R	882	1	RES	R	882
105	1	RES	R	883	1	RES	R	883
106	1	RES	R	884	1	RES	R	884
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111	1	RES	R	889	1	RES	R	889
112	1	RES	R	890	1	RES	R	890
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114	1	RES	R	892	1	RES	R	892
115	1	RES	R	893	1	RES	R	893
116	1	RES	R	894	1	RES	R	894
117	1	RES	R	895	1	RES	R	895
118	1	RES	R	896	1	RES	R	896



VERSION CODES
 J U.S.A.
 K CANADA
 L CENTRAL AMERICA
 M SOUTH AMERICA
 N EUROPE
 O JAPAN
 P INDIA
 Q AUSTRALIA
 R NEW ZEALAND
 S SINGAPORE
 T HONG KONG
 U UNIVERSAL EXCEPT ALL OF ABOVE

SHEET NUMBER	MODEL NUMBER	TO BE USED	UNIT NUMBER	DESCRIPTION
1/12	CA-08T/CA-08STR	DX-08T	DX-08T	PRIMARY WITH MAINS TRANSFORMER
2/12	CA-08T/CA-08STR	DX-08T	DX-08T	DC REGULATORS/AUDIO OUTPUT
3/12	CA-08T/CA-08STR	DX-08T	DX-08T	TAPE DECK MECHANISMS CONTROL SYSTEM CONTROL LSI FOR TAPE DECK
4/12	CA-08T/CA-08STR	DX-08T	DX-08T	SOURCE SELECTOR SWITCH
5/12	CA-08T/CA-08STR	DX-08T	DX-08T	MISCELLANEOUS CIRCUITS FOR TAPE DECK SUCH AS AMPLIFIER FOR AUDIO DISC
6/12	CA-08T/CA-08STR	XT-08T	XT-08T	AMPLIFIER FOR AUDIO DISC
7/12	CA-08T	XT-08T	XT-08T	ONLY FOR J/K/L/A/C/E/ENH-281-E/T/A/XI TUNER SECTION AND AUDIO DISC/SYSTEM CONTROL LSI FOR TUNER SECTION
8/12	CA-08STR	XT-08STR	XT-08STR	ONLY FOR J/K/L/A/C/E/ENH-284-E/T/A/XI TUNER SECTION AND AUDIO DISC/SYSTEM CONTROL LSI FOR TUNER SECTION
9/12	CA-08T	XT-08T	XT-08T	ONLY FOR J/K/L/A/C/E/ENH-284-A TUNER SECTION
10/12	CA-08T/CA-08STR	XT-08T/XT-08STR	XT-08T/XT-08STR	ONLY FOR EP/ENH-281-E/T/A/XI TUNER SECTION AND AUDIO DISC/SYSTEM CONTROL LSI FOR TUNER SECTION
11/12	CA-08T/CA-08STR	XT-08T/XT-08STR	XT-08T/XT-08STR	DIGITAL PROCESSOR AND SERVO FOR AUDIO DISC
12/12	CA-08T/CA-08STR	XT-08T/XT-08STR	XT-08T/XT-08STR	AUDIO DISC MECHANISMS CONTROL

DEFINITE AND EXACTED NEAR THE WORK.

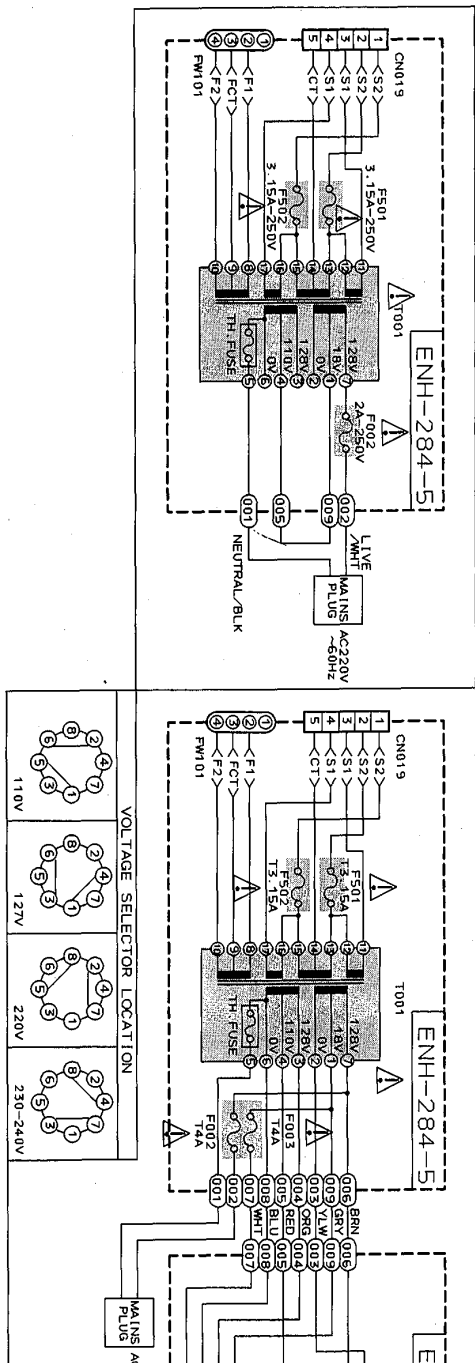
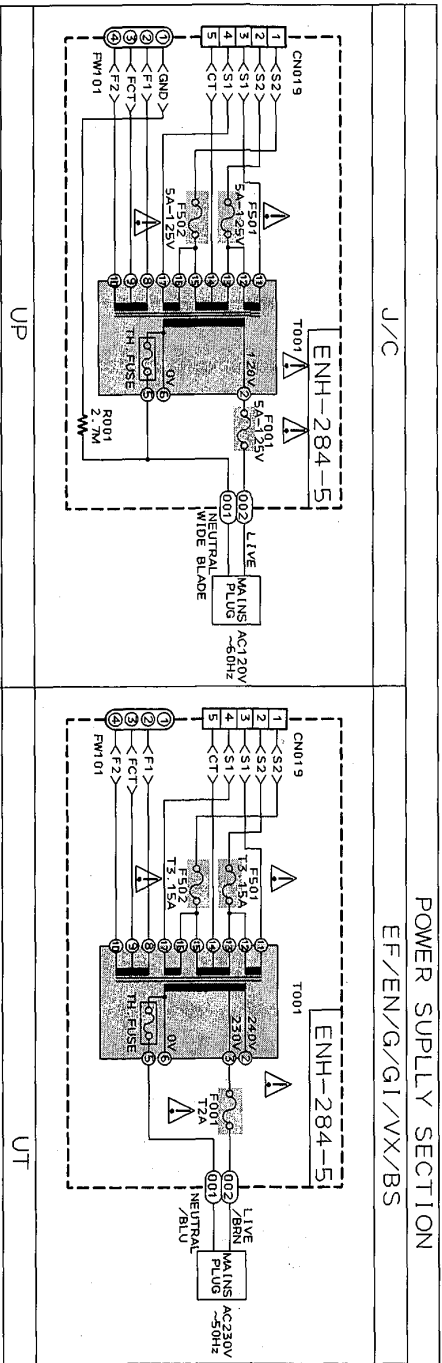
DX-08T

228

UT: SINGAPORE
 U: TAIWAN
 U: UNIVERSAL EXCEPT ALL OF ABOVE'S

11/12	CA-D01/CA-D03R	AT-D01/AT
12/12	CA-D8T/CA-D85TR	XT-D8T/XT

NOTES:
 MARK (*) IS TO SHOW DEVIATION IN VERSIONS.
 DETAILS ARE EXPLAINED NEAR THE MARK.



G
H
I
J
K
L
M
N

1 2 3 4 5 6 7 8 9 10

POWER SUPPLY Section

SHEET NUMBER	MODEL NUMBERS TO BE APPLIED	UNIT NU TO BE CONS
1/12	CA-D8T/CA-D85TR	DX-D8T/DX
2/12	CA-D8T/CA-D85TR	DX-D8T/DX
3/12	CA-D8T/CA-D85TR	DX-D8T/DX
4/12	CA-D8T/CA-D85TR	DX-D8T/DX
5/12	CA-D8T/CA-D85TR	DX-D8T/DX
6/12	CA-D8T/CA-D85TR	XT-D8T/XT
7/12	CA-D8T	XT-D8
8/12	CA-D8T	XT-D8
	CA-D85TR	XT-D8
9/12	CA-D8T	XT-D8
10/12	CA-D8T/CA-D85TR	XT-D8T/XT
11/12	CA-D8T/CA-D85TR	XT-D8T/XT
12/12	CA-D8T/CA-D85TR	XT-D8T/XT

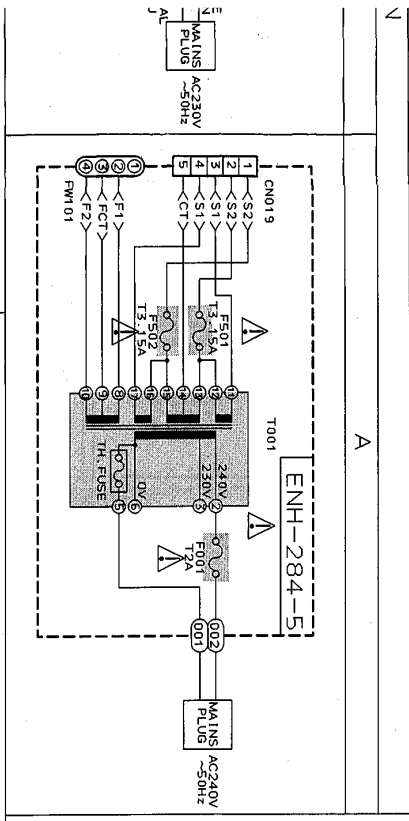
VERSION CODES

J : U.S.A.
 C : CANADA
 EN : NORDIC COUNTRIES
 EF : CONTINENTAL EUROPE EXCEPT GERMANY AND ITALY
 G : GERMANY
 GI : ITALY
 VX : EASTERN EUROPE
 BS : U.K.
 A : AUSTRARIA
 UP : KOREA
 UB : HONGKONG
 US : SINGAPORE
 UT : TAIWAN
 U : UNIVERSAL EXCEPT ALL OF ABOVE

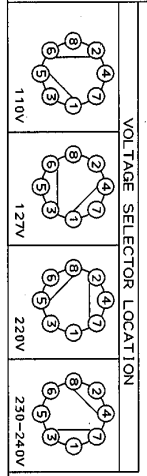
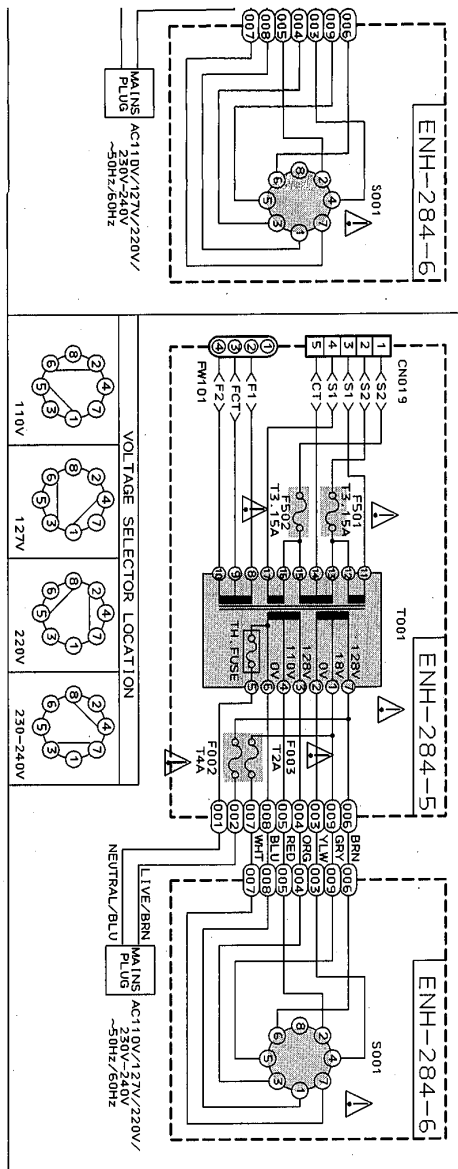
A
B
C
D
E
F
G

-D8T/XT-D85TR · AUDIO DISC MECHANISMS CONTROL

ERSONS.
RK.

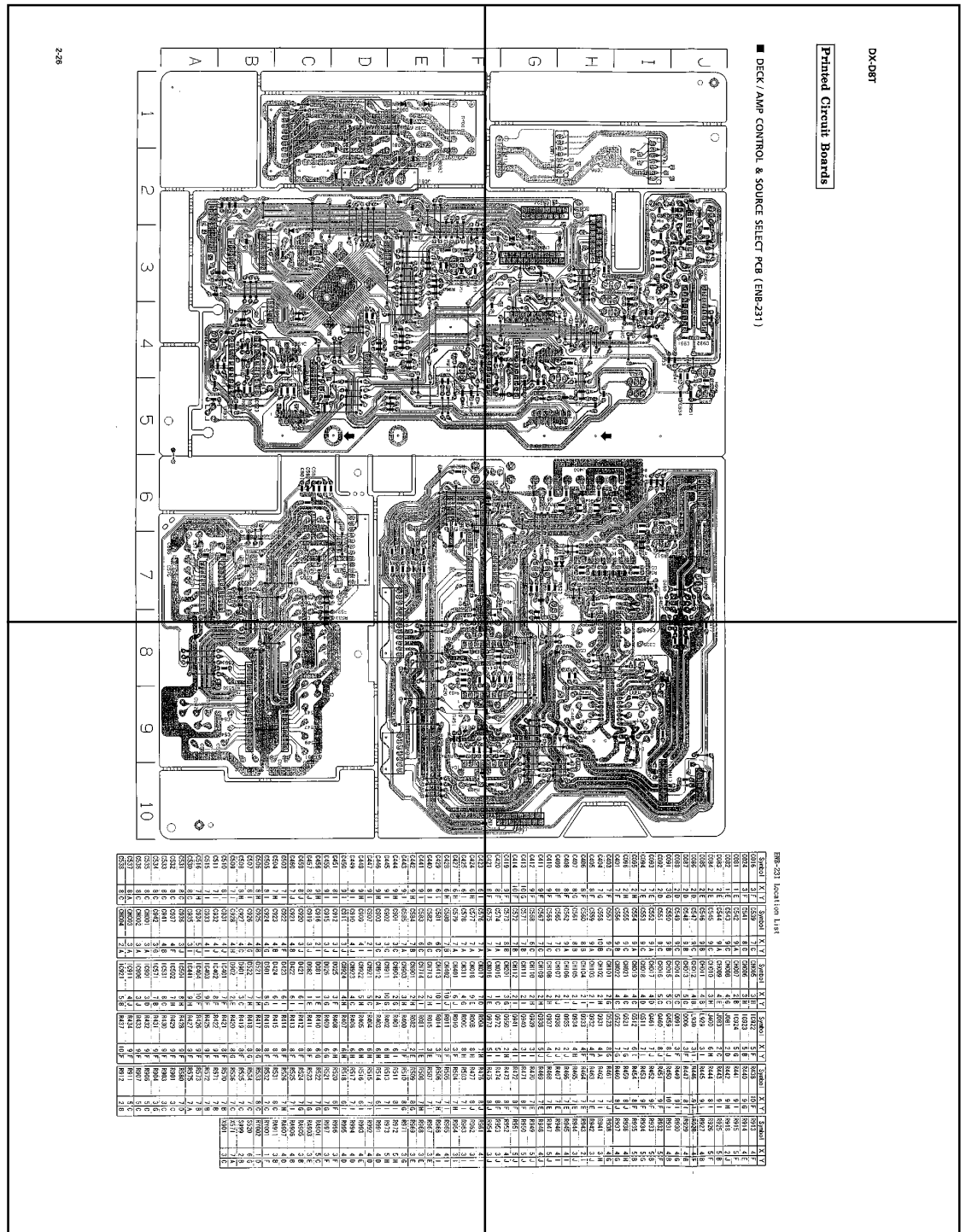


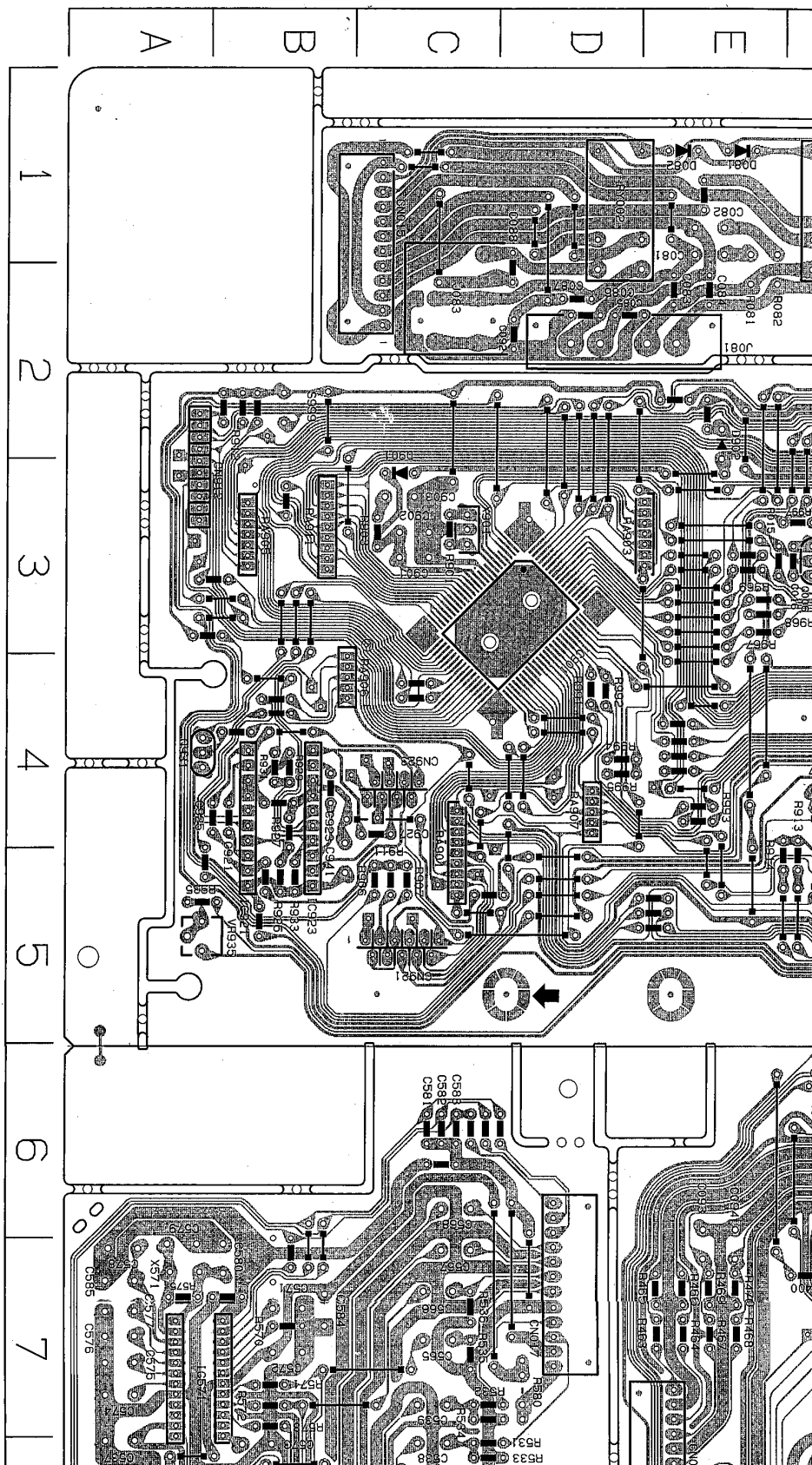
U/UB/US



DX-D8T

UNIT NUMBER BE CONSISTED OF	CIRCUITS DESCRIPTION
-D8T/DX-D85TR	· PRIMARY WITH MAINS TRANSFORMER
-D8T/DX-D85TR	· DC REGULATORS/AUDIO OUTPUT
-D8T/DX-D85TR	· TAPE DECK MECHANISMS CONTROL · USER CONTROL KEYS FOR TAPE DECK · SYSTEM CONTROL LSI FOR TAPE DECK
-D8T/DX-D85TR	· EXTERNAL SIGNAL INPUT · SOURCE SELECTOR SWITCH · MIC AMPLIFIER
-D8T/DX-D85TR	· MISCELLANEOUS CIRCUITS FOR TAPE DECK SUCH AS AMPLIFIER, SWITCH, BIAS AND OTHERS
-D8T/XT-D85TR	· AMPLIFIER FOR AUDIO DISC · SYSTEM CONTROL LSI FOR AUDIO DISC
XT-D8T	(ONLY FOR J/C/A/EF/EN/BS/G/GI/VX) · FL DISPLAY/USER CONTROL KEYS FOR TUNER SECTION AND AUDIO DISC/SYSTEM CONTROL LSI FOR TUNER SECTION
XT-D8T	(ONLY FOR U/US/UT/UB/UP) · FL DISPLAY/USER CONTROL KEYS FOR TUNER SECTION AND AUDIO DISC/SYSTEM CONTROL LSI FOR TUNER SECTION
XT-D85TR	· FL DISPLAY/USER CONTROL KEYS FOR TUNER SECTION AND AUDIO DISC/SYSTEM CONTROL LSI FOR TUNER SECTION
XT-D8T	(ONLY FOR J/C/U/US/UT/UB/UP/A) · TUNER RF/IF/FM MULTIPLEX
-D8T/XT-D85TR	(ONLY FOR EF/EN/BS/G/GI/VX) · TUNER RF/IF/FM MULTIPLEX
-D8T/XT-D85TR	· DIGITAL PROCESSOR AND SERVO FOR AUDIO DISC
-D8T/XT-D85TR	· AUDIO DISC MECHANISMS CONTROL



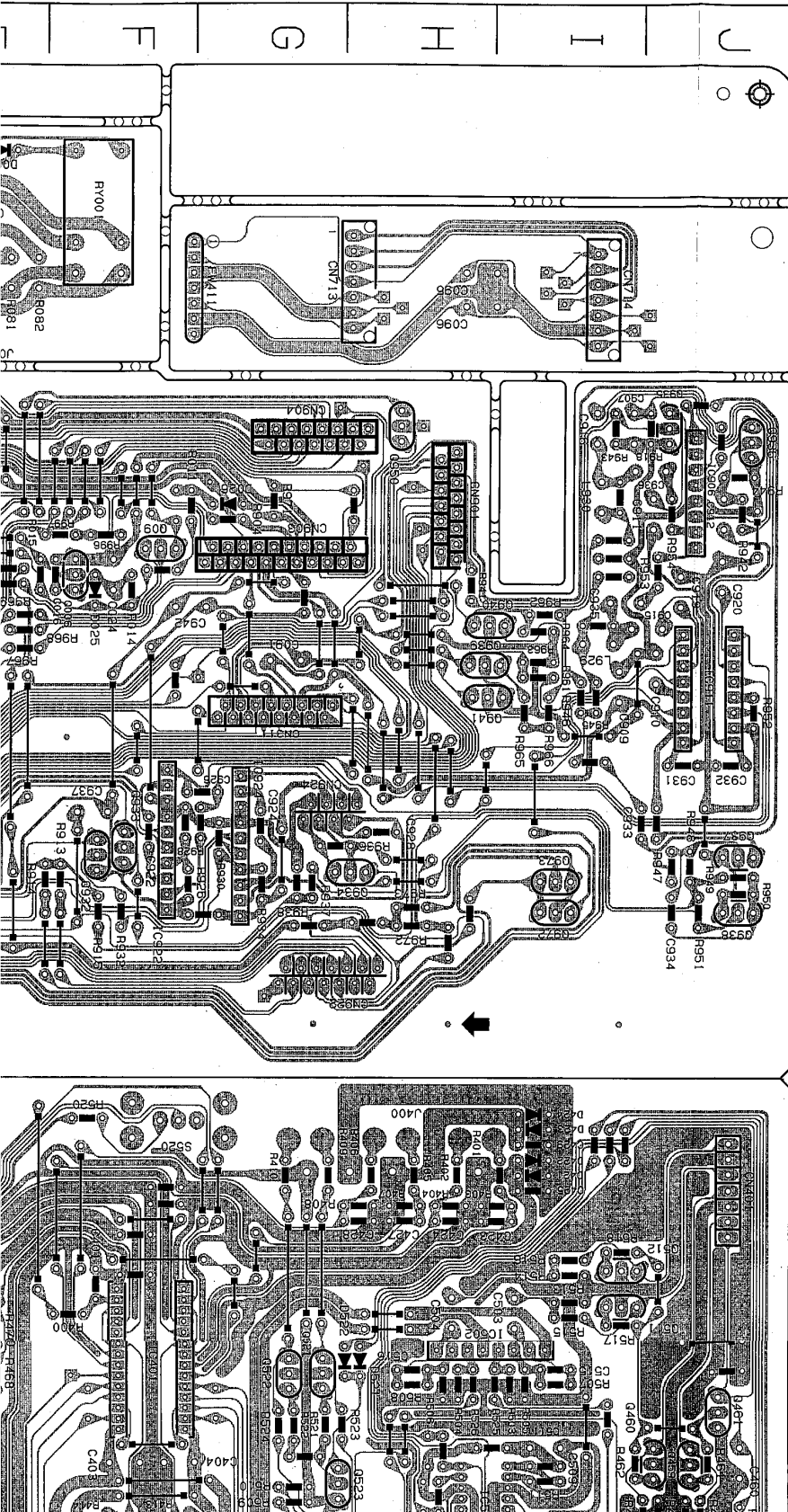


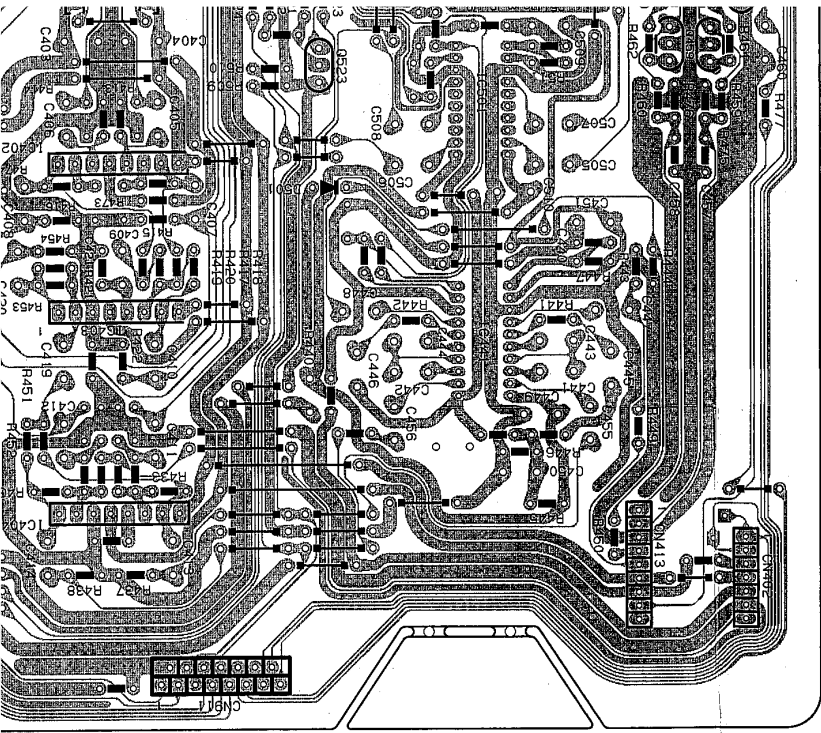
2-26

DX-D8T

Printed Circuit Boards

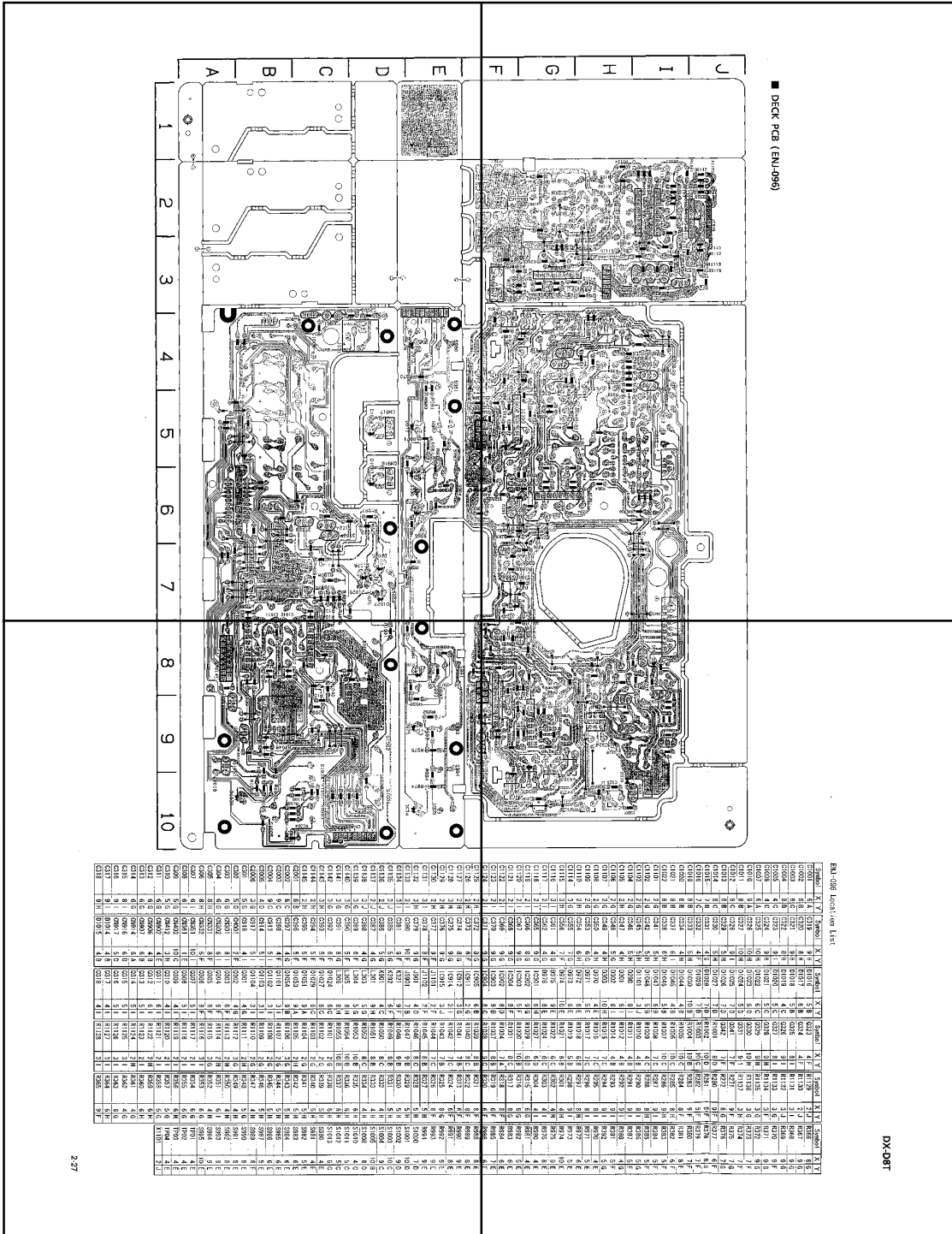
■ DECK / AMP CONTROL & SOURCE SELECT PCB (ENB-231)

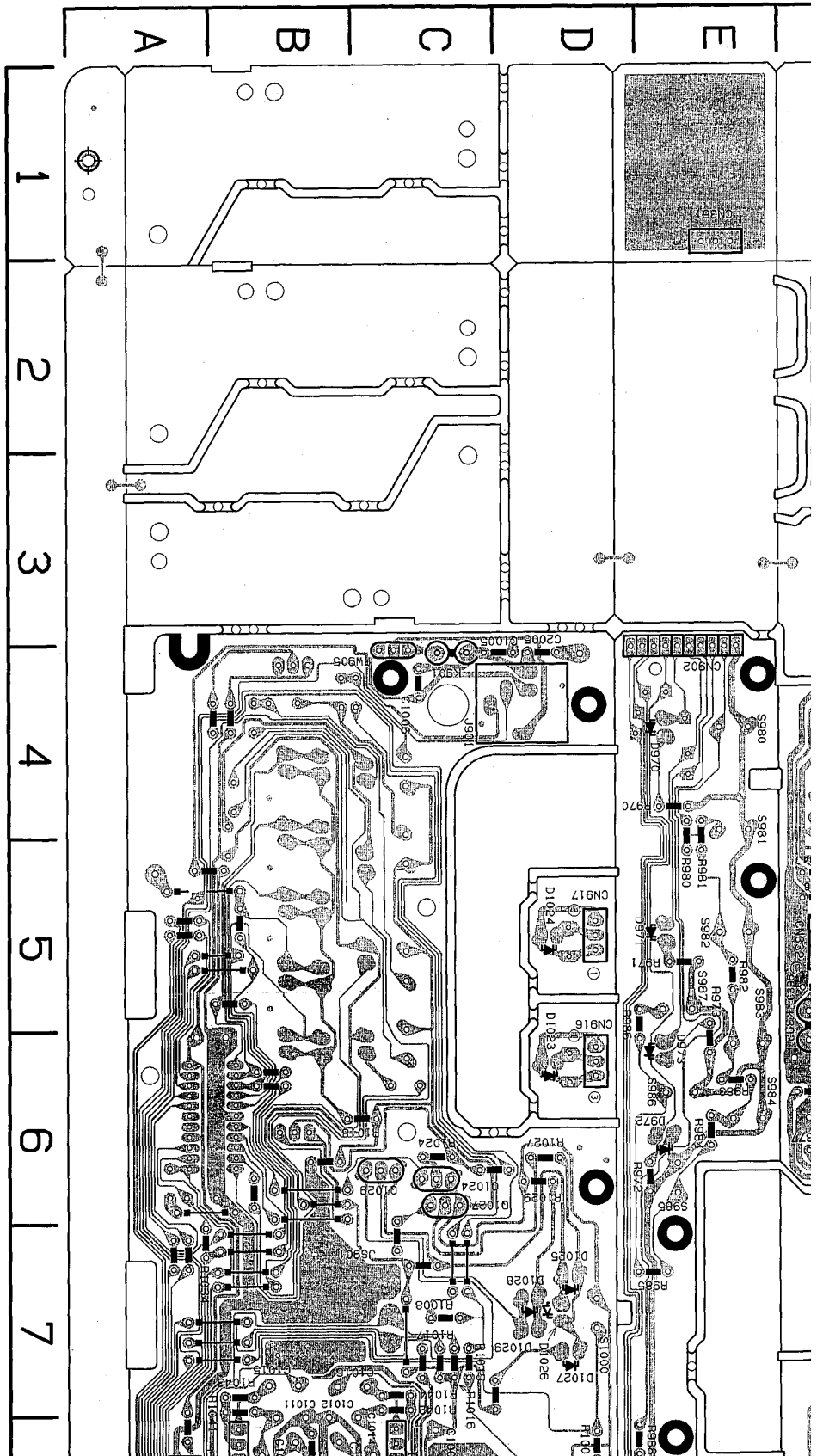




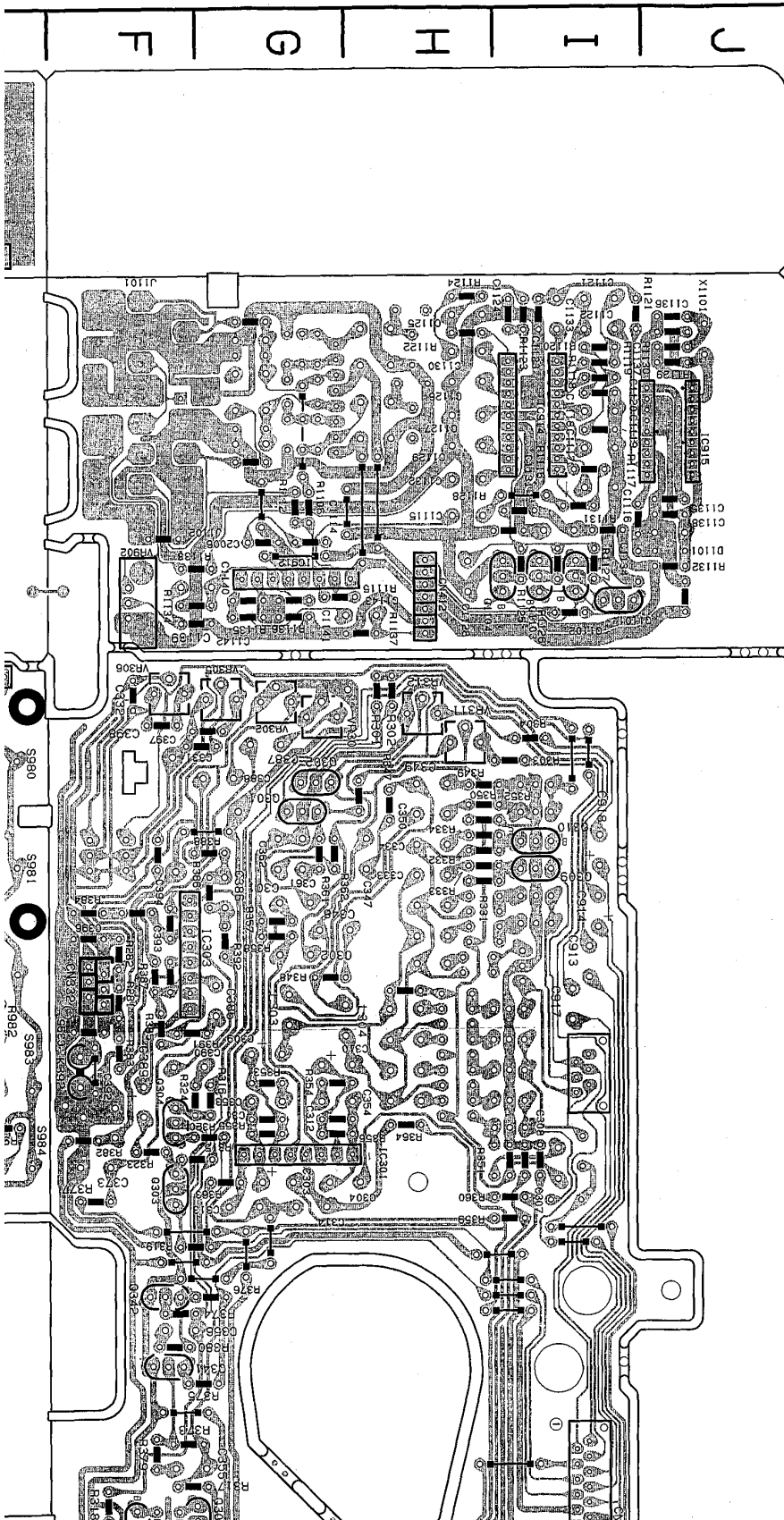
ENB-231 Location List

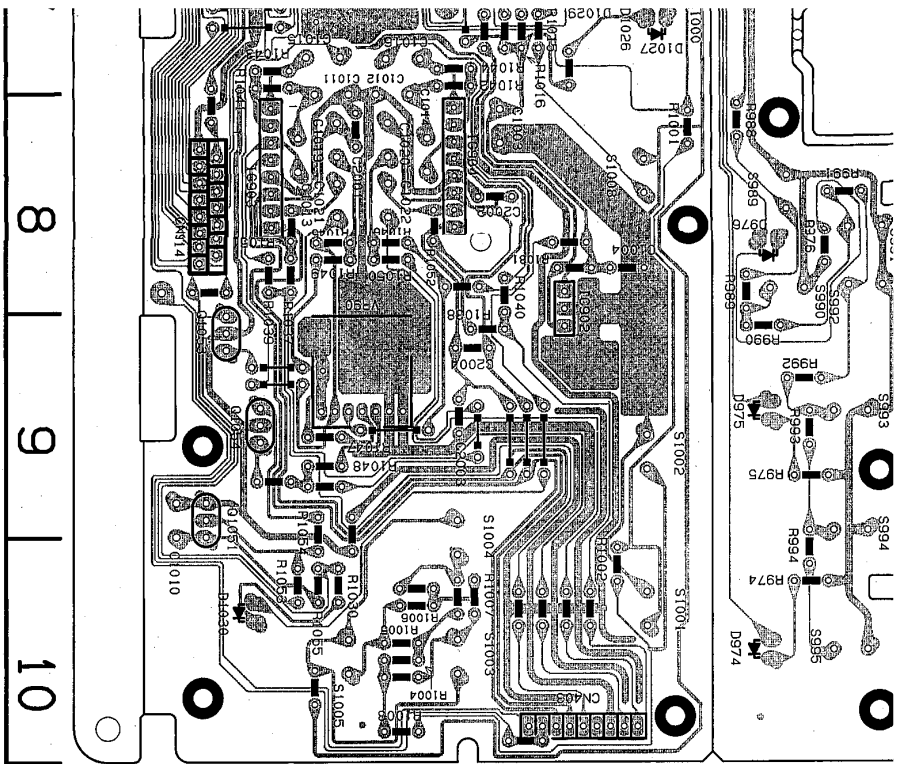
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C016	3 F	C539	7 C	CH005	3 H	TC922	5 F	R438	10 F	R913	4 F						
C024	3 F	C541	8 C	CH006	3 H	IC923	5 B	R440	9 G	R914	4 E						
C081	1 E	C542	9 A	CH007	2 B	IC924	5 G	R441	9 I	R915	5 F						
C082	1 E	C543	9 C	CH008	4 G	J081	2 D	R442	9 H	R918	2 J						
C083	2 E	C544	9 A	CH009	4 E	J083	2 C	R443	9 I	R925	5 B						
C084	2 E	C545	9 C	CH010	3 H	J400	6 H	R444	8 I	R926	5 F						
C085	2 E	C546	9 B	CH011	4 B	L929	3 I	R445	9 I	R927	4 B						
C086	2 D	C547	9 C	CH012	4 B	L930	3 I	R446	9 I	R928	4 F						
C087	2 D	C548	9 B	CH013	5 C	Q006	3 F	R447	8 I	R929	4 B						
C088	2 D	C549	9 C	CH014	5 C	Q091	3 F	R449	9 I	R930	4 G						
C091	3 G	C550	9 B	CH015	5 C	Q459	8 J	R450	10 I	R931	4 B						
C092	2 D	C551	9 C	CH016	5 C	Q460	8 J	R451	9 F	R932	5 F						
C093	7 E	C552	9 A	CH017	4 D	Q461	7 J	R452	9 F	R933	5 B						
C094	7 E	C553	9 C	CH018	4 D	Q511	7 I	R453	9 F	R934	5 G						
C095	2 H	C554	9 A	CH019	4 C	Q512	6 I	R454	8 F	R935	5 B						
C096	2 H	C555	9 C	CH021	4 C	Q521	7 G	R459	8 J	R936	4 H						
C401	7 F	C556	9 B	CH022	4 C	Q522	7 G	R460	8 J	R937	4 G						
C403	7 F	C557	9 C	CH101	2 G	Q523	8 G	R461	7 J	R938	4 G						
C404	7 G	C558	10 B	CH102	2 H	Q931	4 A	R462	7 I	R941	3 H						
C405	8 F	C559	9 A	CH103	2 I	Q932	4 F	R463	7 E	R942	3 J						
C406	8 F	C560	8 B	CH104	2 I	Q933	4 F	R464	7 E	R943	2 J						
C407	8 G	C561	8 B	CH105	2 J	Q934	4 H	R465	7 E	R944	3 J						
C408	8 F	C562	9 A	CH106	2 I	Q935	2 J	R466	7 E	R945	4 I						
C409	8 F	C565	7 C	CH107	2 J	Q936	2 J	R467	7 E	R946	4 I						
C410	9 F	C566	7 C	CH108	2 H	Q937	4 J	R468	7 E	R947	5 J						
C411	9 F	C567	7 C	CH109	2 H	Q938	5 J	R469	7 E	R948	4 J						
C412	9 F	C568	6 C	CH110	2 H	Q939	3 I	R470	7 E	R949	5 J						
C413	10 G	C571	7 B	CH111	2 I	Q940	3 I	R471	8 F	R950	5 J						
C414	10 F	C572	7 B	CH112	2 I	Q941	4 I	R472	8 F	R951	5 J						
C419	9 F	C573	8 B	CH201	3 G	Q950	2 H	R473	8 F	R952	4 J						
C420	8 F	C574	7 A	CH205	1 C	Q972	5 I	R474	8 F	R953	4 J						
C421	8 F	C575	7 A	CH016	7 E	Q973	5 I	R475	8 J	R954	3 J						
C423	6 I	C576	7 A	CH017	7 D	Q974	7 H	R476	8 J	R961	4 I						
C424	6 H	C577	7 A	CH018	9 E	Q975	8 H	R477	8 J	R962	3 I						
C425	6 I	C578	7 A	CH011	4 G	Q976	8 H	R478	7 I	R963	3 I						
C427	6 H	C579	7 A	CH401	6 J	Q977	3 F	R504	7 H	R964	3 I						
C429	6 H	C580	7 R	CH402	10 J	Q978	3 F	R505	7 I	R965	4 I						



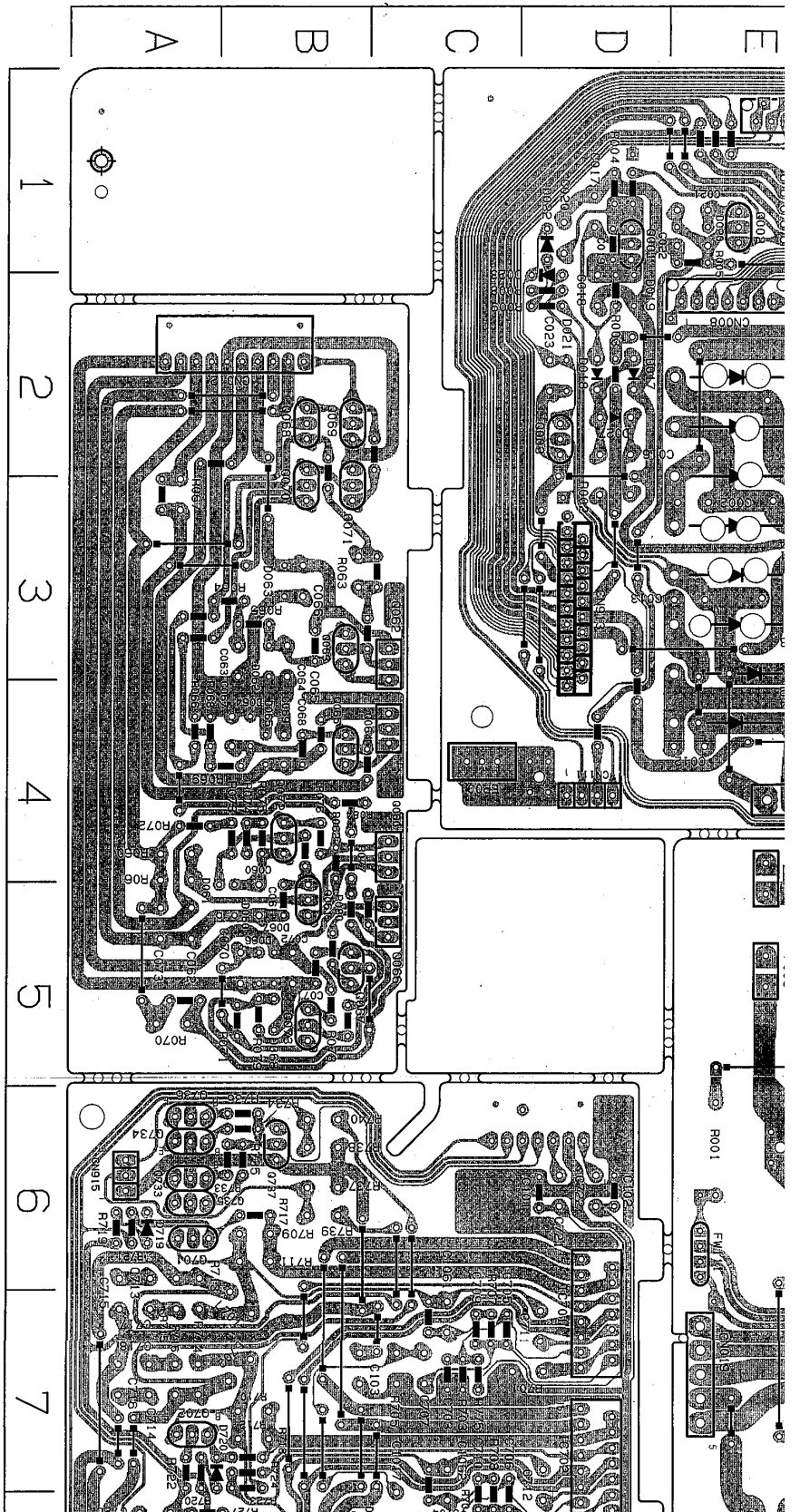


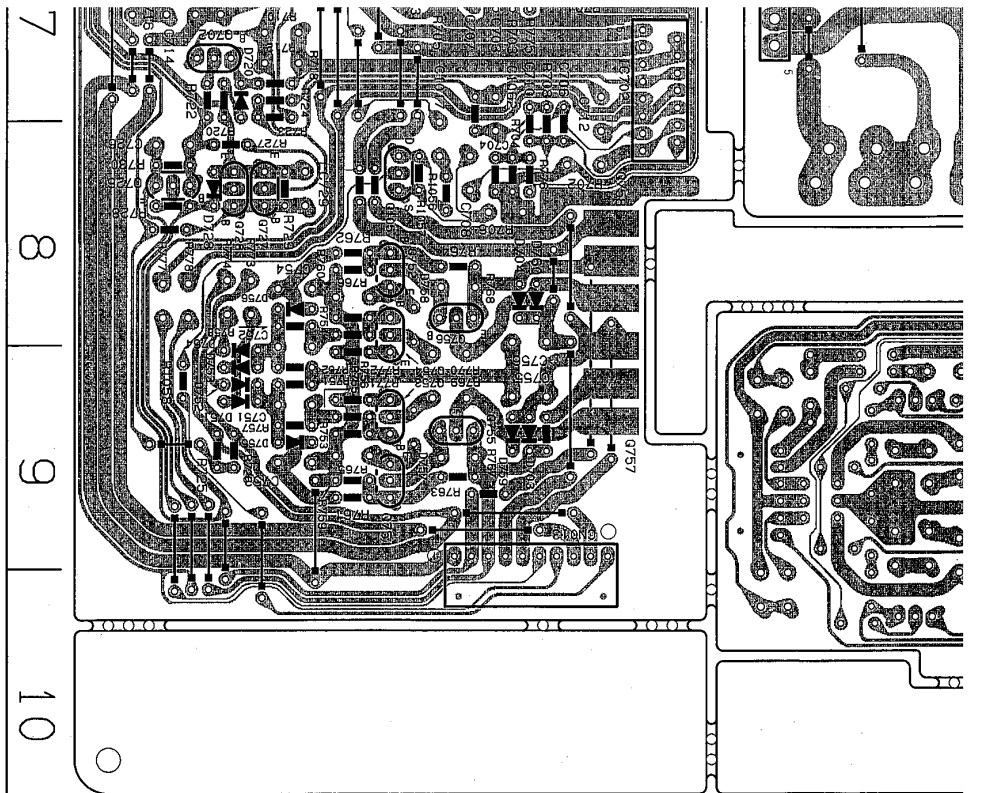
■ DECK PCB (ENJ-096)



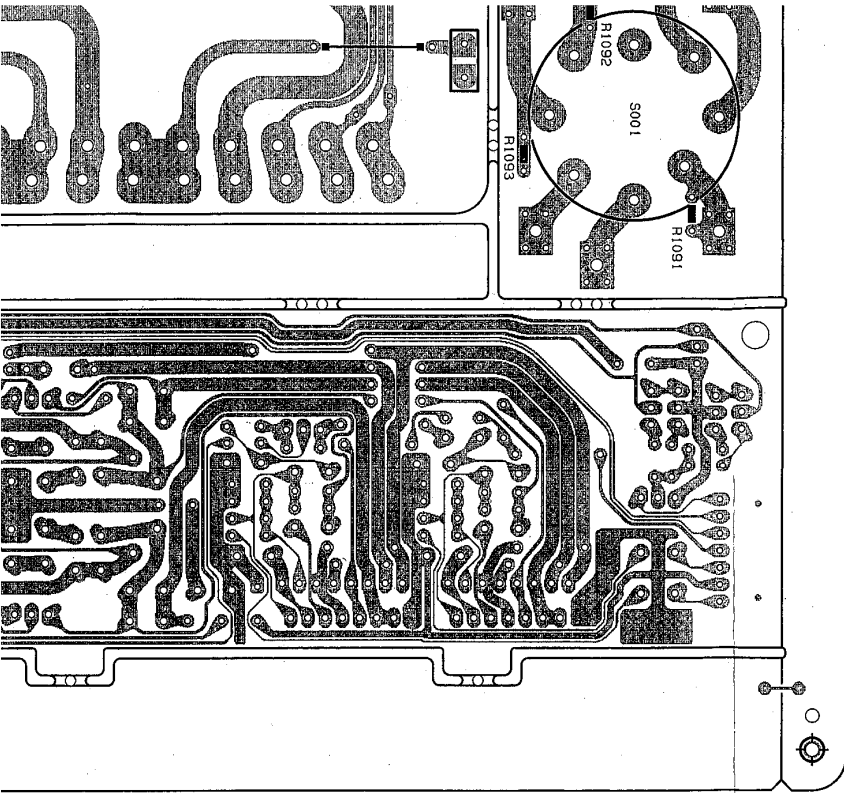


C1127	2 H	C374	8 G	U912	3 G	R1041	7 B	R323	6 F	R990	9 E
C1128	3 H	C375	9 G	U914	2 I	R1042	7 C	R324	6 F	R991	8 E
C1129	2 H	C376	9 G	U915	3 J	R1043	7 B	R325	8 G	R992	9 E
C1130	2 H	C377	9 F	J101	2 F	R1044	7 C	R326	8 F	R993	9 E
C1131	3 I	C378	8 F	J102	2 F	R1045	8 B	R327	5 H	R994	9 E
C1132	3 H	C379	9 G	J901	4 D	R1046	8 C	R328	5 H	S1000	7 D
C1133	2 I	C380	10 F	JS901	7 B	R1047	9 B	R329	5 H	S1001	10 D
C1134	3 I	C381	9 F	K321	9 F	R1048	9 B	R330	5 H	S1002	9 D
C1135	3 J	C385	5 G	K392	6 F	R1049	8 B	R331	5 H	S1003	10 C
C1136	2 J	C386	5 G	K901	4 C	R1050	8 C	R332	4 H	S1004	9 C
C1137	2 J	C387	4 G	L301	9 H	R1051	8 B	R333	4 H	S1005	10 B
C1138	3 J	C388	4 G	L303	5 G	R1052	8 C	R334	4 H	S1008	8 D
C1139	3 G	C389	6 F	L304	5 G	R1053	10 B	R335	6 H	S1010	4 C
C1140	3 G	C390	8 F	L305	8 H	R1054	10 B	R336	6 H	S1011	5 C
C1141	3 G	C391	8 F	L306	8 H	R1055	10 B	R337	6 H	S1012	5 C
C1142	3 G	C392	6 F	U1024	6 C	R1101	2 G	R338	6 H	S1013	6 C
C1143	3 H	C393	5 F	U1027	6 C	R1102	2 G	R339	5 H	S980	4 E
C1144	2 H	C394	5 F	U1029	6 C	R1103	2 G	R340	5 H	S981	4 E
C1145	2 H	C395	5 F	U1051	9 A	R1104	2 G	R341	5 H	S982	5 E
C2001	8 B	C396	5 F	U1053	9 A	R1105	2 H	R342	5 H	S983	6 E
C2002	8 C	C397	4 G	U1054	9 B	R1106	3 G	R343	5 H	S984	6 E
C2003	9 C	C398	4 F	U101	3 I	R1107	2 G	R344	5 H	S985	6 E
C2004	9 C	C913	5 I	U102	3 I	R1108	2 G	R345	5 H	S986	6 E
C2005	4 D	C914	5 I	U103	3 I	R1109	2 G	R346	5 H	S987	5 E
C2006	3 G	C917	5 I	U104	3 I	R1110	2 G	R347	4 H	S988	8 E
C301	5 G	C918	4 I	Q301	4 G	R1111	2 H	R348	5 G	S990	8 E
C302	5 G	CH01	2 F	Q302	4 G	R1112	2 H	R349	4 H	S991	8 E
C303	6 G	CN301	8 I	Q304	6 F	R1113	2 H	R350	4 H	S992	8 E
C304	6 G	CN302	6 I	Q304	6 F	R1114	2 H	R351	6 I	S993	9 E
C305	8 H	CN331	8 F	Q305	8 F	R1115	3 G	R352	4 H	S994	9 E
C306	8 H	CN332	5 F	Q306	8 F	R1116	3 I	R353	6 G	S995	10 E
C307	6 I	CN351	10 I	Q307	5 I	R1117	2 I	R354	6 G	TP01	4 E
C308	6 I	CN361	1 E	Q308	5 I	R1118	2 I	R355	6 G	TP02	4 E
C309	5 G	CN403	10 C	Q309	4 I	R1119	2 I	R356	6 H	TP03	4 E
C310	5 G	CN412	3 H	Q310	4 I	R1120	2 I	R357	5 G	TP04	4 E
C311	6 G	CN902	4 E	Q311	6 I	R1121	2 I	R358	5 G	X1101	2 J
C312	6 G	CN906	4 B	Q312	6 I	R1122	2 H	R359	6 H		
C313	6 G	CN907	6 B	Q313	5 I	R1123	2 I	R360	6 H		
C314	6 G	CN914	8 A	Q314	5 I	R1124	2 H	R361	4 G		
C315	8 I	CN916	6 D	Q315	5 I	R1125	3 I	R362	4 G		
C316	9 I	CN917	5 D	Q316	5 I	R1126	3 I	R363	6 G		
C317	9 I	D1014	4 B	Q317	4 I	R1127	3 I	R364	6 H		
C318	9 H	D1015	4 B	Q318	4 I	R1128	3 I	R365	9 F		





C1017	9H	CN703	61D	0060	41C	R072	4A	R756	8B
C1017	8C	CN704	10J	0061	51B	R073	4B	R757	9B
C1018	4J	CN913	4D	0062	31C	R074	4B	R758	8B
C102	6D	CN915	6A	0063	31B	R075	4B	R759	9B
C103	7B	CN925	8J	0064	41C	R076	4B	R760	8B
C1061	7C	D001	2E	0065	41B	R077	5B	R761	9B
C1062	8C	D002	2E	0066	51C	R078	5B	R762	8B
C103	7C	D003	2E	0067	51B	R079	5B	R763	9C
C104	8C	D004	3E	0068	21B	R080	5B	R764	8C
C105	7C	D001	3E	0069	21B	R084	4B	R765	9B
C106	8C	D002	3E	0070	21B	R1056	9G	R766	8B
C107	7C	D013	3E	0071	21B	R1056	8C	R767	9C
C108	8C	D014	4E	0072	41B	R1057	9G	R768	8C
C109	7C	D015	41	0073	51B	R1057	8C	R769	9C
C110	8C	D016	41	01057	8B	R1058	9G	R770	9C
C111	7D	D017	2D	01057	91G	R1058	9A	R771	9B
C112	8D	D018	2D	01075	91J	R1059	4J	R772	9B
C113	7A	D019	2D	01076	91J	R1060	4J	R773	8B
C114	7A	D020	1E	01077	91I	R1071	9E	R774	8A
C115	6A	D021	2D	01078	91J	R1072	10E	R775	7C
C116	7A	D022	1D	01079	91I	R1073	9E	R776	8C
C117	7A	D023	2D	0701	6A	R1074	10E	R777	8A
C118	7A	D027	2D	0702	7A	R1075	91I	R778	8A
C121	6D	D030	1F	0726	8A	R1076	91J	R779	9F
C122	6D	D040	61	0727	8B	R1077	91I	R780	9E
C126	8A	D041	51	0728	8A	R1078	91J	R781	9H
C129	8B	D042	61	0733	6A	R1091	8J	R782	9G
C151	9B	D043	61	0734	6A	R1092	71I	R783	9H
C152	9B	D060	5B	0735	6A	R1093	81I	R784	9G
C153	9B	D061	5B	0736	6A	R701	7C	R785	9H
C154	8B	D062	3B	0737	6B	R702	8C	R786	9H
C155	9C	D063	3B	0751	91B	R703	7C	R787	9H
C156	8C	D064	4B	0752	81B	R704	8C	R788	9G
C170	10G	D065	4B	0753	91B	R705	7C	R789	9F
C181	91	D066	5B	0754	81B	R706	8C	R790	10F
C182	101	D067	5B	0755	91C	R707	7C	R791	9F
C183	9H	D068	5B	0756	81C	R708	8C	R792	10F
C184	9G	D1060	51	0757	91D	R709	6B	R793	9F
C185	9H	D703	91C	0758	81D	R710	7B	R794	10F
C186	9G	D704	81C	0781	91E	R711	6B	R795	9F
C187	91	D719	6A	0782	101E	R712	7B	R796	9F
C188	9G	D720	7B	R001	61E	R713	6A	R797	9F
C189	9H	D728	8A	R002	31D	R714	7A	R798	10G
C190	9G	D751	9A	R003	21D	R715	7A	S001	71
C191	9H	D752	9A	R004	11D	R716	7A		



Symbol	X	Y	Symbol	X	Y	Symbol	X	Y	Symbol	X	Y	Symbol	X	Y
C001	2E	G792	9G	D753	9B	R005	1E	R717	6B					
C002	3E	G793	9F	D754	9B	R006	1J	R718	7B					
C003	3E	G794	9F	D755	9B	R007	1J	R719	6A					
C004	3G	G795	9E	D756	8B	R008	2D	R720	7A					
C005	3F	G796	9E	D757	9C	R009	2D	R721	6A					
C007	1I	G797	9F	D758	8C	R030	1F	R722	7A					
C011	3E	G798	9F	D759	9C	R031	1G	R723	7B					
C012	4E	CH001	4I	D760	8C	R032	2I	R724	7B					
C013	3E	CH002	3I	D789	9E	R033	2H	R725	9A					
C014	4G	CH003	5I	D790	10E	R034	2H	R726	9A					
C015	4F	CH004	4I	F001	4F	R035	2H	R727	8B					
C016	2D	CH005	1E	F002	5H	R036	2H	R728	8A					
C017	1D	CH006	1E	F003	4E	R037	2H	R729	8B					
C018	2D	CH007	3D	F501	7H	R040	6I	R730	8A					
C019	1D	CH008	2E	F502	6H	R041	5I	R733	6B					
C020	1D	CH009	1E	IC701	7D	R042	5I	R734	6B					
C021	1E	CH010	1F	IC702	8D	R043	5I	R735	6B					
C022	1E	CH011	1F	IC781	10H	R044	5I	R736	6B					
C023	2D	CH012	1F	IC782	10G	R045	5I	R737	6B					
C030	1G	CH013	1F	K001	2I	R046	6I	R738	6B					
C031	1G	CH014	1F	K002	2I	R047	6I	R739	6B					
C032	1G	CH101	1D	K003	2J	R050	1G	R740	6B					
C060	5B	CH001	1J	K004	2I	R051	1G	R741	9H					
C061	5B	CH002	3I	K005	2I	R052	1G	R742	9H					
C062	5A	CH003	3H	K006	1I	R053	1G	R743	9E					
C063	3B	CH004	4I	K007	1I	R060	4A	R744	9E					
C064	3B	CH005	6I	L701	7B	R061	4A	R745	9E					
C065	3B	CH006	2H	L702	7B	R062	4B	R746	10E					
C066	3B	CH007	1F	L781	9F	R063	3B	R747	9E					
C067	4B	CH008	2E	L782	9F	R064	3A	R748	9E					
C068	4B	CH009	4F	L001	1D	R065	3B	R749	9H					
C069	4B	CH012	2B	L002	1E	R066	4A	R750	9G					
C070	5B	CH013	9C	L003	2D	R067	3A	R751	9B					
C071	5B	CH014	9E	L004	1G	R068	4A	R752	9B					
C072	5B	CH019	7E	L005	5I	R069	4A	R753	9B					
C073	5A	CH111	4D	L006	6I	R070	5A	R754	8B					
C101	6D	CH121	1H	L007	6I	R071	5B	R755	9B					
C1017	9H	CH703	6D	L008	4C	R072	4A	R756	8B					
C1017	8C	CH704	10J	L009	5B	R073	4A	R757	9B					
C1018	4J	CH913	4D	L010	3C	R074	4B	R758	8B					

ENH-284 Location List

XT-D8T

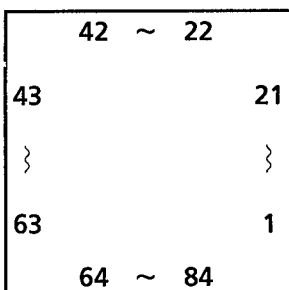
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Description of the ICs

■ MN172412KBL(IC841) : Tuner Controller

1. Terminal layout



2. Key matrix

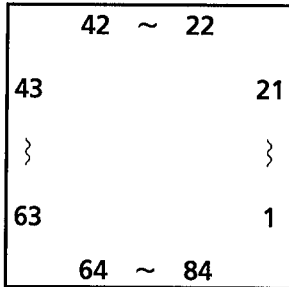
	KEY IN 1 (56pin)	KEY IN 2 (57pin)	KEY IN3 (58pin)	KEY IN 4 (59pin)
KO1 (78pin)	SLEEP (S845)	DAIRY (S846)	ONCE (S847)	REC (S848)
KO2 (4pin)	DEMO (S849)	FM MODE /MUTE (S850)	CLOCK ADJ (S851)	MEMORY (S852)
KO3 (80pin)	TUNING (S853)	TUNING (S854)	PRESET < (S855)	PRESET > (S856)
KO4 (81pin)	TA/NEWS /INFO (S857)	E ON/OFF (S858)	AM (S859)	FM (S860)
KO5 (82pin)	PTY SEARCH (S841)	SELECT ↓ (S842)	SELECT ↑ (S843)	DISPLAY MODE (S844)

3. Terminal Function

Pin No.	Symbol	I/O	Functions and Operations	Pin No.	Symbol	I/O	Functions and Operations
1~2	7G~8G	O	FL Grid control output	45	RD SCK	I	Clock for RDS
3~7	P1~P5	O	FL Segment control output	46	RDS DATA	I	Data for RDS
8	P6	O	FL Segment control output	47	RDS RST	O	Reset for RDS
9	P7	O	FL Segment control output	48	/INH	I	Inhibit signal input
10	P8	O	FL Segment control output	49	RDS DST	I	Key matrix input
11	P9	O	FL Segment control output	50	TUNED	I	'TUNED' indicator control signal
12	P10	O	FL Segment control output	51	STEREO	I	'STEREO' indicator control signal
13	P11	O	FL Segment control output	52	MUTE	I	Tuner mute signal output
14	P12	O	FL Segment control output	53	DCSOUT	I	DCS signal output
15	P13	O	FL Segment control output	54	DCSIN	I	DCS signal input
16	P14	O	FL Segment control output	55	CS	I	Chip select input
17	P15	O	FL Segment control output	56	K11	I	Key matrix input
18	P16	O	FL Segment control output	57	K12	I	Key matrix input
19	P20	O	FL Segment control output	58	K13	I	Key matrix input
20	P19	O	FL Segment control output	59	K14	I	Key matrix input
21	P18	O	FL Segment control output	60	IFDATA	I	Data signal input from IC121
22	P17	O	FL Segment control output	61	CE	O	Chip enable for IC121
23	-BP	O	Power supply(-Vpp,,)	62	CK	O	Clock signal output for IC121
24	P36	O	FL Segment control output	63	KO6(CS)	O	Key matrix output(Chip select)
25	P35	O	FL Segment control output	64	CD,IND	O	'CD' indicator control signal
26	P34	--	FL Segment control output	65	C-REQ	O	CD display control request
27	P33	O	FL Segment control output	66	C-CLK	I	CD display control clock
28	P32	O	FL Segment control output	67	C-DATA	I	CD display control data
29	P31	O	FL Segment control output	68	RESET	I	System reset signal signal input
30	P30	O	FL Segment control output	69	X1	--	Connection of the GND
31	P29	O	FL Segment control output	71	X2	--	Nonconnection
32	P28	O	FL Segment control output	72	OSC2	--	Oscillation terminal (6MHz)
33	P27	O	FL Segment control output	73	OSC1	--	Oscillation terminal (6MHz)
34	P26	O	FL Segment control output	74	V _{DD}	--	Power supply(+5V)
35	P25	O	FL Segment control output	75	A-REQ	O	AMP display control request
36	P24	O	FL Segment control output	76	A-CLK	I	AMP display control clock
37	P23	O	FL Segment control output	77	A-DATA	I	AMP display control data
38	P22	O	FL Segment control output	78	S4	O	Key matrix output
39	P21	O	FL Segment control output	79	S5	O	FL Grid control output(Key matrix output)
40	FOUT	O	Clock frequency output	80	S6	O	FL Grid control output(Key matrix output)
41	SPISTB	O	SPI strove signal	81	S7	O	FL Grid control output(Key matrix output)
42	SPIDATAIN	O	SPI DATA input	82	4G/KO5	O	FL Grid control output(Key matrix output)
43	SPIDATAOUT	I	SPI DATA output	83	S9	O	FL Segment control output
44	SPICSB	O	SPI IC control strove	84	S10	O	FL Segment control output

■ MN172412K BK (IC200) : CD Controller

1. Terminal layout

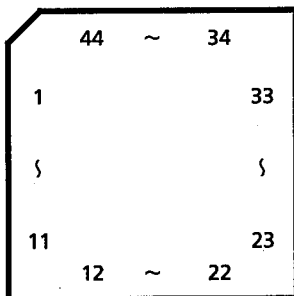


3. Pin Functions

Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1		--	Connected to D.GND	43	CDATA	O	TADA signal for tuner μ-com IC841
2		--	Connected to D.GND	44		--	D.GND
3		--	Connected to D.GND	45	SQCK	O	Clock signal for sub code and Q register
4		--	Connected to D.GND	46	SUBQ	I	Sub code and Q register signal input
5		--	Connected to D.GND	47	P.OFF	O	CD LSI Power output control
6		--	Connected to D.GND	48	STAT	I	Status signal input
7		--	Connected to D.GND	49	RESETSW	O	CD mech. rest switch input
8		--	Connected to D.GND	50	DETECT	--	Connected to D.GND
9		--	Connected to D.GND	51		--	D.GND
10		--	Connected to D.GND	52	/RST	I	System reset signal output
11		--	Connected to D.GND	53	MLD	O	μ-com comand road signal output
12		--	Connected to D.GND	54	MDATA	O	μ-com comand data signal output
13		--	Connected to D.GND	55	MCLK	O	μ-com comand clock signal output
14		--	Connected to D.GND	56	DATA	O	Data signal output for changer μ-com
15		--	Connected to D.GND	57	SCK	O	Clock signal output for changer μ-com
16		--	Connected to D.GND	58	CHST	O	Strove signal output for changer μ-com
17		--	Connected to D.GND	59	CHREQ	I	Redy signal input from changer μ-com
18		--	Connected to D.GND	60		--	Connected to D.GND
19		--	Connected to D.GND	61		--	Connected to D.GND
20		--	Connected to D.GND	62		--	Connected to D.GND
21		--	Connected to D.GND	63		--	Connected to D.GND
22		--	Connected to D.GND	64	D1LED	O	DISC1 Indication signal output
23		--	Connected to D.GND	65	D2LED	O	DISC2 Indication signal output
24		--	Connected to D.GND	66	D3LED	O	DISC3 Indication signal output
25		--	Connected to D.GND	67	D.GND	--	Non connection
26		--	Connected to D.GND	68	/RESET	I	System reset signal input
27		--	Connected to D.GND	69	X1	--	GND
28		--	Connected to D.GND	70	X2	--	Non connection
29		--	Connected to D.GND	71	Vss	--	GND
30		--	Connected to D.GND	72	OSC2	--	Osilation terminal(6MHz)
31		--	Connected to D.GND	73	OSC	--	Osilation terminal(6MHz)
32	KI1	--	Key matrix input	74	VDD	--	Power suply
33	KI2	--	Key matrix input	75	DCS OUT	O	DCS signal output
34	KI3	--	Key matrix input	76	DCS IN	I	DCS signal input
35	KI4	--	Key matrix input	77		--	Connected to D.GND
36	KO1	--	Key matrix output	78		--	Connected to D.GND
37	KO2	--	Key matrix output	79		--	Connected to D.GND
38	KO3	--	Key matrix output	80		--	Connected to D.GND
39	KO4	--	Key matrix output	81		--	Connected to D.GND
40	C-REQ		Redy signal from tuner μ-com IC841	82		--	Connected to D.GND
41	C-CLK		Clpck signal for tuner μ-com IC841	83		--	Connected to D.GND
42	CS	--	Connected to D.GND	84		--	Connected to D.GND

■ UPD65612GB-165(IC801) : Changer Controller

1. Terminal Layout

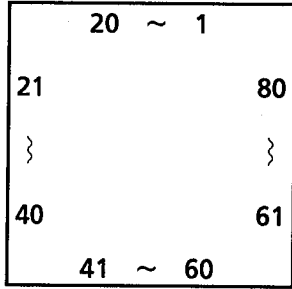


2. Pin Functions

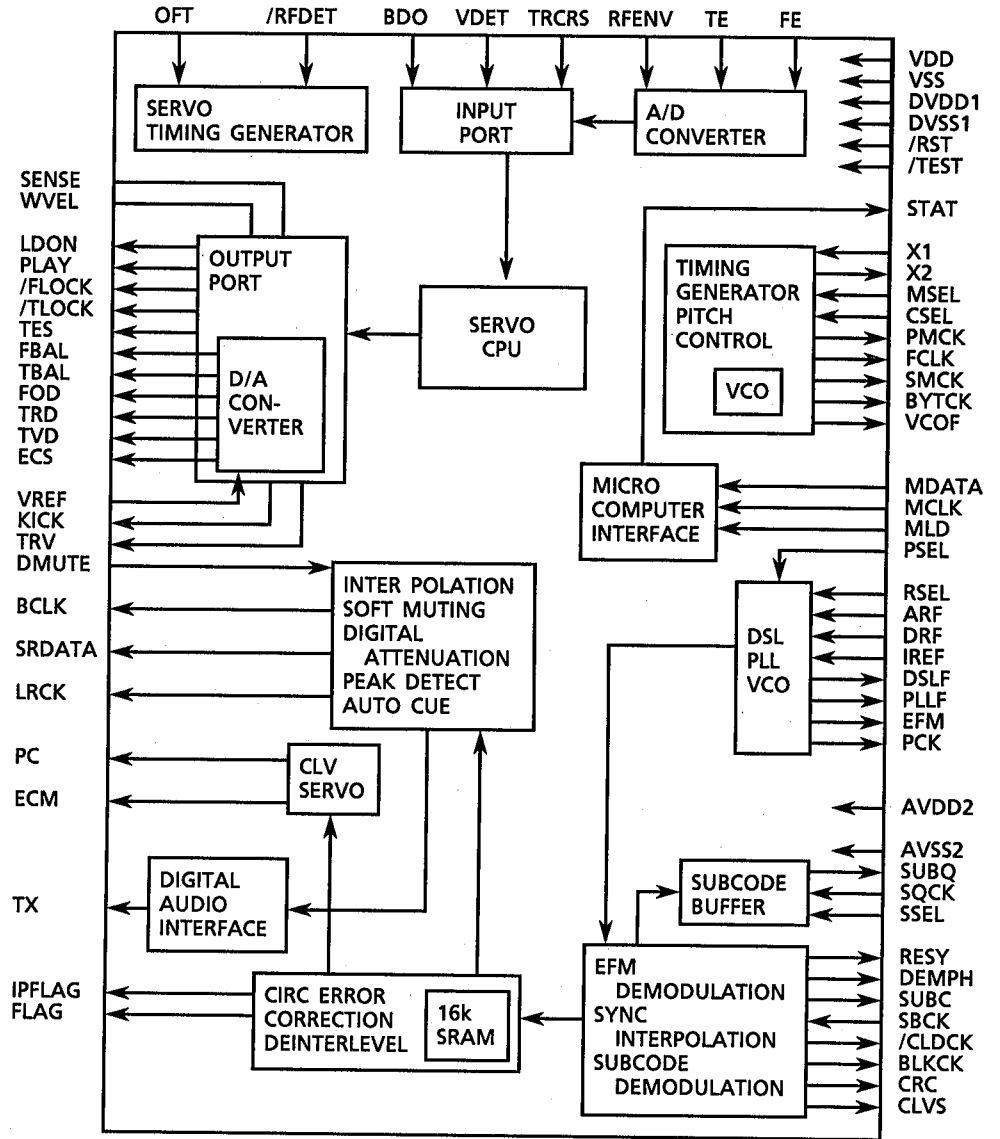
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	NC	--	Non connection	23	2SSW	I	TRAY2 switch input signal
2	NC	--	Non connection	24	1SSW	I	TRAY1 switch input signal
3	NC	--	Non connection	25	NC	--	Non connection
4	OS1I	I	Oscillation terminal	26	CAM0	I	Cam switch input signal for LCAM
5	OS1O	O	Oscillation terminal	27	CAM1	I	Cam switch input signal for LCAM
6	OS2I	I	Oscillation terminal	28	CAM2	I	Cam switch input signal for LCAM
7	OS2O	O	Oscillation terminal	29	CAM3	I	Cam switch input signal for LCAM
8	NC	--	Non connection	30	CAM4	I	Cam switch input signal for RCAM
9	C25IN	I	Connected to C25OUT	31	CAM5	I	Cam switch input signal for RCAM
10	C25OUT	O	Connected to C25IN	32	CAM6	I	Cam switch input signal for RCAM
11	RESET	I	Reset signal input	33	CAM7	I	Cam switch input signal for RCAM
12	REQ	O	Output the "mecha. data request"	34	FIT	O	Connected to C50
13	DATA	I/O	Control, Status data I/O	35	C50	I	Connected to FIT
14	ST	I	Strobe signal input	36	LMUP	O	L motor control signal
15	CKS	I	Clock input	37	LMDWN	O	L motor control signal
16	SELECT	--	Connected to GND	38	C25	--	Non connection
17	GND	--	GND	39	VDD	--	Power supply terminal
18	CK	--	Connected to GND	40	C100	--	Non connection
19	1MSW	I	TRAY1 switch input signal	41	RMUP	O	R motor control signal
20	2MSW	I	TRAY2 switch input signal	42	RMDWN	O	R motor control signal
21	3MSW	I	TRAY3 switch input signal	43	NC	--	Non connection
22	3SSW	I	TRAY3 switch input signal	44	NC	--	Non connection

■ MN35510 (IC603) : DIGITAL SERVO & DIGITAL SIGNAL PROCESSER

1. Terminal Layout



2. Block Diagram



3. Description

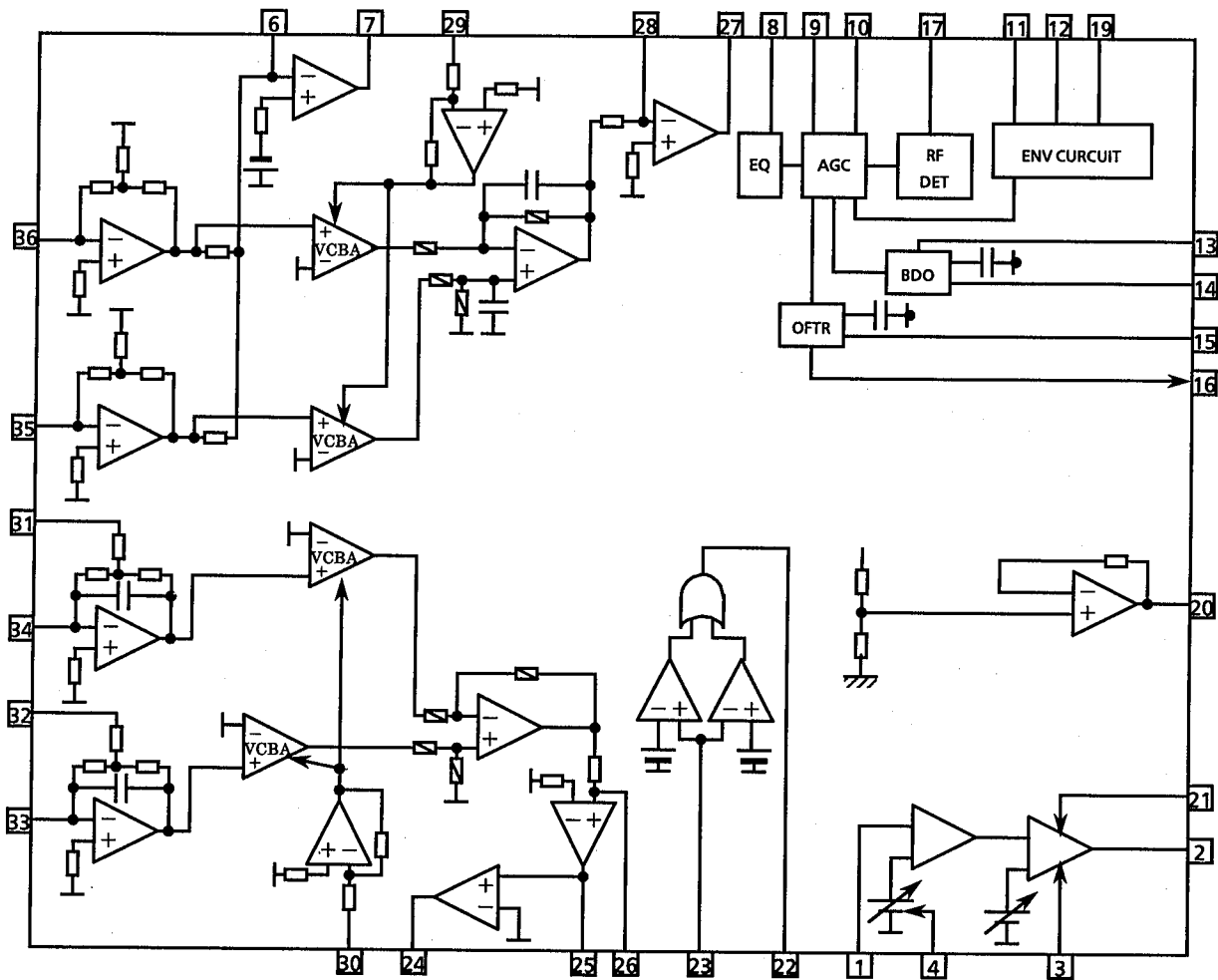
Pin No.	symbol	I/O	Description	Pin No.	symbol	I/O	Description
1	BCLK	O	Not used	41	TES	O	Tracking error shunt signal output (H;shunt)
2	LRCK	O	Not used	42	PLAY	—	Not used
3	SRDATA	O	Not used	43	WVEL	—	Not used
4	DVDD1	—	Power supply(Digital)	44	ARF	I	RF signal input
5	DVSS1	—	Not used	45	IREF	I	Reference current input pin
6	TX	O	Not used	46	DRF	I	Bias pin for DSL
7	MCLK	I	μ-com command clock signal input (Data is latched at signal's rising point)	47	DSL F	I/O	Loop filter pin for DSL
8	MDATA	I	μ-com command data input	48	PLL F	I/O	Loop filter pin for PLL
9	MLD	I	μ-com command load signal input	49	VCOF	—	Not used
10	SENSE	O	Not used	50	AVDD2	—	Power supply (Analog)
11	FLOCK	O	Not used	51	AVSS2	—	Connected to GND(Analog)
12	TLOCK	O	Not used	52	EFM	—	Not used
13	BLKCK	O	Subcode · block · clock signal output	53	PCK	—	Not used
14	SQCK	I	Outside lock 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 cscillation circuit)
18	RST	I	Reset signal input (L :Reset)	58	X1	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	FCLK	—	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,FBAL,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 (H : drop out)	79	MSEL	—	Connected to GND
40	LDON	O	Laser ON signal output (H : on)	80	SSEL	—	Not used

■ AN8806SB (IC601) : RF & SERVO AMP

1. Terminal Layout

PD	1	36	PDAC
LD	2	35	PDBD
LDON	3	34	PDE
LDP	4	33	PDF
VCC	5	32	PDER
RF-	6	31	PDFR
RF OUT	7	30	TBAL
RF IN	8	29	FBAL
C.AGC	9	28	FE-
ARF	10	27	FE 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
/NRFD	17	20	VREF
GND	18	19	ENV

2. Block Diagram

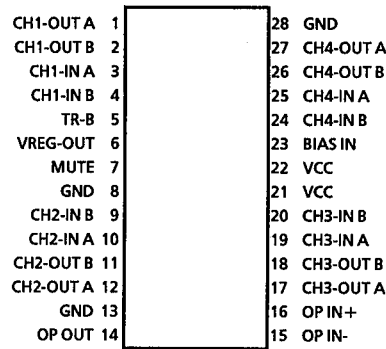


3. Functions

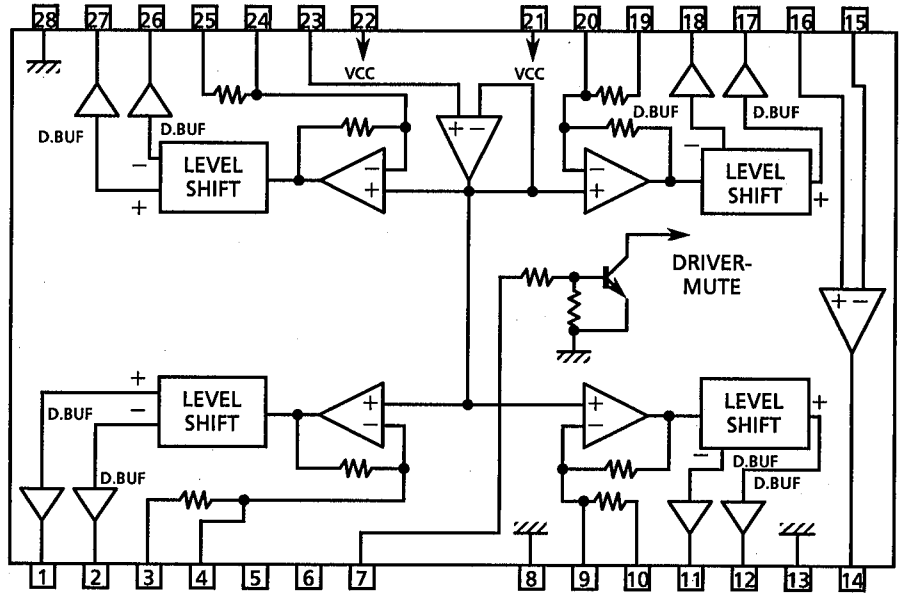
Pin No.	Symbol	I/O	Functions and operations
1	PD	I	APC amp input terminal
2	LD	O	APC amp output terminal
3	LD ON	I	APC ON/OFF control terminal
4	LDP	--	Connected to ground
5	VCC	--	Power supply
6	RF-	I	Inverse input pin for RF amp
7	RF OUT	O	RF amp output
8	RF IN	I	RF input
9	C.AGC	I/O	Connecting pin 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 the RF signal
14	BDO	O	BDO output pin
15	CS BRT	I/O	A capacitor is connected to detect the lower envelope of the 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	--	Non connection
32	PDER	--	Non connection
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

■ BA6397FPW(IC602) : BTL DRIVER

1. Terminal Layout



2. Block Diagram

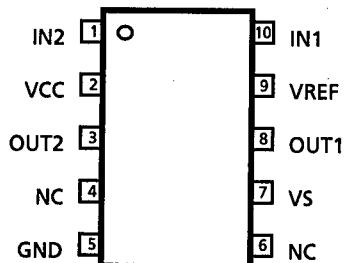


3. Description

Pin No.	Symbol	I/O	Description
1	CH1-OUT A	O	Focus drive output
2	CH1-OUT B	O	
3	CH1-IN A	—	Non connection
4	CH1-IN B	I	FOD input
5	TR-B	O	Transistor control
6	VREG-OUT	O	Reference voltage output
7	MUTE	I	Mute signal input pin
9	CH2-IN B	I	Spindle motor drive input Feed motor drive input
20	CH3-IN B	I	
11	CH2-OUT B	O	Spindle motor drive output
12	CH2-OUT A		
24	CH4-IN B	I	Feed motor drive input

Pin No.	Symbol	I/O	Description
8,13,28	GND	—	GND
10	CH2-IN A	—	Non connection
14	OPOUT		
15	OPIN-		
16	OPIN+		
19	CH3-IN A	O	Feed motor drive output
25	CH4-IN A		
17	CH3-OUT A	O	Feed motor drive output
18	CH3-OUT B		
21,22	Vcc	—	Power supply
23	BIAS IN	I	Input pin of Bias
26	CH4-OUT B	O	Tracking drive output
27	CH4-OUT A		

■ TA8409F (IC802,IC803) : DC Motor driver



INPUT		OUTPUT		MODE
IN1	IN2	OUT1	OUT2	
0	0	∞	∞	stop
1	0	H	L	open
0	1	L	H	close
1	1	L	L	break

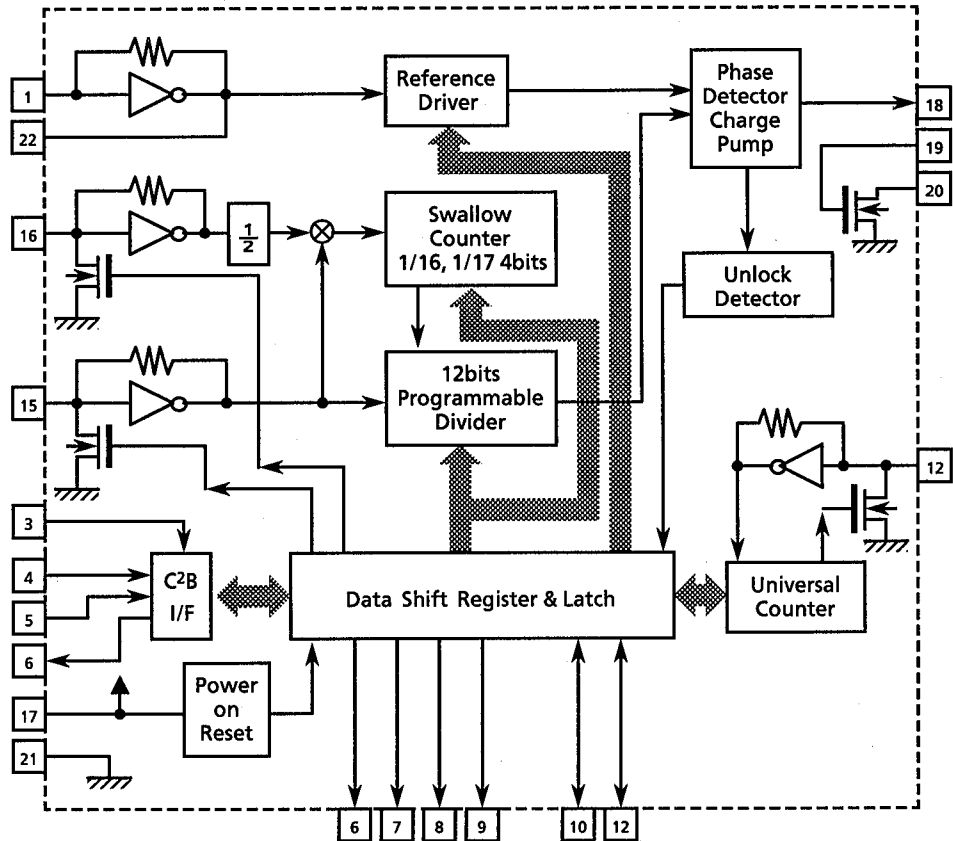
∞--High impedance

■ LC72131 (IC121) : PLL Synthesizer

1. Terminal Layout

XIN	1	22	XOUT
NC	2	21	VSS
CE	3	20	LPF OUT
DI	4	19	LPF IN
CK	5	18	PD
DO	6	17	VDD
FM	7	16	FM OSC
AW	8	15	AM OSC
LW	9	14	NC
AUTO/MONO	10	13	IF REQ
No use	11	12	FM/AM IF

2. Block Diagram



3. Pin Functions

Pin No.	Symbol	I/O	Functions	Pin No.	Symbol	I/O	Functions
1	Xin	I	Crystal oscillator (7.2MHz).	12	FM/AM IF	I	Universal counter input
3	CE	I	Fix the chip enable to "H" when inputting (DI) and outputting (DO) the serial data.	13	IF REQ	O	Output the "IF-signal request" to IC102
4	DI	I	Receive the control data from the controller (IC701).	15	AM IN	I	Input the local oscillator signal of AM.
5	CK	I	This clock is used to synchronize data when transmitting the data of DI and DO.	16	FM IN	I	Input the local oscillator signal of FM.
6	DO	O	Transmit the data from LC72131 to the controller which is synchronized with CK.	17	VDD	--	This is a terminal of power supply.
7	FM	O	It is "L" on FM mode.	18	PD	O	PLL charge pump output : When the local oscillator signal frequency is higher than the reference frequency high level signals will output. When it is lower than the reference frequency, low level signals will output. When it is same as reference frequency signals, it will be floating.
8	MW	O	It is "L" on MW mode.	19	LPF IN	I	Transistor used for the PLL active low-pass filter
9	LW	O	It is "H" on LW mode.	20	LPF OUT	O	Transistor used for the PLL active low-pass filter
10	AUTO/MONO	O	It is "H" on monaural, "L" on auto.	21	VSS	--	Connected to GND
11	NO USE	O		22	Xout	O	Crystal oscillator (7.2MHz).

■ LA1266 (IC104) : FM AM IF AMP & detector

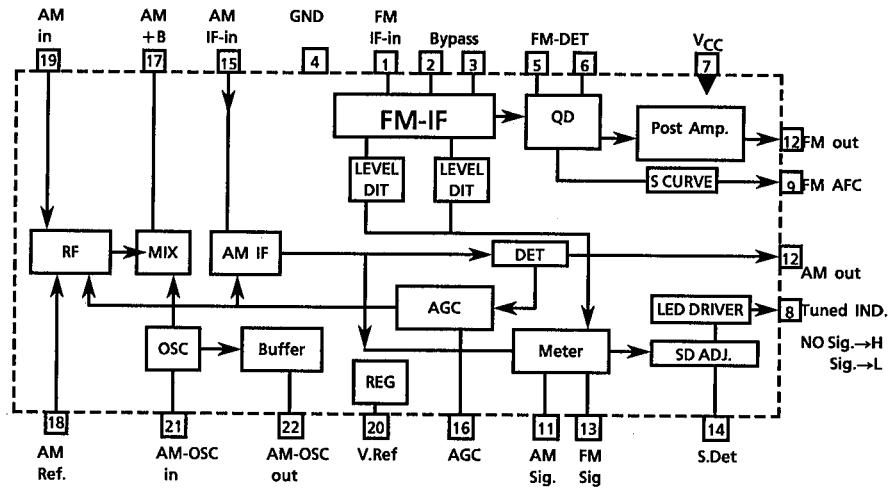
1. The main function descriptions

- (1) Amplify and detect of FM intermodulation frequencies.
- (2) It has local oscillator and mixer for AM, and amplify the AM-IF signal.

2. Top View

FM-In	1	22	AM-OSC out
Bypass	2	21	AM-OSC
Bypass	3	20	V Ref.
GND	4	19	AM-In
FM-DET	5	18	AM-Ref.
FM-DET	6	17	AM +B
V _{cc}	7	16	AM AGC
Tuned	8	15	AM IF-in
FM-AFC	9	14	S.Det
FM-Out	10	13	FM Sig
AB-Sig.	11	12	AM Out

3. Block Diagram



4. Pin Function Description

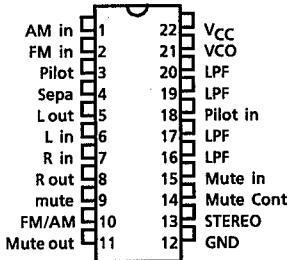
Pin No.	Symbol	I/O	Functions and Operations
1	FM in	I	This is an input terminal of FM IF Signal.
2,3	Bypass	--	Bypass of FM IF Amp.
4	GND	--	This is the device ground terminal.
5,6	FM DET	--	FM detect transformer.
7	V _{cc}	--	This is the power supply terminal.
8	SIG	O	Auto-stop drive signal output for mute and tune
9	FM AFC	O	This is an output terminal of voltage for FM - AFC.
10	FM IF out	O	When the signal of IF REQ of IC121(LC72131) applied to pin12, the signal of FM IF does output.
11	AM IF out	O	When the signal of IF REQ of IC121(LC72131) applied to pin12, the signal of AM IF does output.
12	FM out	O	FM detection output.
13	STRQ	I	The IF-signals come out from pin10 (FM-IF) or pin11 (AM-IF) while this terminal going to "High".
14	NAR SM	--	Control the Band-width of signal meter.
15	AM out	O	AM detection output.
16	FM Adj	--	For adjust the stop level (or mute level) of FM.
17	AM Adj	--	For adjust the stop level (or mute level) of AM.
18	AM-IF	I	Input of AM IF Signal.
19	AM-AGC	I	This is an AGC voltage Input terminal for AM.
20	AM-MIX	O	This is an output terminal for AM mixer.
21	AM-IN	I	This is an input terminal for AM RF Signal.
22	V.REF	--	Resister value between pin9 and pin22 desides the frequency width of the inputsignal
23	AM-OSC	--	This is a terminal of AM Local oscillation circuit.
24	AM-OSC out	O	AM Local Oscillation Signal output.

■ LA3401 (IC105) : FM MPX Detector

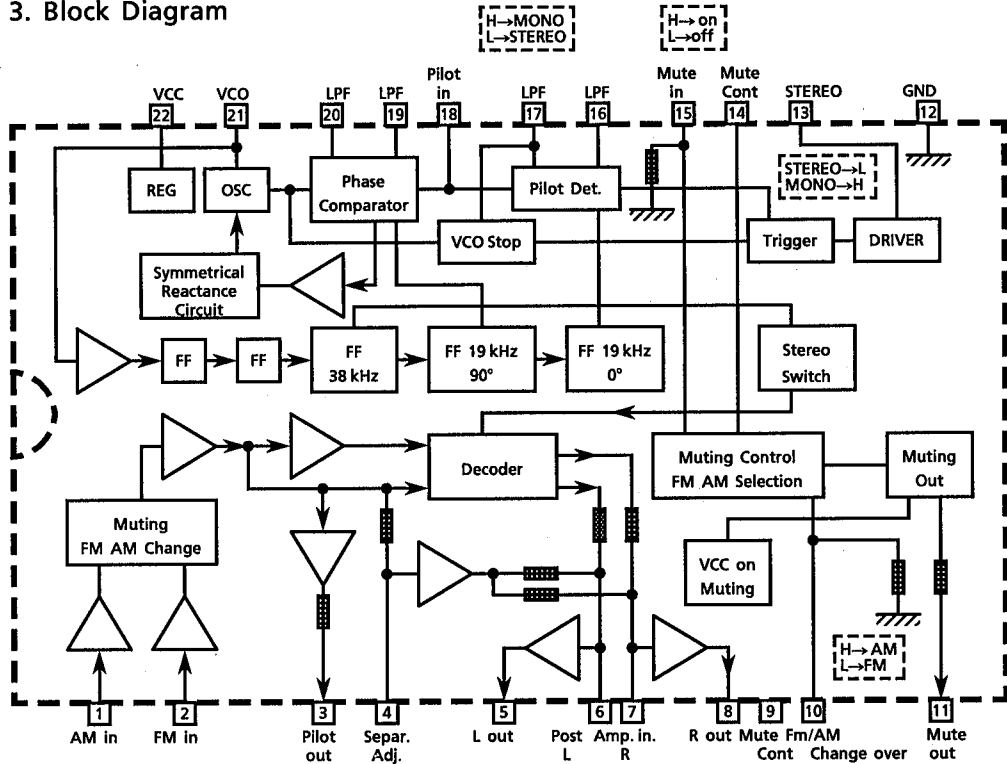
1. The main function descriptions

- (1) Detect the FM Multiplex Signal (Stereo signal).
- (2) When receiving FM Stereo Signal, it outputs the signal for indicator.
- (3) AM /FM Audio Amplifier.

2. Terminal Layout



3. Block Diagram

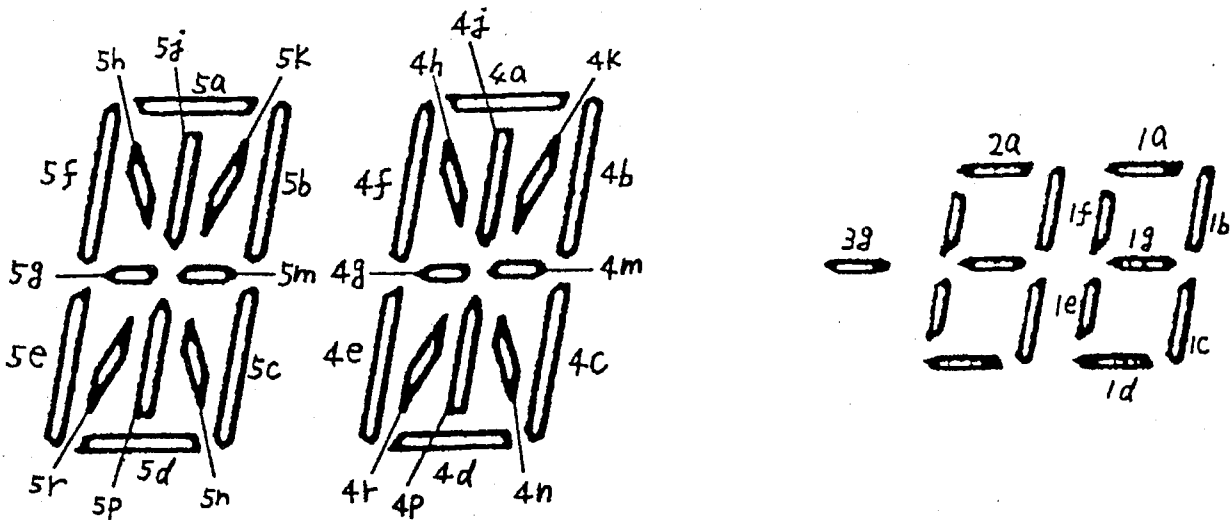


4. Pin Function Description

Pin No.	Symbol	I/O	Functions and Operations
1	AM in	I	This is an input terminal for AM detection signal.
2	FM in	I	This is an input terminal for FM detection signal.
3	Pilot out	O	Output of MPX pilot signal (Connect to Pin18).
4	Sepa. Adj.	--	Separation adjustment.
5	L. out	O	Left channel signal output.
6	L	O	Reversal output of Pin5.
7	R	O	Reversal output of Pin8.
8	R out	O	Right channel signal output
9	Mute Cont	--	The mute time is controlled by the connected capacitor when turning the power switch on.
10	/FM, AM	I	Change over the FM / AM input. "H" : AM, "L" : FM
11	Mute out	--	Not use
12	GND	--	Ground terminal.
13	/Stereo	O	Stereo indicator output. Stereo : "L", Mono : "H"
14	Mute Cont	--	The mute time is controlled by the connected capacitor when changing over the FM / AM .
15	Mute in	I	Mute signal input. "H" : Mute on, "L" : Mute off.
16	LPF	--	Low pass filter of pilot detector.
17	LPF	--	While this terminal goes to "H", the VCO stop.
18	Pilot in	I	Pilot input.
19	LPF	--	Low-pass filter of PLL.
20	LPF	--	Low-pass filter of PLL.
21	VCO	I	Voltage controlled oscillator terminal.
22	V _{CC}	--	Power supply.

3. Anode Connection Table

	1G	2G	3G	4G	5G	6G	7G	8G
P1	⑨					B15	STEREO	5-3
P2	⑩					B14	SEA	4-3
P3	⑪	4a	4a	4a	4a	B13	⊖REC	3-3
P4	⑫	4b	4b	4b	4b	B12		2-3
P5	⑮	4k	4k	4k	4k	B11	REPEAT	1-3
P6	⑯	4j	4j	4j	4j	B10	CONTINUE	5-2
P7	⑰	4h	4h	4h	4h	B9	TUNED	4-2
P8	⑱	4f	4f	4f	4f	B8	LIVE-S	3-2
P9	①	4g	4g	4g	4g	B7	⊖ONCE	2-2
P10	②	4m	4m	4m	4m	B6	6-a	1-2
P11	③	4c	4c	4c	4c	B5	6-b	5-1
P12	④	4n	4n	4n	4n	B4	6-c	4-1
P13	SOURCE	4p	4p	4p	4p	B3	6-d	3-1
P14	OFF TIME	4r	4r	4r	4r	B2	⊖DAILY	2-1
P15	ON TIME	4e	4e	4e	4e	B1	⊖SLEEP	1-1
P16	CLOCK	4d	4d	4d	4d	S2	MEMORY	S3
P17	⑯			s	MHz	B16	PROGRAM	1-4
P18	⑰			t	REMAIN	B17	ALL	2-4
P19	⑱					B18	I	3-4
P20	⑳				kHz	dB	CD	4-4
P21	▷	5d	5d	5d	5d	1d	A.EDIT	5-4
P22	1-a	5e	5e	5e	5e	1e	RANDOM	1-5
P23	1-b	5r	5r	5r	5r	1c	AUTO	2-5
P24	1-c	5p	5p	5p	5p	1g	AUTO-OFF	3-5
P25	2-a	5n	5n	5n	5n	1f	)	4-5
P26	2-b	5c	5c	5c	5c	1b	INFO	5-5
P27	2-c	5m	5m	5m	5m	1a	NEWS	1-6
P28	3-a	5g	5g	5g	5g	CH	TA	2-6
P29	3-b	5f	5f	5f	5f	2d	(	3-6
P30	3-c	5h	5h	5h	5h	2e	R•D•S	4-6
P31	S1	5j	5j	5j	5j	2c	P.EDIT	5-6
P32		5k	5k	5k	5k	2g	DISC	1-7
P33		5b	5b	5b	5b	2f	EON	2-7
P34		5a	5a	5a	5a	2b	INTRO	3-7
P35						2a	[A]	4-7
P36						3g	[B]	5-7



Disassembly Procedures

(1) Top cover removal

1. Remove 2 screws **A** fixing both sides of the top cover, and 4 screws **B** fixing rear sides.
2. Remove the top cover.

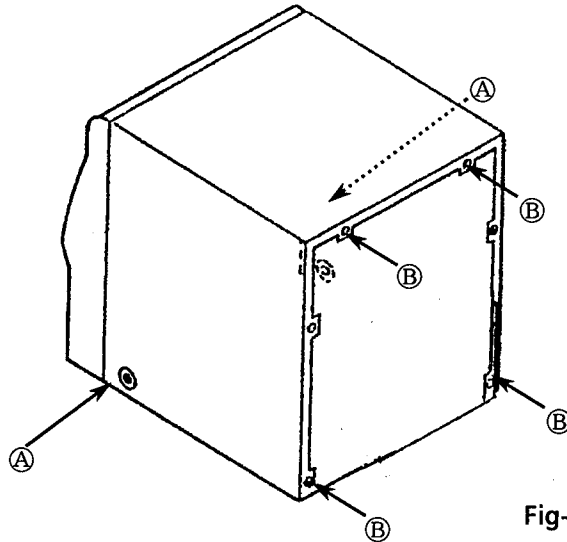


Fig-

(2) Rear panel removal

1. Remove the top cover.
2. Remove the 2 screws **C** holding the CD changer mech. ass'y.
3. Disconnect the CN201.
4. Remove the 4 screws **B**.
5. Remove the rear panel.

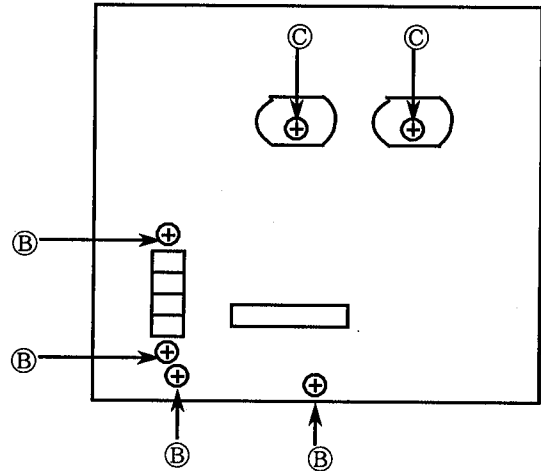


Fig-2

(3) CD changer mech. & Front Panel assembly removal

1. Remove the top cover and rear panel.
2. Disconnect the connectors. (CN614, CN811, CN851)
3. Remove the 2 screws **D** holding the CDchanger mech., Remove it.
4. Remove the 2 screws **E**, Release the hooks.
5. Remove the front panel ass'y.

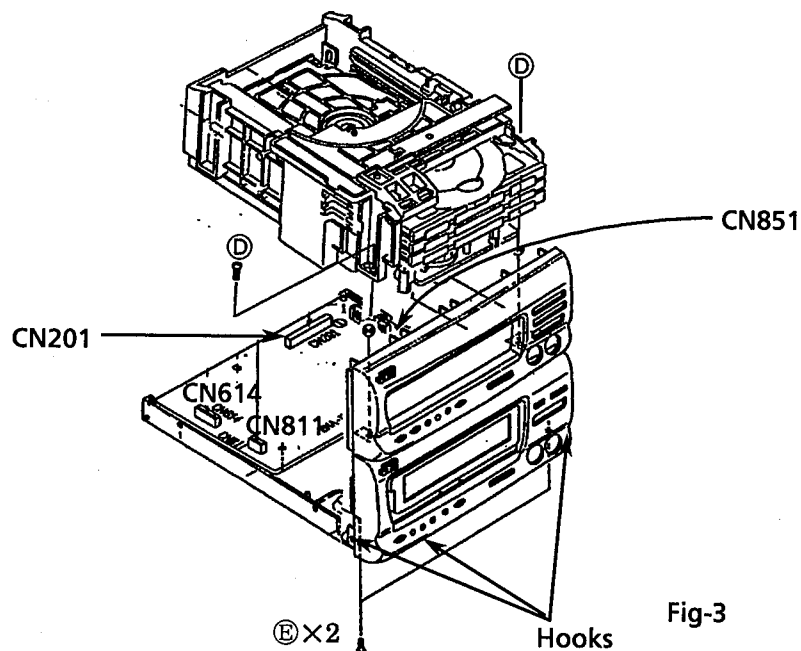


Fig-3

A .. SD5G3006M **B** ... E73273-003 **C** ... SBSF3008Z **D** ... SBSG3008Z **E** SBSG3008M

(4) CD-Tuner control circuit board (ENA-173-2) & Tuner circuit board (ENA-173-1) removal

1. Remove the CD changer mech. and rear panel .
2. Disconnect the CN851 .
3. Disconnect the CN214 ,Remove the Tuner circuit board (ENA-173-1) .
4. Remove the 3 screws (F) fixing the ENA-173-2.
5. Remove the CD-Tuner control circuit board (ENA-173-2) .

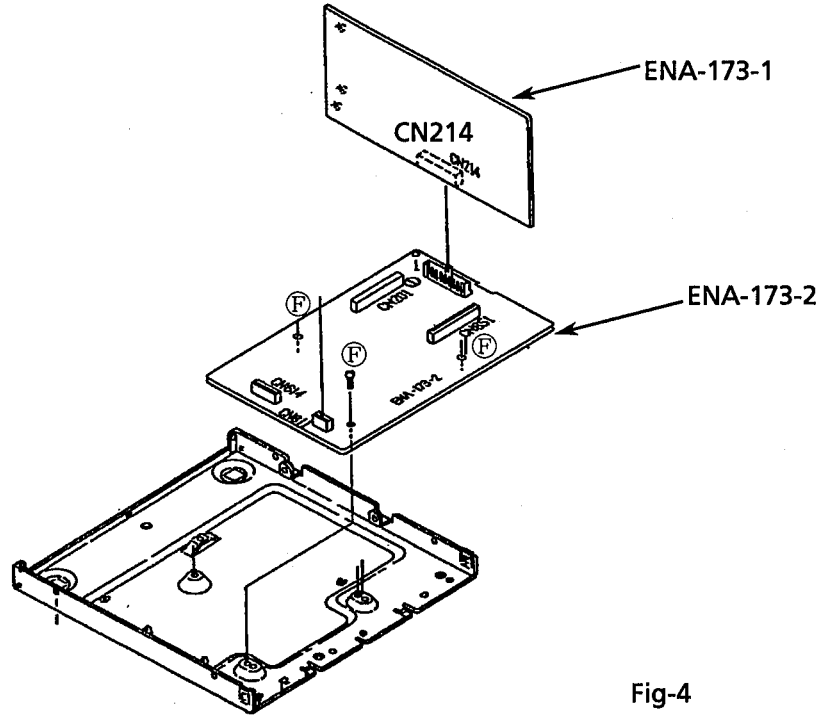


Fig-4

(5) Front circuit board removal

1. Remove the top cover.
2. Remove the frnt panel ass`y.
3. Remove the 11 screws (G) .
4. Remove the bracket and frot circuit board (EN-471-1)

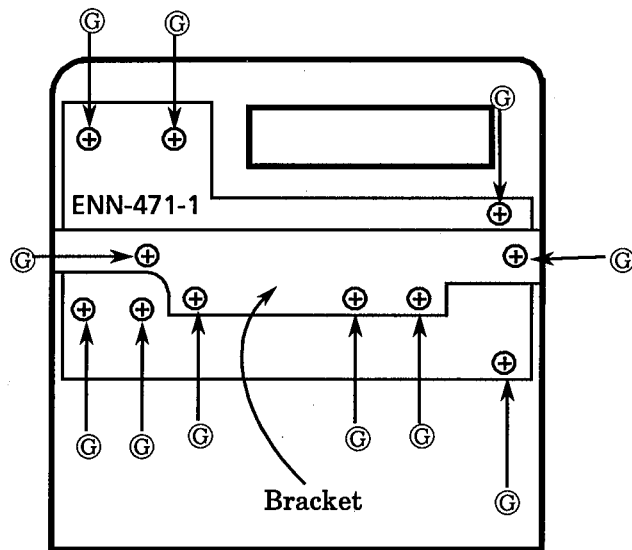


Fig-5

CD changer mech. Ass'y removal

(6) CD Tray assembly removal

1. Disassemble the changer mech..
 2. Remove the screw ⑧ holding the stopper bracket.(See Fig.6) --- (U.S.A and CANADA only)
 3. Remove the rod from both ends' hooks which are secured on T.Bracket ⑩ and clamper base ⑥. [See Fig. 6)
 4. Remove 3 screws ⑧ and screw ⑨ securing T.Bracket.(See Fig. 8.)
 5. Remove a screw ① securing center of the clamper ass'y. (See Fig. 7)
 6. Remove the clamper ass'y from ★ screw fixing side.
 7. Remove a screw ⑧ which secures the return spring and lock levers from the chassis ass'y.(See Fig. 9.)
 8. Remove 2 pawls ④ which slightly secure the return spring to remove it.
 9. Remove 3 lock levers.
 10. Check that the lifter unit stopper is inserted into hole ③ located on CD tray ass'y. (See Fig. 10.)
 11. Check that the driver unit elevator is seen from a hole (marked ⑤) on left side of the CD changer mech..(See Fig. 11 and 12.)
- [NOTE] Set the elevator in correct position (Fig. 12) by rotating the pulley gear with finger if it is not positioned correctly (Fig. 13.).
12. Rotate the motor pulley clockwise with finger until the lifter unit's stopper is lowered from ③ hole located on the CD tray ass'y. (See Fig. 13.)
 13. And, pull all 3 CD tray assemblies forward until they stop. (See Fig. 11.)
 14. Press 2 pawls (f, f') located rear side of the CD tray ass'y according to an arrow ⑥ to remove the CD tray ass'y. (See Fig. 12.)
At first, removing the lowest tray is easier.

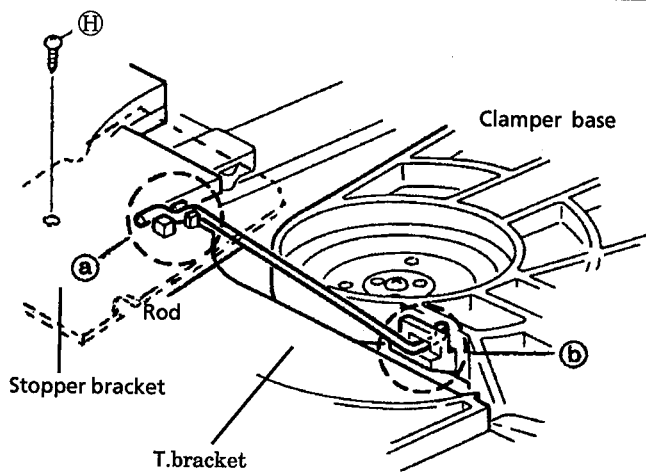


Fig. 6

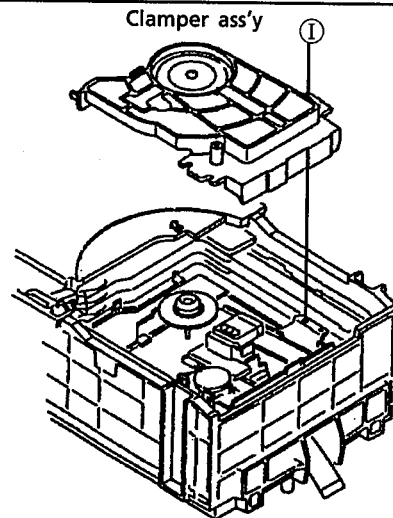


Fig.7

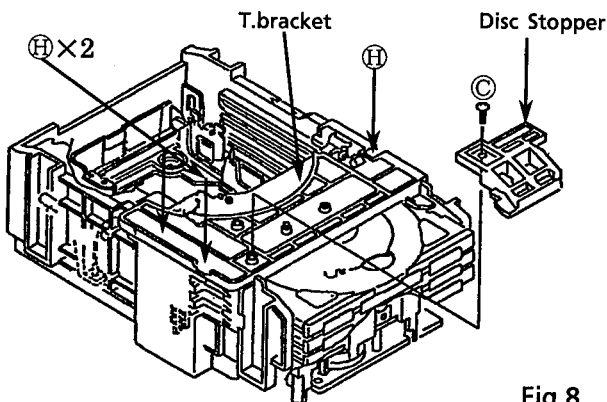


Fig.8

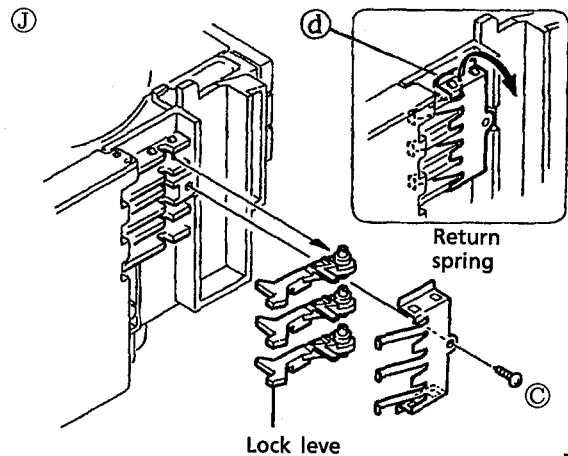


Fig.9

⑧ .. SBSF2608Z

① ... SPST2606Z

⑨ ... SBSF3008Z

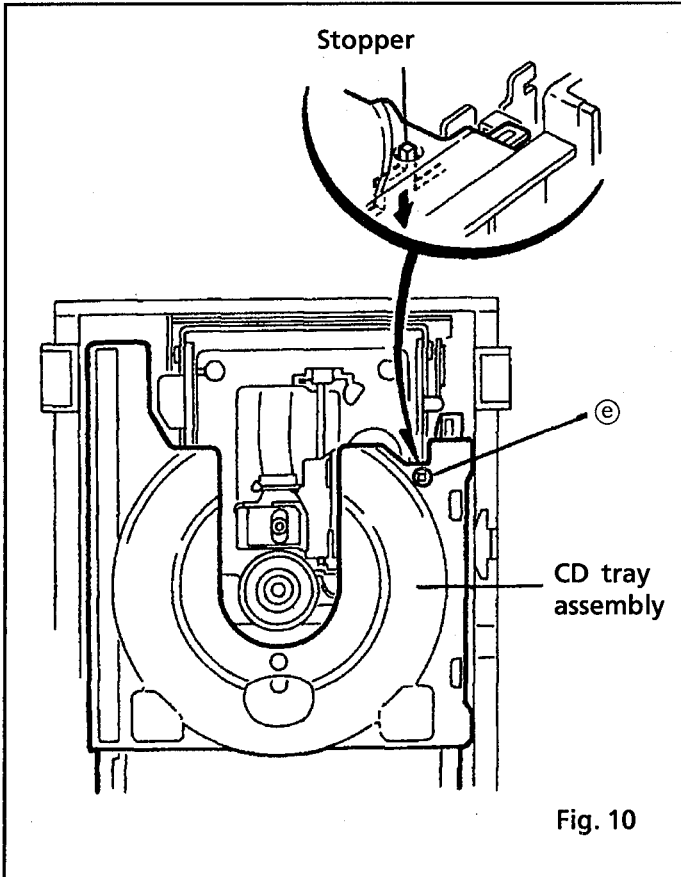


Fig. 10

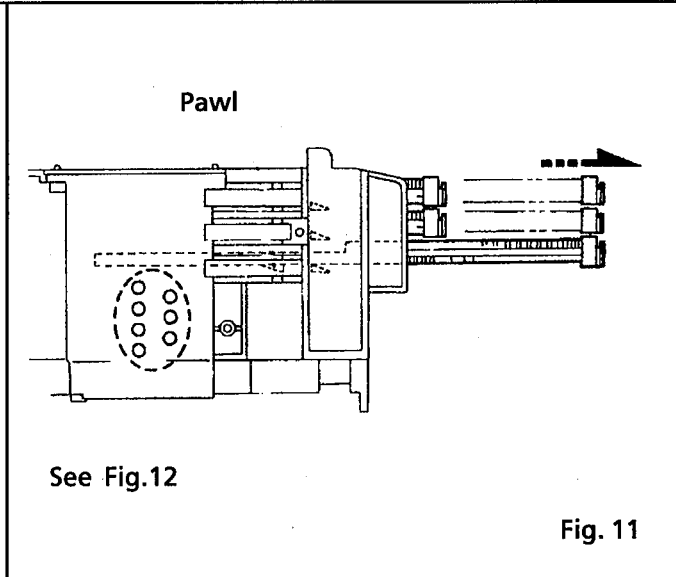


Fig. 11

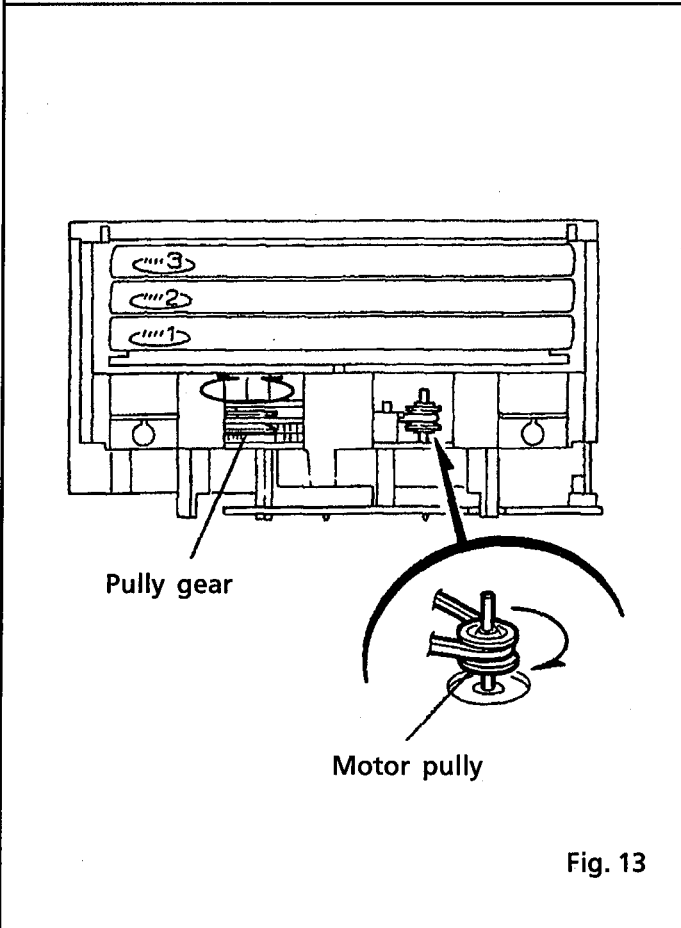


Fig. 13

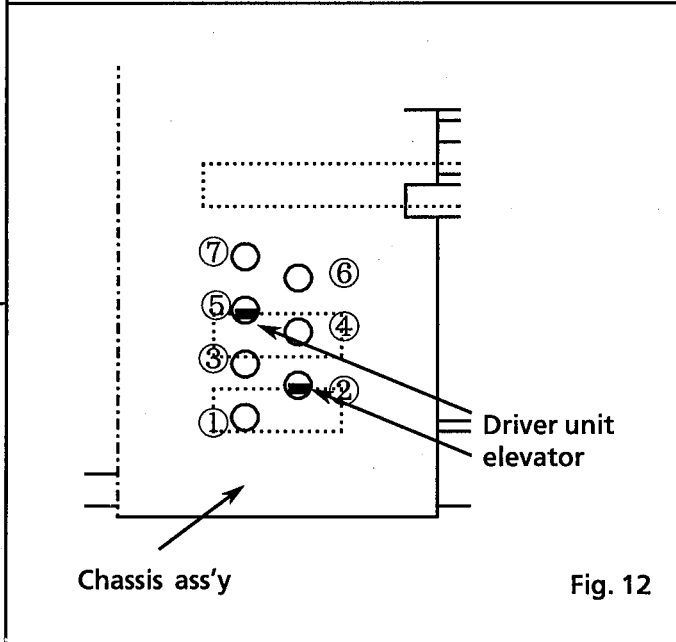


Fig. 12

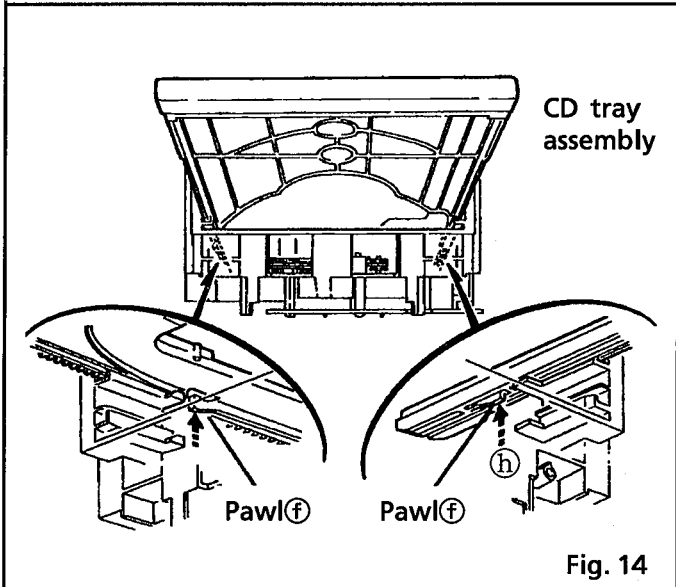


Fig. 14

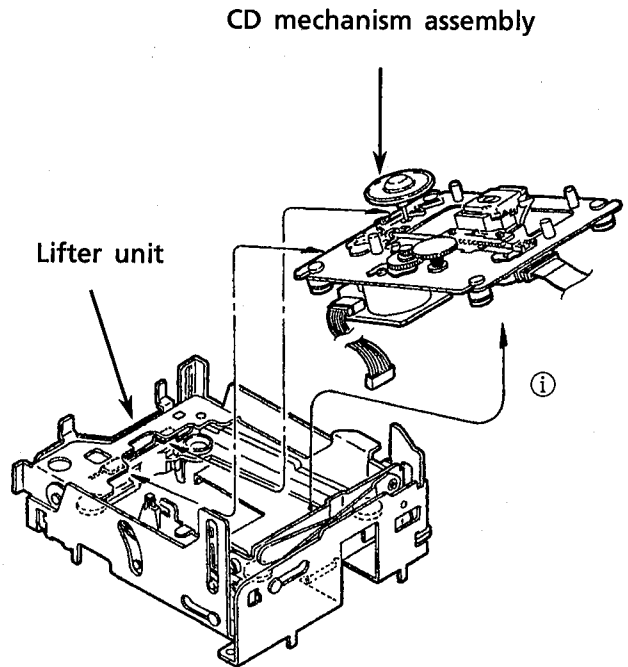
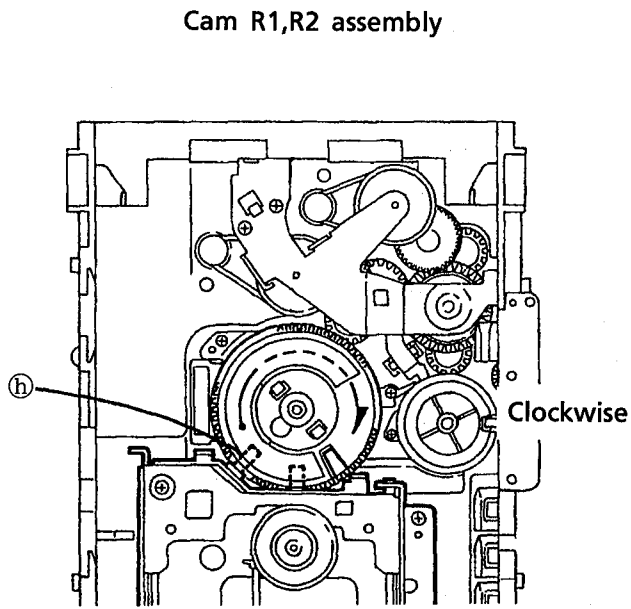
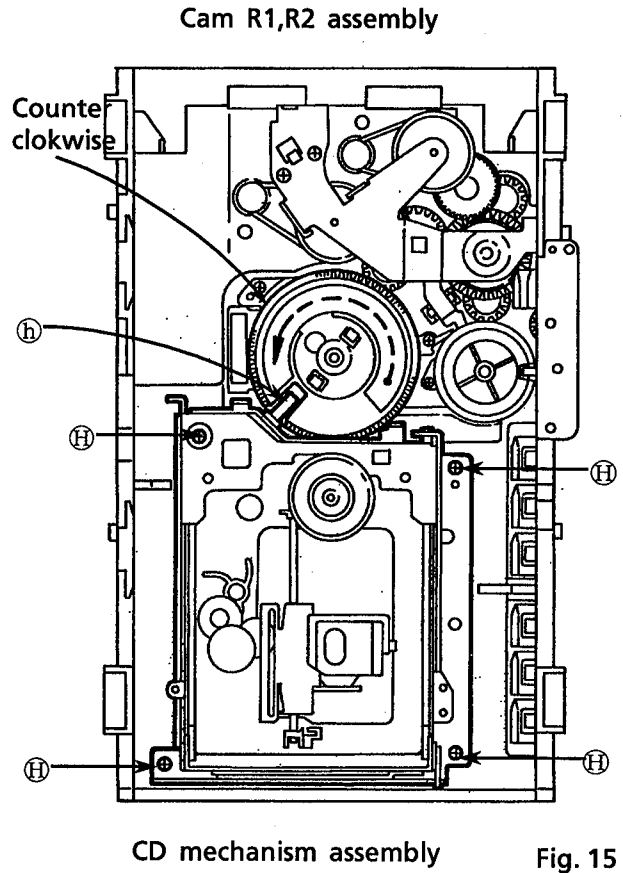
Ⓞ .. SBSF2608Z

(7) CD mechanism removal

1. Remove the CD tray ass'y.
2. Rotate the Cam R1, R2 ass'y counterclockwise so that CD mech. ass'y's shaft (h) is positioned as shown in Fig. 15.
3. Remove 4 screws (H) securing CD mech. ass'y. (See Fig. 15.)

*How to replace pick-up unit

1. If CD mech. is removed without disassembling CD mech. ass'y, rotate the Cam R1, R2 ass'y clockwise to set the CD mech. ass'y's shaft(L) as shown in Fig. 16.
2. Lift the CD mech. ass'y toward the direction (i) to remove it from the lifter unit. (See Fig. 17.)



(H) .. SBSF2608Z

(8) Actuator motor board removal

1. Unsolder 4 soldered point ① for both motors. (See Fig. 18.)
2. Remove a screw ④ securing the CD servo board. (See Fig. 18.)
3. Press the hook and release it to remove the CD servo board.
4. Remove 2 screws ③ securing the actuator motor board. (See Fig. 18.)
5. Remove 2 screws ② securing the tray select switch board. (See Fig. 19.)

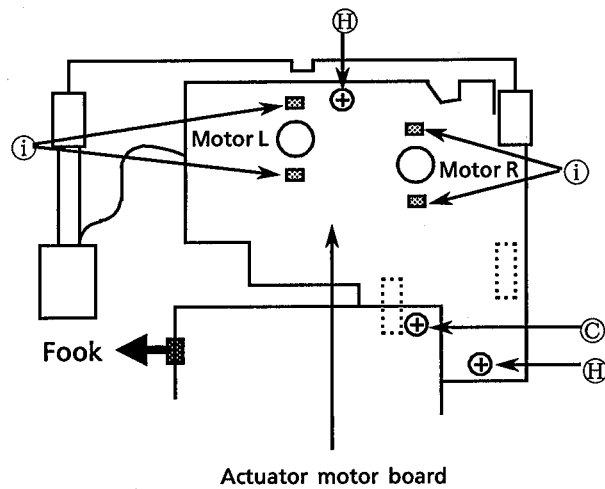


Fig. 18

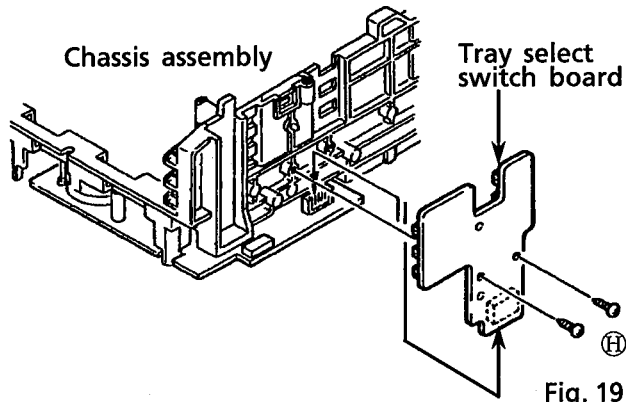


Fig. 19

(9) Cam unit removal

1. Disassemble CD mech. ass'y.
2. Rotate the Cam gear L so that the drive unit's pawl ① is positioned as shown in Fig. 20.
3. Remove the drive unit and cylinder gear. (See Fig. 21.)
4. Rotate the Cam gear L so that the select gear's ② is positioned as shown in Fig. 22.
5. Remove 4 screws ④ securing the cam unit which includes the cam gear L and Cam R1, R2 ass'y. (See Fig 22.)

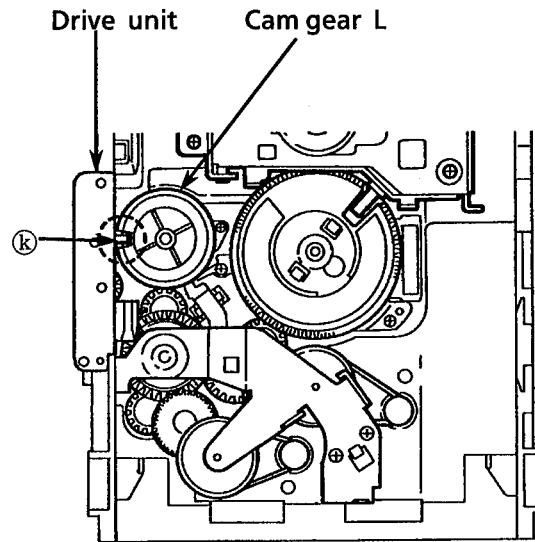


Fig. 20

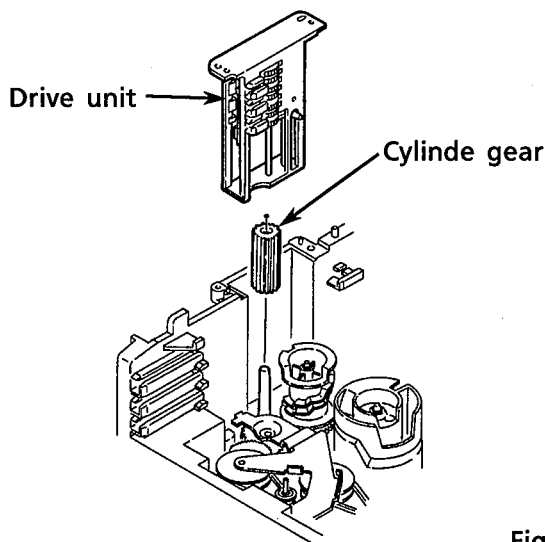


Fig. 21

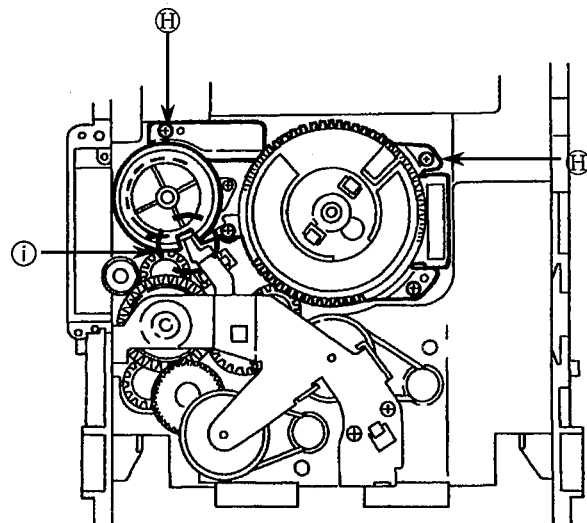


Fig. 22

④ .. SBSF2608Z ③ ... SBSF3008Z

(10) Removal for actuator motor and belt

1. Remove 2 screws ① securing the gear bracket. (See Fig. 23.)
2. Press the pawl ㊟ securing the gear bracket to the arrow in the figure to remove the gear bracket. (See Fig. 23.)
3. Remove the gear bracket from the chassis ass'y's ㊟ securing top of the gear bracket. (See Fig. 24.)
4. Remove each belts from the both actuator motor pulleies and the pulley gears. (See Fig. 23.)
5. Reverse the chassis ass'y and widen 4 pawls ㊟ which secure both actuator motors to its arrows to remove the actuator motors. (See Fig. 25.)

[NOTE] The pulley gears and other gears which consist the gear unit may drop separately if the chassis ass'y is reversed without gear bracket and belt. See Fig. 26 to assemble them again.

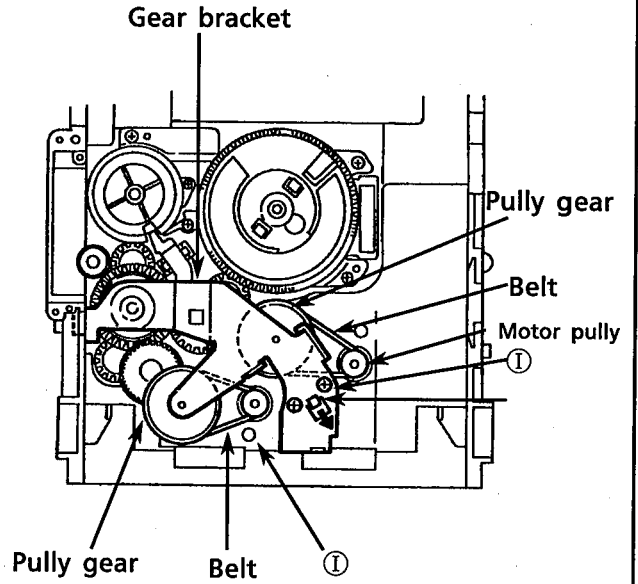


Fig. 23

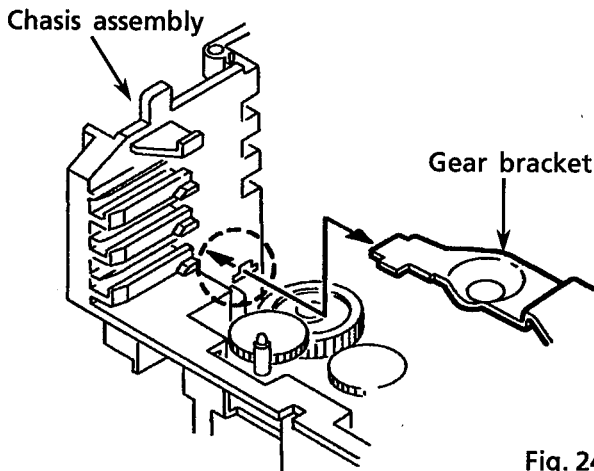


Fig. 24

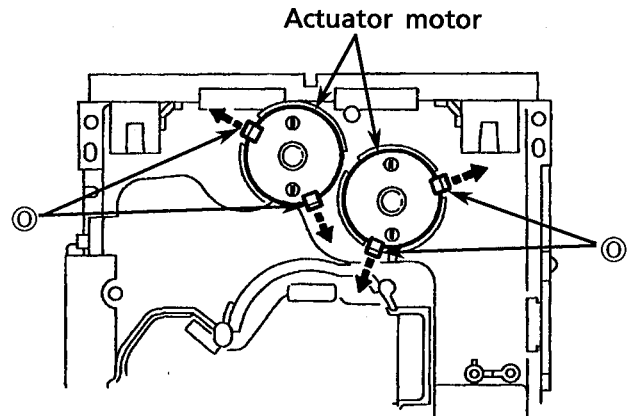


Fig. 25

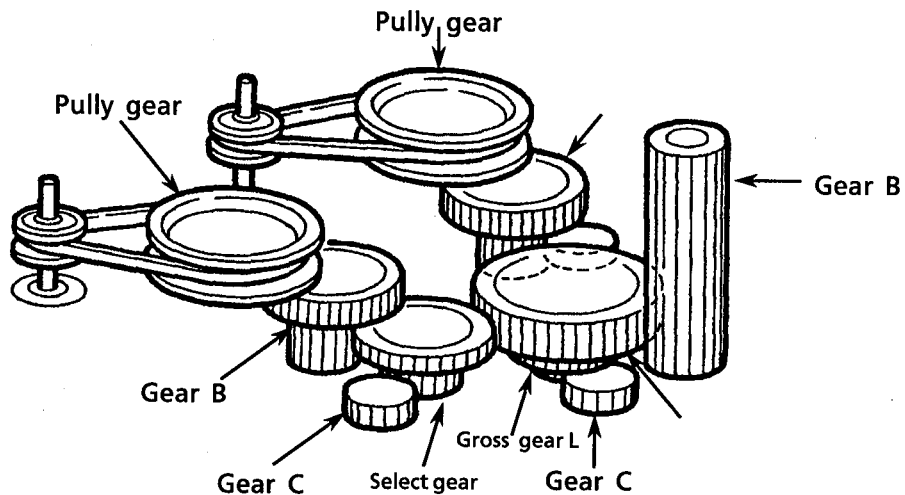


Fig. 26

① .. DPSP2616Z

(11) Removal of cam R1, R2 ass'y and cam gear L

1. Remove the slit washer securing Cam R1, R2 ass'y.
(See Fig. 27.)
2. Remove 2 pawls ⑤ securing Cam R1 to remove Cam R2 from Cam R1.
3. Remove the slit washer securing Cam gear L.
4. Remove Cam gear L from the C.G. base ass'y.s

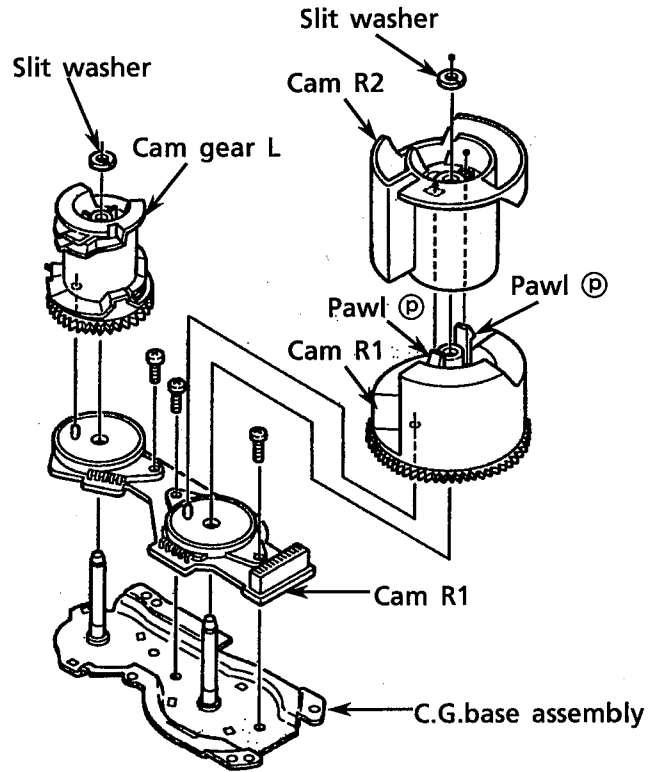


Fig. 27

(12) Removal of C.G base ass'y

Remove 3 screws ① securing the C.G. base ass'y. (See Fig. 27 and 28.)

[NOTE] Set the drive unit's pawl ⑥ so that it is positioned as shown in Fig. 28.
Confirm that the cam gear L engages with the gear unit by rotating the cam gear L.

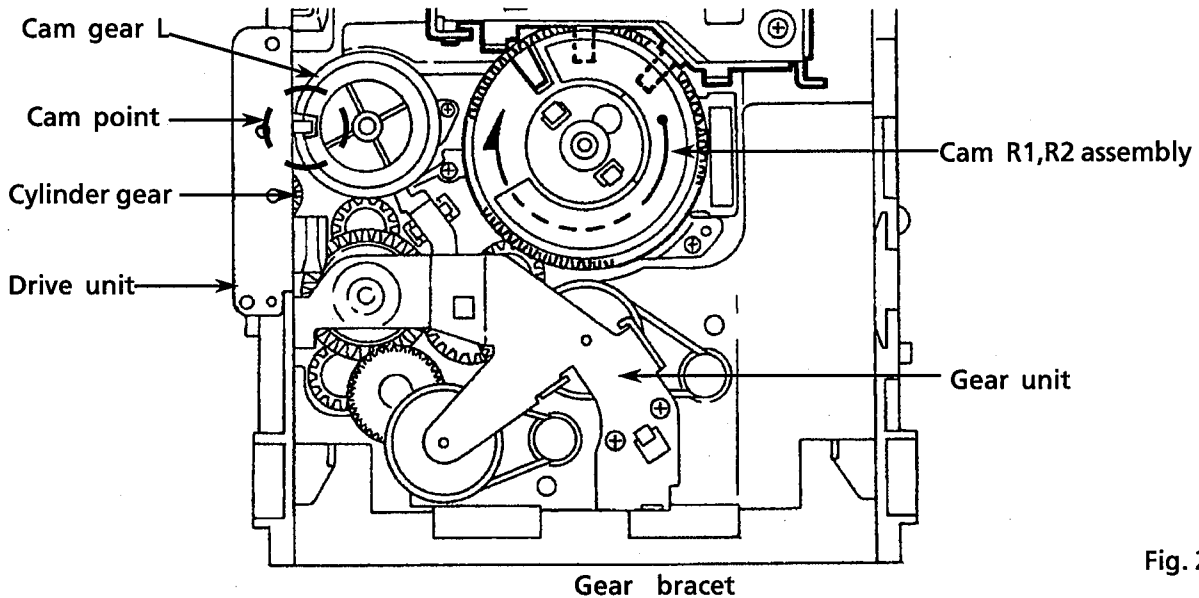


Fig. 28

① .. SPST2606Z

(13) Removing the Pickup

1. Remove the CD mech. assembly.
2. Release the shaft to remove the pickup .

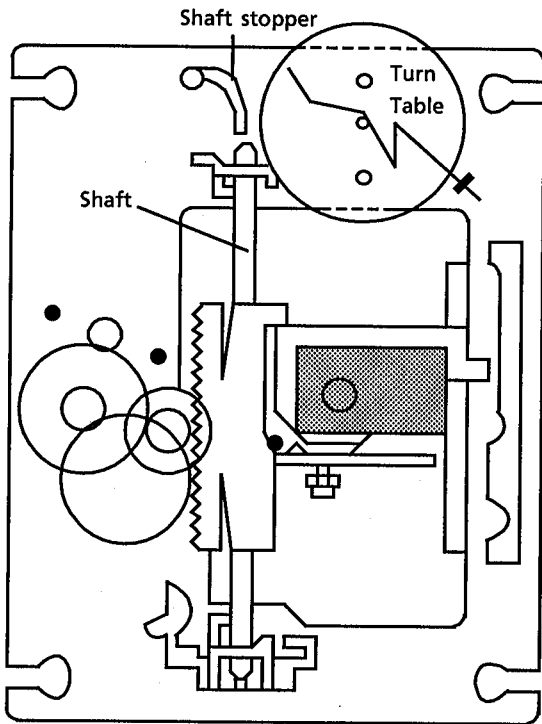


Fig. 29

(14) Spindle motor installation

1. Tighten the 2 screws to the same torque.
2. Fasten the spindle and feed motor P.C. board with the screw and solder.
3. Install the turntable. When installing, press straight down at the center of the turntable until the distance from the surface of the mech. base to the turntable is exactly $19.4 \pm 0.1\text{mm}$.

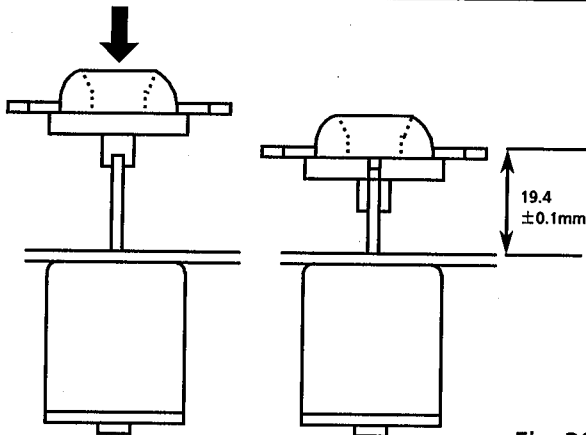


Fig. 30

(15) Removing the Spindle motor

1. Remove the CD mech. assembly.
2. Remove the turntable , and remove the 2 screws ⑧ retaining the spindle motor.
3. Remove the screw retaining the spindle and feed motor circuit board and unsolder it.

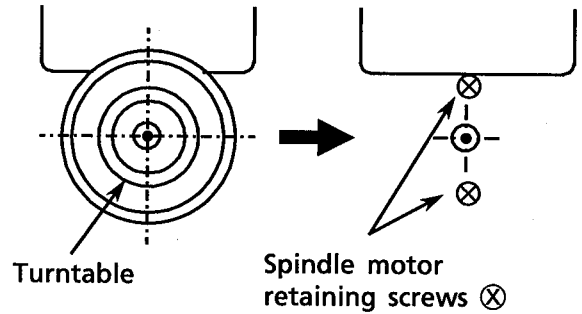


Fig. 31

- (16) After inserting the turntable , bond the motor shaft and turntable together (at the section marked by an arrow in fig 32 on the left below).**

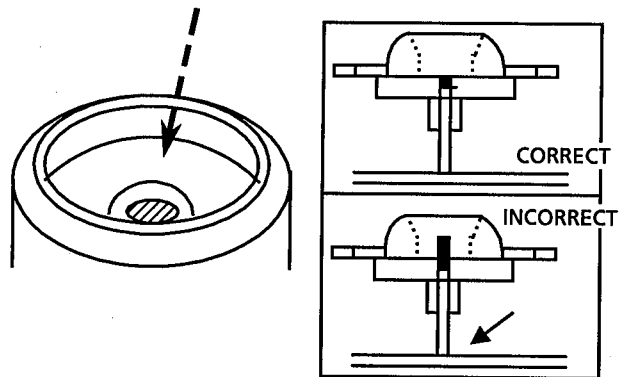


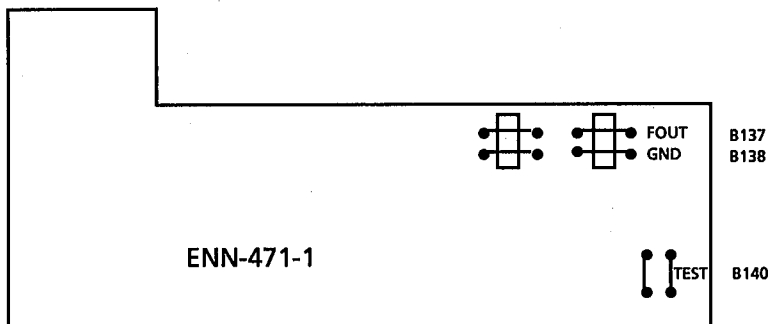
Fig. 32

- (17) Use "LOCKTITE" #460 bonding agent, and apply as little as possible .**

Take care not to allow any excess bonding agent to get onto the turntable .

Be extremely careful not to allow bonding agent to adhere to the motor bearing (the section marked by an allow in fig 32 on the right).

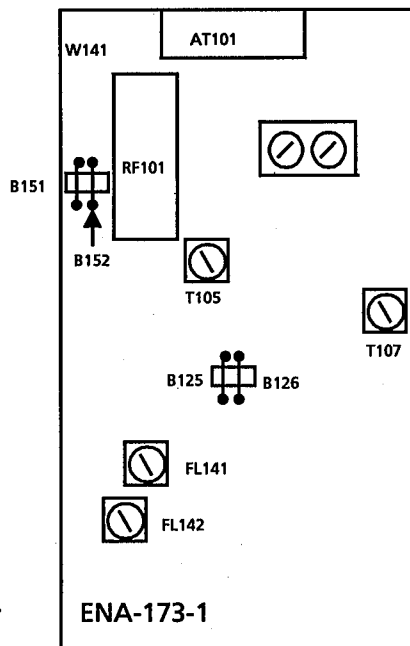
Adjustment Procedures



Note:
Use the DX-D8T when adjusting.

1. Clock frequency adjustment

- 1) Connect the FTEST(B140) and the B139 before turning the AC power on.
- 2) Connect the frequency counter to the OUT(B137) and turn the AC power on. Then you can see the no indication on the display panel.
- 3) Adjust the TC841 so that the frequency becomes $50,000,00 \pm 0.29\text{Hz}$.
- 4) Disconnect the jumper between W701 and W702.



2. FM adjustment

1) Tuning voltage

- (1) Connect the voltmeter to the B151 and B152(GND) at TP101.
- (2) Set the frequency display to the 108MHz and confirm the voltage is set to the $(8.0 \pm 2.0\text{V})$.
- (3) Set the frequency display to the 87.5MHz and confirm the voltage is set to the $(7.16 \pm 1.0\text{V})$.

2) Center meter

- (1) Receive a FM broadcast station by using the auto stop and adjust TP102 (detector coil) so that the voltage at TP102 becomes $0 \pm 1.5\text{mV}$.

3. Confirmation of MW specifications

1) Tuning voltage

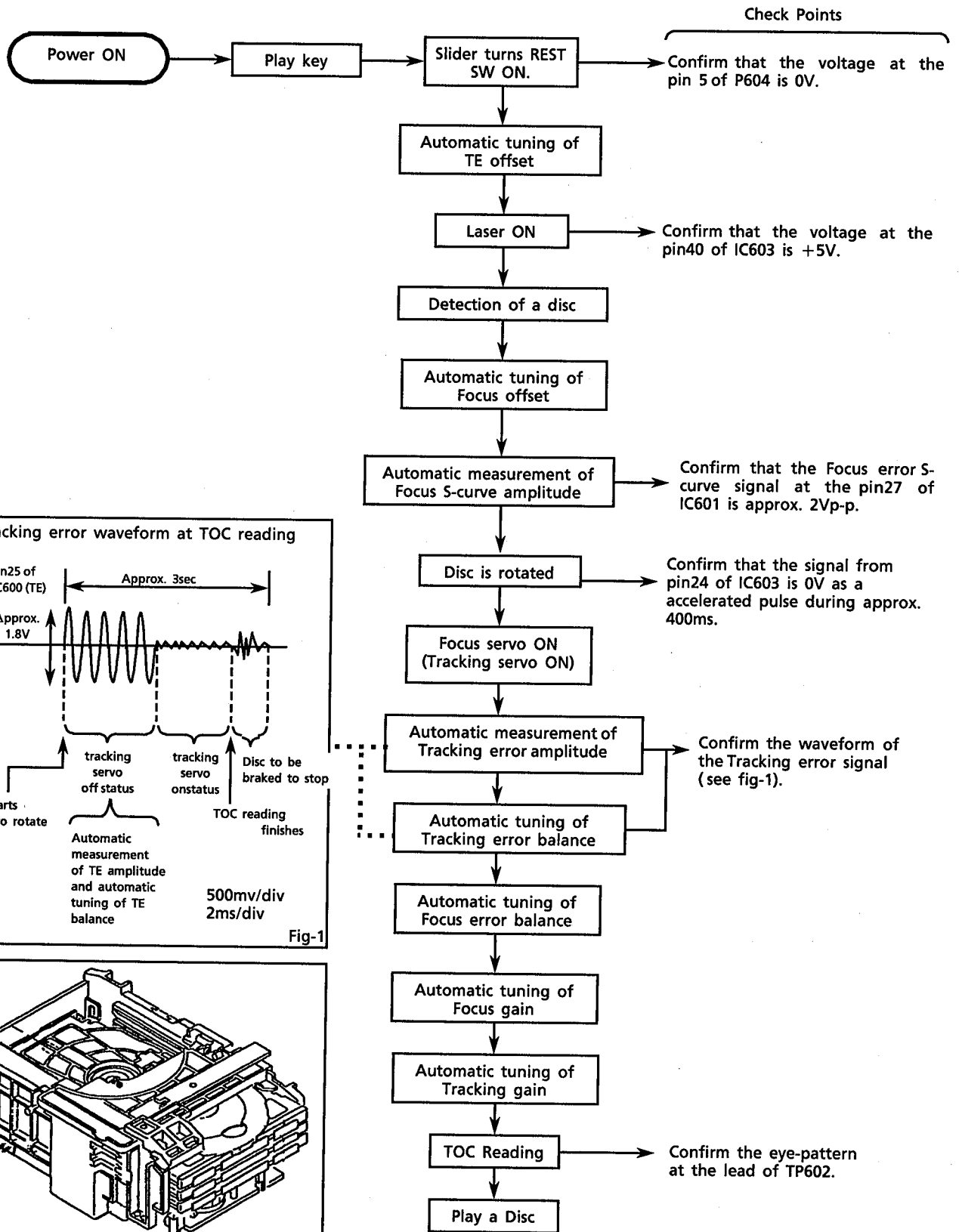
- (1) Connect the voltmeter to the B151 and B152(GND) at TP101.
- (2) Set the frequency display to the 522KHz(531KHz) and confirm the voltage $(1.0 \pm 0.2\text{V})$.
- (3) Set the frequency display to the 1629KHz(1602KHz) and confirm the voltage $(7.2 \pm 0.7\text{V})$.

4. LW adjustment

1) Tuning voltage

- (1) Connect the voltmeter to the B151 and B152(GND) at TP101.
- (2) Set the frequency display to the 144KHz and confirm the voltage $(0.9 \pm 0.4\text{V})$.
- (3) Set the frequency display to the 288KHz and confirm the voltage $(5.0 \pm 2.5\text{V})$.

Flow of Functional Operation Until TOC is Read



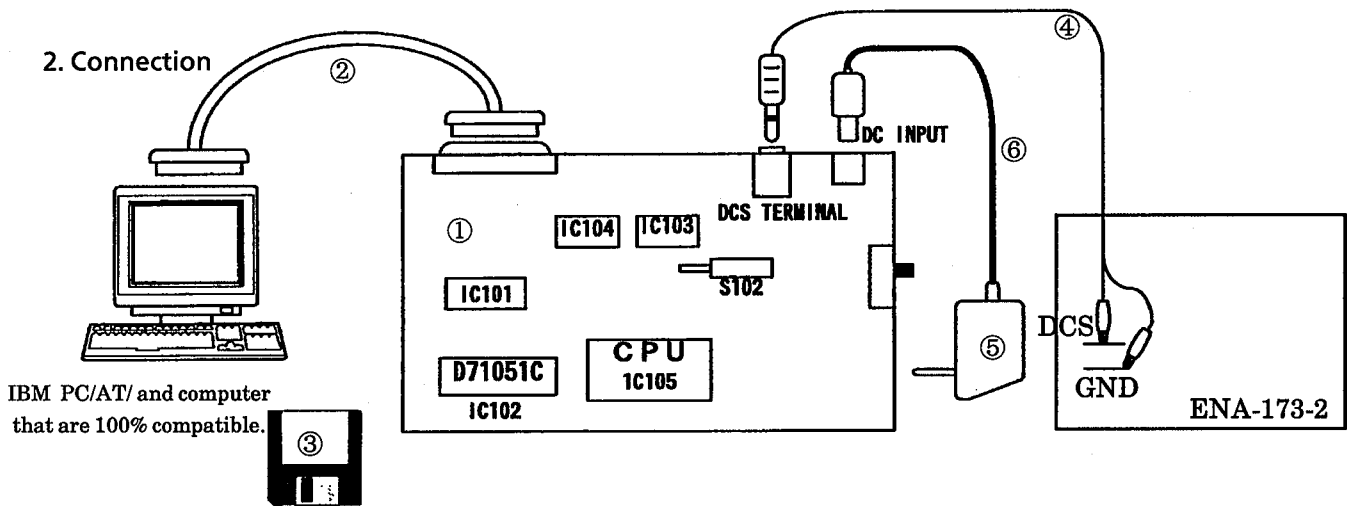
Self-diagnosis for pickup

From DCS output, this model reads automatically adjusted data for CD so that the pickup can be judged defective or not. Following shows its details.

1. Necessary items

- ① DCS → 232C Converting board (No.EBSJ1022)
- ② 232C cord (straight)
- ③ Floppy disc for self-diagnosis (No.EBSJ1022)
- ④ DCS cord
- ⑤ Power supply DC 6.3V (AA-SV11J--America/Canada) (AA-SV11Bs--the UK)
(AA-SV11G--Germany) (AA-SV11EF--Continental Europe) (AA-SV11U--the Other aria)
- ⑥ Cord of Power supply E407992-001
- ⑦ CD (without scratches or damage)

2. Connection



3. Procedure to use CD self-diagnosis jig by IBM PC

Two com pins are frequently adopted in recent IBM AT and its substitute RS232C port. This jig can also use both COM1 and COM2. DEFAULT is COM1. Indicate "2" to the option only for COM2.

When COM1 is used,...

I AUTO 01

When COM2 is used,...

I AUTO 02

[NOTE] Press ESC key to stop processing during the operation.

Contents of the attached floppy IBM self-diagnosis program VER.1.00 Execution file.

(Mistake the conection/Mistake the polarity)

4. Judgment

To judge whether pickup is defective or not, firstly process of automatic adjustment is checked by automatic adjustment flag. And, the value(automatic adjustment value for focus gain) displayed on the screen is used for its final judgment.

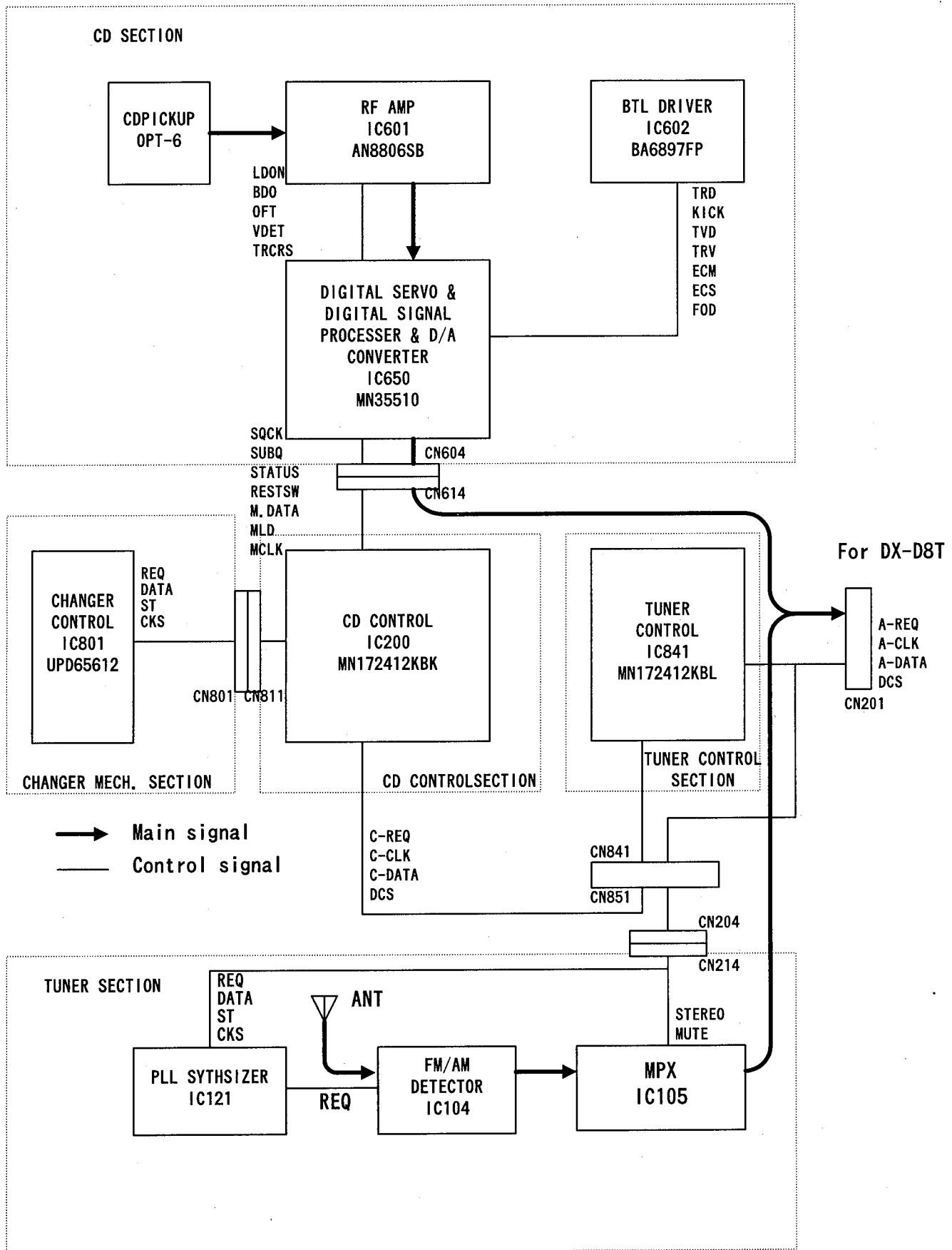
It is supposed that the pickup is defective or the signal path is faulty if the Flag1 or Flag0 indicates not "F" but a figure.

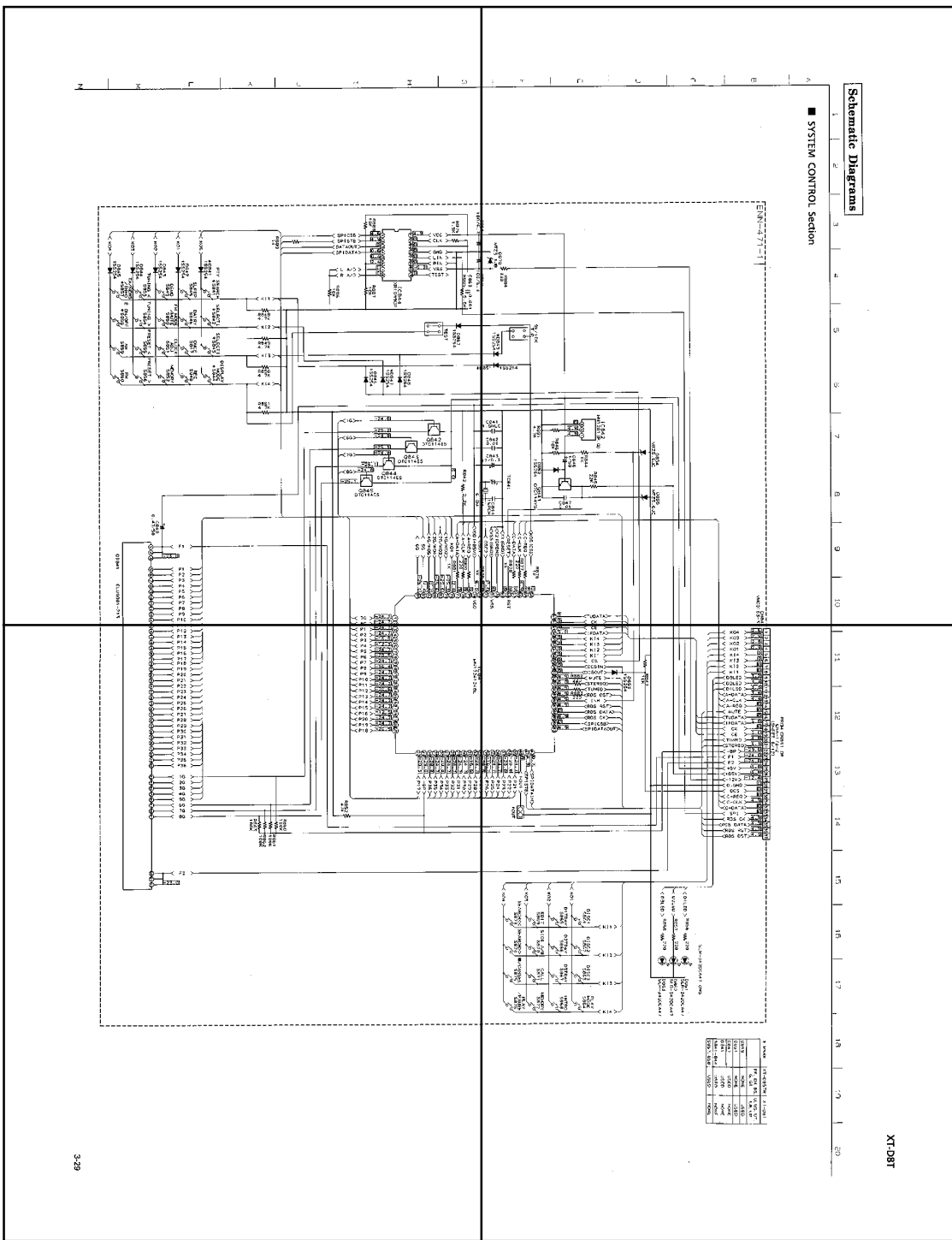
(See the following example.)

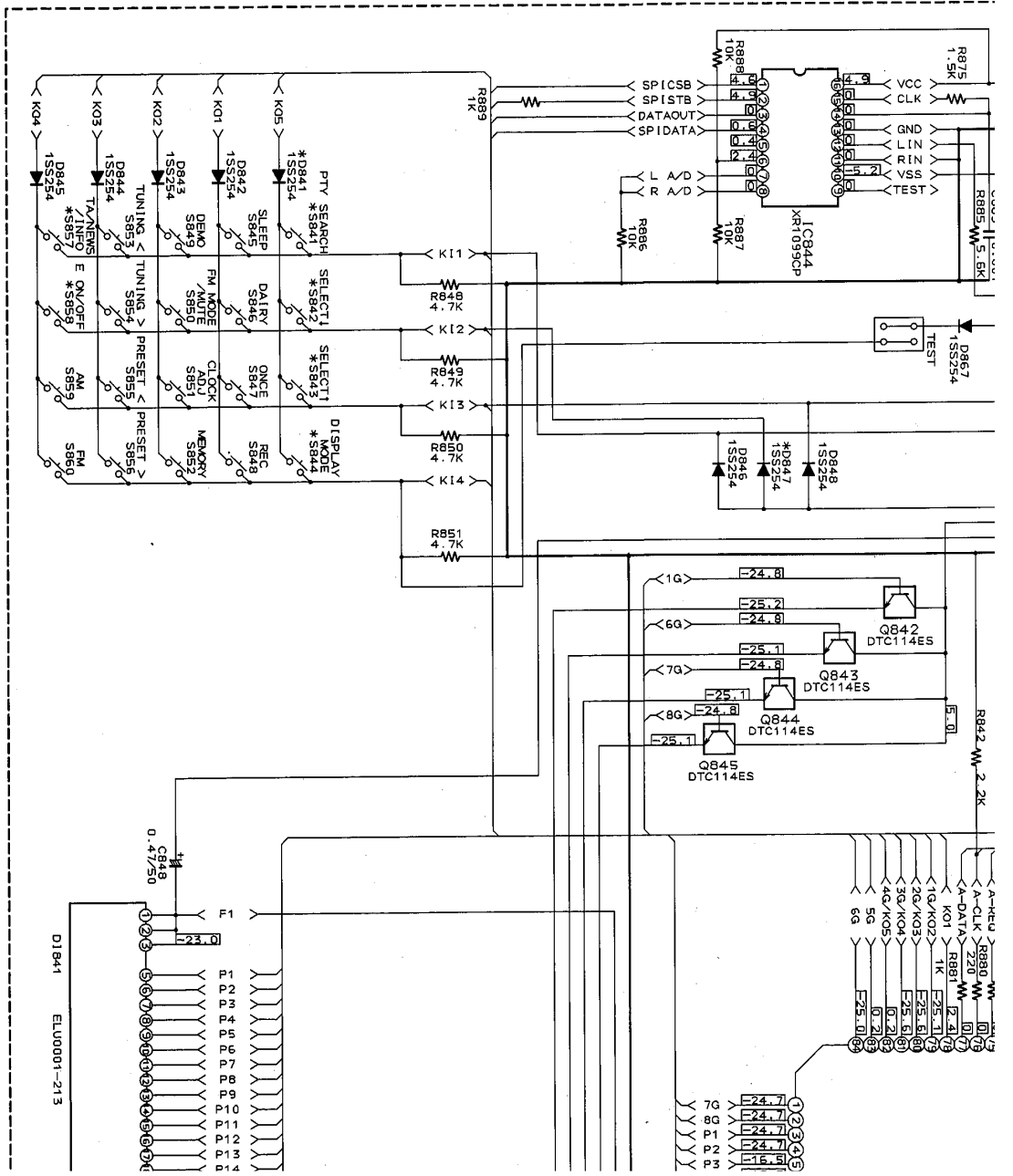
Flag1	Flag0	Details	Supposed cause
0	0	Automatic adjustment for tracking offset is failed.	The automatic adjustment is not completed. (Trouble in circuit.)
0	1	Automatic adjustment for focus offset is failed. (Disc does not rotate.)	The lens does not move. (Power supply is not turned on. Wire is cut.)
0	3	Automatic rough adjustment for focus gain is failed.	
0	7	Automatic rough adjustment for tracking gain is failed. (The focus and tracking gain are not locked though the disc rotates.)	Laser deterioration (low RF signal output). Offset beam.
0	F	Disc rotates, focus and tracking gain are locked and automatic rough adjustment for tracking gain is also completed though automatic adjustment for tracking balance is failed.	Laser deterioration (low RF signal output). Offset beam.
1	F	Automatic adjustment for focus balance is failed. (TOC is not read though the disc rotates.)	RF signal output is low. Tracking loop is not turned on. RF jitter is too much.
3	F	Automatic rough adjustment for focus gain is failed.	
7	F	Automatic rough adjustment for tracking gain is failed.	
F	F	All automatic adjustments are completed.	

The pickup is judged defective though the Flag0 and Flag1 indicate "F" and those adjustments are completed if the adjustment value exceeds 19dB.

XT-D8D Block Diagram



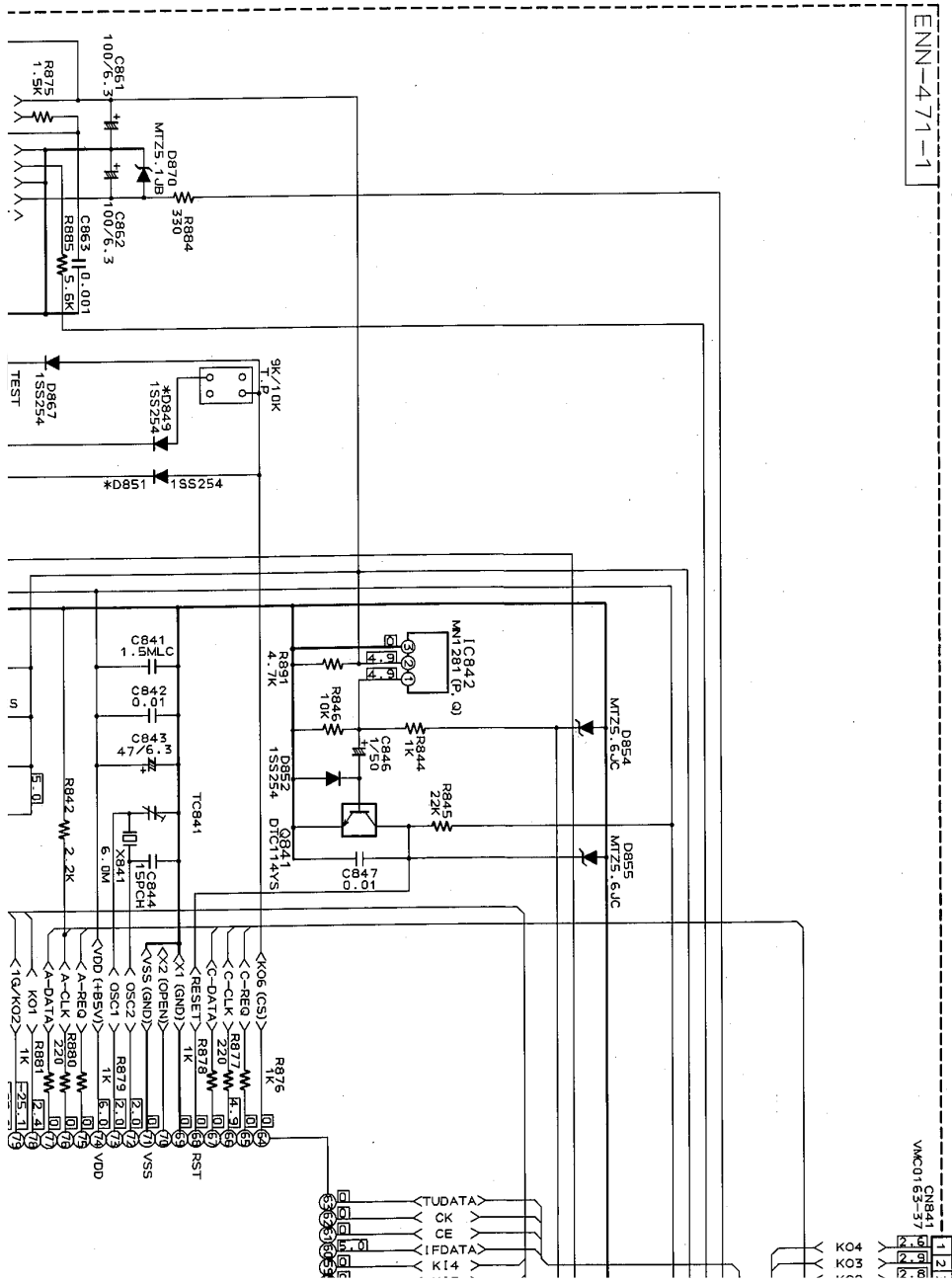


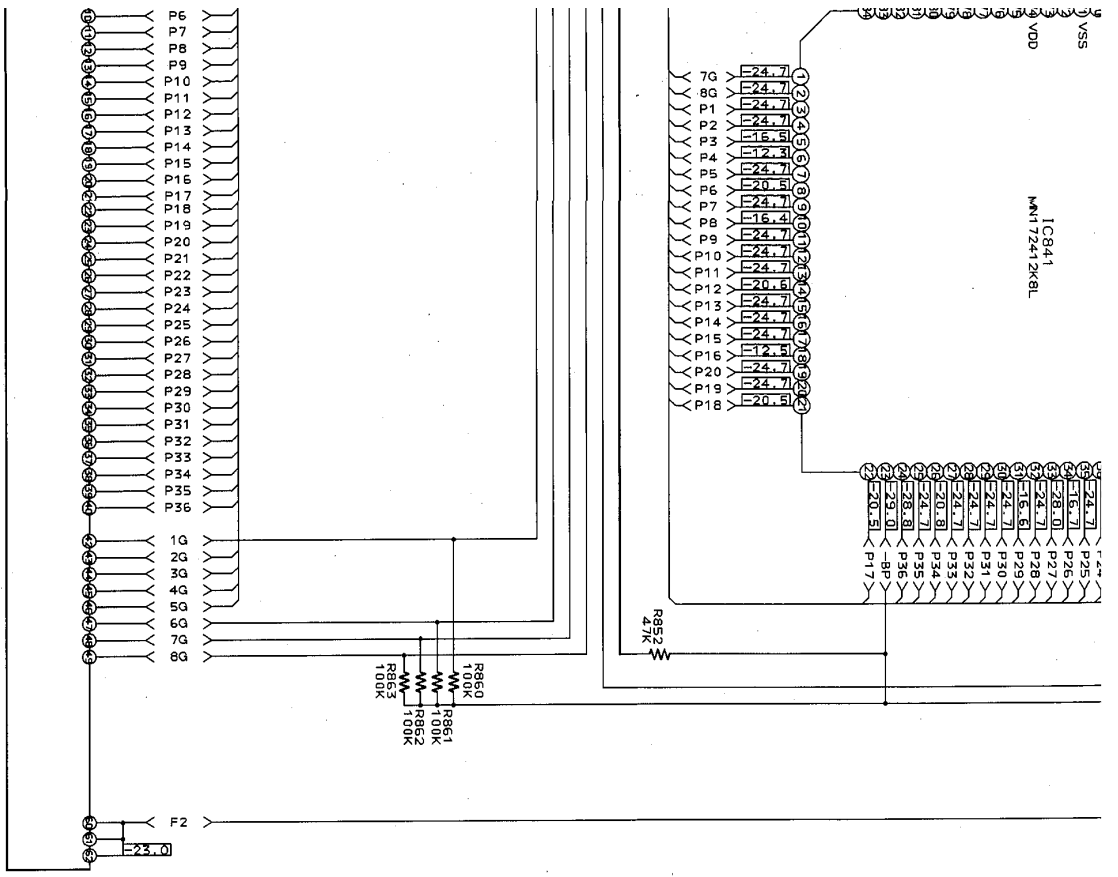


Schematic Diagrams

1 2 3 4 5 6 7 8 9 10

SYSTEM CONTROL Section

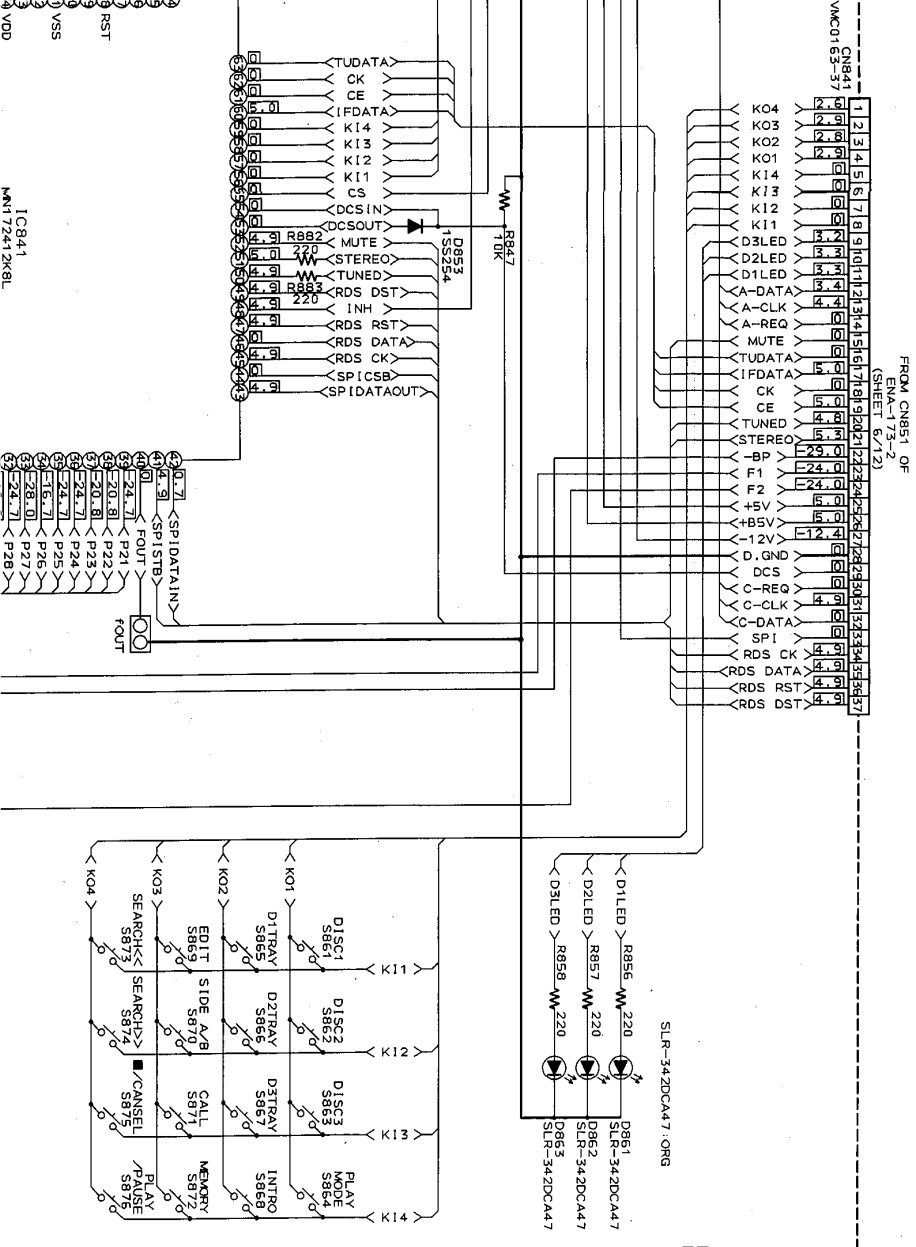




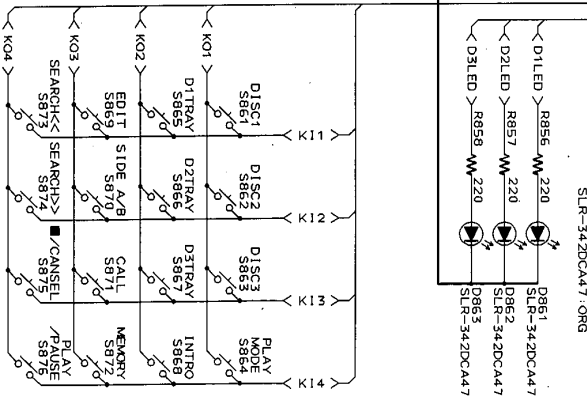
J001-213

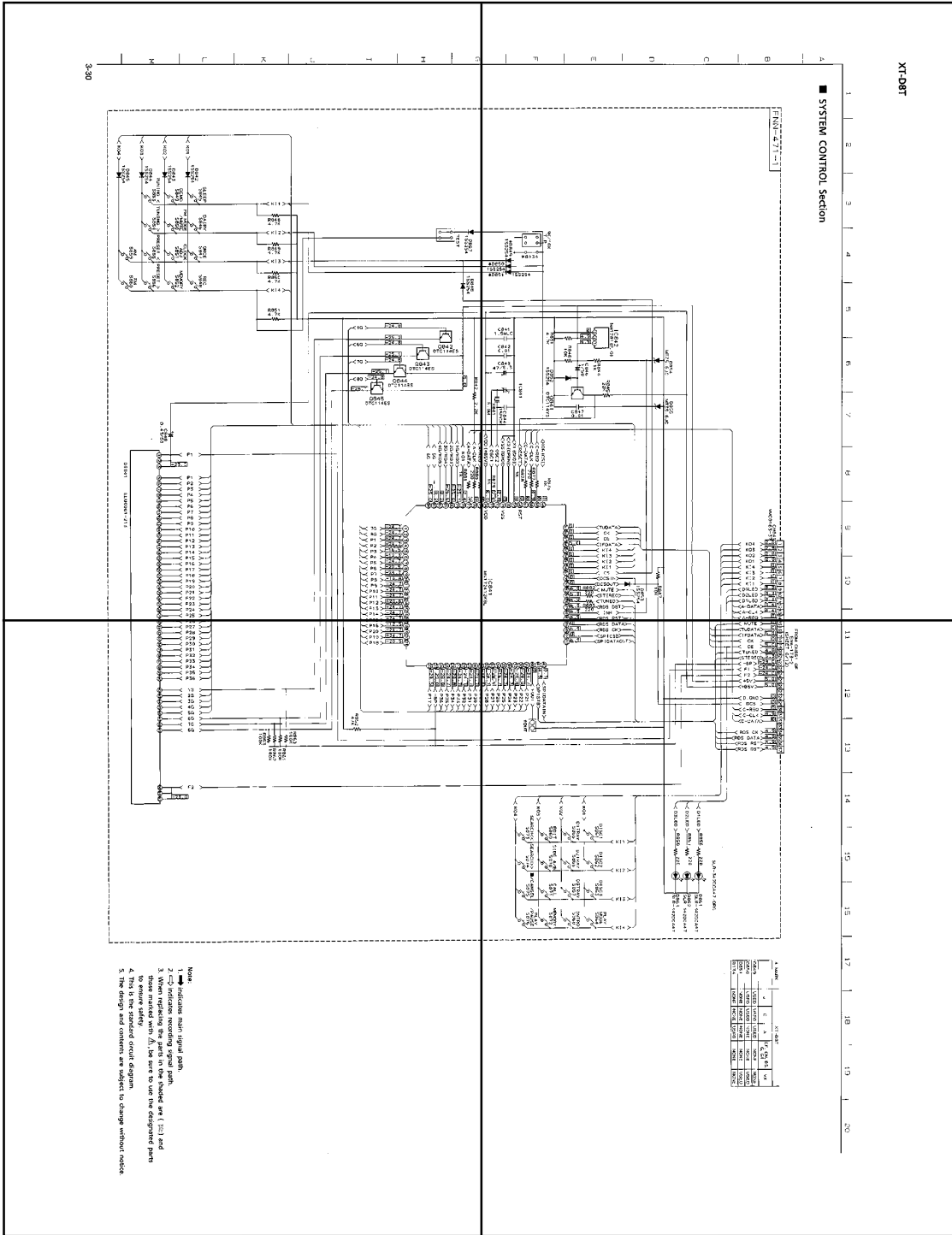
XT-D8T

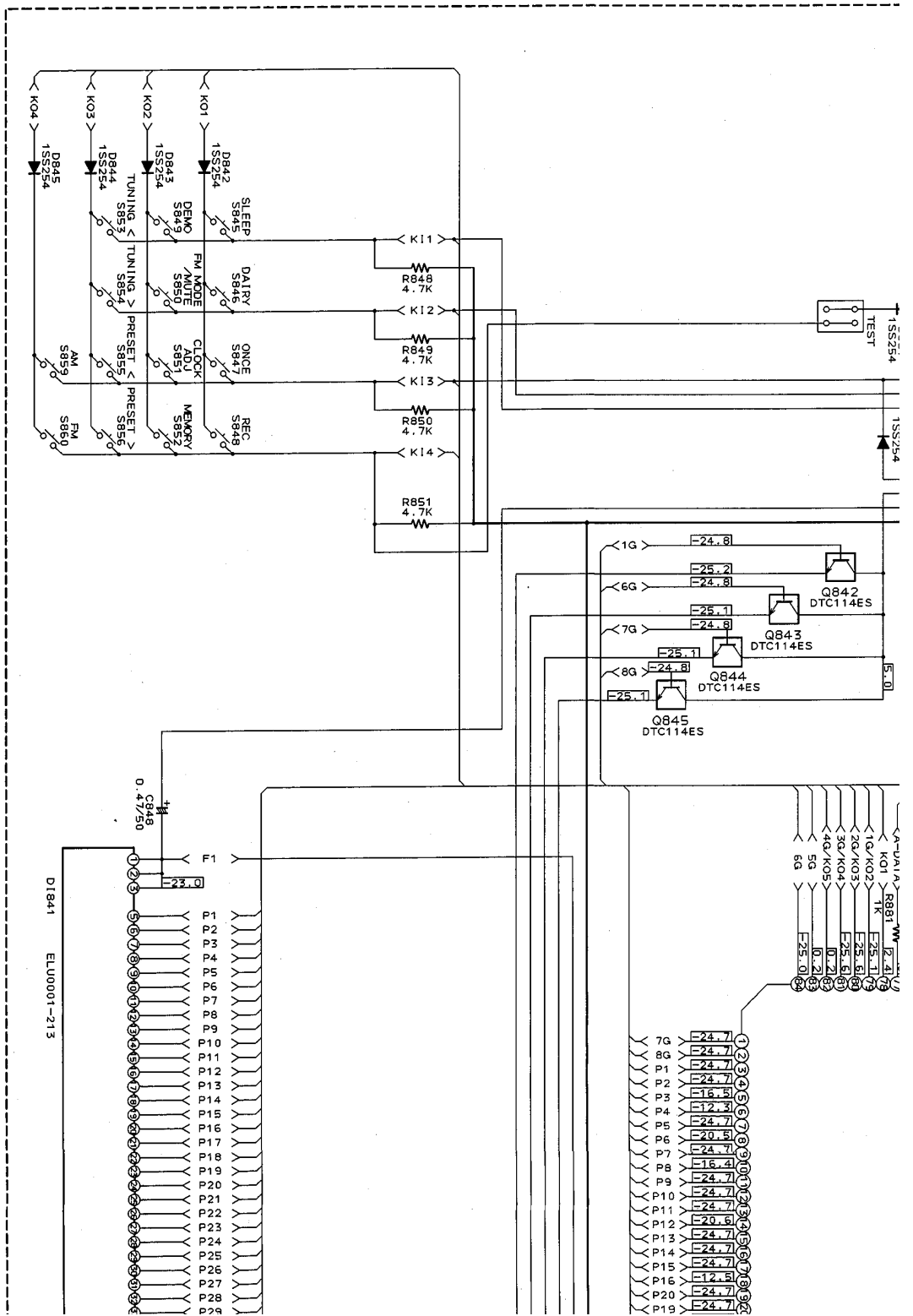
10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20



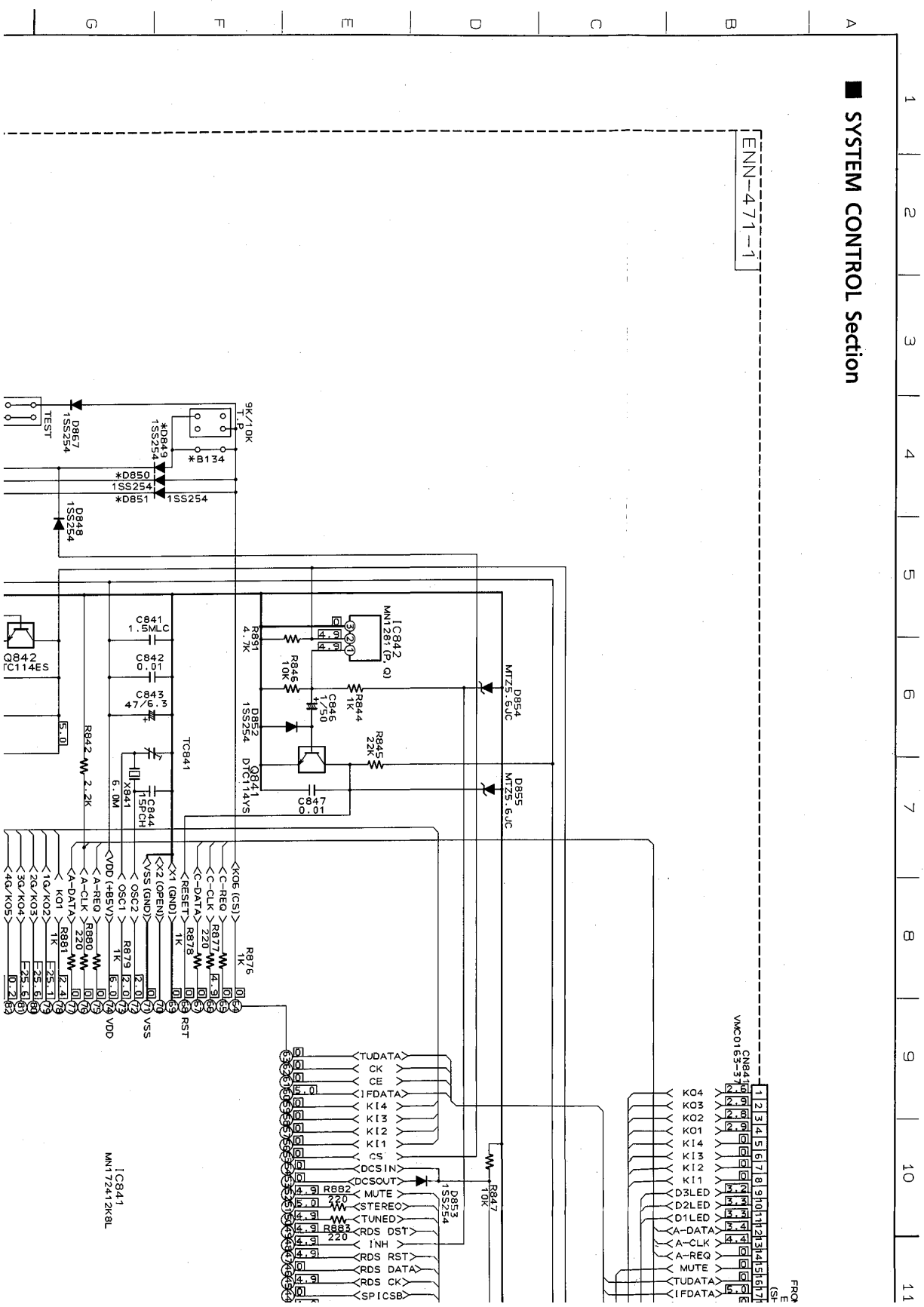
* MARK	XT-D8STR	XT-D8T
D849	EF, EN, BS, 6, G1	U, US, UT, UB, UP
D851	NONE	USED
D847	USED	NONE
D841	USED	NONE
S841~844	USED	NONE
S857, 858	USED	NONE

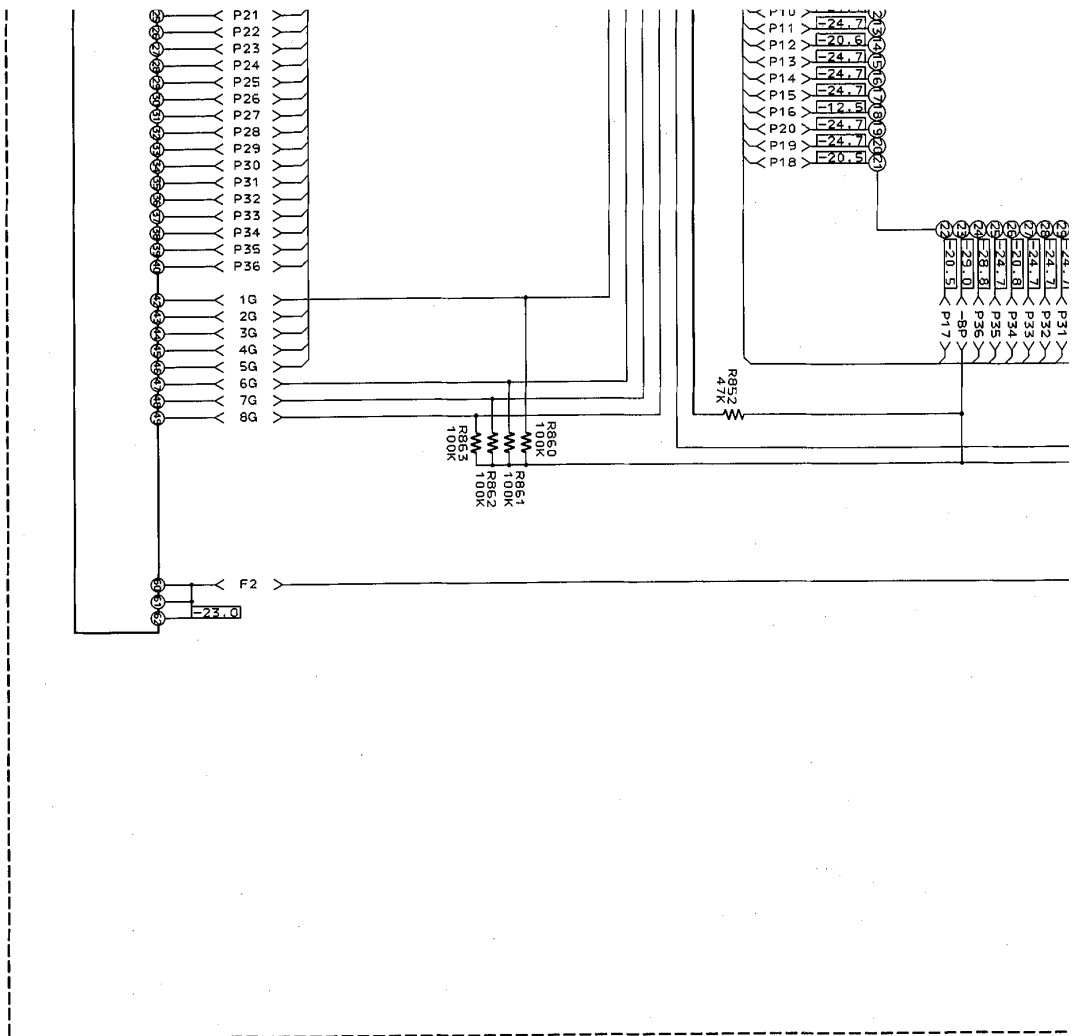






SYSTEM CONTROL Section

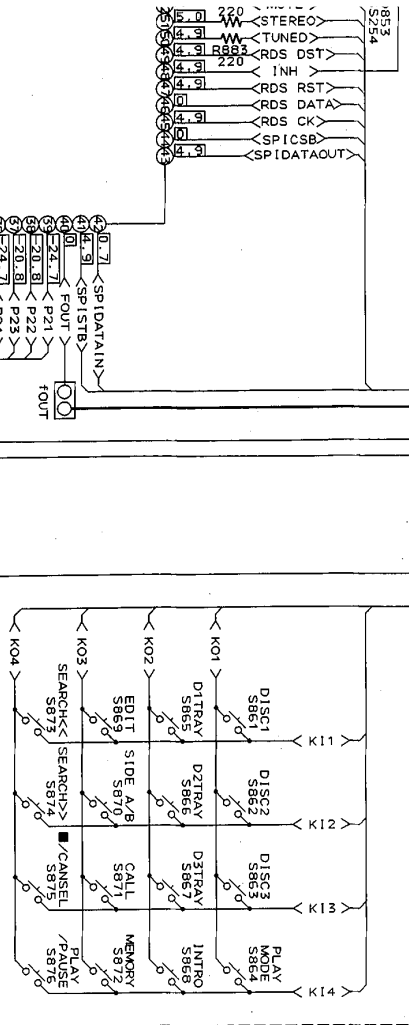
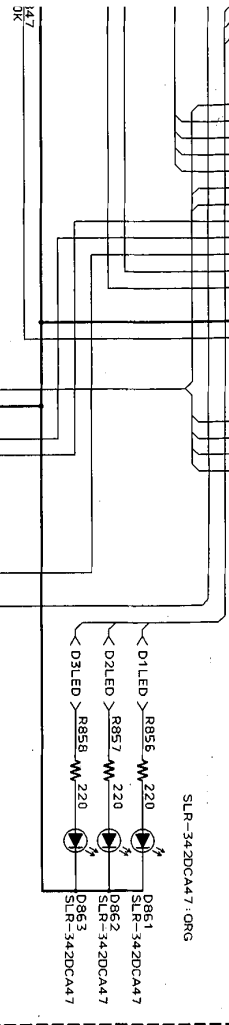
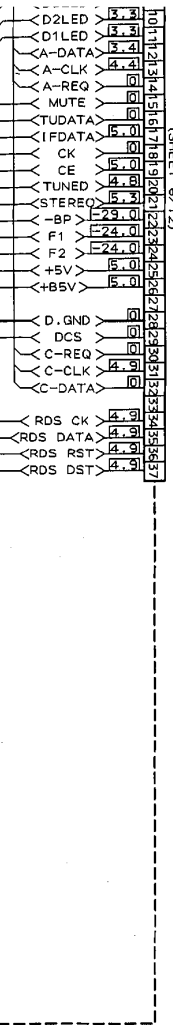




Note:

1. indicates main signal path.
2. indicates recording signal path.
3. When replacing the parts in the shaded are () and those marked with , be sure to use the designated parts to ensure safety.
4. This is the standard circuit diagram.
5. The design and contents are subject to change without notice.

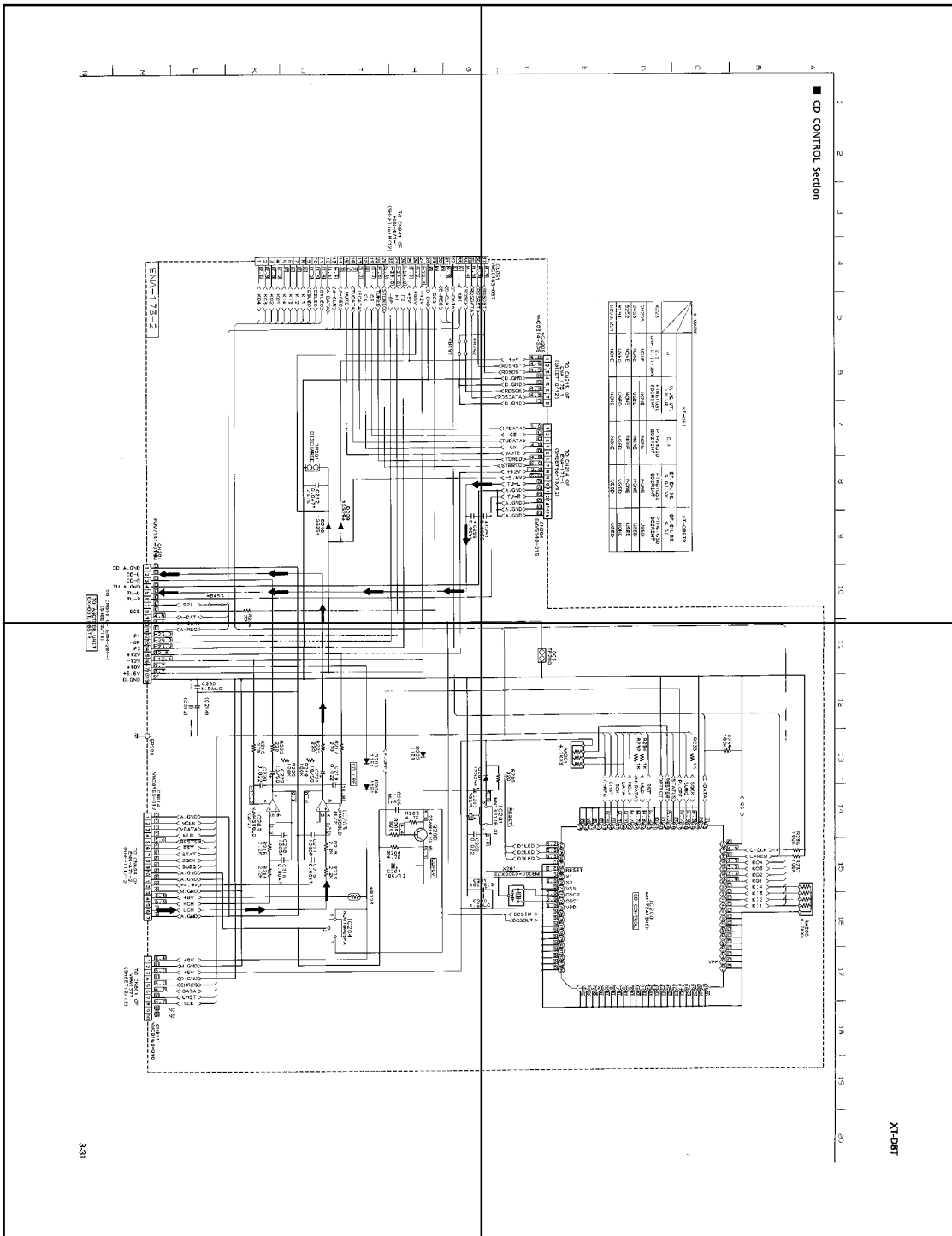
FROM CN851 OF
EWA-173-2
(SHEET 6/12)



* MARK

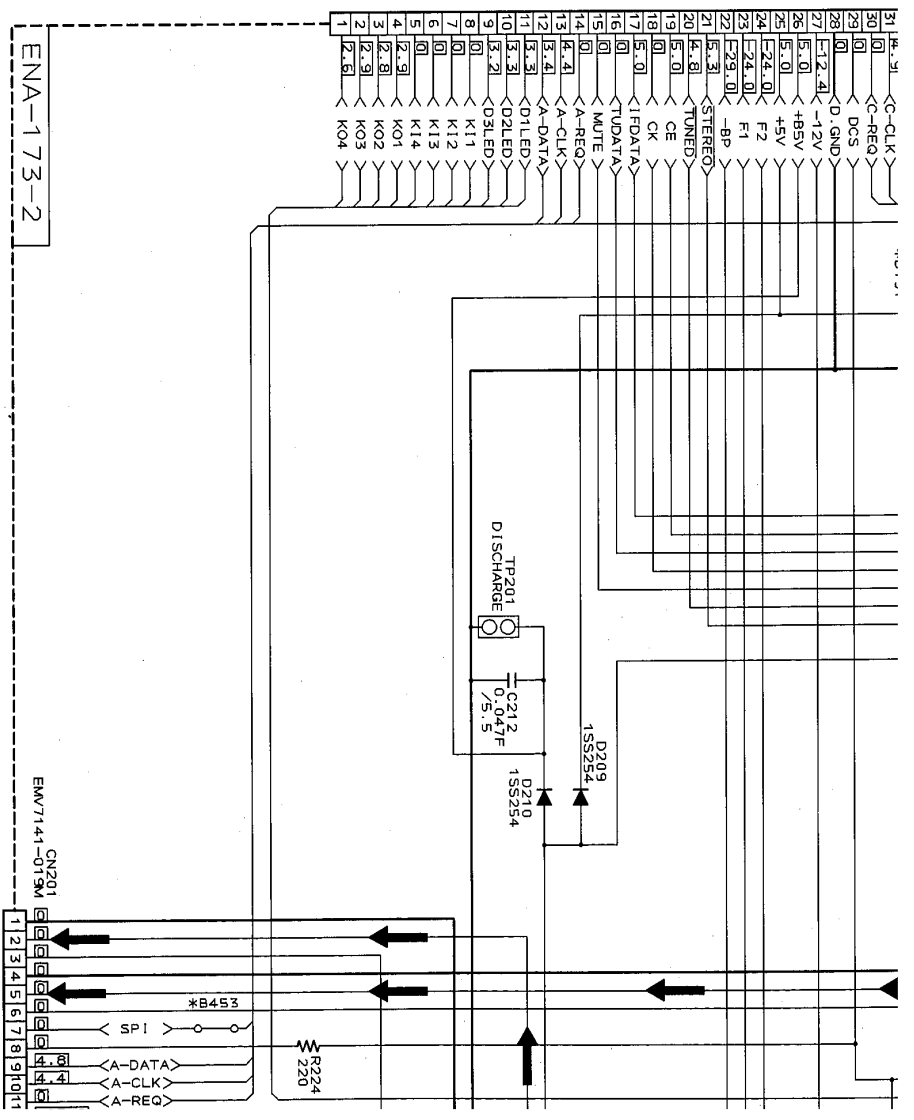
	J	C	A	FF, EN, BS, G, CI	VX
D849	USED	USED	USED	NONE	NONE
D850	USED	USED	NONE	NONE	USED
D851	NONE	NONE	NONE	NONE	USED
B134	NONE	NONE	USED	NONE	NONE

L1
12K8L



Z N L X C H H

TO CNB41 OF
ENN-471-1
(SHEET 1 of 8/12)



ENA-173-2

CN201
EMV7141-013M

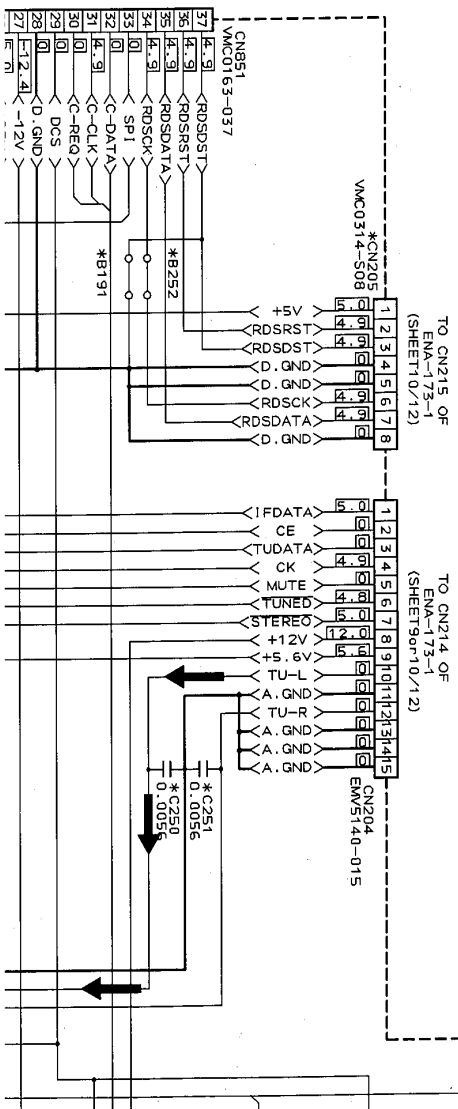
TO CN001 OF E
(SHEET 2)
TO ANOTHER
DX-D8T, D85

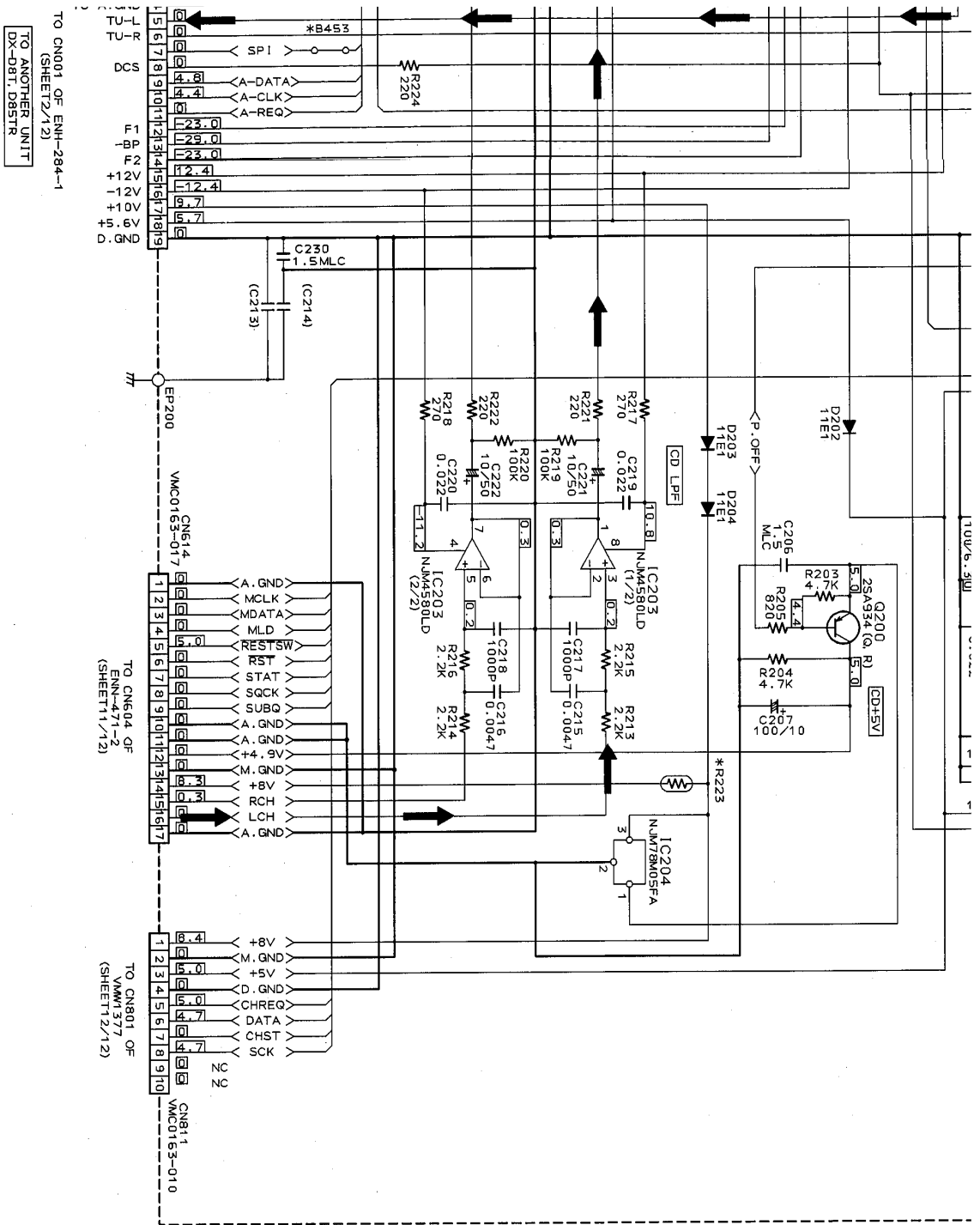
CD CONTROL Section

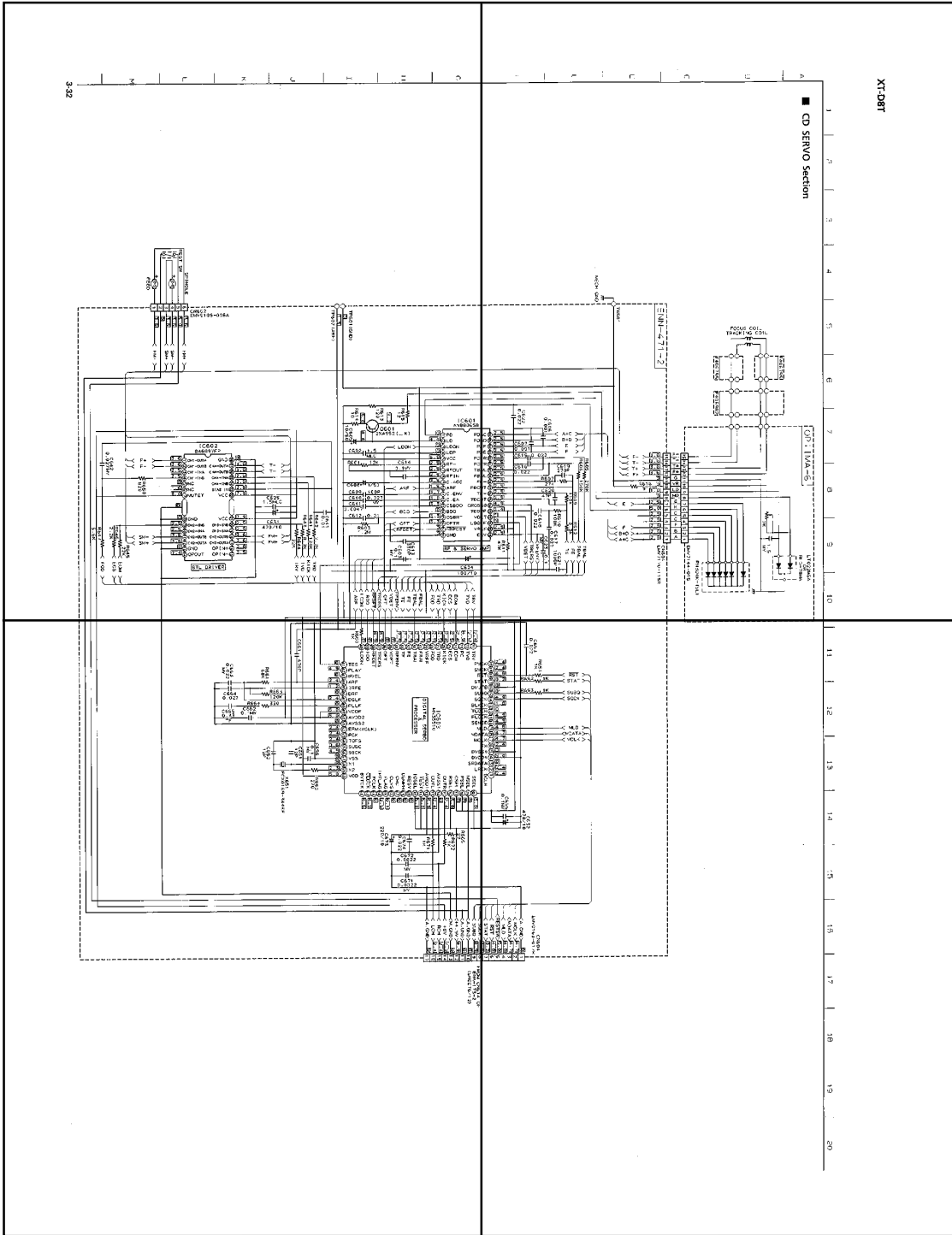
1 2 3 4 5 6 7 8 9 10

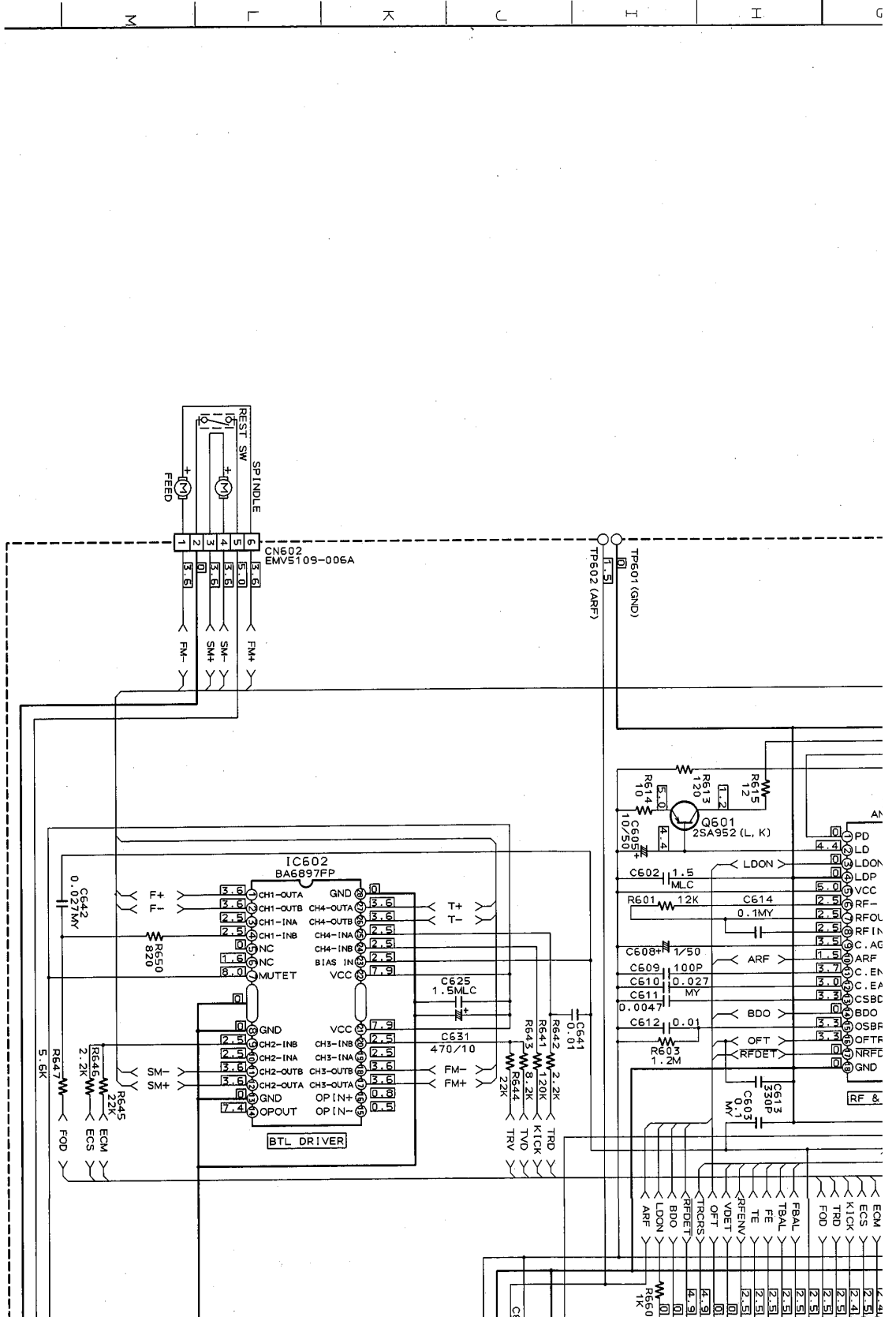
* MARK

	J	U. S. UT. UB. UB	C. A	EF. EN. BS, G. GI, VX	EF. EN. BS, G. GI
R223	2.2 UMF. C.; (1/2W)	PTH61G30 BD2R2NT	PTH61G30 BD2R2NT	PTH61G30 BD2R2NT	PTH61G30 BD2R2NT
CN205	NONE	NONE	NONE	NONE	USED
B453	NONE	USED	NONE	NONE	USED
B252	NONE	NONE	NONE	NONE	USED
B191	USED	USED	USED	USED	NONE
C250, 251	NONE	NONE	NONE	USED	USED

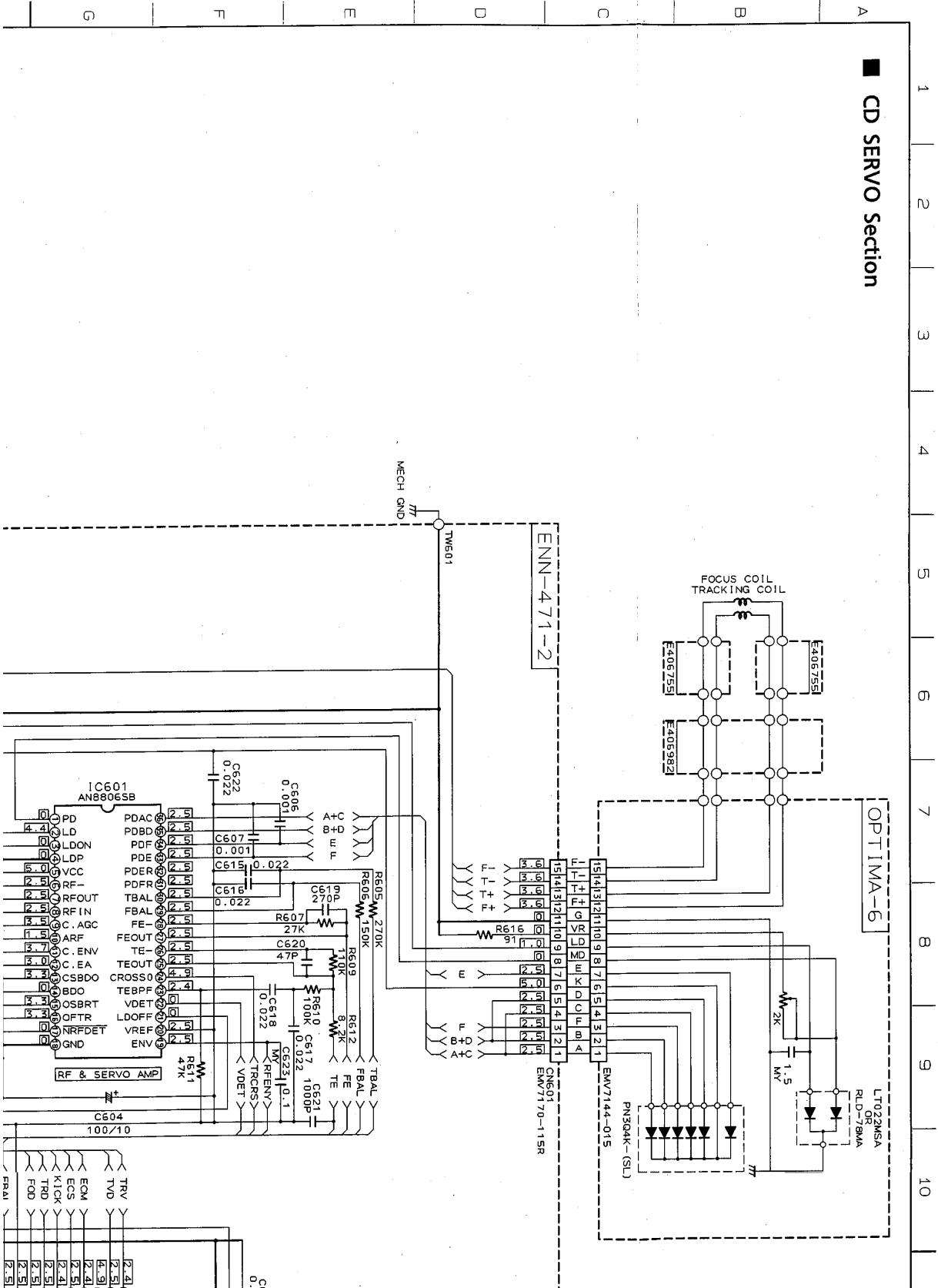


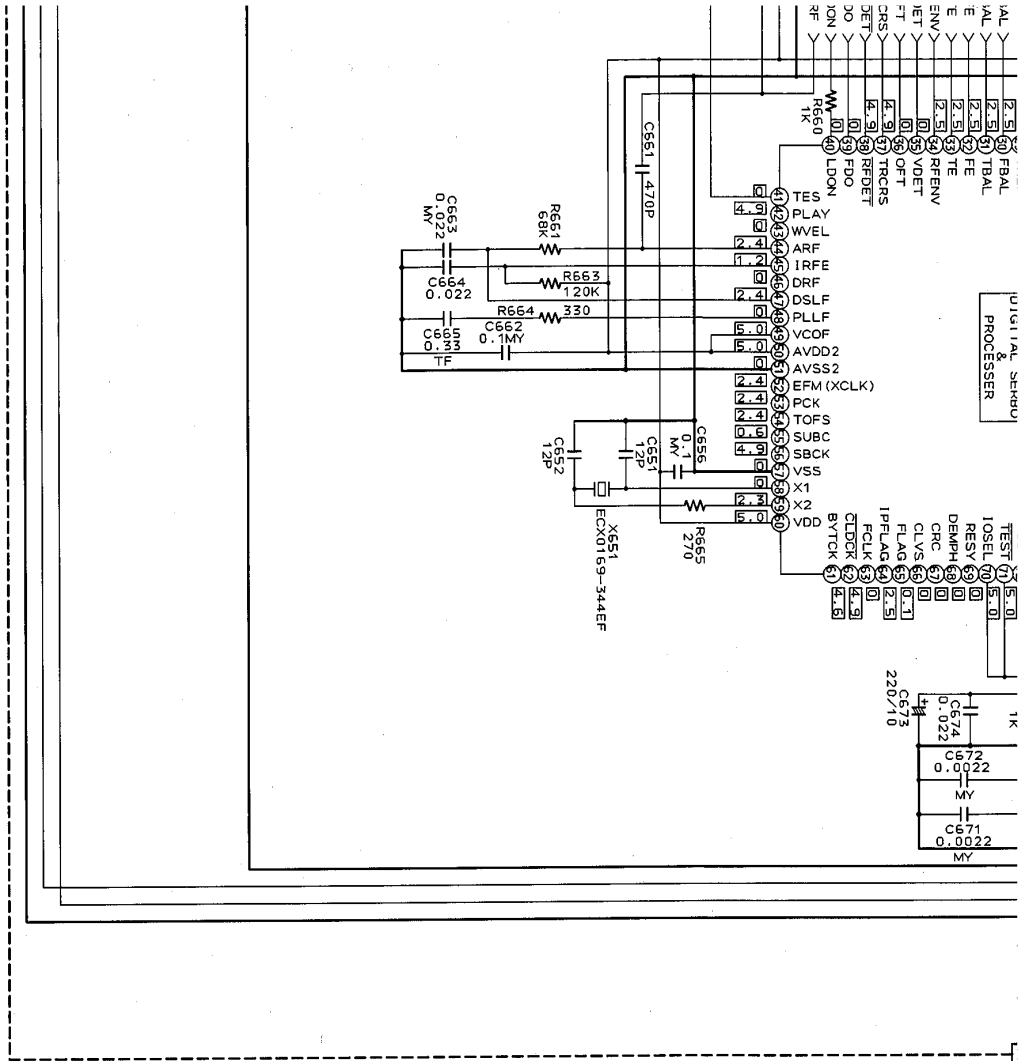


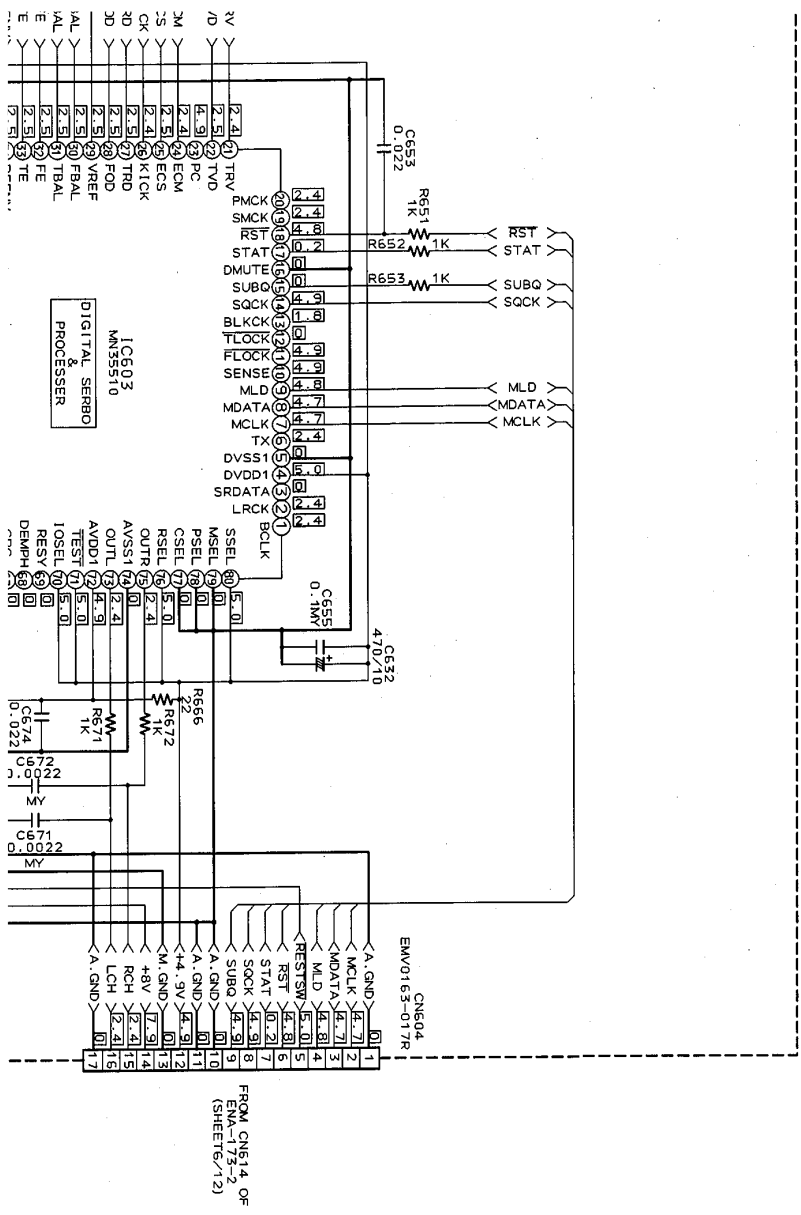




CD SERVO Section

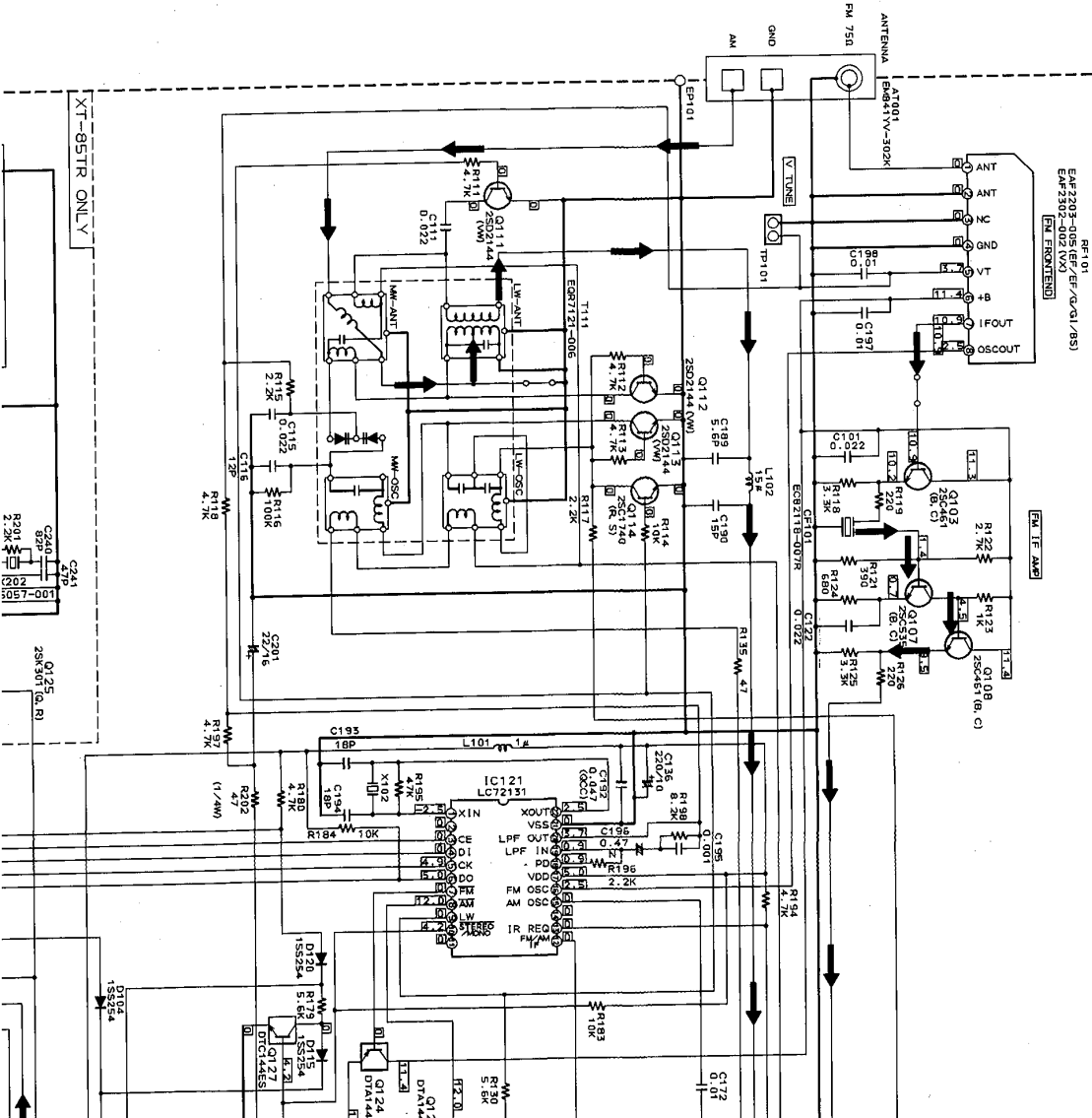






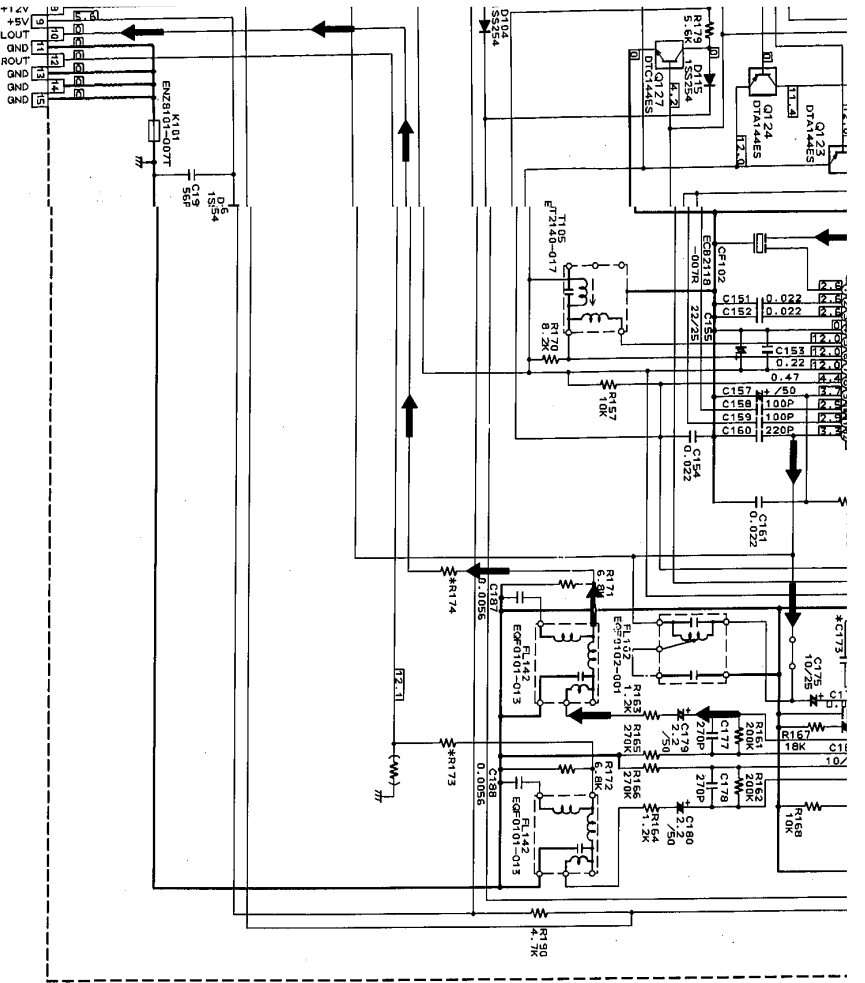
TUNER Section

FOR EE, EN, G, Q1, BS, VX
ENA-173-1

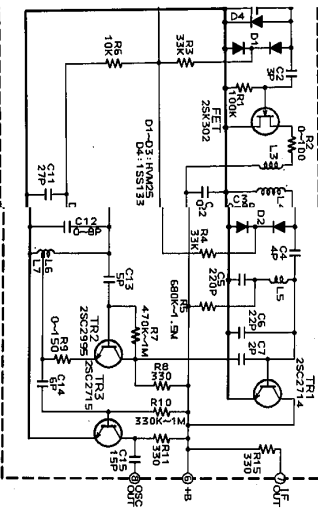


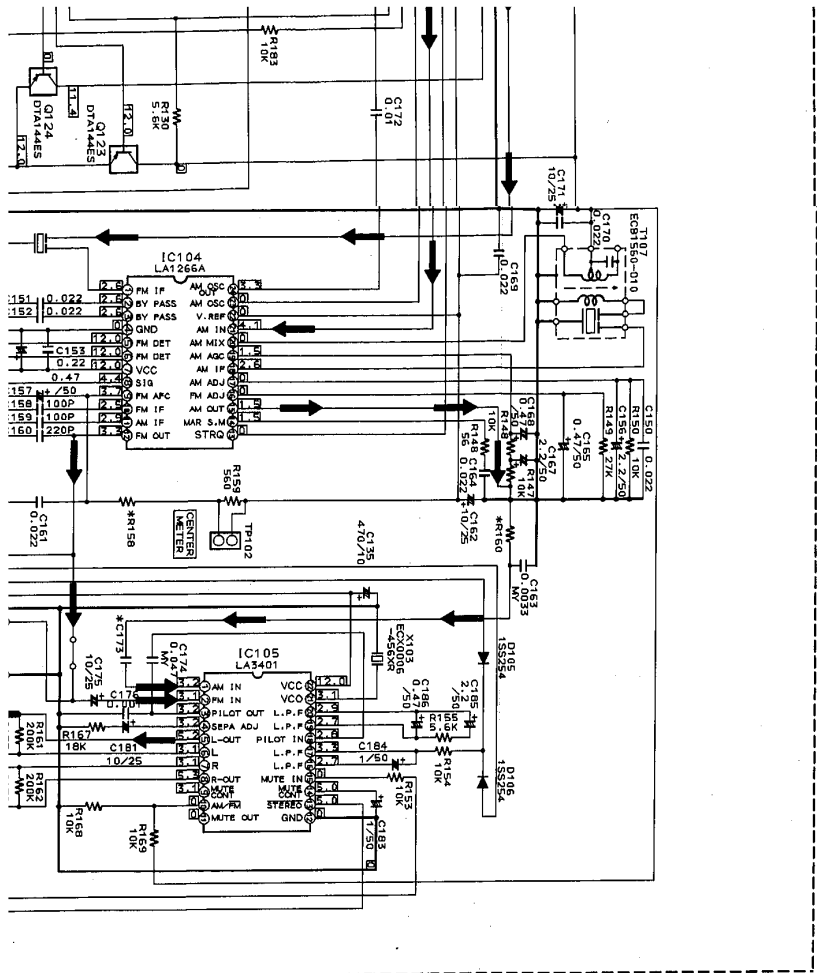
XT-65TR ONLY

1 2 3 4 5 6 7 8 9 10



1
 202-002 (FOR VX)





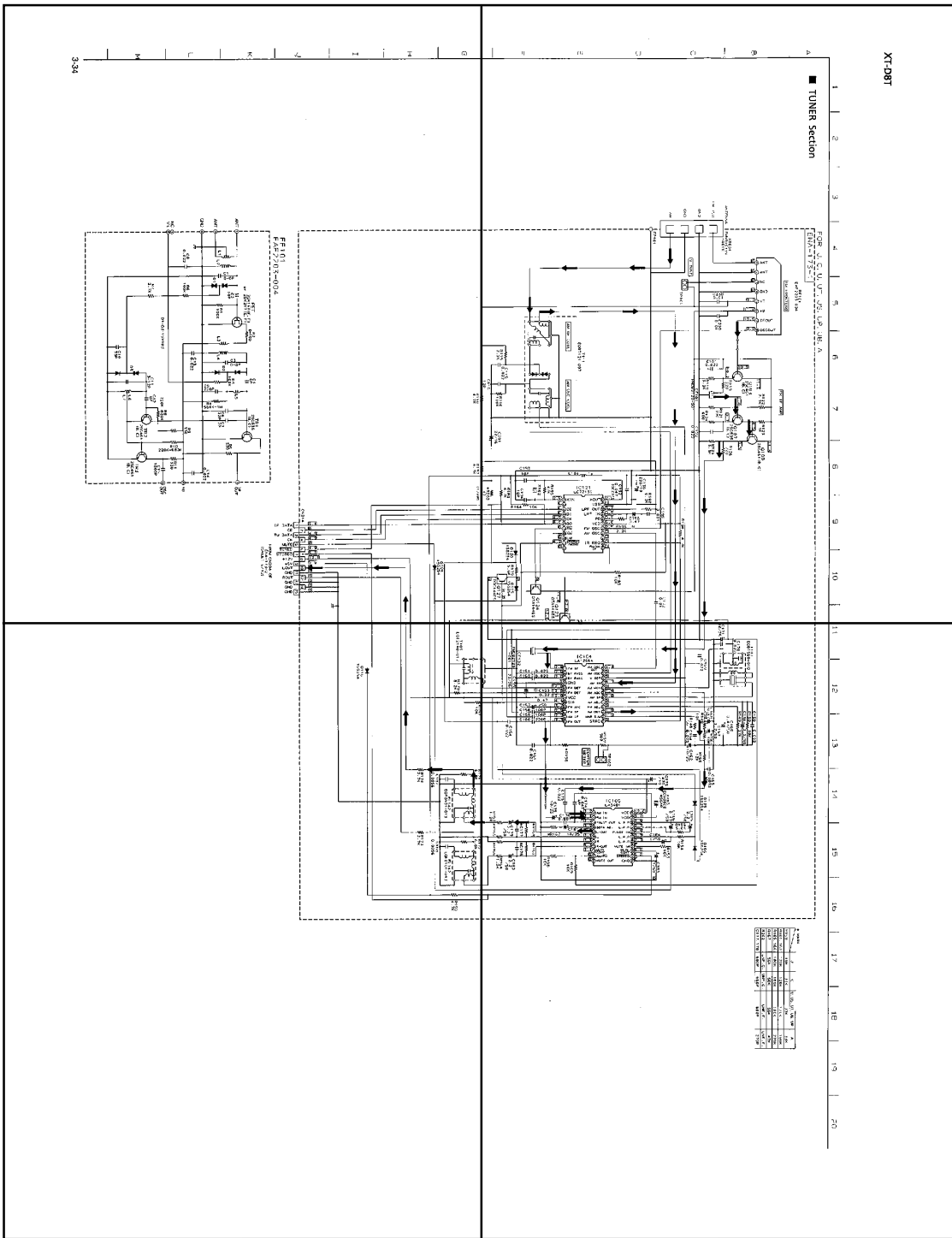
* MARK

MARK	EF, EN, G, GI	BS	VX
R110	NONE	NONE	NONE
R159	33K	1.8K	33K
R160	27K	3.3K	27K
R173, 174	1.5K	2.7K	1.5K
C103	NONE	NONE	NONE
C175	0.022	0.047	0.022

XT-D8T

P3-34a

P3-34-b



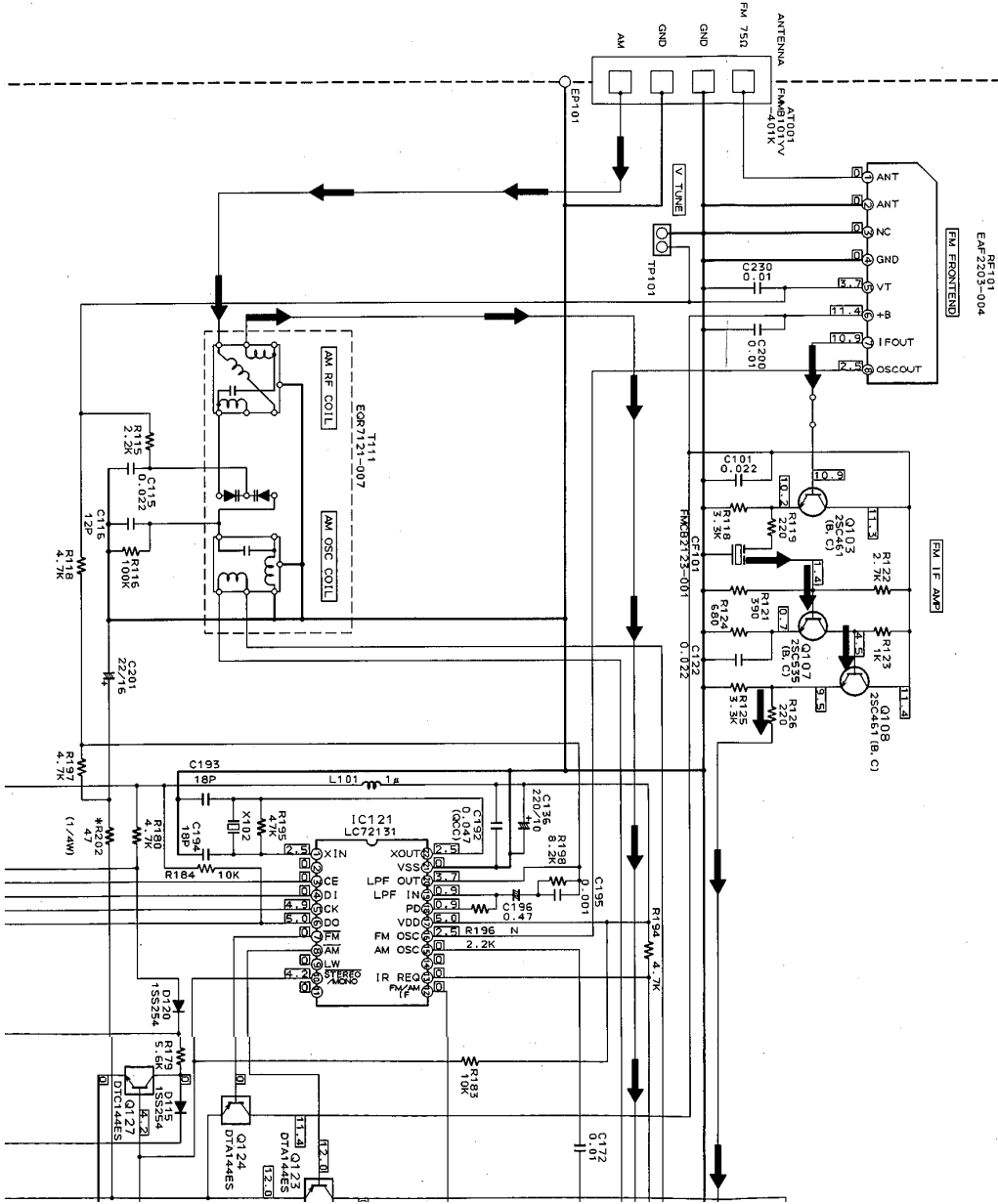
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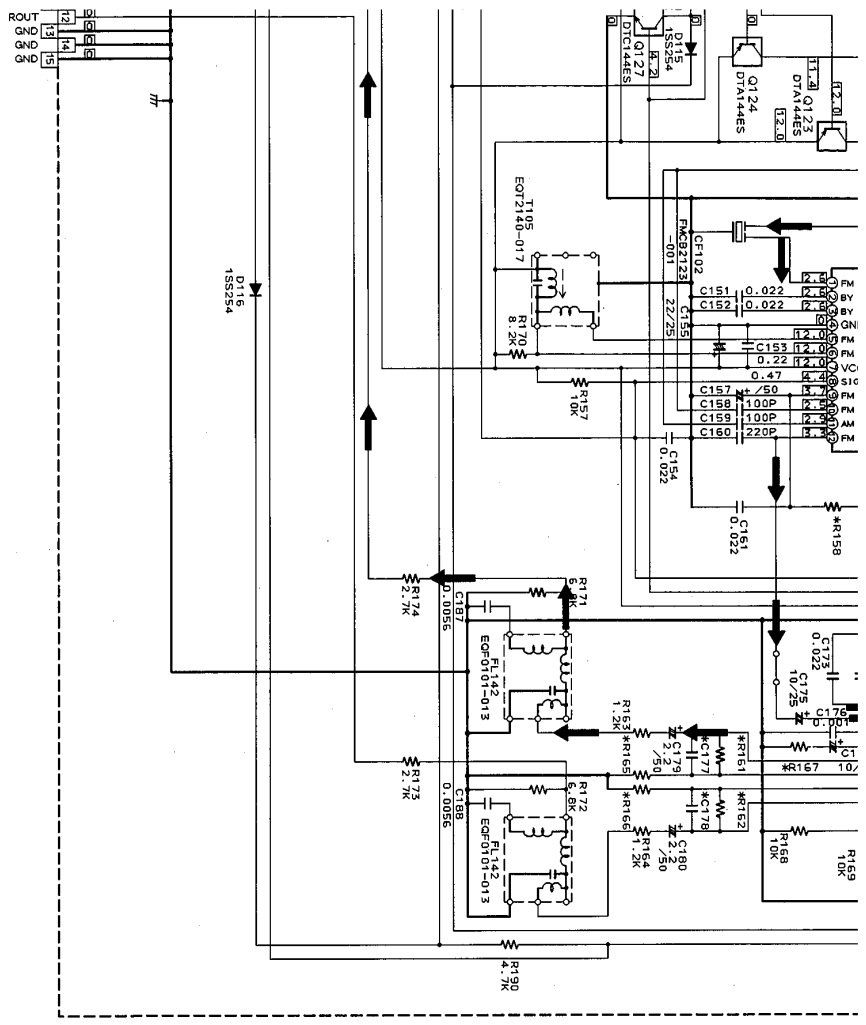
P3-34-d

1 2 3 4 5 6 7 8 9 10

TUNER Section

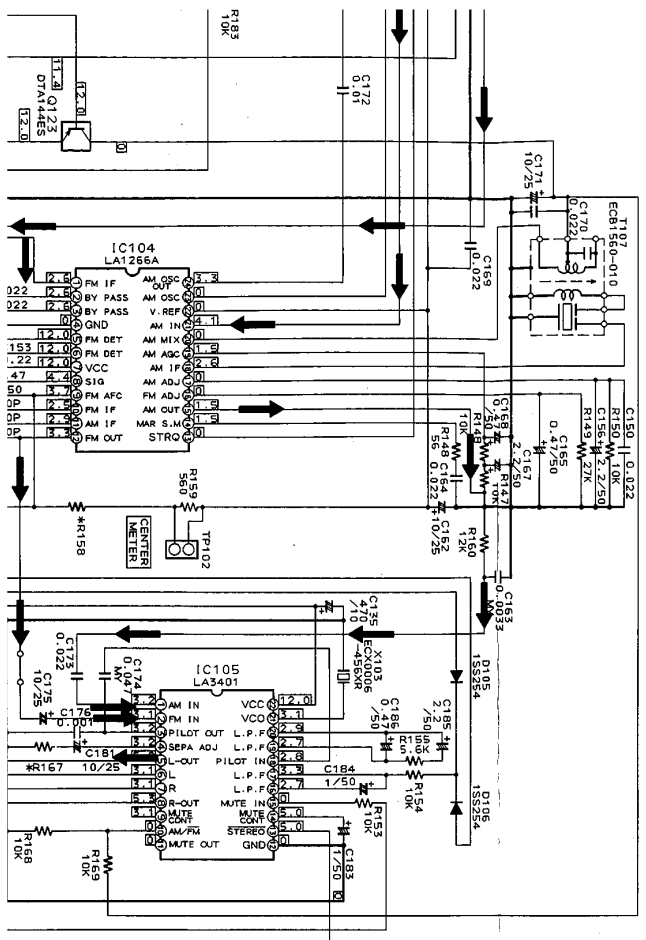
FOR J. C. U. UT. US. UP. UB. A
ENA-173-1





1

0 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20



* MARK

J	C	U.	U.T.	U.B.	U.P.	A
R150	18K	33K		33K		33K
R151, 152	120K	120K		120K		180K
R155, 165	180K	180K		180K		270K
R167	55K	55K		55K		47K
R202	LINE C.	LINE C.		LINE F.		LINE F.
C177, 178	580P	580P		580P		270P

G
H
I
J
K
L
M

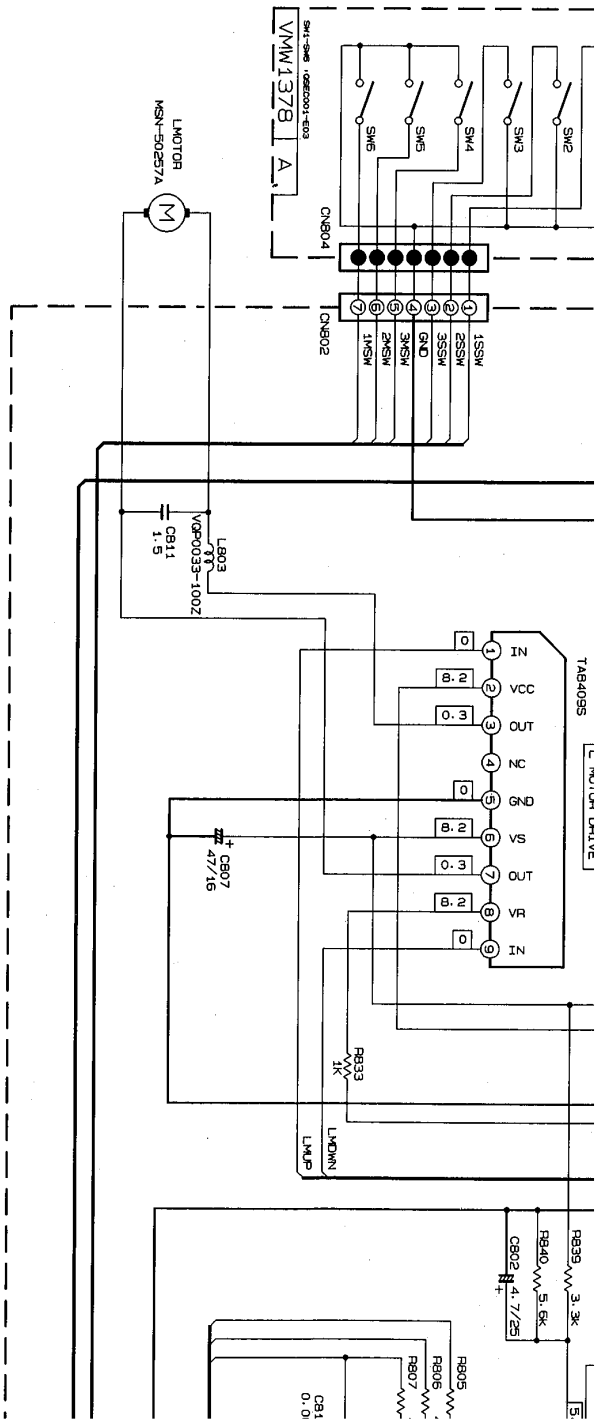
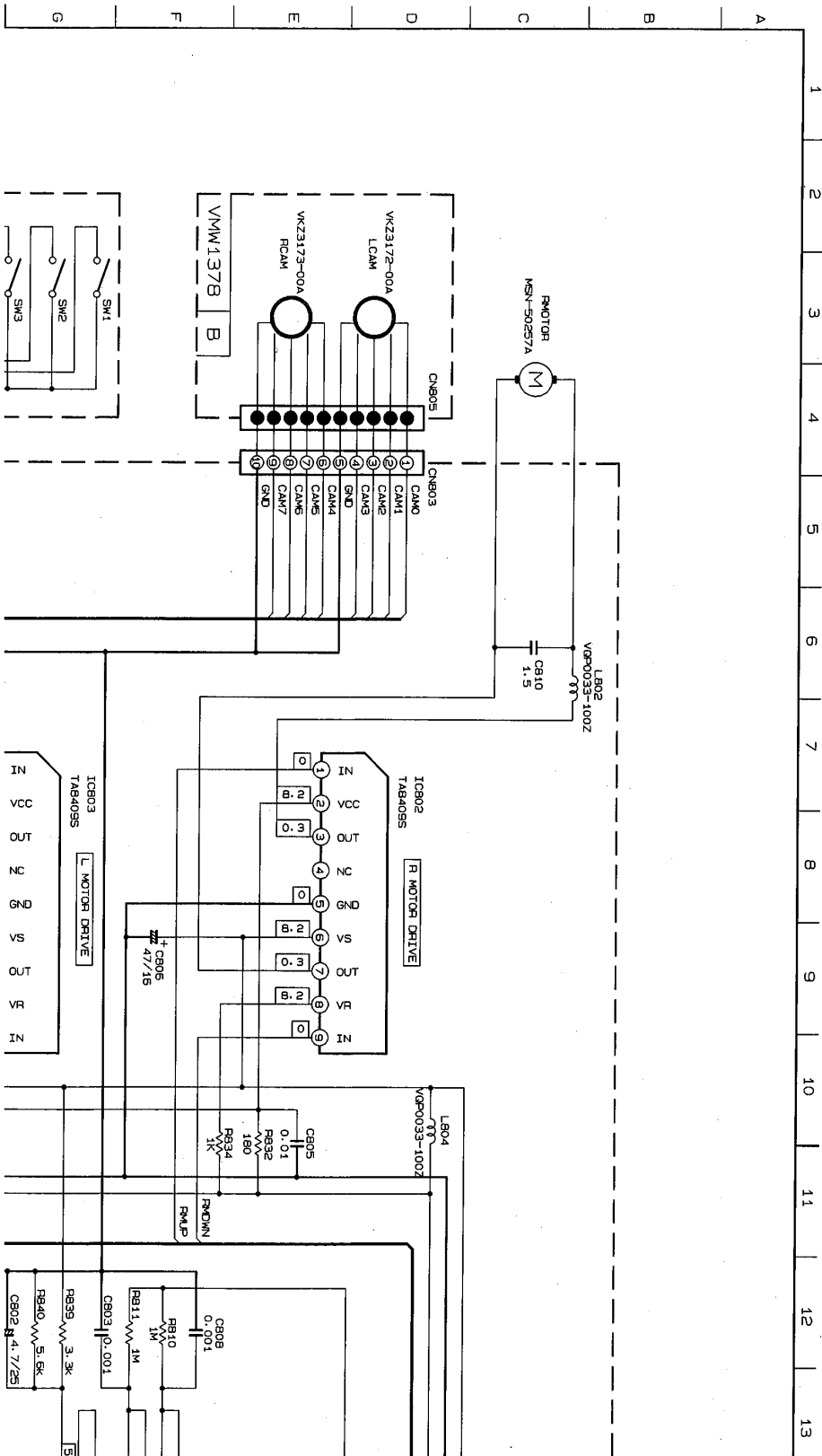


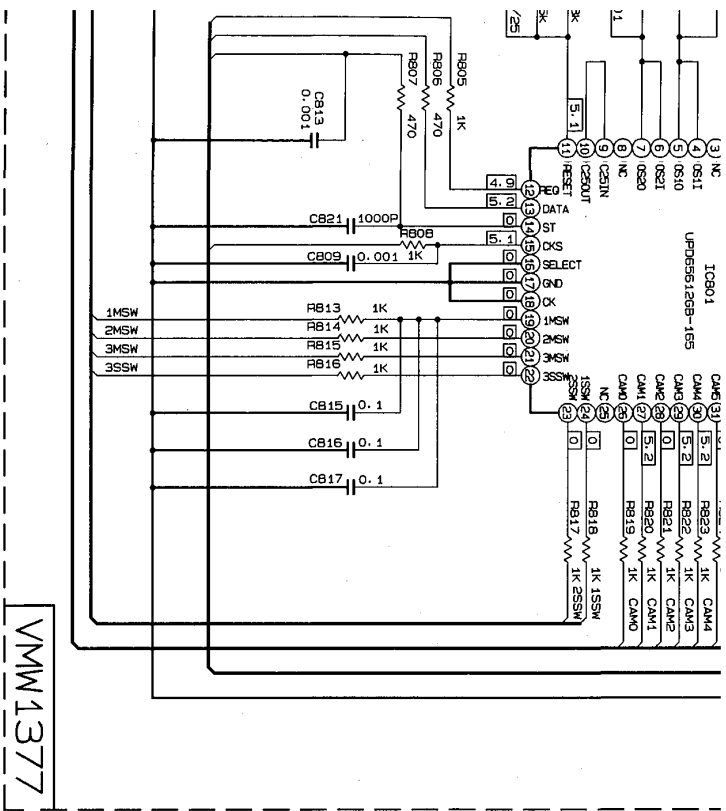
TABLE 1 CAM PATTERN LIST

CAM NO.	LCAM							FCAM						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
POSITION	0	1	2	3	4	5	6	7	8	9	0	1	2	3
MAIN TRAV1	0	0	1	1	0	1	0	0	0	1	1	0	0	0
SUB TRAV1	0	0	1	1	0	1	0	0	0	1	1	0	0	0
CAMP 1	0	1	0	1	0	1	0	0	0	1	1	0	0	0
MAIN TRAV2	1	0	1	0	1	0	0	1	0	1	0	0	1	0
SUB TRAV2	1	0	1	0	1	0	0	1	0	1	0	0	1	0
CAMP 2	1	0	1	0	1	0	0	1	0	1	0	0	1	0
MAIN TRAV3	1	0	0	0	0	0	1	1	0	0	0	0	1	1
SUB TRAV3	1	0	0	0	0	0	1	1	0	0	0	0	1	1
OFF	1	1	1	1	1	1	1	1	1	1	1	1	1	1

149V

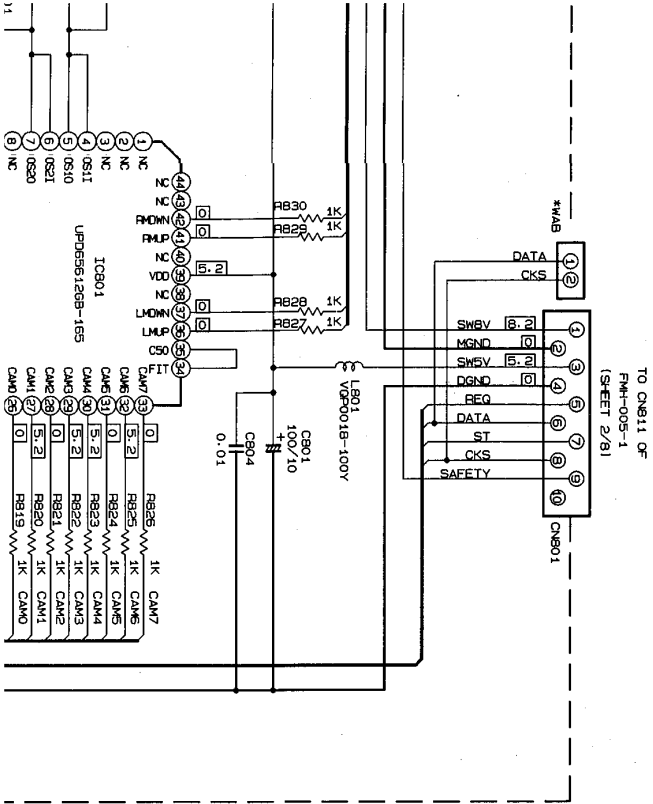
CD CHANGER CONTROL Section

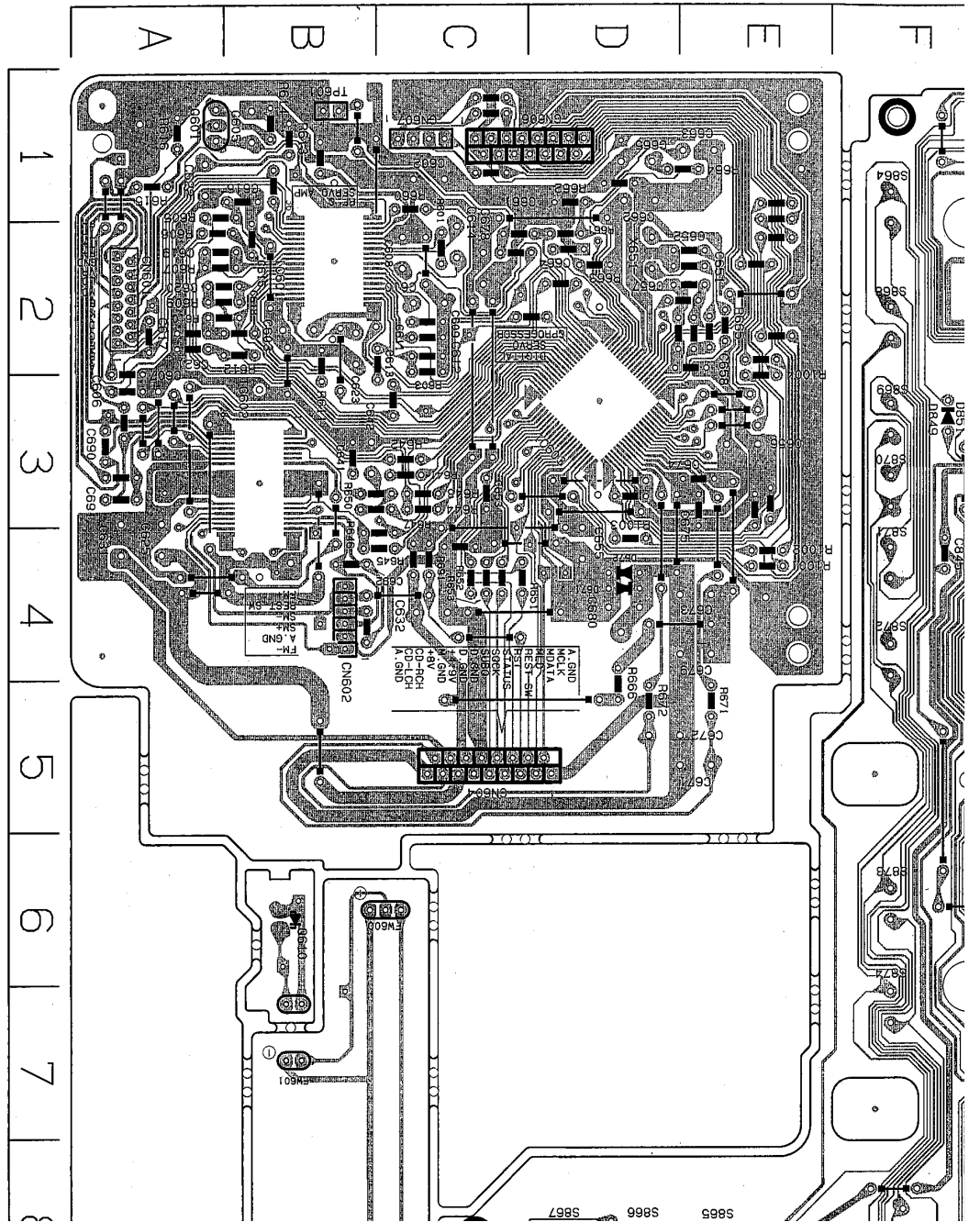




VMW1377

13 14 15 16 17 18 19 20

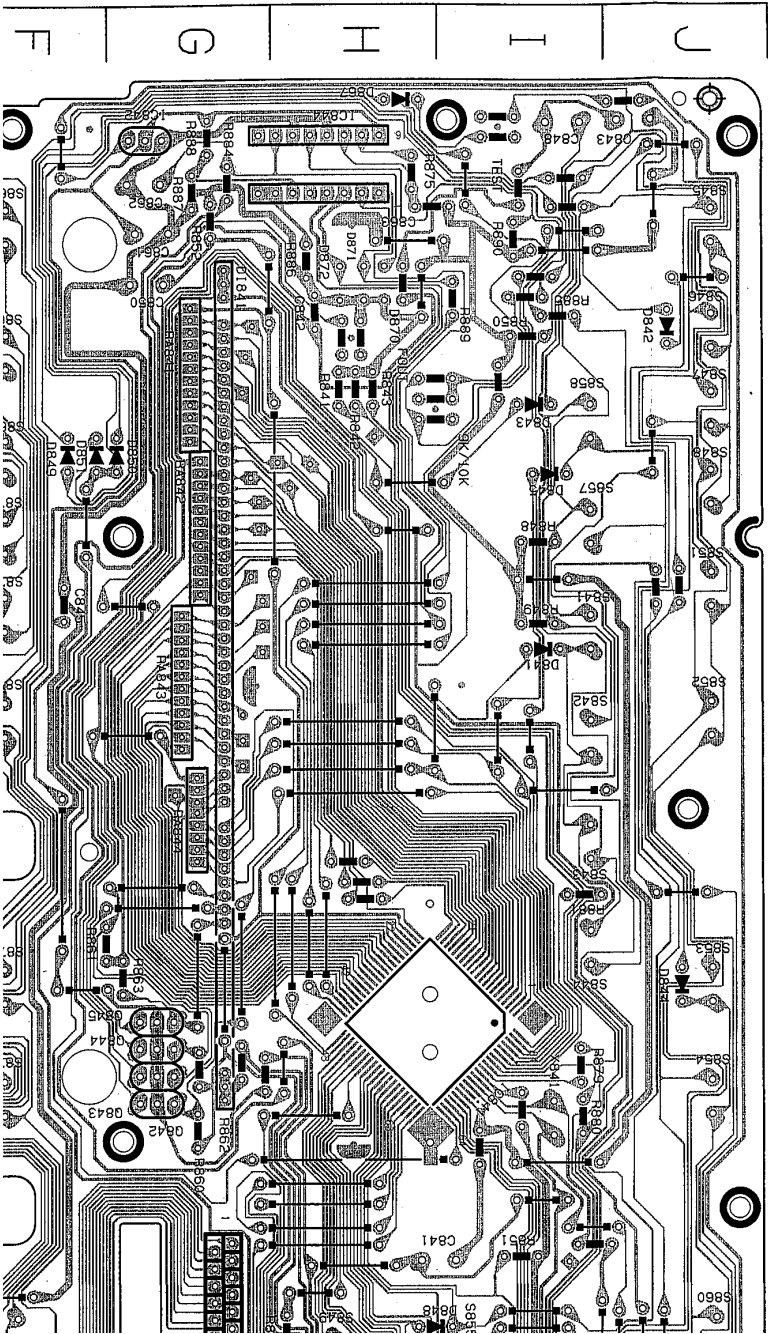


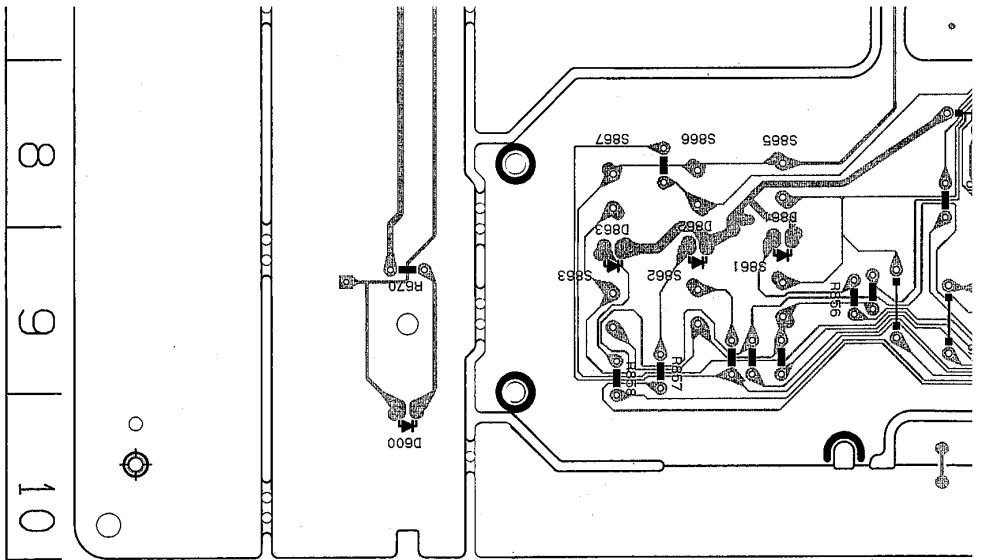


XT-D8T

Printed Circuit Boards

■ SYSTEM CONTROL & CD SERVO PCB (ENN-471)



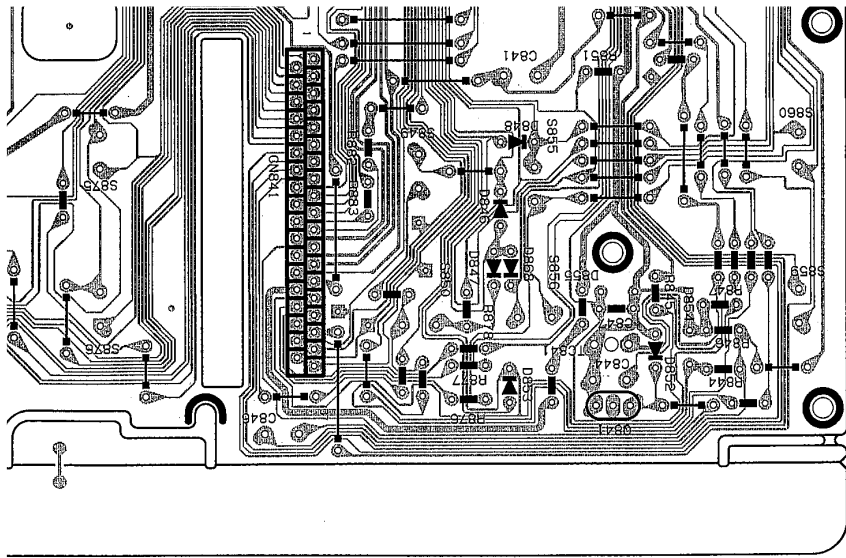


6653	3 C	D871	2 H	R844	9 J
6657	2 D	D872	2 H	R845	9 I
6658	2 E	D1841	2 G	R846	9 J
6661	2 C	I0601	2 B	R847	9 J
6662	1 D	I0602	3 B	R848	3 I
6663	1 E	I0603	3 D	R849	4 I
6664	2 D	I0841	6 H	R850	2 I
6665	1 D	I0842	1 G	R851	8 I
6671	5 E	I0844	1 H	R852	1 G
6672	5 D	P01	4 B	R855	9 E
6673	4 E	P04	4 D	R857	9 D
6674	3 E	P05	4 E	R858	10 D
6675	3 E	P06	1 E	R860	7 G
6677	3 E	0601	1 A	R861	6 F
6678	2 C	0610	6 B	R862	7 G
6679	4 E	0841	10 I	R863	6 G
6680	4 D	0842	7 G	R875	1 H
6690	3 A	0843	7 G	R876	10 H
6691	3 A	0844	6 G	R877	9 H
6692	4 B	0845	6 G	R878	9 H
6841	8 I	R1001	4 E	R879	6 I
6842	2 H	R1002	4 E	R880	7 I
6843	1 J	R1003	4 D	R881	5 I
6844	9 I	R1004	3 E	R882	8 H
6845	4 F	R601	2 C	R883	8 H
6846	10 G	R603	2 C	R884	1 G
6847	9 I	R605	1 A	R885	2 I
6848	1 I	R606	2 A	R886	2 H
6850	2 G	R607	2 A	R887	1 G
6861	1 G	R609	2 A	R888	1 G
6862	1 G	R610	2 A	R889	2 I
6863	1 H	R611	2 B	R890	1 I
CM001	5 D	R612	2 A	RA841	2 G
CM601	2 A	R613	1 B	RA842	3 G

6653	3 C	D871	2 H	R844	9 J
6657	2 D	D872	2 H	R845	9 I
6658	2 E	D1841	2 G	R846	9 J
6661	2 C	I0601	2 B	R847	9 J
6662	1 D	I0602	3 B	R848	3 I
6663	1 E	I0603	3 D	R849	4 I
6664	2 D	I0841	6 H	R850	2 I
6665	1 D	I0842	1 G	R851	8 I
6671	5 E	I0844	1 H	R852	1 G
6672	5 D	P01	4 B	R855	9 E
6673	4 E	P04	4 D	R857	9 D
6674	3 E	P05	4 E	R858	10 D
6675	3 E	P06	1 E	R860	7 G
6677	3 E	0601	1 A	R861	6 F
6678	2 C	0610	6 B	R862	7 G
6679	4 E	0841	10 I	R863	6 G
6680	4 D	0842	7 G	R875	1 H
6690	3 A	0843	7 G	R876	10 H
6691	3 A	0844	6 G	R877	9 H
6692	4 B	0845	6 G	R878	9 H
6841	8 I	R1001	4 E	R879	6 I
6842	2 H	R1002	4 E	R880	7 I
6843	1 J	R1003	4 D	R881	5 I
6844	9 I	R1004	3 E	R882	8 H
6845	4 F	R601	2 C	R883	8 H
6846	10 G	R603	2 C	R884	1 G
6847	9 I	R605	1 A	R885	2 I
6848	1 I	R606	2 A	R886	2 H
6850	2 G	R607	2 A	R887	1 G
6861	1 G	R609	2 A	R888	1 G
6862	1 G	R610	2 A	R889	2 I
6863	1 H	R611	2 B	R890	1 I
CM001	5 D	R612	2 A	RA841	2 G
CM601	2 A	R613	1 B	RA842	3 G

S867	8 D
S868	2 F
S869	3 F
S870	3 F
S871	4 F
S872	4 F
S873	6 F
S874	7 F
S875	8 F
S876	9 F
TC841	9 I
TP01	4 D
TP601	1 B
TW601	1 A
X651	2 D
X841	7 I

ENN-471 Location List

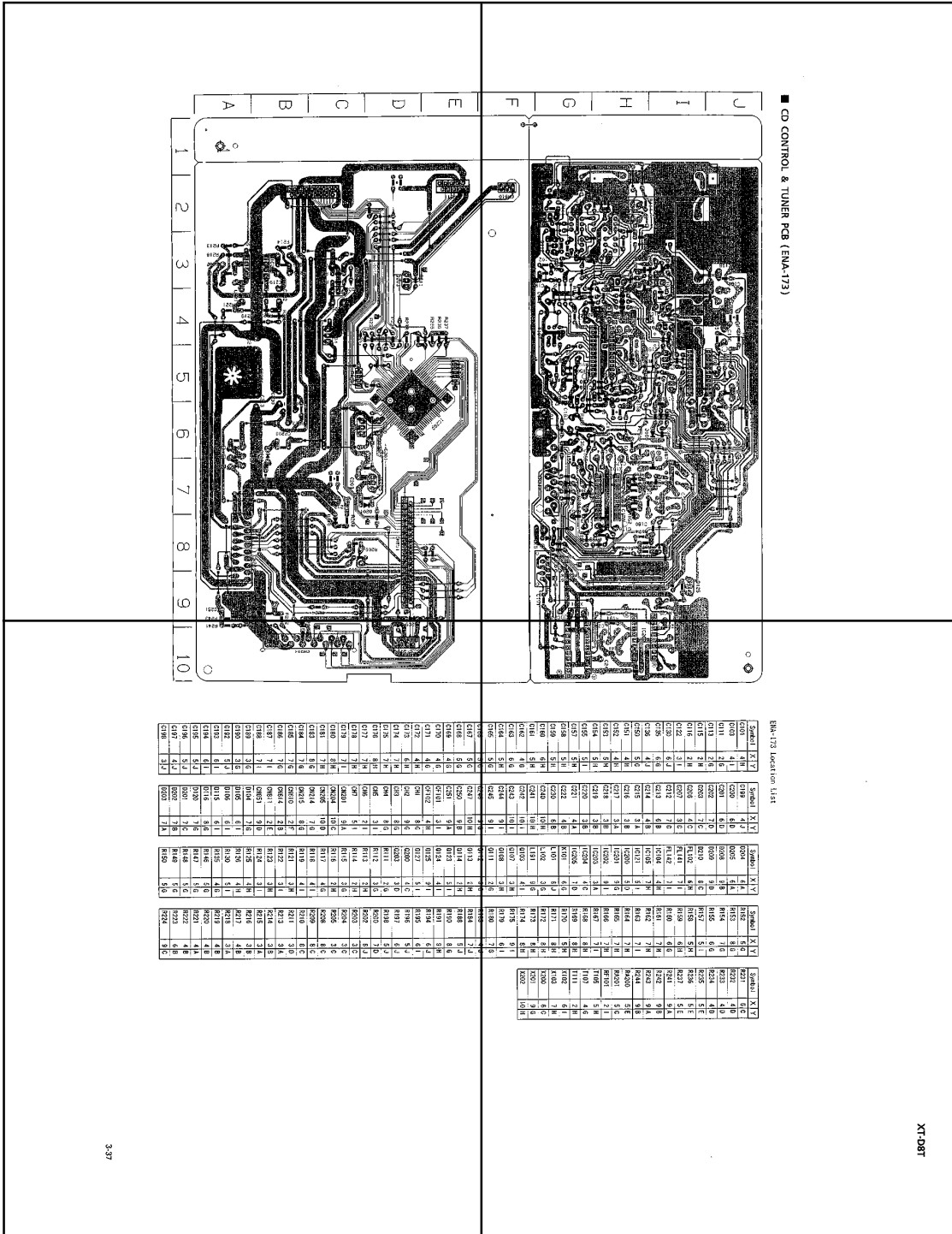


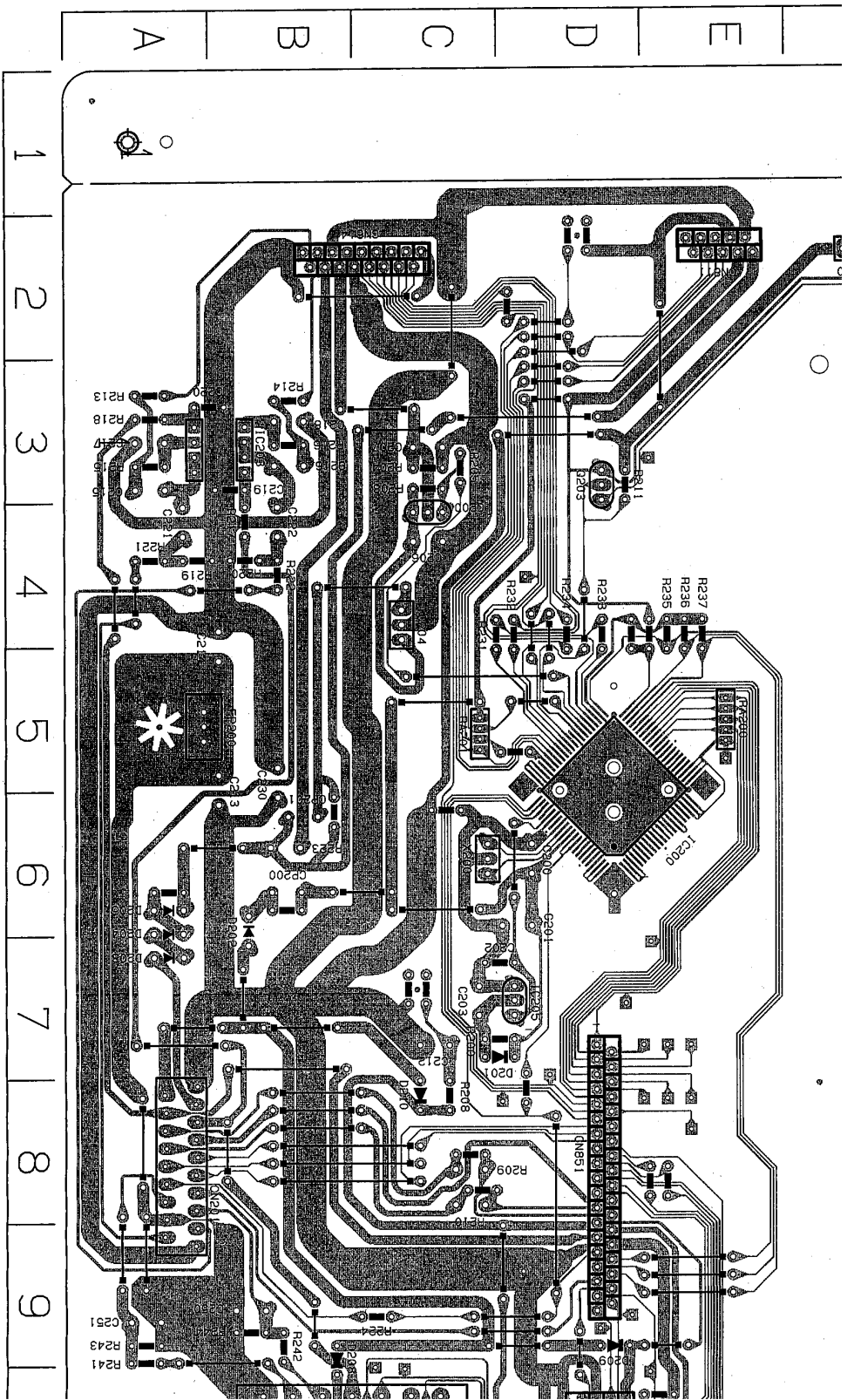
Symbol	X	Y
C602	1	C
C603	2	B
C605	1	B
C606	3	A
C607	2	A
C608	2	C
C609	2	C
C610	2	C
C611	2	C
C612	2	C
C613	2	C
C614	2	C
C615	2	B
C616	1	B
C617	2	A
C618	2	A
C619	2	A
C620	2	A
C621	2	A
C622	1	A
C623	2	B
C625	3	A
C631	3	A
C632	4	C
C641	3	B
C642	3	B
C651	2	D
C652	2	D
C653	3	C
C657	2	D
C658	1	F

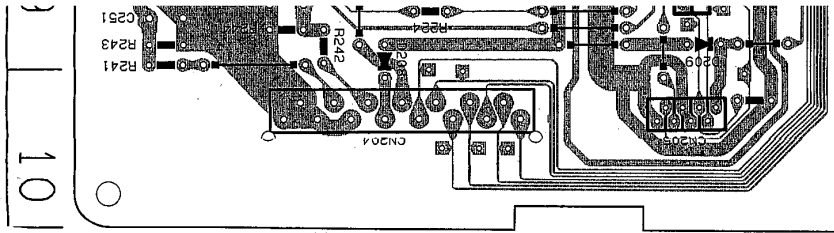
Symbol	X	Y
D602	4	B
D606	1	C
D607	1	C
D641	8	G
D600	10	B
D671	4	D
D672	4	D
D841	4	I
D842	2	J
D843	2	I
D844	6	J
D845	3	I
D846	9	H
D847	9	H
D848	8	H
D849	3	F
D850	3	G
D851	3	F
D852	9	I
D853	10	H
D854	9	J
D855	9	I
D861	9	E
D862	9	D
D863	9	D
D867	1	H
D868	9	H
D870	2	H
D871	2	H
D872	2	H
D1841	2	G

Symbol	X	Y
R614	1	B
R615	1	A
R616	1	A
R641	3	C
R642	3	C
R643	3	C
R644	3	C
R645	4	B
R646	4	B
R647	3	B
R650	3	C
R651	4	C
R652	4	C
R653	4	C
R660	1	C
R661	2	D
R662	1	D
R663	2	D
R664	1	D
R665	2	E
R666	5	D
R670	9	C
R671	5	E
R672	5	D
R691	4	C
R841	2	H
R842	2	H
R843	2	H
R844	9	J
R845	9	I
R846	9	J

Symbol	X	Y
RA843	5	G
RA844	5	G
S841	4	I
S842	4	I
S843	5	I
S844	6	I
S845	1	J
S846	2	J
S847	3	J
S848	3	J
S849	8	H
S850	9	H
S851	4	J
S852	4	J
S853	6	J
S854	7	J
S855	8	I
S856	9	I
S857	3	I
S858	3	I
S859	9	J
S860	8	J
S861	9	E
S862	9	D
S863	9	D
S864	1	F
S865	8	E
S866	8	D
S867	8	D
S868	2	F
S869	3	F

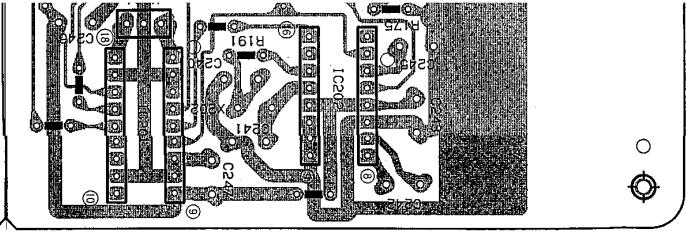






C165	5 G	C245	9 I	Q111	2 G	R180	7 G
C166	5 G	C246	9 G	Q112	3 G	R183	4 J
C167	5 G	C247	10 H	Q113	2 H	R184	7 J
C168	5 G	C250	9 B	Q114	2 H	R188	5 J
C169	4 G	C251	9 A	Q123	5 I	R190	8 G
C170	4 G	CF101	3 I	Q124	4 I	R191	9 H
C171	4 G	CF102	4 H	Q125	9 I	R194	6 J
C172	4 H	CH1	8 G	Q127	5 I	R195	6 I
C173	6 H	CH2	9 G	Q200	4 C	R196	5 J
C174	7 H	CH3	8 G	Q203	3 D	R197	6 J
C175	7 H	CH4	8 G	R111	2 G	R198	5 J
C176	8 H	CH5	3 I	R112	3 G	R200	7 D
C177	7 H	CH6	2 I	R113	2 H	R202	6 J
C178	7 H	CH7	5 I	R114	2 H	R203	3 C
C179	7 I	CN201	9 A	R115	3 G	R204	3 C
C180	8 H	CN204	10 C	R116	2 H	R205	3 C
C181	7 H	CN205	10 D	R117	4 G	R208	8 C
C183	8 G	CN214	7 G	R118	4 I	R209	8 C
C184	7 G	CN215	8 G	R119	4 I	R210	8 C
C185	7 G	CN610	2 F	R121	3 H	R211	3 D
C186	7 G	CN614	2 B	R122	3 I	R213	3 A
C187	7 I	CN811	2 E	R123	3 H	R214	3 B
C188	7 I	CN851	9 D	R124	3 I	R215	3 A
C189	3 G	D104	7 G	R125	4 H	R216	3 B
C190	3 G	D105	6 I	R126	4 H	R217	4 B
C192	5 J	D106	6 I	R130	5 I	R218	3 A
C193	6 I	D115	6 I	R135	4 G	R219	4 B
C194	6 I	D116	8 G	R146	5 G	R220	4 B
C195	5 J	D120	7 G	R147	5 G	R221	4 A
C196	5 J	D201	7 C	R148	5 G	R222	4 B
C197	4 J	D202	7 B	R149	5 G	R223	6 B
C198	3 J	D203	7 A	R150	5 G	R224	9 C

ENNA-173 Location List



Symbol	X	Y
C101	4	H
C103	4	I
C111	2	G
C113	2	G
C115	2	H
C116	2	H
C122	3	I
C130	6	J
C135	6	G
C136	4	J
C150	5	G
C151	4	H
C152	4	H
C153	5	H
C154	5	H
C155	5	I
C157	5	H
C158	5	H
C159	5	H
C160	6	H
C161	5	H
C162	4	G
C163	6	G
C164	5	H
C165	5	G
C166	5	G
C167	5	G

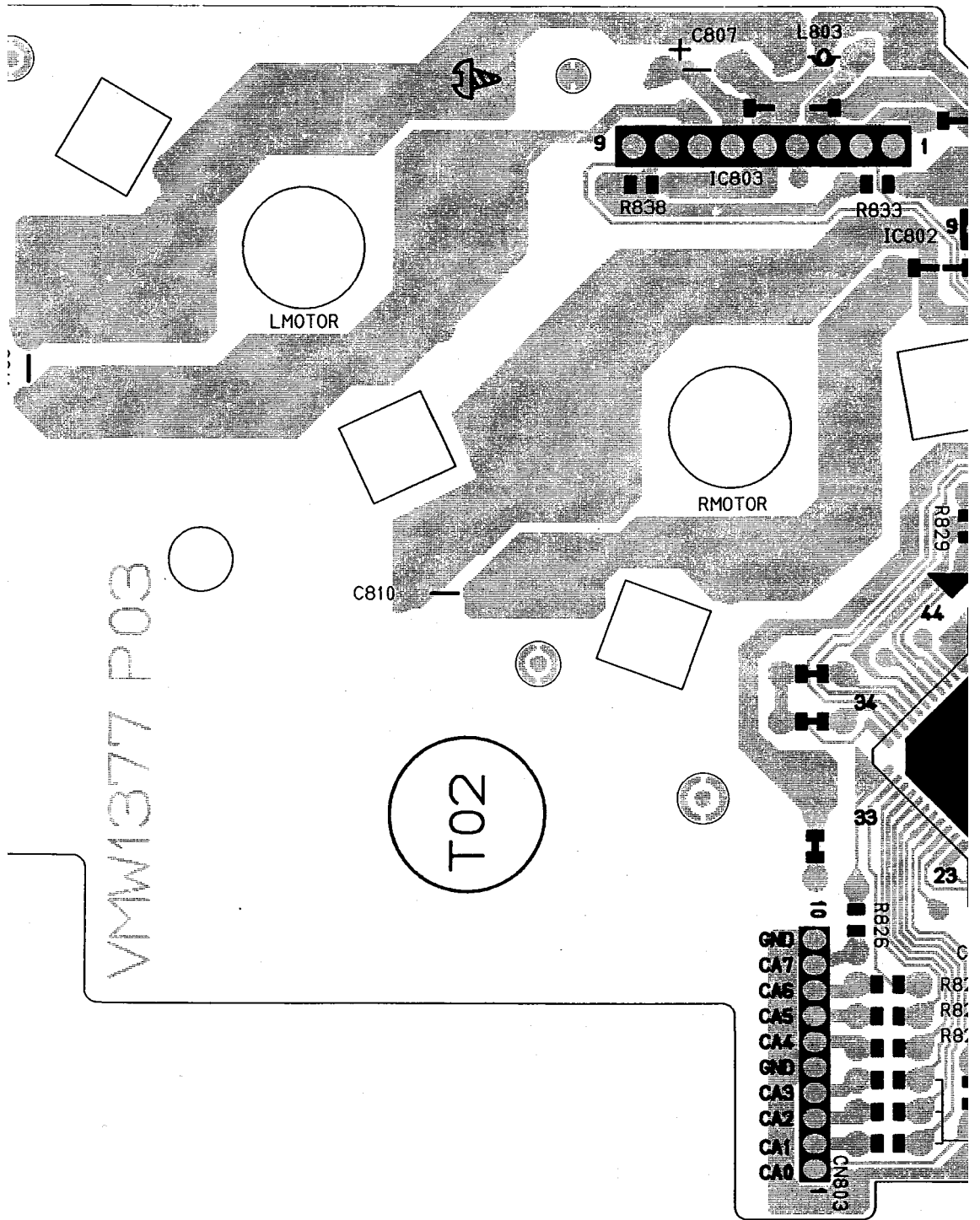
Symbol	X	Y
C199	4	J
C200	6	D
C201	6	D
C202	7	D
C203	7	C
C206	4	C
C207	3	C
C212	7	C
C213	6	B
C214	4	B
C215	3	A
C216	3	B
C217	3	A
C218	3	B
C219	3	B
C220	3	B
C221	4	A
C222	4	B
C230	6	B
C240	10	H
C241	10	H
C242	10	I
C243	10	I
C244	9	I
C245	9	I
C246	9	G
C247	10	H

Symbol	X	Y
D204	6	A
D205	6	A
D208	9	B
D209	9	D
D210	8	C
FL102	6	H
FL141	7	I
FL142	7	I
IC104	4	H
IC105	7	H
IC121	5	I
IC200	5	D
IC201	9	G
IC202	9	I
IC203	3	A
IC204	4	C
IC205	7	D
K101	6	G
L101	6	J
L102	3	G
L191	9	G
Q103	4	I
Q107	3	H
Q108	3	H
Q111	2	G
Q112	3	G
Q113	2	H

Symbol	X	Y
R152	5	G
R153	8	G
R154	7	G
R155	6	G
R157	5	I
R158	5	H
R159	6	H
R160	6	G
R161	7	H
R162	7	H
R163	7	I
R164	7	H
R165	7	H
R166	7	H
R167	7	I
R168	8	H
R169	8	H
R170	5	H
R171	8	H
R172	8	H
R173	8	H
R174	8	H
R175	9	I
R179	6	I
R180	7	G
R183	4	J
R184	7	J

Symbol	X	Y
R231	5	C
R232	4	D
R233	4	D
R234	4	D
R235	5	E
R236	5	E
R237	5	E
R241	9	A
R242	9	B
R243	9	A
R244	9	B
RA200	5	E
RA201	5	C
RF101	2	I
T105	5	H
T107	4	G
T111	2	H
X102	6	I
X103	7	H
X200	6	C
X201	9	G
X202	10	H

CHANGER CONTROL PCB (ENH-284)



PARTS LIST

< DX-D8T >

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

The Markes for Dasignated Areas

A . . . Australia	BS . . . the U.K.	C . . . Canada	EF . . . Continental Europe
EN . . . Scandinavia	GI . . . Italy	G . . . Germany	J . . . the U.S.A.
UB . . . Hong Kong	U . . . Universal Type	UP . . . Korea	US . . . Singapore
UT . . . Taiwan	VX . . . East Europe	No markes indicates all areas.	

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(ENB-231)	4-13
(ENJ-096)	4-16

— MEMO —

■ Parts List

Block No.

M	1	M	M
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△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	1	EFP-DXD8TE(S)	FRONT PANEL ASS'Y	1		A, BS, C, EF, EN, G, GI, J, VX
		EFP-DXD8TU(S)	FRONT PANEL ASS'Y	1		U, UB, UP, US, UT
	1-1	E103146-016SM	FRONT PANEL	1		U, UB, UP, US, UT
		E103146-017SM	FRONT PANEL	1		A, BS, C, EF, EN, G, GI, J, VX
	1-2	E309793-002SM	SCREEN	1		
	1-3	E309790-002SM	WINDOW SCREEN	1		
	1-4	E406971-221	JVC MARK	1		
	2	E75896-001	SPACER	2		
	3	E103148-001SA	HOLDER ASSY	1		
	3-1	E103148-001SM	CASSETTE HOLDER	1		
	3-2	E406971-221	JVC MARK	1		
	4	E103150-001SM	CASSETTE HOLDER	1		
	5	E406713-001	CASSETTE SPRING	4		
	6	E306805-174	SPACER	1		
	7	E304434-005	DAMPER ASSY	2		
	8	E409103-001SM	INDICATOR	1	BASS	
	9	E309785-001SM	INDICATOR	1	SOURCE	
	10	E407431-001SM	REMOTE LENS	1		
	11	E409101-001SM	INDICATOR	1	DOLBY	
	12	E409102-001SM	INDICATOR	1	REC	
	13	E208827-004SM	PUSH BUTTON ASSY	1		
	14	E208830-001SM	PUSH BUTTON ASSY	1		
	15	E208833-001SM	PUSH BUTTON ASSY	1		
	16	E309791-001SM	PUSH BUTTON	1	P. LOGIC	
	17	VWF1215-25TTB	FLAT WIRE ASSY	1		
	18	SDSF2608Z	SCREW	17		
		SDSF2608Z	SCREW	21		U, UB, UP, US, UT
	19	E308683-002SS	EJECT GUIDE	1		
	20	E308681-002SS	EJECT LEVER	1		
	21	E308682-002SS	EJECT LEVER	1		
	22	E407798-002	SPRING	1		
	23	E207974-005SM	HOLDER BRACKET	1		
	24	E408058-002SM	HOLDER SPRING	1		
	25	E408122-002SM	HOLDER SPRING	1		
	26	E309783-001SM	EJECT BUTTON	1		
	27	E309784-001SM	EJECT BUTTON	1		
	28	SPST2604Z	SCREW	2		
	29	E48729-021	PLASTIC RIVET	1		
	30	SBSF3008Z	TAPPING SCREW	4		
	31	SBST3006Z	TAPPING SCREW	10		
	32	PU49485-3	CORD CLAMP	1		
	33	E407799-001SS	EJECT SAFETY	1		
	34	E407800-001SS	EJECT SAFETY	1		
	35	E407801-002	SPRING	1		
	36	E407802-002	SPRING	1		
	37	SBSF3006Z	TAPPING SCREW	2		
	38	-----	CASSETTE MECHANISM ASSY	1		
	39	SBST3008M	TAPPING SCREW	2		
	40	SBSG3008M	SCREW	1		
	41	VWF1221-16TTB	FLAT WIRE ASSY	1		
	42	VWF1215-30TTB	FFC CABLE	1		
	43	E309789-004SM	HEAT SINK	1		
	44	FMPK4003-001	MICA SHEET	2		
	45	FMPK4004-001	MICA SHEET	1		
	46	FMKL4007-001	HEAT SINK BRACKET	2		
	47	SBSG3014CC	SCREW	6		
	48	2SA1633LD(D, E)	SI. TRANSISTOR	1	Q758	
	49	2SC4278LD(D, E)	SI. TRANSISTOR	1	Q757	
	50	E406969-001SM	LEAF SPRING	1		

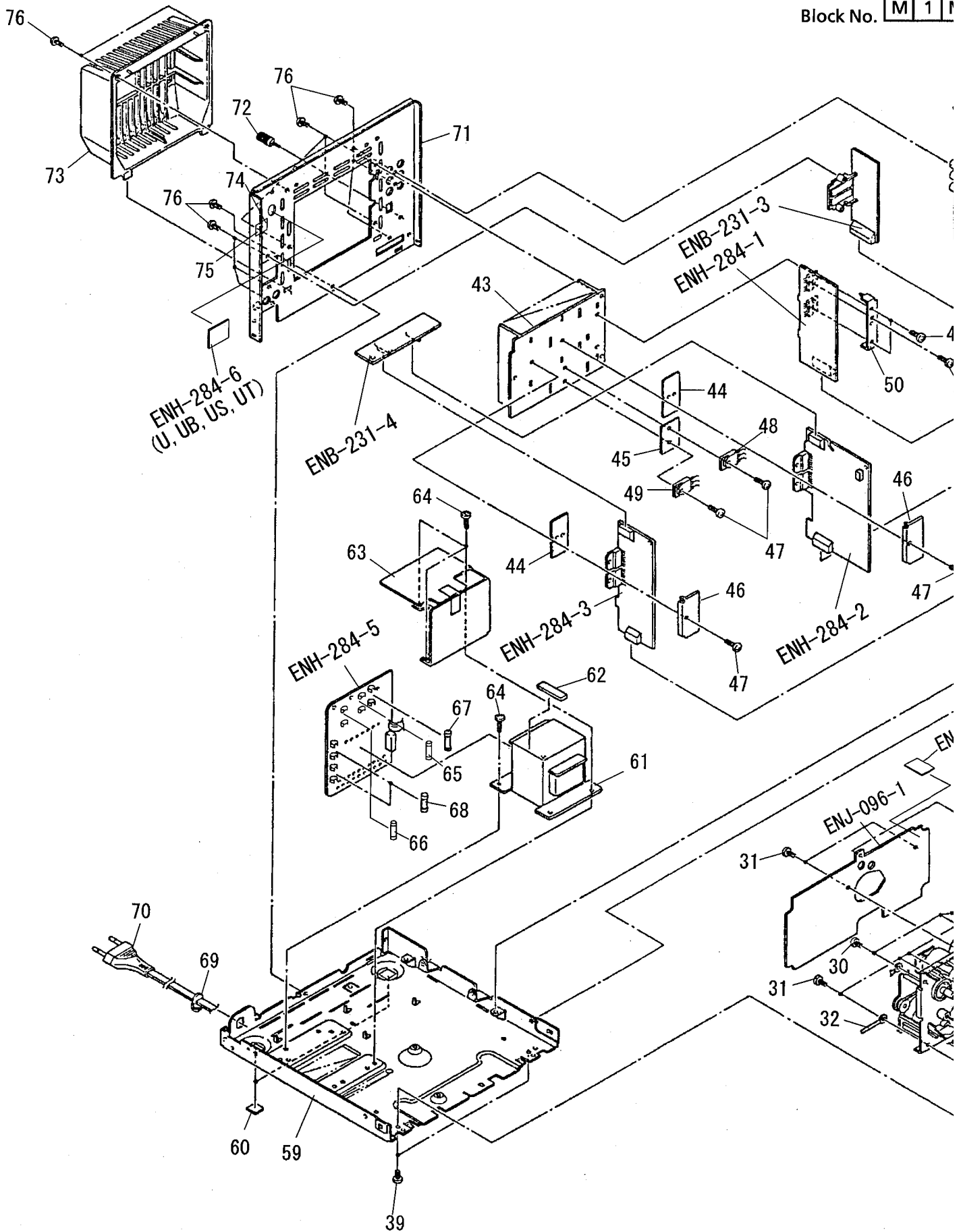
■ Parts List

△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	53	E309787-001SM	VOLUME KNOB	1	BASS CONTROL	
	54	E208836-001SM	CASSETTE LENS	1		
	55	E208838-001SM	CASSETTE LENS	1		
	56	E208843-005	METAL COVER	1		
	57	GBSG3008CC	TAPPING SCREW	7		
	58	SDSG3006M	TAPPING SCREW	2		
	59	E102616-230SM	CHASSIS BASE	1		
	60	E75896-006	FELT SPACER	2		
△	61	ETP1100-68EAJ	POWER TRANSFORMER	1		A, EF, EN, G, GI, VX, BS
△		ETP1100-68FAJ	POWER TRANSFORMER	1		U, UB, UP, US, UT
△		ETP1150-58JAJ	POWER TRANSFORMER	1		C, J
	62	E306805-146	SPACER	1		Except C and J
		E306805-145	SPACER	1		C, J
	63	E309788-002SM	SHIELD COVER	1		
	64	E65389-004	SPECIAL SCREW	4		
△	65	QMF0007-5R0J1	FUSE	1	F001	C, J
△		QMF51E2-2R0	FUSE	1	F001	A, BS, EF, EN, G, GI, VX
△	66	QMF51E2-2R0	FUSE	1	F002	UP
△		QMF51E2-4R0	FUSE	1	F002	U, UB, US, UT
△	67	QMF51E2-2R0	FUSE	1	F003	U, UB, US, UT
△	68	QMF0007-5R0J1	FUSE	2	F501	J, C
△		QMF51E2-3R1	FUSE	2	F501	BS
△		QMF51E2-3R15J1	FUSE	2	F501	Except J, C and BS
△	69	QHS3876-162	CORD STOPPER	1		Except C and J
△		QHS3876-163	CORD STOPPER	1		C, J
△	70	EMP7000-200	POWER CORD	1		UP
△		QMP1D00-200H	POWER CORD	1		C, J
△		QMP25F0-244	POWER CORD	1		A
△		QMP39E0-200	POWER CORD	1		EF, EN, G, GI, US, VX
△		QMP5530-0085BS	POWER CORD	1		BS, UB
△		QMP7520-200	POWER CORD	1		U, UT
	71	E208841-013SM	REAR PANEL	1		UP
		E208841-039SM	REAR PANEL	1		U, UB, US, UT
		E208841-046SM	REAR PANEL	1		BS, EF, EN, G, GI
		E208841-041SM	REAR PANEL	1		J
		E208841-042SM	REAR PANEL	1		C
		E208841-043SM	REAR PANEL	1		A
		E208841-047SM	REAR PANEL	1		VX
	72	E409257-001	GND TERMINAL	1		
	73	E207356-001SM	REAR COVER	1		Except C and J
		E207356-002SM	REAR COVER	1		C, J
	74	E75804-001	CAUTION LABEL	1		C
	75	E75803-001	CAUTION LABEL	1		J
	76	E73273-003	SPECIAL SCREW	12		Except U, UB, US and UT
		E73273-003	SPECIAL SCREW	14		U, UB, US, UT
	-	E309551-004	R. LABEL (M' SIA)	1		U
	-	E407619-062	FTZ LABEL	1		G
	-	E70028-001	APPROVAL LABEL	1		EN
	-	QZL1007-001	BEAB LABEL	1		BS
	-	QZL1031-101	LABEL	1		EF

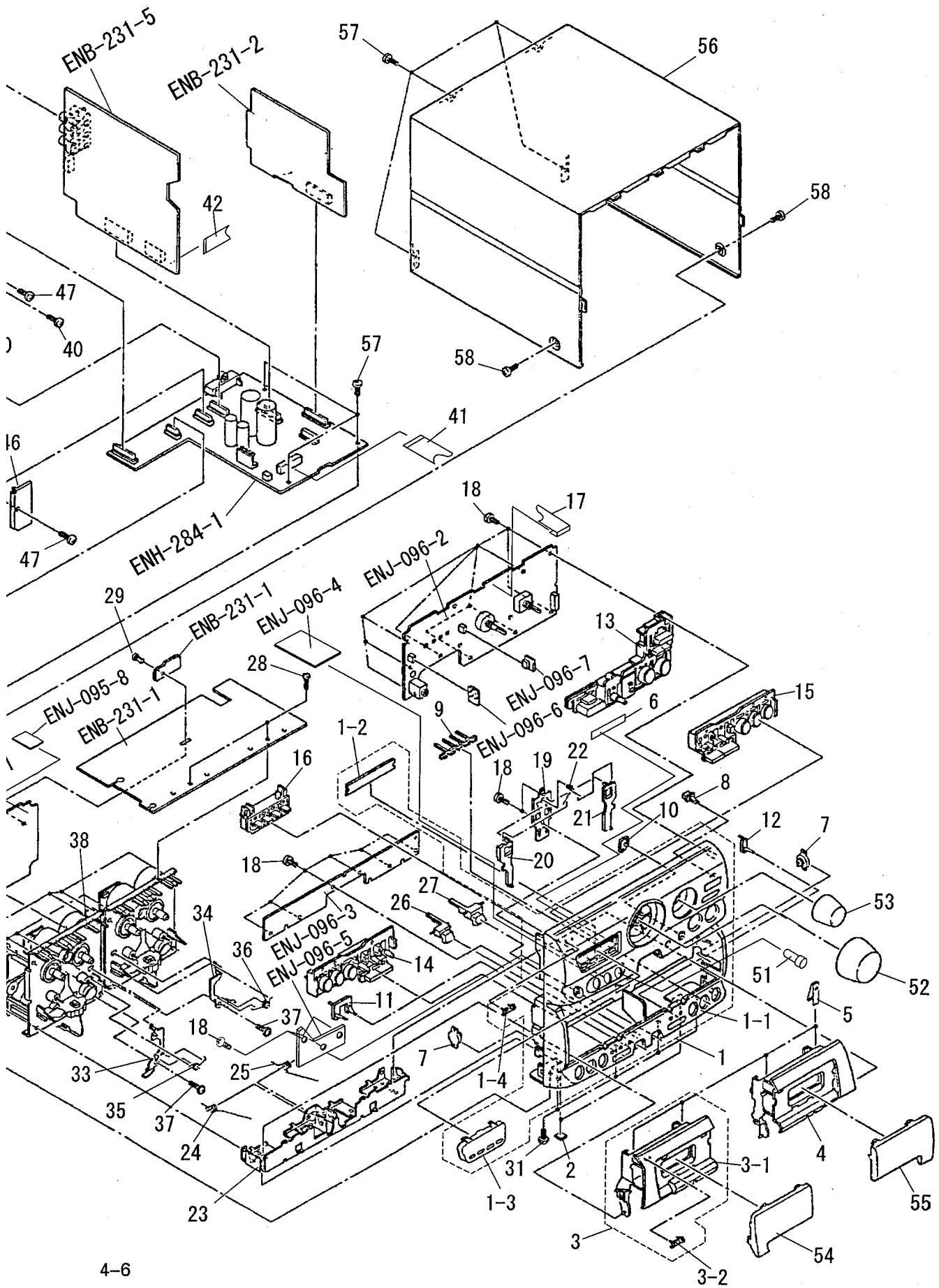
General Exploded View and Parts List

Block No.

M	1	F
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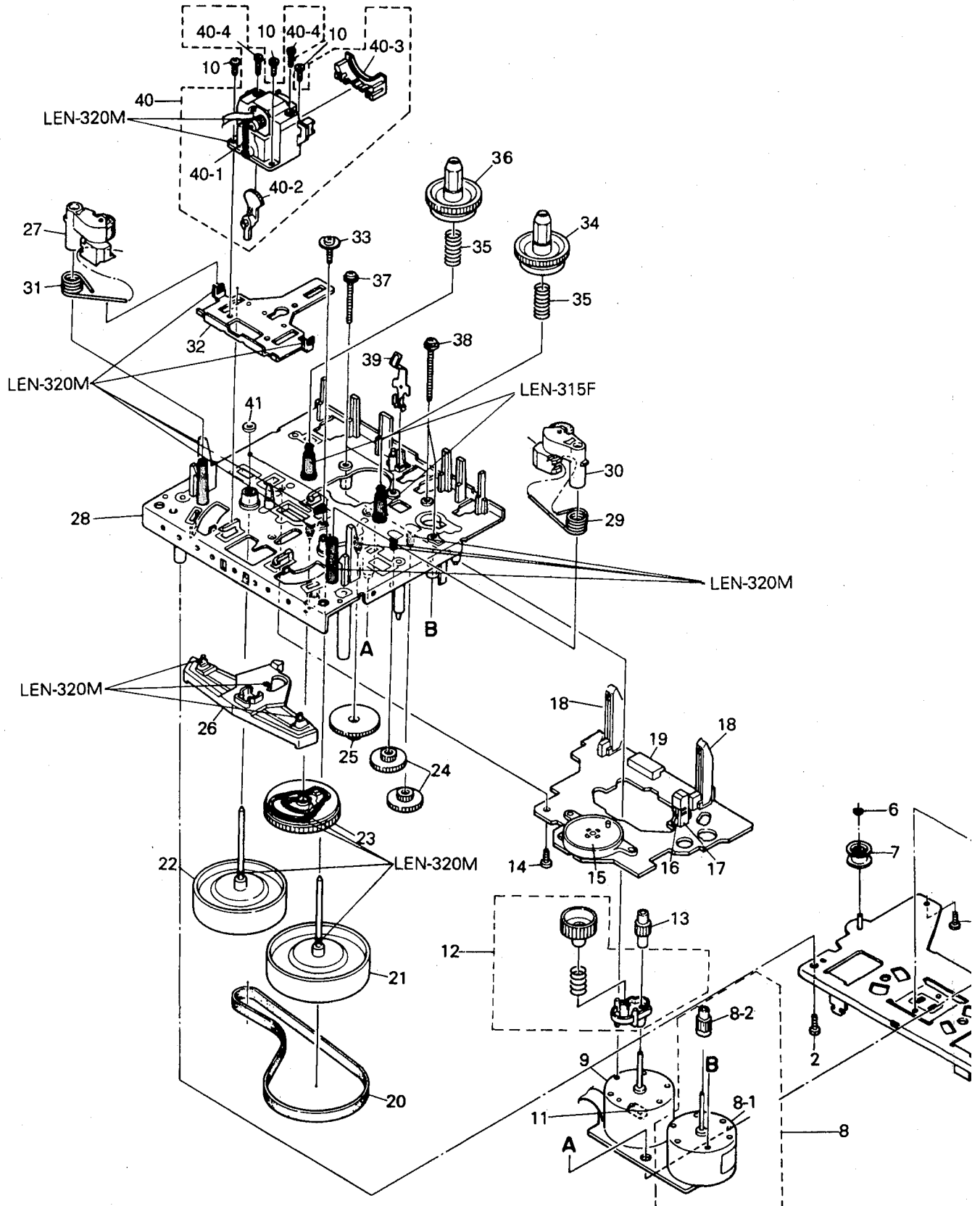
1 M M



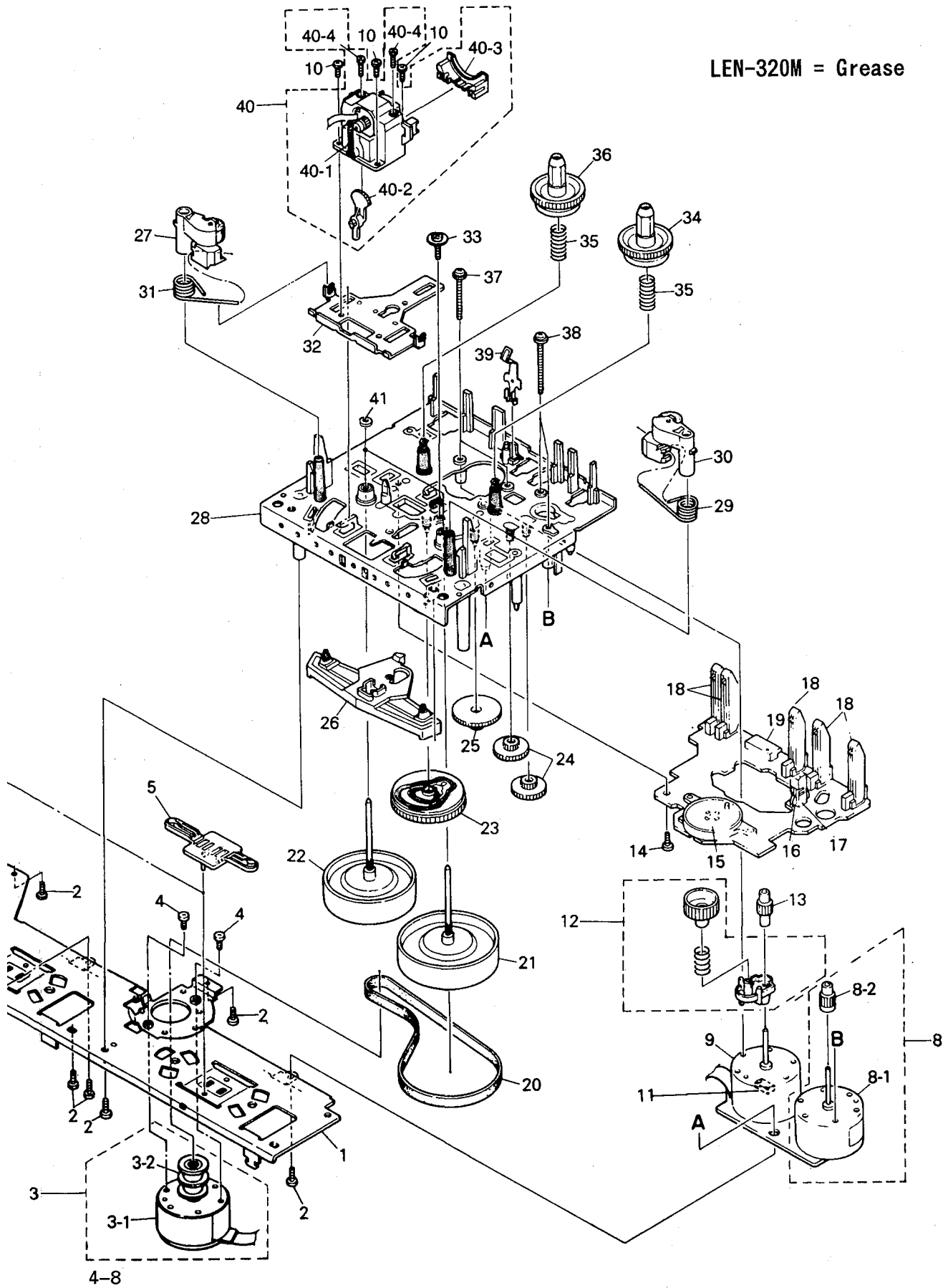
Cassette Mechanism Ass'y and Parts List

■ Grease Point

Block No. **M2MM**



LEN-320M = Grease



■ Parts List (Cassette Mechanism Ass'y)

Block No.

M	2	M	M
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△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	1	VKM3775-00A	GUIDE BRACKET	1		
	2	SBSF2608Z	TAPPING SCREW	7		
	3	MS15U2LWA-SA1	DC MOTOR	1		
	3-1	MS1-5U2LWA	DC MOTOR	1		
	3-2	VKR4632-003	MOTOR PULLEY	1		
	4	SPSP2603Z	WOOD SCREW	2		
	5	VKS5327-005MM	LOCK PLATE	2		
	6	WDL163525-4	WASHER	1		
	7	VKR4631-005MM	IDLER PULLEY	1		
	8	MSN5D257A-SA1	DC MOTOR	2		
	8-1	MSN-5D257A	DC MOTOR	2		
	8-2	VKS5433-001	ACTUATER MOTOR GEAR	2		
	9	MMN-6F4RA38	DC MOTOR	2		
	10	SDSR2004Z	SCREW	6		
	11	VMC0234-R08	CONNECT TERMINAL	2		
	12	VKS5430-00CMM	F. F/REW. ARM	2		
	13	VKS5432-001	REEL MOTOR GEAR	2		
	14	SDST2612Z	SCREW	1		
	15	VKS3616-00A	CAM SWITCH	1		
	16	DN6851-HI	I. C(M)	2		
	17	VKS3630-001MM	I. C. PROTECTOR	1		
	18	MXS00220MVL0	CASSETTE SWITCH	2		
	19	VMC0234-R11	CONNECT TERMINAL	1		
	19	VMC0234-R14	CONNECT TERMINAL	1		
	20	VKB3001-064	DRIVE BELT	1		
		VKB3001-065	DRIVE BELT	1		
	21	VKF3184-00H	FLYWHEEL	1		
		VKF3184-00HMM	FLYWHEEL (R) ASS'	1		
	22	VKF3186-00HMM	FLYWHEEL (L) ASS'	2		
	23	VKS2224-001	CONTROL CAM	2		
	24	VKS5454-001	ACTUATER GEAR	4		
	25	VKS5455-001	ACTUATER GEAR	2		
	26	VKS3627-001	PINCH ROLLER LEVER	2		
	27	VKP4229-00B	PINCH ROLLER	2		
	28	VKS1134-00B	CHASSIS BASE	2		
	29	VKW5045-003	PINCH ROLLER SPRING	1		
	30	VKP4227-00B	PINCH ROLLER	2		
	31	VKS5428-00B	REEL DISK	2		
	32	VKW5043-001	TENSION SPRING	2		
	33	VKS3617-002	REEL DISK	2		
	34	VKZ4705-102	SCREW	4		
	35	VKY4670-001	CASSETTE SPRING	2		
	36	VKZ4705-101	SCREW	4		
	37	VKZ4708-001	SPECIAL SCREW	2		
	38	VKM3632-001	HEAD BASE	2		
	39	VKW5046-003	PINCH ROLLER SPRING	2		
	40	VKS3669-00DMM	H. MOUNT ASS' Y	1		
		VKS3672-00DMM	H. MOUNT ASS' Y	1		
	40-1	VKW5126-001	HEAD SPRING	2		
	40-2	VKS3670-001	TURN OVER GEAR	2		
	40-3	VKS3671-001	HEAD MT. COVER	2		
	40-4	VKZ4629-003	SCREW	4		

■ Electrical Parts List (ENH-284)

△	Item	Parts Number	Description	Area
		I. C. S		
	IC701	TDA7294	I. C (M)	
	IC702	TDA7294	I. C (M)	
	IC781	TDA7294	I. C (M)	
	IC782	TDA7294	I. C (M)	
		DIODES		
△	D001	30DL2FC	SI. DIODE	
△	D002	30DL2FC	SI. DIODE	
△	D003	30DL2FC	SI. DIODE	
△	D004	30DL2FC	SI. DIODE	
△	D011	30DF2SFC	SI. DIODE	
△	D012	30DF2SFC	SI. DIODE	
△	D013	30DF2SFC	SI. DIODE	
△	D014	30DF2SFC	SI. DIODE	
△	D015	30DF2SFC	SI. DIODE	C J
△	D015	30DL2FC	SI. DIODE	A BS EF EN G GI U UB UP US UT VX
△	D016	30DF2SFC	SI. DIODE	C J
△	D016	30DL2FC	SI. DIODE	A BS EF EN G GI U UB UP US UT VX
	D017	11E1	SI. DIODE	
	D018	11E1	SI. DIODE	
	D019	MTZ30JC	ZENER DIODE	
	D020	MTZ5. 6JC	ZENER DIODE	
	D021	MTZ5. 1JB	ZENER DIODE	
	D022	1SS254	DIODE	
	D023	1SS254	DIODE	
	D027	11E1	SI. DIODE	
	D030	MTZ10JC	ZENER DIODE	
	D043	1SS254	DIODE	
	D060	MTZ5. 1JB	ZENER DIODE	
	D061	MTZ11JC	ZENER DIODE	
	D062	MTZ13JC	ZENER DIODE	
	D063	MTZ13JC	ZENER DIODE	
	D064	MTZ13JC	ZENER DIODE	
	D065	MTZ13JC	ZENER DIODE	
	D066	MTZ9. 1JC	ZENER DIODE	
	D067	MTZ13JC	ZENER DIODE	
	D068	MTZ15JC	ZENER DIODE	
	D069	MTZ13JC	ZENER DIODE	A BS EF EN G GI U UB UP US UT VX
	D703	1SS254	DIODE	
	D704	1SS254	DIODE	
	D719	1SS254	DIODE	
	D720	1SS254	DIODE	
	D728	1SS254	DIODE	
	D751	1SS254	DIODE	
	D752	1SS254	DIODE	
	D753	1SS254	DIODE	
	D754	1SS254	DIODE	
	D755	1SS254	DIODE	
	D756	1SS254	DIODE	
	D757	MTZ3. 9JB	ZENER DIODE	
	D758	MTZ3. 9JB	ZENER DIODE	
	D759	1SS254	DIODE	
	D760	1SS254	DIODE	
	D789	1SS254	DIODE	
	D790	1SS254	DIODE	
		TRANSISTORS		
	Q001	2SB1187 (F, G)	SI. TRANSISTOR	
	Q002	2SD2037 (E, F)	SI. TRANSISTOR	
	Q003	DTC114YS	DIGITAL TRANSISTOR	
	Q030	2SD2061 (F, G)	SI. TRANSISTOR	
	Q040	2SC945A	SI. TRANSISTOR	
	Q041	DTC114YS	DIGITAL TRANSISTOR	
	Q060	2SD2061 (F, G)	SI. TRANSISTOR	
	Q061	2SC945A	SI. TRANSISTOR	
	Q062	2SD2061 (F, G)	SI. TRANSISTOR	
	Q063	2SC945A	SI. TRANSISTOR	
	Q064	2SB1187 (F, G)	SI. TRANSISTOR	
	Q065	2SA933S (RS)	SI. TRANSISTOR	

△	Item	Parts Number	Description	Area
	Q066	2SD2061 (F, G)	SI. TRANSISTOR	
	Q067	2SC945A	SI. TRANSISTOR	
	Q068	DTA144ES	DIGITAL TRANSISTOR	
	Q069	DTC144ES	DIGITAL TRANSISTOR	
	Q070	DTC144ES	DIGITAL TRANSISTOR	
	Q071	DTA144ES	DIGITAL TRANSISTOR	
	Q072	2SC945A	SI. TRANSISTOR	
	Q073	2SC945A	SI. TRANSISTOR	
	Q701	2SA1038 (R, S)	SI. TRANSISTOR	
	Q702	2SA1038 (R, S)	SI. TRANSISTOR	
	Q726	2SC2240 (GR, BL)	SI. TRANSISTOR	
	Q726	2SC2389 (S, E)	SI. TRANSISTOR	
	Q727	2SA1038 (R, S)	SI. TRANSISTOR	
	Q728	2SC1740S (R, S)	SI. TRANSISTOR	
	Q733	2SD2144S (VW)	SI. TRANSISTOR	
	Q734	2SD2144S (VW)	SI. TRANSISTOR	
	Q735	2SD2144S (VW)	SI. TRANSISTOR	
	Q736	2SD2144S (VW)	SI. TRANSISTOR	
	Q737	DTA114TS	DIGITAL TRANSISTOR	
	Q751	2SC1685	SI. TRANSISTOR	
	Q752	2SA933S (RS)	SI. TRANSISTOR	
	Q753	2SC1685	SI. TRANSISTOR	
	Q754	2SA933S (RS)	SI. TRANSISTOR	
	Q755	2SA965 (Y)	SI. TRANSISTOR	
	Q756	2SC2235 (O, Y)	SI. TRANSISTOR	
	Q781	2SA1038 (R, S)	SI. TRANSISTOR	
	Q782	2SA1038 (R, S)	SI. TRANSISTOR	
		CAPACITORS		
	C001	QFV82AJ-104	0. 1MF 100V THIN FILM CA	
	C002	QFV82AJ-104	0. 1MF 100V THIN FILM CA	
	C003	QFV82AJ-104	0. 1MF 100V THIN FILM CA	
	C004	EEW5616-688E	6800MF E. CAP.	
	C005	EEW5616-688E	6800MF E. CAP.	
	C011	QFV81HJ-104	0. 1MF 50V THIN FILM CA	
	C012	QFV81HJ-104	0. 1MF 50V THIN FILM CA	
	C013	QFV81HJ-104	0. 1MF 50V THIN FILM CA	
	C014	QETB1VM-338	3300MF 35V AL. E. CAP.	
	C015	QETB1VM-338	3300MF 35V AL. E. CAP.	
	C016	QETB1VM-107	100MF 35V AL. E. CAP.	
	C017	QETB1JM-476	47MF 63V AL. E. CAP.	
	C018	QETB1HM-226E	22MF 50V E. CAP.	
	C019	QCVB1CM-103Y	0. 01MF 16V CER. CAP.	
	C020	QETB1HM-226E	22MF 50V E. CAP.	
	C021	QETB1HM-475E	4. 7MF 50V E. CAP.	
	C022	QETB1HM-475E	4. 7MF 50V E. CAP.	
	C023	QETB1HM-105	1MF 50V AL. E. CAP.	
	C030	QETB1EM-226N	22MF 25V E. CAP.	
	C031	QCVB1CM-103Y	0. 01MF 16V CER. CAP.	
	C032	QETB1EM-226N	22MF 25V E. CAP.	
	C033	QFLB1HJ-223	0. 022MF 50V MYLAR CAP.	C J U US UP UB UT A
	C060	QETB1EM-226N	22MF 25V E. CAP.	
	C061	QCGB1HK-102	1000PF 50V CER. CAP.	
	C062	QETB1EM-226N	22MF 25V E. CAP.	
	C064	QETB1EM-226N	22MF 25V E. CAP.	
	C065	QCVB1CM-103Y	0. 01MF 16V CER. CAP.	
	C066	QETB1EM-226N	22MF 25V E. CAP.	
	C067	QETB1EM-226N	22MF 25V E. CAP.	
	C068	QCVB1CM-103Y	0. 01MF 16V CER. CAP.	
	C069	QETB1EM-226N	22MF 25V E. CAP.	
	C070	QETB1EM-226N	22MF 25V E. CAP.	
	C071	QCVB1CM-103Y	0. 01MF 16V CER. CAP.	
	C072	QETB1EM-226N	22MF 25V E. CAP.	
	C101	QCSB1HJ-5R6	5. 6PF 50V CERAMIC	BS EF EN G GI VX
	C102	QCSB1HJ-5R6	5. 6PF 50V CERAMIC	BS EF EN G GI VX
	C103	QFLB1HJ-102	1000PF 50V MYLAR CAP.	BS EF EN G GI VX
	C703	QCBB1HK-101Y	100PF 50V CER. CAP.	
	C704	QCBB1HK-101Y	100PF 50V CER. CAP.	
	C705	QCBB1HK-181Y	180PF 50V CER. CAP.	
	C706	QCBB1HK-181Y	180PF 50V CER. CAP.	

■ Electrical Parts List (ENH-284)

△	Item	Parts Number	Description	Area
	C707	QETB1EM-476	47MF 25V AL. E. CAP.	
	C708	QETB1EM-476	47MF 25V AL. E. CAP.	
	C709	QCSB1HJ-100Y	10PF 50V CER. CAP.	
	C710	QCSB1HJ-100Y	10PF 50V CER. CAP.	
	C711	QETB1HM-226E	22MF 50V E. CAP.	
	C712	QETB1HM-226E	22MF 50V E. CAP.	
	C713	QFV81HJ-104	0.1MF 50V THIN FILM CA	A BS C EF EN G GI U UB UP US UT VX
	C714	QFV81HJ-104	0.1MF 50V THIN FILM CA	A BS C EF EN G GI U UB UP US UT VX
	C715	QFV81HJ-104	0.1MF 50V THIN FILM CA	A BS C EF EN G GI U UB UP US UT VX
	C716	QFV81HJ-104	0.1MF 50V THIN FILM CA	A BS C EF EN G GI U UB UP US UT VX
	C717	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	J
	C718	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	J
	C721	QETB1HM-225	2.2MF 50V AL. E. CAP.	
	C722	QETB1HM-225	2.2MF 50V AL. E. CAP.	
	C726	QETB1EM-106	10MF 25V AL. E. CAP.	
	C729	QETB1CM-476	47MF 16V AL. E. CAP.	
	C751	QCY31HK-272Z	2700PF 50V CER. CAP.	
	C752	QCY31HK-272Z	2700PF 50V CER. CAP.	
	C753	QCY31HK-472Z	4700PF 50V CER. CAP.	
	C754	QCY31HK-472Z	4700PF 50V CER. CAP.	
	C755	QFV81HJ-105	1MF 50V THIN FILM CA	
	C756	QFV81HJ-105	1MF 50V THIN FILM CA	
	C757	QCXB1CM-152Y	1500PF 16V CER. CAP.	
	C758	QCXB1CM-152Y	1500PF 16V CER. CAP.	
	C770	QFLB1HJ-102	1000PF 50V MYLAR CAP.	BS EF EN G GI VX
	C781	QETB1HM-225	2.2MF 50V AL. E. CAP.	
	C782	QETB1HM-225	2.2MF 50V AL. E. CAP.	
	C783	QCBB1HK-101Y	100PF 50V CER. CAP.	
	C784	QCBB1HK-101Y	100PF 50V CER. CAP.	
	C785	QCBB1HK-181Y	180PF 50V CER. CAP.	
	C786	QCBB1HK-181Y	180PF 50V CER. CAP.	
	C787	QETB1EM-476	47MF 25V AL. E. CAP.	
	C788	QETB1EM-476	47MF 25V AL. E. CAP.	
	C789	QCSB1HJ-100Y	10PF 50V CER. CAP.	
	C790	QCSB1HJ-100Y	10PF 50V CER. CAP.	
	C791	QETB1HM-226E	22MF 50V E. CAP.	
	C792	QETB1HM-226E	22MF 50V E. CAP.	
	C793	QFV81HJ-104	0.1MF 50V THIN FILM CA	A BS C EF EN G GI U UB UP US UT VX
	C794	QFV81HJ-104	0.1MF 50V THIN FILM CA	A BS C EF EN G GI U UB UP US UT VX
	C795	QFV81HJ-104	0.1MF 50V THIN FILM CA	A BS C EF EN G GI U UB UP US UT VX
	C796	QFV81HJ-104	0.1MF 50V THIN FILM CA	A BS C EF EN G GI U UB UP US UT VX
	C797	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	J
	C798	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	J
		RESISTORS		
△	R001	QRD128K-275EM	2.7M 1/2W COMPOSITION	C J
△	R002	PTH61G25ARAR7M	POSITIVE THE	A BS C EF EN G GI U UB UP US UT VX
	R002	QRD14CJ-4R7SX	4.7 1/4W UNF. CARBON R	J
	R003	QRD167J-332	3.3K 1/6W CARBON RES.	
	R004	QRD167J-223	22K 1/6W CARBON RES.	
	R005	QRD161J-104	100K 1/6W CARBON RES.	
	R008	QRD161J-103	10K 1/6W CARBON RES.	
	R009	QRD161J-103	10K 1/6W CARBON RES.	
	R030	QRD14CJ-4R7SX	4.7 1/4W UNF. CARBON R	
	R031	QRD161J-222	2.2K 1/6W CARBON RES.	
	R040	QRD12CJ-471SX	470 1/2W UNF. CARBON R	C J
	R040	QRD12CJ-331SX	330 1/2W UNF. CARBON R	BS EF EN G GI VX

△	Item	Parts Number	Description	Area
	R040	QRD12CJ-271SX	270 1/2W UNF. CARBON R	U US UB UP UT
	R041	QRD12CJ-331SX	330 1/2W UNF. CARBON R	Except J and C
	R042	QRD161J-222	2.2K 1/6W CARBON RES.	
	R043	QRD12CJ-471SX	470 1/2W UNF. CARBON R	C J
	R043	QRD12CJ-331SX	330 1/2W UNF. CARBON R	BS EF EN G GI VX
	R043	QRD12CJ-271SX	270 1/2W UNF. CARBON R	U US UB UP UT
	R044	QRD12CJ-331SX	330 1/2W UNF. CARBON R	A BS EF EN G GI U UB UP US UT VX
	R044	QRD12CJ-471SX	470 1/2W UNF. CARBON R	C J
	R045	QRD161J-222	2.2K 1/6W CARBON RES.	
	R050	QRD161J-331	330 1/6W CARBON RES.	
	R051	QRD161J-331	330 1/6W CARBON RES.	
	R052	QRD161J-331	330 1/6W CARBON RES.	
	R053	QRD161J-331	330 1/6W CARBON RES.	
△	R060	QRD14CJ-100SX	10 1/4W UNF. CARBON R	C J
△	R060	QRD14CJ-2R7SX	2.7 1/4W UNF. CARBON R	Except C and J
△	R061	QRD14CJ-100SX	10 1/4W UNF. CARBON R	C J
△	R061	QRD14CJ-2R7SX	2.7 1/4W UNF. CARBON R	Except C and J
	R062	QRD161J-331	330 1/6W CARBON RES.	
	R063	QRD14CJ-4R7SX	4.7 1/4W UNF. CARBON R	C
	R063	QRG01DJ-100X	10 1W OXIDE METAL	J
	R065	QRD161J-222	2.2K 1/6W CARBON RES.	
	R066	QRD167J-153	15K 1/6W CARBON RES.	
△	R067	QRD14CJ-100SX	10 1/4W UNF. CARBON R	C
△	R067	QRD145J-150S	15 1/4W UNF. CARBON R	J
	R068	QRD167J-153	15K 1/6W CARBON RES.	
	R069	QRD161J-222	2.2K 1/6W CARBON RES.	
△	R070	QRD14CJ-1R0SX	1 1/4W UNF. CARBON R	C
	R070	QRG01DJ-100X	10 1W OXIDE METAL	J
	R071	QRD161J-102	1K 1/6W CARBON RES.	
	R072	QRD161J-561	560 1/6W CARBON RES.	
	R073	QRD161J-561	560 1/6W CARBON RES.	
	R074	QRD161J-122	1.2K 1/6W CARBON RES.	
	R075	QRD161J-122	1.2K 1/6W CARBON RES.	
	R076	QRD161J-331	330 1/6W CARBON RES.	
	R077	QRD161J-331	330 1/6W CARBON RES.	
	R078	QRD161J-331	330 1/6W CARBON RES.	
	R079	QRD161J-102	1K 1/6W CARBON RES.	
	R080	QRD161J-102	1K 1/6W CARBON RES.	
	R081	QRG01DJ-100X	10 1W OXIDE METAL	J
	R082	QRG01DJ-100X	10 1W OXIDE METAL	J
△	R083	QRX022J-6R8AM	6.8 2W METAL FILM R	J
△	R701	QRD14CJ-100SX	10 1/4W UNF. CARBON R	
△	R702	QRD14CJ-100SX	10 1/4W UNF. CARBON R	
	R703	QRD161J-563	56K 1/6W CARBON RES.	
	R704	QRD161J-563	56K 1/6W CARBON RES.	
△	R705	QRD14CJ-182SX	1.8K 1/4W UNF. CARBON R	
△	R706	QRD14CJ-182SX	1.8K 1/4W UNF. CARBON R	
	R707	QRD161J-563	56K 1/6W CARBON RES.	
	R708	QRD161J-563	56K 1/6W CARBON RES.	
△	R709	QRX014J-R22	0.22 1W METAL FILM R	
△	R710	QRX014J-R22	0.22 1W METAL FILM R	
△	R711	QRX014J-R22	0.22 1W METAL FILM R	
△	R712	QRX014J-R22	0.22 1W METAL FILM R	
△	R713	QRD14CJ-100SX	10 1/4W UNF. CARBON R	
△	R714	QRD14CJ-100SX	10 1/4W UNF. CARBON R	
△	R715	QRD14CJ-100SX	10 1/4W UNF. CARBON R	
△	R716	QRD14CJ-100SX	10 1/4W UNF. CARBON R	
	R717	QRD161J-122	1.2K 1/6W CARBON RES.	
	R718	QRD161J-122	1.2K 1/6W CARBON RES.	
	R719	QRD167J-223	22K 1/6W CARBON RES.	
	R720	QRD167J-223	22K 1/6W CARBON RES.	
	R721	QRD161J-103	10K 1/6W CARBON RES.	
	R722	QRD161J-103	10K 1/6W CARBON RES.	
	R723	QRD161J-473	47K 1/6W CARBON RES.	
	R724	QRD161J-473	47K 1/6W CARBON RES.	
	R725	QRD161J-104	100K 1/6W CARBON RES.	
	R726	QRD161J-823	82K 1/6W CARBON RES.	
	R727	QRD161J-104	100K 1/6W CARBON RES.	
	R728	QRD161J-103	10K 1/6W CARBON RES.	
	R729	QRD161J-104	100K 1/6W CARBON RES.	

■ Electrical Parts List (ENH-284)

△	Item	Parts Number	Description	Area	
	R730	QRD161J-103	10K 1/6W CARBON RES.		
	R733	QRD161J-473	47K 1/6W CARBON RES.		
	R734	QRD161J-473	47K 1/6W CARBON RES.		
	R735	QRD161J-473	47K 1/6W CARBON RES.		
	R736	QRD161J-473	47K 1/6W CARBON RES.		
	R739	QRG01DJ-821X	820 1W OXIDE METAL		
	R740	QRG01DJ-821X	820 1W OXIDE METAL		
	R741	QRD161J-473	47K 1/6W CARBON RES.		
	R742	QRD161J-473	47K 1/6W CARBON RES.		
	R743	QRD167J-223	22K 1/6W CARBON RES.		
	R744	QRD167J-223	22K 1/6W CARBON RES.		
	R745	QRD161J-103	10K 1/6W CARBON RES.		
	R746	QRD161J-103	10K 1/6W CARBON RES.		
	R747	QRD161J-104	100K 1/6W CARBON RES.		
	R748	QRD161J-823	82K 1/6W CARBON RES.		
	R749	QRD161J-471	470 1/6W CARBON RES.		
	R750	QRD161J-471	470 1/6W CARBON RES.		
	R751	QRD167J-223	22K 1/6W CARBON RES.		
	R752	QRD167J-223	22K 1/6W CARBON RES.		
	R753	QRD161J-222	2.2K 1/6W CARBON RES.		
	R754	QRD161J-222	2.2K 1/6W CARBON RES.		
	R755	QRD161J-221	220 1/6W CARBON RES.		
	R756	QRD161J-221	220 1/6W CARBON RES.		
	R757	QRD167J-223	22K 1/6W CARBON RES.		
	R758	QRD167J-223	22K 1/6W CARBON RES.		
	R759	QRD167J-682	6.8K 1/6W CARBON RES.		
	R760	QRD167J-682	6.8K 1/6W CARBON RES.		
	R761	QRD161J-222	2.2K 1/6W CARBON RES.		
	R762	QRD161J-222	2.2K 1/6W CARBON RES.		
	R763	QRD167J-223	22K 1/6W CARBON RES.		
	R764	QRD167J-223	22K 1/6W CARBON RES.		
	R765	QRG01DJ-182X	1.8K 1W OXIDE METAL		
	R766	QRG01DJ-182X	1.8K 1W OXIDE METAL		
△	R767	QRD14CJ-681SX	680 1/4W UNF. CARBON R		
△	R768	QRD14CJ-681SX	680 1/4W UNF. CARBON R		
	R769	QRD14CJ-821SX	820 1/4W CARBON RES.		
	R770	QRD14CJ-821SX	820 1/4W CARBON RES.		
	R771	QRD161J-821	820 1/6W CARBON RES.		
	R772	QRD161J-821	820 1/6W CARBON RES.		
△	R773	QRD14CJ-101S	100 1/4W UNF. CARBON R		
△	R774	QRD14CJ-101S	100 1/4W UNF. CARBON R		
	R775	QRD161J-471	470 1/6W CARBON RES.		
	R776	QRD161J-471	470 1/6W CARBON RES.		
	R777	QRD14CJ-4R7SX	4.7 1/4W UNF. CARBON R		
	R778	QRD14CJ-4R7SX	4.7 1/4W UNF. CARBON R		
△	R781	QRD14CJ-100SX	10 1/4W UNF. CARBON R		
△	R782	QRD14CJ-100SX	10 1/4W UNF. CARBON R		
	R783	QRD161J-563	56K 1/6W CARBON RES.		
	R784	QRD161J-563	56K 1/6W CARBON RES.		
△	R785	QRD14CJ-182SX	1.8K 1/4W UNF. CARBON R		
△	R786	QRD14CJ-182SX	1.8K 1/4W UNF. CARBON R		
	R787	QRD161J-563	56K 1/6W CARBON RES.		
	R788	QRD161J-563	56K 1/6W CARBON RES.		
△	R789	QRX014J-R22	0.22 1W METAL FILM R		
△	R790	QRX014J-R22	0.22 1W METAL FILM R		
△	R791	QRX014J-R22	0.22 1W METAL FILM R		
△	R792	QRX014J-R22	0.22 1W METAL FILM R		
△	R793	QRD14CJ-100SX	10 1/4W UNF. CARBON R		
△	R794	QRD14CJ-100SX	10 1/4W UNF. CARBON R		
△	R795	QRD14CJ-100SX	10 1/4W UNF. CARBON R		
△	R796	QRD14CJ-100SX	10 1/4W UNF. CARBON R		
	R797	QRD161J-122	1.2K 1/6W CARBON RES.		
	R798	QRD161J-122	1.2K 1/6W CARBON RES.		
	R1071	QRD14CJ-4R7SX	4.7 1/4W UNF. CARBON R	BS EF EN G GI VX	
	R1072	QRD14CJ-4R7SX	4.7 1/4W UNF. CARBON R	BS EF EN G GI VX	
	R1091	QRD161J-104	100K 1/6W CARBON RES.	U UB US UT	
	R1092	QRD161J-104	100K 1/6W CARBON RES.	U UB US UT	
	R1093	QRD161J-104	100K 1/6W CARBON RES.	U UB US UT	
	OTHERS				
		EMW10610-004	CIR. BOARD		
		EMW10610-104	CIR. BOARD	C J	

△	Item	Parts Number	Description	Area
		E61380-034	FUSE LABEL	UP
		E61380-036	FUSE LABEL	UP
		E67132-T2R0	FUSE LABEL	U UB US UT
		QWE880-08RR	VINYL WIRE	UP
		QWE880-12RR	VINYL WIRE	
		QWE881-32RR	VINYL WIRE	U UB US UT
		QWE882-30RR	VINYL WIRE	U UB US UT
		QWE883-24RR	VINYL WIRE	U UB US UT
		QWE884-28RR	VINYL WIRE	UB US US UT
		QWE886-26RR	VINYL WIRE	U UB US UT
		QWE888-26RR	VINYL WIRE	U UB US UT
		QWE889-26RR	VINYL WIRE	U UB US UT
	K001	ENZ8101-007	INDUCTOR	BS EF EN G GI VX
	K002	ENZ8101-007	INDUCTOR	BS EF EN G GI VX
	K003	ENZ8101-007	INDUCTOR	BS EF EN G GI VX
	K004	ENZ8101-007	INDUCTOR	BS EF EN G GI VX
	K005	ENZ8101-007	INDUCTOR	BS EF EN G GI VX
	K006	ENZ8101-007	INDUCTOR	BS EF EN G GI VX
	K007	ENZ8101-007	INDUCTOR	BS EF EN G GI VX
	L701	EQL0011-R45J1	INDUCTOR	
	L702	EQL0011-R45J1	INDUCTOR	
	L781	EQL0011-R45J1	INDUCTOR	
	L782	EQL0011-R45J1	INDUCTOR	
	S001	QSR8001-E01U	ROTARY SWITCH	U UB US UT
	CN001	EMV7127-019	CONNECT TERMINAL	
	CN002	EMV7163-010	CONNECT TERMINAL	
	CN003	EMV7163-010	CONNECT TERMINAL	
	CN004	EMV7163-006	CONNECT TERMINAL	
	CN005	EMV7163-012	CONNECT TERMINAL	
	CN006	EMV7163-012	CONNECT TERMINAL	
	CN007	EMV7163-012	CONNECT TERMINAL	
	CN008	EMV7163-007	CONNECT TERMINAL	
	CN009	EMV5138-005	CONNECT TERMINAL	
	CN012	EMV5163-010R	CONNECT TERMINAL	
	CN013	EMV5163-010R	CONNECT TERMINAL	
	CN014	EMV5163-006R	CONNECT TERMINAL	
	CN019	EWS285-002J	SOCKET WIRE ASSY	
	CN111	EMV7122-004Z	CONNECT TERMINAL	
	CN703	EMV5163-007R	CONNECT TERMINAL	
	CN704	EMV5163-007R	CONNECT TERMINAL	
	CN913	VMC0163-021	CONNECT TERMINAL	
	CN915	EMW7145-003Z	SOCKET ASSY	
	EP001	EMZ4002-001Z	EARTH PLATE	
	FT011	EMG7331-003Z	FUSE CLIP	A BS C EF EN G GI J UP VX
	FT012	EMG7331-003Z	FUSE CLIP	A BS C EF EN G GI J UP VX
	FT021	EMG7331-003Z	FUSE CLIP	U UB US UT
	FT022	EMG7331-003Z	FUSE CLIP	U UB US UT
	FT031	EMG7331-003Z	FUSE CLIP	U UB US UT
	FT032	EMG7331-003Z	FUSE CLIP	U UB US UT
	FT511	EMG7331-003Z	FUSE CLIP	
	FT512	EMG7331-003Z	FUSE CLIP	
	FT521	EMG7331-003Z	FUSE CLIP	
	FT522	EMG7331-003Z	FUSE CLIP	
	FW101	ENR34D-16LS	FLAT WIRE ASSY	
	TB001	EMZ4001-002Z	TAB	
	TB002	EMZ4001-002Z	TAB	

■ Electrical Parts List (ENB-231)

△	Item	Parts Number	Description	Area	△	Item	Parts Number	Description	Area
		I. C. S							
	IC401	TC9163N	I. C (DIGI-MOS)			C095	QCS21HJ-5R0	5.0PF 50V CER. CAP.	BS EF EN G GI VX
	IC402	BA15218N	I. C (MONO-ANALOG)			C096	QCS21HJ-5R0	5.0PF 50V CER. CAP.	BS EF EN G GI VX
	IC403	BA15218N	I. C (MONO-ANALOG)	U, UB, UP, US, UT		C401	QCB1HK-561Y	560PF 50V CER. CAP.	
	IC404	BA15218N	I. C (MONO-ANALOG)			C403	QETB1EM-476	47MF 25V AL E. CAP.	
	IC441	M62420SP	I. C (M)			C404	QETB1EM-476	47MF 25V AL E. CAP.	
	IC501	M62420SP	I. C (M)			C405	QETB1EM-106	10MF 25V AL E. CAP.	
	IC502	BA15218N	I. C (MONO-ANALOG)			C406	QETB1EM-106	10MF 25V AL E. CAP.	
	IC531	LA2786	I. C (MONO-ANALOG)			C407	QETB1EM-106	10MF 25V AL E. CAP.	
	IC571	LV1015	I. C (M)			C408	QETB1EM-106	10MF 25V AL E. CAP.	
	IC901	HD404719A69FS	I. C (MICRO-COMPUTER)			C409	QETB1HM-224	0.22MF 50V AL E. CAP.	U UB UP US UT
	IC906	BA8221AN	I. C (MONO-ANALOG)			C410	QETB1EM-106	10MF 25V AL E. CAP.	U UB UP US UT
	IC911	HA12136A	I. C (MONO-ANALOG)			C411	QETB1EM-106	10MF 25V AL E. CAP.	
	IC921	LB1641	I. C (DIGI-OTHER)			C412	QETB1EM-106	10MF 25V AL E. CAP.	
	IC922	LB1641	I. C (DIGI-OTHER)			C413	QETB1EM-106	10MF 25V AL E. CAP.	
	IC923	LB1641	I. C (DIGI-OTHER)			C414	QETB1EM-106	10MF 25V AL E. CAP.	
	IC924	LB1641	I. C (DIGI-OTHER)			C419	QETB1EM-106	10MF 50V CER. CAP.	BS EF EN G GI VX
						C420	QETB1EM-106	10MF 25V AL E. CAP.	U UB UP US UT
		DIODES				C421	QCB1HK-101Y	100PF 50V CER. CAP.	U UB UP US UT
	D026	1S254	DIODE			C423	QCB1HK-471Y	470PF 50V CER. CAP.	BS EF EN G GI VX
	D522	1S254	DIODE			C424	QCB1HK-471Y	470PF 50V CER. CAP.	BS EF EN G GI VX
	D081	1S254	DIODE			C427	QCB1HK-471Y	470PF 50V CER. CAP.	BS EF EN G GI VX
	D082	1S254	DIODE			C428	QCB1HK-471Y	470PF 50V CER. CAP.	BS EF EN G GI VX
	D423	1S254	DIODE			C429	QCXB1CM-222Y	2200PF 16V CER. CAP.	
	D424	1S254	DIODE			C440	QCGB1HK-102	1000PF 50V CER. CAP.	
	D501	1S254	DIODE			C441	QFLB1HJ-223	0.022MF 50V MYLAR CAP.	
	D522	1S254	DIODE			C442	QFLB1HJ-223	0.022MF 50V MYLAR CAP.	
	D901	1S254	DIODE			C443	QEK51HM-224G	0.22MF 50V AL E. CAP.	Except U US UB UP and UT
	D902	1SR139-200	SI. DIODE			C443	QFLB1HJ-563	0.056MF 50V MYLAR CAP.	U US UB UP UT
		TRANSISTORS				C444	QEK51HM-224G	0.22MF 50V AL E. CAP.	Except U US UB UP and UT
	Q006	DTC114WS	DIGITAL TRANSISTOR			C444	QFLB1HJ-563	0.056MF 50V MYLAR CAP.	U US UB UP UT
	Q091	DTA114YS	DIGITAL TRANSISTOR			C445	QFLB1HJ-332	3300PF 50V MYLAR CAP.	
	Q459	2SD2144S (VW)	SI. TRANSISTOR			C446	QFLB1HJ-332	3300PF 50V MYLAR CAP.	
	Q460	2SD2144S (VW)	SI. TRANSISTOR			C447	QETB1EM-106	10MF 25V AL E. CAP.	
	Q461	DTA114ES	DIGITAL TRANSISTOR			C448	QETB1EM-106	10MF 25V AL E. CAP.	
	Q511	2SD2144S (VW)	SI. TRANSISTOR			C449	QETB1AM-107	100MF 10V AL E. CAP.	
	Q512	2SD2144S (VW)	SI. TRANSISTOR			C450	QETB1AM-477	470MF 10V E. CAP.	
	Q521	2SD2144S (VW)	SI. TRANSISTOR			C451	QETB1EM-476	47MF 25V AL E. CAP.	
	Q522	2SD2144S (VW)	SI. TRANSISTOR			C455	QEK51HM-224G	0.22MF 50V AL E. CAP.	
	Q523	DTA114ES	DIGITAL TRANSISTOR			C456	QEK51HM-224G	0.22MF 50V AL E. CAP.	
	Q931	DTC144ES	DIGITAL TRANSISTOR			C460	QETB1HM-475E	4.7MF 50V E. CAP.	
	Q932	DTC144ES	DIGITAL TRANSISTOR			C503	QETB1EM-106	10MF 25V AL E. CAP.	
	Q933	DTC144ES	DIGITAL TRANSISTOR			C504	QETB1EM-106	10MF 25V AL E. CAP.	
	Q934	2SA933S (RS)	SI. TRANSISTOR			C505	QEK51HM-224G	0.22MF 50V AL E. CAP.	
	Q935	2SC1740S (R, S)	SI. TRANSISTOR			C506	QEK51HM-224G	0.22MF 50V AL E. CAP.	
	Q936	2SC1740S (R, S)	SI. TRANSISTOR			C507	QEK51HM-224G	0.22MF 50V AL E. CAP.	
	Q937	2SC1740S (R, S)	SI. TRANSISTOR			C508	QEK51HM-224G	0.22MF 50V AL E. CAP.	
	Q938	2SC1740S (R, S)	SI. TRANSISTOR			C509	QCGB1HK-102	1000PF 50V CER. CAP.	
	Q939	2SC2001 (L, K)	SI. TRANSISTOR			C510	QETB1AM-107	100MF 10V AL E. CAP.	
	Q940	2SC2001 (L, K)	SI. TRANSISTOR			C511	QETB1EM-476	47MF 25V AL E. CAP.	
	Q941	DTA114YS	DIGITAL TRANSISTOR			C515	QCS21HJ-100	10PF 50V CER. CAP.	A C J U UB UP US UT
	Q950	DTA114YS	DIGITAL TRANSISTOR			C515	QCS21HJ-221	220PF 50V CER. CAP.	BS EF EN G GI VX
	Q972	DTC114YS	DIGITAL TRANSISTOR			C516	QCS21HJ-100	10PF 50V CER. CAP.	A C J U UB UP US UT
	Q973	DTC114YS	DIGITAL TRANSISTOR			C516	QCS21HJ-221	220PF 50V CER. CAP.	BS EF EN G GI VX
		CAPACITORS				C530	QFLB1HJ-223	0.022MF 50V MYLAR CAP.	
	C016	QCB1HK-101Y	100PF 50V CER. CAP.			C531	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C024	QETB1EM-106	10MF 25V AL E. CAP.			C532	QETB1AM-227	220MF 10V E. CAP.	
	C081	QFLB1HJ-223	0.022MF 50V MYLAR CAP.			C533	QETB1EM-106	10MF 25V AL E. CAP.	
	C082	QFLB1HJ-223	0.022MF 50V MYLAR CAP.			C534	QETB1EM-106	10MF 25V AL E. CAP.	
	C083	QCXB1CM-222Y	2200PF 16V CER. CAP.	BS, EF, EN, G, GI, VX		C535	QETB1EM-106	10MF 25V AL E. CAP.	
	C084	QCXB1CM-222Y	2200PF 16V CER. CAP.	BS, EF, EN, G, GI, VX		C536	QETB1EM-106	10MF 25V AL E. CAP.	
	C085	QFLB1HJ-393	0.039MF 50V MYLAR CAP.	BS EF EN G GI VX		C537	QETB1AM-227	220MF 10V E. CAP.	
	C086	QFLB1HJ-393	0.039MF 50V MYLAR CAP.	BS EF EN G GI VX		C538	QETB1EM-106	10MF 25V AL E. CAP.	
	C087	QCHB1EZ-223	0.022MF 25V CER. CAP.	BS EF EN G GI VX		C539	QETB1EM-106	10MF 25V AL E. CAP.	
	C088	QCHB1EZ-223	0.022MF 25V CER. CAP.	BS EF EN G GI VX		C541	QFV81HJ-104	0.1MF 50V THIN FILM CA	
	C091	QCS21HJ-121	120PF 25V CER. CAP.	BS EF EN G GI VX		C542	QFV81HJ-104	0.1MF 50V THIN FILM CA	
	C092	QFLB1HJ-393	0.039MF 50V MYLAR CAP.	BS EF EN G GI VX		C543	QFV81HJ-104	0.1MF 50V THIN FILM CA	
	C093	QFLB1HJ-392	3900PF 50V MYLAR CAP.	BS EF EN G GI VX		C544	QFV81HJ-104	0.1MF 50V THIN FILM CA	
	C094	QFLB1HJ-392	3900PF 50V MYLAR CAP.	BS EF EN G GI VX					

■ Electrical Parts List (ENB-231)

△	Item	Parts Number	Description	Area	△	Item	Parts Number	Description	Area
	C545	QETB1HM-474	0.47MF 50V E. CAP.			R081	QRD14CJ-4R7SX	4.7 1/4W UNF. CARBON R	
	C546	QETB1HM-474	0.47MF 50V E. CAP.			R082	QRD14CJ-4R7SX	4.7 1/4W UNF. CARBON R	
	C547	QETB1HM-475E	4.7MF 50V E. CAP.			R400	QRD161J-102	1K 1/6W CARBON RES.	
	C548	QETB1HM-475E	4.7MF 50V E. CAP.			R401	QRD161J-183	18K 1/6W CARBON RES.	
	C549	QETB1HM-474	0.47MF 50V E. CAP.			R402	QRD161J-183	18K 1/6W CARBON RES.	
	C550	QETB1HM-474	0.47MF 50V E. CAP.			R403	QRD161J-433	43K 1/6W CARBON RES.	
	C551	QETB1HM-475E	4.7MF 50V E. CAP.			R404	QRD161J-433	43K 1/6W CARBON RES.	
	C552	QETB1HM-475E	4.7MF 50V E. CAP.			R405	QRD161J-183	18K 1/6W CARBON RES.	
	C553	QFV81HJ-154	0.15MF 50V THIN FILM CA			R406	QRD161J-183	18K 1/6W CARBON RES.	
	C554	QFV81HJ-154	0.15MF 50V THIN FILM CA			R407	QRD161J-433	43K 1/6W CARBON RES.	
	C555	QETB1HM-335	3.3MF 50V AL. E. CAP.			R408	QRD161J-433	43K 1/6W CARBON RES.	
	C556	QETB1HM-335	3.3MF 50V AL. E. CAP.			R409	QRD161J-221	220 1/6W CARBON RES.	
	C557	QFV81HJ-154	0.15MF 50V THIN FILM CA			R410	QRD161J-221	220 1/6W CARBON RES.	
	C558	QFV81HJ-154	0.15MF 50V THIN FILM CA			R413	QRD161J-104	100K 1/6W CARBON RES.	
	C559	QFV71HJ-474ZM	0.47MF 50V THIN FILM CA			R414	QRD161J-104	100K 1/6W CARBON RES.	
	C560	QETB1AM-227	220MF 10V E. CAP.			R415	QRD161J-104	100K 1/6W CARBON RES.	
	C561	QCB81HK-681Y	680PF 50V CER. CAP.			R416	QRD161J-104	100K 1/6W CARBON RES.	
	C562	QETB1EM-476	47MF 25V AL. E. CAP.			R417	QRD161J-303Y	30K 1/6W CARBON RES.	U UB UP US UT
	C565	QETB1EM-106	10MF 25V AL. E. CAP.			R418	QRD161J-303Y	30K 1/6W CARBON RES.	U UB UP US UT
	C566	QETB1EM-106	10MF 25V AL. E. CAP.			R419	QRD167J-153	15K 1/6W CARBON RES.	U UB UP US UT
	C567	QETB1EM-106	10MF 25V AL. E. CAP.			R420	QRD167J-153	15K 1/6W CARBON RES.	U UB UP US UT
	C568	QETB1EM-106	10MF 25V AL. E. CAP.			R421	QRD167J-153	15K 1/6W CARBON RES.	U UB UP US UT
	C571	QETB1HM-225	2.2MF 50V AL. E. CAP.			R422	QRD161J-104	100K 1/6W CARBON RES.	U UB UP US UT
	C572	QETB1AM-227	220MF 10V E. CAP.			R429	QRD161J-472	4.7K 1/6W CARBON RES.	
	C573	QEK51HM-474G	0.47MF 50V AL. E. CAP.			R430	QRD161J-472	4.7K 1/6W CARBON RES.	
	C574	QEK51HM-474G	0.47MF 50V AL. E. CAP.			R431	QRD161J-333	33K 1/6W CARBON RES.	U UB UP US UT
	C575	QFLB1HJ-823	0.082MF 50V MYLAR CAP.			R432	QRD161J-333	33K 1/6W CARBON RES.	U UB UP US UT
	C576	QCY31HK-332Z	3300PF 50V CER. CAP.			R433	QRD161J-912	9.1K 1/6W CARBON RES.	C J
	C577	QFLB1HJ-823	0.082MF 50V MYLAR CAP.			R433	QRD167J-682	6.8K 1/6W CARBON RES.	A BS EF EN G GI U UB UP US UT VX
	C578	QETB1AM-227	220MF 10V E. CAP.			R434	QRD161J-912	9.1K 1/6W CARBON RES.	C J
	C579	QCS21HJ-300	30PF 50V CER. CAP.			R434	QRD167J-682	6.8K 1/6W CARBON RES.	A BS EF EN G GI U UB UP US UT VX
	C580	QCS21HJ-300	30PF 50V CER. CAP.						
	C581	QCB81HK-561Y	560PF 50V CER. CAP.			R437	QRD161J-104	100K 1/6W CARBON RES.	
	C582	QCB81HK-561Y	560PF 50V CER. CAP.			R438	QRD161J-104	100K 1/6W CARBON RES.	
	C584	QCF21HP-473A	0.047MF 50V CER. CAP.			△	R440	QRD14CJ-220S	22 1/4W UNF. CARBON R
	C585	QCF21HP-473A	0.047MF 50V CER. CAP.			R441	QRD161J-182	1.8K 1/6W CARBON RES.	
	C901	QETB1AM-107	100MF 10V AL. E. CAP.			R442	QRD161J-182	1.8K 1/6W CARBON RES.	
	C902	QCF21HP-103A	0.01MF 50V CER. CAP.			R443	QRD161J-104	100K 1/6W CARBON RES.	
	C903	QEAD0HZ-479A	47000MF E. CAP.			R444	QRD161J-104	100K 1/6W CARBON RES.	
	C907	QETB1CM-476	47MF 16V AL. E. CAP.			R445	QRD161J-102	1K 1/6W CARBON RES.	
	C909	QETB1CM-476	47MF 16V AL. E. CAP.			R446	QRD161J-102	1K 1/6W CARBON RES.	
	C910	QETB1HM-475E	4.7MF 50V E. CAP.			R447	QRD161J-104	100K 1/6W CARBON RES.	
	C911	QETB1HM-105	1MF 50V AL. E. CAP.			R449	QRD161J-101	100 1/6W CARBON RES.	
	C912	QETB1HM-105	1MF 50V AL. E. CAP.			R450	QRD161J-101	100 1/6W CARBON RES.	
	C915	QETB1HM-105	1MF 50V AL. E. CAP.			R451	QRD161J-182	1.8K 1/6W CARBON RES.	U UB UP US UT
	C916	QETB1HM-105	1MF 50V AL. E. CAP.			R452	QRD161J-182	1.8K 1/6W CARBON RES.	U UB UP US UT
	C919	QFV81HJ-224	0.22MF 50V THIN FILM CA			R453	QRD161J-472	4.7K 1/6W CARBON RES.	U UB UP US UT
	C920	QFV81HJ-224	0.22MF 50V THIN FILM CA			R454	QRD161J-104	100K 1/6W CARBON RES.	U UB UP US UT
	C921	QCVB1CM-103Y	0.01MF 16V CER. CAP.			R459	QRD161J-221	220 1/6W CARBON RES.	
	C922	QCVB1CM-103Y	0.01MF 16V CER. CAP.			R460	QRD161J-221	220 1/6W CARBON RES.	
	C923	QCVB1CM-103Y	0.01MF 16V CER. CAP.			R461	QRD161J-103	10K 1/6W CARBON RES.	
	C924	QCVB1CM-103Y	0.01MF 16V CER. CAP.			R462	QRD161J-103	10K 1/6W CARBON RES.	
	C925	QCHB1EZ-223	0.022MF 25V CER. CAP.			R463	QRD161J-472	4.7K 1/6W CARBON RES.	
	C926	QCHB1EZ-223	0.022MF 25V CER. CAP.			R464	QRD161J-472	4.7K 1/6W CARBON RES.	
	C927	QCHB1EZ-223	0.022MF 25V CER. CAP.			R465	QRD167J-682	6.8K 1/6W CARBON RES.	
	C928	QCHB1EZ-223	0.022MF 25V CER. CAP.			R466	QRD167J-682	6.8K 1/6W CARBON RES.	
	C931	QCB81HK-561Y	560PF 50V CER. CAP.			R467	QRD167J-682	6.8K 1/6W CARBON RES.	
	C932	QCB81HK-561Y	560PF 50V CER. CAP.			R468	QRD167J-682	6.8K 1/6W CARBON RES.	
	C933	QCHB1EZ-223	0.022MF 25V CER. CAP.			R469	QRD161J-472	4.7K 1/6W CARBON RES.	
	C934	QCHB1EZ-223	0.022MF 25V CER. CAP.			R470	QRD161J-472	4.7K 1/6W CARBON RES.	
	C935	QCF21HP-473A	0.047MF 50V CER. CAP.			R475	QRD161J-104	100K 1/6W CARBON RES.	
	C936	QCF21HP-473A	0.047MF 50V CER. CAP.			R476	QRD161J-104	100K 1/6W CARBON RES.	
	C937	QETB1HM-105	1MF 50V AL. E. CAP.			R477	QRD161J-102	1K 1/6W CARBON RES.	
	C941	QETB1CM-107	100MF 16V AL. E. CAP.			R503	QRD161J-104	100K 1/6W CARBON RES.	
	C942	QETB1CM-107	100MF 16V AL. E. CAP.			R504	QRD161J-104	100K 1/6W CARBON RES.	
		RESISTORS				R505	QRD167J-272	2.7K 1/6W CARBON RES.	
	R014	QRD161J-103	10K 1/6W CARBON RES.			R506	QRD167J-272	2.7K 1/6W CARBON RES.	
	R015	QRD161J-103	10K 1/6W CARBON RES.			R507	QRD167J-153	15K 1/6W CARBON RES.	

■ Electrical Parts List (ENB-231)

△	Item	Parts Number	Description	Area	△	Item	Parts Number	Description	Area
	R508	QRD167J-153	15K 1/6W CARBON RES.			R961	QRD161J-472	4.7K 1/6W CARBON RES.	
	R509	QRD161J-104	100K 1/6W CARBON RES.			R962	QRD161J-472	4.7K 1/6W CARBON RES.	
	R510	QRD161J-104	100K 1/6W CARBON RES.			R963	QRD167J-562	5.6K 1/6W CARBON RES.	
	R511	QRD161J-104	100K 1/6W CARBON RES.			R964	QRD167J-562	5.6K 1/6W CARBON RES.	
	R513	QRD161J-104	100K 1/6W CARBON RES.			R965	QRD161J-103	10K 1/6W CARBON RES.	
	R514	QRD161J-104	100K 1/6W CARBON RES.			R966	QRD161J-103	10K 1/6W CARBON RES.	
	R515	QRD161J-221	220 1/6W CARBON RES.			R967	QRD161J-221	220 1/6W CARBON RES.	
	R516	QRD161J-221	220 1/6W CARBON RES.			R968	QRD161J-102	1K 1/6W CARBON RES.	
	R517	QRD161J-103	10K 1/6W CARBON RES.			R969	QRD161J-102	1K 1/6W CARBON RES.	
	R518	QRD161J-103	10K 1/6W CARBON RES.			R972	QRD161J-102	1K 1/6W CARBON RES.	
	R520	QRD161J-221	220 1/6W CARBON RES.	BS EF EN G GI VX		R973	QRD161J-103	10K 1/6W CARBON RES.	
	R521	QRD161J-103	10K 1/6W CARBON RES.			R991	QRD161J-221	220 1/6W CARBON RES.	
	R522	QRD161J-103	10K 1/6W CARBON RES.			R992	QRD161J-221	220 1/6W CARBON RES.	
	R523	QRD161J-222	2.2K 1/6W CARBON RES.			R993	QRD161J-221	220 1/6W CARBON RES.	
	R524	QRD161J-222	2.2K 1/6W CARBON RES.			R994	QRD161J-103	10K 1/6W CARBON RES.	
	R525	QRD161J-101	100 1/6W CARBON RES.			R995	QRD161J-103	10K 1/6W CARBON RES.	
	R526	QRD161J-101	100 1/6W CARBON RES.			R996	QRD161J-222	2.2K 1/6W CARBON RES.	
	R531	QRD161J-102	1K 1/6W CARBON RES.			R997	QRD161J-103	10K 1/6W CARBON RES.	
	R532	QRD161J-102	1K 1/6W CARBON RES.			RA901	QRB089J-103	10K 1/10W NETWORK RES.	
	R535	QRD161J-104	100K 1/6W CARBON RES.			RA903	QRB069J-222	2.2K 1/10W NETWORK RES.	
	R536	QRD161J-104	100K 1/6W CARBON RES.			RA905	QRB069J-222	2.2K 1/10W NETWORK RES.	
	R570	QRD161J-393	39K 1/6W CARBON RES.			RA906	QRB049J-103	10K 1/10W RES.	
	R571	QRD161J-102	1K 1/6W CARBON RES.			RA907	QRB049J-103	10K 1/10W RES.	
	R572	QRD161J-102	1K 1/6W CARBON RES.			RA911	QRB089J-103	10K 1/10W NETWORK RES.	
	R573	QRD161J-203	20K 1/6W CARBON RES.			VR935	QVPA603-103A	10K TRIMMER RES.	
	R575	QRD161J-105	1M 1/6W CARBON RES.				OTHERS		
	R901	QRD161J-105	1M 1/6W CARBON RES.				EMW10616-002	PRINTED BOARD	
	R903	QRD161J-220	22 1/6W CARBON RES.				QWE352-074K4K	WIRE	
	R904	QRD161J-103	10K 1/6W CARBON RES.				QWE373-064K4K	WIRE	
	R906	QRD167J-562	5.6K 1/6W CARBON RES.				VYH7653-001	SPRING	
	R907	QRD167J-332	3.3K 1/6W CARBON RES.			J081	EMB10TV-401AJ3	SPEAKER TERMINAL	
	R911	QRD161J-103	10K 1/6W CARBON RES.			J083	EMN00TV-303AJ4	3P PIN JACK	A C J U B U P U S U T
	R912	QRD161J-103	10K 1/6W CARBON RES.			J083	EMN00TV-304AJ4	3P PIN JACK	BS EF EN G GI VX
	R913	QRD161J-392	3.9K 1/6W CARBON RES.			J400	EMN00TV-612AJ2	PIN JACK	
	R914	QRD161J-242	2.4K 1/6W CARBON RES.			S520	QSS7A12-E01	SLIDE SWITCH	BS EF EN G GI VX
	R915	QRD167J-153	15K 1/6W CARBON RES.			S999	ESP0001-023M	TACT SWITCH	
	R918	QRD161J-105	1M 1/6W CARBON RES.			X571	ECXP8R0-001Z	CRYSTAL	
	R925	QRD161J-432	4.3K 1/6W CARBON RES.			CN015	EMV5163-012R	CONNECT TERMINAL	
	R926	QRD161J-432	4.3K 1/6W CARBON RES.			CN016	EMV5163-012R	CONNECT TERMINAL	
	R927	QRD161J-103	10K 1/6W CARBON RES.			CN017	EMV5163-012R	CONNECT TERMINAL	
	R928	QRD161J-103	10K 1/6W CARBON RES.			CN018	EMV5163-007R	CONNECT TERMINAL	
	R929	QRD161J-913	91K 1/6W CARBON RES.			CN311	VMC0314-S16	CONNECT TERMINAL	
	R930	QRD161J-913	91K 1/6W CARBON RES.			CN412	EMV5109-007A	MALE CONNECTOR	U B U P U S U T
	R931	QRD167J-822	8.2K 1/6W CARBON RES.			CN413	EMV5109-009A	PIN PLUG	
	R932	QRD167J-822	8.2K 1/6W CARBON RES.			CN421	EMV7145-004Z	SOCKET ASSY	
	R933	QRD161J-163	16K 1/6W CARBON RES.			CN431	EMV7145-003Z	SOCKET ASSY	
	R934	QRD161J-163	16K 1/6W CARBON RES.			CN713	EMV7163-007	CONNECT TERMINAL	
	R935	QRD161J-133Y	13K 1/6W CARBON RES.			CN714	EMV7163-007	CONNECT TERMINAL	
	R936	QRD161J-683	68K 1/6W CARBON RES.			CN901	VMC0163-015	CONNECT TERMINAL	
	R937	QRD161J-224	220K 1/6W CARBON RES.			CN903	VMC0163-021	CONNECT TERMINAL	
	R938	QRD161J-103	10K 1/6W CARBON RES.			CN904	VMC0163-R15	CONNECT TERMINAL	
	R941	QRD161J-303Y	30K 1/6W CARBON RES.	C J		CN911	VMC0163-015	CONNECT TERMINAL	
	R941	QRD167J-223	22K 1/6W CARBON RES.	A BS EF EN G GI U UB UP US UT VX		CN912	EMV5109-010A	CONNECT TERMINAL	
	R942	QRD161J-303Y	30K 1/6W CARBON RES.	C J		CN921	VMC0234-P11	CONNECT TERMINAL	
	R942	QRD167J-223	22K 1/6W CARBON RES.	A BS EF EN G GI U UB UP US UT VX		CN922	VMC0234-P14	CONNECT TERMINAL	
	R943	QRD161J-122	1.2K 1/6W CARBON RES.			CN923	VMC0234-P08	CONNECT TERMINAL	
	R944	QRD161J-122	1.2K 1/6W CARBON RES.			CN924	VMC0234-P08	CONNECT TERMINAL	
	R945	QRD161J-754	750K 1/6W CARBON RES.			FW411	EWR37D-08LS	FLAT WIRE ASSY	
	R946	QRD161J-754	750K 1/6W CARBON RES.			RY001	ESK7D24-213R	RELAY	
	R947	QRD161J-105	1M 1/6W CARBON RES.			RY002	ESK7D24-213R	RELAY	
	R948	QRD161J-103	10K 1/6W CARBON RES.			XT901	ECX0004-194KM	CERAMIC RESONATOR	
	R949	QRD161J-105	1M 1/6W CARBON RES.						
	R950	QRD161J-913	91K 1/6W CARBON RES.						
	R951	QRD161J-104	100K 1/6W CARBON RES.						
	R952	QRD161J-183	18K 1/6W CARBON RES.						
	R953	QRD161J-183	18K 1/6W CARBON RES.						
	R954	QRD161J-183	18K 1/6W CARBON RES.						

■ Electrical Parts List (ENJ-096)

△	Item	Parts Number	Description	Area	△	Item	Parts Number	Description	Area
		I. C. S							
	IC301	BA15218N	I. C (MONO-ANALOG)			C304	QETB1HM-225	2.2MF 50V AL E. CAP.	
	IC302	BA15218N	I. C (MONO-ANALOG)			C305	QCBB1HK-101Y	100PF 50V CER. CAP.	
	IC303	BA15218N	I. C (MONO-ANALOG)			C306	QCBB1HK-101Y	100PF 50V CER. CAP.	
	IC304	BA3126N	I. C (MONO-ANALOG)			C307	QCBB1HK-181Y	180PF 50V CER. CAP.	
	IC902	NJL53H380	INFRARED DETECT UNIT			C308	QCBB1HK-181Y	180PF 50V CER. CAP.	
	IC903	BA15218N	I. C (MONO-ANALOG)			C309	QETB1EM-106	10MF 25V AL E. CAP.	
	IC904	BA15218N	I. C (MONO-ANALOG)			C310	QETB1EM-106	10MF 25V AL E. CAP.	
	IC905	NJU3715L	I. C (MONO-ANALOG)			C311	QCSB1HJ-470	47PF 50V CER. CAP.	
	IC912	BA15218N	I. C (MONO-ANALOG)	U UB UP US UT		C312	QCSB1HJ-470	47PF 50V CER. CAP.	
	IC914	BA7725S	I. C (MONO-ANALOG)	U UB US UT		C313	QETB1CM-476	47MF 16V AL E. CAP.	
	IC915	BU9251S	I. C (M)	U UB UP US UT		C314	QETB1CM-476	47MF 16V AL E. CAP.	
		DIODES				C315	QETB1HM-105	1MF 50V AL E. CAP.	
	D290	1SS254	DIODE			C316	QEK51HM-105G	1MF 50V AL E. CAP.	
	D303	1SS254	DIODE	BS EF EN G GI VX		C317	QETB1EM-106	10MF 25V AL E. CAP.	
	D970	SLR-342DCA47	L. E. D.			C318	QETB1CM-107	100MF 16V AL E. CAP.	
	D971	SLR-342DCA47	L. E. D.			C319	QCF21HP-103A	0.01MF 50V CER. CAP.	BS EF EN G GI VX
	D972	SLR-342VC3F	L. E. D.			C320	QFLB1HJ-682	6800PF 50V MYLAR CAP.	
	D973	SLR-342VC3F	L. E. D.			C321	QFLB1HJ-332	3300PF 50V MYLAR CAP.	
	D974	SLR-342DCA47	L. E. D.			C322	QFLB1HJ-332	3300PF 50V MYLAR CAP.	
	D975	SLR-342DCA47	L. E. D.			C323	QFLB1HJ-183	0.018MF 50V MYLAR CAP.	
	D976	SLR-342VC3F	L. E. D.			C324	QFP31HG-472	4700PF 50V POLYPROP. FI	
	D1005	MTZ2.4JB	ZENER DIODE			C325	QCBB1HK-101Y	100PF 50V CER. CAP.	
	D1019	SLR-342DCA47	L. E. D.			C326	QCBB1HK-101Y	100PF 50V CER. CAP.	
	D1020	SLR-342DCA47	L. E. D.			C327	QCBB1HK-561Y	560PF 50V CER. CAP.	BS EF EN G GI VX
	D1021	SLR-342DCA47	L. E. D.			C328	QCHB1EZ-223	0.022MF 25V CER. CAP.	BS EF EN G GI VX
	D1022	SLR-342DCA47	L. E. D.			C329	QFLB1HJ-333	0.033MF 50V MYLAR CAP.	
	D1023	SLA-380LT	L. E. D.			C330	QFLB1HJ-333	0.033MF 50V MYLAR CAP.	
	D1024	SLA-380LT	L. E. D.			C347	QFLB1HJ-682	6800PF 50V MYLAR CAP.	
	D1025	SLR-342DCA47	L. E. D.			C348	QFLB1HJ-682	6800PF 50V MYLAR CAP.	
	D1026	SLR-342DCA47	L. E. D.			C349	QFLB1HJ-103	0.01MF 50V MYLAR CAP.	
	D1027	SLR-342DCA47	L. E. D.			C350	QFLB1HJ-103	0.01MF 50V MYLAR CAP.	
	D1028	SLR-342VC3F	L. E. D.			C353	QCY21HK-392	3900PF 50V CER. CAP.	
	D1029	SLR-342VC3F	L. E. D.			C354	QCY21HK-392	3900PF 50V CER. CAP.	
	D1030	SLR-342VC3F	L. E. D.			C355	QFLB1HJ-822	8200PF 50V MYLAR CAP.	
	D1044	SLR-342DCA47	L. E. D.			C356	QFLB1HJ-822	8200PF 50V MYLAR CAP.	
	D1045	SLR-342DCA47	L. E. D.			C361	QCF21HP-473A	0.047MF 50V CER. CAP.	
	D1046	SLR-342DCA47	L. E. D.			C362	QCF21HP-473A	0.047MF 50V CER. CAP.	
	D1047	SLR-342DCA47	L. E. D.			C365	QEK51HM-225G	2.2MF 50V AL E. CAP.	
	D1048	SLR-342DCA47	L. E. D.			C366	QEK51HM-225G	2.2MF 50V AL E. CAP.	
	D1101	MTZ5.1JB	ZENER DIODE	U UB UP US UT		C367	QFLB1HJ-682	6800PF 50V MYLAR CAP.	
		TRANSISTORS				C368	QFLB1HJ-682	6800PF 50V MYLAR CAP.	
	Q301	2SC2001 (L, K)	SI. TRANSISTOR			C369	QETB1AM-107	100MF 10V AL E. CAP.	
	Q302	2SC2001 (L, K)	SI. TRANSISTOR			C370	QETB1AM-107	100MF 10V AL E. CAP.	
	Q303	2SC1740S (R, S)	SI. TRANSISTOR			C371	QEK51HM-225G	2.2MF 50V AL E. CAP.	
	Q304	2SC1740S (R, S)	SI. TRANSISTOR			C372	QEK51HM-225G	2.2MF 50V AL E. CAP.	
	Q305	2SC1740S (R, S)	SI. TRANSISTOR			C373	QETB1CM-476	47MF 16V AL E. CAP.	
	Q306	2SC1740S (R, S)	SI. TRANSISTOR			C374	QEK51CM-476	47MF 16V AL E. CAP.	
	Q309	DTC144TS	DIGITAL TRANSISTOR			C375	QCBB1HK-101Y	100PF 50V CER. CAP.	
	Q310	DTC144TS	DIGITAL TRANSISTOR			C376	QCBB1HK-101Y	100PF 50V CER. CAP.	
	Q326	2SC1740S (R, S)	SI. TRANSISTOR			C377	QCXB1CM-122	1200PF 16V POLYPROP. FI	
	Q327	2SC1740S (R, S)	SI. TRANSISTOR			C378	QCXB1CM-122	1200PF 16V POLYPROP. FI	
	Q328	2SC1740S (R, S)	SI. TRANSISTOR			C379	QCBB1HK-331Y	330PF 50V CER. CAP.	
	Q329	2SC1740S (R, S)	SI. TRANSISTOR			C380	QCBB1HK-331Y	330PF 50V CER. CAP.	
	Q330	2SC1740S (R, S)	SI. TRANSISTOR	BS EF EN G GI VX		C381	QETB1CM-476	47MF 16V AL E. CAP.	
	Q331	DTA144ES	DIGITAL TRANSISTOR	BS EF EN G GI VX		C385	QFLB1HJ-682	6800PF 50V MYLAR CAP.	
	Q341	2SD2144S (VW)	SI. TRANSISTOR			C386	QFLB1HJ-682	6800PF 50V MYLAR CAP.	
	Q342	2SD2144S (VW)	SI. TRANSISTOR			C387	QETB1AM-107	100MF 10V AL E. CAP.	
	Q1024	DTC114WS	DIGITAL TRANSISTOR			C388	QETB1AM-107	100MF 10V AL E. CAP.	
	Q1027	DTC114WS	DIGITAL TRANSISTOR			C389	QETB1HM-225	2.2MF 50V AL E. CAP.	
	Q1029	DTA114WS	DIGITAL TRANSISTOR			C390	QETB1HM-225	2.2MF 50V AL E. CAP.	
	Q1051	DTA144ES	DIGITAL TRANSISTOR			C391	QETB1CM-476	47MF 16V AL E. CAP.	
	Q1053	2SD2144S (VW)	SI. TRANSISTOR			C392	QETB1CM-476	47MF 16V AL E. CAP.	
	Q1054	2SD2144S (VW)	SI. TRANSISTOR			C393	QCBB1HK-101Y	100PF 50V CER. CAP.	
	Q1101	DTC144ES	DIGITAL TRANSISTOR	U UB UP US UT		C394	QCBB1HK-101Y	100PF 50V CER. CAP.	
	Q1102	DTC144ES	DIGITAL TRANSISTOR	U UB UP US UT		C395	QCXB1CM-152Y	1500PF 16V CER. CAP.	
	Q1103	DTC144ES	DIGITAL TRANSISTOR	U UB UP US UT		C396	QCXB1CM-152Y	1500PF 16V CER. CAP.	
	Q1104	DTC144ES	DIGITAL TRANSISTOR	U UB UP US UT		C397	QCBB1HK-391Y	390PF 50V CER. CAP.	
		CAPACITORS				C398	QCBB1HK-391Y	390PF 50V CER. CAP.	
	C281	QCBB1HK-221Y	220PF 50V CER. CAP.			C913	QETB1HM-105	1MF 50V AL E. CAP.	
	C282	QCBB1HK-221Y	220PF 50V CER. CAP.			C914	QETB1HM-105	1MF 50V AL E. CAP.	
	C301	QETB1HM-225	2.2MF 50V AL E. CAP.			C917	QETB1HM-105	1MF 50V AL E. CAP.	
	C302	QETB1HM-225	2.2MF 50V AL E. CAP.			C918	QETB1HM-105	1MF 50V AL E. CAP.	
	C303	QETB1HM-225	2.2MF 50V AL E. CAP.			C1001	QETB1EM-476	47MF 25V AL E. CAP.	
						C1002	QCBB1HK-561Y	560PF 50V CER. CAP.	

■ Electrical Parts List (ENJ-096)

Δ	Item	Parts Number	Description	Area	Δ	Item	Parts Number	Description	Area
	C1003	QEK51EM-476	47MF 25V AL E. CAP.			R301	QRD161J-103	10K 1/6W CARBON RES.	
	C1004	QCHB1EZ-223	0.022MF 25V CER. CAP.			R302	QRD161J-103	10K 1/6W CARBON RES.	
	C1005	QCBBIHK-471Y	470PF 50V CER. CAP.	BS EF EN G GI VX		R303	QRD167J-153	15K 1/6W CARBON RES.	
	C1006	QCBBIHK-471Y	470PF 50V CER. CAP.	BS EF EN G GI VX		R304	QRD167J-153	15K 1/6W CARBON RES.	
	C1007	QCBBIHK-561Y	560PF 50V CER. CAP.			R315	QRD161J-103	10K 1/6W CARBON RES.	
	C1010	QEK51EM-106	10MF 25V AL E. CAP.			R316	QRD161J-103	10K 1/6W CARBON RES.	
	C1011	QER51HM-474G	0.47MF 50V AL E. CAP.			R317	QRD161J-103	10K 1/6W CARBON RES.	
	C1012	QER51HM-474G	0.47MF 50V AL E. CAP.			R318	QRD161J-103	10K 1/6W CARBON RES.	
	C1013	QFLB1HJ-563	0.056MF 50V MYLAR CAP.			R319	QRD161J-103	10K 1/6W CARBON RES.	
	C1014	QFLB1HJ-563	0.056MF 50V MYLAR CAP.			R320	QRD161J-103	10K 1/6W CARBON RES.	
	C1015	QEK51HM-105	1MF 50V AL E. CAP.			R321	QRD161J-103	10K 1/6W CARBON RES.	
	C1016	QEK51HM-105	1MF 50V AL E. CAP.			R322	QRD161J-103	10K 1/6W CARBON RES.	
	C1019	QER51HM-474G	0.47MF 50V AL E. CAP.			R323	QRD167J-562	5.6K 1/6W CARBON RES.	
	C1020	QER51HM-474G	0.47MF 50V AL E. CAP.			R324	QRD167J-562	5.6K 1/6W CARBON RES.	
	C1021	QETB1HM-105	1MF 50V AL E. CAP.			R325	QRD167J-562	5.6K 1/6W CARBON RES.	
	C1022	QETB1HM-105	1MF 50V AL E. CAP.			R326	QRD167J-562	5.6K 1/6W CARBON RES.	
	C1022	QETB1HM-105	1MF 50V AL E. CAP.			R331	QRD167J-682	6.8K 1/6W CARBON RES.	
	C1107	QCBBIHK-151	150PF 50V CER. CAP.	U UB UP US UT		R332	QRD167J-682	6.8K 1/6W CARBON RES.	
	C1115	QEK61EM-106	10MF 25V AL E. CAP.	U UB UP US UT		R333	QRD161J-471	470 1/6W CARBON RES.	
	C1116	QEK61CM-226	22MF 16V E. CAP.	U UB UP US UT		R334	QRD161J-471	470 1/6W CARBON RES.	
	C1117	QFLB1HJ-104	0.1MF 50V MYLAR CAP.	U UB UP US UT		R347	QRD161J-221	220 1/6W CARBON RES.	
	C1118	QEK61HM-474	0.47MF 50V E. CAP.	U UB UP US UT		R348	QRD161J-221	220 1/6W CARBON RES.	
	C1119	QCXB1CM-562Y	5600PF 16V CER. CAP.	U UB UP US UT		R349	QRD161J-821	820 1/6W CARBON RES.	
	C1120	QCBBIHK-821	820PF 50V CER. CAP.	U UB UP US UT		R350	QRD161J-821	820 1/6W CARBON RES.	
	C1121	QFLB1HJ-183	0.018MF 50V MYLAR CAP.	U UB UP US UT		R351	QRD167J-272	2.7K 1/6W CARBON RES.	
	C1122	QFV81HJ-104	0.1MF 50V MYLAR CAP.	U UB UP US UT		R352	QRD167J-272	2.7K 1/6W CARBON RES.	
	C1123	QCVB1CM-103Y	0.01MF 16V CER. CAP.	U UB UP US UT		R353	QRD161J-103	10K 1/6W CARBON RES.	
	C1124	QCBBIHK-821	820PF 50V CER. CAP.	U UB UP US UT		R354	QRD161J-103	10K 1/6W CARBON RES.	
	C1125	QCXB1CM-562Y	5600PF 16V CER. CAP.	U UB UP US UT		R355	QRD161J-243	24K 1/6W CARBON RES.	
	C1126	QEKB1HM-474	0.47MF 50V E. CAP.	U UB UP US UT		R356	QRD161J-243	24K 1/6W CARBON RES.	
	C1127	QFV81HJ-104	0.1MF 50V MYLAR CAP.	U UB UP US UT		R357	QRD161J-683	68K 1/6W CARBON RES.	
	C1128	QFV81HJ-104	0.1MF 50V MYLAR CAP.	U UB UP US UT		R358	QRD161J-683	68K 1/6W CARBON RES.	
	C1129	QFV81HJ-104	0.1MF 50V MYLAR CAP.	U UB UP US UT		R359	QRD167J-223	22K 1/6W CARBON RES.	
	C1130	QFLB1HJ-183	0.018MF 50V MYLAR CAP.	U UB UP US UT		R360	QRD167J-223	22K 1/6W CARBON RES.	
	C1131	QEKB1CM-107	100MF 16V AL E. CAP.	U UB UP US UT		R361	QRD161J-393	39K 1/6W CARBON RES.	
	C1132	QEKB1HM-105	1MF 50V AL E. CAP.	U UB UP US UT		R362	QRD161J-393	39K 1/6W CARBON RES.	
	C1133	QFV81HJ-104	0.1MF 50V MYLAR CAP.	U UB UP US UT		R363	QRD161J-221	220 1/6W CARBON RES.	
	C1134	QCBBIHK-221Y	220PF 50V CER. CAP.	U UB UP US UT		R364	QRD161J-221	220 1/6W CARBON RES.	
	C1135	QCVB1CM-103Y	0.01MF 16V CER. CAP.	U UB UP US UT		R365	QRD161J-470	47 1/6W CARBON RES.	BS EF EN G GI VX
	C1136	QCBBIHK-221Y	220PF 50V CER. CAP.	U UB UP US UT		R366	QRD161J-470	47 1/6W CARBON RES.	BS EF EN G GI VX
	C1137	QCBBIHK-221Y	220PF 50V CER. CAP.	U UB UP US UT		R367	QRD161J-274	270K 1/6W CARBON RES.	
	C1138	QER51CM-107	100MF 16V E. CAP.	U UB UP US UT		R368	QRD161J-274	270K 1/6W CARBON RES.	
	C1139	QCBBIHK-102	1000PF 50V CER. CAP.	U UB UP US UT		R369	QRD161J-470	47 1/6W CARBON RES.	
	C1140	QEK51EM-106	10MF 25V AL E. CAP.	U UB UP US UT		R370	QRD161J-470	47 1/6W CARBON RES.	
	C1141	QCBBIHK-101Y	100PF 50V CER. CAP.	U UB UP US UT		R371	QRD161J-203	20K 1/6W CARBON RES.	
	C1142	QCBBIHK-101Y	100PF 50V CER. CAP.	U UB UP US UT		R372	QRD161J-203	20K 1/6W CARBON RES.	
	C1143	QETB1EM-106	10MF 25V AL E. CAP.	U UB UP US UT		R375	QRD161J-103	10K 1/6W CARBON RES.	
	C1144	QETB1EM-106	10MF 25V AL E. CAP.	U UB UP US UT		R376	QRD161J-103	10K 1/6W CARBON RES.	
	C1145	QETB1EM-106	10MF 25V AL E. CAP.	U UB UP US UT		R377	QRD161J-221	220 1/6W CARBON RES.	
	C2001	QCSB1HK-221	220PF 50V CER. CAP.	BS EF EN G GI VX		R378	QRD161J-221	220 1/6W CARBON RES.	
	C2002	QCSB1HK-221	220PF 50V CER. CAP.	BS EF EN G GI VX		R379	QRD161J-912	9.1K 1/6W CARBON RES.	
	C2003	QCBBIHK-102	1000PF 50V CER. CAP.	BS EF EN G GI VX		R380	QRD161J-912	9.1K 1/6W CARBON RES.	
	C2004	QCBBIHK-102	1000PF 50V CER. CAP.	BS EF EN G GI VX		R381	QRD161J-221	220 1/6W CARBON RES.	
		RESISTORS				R382	QRD161J-221	220 1/6W CARBON RES.	
	R271	QRD161J-104	100K 1/6W CARBON RES.			R383	QRD161J-470	47 1/6W CARBON RES.	BS EF EN G GI VX
	R272	QRD161J-104	100K 1/6W CARBON RES.			R384	QRD161J-470	47 1/6W CARBON RES.	BS EF EN G GI VX
	R280	QRD161J-221	220 1/6W CARBON RES.			R385	QRD161J-274	270K 1/6W CARBON RES.	
	R281	QRD161J-224	220K 1/6W CARBON RES.			R386	QRD161J-274	270K 1/6W CARBON RES.	
	R282	QRD161J-224	220K 1/6W CARBON RES.			R387	QRD161J-470	47 1/6W CARBON RES.	
	R283	QRD161J-100	10 1/6W CARBON RES.			R388	QRD161J-470	47 1/6W CARBON RES.	
	R284	QRD161J-100	10 1/6W CARBON RES.			R391	QRD161J-203	20K 1/6W CARBON RES.	
	R285	QRD161J-393	39K 1/6W CARBON RES.			R392	QRD161J-203	20K 1/6W CARBON RES.	
	R286	QRD161J-393	39K 1/6W CARBON RES.			R970	QRD161J-221	220 1/6W CARBON RES.	
	R287	QRD14CJ-6R8SX	6.8 1/4W UNF. CARBON R			R971	QRD161J-181	180 1/6W CARBON RES.	
Δ	R288	QRD14CJ-100SX	10 1/4W UNF. CARBON R	C J		R972	QRD161J-331	330 1/6W CARBON RES.	
Δ	R288	QRZ0077-100	10 1/4W FUSIBLE RES.	A BS EF EN G GI U U B UP US UT VX		R973	QRD161J-181	180 1/6W CARBON RES.	
	R290	QRD167J-332	3.3K 1/6W CARBON RES.			R974	QRD161J-221	220 1/6W CARBON RES.	
	R292	QRD161J-221	220 1/6W CARBON RES.			R975	QRD161J-181	180 1/6W CARBON RES.	
	R293	QRD167J-511	510 1/6W CARBON RES.			R976	QRD161J-331	330 1/6W CARBON RES.	
	R294	QRD161J-561	560 1/6W CARBON RES.			R980	QRD167J-431	430 1/6W CARBON RES.	
	R296	QRD161J-104	100K 1/6W CARBON RES.			R981	QRD167J-431	430 1/6W CARBON RES.	
	R297	QRD161J-222	2.2K 1/6W CARBON RES.			R982	QRD161J-561	560 1/6W CARBON RES.	
	R298	QRD161J-561	560 1/6W CARBON RES.	BS EF EN G GI VX		R983	QRD167J-751	750 1/6W CARBON RES.	
						R984	QRD161J-132	1.3K 1/6W CARBON RES.	

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△	Item	Parts Number	Description	Area	△	Item	Parts Number	Description	Area
	R985	QRD161J-222	2.2K 1/6W CARBON RES.			VR301	QVPA603-501A	500 TRIMMER RES.	
	R986	QRD161J-512	5.1K 1/6W CARBON RES.			VR302	QVPA603-501A	500 TRIMMER RES.	
	R988	QRD167J-431	430 1/6W CARBON RES.			VR303	QVPA603-501A	500 TRIMMER RES.	
	R989	QRD167J-431	430 1/6W CARBON RES.			VR304	QVPA603-501A	500 TRIMMER RES.	
	R990	QRD161J-561	560 1/6W CARBON RES.			VR305	QVPA603-104A	100K TRIMMER RES.	
	R991	QRD167J-751	750 1/6W CARBON RES.			VR306	QVPA603-104A	100K TRIMMER RES.	
	R992	QRD161J-132	1.3K 1/6W CARBON RES.			VR307	QVPA603-104A	100K TRIMMER RES.	
	R993	QRD161J-222	2.2K 1/6W CARBON RES.			VR308	QVPA603-104A	100K TRIMMER RES.	
	R994	QRD161J-512	5.1K 1/6W CARBON RES.			VR309	QVPA603-104A	100K TRIMMER RES.	
	R1001	QRD167J-431	430 1/6W CARBON RES.			VR310	QVPA603-104A	100K TRIMMER RES.	
	R1002	QRD167J-431	430 1/6W CARBON RES.			VR311	QVPA603-503A	50K VARIABLE RE	
	R1003	QRD161J-561	560 1/6W CARBON RES.			VR312	QVPA603-503A	50K VARIABLE RE	
	R1004	QRD167J-751	750 1/6W CARBON RES.			VR901	QVAA73B-E53BJ3	5K VARIABLE RE	
	R1005	QRD161J-132	1.3K 1/6W CARBON RES.			VR902	QVAA74B-E54BJ3	50K VARIABLE RE	U UB UP US UT
	R1006	QRD161J-222	2.2K 1/6W CARBON RES.				OTHERS		
	R1007	QRD161J-512	5.1K 1/6W CARBON RES.	U UB UP US UT			EMW10611-102	PRINTED BOARD	
	R1008	QRD167J-431	430 1/6W CARBON RES.				QWE350-14RR	VINYL WIRE	
	R1009	QRD167J-431	430 1/6W CARBON RES.				QWE351-17RR	VINYL WIRE	
	R1010	QRD161J-561	560 1/6W CARBON RES.				QWE352-13RR	VINYL WIRE	
	R1011	QRD167J-751	750 1/6W CARBON RES.				QXTF400-003	TUBE	
	R1012	QRD161J-132	1.3K 1/6W CARBON RES.			J901	QMS3R80-EE0S	HEADPHONE JACK	
	R1015	QRD167J-431	430 1/6W CARBON RES.	U UB UP US UT		K321	EN28101-007	INDUCTOR	BS EF EN G GI VX
	R1016	QRD161J-103	10K 1/6W CARBON RES.			K392	EN28101-007	INDUCTOR	BS EF EN G GI VX
	R1017	QRD161J-103	10K 1/6W CARBON RES.			K901	EN28101-007	INDUCTOR	BS EF EN G GI VX
	R1018	QRD161J-391	390 1/6W CARBON RES.			L301	EN26002-012	OSCILLATOR COIL	
	R1019	QRD161J-181	180 1/6W CARBON RES.			L303	EQL2106-562	INDUCTOR	
	R1021	QRD161J-181	180 1/6W CARBON RES.			L304	EQL2106-562	INDUCTOR	
	R1022	QRD161J-181	180 1/6W CARBON RES.			L305	EQL2106-223	INDUCTOR	
	R1024	QRD161J-101	100 1/6W CARBON RES.			L306	EQL2106-223	INDUCTOR	
	R1027	QRD167J-680	68 1/6W CARBON RES.			S980	ESP0001-023M	TACT SWITCH	
	R1029	QRD161J-101	100 1/6W CARBON RES.			S981	ESP0001-023M	TACT SWITCH	
	R1030	QRD167J-431	430 1/6W CARBON RES.			S982	ESP0001-023M	TACT SWITCH	
	R1031	QRD167J-562	5.6K 1/6W CARBON RES.			S983	ESP0001-023M	TACT SWITCH	
	R1037	QRD167J-153	15K 1/6W CARBON RES.			S984	ESP0001-023M	TACT SWITCH	
	R1038	QRD167J-153	15K 1/6W CARBON RES.			S985	ESP0001-023M	TACT SWITCH	
	R1039	QRD161J-823	82K 1/6W CARBON RES.			S986	ESP0001-023M	TACT SWITCH	
	R1040	QRD161J-823	82K 1/6W CARBON RES.			S987	ESP0001-023M	TACT SWITCH	
	R1041	QRD161J-182	1.8K 1/6W CARBON RES.			S989	ESP0001-023M	TACT SWITCH	
	R1042	QRD161J-182	1.8K 1/6W CARBON RES.			S990	ESP0001-023M	TACT SWITCH	
	R1043	QRD161J-681	680 1/6W CARBON RES.			S991	ESP0001-023M	TACT SWITCH	
	R1044	QRD161J-681	680 1/6W CARBON RES.			S992	ESP0001-023M	TACT SWITCH	
	R1047	QRD161J-222	2.2K 1/6W CARBON RES.			S993	ESP0001-023M	TACT SWITCH	
	R1048	QRD161J-222	2.2K 1/6W CARBON RES.			S994	ESP0001-023M	TACT SWITCH	
	R1049	QRD161J-912	9.1K 1/6W CARBON RES.			S995	ESP0001-023M	TACT SWITCH	
	R1050	QRD161J-912	9.1K 1/6W CARBON RES.			CN301	VMC0314-P16	CONNECT TERMINAL	
	R1051	QRD161J-203	20K 1/6W CARBON RES.			CN331	EMV7155-106R	CONNECT TERMINAL	
	R1052	QRD161J-203	20K 1/6W CARBON RES.			CN332	EMV7155-106R	CONNECT TERMINAL	
	R1053	QRD161J-183	18K 1/6W CARBON RES.			CN351	VMC0177-003	CONNECT TERMINAL	
	R1054	QRD161J-183	18K 1/6W CARBON RES.			CN361	VMC0178-003	CONNECT TERMINAL	
	R1055	QRD161J-472	4.7K 1/6W CARBON RES.			CN403	EWS269-A420J	SOCKET WIRE ASSY	
	R1106	QRD161J-472	4.7K 1/6W CARBON RES.	U UB UP US UT		CN412	EWS267-A922J	SOCKET WIRE ASSY	U UB UP US UT
	R1112	QRD161J-472	4.7K 1/6W CARBON RES.	U UB UP US UT		CN902	EWS26A-A426J	SOCKET WIRE ASSY	
	R1115	QRD161J-393	39K 1/6W CARBON RES.	U UB UP US UT		CN906	VMC0177-003	CONNECT TERMINAL	
	R1116	QRD167J-152	1.5K 1/6W CARBON RES.	U UB UP US UT		CN907	VMC0177-003	CONNECT TERMINAL	
	R1117	QRD161J-123	12K 1/6W CARBON RES.	U UB UP US UT		CN914	VMC0163-015	CONNECT TERMINAL	
	R1118	QRD161J-103	10K 1/6W CARBON RES.	U UB UP US UT		CN916	VMC0178-003	CONNECT TERMINAL	
	R1119	QRD161J-103	10K 1/6W CARBON RES.	U UB UP US UT		CN917	VMC0178-003	CONNECT TERMINAL	
	R1120	QRD161J-103	10K 1/6W CARBON RES.	U UB UP US UT		FW905	EWK33D-30LS	FLAT WIRE ASSY	
	R1121	QRD161J-472	4.7K 1/6W CARBON RES.	U UB UP US UT		JS901	QSJ4002-E05J5	PUSH SWITCH	
	R1122	QRD161J-103	10K 1/6W CARBON RES.	U UB UP US UT		J1101	QMS6312-025	HEADPHONE JACK	U UB UP US UT
	R1123	QRD161J-103	10K 1/6W CARBON RES.	U UB UP US UT		J1102	QMS6312-025	HEADPHONE JACK	U UB UP US UT
	R1124	QRD161J-103	10K 1/6W CARBON RES.	U UB UP US UT		RW901	EWT015-001	TERMINAL WIRE	
	R1125	QRD161J-243	24K 1/6W CARBON RES.	U UB UP US UT		S1000	ESP0001-023M	TACT SWITCH	
	R1126	QRD161J-563	56K 1/6W CARBON RES.	U UB UP US UT		S1001	ESP0001-023M	TACT SWITCH	
	R1127	QRD161J-123	12K 1/6W CARBON RES.	U UB UP US UT		S1002	ESP0001-023M	TACT SWITCH	
	R1128	QRD161J-303Y	30K 1/6W CARBON RES.	U UB UP US UT		S1003	ESP0001-023M	TACT SWITCH	
	R1129	QRD161J-105	1M 1/6W CARBON RES.	U UB UP US UT		S1004	ESP0001-023M	TACT SWITCH	
	R1130	QRD167J-682	6.8K 1/6W CARBON RES.	U UB UP US UT		S1005	ESP0001-023M	TACT SWITCH	
	R1131	QRD161J-221	220 1/6W CARBON RES.	U UB UP US UT		S1008	ESP0001-023M	TACT SWITCH	
	R1132	QRD161J-331	330 1/6W CARBON RES.	U UB UP US UT		S1010	ESP0001-023M	TACT SWITCH	
	R1133	QRD161J-221	220 1/6W CARBON RES.	U UB UP US UT		S1011	ESP0001-023M	TACT SWITCH	
	R1134	QRD167J-223	22K 1/6W CARBON RES.	U UB UP US UT		S1012	ESP0001-023M	TACT SWITCH	
	R1135	QRD161J-103	10K 1/6W CARBON RES.	U UB UP US UT		S1013	ESP0001-023M	TACT SWITCH	
	R1136	QRD161J-222	2.2K 1/6W CARBON RES.	U UB UP US UT		X1101	ECX0000-400KS	CERAMIC RESONATOR	U UB UP US UT

PARTS LIST

< XT-D8T >

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

The Markes for Dasignated Areas

A . . . Australia	BS . . . the U.K.	C . . . Canada	EF . . . Continental Europe
EN . . . Scandinavia	GI . . . Italy	G . . . Germany	J . . . the U.S.A.
UB . . . Hong Kong	U . . . Universal Type	UP . . . Korea	US . . . Singapore
UT . . . Taiwan	VX . . . East Europe	No markes indicates all areas.	

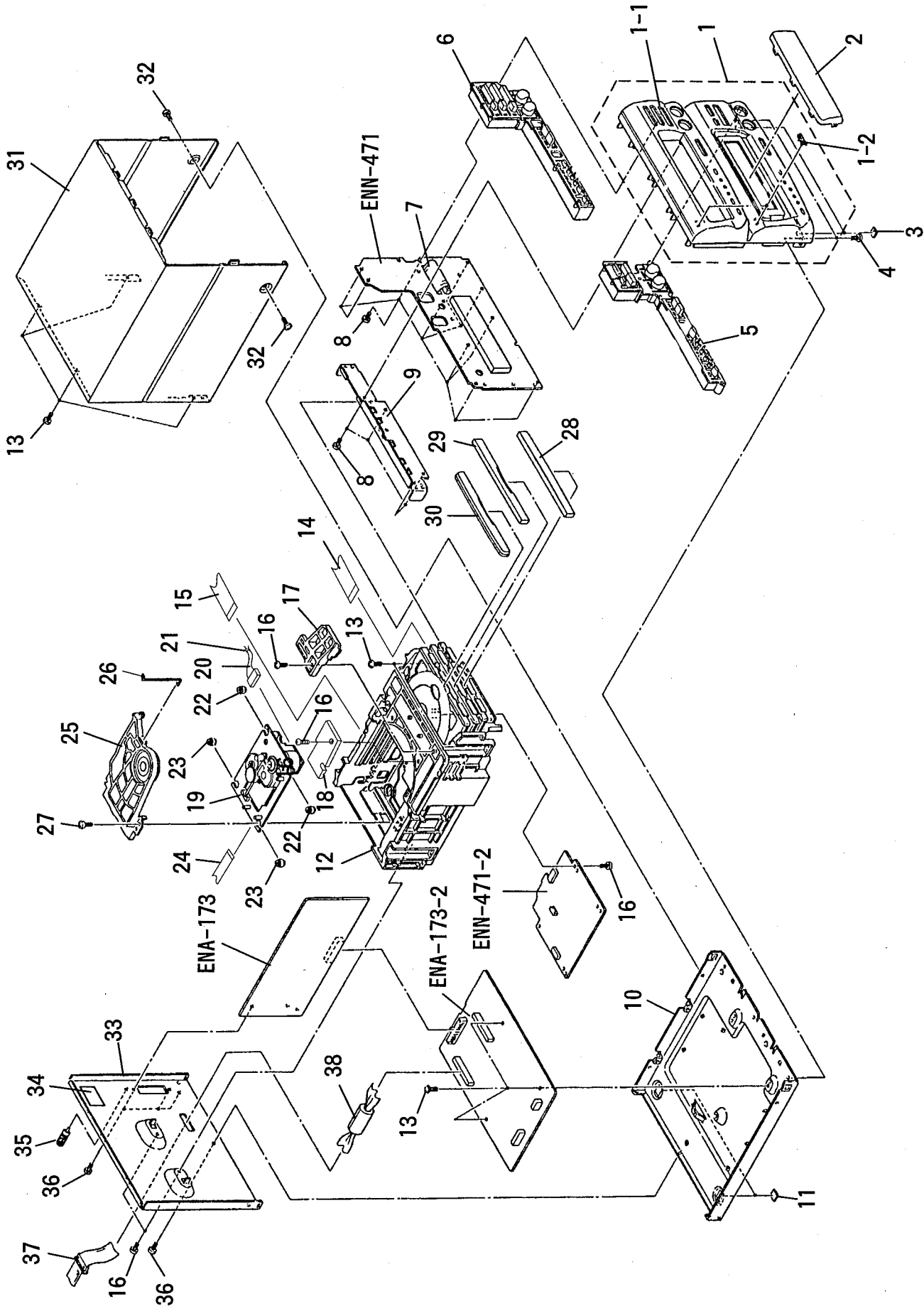
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General Exploded View and Parts List

Block No.

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■ Parts List

Block No. **M 2 M M**

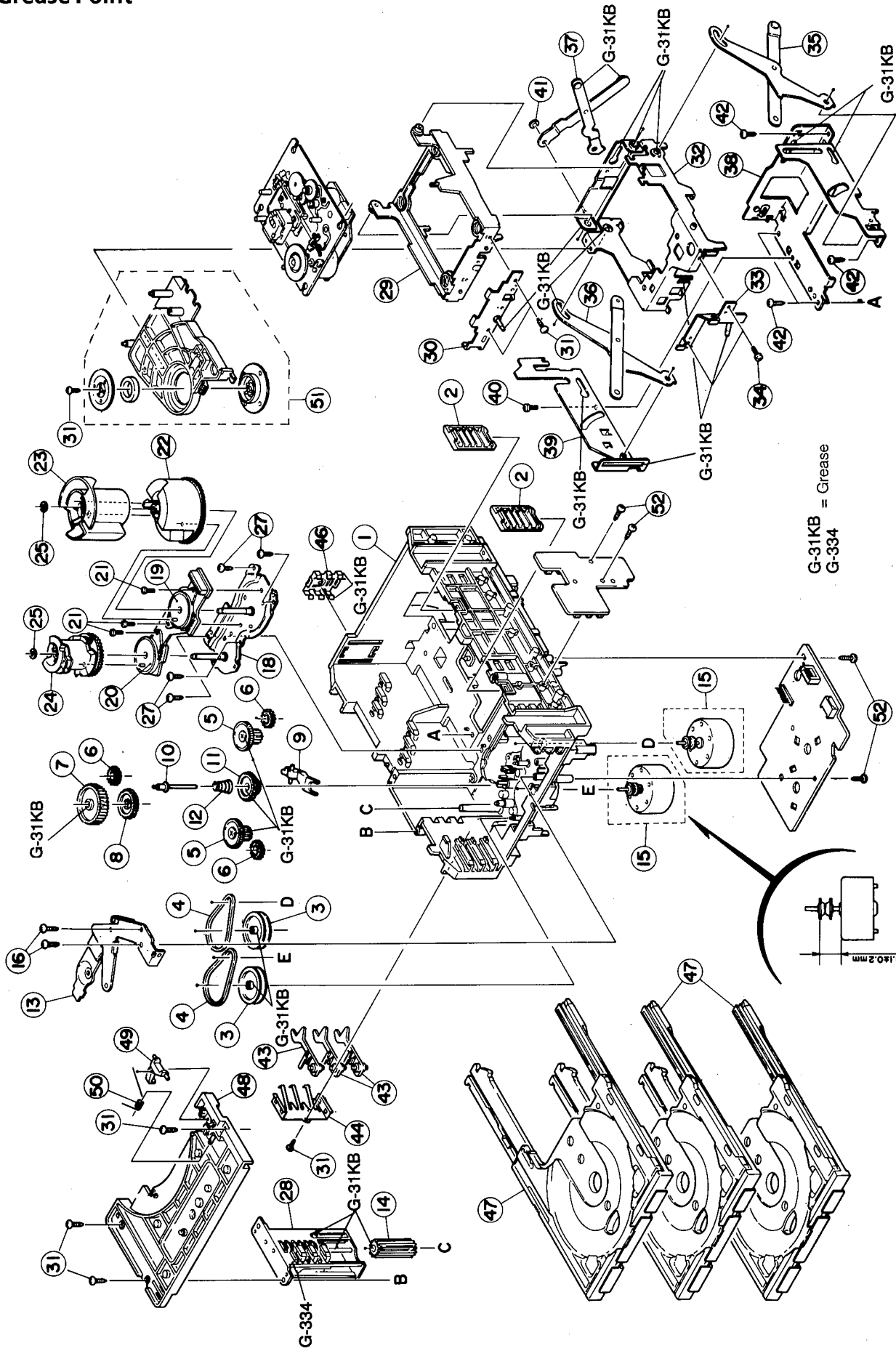
△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	1	EFP-XTD8TE(S)	FRONT PANEL ASSY	1		
	1-1	E103144-001SM	FRONT PANEL	1		
	1-2	E406971-221	JVC MARK	2		
	2	E208809-001SM	WINDOW SCREEN	1	TUNER	
	3	E75896-001	SPACER	2		
	4	SBSG3008M	TAPPING SCREW	2		
	5	E208811-001SM	PUSH BUTTON ASSY	1	CD	
	6	E208814-001SM	PUSH BUTTON	1	TUNER	Except BS, EF, EN, G and GI
		E208814-002SM	PUSH BUTTON	1	TUNER	BS, EF, EN, G, GI
	7	VWF1237-20TTBW	FLAT WIRE ASSY	1	FC841	
	8	SDSF2608Z	SCREW	14		
	9	E208824-001SM	STAY BRACKET	1		
	10	E102974-002SM	CHASSIS BASE	1		
	11	E75896-006	FELT SPACER	2		
	12	-----	CHANGER MECHANISM ASSY	1	See page 6-4	
	13	GBSG3008CC	TAPPING SCREW	9		
	14	VWF1210-25TTB	FLAT WIRE ASSY	1		
	15	VWF1217-25TTB	FLAT WIRE ASSY	1	FC604	
	16	SBSF3008Z	TAPPING SCREW	4		
		SBSF3008Z	TAPPING SCREW	1		J
	17	E309662-001	DISC STOPPER	1		
	18	FMKL4008-001	LOD STOPPER	1		J
	19	-----	CD MECHANISM ASSY	1	See page 6-7	
	20	VDM1001-M001A	SOCKET WIRE ASSY	1		
	21	VYSA1R2-033	SPACER	1		
	22	FMYH4003-001	INSULATOR	2	ORANGE	
	23	FMYH4003-002	INSULATOR	2	BROWN	
	24	VWF1015-09TTAV	FLAT WIRE ASSY	1		
	25	VKS3703-00DMM	CLAMPER	1		
	26	VKW5187-001	ROD	1		
	27	SPST2606Z	TAPPING SCREW	1		
	28	E208818-001SM	CD FITTING	1		Except U, UB, UP, US and UT
		E208818-002SM	CD FITTING	1		U, UB, UP, US, UT
	29	E208820-001SM	CD FITTING	1		Except U, UB, UP, US and UT
		E208820-002SM	CD FITTING	1		U, UB, UP, US, UT
	30	E208822-001SM	CD FITTING	1		Except U, UB, UP, US and UT
		E208822-002SM	CD FITTING	1		U, UB, UP, US, UT
	31	E208843-002(S)	METAL COVER	1		
	32	SDSG3006M	TAPPING SCREW	2		
	33	E208825-017SM	REAR PANEL	1		J
		E208825-020SM	REAR PANEL	1		U, UB, US, UT, VX
		E208825-018SM	REAR PANEL	1		A, C, UP
		E208825-019SM	REAR PANEL	1		BS, EF, EN, G, GI
	34	E406507-001	CAUTION LABEL	1		
	35	E409257-001	EARTH TERMINAL	1		
	36	E73273-003	SPECIAL SCREW	4		
	37	EWP907-022	FLAT WIRE ASSY	1	SC001	
	38	ENZ8104-005	NOISE FILTER	1		BS, EF, EN, G, GI, VX
	-	E307570-001	NUMBER LABEL	1		J
	-	E70891-001	CLASS 1 LABEL	1		Except J and C

Changer Mechanism Ass'y and Parts List

■ Grease Point

Block No.

M	3	M	M
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■ Parts List (Changer Mechanism Ass'y)

Block No.

M	3	M	M
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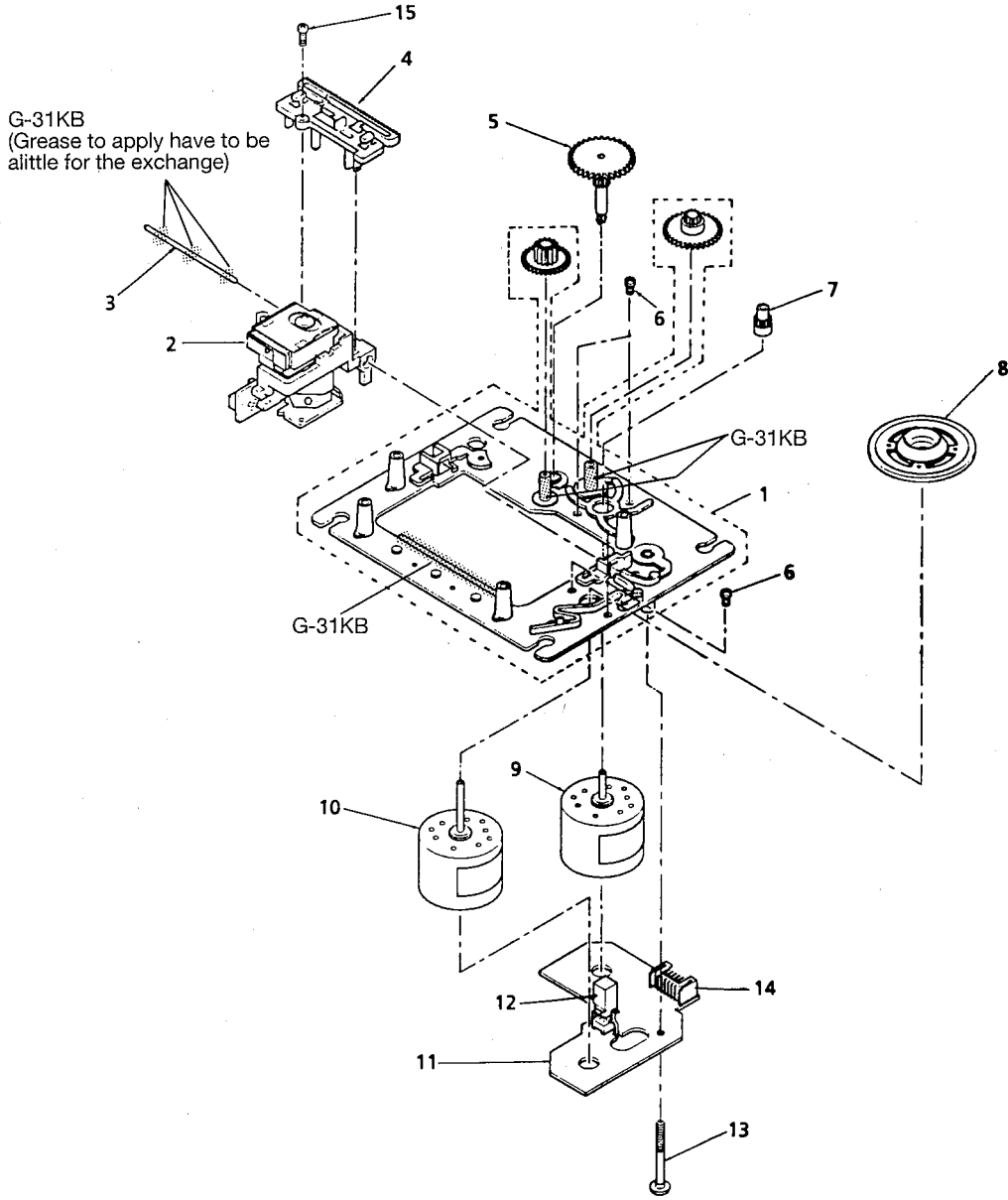
△	Item	Parts Number	Parts Name	Q'ty	Description	Area
	1	VKS1144-003	CHASSIS BASE	1		
	2	VKS3698-003	TRAY GUIDE	2		
	3	VKS5532-003	PULLEY GEAR	2		
	4	VKB3000-164	DRIVE BELT	2		
	5	VKS5505-003	GEAR B	2		
	6	VKS5506-002	GEAR C	3		
	7	VKS5507-002	CROSS GEAR U	1		
	8	VKS5508-002	CROSS GEAR L	1		
	9	VKS5510-003	SELECT LEVER	1		
	10	VKH5769-001	GEAR STUD	1		
	11	VKS5511-002	SELECT GEAR	1		
	12	VKW5155-003	COMPRESS SPRING	1		
	13	VKM3846-002	GEAR BRACKET	1		
	14	VKS5509-002MM	CYLINDER GEAR	1		
	15	MSN5D257A-SA2	DC MOTOR	1		
	16	DPSP2616Z	SCREW	2		
	19	VKZ3172-00A	CAM SWITCH	1		
	20	VKZ3173-00A	CAM SWITCH	1		
	21	SPST2606Z	TAPPING SCREW	1		
	22	VKS2263-002MM	CAM R1	1		
	23	VKS2264-002MM	CAM R2	1		
	24	VKS2265-002MM	CAM GEAR L	1		
	25	WDL316050	SLIT WASHER	2		
	27	SBSF2608Z	TAPPING SCREW	4		
	28	VKS3702-00FMM	DRIVE UNIT	1		
	29	VKS2247-003	MECHA HOLDER A	1		
	30	VKL7767-00B	MECHABRACKET	1		
	31	SBSF2606Z	TAPPING SCREW	2		
	32	VKM3860-00A	MECHA HOLDER	1		
	33	VKL7802-00C	MECHA HOLDER	1		
	34	SDST2604Z	SCREW	2		
	35	VKL7810-00A	LIFTER	1		
	36	VKL7811-00A	LIFTER	1		
	37	VKL7812-00A	LIFTER	1		
	38	VKL2732-002	LIFTER BASE	1		
	39	VKM3823-001	LIFTER BRACKET	1		
	40	SDST2604Z	SCREW	1		
	41	WDL266035-2	SLIT WASHER	1		
	42	SBSF2608Z	TAPPING SCREW	8		
	43	VKS5514-002MM	LOCK LEVER	3		
	44	VKY3133-002MM	RETURN SPRING	1		
	46	VKY3134-003	SPRING	1		
	47	VKS2252-00C	TRAY	3		
	48	VKS2250-003	TOP BRACKET	1		
	49	VKS5515-002	S. TRAY STOPPER	1		
	50	VKW5156-004	TORSION SPRING	1		

CD Mechanism Ass'y and Parts List

Block No.

M	4	M	M
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■ Grease Point



■ Parts List (CD Mechanism Ass'y)

Item	Part Number	Part Name	Q'ty	Description	Area
1	EPB-002A	MECHANISM BASE ASSY	1		
2	OPTIMA-6S	PICK UP ASSY	1		
3	E406777-001	SHAFT	1		
4	E307746-001	CD RACK	1		
5	E307745-221SS	GEAR (3)	1		
6	SDSP2003N	SCREW	4		
7	E406750-001	PINION GEAR	1		
8	EPB309173A	TURN TABLE	1		
9	E406784-001	FEED MOTOR	1		
10	E406783-001	SPINDLE MOTOR	1		
11	EW10190-001(S)	CIRCUIT BOARD	1		
12	ESB1100-005	LEAF SWITCH	1		
13	E75832-001	SCREW	1		
14	EMV5109-006B	PLUG ASSY	1	6PIN	
15	SDSF2006Z	SCREW	1		

■ Parts List (ENN-471)

△	Item	Parts Number	Description	Area
		I. C. S		
	IC601	AN8806SB	I. C (MONO-ANALOG)	
	IC602	BA6897FPW	I. C (MONO-ANALOG)	
	IC603	MN35510	I. C (DIGI-MOS)	
	IC841	MN172412K8L	I. C (MICRO-COMPUTER)	
	IC842	MN1381 (P. Q) TA	I. C (DIGI-MOS)	
	IC844	XR1099CP	I. C (MONO-ANALOG)	U UB UP US UT
		DIODES		
	D842	1SS254	DIODE	
	D843	1SS254	DIODE	
	D844	1SS254	DIODE	
	D845	1SS254	DIODE	
	D846	1SS254	DIODE	U UB UP US UT
	D848	1SS254	DIODE	
	D849	1SS254	DIODE	C J U UB UP US UT
	D850	1SS254	DIODE	C J VX
	D851	1SS254	DIODE	U UB UP US UT VX
	D852	1SS254	DIODE	
	D853	1SS254	DIODE	
	D854	MTZ5. 6JC	ZENER DIODE	
	D855	MTZ5. 6JC	ZENER DIODE	
	D861	SLR-342DCA47	L. E. D.	
	D862	SLR-342DCA47	L. E. D.	
	D863	SLR-342DCA47	L. E. D.	
	D867	1SS254	DIODE	
	D870	MTZ5. 1JB	ZENER DIODE	U UB UP US UT
		TRANSISTORS		
	Q601	2SA952 (L, K)	SI. TRANSISTOR	
	Q841	DTC114YS	DIGITAL TRANSISTOR	
	Q842	DTC114ES	DIGITAL TRANSISTOR	
	Q843	DTC114ES	DIGITAL TRANSISTOR	
	Q844	DTC114ES	DIGITAL TRANSISTOR	
	Q845	DTC114ES	DIGITAL TRANSISTOR	
		CAPACITORS		
	C602	QCZ0205-155	1. 5MF 25V C. CAP.	
	C603	QFLB1HJ-104	0. 1MF 50V MYLAR CAP.	
	C605	QETB1EM-106	10MF 25V AL. E. CAP.	
	C606	QCBB1HK-102Y	1000PF 50V CER. CAP.	
	C607	QCBB1HK-102Y	1000PF 50V CER. CAP.	
	C608	QETB1HM-105	1MF 50V AL. E. CAP.	
	C609	QCBB1HK-101Y	100PF 50V CER. CAP.	
	C610	QFLB1HJ-273	0. 022MF 50V MYLAR CAP.	
	C611	QCXB1CM-472Y	4700PF 16V CER. CAP.	
	C612	QCVB1CM-103Y	0. 01MF 16V CER. CAP.	
	C613	QCBB1HK-331Y	330PF 50V CER. CAP.	
	C614	QFLB1HJ-104	0. 1MF 50V MYLAR CAP.	
	C615	QCHB1EZ-223	0. 022MF 25V CER. CAP.	
	C616	QCHB1EZ-223	0. 022MF 25V CER. CAP.	
	C617	QCHB1EZ-223	0. 022MF 25V CER. CAP.	
	C618	QCHB1EZ-223	0. 022MF 25V CER. CAP.	
	C619	QCBB1HK-271Y	270PF 50V CER. CAP.	
	C620	QCSB1HJ-470	47PF 50V CER. CAP.	
	C621	QCBB1HK-102Y	1000PF 50V CER. CAP.	
	C622	QCF21HP-223A	0. 022MF 50V CER. CAP.	
	C623	QFLB1HJ-104	0. 1MF 50V MYLAR CAP.	
	C625	QCZ0205-155	1. 5MF 25V C. CAP.	
	C631	QETB1AM-477	470MF 10V E. CAP.	
	C632	QETB1AM-477	470MF 10V E. CAP.	
	C641	QCVB1CM-103Y	0. 01MF 16V CER. CAP.	
	C642	QFLB1HJ-273	0. 022MF 50V MYLAR CAP.	
	C651	QCSB1HJ-120Y	12PF 50V CER. CAP.	
	C652	QCSB1HJ-120Y	12PF 50V CER. CAP.	
	C653	QCHB1EZ-223	0. 022MF 25V CER. CAP.	
	C655	QFLB1HJ-104	0. 1MF 50V MYLAR CAP.	
	C656	QFV81HJ-104	0. 1MF 50V THIN FILM	
	C661	QCBB1HK-471Y	470PF 50V CER. CAP.	

△	Item	Parts Number	Description	Area
	C662	QFV81HJ-104	0. 1MF 50V THIN FILM	
	C663	QFLB1HJ-223	0. 022MF 50V MYLAR CAP.	
	C664	QCHB1EZ-223	0. 022MF 25V CER. CAP.	
	C665	QFV81HJ-334	0. 33MF 25V TF. CAP.	
	C671	QFLB1HJ-222	2200PF 50V MYLAR CAP.	
	C672	QFLB1HJ-222	2200PF 50V MYLAR CAP.	
	C673	QEK61AM-227ZM	220MF 10V AL. E. CAP.	
	C674	QCHB1EZ-223	0. 022MF 25V CER. CAP.	
	C678	QCZ0205-155	1. 5MF 25V C. CAP.	
	C841	QCZ0205-155	1. 5MF 25V C. CAP.	
	C842	QCVB1CM-103Y	0. 01MF 16V CER. CAP.	
	C843	QER50JM-476	47MF 6. 3V AL. E. CAP.	
	C844	QCT26CH-150	15PF 50V CER. CAP.	
	C846	QER51HM-105G	1MF 50V AL. E. CAP.	
	C847	QCVB1CM-103Y	0. 01MF 16V CER. CAP.	
	C848	QEK51HM-474G	0. 47MF 50V AL. E. CAP.	
	C850	QER61VM-226ZM	22MF 35V E. CAP.	
	C861	QER50JM-107	100MF 6. 3V AL. E. CAP.	U UB UP US UT
	C862	QER50JM-107	100MF 6. 3V AL. E. CAP.	U UB UP US UT
	C863	QCBB1HK-102Y	1000PF 50V CER. CAP.	U UB UP US UT
	TC841	ENZ1003-015	0. 1MF TRIMMER CA	
		RESISTORS		
	R601	QRD161J-123	12K 1/6W CARBON RE	
	R603	QRD161J-125	1. 2M 1/6W CARBON RE	
	R605	QRD161J-274	270K 1/6W CARBON RE	
	R606	QRD167J-154	150K 1/6W CARBON RE	
	R607	QRD161J-273	27K 1/6W CARBON RE	
	R609	QRD161J-114	110K 1/6W CARBON RE	
	R610	QRD161J-104	100K 1/6W CARBON RE	
	R611	QRD161J-473	47K 1/6W CARBON RE	
	R612	QRD167J-822	8. 2K 1/6W CARBON RE	
	R613	QRD167J-121	120 1/6W CARBON RE	
	R614	QRD161J-100	10 1/6W CARBON RE	
	R615	QRD161J-120	12 1/6W CARBON RE	
	R616	QRD161J-910Y	91 1/6W CARBON RE	
	R641	QRD161J-124	120K 1/6W CARBON RE	
	R642	QRD161J-222	2. 2K 1/6W CARBON RE	
	R643	QRD167J-822	8. 2K 1/6W CARBON RE	
	R644	QRD167J-223	22K 1/6W CARBON RE	
	R645	QRD167J-223	22K 1/6W CARBON RE	
	R646	QRD161J-222	2. 2K 1/6W CARBON RE	
	R647	QRD167J-562	5. 6K 1/6W CARBON RE	
	R650	QRD161J-821	820 1/6W CARBON RE	
	R651	QRD161J-102	1K 1/6W CARBON RE	
	R652	QRD161J-102	1K 1/6W CARBON RE	
	R653	QRD161J-102	1K 1/6W CARBON RE	
	R660	QRD161J-102	1K 1/6W CARBON RE	
	R661	QRD161J-683	68K 1/6W CARBON RE	
	R663	QRD161J-124	120K 1/6W CARBON RE	
	R664	QRD161J-331	330 1/6W CARBON RE	
	R665	QRD161J-271	270 1/6W CARBON RE	
	R666	QRD161J-220	22 1/6W CARBON RE	
	R671	QRD161J-102	1K 1/6W CARBON RE	
	R672	QRD161J-102	1K 1/6W CARBON RE	
	R842	QRD161J-222	2. 2K 1/6W CARBON RE	
	R844	QRD161J-102	1K 1/6W CARBON RE	
	R845	QRD167J-223	22K 1/6W CARBON RE	
	R846	QRD161J-103	10K 1/6W CARBON RE	
	R847	QRD161J-103	10K 1/6W CARBON RE	
	R848	QRD161J-472	4. 7K 1/6W CARBON RE	
	R849	QRD161J-472	4. 7K 1/6W CARBON RE	
	R850	QRD161J-472	4. 7K 1/6W CARBON RE	
	R851	QRD161J-472	4. 7K 1/6W CARBON RE	
	R852	QRD161J-473	47K 1/6W CARBON RE	
	R856	QRD161J-221	220 1/6W CARBON RE	
	R857	QRD161J-221	220 1/6W CARBON RE	

■ Parts List (ENN-471)

△	Item	Parts Number	Description	Area
	R858	QRD161J-221	220 1/6W CARBON RE	
	R860	QRD161J-104	100K 1/6W CARBON RE	
	R861	QRD161J-104	100K 1/6W CARBON RE	
	R862	QRD161J-104	100K 1/6W CARBON RE	
	R863	QRD161J-104	100K 1/6W CARBON RE	
	R875	QRD167J-152	1.5K 1/6W CARBON RE	U UB UP US UT
	R876	QRD161J-221	220 1/6W CARBON RE	
	R877	QRD161J-221	220 1/6W CARBON RE	
	R878	QRD161J-221	220 1/6W CARBON RE	
	R879	QRD161J-102	1K 1/6W CARBON RE	
	R880	QRD161J-221	220 1/6W CARBON RE	
	R881	QRD161J-102	1K 1/6W CARBON RE	
	R882	QRD161J-221	220 1/6W CARBON RE	
	R883	QRD161J-221	220 1/6W CARBON RE	
	R884	QRD161J-331	330 1/6W CARBON RE	U UB UP US UT
	R885	QRD167J-562	5.6K 1/6W CARBON RE	U UB UP US UT
	R886	QRD161J-103	10K 1/6W CARBON RE	U UB UP US UT
	R887	QRD161J-103	10K 1/6W CARBON RE	U UB UP US UT
	R888	QRD161J-103	10K 1/6W CARBON RE	U UB UP US UT
	R889	QRD161J-102	1K 1/6W CARBON RE	U UB UP US UT
	R890	QRD161J-301	300 1/6W CARBON RE	U UB UP US UT
	R891	QRD161J-472	4.7K 1/6W CARBON RE	
		OTHERS		
		EMW10613-002	PRINTED BOARD	
	S845	ESP0001-023M	TACT SWITCH	
	S846	ESP0001-023M	TACT SWITCH	
	S847	ESP0001-023M	TACT SWITCH	
	S848	ESP0001-023M	TACT SWITCH	
	S849	ESP0001-023M	TACT SWITCH	
	S850	ESP0001-023M	TACT SWITCH	
	S851	ESP0001-023M	TACT SWITCH	
	S852	ESP0001-023M	TACT SWITCH	
	S853	ESP0001-023M	TACT SWITCH	
	S854	ESP0001-023M	TACT SWITCH	
	S855	ESP0001-023M	TACT SWITCH	
	S856	ESP0001-023M	TACT SWITCH	
	S859	ESP0001-023M	TACT SWITCH	
	S860	ESP0001-023M	TACT SWITCH	
	S861	ESP0001-023M	TACT SWITCH	
	S862	ESP0001-023M	TACT SWITCH	
	S863	ESP0001-023M	TACT SWITCH	
	S864	ESP0001-023M	TACT SWITCH	
	S865	ESP0001-023M	TACT SWITCH	
	S866	ESP0001-023M	TACT SWITCH	
	S867	ESP0001-023M	TACT SWITCH	
	S868	ESP0001-023M	TACT SWITCH	
	S869	ESP0001-023M	TACT SWITCH	
	S870	ESP0001-023M	TACT SWITCH	
	S871	ESP0001-023M	TACT SWITCH	
	S872	ESP0001-023M	TACT SWITCH	
	S873	ESP0001-023M	TACT SWITCH	
	S874	ESP0001-023M	TACT SWITCH	
	S875	ESP0001-023M	TACT SWITCH	
	S876	ESP0001-023M	TACT SWITCH	
	X651	ECX0169-344EF	CRYSTAL	
	X841	ECX0006-000KNJ	CRYSTAL	
	BK841	E309782-001SM	P. W. BOARD BRACKET	
	CN601	EMV7144-015R	CONNECT TERMINAL	
	CN602	EMV5109-006A	CONNECT TERMINAL	
	CN604	VMC0163-R17	CONNECT TERMINAL	
	CN841	VMC0163-037	CONNECT TERMINAL	
	D1841	ELU0001-213	FLUORESCENT DISPLAY TUB	
	FS841	E306805-014	FELT SPACER	
	SP601	VYH7237-001	I. C. COVER	
	SP602	VYH7237-003	I. C. COVER	
	SP603	VYH7237-003	I. C. COVER	

△	Item	Parts Number	Description	Area
	SP841	VYH7653-001	SPRING	
	TP601	QMV5004-002K	PLUG ASSY	
	TW601	ENF102-047	TERMINAL WIRE	

■ Electrical Parts List (ENA-173)

△	Item	Parts Number	Description	Area
		I. C. S		
	IC104	LA1266A	I. C (MONO-ANALOG)	
	IC105	LA3401	I. C (MONO-ANALOG)	
	IC121	LC72131	I. C (M)	
	IC200	MN172412K8K	I. C (MICRO-COMPUTER)	
	IC203	NJM4580DD	I. C (MONO-ANALOG)	
	IC204	NJM78M05FA	I. C (MONO-ANALOG)	
	IC205	MN1381 (P, Q) TA	I. C (DIGI-MOS)	
		DIODES		
	D104	1SS254	DIODE	
	D105	1SS254	DIODE	
	D106	1SS254	DIODE	
	D115	1SS254	DIODE	
	D116	1SS254	DIODE	
	D120	1SS254	DIODE	
	D201	1SS254	DIODE	
	D202	11E1	SI. DIODE	
	D203	11E1	SI. DIODE	
	D204	11E1	SI. DIODE	
	D209	1SS254	DIODE	
	D210	1SS254	DIODE	
		TRANSISTORS		
	Q103	2SC461	SI. TRANSISTOR	
	Q107	2SC535	SI. TRANSISTOR	
	Q108	2SC461	SI. TRANSISTOR	
	Q111	2SD2144S (VW)	SI. TRANSISTOR	BS EF EN G GI VX
	Q112	2SD2144S (VW)	SI. TRANSISTOR	BS EF EN G GI VX
	Q113	2SD2144S (VW)	SI. TRANSISTOR	BS EF EN G GI VX
	Q114	2SC1740S (R, S)	SI. TRANSISTOR	BS EF EN G GI VX
	Q123	DTA144ES	DIGITAL TRANSISTOR	
	Q124	DTA144ES	DIGITAL TRANSISTOR	
	Q127	DTC144ES	DIGITAL TRANSISTOR	
	Q200	2SA934 (Q, R)	SI. TRANSISTOR	
		CAPACITORS		
	C101	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C111	QCHB1EZ-223	0.022MF 25V CER. CAP.	BS EF EN G GI VX
	C115	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C116	QCSB1HJ-120Y	12PF 50V CER. CAP.	
	C122	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C130	QETB1CM-227	220MF 16V AL. E. CAP.	
	C135	QETB1AM-477	470MF 10V E. CAP.	
	C136	QETB1AM-227	220MF 10V E. CAP.	
	C150	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C151	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C152	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C153	QCC21EM-223	0.022MF 25V CER. CAP.	
	C154	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C155	QETB1EM-226N	22MF 25V E. CAP.	
	C157	QETB1HM-474	0.47MF 50V E. CAP.	
	C158	QCB1HK-101Y	100PF 50V CER. CAP.	
	C159	QCB1HK-101Y	100PF 50V CER. CAP.	
	C160	QCS21HJ-221	220PF 50V CER. CAP.	
	C161	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C162	QETB1EM-106	10MF 25V AL. E. CAP.	
	C163	QCY31HK-332Z	3300PF 50V CER. CAP.	
	C164	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C165	QETB1HM-474	0.47MF 50V E. CAP.	
	C166	QETB1HM-225	2.2MF 50V AL. E. CAP.	
	C167	QETB1HM-225	2.2MF 50V AL. E. CAP.	
	C168	QETB1HM-474	0.47MF 50V E. CAP.	
	C169	QCF21HP-223A	0.022MF 50V CER. CAP.	
	C170	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C171	QETB1EM-106	10MF 25V AL. E. CAP.	
	C172	QCVB1CM-103Y	0.01MF 16V CER. CAP.	
	C173	QFLB1HJ-223	0.022MF 50V MYLAR CAP.	A C EF EN G GI J U UB UP US UT VX
	C173	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	BS
	C174	QFLB1HJ-473	0.047MF 50V MYLAR CAP.	
	C175	QETB1EM-106	10MF 25V AL. E. CAP.	

△	Item	Parts Number	Description	Area
	C176	QCY31HK-102Z	1000PF 50V CER. CAP.	
	C177	QCB1HK-271Y	270PF 50V CER. CAP.	A BS EF EN G GI VX
	C177	QCB1HK-681Y	680PF 50V CER. CAP.	C J U UB UP US UT
	C178	QCB1HK-271Y	270PF 50V CER. CAP.	A BS EF EN G GI VX
	C178	QCB1HK-681Y	680PF 50V CER. CAP.	C J U UB UP US UT
	C179	QETB1HM-225	2.2MF 50V AL. E. CAP.	
	C180	QETB1HM-225	2.2MF 50V AL. E. CAP.	
	C181	QETB1EM-106	10MF 25V AL. E. CAP.	
	C183	QETB1HM-105	1MF 50V AL. E. CAP.	
	C184	QETB1HM-105	1MF 50V AL. E. CAP.	
	C185	QETB1HM-225	2.2MF 50V AL. E. CAP.	
	C186	QETB1HM-474	0.47MF 50V E. CAP.	
	C187	QFLB1HJ-562	5600PF 50V MYLAR CAP.	
	C188	QFLB1HJ-562	5600PF 50V MYLAR CAP.	
	C189	QCSB1HK-5R6Y	5.6PF 50V CER. CAP.	BS EF EN G GI VX
	C190	QCSB1HJ-150Y	15PF 50V CER. CAP.	BS EF EN G GI VX
	C192	QCC21EM-473	0.047MF 25V CER. CAP.	
	C193	QCS21HJ-180A	18PF 50V CER. CAP.	
	C194	QCS21HJ-180A	18PF 50V CER. CAP.	
	C195	QCY31HK-102Z	1000PF 50V CER. CAP.	
	C196	QEN51HM-474	0.47MF 50V NP. E. CAP.	
	C197	QCF21HP-103A	0.01MF 50V CER. CAP.	
	C198	QCF21HP-103A	0.01MF 50V CER. CAP.	
	C199	QCS21HJ-560	56PF 50V CER. CAP.	BS EF EN G GI VX
	C200	QCZ0205-155	1.5MF 25V C. CAP.	
	C201	QETB0JM-107	100MF 6.3V AL. E. CAP.	
	C202	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C203	QETB0JM-107	100MF 6.3V AL. E. CAP.	
	C206	QCZ0205-155	1.5MF 25V C. CAP.	
	C207	QETB1AM-477	470MF 10V E. CAP.	A BS C EF EN G GI U UB UP US UT VX
	C212	QEADOHZ-479A	47000MF E. CAP.	
	C215	QFN81HJ-472	4700PF 50V MYLAR CAP.	
	C216	QFN81HJ-472	4700PF 50V MYLAR CAP.	
	C217	QFN81HJ-102	1000PF 50V METAL. MYLA	
	C218	QFN81HJ-102	1000PF 50V METAL. MYLA	
	C219	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C220	QCHB1EZ-223	0.022MF 25V CER. CAP.	
	C221	QETB1HM-106	10MF 50V E. CAP.	
	C222	QETB1HM-106	10MF 50V E. CAP.	
	C230	QCZ0205-155	1.5MF 25V C. CAP.	
	C250	QFLB1HJ-562	5600PF 50V MYLAR CAP.	BS EF EN G GI VX
	C251	QFLB1HJ-562	5600PF 50V MYLAR CAP.	BS EF EN G GI VX
		RESISTORS		
	R111	QRD161J-472	4.7K 1/6W CARBON RE	BS EF EN G GI VX
	R112	QRD161J-472	4.7K 1/6W CARBON RE	BS EF EN G GI VX
	R113	QRD161J-472	4.7K 1/6W CARBON RE	BS EF EN G GI VX
	R114	QRD161J-103	10K 1/6W CARBON RE	BS EF EN G GI VX
	R115	QRD161J-222	2.2K 1/6W CARBON RE	
	R116	QRD161J-104	100K 1/6W CARBON RE	
	R117	QRD161J-222	2.2K 1/6W CARBON RE	BS EF EN G GI VX
	R118	QRD167J-332	3.3K 1/6W CARBON RE	
	R119	QRD161J-221	220 1/6W CARBON RE	
	R121	QRD161J-391	390 1/6W CARBON RE	
	R122	QRD167J-272	2.7K 1/6W CARBON RE	
	R123	QRD161J-102	1K 1/6W CARBON RE	
	R124	QRD161J-681	680 1/6W CARBON RE	
	R125	QRD167J-332	3.3K 1/6W CARBON RE	
	R126	QRD161J-221	220 1/6W CARBON RE	
	R130	QRD167J-562	5.6K 1/6W CARBON RE	BS EF EN G GI VX
	R135	QRD161J-470	47 1/6W CARBON RE	BS EF EN G GI VX
	R146	QRD167J-560	56 1/6W CARBON RE	
	R147	QRD161J-103	10K 1/6W CARBON RE	
	R148	QRD161J-103	10K 1/6W CARBON RE	
	R149	QRD161J-273	27K 1/6W CARBON RE	
	R150	QRD161J-103	10K 1/6W CARBON RE	
	R153	QRD161J-103	10K 1/6W CARBON RE	
	R154	QRD161J-103	10K 1/6W CARBON RE	
	R155	QRD167J-562	5.6K 1/6W CARBON RE	

■ Electrical Parts List (ENA-173)

△	Item	Parts Number	Description	Area
	R157	QRD161J-103	10K 1/6W CARBON RE	
	R158	QRD161J-183	18K 1/6W CARBON RE	BS J
	R158	QRD161J-333	33K 1/6W CARBON RE	A C EF EN G GI U UB UP US UT VX
	R159	QRD161J-561	560 1/6W CARBON RE	
	R160	QRD161J-123	12K 1/6W CARBON RE	A C J U UB UP US UT
	R160	QRD161J-273	27K 1/6W CARBON RE	EF EN G GI VX
	R160	QRD161J-332	3.3K 1/6W CARBON RE	BS
	R161	QRD161J-124	120K 1/6W CARBON RE	C J U UB UP US UT
	R161	QRD161J-184	180K 1/6W CARBON RE	A
	R161	QRD161J-204	200K 1/6W CARBON RE	BS EF EN G GI VX
	R162	QRD161J-124	120K 1/6W CARBON RE	C J U UB UP US UT
	R162	QRD161J-184	180K 1/6W CARBON RE	A
	R162	QRD161J-204	200K 1/6W CARBON RE	BS EF EN G GI VX
	R163	QRD161J-122	1.2K 1/6W CARBON RE	
	R164	QRD161J-122	1.2K 1/6W CARBON RE	
	R165	QRD161J-184	180K 1/6W CARBON RE	C J U UB UP US UT
	R165	QRD161J-274	270K 1/6W CARBON RE	A BS EF EN G GI VX
	R166	QRD161J-184	180K 1/6W CARBON RE	C J U UB UP US UT
	R166	QRD161J-274	270K 1/6W CARBON RE	A BS EF EN G GI VX
	R167	QRD161J-473	47K 1/6W CARBON RE	A BS EF EN G GI VX
	R167	QRD161J-683	68K 1/6W CARBON RE	U UB UP US UT
	R167	QRD161J-563	56K 1/6W CARBON RE	C J
	R168	QRD161J-103	10K 1/6W CARBON RE	
	R169	QRD161J-103	10K 1/6W CARBON RE	
	R170	QRD161J-822	8.2K 1/6W CARBON RE	
	R171	QRD161J-682	6.8K 1/6W CARBON RE	
	R172	QRD161J-682	6.8K 1/6W CARBON RE	
	R173	QRD161J-152	1.5K 1/6W CARBON RE	EF EN G GI VX
	R173	QRD161J-272	2.7K 1/6W CARBON RE	A BS C J U UB UP US UT
	R174	QRD161J-152	1.5K 1/6W CARBON RE	EF EN G GI VX
	R174	QRD161J-272	2.7K 1/6W CARBON RE	A BS C J U UB UP US UT
	R179	QRD161J-562	5.6K 1/6W CARBON RE	
	R180	QRD161J-472	4.7K 1/6W CARBON RE	
	R183	QRD161J-103	10K 1/6W CARBON RE	
	R184	QRD161J-103	10K 1/6W CARBON RE	
	R188	QRD161J-472	4.7K 1/6W CARBON RE	
	R190	QRD161J-472	4.7K 1/6W CARBON RE	
	R194	QRD161J-472	4.7K 1/6W CARBON RE	
	R195	QRD161J-473	47K 1/6W CARBON RE	
	R196	QRD161J-222	2.2K 1/6W CARBON RE	
	R197	QRD161J-472	4.7K 1/6W CARBON RE	
	R198	QRD161J-822	8.2K 1/6W CARBON RE	
	R200	QRD161J-821	820 1/6W CARBON RE	
△	R202	QRD14CJ-470SX	47 1/4W UNF. CARBON	C J
△	R202	QRZ0077-470	47 1/4W FUSIBLE RE	A BS EF EN G GI U UB UP US UT VX
	R203	QRD161J-472	4.7K 1/6W CARBON RE	
	R204	QRD161J-472	4.7K 1/6W CARBON RE	
	R205	QRD161J-821	820 1/6W CARBON RE	
	R213	QRD161J-222	2.2K 1/6W CARBON RE	
	R214	QRD161J-222	2.2K 1/6W CARBON RE	
	R215	QRD161J-222	2.2K 1/6W CARBON RE	
	R216	QRD161J-222	2.2K 1/6W CARBON RE	
	R217	QRD161J-271	270 1/6W CARBON RE	
	R218	QRD161J-271	270 1/6W CARBON RE	
	R219	QRD161J-104	100K 1/6W CARBON RE	
	R220	QRD161J-104	100K 1/6W CARBON RE	
	R221	QRD161J-221	220 1/6W CARBON RE	
	R222	QRD161J-221	220 1/6W CARBON RE	
△	R223	PTH61G30BD2R2N	FUSIBLE RE	A BS C EF G GI U UB UP US UT VX
△	R223	QRD12CJ-2R2SX	2.2 1/2W CARBON RE	J
	R224	QRD161J-221	220 1/6W CARBON RE	
	R231	QRD161J-102	1K 1/6W CARBON RE	
	R232	QRD161J-102	1K 1/6W CARBON RE	
	R233	QRD161J-102	1K 1/6W CARBON RE	
	R234	QRD161J-102	1K 1/6W CARBON RE	

△	Item	Parts Number	Description	Area
	R235	QRD161J-104	100K 1/6W CARBON RE	
	R236	QRD161J-104	100K 1/6W CARBON RE	
	R237	QRD161J-104	100K 1/6W CARBON RE	
	RA200	QRB049J-472	4.7K 1/10W NETWORK RE	
	RA201	QRB039J-472A	4.7K 1/10W NETWORK RE	
		OTHERS		
		ENW10612-002	PRINTED BOARD	
		QWE351-18BB	VINYL WIRE	BS
		QWE351-18BB	VINYL WIRE	EF
		QWE351-18BB	VINYL WIRE	EN
		QWE351-18BB	VINYL WIRE	G
		QWE351-18BB	VINYL WIRE	GI
		QWE351-18BB	VINYL WIRE	VX
	K101	ENZ8101-007	FERRITE BEAD	BS EF EN G GI VX
	L101	EQL4007-1R0	INDUCTOR	
	L102	EQL4007-150T	INDUCTOR	BS EF EN G GI VX
	T105	EQT2140-017	I.F. TRANSFORMER	
	T107	ECB1560-010	CERAMIC FILTER	
	T111	EQR7121-006	RF COIL	BS EF EN G GI VX
	T111	EQR7121-007	RF COIL	A C J U UB UP US UT
	X102	ECX0007-200KWJ1	CRYSTAL	
	X103	ECX0000-456KR	CERAMIC RESONATOR	
	X200	ECX0060-000EM	CERAMIC RESONATOR	
	AT101	EMB41YV-302K	ANTENNA TERMINAL	BS EF EN G GI VX
	AT101	FMMB10YV-401K	ANTENNA TERMINAL	A C J U UB UP US UT
	BK101	E308963-001	SHIELD BRACKET	BS EF EN G GI VX
	CF101	ECB2118-007R	CERAMIC FILTER	BS EF EN G GI VX
	CF101	FMCB2123-001	CERAMIC FILTER	A C J U UB UP US UT
	CF102	ECB2118-007R	CERAMIC FILTER	BS EF EN G GI VX
	CF102	FMCB2123-001	CERAMIC FILTER	A C J U UB UP US UT
	CN201	EMV7141-019M	FLAT WIRE ASSY	
	CN204	EMV5140-015	CONNECT TERMINAL	
	CN214	EMV7140-L15R	CONNECT TERMINAL	
	CN614	VMC0163-017	CONNECT TERMINAL	
	CN811	VMC0163-010	AC CONNECTOR	
	CN851	VMC0163-037	CONNECT TERMINAL	
	EP101	E409182-001SM	EARTH TERMINAL	
	FL102	EQF0102-001	LOWPASS FILTER	BS EF EN G GI VX
	FL141	EQF0101-013	LOWPASS FILTER	
	FL142	EQF0101-013	LOWPASS FILTER	
	FS100	E3400-431	FELT SPACER	BS EF EN G GI VX
	FS101	E3400-431	FELT SPACER	BS EF EN G GI VX
	RF101	EAF2203-004	FRONT END	A C J U UB UP US UT
	RF101	EAF2203-005	FRONT END	BS EF EN G GI
	RF101	EAF2302-002	FRONT END	VX
	SP200	VYH7653-001	SPRING	

■ Electrical Parts List (C3 Mecha)

△	Item	Parts Number	Description	Area
		I. C. S		
	IC802	TA8409S	I. C (MONO-ANALOG)	
	IC803	TA8409S	I. C (MONO-ANALOG)	
		CAPACITORS		
	C801	QEK51AM-107	100MF 10V AL. E. CAP.	
	C802	QEK51EM-475	4.7MF 25V AL. E. CAP.	
	C803	QFLB1HJ-102	1000PF 50V MYLAR CAP.	
	C804	QCFB1HZ-104Y	0.1MF 50V CER. CAP.	
	C805	QCVB1CM-103Y	0.01MF 16V CER. CAP.	
	C806	QEK51CM-476	47MF 16V AL. E. CAP.	
	C807	QEK51CM-476	47MF 16V AL. E. CAP.	
	C808	QFLB1HJ-102	1000PF 50V MYLAR CAP.	
	C810	QCZ0205-155	1.5MF 25V C. CAP.	
	C811	QCZ0205-155	1.5MF 25V C. CAP.	
	C813	QCVB1CM-103Y	0.01MF 16V CER. CAP.	
	C821	QCBB1HK-102Y	1000PF 50V CER. CAP.	
		RESISTORS		
	R805	QRD161J-102	1K 1/6W CARBON RE	
	R806	QRD161J-471	470 1/6W CARBON RE	
	R807	QRD161J-471	470 1/6W CARBON RE	
	R808	QRD161J-102	1K 1/6W CARBON RE	
	R810	QRD161J-684	680K 1/6W CARBON RE	
	R811	QRD161J-105	1M 1/6W CARBON RE	
	R813	QRD161J-102	1K 1/6W CARBON RE	
	R814	QRD161J-102	1K 1/6W CARBON RE	
	R815	QRD161J-102	1K 1/6W CARBON RE	
	R816	QRD161J-102	1K 1/6W CARBON RE	
	R817	QRD161J-102	1K 1/6W CARBON RE	
	R818	QRD161J-102	1K 1/6W CARBON RE	
	R819	QRD161J-102	1K 1/6W CARBON RE	
	R820	QRD161J-102	1K 1/6W CARBON RE	
	R821	QRD161J-102	1K 1/6W CARBON RE	
	R822	QRD161J-102	1K 1/6W CARBON RE	
	R823	QRD161J-102	1K 1/6W CARBON RE	
	R824	QRD161J-102	1K 1/6W CARBON RE	
	R825	QRD161J-102	1K 1/6W CARBON RE	
	R826	QRD161J-102	1K 1/6W CARBON RE	
	R827	QRD161J-102	1K 1/6W CARBON RE	
	R828	QRD161J-102	1K 1/6W CARBON RE	
	R829	QRD161J-102	1K 1/6W CARBON RE	
	R830	QRD161J-102	1K 1/6W CARBON RE	
	R832	QRD161J-181	180 1/6W CARBON RE	
	R833	QRD161J-102	1K 1/6W CARBON RE	
	R834	QRD161J-102	1K 1/6W CARBON RE	
	R839	QRD167J-332	3.3K 1/6W CARBON RE	
	R840	QRD167J-562	5.6K 1/6W CARBON RE	
		OTHERS		
		QSEC001-E03	LEVER SWITCH	
		SBSF2608Z	TAPPING SCREW	
		UPD65612GB-208	I. C (M)	
		VMC0289-S07	CONNECTOR	
		VMW1377-004X	PW BOARD	
		VMW1378-001X	PW BOARD	
		VYH7237-001	IC HOLDER	
	L801	VQP0018-100	INDUCTOR	
	L802	VQP0033-100Z	INDUCTOR	
	L803	VQP0033-100Z	INDUCTOR	
	L804	VQP0033-100Z	INDUCTOR	
	CN801	VMC0163-R10	CONNECT TERMINAL	
	CN802	VMC0289-P07	CONNECT TERMINAL	
	CN803	VMC0324-12310	CONNECT TERMINAL	

— MEMO —

Accessories List

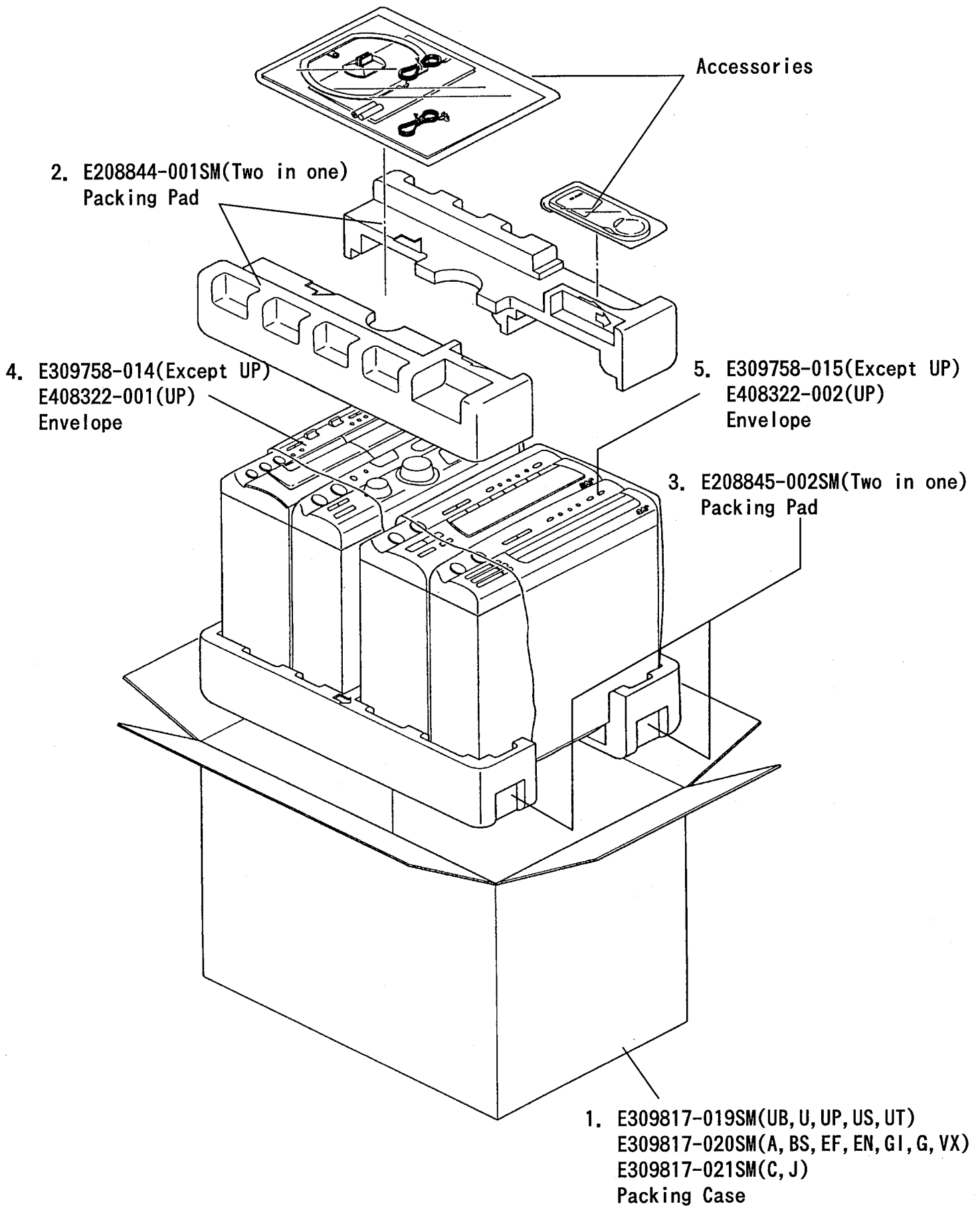
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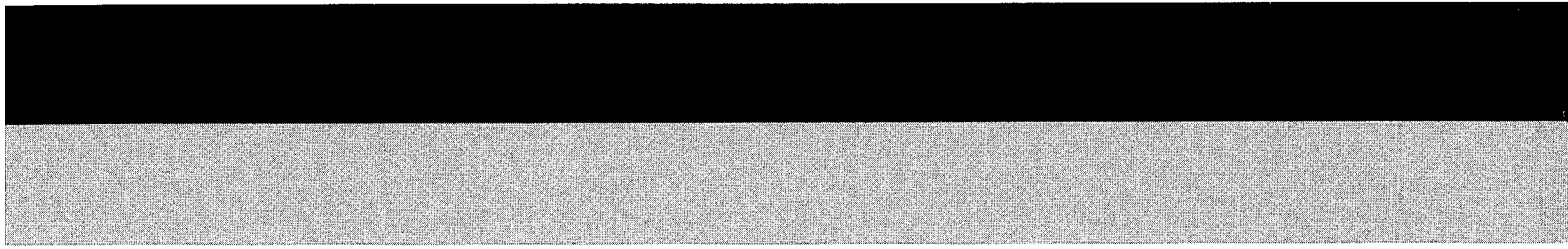
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△	Item	Parts Number	Parts Name	Q' ty	Description	Area
	1	E30580-2437A	INSTRUCTION BOOK	1		J
		E30580-2438A	INSTRUCTION BOOK	1		A
		E30580-2438ABS	INSTRUCTION BOOK	1		BS
		E30580-2439A	INSTRUCTION BOOK	1		C
		E30580-2440A	INSTRUCTION BOOK	1		EF G GI
		E30580-2441A	INSTRUCTION BOOK	1		VX
		E30580-2442A	INSTRUCTION BOOK	1		U UB US UT
		E30580-2443A	INSTRUCTION BOOK	1		UP
		E30580-2488A	INSTRUCTION BOOK	1		EN
	2	E43486-519A	CAUTION SHEET	1		
	3	E309758-003	ENVELOPE	1		BS
		QPGA025-03505	ENVELOPE	1		A C EF EN G GI J U UB UP US UT VX
	4	BT-51006-1	REGISTER CARD	1		J
	5	BT-20044G	SAFETY SHEET	1		J
	6	BT-20066A	DISTRIBUTOR LIST	1		BS
		BT-20134	WARRANTY CARD	1		G
		BT-52002-1	WARRANTY CARD	1		C
		BT-54003-1	WARRANTY CARD	1		BS
		BT-56001-1	WARRANTY CARD	1		A
		BT-56004-3	WARRANTY CARD	1		UP
	7	BT-20071B	SERVICE NETWORK	1		C
	8	E43486-340A	SAFETY SHEET	1		BS
△	9	ENZ2202-001	SIEMENS PLUG	1		US
△		ENZ2203-001	SIEMENS PLUG	1		U UT
	10	EWP201-011	ANTENNA WIRE	1		A C J U UB UP US UT
	10	EWP503-001	ANTENNA WIRE	1		BS EF EN G GI
	11	EWP503-001	ANTENNA WIRE	1		VX
	12	EQB4001-015	LOOP ANTENNA	1		
	13	RM-SED8TU	WIRE-LESS REMOTE CONTROL	1		
	14	R03BPA-2STSA	DRY CELL	1		
	15	EWPZ01-005	CONNECTOR CORD ASSY	1		A C J U UB UP US UT
		EWPZ01-006	EARTH WIRE	1		BS EF EN G GI VX

Packing Materials and Part Numbers

Block No. **M7MM**





JVC

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