

SHARP SERVICE MANUAL

No. S1002QTCD210H

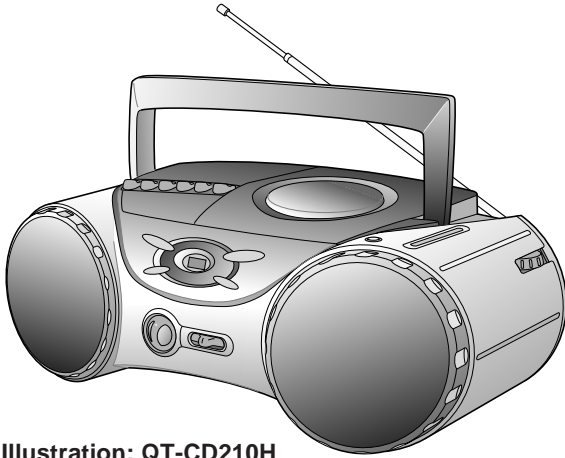


Illustration: QT-CD210H

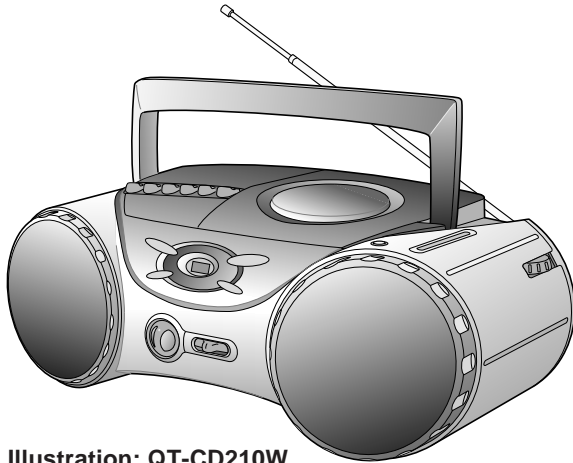


Illustration: QT-CD210W



QT-CD210H(BK)
QT-CD210H(BL)
QT-CD210H(S)
QT-CD210W(BK)
QT-CD210W(BL)
QT-CD210W(S)

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified should be used.

• **Note for users in U.K.**
 Recording and playback of any material may require consent which SHARP is unable to give. Please refer particularly to the provisions of Copyright Act 1956, the Dramatic and Musical Performers Protection Act 1956, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

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SAFETY PRECAUTION FOR SERVICE MANUAL

Precaution to be taken when replacing and servicing the Laser Pickup.

The AEL (Accessible Emission Level) of Laser Power Output for this model is specified to be lower than Class I Requirements. However, the following precautions must be observed during servicing to protect your eyes against exposure to the Laser beam.

- (1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position outer than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
- (2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
- (3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
- (4) Under no circumstances look directly into the Pickup Lens at any time.
- (5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN Tässä KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTÖN LASERSÄTEILYLLE.

WARNING - OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT EN I DENNA BRUKSANVISNING SPECIFICERAS. KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

CAUTION-INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

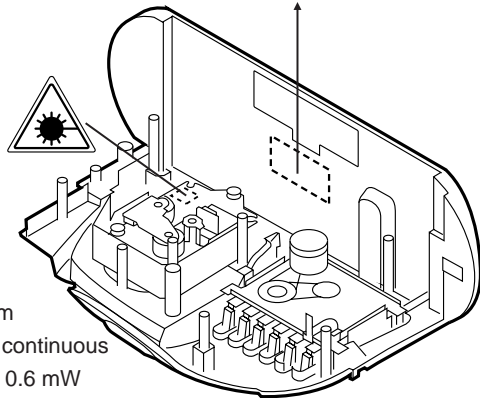
VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.

ADVERSEL-USYNLIG LASERSTRÅLING VED ÅBNING. SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.

VARO! AVATTAESSA OLET ALTTIINA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUJOTA SÄTEESEEN ALAKA KATSO SITÄ OPTISEN LAITTEEN LAPI.

VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.

ADVERSEL-USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.



Laser Diode Properties
 Material: GaAlAs
 Wavelength: 780 nm
 Emission Duration: continuous
 Laser Output: max. 0.6 mW

QT-CD210H for Europe

CAUTION

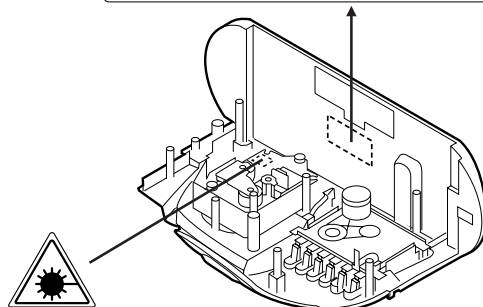
**CLASS 1 LASER PRODUCT
 APPAREIL À LASER DE CLASSE 1
 PRODUCTO LASER DE CLASE 1**

- This Portable CD Stereo System is classified as a CLASS 1 LASER product.
- The CLASS 1 LASER PRODUCT label is located on the rear cover.
- Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

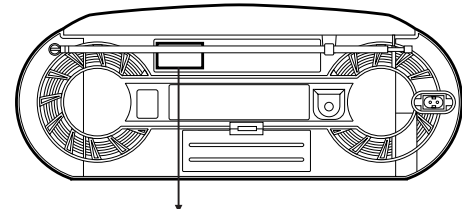
As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

Laser Diode Properties
 Material: GaAlAs
 Wavelength: 780 nm
 Emission Duration: continuous
 Laser Output: max. 0.6 mW

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 VARO! AVATTAESSA OLET ALTTIINA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUJOTA SÄTEESEEN ALAKA KATSO SITÄ OPTISEN LAITTEEN LAPI.
 VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.
 ADVERSEL-USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.



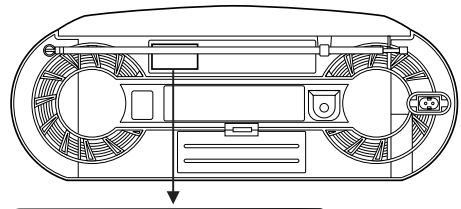
QT-CD210H for Australia/New Zealand/Thailand/Philippines/QT-CD210W



CLASS 1 LASER PRODUCT
APPAREIL À LASER DE CLASSE 1
PRODUCTO LASER DE CLASE 1

LASER KLASSE 1
 LUOKAN 1 LASERLAITE
 KLASS 1 LASERAPPARAT
LASER TRÍDY 1
LASER TRIEDY 1

QT-CD210H for Europe



CLASS 1 LASER PRODUCT
APPAREIL À LASER DE CLASSE 1
PRODUCTO LASER DE CLASE 1

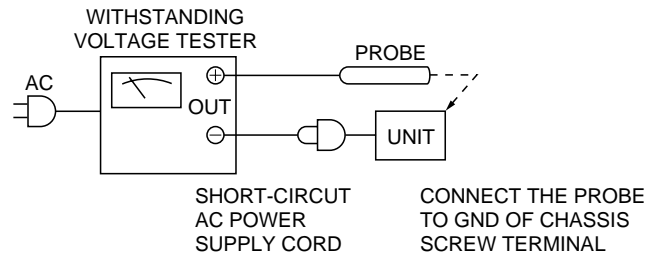
QT-CD210H for U.K.

IMPORTANT SERVICE NOTES (QT-CD210H FOR U.K. ONLY)

Before returning the unit to the customer after completion of a repair or adjustment it is necessary for the following withstand voltage test to be applied to ensure the unit is safe for the customer to use.

Setting of Withstanding Voltage Tester and set.

Set name	Set value
Withstanding Voltage Tester	
Test voltage	4,240 VPEAK 3,000 VRMS
Set time	6 secs
Set current (Cutoff current)	4 mA
Unit	
Judgment	
	OK: The "GOOD" lamp lights.
	NG: The "NG" lamp lights and the buzzer sounds.

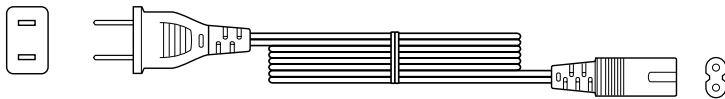


VOLTAGE SELECTION (QT-CD210W ONLY)

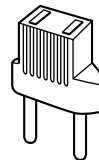
The voltage selector is located on the AC voltage selector box. If adjustment is necessary, use a screwdriver in order to turn the selector in either direction until the correct voltage figure is displayed in the window next the adjustment screw.

AC POWER SUPPLY CORD AND AC PLUG ADAPTOR (FOR QT-CD210W)

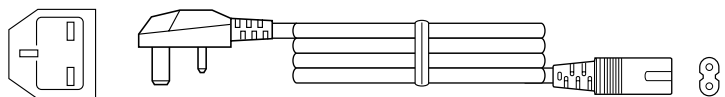
QACCA0001SJ00



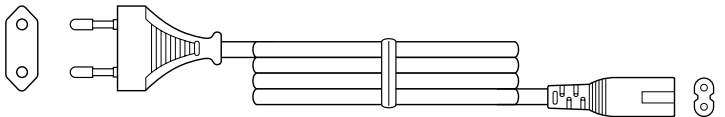
QPLGA0253AFZZ



QACCB0001SJ00



QACCE0001SJZZ



QPLGA0250AFZZ



QT-CD210H/W

FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

QT-CD210H/W

● General

Power source: AC 230-240 V, 50 Hz
(QT-CD210H for U.K./Europe) DC 9 V ["D" size (UM/SUM-1, R20 or HP-2) battery × 6]

Power source: AC 230-240 V, 50 Hz
(QT-CD210H for Australia/New Zealand/Thailand) DC 9 V ["D" size (UM/SUM-1, R20 or HP-2) battery × 6]

Power source: AC 220 V, 60 Hz
(QT-CD210H for Philippines) DC 9 V ["D" size (UM/SUM-1, R20 or HP-2) battery × 6]

Power source: AC 110-127/220-240 V, 50/60 Hz
(QT-CD210W) DC 9 V ["D" size (UM/SUM-1, R20 or HP-2) battery × 6]

Power consumption: 8 W
(QT-CD210H)

Power consumption: 10 W
(QT-CD210W)

Output power: MPO; 8.4 W (4.2 W + 4.2 W)
(QT-CD210H for U.K./Australia/New Zealand/Thailand/Philippines/QT-CD210W) (AC operation, 10 % T.H.D.)
RMS; 4.6 W (2.3 W + 2.3 W)
(DC operation, 10 % T.H.D.)

Output power: MPO; 8.4 W (4.2 W + 4.2 W)
(QT-CD210H for Europe) (AC operation, DIN 45 324)
RMS; 4.6 W (2.3 W + 2.3 W)
(DC operation, DIN 45 324)

Speakers: 10 cm (4") full-range speaker x 2

Output terminals: Headphones; 16-50 ohms
(recommended; 32 ohms)

Dimensions: Width; 400 mm (15-3/4")
Height; 158 mm (6-1/4")
Depth; 212 mm (8-3/8")

Weight: 2.2 kg (6.0 lbs.) without batteries

● Radio

Frequency range: FM; 87.5 - 108 MHz
AM; 526.5 - 1,606.5 kHz
(QT-CD210H)

● Radio

Frequency range: FM; 88 - 108 MHz
AM; 526.5 - 1,606.5 kHz
(QT-CD210W)

● Tape recorder

Frequency response: 50 - 14,000 Hz (Normal tape)

Signal/noise ratio: 50 dB

Wow and flutter: 0.3 % (DIN 45 511)
(QT-CD210H for Europe)

Wow and flutter: 0.25 % (WRMS)
(QT-CD210H for U.K./Australia/New Zealand/Thailand/Philippines/QT-CD210W)

Motor: DC 9 V electric governor

Bias system: AC bias

Erase system: Magnet erase

● Compact disc player

Type: Compact disc

Signal readout: Non-contact, 3-beam semiconductor laser pickup

Audio channels: 2

Filter: 8-times oversampling digital filter

D/A converter: 1-bit D/A converter

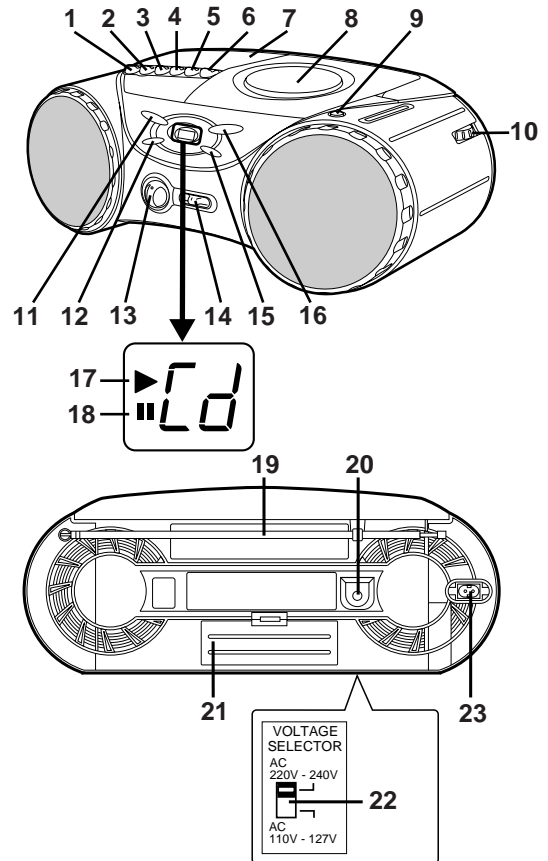
Wow and flutter: Unmeasurable
(less than 0.001% W. peak)

Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

Illustration: QT-CD210W

1. (TAPE) Record Button
2. (TAPE) Play Button
3. (TAPE) Rewind Button
4. (TAPE) Fast Forward Button
5. (TAPE) Stop/Eject Button
6. (TAPE) Pause Button
7. Cassette Compartment
8. CD Compartment
9. CD Eject Button
10. Tuning Control
11. (CD) Stop Button
12. (CD) Track Down/Review Button
13. Volume Control
14. Stand-by, On/Function Switch
15. (CD) Track Up/Cue Button
16. (CD) Play/Pause Button
17. (CD) Play Indicator
18. (CD) Pause Indicator
19. FM Telescopic Rod Aerial
20. Headphone Socket
21. Battery Compartment
22. Voltage Selector Switch (QT-CD210W Only)
23. AC Power Input Socket



FITTING OF DIAL POINTER

Setting method of the dial pointer

1. Remove the front cabinet. (Refer to Fig.8-1 on page 8, "Disassembly method".)
2. Remove the dial pointer.
3. Insert the dial pointer from (A) of the top cabinet so that it engages with the drum gear.
4. Fully turn the drum in the opposite direction of (B) and set it to the FL marks.
5. Reassemble the front cabinet.

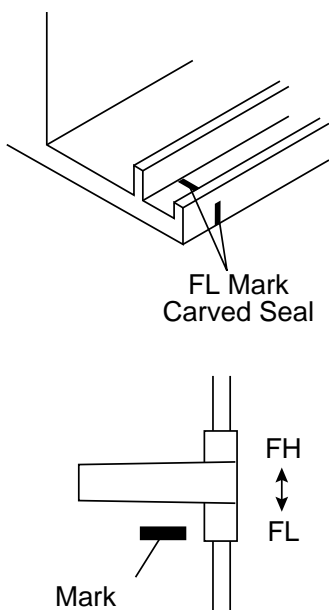


Figure 5-1

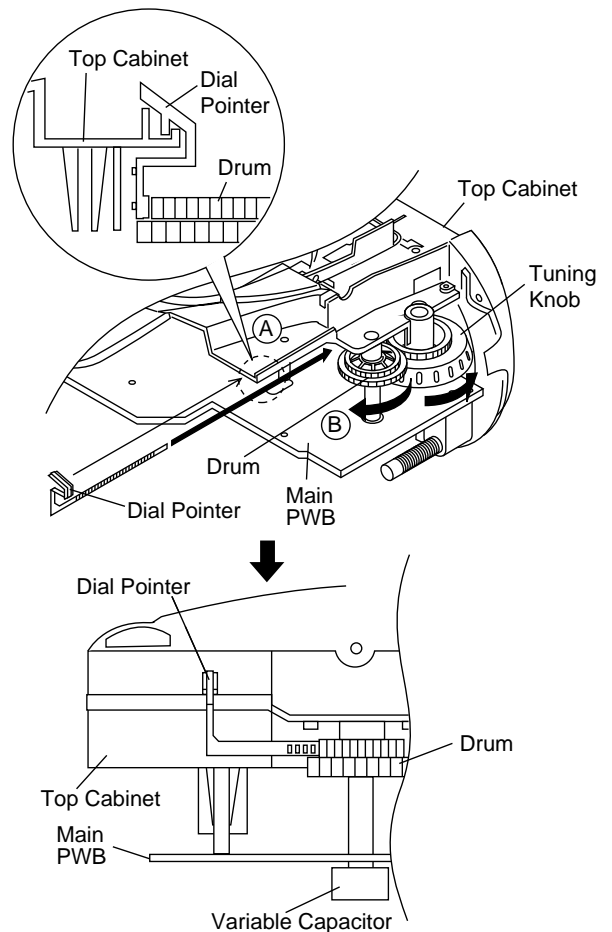
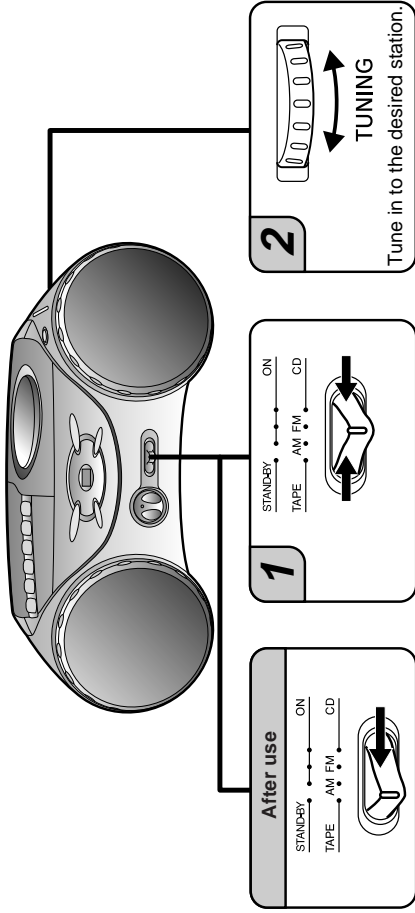


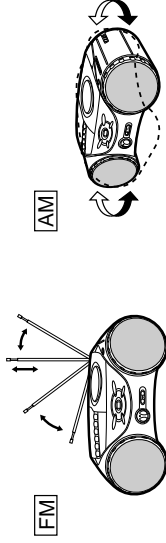
Figure 5-2

OPERATION MANUAL

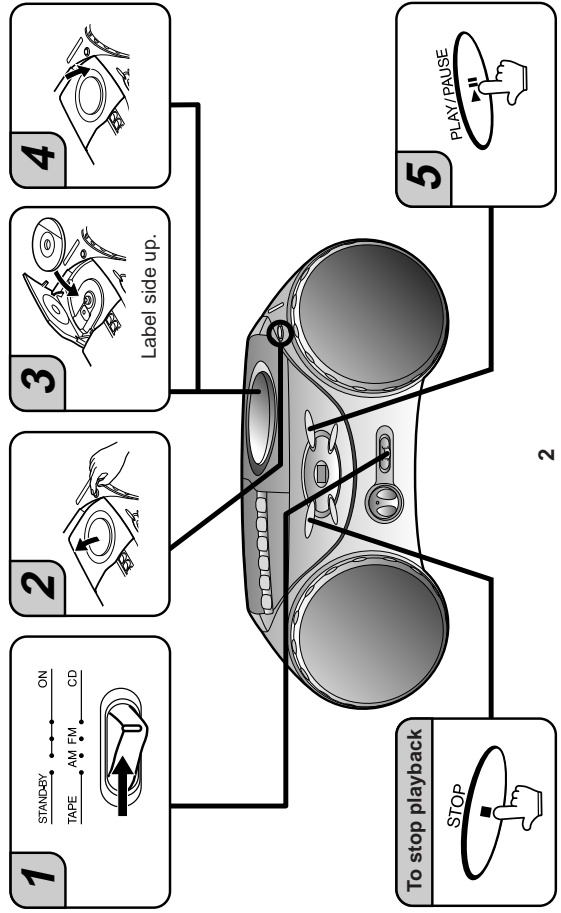
3 Listening to the radio



■ Aerial adjustment



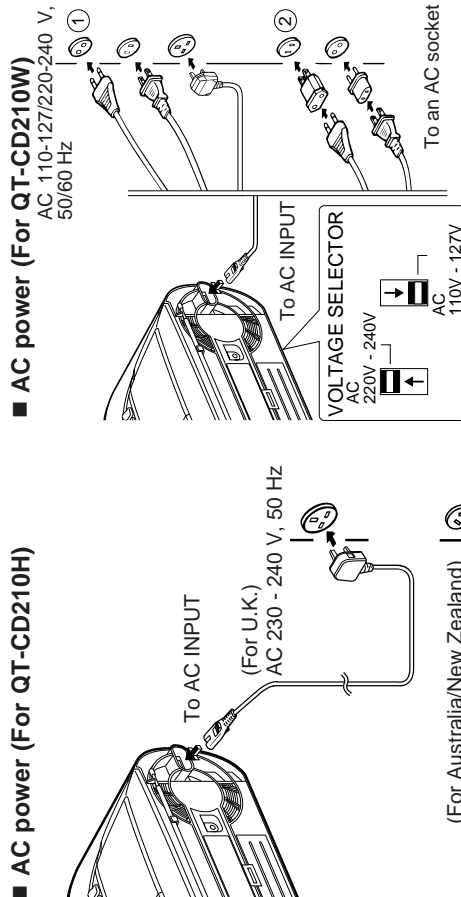
4 Listening to a CD



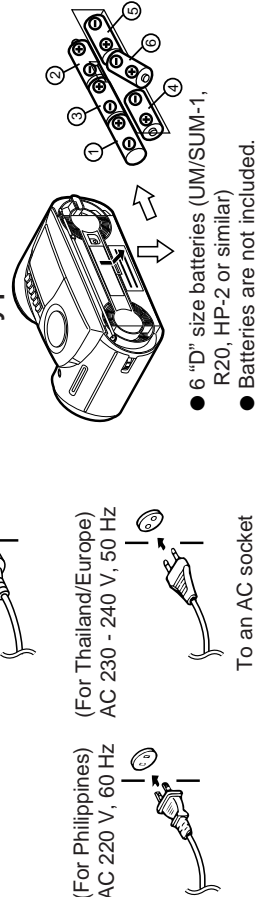
1 Check the supplied accessory

- AC power lead x 1
- QT-CD210H for customers in Australia and New Zealand
- QT-CD210H for customers in Philippines
- QT-CD210H for customers in Thailand and Europe
- For QT-CD210W
- For QT-CD210W
- For QT-CD210W

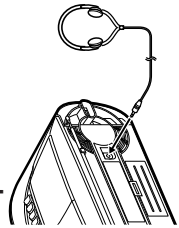
2 Preparation for use



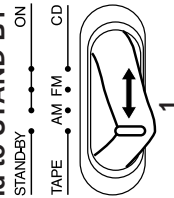
■ Battery power



■ Headphones



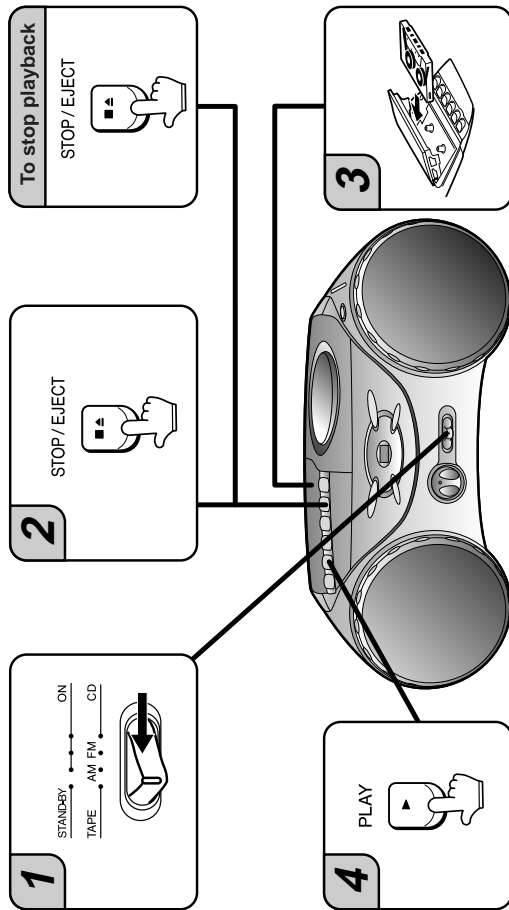
■ Tuning the power ON and to STAND-BY



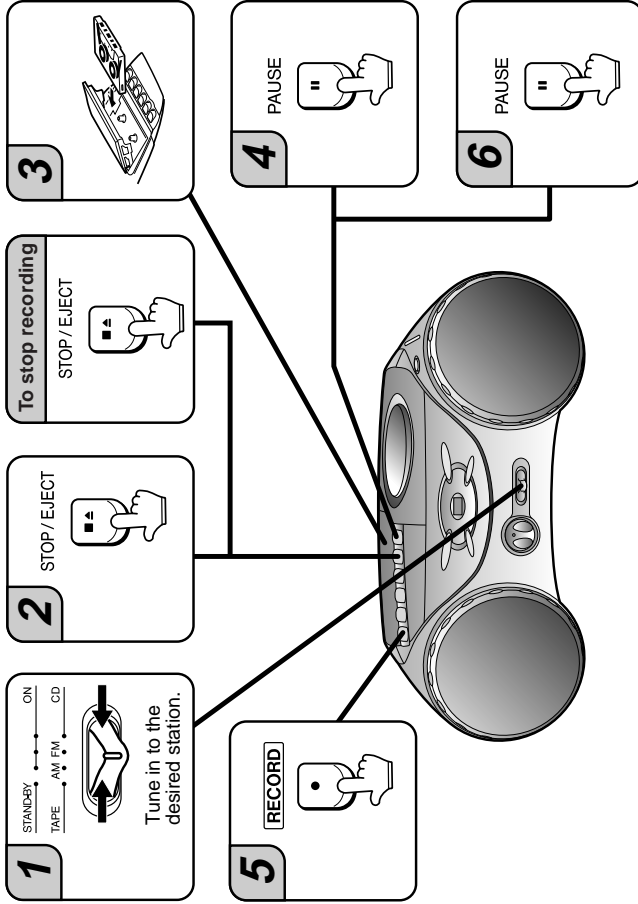
■ Volume control



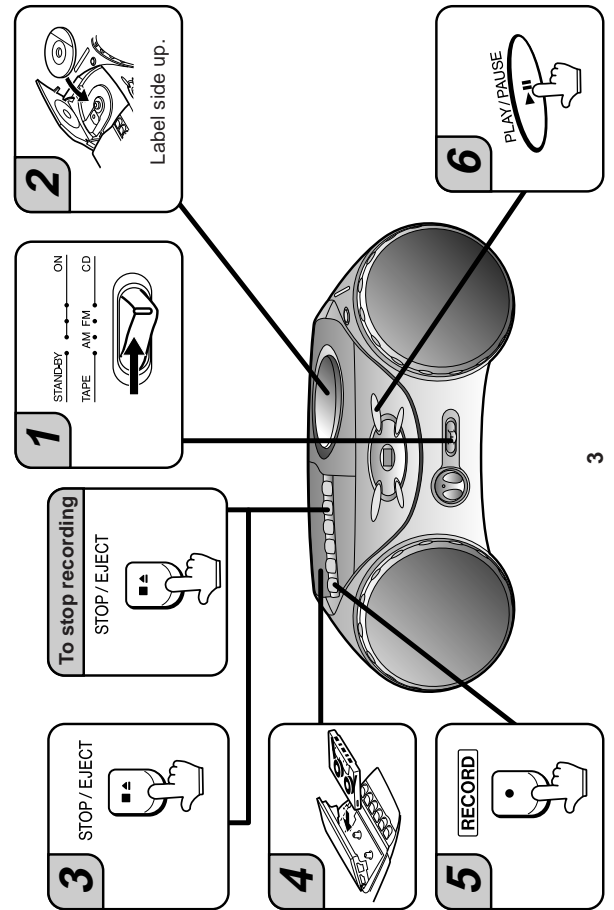
5 Listening to a tape



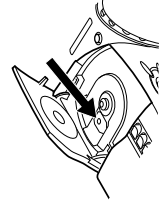
7 Recording from the radio



6 Recording from CDs



CD pickup cleaning



- Do not touch the Laser pickup lens. If fingerprints or dust accumulate on the pickup, clean it using commercial cleaning disc (brush type.)

DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet/ Front Cabinet	1. Screw (A1) x7 2. Socket (A2) x1	8-1
2	Power PWB	1. Screw (B1) x2 2. Hook (B2) x2 3. Socket (B3) x1 4. Hook (B4) x2	8-2
3	Main PWB/ CD Control PWB (Note)	1. Socket (C1) x1 2. Screw (C2) x7 3. Screw (C3) x1 4. Solder (C4) x3 5. Socket (C5) x3 6. Screw (C6) x2	8-2 8-3
4	CD Mechanism	1. Screw (D1) x3	8-3
5	Tape Mechanism	1. Screw (E1) x4	8-3

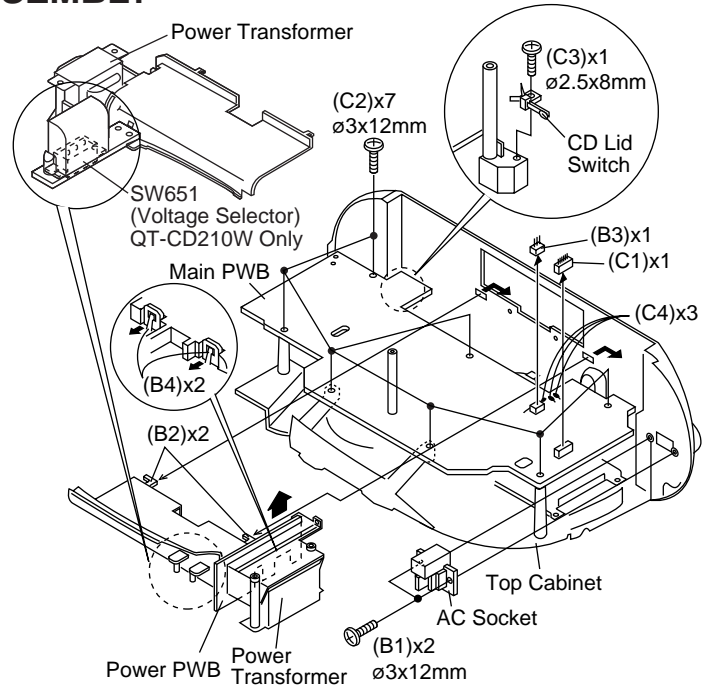


Figure 8-2

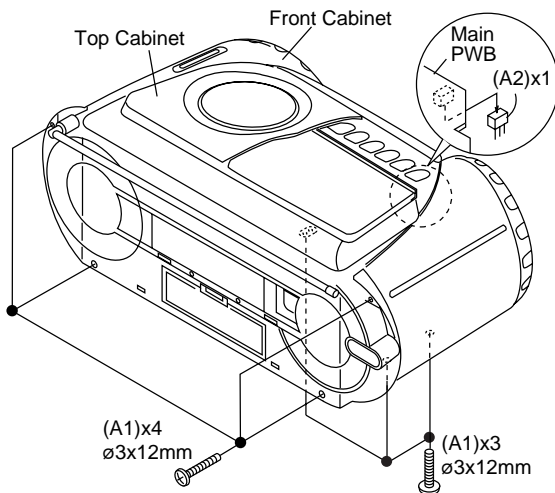


Figure 8-1

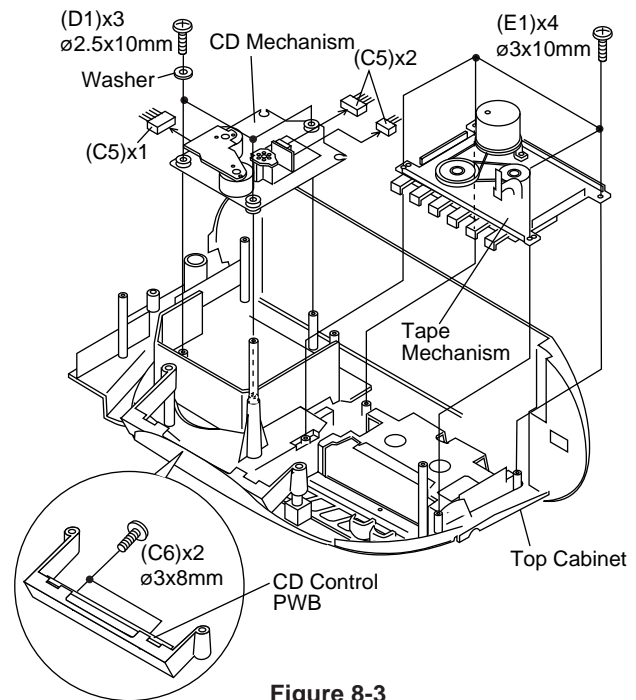


Figure 8-3

REMOVING AND REINSTALLING THE MAIN PARTS

CD MECHANISM SECTION

Perform steps 1 to 4 of the disassembly method to remove the CD mechanism.

How to remove the pickup (See Fig. 8-4.)

1. Remove the screws (A1) x 2 pcs., to remove the shaft (A2) x 1 pc.
2. Remove the stop washer (A3) x 1 pc., to remove the gear (A4) x 1 pc.
3. Remove the pickup.

Note : (Figure 8-3 and Figure 8-4)

After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector to protect the optical pickup from electrostatic damage.

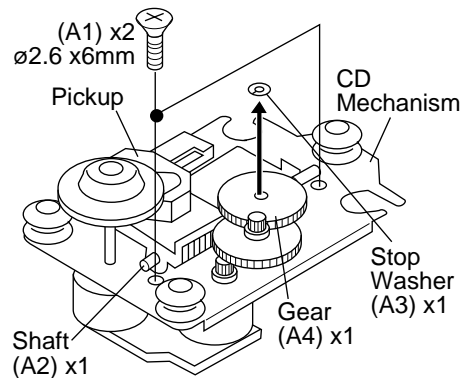


Figure 8-4

TAPE MECHANISM SECTION

Perform steps 1 to 5 of the disassembly method to remove the tape mechanism. (See page 8.)

How to remove the record / playback and erase heads (See Fig. 9-1.)

1. Remove the screws (A1) x 2 pcs., to remove the record/playback head.
2. Remove the hooks (A2) x 2 pcs., toward the center position as shown in Fig. 5-1. and then extract the erase head upward.

Note:

After replacing the heads and performing the azimuth adjustment, be sure to apply screwlock.

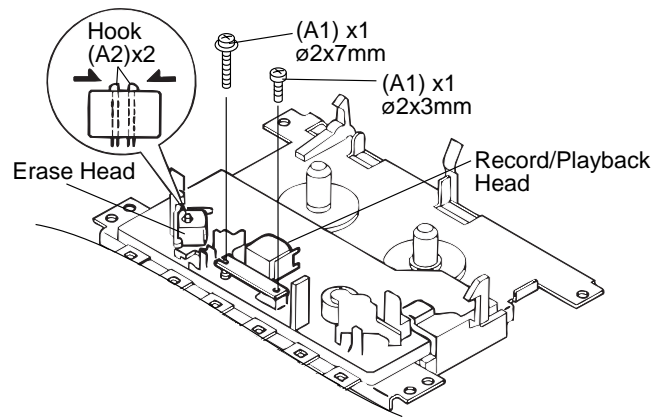


Figure 9-1

How to remove the pinch roller (See Fig. 9-2.)

1. Carefully bend the pinch roller pawl in the direction of the arrow <A>, and remove the pinch roller (B1) x 1 pc., upwards.

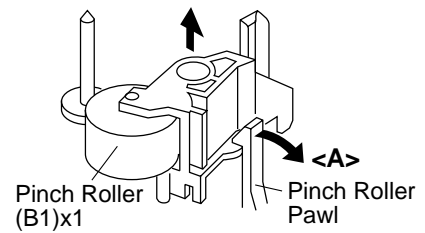


Figure 9-2

How to remove the belts (See Fig. 9-3.)

1. Remove the main belt (C1) x 1 pc., from the motor pulley.
2. Remove the FF/REW belt (C2) x 1 pc., from the REW/FF roller.
3. Put on the belts in the reverse order of removal.

Note:

When putting on the belt, ascertain that the belt is not twisted, and clean it.

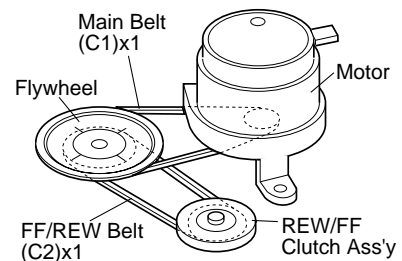


Figure 9-3

How to remove the motor (See Figs. 9-4.)

1. Remove the mainbelt.
2. Remove the screw (D1) x 1 pc., to remove the motor mount.
3. Remove the screws (D2) x 2 pcs., to remove the motor.

Note:

When mounting the motor, pay attention to the motor mounting angle.

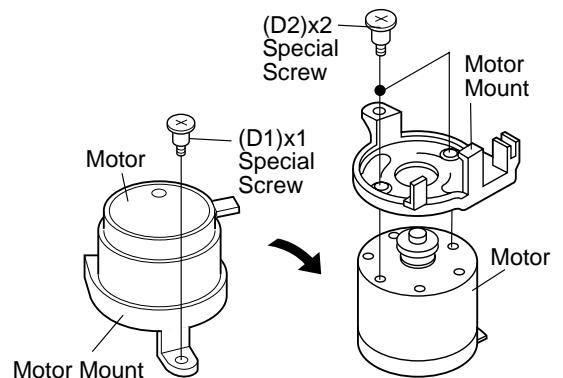


Figure 9-4

How to remove the flywheel (See Fig. 9-5.)

1. Remove the belt.
2. Remove the stop washer (E1) x 1 pc., with a small precision screwdriver to extract the flywheel from the capstan metal.

Note:

When the stop washer is deformed or damaged, replace it with a new one.

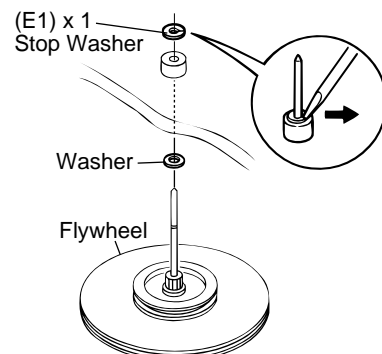


Figure 9-5

How to reinstall the parts

Install each part in the reverse order of the removal with care.

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
PLAY: TW-2412	Over 120 g

• Torque Check

Torque Meter	Specified Value
Play: TW-2111	25 to 65 g.cm
Fast Forward: TW-2231	60 to 130 g.cm
Rewind: TW-2231	60 to 130 g.cm

• Head Azimuth

Torque Meter	Specified Value
MTT-114	Output: Speaker Terminal (CNP201 Load resistance: 4 ohms)

• Tape Speed

Test Tape	Adjusting Point	Specified Value	Instrument Connection
MTT-111	Variable resistor in motor. (M601)	3,000 ± 90 Hz	Output: Speaker Terminal (CNP201 Load resistance: 4 ohms)

TAPE SECTION

Position of each switch or control	
Volume control	Max
Function switch	Tape/Power Off

• Bias Oscillation

Adjustment Point	Specified Value	Instrument Connection
L301	82 kHz ± 6 kHz	Pin 1 of CNP101

• Playback Amplifier Sensitivity Check

Test Tape	Specified Value	Instrument Connection
MTT-118	1.1 V ± 3 dB	Speaker Terminal (Load resistance: 4 ohms)

TUNER SECTION

fL: Low-range frequency
fH: High-range frequency

• FM IF/RF

Test Stage	Specified Value/Adjusting Point	Instrument Connection
FM Detection	T2	Input: Pin 1 of IC1 Output: Pin 18 of IC1
FM Band Coverage	fL: L2 fH: TC2	Input: Antenna Output: Speaker Terminal (CNP201 Load resistance: 4 ohms)
FM Tracking	fL: 88.0 MHz: L1 fH: 108.0 MHz: TC1	

• AM IF/RF

Test Stage	Specified Value/Adjusting Point	Instrument Connection
AM IF	T3	Input: Antenna Output: Pin 18 of IC1
AM Band Coverage	fL: L4 fH: TC4	Input: Antenna Output: Speaker Terminal (CNP201 Load resistance: 4 ohms)
AM Tracking	fL: 600 kHz: L3 fH: 1,400 kHz: TC3	

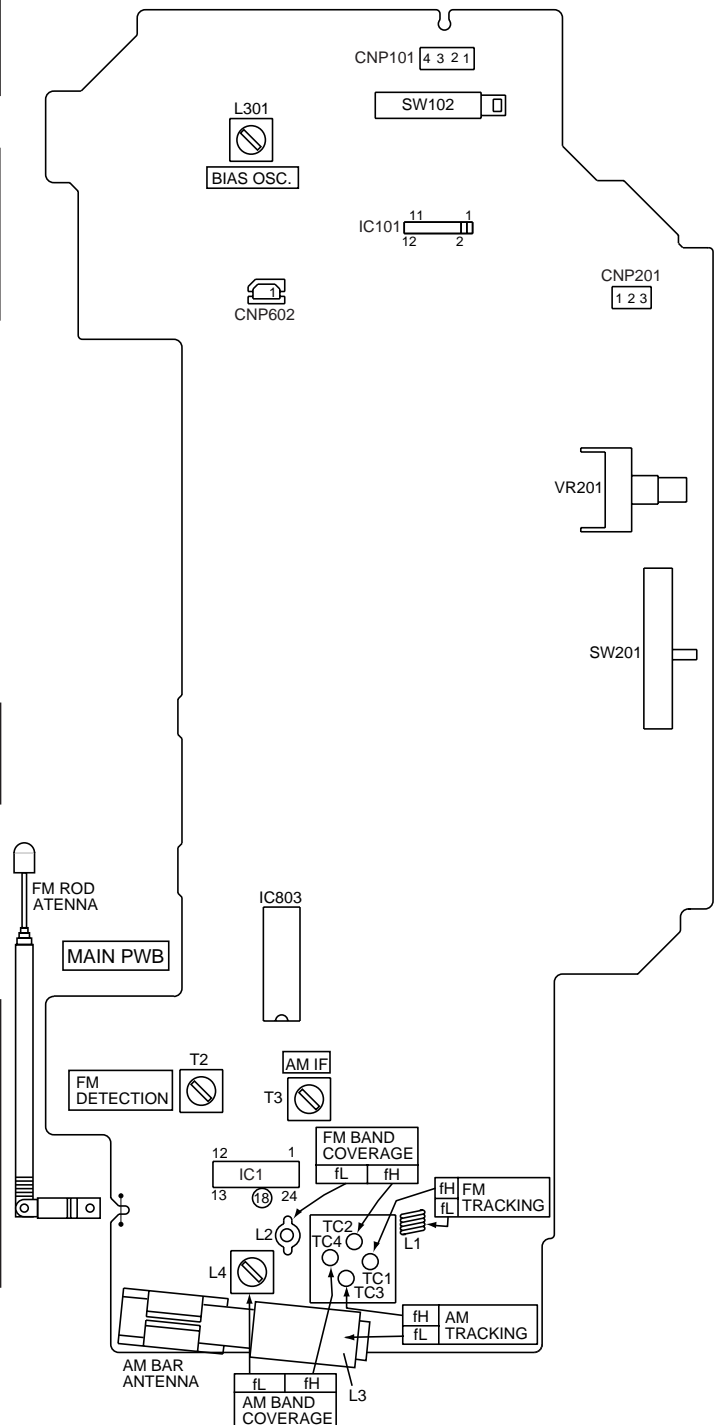


Figure 10 ADJUSTMENT POINTS

CD SECTION

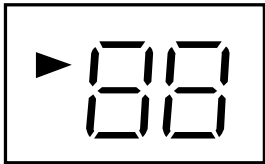
Since this CD system incorporates the following automatic adjustment function, when the pickup is replaced, it is not necessary to reajust it.

Since this CD unit does not need adjustment, the combination of PWB and laser pickup unit is not restricted.

TEST MODE

Start	While holding down the "PLAY" button, move the FUNCTION/POWER switch to "CD".
Note	1. When the CD LID switch is in the OFF position, (CD LID is open) the unit will be able to enter the test mode. However, can use the "UP/CUE" and "DOWN/REVIEW" button only. 2. You can only move the pickup. 3. The LCD display should be the same as it is for normal CD operations.
Operation	The use of the "UP/CUE" button will move the pickup to the outermost position. The use of the "DOWN/REVIEW" button will move the pickup to the innermost position.

LCD MODE

Start	After connecting of the 10kΩ resistor between IC802 (27)pin and GND and holding down the "PLAY" button, move the FUNCTION/POWER switch to "CD".
Display	

LASER LIGHTING CONFIRMATION

1. Remove the front cabinet according to the disassembly method.
2. Short the TP of the Figure 11-1 to turn on the CD LID SW 810.
3. While holding down the "PLAY" button, move the FUNCTION/POWER switch to "CD".
4. Open the CD LID and press the PLAY button. The laser lights up for a few seconds. (At this time, the pickup lens moves up and down and adjusts the focus to check if there is a disc or not.)

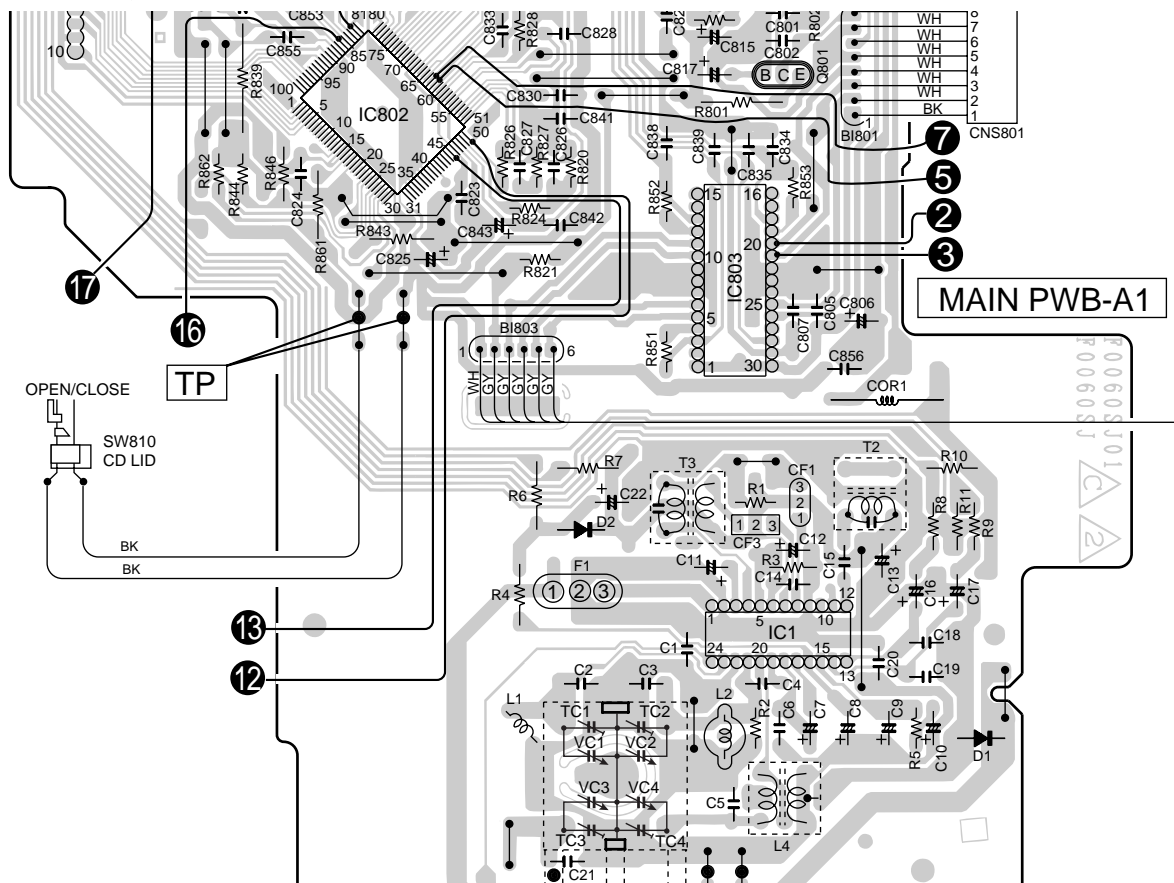
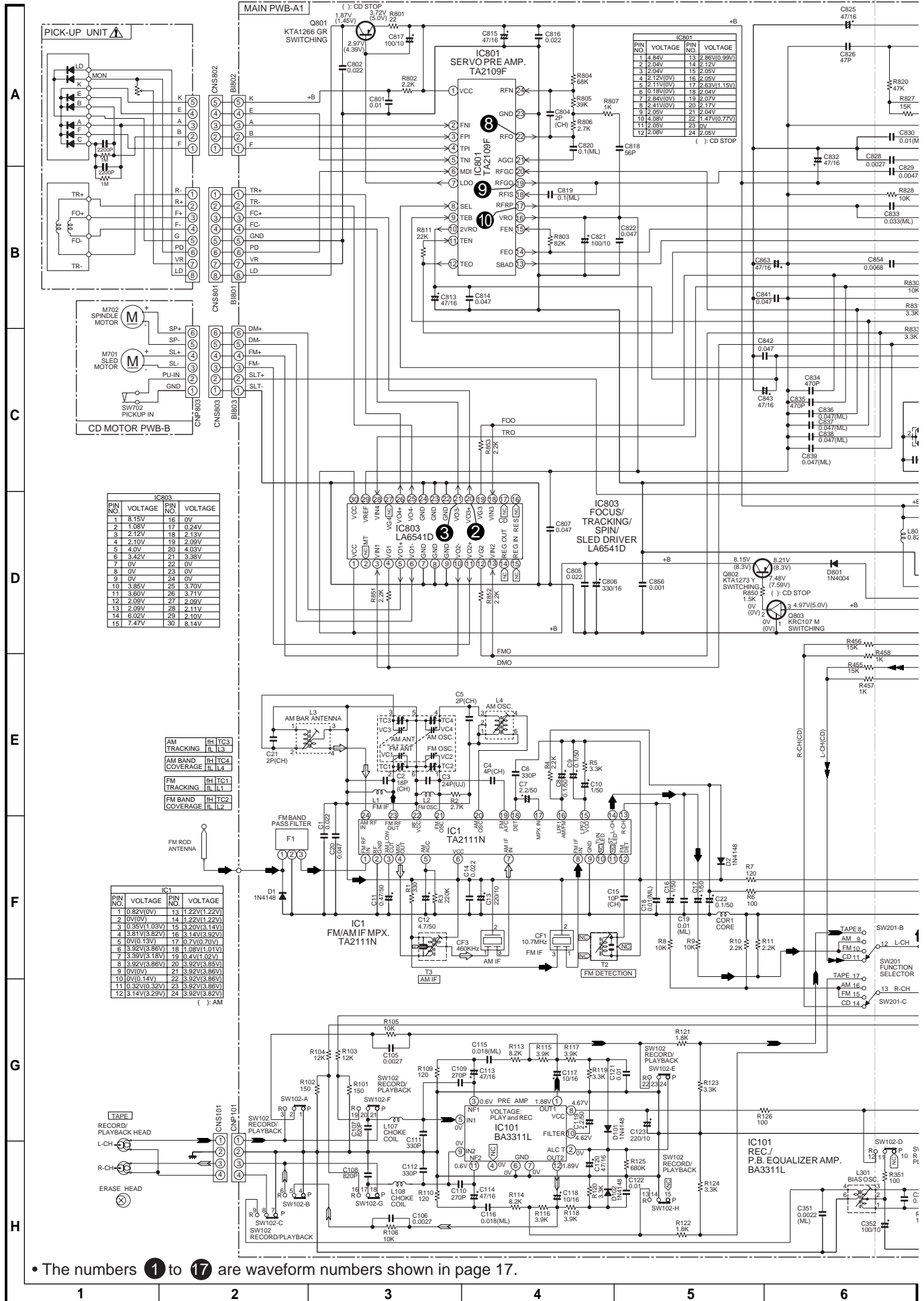
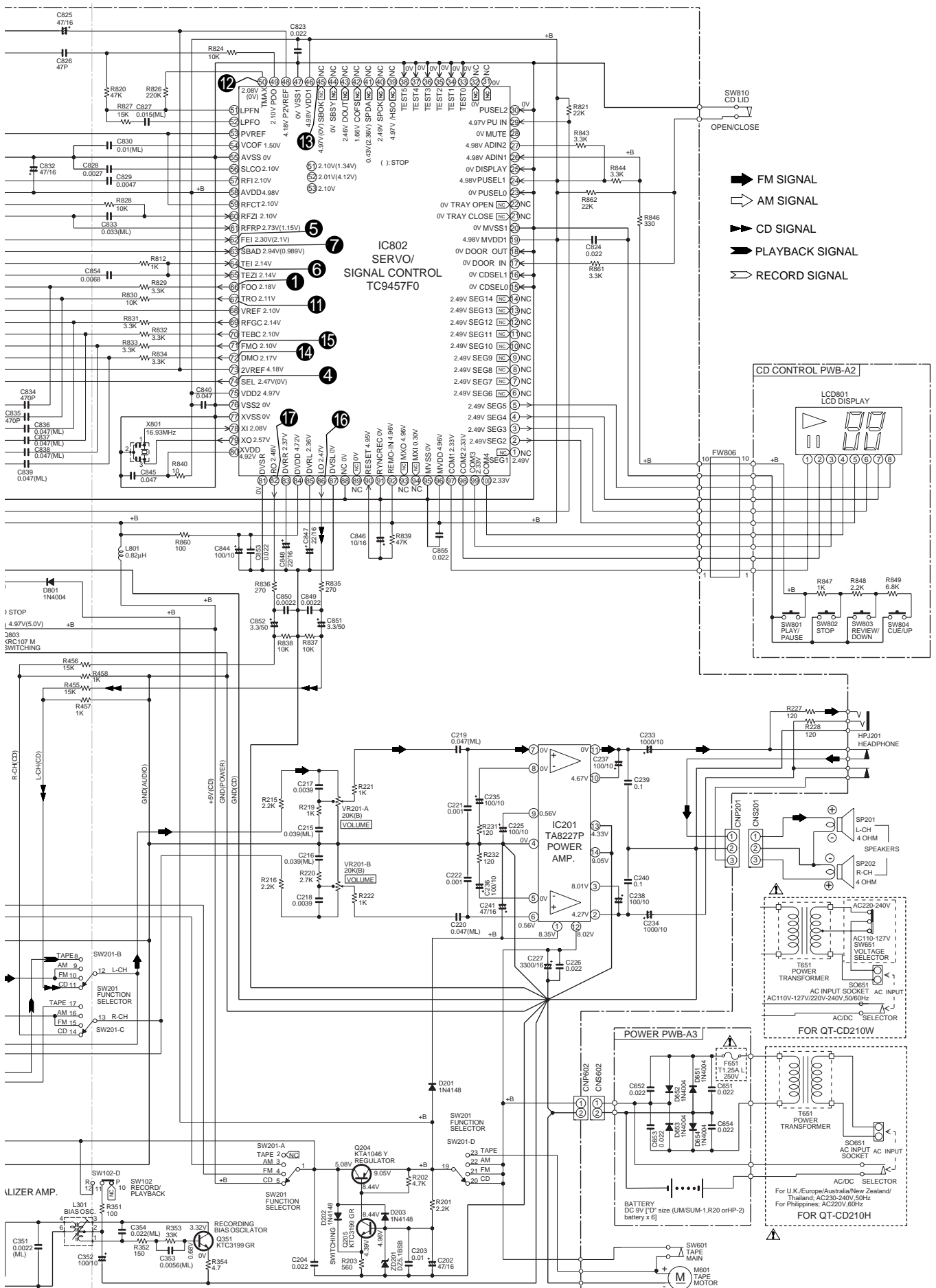


Figure 11-1



• The numbers 1 to 17 are waveform numbers shown in page 17.

Figure 12 SCHEMATIC DIAGRAM (1/2)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 16.

7	8	9	10	11	12
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Figure 13 SCHEMATIC DIAGRAM (2/2)

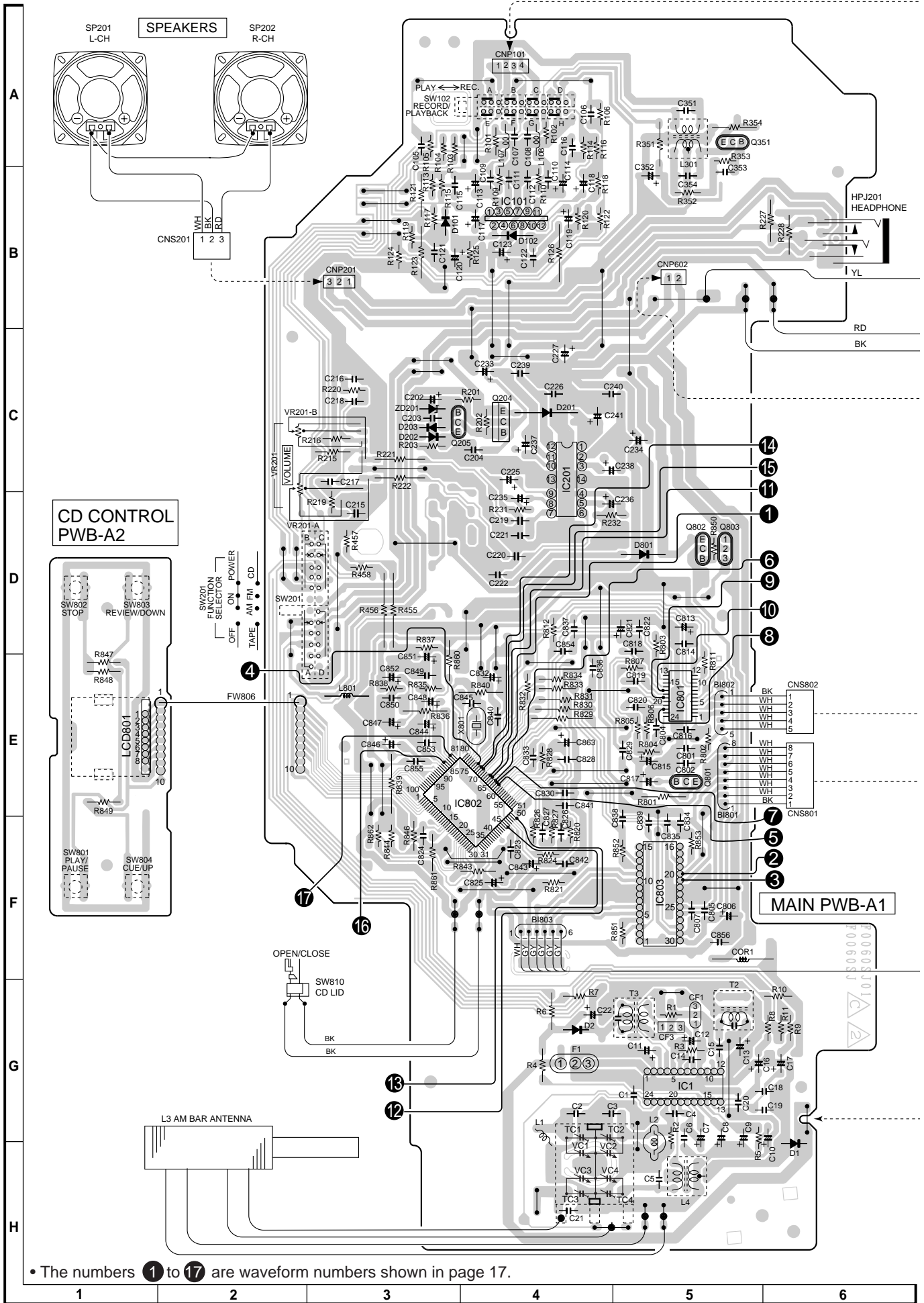


Figure 14 WIRING OF P.W.BOARD (1/2)

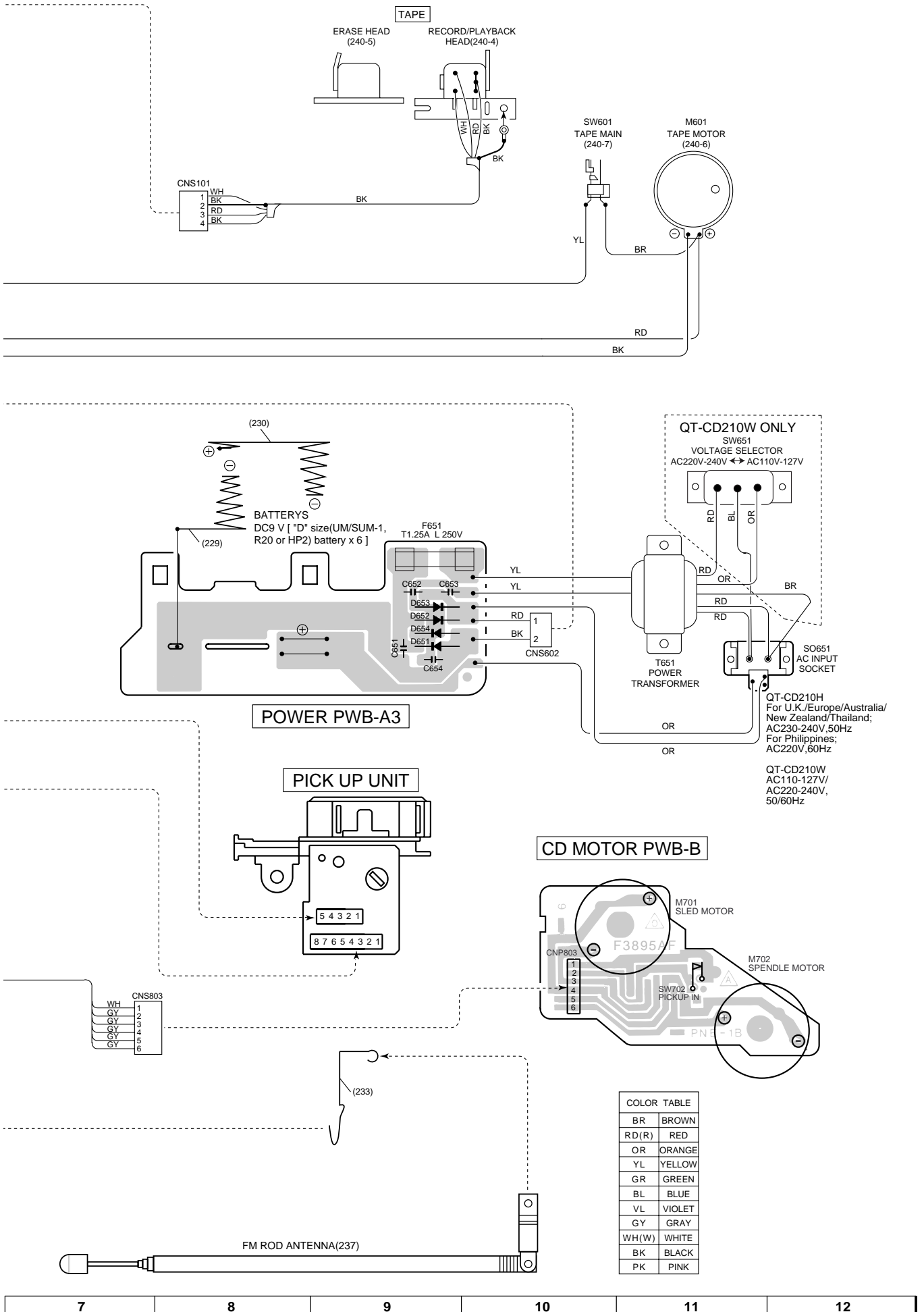



Figure 15 WIRING OF P.W.BOARD (2/2)

NOTES ON SCHEMATIC DIAGRAM

- Resistor:
To differentiate the units of resistors, the symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is an ohm resistor. The resistor designated "Fusible" is a fuse type resistor
- Capacitor:
To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.
(CH), (TH), (RH), (UJ): Temperature compensation
(ML): Mylar type
(P.P.): Polypropylene type
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.

1. Tuner
(): AM mode
Marking except for (): FM mode
 2. CD
(): Play mode
Marking except for (): Stop state
 3. Deck section
(): Record mode
Marking except for (): Playback mode
Display / Control section:
(): Active state
Marking except for (): CD Function mode at stop state
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
 - Parts marked with " ⚠ " () are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
SW102	RECODE/PLAYBACK	REC— <u>P.B.</u>
SW201	FUNCTION SELECTOR	TAPE/OFF—AM/ON— FM/ON— <u>CD/ON</u>
SW601	TAPE MAIN	<u>OFF</u> —ON
SW651	VOLTAGE SELECTOR (QT-CD210W ONLY)	<u>AC220-240V</u> — AC110-127V
SW702	PICKUP IN	<u>OFF</u> —ON
SW801	PLAY/PAUSE	<u>OFF</u> —ON
SW802	STOP	<u>OFF</u> —ON
SW803	REVIEW/DOWN	<u>OFF</u> —ON
SW804	CUE/UP	<u>OFF</u> —ON
SW810	CD LID	<u>OFF</u> —ON

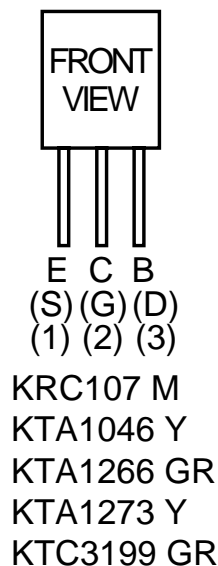
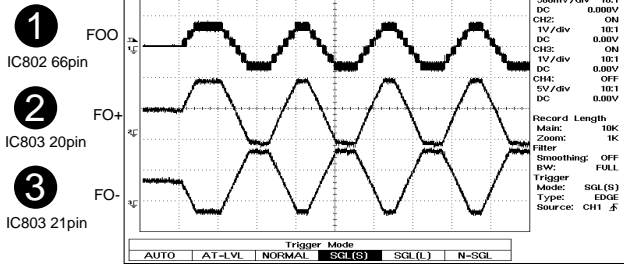


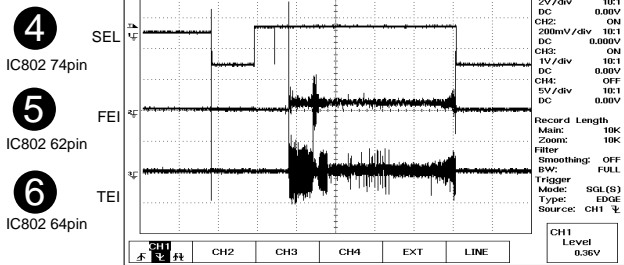
Figure 16 TYPES OF TRANSISTOR

WAVEFORMS OF CD CIRCUIT

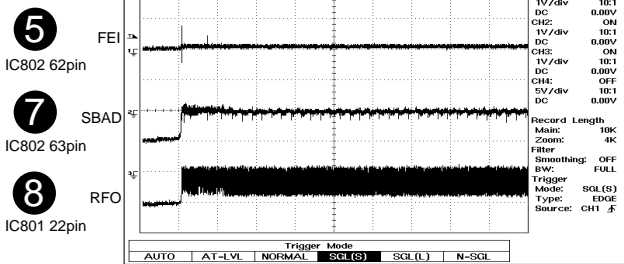
NO DISC FOCUS SEARCH



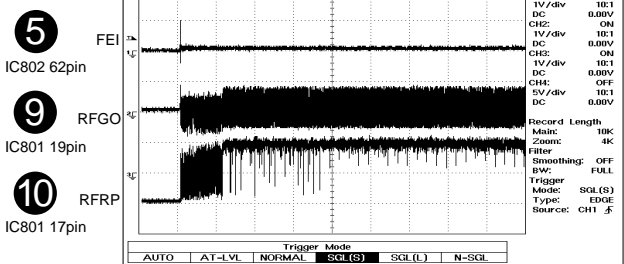
FOCUS SEARCH → TOC IL



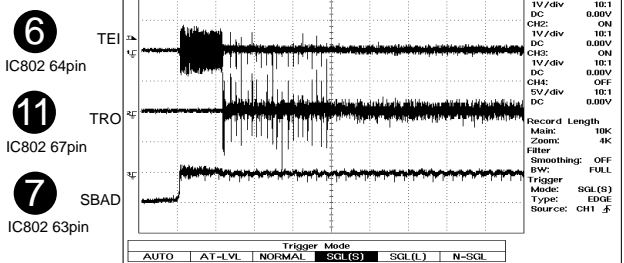
STOP → PLAY



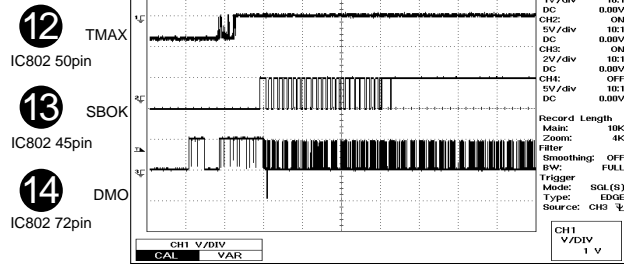
STOP → PLAY



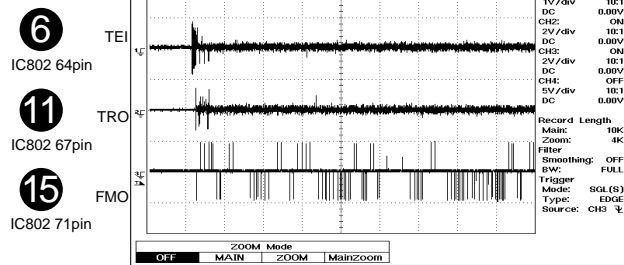
STOP → PLAY



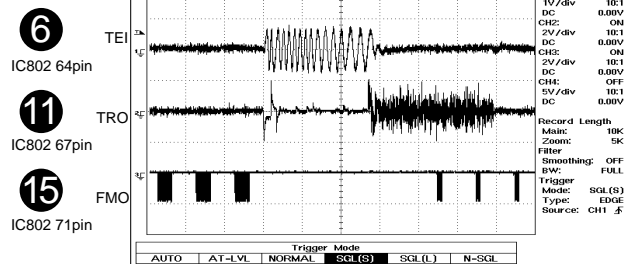
STOP → PLAY



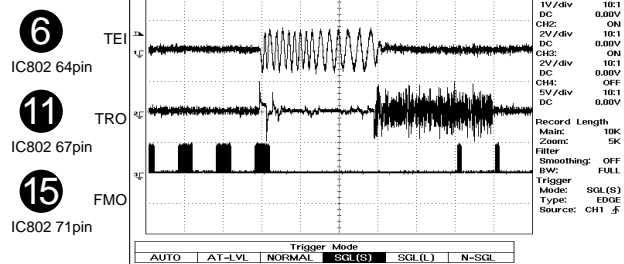
STOP → PLAY



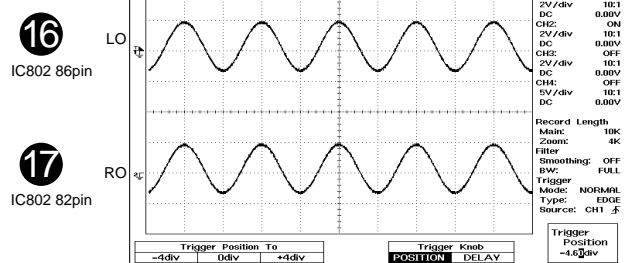
CUE



REVIEW



TCD-782 TNO-02 PLAYBACK



TROUBLESHOOTING (CD SECTION)

When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.

Remove the cabinet and follow the troubleshooting instructions.

"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.

Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.

Do not touch the lens with the bare hand.

Dust gradually accumulates on the objective lens during use, and it may degrade performance.

To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has ▲ the mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down, then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continues to turn, press the stop button.

CAUTION

- The CD lens cleaner should be effective for 30 - 50 operations, however if the brushes become worn out earlier then please replace the cleaner disc.
 - If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
 - Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
 - The CD cleaner disc must not be used on car CD player or on computer CD ROM drives.
- All rights reserved. Unauthorized duplicating, broadcasting and renting product is prohibited by law.

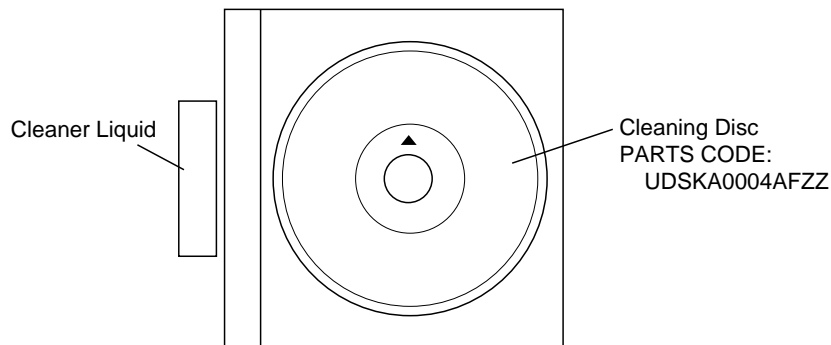


Figure 18

• The CD function will not work.

The CD operating keys don't work.

Yes

Check the power supply, 16.93 MHz clock, and reset terminal.

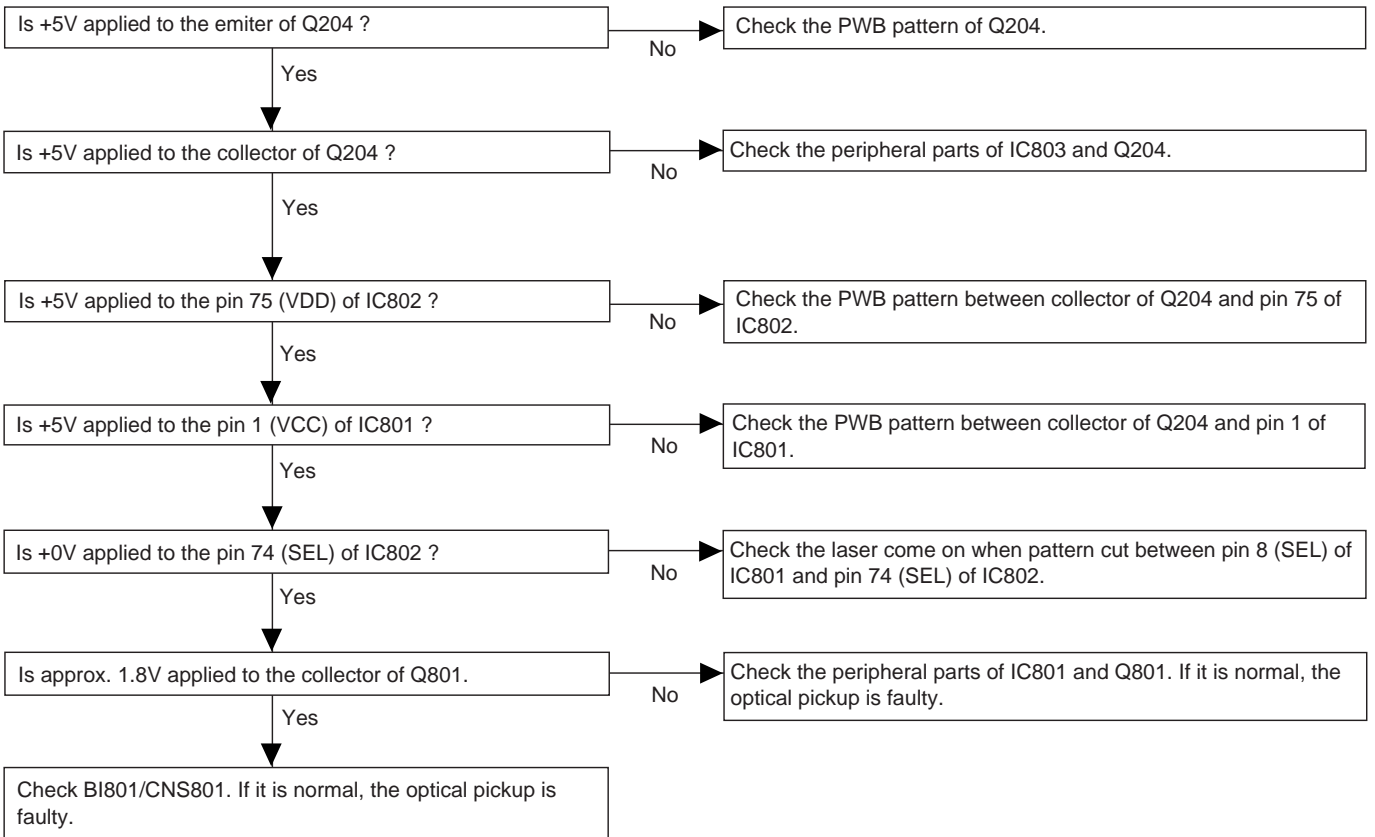
Yes

Check the pickup-in switch (SW702) position.

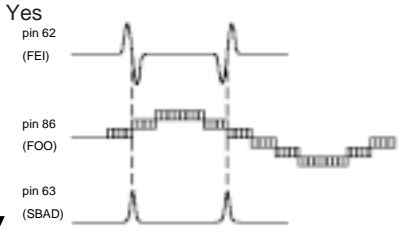
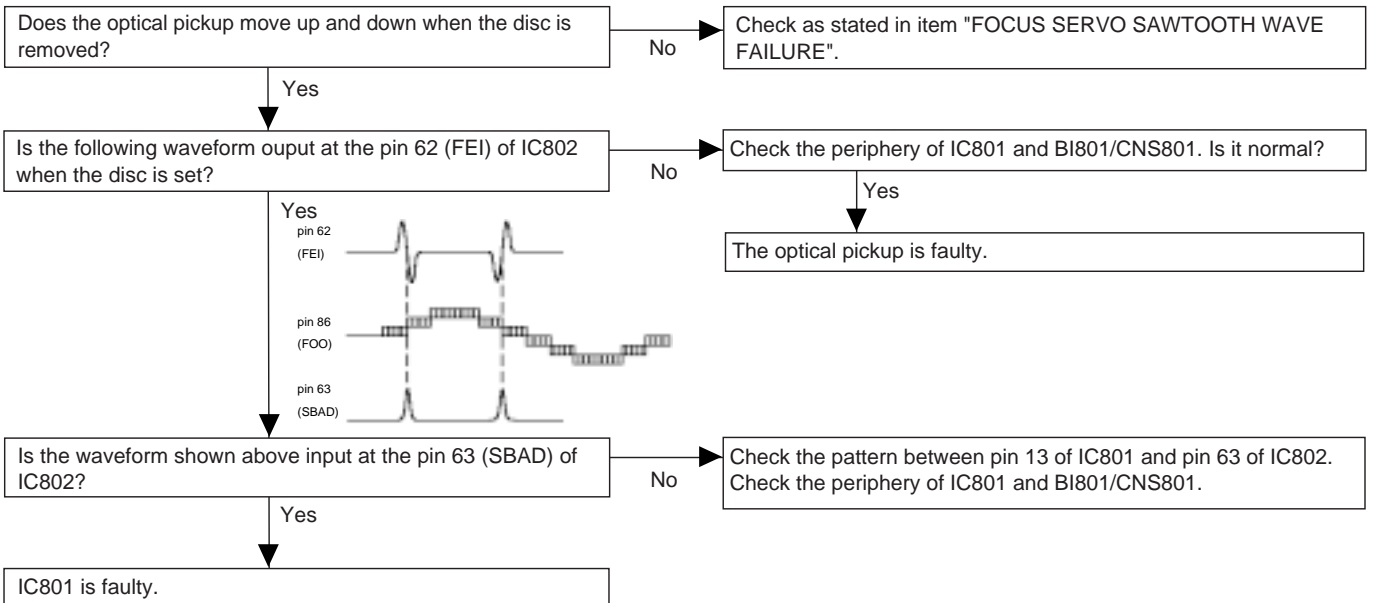
Yes

Check the Focus system.

• Laser failure.

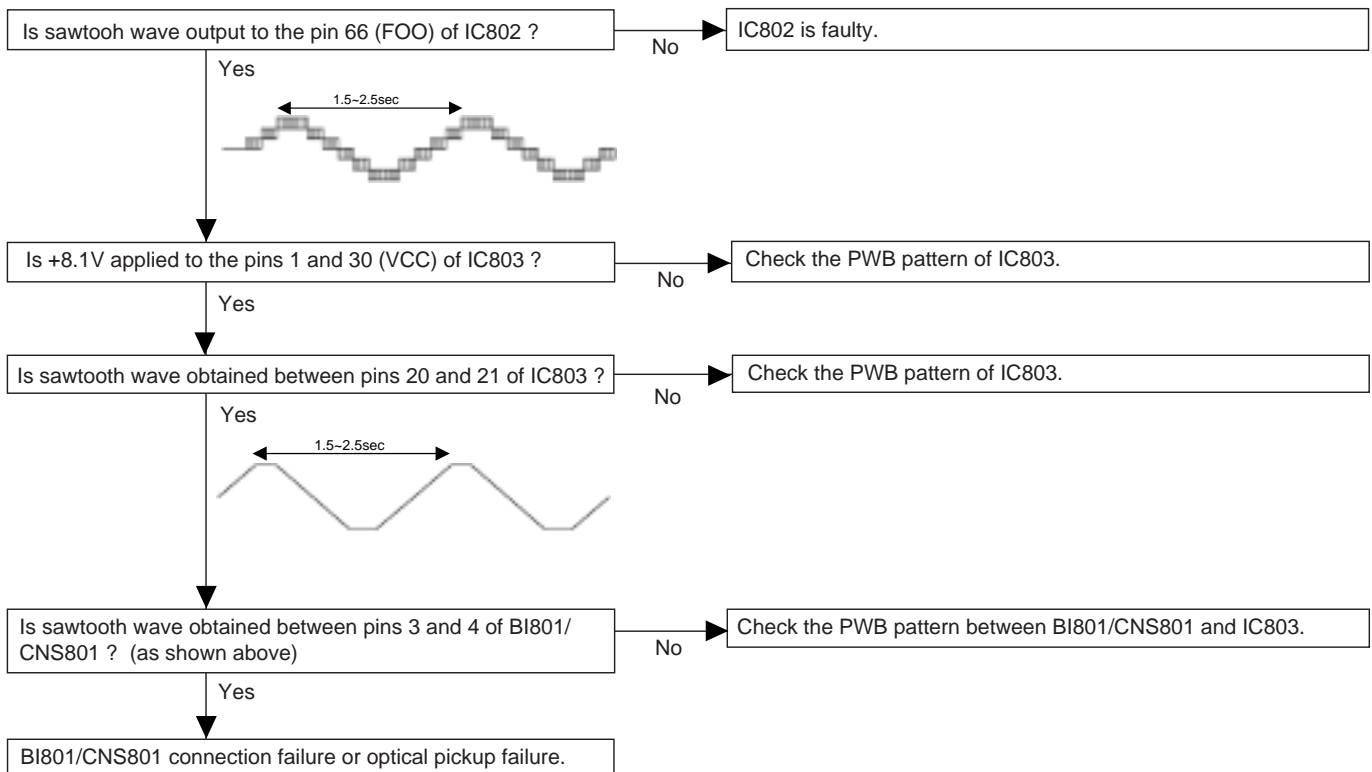


• Focus failure.

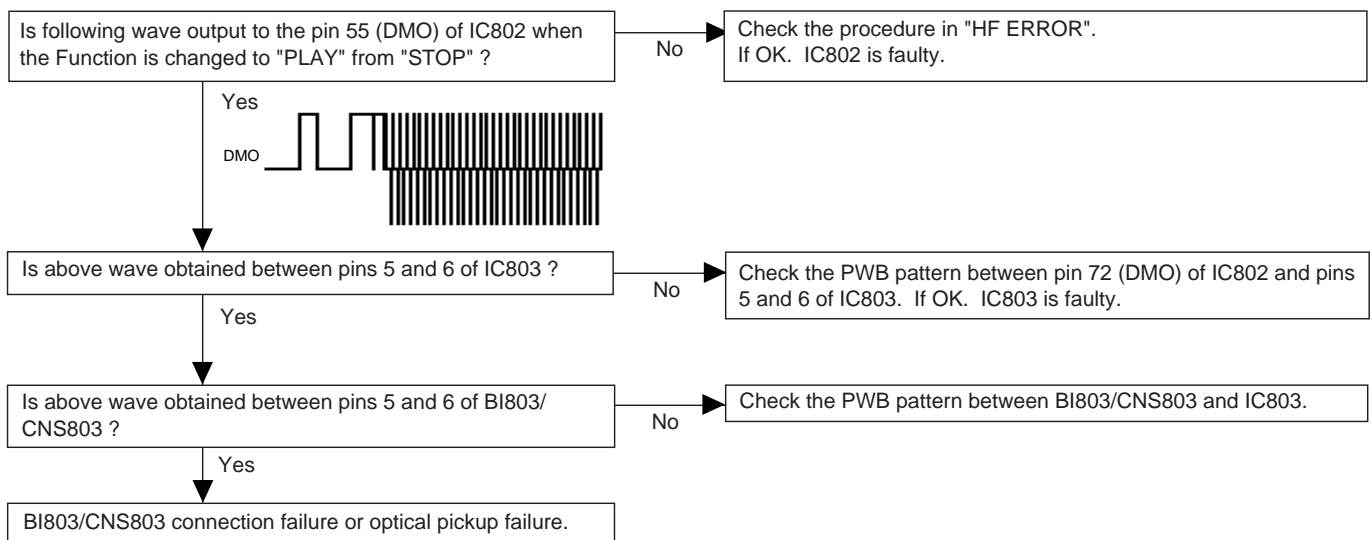


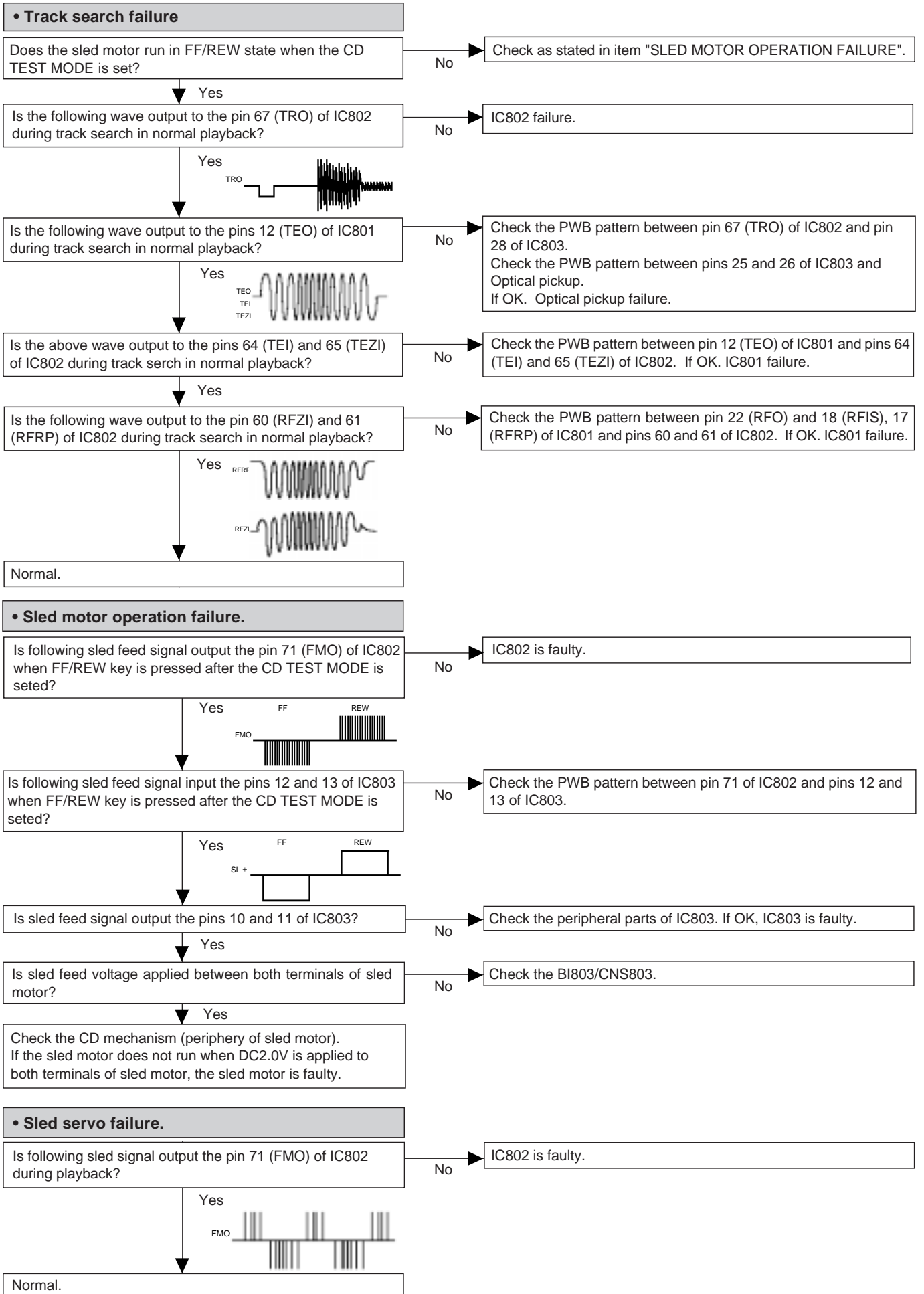
QT-CD210H/W

• Focus servo sawtooth wave failure.



• Spindle motor clv servo failure.





FUNCTION TABLE OF IC

IC802 VHiTC9457F0-1: Servo/Signal Control (TC9457F0) (1/4)

Pin No.	Port Name	Terminal Name	Input/Output	Function
1*	(OT5)S1	SEG1	Output	<p>Segment signal output to the LCD panel. Up to 72 segments in a matrix with COM1 to COM4 can be displayed. All of the S1 to S18 pins can be switched for output ports by a program. Also, the S15 to S18 pins each can be switched for I/O ports individually. When set for I/O ports, these pins become Nch open-drain output. Furthermore, the S11 to S14 and the P8-0 to P8-3 pins can be switched for use as CD signal (CLCK to IPF) input/output pins by a program.</p> <ul style="list-style-type: none"> • CLCK: Subcodes P thru W data readout clock input/output. Selected between input and output by a command. • DATA: Subcodes P thru W data output. • SFSY: Playback system frame sync signal output. • LRCK: Channel clock (44.1kHz) output. It outputs a low for L channel and a high for R channel. Polarity can be inverted by a command. • BCK : Bit clock (1.4122MHz) output. • AOUT: Audio data output. • MBOV: Buffer memory-over signal output. It outputs a high when buffer overflows. • IPF : Correction flag output. When AOUT is C2 correction output, it outputs a high indicating that correction is impossible.
2	(OT6)S2	SEG2	Output	
3	(OT7)S3	SEG3	Output	
4	(OT8)S4	SEG4	Output	
5	(OT9)S5	SEG5	Output	
6*	(OT10)S6	SEG6	Output	
7*	(OT11)S7	SEG7	Output	
8*	(OT12)S8	SEG8	Output	
9*	(OT13)S9	SEG9	Output	
10*	(OT14)S10	SEG10	Output	
11*	(CLCK/OT15)S11	SEG11	Output	
12*	(DATA/OT16)S12	SEG12	Output	
13*	(SFSY/OT17)S13	SEG13	Output	
14*	(LRCK/OT18)S14	SEG14	Output	
15	(BCK/S15)P8-0	CDSEL0	Output	
16	(AOUT/S16)P8-1	CDSEL1	Output	
17	(MBOV/S17)P8-2	DOOR IN	Output	
18	(IPF/S18)P8-3	DOOR OUT	Output	
19	MVDD	MVDD1	—	<p>Power supply pins. Normally, apply a voltage of 4.5 to 5.5V to VDD. In a backup state (when the CKSTP instruction executed), the device's current consumption is reduced to 1μA or less, allowing for the supply voltage to be lowered to 2.0V. The device is reset and the program starts from address 0 when a voltage of 2.7V or more is applied to this pin when it is at 0V (power-on reset).</p>
20	MVSS	MVSS1	—	
21*	(K0)P1-0	TRAY CLOSE	Input	<p>4-bit CMOS I/O ports. These ports can be set for input or output bit for bit by a program. These pins can be pulled up to VDD or down to GND by program. Therefore, they can be used as key input pins. Also, when they are set for I/O port, a change of state in this input can be used to clear the clock stop or wait mode.</p>
22*	(K1)P1-1	TRAY OPEN	Input	
23	(K2)P1-2	PUSEL0	Input	
24	(K3)P1-3	PUSEL1	Input	
25	(DCREF)P3-0	DISPLAY	Input	<p>5-bit CMOS I/O ports. These ports can be set for input or output bit for bit by a program. The P3-0 to P4-0 pins serve dual purposes as analog inputs for the internal 6-bit 4-channel A/D converters. The internal A/D converters can complete conversion in 6 instruction cycles using a successive approximation method. The required pins can be set for A/D analog input bit for bit by a program. P3-0 can be set for reference voltage input, and the internal power supply (MVDD) can be used for this reference voltage. The P4-0 pin serves dual purposes as a buzzer output pin. The buzzer output can be selected from 8 frequencies, 0.625 to 3kHz. Each selected frequency can be output in one of four modes: continuous, single, 10Hz intermittent, and 10Hz intermittent at 1Hz interval. Whether or not to use and how to control the A/D converter and buzzer all can be set by a program.</p>
26	(ADin1)P3-1	ADIN1	Input	
27	(ADin2)P3-2	ADIN2	Input	
28	(ADin3)P3-3	MUTE	Input	
29	(BUZR/ADin4)P4-0	PU IN	Input	

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC802 VHiTC9457F0-1: Servo/Signal Control (TC9457F0) (2/4)

Pin No.	Port Name	Terminal Name	Input/Output	Function
30 31*	(S12)P4-1 (SO/S11/ SDA)P4-2	PUSEL2 NC	Input Input/Output	<p>3-bit CMOS I/O ports. These ports can be set for input or output bit for bit by a program. These pins serve dual purposes as input or output pins for the serial interface circuit (SIO). The SIO is a 2-wire/3-wire compatible serial interface. 4 or 8 bits of serial data, beginning with the MSB or LSB, are serially output from the SO/SDA, pin at each clock edge on the SCK/SCL pin, and the data on S11 or S12 pin is serially input to the device. The serial clock (SCK/SCL) allows selection between the internal (450/225/150/75 kHz) and external sources and a selection of the active edge, rise or fall. Moreover, since the clock and data can be output via Nch open-drain outputs, variouts, device controls and communication between controllers can be greatly facilitated. When an SIO interrupt is enabled, an interrupt is generated at completion of SIO execution and the program jumps to address 4. All inputs to SIO contain a Schmitt trigger circuit.</p>
32*	(SCK/SCL) P4-3	NC	Input/Output	
33 34 35 36 37 38	TEST0 TEST1 TEST2 TEST3 TEST4 TEST5	TEST0 TEST1 TEST2 TEST3 TEST4 TEST5	Input Input Input Input Input Input	
39* 40* 41* 42*	(OT19)/HSO (OT20)SPCK (OT21)SPDA (OT22)COFS	/HSO SPCK SPDA COFS	Output Output Output Output	<p>CD control output pins. • /HSO: Playback speed mode output. High = normal speed; Low = double speed. • SPCK: Processor status signal readout clock output (176.4kHz) • SPDA: Processor status signal output. • COFS: Correction system frame clock output (7.35kHz) These pins can be switched for output ports by a program.</p>
43*	DOUT	DOUT	Input/Output	Digital output pin.
44*	SBSY	SBSY	Input/Output	Subcode block sync output pin. It outputs a high at the S1 position when subcode sync is detected.
45*	SBOK	SBOK	Input/Output	Subcode Q data CRCC determination result output pin. It outputs a high when CRCC check is found OK.
46 47	VDD VSS	VDD1 VSS1	Input/Output Input/Output	<p>CD unit's digital block power supply pins. Normally, apply 5V to VDD. When not using a CD (CD off), this power supply can be turned off, with only the controller power supply kept active, so that the contrller alone is operating. In this case, the CD off bit must be set to 1. When this bit is set to 1, pins 11 through 18 and pins 39 through 42 all are changed for output ports if they have been set for CD control signal input/output pins.</p>
48	P2VREF	P2VREF	Input/Output	PLL block-2 VREF pin.
49	PDO	PDO	Input/Output	This pin outputs a phase error between EFM and PLCK signals.
50	TMAX	TMAX	Input/Output	<p>TMAX detection result output pin. Selected by command bit TMPS. Longer than preset period: Outputs P2VREF. Shorter than preset period: Low level (Vss). Within preset period: High impedance.</p>
51	LPFN	LPFN	Input/Output	Inverted input of low-pass filter amp.
52	LPFO	LPFO	Input/Output	Output of low-pass filter amp.
53	PVREF	PVREF	Input/Output	PLL block VREF pin.
54	VCOF	VCOF	Input/Output	VCO filter pin.
55	AVSS	AVSS	Input/Output	Analog block ground pin.
56	SLCO	SLCO	Input/Output	DAC output pin for data slice level generation.
57	RFI	RFI	Input/Output	RF signal input pin.
58	AVDD	AVDD	Input/Output	Analog block power supply pin.
59	RFCT	RFCT	Input/Output	RFRP signal center level input pin.
60	RFZI	RFZI	Input/Output	RFRP zero-cross input pin.
61	RFRP	RFRP	Input/Output	RF ripple signal input pin.
62	FEI	FEI	Input/Output	Focus error signal input pin.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

QT-CD210H/W

IC802 VHiTC9457F0-1: Servo/Signal Control (TC9457F0) (3/4)

Pin No.	Port Name	Terminal Name	Input/Output	Function
63	SBAD	SBAD	Input/Output	Subbeam add signal input pin.
64	TEI	TEI	Input/Output	Tracking error input pin. This input is read when tracking servo is on.
65	TEZI	TEZI	Input/Output	Tracking error zero-cross input pin.
66	FOO	FOO	Input/Output	Focus equalizer output pin.
67	TRO	TRO	Input/Output	Tracking equalizer output pin.
68	VREF	VREF	Input/Output	Analog reference power supply pin.
69	RFGC	RFGC	Input/Output	RF amplitude adjusting control signal output pin. It outputs 3-level PWM signals. (PWM carrier = 88.2kHz)
70	TEBC	TEBC	Input/Output	Tracking balance control signal output pin. It outputs 3-level PWM signals. (PWM carrier = 88.2kHz)
71	FMO	FMO	Input/Output	Focus equalizer output pin. It outputs 3-level PWM signals. (PWM carrier = 88.2kHz)
72	DMO	DMO	Input/Output	Disc equalizer output pin. It outputs 3-level PWM signals. (PWM carrier = DSP block 88.2kHz, synchronized to PXO)
73	2VREF	2VREF	Input/Output	Analog reference power supply pin. (2 x VREF)
74	SEL	SEL	Input/Output	APC circuit on/off signal output pin. When laser is on, this pin goes to a high-impedance state when UHS = low and outputs a high when UHS = high
75 76	VDD VDD	VDD2 VSS2	Input/Output Input/Output	CD unit's digital block power supply pins. Normally, apply 5V to VDD. When not using a CD (CD off), this power supply can be turned off, with only the controller power supply kept active, so that the controller alone is operating. In this case, the CD off bit must be set to 1. When this bit is set to 1, pins 11 through 18 and pins 39 through 42 all are changed for output ports if they have been set for CD control signal input/output pins.
77	XVSS	XVSS	Input/Output	CD's crystal oscillator power supply pins. Normally, connect these pins to the power supply lines that are used in common for the VDD and VSS pins.
78 79	XI XO	XI XO	Input/Output Input/Output	CD's crystal oscillator input/output pins. Normally, connect 16.934MHz here. This clock is used as the system clock for the CD. After a system reset, it also is used as the system clock on the controller side.
80	XVDD	XVDD	Input/Output	CD's crystal oscillator input/output pins. Normally, connect these pins to the power supply lines that are used in common for the VDD and VSS pins.
81	DVSR	DVSR	Input/Output	R-channel D/A converter unit ground pin.
82	RO	RO	Input/Output	R-channel data forward output pin.
83	DVRR	DVRR	Input/Output	R-channel reference voltage pin.
84	DVDD	DVDD	Input/Output	D/A converter unit power supply pin.
85	DVRL	DVRL	Input/Output	L-channel reference voltage pin.
86	LO	LO	Input/Output	L-channel data forward output pin.
87	DVSL	DVSL	Input/Output	L-channel D/A converter unit ground pin.
88 89*	NC NC/VPP	NC NC	Input/Output Input/Output	NC pins. Normally, connect these pins to ground or leave them open.
90	/RST	RESET	Input	Device's system reset signal input pin. The device remains reset while $\overline{\text{RESET}}$ is held low and when $\overline{\text{RESET}}$ is released back high, the CD unit becomes operational and the program starts from address 0. Normally, a system reset is asserted when a voltage of 2.7V or more is applied to VDD when it is at 0V (power-on reset). Therefore, this pin must be pulled high when used for this purpose.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC802 VHiTC9457F0-1: Servo/Signal Control (TC9457F0) (4/4)

Pin No.	Port Name	Terminal Name	Input/Output	Function
91	/HOLD	RYNCREC	Input	<p>This pin is used to input a signal that requests or clears the hold mode. Normally, use this pin for CD mode select signal input or battery detection signal input.</p> <p>There are two hold modes: clock stop mode (crystal oscillator turned off) and a wait mode (CPU stopped). These modes are entered by executing the CKSTP and WAIT instructions, respectively.</p> <p>The clock stop mode can be requested by a programmed input: low level detection on $\overline{\text{HOLD}}$ pin or forced execution, and can be cleared by detecting a high on the $\overline{\text{HOLD}}$ pin or a change of state in its input signal. When the CKSTP instruction is executed, the clock generator and the CPU stop operating and the device is placed in a memory backup state. During this state, the device's current consumption is reduced to 1μA or less. At the same time, the display output and CMOS output ports are automatically set low, and the Nch open-drain outputs are turned off. The wait mode is executed regardless of the input state on the HOLD pin, with the device's current consumption reduced.</p> <p>This mode is cleared by a change of state in the $\overline{\text{HOLD}}$ input.</p>
92	INTR	REMO-IN	Input	<p>External interrupt input pin.</p> <p>When the interrupt facility is enabled and a pulse of 1.11 to 2.22μs in duration is applied to this pin, an interrupt is generated and the program jumps to address 1. Input logic and the active edge (rise or fall) can be selected for each interrupt input.</p> <p>Also, the internal 8-bit time clock can be chosen for this interrupt input, in which case it is possible to count pulses or generate an interrupt at a given pulse count (address 3).</p>
93* 94*	MXO MXI	MXO MXI	— —	<p>Crystal oscillator pins for the controller.</p> <p>The oscillator clock is used as the timebase for the clock facility or as the controller's system clock. Connect a 4.5MHz or 75kHz crystal resonator to the MXO and MXI pins. Since these pins do not contain internal feedback resistors, etc, an amp resistor or output resistor must be added external to the chip.</p> <p>When using the clock generated by the CD unit's crystal oscillator for clocking the entire device operation, fix the MXI pin to the GND level. Oscillation is stopped by executing a CKSTP instruction.</p> <p>Select the crystal oscillator and control its operation by a program.</p>
95 96	MVSS MVDD	MVSS MVDD	— —	<p>Power supply pins.</p> <p>Normally, apply a voltage of 4.5 to 5.5V to VDD.</p> <p>In a backup state (when the CKSTP instruction executed), the device's current consumption is reduced to 1μA or less, allowing for the supply voltage to be lowered to 2.0V.</p> <p>The device is reset and the program starts from address 0 when a voltage of 2.7V or more is applied to this pin when it is at 0V (power-on reset).</p>
97 98 99 100	OT1 OT2 OT3 OT4	COM1 COM2 COM3 COM4	Output Output Output Output	<p>Common signal outputs to the LCD panel.</p> <p>Up to 72 segments in a matrix with S1 to S18 can be displayed.</p> <p>Three voltage levels MVDD, VEE (1/2 MVDD), and GND are output for 83Hz period at 2ms intervals.</p> <p>After a system reset and after deassertion of a clock stop instruction, the VEE voltage is output and the DISP OFF bit is set to 0 before common signals are output.</p>

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

QT-CD210H/W

— M E M O —

SHARP PARTS GUIDE

MODEL **QT-CD210H(BK)**
QT-CD210H(BL)
QT-CD210H(S)
QT-CD210W(BK)
QT-CD210W(BL)
QT-CD210W(S)

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Explanation of capacitors/resistors parts codes

Capacitors

- VCC Ceramic type
- VCK Ceramic type
- VCT Semiconductor type
- VC •• MF Cylindrical type (without lead wire)
- VC •• MN Cylindrical type (without lead wire)
- VC •• TV Square type (without lead wire)
- VC •• TQ Square type (without lead wire)
- VC •• CY Square type (without lead wire)
- VC •• CZ Square type (without lead wire)
- VC J .. The 13th character represents capacity difference.
 ("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
 "C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)


If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

- VRD Carbon-film type
- VRS Carbon-film type
- VRN Metal-film type
- VR •• MF Cylindrical type (without lead wire)
- VR •• MN Cylindrical type (without lead wire)
- VR •• TV Square type (without lead wire)
- VR •• TQ Square type (without lead wire)
- VR •• CY Square type (without lead wire)
- VR •• CZ Square type (without lead wire)
- VR J .. The 13th character represents error.
 ("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:

Parts marked with “” are important for maintaining the safety of the set.
 Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

QT-CD210H/W

NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
INTEGRATED CIRCUITS							
IC1	VHITA2111N/-1	J AN	FM/AM IF MPX.,TA2111N	C11	RC-GZA474AF1H	J AA	0.47 μF,50V,Electrolytic
IC101	VHIBA3311L/-1	J AK	REC./P.B.Equalizer Amp., BA3311L	C12	RC-GZA475AF1H	J AB	4.7 μF,50V,Electrolytic
IC201	VHITA8227P/-1	J AH	Power Amp.,TA8227P	C13	RC-GZA227AF1A	J AB	220 μF,10V,Electrolytic
IC801	VHITA2109F/-1	J AL	Servo Pre Amp.,TA2109F	C14	VCKYPA1HF223Z	J AB	0.022 μF,50V
IC802	VHITC9457F0-1	J AZ	Servo/Signal Control,TC9457F0	C15	VCCCPA1HH100J	J AA	10 pF (CH),50V
IC803	VHILA6541D/-1	J AW	Focus/Tracking/Spin/Sled Driver,LA6541D	C16,17	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic
				C18,19	VCQYKA1HM103K	J AA	0.01 μF,50V,Mylar
				C20	VCKYPA1HF473Z	J AB	0.047 μF,50V
				C21	VCCCPA1HH2R0C	J AA	2 pF (CH),50V
				C22	RC-GZA104AF1H	J AB	0.1 μF,50V,Electrolytic
				C105,106	VCKYPA1HB272K	J AA	0.0027 μF,50V
				C107,108	VCKYPA1HB821K	J AA	820 pF,50V
				C109,110	VCKYPA1HB271K	J AA	270 pF,50V
				C111,112	VCKYPA1HB331K	J AA	330 pF,50V
				C113,114	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
				C115,116	VCQYKA1HM183K	J AB	0.018 μF,50V,Mylar
				C117,118	RC-GZA106AF1C	J AB	10 μF,16V,Electrolytic
				C119	RC-GZA225AF1H	J AB	2.2 μF,50V,Electrolytic
				C120	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
				C121,122	VCKYPA1HF103Z	J AB	0.01 μF,16V
				C123	RC-GZA227AF1A	J AB	220 μF,10V,Electrolytic
				C202	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
				C203	VCKYPA1HF103Z	J AB	0.01 μF,16V
				C204	VCKYPA1HF223Z	J AB	0.022 μF,50V
				C215,216	VCQYKA1HM393K	J AB	0.039 μF,50V,Mylar
				C217,218	VCKYPA1HB392K	J AA	0.0039 μF,50V
				C219,220	VCQYKA1HM473K	J AB	0.047 μF,50V,Mylar
				C221,222	VCKYPA1HB102K	J AA	0.001 μF,50V
				C225	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic
				C226	VCKYPA1HF223Z	J AB	0.022 μF,50V
				C227	RC-GZW338AF1C	J AF	3300 μF,16V,Electrolytic
				C233,234	RC-GZV108AF1A	J AD	1000 μF,10V,Electrolytic
				C235-238	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic
				C239,240	VCQYKA1HM104K	J AB	0.1 μF,50V,Mylar
				C241	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
				C351	VCQYKA1HM222K	J AA	0.0022 μF,50V,Mylar
				C352	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic
				C353	VCQYKA1HM562K	J AA	0.0056 μF,50V,Mylar
				C354	VCQYKA1HM223K	J AB	0.022 μF,50V,Mylar
				C651-654	VCKYPA1HF223Z	J AB	0.022 μF,50V
				C801	VCKYPA1HF103Z	J AB	0.01 μF,16V
				C802	VCKYPA1HF223Z	J AB	0.022 μF,50V
				C804	VCCCPA1HH2R0C	J AA	2 pF (CH),50V
				C805	VCKYPA1HF223Z	J AB	0.022 μF,50V
				C806	RC-GZA337AF1C	J AC	330 μF,16V,Electrolytic
				C807	VCKYPA1HF473Z	J AB	0.047 μF,50V
				C813	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
				C814	VCKYPA1HF473Z	J AB	0.047 μF,50V
				C815	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
				C816	VCKYPA1HF223Z	J AB	0.022 μF,50V
				C817	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic
				C818	VCCSPA1HL560J	J AA	56 pF,50V
				C819,820	VCQYKA1HM104K	J AB	0.1 μF,50V,Mylar
				C821	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic
				C822	VCKYPA1HF473Z	J AB	0.047 μF,50V
				C823,824	VCKYPA1HF223Z	J AB	0.022 μF,50V
				C825	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
				C826	VCCSPA1HL470J	J AA	47 pF,50V
				C827	VCQYKA1HM153K	J AB	0.015 μF,50V,Mylar
				C828	VCKYPA1HB272K	J AA	0.0027 μF,50V
				C829	VCKYPA1HB472K	J AB	0.0047 μF,50V
				C830	VCQYKA1HM103K	J AA	0.01 μF,50V,Mylar
				C832	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
				C833	VCQYKA1HM333K	J AB	0.033 μF,50V,Mylar
				C834,835	VCKYPA1HB471K	J AA	470 pF,50V
				C836-839	VCQYKA1HM473K	J AB	0.047 μF,50V,Mylar
				C840-842	VCKYPA1HF473Z	J AB	0.047 μF,50V
				C843	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
				C844	RC-GZA107AF1A	J AB	100 μF,10V,Electrolytic
				C845	VCKYPA1HF473Z	J AB	0.047 μF,50V
				C846	RC-GZA106AF1C	J AB	10 μF,16V,Electrolytic
				C847,848	RC-GZA226AF1C	J AB	22 μF,16V,Electrolytic
				C849,850	VCKYPA1HB222K	J AA	0.0022 μF,50V
				C851,852	RC-GZA335AF1H	J AB	3.3 μF,50V,Electrolytic
				C853	VCKYPA1HF223Z	J AB	0.022 μF,50V
				C854	VCKYPA1HB682K	J AB	0.0068 μF,50V
				C855	VCKYPA1HF223Z	J AB	0.022 μF,50V
				C856	VCKYPA1HB102K	J AA	0.001 μF,50V
				C863	RC-GZA476AF1C	J AB	47 μF,16V,Electrolytic
TRANSISTORS							
Q204	VSKTA1046Y/-1	J AC	Silicon,PNP,KTA1046 Y				
Q205	VSKTC3199GR-1	J AB	Silicon,NPN,KTC3199 GR				
Q351	VSKTC3199GR-1	J AB	Silicon,NPN,KTC3199 GR				
Q801	VSKTA1266GR-1	J AB	Silicon,PNP,KTA1266 GR				
Q802	VSKTA1273Y/-1	J AE	Silicon,PNP,KTA1273 Y				
Q803	VSKRC107M/-1	J AC	Digital,NPN,KRC107 M				
DIODES							
D1,2	VHD1N4148/-1	J AA	Silicon,1N4148				
D101,102	VHD1N4148/-1	J AA	Silicon,1N4148				
D201-203	VHD1N4148/-1	J AA	Silicon,1N4148				
D651-654	VHD1N4004/-1	J AB	Silicon,1N4004				
D801	VHD1N4004/-1	J AB	Silicon,1N4004				
ZD201	VHEDZ5R1BSB-1	J AC	Zener,5.1V,DZ5.1BSB				
FILTERS							
CF1	RFILF0001SJZZ	J AD	FM IF,10.7 MHz				
CF3	RFILA0001SJZZ	J AD	AM IF,460 kHz				
F1	RFILR0001SJZZ	J AD	FM Band Pass Filter				
TRANSFORMERS							
T2	RCILI0006SJZZ	J AC	FM Detection				
T3	RCILI0007SJZZ	J AC	AM IF				
△ T651	RTRNP0038SJZZ	J AR	Power [QT-CD210H]				
△ T651	RTRNP0039SJZZ	J	Power [QT-CD210W]				
COILS							
COR1	RCORF0005SJZZ	J AB	Core				
L1	RCILR0001SJZZ	J AB	FM RF				
L2	RCILB0004SJZZ	J AD	FM Oscillation				
L3	RCILA0002SJZZ	J AE	AM Bar Antenna				
L4	RCILB0002SJZZ	J AC	AM Oscillation				
L107,108	RCILC0001SJZZ	J	Choke Coil				
L301	RCILB0003SJZZ	J AD	Bias Oscillation				
L801	VP-DHR82K0000	J AE	0.82 μH,Choke				
VARIABLE RESISTOR							
VR201	RVR-B0001SJZZ	J AE	20 kohms (B),Semi-VR [Volume]				
VARIABLE CAPACITORS							
VC1-4	RVC-R0002SJZZ	J AM	Variable Capacitor with Trimmer (TC1-4)				
VIBRATOR							
X801	RCRM-0002SJZZ	J AE	Ceramic,16.93 MHz				
CAPACITORS							
C1	VCKYPA1HF223Z	J AB	0.022 μF,50V				
C2	VCCCPA1HH180J	J AA	18 pF (CH),50V				
C3	VCCUPA1HJ240J	J AB	24 pF (UJ),50V				
C4	VCCCPA1HH4R0C	J AA	4 pF (CH),50V				
C5	VCCCPA1HH2R0C	J AA	2 pF (CH),50V				
C6	VCKYPA1HB331K	J AA	330 pF,50V				
C7	RC-GZA225AF1H	J AB	2.2 μF,50V,Electrolytic				
C8,9	RC-GZA104AF1H	J AB	0.1 μF,50V,Electrolytic				
C10	RC-GZA105AF1H	J AB	1 μF,50V,Electrolytic				

NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
RESISTORS							
R1	VRD-ST2CD331J	J AA	330 ohms,1/6W	△ F651	QFS-C132ASJNA	J AH	Fuse,T1.25A L 250V
R2	VRD-ST2CD272J	J AA	2.7 kohms,1/6W	FW806	QCNWN0208SJZZ	J	Flat Wire,10Pin [QT-CD210W]
R3	VRD-ST2CD224J	J AA	220 kohms,1/6W	FW806	QCNWN0210SJZZ	J	Flat Wire,10Pin [QT-CD210H]
R4	VRD-ST2CD222J	J AA	2.2 kohms,1/6W	HPJ201	QJAKM0001SJZZ	J AG	Jack,Headphone
R5	VRD-ST2CD332J	J AA	3.3 kohms,1/6W	LCD801	RV-LX0006SJZZ	J AF	LCD Display
R6	VRD-ST2CD101J	J AA	100 ohm,1/6W	M601(240-6)	9GD192112346	J AX	Motor with Pulley [Tape]
R7	VRD-ST2CD121J	J AA	120 ohms,1/6W	M701	RMOTV0409AFM1	J AN	Motor with Gear [Sled]
R8,9	VRD-ST2CD103J	J AA	10 kohm,1/6W	M702	RMOTV0408AFM3	J AN	Motor with Chassis [Spindle]
R10,11	VRD-ST2CD222J	J AA	2.2 kohms,1/6W	△ SO651	QSOCA0002SJZZ	J AK	AC Input Socket
R101,102	VRD-ST2CD151J	J AA	150 ohms,1/6W	or			
R103,104	VRD-ST2CD123J	J AA	12 kohms,1/6W	△ SO651	QSOCA0006SJZZ	J	AC Input Socket
R105,106	VRD-ST2CD103J	J AA	10 kohm,1/6W	SP201,202	VSPA010PB024S	J AC	Speaker,Woofers
R109,110	VRD-ST2CD121J	J AA	120 ohms,1/6W	SW102	QSW-S0001SJZZ	J AD	Switch,Slide Type [Record/Playback]
R113,114	VRD-ST2CD822J	J AA	8.2 kohms,1/6W	SW201	QSW-S0002SJZZ	J AD	Switch,Slide Type [Function Selector]
R115-118	VRD-ST2CD392J	J AA	3.9 kohms,1/6W	SW601(240-7)	9GD640101149	J	Switch,Leaf Type [Tape Main]
R119,120	VRD-ST2CD332J	J AA	3.3 kohms,1/6W	△ SW651	QSW-S0004SJZZ	J AK	Switch,Slide Type [Voltage Selector] [QT-CD210W Only]
R121,122	VRD-ST2CD182J	J AA	1.8 kohms,1/6W	SW702	QSW-F9001AWZZ	J AE	Switch,Push Type [Pickup In]
R123,124	VRD-ST2CD332J	J AA	3.3 kohms,1/6W	SW801	QSW-K0001SJZZ	J AC	Switch,Key Type [Play/Pause]
R125	VRD-ST2CD684J	J AA	680 kohms,1/6W	SW802	QSW-K0001SJZZ	J AC	Switch,Key Type [Stop]
R126	VRD-ST2CD101J	J AA	100 ohm,1/6W	SW803	QSW-K0001SJZZ	J AC	Switch,Key Type [Review/Down]
R201	VRD-ST2CD222J	J AA	2.2 kohms,1/6W	SW804	QSW-K0001SJZZ	J AC	Switch,Key Type [Cue/Up]
R202	VRD-ST2CD472J	J AA	4.7 kohms,1/6W	SW810	QSW-F0001SJZZ	J AD	Switch,Leaf [CD Lid]
R203	VRD-ST2CD561J	J AA	560 ohms,1/6W	CD MECHANISM PARTS			
R215,216	VRD-ST2CD222J	J AA	2.2 kohms,1/6W	301	NGERH0586AFZZ	J AC	Gear,Middle
R219,220	VRD-ST2CD272J	J AA	2.7 kohms,1/6W	302	NGERH0587AFZZ	J AC	Gear,Drive
R221,222	VRD-ST2CD102J	J AA	1 kohm,1/6W	303	MLEVP1054AFZZ	J AC	Rail,Guide
R227,228	VRD-ST2EE121J	J AA	120 ohms,1/4W	304	NSFTM0291AFFW	J AD	Shaft,Guide
R231,232	VRD-ST2CD121J	J AA	120 ohms,1/6W	305	PCUSG0613AFZZ	J AC	Cushion
R351	VRD-ST2CD101J	J AA	100 ohm,1/6W	△ 306	DCTRH8003SJ01	J BC	Pickup Unit Ass'y
R352	VRD-ST2CD151J	J AA	150 ohms,1/6W	701	XBSSD26P06000	J AA	Screw,ø2.6×6mm
R353	VRD-ST2CD333J	J AA	33 kohms,1/6W	702	XHBSD20P05000	J AA	Screw,ø2×5mm
R354	VRD-ST2CD4R7J	J AA	4.7 ohms,1/6W	703	XBBSD20P03000	J AA	Screw,ø2×3mm
R455,456	VRD-ST2CD153J	J AA	15 kohms,1/6W	704	LX-WZ1070AFZZ	J AA	Washer,ø1.5×ø3.8×0.25mm
R457,458	VRD-ST2CD102J	J AA	1 kohm,1/6W	M701	RMOTV0409AFM1	J AN	Motor with Gear [Sled]
R801	VRD-ST2EE220J	J AA	22 ohms,1/4W	M702	RMOTV0408AFM3	J AN	Motor with Chassis [Spindle]
R802	VRD-ST2CD222J	J AA	2.2 kohms,1/6W	SW702	QSW-F9001AWZZ	J AE	Switch,Push Type [Pickup In]
R803	VRD-ST2CD823J	J AA	82 kohms,1/6W	CABINET PARTS			
R804	VRD-ST2CD683J	J AA	68 kohms,1/6W	201	GCABA1041SJM1	J AV	Front Cabinet [H [S]]
R805	VRD-ST2CD393J	J AA	39 kohms,1/6W	201	GCABA1041SJM2	J	Front Cabinet [H [BK]]
R806	VRD-ST2CD272J	J AA	2.7 kohms,1/6W	201	GCABA1041SJM3	J	Front Cabinet [H [BL]]
R807	VRD-ST2CD102J	J AA	1 kohm,1/6W	201	GCABA1044SJM1	J	Front Cabinet [W [S]]
R811	VRD-ST2CD223J	J AA	22 kohms,1/6W	201	GCABA1044SJM2	J	Front Cabinet [W [BL]]
R812	VRD-ST2CD102J	J AA	1 kohm,1/6W	201	GCABA1044SJM7	J	Front Cabinet [W [BK]]
R820	VRD-ST2CD473J	J AA	47 kohms,1/6W	202	GCABB1041SJSA	J AN	Top Cabinet
R821	VRD-ST2CD223J	J AA	22 kohms,1/6W	203	GFTAT1005SJSJ	J AF	CD Lid
R824	VRD-ST2CD103J	J AA	10 kohm,1/6W	204	CHLDM1001SJO1	J AG	Stabilizer Ass'y
R826	VRD-ST2CD224J	J AA	220 kohms,1/6W	204-1	PMAGF0002AWZZ	J AE	Magnet
R827	VRD-ST2CD153J	J AA	15 kohms,1/6W	204-2	—	—	Holder,Stabilizer (Not Replacement Item)
R828	VRD-ST2CD103J	J AA	10 kohm,1/6W	205	GFTAB1009SJSJ	J AC	Battery Compartment Lid
R829	VRD-ST2CD332J	J AA	3.3 kohms,1/6W	206	GFTAC1004SJSJ	J AE	Cassette Holder
R830	VRD-ST2CD103J	J AA	10 kohm,1/6W	208	HDECQ0027SJSJ	J AB	Decoration Plate,Dial Window
R831-834	VRD-ST2CD332J	J AA	3.3 kohms,1/6W	209	HPNLC1042SJSJ	J AC	Panel,Control
R835,836	VRD-ST2CD271J	J AA	270 ohms,1/6W	210	HSSND0001SJSJ	J AB	Dial Pointer
R837,838	VRD-ST2CD103J	J AA	10 kohm,1/6W	211	JBTN-0013SJSJ	J AB	Button,Pause
R839	VRD-ST2CD473J	J AA	47 kohms,1/6W	212	JBTN-0014SJSJ	J AB	Button,Stop/Eject
R840	VRD-ST2EE100J	J AA	10 ohm,1/4W	213	JBTN-0015SJSJ	J AB	Button,Fast Forward
R843,844	VRD-ST2CD332J	J AA	3.3 kohms,1/6W	214	JBTN-0016SJSJ	J AB	Button,Rewind
R846	VRD-ST2CD331J	J AA	330 ohms,1/6W	215	JBTN-0017SJSJ	J AB	Button,Play
R847	VRD-ST2CD102J	J AA	1 kohm,1/6W	216	JBTN-0018SJSJ	J AB	Button,Record
R848	VRD-ST2CD222J	J AA	2.2 kohms,1/6W	217	JHNDP1003SJSJ	J AE	Handle
R849	VRD-ST2CD682J	J AA	6.8 kohms,1/6W	218	JKNBK0023SJSJ	J AB	Knob,Volume
R850	VRD-ST2CD152J	J AA	1.5 kohms,1/6W	219	JKNBK0024SJSJ	J AB	Button,Function
R851-853	VRD-ST2CD222J	J AA	2.2 kohms,1/6W	220	JKNBZ0031SJSJ	J AD	Button,CD
R860	VRD-ST2CD101J	J AA	100 ohm,1/6W	221	JKNBZ0032SJSJ	J AC	Knob,Tuning
R861	VRD-ST2CD332J	J AA	3.3 kohms,1/6W	222	CGERH0001SJO1	J AF	Damper Gear Ass'y
R862	VRD-ST2CD223J	J AA	22 kohms,1/6W	223	LANGK0001SJFW	J AC	Bracket,Button
OTHER CIRCUITRY PARTS							
BI801/CNS801	QCNWN0206SJZZ	J	Connector Ass'y,8/8Pin	224	LANGZ0003SJZZ	J AE	Bracket,Battery
BI802/CNS802	QCNWN0207SJZZ	J	Connector Ass'y,5/5Pin	225	LHLDA1001SJZZ	J AC	Holder,AM Bar Antenna
BI803/CNS803	QCNWN0208SJZZ	J	Connector Ass'y,6/6Pin	226	LHLDW1001SJZZ	J AD	Nylon Band
CNP101	QCNCW001DSJZZ	J AC	Plug,4Pin	227	RCORF0002SJZZ	J AC	Core
CNP201	QCNCW001CSJZZ	J AC	Plug,3Pin	228	LHLDD3001SJFW	J AC	Holder,LCD
CNP602	QCNCW002BSJZZ	J AC	Plug,2Pin	229	MSPRC0004SJFN	J AB	Spring,Battery,-
CNP803	QCNCM932FAFZZ	J AC	Plug,6Pin	230	MSPRC0005SJFD	J AB	Spring,Battery,+/-
CNS101	QCNWN0205SJZZ	J	Connector Ass'y,4Pin				
CNS201	QCNWN0213SJZZ	J	Connector Ass'y,3Pin				
CNS602	QCNWN0211SJZZ	J	Connector Ass'y,2Pin				

QT-CD210H/W

NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
231	MSPRD0011SJFD	J AC	Spring,CD Lid	△	QPLGA0253AFZZ	J AE	Adaptor,AC Plug [W for Saudi Arabia Only]
232	MSPRD0009SJFD	J AB	Spring,Cassette Holder Up		SPAKC0107SJZZ	J	Packing Case [W]
233	MSPRZ0002SJFD	J AB	Spring,Rod Antenna		SSAKK0001SJZZ	J AD	Polyethylene Bag,Accessories [W for Central and South America/Saudi Arabia/Chile/ Peru/Bolivia/U.A.E. Only]
234	NDRM-0003SJZZ	J AB	Drum				
236	PSLDM3003SJFW	J	Bracket,Shield				
237	QANTR0001SJZZ	J AG	Rod Antenna				
238	MSPRP0002SJFW	J AC	Bracket,Record				
△ 239	QFSHD0001AWZZ	J AB	Holder,Fuse		SSAKK0002SJZZ	J AC	Polyethylene Bag,AC Power Supply Cord [W for Saudi Arabia/Hong Kong Only]
240	CMECB0003SJ03	J AZ	Tape Mechanism Ass'y				
240- 1	9GD192104309	J AR	Pinch Roller Arm Ass'y		TCAUZ0011SJZZ	J	Warranty Card [H for Philippines Only]
240- 2	9GD19210703	J AE	Belt,REW/FF		TGANE0001SJZZ	J AM	Warranty Card [H for Australia/ New Zealand Only]
240- 3	9GD19210938	J	Belt,Main		TGANE0002SJ06	J	G-Card [H for Philippines Only]
240- 4	9GD62140116	J AT	Head,Record/Playback		TINSE0033SJZZ	J	Operation Manual [H for Australia/New Zealand/ Philippines]
240- 5	9GD62071008	J AQ	Head,Erase		TINSZ0051SJZZ	J AF	Operation Manual [H for Europe/Thailand]
			or		TINSZ0058SJZZ	J	Operation Manual [W]
240- 5	9GD62091010	J AM	Head,Erase		TLABG0001SJZZ	J AB	Label,Hong Kong [W for Hong Kong Only]
240- 6(M601)	9GD192112346	J AX	Motor with Pulley [Tape]		TLABG0023SJZZ	J	Label,Rated Input [W for Hong Kong Only]
240- 7(SW601)	9GD640101149	J	Switch,Leaf Type [Tape Main]		TLABM0029SJZZ	J	Label,Color [W [BL]]
241	PRDAR0026SJZZ	J	Heat Sink [QT-CD210H]		TLABM0034SJZZ	J	Label,Color [W [BK]]
241	PRDAR0030SJFW	J	Heat Sink [QT-CD210W]		TLABM0035SJZZ	J	Label,Color [W [S]]
243	PCOVW1011SJZZ	J	Cover,Voltage Selector Switch [W Only]		TLABR1097SJZZ	J	Label,Bar Code,Packing Case [W [S] for Central and South America/Chile/Peru/Bolivia/ U.A.E. Only]
244	TSPC-0099SJZZ	J	Label,Specifications [H [S] for Europe]		TLABR1123SJZZ	J	Label,Bar Code,Packing Case [W [BL] for Central and South America/Chile/Peru/Bolivia/ U.A.E. Only]
244	TSPC-0100SJZZ	J	Label,Specifications [H [S] for Australia/New Zealand/U.K.]		TLABR1134SJZZ	J	Label,Bar Code,Packing Case [W [BK] for Central and South America/Chile/Peru/Bolivia/ U.A.E. Only]
244	TSPC-0101SJZZ	J	Label,Specifications [H [S] for Thailand]		TLABZ0009SJZZ	J AD	Label,C [W for Syria/Central and South America]
244	TSPC-0117SJZZ	J	Label,Specifications [W [S]]		TLABZ0010SJZZ	J AD	Label,Made in China [W for Central and South America Only]
244	TSPC-0119SJZZ	J	Label,Specifications [H [BK] for Europe]		TLABZ0011SJZZ	J AD	Label,SHARP [W for Syria/Chile/ Peru/Bolivia/U.A.E. Only]
244	TSPC-0120SJZZ	J	Label,Specifications [H [BK] for Australia/New Zealand/U.K.]		TLABZ0012SJZZ	J AC	Label,SHARP [W for Syria/Chile/ Peru/Bolivia/U.A.E. Only]
244	TSPC-0121SJZZ	J	Label,Specifications [H [BK] for Thailand]		TLABZ0019SJZZ	J AC	Label,Made in China [W for Egypt/Kuwait/Bahrain/ Cyprus/Jordan/Reunion/Saudi Arabia Only]
244	TSPC-0122SJZZ	J	Label,Specifications [H [BL] for Europe]		TLABZ0044SJZZ	J	Label,Feature [W]
244	TSPC-0123SJZZ	J	Label,Specifications [H [BL] for Australia/New Zealand/U.K.]	1	SSAKH0001SJZZ	J AC	Polyethylene Bag,Unit [H]/ [W]
244	TSPC-0124SJZZ	J	Label,Specifications [H [BL] for Thailand]	2	TINSE0034SJZZ	J AB	Operation Manual [H for U.K.]
244	TSPC-0145SJZZ	J	Label,Specifications [W [BL]]	△ 3	QACCB0001SJ00	J AW	AC Power Supply Cord [H for U.K.]
244	TSPC-0150SJZZ	J	Label,Specifications [W [BK]]	4	SPAKA0036SJZZ	J	Packing Add.,Left/Right [H]/ [W]
244	TSPC-0153SJZZ	J	Label,Specifications [H [S] for Philippines]	5	SPAKZ0014SJZZ	J	Polyethylene Sheet,Unit [H]/ [W]
244	TSPC-0154SJZZ	J	Label,Specifications [H [BL] for Philippines]	6	SPAKC0093SJZZ	J AK	Packing Case [H [S]]
244	TSPC-0157SJZZ	J	Label,Specifications [H [BK] for Philippines]	6	SPAKC0113SJZZ	J	Packing Case [H [BK]]
245	JKNBZ0042SJS	J AB	Button,CD Eject	6	SPAKC0114SJZZ	J	Packing Case [H [BL]]
246	MLEVP0003SJZZ	J AB	Lever,CD Eject	7	SSAKK0002SJZZ	J AC	Polyethylene Bag,AC Power Supply Cord [H for Australia/New Zealand/ Philippines/U.K. Only]
247	TLABS0003SJZZ	J AD	Label,Class 3A	8	TLABZ0042SJZZ	J AH	Label,Feature [H]
248	TLABS0004SJZZ	J AC	Label,Laser	9	SPAKZ0013SJZZ	J	Top Pad,Packing Case [H]/ [W]
601	XBBSD25P06000	J AB	Screw,ø2.5×6mm	10	TLABE0043SJZZ	J	Label,Bar Code,Packing Case [H [S]]
602	XUBSD25P10000	J AB	Screw,ø2.5×10mm	10	TLABE0048SJZZ	J	Label,Bar Code,Packing Case [H [BK]]
603	XUBSD30P08000	J AA	Screw,ø3×8mm	10	TLABE0049SJZZ	J	Label,Bar Code,Packing Case [H [BL]]
604	XUBSD30P10000	J AA	Screw,ø3×10mm	11	TLABZ0015SJZZ	J AC	Label,VJ No.,Packing Case [H Only]
605	XUBSD30P12000	J AA	Screw,ø3×12mm	12	SSAKK0001SJZZ	J AD	Polyethylene Bag,Accessories [H for Australia/New Zealand/ Philippines/U.K. Only]
606	XUPSD25P08000	J AB	Screw,ø2.5×8mm	13	TINSE0045SJZZ	J AB	Quick Guide [H for U.K. Only]
607	XWHSD28-08120	J AB	Washer,ø2.8×ø12×0.8mm	14	TCADN0001SJZZ	J AE	Warranty Card [H for U.K. Only]
608	XWSSJ26-06000	J AA	Washer,ø2.7×ø5.3×0.6mm				
610	XHPSD20P03000	J AA	Screw,ø2×3mm				
ACCESSORIES/PACKING PARTS							
△	QACCA0001SJ00	J AS	AC Power Supply Cord [H for Philippines]				
△	QACCA0001SJ00	J AS	AC Power Supply Cord [W for Saudi Arabia]				
△	QACCB0001SJ00	J AW	AC Power Supply Cord [W for Hong Kong]				
△	QACCE0001SJZZ	J AH	AC Power Supply Cord [H for Europe/Thailand]				
△	QACCE0001SJZZ	J AH	AC Power Supply Cord [W Except for Saudi Arabia/Hong Kong]				
△	QACCL0002AW00	J AN	AC Power Supply Cord [H for Australia/New Zealand]				
△	QPLGA0250AFZZ	J AF	Adaptor,AC Plug [W for Central and South America/Chile/Peru/ Bolivia/U.A.E. Only]				

NO.	PARTS CODE	★ PRICE RANK	DESCRIPTION
P.W.B. ASSEMBLY (Not Replacement Item)			
PWB-A1~4	DCEK-0007SJ06	J —	Main/CD Control/Power/Washer (Combined Ass'y)
PWB-B	QPWBF3895AFZZ	J AC	CD Motor (PWB Only)
OTHER SERVICE PART			
	UDSKA0004AFZZ	J AZ	CD Pickup Lens Cleaner

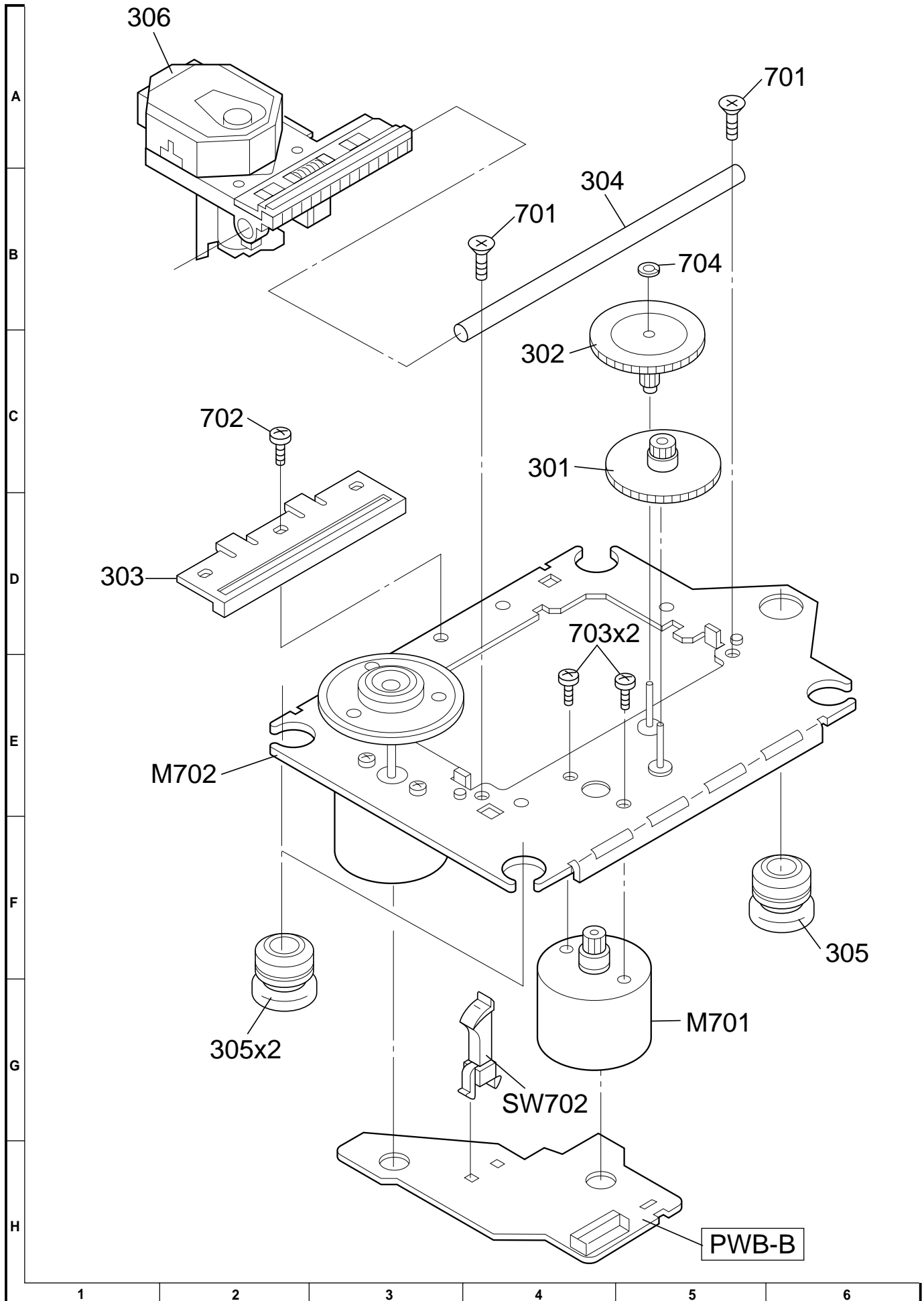


Figure 5 CD MECHANISM EXPLODED VIEW

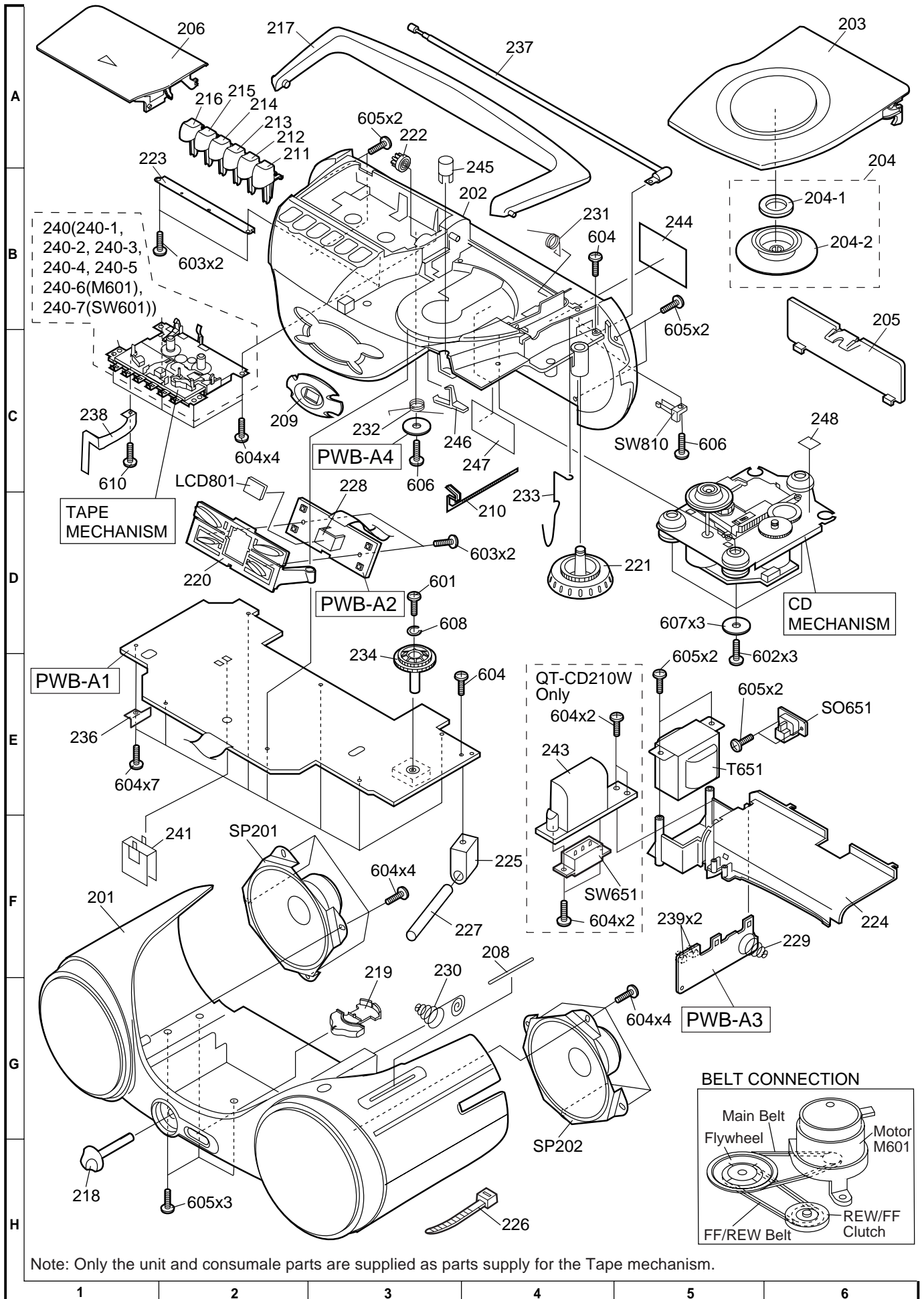


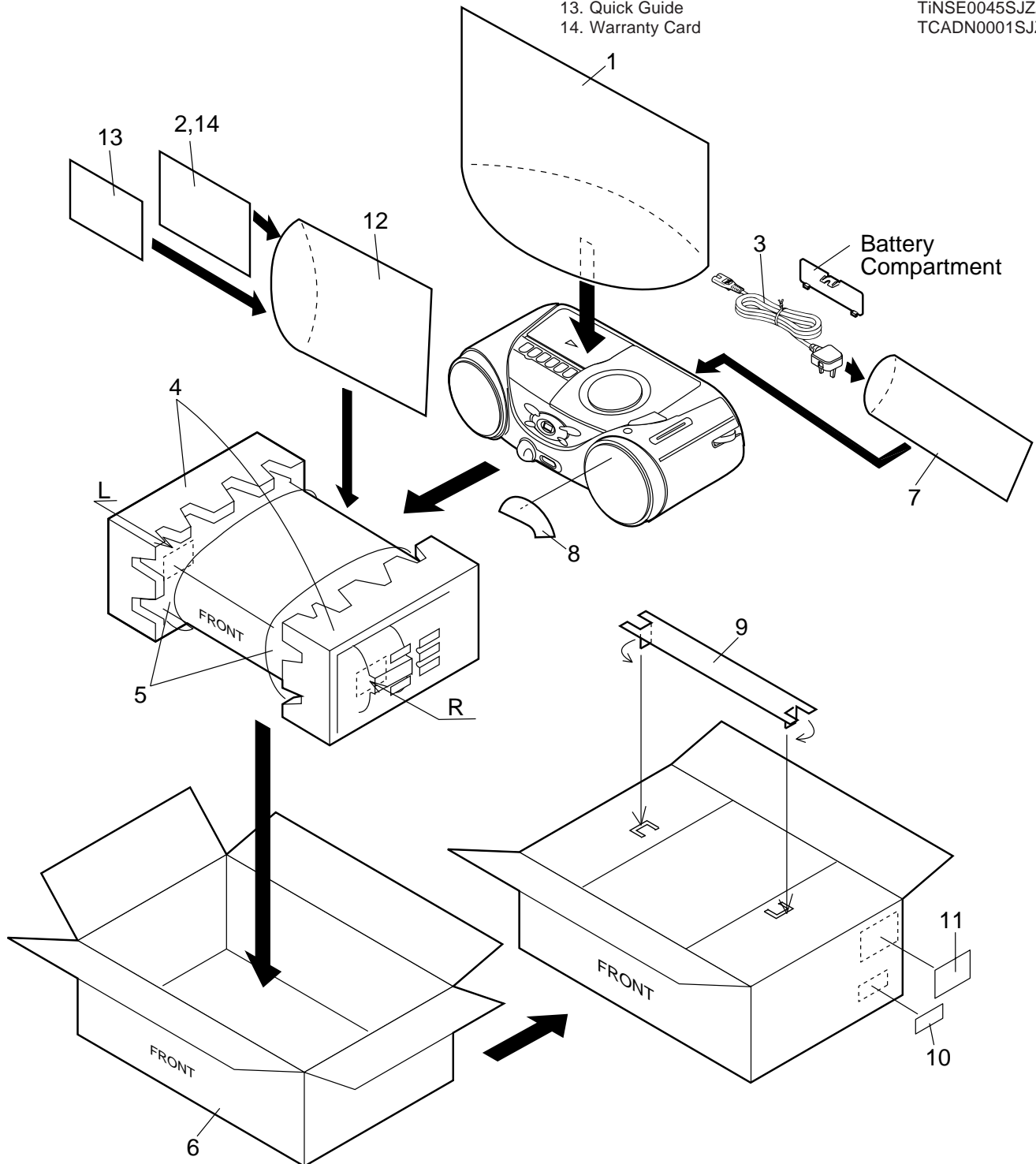
Figure 6 CABINET EXPLODED VIEW

PACKING METHOD (QT-CD210H FOR U.K. ONLY)

• Setting position of switches and knobs

Tape Mechanism Control	STOP STATE
TUNING	LOW
FUNCTION SELECTOR	OFF/TAPE
VOLUME	LOW

- | | |
|---|---------------|
| 1. Polyethylene Bag, Unit | SSAKH0001SJZZ |
| 2. Operation Manual | TiNSE0034SJZZ |
| 3. AC Power Supply Cord | QACCB0001SJ00 |
| 4. Packing Add., Left/Right | SPAKA0036SJZZ |
| 5. Polyethylene Sheet, Unit | SPAKZ0014SJZZ |
| 6. Packing Case [S] | SPAKC0093SJZZ |
| 6. Packing Case [BK] | SPAKC0113SJZZ |
| 6. Packing Case [BL] | SPAKC0114SJZZ |
| 7. Polyethylene Bag, AC Power Supply Cord | SSAKK0002SJZZ |
| 8. Feature Label | TLABZ0042SJZZ |
| 9. Top Pad, Packing Case | SPAKZ0013SJZZ |
| 10. Bar Code Label [S] | TLABE0043SJZZ |
| 10. Bar Code Label [BK] | TLABE0048SJZZ |
| 10. Bar Code Label [BL] | TLABE0049SJZZ |
| 11. VJ No. Label | TLABZ0015SJZZ |
| 12. Polyethylene Bag, Accessories | SSAKK0001SJZZ |
| 13. Quick Guide | TiNSE0045SJZZ |
| 14. Warranty Card | TCADN0001SJZZ |



— M E M O —

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