RXD-700

SERVICE MANUAL

AEP Model
UK Model

Model Name Using Similar Mechanism	NEW
CD Drive Mechanism Type	————
Optical Pick-up Name	KSS-213C/Q-RP

SPECIFICATIONS

Amplifier section

Continuous RMS power output
55 + 55 watts
(4 ohms at 1 kHz, 0.7% THD)
Inputs
TAPE LINE IN (phono jacks):
sensitivity 150 mV, impedance 50 kilohms
Outputs
TAPE REC OUT (phono jacks):
150 mV, 4.7 kilohms
SPEAKER: accepts impedance of 4 to 16 ohms, 8 to 16 ohms (SPEAKER A + B).

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser (λ = 780 nm) Emission duration: continuous
Laser output	Max. 44.6 µW* * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Wavelength	780 - 790 nm
Frequency response	20 Hz - 20 kHz (± 0.5 dB)
Signal-to-noise ratio	More than 114 dB
Dynamic range	More than 100 dB
Harmonic distortion	Less than 0.003 %
Channel separation	More than 108 dB (1 kHz, 20 kHz LPF)

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	87.5 - 108.0 MHz (50 kHz step)
Aerial	FM wire aerial
Aerial terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz
Sensitivity	at 26 dB quieting (mono) 10.3 dBf, 0.9 µV/ 75 ohms at 46 dB quieting (stereo) 38.5 dBf, 23 µV/ 75 ohms
Usable sensitivity (IHF)	10.3 dBf, 0.9 µV/ 75 ohms
S/N	at 40 kHz deviation Mono: 75 dB Stereo: 70 dB
Harmonic distortion at 1 kHz	Mono: 0.04% Stereo: 0.07%
Separation	45 dB at 1 kHz
Frequency response	30 Hz - 15 kHz (+0.3/-0.7)

– Continued on next page –

CD RECEIVER

MICROFILM

SONY®

AM tuner section

Tuning range	531 - 1,602 kHz (9 kHz step)
Aerial	AM loop aerial, External aerial terminals
Intermediate frequency	450 kHz
Usable sensitivity	300 µV/m
S/N	50 dB (50 mV/m, 999 kHz)
Harmonic distortion	0.3 % (50 mV/m, 400 Hz)

General

Power requirements	230 V AC, 50/60 Hz
Power consumption	150 watts
Dimensions (w/h/d)	Approx. 440 × 110 × 340 mm (17 3/8 × 4 3/8 × 13 1/2 in) incl. projecting parts and controls
Mass	Approx. 7.4 kg (16 lb. 5 oz.)
Supplied accessories	Remote commander (remote) RM-U301 (1) R6 (size AA) batteries (2) AM loop aerial (1)

Design and specifications are subject to change without notice.

SERVICE NOTE

CAUTION

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

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

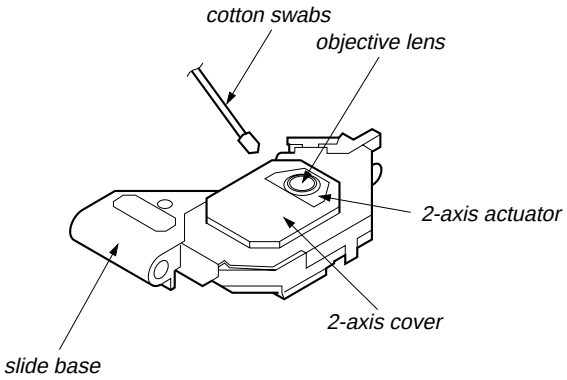
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

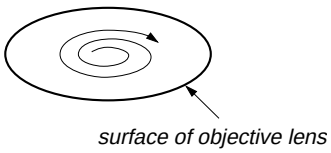
NOTES ON PICK-UP FLEXIBLE BOARD

The pick-up flexible board in this set is secured to the optical pick-up with an adhesive tape. Once the tape is removed, an adhering force becomes weak, and it cannot be reused.
Therefore, if the optical pick-up is replaced, replace also the pick-up flexible board with a new one.

NOTES ON CLEANING THE OBJECTIVE LENS



Apply CD lens cleaner B-4 (Part No.:J-2501-000-A) to cotton swabs (narrow type) (Part No.:J-2501-023-A) to be lightly wet. Use a force (about 5 g (0.18 oz)) to make the objective lens in contact with the bottom lightly, and clean the lens by spirals as following below.
Replace the cotton swab and repeat this cleaning two or three times.



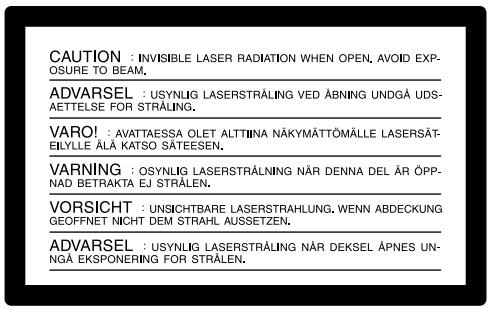
Notes:
Do not force to push the objective lens. Otherwise, the plate spring supporting the objective lens will be bent, causing a deteriorated RF waveform.
Never touch anything other than the objective lens. Otherwise, a significant deterioration occurs in the RF waveform.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

This appliance is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

The following caution label is located inside the unit.



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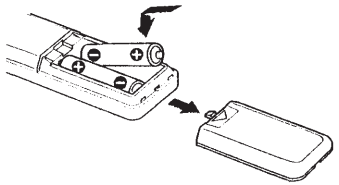
Unpacking

Check that you received the following items:
- Remote commander (remote) (1)
- R6 (size AA) batteries (2)
- AM loop aerial (1)

Inserting batteries into the remote

You can control the CD Receiver using the supplied remote.
Insert two R6 (size AA) batteries by matching the + and – on the batteries. When using the remote, point it at the remote sensor ◘ on the CD Receiver.



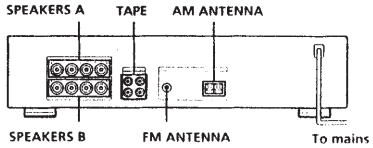
When to replace batteries
With normal use, the batteries should last for about six months. When the remote no longer operates the CD Receiver, replace both batteries with new ones.

Notes
- Do not leave the remote near an extremely hot or humid place.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.
- If you do not use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Hooking Up the System

Overview

This section describes how to connect your speakers, tape deck, FM aerial and the supplied AM loop aerial to the CD Receiver. Be sure to turn off the power of each component before making the connections.

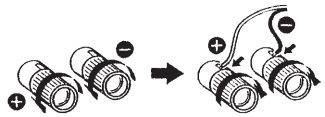


Speaker system hookups

You can connect two pairs of speakers, A and B.

What cords will I need?
Speaker cord (not supplied) (1 for each speaker)

Twist the stripped ends of the cord about 15 mm (about 2/3 inch). Be sure to match the speaker cord to the appropriate terminal on the components: + to + and – to –. If the cords are reversed, the sound will be distorted and will lack bass.



Connecting to bi-wire system speakers
Since the two pairs of speaker terminals on your CD Receiver, SPEAKERS A and B, can provide simultaneous speaker output, you can use them to connect a bi-wire speaker system.

To select speaker system A or B
Press SPEAKER A or B. To drive both speaker systems simultaneously, press both SPEAKER A and B.

Note
Use speakers with a nominal impedance of 4 to 16 ohms.
When outputting at the same time to two speaker systems, use speakers with a nominal impedance of 8 to 16 ohms.

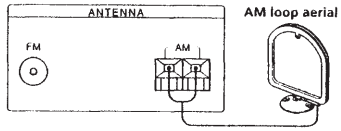
AM aerial hookups

What will I need?
AM loop aerial (supplied) (1)

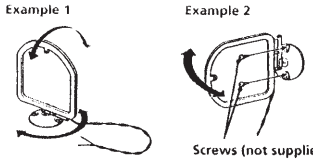
1 Set up the supplied aerial.

You can use the aerial by standing it (Example 1) or fixing it to a wall (Example 2).

2 Connect the AM loop aerial to the AM ANTENNA terminals on the back of the CD Receiver.



3 Adjust the aerial direction for the best reception. The AM loop aerial has a directivity which detects the signal from some angles more strongly than others. Set the aerial to the orientation which provides the best receiving condition.
If a high pitched noise (beat noise) occurs when recording AM broadcasts, adjust the position of the AM loop aerial so that the noise disappears.
If you live in a building constructed of reinforced concrete, or with a steel frame, you may not be able to achieve good reception since the radio waves become weaker indoors.



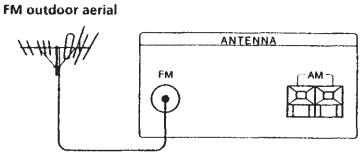
For stations that are difficult to receive
Try repositioning the loop aerial while tuning. Placing the supplied AM loop aerial near a window will help improve reception quality.

FM aerial hookups

With an FM outdoor aerial, you can obtain higher FM broadcast sound quality.

What will I need?
FM outdoor aerial (not supplied) (1) and 75-ohm coaxial cable with IEC female type connector (not supplied) (1)

Connect an FM outdoor aerial (not supplied) to the FM ANTENNA terminal on the back of the CD Receiver.

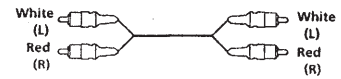


Connecting a ground wire

If you connect an outdoor aerial, be sure to connect an earth lead (not supplied) to the AM ANTENNA ⏚ terminal (in addition to the AM loop aerial) for lightning protection.

Audio component hookups

What cords will I need?
Audio cords (not supplied) (2)

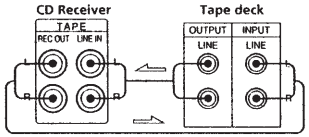


When connecting an audio cord, be sure to match the colour-coded pins to the appropriate jacks on the components: Red (right) to Red and White (left) to White. Be sure to make connections firmly to avoid hum and noise.

(Continued)

This section extracted from instruction manual.

The arrow ⇨ indicates signal flow.



The audio signal of the currently selected source (CD or tuner) is output through the TAPE OUT jacks.

Connecting the mains lead

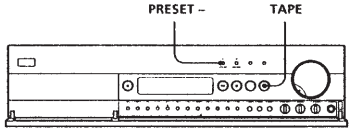
Connect the mains lead to a wall outlet.

Note

Separate the mains lead, audio cords and speaker cords. Noise or sound deterioration may occur when audio cords are in contact with the mains lead, or when the mains lead or speaker cords are placed near a loop aerial or aerial wire.

Before using the CD Receiver for the first time

You need to reset the CD Receiver.



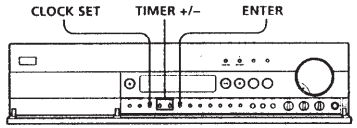
While the power is off, press TAPE while holding down PRESET –.
"All Clear" appears in the display.

Note

When you reset the CD Receiver, all the preset radio stations are erased.

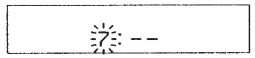
Setting the Clock

You must set the time before using the timer functions.

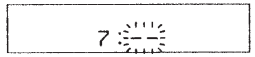


1 Press CLOCK SET.
The hour indication flashes.

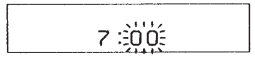
2 Press TIMER +/– to set the hour.
The clock uses the 24-hour system.



3 Press ENTER.
The minute indication flashes.



4 Press TIMER +/– to set the minute.



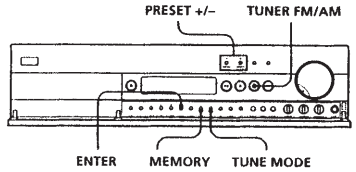
5 Press ENTER.
The clock starts.

To adjust the clock after you have set it

Press CLOCK SET and hold down until the hour indication of the clock starts flashing (about one second), then adjust the clock following the above procedure.

Presetting Radio Stations

This section shows you how to store up to 30 of your favourite FM or AM stations manually onto preset codes made up of characters (A, B or C) and numbers (1–0), such as A7. You can store up to 10 stations on each of the 3 different letters. You can use these letters to classify stations according to music category or station band.



1 Press POWER to turn on the CD Receiver.

2 Press TUNER FM/AM repeatedly to choose either FM or AM.

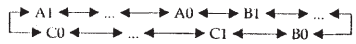
3 Press and hold PRESET +/– and release it when the frequency numbers start changing.
Press PRESET + for a higher frequency; press PRESET – for a lower frequency.
When this unit locates a station, "TUNED" appears in the display and scanning stops automatically (Automatic Tuning).

If "PRESET" appears in the display

Press TUNE MODE repeatedly until "PRESET" disappears from the display, then do the above procedure.

4 Press MEMORY.
The lowest available preset code number flashes to indicate that this unit is ready to store the station.

5 Press PRESET +/– repeatedly until the preset code you want appears in the display.
Each time you press the button, the preset code changes as follows:



If you store a station at a preset code where you have already stored another station, the previous station is erased.

6 Press ENTER.
This unit stores the station at the preset code you specified.

7 Repeat Steps 2 through 6 to store other stations.

When you tune in AM stations

Adjust the direction of the AM loop aerial for optimum reception.

If the STEREO indicator remains off

Press ST/MONO when an FM stereo broadcast is received.

If an FM stereo programme is distorted

The STEREO indicator flashes. Press ST/MONO to change to monaural (MONO). You will not have the stereo effect but the distortion will be reduced. To return to stereo mode, press this button again.

If you cannot tune in the station you want (Manual Tuning)

With Manual Tuning, you can search through all stations broadcasting on each band, and tune in stations with extremely weak signals that you might not be able to receive with Automatic Tuning.

1 Press TUNER FM/AM repeatedly to choose FM or AM.
2 Press PRESET +/– repeatedly until you tune in the desired station.
Press PRESET + for a higher frequency; press PRESET – for a lower frequency.

If "PRESET" appears in the display

Press TUNE MODE repeatedly until "PRESET" disappears from the display, then do the above procedure.

RDS (Radio Data System) Station names are stored automatically

When you preset an RDS station broadcasting station name information, the station name is automatically stored at the station preset.

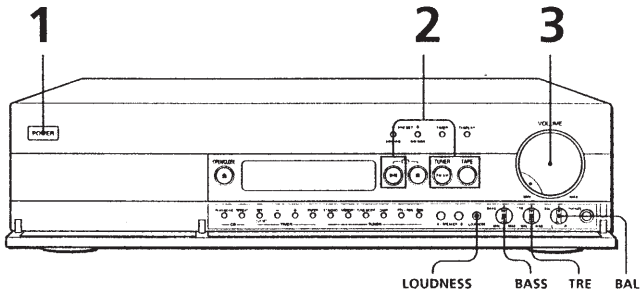
If you want to label the stations

Follow the procedure described in "Naming the Preset Stations" on page 13.

Note

If the mains lead is disconnected for about a month, the preset stations will be cleared from the CD Receiver's memory, and you will have to preset the stations again.

Selecting a Source



- **See pages 4 – 6 for the hookup information.**

You can listen through the headphones
Connect the headphones to the PHONES jack and set SPEAKER A and B to OFF.

You can adjust the volume using the remote
Press VOL +/–.

Note
Avoid high speaker output at which the sound is distorted. High-frequency distortion may damage the speakers.

1 Press POWER to turn on the CD Receiver and turn VOLUME fully anticlockwise to prevent damaging the speakers with excessive output.

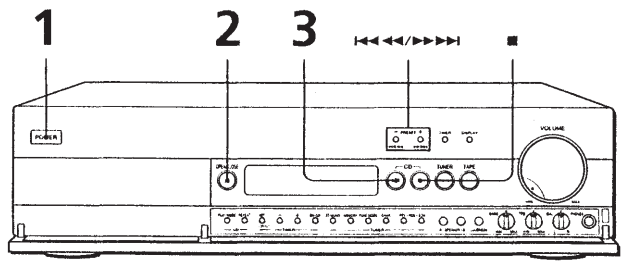
2 Press a function button to select the programme source you want to listen to.

To listen to a	Press
Radio broadcast	TUNER FM/AM
Compact disc	CD ▶II
Tape	TAPE and start playing a tape

3 Adjust the volume by turning VOLUME.

To	You need to
Adjust the bass	Turn BASS
Adjust the treble	Turn TRE
Adjust the balance	Turn BAL
Reinforce the bass and treble at low listening level	Press LOUDNESS
Mute the sound [🔇]	Press MUTING on the remote

Playing a CD

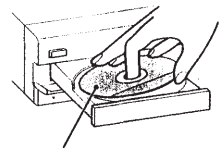


If playback doesn't start from the first track
Press PLAY MODE until "SHUFFLE" and "PROGRAM" disappears from the display.

You can locate a point quickly by observing the display during pause
Press I◀◀ ◀◀/▶▶ ▶▶I and hold down until you find the point. You will not hear the sound during the operation.

1 Press POWER to turn on the CD Receiver.

2 Press ⏏ OPEN/CLOSE, and place a CD on the tray.



With the label side up

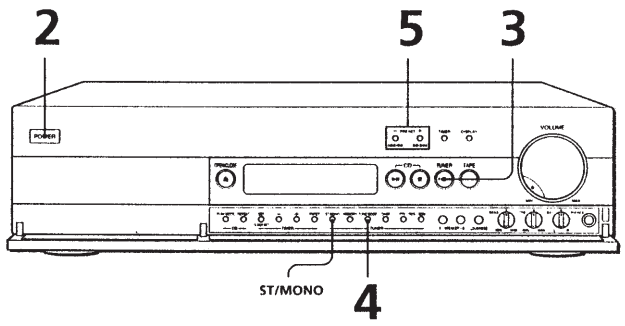
3 Press CD ▶II.
The disc tray closes and playback starts (Continuous Play).

To stop playback

Press CD ■.

When you want to	Press
Pause during play	CD ▶II (or II on the remote)
Resume play after pause	CD ▶II (or II on the remote)
Go to the next track	▶▶ ▶▶I (or ▶▶I on the remote)
Go back to the preceding track	I◀◀ ◀◀ (or I◀◀ on the remote)
Locate a point during play	I◀◀ ◀◀ (forward) or ▶▶ ▶▶I (backward) and hold down until you find the point (or ◀◀/▶▶ on the remote)
Stop playback and remove the CD	⏏ OPEN/CLOSE

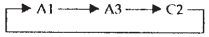
Receiving Preset Stations



- To tune in a non-preset station, see "Presetting Radio Stations" on page 7 for Automatic or Manual Tuning.

Notes

- If no stations are stored, "No Preset" flashes in the display. If only one station is stored, "1 Preset only" flashes.
- The display shows only the preset codes where you have stored the stations beforehand. Example: If you have stored the stations onto A1, A3 and C2, the display changes as follows each time you press the PRESET + button.



1 Make sure you have preset radio stations. (See page 7 for presetting.)

2 Press POWER to turn on the CD Receiver.

3 Press TUNER FM/AM.

4 Press TUNE MODE repeatedly until "PRESET" appears in the display.

5 Press PRESET +/– to select the preset code you want (A1 – C0).

Setting the FM mode manually

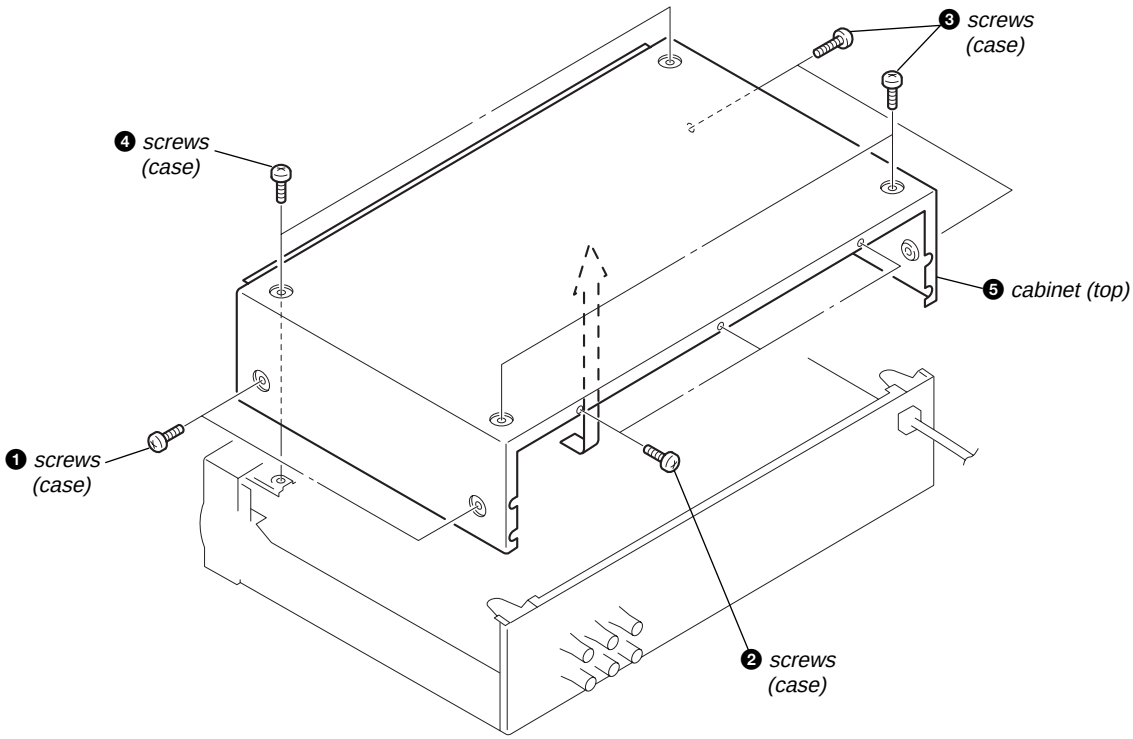
Press ST/MONO to choose the reception mode, select either Auto Stereo or MONO.

- Auto Stereo mode receives stereo broadcasts with strong signals. Press ST/MONO repeatedly until "MONO" disappears from the display.
- MONO mode receives stations with weak signals. Stations will be received in monaural but with even less noise.

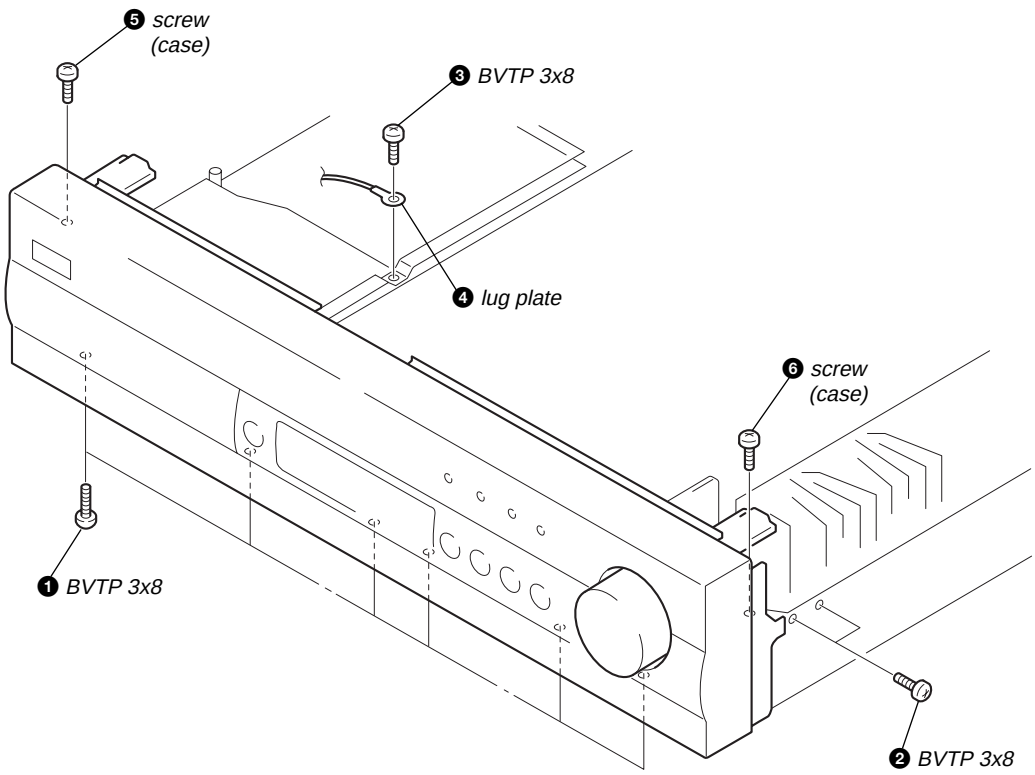
SECTION 2
DISASSEMBLY

Note : Follow the disassembly procedure in the numerical order given.

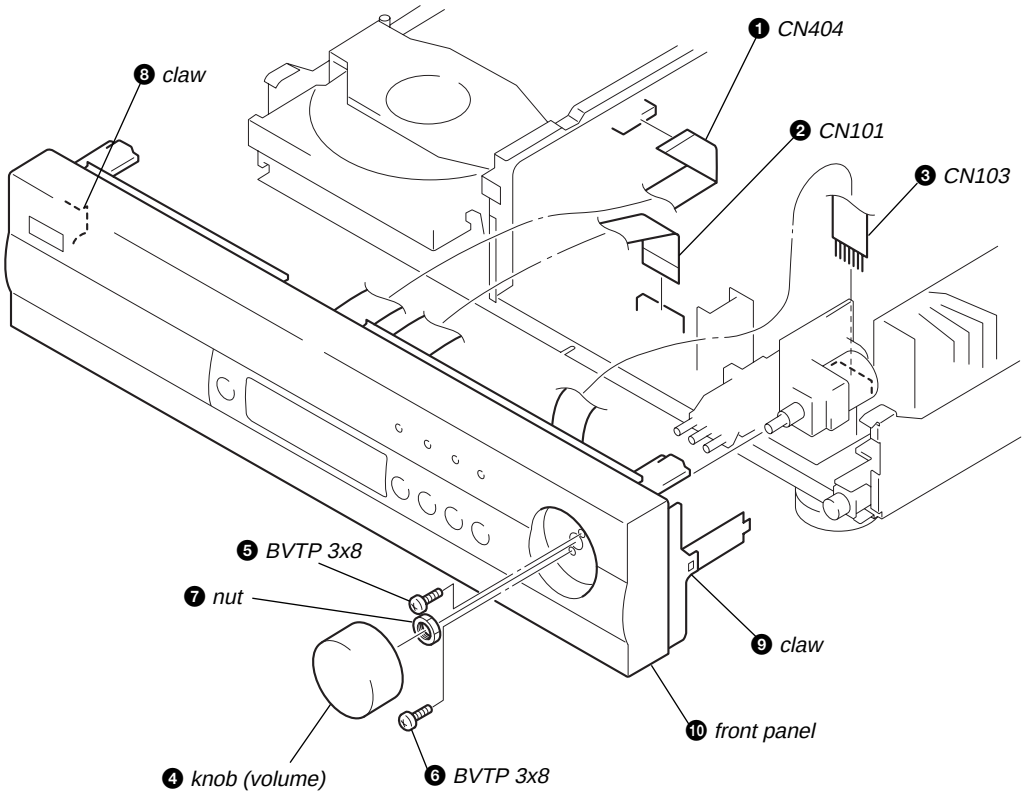
2-1. CABINET (TOP)



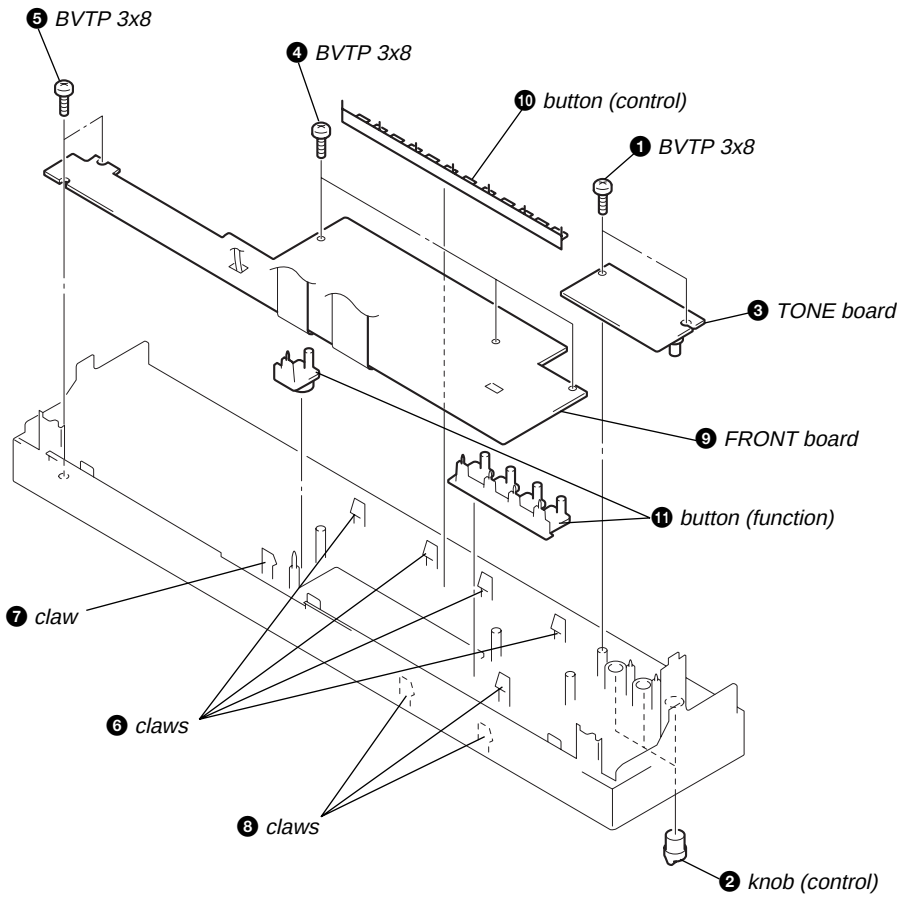
2-2. FRONT PANEL (1)



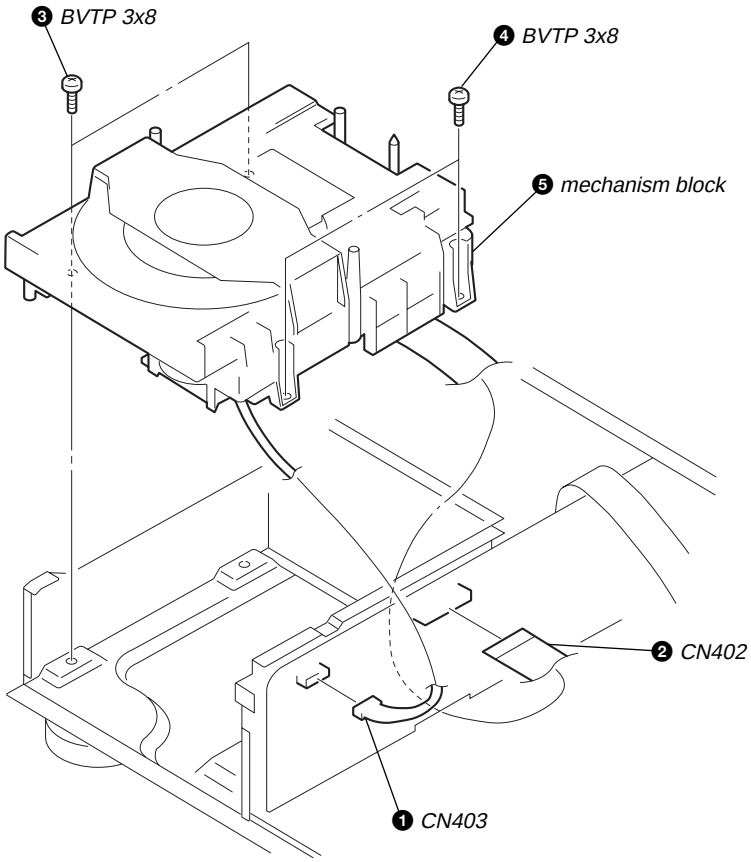
2-3. FRONT PANEL (2)



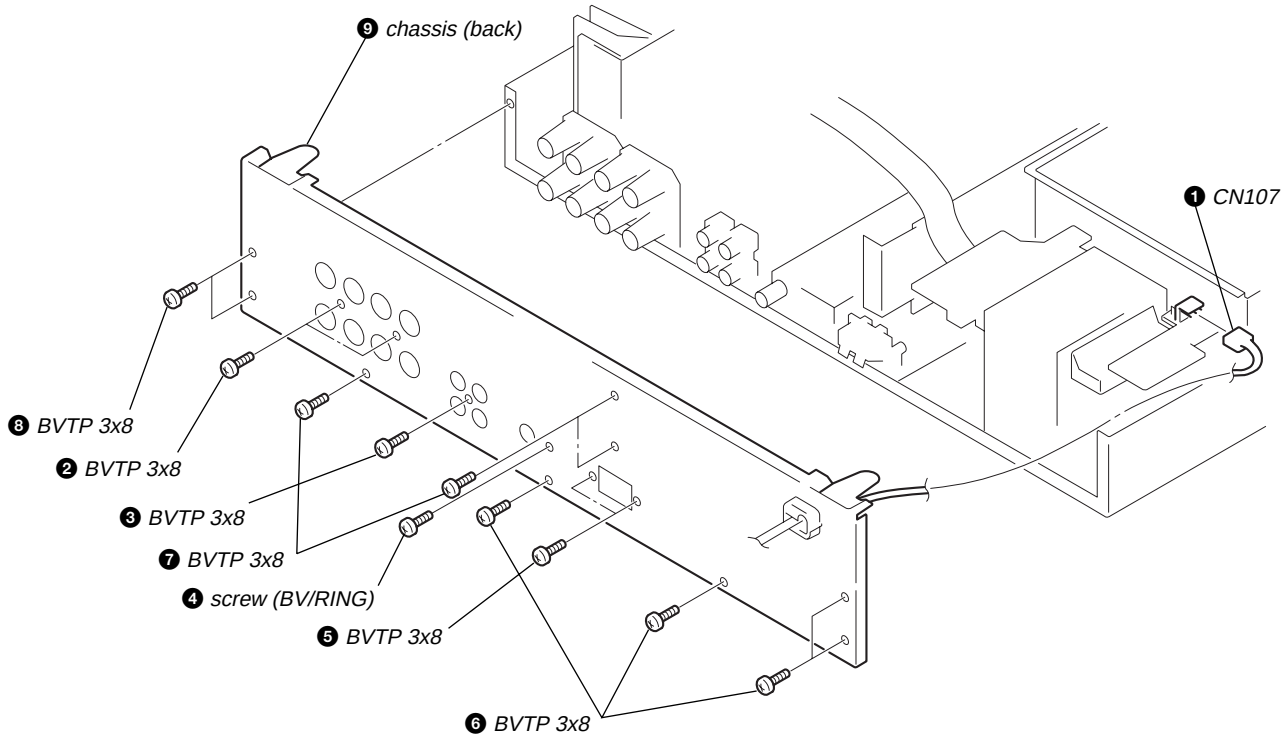
2-4. FRONT BOARD



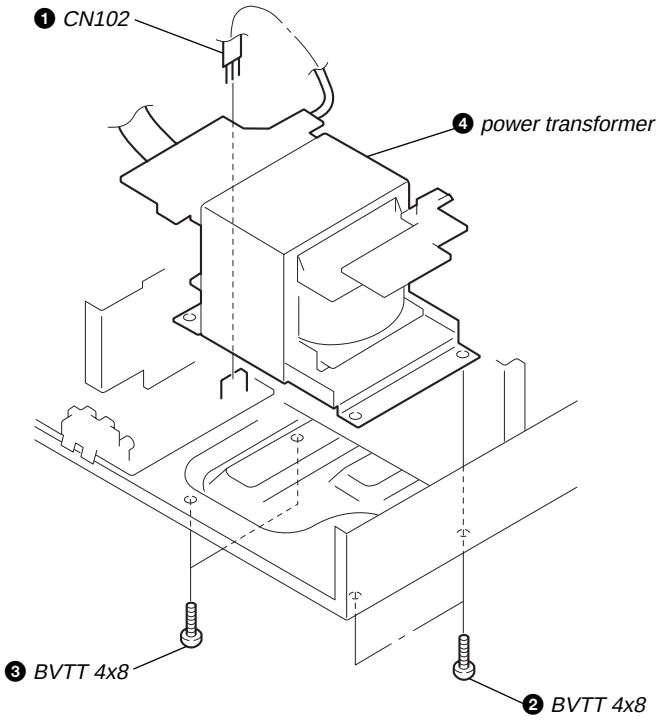
2-5. MECHANISM BLOCK



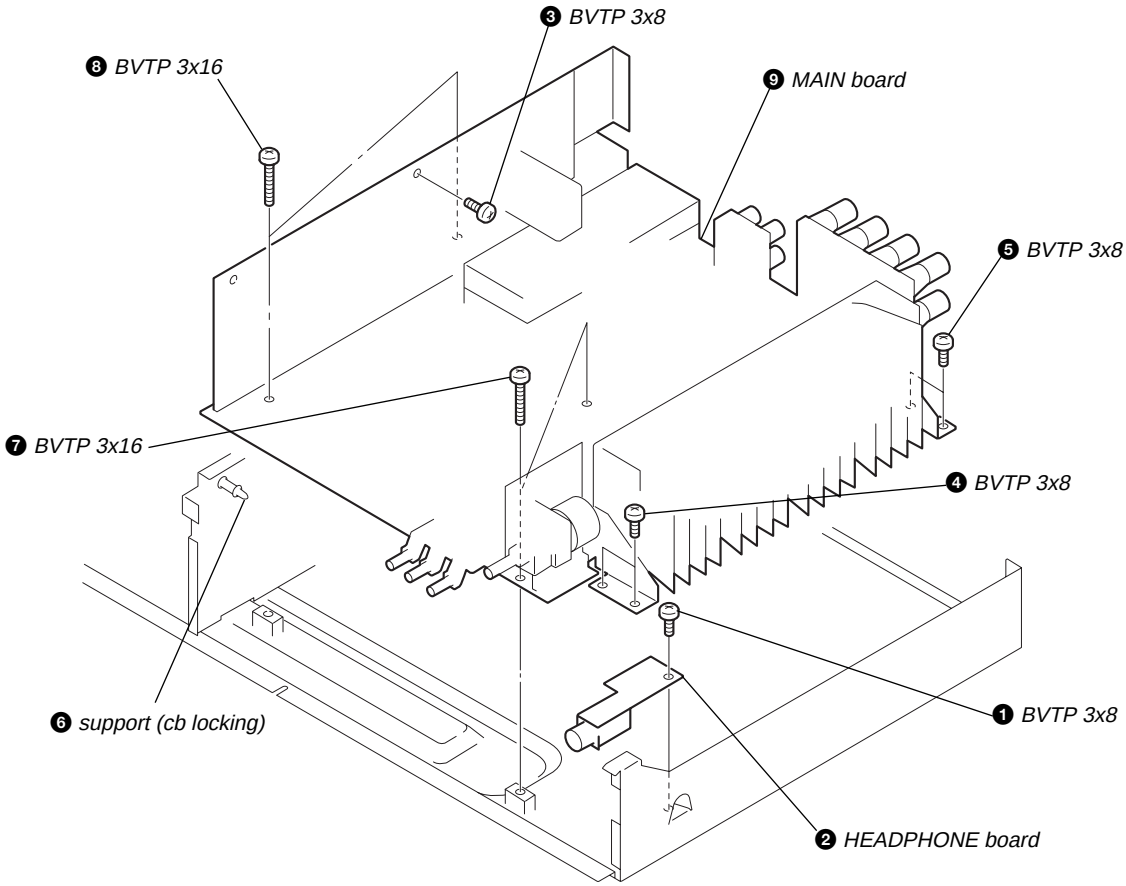
2-6. CHASSIS (BACK)



2-7. POWER TRANSFORMER



2-8. MAIN BOARD



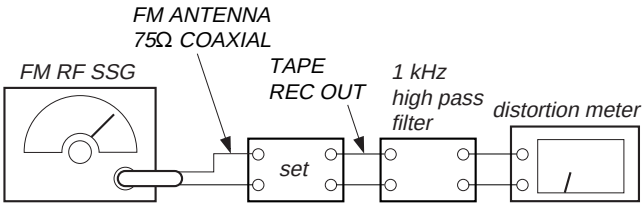
SECTION 3
DISASSEMBLY

FM SECTION **0 dB = 1 μV**

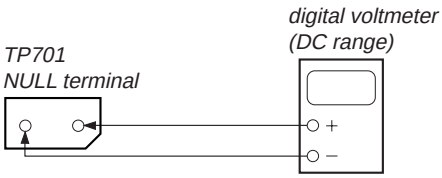
Cautions during repair
When the front end is defective, replace it by a new one because its internal block is difficult to repair.

FM Discriminator Adjustment (NULL and MONO Distortion Adjustment)

Setting :
TUNER button : FM



Carrier frequency : 98.0 MHz
Output level : 60 dB (1 mV)
Mode : mono
Modulation : 1 kHz, 75 kHz deviation (100%)



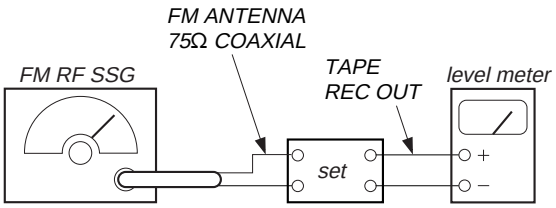
Procedure :
1. Tune the set to 98.0 MHz.
2. Adjust L702 for 0 ± 25 mV reading on the digital voltmeter.
   ..... NULL
3. Adjust L703 for a minimum reading on the distortion meter.
   ..... MONO Distortion (THD)
4. Repeat the adjustments of 2 and 3 several times.

Note : When replacing the ceramic filter, perform this adjustment.

Adjustment Location : See page 14.

FM Stereo Separation Adjustment

Setting :
TUNER button : FM



Carrier frequency : 98.0 MHz
Output level : 60 dB (1 mV)
Mode : stereo
Modulation : main : 1 kHz, 37.5 kHz deviation (50%)
sub : 1 kHz, 37.5 kHz deviation (50%)
19 kHz pilot : 6.75 kHz deviation (9%)

Procedure :

FM stereo signal generator output channel	Level meter connection	Level meter reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust VR703 for minimum reading on level meter.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust VR703 for minimum reading on level meter.

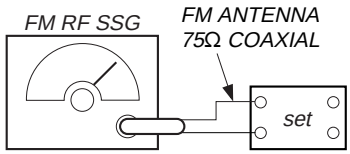
L-CH stereo separation : Ⓐ – Ⓑ
R-CH stereo separation : Ⓒ – Ⓓ

The separations of both channels should be equal.

Adjustment Location : See page 14.

FM Tuning Level Adjustment

Setting :
TUNER button : FM



Carrier frequency : 98.0 MHz
Output level : 25 dB (17.8 μV)
Mode : mono
Modulation : no modulation

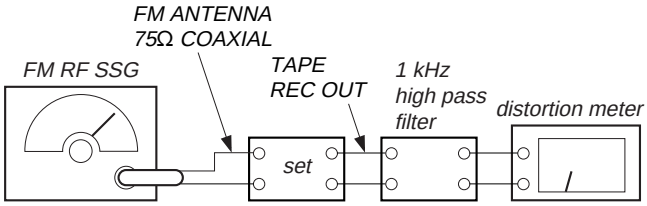
Procedure :
1. Tune the set to 98.0 MHz.
2. Adjust VR701 so that the TUNED indicator goes on.
3. Confirm that the TUNED indicator goes off with FM RF SSG output level set at 22 dB.

Adjustment Location : See page 14.

FM Stereo Distortion Adjustment

Setting :

TUNER button : FM



Carrier frequency : 98.0 MHz
Output level : 60 dB (1 mV)
Mode : stereo
Modulation : main : 1 kHz, 34.125 kHz deviation (45.5%)
sub : 1 kHz, 34.125 kHz deviation (45.5%)
19 kHz pilot : 6.75 kHz deviation (9%)

Procedure :

1. Tune the set to 98.0 MHz.
2. Adjust IFT on PACK701 for a minimum reading on the distortion meter.

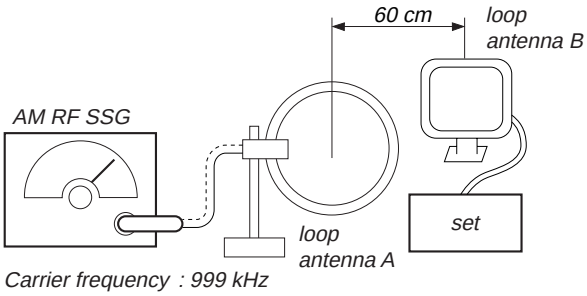
Adjustment Location : See page 14.

AM SECTION 0 dB = 1 μV

AM Tuning Level Adjustment

Setting :

TUNER button : AM



Carrier frequency : 999 kHz
Output level : 55 dB (0.56 mV)

Procedure :

1. Set loop antenna A so that the loop antenna B input level becomes 55 dB (0.56 mV)
2. Tune the set to 999 kHz.
3. Adjust VR702 so that the TUNED indicator goes on.
4. Confirm that the TUNED indicator goes off with AM RF SSG output level set at 53 dB.

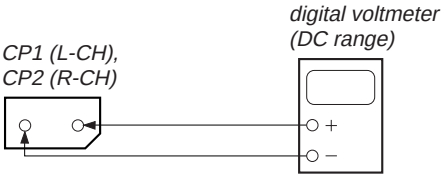
Adjustment Location : See page 14.

AUDIO SECTION

Idle Current Adjustment

Setting :

VOLUME control : MIN



Procedure :

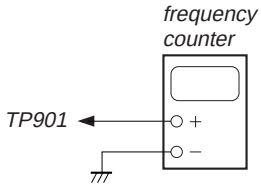
1. Adjust VR101 (L-CH), VR102 (R-CH) for 7 ± 0.2mV reading on digital voltmeter.

Adjustment Location : See page 14.

FRONT SECTION

Frequency (Clock) Adjustment

Setting :



Procedure :

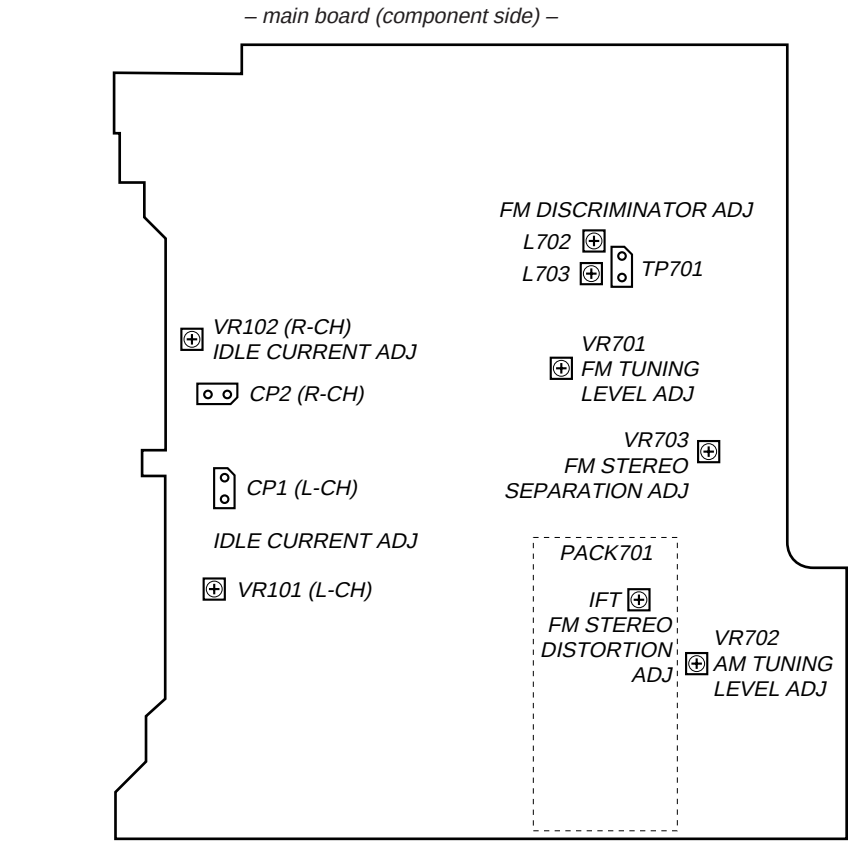
1. Connect the frequency counter to TP901.
2. Adjust C914 for 32.768 kHz ± 0.1 Hz reading on frequency counter.

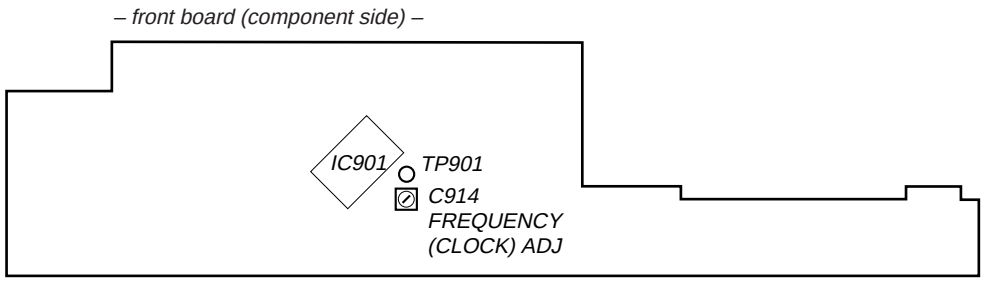
Adjustment Location : See page 14.

CD SECTION

• This set is automatically adjustment.

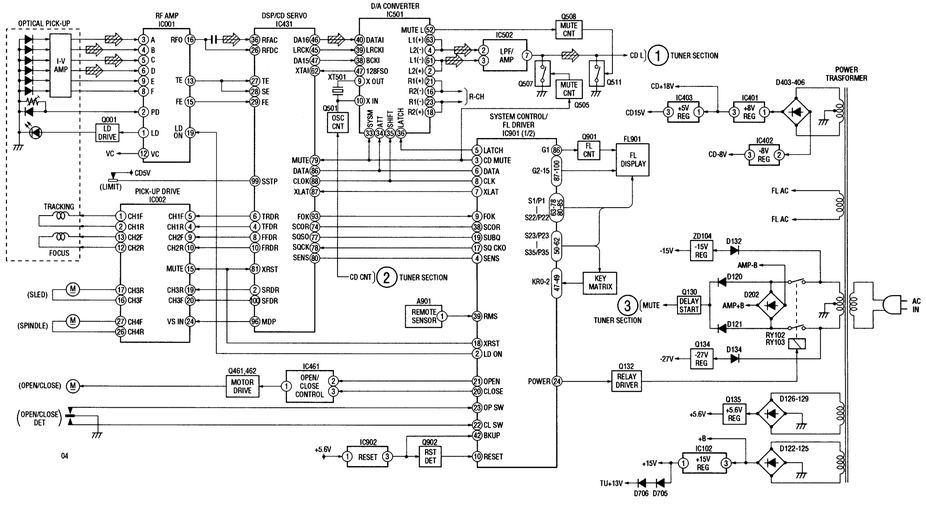
Adjustment Location :



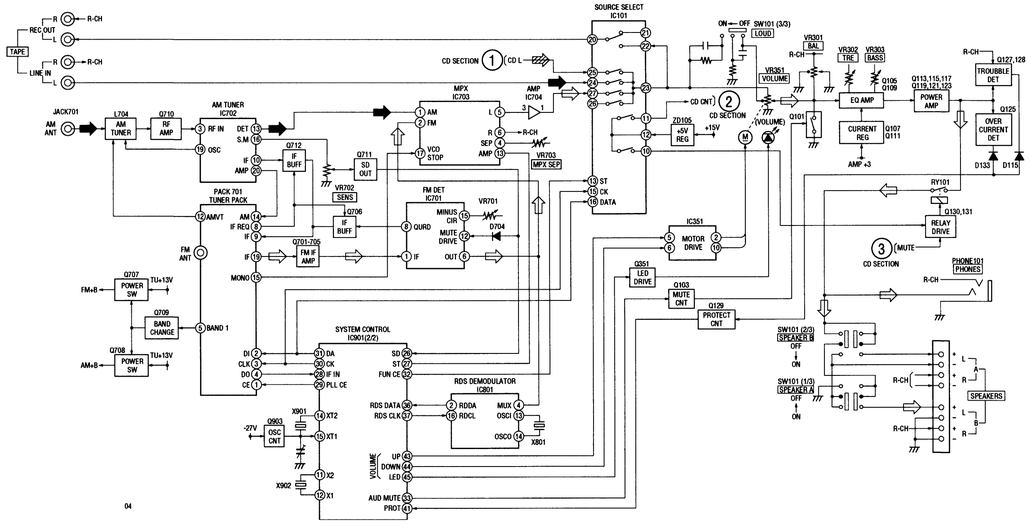


SECTION 4
DIAGRAMS

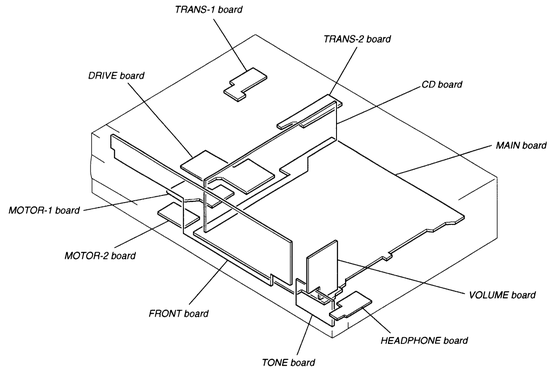
4-1. BLOCK DIAGRAM — CD SECTION —



4-2. BLOCK DIAGRAM — TUNER SECTION —



4-3. CIRCUIT BOARDS LOCATION

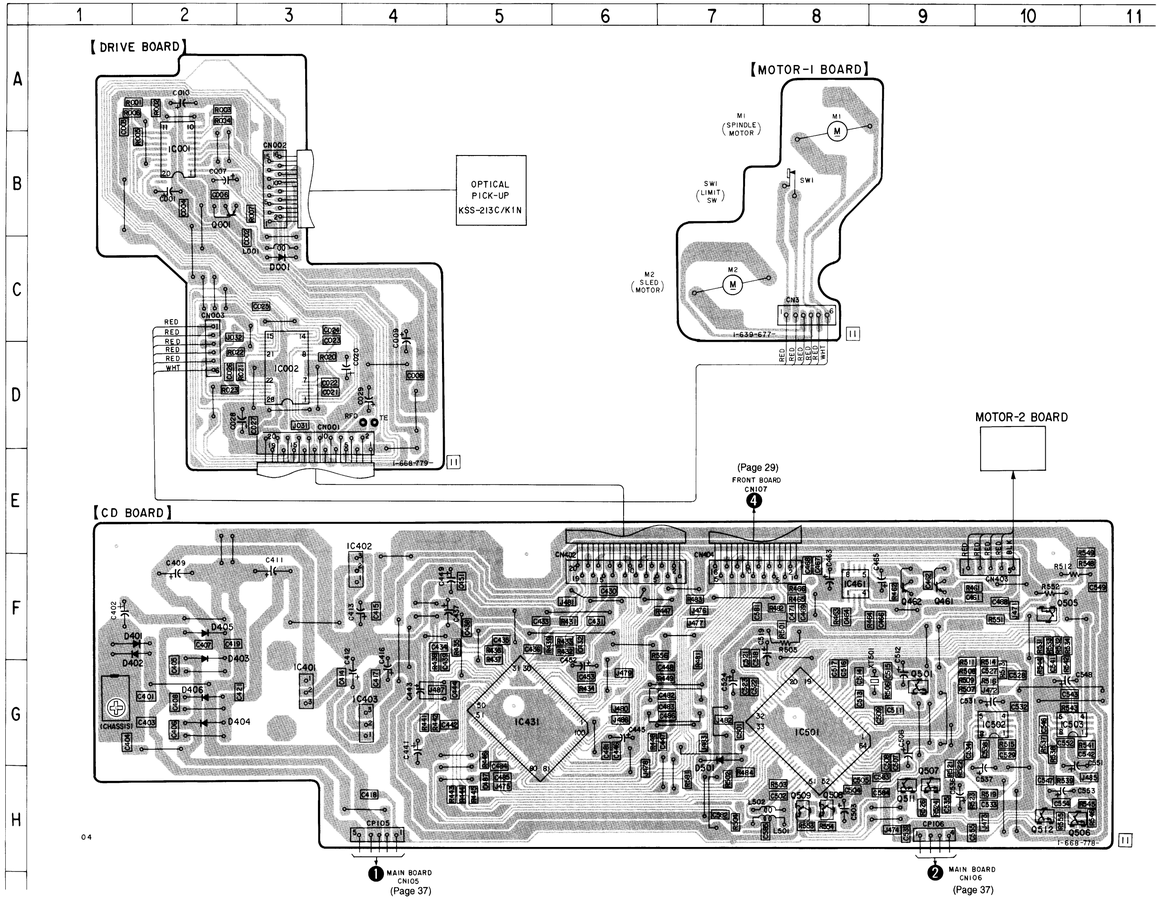


• **Semiconductor Location**

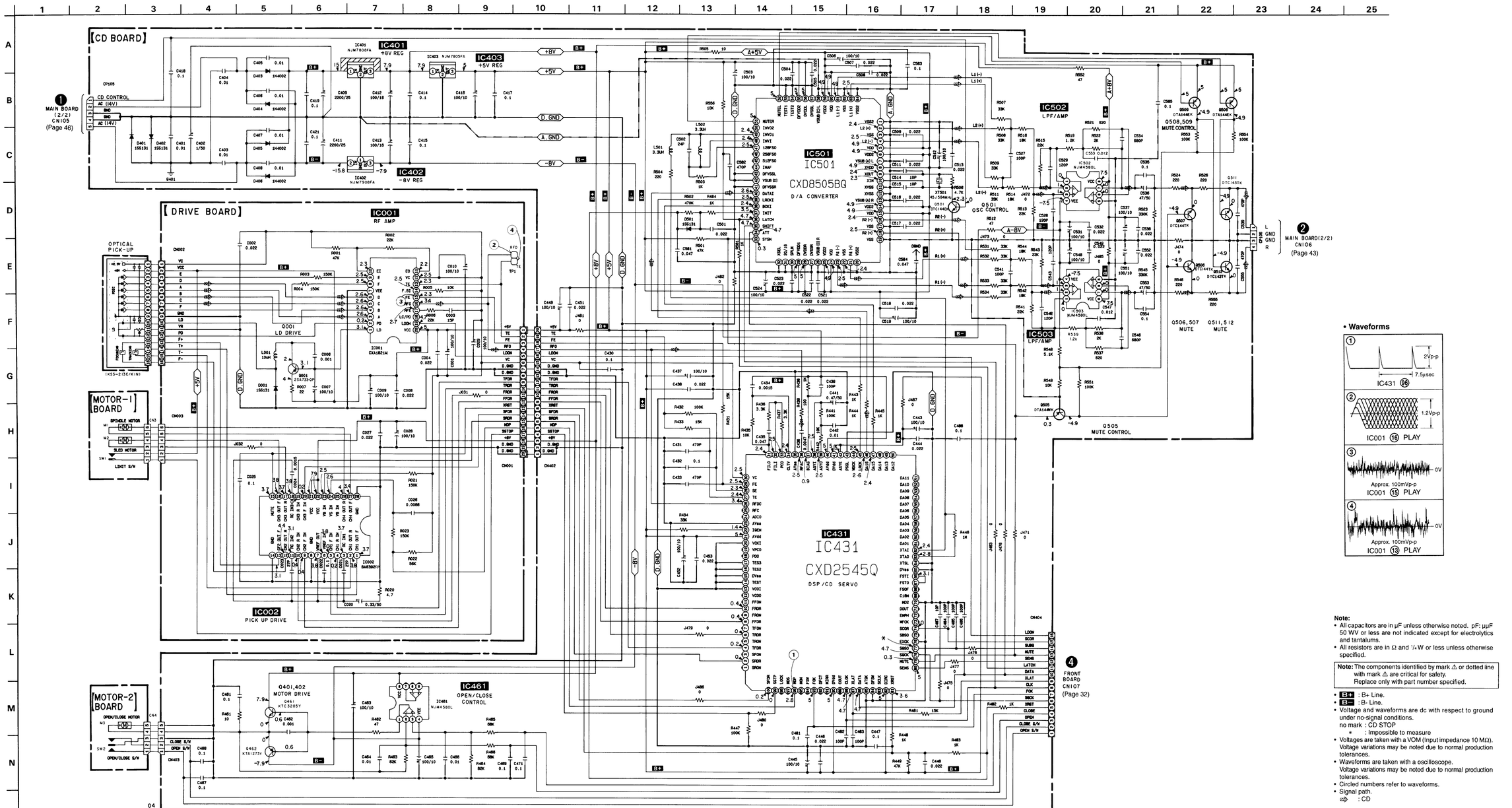
Ref. No.	Location
D001	C-3
D401	F-1
D402	F-1
D403	F-2
D404	G-2
D405	F-2
D406	G-2
D501	G-7
IC001	B-2
IC002	D-3
IC401	G-3
IC402	F-4
IC403	G-4
IC431	G-5
IC461	F-8
IC501	G-8
IC502	G-10
IC503	G-10
Q001	B-2
Q461	F-9
Q462	F-9
Q501	G-9
Q505	F-10
Q506	H-10
Q507	H-9
Q508	H-8
Q509	H-8
Q511	H-9
Q512	H-10

Note:
- ○—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

4-4. PRINTED WIRING BOARDS — CD SECTION —



4-5. SCHEMATIC DIAGRAM — CD SECTION — • Refer to page 47 for IC Block Diagrams.



• Waveforms

Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.

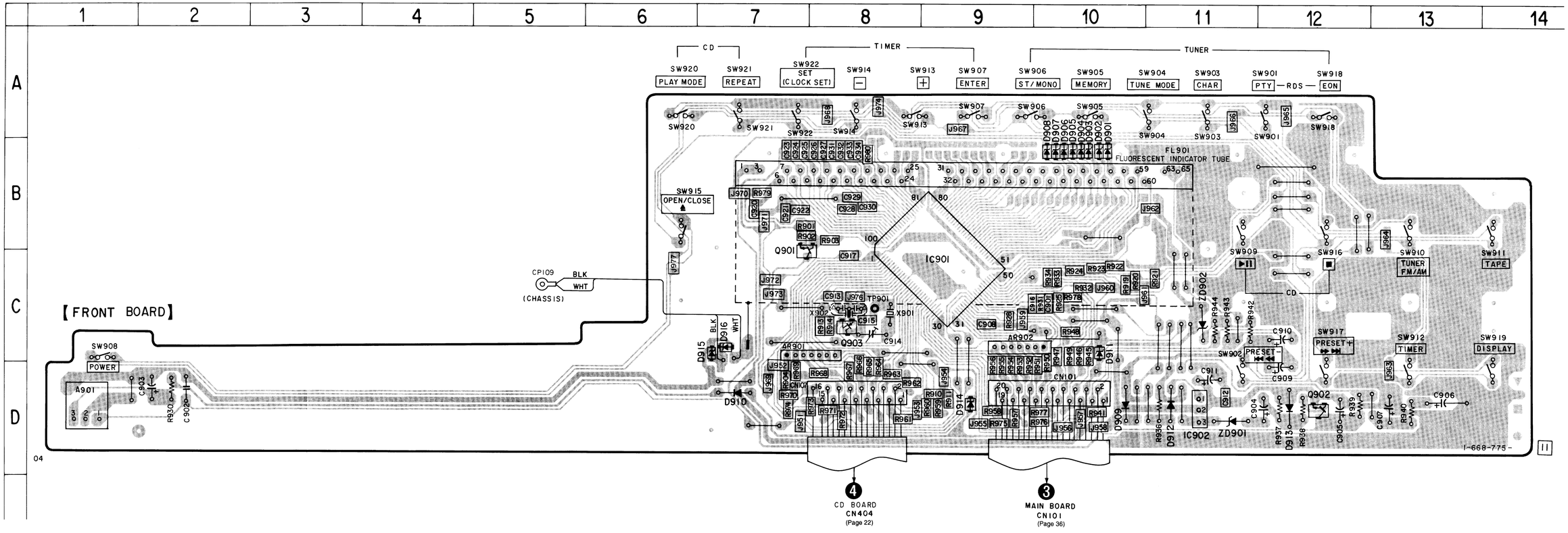
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- B+ : B+ Line.
- B- : B- Line.
- Voltage and waveforms are dc with respect to ground under no-signal conditions. no mark : CD STOP * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path. ▱▷ : CD

4-6. PRINTED WIRING BOARD — FRONT SECTION —

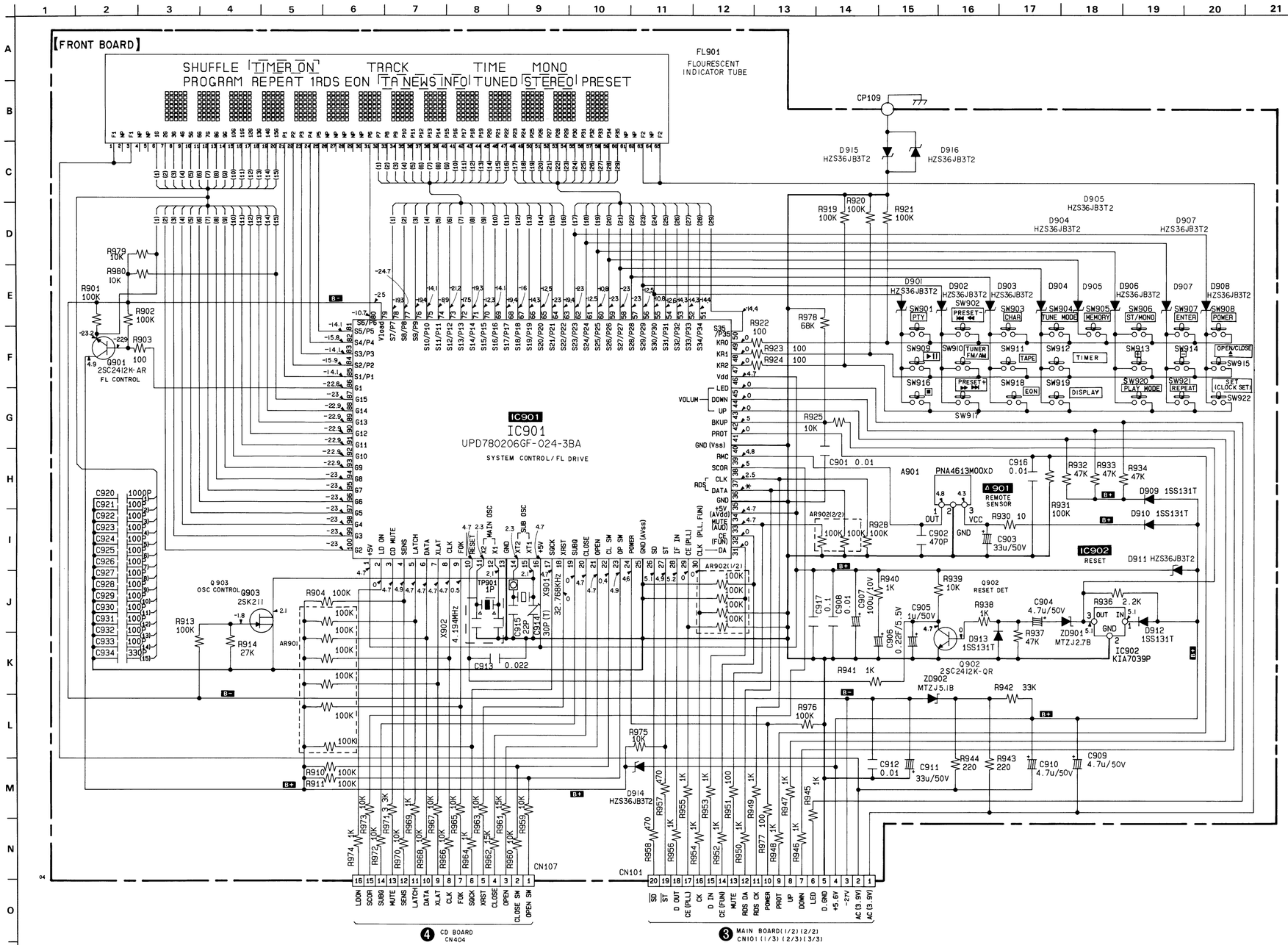
• **Semiconductor Location**

Ref. No.	Location
D901	B-10
D902	B-10
D903	B-10
D904	B-10
D905	B-10
D906	B-10
D907	B-10
D908	B-10
D909	D-10
D910	D-7
D911	C-10
D912	D-11
D913	D-12
D914	D-9
D915	C-7
D916	C-7
IC901	C-9
IC902	D-11
Q901	B-7
Q902	D-12
Q903	C-8
ZD901	D-11
ZD902	C-11



Note:
- △ : internal component.
- ▒▒ : Pattern from the side which enables seeing.

4-7. SCHEMATIC DIAGRAM — FRONT SECTION — • Refer to page 48 for IC Block Diagrams.



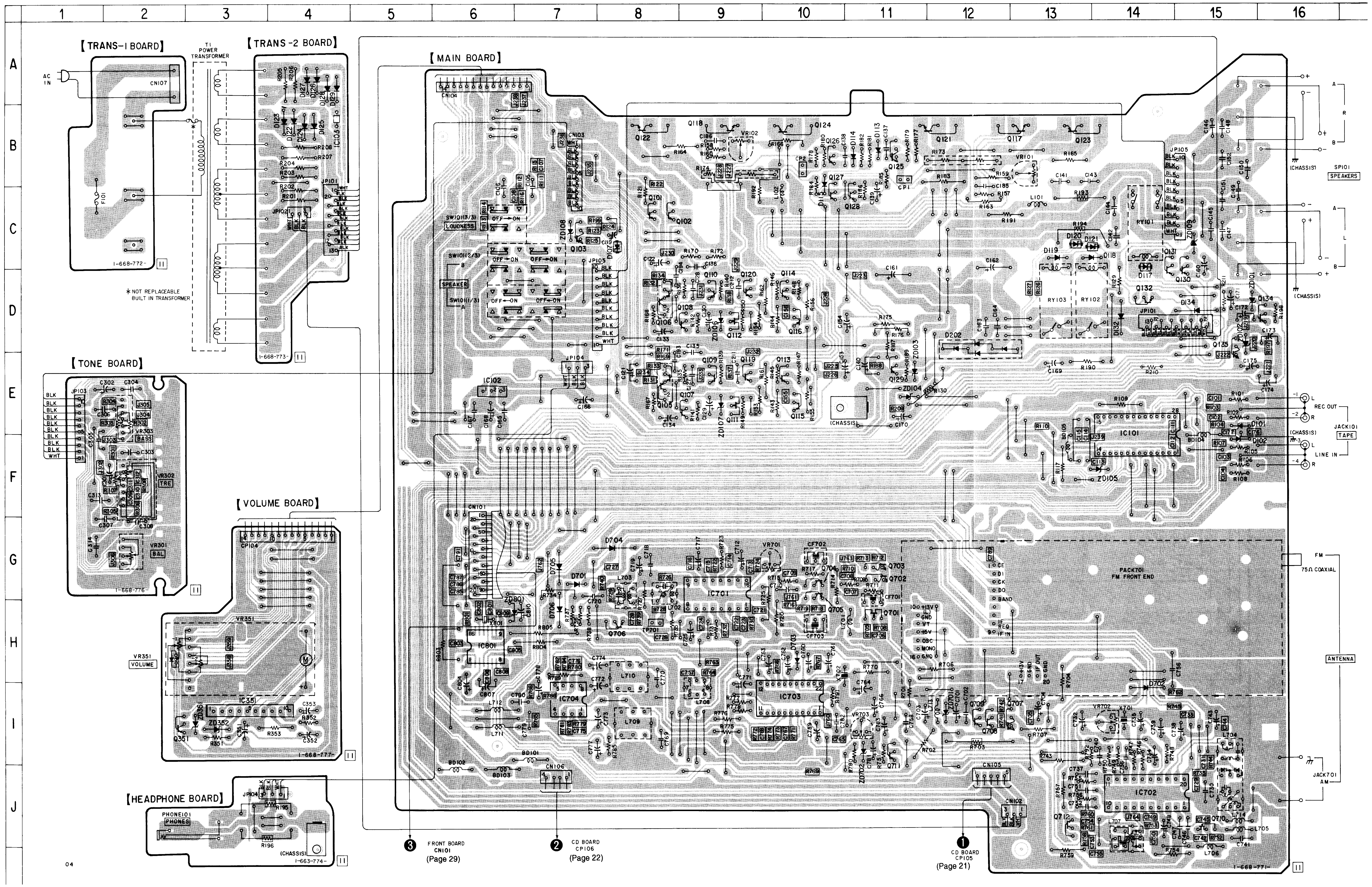
Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¹/₄ W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- B+ : B+ Line.
- B- : B- Line.
- ▭ : adjustment for repair.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.

4-8. PRINTED WIRING BOARDS — MAIN SECTION —

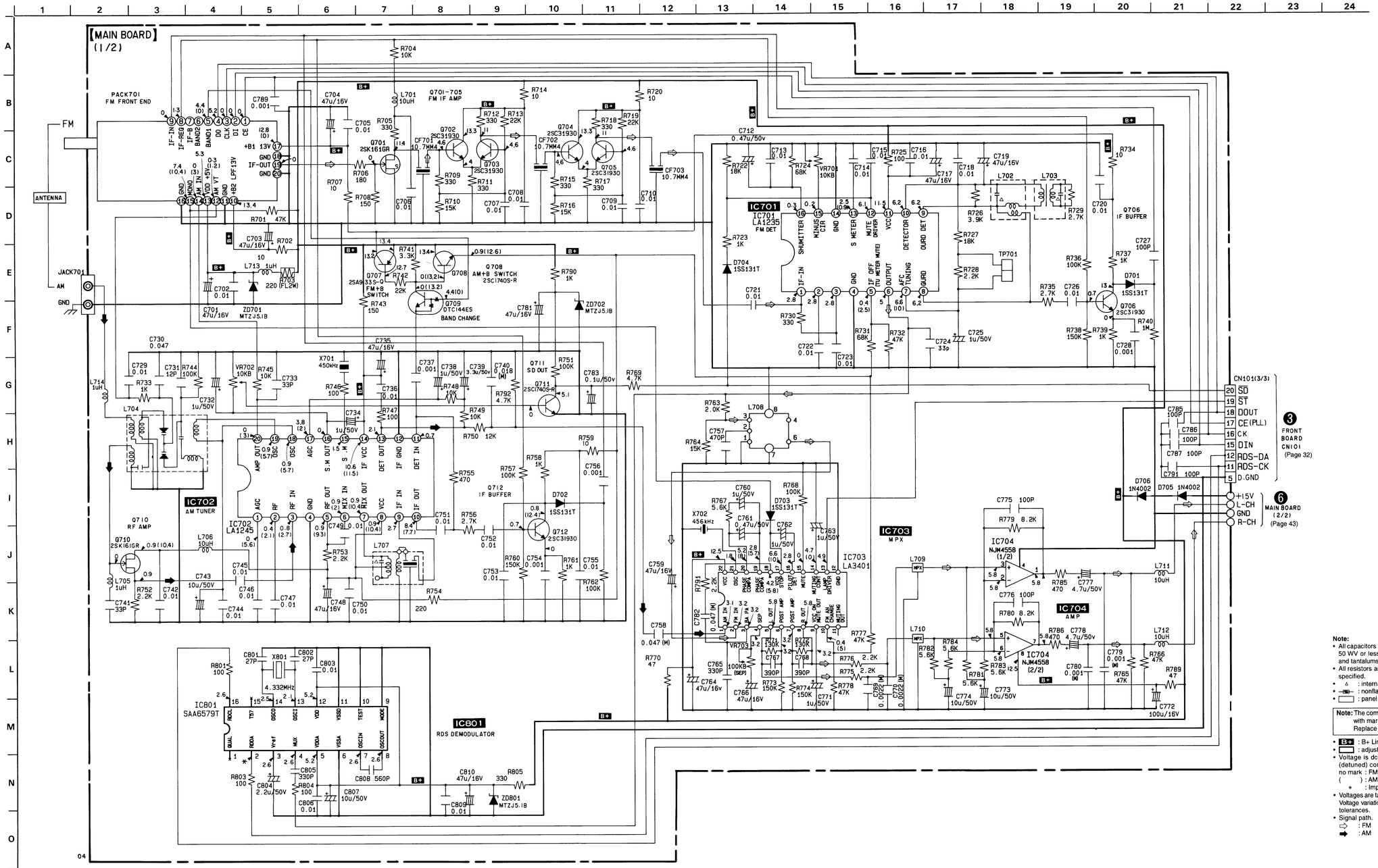
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	E-15	Q115	E-10
D102	F-15	Q116	D-10
D107	C-8	Q117	B-12
D113	B-12	Q118	B-9
D114	B-11	Q119	E-9
D115	B-10	Q120	D-9
D117	C-14	Q121	B-11
D118	C-13	Q122	B-8
D119	C-13	Q123	B-13
D120	C-13	Q124	B-10
D121	C-13	Q125	B-11
D122	B-4	Q126	B-10
D123	B-4	Q127	C-10
D124	B-4	Q128	C-11
D125	B-4	Q129	E-11
D126	A-4	Q130	C-15
D127	A-4	Q131	C-14
D128	A-4	Q132	D-14
D129	A-4	Q134	D-15
D202	D-12	Q135	D-15
D701	G-7	Q351	I-2
D702	I-14	Q701	H-11
D703	H-10	Q702	G-11
D704	G-8	Q703	G-11
D705	G-7	Q704	G-10
D706	H-7	Q705	G-10
		Q706	H-8
IC101	E-14	Q707	I-12
IC102	E-6	Q708	I-12
IC351	I-3	Q709	I-12
IC701	G-9	Q710	J-15
IC702	J-14	Q711	I-11
IC703	I-10	Q712	J-13
IC704	I-7		
IC801	H-6	ZD101	D-15
		ZD102	D-15
Q101	C-8	ZD103	E-11
Q102	C-8	ZD104	E-11
Q103	C-7	ZD105	F-13
Q105	E-8	ZD106	D-9
Q106	D-8	ZD107	E-9
Q107	E-8	ZD108	C-7
Q108	D-8	ZD109	C-15
Q109	E-9	ZD351	I-3
Q110	C-9	ZD352	I-3
Q111	E-9	ZD701	I-12
Q112	D-9	ZD702	I-11
Q113	E-10	ZD801	H-6
Q114	D-10		

Note:
- o—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.



4-9. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) — • Refer to page 49 for IC Block Diagrams.

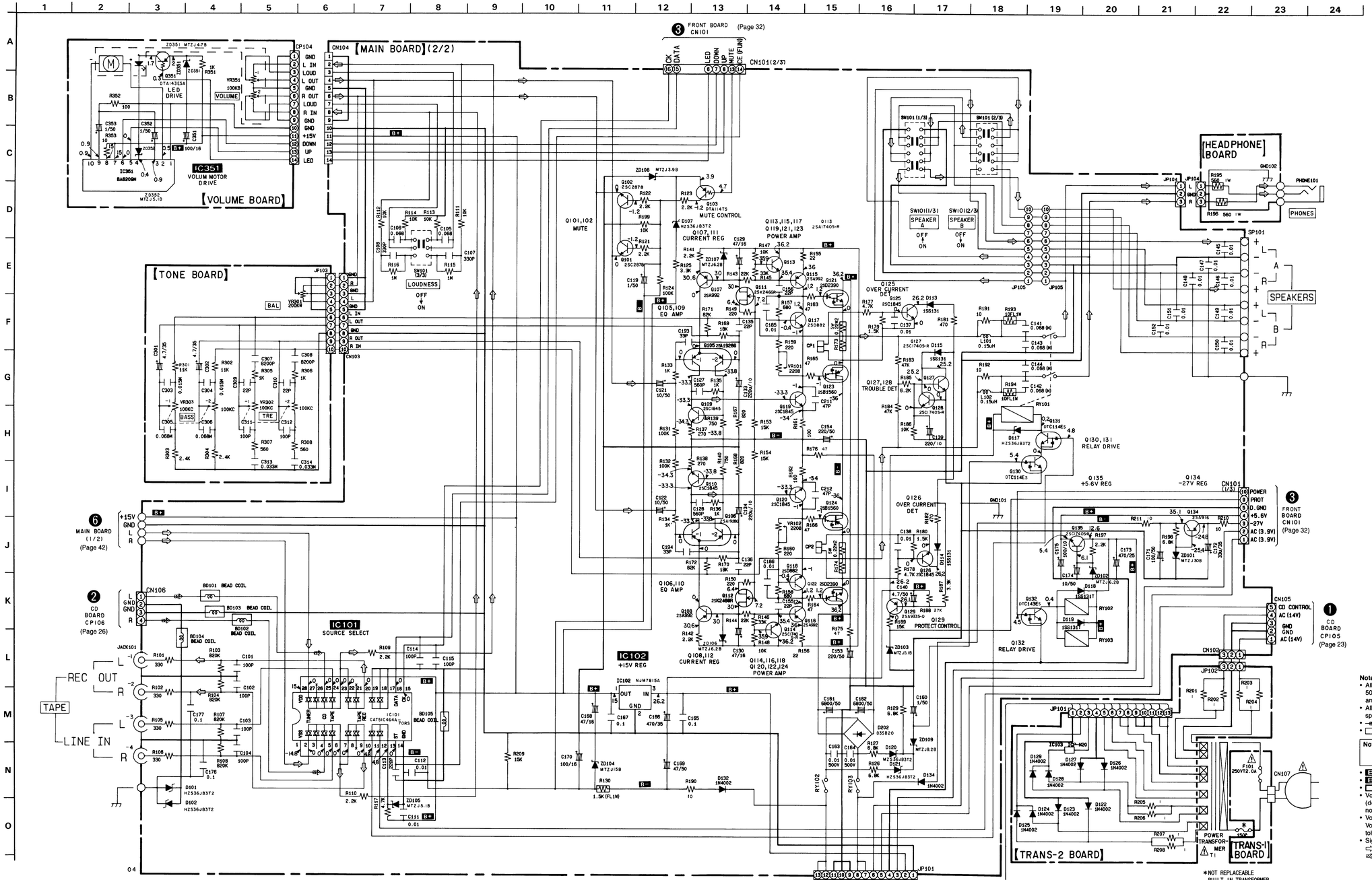


Note:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- ⚠ : internal component.
- ⚠ : nonflammable resistor.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B+ Line.
- ▭ : adjustment for repair.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : AM
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
  ➡ : AM

4-10. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) — • Refer to page 50 for IC Block Diagrams.



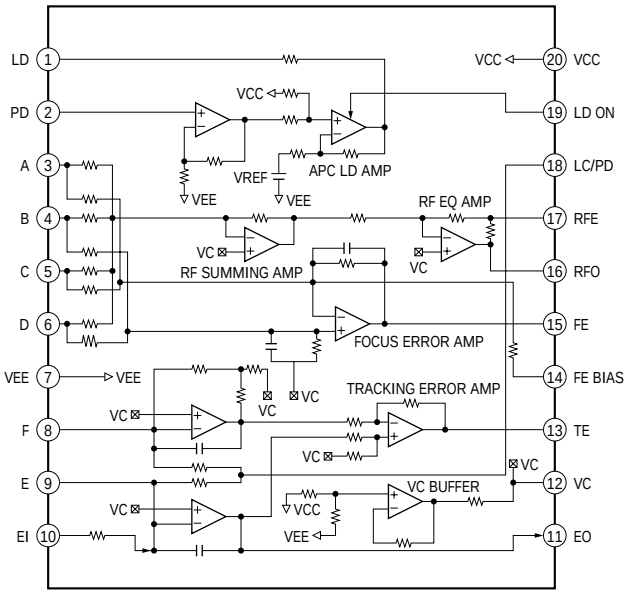
Note:
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- : nonflammable resistor.
- : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

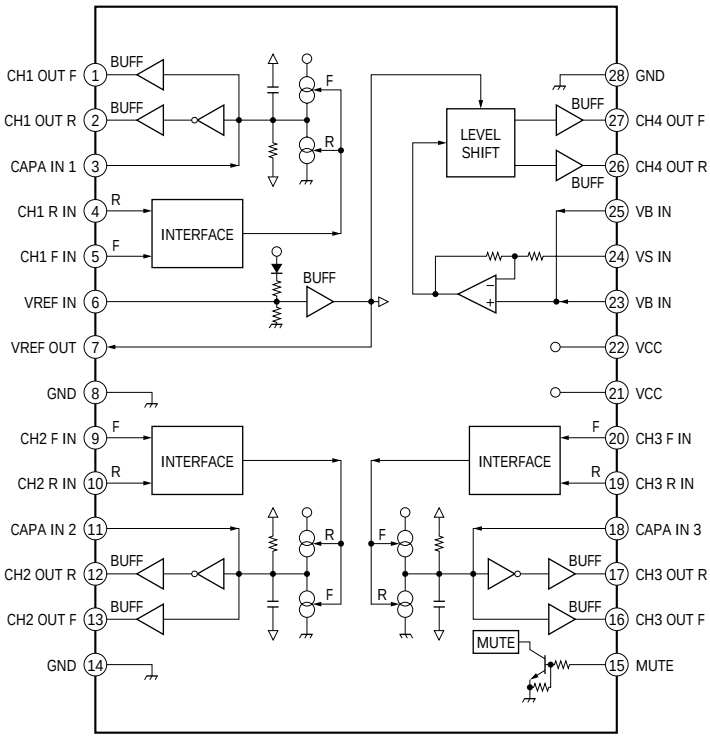
- B+ : B+ Line.
- B- : B- Line.
- : adjustment for repair.
- Voltage is dc with respect to ground under no-signal (detuned) conditions. no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path. ⇨ : FM ⇒ : CD

• IC Block Diagrams

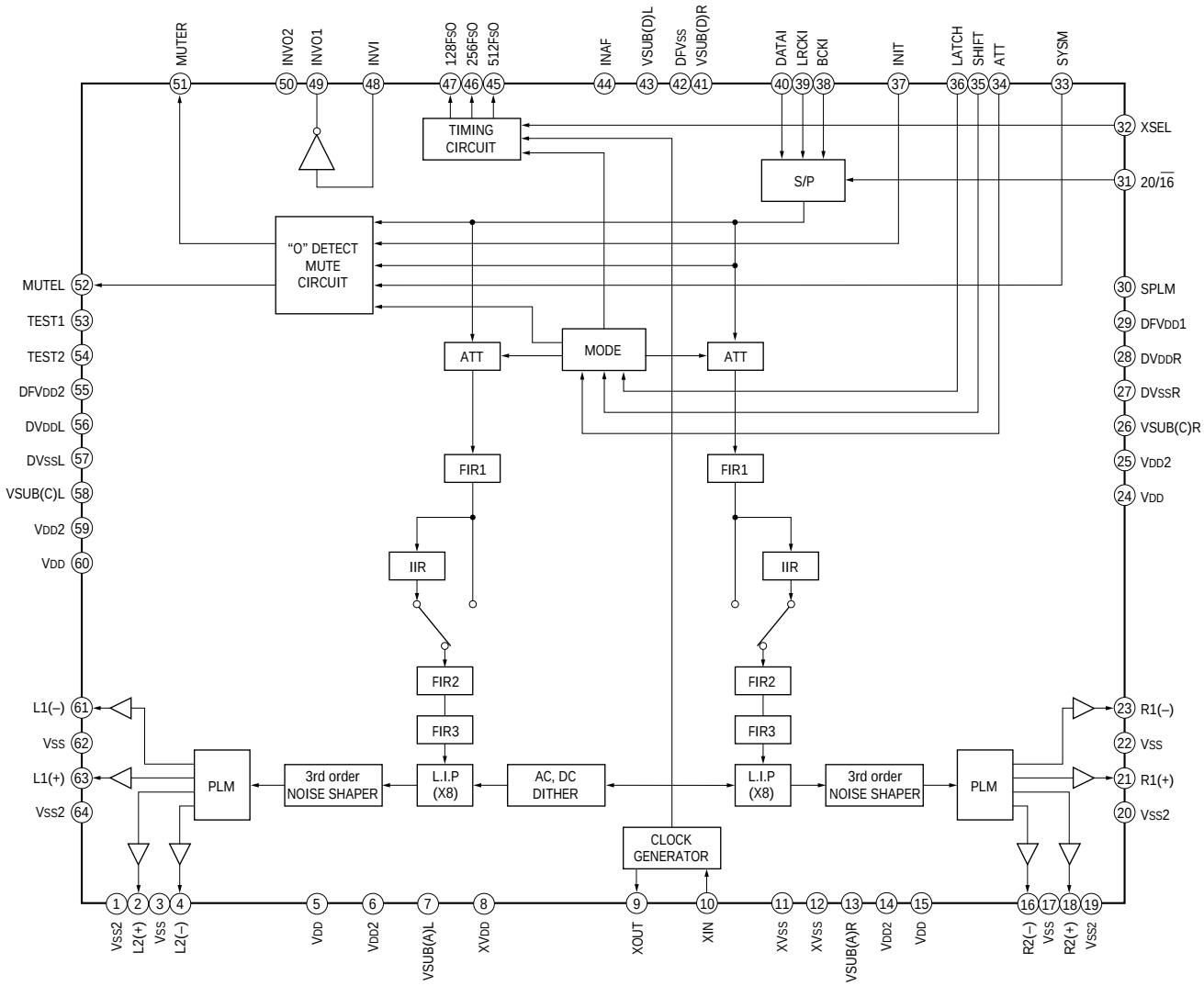
IC001 CXA1821M



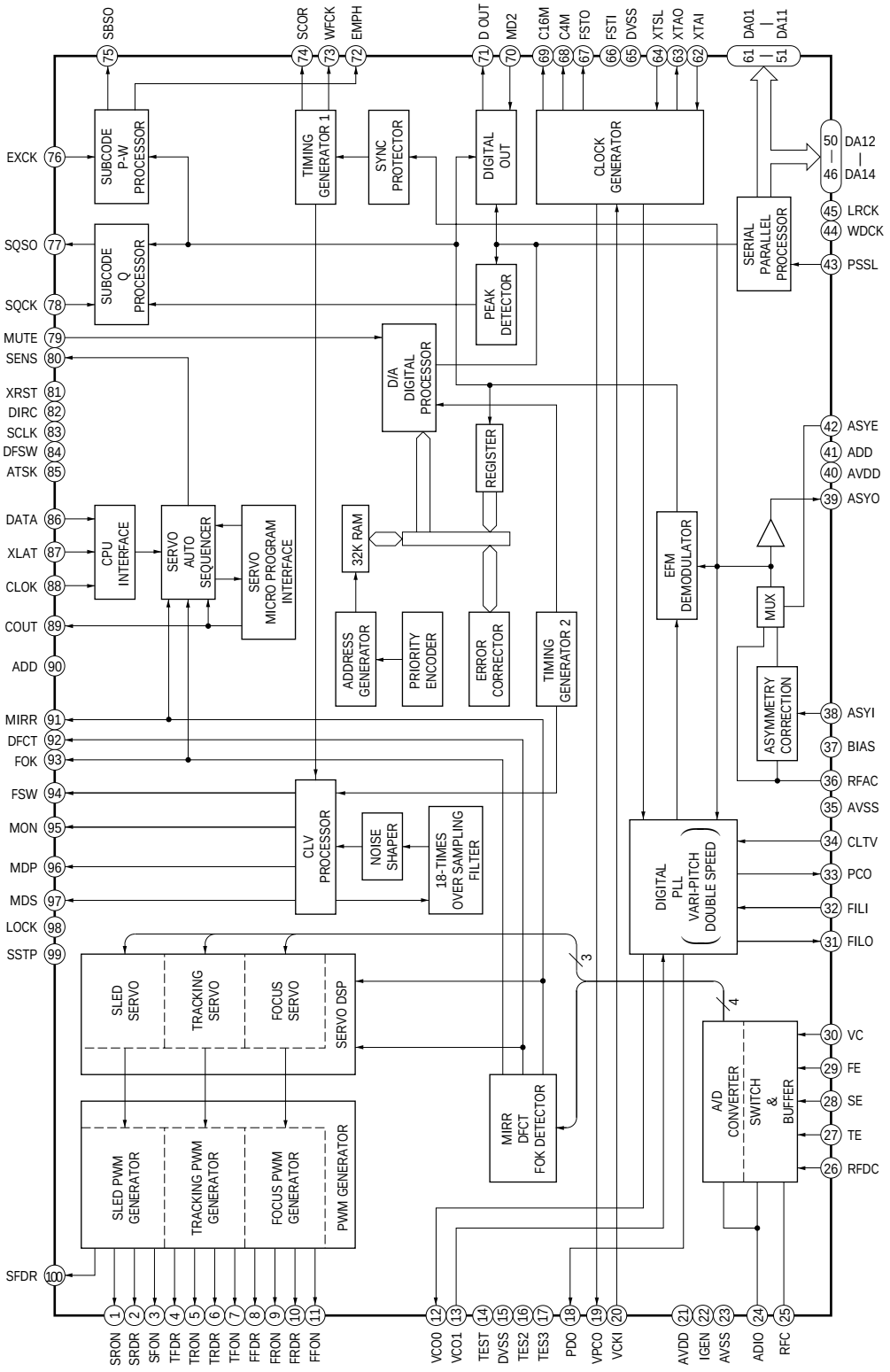
IC002 BA6392FP



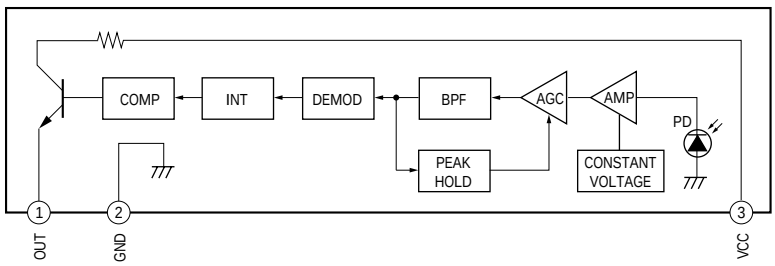
IC501 CXD8505BQ



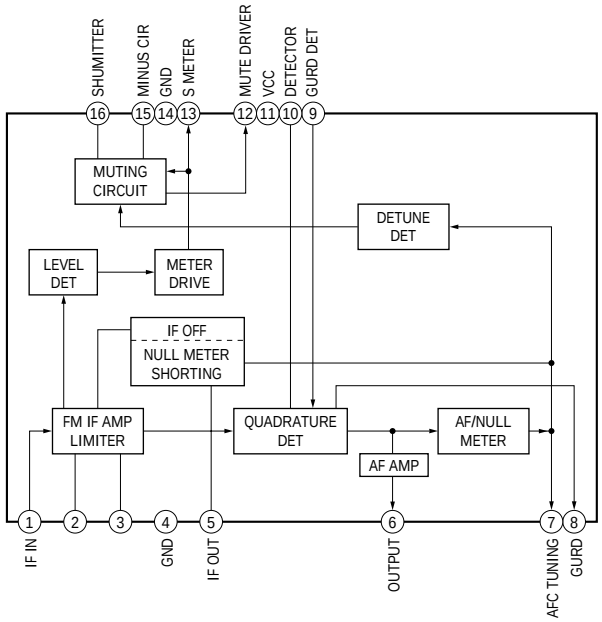
IC431 CXD2545Q



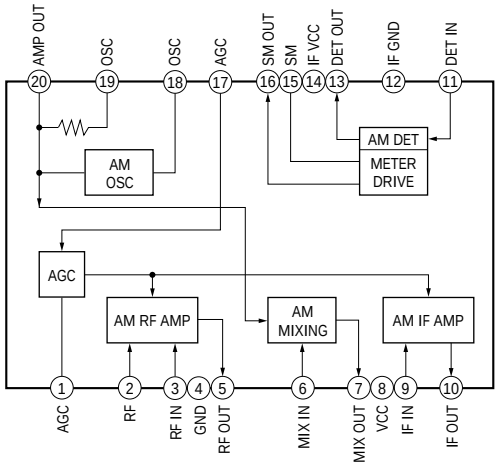
IC902 PNA4613M



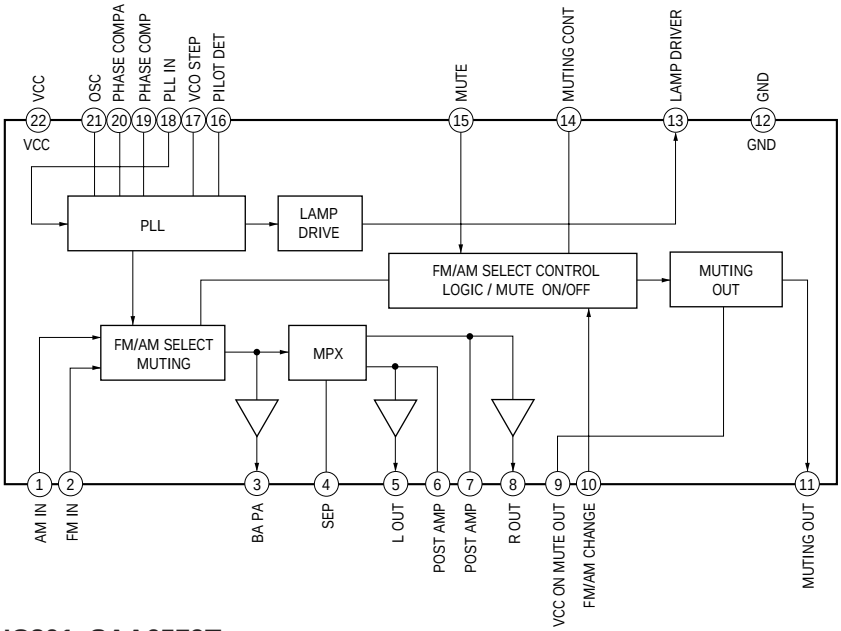
IC701 LA1235



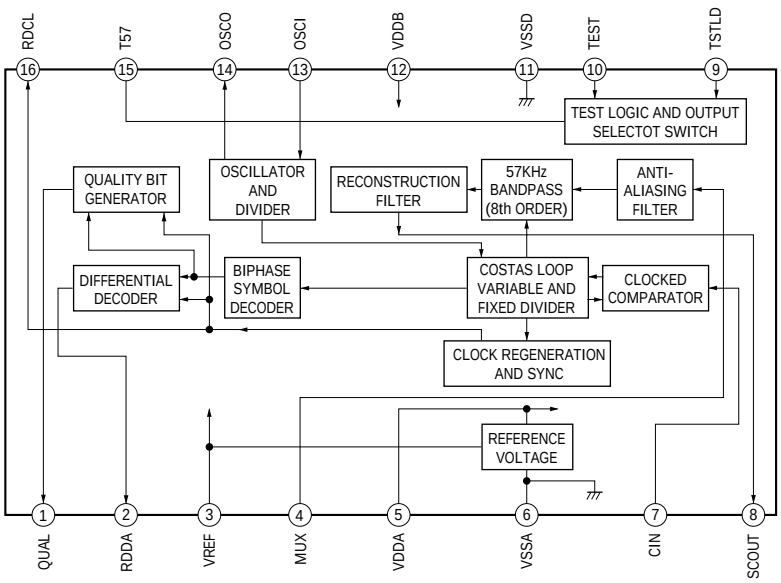
IC702 LA1245



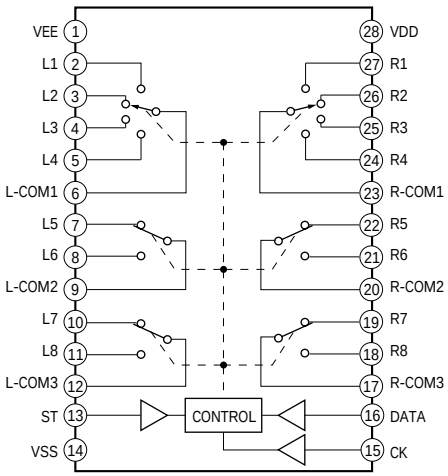
IC703 LA3401



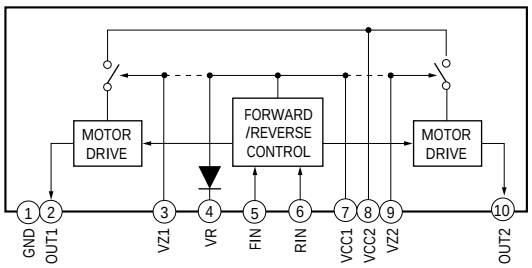
IC801 SAA6579T



IC101 NJU7313L



IC351 BA6209N



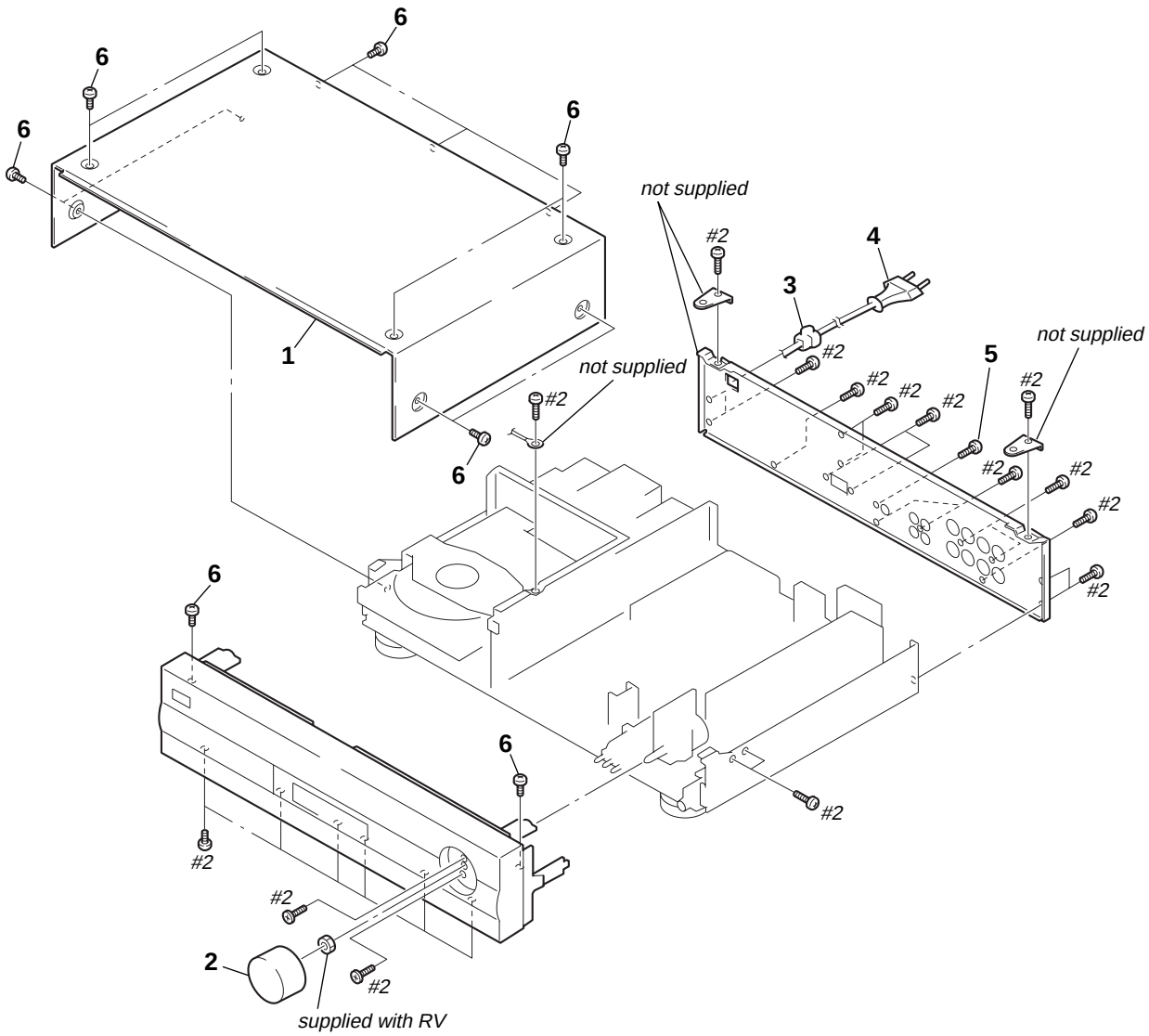
SECTION 5
EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Accessories and packing materials and hardware (# mark) list are given in the last of this parts list.

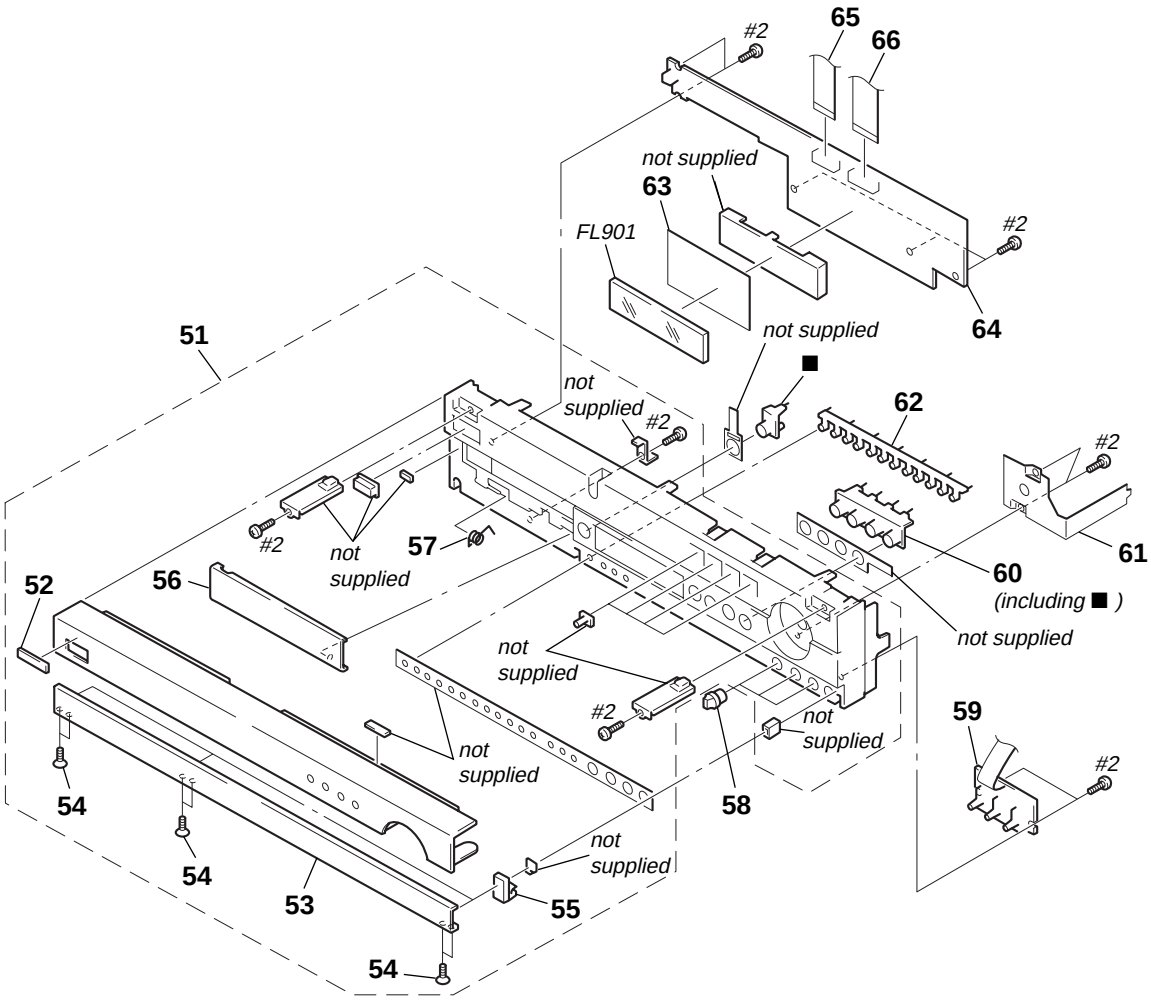
The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

5-1. CASE SECTION



Ref. No.	Part No.	Description	Remark
* 1	4-997-301-01	CABINET (TOP)	
2	4-997-281-11	KNOB (VOLUME)	
3	4-997-291-01	STOPPER, AC CORD	
⚠4	1-575-651-11	CORD, POWER	
5	3-704-515-31	SCREW (BV/RING)	
6	4-997-889-01	SCREW (CASE)	

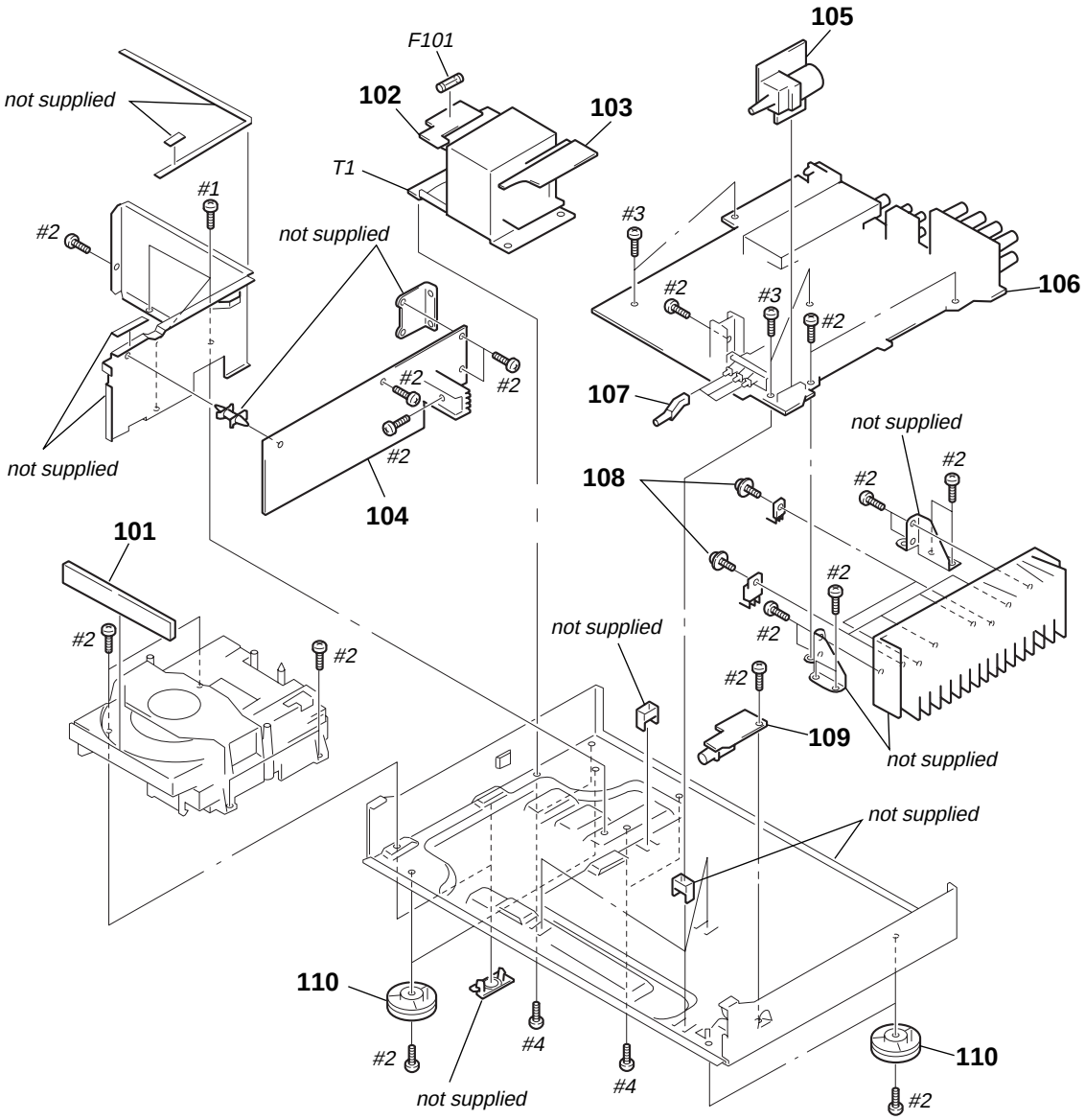
5-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	X-4949-438-1	PANEL ASSY, FRONT	
52	4-942-568-31	EMBLEM (NO.5), SONY	
53	4-997-316-01	DOOR (FRONT)	
54	4-997-895-01	SCREW (K 2X6)	
55	4-997-317-01	HOLDER (DOOR)	
56	4-997-327-01	DOOR (CD)	
57	4-997-325-01	SPRING (DOOR)	
58	4-997-282-01	KNOB (CONTROL)	
* 59	A-4407-350-A	TONE BOARD, COMPLETE	

Ref. No.	Part No.	Description	Remark
60	4-997-284-01	BUTTON (FUNCTION)	
61	4-997-283-01	BRACKET (VOLUME)	
62	4-997-300-01	BUTTON (CONTROL)	
* 63	4-997-304-01	PLATE (FLT)	
* 64	A-4407-347-A	FRONT BOARD, COMPLETE	
65	1-782-465-11	WIRE (FLAT TYPE) (16 CORE)	
66	1-769-326-11	WIRE (FLAT TYPE) (20 CORE)	
FL901	1-517-750-11	INDICATOR TUBE, FLUORESCENT	

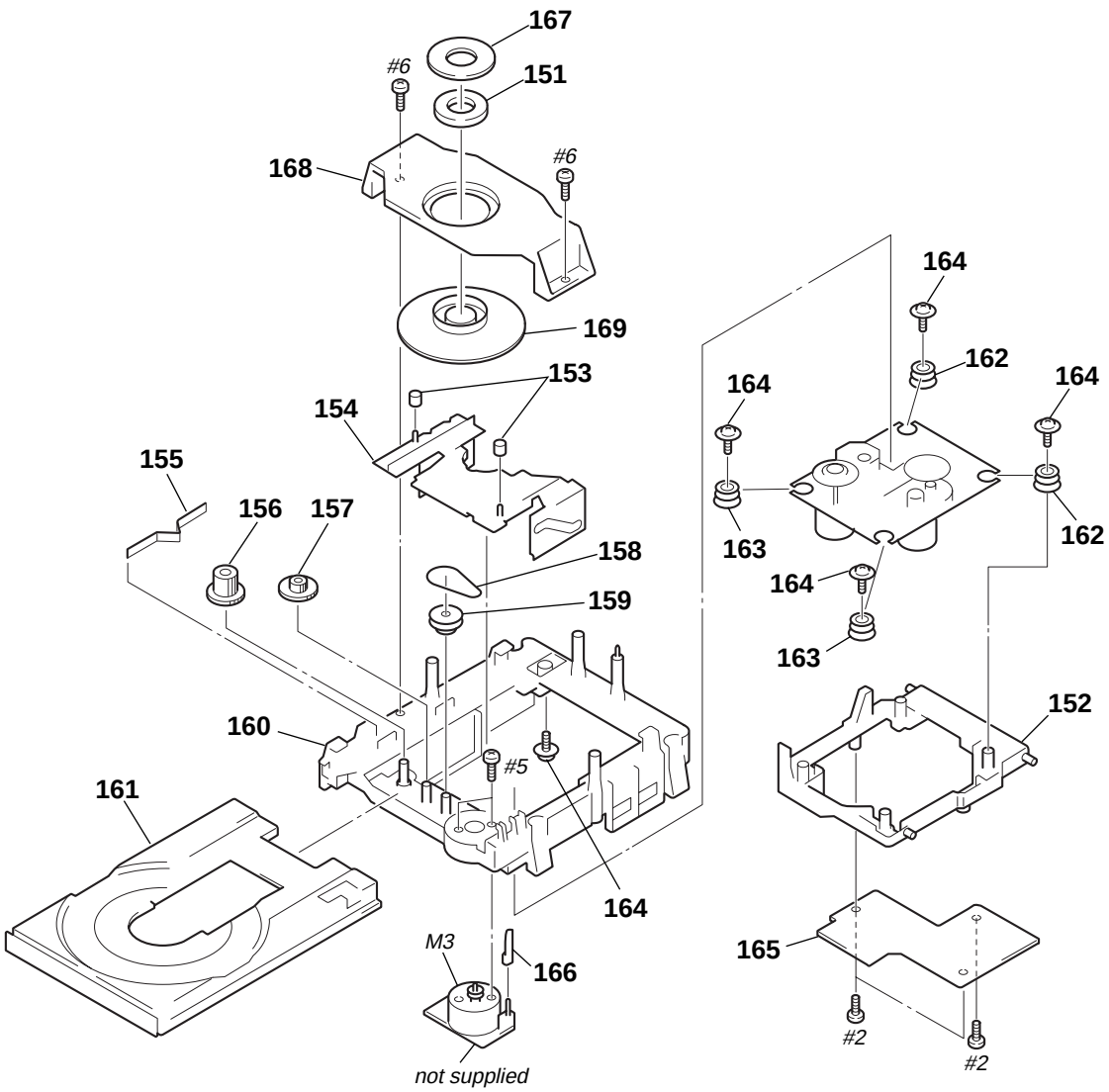
5-3. CHASSIS SECTION



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
101	4-997-298-01	COVER (TRAY)	
* 102	A-4407-344-A	TRANS-1 BOARD, COMPLETE	
* 103	A-4407-345-A	TRANS-2 BOARD, COMPLETE	
* 104	A-4407-348-A	CD BOARD, COMPLETE	
* 105	A-4407-349-A	VOLUME BOARD, COMPLETE	
* 106	A-4407-343-A	MAIN BOARD, COMPLETE	
107	4-997-285-01	KNOB (PUSH)	
108	4-997-888-01	SCREW (TR)	
* 109	A-4407-346-A	HEADPHONE BOARD, COMPLETE	
110	X-4949-439-1	FOOT ASSY	
⚠F101	1-532-388-51	FUSE, TIME LAG (2A/250V)	
⚠T1	1-431-725-11	TRANSFORMER, POWER	

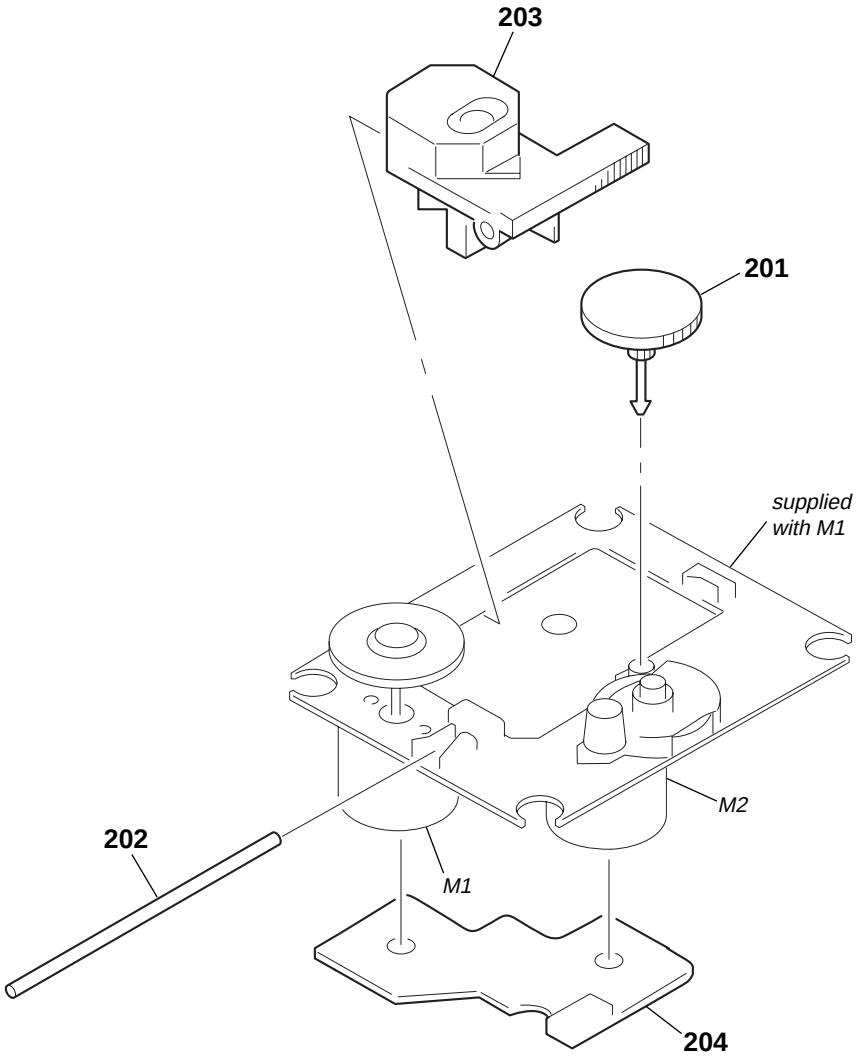
5-4. CD MECHANISM SECTION



Ref. No.	Part No.	Description	Remark
151	4-997-924-01	MAGNET (CORE 3)	
152	4-997-934-01	FRAME (FEED)	
153	4-997-893-01	STOPPER, RUBBER	
154	4-997-926-01	FRAME, GUIDE	
155	4-997-928-01	SPRING (RACK)	
156	4-997-929-01	GEAR (LOAD)	
157	4-997-930-01	GEAR (CENTER)	
158	4-997-933-01	BELT	
159	4-997-931-01	GEAR (PULLEY)	
160	4-997-927-01	BASE, MECHANICAL	

Ref. No.	Part No.	Description	Remark
161	4-997-932-01	TRAY	
162	4-997-892-01	INSULATOR (30'RED)	
163	4-997-891-01	INSULATOR (48'GREEN)	
164	4-997-894-01	SCREW (W 3X8)	
* 165	A-4407-351-A	DRIVE BOARD, COMPLETE	
166	4-997-890-01	HOLDER (S/W)	
167	4-997-922-01	PLATE, CLAMP	
168	4-997-923-01	FLAPPER	
169	4-997-925-01	CLAMP (4)	
M3	X-4949-441-1	MOTOR ASSY, DC (OPEN/CLOSE)	

5-5. OPTICAL PICK-UP SECTION



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
201	2-625-188-02	GEAR (A) (K)	
* 202	2-626-908-01	SHAFT, SLED	
⚠203	8-848-483-05	OPTICAL PICK-UP KSS-213C/Q-RP	
204	1-636-789-13	MOTOR-1 BOARD	
M1	X-2626-272-1	MOTOR ASSY (SPINDLE)	
M2	X-2625-769-1	MOTOR ASSY, SLED	

CD

SECTION 6
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : μ, for example:
  uA.. : μA.. uPA.. : μPA..
  uPB.. : μPB.. uPC.. : μPC.. uPD.. : μPD..
- CAPACITORS
  uF : μF
- COILS
  uH : μH

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-4407-348-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C401	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C402	1-126-960-11	ELECT	1uF	20%	50V
C403	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C404	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C405	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C406	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C407	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C408	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C409	1-126-943-11	ELECT	2200uF	20%	25V
C411	1-126-943-11	ELECT	2200uF	20%	25V
C412	1-126-933-11	ELECT	100uF	20%	16V
C413	1-126-933-11	ELECT	100uF	20%	16V
C414	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C415	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C416	1-126-933-11	ELECT	100uF	20%	10V
C417	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C418	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C419	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C421	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C430	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C431	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C432	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C433	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C434	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C435	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C436	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C437	1-126-933-11	ELECT	100uF	20%	10V
C438	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C439	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C441	1-126-959-11	ELECT	0.47uF	20%	50V
C442	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C443	1-126-933-11	ELECT	100uF	20%	10V
C444	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C445	1-126-933-11	ELECT	100uF	20%	10V
C446	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C447	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C448	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C449	1-126-933-11	ELECT	100uF	20%	10V
C451	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C452	1-126-933-11	ELECT	100uF	20%	10V

Ref. No.	Part No.	Description			Remark
C453	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C461	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C462	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C463	1-126-933-11	ELECT	100uF	20%	10V
C464	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C465	1-126-933-11	ELECT	100uF	20%	10V
C466	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C467	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C468	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C469	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C471	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C481	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C482	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C483	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C484	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C485	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C486	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C487	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C488	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C501	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C502	1-163-102-00	CERAMIC CHIP	24PF	5%	50V
C503	1-124-584-00	ELECT	100uF	20%	10V
C504	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C505	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C506	1-126-933-11	ELECT	100uF	20%	10V
C507	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C508	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C509	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C511	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C512	1-126-933-11	ELECT	100uF	20%	10V
C513	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C514	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C515	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C516	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C517	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C518	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C519	1-126-933-11	ELECT	100uF	20%	10V
C521	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C522	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C523	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C524	1-126-933-11	ELECT	100uF	20%	10V
C527	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C528	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C529	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C531	1-126-933-11	ELECT	100uF	20%	10V

Ref. No.	Part No.	Description			Remark
C532	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C533	1-163-022-00	CERAMIC CHIP	0.012uF	10%	50V
C534	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C535	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C536	1-126-967-11	ELECT	47uF	20%	50V
C537	1-126-933-11	ELECT	100uF	20%	10V
C538	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C539	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C541	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C542	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C543	1-163-253-11	CERAMIC CHIP	120PF	5%	50V
C546	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C547	1-163-022-00	CERAMIC CHIP	0.012uF	10%	50V
C548	1-126-933-11	ELECT	100uF	20%	10V
C549	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C551	1-126-933-11	ELECT	100uF	20%	10V
C552	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C553	1-126-967-11	ELECT	47uF	20%	50V
C554	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C555	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C581	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C582	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C583	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C584	1-163-075-00	CERAMIC CHIP	0.047uF		50V
C585	1-163-038-00	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
CN402	1-695-343-21	PIN, CONNECTOR (PC BOARD) 20P			
* CN403	1-565-731-11	PLUG, CONNECTOR (2.5MM) 5P			
CN404	1-695-339-21	PIN, CONNECTOR (PC BOARD) 16P			
CP105	1-784-445-11	CONNECTOR, 2.0MM PITCH (90) 5P			
CP106	1-784-444-11	CONNECTOR, 2.0MM PITCH (90) 4P			
		< DIODE >			
D401	8-719-815-85	DIODE 1S1585			
D402	8-719-815-85	DIODE 1S1585			
D403	8-719-200-02	DIODE 10E2			
D404	8-719-200-02	DIODE 10E2			
D405	8-719-200-02	DIODE 10E2			
D406	8-719-200-02	DIODE 10E2			
D501	8-719-815-85	DIODE 1S1585			
		< IC >			
IC401	8-759-982-07	IC RC7808FA			
IC402	8-759-990-36	IC RC7908FA			
IC403	8-759-701-75	IC NJM7805FA			
IC431	8-752-369-78	IC CXD2545Q			
IC461	8-759-710-73	IC NJM4580L			
IC501	8-759-370-62	IC CXD8505BQ			
IC502	8-759-710-73	IC NJM4580L			
IC503	8-759-710-73	IC NJM4580L			

Ref. No.	Part No.	Description			Remark
		< JUMPER RESISTOR >			
J471	1-216-296-00	CONDUCTOR, CHIP (3216)			
J472	1-216-296-00	CONDUCTOR, CHIP (3216)			
J473	1-216-296-00	CONDUCTOR, CHIP (3216)			
J474	1-216-296-00	CONDUCTOR, CHIP (3216)			
J475	1-216-296-00	CONDUCTOR, CHIP (3216)			
J476	1-216-296-00	CONDUCTOR, CHIP (3216)			
J477	1-216-296-00	CONDUCTOR, CHIP (3216)			
J478	1-216-296-00	CONDUCTOR, CHIP (3216)			
J479	1-216-296-00	CONDUCTOR, CHIP (3216)			
J480	1-216-296-00	CONDUCTOR, CHIP (3216)			
J481	1-216-296-00	CONDUCTOR, CHIP (3216)			
J482	1-216-296-00	CONDUCTOR, CHIP (3216)			
J483	1-216-296-00	CONDUCTOR, CHIP (3216)			
J485	1-216-296-00	CONDUCTOR, CHIP (3216)			
J486	1-216-296-00	CONDUCTOR, CHIP (3216)			
J487	1-216-296-00	CONDUCTOR, CHIP (3216)			
		< COIL >			
L501	1-410-503-11	INDUCTOR	3.3uH		
L502	1-410-503-11	INDUCTOR	3.3uH		
		< TRANSISTOR >			
Q461	8-729-043-89	TRANSISTOR KTC3205Y			
Q462	8-729-043-88	TRANSISTOR KTA1273Y			
Q501	8-729-901-01	TRANSISTOR DTC144EK			
Q505	8-729-900-99	TRANSISTOR DTA144WK			
Q506	8-729-027-60	TRANSISTOR DTC144TKA-T146			
Q507	8-729-027-60	TRANSISTOR DTC144TKA-T146			
Q508	8-729-901-06	TRANSISTOR DTA144EK			
Q509	8-729-901-06	TRANSISTOR DTA144EK			
Q511	8-729-027-56	TRANSISTOR DTC143TKA-T146			
Q512	8-729-027-56	TRANSISTOR DTC143TKA-T146			
		< RESISTOR >			
R431	1-216-077-00	METAL CHIP	15K	5%	1/10W
R432	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R433	1-216-077-00	METAL CHIP	15K	5%	1/10W
R434	1-216-085-00	METAL CHIP	33K	5%	1/10W
R435	1-216-073-00	METAL CHIP	10K	5%	1/10W
R436	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R437	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R438	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R439	1-216-025-00	METAL GLAZE	100	5%	1/10W
R441	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R442	1-216-073-00	METAL CHIP	10K	5%	1/10W
R443	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R444	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R445	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R446	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R447	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R448	1-216-049-11	METAL GLAZE	1K	5%	1/10W

CD DRIVE

Ref. No.	Part No.	Description			Remark
R449	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R461	1-216-001-00	METAL CHIP	10	5%	1/10W
R462	1-216-017-00	METAL GLAZE	47	5%	1/10W
R463	1-216-095-00	METAL CHIP	82K	5%	1/10W
R464	1-216-095-00	METAL CHIP	82K	5%	1/10W
R465	1-216-093-00	METAL CHIP	68K	5%	1/10W
R466	1-216-093-00	METAL CHIP	68K	5%	1/10W
R481	1-216-077-00	METAL CHIP	15K	5%	1/10W
R482	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R483	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R484	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R501	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R502	1-216-113-00	METAL CHIP	470K	5%	1/10W
R503	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R504	1-216-033-00	METAL CHIP	220	5%	1/10W
R505	1-249-393-11	CARBON	10	5%	1/4W
R506	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R507	1-216-085-00	METAL CHIP	33K	5%	1/10W
R508	1-216-085-00	METAL CHIP	33K	5%	1/10W
R509	1-216-085-00	METAL CHIP	33K	5%	1/10W
R511	1-216-085-00	METAL CHIP	33K	5%	1/10W
R512	1-249-401-11	CARBON	47	5%	1/4W
R513	1-216-081-00	METAL CHIP	22K	5%	1/10W
R514	1-216-079-00	METAL CHIP	18K	5%	1/10W
R515	1-216-081-00	METAL CHIP	22K	5%	1/10W
R516	1-216-079-00	METAL CHIP	18K	5%	1/10W
R519	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R521	1-216-044-00	METAL CHIP	620	5%	1/10W
R522	1-216-056-00	METAL GLAZE	2K	5%	1/10W
R523	1-216-109-00	METAL CHIP	330K	5%	1/10W
R524	1-216-033-00	METAL CHIP	220	5%	1/10W
R526	1-216-033-00	METAL CHIP	220	5%	1/10W
R531	1-216-085-00	METAL CHIP	33K	5%	1/10W
R532	1-216-085-00	METAL CHIP	33K	5%	1/10W
R533	1-216-085-00	METAL CHIP	33K	5%	1/10W
R534	1-216-085-00	METAL CHIP	33K	5%	1/10W
R537	1-216-044-00	METAL CHIP	620	5%	1/10W
R538	1-216-056-00	METAL GLAZE	2K	5%	1/10W
R539	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R541	1-216-081-00	METAL CHIP	22K	5%	1/10W
R542	1-216-079-00	METAL CHIP	18K	5%	1/10W
R543	1-216-081-00	METAL CHIP	22K	5%	1/10W
R544	1-216-079-00	METAL CHIP	18K	5%	1/10W
R545	1-216-109-00	METAL CHIP	330K	5%	1/10W
R546	1-216-033-00	METAL CHIP	220	5%	1/10W
R548	1-216-066-00	METAL CHIP	5.1K	5%	1/10W
R549	1-216-073-00	METAL CHIP	10K	5%	1/10W
R551	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R552	1-249-401-11	CARBON	47	5%	1/4W
R553	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R554	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R555	1-216-033-00	METAL CHIP	220	5%	1/10W
R556	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R581	1-216-049-11	METAL GLAZE	1K	5%	1/10W
		< VIBRATOR >			
XT501	1-579-161-11	VIBRATOR, CRYSTAL (45.1584MHz)			
**********					
*	A-4407-351-A	DRIVE BOARD, COMPLETE			
		**********			
	1-769-326-11	WIRE (FLAT TYPE) (20 CORE)			
		< CAPACITOR >			
C001	1-124-584-00	ELECT	100uF	20%	10V
C002	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C003	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C004	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C006	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C007	1-124-584-00	ELECT	100uF	20%	10V
C008	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C009	1-124-584-00	ELECT	100uF	20%	10V
C010	1-124-584-00	ELECT	100uF	20%	10V
C020	1-124-252-00	ELECT	0.33uF	20%	50V
C021	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C022	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C023	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C024	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C025	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C026	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C027	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C028	1-124-584-00	ELECT	100uF	20%	10V
C029	1-124-584-00	ELECT	100uF	20%	10V
		< CONNECTOR >			
CN001	1-695-381-31	PIN, CONNECTOR (PC BOARD) 20P			
CN002	1-770-168-11	CONNECTOR, FFC/FPC 16P			
* CN003	1-566-003-11	PIN, CONNECTOR (PC BOARD) 6P			
		< DIODE >			
D001	8-719-815-85	DIODE 1S1585			
		< IC >			
IC001	8-752-072-43	IC CXA1821M			
IC002	8-759-176-09	IC BA6392FP			
		< JUMPER RESISTOR >			
J031	1-216-295-00	CONDUCTOR, CHIP (2012)			
J032	1-216-295-00	CONDUCTOR, CHIP (2012)			
		< COIL >			
L001	1-410-509-11	INDUCTOR	10uH		

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q001	8-729-141-03	TRANSISTOR 2SA733-QP			
		< RESISTOR >			
R001	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R002	1-216-081-00	METAL CHIP	22K	5%	1/10W
R003	1-216-101-00	METAL CHIP	150K	5%	1/10W
R004	1-216-101-00	METAL CHIP	150K	5%	1/10W
R005	1-216-073-00	METAL CHIP	10K	5%	1/10W
R006	1-216-081-00	METAL CHIP	22K	5%	1/10W
R007	1-216-009-00	METAL CHIP	22	5%	1/10W
R020	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R021	1-216-101-00	METAL CHIP	150K	5%	1/10W
R022	1-216-091-00	METAL CHIP	56K	5%	1/10W
R023	1-216-101-00	METAL CHIP	150K	5%	1/10W
**********					
*	A-4407-347-A	FRONT BOARD, COMPLETE			
		**********			
	1-769-326-11	WIRE (FLAT TYPE) (20 CORE)			
	1-782-465-11	WIRE (FLAT TYPE) (16 CORE)			
		< IC >			
A901	8-749-013-49	IC PNA4613M00XD			
		< CAPACITOR >			
C901	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C902	1-162-290-31	CERAMIC	470PF	10%	50V
C903	1-126-966-11	ELECT	33uF	20%	50V
C904	1-126-163-11	ELECT	4.7uF	20%	50V
C905	1-126-301-11	ELECT	1uF	20%	50V
C906	1-104-905-11	DOUBLE LAYERS	0.22F		5.5V
C907	1-124-584-00	ELECT	100uF	20%	10V
C908	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C909	1-126-163-11	ELECT	4.7uF	20%	50V
C910	1-126-163-11	ELECT	4.7uF	20%	50V
C911	1-126-966-11	ELECT	33uF	20%	50V
C912	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C913	1-163-033-91	CERAMIC CHIP	0.022uF		50V
C914	1-141-245-00	CAP, TRIMMER	30PF		
C915	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C916	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C917	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C920	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C921	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C922	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C923	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C924	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C925	1-163-251-11	CERAMIC CHIP	100PF	5%	50V

Ref. No.	Part No.	Description			Remark
C926	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C927	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C928	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C929	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C930	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C931	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C932	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C933	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C934	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
		< CONNECTOR >			
CN101	1-695-381-31	PIN, CONNECTOR (PC BOARD) 20P			
CN107	1-695-377-21	PIN, CONNECTOR (PC BOARD) 16P			
		< DIODE >			
D901	8-719-927-70	DIODE HZS36JB3T2			
D902	8-719-927-70	DIODE HZS36JB3T2			
D903	8-719-927-70	DIODE HZS36JB3T2			
D904	8-719-927-70	DIODE HZS36JB3T2			
D905	8-719-927-70	DIODE HZS36JB3T2			
D906	8-719-927-70	DIODE HZS36JB3T2			
D907	8-719-927-70	DIODE HZS36JB3T2			
D908	8-719-927-70	DIODE HZS36JB3T2			
D909	8-719-815-85	DIODE 1S1585			
D910	8-719-815-85	DIODE 1S1585			
D911	8-719-927-70	DIODE HZS36JB3T2			
D912	8-719-815-85	DIODE 1S1585			
D913	8-719-815-85	DIODE 1S1585			
D914	8-719-927-70	DIODE HZS36JB3T2			
D915	8-719-927-70	DIODE HZS36JB3T2			
D916	8-719-927-70	DIODE HZS36JB3T2			
		< FLUORESCENT INDICATOR >			
FL901	1-517-750-11	INDICATOR TUBE, FLUORESCENT			
		< IC >			
IC901	8-759-497-96	IC uPD780206GF-024-3BA			
IC902	8-749-010-99	IC KIA7039P-AT			
		< JUMPER RESISTOR >			
J951	1-216-296-00	CONDUCTOR, CHIP (3216)			
J952	1-216-296-00	CONDUCTOR, CHIP (3216)			
J953	1-216-296-00	CONDUCTOR, CHIP (3216)			
J954	1-216-296-00	CONDUCTOR, CHIP (3216)			
J955	1-216-296-00	CONDUCTOR, CHIP (3216)			
J956	1-216-296-00	CONDUCTOR, CHIP (3216)			
J957	1-216-296-00	CONDUCTOR, CHIP (3216)			
J958	1-216-296-00	CONDUCTOR, CHIP (3216)			
J959	1-216-296-00	CONDUCTOR, CHIP (3216)			
J960	1-216-296-00	CONDUCTOR, CHIP (3216)			

FRONT

Ref. No.	Part No.	Description			Remark
J961	1-216-296-00	CONDUCTOR, CHIP (3216)			
J962	1-216-296-00	CONDUCTOR, CHIP (3216)			
J963	1-216-296-00	CONDUCTOR, CHIP (3216)			
J964	1-216-296-00	CONDUCTOR, CHIP (3216)			
J965	1-216-296-00	CONDUCTOR, CHIP (3216)			
J966	1-216-296-00	CONDUCTOR, CHIP (3216)			
J967	1-216-296-00	CONDUCTOR, CHIP (3216)			
J968	1-216-296-00	CONDUCTOR, CHIP (3216)			
J969	1-216-296-00	CONDUCTOR, CHIP (3216)			
J970	1-216-296-00	CONDUCTOR, CHIP (3216)			
J971	1-216-296-00	CONDUCTOR, CHIP (3216)			
J972	1-216-296-00	CONDUCTOR, CHIP (3216)			
J973	1-216-296-00	CONDUCTOR, CHIP (3216)			
J974	1-216-296-00	CONDUCTOR, CHIP (3216)			
J976	1-216-296-00	CONDUCTOR, CHIP (3216)			
J977	1-216-296-00	CONDUCTOR, CHIP (3216)			
		< TRANSISTOR >			
Q901	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q902	8-729-620-06	TRANSISTOR 2SC3052-EF			
Q903	8-729-033-66	TRANSISTOR 2SK211-O-TE85L			
		< RESISTOR >			
R901	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R902	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R903	1-216-025-00	METAL GLAZE	100	5%	1/10W
R904	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R910	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R911	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R913	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R914	1-216-083-00	METAL CHIP	27K	5%	1/10W
R919	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R920	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R921	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R922	1-216-025-00	METAL GLAZE	100	5%	1/10W
R923	1-216-025-00	METAL GLAZE	100	5%	1/10W
R924	1-216-025-00	METAL GLAZE	100	5%	1/10W
R925	1-216-073-00	METAL CHIP	10K	5%	1/10W
R928	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R930	1-249-393-11	CARBON	10	5%	1/4W
R931	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R932	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R933	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R934	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R936	1-249-421-11	CARBON	2.2K	5%	1/4W
R937	1-249-437-11	CARBON	47K	5%	1/4W
R938	1-249-417-11	CARBON	1K	5%	1/4W
R939	1-249-429-11	CARBON	10K	5%	1/4W
R940	1-249-417-11	CARBON	1K	5%	1/4W
R941	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R942	1-249-435-11	CARBON	33K	5%	1/4W
R943	1-249-409-11	CARBON	220	5%	1/4W
R944	1-249-409-11	CARBON	220	5%	1/4W

Ref. No.	Part No.	Description			Remark
R945	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R946	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R947	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R948	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R949	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R950	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R951	1-216-025-00	METAL GLAZE	100	5%	1/10W
R952	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R953	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R954	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R955	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R956	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R957	1-216-041-00	METAL CHIP	470	5%	1/10W
R958	1-216-041-00	METAL CHIP	470	5%	1/10W
R959	1-216-073-00	METAL CHIP	10K	5%	1/10W
R960	1-216-073-00	METAL CHIP	10K	5%	1/10W
R961	1-216-077-00	METAL CHIP	15K	5%	1/10W
R962	1-216-077-00	METAL CHIP	15K	5%	1/10W
R963	1-216-073-00	METAL CHIP	10K	5%	1/10W
R964	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R965	1-216-073-00	METAL CHIP	10K	5%	1/10W
R966	1-216-073-00	METAL CHIP	10K	5%	1/10W
R967	1-216-073-00	METAL CHIP	10K	5%	1/10W
R968	1-216-073-00	METAL CHIP	10K	5%	1/10W
R969	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R970	1-216-073-00	METAL CHIP	10K	5%	1/10W
R971	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R972	1-216-073-00	METAL CHIP	10K	5%	1/10W
R973	1-216-073-00	METAL CHIP	10K	5%	1/10W
R974	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R975	1-216-073-00	METAL CHIP	10K	5%	1/10W
R976	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R977	1-216-025-00	METAL GLAZE	100	5%	1/10W
R978	1-216-093-00	METAL CHIP	68K	5%	1/10W
R979	1-216-073-00	METAL CHIP	10K	5%	1/10W
R980	1-216-073-00	METAL CHIP	10K	5%	1/10W
		< SWITCH >			
SW901	1-762-196-21	SWITCH, TACT (PTY (RDS))			
SW902	1-762-196-21	SWITCH, TACT (PRESET -/ ⏮ ◀◀)			
SW903	1-762-196-21	SWITCH, TACT (CHAR)			
SW904	1-762-196-21	SWITCH, TACT (TUNE MODE)			
SW905	1-762-196-21	SWITCH, TACT (MEMORY)			
SW906	1-762-196-21	SWITCH, TACT (ST/MONO)			
SW907	1-762-196-21	SWITCH, TACT (ENTER)			
SW908	1-762-196-21	SWITCH, TACT (POWER)			
SW909	1-762-196-21	SWITCH, TACT (▶II (CD))			
SW910	1-762-196-21	SWITCH, TACT (TUNER FM/AM)			
SW911	1-762-196-21	SWITCH, TACT (TAPE)			
SW912	1-762-196-21	SWITCH, TACT (TIMER)			
SW913	1-762-196-21	SWITCH, TACT (+ (TIMER))			
SW914	1-762-196-21	SWITCH, TACT (- (TIMER))			
SW915	1-762-196-21	SWITCH, TACT (OPEN/CLOSE (⏏))			

Ref. No.	Part No.	Description				Remark
SW916	1-762-196-21	SWITCH, TACT (■ (CD))				
SW917	1-762-196-21	SWITCH, TACT (PRESET +/ ►► ►►I)				
SW918	1-762-196-21	SWITCH, TACT (EON (RDS))				
SW919	1-762-196-21	SWITCH, TACT (DISPLAY)				
SW920	1-762-196-21	SWITCH, TACT (PLAY MODE)				
SW921	1-762-196-21	SWITCH, TACT (REPEAT)				
SW922	1-762-196-21	SWITCH, TACT (SET (CLOCK SET))				
		< VIBRATOR >				
X901	1-767-811-11	VIBRATOR, CRYSTAL (32.768kHz)				
X902	1-577-101-11	VIBRATOR, CERAMIC (4.19MHz)				
		< DIODE >				
ZD901	8-719-981-95	DIODE MTZJ-2.7B				
ZD902	8-719-921-43	DIODE MTZJ-5.1B				
**********						
*	A-4407-346-A	HEADPHONE BOARD, COMPLETE				
		**********				
		< JACK >				
PHONE101	1-774-933-11	JACK (LARGE TYPE) (PHONES)				
		< RESISTOR >				
⚠R195	1-216-431-11	METAL OXIDE	560	5%	1W	F
⚠R196	1-216-431-11	METAL OXIDE	560	5%	1W	F
**********						
*	A-4407-343-A	MAIN BOARD, COMPLETE				
		**********				
		< COIL >				
BD101	1-414-829-11	INDUCTOR	0uH			
BD102	1-414-829-11	INDUCTOR	0uH			
BD103	1-414-829-11	INDUCTOR	0uH			
BD104	1-414-829-11	INDUCTOR	0uH			
BD105	1-414-829-11	INDUCTOR	0uH			
		< CAPACITOR >				
C101	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C102	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C103	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C104	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C105	1-136-163-00	FILM	0.068uF	5%	50V	
C106	1-136-163-00	FILM	0.068uF	5%	50V	
C107	1-163-263-11	CERAMIC CHIP	330PF	5%	50V	
C108	1-163-263-11	CERAMIC CHIP	330PF	5%	50V	
C111	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C112	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C113	1-163-259-11	CERAMIC CHIP	220PF	5%	50V	
C114	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C115	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C119	1-126-960-11	ELECT	1uF	20%	50V	
C121	1-126-964-11	ELECT	10uF	20%	50V	

Ref. No.	Part No.	Description			Remark
C122	1-126-964-11	ELECT	10uF	20%	50V
C127	1-162-291-31	CERAMIC	560PF	10%	50V
C128	1-162-291-31	CERAMIC	560PF	10%	50V
C129	1-126-967-11	ELECT	47uF	20%	16V
C130	1-126-967-11	ELECT	47uF	20%	16V
C133	1-126-923-11	ELECT	220uF	20%	10V
C134	1-126-923-11	ELECT	220uF	20%	10V
C135	1-164-054-11	CERAMIC	22PF	5%	50V
C136	1-164-054-11	CERAMIC	22PF	5%	50V
C137	1-162-306-11	CERAMIC	0.01uF	20%	16V
C138	1-162-306-11	CERAMIC	0.01uF	20%	16V
C139	1-126-923-11	ELECT	220uF	20%	10V
C140	1-126-963-11	ELECT	4.7uF	20%	50V
C141	1-136-163-00	FILM	0.068uF	5%	50V
C142	1-136-163-00	FILM	0.068uF	5%	50V
C143	1-136-163-00	FILM	0.068uF	5%	50V
C144	1-136-163-00	FILM	0.068uF	5%	50V
C145	1-164-096-11	CERAMIC	0.01uF		50V
C146	1-164-096-11	CERAMIC	0.01uF		50V
C147	1-164-096-11	CERAMIC	0.01uF		50V
C148	1-164-096-11	CERAMIC	0.01uF		50V
C149	1-164-096-11	CERAMIC	0.01uF		50V
C150	1-164-096-11	CERAMIC	0.01uF		50V
C151	1-164-096-11	CERAMIC	0.01uF		50V
C152	1-164-096-11	CERAMIC	0.01uF		50V
C153	1-126-969-11	ELECT	220uF	20%	50V
C154	1-126-969-11	ELECT	220uF	20%	50V
C155	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C156	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C160	1-126-960-11	ELECT	1uF	20%	50V
C161	1-119-946-11	ELECT	6800uF		50V
C162	1-119-946-11	ELECT	6800uF		50V
⚠C163	1-102-050-00	CERAMIC	0.01uF		500V
⚠C164	1-102-050-00	CERAMIC	0.01uF		500V
C165	1-161-063-00	CERAMIC	0.1uF	10%	50V
C166	1-126-951-11	ELECT	470uF	20%	35V
C167	1-161-063-00	CERAMIC	0.1uF	10%	50V
C168	1-126-967-11	ELECT	47uF	20%	16V
C169	1-126-967-11	ELECT	47uF	20%	50V
C170	1-126-933-11	ELECT	100uF	20%	16V
C171	1-126-968-11	ELECT	100uF	20%	50V
C172	1-104-668-11	ELECT	33uF	20%	35V
C173	1-126-941-11	ELECT	470uF	20%	25V
C174	1-126-964-11	ELECT	10uF	20%	50V
C175	1-126-933-11	ELECT	100uF	20%	10V
C176	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C177	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C185	1-162-306-11	CERAMIC	0.01uF	20%	16V
C186	1-162-306-11	CERAMIC	0.01uF	20%	16V
C193	1-162-211-31	CERAMIC	33PF	5%	50V
C194	1-162-211-31	CERAMIC	33PF	5%	50V
C211	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C212	1-163-243-11	CERAMIC CHIP	47PF	5%	50V

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

MAIN

Ref. No.	Part No.	Description			Remark
C701	1-126-967-11	ELECT	47uF	20%	16V
C702	1-162-306-11	CERAMIC	0.01uF	20%	16V
C703	1-126-967-11	ELECT	47uF	20%	16V
C704	1-126-967-11	ELECT	47uF	20%	16V
C705	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C706	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C707	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C708	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C709	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C710	1-162-306-11	CERAMIC	0.01uF	20%	16V
C712	1-126-959-11	ELECT	0.47uF	20%	50V
C713	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C714	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C715	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C716	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C717	1-126-967-11	ELECT	47uF	20%	16V
C718	1-162-306-11	CERAMIC	0.01uF	20%	16V
C719	1-126-967-11	ELECT	47uF	20%	16V
C720	1-162-306-11	CERAMIC	0.01uF	20%	16V
C721	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C722	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C723	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C724	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C725	1-126-960-11	ELECT	1uF	20%	50V
C726	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C727	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C728	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C729	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C730	1-110-671-31	CERAMIC	47000PF		50V
C731	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C732	1-126-960-11	ELECT	1uF	20%	50V
C733	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C734	1-126-960-11	ELECT	1uF	20%	50V
C735	1-126-967-11	ELECT	47uF	20%	16V
C736	1-162-306-11	CERAMIC	0.01uF	20%	16V
C737	1-162-294-31	CERAMIC	0.001uF	10%	50V
C738	1-126-960-11	ELECT	1uF	20%	50V
C739	1-126-962-11	ELECT	3.3uF	20%	50V
C740	1-130-486-00	MYLAR	0.018uF	10%	50V
C741	1-162-211-31	CERAMIC	33PF	5%	50V
C742	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C743	1-126-964-11	ELECT	10uF	20%	50V
C744	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C745	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C746	1-162-306-11	CERAMIC	0.01uF	20%	16V
C747	1-162-306-11	CERAMIC	0.01uF	20%	16V
C748	1-126-967-11	ELECT	47uF	20%	16V
C749	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C750	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C751	1-162-306-11	CERAMIC	0.01uF	20%	16V
C752	1-162-306-11	CERAMIC	0.01uF	20%	16V
C753	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C754	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C755	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C756	1-162-294-31	CERAMIC	0.001uF	10%	50V
C757	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C758	1-136-161-00	FILM	0.047uF	5%	50V
C759	1-126-967-11	ELECT	47uF	20%	16V
C760	1-126-960-11	ELECT	1uF	20%	50V
C761	1-126-959-11	ELECT	0.47uF	20%	50V
C762	1-126-960-11	ELECT	1uF	20%	50V
C763	1-126-960-11	ELECT	1uF	20%	50V
C764	1-126-967-11	ELECT	47uF	20%	16V
C765	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C766	1-126-967-11	ELECT	47uF	20%	16V
C767	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C768	1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C769	1-130-475-00	MYLAR	0.0022uF	5%	50V
C770	1-130-475-00	MYLAR	0.0022uF	5%	50V
C771	1-126-960-11	ELECT	1uF	20%	50V
C772	1-126-933-11	ELECT	100uF	20%	16V
C773	1-126-964-11	ELECT	10uF	20%	50V
C774	1-126-964-11	ELECT	10uF	20%	50V
C775	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C776	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C777	1-126-963-11	ELECT	4.7uF	20%	50V
C778	1-126-963-11	ELECT	4.7uF	20%	50V
C779	1-130-471-00	MYLAR	0.001uF	5%	50V
C780	1-130-471-00	MYLAR	0.001uF	5%	50V
C781	1-126-967-11	ELECT	47uF	20%	16V
C782	1-136-161-00	FILM	0.047uF	5%	50V
C783	1-126-956-91	ELECT	0.1uF	20%	50V
C785	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C786	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C787	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C789	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C791	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C801	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C802	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C803	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C804	1-126-961-11	ELECT	2.2uF	20%	50V
C805	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C806	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C807	1-126-964-11	ELECT	10uF	20%	50V
C808	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C809	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C810	1-126-967-11	ELECT	47uF	20%	16V

< FILTER >

CF701	1-567-389-11	FILTER, CERAMIC
CF702	1-567-389-11	FILTER, CERAMIC
CF703	1-567-389-11	FILTER, CERAMIC

< CONNECTOR >

CN101	1-695-343-21	PIN, CONNECTOR (PC BOARD) 20P
CN102	1-568-269-11	SOCKET, CONNECTOR 3P

Ref. No.	Part No.	Description	Remark
* CN103	1-568-276-11	SOCKET, CONNECTOR 10P	
CN104	1-784-442-11	CONNECTOR, 2.0MM PITCH 14P	
CN105	1-784-441-11	CONNECTOR, 2.0MM PITCH 5P	
CN106	1-784-440-11	CONNECTOR, 2.0MM PITCH 4P	
		< DIODE >	
D101	8-719-927-70	DIODE HZS36JB3T2	
D102	8-719-927-70	DIODE HZS36JB3T2	
D107	8-719-927-70	DIODE HZS36JB3T2	
D113	8-719-815-85	DIODE 1S1585	
D114	8-719-815-85	DIODE 1S1585	
D115	8-719-815-85	DIODE 1S1585	
D117	8-719-927-70	DIODE HZS36JB3T2	
D118	8-719-815-85	DIODE 1S1585	
D119	8-719-815-85	DIODE 1S1585	
D120	8-719-927-70	DIODE HZS36JB3T2	
D121	8-719-927-70	DIODE HZS36JB3T2	
D132	8-719-200-02	DIODE 10E2	
D134	8-719-200-02	DIODE 10E2	
D202	8-719-500-33	DIODE D3SB20	
D701	8-719-815-85	DIODE 1S1585	
D702	8-719-815-85	DIODE 1S1585	
D703	8-719-815-85	DIODE 1S1585	
D704	8-719-815-85	DIODE 1S1585	
D705	8-719-200-02	DIODE 10E2	
D706	8-719-200-02	DIODE 10E2	
		< IC >	
IC101	8-759-247-11	IC CAT51C464A-70RS	
IC102	8-759-982-15	IC RC7815FA	
IC701	8-759-812-35	IC LA1235	
IC702	8-759-812-45	IC LA1245	
IC703	8-759-801-80	IC LA3401	
IC704	8-759-705-58	IC NJM4558D-D	
IC801	8-759-065-98	IC SAA6579T	
		< IC LINK >	
⚠ IC103	1-532-685-00	LINK, IC (ICP-N20) 0.8A	
		< JUMPER RESISTOR >	
J219	1-216-296-00	CONDUCTOR, CHIP (3216)	
J220	1-216-296-00	CONDUCTOR, CHIP (3216)	
J221	1-216-296-00	CONDUCTOR, CHIP (3216)	
J222	1-216-296-00	CONDUCTOR, CHIP (3216)	
J223	1-216-296-00	CONDUCTOR, CHIP (3216)	
J224	1-216-296-00	CONDUCTOR, CHIP (3216)	
J225	1-216-296-00	CONDUCTOR, CHIP (3216)	
J226	1-216-296-00	CONDUCTOR, CHIP (3216)	
J227	1-216-296-00	CONDUCTOR, CHIP (3216)	
J228	1-216-296-00	CONDUCTOR, CHIP (3216)	
J229	1-216-296-00	CONDUCTOR, CHIP (3216)	
J230	1-216-296-00	CONDUCTOR, CHIP (3216)	
J231	1-216-296-00	CONDUCTOR, CHIP (3216)	
J232	1-216-296-00	CONDUCTOR, CHIP (3216)	
J233	1-216-296-00	CONDUCTOR, CHIP (3216)	
J234	1-216-296-00	CONDUCTOR, CHIP (3216)	
J235	1-216-296-00	CONDUCTOR, CHIP (3216)	
J236	1-216-296-00	CONDUCTOR, CHIP (3216)	
J237	1-216-296-00	CONDUCTOR, CHIP (3216)	
J238	1-216-296-00	CONDUCTOR, CHIP (3216)	
J239	1-216-296-00	CONDUCTOR, CHIP (3216)	
J760	1-216-296-00	CONDUCTOR, CHIP (3216)	
J761	1-216-296-00	CONDUCTOR, CHIP (3216)	
J762	1-216-296-00	CONDUCTOR, CHIP (3216)	
J763	1-216-296-00	CONDUCTOR, CHIP (3216)	
J764	1-216-296-00	CONDUCTOR, CHIP (3216)	
		< JACK >	
JACK101	1-784-439-11	JACK, PIN 4P (REC OUT, LINE IN)	
JACK701	1-537-897-11	TERMINAL BOARD, PUSH 2P (ANTENNA)	
		< COIL >	
* L101	1-428-203-11	COIL, AIR-CORE 0.15uH	
* L102	1-428-203-11	COIL, AIR-CORE 0.15uH	
L701	1-410-509-11	INDUCTOR 10uH	
L702	1-404-845-11	COIL, DISCRI (PRIMARY)	
L703	1-404-846-11	COIL, DISCRI (SECONDARY)	
L704	1-234-035-11	ENCAPSULATED COMPONENT (MW.RF)	
L705	1-414-142-11	INDUCTOR 1uH	
L706	1-410-509-11	INDUCTOR 10uH	
L707	1-404-713-	TRANSFORMER, IF	
L708	1-234-034-11	ENCAPSULATED COMPONENT (FILTER)	
L709	1-235-164-00	FILTER, LOW PASS	
L710	1-235-164-00	FILTER, LOW PASS	
L711	1-410-509-11	INDUCTOR 10uH	
L712	1-410-509-11	INDUCTOR 10uH	
L713	1-414-142-11	INDUCTOR 1uH	
L714	1-414-142-11	INDUCTOR 1uH	
		< ERONT END >	
PACK701	1-693-405-11	FRONT END (FM)	
		< TRANSISTOR >	
Q101	8-729-231-55	TRANSISTOR 2SC2878-AB	
Q102	8-729-231-55	TRANSISTOR 2SC2878-AB	
Q103	8-729-904-34	TRANSISTOR DTA114TS	
Q105	8-729-043-86	TRANSISTOR 2SA1928G	
Q106	8-729-043-86	TRANSISTOR 2SA1928G	
Q107	8-729-199-22	TRANSISTOR 2SA992-FA	
Q108	8-729-199-22	TRANSISTOR 2SA992-FA	
Q109	8-729-184-52	TRANSISTOR 2SC1845-FA	
Q110	8-729-184-52	TRANSISTOR 2SC1845-FA	
Q111	8-729-224-62	TRANSISTOR 2SK246-GR	
Q112	8-729-224-62	TRANSISTOR 2SK246-GR	
Q113	8-729-119-78	TRANSISTOR 2SC2785-HFE	

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

MAIN

Ref. No.	Part No.	Description	Remark
Q114	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q115	8-729-199-22	TRANSISTOR 2SA992-FA	
Q116	8-729-199-22	TRANSISTOR 2SA992-FA	
Q117	8-729-188-23	TRANSISTOR 2SD882	
Q118	8-729-188-23	TRANSISTOR 2SD882	
Q119	8-729-184-52	TRANSISTOR 2SC1845-FA	
Q120	8-729-184-52	TRANSISTOR 2SC1845-FA	
Q121	8-729-020-27	TRANSISTOR 2SD2390	
Q122	8-729-020-27	TRANSISTOR 2SD2390	
Q123	8-729-020-23	TRANSISTOR 2SB1560	
Q124	8-729-020-23	TRANSISTOR 2SB1560	
Q125	8-729-184-52	TRANSISTOR 2SC1845-FA	
Q126	8-729-184-52	TRANSISTOR 2SC1845-FA	
Q127	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q128	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q129	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q130	8-729-029-66	TRANSISTOR DTC114ESA	
Q131	8-729-029-66	TRANSISTOR DTC114ESA	
Q132	8-729-029-92	TRANSISTOR DTC143ES	
Q134	8-729-803-76	TRANSISTOR 2SA1371	
Q135	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q701	8-729-216-13	TRANSISTOR 2SK161-GR	
Q702	8-729-043-87	TRANSISTOR 2SC3193O	
Q703	8-729-043-87	TRANSISTOR 2SC3193O	
Q704	8-729-043-87	TRANSISTOR 2SC3193O	
Q705	8-729-043-87	TRANSISTOR 2SC3193O	
Q706	8-729-043-87	TRANSISTOR 2SC3193O	
Q707	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q709	8-729-030-02	TRANSISTOR DTC144ESA	
Q710	8-729-216-13	TRANSISTOR 2SK161-GR	
Q711	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q712	8-729-043-87	TRANSISTOR 2SC3193O	

< RESISTOR >

Ref. No.	Part No.	Description			Remark
R101	1-249-411-11	CARBON	330	5%	1/4W
R102	1-249-411-11	CARBON	330	5%	1/4W
R103	1-216-119-00	METAL CHIP	820K	5%	1/10W
R104	1-216-119-00	METAL CHIP	820K	5%	1/10W
R105	1-249-411-11	CARBON	330	5%	1/4W
R106	1-249-411-11	CARBON	330	5%	1/4W
R107	1-216-119-00	METAL CHIP	820K	5%	1/10W
R108	1-247-901-11	CARBON	820K	5%	1/4W
R109	1-249-421-11	CARBON	2.2K	5%	1/4W
R110	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R111	1-216-073-00	METAL CHIP	10K	5%	1/10W
R112	1-216-073-00	METAL CHIP	10K	5%	1/10W
R113	1-216-073-00	METAL CHIP	10K	5%	1/10W
R114	1-216-073-00	METAL CHIP	10K	5%	1/10W
R115	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R116	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R117	1-249-425-11	CARBON	4.7K	5%	1/4W
R121	1-249-421-11	CARBON	2.2K	5%	1/4W
R122	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R123	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R124	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R125	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R126	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R127	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R129	1-249-427-11	CARBON	6.8K	5%	1/4W
⚠R130	1-215-870-11	METAL OXIDE	1.5K	5%	1W F
R131	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R132	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R133	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R134	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R135	1-249-417-11	CARBON	1K	5%	1/4W
R136	1-249-417-11	CARBON	1K	5%	1/4W
R137	1-216-035-00	METAL CHIP	270	5%	1/10W
R138	1-216-035-00	METAL CHIP	270	5%	1/10W
R139	1-247-828-11	CARBON	750	5%	1/4W
R140	1-247-828-11	CARBON	750	5%	1/4W
R141	1-249-421-11	CARBON	2.2K	5%	1/4W
R142	1-249-421-11	CARBON	2.2K	5%	1/4W
R143	1-249-433-11	CARBON	22K	5%	1/4W
R144	1-249-433-11	CARBON	22K	5%	1/4W
R145	1-249-435-11	CARBON	33K	5%	1/4W
R146	1-249-435-11	CARBON	33K	5%	1/4W
R147	1-249-429-11	CARBON	10K	5%	1/4W
R148	1-249-429-11	CARBON	10K	5%	1/4W
R149	1-249-409-11	CARBON	220	5%	1/4W
R150	1-249-409-11	CARBON	220	5%	1/4W
R153	1-249-431-11	CARBON	15K	5%	1/4W
R154	1-249-431-11	CARBON	15K	5%	1/4W
R155	1-247-692-11	CARBON	22	5%	1/4W
R156	1-247-692-11	CARBON	22	5%	1/4W
R157	1-249-415-11	CARBON	680	5%	1/4W
R158	1-249-415-11	CARBON	680	5%	1/4W
R159	1-249-409-11	CARBON	220	5%	1/4W
R160	1-249-409-11	CARBON	220	5%	1/4W
R161	1-249-899-11	CARBON	100	5%	1/4W
R162	1-249-899-11	CARBON	100	5%	1/4W
R163	1-247-696-11	CARBON	47	5%	1/4W
R164	1-247-696-11	CARBON	47	5%	1/4W
R165	1-247-696-11	CARBON	47	5%	1/4W
R166	1-247-696-11	CARBON	47	5%	1/4W
R167	1-249-416-11	CARBON	820	5%	1/4W
R168	1-249-416-11	CARBON	820	5%	1/4W
R169	1-216-079-00	METAL CHIP	18K	5%	1/10W
R170	1-249-432-11	CARBON	18K	5%	1/4W
R171	1-216-095-00	METAL CHIP	82K	5%	1/10W
R172	1-249-440-11	CARBON	82K	5%	1/4W
⚠R173	1-219-129-21	METAL OXIDE	0.22X2		5W F
⚠R174	1-219-129-21	METAL OXIDE	0.22X2		5W F
R175	1-247-696-11	CARBON	47	5%	1/4W
R176	1-247-696-11	CARBON	47	5%	1/4W
R177	1-249-425-11	CARBON	4.7K	5%	1/4W

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
R178	1-249-425-11	CARBON	4.7K	5%	1/4W
R179	1-249-419-11	CARBON	1.5K	5%	1/4W
R180	1-249-419-11	CARBON	1.5K	5%	1/4W
R181	1-249-413-11	CARBON	470	5%	1/4W
R182	1-249-413-11	CARBON	470	5%	1/4W
R183	1-249-437-11	CARBON	47K	5%	1/4W
R184	1-249-437-11	CARBON	47K	5%	1/4W
R185	1-247-850-11	CARBON	6.2K	5%	1/4W
R186	1-249-429-11	CARBON	10K	5%	1/4W
R187	1-247-843-11	CARBON	3.3K	5%	1/4W
R188	1-216-083-00	METAL CHIP	27K	5%	1/10W
R189	1-249-431-11	CARBON	15K	5%	1/4W
R190	1-247-688-11	CARBON	10	5%	1/4W
R191	1-249-393-11	CARBON	10	5%	1/4W
R192	1-249-393-11	CARBON	10	5%	1/4W
⚠R193	1-215-857-11	METAL OXIDE	10	5%	1W F
⚠R194	1-215-857-11	METAL OXIDE	10	5%	1W F
R197	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R198	1-249-427-11	CARBON	6.8K	5%	1/4W
R199	1-216-073-00	METAL CHIP	10K	5%	1/10W
R209	1-216-077-00	METAL CHIP	15K	5%	1/10W
R210	1-249-393-11	CARBON	10	5%	1/4W
R211	1-247-688-11	CARBON	10	5%	1/4W
R701	1-249-437-11	CARBON	47K	5%	1/4W
R702	1-247-688-11	CARBON	10	5%	1/4W
⚠R703	1-215-888-00	METAL OXIDE	220	5%	2W F
R704	1-249-429-11	CARBON	10K	5%	1/4W
R705	1-216-037-00	METAL CHIP	330	5%	1/10W
R706	1-249-408-11	CARBON	180	5%	1/4W
R707	1-247-688-11	CARBON	10	5%	1/4W
R708	1-216-029-00	METAL CHIP	150	5%	1/10W
R709	1-249-411-11	CARBON	330	5%	1/4W
R710	1-216-077-00	METAL CHIP	15K	5%	1/10W
R711	1-249-411-11	CARBON	330	5%	1/4W
R712	1-216-037-00	METAL CHIP	330	5%	1/10W
R713	1-216-081-00	METAL CHIP	22K	5%	1/10W
R714	1-247-688-11	CARBON	10	5%	1/4W
R715	1-249-411-11	CARBON	330	5%	1/4W
R716	1-216-077-00	METAL CHIP	15K	5%	1/10W
R717	1-249-411-11	CARBON	330	5%	1/4W
R718	1-216-037-00	METAL CHIP	330	5%	1/10W
R719	1-216-081-00	METAL CHIP	22K	5%	1/10W
R720	1-247-688-11	CARBON	10	5%	1/4W
R722	1-216-079-00	METAL CHIP	18K	5%	1/10W
R723	1-249-417-11	CARBON	1K	5%	1/4W
R724	1-216-093-00	METAL CHIP	68K	5%	1/10W
R725	1-249-899-11	CARBON	100	5%	1/4W
R726	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R727	1-249-432-11	CARBON	18K	5%	1/4W
R728	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R729	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R730	1-216-037-00	METAL CHIP	330	5%	1/10W
R731	1-249-439-11	CARBON	68K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R732	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R733	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R734	1-247-688-11	CARBON	10	5%	1/4W
R735	1-249-422-11	CARBON	2.7K	5%	1/4W
R736	1-249-441-11	CARBON	100K	5%	1/4W
R737	1-249-417-11	CARBON	1K	5%	1/4W
R738	1-247-883-00	CARBON	150K	5%	1/4W
R739	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R740	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R741	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R742	1-216-081-00	METAL CHIP	22K	5%	1/10W
R743	1-247-702-11	CARBON	150	5%	1/4W
R744	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R745	1-216-073-00	METAL CHIP	10K	5%	1/10W
R746	1-247-807-11	CARBON	100	5%	1/4W
R747	1-247-807-11	CARBON	100	5%	1/4W
R748	1-249-429-11	CARBON	10K	5%	1/4W
R749	1-249-429-11	CARBON	10K	5%	1/4W
R750	1-249-430-11	CARBON	12K	5%	1/4W
R751	1-249-441-11	CARBON	100K	5%	1/4W
R752	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R753	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R754	1-247-704-11	CARBON	220	5%	1/4W
R755	1-249-413-11	CARBON	470	5%	1/4W
R756	1-249-422-11	CARBON	2.7K	5%	1/4W
R757	1-249-441-11	CARBON	100K	5%	1/4W
R758	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R759	1-247-688-11	CARBON	10	5%	1/4W
R760	1-216-101-00	METAL CHIP	150K	5%	1/10W
R761	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R762	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R763	1-216-056-00	METAL GLAZE	2K	5%	1/10W
R764	1-216-077-00	METAL CHIP	15K	5%	1/10W
R765	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R766	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R767	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R768	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R769	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R770	1-247-696-11	CARBON	47	5%	1/4W
R771	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R772	1-216-100-00	METAL GLAZE	130K	5%	1/10W
R773	1-216-101-00	METAL CHIP	150K	5%	1/10W
R774	1-216-101-00	METAL CHIP	150K	5%	1/10W
R775	1-249-421-11	CARBON	2.2K	5%	1/4W
R776	1-249-421-11	CARBON	2.2K	5%	1/4W
R777	1-249-437-11	CARBON	47K	5%	1/4W
R778	1-249-437-11	CARBON	47K	5%	1/4W
R779	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R780	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R781	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R782	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R783	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R784	1-216-067-00	METAL CHIP	5.6K	5%	1/10W

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Replace only with part number specified.

MAIN **MOTOR-1** **MOTOR-2** **TONE**

Ref. No.	Part No.	Description			Remark
R785	1-249-413-11	CARBON	470	5%	1/4W
R786	1-216-041-00	METAL CHIP	470	5%	1/10W
R789	1-247-696-11	CARBON	47	5%	1/4W
R790	1-249-417-11	CARBON	1K	5%	1/4W
R791	1-249-421-11	CARBON	2.2K	5%	1/4W
R792	1-249-425-11	CARBON	4.7K	5%	1/4W
R801	1-216-025-00	METAL GLAZE	100	5%	1/10W
R803	1-247-807-11	CARBON	100	5%	1/4W
R804	1-247-807-11	CARBON	100	5%	1/4W
R805	1-249-911-11	CARBON	330	5%	1/4W
		< RELAY >			
RY101	1-755-126-11	RELAY			
RY102	1-515-720-11	RELAY			
RY103	1-515-720-11	RELAY			
		< SPEAKER >			
SP101	1-694-385-11	TERMINAL 8P (SPEAKERS)			
		< SWITCH >			
SW101	1-771-307-11	SWITCH, PUSH (3 KEY) (SPEAKER A, SPEAKER B, LOUDNESS)			
		< CABLE >			
TP701	1-556-690-00	CABLE ASSY, SHIELD			
		< VARIABLE RESISTOR >			
VR101	1-230-504-11	RES, ADJ, METAL	220		
VR102	1-230-504-11	RES, ADJ, METAL	220		
VR701	1-230-523-11	RES, ADJ, METAL	10K		
VR702	1-230-523-11	RES, ADJ, METAL	10K		
VR703	1-230-527-11	RES, ADJ, METAL	100K		
		< VIBRATOR >			
X701	1-527-981-00	FILTER, CERAMIC (450kHz)			
X702	1-567-250-11	OSCILLATOR, CERAMIC (456kHz)			
X801	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz)			
		< DIODE >			
ZD101	8-719-982-20	DIODE	MTZJ-30B		
ZD102	8-719-921-54	DIODE	MTZJ-6.2B		
ZD103	8-719-921-43	DIODE	MTZJ-5.1B		
ZD104	8-719-921-92	DIODE	MTZJ-15B		
ZD105	8-719-921-43	DIODE	MTZJ-5.1B		
ZD106	8-719-921-54	DIODE	MTZJ-6.2B		
ZD107	8-719-921-54	DIODE	MTZJ-6.2B		
ZD108	8-719-109-72	DIODE	RD3.9ES-B2		
ZD109	8-719-921-67	DIODE	MTZJ-8.2B		
ZD701	8-719-921-43	DIODE	MTZJ-5.1B		
ZD702	8-719-921-43	DIODE	MTZJ-5.1B		
ZD801	8-719-921-43	DIODE	MTZJ-5.1B		

Ref. No.	Part No.	Description			Remark
	1-636-789-13	MOTOR-1 BOARD			
		**********			
		< CONNECTOR >			
CN3	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P			
		< SWITCH >			
SW1	1-572-085-11	SWITCH, LEAF (LIMIT)			
**********					
		MOTOR-2 BOARD (not supplied)			
		**********			
		< SWITCH >			
SW2	1-571-300-21	LEAF, SWITCH (OPEN/CLOSE)			
**********					
*	A-4407-350-A	TONE BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C301	1-126-163-11	ELECT	4.7uF	20%	50V
C302	1-126-163-11	ELECT	4.7uF	20%	50V
C303	1-130-485-00	MYLAR	0.015uF	5%	50V
C304	1-130-485-00	MYLAR	0.015uF	5%	50V
C305	1-136-163-00	FILM	0.068uF	5%	50V
C306	1-136-163-00	FILM	0.068uF	5%	50V
C307	1-130-482-00	MYLAR	0.0082uF	5%	50V
C308	1-130-482-00	MYLAR	0.0082uF	5%	50V
C309	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C310	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C311	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C312	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C313	1-136-159-00	FILM	0.033uF	5%	50V
C314	1-136-159-00	FILM	0.033uF	5%	50V
		< JUMPER RESISTOR >			
J302	1-216-296-00	CONDUCTOR, CHIP (3216)			
J303	1-216-296-00	CONDUCTOR, CHIP (3216)			
J304	1-216-296-00	CONDUCTOR, CHIP (3216)			
J305	1-216-296-00	CONDUCTOR, CHIP (3216)			
J306	1-216-296-00	CONDUCTOR, CHIP (3216)			
		< RESISTOR >			
R301	1-216-074-00	METAL CHIP	11K	5%	1/10W
R302	1-216-074-00	METAL CHIP	11K	5%	1/10W
R303	1-216-058-00	METAL GLAZE	2.4K	5%	1/10W
R304	1-216-058-00	METAL GLAZE	2.4K	5%	1/10W
R305	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R306	1-216-049-11	METAL GLAZE	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R307	1-216-043-00	METAL GLAZE	560	5%	1/10W
R308	1-216-043-00	METAL GLAZE	560	5%	1/10W
		< VARIABLE RESISTOR >			
VR301	1-225-595-11	RES, VAR, CARBON 200K (BAL)			
VR302	1-225-594-11	RES, VAR, CARBON 100K (TRE)			
VR303	1-225-594-11	RES, VAR, CARBON 100K (BASS)			
**********					
*	A-4407-344-A	TRANS-1 BOARD, COMPLETE			
		**********			
	1-533-233-11	HOLDER, FUSE			
		< CONNECTOR >			
* CN107	1-568-226-11	PIN, CONNECTOR 2P			
		< FUSE >			
⚠F101	1-532-388-51	FUSE, TIME LAG (2A/250V)			
**********					
*	A-4407-345-A	TRANS-2 BOARD, COMPLETE			
		**********			
		< DIODE >			
D122	8-719-200-02	DIODE 10E2			
D123	8-719-200-02	DIODE 10E2			
D124	8-719-200-02	DIODE 10E2			
D125	8-719-200-02	DIODE 10E2			
D126	8-719-200-02	DIODE 10E2			
D127	8-719-200-02	DIODE 10E2			
D128	8-719-200-02	DIODE 10E2			
D129	8-719-200-02	DIODE 10E2			
		< CONNECTOR >			
JP101	1-784-443-11	CONNECTOR, 1.5MM PITCH 13P			
		< RESISTOR >			
R201	1-249-447-11	CARBON	1	5%	1/4W
R202	1-249-447-11	CARBON	1	5%	1/4W
R203	1-249-447-11	CARBON	1	5%	1/4W
R204	1-249-447-11	CARBON	1	5%	1/4W
R205	1-249-447-11	CARBON	1	5%	1/4W
R206	1-249-447-11	CARBON	1	5%	1/4W
R207	1-249-447-11	CARBON	1	5%	1/4W
R208	1-249-447-11	CARBON	1	5%	1/4W
**********					
*	A-4407-349-A	VOLUME BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C351	1-126-933-11	ELECT	100uF	20%	16V
C352	1-126-960-11	ELECT	1uF	20%	50V

Ref. No.	Part No.	Description			Remark
C353	1-126-960-11	ELECT	1uF	20%	50V
		< CONNECTOR >			
CP104	1-784-446-11	CONNECTOR, 2.0MM PITCH (90) 14P			
		< IC >			
IC351	8-759-988-58	IC BA6209N			
		< JUMPER RESISTOR >			
J358	1-216-296-00	CONDUCTOR, CHIP		(3216)	
J359	1-216-296-00	CONDUCTOR, CHIP		(3216)	
		< TRANSISTOR >			
Q351	8-729-029-46	TRANSISTOR DTA143ESA			
		< RESISTOR >			
R351	1-249-417-11	CARBON	1K	5%	1/4W
R352	1-247-807-11	CARBON	100	5%	1/4W
R353	1-249-393-11	CARBON	10	5%	1/4W
		< VARIABLE RESISTOR >			
VR351	1-225-593-11	RES, VAR, CARBON 100K/100K (VOLUME)			
		< DIODE >			
ZD351	8-719-010-34	DIODE UZ-4.7BSC			
ZD352	8-719-921-43	DIODE MTZJ-5.1B			
**********					
		MISCELLANEOUS			
		**********			
⚠4	1-575-651-11	CORD, POWER			
65	1-782-465-11	WIRE (FLAT TYPE) (16 CORE)			
66	1-769-326-11	WIRE (FLAT TYPE) (20 CORE)			
⚠203	8-848-483-05	OPTICAL PICK-UP KSS-213C/Q-RP			
⚠F101	1-532-388-51	FUSE, TIME LAG (2A/250V)			
M1	X-2626-272-1	MOTOR ASSY (SPINDLE)			
M2	X-2625-769-1	MOTOR ASSY, SLED			
M3	X-4949-441-1	MOTOR ASSY, DC (OPEN/CLOSE)			
⚠T1	1-431-725-11	TRANSFORMER, POWER			
**********					
		ACCESSORIES & PACKING MATERIALS			
		**********			
	1-475-593-11	REMOTE COMMANDER (RM-U301)			
	1-501-986-11	ANTENNA, ROOP			
	3-860-986-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH, SPANISH,PORTUGUESE,ITALIAN)			
	3-860-986-21	MANUAL, INSTRUCTION (GERMAN,DUTCH, SWEDISH,DANISH,FINNISH)			
**********					

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-645-79	SCREW +BVTP 3X6 TYPE2 N-S	
#2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#3	7-685-650-79	SCREW +BVTP 3X16 TYPE2 N-S	
#4	7-685-881-09	SCREW +BVTT 4X8 (S)	
#5	7-621-775-20	SCREW +B 2.6X5	
#6	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	

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