

CFD-10/10L

SERVICE MANUAL

Ver 1.1 2002.06



Photo : CFD-10

US Model
Canadian Model
CFD-10(Made in Korea)

US Model
Central and South
America Model
Australian Model
Taiwan Model
CFD-10(Made in Malaysia)

AEP Model
CFD-10/10L(Made in Malaysia)

UK Model
CFD-10L(Made in Malaysia)

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US MODEL)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 4-ohm loads, both channels driven from 150-10,000 Hz; rated 2.3 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

CD player section

System	Compact disc digital audio system
Laser diode properties	Material: GaAlAs Wave length: 780 nm Emission duration: Continuous Laser output: Less than 44.6 μ W (This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block.)
Spindle speed	200 r/min (rpm) to 500 r/min (rpm) (CLV)
Error correction	Sony Refined Super Strategy Cross Interleave Reed Solomon Code
Number of channels	2
Frequency response	20-20,000 Hz $\pm$ 2 dB
Wow and flutter	Below measurable limit

Radio section

Frequency range

	FM	MW	LW	SW
US, Canadian, C&SA, Taiwan, Australian Model	87.6 - 108 MHz	530 - 1,710 kHz	—	
AEP, (10L) UK Model	87.6 - 107 MHz	531 - 1,602 kHz	153 - 279 kHz	5.95 - 18 MHz
Italian Model	87.5 - 108 MHz	526.5 - 1,606.5 kHz	—	
AEP (10), German Model	87.6 - 107 MHz	531 - 1,602 MHz	—	

Model Name Using Similar Mechanism	CD Section	CFD-100/100L
	Tape Section	CFD-60
Optical Device Name	KSM-2101BAN	
Tape Transport Mechanism Type	MF-10-64 (Made in Korea)	
	MF-204-64 (Made in Malaysia)	

Aerials	FM/SW: Telescopic aerial MW/LW: Built-in ferrite bar aerial
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Cassette-corder section

Recording system	4-track 2-channel stereo
Frequency response	TYPE I (normal) cassette: 70-10,000 Hz

General

Speaker	Full range: 10 cm dia., 3.2 ohms cone type
Inputs	Mixing microphone input jack (minijack): Sensitivity 2.5 mV For low impedance microphone
Outputs	Headphones jack (stereo minijack) For 16-68 ohms impedance headphones
Maximum power output	5.5 W (2.75 W + 2.75 W) (Except US Model)

CD RADIO CASSETTE-CORDER

SONY®

9-957-793-13
2002F0500-1
© 2002.06

Sony Corporation
Personal Audio Company
Published by Sony Engineering Corporation

Power requirements

Europe	220-230 V AC, 50 Hz		
US, Canadian, Central and South America, Taiwan Model	120 V AC, 60 Hz		
AEP, Italian Model	220 - 230 V AC, 50 Hz		
UK, Australian Model	240 V AC, 50Hz		
	DC 9 V, 6 size D (R20) batteries		
Power consumption	20 W		
Battery life	For CD radio cassette-corder:		
	FM recording	Tape playback	CD playback
Sony SUM-1 (NS)	approx. 13.5 h	approx. 7.5 h	approx. 2.5 h
Sony Alkaline AM1	approx. 19 h	approx. 12 h	approx. 4.5 h

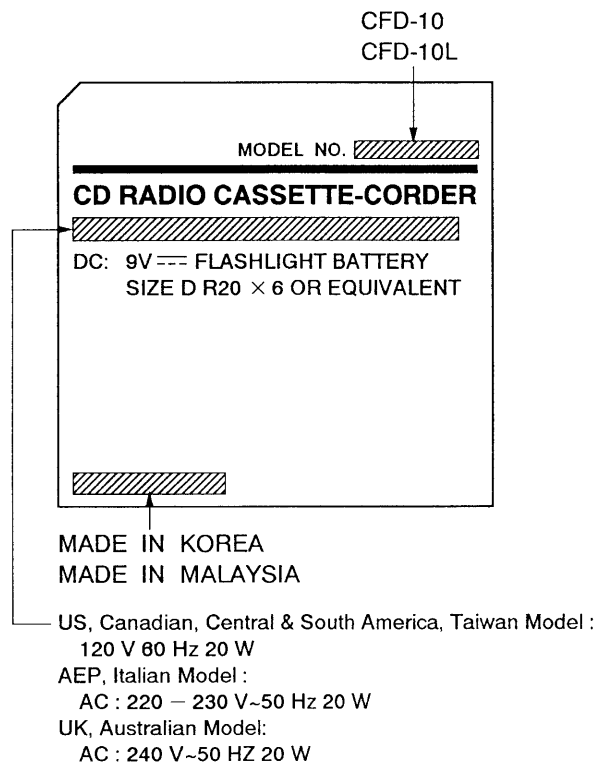
Dimensions Approx. 501.5 × 156 × 238 mm (w/h/d)
incl. projecting parts
Mass 4.4 kg (incl. batteries)
Supplied accessories AC power cord (1)

Design and specifications subject to change without notice.

C & SA Model: Central & South America Model

MODEL IDENTIFICATION

— Model Number Label — Carved on rear cabinet



ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

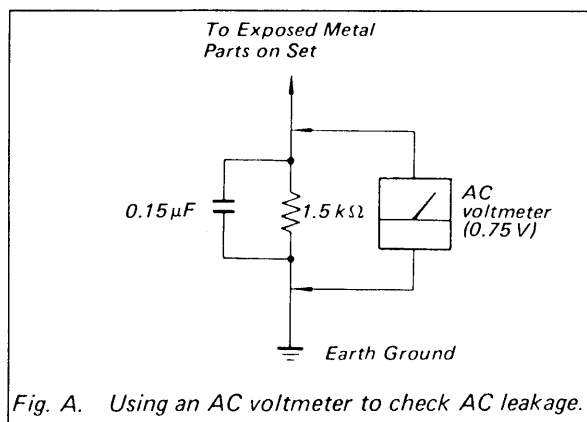


Fig. A. Using an AC voltmeter to check AC leakage.

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.

SECTION 1

SERVICING NOTES

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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.

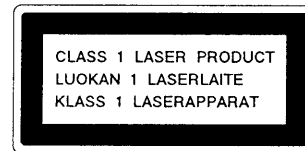
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

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 more than 25 cm away from the objective lens.

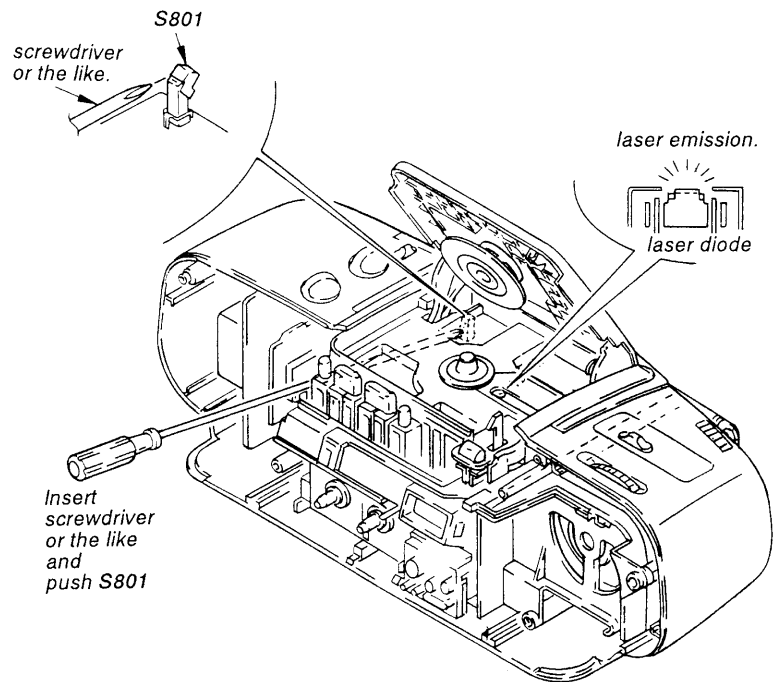
This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.



LASER COMPONENT in this product is capable of emitting adiation exceeding the limit for Class 1.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

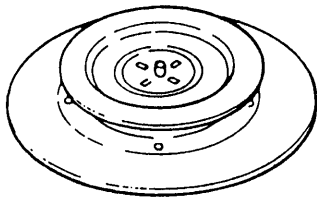
1. Make Function switch to CD position with no disc inserted.
2. Open the lid for CD.
3. Turn on S801 as following figure.
4. Press ► key.
5. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken. Objective lens moves up and down once for the focus search.



CHUCK PLATE JIG ON REPAIRING

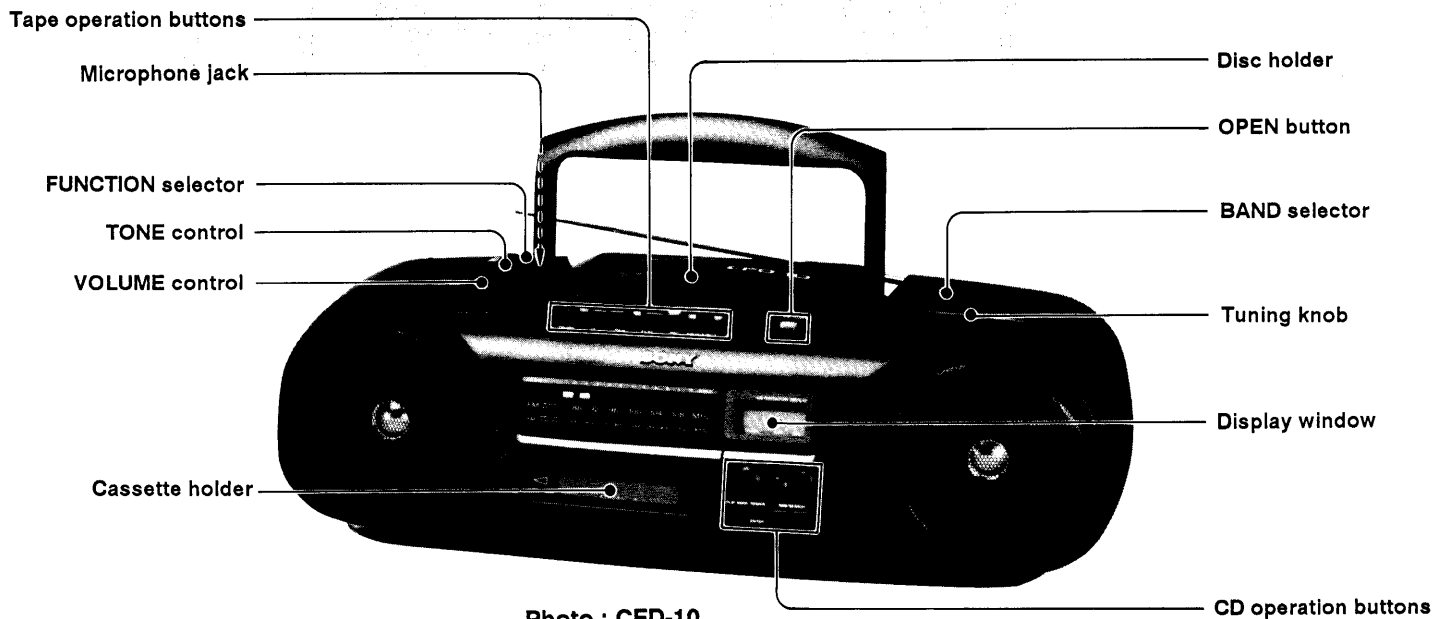
On repairing CD section, playing a disc without the CD lid, use Chuck Plate Jig.

- Code number of Chuck Plate Jig: X-4918-255-1



SECTION 2 GENERAL

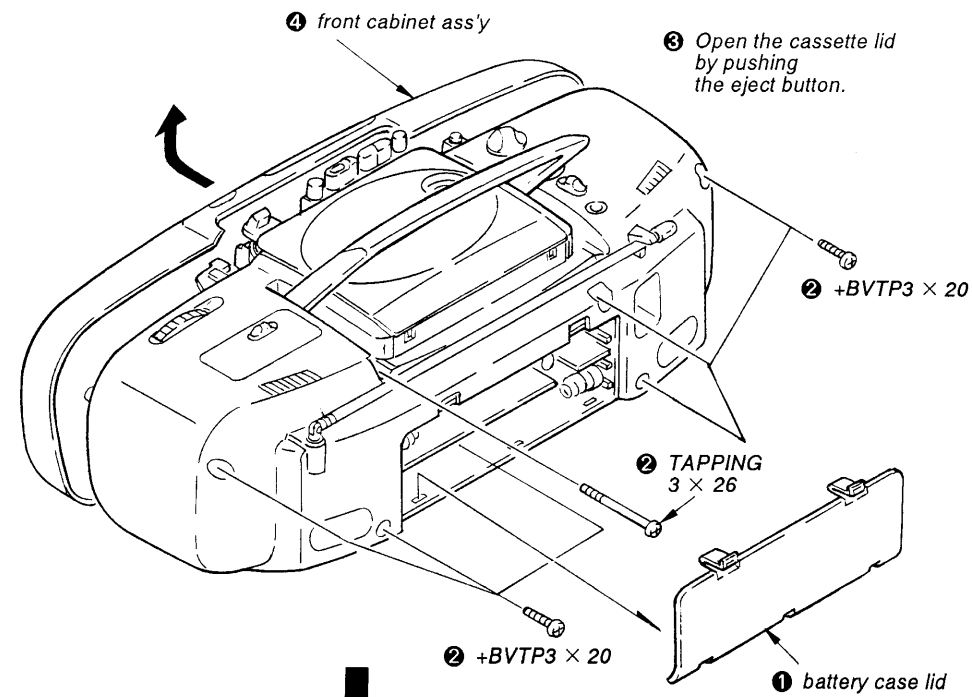
• Parts Identification



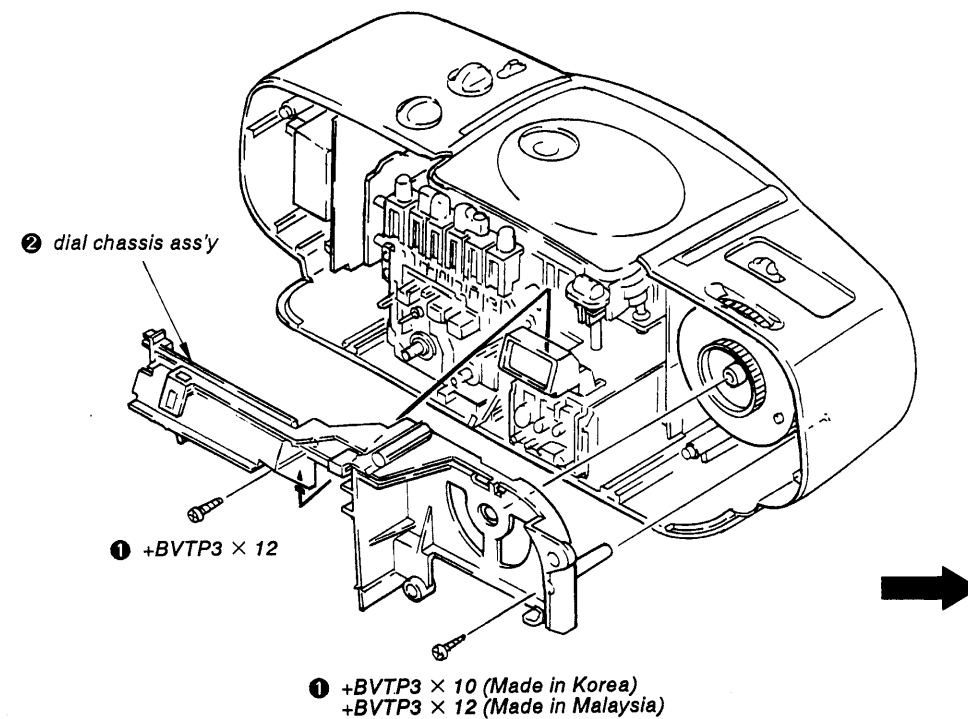
SECTION 3 DISASSEMBLY

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

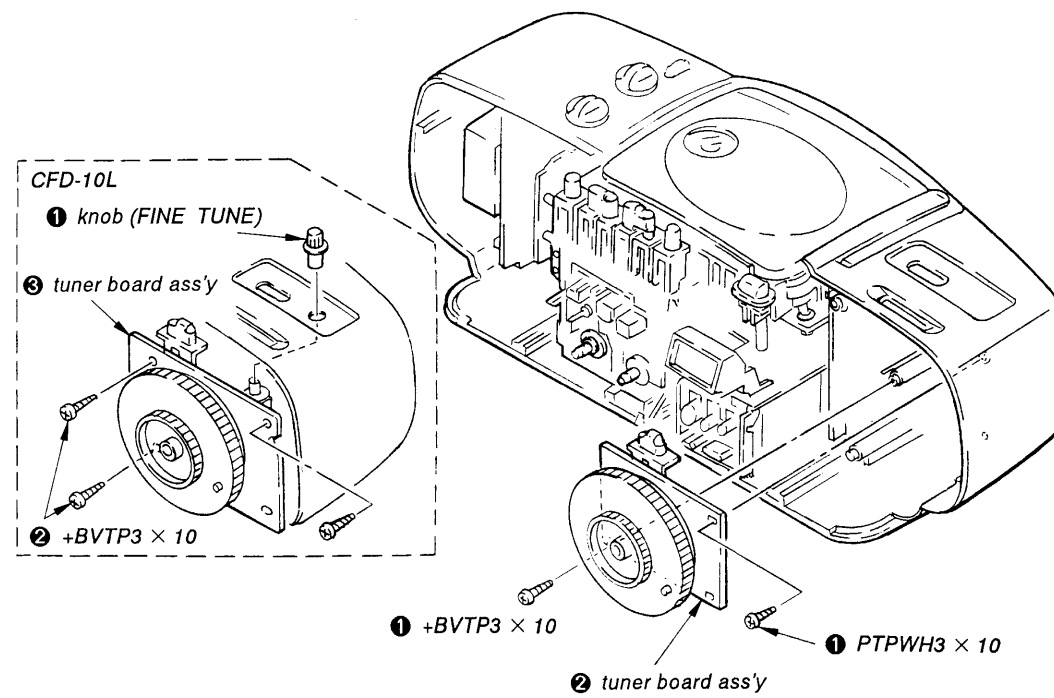
FRONT CABINET ASS'Y



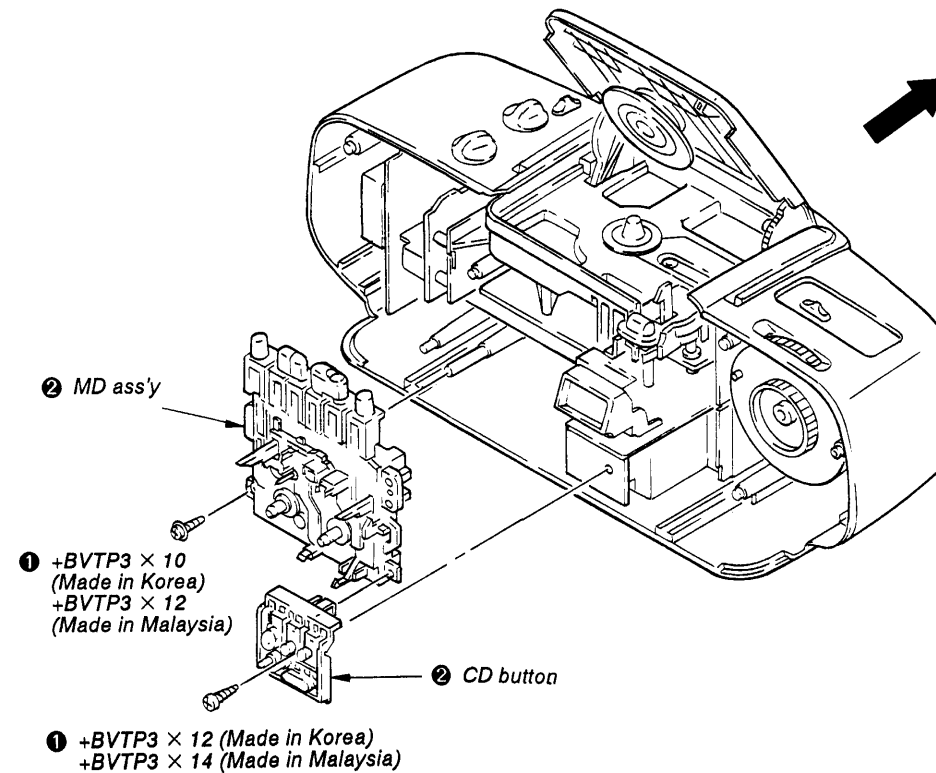
DIAL CHASSIS ASS'Y



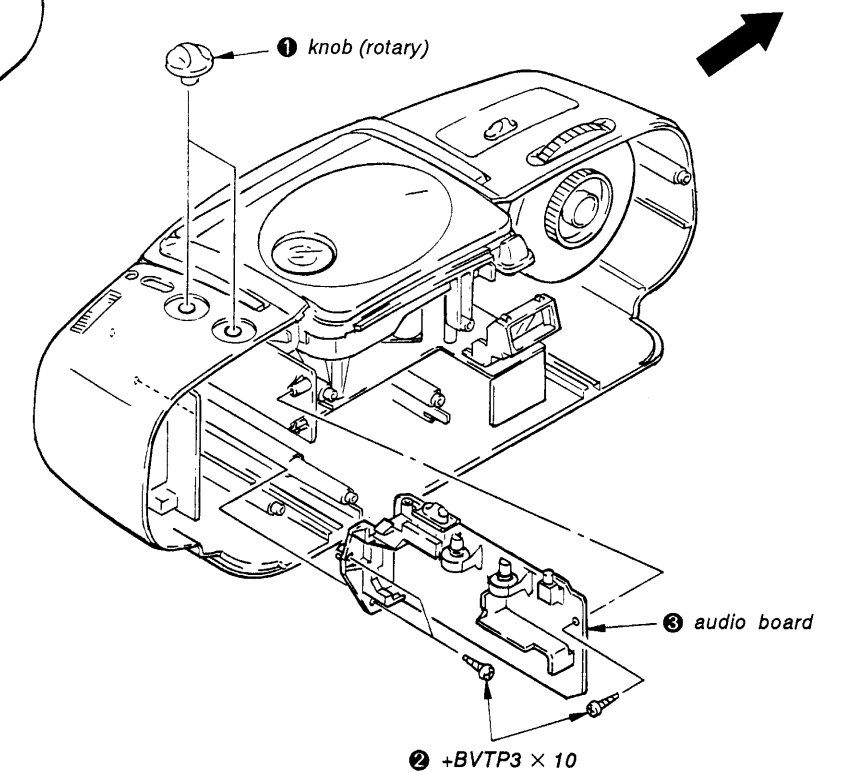
TUNER BOARD ASS'Y



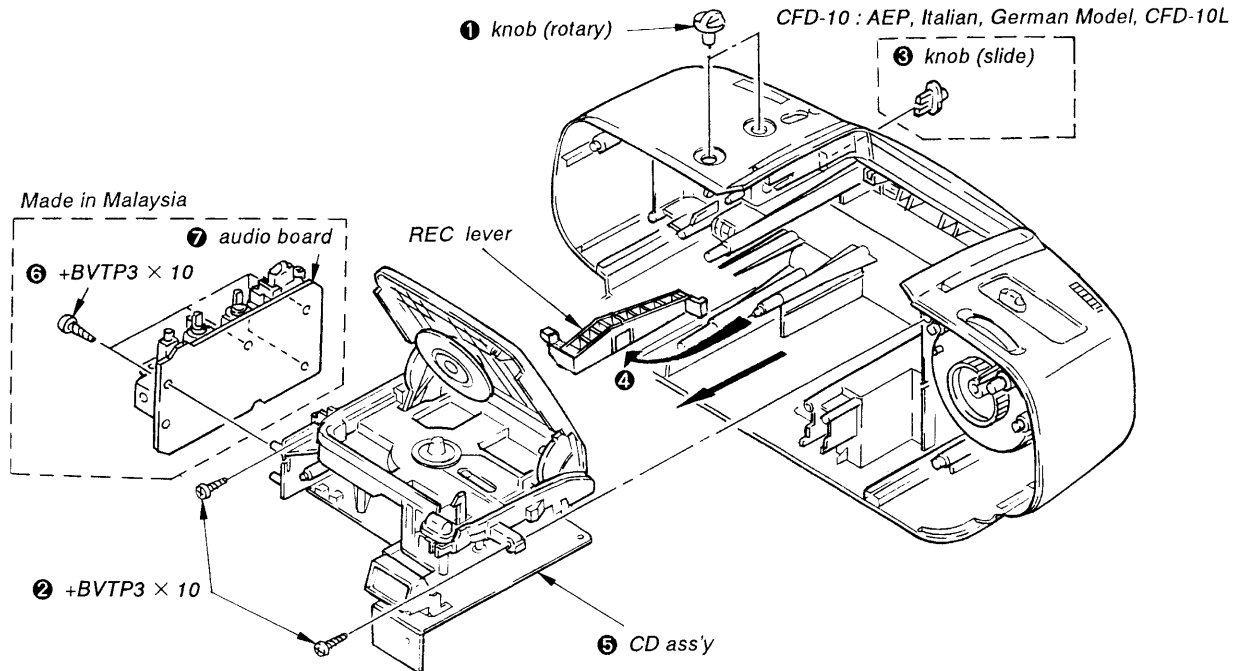
MD ASS'Y, CD BUTTON



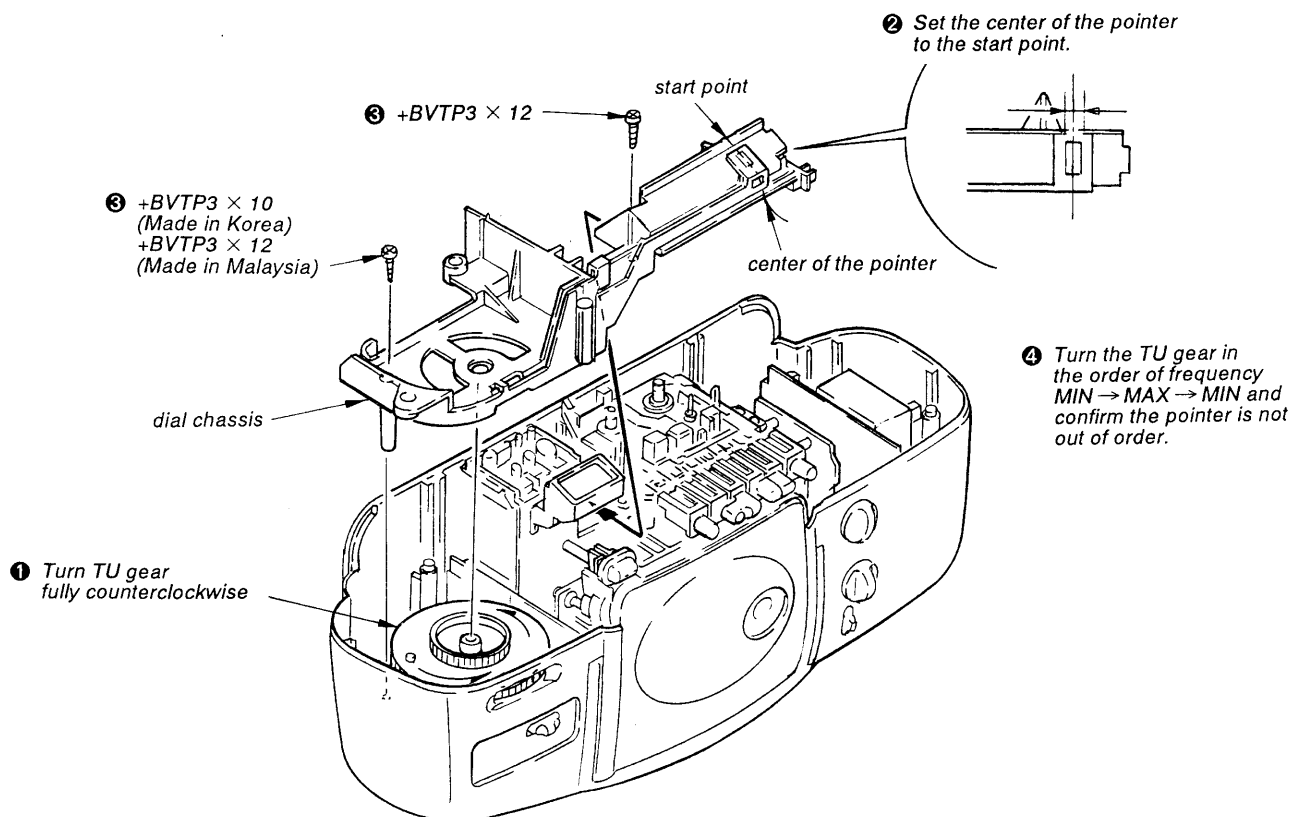
AUDIO BOARD (MADE IN KOREA)



CD ASS'Y, AUDIO BOARD



POINTER SETTING



SECTION 4 MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
6. Power supply voltage: 9V dc.

Torque Measurement

Torque	Meter Reading	Torque Meter
Forward	22.5 – 55 g•cm (0.31 – 0.76 oz•inch)	CQ-102C
Fast Forward and Rewind	60 – 120 g•cm (0.83 – 1.67 oz•inch)	CQ-201B
Back Tension	2 – 5 g•cm (0.03 – 0.07 oz•inch)	CQ-102C

Tape Tension Measurement

Meter	Meter Reading
CQ-403A	more than 150 g (5.29 oz)

SECTION 5 ELECTRICAL ADJUSTMENTS

PRECAUTION

1. Adjustments should be performed in the order given. Generally playback circuit adjustments should be completed before performing recording circuit adjustments.
 2. Adjustments should be performed for both L-ch and R-ch. Switches and controls should be set as follows unless otherwise specified.
- Positions of switches and control knobs
TONE maximum
 - **Standard recording position**
Adjust the VOLUME knob so that the following regulated input/output signal levels are obtained.

- **Standard input level**

Input	MIX MIC
Signal source impedance	300 Ω
Input signal level	2.5 mV (– 50 dB)
Frequency	1 kHz

- **Standard output level**

Output	Speaker (L, R)	PHONES
Signal source impedance	3.2 Ω	32 Ω
Output signal level	0.775 V (0 dB)	0.245 V (– 10 dB)

0 dB=0.775 V

5-1. TAPE RECORDER SECTION

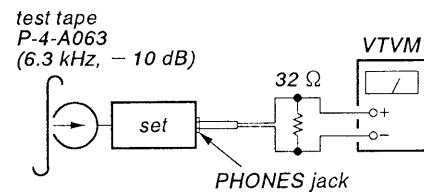
- **Test Tape**

Type	Signal	Used for
WS-48A	3 kHz, 0 dB	tape speed adjustment
P-4-A063	6.3 kHz, – 10 dB	head azimuth adjustment

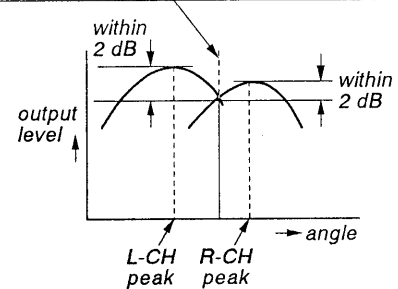
REC/PB Head Azimuth Check

Procedure:

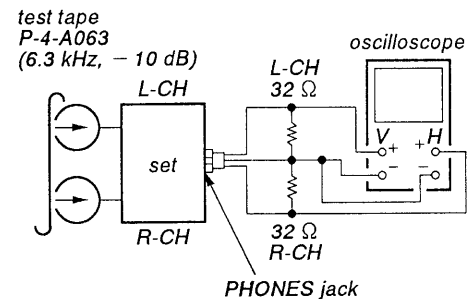
1. Mode: playback



2. Check the both of output levels match together within 2 dB.



3. Phase Check
Mode: playback

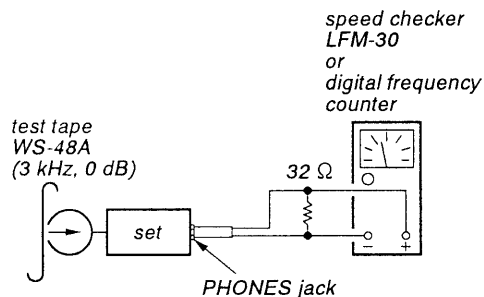


Screen pattern				
good			wrong	

Tape Speed Adjustment

Procedure:

Mode: playback

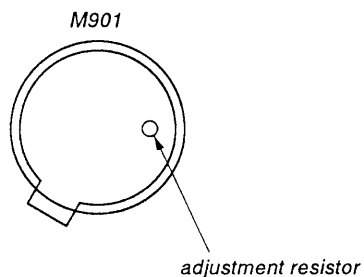


Adjustment Value:

	Speed checker	Digital frequency counter
Made in Malaysia	- 1.3 to 0.6%	$2,990 \pm 30$ Hz
Made in Korea	- 0.3 to 0.3%	$3,000 \pm 10$ Hz

Frequency difference between the beginning and the end of the tape should be within 1.5% (45 Hz).

Adjustment Location:



5-2. TUNER SECTION

0 dB=1 μ V

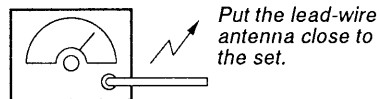
[AM]

FUNCTION switch: RADIO

FINE TUNE control: Mechanical center

BAND switch: AM, MW, LW

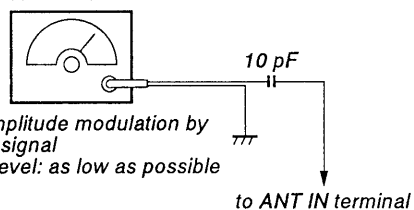
AM RF SSG



30% amplitude modulation by
400 Hz signal
output level: as low as possible

BAND switch: SW

AM RF SSG

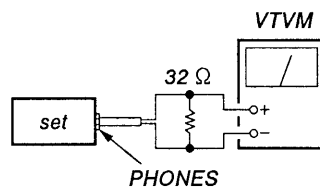
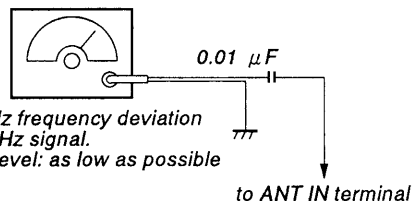


[FM]

FUNCTION switch: RADIO

BAND switch: FM

FM RF SSG



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

AM IF ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
T1	455 kHz

LW FREQUENCY COVERAGE ADJUSTMENT (CFD-10L)	
Adjust for a maximum reading on VTVM.	
L4	150 kHz
CT8	300 kHz

LW TRACKING ADJUSTMENT (CFD-10L)	
Adjust for a maximum reading on VTVM.	
L10	160 kHz
CT7	260 kHz

AM (MW) FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L4	515 kHz 516 kHz (Italian)
CT4	1,680 kHz 1,630 kHz (Italian) 1,780 kHz (US, Canadian, Australian, Central & South America, Taiwan)

AM (MW) TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L3	600 kHz
CT3	1,400 kHz 1,500 kHz (US, Canadian, Australian, Central & South America, Taiwan)

SW FREQUENCY COVERAGE ADJUSTMENT (CFD-10L)	
Adjust for a maximum reading on VTVM.	
L6	5.8 MHz
CT6	18.4 MHz

SW TRACKING ADJUSTMENT (CFD-10L)	
Adjust for a maximum reading on VTVM.	
L5	5.8 MHz
CT5	18.4 MHz

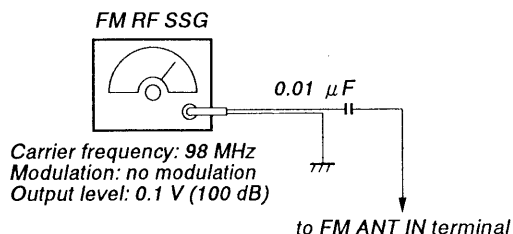
FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L2	87.35 MHz 86.5 MHz (US, Canadian, Australian, Central & South America, Taiwan)
CT2	107.8 MHz 108.3 MHz (Italian) 109.5 MHz (US, Canadian, Australian, Central & South America, Taiwan)

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L1	87.35 MHz 86.5 MHz (US, Canadian, Australian, Central & South America, Taiwan)
CT1	107.8 MHz 108.3 MHz (Italian) 109.5 MHz (US, Canadian, Australian, Central & South America, Taiwan)

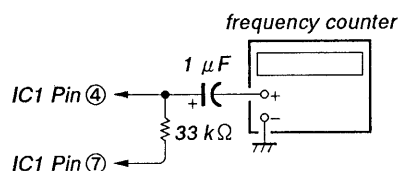
FM VCO Adjustment (Made in Malaysia)

Procedure:

- FUNCTION switch: FM



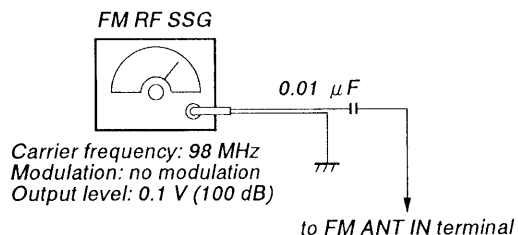
1. Connect frequency counter to the positions shown below.
2. Tune the set to 98 MHz.
3. Adjust RV1 for 76 kHz $\pm$ 500 Hz reading on the frequency counter.



FM VCO Adjustment (Made in Korea)

Procedure:

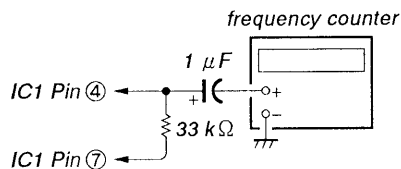
- FUNCTION switch: FM



Intermediate Frequency: According to the color of the mark on ceramic filter (CF4),

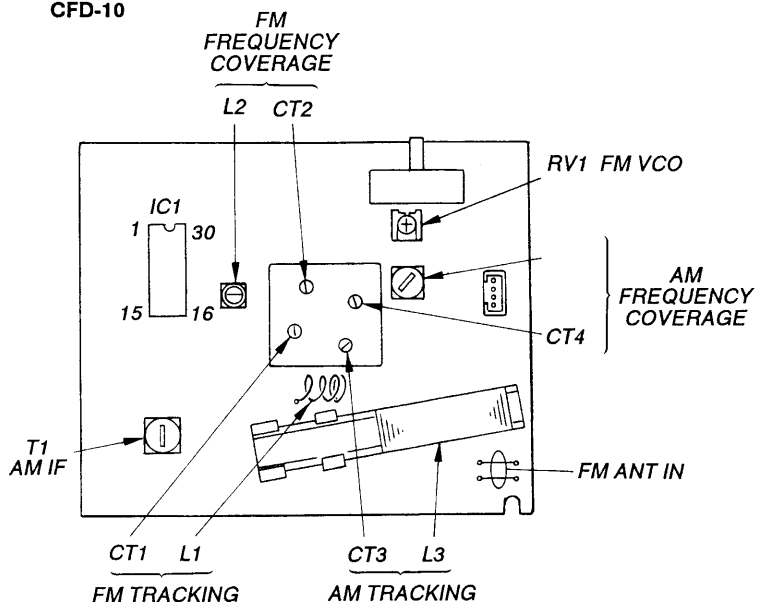
mark	Mark	Intermediate Frequency
	red	10.7 MHz
	blue	10.67 MHz
	orange	10.73 MHz
	black	10.64 MHz
	white	10.76 MHz

1. Connect frequency counter to the positions shown below.
2. Tune the set to 98 MHz.
3. Adjust RV1 for 76.0 ± 0.3 kHz reading on the frequency counter.

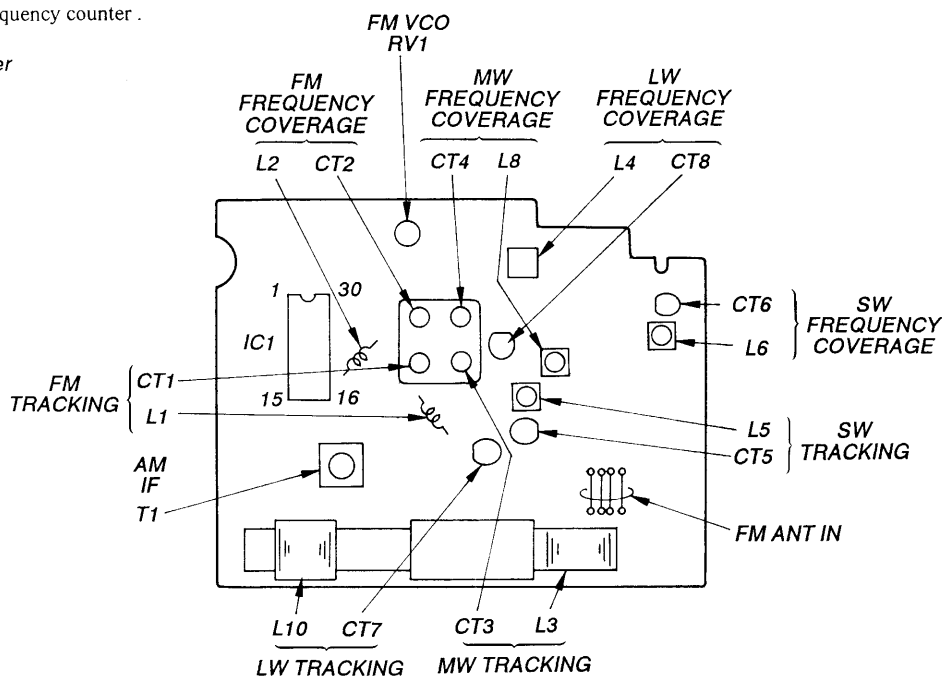


• Adjusting Parts Location

CFD-10



CFD-10L



5-3. CD SECTION

Notes on Adjustment

1. Perform adjustment in service mode.
After adjustment, be sure to release service mode.
2. Perform adjustments in the order given.
3. Use the disc (YEDS-18, Part No. 3-702-101-01) only when so indicated.

How to Put the Set Into Service Mode

1. Short-circuit between TP TEST and ground on the CD main board.
2. Tune POWER on. (Set the FUNCTION switch to CD position.)
3. LCD801 indicator blinks the test mode pattern.

Before Adjustment

Put the set into service mode and perform the following checks. Repair if there are any problems.

• Sled Motor Check

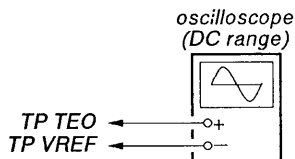
1. Press $\blacksquare$ key for long.
2. Press $\blacktriangleright\blacktriangleleft$, $\blacktriangleleft\blacktriangleright$ keys and confirm that the FOP moves smoothly from the innermost to outermost circumference and back smoothly and with no catching or abnormal noises.
 $\blacktriangleright\blacktriangleleft$: FOP moves to the outer circumference
 $\blacktriangleleft\blacktriangleright$: FOP moves to the inner circumference
3. Press $\blacksquare$ key for long.
4. Confirm that FOP moving operations stops. If it does not, press $\blacksquare$ key again longer.

• Focus Search Check

1. Press $\blacksquare$ key.
2. Press $\blacktriangleright$ key. (Focus search operation is performed continuously.)
3. Look at the FOP objective lens and confirm that it moves up and down smoothly, with no catching or abnormal noises.
4. Press $\blacksquare$ key for long.
5. Confirm that focus search operation stops. If it does not, press $\blacksquare$ key again longer.

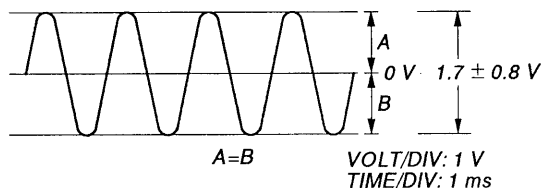
E-F Balance Adjustment

This adjustment is to be done when the optical block is replaced.



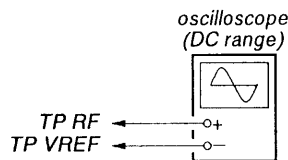
Adjustment Procedure:

1. Connect the oscilloscope between TP TEO and TP VREF.
2. Put the set into service mode.
3. Press the $\blacktriangleright\blacktriangleleft$ and $\blacktriangleleft\blacktriangleright$ keys to move the FOP to the center.
4. Insert disc (YEDS-18) and press $\blacktriangleright$ key.
5. Adjust RV701 so that the oscilloscope traverse waveform is symmetrical, as shown in the figure below.
6. Release service mode after adjustment is completed.



Focus Bias Adjustment

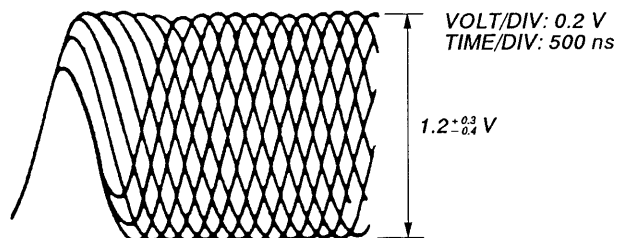
This adjustment is to be done when the optical block is replaced.



Adjustment Procedure:

1. Connect the oscilloscope between TP RF and TP VREF.
2. Put the set into service mode.
3. Press the $\blacktriangleright\blacktriangleleft$ and $\blacktriangleleft\blacktriangleright$ keys to move the FOP to the center. (Move the FOP to the music area on the disc to enable easy visibility of the eye pattern.)
4. Insert disc (YEDS-18) and press $\blacktriangleright$ key.
5. Press $\blacksquare$ key (Tracking and sledding go on).
6. Adjust RV702 so that the oscilloscope waveform is as shown in the figure below (eye pattern).
A good eye pattern means that the diamond shape ($\diamond$) in the center of the waveform can be clearly distinguished.
7. Release service mode after adjustment is completed.

• RF signal reference waveform (eye pattern)



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

REFERENCE

Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pickup follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is at the point where both are satisfied.

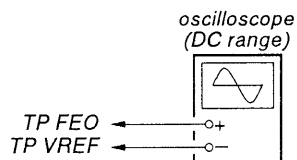
- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

Symptoms \ Gain	Focus	Tracking
• The time until music starts becomes longer for STOP → ► PLAY or automatic selection (◀◀, ►► buttons pressed). (Normally takes about 2 seconds.)	low	low or high
• Music does not start and disc continues to rotate for STOP → ► PLAY or automatic selection (◀◀, ►► buttons pressed).	—	low
• Sound is interrupted during PLAY. Or time counter display stops progressing.	—	low
• More noise during 2-axis device operation.	high	high

The following is a simple adjustment method.

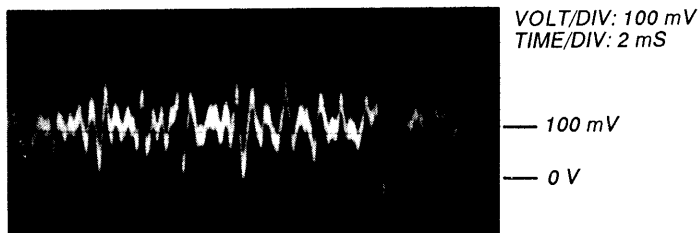
— Simple Adjustment —

Note: Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.



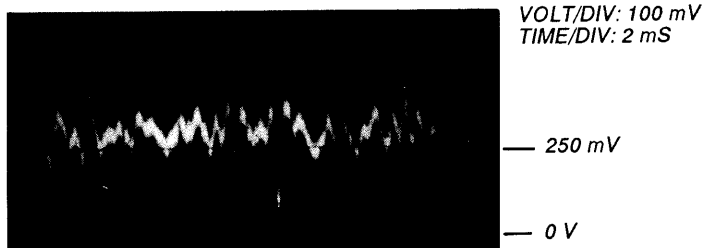
Procedure:

1. Keep the set horizontal.
(If the set is not horizontal, this adjustment cannot be performed) due to the gravity against the 2-axis device.
2. Put the set into service mode.
3. Insert disc (YEDS-18) and press ► PLAY button.
4. Press ■ key (Tracking and sledding go on).
5. Connect the oscilloscope between TP FEO and TP VREF.
6. Adjustment RV703 so that the waveform is as shown in the figure below. (focus gain adjustment)

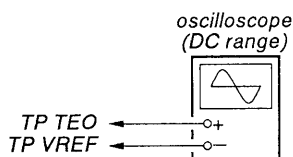
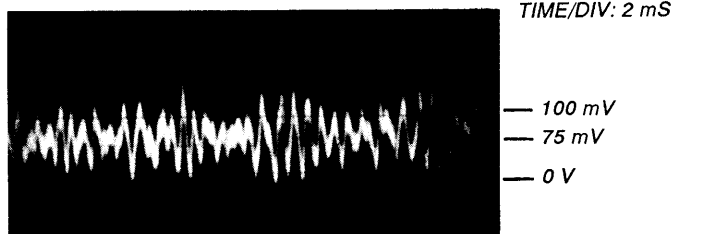


- Inccorent Examples (DC level changes more than on adjusted waveform)

low focus gain



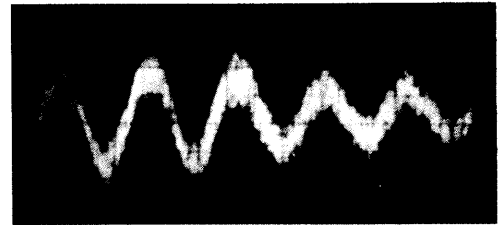
high focus gain



7. Connect the oscilloscope between TP TEO and TP VREF.
8. Adjust RV704 so that the waveform is as shown in the figure below. (tracking gain adjustment)



- Incorrect Examples (fundamental wave appears)
low track gain



VOLT/DIV: 1 V
TIME/DIV: 2 mS

— 0 V

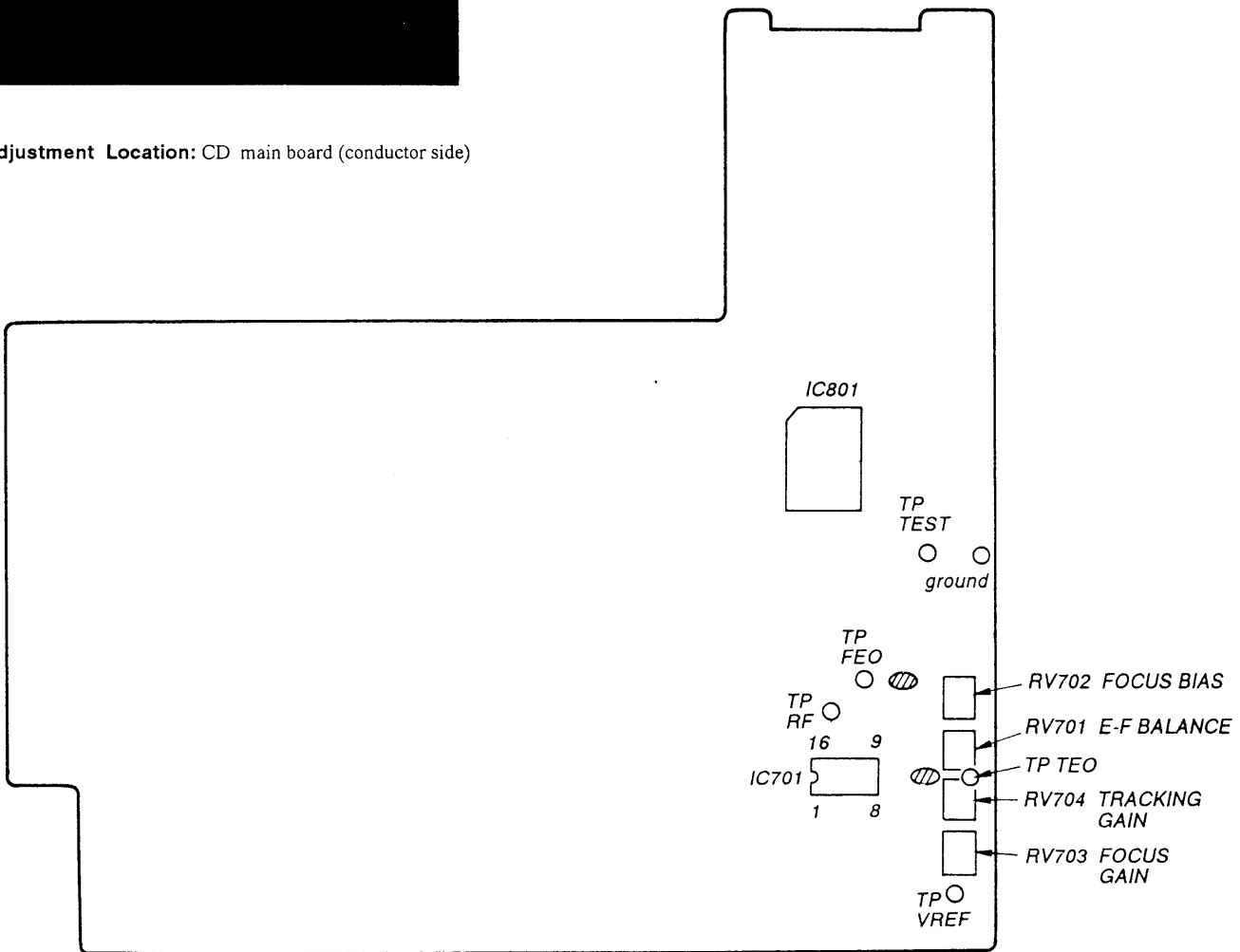
high track gain
(higher fundamental wave than for low gain)



VOLT/DIV: 1 V
TIME/DIV: 2 mS

— 0 V

Adjustment Location: CD main board (conductor side)



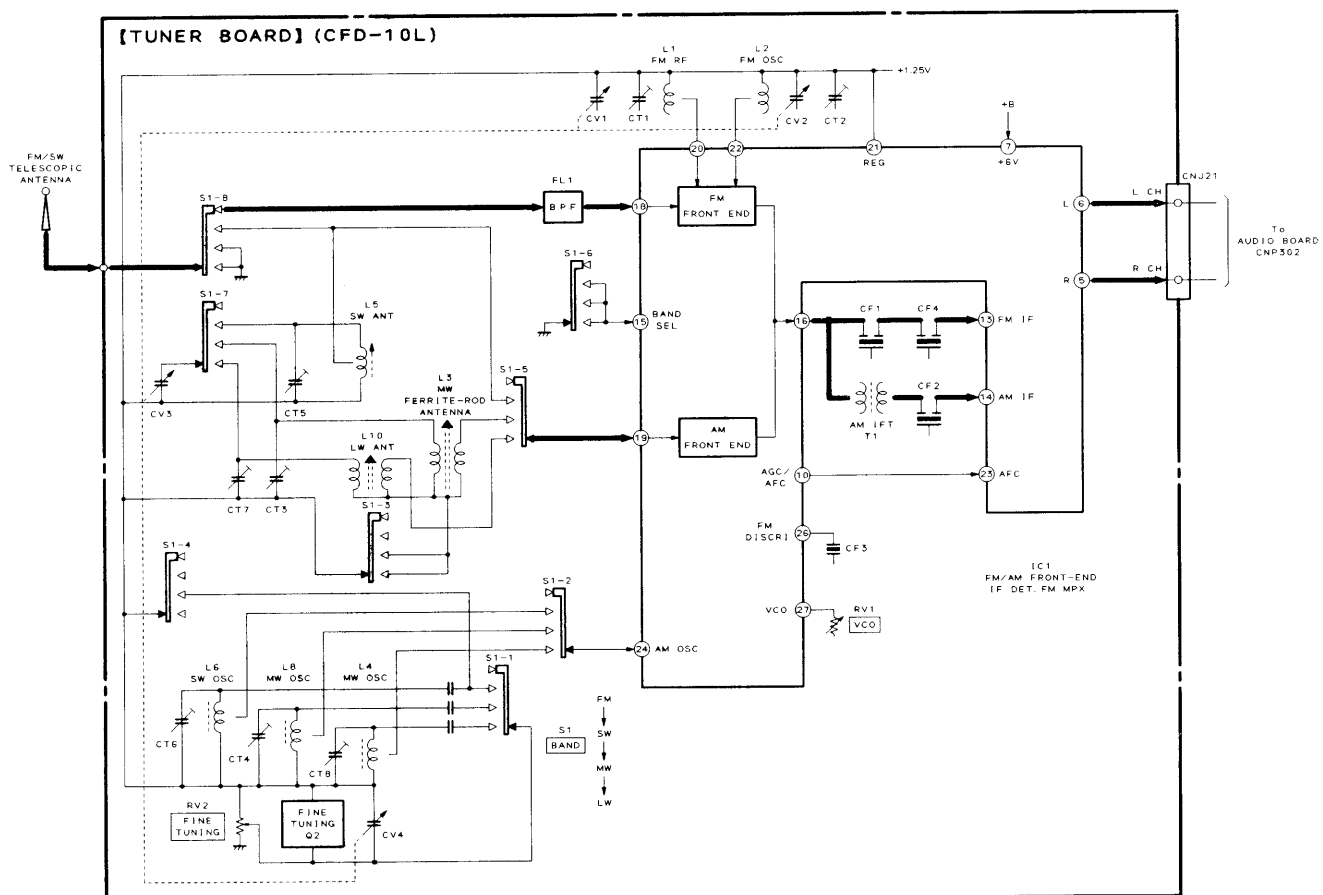
[TUNER BOARD] (CFD-10)

The schematic diagram illustrates the internal circuitry of the Tuner Board (CFD-10). Key components include:

- Antennas:** ANT1 TELESCOPIC ANTENNA and L5 FERRITE-ROD ANTENNA.
- Power Supply:** +125V and +6V REG.
- Capacitors:** CV1, CT1, CV2, CT2, CF1, CF2, CF3, CF4.
- Transistors:** T1 AM JFT.
- Integrated Circuits:** IC1 FM/AM FRONT-END IF DET. FM MPX, MODE SW Q2.
- Other Components:** FL1 B.P.F., L1 FM RF, L2 FM OSC, L3 FERRITE-ROD ANTENNA, L4 AM OSC, RV1 VCO, S1 BAND selector switch.

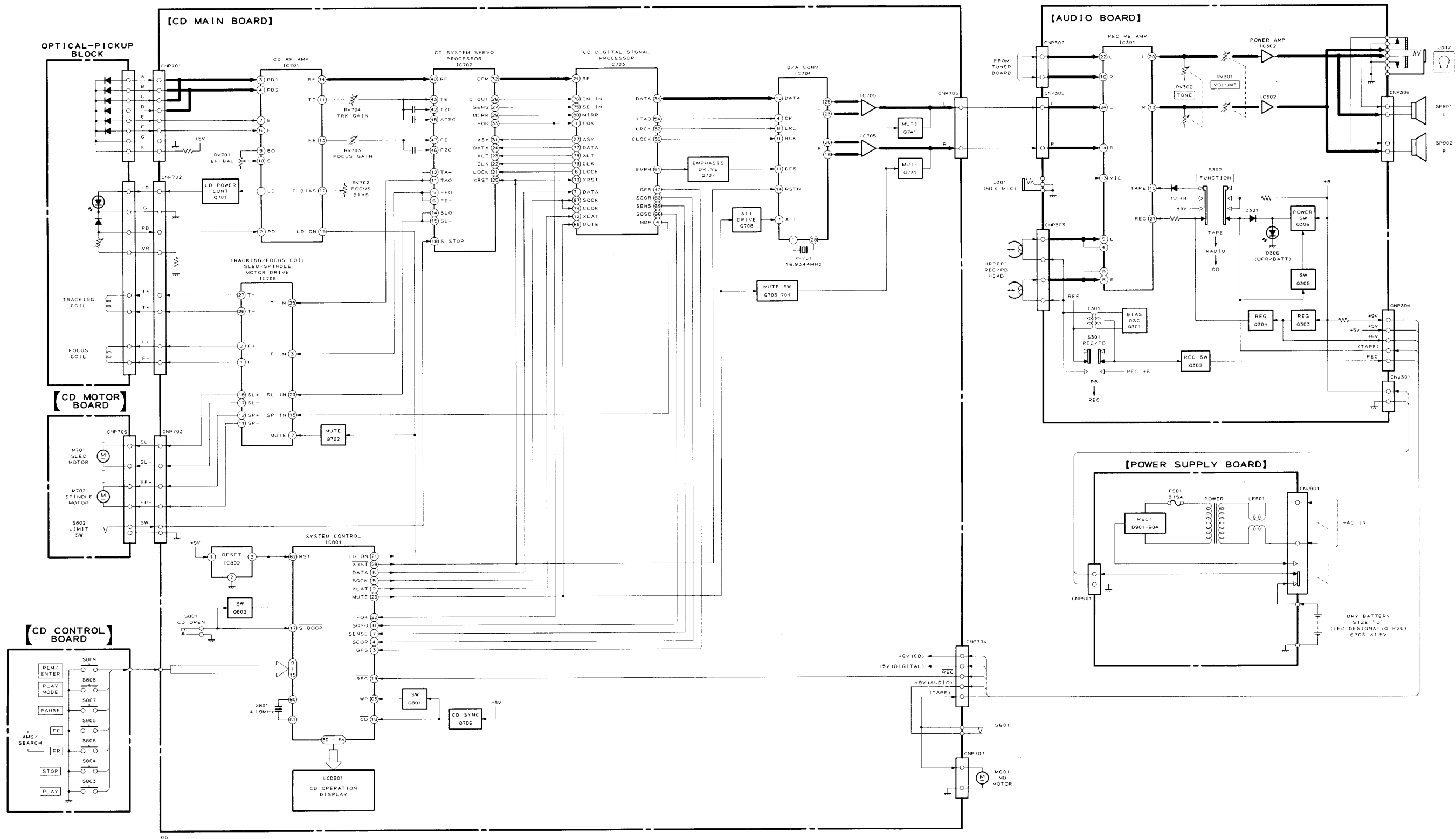
The diagram shows the signal flow from the telescopic antenna through various stages (FM Front End, AM Front End, FM IF, AM IF, AGC/AFC, FM Discr.) to the output jacks (L CH, R CH, MO/ST).

05



05

6-2. OTHER SECTION BLOCK DIAGRAM



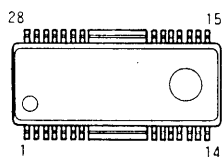
SECTION 7

PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM

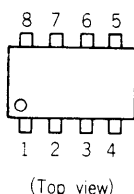
(MADE IN KOREA MODEL)

• Semiconductor Lead Layouts

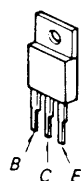
BA6296FP



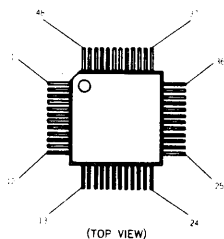
MC4558-C



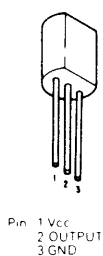
2SD1944-K



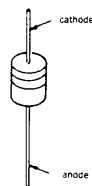
CXA1372AQ



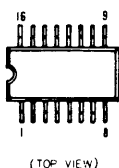
PST529D



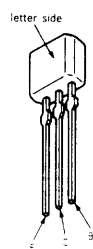
**MTZJ-5.6C
RD6.8ESB2
1SS119**



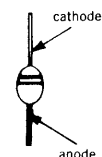
CXA1421M



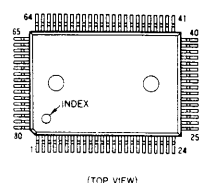
**DTA114YS
DTA124ES
DTC114TS
DTC143ES
DTC144ES
2SA1175-HFE**



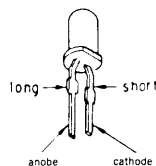
U15G



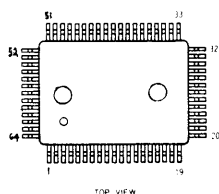
CXD2500BQ



GL-3PR9



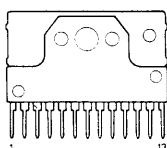
CXP5084H-636Q



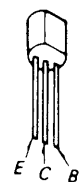
**DTC114YS
DTC143TS**



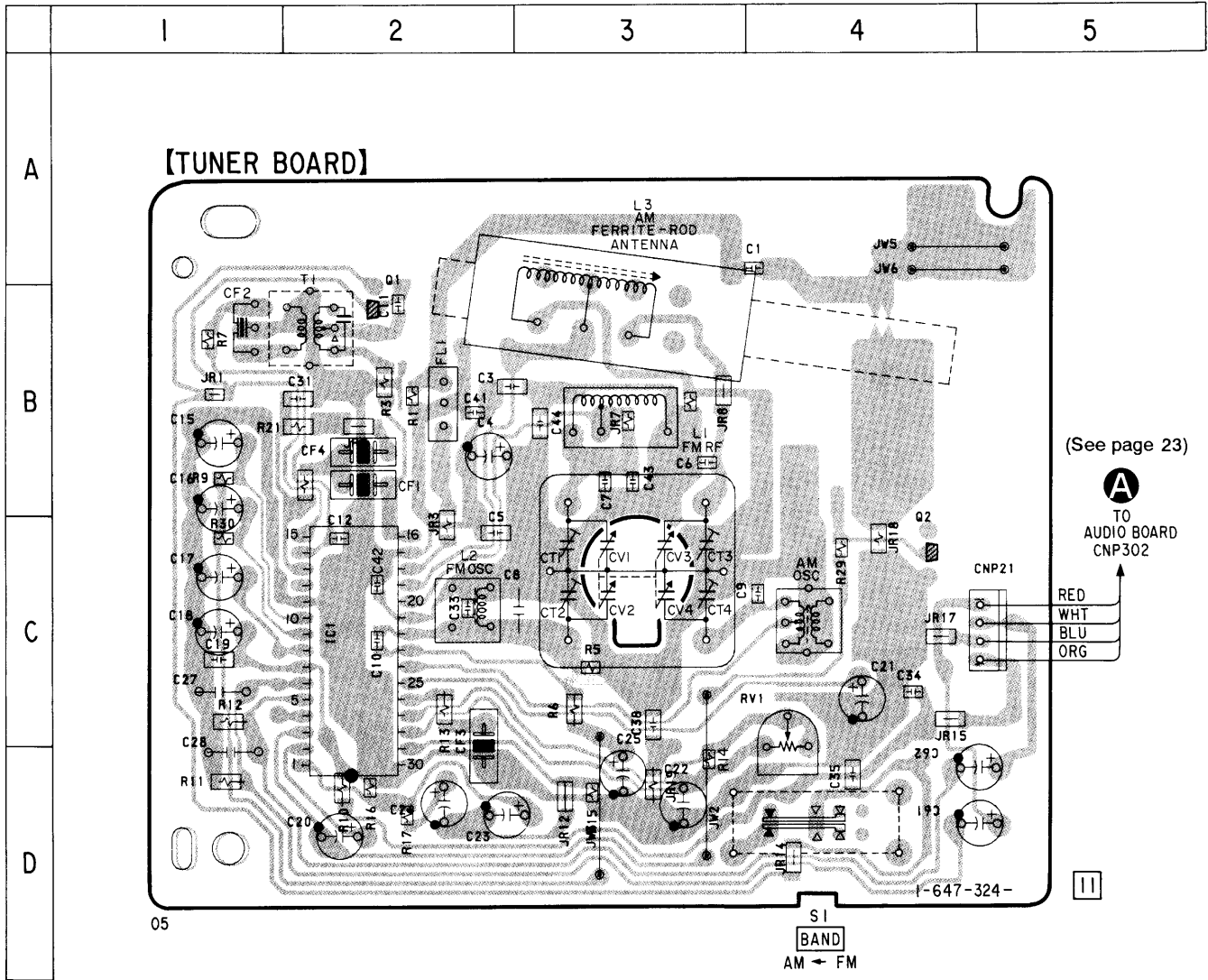
LA4597



**2SB1013-4
2SC1815-GR
2SC2001TP-K1K2**



7-1. TUNER SECTION • See page 25 for notes.



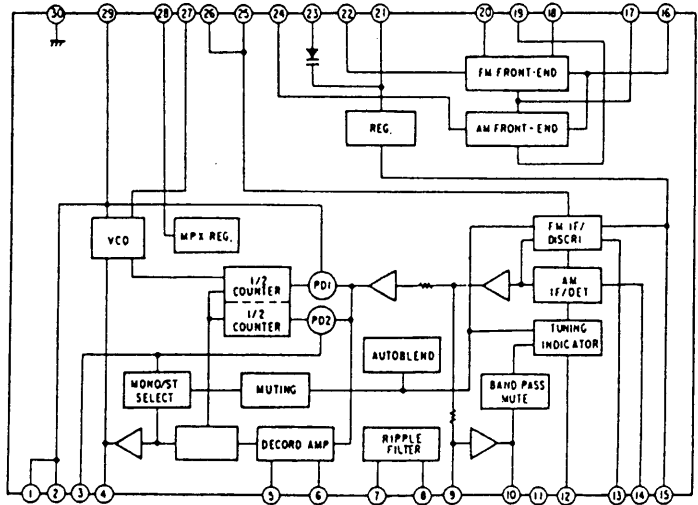
(See page 23)



TO
AUDIO BOARD
CNP302

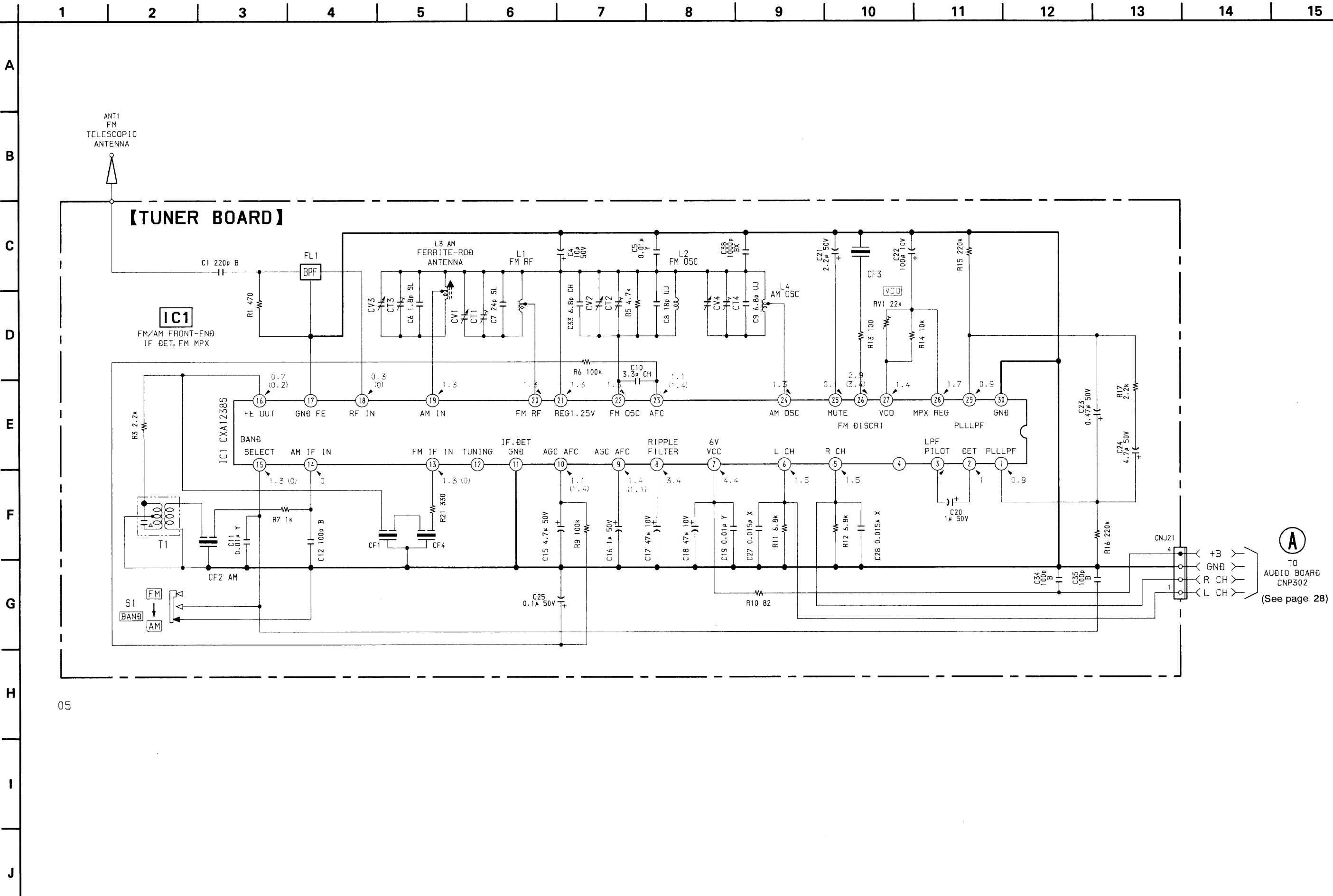
• IC Block Diagram

IC1 CXA1238S



• Semiconductor Location

Ref. No.	Location
IC1	C-2

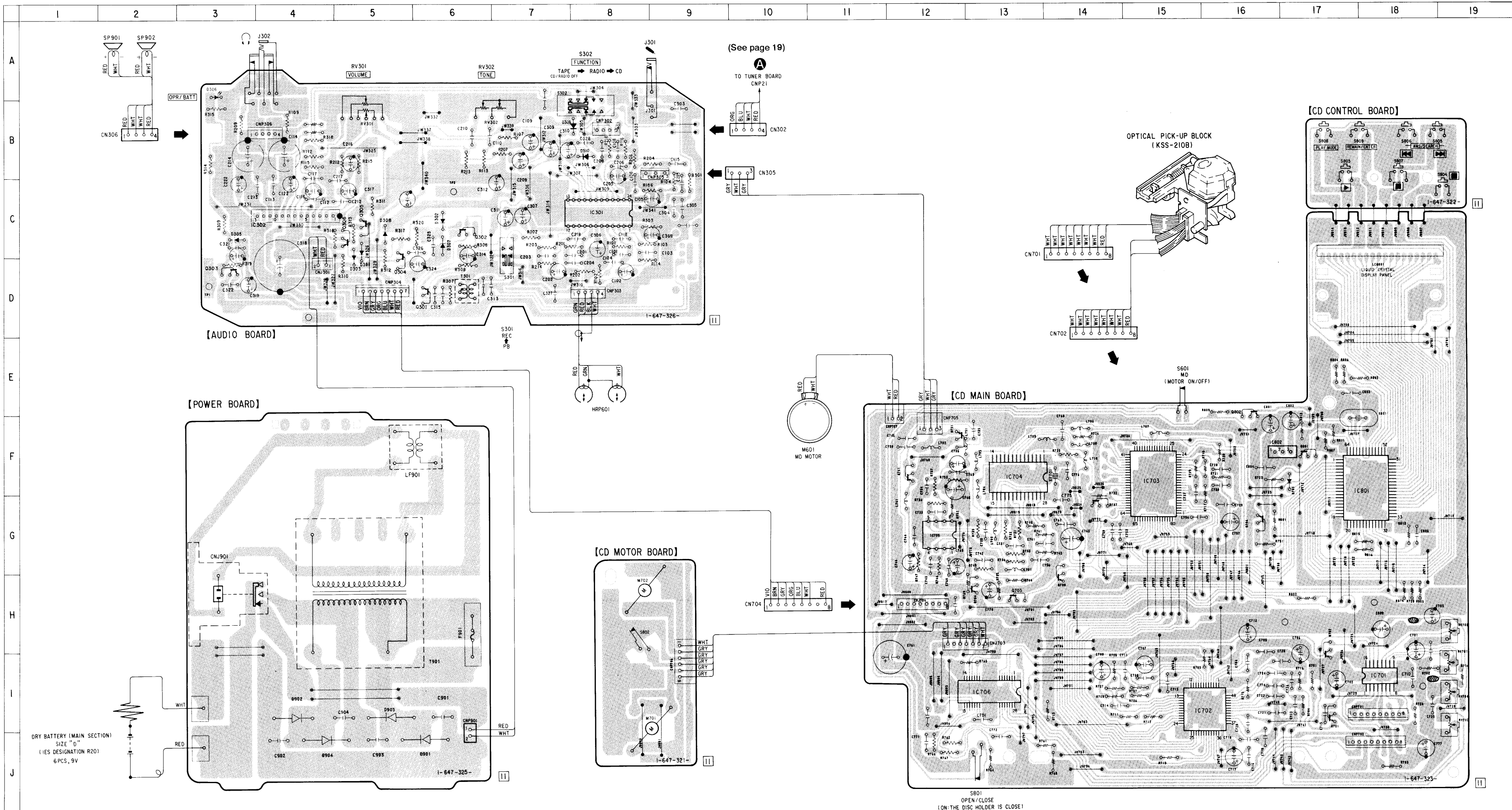


TO
AUDIO BOARD
CNP302
(See page 28)

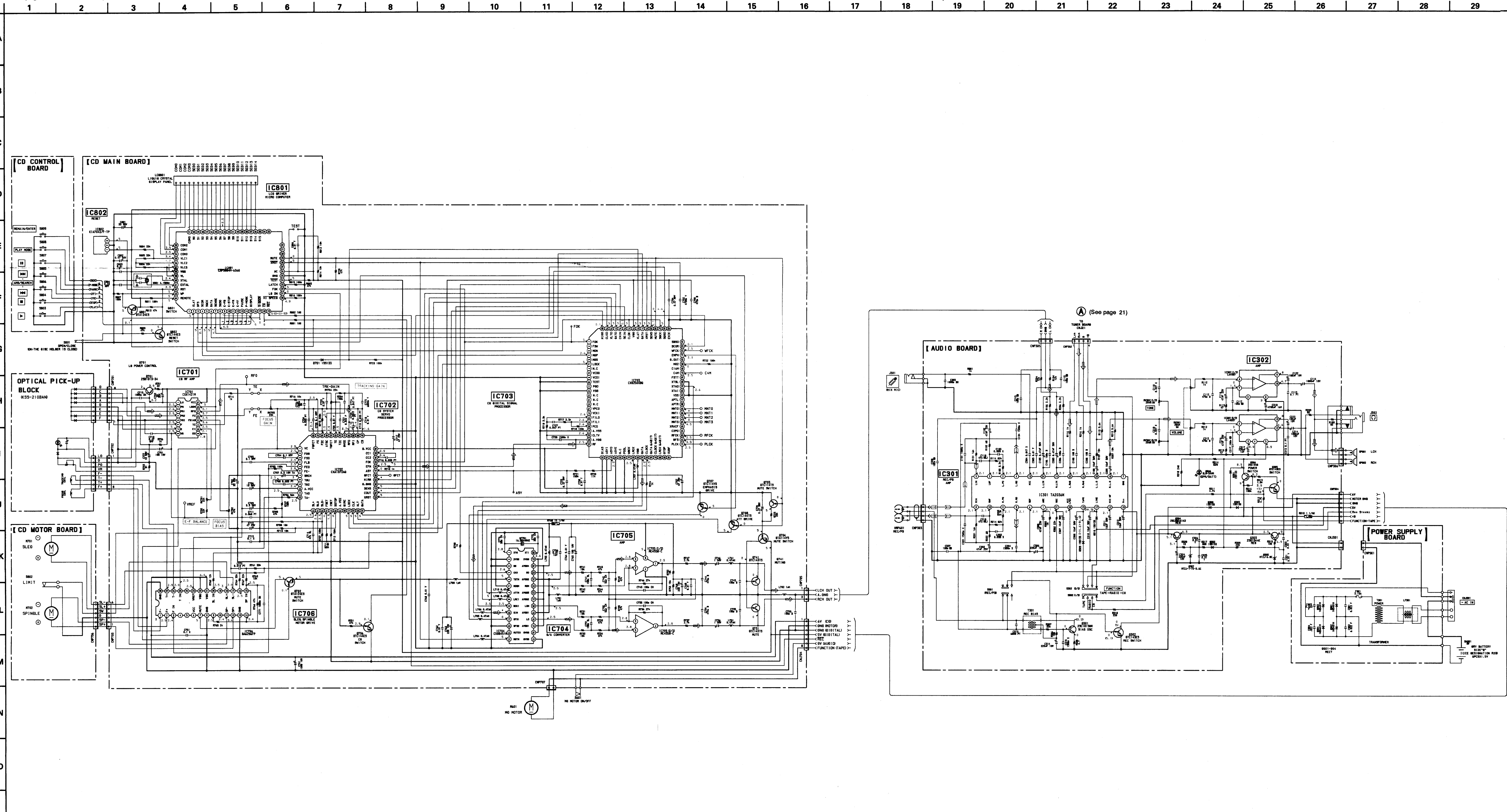
Ref. No.	Location
D301	C-5
D302	C-6
D303	C-5
D305	C-3
D306	A-3
D307	C-6
D308	C-5
D309	B-8
D310	B-8
D701	F-17
D901	J-6
D902	I-4
D903	I-5
D904	J-4
IC301	C-8
IC302	C-4
IC701	I-18
IC702	I-16
IC703	F-15
IC704	F-13
IC705	G-12
IC706	I-13
IC801	F-18
IC802	F-13
Q301	D-6
Q302	C-6
Q303	D-3
Q304	D-5
Q305	C-5
Q306	C-5
Q701	I-17
Q702	I-17
Q703	H-13
Q704	H-13
Q706	G-16
Q707	G-14
Q708	H-14
Q731	F-12
Q741	F-12
Q801	F-17
Q802	F-16

Diagram illustrating the layout of the CD player chassis components:

- POWER board
- CD MOTOR board
- Optical pick-up
- TUNER board
- AUDIO board
- CD CONTROL board
- CD MAIN board



• See page 30 for IC Block Diagrams.



Note on Printed Wiring Board:

- : parts extracted from the component side.
- : indicates side identified with part number.

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- ⚡ : fusible resistor.

Note:

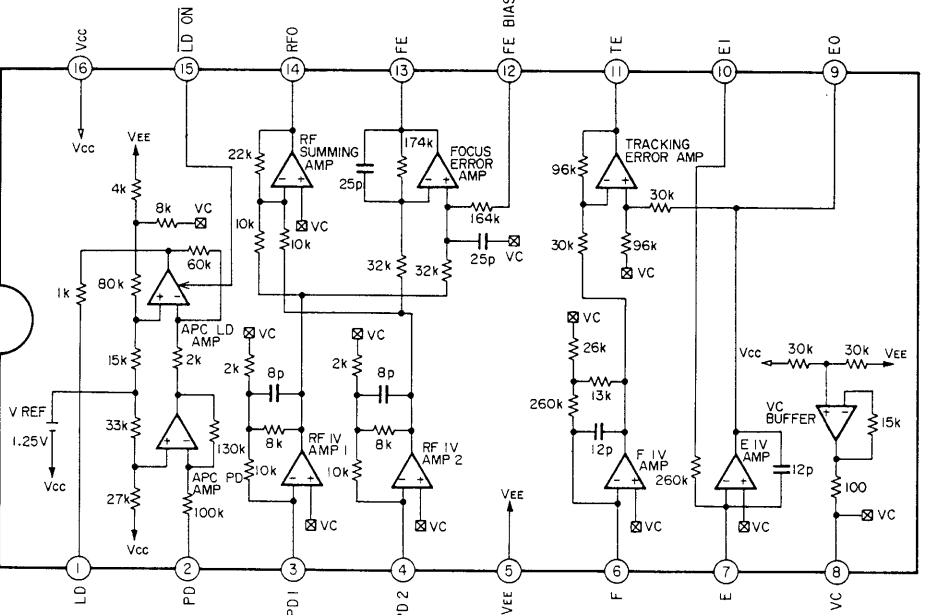
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

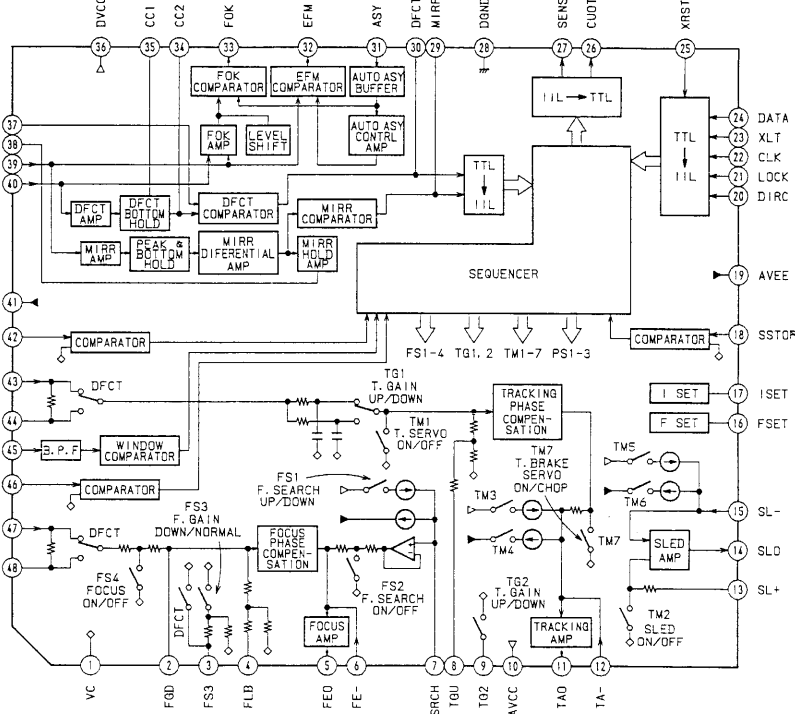
- : panel designation.
- : B + Line.
- : B - Line.
- : adjustment for repair.
- Power voltage is dc 9 V and fed with regulated dc power supply from external power voltage jack.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Tuner Section
 - no mark : Common (FM)
 - () : AM
- CD Main board
 - no mark : (CD) play
- Audio Board
 - no mark : Common
 - () : CD play
 - < : > : Tape PB
 - () : Tape REC
- Voltages are taken with a VOM (10 M Ω /V). Voltage variations may be noted due to normal production tolerances.
- Signal path:
 - FM
 - PB (DECK A)
 - CD
 - REC (DECK A)

• IC Block Diagrams

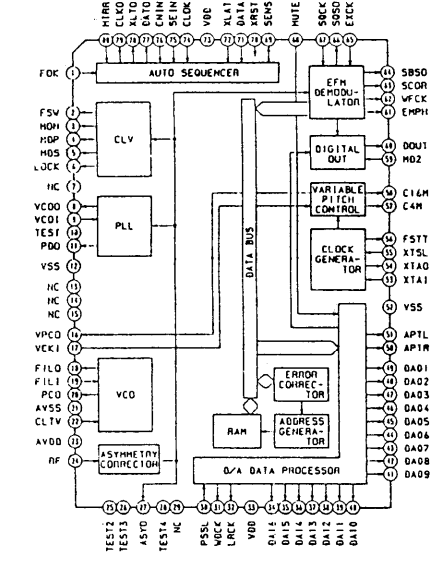
IC701 CXA1421M



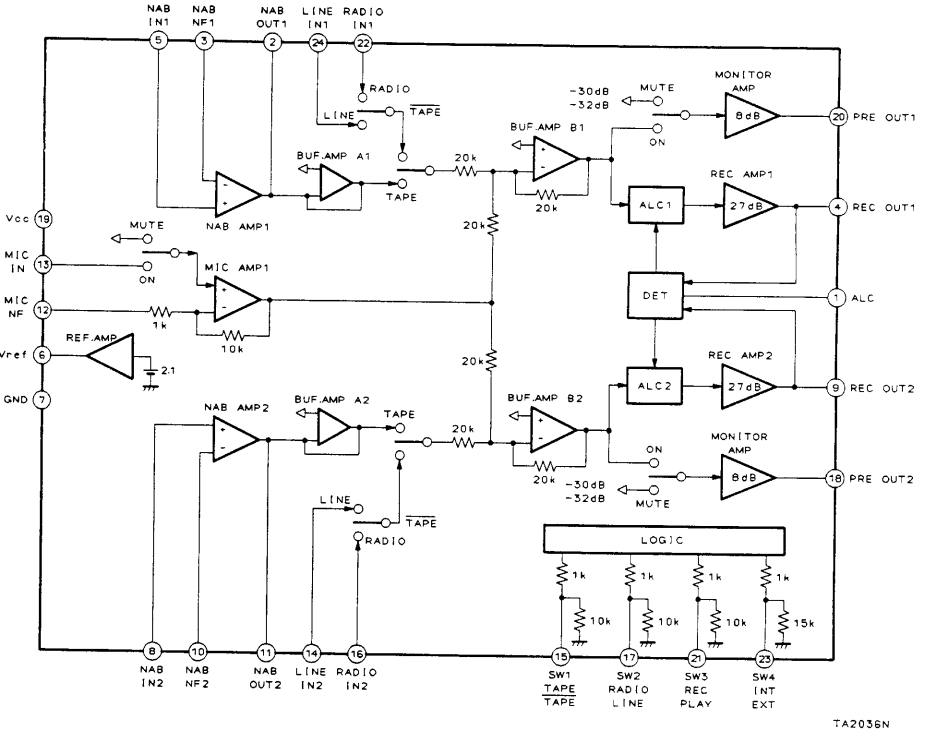
IC702 CXA1372AQ



IC703 CXD2500BQ



IC301 TA2036N



SECTION 8
EXPLODED VIEWS
(MADE IN KOREA MODEL)

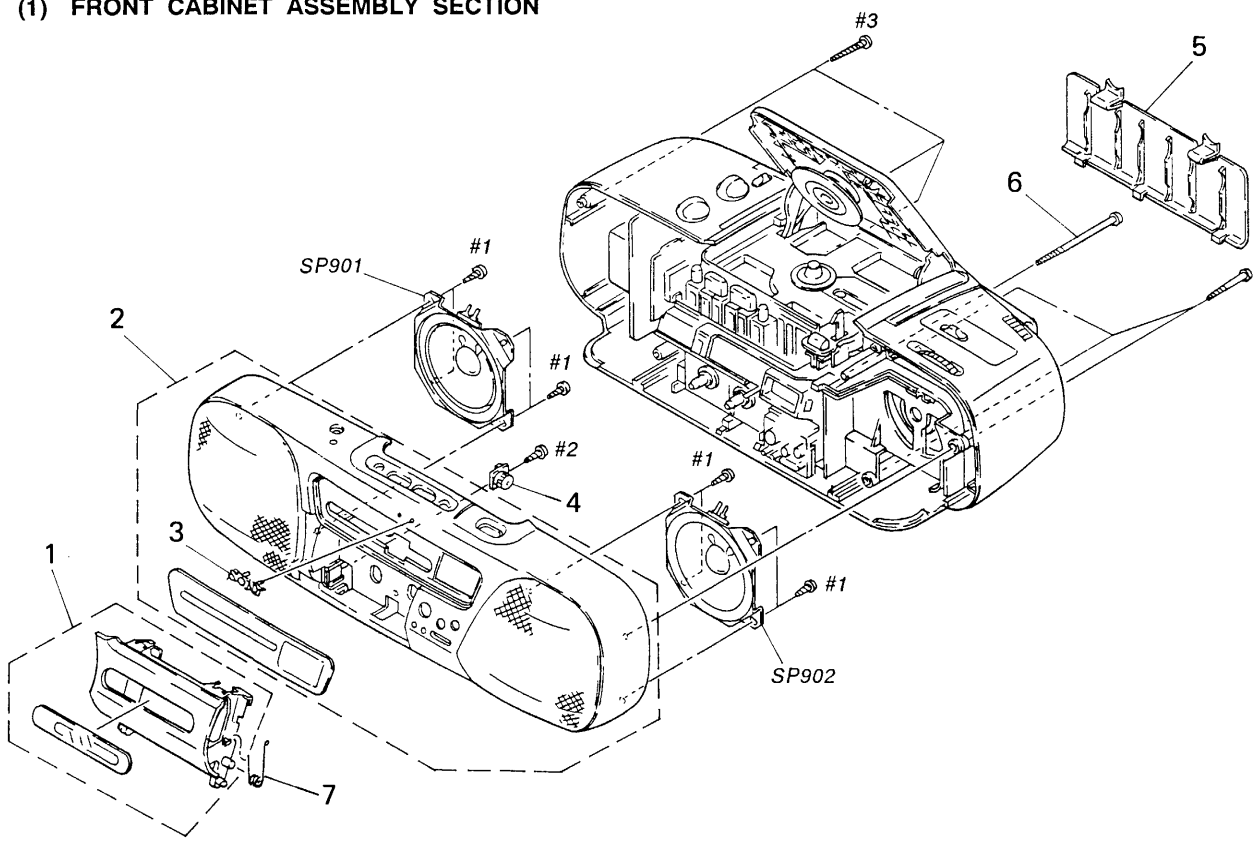
NOTE:

- -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
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.
- Abbreviations
CND : (Canadian Model)

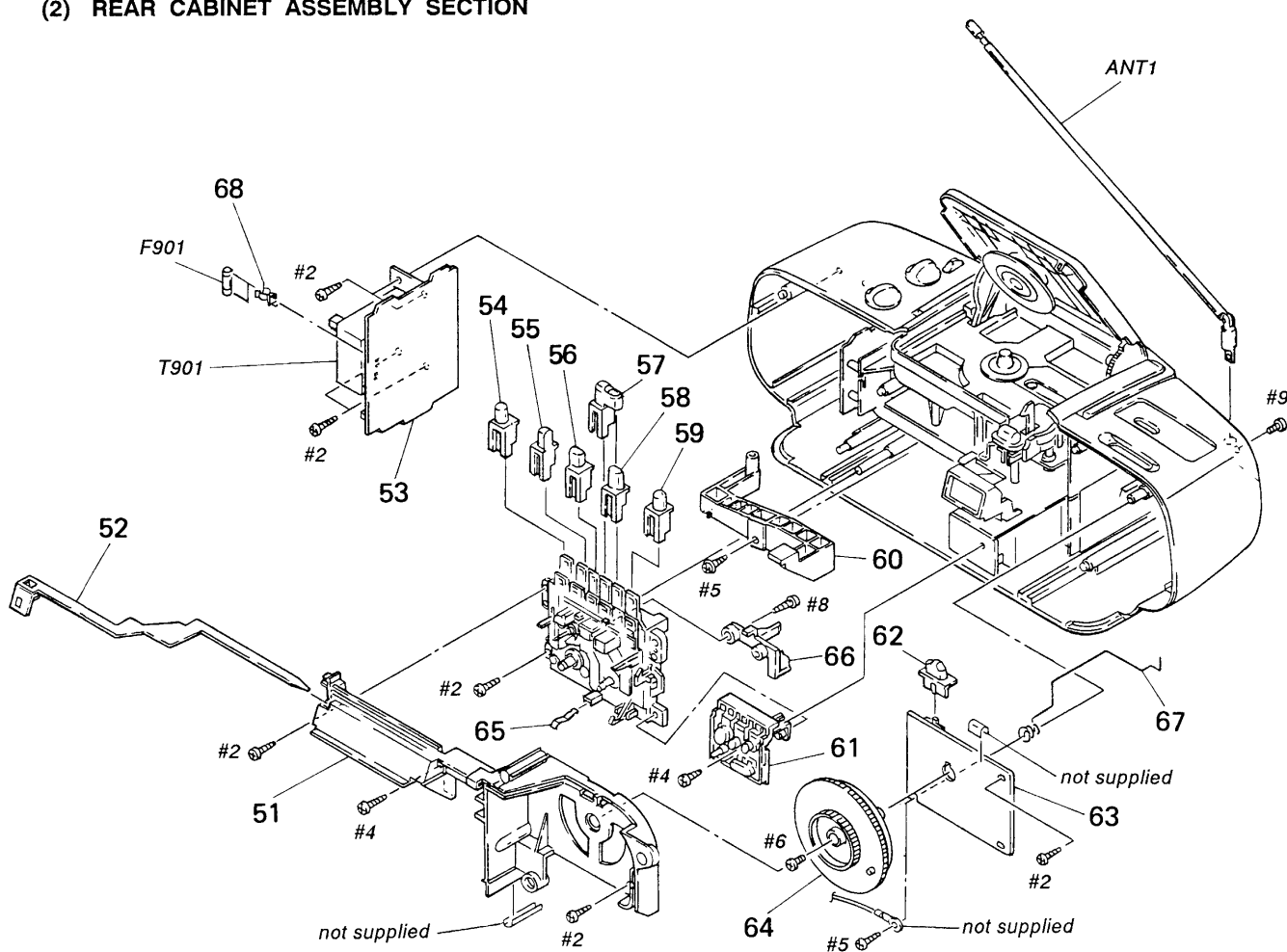
The components identified by mark or dotted line with mark are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ou trait pointillé avec une marque sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

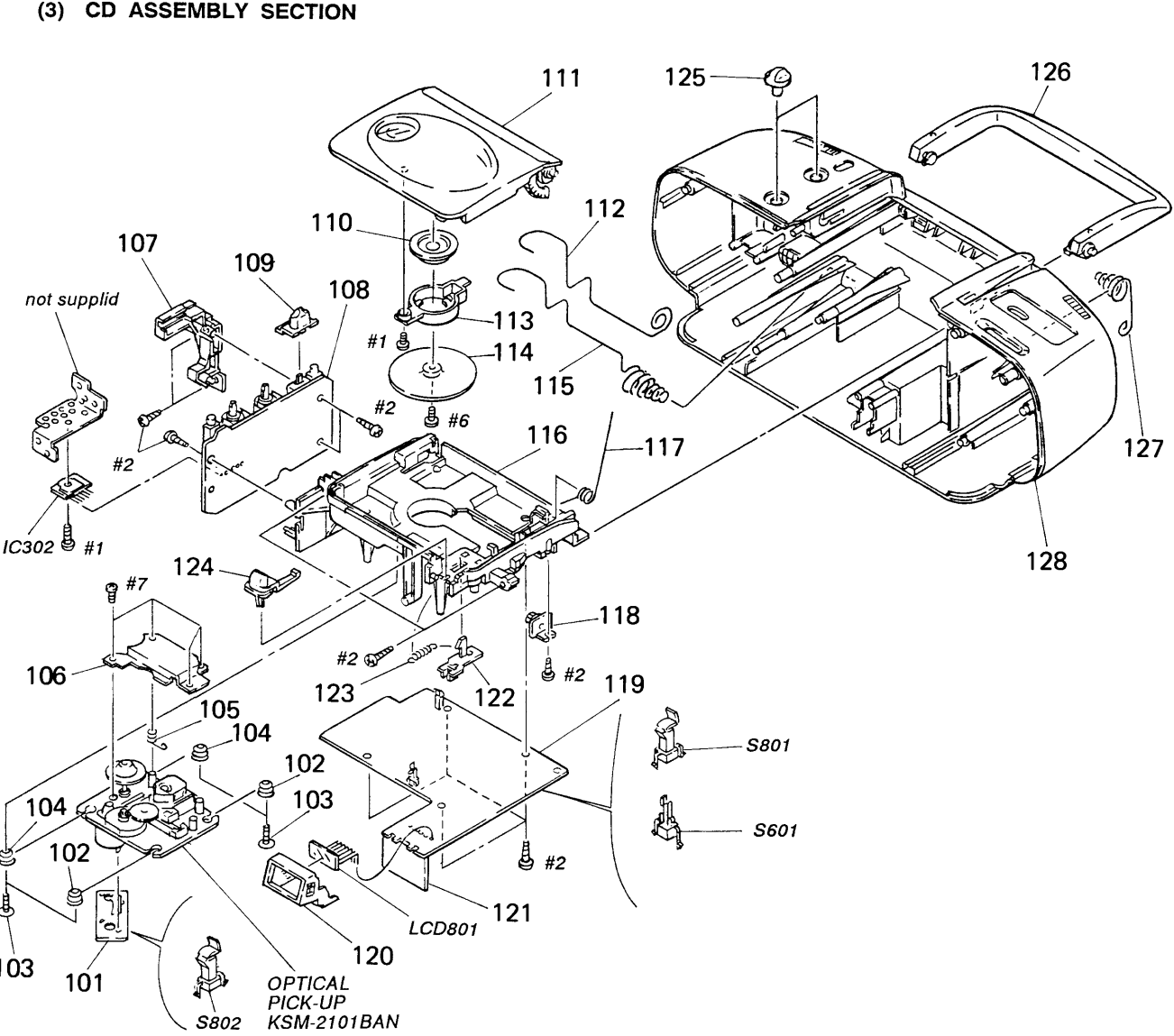
(1) FRONT CABINET ASSEMBLY SECTION



(2) REAR CABINET ASSEMBLY SECTION



(3) CD ASSEMBLY SECTION



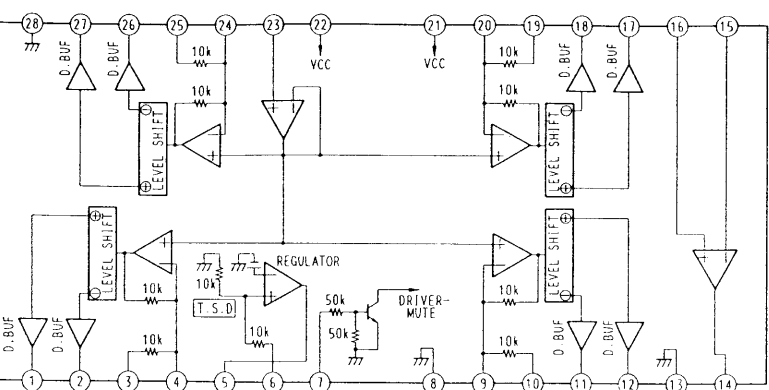
Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
1	X-3367-136-1	HOLDER (CASSETTE) ASSY		6	4-926-715-01	SCREW (3X62), TAPPING	
2	X-3366-977-1	CABINET (FRONT) SUB ASSY		7	3-386-930-01	SPRING, CASSETTE	
3	4-125-334-31	EMBLEM (S-A), SONY		SP901	1-504-237-11	SPEAKER (10CM)	
4	3-351-377-11	DAMPER		SP902	1-504-237-11	SPEAKER (10CM)	
5	3-368-922-01	LID, BATTERY CASE					

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
51	3-386-911-01	CHASSIS (DIAL)		62	3-386-928-01	KNOB (BAND)	
52	3-386-912-01	POINTNER		* 63	A-3264-225-A	TUNER BOARD, COMPLETE	
* 53	1-647-925-11	POWER BOARD		64	3-386-913-01	TU GEAR	
54	3-386-914-01	BUTTON (PAUSE)		65	4-928-857-01	RETAINER, CASSETTE	
55	3-386-915-01	BUTTON (FF)		66	3-386-928-01	LEVER (MD)	
56	3-386-916-01	BUTTON (REW)		67	3-386-933-01	TERMINAL, ANT	
57	3-386-917-01	BUTTON (PLAY)		68	1-533-233-11	HOLDER, FUSE	
58	3-386-918-01	BUTTON (REC)		ANT1	1-501-598-11	ANTENNA, TELESCOPIC	
59	3-386-919-01	BUTTON (STOP)		△F901	1-532-745-11	FUSE 3.15A 125V	
* 60	3-386-920-01	LEVER (REC)		△T901	1-423-550-11	TRANSFORMER, POWER	
61	3-386-926-01	BUTTON (CD)					

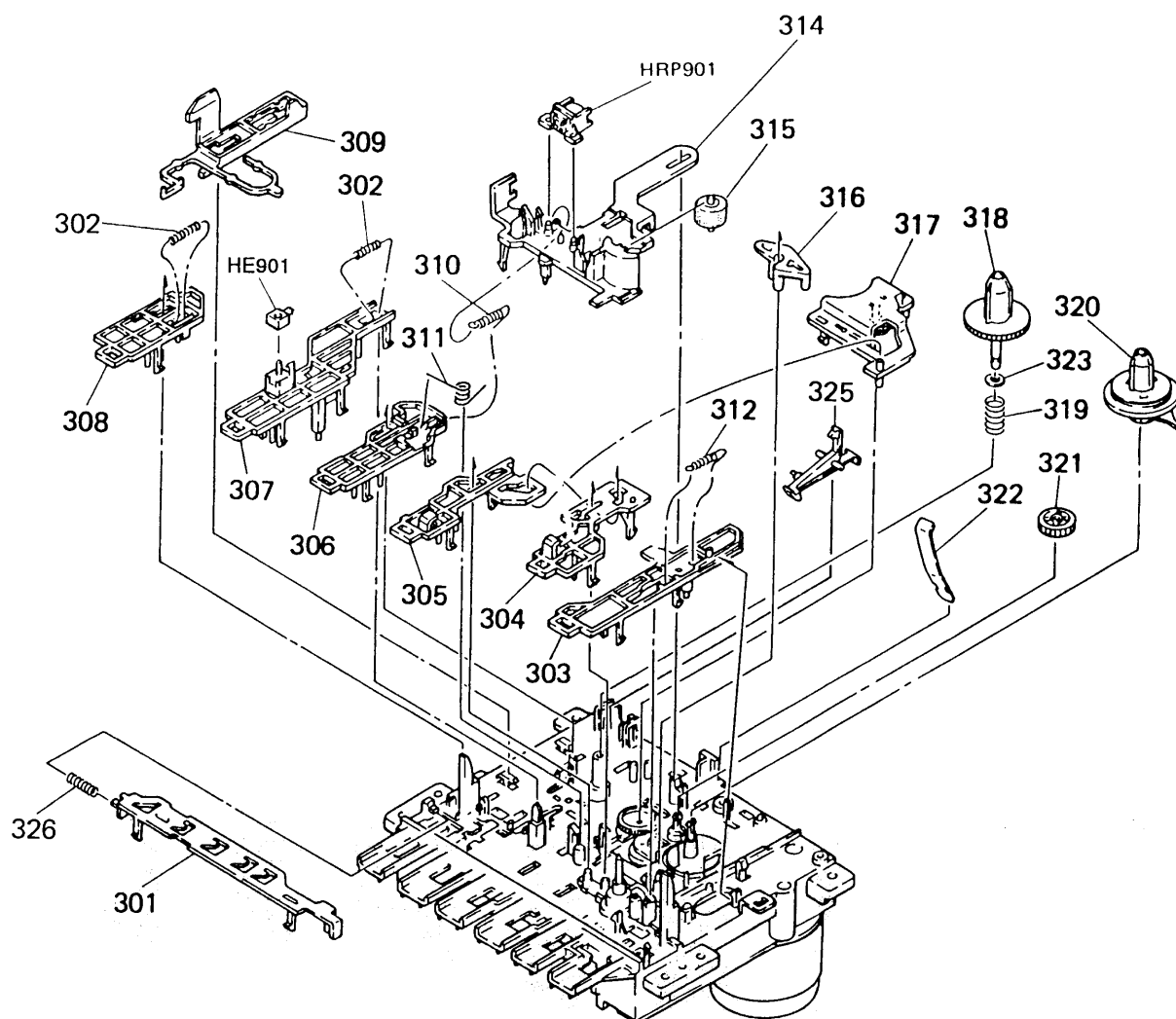
Note:
The components identified by mark or dotted line with mark are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque ou trait pointillé avec une marque sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

IC706 BA6296FP



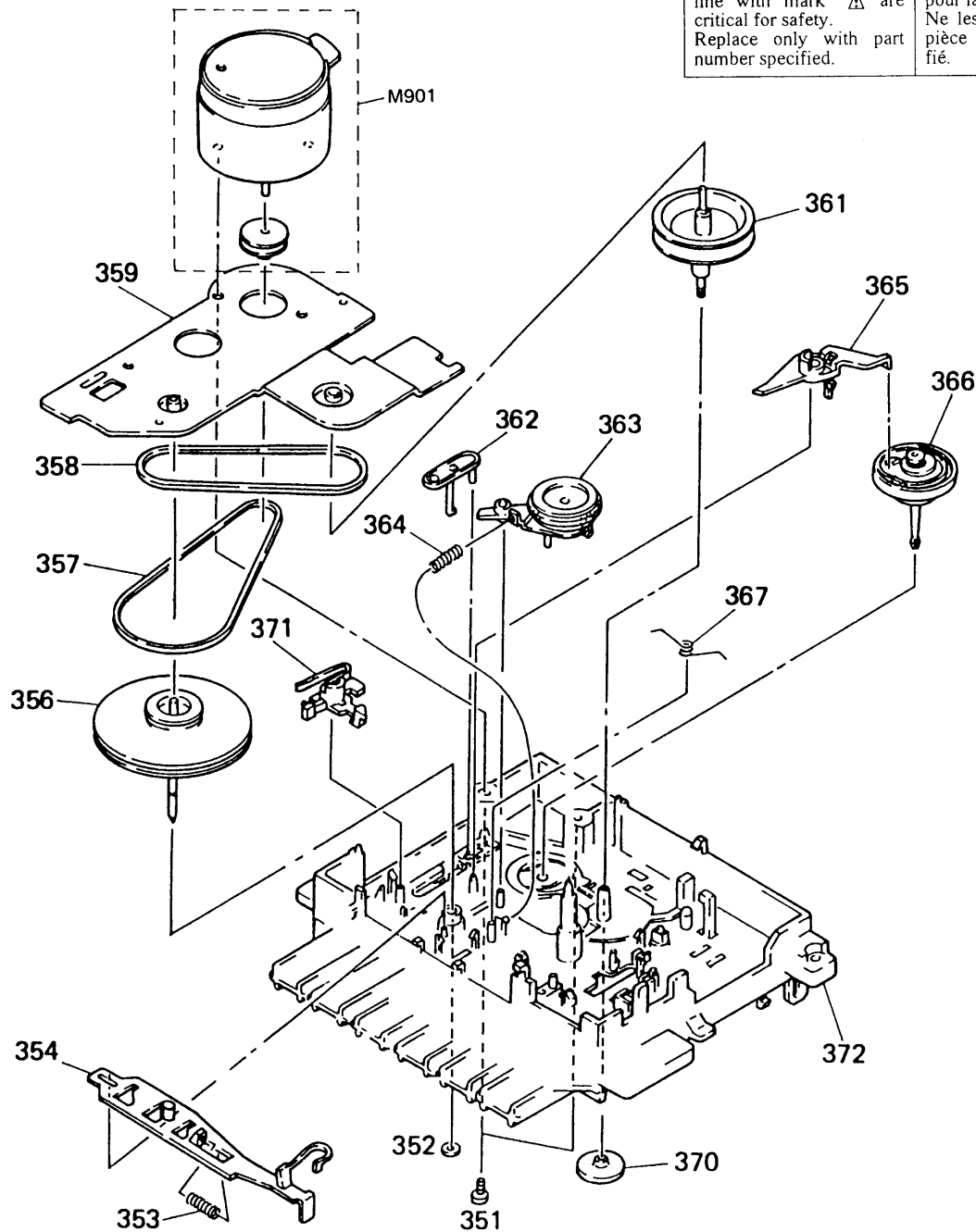
(4) TAPE TRANSPORT MECHANISM-1
(MF-10-64)



Ref. No.	Part No.	Description	Remark
301	4-932-695-11	SLIDER (FR), LOCK	
302	4-932-648-01	SPRING, COMPRESSION	
303	4-928-994-01	LEVER, PAUSE	
304	4-928-993-01	LEVER, FF	
305	4-928-992-01	LEVER, REW	
306	4-928-991-01	LEVER, PLAY	
307	4-934-511-11	LEVER (S), REC	
308	4-928-985-01	LEVER, STOP	
309	4-936-206-01	SLIDER (S), EJECT	
310	4-928-972-01	SPRING, TENSION	
311	4-928-973-01	SPRING	
312	3-313-372-01	SPRING, TENSION	
314	4-932-693-03	DECK (S), HEAD	

Ref. No.	Part No.	Description	Remark
315	4-928-962-01	PINCH ROLLER	
316	4-928-982-01	LEVER (C)	
317	X-4920-347-1	LEVER (S) ASSY, FR	
318	4-928-978-01	GEAR (C), SUPPLY REEL	
319	3-343-381-01	SPRING, COMPRESSION	
320	X-4920-350-3	GEAR (S) ASSY, T REEL	
321	3-343-285-01	GEAR, FF	
322	4-928-957-01	RETAINER, CASSETTE	
323	4-931-795-11	WASHER	
* 325	3-370-187-01	CLAW, ERASING PROTECTION	
326	4-932-656-11	SPRING, COMPRESSION	
HE901	1-543-525-11	HEAD, MAGNETIC (ERASE)	
HRP901	1-543-628-11	HEAD, MAGNETIC (REC/PB)	

(5) TAPE TRANSPORT MECHANISM-2
(MF-10-64)



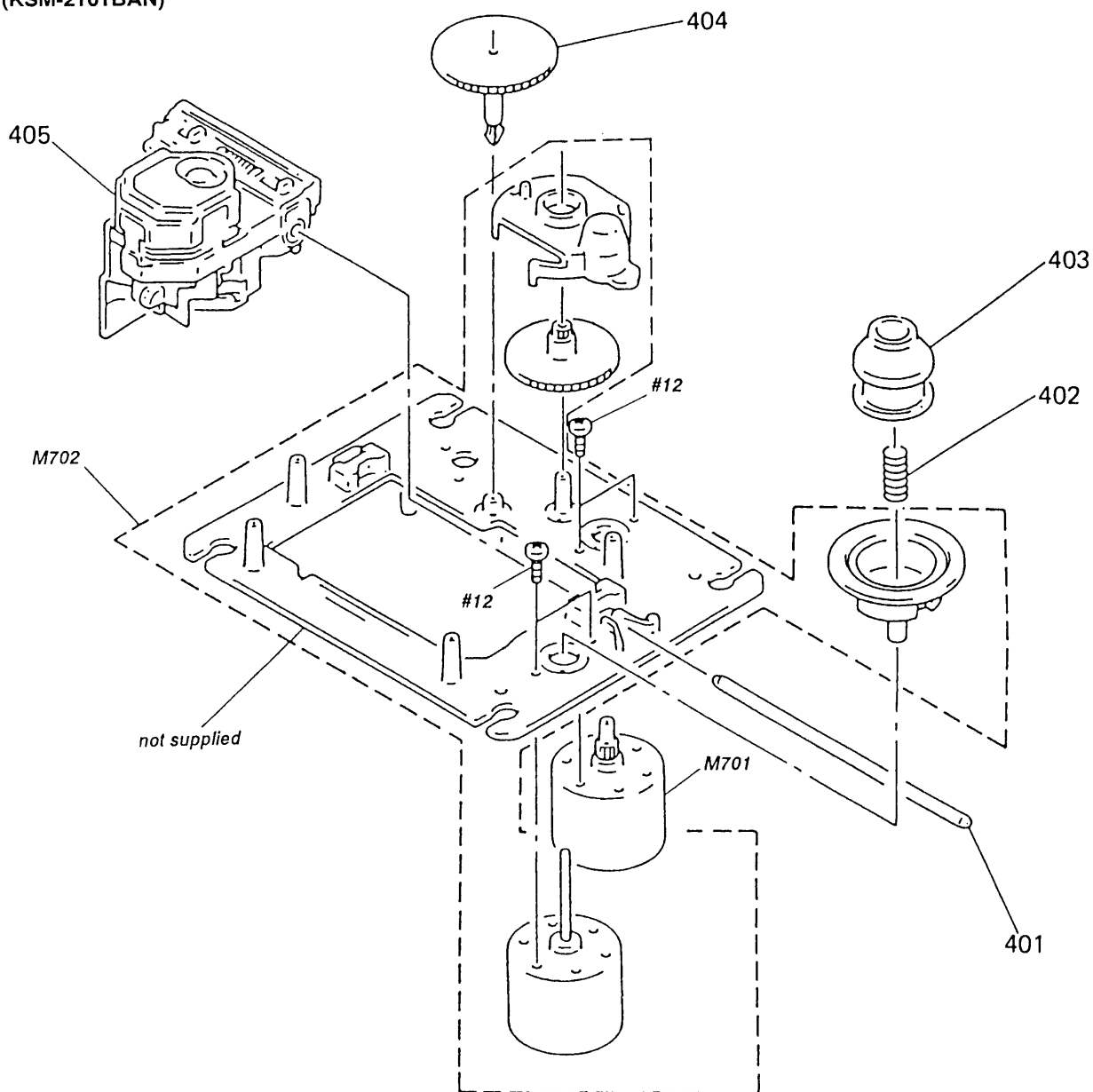
Note:
The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

Note:
Les composants identifiés par une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
352	3-343-358-01	RING, RETAINING	
353	4-931-746-01	SPRING, COMPRESSION	
354	4-928-996-11	LEVER, SW	
356	X-4920-349-1	WHEEL (S) ASSY, CAPSTAN	
357	4-928-951-01	BELT (CAPSTAN)	
358	4-928-974-01	BELT (MIDWAY)	
* 359	X-4918-598-1	PLATE ASSY, GROUND	
361	X-4918-580-1	PULLEY ASSY, FR	
362	4-928-961-01	PLATE, PAUSE LOCK	
363	X-4920-346-2	LEVER (S) ASSY, IDLER	

Ref. No.	Part No.	Description	Remark
364	4-932-655-01	SPRING, COMPRESSION	
365	4-928-986-01	LEVER (S), SHUT-OFF	
366	X-4918-582-1	PLATE ASSY, TAKE-UP REEL	
367	4-928-958-01	SPRING, FR RETURN	
370	4-928-967-01	GEAR (C), MIDWAY	
371	4-928-987-01	LEVER (T), SHUT-OFF	
372	X-4920-348-1	CHASSIS (S) ASSY, MECHANICAL	
Δ 405	8-848-137-11	PICK-UP, OPTICAL KSS-210B	
M901	X-4919-956-1	MOTOR ASSY	

(6) OPTICAL PICK-UP SECTION
(KSM-2101BAN)



Ref. No.	Part No.	Description	Remark
401	4-917-565-01	SHAFT (K), SLED	
402	2-625-191-01	SPRING, COMPRESSION	
403	2-625-186-01	RING (C), CENTER	
404	2-625-188-02	GEAR (A)	

Ref. No.	Part No.	Description	Remark
△405	8-848-137-11	PICK-UP, OPTICAL KSS-210B	
M702	X-2625-133-1	CHASSIS (MB), TT (WITH M702 SPINDLE)	
M701	X-2625-132-1	GEAR ASSY (MB), MOTOR (SLED)	

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

Note:
Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

AUDIO

SECTION 9 ELECTRICAL PARTS LIST (MADE IN KOREA MODEL)

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...: μ A... uPA...: μ PA...

uPB...: μ PB... uPC...: μ PC... uPD...: μ PD...

CAPACITORS

uF: μ F

COILS

uH: μ H

Abbreviations

CND: (Canadian Model)

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

Les composants identifiés par une marque Δ sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
*	A-3264-229-A	AUDIO BOARD, COMPLETE *****	
	3-386-908-01	KNOB (FUNCTION)	
	3-386-924-01	HOLDER (AUDIO PCB)	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
< CAPACITOR >			
C101	1-161-374-11	CERAMIC 0.0015uF	20% 50V
C102	1-124-477-11	ELECT 47uF	20% 25V
C103	1-161-020-11	CERAMIC 0.039uF	10% 16V
C104	1-161-374-11	CERAMIC 0.0015uF	20% 50V
C105	1-124-902-00	ELECT 0.47uF	20% 50V
C106	1-162-282-31	CERAMIC 100PF	10% 50V
C108	1-162-282-31	CERAMIC 100PF	10% 50V
C109	1-124-907-11	ELECT 10uF	20% 50V
C110	1-162-844-11	CERAMIC 0.027uF	10% 16V
C112	1-162-290-31	CERAMIC 470PF	10% 50V
C113	1-130-495-00	MYLAR 0.1uF	5% 50V
C114	1-124-473-11	ELECT 1000uF	20% 10V
C115	1-162-282-31	CERAMIC 100PF	10% 50V
C116	1-124-477-11	ELECT 47uF	20% 25V
C117	1-162-282-31	CERAMIC 100PF	10% 50V
C118	1-162-215-31	CERAMIC 47PF	5% 50V
C122	1-124-443-00	ELECT 100uF	20% 10V
C201	1-161-374-11	CERAMIC 0.0015uF	20% 50V
C202	1-124-477-11	ELECT 47uF	20% 25V
C203	1-161-020-11	CERAMIC 0.039uF	10% 16V
C204	1-161-374-11	CERAMIC 0.0015uF	20% 50V
C205	1-124-902-00	ELECT 0.47uF	20% 50V
C206	1-162-282-31	CERAMIC 100PF	10% 50V
C208	1-162-282-31	CERAMIC 100PF	10% 50V
C209	1-124-907-11	ELECT 10uF	20% 50V
C210	1-162-844-11	CERAMIC 0.027uF	10% 16V
C212	1-162-290-31	CERAMIC 470PF	10% 50V
C213	1-130-495-00	MYLAR 0.1uF	5% 50V

Ref. No.	Part No.	Description	Remark
C214	1-124-473-11	ELECT 1000uF	20% 10V
C215	1-162-282-31	CERAMIC 100PF	10% 50V
C216	1-124-477-11	ELECT 47uF	20% 25V
C217	1-162-282-31	CERAMIC 100PF	10% 50V
C218	1-162-215-31	CERAMIC 47PF	5% 50V
C222	1-124-443-00	ELECT 100uF	20% 10V
C303	1-162-294-31	CERAMIC 0.001uF	10% 50V
C304	1-162-847-11	CERAMIC 0.047uF	10% 16V
C305	1-161-379-00	CERAMIC 0.01uF	20% 25V
C306	1-126-176-11	ELECT 220uF	20% 10V
C307	1-124-477-11	ELECT 47uF	20% 25V
C308	1-124-477-11	ELECT 47uF	20% 25V
C309	1-124-907-11	ELECT 10uF	20% 50V
C310	1-124-902-00	ELECT 0.47uF	20% 50V
C311	1-124-907-11	ELECT 10uF	20% 50V
C312	1-124-907-11	ELECT 10uF	20% 50V
C313	1-130-481-00	MYLAR 0.0068uF	5% 50V
C314	1-126-176-11	ELECT 220uF	20% 10V
C315	1-161-374-11	CERAMIC 0.0015uF	20% 50V
C317	1-124-120-11	ELECT 220uF	20% 25V
C318	1-124-898-11	ELECT 4700uF	20% 16V
C321	1-161-379-00	CERAMIC 0.01uF	20% 25V
C322	1-161-379-00	CERAMIC 0.01uF	20% 25V
C324	1-126-176-11	ELECT 220uF	20% 10V
C325	1-161-379-00	CERAMIC 0.01uF	20% 25V
C326	1-161-379-00	CERAMIC 0.01uF	20% 25V
C327	1-162-282-31	CERAMIC 100PF	10% 50V
C328	1-162-282-31	CERAMIC 100PF	10% 50V

< CONNECTOR >

- * CNP302 1-506-986-11 PIN, CONNECTOR (PC BOARD) 4P
- CNP303 1-506-483-21 PIN, CONNECTOR 4P
- * CNP304 1-506-989-11 PIN, CONNECTOR (PC BOARD) 7P
- CNP305 1-506-468-11 PIN, CONNECTOR 3P
- * CNP306 1-506-986-11 PIN, CONNECTOR (PC BOARD) 4P

AUDIO

CD CONTROL

Ref. No.	Part No.	Description	Remark
< DIODE >			
D301	8-719-911-19	DIODE 1SS119	
D302	8-719-911-19	DIODE 1SS119	
D303	8-719-911-19	DIODE 1SS119	
D305	8-719-109-97	DIODE RD6. 8ESB2	
D306	8-719-918-76	LED GL-3PR9	
D307	8-719-921-48	DIODE MTZJ-5. 6C	
D308	8-719-911-19	DIODE 1SS119	
D309	8-719-911-19	DIODE 1SS119	
D310	8-719-911-19	DIODE 1SS119	
< IC >			
IC301	8-759-164-45	IC TA2036N	
IC302	8-759-820-22	IC LA4597	
< JACK >			
J301	1-563-330-11	JACK (MIX MIC)	
J302	1-568-267-11	JACK (PHONES)	
< TRANSISTOR >			
Q301	8-729-281-53	TRANSISTOR 2SC1815-GR	
Q302	8-729-921-65	TRANSISTOR DTC143ES	
Q303	8-729-905-67	TRANSISTOR 2SD1944-K	
Q304	8-729-011-92	TRANSISTOR 2SC2001TP-K1K2	
Q305	8-729-921-65	TRANSISTOR DTC143ES	
Q306	8-729-119-76	TRANSISTOR 2SA1175-HFE	
< RESISTOR >			
R101	1-247-860-11	CARBON 16K 5% 1/4W	
R102	1-249-403-11	CARBON 68 5% 1/4W F	
R103	1-249-423-11	CARBON 3.3K 5% 1/4W F	
R104	1-249-430-11	CARBON 12K 5% 1/4W	
R106	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R107	1-249-429-11	CARBON 10K 5% 1/4W	
R109	1-249-404-00	CARBON 82 5% 1/4W	
R112	1-249-417-11	CARBON 1K 5% 1/4W F	
R113	1-249-426-11	CARBON 5.6K 5% 1/4W	
R114	1-249-440-11	CARBON 82K 5% 1/4W	
R115	1-249-401-11	CARBON 47 5% 1/4W F	
R116	1-249-417-11	CARBON 1K 5% 1/4W F	
R201	1-247-860-11	CARBON 16K 5% 1/4W	
R202	1-249-403-11	CARBON 68 5% 1/4W F	
R203	1-249-423-11	CARBON 3.3K 5% 1/4W F	
R204	1-249-430-11	CARBON 12K 5% 1/4W	
R206	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R207	1-249-429-11	CARBON 10K 5% 1/4W	
R209	1-249-404-00	CARBON 82 5% 1/4W	
R212	1-249-417-11	CARBON 1K 5% 1/4W F	

Ref. No.	Part No.	Description	Remark
R213	1-249-426-11	CARBON 5.6K 5% 1/4W	
R214	1-249-440-11	CARBON 82K 5% 1/4W	
R215	1-249-401-11	CARBON 47 5% 1/4W F	
R216	1-249-417-11	CARBON 1K 5% 1/4W F	
R301	1-249-417-11	CARBON 1K 5% 1/4W F	
R302	1-249-433-11	CARBON 22K 5% 1/4W	
R303	1-247-903-91	CARBON 1M 5% 1/4W	
R306	1-249-408-11	CARBON 180 5% 1/4W F	
R307	1-249-435-11	CARBON 33K 5% 1/4W	
R308	1-249-389-11	CARBON 4.7 5% 1/4W F	
R309	1-249-409-11	CARBON 220 5% 1/4W F	
△R310	1-219-149-11	FUSIBLE 1 5% 1/4W F	
R311	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R312	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R313	1-249-420-11	CARBON 1.8K 5% 1/4W F	
R314	1-249-416-11	CARBON 820 5% 1/4W F	
R315	1-247-816-11	CARBON 240 5% 1/4W	
R316	1-249-441-11	CARBON 100K 5% 1/4W	
R317	1-249-411-11	CARBON 330 5% 1/4W	
R318	1-249-409-11	CARBON 220 5% 1/4W F	
R319	1-249-405-11	CARBON 100 5% 1/4W F	
R320	1-249-393-11	CARBON 10 5% 1/4W F	
< VARIABLE RESISTOR >			
RV301	1-241-746-11	RES. VAR. CARBON 20K/20K (VOLUME)	
RV302	1-241-745-11	RES. VAR. CARBON 20K/20K (TONE)	
< SWITCH >			
S301	1-571-043-11	SWITCH, PUSH (1 KEY) (REC/PB)	
S302	1-571-307-11	SWITCH, SLIDE (FUNCTION)	
< TRANSFORMER >			
T301	1-433-268-00	TRANSFORMER, BIAS OSCILLATOR	

*	1-647-322-11	CD CONTROL BOARD	

< SWITCH >			
S803	1-572-199-11	SWITCH, KEY BOARD (▶)	
S804	1-572-199-11	SWITCH, KEY BOARD (■)	
S805	1-572-199-11	SWITCH, KEY BOARD (AMS/SEARCH:▶▶)	
S806	1-572-199-11	SWITCH, KEY BOARD (AMS/SEARCH:◀◀)	
S807	1-572-199-11	SWITCH, KEY BOARD ()	
S808	1-572-199-11	SWITCH, KEY BOARD (PLAY MODE)	
S809	1-572-199-11	SWITCH, KEY BOARD (REMAIN/ENTER)	

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

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

CD CONTROL MOTOR

CD MAIN

Ref.No.	Part No.	Description	Remark	
*	1-647-321-11	CD CONTROL MOTOR BOARD *****		
		< CONNECTOR >		
	CNP706 1-506-485-11	PIN, CONNECTOR 6P		
		< SWITCH >		
	S802 1-571-936-11	SWITCH, LEAF *****		
*	A-3275-839-A	CD MAIN BOARD, COMPLETE *****		
*	1-569-193-11	TERMINAL, SOLDERLESS		
	3-386-927-01	HOLDER (LCD)		
		< CAPACITOR >		
C701	1-124-443-00	ELECT 100uF	20%	10V
C702	1-124-482-11	ELECT 33uF	20%	35V
C703	1-124-482-11	ELECT 33uF	20%	35V
C704	1-136-165-00	FILM 0.1uF	5%	50V
C705	1-136-165-00	FILM 0.1uF	5%	50V
C706	1-124-907-11	ELECT 10uF	20%	50V
C707	1-131-368-00	TANTALUM 3.3uF	10%	16V
C708	1-130-489-00	MYLAR 0.033uF	5%	50V
C709	1-123-382-00	ELECT 3.3uF	20%	100V
C710	1-136-173-00	FILM 0.47uF	5%	50V
C711	1-130-493-00	MYLAR 0.068uF	5%	50V
C712	1-124-477-11	ELECT 47uF	20%	25V
C713	1-162-851-11	CERAMIC 0.1uF		16V
C714	1-162-215-31	CERAMIC 47PF	5%	50V
C715	1-162-294-31	CERAMIC 0.001uF	10%	50V
C716	1-130-489-00	MYLAR 0.033uF	5%	50V
C717	1-124-477-11	ELECT 47uF	20%	25V
C718	1-161-379-00	CERAMIC 0.01uF	20%	25V
C719	1-130-489-00	MYLAR 0.033uF	5%	50V
C720	1-130-475-00	MYLAR 0.0022uF	5%	50V
C721	1-161-494-00	CERAMIC 0.022uF		25V
C722	1-161-379-00	CERAMIC 0.01uF	20%	25V
C723	1-161-379-00	CERAMIC 0.01uF	20%	25V
C724	1-130-489-00	MYLAR 0.033uF	5%	50V
C725	1-136-165-00	FILM 0.1uF	5%	50V
C726	1-162-294-31	CERAMIC 0.001uF	10%	50V
C727	1-130-491-00	MYLAR 0.047uF	5%	50V
C728	1-161-374-11	CERAMIC 0.0015uF	20%	50V
C729	1-136-173-00	FILM 0.47uF	5%	50V
C730	1-161-379-00	CERAMIC 0.01uF	20%	25V
C731	1-101-361-00	CERAMIC 150PF	5%	50V
C732	1-101-884-00	CERAMIC 56PF	5%	50V
C733	1-102-973-00	CERAMIC 100PF	5%	50V
C734	1-162-290-31	CERAMIC 470PF	10%	50V
C735	1-162-282-31	CERAMIC 100PF	10%	50V

Ref.No.	Part No.	Description	Remark	
C736	1-124-903-11	ELECT 1uF	20%	50V
C741	1-101-361-00	CERAMIC 150PF	5%	50V
C742	1-101-884-00	CERAMIC 56PF	5%	50V
C743	1-102-973-00	CERAMIC 100PF	5%	50V
C744	1-162-290-31	CERAMIC 470PF	10%	50V
C745	1-162-282-31	CERAMIC 100PF	10%	50V
C746	1-124-903-11	ELECT 1uF	20%	50V
C751	1-162-851-11	CERAMIC 0.1uF		16V
C752	1-161-377-00	CERAMIC 0.0047uF	30%	16V
C754	1-136-173-00	FILM 0.47uF	5%	50V
C755	1-162-282-31	CERAMIC 100PF	10%	50V
C756	1-161-379-00	CERAMIC 0.01uF	20%	25V
C757	1-124-477-11	ELECT 47uF	20%	25V
C759	1-162-290-31	CERAMIC 470PF	10%	50V
C760	1-161-379-00	CERAMIC 0.01uF	20%	25V
C761	1-124-473-11	ELECT 1000uF	20%	10V
C762	1-161-379-00	CERAMIC 0.01uF	20%	25V
C763	1-126-176-11	ELECT 220uF	20%	10V
C764	1-161-379-00	CERAMIC 0.01uF	20%	25V
C765	1-124-443-00	ELECT 100uF	20%	10V
C768	1-126-176-11	ELECT 220uF	20%	10V
C769	1-161-379-00	CERAMIC 0.01uF	20%	25V
C770	1-124-902-00	ELECT 0.47uF	20%	50V
C771	1-162-294-31	CERAMIC 0.001uF	10%	50V
C772	1-130-484-00	MYLAR 0.012uF	5%	50V
C773	1-161-329-00	CERAMIC 0.0068uF	30%	16V
C774	1-130-491-00	MYLAR 0.047uF	5%	50V
C775	1-102-962-00	CERAMIC 30PF	5%	50V
C776	1-102-962-00	CERAMIC 30PF	5%	50V
C777	1-124-907-11	ELECT 10uF	20%	50V
C801	1-124-482-11	ELECT 33uF	20%	35V
C802	1-124-902-00	ELECT 0.47uF	20%	50V
C803	1-161-379-00	CERAMIC 0.01uF	20%	25V
C804	1-136-169-00	FILM 0.22uF	5%	50V
C806	1-161-379-00	CERAMIC 0.01uF	20%	25V
		< JACK >		
*	CNJ304 1-569-200-11	HOUSING, CONNECTOR 7P		
*	CNJ305 1-569-196-11	HOUSING, CONNECTOR 3P		
*	CNJ703 1-569-199-11	HOUSING, CONNECTOR 6P		
*	CNJ704 1-569-200-11	HOUSING, CONNECTOR 7P		
*	CNJ705 1-569-196-11	HOUSING, CONNECTOR 3P		
*	CNJ706 1-569-199-11	HOUSING, CONNECTOR 6P		
		< CONNECTOR >		
*	CNP701 1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P		
*	CNP702 1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P		
*	CNP705 1-564-013-11	PIN, CONNECTOR 3P		
*	CNP707 1-506-998-11	PIN, CONNECTOR (PC BOARD) 2P		
		< DIODE >		
D701	8-719-911-19	DIODE 1SS119		

Ref. No.	Part No.	Description	Remark
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< IC >

IC701	8-752-039-03	IC CXA1421M	
IC702	8-752-053-73	IC CXA1372AQ	
IC703	8-752-352-93	IC CXD2500BQ	
IC704	8-759-093-98	IC CXD8451M	
IC705	1-807-547-11	IC MC4558-C	

IC706	8-759-518-59	IC BA6296FP	
IC801	8-752-830-87	IC CXP5084H-636Q	
IC802	8-759-971-11	IC PST529D	

< COIL >

L701	1-410-316-11	INDUCTOR 1uH	
L702	1-410-316-11	INDUCTOR 1uH	
L703	1-410-314-11	INDUCTOR 0.47uH	
L704	1-410-314-11	INDUCTOR 0.47uH	
L705	1-410-314-11	INDUCTOR 0.47uH	

L706	1-410-314-11	INDUCTOR 0.47uH	
L707	1-410-314-11	INDUCTOR 0.47uH	
L708	1-410-314-11	INDUCTOR 0.47uH	
L709	1-410-316-11	INDUCTOR 1uH	
L710	1-410-314-11	INDUCTOR 0.47uH	

L741	1-410-314-11	INDUCTOR 0.47uH	
L751	1-410-314-11	INDUCTOR 0.47uH	

< LIQUID CRYSTAL DISPLAY >

LCD801	1-810-037-11	DISPLAY PANEL, LIQUID CRYSTAL	
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< TRANSISTOR >

Q701	8-729-801-84	TRANSISTOR 2SB1013-4	
Q702	8-729-900-63	TRANSISTOR DTA124ES	
Q703	8-729-904-39	TRANSISTOR DTC114TS	
Q704	8-729-902-80	TRANSISTOR DTA114YS	
Q706	8-729-900-89	TRANSISTOR DTC144ES	

Q707	8-729-904-36	TRANSISTOR DTC114YS	
Q708	8-729-900-89	TRANSISTOR DTC144ES	
Q731	8-729-900-74	TRANSISTOR DTC143TS	
Q741	8-729-900-74	TRANSISTOR DTC143TS	
Q801	8-729-900-63	TRANSISTOR DTA124ES	

Q802	8-729-900-89	TRANSISTOR DTC144ES	
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< RESISTOR >

R701	1-249-397-11	CARBON	22	5%	1/4W	F
R702	1-249-433-11	CARBON	22K	5%	1/4W	
R703	1-247-806-11	CARBON	91	5%	1/4W	
R704	1-247-883-00	CARBON	150K	5%	1/4W	
R705	1-249-441-11	CARBON	100K	5%	1/4W	

R706	1-249-438-11	CARBON	56K	5%	1/4W	
R707	1-247-885-00	CARBON	180K	5%	1/4W	
R708	1-249-432-11	CARBON	18K	5%	1/4W	
R709	1-249-437-11	CARBON	47K	5%	1/4W	

Ref. No.	Part No.	Description	Remark
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R710	1-249-417-11	CARBON	1K 5% 1/4W F
R711	1-247-896-11	CARBON	510K 5% 1/4W
R712	1-247-883-00	CARBON	150K 5% 1/4W
R713	1-249-429-11	CARBON	10K 5% 1/4W
R714	1-249-417-11	CARBON	1K 5% 1/4W F
R715	1-247-887-00	CARBON	220K 5% 1/4W

R716	1-249-429-11	CARBON	10K 5% 1/4W
R717	1-249-423-11	CARBON	3.3K 5% 1/4W F
R718	1-247-881-00	CARBON	120K 5% 1/4W
R719	1-249-423-11	CARBON	3.3K 5% 1/4W F
R720	1-247-856-00	CARBON	11K 5% 1/4W

R721	1-249-441-11	CARBON	100K 5% 1/4W
R722	1-249-441-11	CARBON	100K 5% 1/4W
R723	1-249-441-11	CARBON	100K 5% 1/4W
R724	1-249-417-11	CARBON	1K 5% 1/4W F
R725	1-249-433-11	CARBON	22K 5% 1/4W

R726	1-249-417-11	CARBON	1K 5% 1/4W F
R727	1-249-441-11	CARBON	100K 5% 1/4W
R728	1-249-437-11	CARBON	47K 5% 1/4W
R730	1-249-417-11	CARBON	1K 5% 1/4W F
R731	1-249-429-11	CARBON	10K 5% 1/4W

R732	1-249-429-11	CARBON	10K 5% 1/4W
R733	1-249-437-11	CARBON	47K 5% 1/4W
R734	1-249-437-11	CARBON	47K 5% 1/4W
R735	1-249-437-11	CARBON	47K 5% 1/4W
R736	1-249-434-11	CARBON	27K 5% 1/4W

R737	1-249-422-11	CARBON	2.7K 5% 1/4W F
R741	1-249-429-11	CARBON	10K 5% 1/4W
R742	1-249-429-11	CARBON	10K 5% 1/4W
R743	1-249-437-11	CARBON	47K 5% 1/4W
R744	1-249-437-11	CARBON	47K 5% 1/4W

R745	1-249-437-11	CARBON	47K 5% 1/4W
R746	1-249-434-11	CARBON	27K 5% 1/4W
R747	1-249-422-11	CARBON	2.7K 5% 1/4W F
R751	1-249-437-11	CARBON	47K 5% 1/4W
R752	1-249-429-11	CARBON	10K 5% 1/4W

R753	1-249-431-11	CARBON	15K 5% 1/4W
R761	1-249-435-11	CARBON	33K 5% 1/4W
R762	1-249-430-11	CARBON	12K 5% 1/4W
R763	1-249-429-11	CARBON	10K 5% 1/4W
R764	1-249-435-11	CARBON	33K 5% 1/4W

R765	1-247-838-00	CARBON	2K 5% 1/4W
R766	1-249-437-11	CARBON	47K 5% 1/4W
R767	1-249-433-11	CARBON	22K 5% 1/4W
△R769	1-212-861-11	FUSIBLE	15 5% 1/4W F
R801	1-249-405-11	CARBON	100 5% 1/4W F

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
--	---

CD MAIN

POWER

TUNER

Ref. No.	Part No.	Description	Remark
R802	1-249-405-11	CARBON 100 5% 1/4W F	
R803	1-249-437-11	CARBON 47K 5% 1/4W	
R804	1-249-435-11	CARBON 33K 5% 1/4W	
R805	1-249-435-11	CARBON 33K 5% 1/4W	
R806	1-249-435-11	CARBON 33K 5% 1/4W	
R807	1-249-441-11	CARBON 100K 5% 1/4W	
R809	1-249-437-11	CARBON 47K 5% 1/4W	
R811	1-249-441-11	CARBON 100K 5% 1/4W	
R815	1-249-441-11	CARBON 100K 5% 1/4W	
R816	1-249-441-11	CARBON 100K 5% 1/4W	
< VARIABLE RESISTOR >			
RV701	1-230-497-11	RES, ADJ, CARBON 22K (E-F BALANCE)	
RV702	1-237-288-11	RES, ADJ, CARBON 47K (FOCUS BIAS)	
RV703	1-230-497-11	RES, ADJ, CARBON 22K	
RV704	1-230-497-11	RES, ADJ, CARBON 22K	
< SWITCH >			
S601	1-571-890-11	SWITCH, LEAF (MD MOTOR ON/OFF)	
S801	1-571-936-11	SWITCH, LEAF (OPEN/CLOSE)	
< VIBRATOR >			
X801	1-567-775-11	VIBRATOR, CERAMIC 4.19MHz	
< VIBRATOR >			
XF701	1-579-345-11	VIBRATOR, CERAMIC 16.9344MHz	

*	1-647-325-11	POWER BOARD	

*	1-564-831-11	CONTACT, CONNECTOR	
< FUSE >			
△F901	1-532-745-11	FUSE 3.15A 125V	
	1-533-233-11	HOLDER, FUSE	
< CAPACITOR >			
C901	1-101-005-00	CERAMIC 22000PF 50V	
C902	1-101-005-00	CERAMIC 22000PF 50V	
C903	1-101-005-00	CERAMIC 22000PF 50V	
C904	1-101-005-00	CERAMIC 22000PF 50V	
< JACK >			
△CNJ901	1-540-009-11	INLET, AC	
* CNJ901	1-562-735-11	HOUSING, CONNECTOR 2P	
< CONNECTOR >			
* CNP901	1-506-998-11	PIN, CONNECTOR (PC BOARD) 2P	

Ref. No.	Part No.	Description	Remark
< DIODE >			
D901	8-719-902-17	DIODE U15G	
D902	8-719-902-17	DIODE U15G	
D903	8-719-902-17	DIODE U15G	
D904	8-719-902-17	DIODE U15G	
< LINE FILTER >			
△LF901	1-424-150-11	TRANSFORMER, LINE FILTER	
< TRANSFORMER >			
△T901	1-423-550-11	TRANSFORMER, POWER	

*	A-3264-225-A	TUNER BOARD, COMPLETE	

	3-386-913-01	KNOB (TUNING)	
	3-386-929-01	KNOB (BAND)	
	7-621-775-20	SCREW +B 2. 6X5	
< CAPACITOR >			
C1	1-163-001-11	CERAMIC CHIP 220PF 10% 50V	
C3	1-163-059-00	CERAMIC CHIP 0.01uF 10% 50V	
C4	1-124-907-11	ELECT 10uF 20% 50V	
C5	1-163-059-00	CERAMIC CHIP 0.01uF 10% 50V	
C6	1-163-084-00	CERAMIC CHIP 1.5PF 50V	
C7	1-163-102-00	CERAMIC CHIP 24PF 5% 50V	
C8	1-102-953-00	CERAMIC 18PF 5% 50V	
C9	1-163-090-00	CERAMIC CHIP 7PF 50V	
C10	1-163-220-11	CERAMIC CHIP 3PF 0.25PF 50V	
C11	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
C12	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C15	1-124-927-11	ELECT 4.7uF 20% 100V	
C16	1-124-903-11	ELECT 1uF 20% 50V	
C17	1-124-126-00	ELECT 47uF 20% 10V	
C18	1-124-126-00	ELECT 47uF 20% 10V	
C19	1-163-059-00	CERAMIC CHIP 0.01uF 10% 50V	
C20	1-124-903-11	ELECT 1uF 20% 50V	
C21	1-124-925-11	ELECT 2.2uF 20% 100V	
C22	1-124-443-00	ELECT 100uF 20% 10V	
C23	1-124-902-00	ELECT 0.47uF 20% 50V	
C24	1-124-927-11	ELECT 4.7uF 20% 100V	
C25	1-124-463-00	ELECT 0.1uF 20% 50V	
C27	1-161-053-00	CERAMIC 0.015uF 10% 50V	
C28	1-161-053-00	CERAMIC 0.015uF 10% 50V	
C33	1-163-224-11	CERAMIC CHIP 7PF 0.25PF 50V	
C34	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C35	1-163-181-00	CERAMIC CHIP 100PF 5% 50V	

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

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

TUNER

Ref. No.	Part No.	Description	Remark
C38	1-163-205-00	CERAMIC CHIP 0.001uF	5% 50V
C61	1-124-902-00	ELECT 0.47uF	20% 50V
C62	1-124-902-00	ELECT 0.47uF	20% 50V

< FILTER >

CF1	1-577-599-81	FILTER, CERAMIC
CF2	1-239-249-11	ENCAPSULATED COMPONENT
CF3	1-577-599-81	FILTER, CERAMIC
CF4	1-577-599-81	FILTER, CERAMIC

< JACK >

* CNJ21 1-506-986-11 PIN, CONNECTOR (PC BOARD) 4P

< TRIMMER >

CT1-4 } CV1-4 }	1-151-696-11	CAP, VAR
--------------------	--------------	----------

< FILTER >

FL1	1-236-022-11	FILTER, BAND PASS
-----	--------------	-------------------

< IC >

IC1	8-752-050-20	IC CXA1238S
-----	--------------	-------------

< JUMPER RESISTOR >

JR2	1-216-296-00	METAL CHIP 0	5%	1/8W
JR3	1-216-296-00	METAL CHIP 0	5%	1/8W
JR8	1-216-296-00	METAL CHIP 0	5%	1/8W
JR12	1-216-296-00	METAL CHIP 0	5%	1/8W
JR14	1-216-296-00	METAL CHIP 0	5%	1/8W
JR15	1-216-296-00	METAL CHIP 0	5%	1/8W
JR17	1-216-296-00	METAL CHIP 0	5%	1/8W
JR18	1-216-296-00	METAL CHIP 0	5%	1/8W
JR19	1-216-296-00	METAL CHIP 0	5%	1/8W

< COIL >

L1	1-428-777-11	COIL, AIR-CORE
L2	1-460-336-11	COIL (WITH CORE)
L3	1-402-416-11	ANTENNA, FERRITE-ROD (MW)
L4	1-406-474-11	COIL (OSC)

< RESISTOR >

R1	1-216-041-00	METAL CHIP 470	5%	1/10W
R3	1-216-206-00	METAL GLAZE 2.2K	5%	1/8W
R5	1-216-065-00	METAL CHIP 4.7K	5%	1/10W
R6	1-216-246-00	METAL GLAZE 100K	5%	1/8W
R7	1-216-049-00	METAL CHIP 1K	5%	1/10W
R9	1-216-097-00	METAL CHIP 100K	5%	1/10W
R10	1-216-172-00	METAL CHIP 82	5%	1/8W
R11	1-216-218-00	METAL GLAZE 6.8K	5%	1/8W
R12	1-216-218-00	METAL GLAZE 6.8K	5%	1/8W
R13	1-216-174-00	METAL GLAZE 100	5%	1/8W

Ref. No.	Part No.	Description	Remark
R14	1-216-073-00	METAL CHIP 10K	5% 1/10W
R15	1-216-105-00	METAL CHIP 220K	5% 1/10W
R16	1-216-105-00	METAL CHIP 220K	5% 1/10W
R17	1-216-057-00	METAL CHIP 2.2K	5% 1/10W
R21	1-216-186-00	METAL GLAZE 330	5% 1/8W

< VARIABLE RESISTOR >

RV1	1-238-601-11	RES, ADJ, CARBON 22K (FM VCO)
-----	--------------	-------------------------------

< SWITCH >

S1	1-571-547-11	SWITCH, SLIDE (BAND)
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MISCELLANEOUS

110	1-452-531-11	MAGNET
△405	8-848-137-11	PICK-UP, OPTICAL KSS-210B
ANT1	1-501-598-11	ANTENNA, TELESCOPIC
HE901	1-543-525-11	HEAD, MAGNETIC (ERASE)
HRP901	1-543-628-11	HEAD, MAGNETIC (REC/PB)

M901	X-4919-956-1	MOTOR ASSY
SP901	1-504-237-11	SPEAKER (10CM)
SP902	1-504-237-11	SPEAKER (10CM)

ACCESSORIES & PACKING MATERIALS

△	1-696-064-21	CORD, POWER (POLARIZED) (US)
△	1-696-442-21	CORD, POWER (POLARIZED) (CND)
*	3-389-236-01	CUSHION (L)
*	3-389-237-01	CUSHION (R)
*	3-389-238-01	INDIVIDUAL CARTON
	3-756-465-61	MANUAL, INSTRUCTION (ENGLISH)
	3-756-465-71	MANUAL, INSTRUCTION (FRENCH) (CND)

HARDWARE LIST

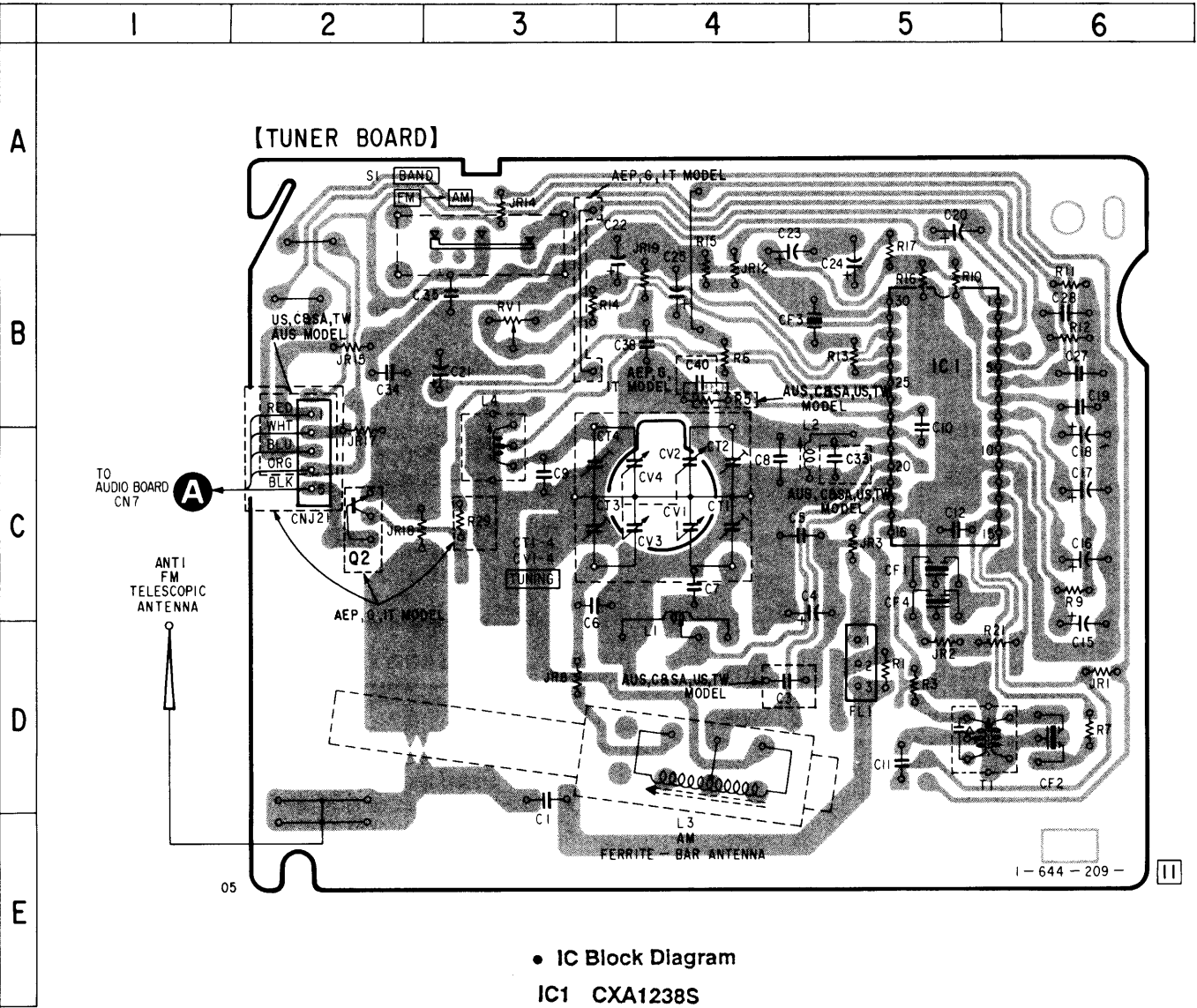
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S
#3	7-685-651-79	SCREW +BVTP 3X20 TYPE2
#4	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S
#5	7-685-903-31	SCREW +PTPHW 3X10 (TYPE2)
#6	7-621-772-00	SCREW +B 2X3
#7	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT
#8	7-685-132-19	SCREW +P 2.6X5 TYPE2 NON-SLIT
#9	7-682-548-09	SCREW +B 3X8
#10	7-621-775-20	SCREW +B 2.6X5

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

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 10
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS
(MADE IN MALAYSIA MODEL)

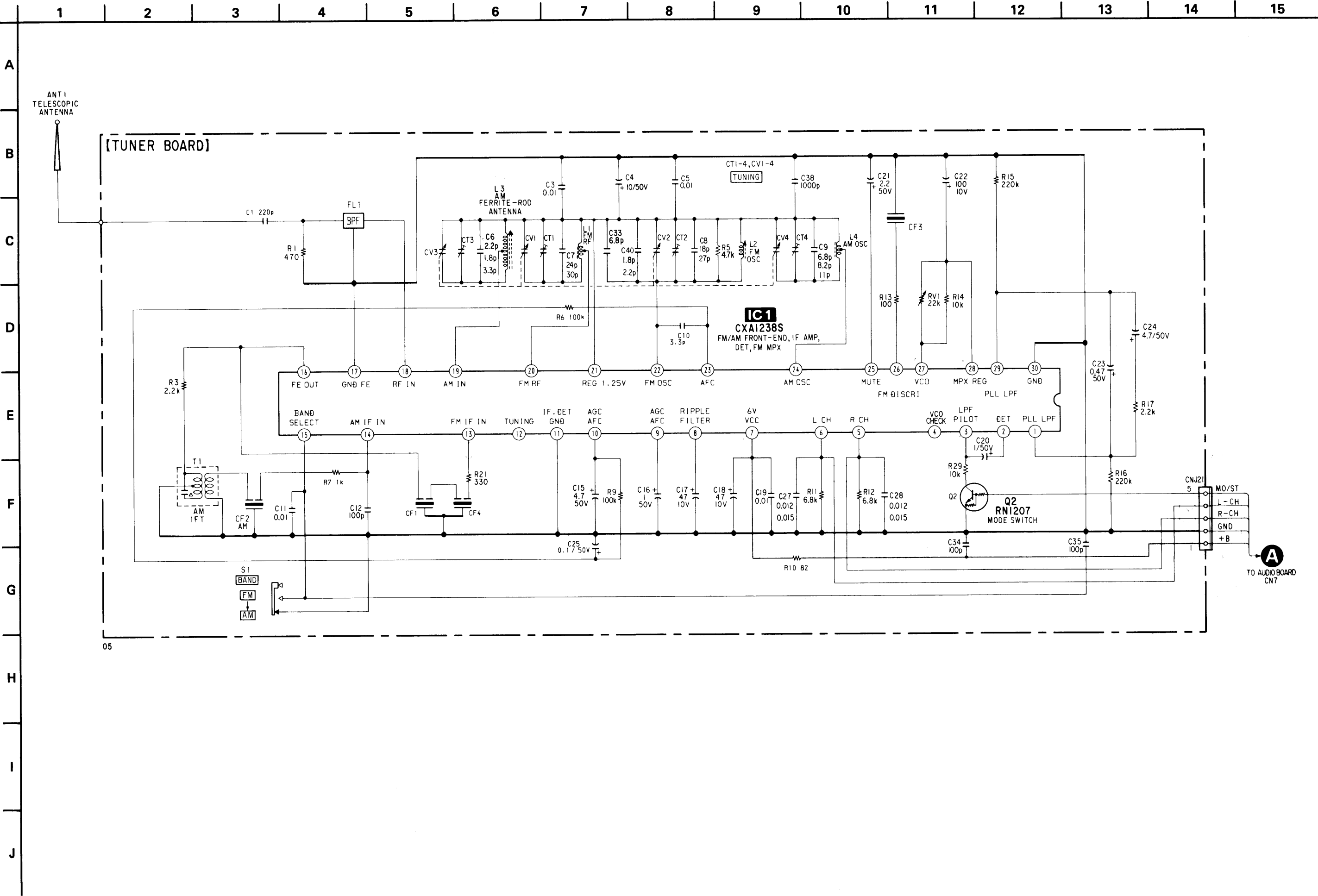
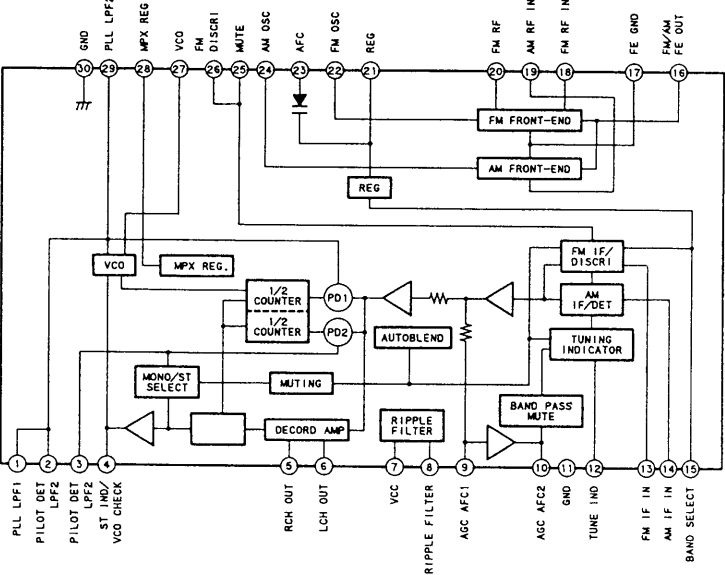
10-1. CFD-10 TUNER SECTION • See page 53 for notes and page 58 to 59 for Semiconductor Lead Layouts.



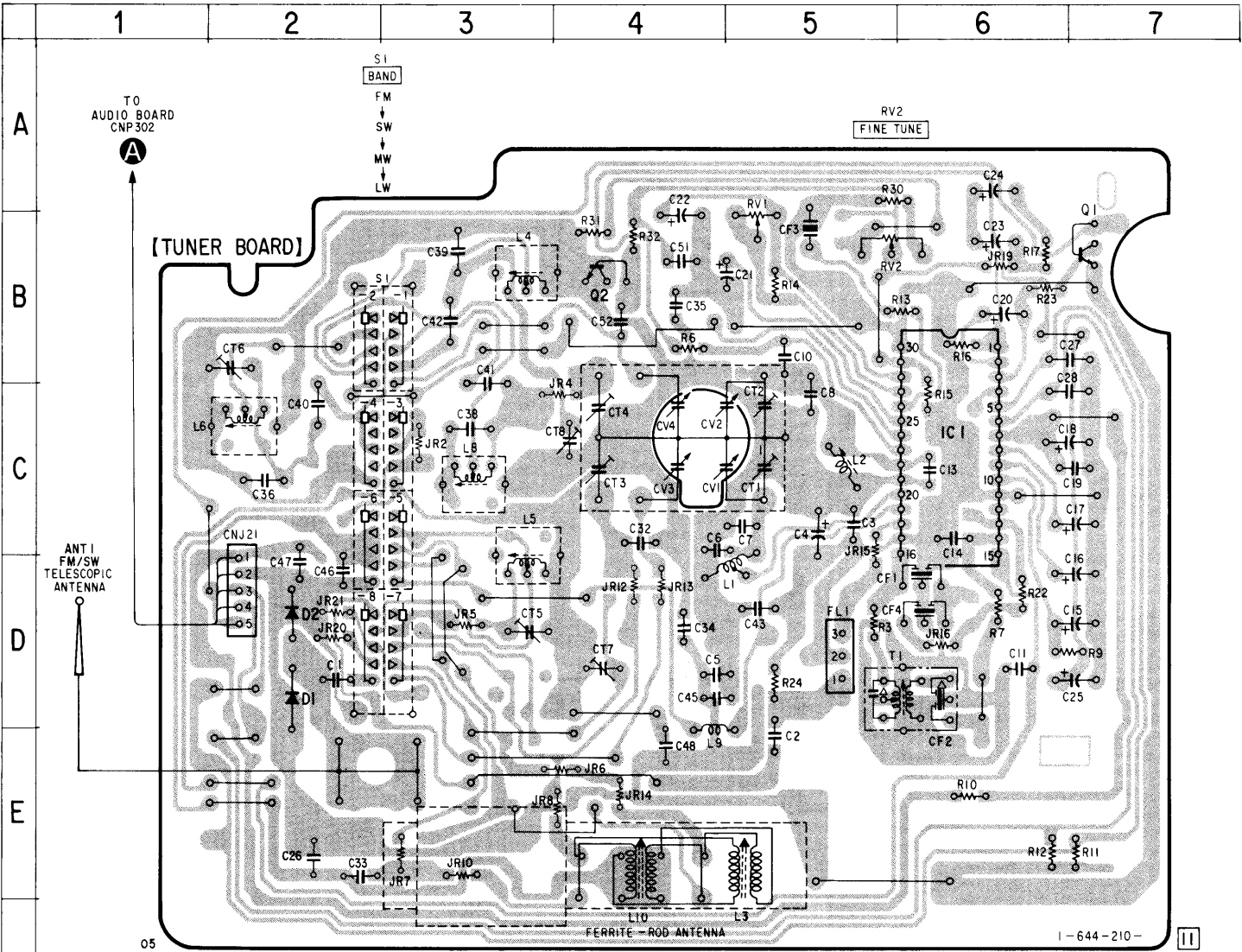
• IC Block Diagram
IC1 CXA1238S

• Semiconductor Location

Ref. No.	Location
IC1	B-5
Q2	C-2

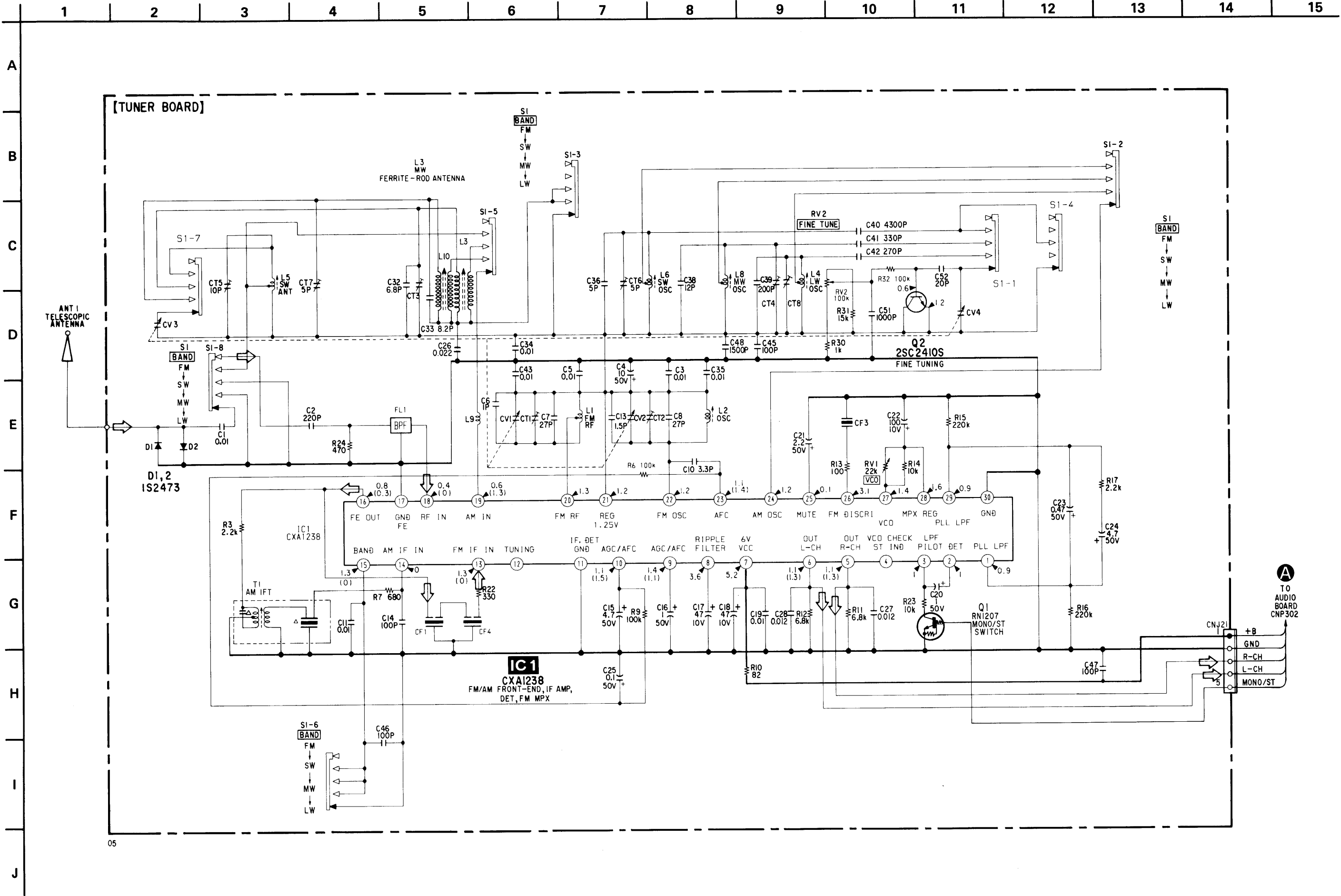


10-2. CFD-10L TUNER SECTION • See page 53 for notes and page 58 to 59 for Semiconductor Lead Layouts.



• Semiconductor Location

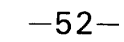
Ref. No.	Location
IC1	C-6
Q1	B-6
Q2	B-4



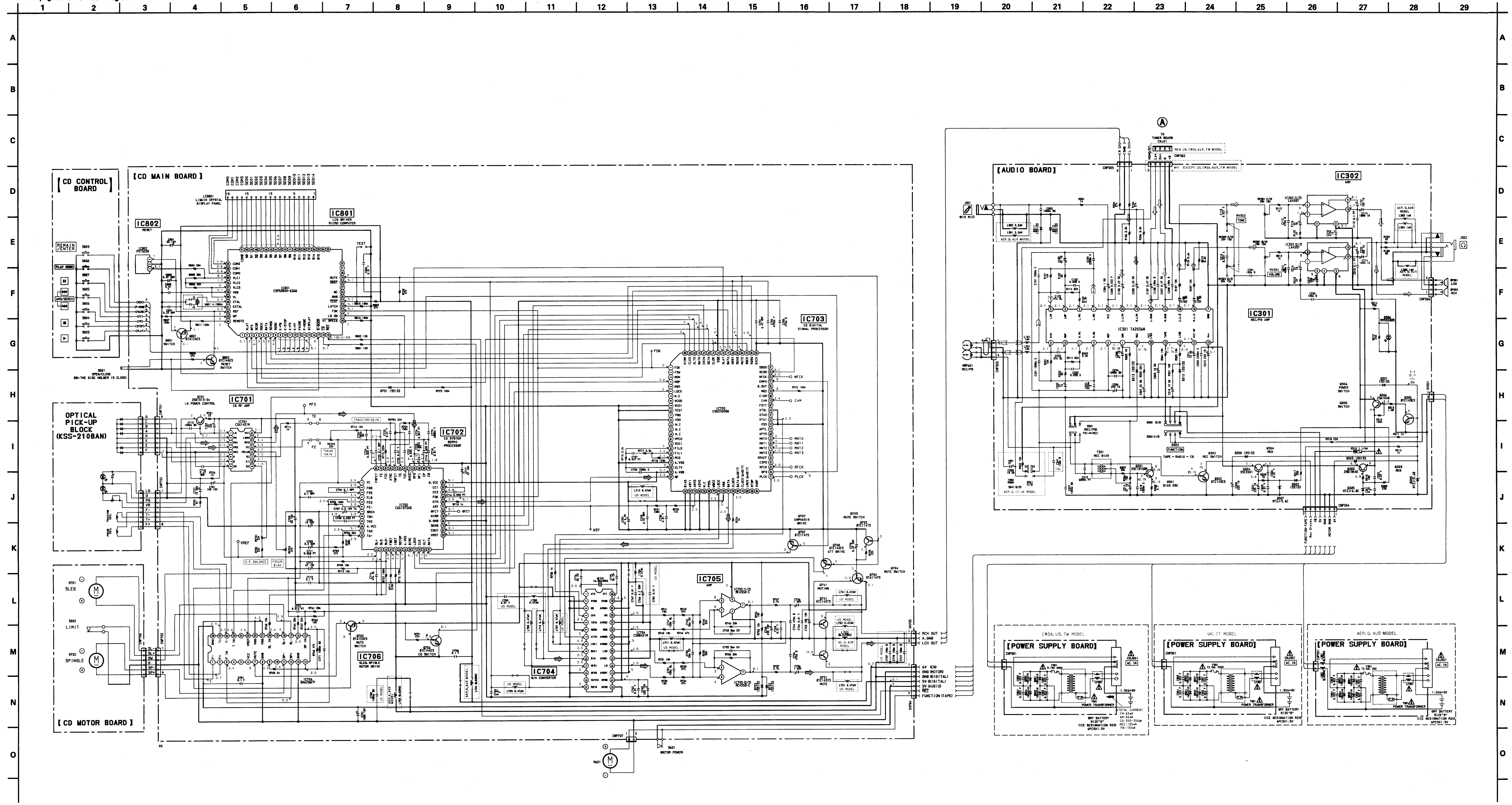
Ref. No.	Location
D301	D-5
D302	C-6
D303	D-5
D305	D-3
D306	B-3
D307	D-6
D308	C-5
D309	C-5
D310	B-8
D311	B-9
D312	B-9
D313	D-7
D701	G-17
D702	G-12
D703	G-12
D901	J-6
D902	J-4
D903	J-5
D904	J-5
IC301	C-8
IC302	C-4
IC701	I-18
IC702	I-16
IC703	G-15
IC704	G-13
IC705	G-12
IC706	I-13
IC801	G-18
IC802	F-17
Q301	D-6
Q302	D-6
Q303	D-3
Q304	D-5
Q305	C-5
Q306	D-5
Q701	J-17
Q702	I-17
Q703	H-13
Q704	H-13
Q706	G-16
Q707	G-14
Q708	H-14
Q731	F-12
Q741	F-12
Q801	G-17
Q802	F-16

Diagram illustrating the layout of the CD player chassis components:

- POWER board
- CD MOTOR board
- Optical pick-up
- TUNER board
- AUDIO board
- CD CONTROL board
- CD MAIN board



• See page 30 for IC Block Diagrams.



Note on Printed Wiring Board:

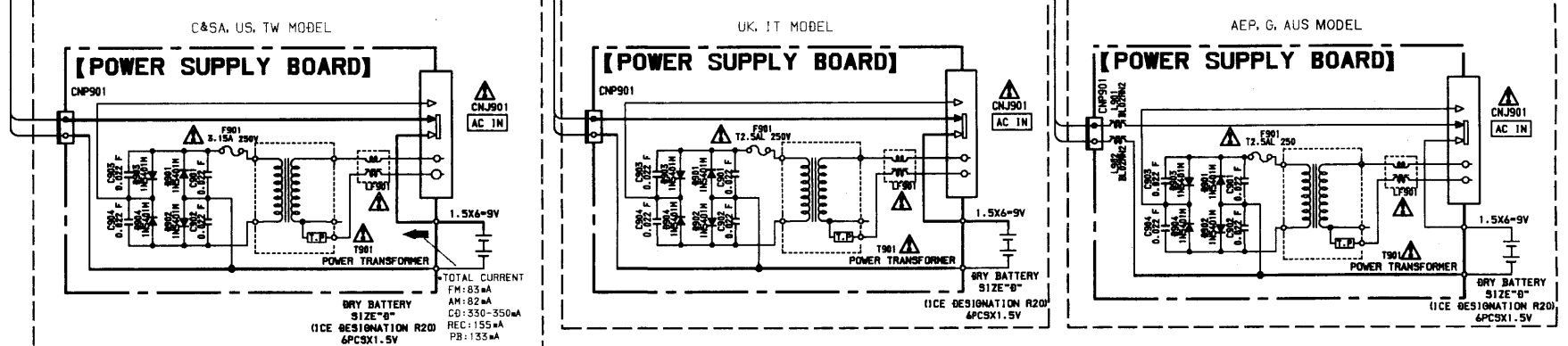
- : parts extracted from the component side.
- : indicates side identified with part number.

Note on Schematic Diagram:

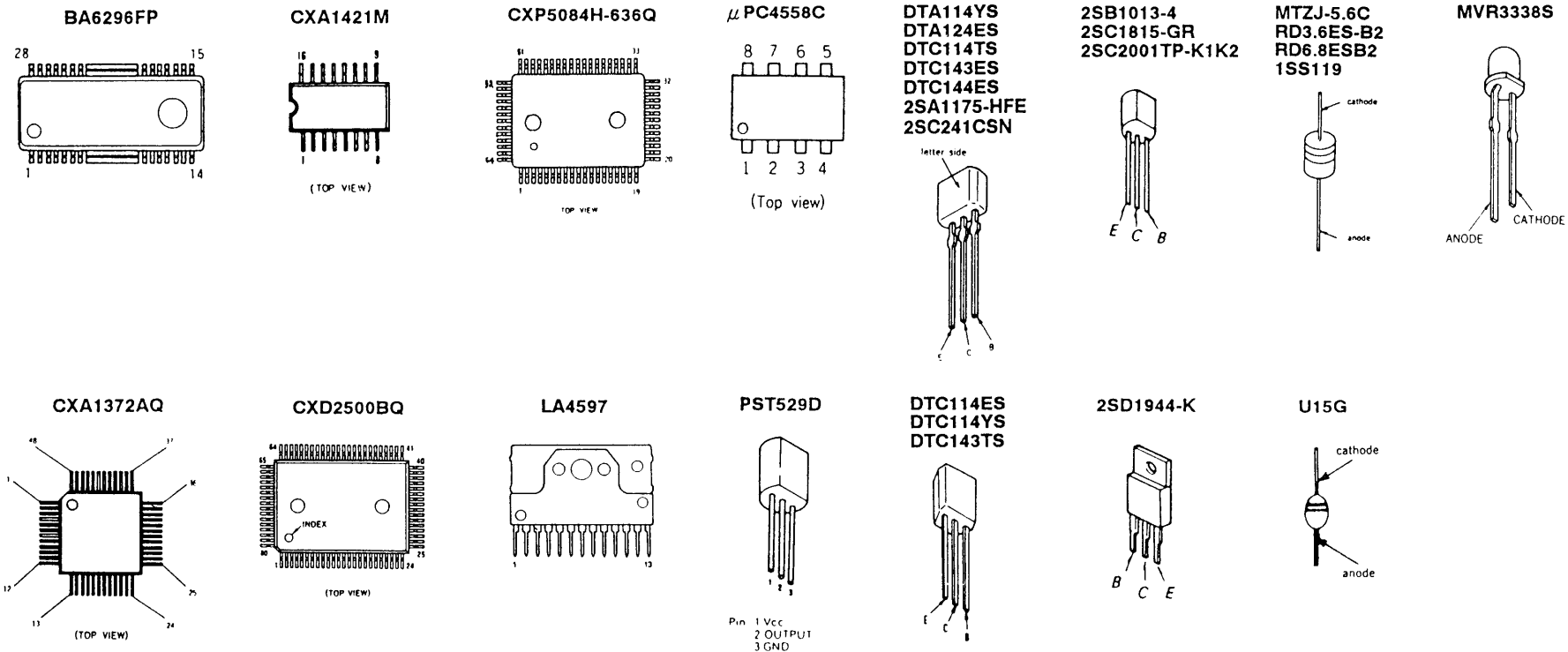
- All capacitors are in μF unless otherwise noted. pF: μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
- ⎓ : fusible resistor.

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

- : panel designation.
- B + Line.
- - - B - Line.
- ⋈ : adjustment for repair.
- Power voltage is dc 9 V and fed with regulated dc power supply from external power voltage jack.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Tuner Section
 - no mark : Common (FM)
 - () : AM (MW/LW)
- CD Main board
 - no mark : (CD) play
- Audio Board
 - no mark : Common
 - () : CD play
 - < > : Tape PB
 - < > : Tape REC
- Voltages are taken with a VOM (10 M Ω /V).
- Voltage variations may be noted due to normal production tolerances.
- Signal path
 - ⤴ : FM
 - ⤵ : PB (DECK A)
 - ⤶ : CD
 - ⤷ : REC (DECK A)
- Abbreviations
 - AUS : Australian Model
 - C & SA : Central & South America Model
 - G : German Model
 - IT : Italian Model
 - TW : Taiwan Model



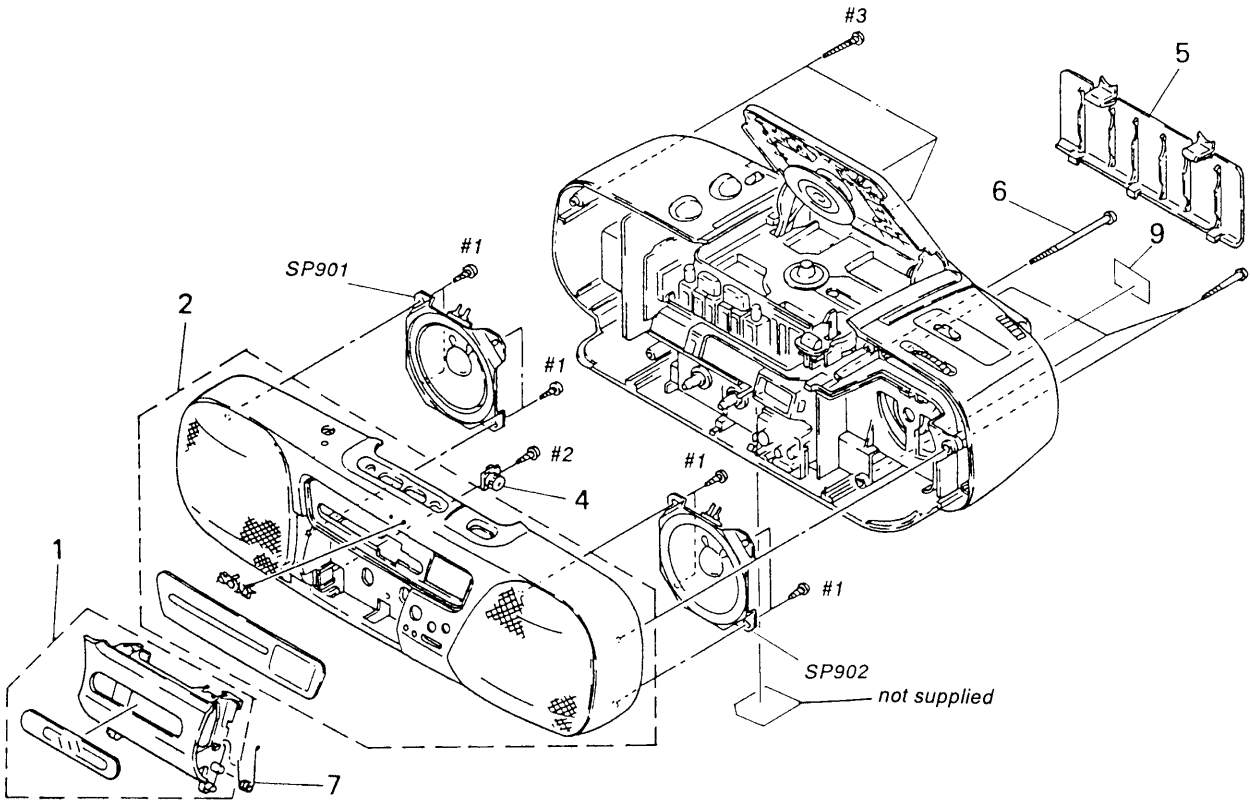
Semiconductor Lead Layouts



SECTION 11
EXPLODED VIEWS
(CFD-10/10L MADE IN MALAYSIIA MODEL)

- NOTE:
- 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
 - Items marked "※" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
 - The mechanical parts with no reference number in the exploded views are not supplied.
 - Hardware (# mark) list is 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.
- Abbreviation
AUS: Australian Model
C & SA: Central & South America Model
G: German Model
IT: Italian Model
TW: Taiwan Model
10: CFD-10
10L: CFD-10L

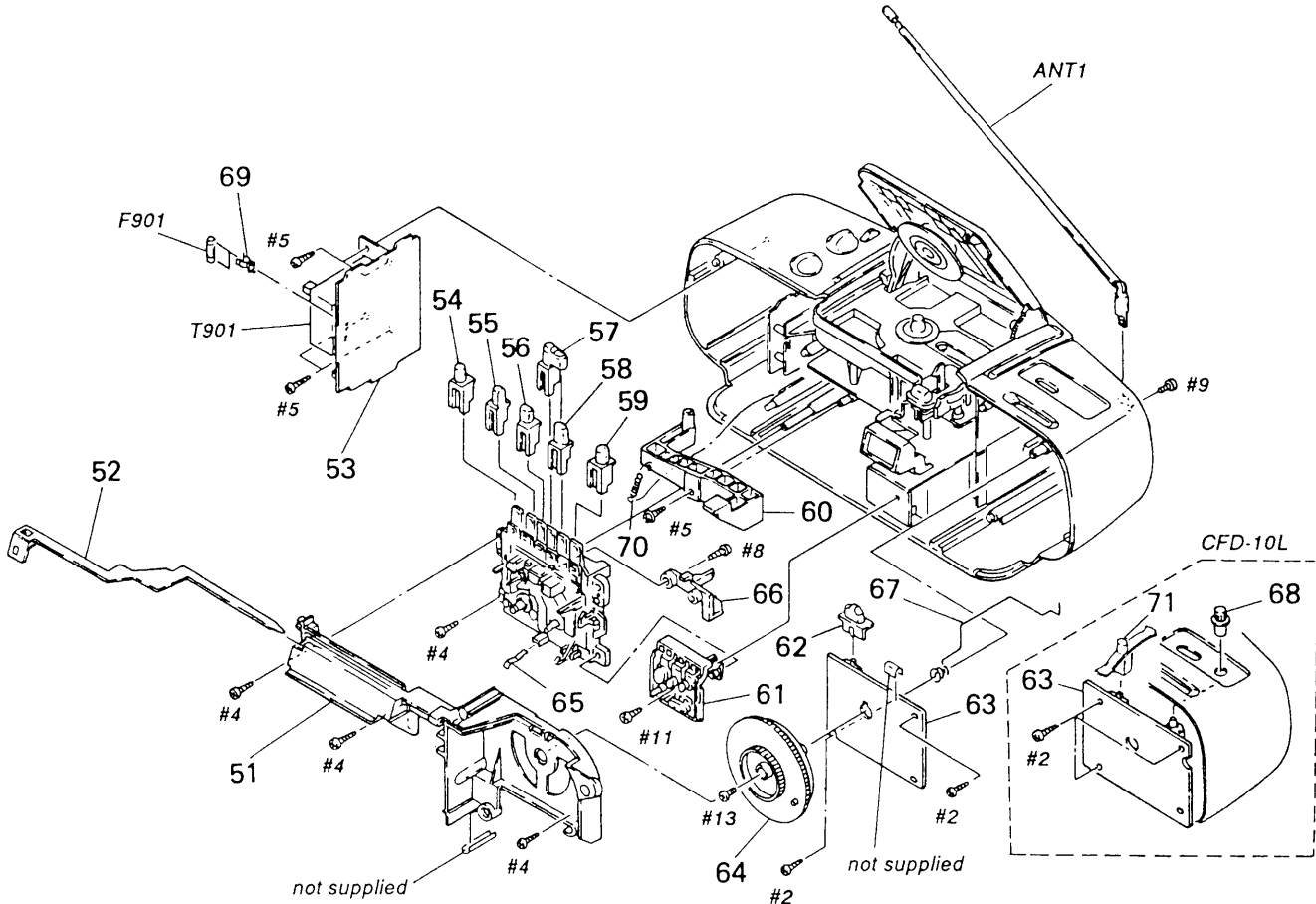
(1) FRONT CABINET ASSEMBLY SECTION



Ref. No.	Part No.	Description	Remark
1	X-3367-128-1	HOLDER (CASSETTE) ASSY	
2	X-3368-977-1	CABINET (FRONT) SUB ASSY (10:US, AUS, TW, C&SA)	
2	X-3366-978-1	CABINET (FRONT) SUB ASSY (10:AEP, G)	
2	X-3366-979-1	CABINET (FRONT) SUB ASSY (10L)	
2	X-3366-980-1	CABINET (FRONT) SUB ASSY (10:IT)	
4	3-351-377-11	DAMPER	
5	3-368-522-01	LID, BATTERY CASE	

Ref. No.	Part No.	Description	Remark
6	4-926-715-01	SCREW (XN62), TAPPING	
7	3-386-976-01	SPRING, CASSETTE	
• 9	4-941-548-01	LABEL, CLASS 1 (10:AEP, G, IT/10L)	
SP901	1-504-237-11	SPEAKER (10CM) (10:US)	
SP901	1-504-237-21	SPEAKER (10CM) (EXCEPT 10:US)	
SP902	1-504-237-11	SPEAKER (10CM) (10:US)	
SP902	1-504-237-21	SPEAKER (10CM) (EXCEPT 10:US)	

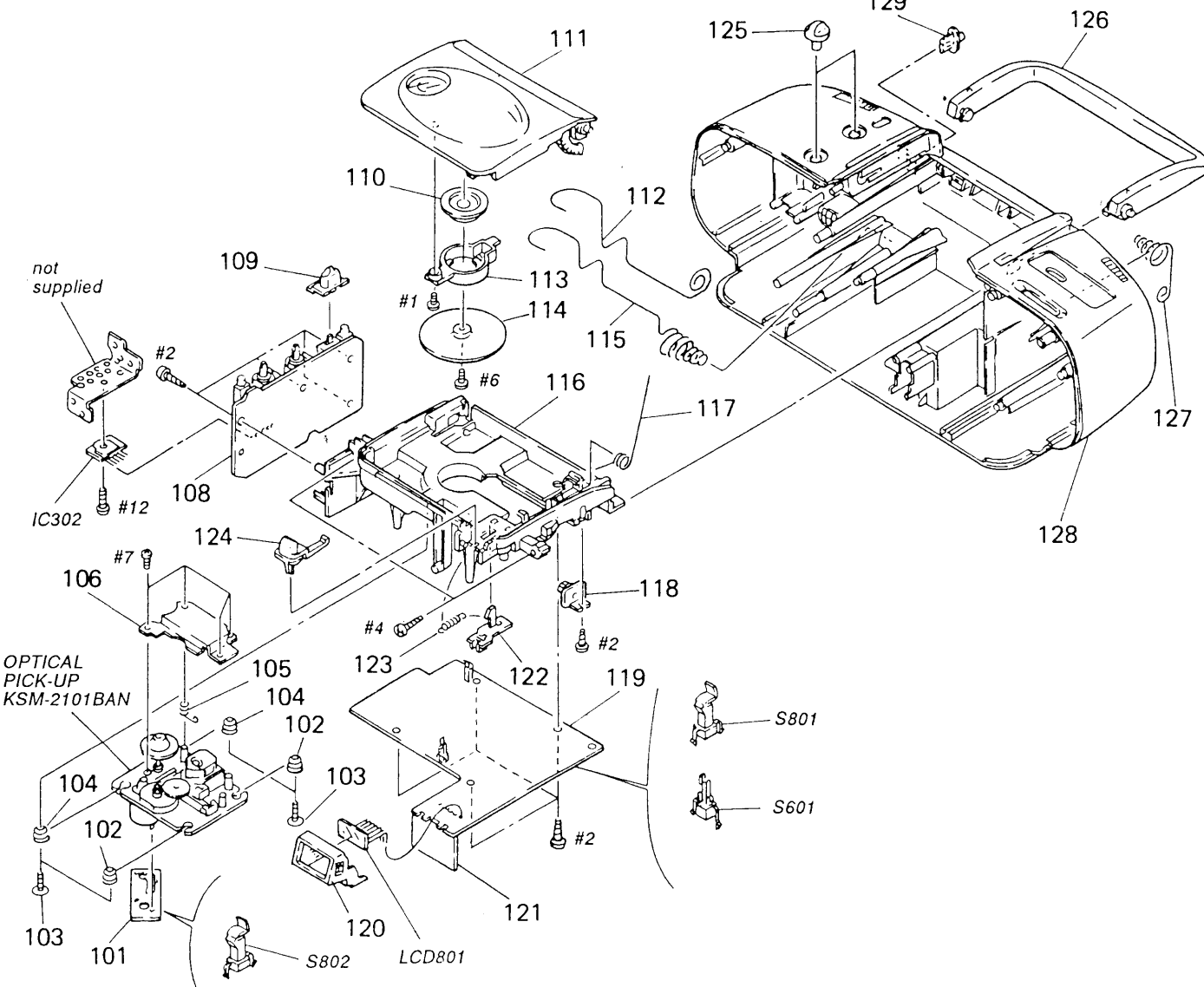
(2) REAR CABINET ASSEMBLY SECTION



Ref. No.	Part No.	Description	Remark
• 51	3-386-955-01	CHASSIS (DIAL)	
52	3-386-956-01	POINTER	
• 53	1-647-148-11	POWER BOARD (10:AEP, G, IT, AUS/10L)	
• 53	1-647-148-21	POWER BOARD (10:US, C&SA, TW)	
54	3-386-951-01	BUTTON (PAUSE)	
55	3-386-958-01	BUTTON (FF)	
56	3-386-959-01	BUTTON (REW)	
57	3-386-960-01	BUTTON (PLAY)	
58	3-386-961-01	BUTTON (REC)	
59	3-386-962-01	BUTTON (STOP)	
• 60	3-386-957-01	LEVER (REC)	
61	3-386-968-01	BUTTON (CD)	
62	3-386-977-01	KNOB (BAND) (10)	
• 63	A-3264-271-A	TUNER BOARD, COMPLETE (10:IT)	
• 63	A-3264-275-A	TUNER BOARD, COMPLETE (10:US)	
• 63	A-3264-277-A	TUNER BOARD, COMPLETE (10:AEP, G)	
• 63	A-3264-345-A	TUNER BOARD, COMPLETE (10L)	
• 63	A-3264-726-A	TUNER BOARD, COMPLETE (10:AUS, C&SA, TW)	

Ref. No.	Part No.	Description	Remark
64	3-386-952-01	KNOB (TUNING)	
65	4-928-957-01	RETAINER, CASSETTE	
• 66	3-386-966-01	LEVER (MD)	
• 67	3-386-975-01	TERMINAL, ANT (10L)	
• 67	3-386-983-01	TERMINAL, ANT (10)	
68	3-386-969-01	KNOB (FINE TUNE) (10L)	
69	1-533-217-31	HOLDER, FUSE	
70	3-386-973-01	SPRING (EJECT)	
71	3-386-953-01	KNOB (LEVER) (10L)	
ANT1	1-501-388-11	ANTENNA, TELESCOPIC (10:US, C&SA, AUS, TW)	
ΔF901	1-576-107-11	FUSE, (10:US, C&SA, TW)	
ΔF901	1-532-286-00	FUSE, (10:AEP, G, IT, AUS/10L)	
ΔT901	1-423-503-11	TRANSFORMER, POWER (10:AUS/10L:UK)	
ΔT901	1-423-504-11	TRANSFORMER, POWER (10:US, C&SA, TW)	
ΔT901	1-423-505-11	TRANSFORMER, POWER (10:AEP, G, IT/10L:AEP)	

(3) CD ASSEMBLY SECTION

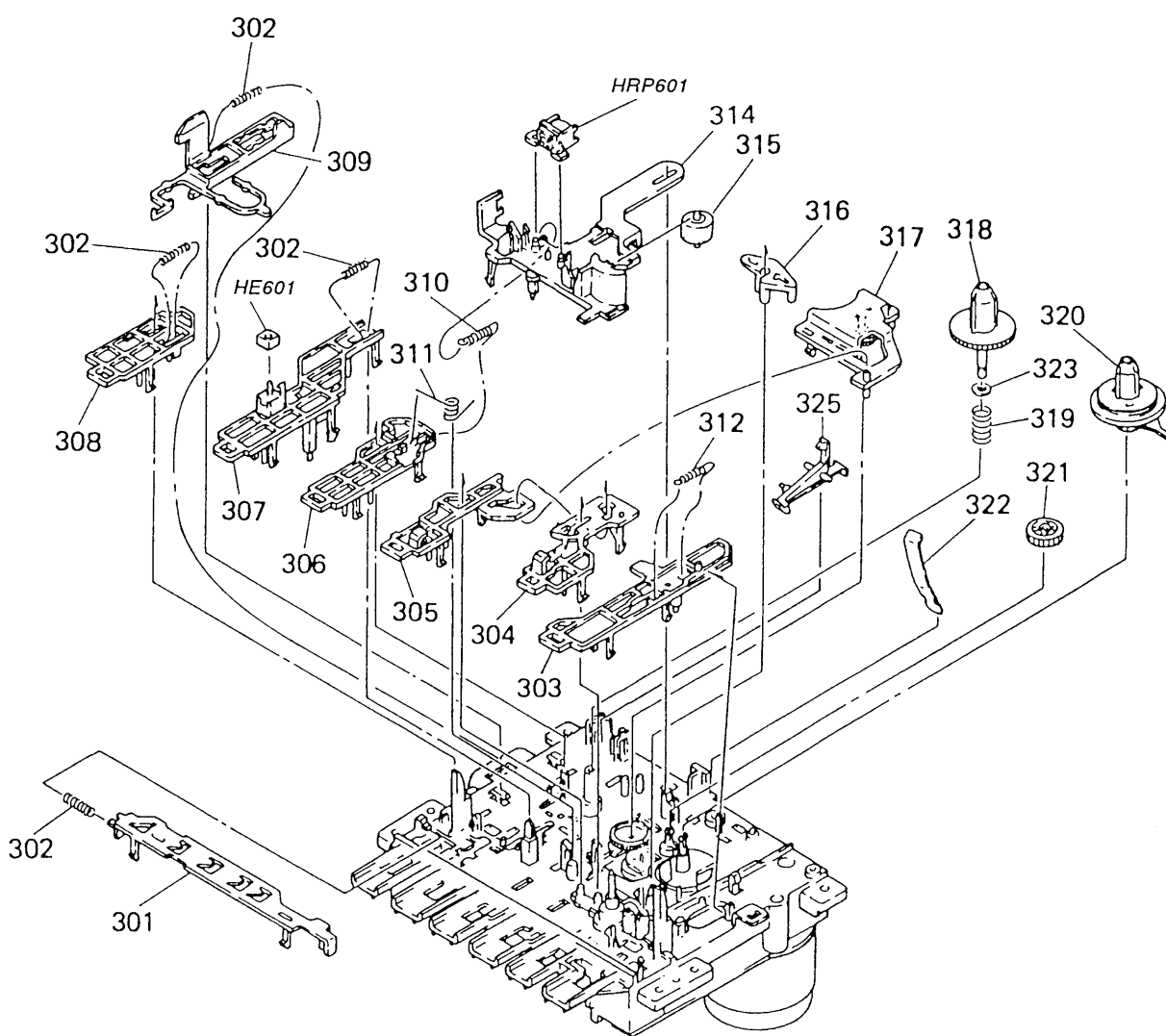


Ref. No.	Part No.	Description	Remark
• 101	1-647-151-11	CD MOTOR BOARD	
102	4-922-858-01	DAMPER	
103	4-931-373-01	SCREW, CD FITTING	
104	4-922-858-11	DAMPER (10:C&SA, IT, TW/10L:UK)	
105	4-931-358-01	SPRING	
106	4-928-936-01	COVER, CD	
• 108	A-3264-239-A	AUDIO BOARD, COMPLETE (10L:AEP)	
• 108	A-3264-274-A	AUDIO BOARD, COMPLETE (10:US, C&SA, TW)	
• 108	A-3264-278-A	AUDIO BOARD, COMPLETE (10:AEP, G)	
• 108	A-3264-452-A	AUDIO BOARD, COMPLETE (10L:UK)	
• 108	A-3264-454-A	AUDIO BOARD, COMPLETE (10:IT)	
• 108	A-3264-626-A	AUDIO BOARD, COMPLETE (10:AUS)	
109	3-386-947-01	KNOB (FUNCTION)	
110	1-452-531-11	MAGNET	
111	X-3367-129-1	HOLDER (CD) ASSY (10)	
111	X-3367-131-1	HOLDER (CD) ASSY (10L)	
112	3-386-978-01	TERMINAL (-), BATTERY	
• 113	3-386-971-01	HOLDER (MAGNET)	
114	3-704-435-01	PLATE (M), CHUCK	
115	3-386-972-01	TERMINAL (+), BATTERY	
116	3-386-945-01	CABINET (CD)	
117	3-386-974-01	SPRING (CD)	
118	3-351-377-11	DAMPER	

Ref. No.	Part No.	Description	Remark
• 119	A-3264-237-A	CD MAIN BOARD, COMPLETE (10:AEP, G, AUS/10L:AEP)	
• 119	A-3264-449-A	CD MAIN BOARD, COMPLETE (10:C&SA, IT, TW/10L:UK)	
• 119	A-3264-453-A	CD MAIN BOARD, COMPLETE (10:US)	
• 120	3-386-970-01	HOLDER (LCD)	
• 121	1-647-150-11	CD CONTROL BOARD	
• 122	3-386-965-01	SLIDER	
123	3-386-973-01	SPRING (EJECT)	
124	3-386-964-01	BUTTON (EJECT)	
125	3-386-950-01	KNOB (ROTARY)	
126	X-3366-819-1	HANDLE ASSY	
127	3-386-979-01	TERMINAL (+ -), BATTERY	
128	3-386-944-01	CABINET (REAR) (10L:AEP)	
128	3-386-944-11	CABINET (REAR) (10:US)	
128	3-386-944-21	CABINET (REAR) (10L:UK)	
128	3-386-944-31	CABINET (REAR) (10:AEP, G, IT)	
128	3-386-944-51	CABINET (REAR) (10:C&SA, AUS, TW)	
129	3-381-401-01	KNOB (SLIDE) (10:AEP, G, IT/10L)	
IC302	8-759-820-22	IC LA4597	

LCDB01	1-810-037-11	DISPLAY PANEL, LIQUID CRYSTAL
SS01	1-571-936-11	SWITCH, LEAF (MD MOTOR ON/OFF)
S801	1-572-053-12	SWITCH, LEAF (OPEN/CLOSE)
S802	1-572-053-12	SWITCH, LEAF (LIMIT)

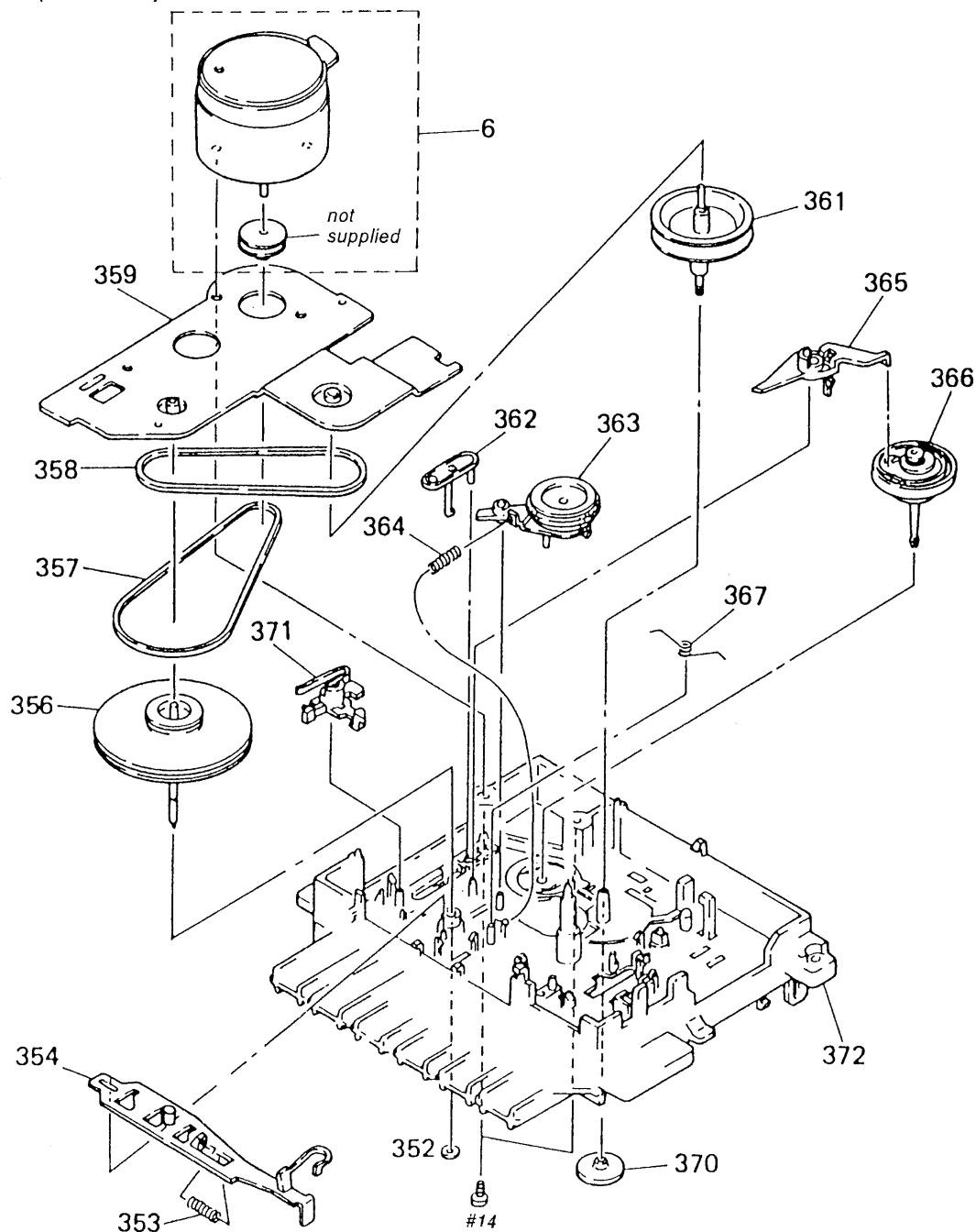
(4) TAPE TRANSPORT MECHANISM-1
(MF-204-64)



Ref. No.	Part No.	Description	Remark
301	4-932-695-01	SLIDER (FR), LOCK	
302	4-932-648-01	SPRING, COMPRESSION	
303	4-928-984-01	LEVER, PAUSE	
304	4-928-983-01	LEVER, FF	
305	4-928-992-01	LEVER, REW	
306	4-928-991-01	LEVER, PLAY	
307	4-934-511-01	LEVER (S), REC	
308	4-928-985-11	LEVER, STOP	
309	4-936-206-01	SLIDER (S), EJECT	
310	4-928-972-01	SPRING, TENSION	
311	4-928-973-01	SPRING	
312	3-313-372-01	SPRING, TENSION	

Ref. No.	Part No.	Description	Remark
314	4-932-693-03	DECK (S), HEAD	
315	4-928-982-01	PINCH ROLLER	
316	4-928-982-01	LEVER (C)	
317	X-4920-347-1	LEVER (S) ASSY, FR	
318	4-928-978-01	GEAR (C), SUPPLY REEL	
319	3-343-381-01	SPRING, COMPRESSION	
320	X-4920-350-1	GEAR (S) ASSY, T REEL	
321	3-343-285-01	GEAR, FF	
322	4-928-957-01	RETAINER, CASSETTE	
323	4-931-795-11	WASHER	
325	4-928-960-02	CLAW, SAFETY	
HEB01	1-543-876-11	HEAD (ERASE)	
HRP601	1-543-828-11	HEAD, MAGNETIC (REC/PB)	

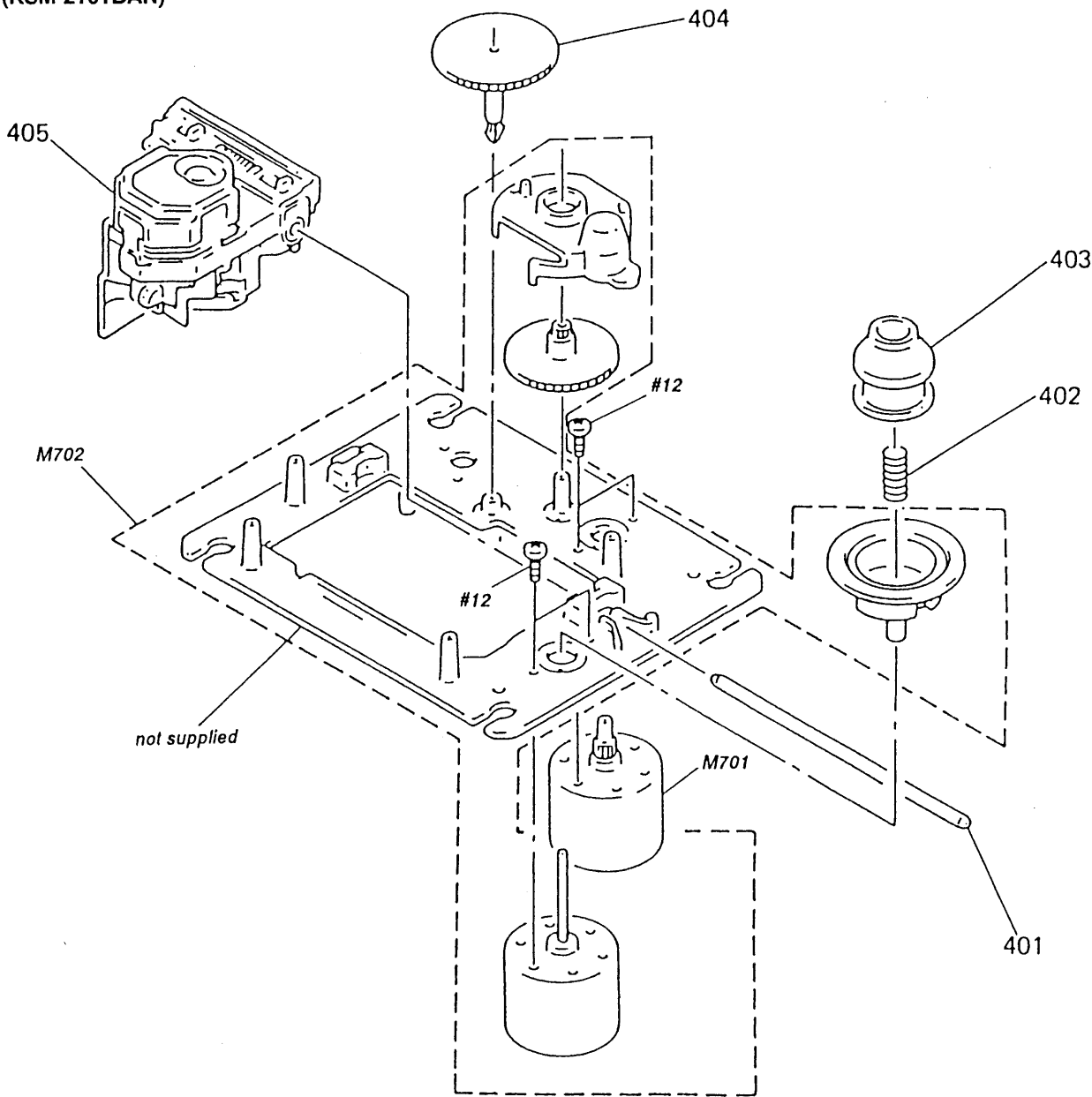
(5) TAPE TRANSPORT MECHANISM-2
(MF-204-64)



Ref. No.	Part No.	Description	Remark
352	3-343-358-01	RING, RETAINING	
353	4-932-656-01	SPRING, COMPRESSION	
354	4-928-996-11	LEVER, SW	
356	X-4920-349-1	WHEEL (S) ASSY, CAPSTAN	
357	4-928-951-01	BELT (CAPSTAN)	
358	4-928-974-01	BELT (MIDWAY)	
* 359	X-4918-598-1	PLATE ASSY, GROUND	
361	X-4918-580-1	PULLEY ASSY, FR	
362	4-928-961-01	PLATE, PAUSE LOCK	

Ref. No.	Part No.	Description	Remark
363	X-4920-346-1	LEVER (S) ASSY, IDLER	
364	3-905-168-01	SPRING, COMPRESSION	
365	4-928-986-01	LEVER (S), SHUT-OFF	
366	X-4918-582-1	PLATE ASSY, TAKE-UP REEL	
367	4-928-958-01	SPRING, FR RETURN	
370	4-928-967-01	GEAR (C), MIDWAY	
371	4-928-987-01	LEVER (T), SHUT-OFF	
372	X-4920-348-1	CHASSIS (S) ASSY, MECHANICAL	
M601	X-4919-956-1	MOTOR ASSY	

(6) OPTICAL PICK-UP SECTION
(KSM-2101BAN)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
401	4-917-565-01	SHAFT (K), SLED		△405	8-848-137-11	PICK-UP, OPTICAL KSS-210B	
402	2-625-191-01	SPRING, COMPRESSION		M702	X-2625-133-1	CHASSIS (MB), TT (WITH M702 SPINDLE)	
403	2-625-186-01	RING (C), CENTER		M701	X-2625-132-1	GEAR ASSY (MB), MOTOR (SLED)	
404	2-625-188-02	GEAR (A)					

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

SECTION 12

ELECTRICAL PARTS LIST

(CFD-10/10L MADE IN MALAYSIA MODEL)

Ver 1.1

AUDIO

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...: μ A... uPA...: μ PA...
uPB...: μ PB... uPC...: μ PC... uPD...: μ PD...
- CAPACITORS
uF: μ F
- COILS
uH: μ H
- Abbreviations
AUS: Australian Model
C & SA: Central & South America Model
G: German Model
IT: Italian Model
TW: Taiwan Model

The components identified by mark Δ or dotted line with mark Δ 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-3264-239-A	AUDIO BOARD, COMPLETE (10L:AEP) *****	
*	A-3264-274-A	AUDIO BOARD, COMPLETE (10:C&SA, US, TW) *****	
*	A-3264-278-A	AUDIO BOARD, COMPLETE (10:AEP, G) *****	
*	A-3264-452-A	AUDIO BOARD, COMPLETE (10L:UK) *****	
*	A-3264-454-A	AUDIO BOARD, COMPLETE (10:IT) *****	
*	A-3264-626-A	AUDIO BOARD, COMPLETE (10:AUS) *****	
	3-386-947-01	KNOB (FUNCTION)	
	7-685-870-01	SCREW +BVT 3X5 (S)	
	< CAPACITOR >		
C101	1-161-374-11	CERAMIC 0.0015uF	20% 50V
C102	1-124-126-00	ELECT 47uF	20% 10V
C103	1-161-020-11	CERAMIC 0.039uF	10% 16V
C104	1-161-375-00	CERAMIC 0.0022uF	20% 50V
C105	1-124-464-11	ELECT 0.22uF	20% 50V
C107	1-124-902-00	ELECT 0.47uF	20% 50V
C108	1-162-282-31	CERAMIC 100PF	10% 50V
C109	1-124-907-11	ELECT 10uF	20% 50V
C110	1-162-844-11	CERAMIC 0.027uF	10% 16V
C112	1-162-290-31	CERAMIC 470PF	10% 50V
C113	1-130-495-00	MYLAR 0.1uF	5% 50V
C114	1-126-926-11	ELECT 1000uF	20% 10V
C116	1-124-126-00	ELECT 47uF	20% 10V
C122	1-124-443-00	ELECT 100uF	20% 10V
C123	1-162-215-31	CERAMIC 47PF	5% 50V
C201	1-161-374-11	CERAMIC 0.0015uF	20% 50V
C202	1-124-126-00	ELECT 47uF	20% 10V
C203	1-161-020-11	CERAMIC 0.039uF	10% 16V
C204	1-161-375-00	CERAMIC 0.0022uF	20% 50V
C205	1-124-464-11	ELECT 0.22uF	20% 50V

Ref. No.	Part No.	Description	Remark
C207	1-124-902-00	ELECT 0.47uF	20% 50V
C208	1-162-282-31	CERAMIC 100PF	10% 50V
C209	1-124-907-11	ELECT 10uF	20% 50V
C210	1-162-844-11	CERAMIC 0.027uF	10% 16V
C212	1-162-290-31	CERAMIC 470PF	10% 50V
C213	1-130-495-00	MYLAR 0.1uF	5% 50V
C214	1-126-926-11	ELECT 1000uF	20% 10V
C216	1-124-126-00	ELECT 47uF	20% 10V
C222	1-124-443-00	ELECT 100uF	20% 10V
C223	1-162-215-31	CERAMIC 47PF	5% 50V
C303	1-162-294-31	CERAMIC 0.001uF	10% 50V
C304	1-124-903-11	ELECT 1uF	20% 50V
C305	1-161-494-00	CERAMIC 0.022uF	25V
C306	1-126-176-11	ELECT 220uF	20% 10V
C307	1-124-916-11	ELECT 22uF	20% 63V
C308	1-124-126-00	ELECT 47uF	20% 10V
C309	1-124-907-11	ELECT 10uF	20% 50V
C310	1-124-907-11	ELECT 10uF	20% 50V
C311	1-124-907-11	ELECT 10uF	20% 50V
C312	1-126-176-11	ELECT 220uF	20% 10V
C313	1-130-481-00	MYLAR 0.0068uF	5% 50V
C314	1-124-126-00	ELECT 47uF	20% 10V
C315	1-161-374-11	CERAMIC 0.0015uF	20% 50V
C317	1-124-120-11	ELECT 220uF	20% 25V
C318	1-126-937-11	ELECT 4700uF	20% 16V
C321	1-161-379-00	CERAMIC 0.01uF	20% 25V
C322	1-161-379-00	CERAMIC 0.01uF	20% 25V
C324	1-126-176-11	ELECT 220uF	20% 10V
C325	1-161-379-00	CERAMIC 0.01uF	20% 25V
C326	1-161-379-00	CERAMIC 0.01uF	20% 25V
C327	1-162-294-31	CERAMIC 0.001uF	10% 50V
C328	1-126-176-11	ELECT 220uF	20% 10V
C329	1-161-375-00	CERAMIC 0.0022uF	20% 50V
C330	1-162-282-31	CERAMIC 100PF	10% 50V
C331	1-162-282-31	CERAMIC 100PF	10% 50V
C333	1-124-907-11	ELECT 10uF (10:AEP, G, IT/10L)	20% 50V
C334	1-162-294-31	CERAMIC 0.001uF	10% 50V
C341	1-162-284-31	CERAMIC (10L) 150PF	10% 50V

AUDIO

Ref. No.	Part No.	Description	Remark
< JACK >			
* CNJ901	1-691-559-11	HOUSING, CONNECTOR 2P (10:IT/10L:UK)	
< CONNECTOR >			
CNP302	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P (10:US, C&SA, AUS, TW)	
CNP302	1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P (10:AEP, G, IT/10L)	
CNP303	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P	
* CNP304	1-691-578-11	PIN, CONNECTOR (PC BOARD) 7P	
* CNP305	1-691-574-11	PIN, CONNECTOR (PC BOARD) 3P	
CNP306	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P	
< DIODE >			
D301	8-719-911-19	DIODE 1SS119	
D302	8-719-911-19	DIODE 1SS119	
D303	8-719-911-19	DIODE 1SS119	
D305	8-719-109-97	DIODE RD6. 8ES-B2	
D306	8-719-980-67	LED MVR3338S (OPR/BATT)	
D307	8-719-921-48	DIODE MTZJ-5. 6C	
D308	8-719-911-19	DIODE 1SS119	
D309	8-719-109-69	DIODE RD3. 6ES-B2	
D310	8-719-911-19	DIODE 1SS119	
D311	8-719-911-19	DIODE 1SS119	
D312	8-719-911-19	DIODE 1SS119	
D313	8-719-911-19	DIODE 1SS119	
< IC >			
IC301	8-759-164-45	IC TA2036N	
IC302	8-759-820-22	IC LA4597	
< JACK >			
J301	1-563-330-11	JACK (MIX MIC)	
J302	1-566-891-11	JACK (PHONES)	
< HOLDER >			
* KH301	1-573-287-11	HOLDER, CABLE 2P	
< COIL >			
L101	1-410-316-11	INDUCTOR 1uH	
L201	1-410-316-11	INDUCTOR 1uH	
L301	1-410-501-11	INDUCTOR 2. 2uH (AEP, G, AUS)	
L302	1-410-501-11	INDUCTOR 2. 2uH (AEP, G, AUS)	
L303	1-410-316-11	INDUCTOR 1uH (AEP, G, AUS)	
L304	1-410-316-11	INDUCTOR 1uH (AEP, G, AUS)	
L305	1-410-316-11	INDUCTOR 1uH (AEP, G, AUS)	

Ref. No.	Part No.	Description	Remark
< TRANSISTOR >			
Q301	8-729-281-53	TRANSISTOR 2SC1815-GR	
Q302	8-729-921-65	TRANSISTOR DTC143ES	
Q303	8-729-905-67	TRANSISTOR 2SD1944-K	
Q304	8-729-011-92	TRANSISTOR 2SC2001TP-K1K2	
Q305	8-729-921-65	TRANSISTOR DTC143ES	
Q306	8-729-119-76	TRANSISTOR 2SA1175-HFE	
< RESISTOR >			
R101	1-247-860-11	CARBON 16K 5% 1/4W	
R102	1-249-404-00	CARBON 82 5% 1/4W	
R103	1-249-423-11	CARBON 3. 3K 5% 1/4W F	
R104	1-249-434-11	CARBON 27K 5% 1/4W	
R106	1-249-423-11	CARBON 3. 3K 5% 1/4W F	
R107	1-249-429-11	CARBON 10K 5% 1/4W	
R109	1-249-404-00	CARBON 82 5% 1/4W	
R112	1-249-417-11	CARBON 1K 5% 1/4W F	
R113	1-249-426-11	CARBON 5. 6K 5% 1/4W	
R114	1-249-440-11	CARBON 82K 5% 1/4W	
R115	1-249-401-11	CARBON 47 5% 1/4W F	
R201	1-247-860-11	CARBON 16K 5% 1/4W	
R202	1-249-404-00	CARBON 82 5% 1/4W	
R203	1-249-423-11	CARBON 3. 3K 5% 1/4W F	
R204	1-249-434-11	CARBON 27K 5% 1/4W	
R206	1-249-423-11	CARBON 3. 3K 5% 1/4W F	
R207	1-249-429-11	CARBON 10K 5% 1/4W	
R209	1-249-404-00	CARBON 82 5% 1/4W	
R212	1-249-417-11	CARBON 1K 5% 1/4W F	
R213	1-249-426-11	CARBON 5. 6K 5% 1/4W	
R214	1-249-440-11	CARBON 82K 5% 1/4W	
R215	1-249-401-11	CARBON 47 5% 1/4W F	
R301	1-249-417-11	CARBON 1K 5% 1/4W F	
R302	1-249-433-11	CARBON 22K 5% 1/4W	
R303	1-247-903-91	CARBON 1M 5% 1/4W	
R304	1-249-429-11	CARBON 10K 5% 1/4W	
R305	1-249-429-11	CARBON 10K 5% 1/4W	
R306	1-247-810-11	CARBON 130 5% 1/4W	
R307	1-249-435-11	CARBON 33K 5% 1/4W	
R308	1-249-389-11	CARBON 4. 7 5% 1/4W F	
R309	1-249-409-11	CARBON 220 5% 1/4W F	
△R310	1-219-149-11	FUSIBLE 1 5% 1/4W F	
R311	1-249-417-11	CARBON 1K 5% 1/4W F	
R312	1-249-417-11	CARBON 1K 5% 1/4W F	
R313	1-249-420-11	CARBON 1. 8K 5% 1/4W F	
R314	1-247-828-11	CARBON 750 5% 1/4W	
R315	1-247-816-11	CARBON 240 5% 1/4W	
R316	1-249-441-11	CARBON 100K 5% 1/4W	
R317	1-249-411-11	CARBON 330 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
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R318	1-249-409-11	CARBON 220 5% 1/4W F	
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R319	1-249-405-11	CARBON 100 5% 1/4W F	
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R320	1-249-393-11	CARBON 10 5% 1/4W F	
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R321	1-249-405-11	CARBON 100 5% 1/4W F	
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R322	1-249-429-11	CARBON 10K 5% 1/4W	
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(10:AEP, G, IT/10L)

< VARIABLE RESISTOR >

RV301	1-241-746-11	RES, VAR, CARBON 20K/20K (VOLUME)	
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RV302	1-241-745-11	RES, VAR, CARBON 20K/20K (TONE)	
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< SWITCH >

S301	1-571-043-11	SWITCH, PUSH (1 KEY) (REC/PB)	
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S302	1-571-307-21	SWITCH, SLIDE (FUNCTION)	
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S341	1-571-547-11	SWITCH, SLIDE (ST/MONO) (10:AEP, G, IT/10L)	
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< TRANSFORMER >

T301	1-433-268-00	TRANSFORMER, BIAS OSCILLATOR	
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*	1-647-150-11	CD CONTROL BOARD	
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< SWITCH >

S803	1-572-198-11	SWITCH, KEYBOARD (▶)	
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S804	1-572-198-11	SWITCH, KEYBOARD (■)	
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S805	1-572-198-11	SWITCH, KEYBOARD (AMS/SEARCH:▶▶)	
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S806	1-572-198-11	SWITCH, KEYBOARD (AMS/SEARCH:◀◀)	
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S807	1-572-198-11	SWITCH, KEYBOARD ()	
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S808	1-572-198-11	SWITCH, KEYBOARD (PLAY MODE)	
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S809	1-572-198-11	SWITCH, KEYBOARD (REMAIN/ENTER)	
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*	A-3264-237-A	CD MAIN BOARD, COMPLETE	
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(10:AEP, G, AUS/10L:AEP)

*	A-3264-449-A	CD MAIN BOARD, COMPLETE	
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(10:C&SA, IT, TW/10L:UK)

*	A-3264-453-A	CD MAIN BOARD, COMPLETE (10:US)	
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*	3-386-970-01	HOLDER (LCD)	
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Ref. No.	Part No.	Description	Remark
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< CAPACITOR >

C701	1-124-443-00	ELECT 100uF 20% 10V	
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C702	1-124-034-51	ELECT 33uF 20% 16V	
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C703	1-124-034-51	ELECT 33uF 20% 16V	
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C704	1-136-165-00	FILM 0.1uF 5% 50V	
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C705	1-136-165-00	FILM 0.1uF 5% 50V	
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C706	1-124-907-11	ELECT 10uF 20% 50V	
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C707	1-131-368-00	TANTALUM 3.3uF 10% 16V	
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C708	1-130-489-00	MYLAR 0.033uF 5% 50V	
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C709	1-123-382-00	ELECT 3.3uF 20% 100V	
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C710	1-136-173-00	FILM 0.47uF 5% 50V	
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C711	1-130-493-00	MYLAR 0.068uF 5% 50V	
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C712	1-124-126-00	ELECT 47uF 20% 10V	
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C713	1-162-851-11	CERAMIC 0.1uF 16V	
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C714	1-162-215-31	CERAMIC 47PF 5% 50V	
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C715	1-162-294-31	CERAMIC 0.001uF 10% 50V	
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C716	1-130-489-00	MYLAR 0.033uF 5% 50V	
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C717	1-124-126-00	ELECT 47uF 20% 10V	
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C718	1-161-379-00	CERAMIC 0.01uF 20% 25V	
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C719	1-130-489-00	MYLAR 0.033uF 5% 50V	
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C720	1-130-475-00	MYLAR 0.0022uF 5% 50V	
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C721	1-161-494-00	CERAMIC 0.022uF 25V	
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C722	1-161-379-00	CERAMIC 0.01uF 20% 25V	
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C723	1-161-379-00	CERAMIC 0.01uF 20% 25V	
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C724	1-130-489-00	MYLAR 0.033uF 5% 50V	
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C725	1-136-165-00	FILM 0.1uF 5% 50V	
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C726	1-162-294-31	CERAMIC 0.001uF 10% 50V	
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C727	1-130-491-00	MYLAR 0.047uF 5% 50V	
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C728	1-161-374-11	CERAMIC 0.0015uF 20% 50V	
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C729	1-136-173-00	FILM 0.47uF 5% 50V	
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C730	1-161-379-00	CERAMIC 0.01uF 20% 25V	
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C731	1-101-361-00	CERAMIC 150PF 5% 50V	
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C732	1-101-884-00	CERAMIC 56PF 5% 50V	
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C733	1-102-527-11	CERAMIC 82PF 5% 50V	
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C734	1-162-290-31	CERAMIC 470PF 10% 50V	
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C736	1-124-903-11	ELECT 1uF 20% 50V	
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C737	1-162-282-31	CERAMIC 100PF 10% 50V	
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(10:US)

C741	1-101-361-00	CERAMIC 150PF 5% 50V	
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C742	1-101-884-00	CERAMIC 56PF 5% 50V	
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C743	1-102-527-11	CERAMIC 82PF 5% 50V	
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C744	1-162-290-31	CERAMIC 470PF 10% 50V	
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C746	1-124-903-11	ELECT 1uF 20% 50V	
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C747	1-162-282-31	CERAMIC 100PF 10% 50V	
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(10:US)

C751	1-162-851-11	CERAMIC 0.1uF 16V	
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C752	1-161-377-00	CERAMIC 0.0047uF 30% 16V	
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C754	1-136-173-00	FILM 0.47uF 5% 50V	
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MAIN

Ref. No.	Part No.	Description	Remark
C757	1-126-154-11	ELECT 47uF 20%	6.3V
C758	1-162-851-11	CERAMIC 0.1uF	16V
C759	1-162-290-31	CERAMIC 470PF 10%	50V
C760	1-161-379-00	CERAMIC 0.01uF 20%	25V
C761	1-126-926-11	ELECT 1000uF 20%	10V
C762	1-161-379-00	CERAMIC 0.01uF 20%	25V
C763	1-126-176-11	ELECT 220uF 20%	10V
C764	1-161-379-00	CERAMIC 0.01uF 20%	25V
C765	1-124-443-00	ELECT 100uF 20%	10V
C766	1-124-927-11	ELECT 4.7uF 20%	100V
C767	1-161-379-00	CERAMIC 0.01uF 20%	25V
C768	1-126-176-11	ELECT 220uF 20%	10V
C769	1-161-379-00	CERAMIC 0.01uF 20%	25V
C770	1-124-902-00	ELECT 0.47uF 20%	50V
C771	1-162-294-31	CERAMIC 0.001uF 10%	50V
C772	1-130-484-00	MYLAR 0.012uF 5%	50V
C773	1-161-329-00	CERAMIC 0.0068uF 30%	16V
C774	1-130-491-00	MYLAR 0.047uF 5%	50V
C775	1-164-014-11	CERAMIC 5PF 0.25PF	50V
C776	1-164-014-11	CERAMIC 5PF 0.25PF	50V
C777	1-124-907-11	ELECT 10uF 20%	50V
C778	1-162-282-31	CERAMIC 100PF 10%	50V (10:US)
C780	1-161-379-00	CERAMIC 0.01uF 20%	25V (10:US)
C781	1-161-379-00	CERAMIC 0.01uF 20%	25V (10:US)
C782	1-162-294-31	CERAMIC 0.001uF 10%	50V (10:US)
C801	1-124-034-51	ELECT 33uF 20%	16V
C802	1-124-902-00	ELECT 0.47uF 20%	50V
C803	1-161-379-00	CERAMIC 0.01uF 20%	25V
C804	1-136-169-00	FILM 0.22uF 5%	50V
C806	1-161-379-00	CERAMIC 0.01uF 20%	25V
< JACK >			
* CNJ304	1-691-564-11	HOUSING, CONNECTOR 7P	
* CNJ706	1-691-563-11	HOUSING, CONNECTOR 6P	
< CONNECTOR >			
* CNP701	1-691-579-11	PIN, CONNECTOR (PC BOARD) 8P	
* CNP702	1-691-579-21	PIN, CONNECTOR (PC BOARD) 8P	
* CNP703	1-563-976-11	HOUSING, CONNECTOR 6P	
* CNP707	1-695-104-11	PIN, CONNECTOR (PC BOARD) 2P	
< DIODE >			
D701	8-719-911-19	DIODE 1SS119	
D702	8-719-911-19	DIODE 1SS119	
D703	8-719-911-19	DIODE 1SS119	

Ref. No.	Part No.	Description	Remark
< IC >			
IC701	8-752-039-03	IC CXA1421M	
IC702	8-752-058-77	IC CXA1372AQ	
IC703	8-752-352-93	IC CXD2500BQ	
IC704	8-759-093-98	IC CXD8451M	
IC705	8-759-145-58	IC uPC4558C	
IC706	8-759-518-59	IC BA6296FP	
IC801	8-752-830-87	IC CXP5084H-636Q	
IC802	8-759-971-11	IC PST529D	
< HOLDER >			
* KH704	1-568-135-11	HOLDER, CABLE 7P	
* KH705	1-565-384-11	HOLDER, CABLE 3P	
< COIL >			
L702	1-414-175-31	INDUCTOR 0.47uH (10:US)	
L702	1-410-397-21	FERRITE BEAD INDUCTOR (10:AEP, G, AUS/10L:AEP)	
L703	1-410-397-21	FERRITE BEAD INDUCTOR (10:AEP, G, AUS/10L:AEP)	
L704	1-410-397-21	FERRITE BEAD INDUCTOR (10:AEP, G, AUS/10L:AEP)	
L705	1-414-175-41	INDUCTOR 0.47uH (10:US)	
L706	1-414-175-41	INDUCTOR 0.47uH (10:US)	
L707	1-414-175-41	INDUCTOR 0.47uH (10:US)	
L708	1-414-175-41	INDUCTOR 0.47uH (10:US)	
L709	1-414-175-41	INDUCTOR 0.47uH (10:US)	
L710	1-414-175-41	INDUCTOR 0.47uH (10:US)	
L711	1-414-175-31	INDUCTOR 0.47uH (10:US)	
L712	1-414-175-31	INDUCTOR 0.47uH (10:US)	
L731	1-414-175-41	INDUCTOR 0.47uH (10:US)	
L741	1-414-175-41	INDUCTOR 0.47uH (10:US)	
< LIQUID CRYSTAL DISPLAY >			
LCD801	1-810-037-11	DISPLAY PANEL, LIQUID CRYSTAL	
< TRANSISTOR >			
Q701	8-729-801-84	TRANSISTOR 2SB1013-4	
Q702	8-729-900-63	TRANSISTOR DTA124ES	
Q703	8-729-904-39	TRANSISTOR DTC114TS	
Q704	8-729-902-80	TRANSISTOR DTA114YS	
Q706	8-729-900-89	TRANSISTOR DTC144ES	
Q707	8-729-904-36	TRANSISTOR DTC114YS	
Q708	8-729-900-89	TRANSISTOR DTC144ES	
Q731	8-729-900-74	TRANSISTOR DTC143TS	
Q741	8-729-900-74	TRANSISTOR DTC143TS	
Q801	8-729-900-63	TRANSISTOR DTA124ES	

Ref. No.	Part No.	Description	Remark
Q802	8-729-900-89	TRANSISTOR DTC144ES	
< RESISTOR >			
R701	1-249-397-11	CARBON 22 5% 1/4W F	
R702	1-249-433-11	CARBON 22K 5% 1/4W	
R703	1-247-806-11	CARBON 91 5% 1/4W	
R704	1-247-883-00	CARBON 150K 5% 1/4W	
R705	1-249-441-11	CARBON 100K 5% 1/4W	
R706	1-249-438-11	CARBON 56K 5% 1/4W	
R707	1-247-885-00	CARBON 180K 5% 1/4W	
R708	1-249-432-11	CARBON 18K 5% 1/4W	
R709	1-249-437-11	CARBON 47K 5% 1/4W	
R710	1-249-417-11	CARBON 1K 5% 1/4W F	
R711	1-247-896-11	CARBON 510K 5% 1/4W	
R712	1-247-883-00	CARBON 150K 5% 1/4W	
R713	1-249-429-11	CARBON 10K 5% 1/4W	
R714	1-249-417-11	CARBON 1K 5% 1/4W F	
R715	1-247-887-00	CARBON 220K 5% 1/4W	
R716	1-249-429-11	CARBON 10K 5% 1/4W	
R717	1-249-423-11	CARBON 3.3K 5% 1/4W F	
R718	1-247-881-00	CARBON 120K 5% 1/4W	
R719	1-249-423-11	CARBON 3.3K 5% 1/4W F	
R720	1-247-856-00	CARBON 11K 5% 1/4W	
R721	1-249-441-11	CARBON 100K 5% 1/4W	
R722	1-249-441-11	CARBON 100K 5% 1/4W	
R723	1-249-441-11	CARBON 100K 5% 1/4W	
R724	1-249-417-11	CARBON 1K 5% 1/4W F	
R725	1-249-433-11	CARBON 22K 5% 1/4W	
R726	1-249-417-11	CARBON 1K 5% 1/4W F	
R727	1-249-441-11	CARBON 100K 5% 1/4W	
R728	1-249-437-11	CARBON 47K 5% 1/4W	
R730	1-249-417-11	CARBON 1K 5% 1/4W F	
R731	1-249-429-11	CARBON 10K 5% 1/4W	
R732	1-249-429-11	CARBON 10K 5% 1/4W	
R733	1-249-437-11	CARBON 47K 5% 1/4W	
R734	1-249-437-11	CARBON 47K 5% 1/4W	
R735	1-249-437-11	CARBON 47K 5% 1/4W	
R736	1-249-434-11	CARBON 27K 5% 1/4W	
R737	1-249-422-11	CARBON 2.7K 5% 1/4W F	
R741	1-249-429-11	CARBON 10K 5% 1/4W	
R742	1-249-429-11	CARBON 10K 5% 1/4W	
R743	1-249-437-11	CARBON 47K 5% 1/4W	
R744	1-249-437-11	CARBON 47K 5% 1/4W	
R745	1-249-437-11	CARBON 47K 5% 1/4W	
R746	1-249-434-11	CARBON 27K 5% 1/4W	
R747	1-249-422-11	CARBON 2.7K 5% 1/4W F	
R751	1-249-437-11	CARBON 47K 5% 1/4W	
R752	1-249-429-11	CARBON 10K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R753	1-249-431-11	CARBON 15K 5% 1/4W	
R761	1-249-435-11	CARBON 33K 5% 1/4W	
R762	1-249-429-11	CARBON 10K 5% 1/4W	
R763	1-249-429-11	CARBON 10K 5% 1/4W	
R764	1-249-435-11	CARBON 33K 5% 1/4W	
R765	1-247-838-00	CARBON 2K 5% 1/4W	
R766	1-249-437-11	CARBON 47K 5% 1/4W	
R767	1-249-433-11	CARBON 22K 5% 1/4W	
R801	1-249-405-11	CARBON 100 5% 1/4W F	
R802	1-249-405-11	CARBON 100 5% 1/4W F	
R803	1-249-437-11	CARBON 47K 5% 1/4W	
R804	1-249-435-11	CARBON 33K 5% 1/4W	
R805	1-249-435-11	CARBON 33K 5% 1/4W	
R806	1-249-435-11	CARBON 33K 5% 1/4W	
R807	1-249-441-11	CARBON 100K 5% 1/4W	
R809	1-249-437-11	CARBON 47K 5% 1/4W	
R811	1-249-441-11	CARBON 100K 5% 1/4W	
R815	1-249-441-11	CARBON 100K 5% 1/4W	
R816	1-249-441-11	CARBON 100K 5% 1/4W	
< VARIABLE RESISTOR >			
RV701	1-230-497-11	RES, ADJ, CARBON 22K (E-F BALANCE)	
RV702	1-237-288-11	RES, ADJ, CARBON 47K (FOCUS BIAS)	
RV703	1-230-497-11	RES, ADJ, CARBON 22K (FOCUS GAIN)	
RV704	1-230-497-11	RES, ADJ, CARBON 22K (TRACKING GAIN)	
< SWITCH >			
S601	1-572-053-12	SWITCH, LEAF (MD MOTOR ON/OFF)	
S801	1-572-053-12	SWITCH, LEAF (OPEN/CLOSE)	
< VIBRATOR >			
X801	1-567-775-11	VIBRATOR, CERAMIC 4.19MHz	
< VIBRATOR >			
XF701	1-579-345-11	VIBRATOR, CERAMIC 16.9344MHz	

*	1-647-151-11	CD MOTOR BOARD	

< JUMPER RESISTOR >			
* JW880	3-368-054-01	PIN (UX-50), GROUND	
* JW881	3-368-054-01	PIN (UX-50), GROUND	
< SWITCH >			
S802	1-571-936-11	SWITCH, LEAF (LIMIT)	

POWER

TUNER

Ref. No.	Part No.	Description	Remark
*	1-647-148-11	POWER BOARD (10:AEP, G, IT, AUS/10L) *****	
*	1-647-148-21	POWER BOARD (10:US, C&SA, TW) *****	
	1-533-217-31	HOLDER, FUSE	
		< CAPACITOR >	
C901	1-101-005-00	CERAMIC 22000PF	50V
C902	1-101-005-00	CERAMIC 22000PF	50V
C903	1-101-005-00	CERAMIC 22000PF	50V
C904	1-101-005-00	CERAMIC 22000PF	50V
		< JACK >	
△CNJ901	1-526-818-11	INLET, AC (10:C&SA, TW)	
△CNJ901	1-526-838-11	INLET, AC 2P (10:AEP, G, IT, AUS/10L)	
△CNJ901	1-540-009-11	INLET, AC (10:US)	
		< CONNECTOR >	
*	CNP901 1-695-104-11	PIN, CONNECTOR (PC BOARD) 2P	
		< DIODE >	
D901	8-719-902-17	DIODE U15G	
D902	8-719-902-17	DIODE U15G	
D903	8-719-902-17	DIODE U15G	
D904	8-719-902-17	DIODE U15G	
		< FUSE >	
△F901	1-532-286-00	FUSE, TIME-LAG (10:AEP, G, IT, AUS/10L)	
△F901	1-576-107-11	FUSE (10:US, C&SA, TW)	
		< COIL >	
L901	1-410-397-21	FERRITE BEAD INDUCTOR (10:AEP, G, AUS/ 10L:AEP)	
L902	1-410-397-21	FERRITE BEAD INDUCTOR (10:AEP, G, AUS/ 10L:AEP)	
		< LINE FILTER >	
△LF901	1-424-150-11	TRANSFORMER, LINE FILTER	
		< TRANSFORMER >	
△T901	1-423-503-11	TRANSFORMER, POWER (10:AUS/10L:UK)	
△T901	1-423-504-11	TRANSFORMER, POWER (10:US, C&SA, TW)	
△T901	1-423-505-11	TRANSFORMER, POWER (10:AEP, G, IT/10L :AEP)	

Ref. No.	Part No.	Description	Remark
*	A-3264-271-A	TUNER BOARD, COMPLETE (10:IT) *****	
*	A-3264-275-A	TUNER BOARD, COMPLETE (10:US) *****	
*	A-3264-277-A	TUNER BOARD, COMPLETE (10:AEP, G) *****	
*	A-3264-726-A	TUNER BOARD, COMPLETE (10:AUS, C&SA, TW) *****	
	3-386-952-01	KNOB (TUNING)	
	3-386-977-01	KNOB (BAND) (10)	
	7-621-259-39	SCREW +P 2. 6X5	
		< CAPACITOR >	
C1	1-163-189-00	CERAMIC MELF 220PF	10% 50V
C3	1-163-059-00	CERAMIC CHIP 0.01uF (10:US, C&SA, AUS, E, TW)	10% 50V
C4	1-124-907-11	ELECT 10uF	20% 50V
C5	1-163-059-00	CERAMIC CHIP 0.01uF	10% 50V
C6	1-162-324-11	CERAMIC MELF 1.8PF (10:US, C&SA, AUS, E, TW)	20% 50V
C6	1-163-149-00	CERAMIC MELF 2.2PF (10:AEP, G)	10% 50V
C6	1-163-150-00	CERAMIC MELF 3.3PF (10:IT)	10% 50V
C7	1-162-409-11	CERAMIC MELF 30PF (10:AEP, G, IT)	5% 50V
C7	1-163-166-00	CERAMIC MELF 24PF (10:US, C&SA, AUS, E, TW)	5% 50V
C8	1-102-961-00	CERAMIC 27PF (10:AEP, G, IT, E, TW)	5% 50V
C8	1-102-953-00	CERAMIC 18PF (10:US, C&SA, AUS, E, TW)	5% 50V
C9	1-163-154-00	CERAMIC MELF 6.8PF (10:US, C&SA, AUS, E, TW)	10% 50V
C9	1-163-155-00	CERAMIC MELF 8.2PF (10:AEP, G)	10% 50V
C9	1-163-158-00	CERAMIC MELF 11PF (10:IT)	5% 50V
C10	1-163-150-00	CERAMIC MELF 3.3PF	10% 50V
C11	1-163-059-00	CERAMIC CHIP 0.01uF	10% 50V
C12	1-163-181-00	CERAMIC MELF 100PF	10% 50V
C15	1-124-927-11	ELECT 4.7uF	20% 100V
C16	1-124-903-11	ELECT 1uF	20% 50V
C17	1-124-126-00	ELECT 47uF	20% 10V
C18	1-124-126-00	ELECT 47uF	20% 10V
C19	1-163-059-00	CERAMIC CHIP 0.01uF	10% 50V
C20	1-124-903-11	ELECT 1uF	20% 50V
C21	1-124-925-11	ELECT 2.2uF	20% 100V

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
C22	1-124-443-00	ELECT 100uF	20% 10V
C23	1-124-902-00	ELECT 0.47uF	20% 50V
C24	1-124-927-11	ELECT 4.7uF	20% 100V
C25	1-124-463-00	ELECT 0.1uF	20% 50V
C27	1-161-053-00	CERAMIC 0.015uF	10% 50V
		(10:US, C&SA, AUS, TW)	
C27	1-162-840-11	CERAMIC 0.012uF	10% 16V
		(10:AEP, G, IT)	
C28	1-161-053-00	CERAMIC 0.015uF	10% 50V
		(10:US, C&SA, AUS, TW)	
C28	1-162-840-11	CERAMIC 0.012uF	10% 16V
		(10:AEP, G, IT)	
C33	1-163-154-00	CERAMIC MELF 6.8PF	10% 50V
		(10:US, C&SA, AUS, TW)	
C34	1-163-181-00	CERAMIC MELF 100PF	10% 50V
C35	1-163-181-00	CERAMIC MELF 100PF	10% 50V
C38	1-162-397-11	CERAMIC MELF 0.001uF	10% 50V
C40	1-162-347-11	CERAMIC MELF 1.8PF	20% 50V
		(10:IT)	
C40	1-163-159-00	CERAMIC MELF 2.2PF	10% 50V
		(10:AEP, G)	
		< FILTER >	
CF1	1-577-599-81	FILTER, CERAMIC	
CF2	1-239-249-11	ENCAPSULATED COMPONENT	
CF3	1-577-599-81	FILTER, CERAMIC	
CF4	1-577-599-81	FILTER, CERAMIC	
		< JACK >	
CNJ21	1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P	
		(10:AEP, G, IT)	
CNJ21	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P	
		(10:US, C&SA, AUS, TW)	
		< TRIMMER >	
CT1-4	1-151-695-11	CAP, VAR (10:AEP, G, IT)	
CV1-4			
CT1-4	1-151-696-11	CAP, VAR (10:US, C&SA, AU, TW)	
CV1-4			
		< FILTER >	
FL1	1-236-022-11	FILTER, BAND PASS	
		< IC >	
IC1	8-752-050-20	IC CXA1238S	

Ref.No.	Part No.	Description	Remark
		< JUMPER RESISTOR >	
JR1	1-216-296-00	METAL CHIP 0 5%	1/8W
JR2	1-216-296-00	METAL CHIP 0 5%	1/8W
JR3	1-216-296-00	METAL CHIP 0 5%	1/8W
JR8	1-216-296-00	METAL CHIP 0 5%	1/8W
JR12	1-216-296-00	METAL CHIP 0 5%	1/8W
JR14	1-216-296-00	METAL CHIP 0 5%	1/8W
JR15	1-216-296-00	METAL CHIP 0 5%	1/8W
JR17	1-216-296-00	METAL CHIP 0 5%	1/8W
JR18	1-216-296-00	METAL CHIP 0 5%	1/8W
JR19	1-216-296-00	METAL CHIP 0 5%	1/8W
		< COIL >	
L1	1-428-776-11	COIL, AIR-CORE (10:AEP, G, IT)	
L1	1-428-777-11	COIL, AIR-CORE (10:US, C&SA, AUS, TW)	
L2	1-460-205-11	COIL (WITH CORE) (10:AEP, G, IT)	
L2	1-460-336-11	COIL (WITH CORE) (10:US, C&SA, AUS, TW)	
L3	1-402-158-11	ANTENNA, FERRITE-ROD (MW) (10:AEP, G, IT)	
L3	1-402-416-11	ANTENNA, FERRITE-ROD (MW) (10:US, C&SA, AUS, TW)	
L4	1-406-475-11	COIL (OSC) (10:AEP, G)	
L4	1-406-475-21	COIL (OSC) (10:AEP, G)	
L4	1-406-474-11	COIL (OSC)	
		< TRANSISTOR >	
Q2	8-729-900-80	TRANSISTOR DTC114ES (10:AEP, G, IT)	
		< RESISTOR >	
R1	1-249-413-11	CARBON 470 5%	1/4W F
R3	1-249-421-11	CARBON 2.2K 5%	1/4W F
R5	1-249-425-11	CARBON 4.7K 5%	1/4W F
		(10:US, C&SA, AUS, TW)	
R6	1-249-441-11	CARBON 100K 5%	1/4W
R7	1-249-417-11	CARBON 1K 5%	1/4W F
R9	1-249-441-11	CARBON 100K 5%	1/4W
R10	1-249-404-00	CARBON 82 5%	1/4W
R11	1-249-427-11	CARBON 6.8K 5%	1/4W F
R12	1-249-427-11	CARBON 6.8K 5%	1/4W F
R13	1-249-405-11	CARBON 100 5%	1/4W F
R14	1-249-429-11	CARBON 10K 5%	1/4W
R15	1-215-477-00	METAL 220K 1%	1/6W
R16	1-215-477-00	METAL 220K 1%	1/6W
R17	1-249-421-11	CARBON 2.2K 5%	1/4W F
R21	1-249-411-11	CARBON 330 5%	1/4W
R29	1-249-429-11	CARBON 10K 5%	1/4W
		(10:AEP, G, IT)	
		< VARIABLE RESISTOR >	
RV1	1-238-601-11	RES, ADJ, CARBON 22K (FM VCO)	

TUNER

Ref. No.	Part No.	Description	Remark		
< SWITCH >					
S1	1-571-547-11	SWITCH, SLIDE (BAND)			
< TRANSFORMER >					
T1	1-239-249-11	ENCAPSULATED COMPONENT			

*	A-3264-345-A	TUNER BOARD, COMPLETE (10L)			

	3-386-952-01	KNOB (TUNING)			
	3-386-953-01	KNOB (LEVER)			
	7-621-259-39	SCREW +P 2.6X5			
< CAPACITOR >					
C1	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C2	1-163-189-00	CERAMIC MELF	220PF	10%	50V
C3	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C4	1-124-907-11	ELECT	10uF	20%	50V
C5	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C6	1-163-147-00	CERAMIC MELF	1PF	20%	50V
C7	1-163-167-00	CERAMIC MELF	27PF	5%	50V
C8	1-102-961-00	CERAMIC	27PF	5%	50V
C10	1-163-150-00	CERAMIC MELF	3.3PF	10%	50V
C11	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C13	1-163-148-00	CERAMIC MELF	1.5PF	20%	50V
C14	1-163-181-00	CERAMIC MELF	100PF	10%	50V
C15	1-124-927-11	ELECT	4.7uF	20%	100V
C16	1-124-903-11	ELECT	1uF	20%	50V
C17	1-124-126-00	ELECT	47uF	20%	10V
C18	1-124-126-00	ELECT	47uF	20%	10V
C19	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C20	1-124-903-11	ELECT	1uF	20%	50V
C21	1-124-925-11	ELECT	2.2uF	20%	100V
C22	1-124-443-00	ELECT	100uF	20%	10V
C23	1-124-902-00	ELECT	0.47uF	20%	50V
C24	1-124-927-11	ELECT	4.7uF	20%	100V
C25	1-124-463-00	ELECT	0.1uF	20%	50V
C26	1-163-063-00	CERAMIC MELF	0.022uF		25V
C27	1-162-840-11	CERAMIC	0.012uF	10%	16V
C28	1-162-840-11	CERAMIC	0.012uF	10%	16V
C32	1-163-154-00	CERAMIC MELF	6.8PF	10%	50V
C33	1-163-155-00	CERAMIC MELF	8.2PF	10%	50V
C34	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C35	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C36	1-102-942-00	CERAMIC	5.0PF	+0.5PF	50V
C38	1-102-949-00	CERAMIC	12PF	5%	50V
C39	1-130-918-00	FILM	200PF	5%	63V
C40	1-136-232-11	FILM	0.0043uF	5%	63V

Ref. No.	Part No.	Description	Remark		
C41	1-136-355-11	FILM 330PF	5%	63V	
C42	1-130-011-00	FILM 270PF	5%	63V	
C43	1-163-059-00	CERAMIC CHIP 0.01uF	10%	50V	
C45	1-163-181-00	CERAMIC MELF 100PF	10%	50V	
C46	1-163-181-00	CERAMIC MELF 100PF	10%	50V	
C47	1-163-181-00	CERAMIC MELF 100PF	10%	50V	
C48	1-163-209-00	CERAMIC MELF 0.0015uF	20%	16V	
C51	1-162-397-11	CERAMIC MELF 0.001uF	10%	50V	
C52	1-163-164-00	CERAMIC MELF 20PF	5%	50V	
< FILTER >					
CF1	1-577-599-81	FILTER, CERAMIC			
CF2	1-239-246-11	ENCAPSULATED COMPONENT			
CF3	1-577-599-81	FILTER, CERAMIC			
CF4	1-577-599-81	FILTER, CERAMIC			
< JACK >					
CNJ21	1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P			
< TRIMMER >					
CT1-4	1-151-693-11	CAP, VAR			
CV1-4					
< TRIMMER >					
CT5	1-141-290-31	CAP, VAR FILM TRIMMER 10.0PF			
CT6	1-141-290-31	CAP, VAR FILM TRIMMER 5.0PF			
CT7	1-141-439-21	CAP, ADJ 5.0PF			
CT8	1-141-438-21	CAP, ADJ 5.0PF			
< DIODE >					
D1	8-719-911-19	DIODE 1SS119			
D2	8-719-911-19	DIODE 1SS119			
< FILTER >					
FL1	1-236-711-21	FILTER, BAND PASS			
< IC >					
IC1	8-752-050-20	IC CXA1238S			
< JUMPER RESISTOR >					
JR2	1-216-296-00	METAL CHIP 0	5%	1/8W	
JR4	1-216-296-00	METAL CHIP 0	5%	1/8W	
JR5	1-216-296-00	METAL CHIP 0	5%	1/8W	
JR6	1-216-296-00	METAL CHIP 0	5%	1/8W	
JR7	1-216-296-00	METAL CHIP 0	5%	1/8W	
JR8	1-216-296-00	METAL CHIP 0	5%	1/8W	
JR10	1-216-296-00	METAL CHIP 0	5%	1/8W	
JR12	1-216-296-00	METAL CHIP 0	5%	1/8W	

Ref. No.	Part No.	Description	Remark		
JR13	1-216-296-00	METAL CHIP	0	5%	1/8W
JR14	1-216-296-00	METAL CHIP	0	5%	1/8W
JR15	1-216-296-00	METAL CHIP	0	5%	1/8W
JR16	1-216-296-00	METAL CHIP	0	5%	1/8W
JR19	1-216-296-00	METAL CHIP	0	5%	1/8W
JR20	1-216-296-00	METAL CHIP	0	5%	1/8W
JR21	1-216-296-00	METAL CHIP	0	5%	1/8W
< COIL >					
L1	1-428-776-11	COIL, AIR-CORE			
L2	1-460-206-11	COIL (WITH CORE)			
L3	1-402-590-11	ANTENNA, FERRITE-ROD (LW/MW)			
L4	1-406-472-11	COIL (OSC)			
L5	1-402-596-11	COIL (ANT)			
L6	1-406-471-11	COIL (OSC)			
L8	1-406-473-11	COIL (OSC)			
L9	1-414-097-11	INDUCTOR 0.33uH			
L10	1-402-590-11	ANTENNA, FERRITE-ROD (LW/MW)			
< TRANSISTOR >					
Q1	8-729-900-80	TRANSISTOR DTC114ES			
Q2	8-729-922-66	TRANSISTOR 2SC2410SN			
< RESISTOR >					
R3	1-249-421-11	CARBON	2.2K	5%	1/4W F
R6	1-249-441-11	CARBON	100K	5%	1/4W
R7	1-249-415-11	CARBON	680	5%	1/4W F
R9	1-249-441-11	CARBON	100K	5%	1/4W
R10	1-249-404-00	CARBON	82	5%	1/4W
R11	1-249-427-11	CARBON	6.8K	5%	1/4W F
R12	1-249-427-11	CARBON	6.8K	5%	1/4W F
R13	1-249-405-11	CARBON	100	5%	1/4W F
R14	1-249-429-11	CARBON	10K	5%	1/4W
R15	1-215-477-00	METAL	220K	1%	1/6W
R16	1-215-477-00	METAL	220K	1%	1/6W
R17	1-249-421-11	CARBON	2.2K	5%	1/4W F
R22	1-249-411-11	CARBON	330	5%	1/4W
R23	1-249-429-11	CARBON	10K	5%	1/4W
R24	1-249-413-11	CARBON	470	5%	1/4W F
R30	1-249-417-11	CARBON	1K	5%	1/4W F
R31	1-249-431-11	CARBON	15K	5%	1/4W
R32	1-249-441-11	CARBON	100K	5%	1/4W
< VARIABLE RESISTOR >					
RV1	1-238-601-11	RES, ADJ, CARBON 22K (FM VCO)			
RV2	1-230-534-11	RES, VAR, CARBON 100K (FINE TUNING)			

Ref. No.	Part No.	Description	Remark
< SWITCH >			
S1	1-571-147-11	SWITCH, LEVER SLIDE (BAND)	
< TRANSFORMER >			
T1	1-239-246-11	ENCAPSULATED COMPONENT	

MISCELLANEOUS			

110	1-452-531-11	MAGNET	
△405	8-848-137-11	PICK-UP, OPTICAL KSS-210B	
ANT1	1-501-388-11	ANTENNA, TELESCOPIC (10:US, C&SA, AUS, TW)	
ANT1	1-501-515-11	ANTENNA, TELESCOPIC (10:AEP, G, IT/10L)	
HE601	1-543-876-11	HEAD (ERASE)	
HRP601	1-543-628-11	HEAD, MAGNETIC (REC/PB)	
M601	X-4919-956-1	MOTOR ASSY	
SP901	1-504-237-11	SPEAKER (10CM) (10:US)	
SP901	1-504-237-21	SPEAKER (10CM) (EXCEPT US)	
SP902	1-504-237-11	SPEAKER (10CM) (10:US)	
SP902	1-504-237-21	SPEAKER (10CM) (EXCEPT US)	

ACCESSORIES & PACKING MATERIALS			

△	1-555-074-00	CORD, POWER (10:AUS)	
△	1-557-287-11	CORD, POWER (10:C&SA, TW)	
△	1-574-131-21	CORD, POWER SUPPLY (10:AEP, G, IT/10L:AEP)	
△	1-690-952-21	CORD, POWER (10:US)	
△	1-696-819-11	CORD, POWER (10:AUS)	
△	1-751-214-11	CORD, POWER (10L:UK)	
*	3-389-236-11	CUSHION (L)	
*	3-389-237-11	CUSHION (R)	
*	3-389-239-01	INDIVIDUAL CARTON (10:US, AUS, TW)	
*	3-389-240-01	INDIVIDUAL CARTON (10:AEP, G, IT, AUS)	
*	3-389-241-01	INDIVIDUAL CARTON (10L)	
*	3-907-314-01	INDIVIDUAL CARTON (10:C&SA)	
	3-756-465-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, SPANISH) (10L)	
	3-756-465-21	MANUAL, INSTRUCTION (ENGLISH) (10:US, C&SA, AUS, TW)	
	3-756-465-52	MANUAL, INSTRUCTION (ENGLISH, GERMAN, ITALIAN) (10:AEP, G, IT)	
	3-756-465-81	MANUAL, INSTRUCTION (SPANISH) (10:C&SA)	
	3-757-357-41	MANUAL, INSTRUCTION (CHINESE) (10:TW)	

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	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#3	7-685-651-79	SCREW +BVTP 3X20 TYPE2	
#4	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	
#5	7-685-903-31	SCREW +PTPWH 3X10 (TYPE2)	
#6	7-621-772-10	SCREW +B 2X4	
#7	7-685-104-19	SCREW +P 2X6 TYPE2 NON-SLIT	
#8	7-685-132-01	SCREW +P 2.6X5 TYPE1	
#9	7-682-548-09	SCREW +B 3X8	
#10	7-621-775-20	SCREW +B 2.6X5	
#11	7-685-649-79	SCREW +BVTP 3X14 TYPE2 N-S	
#12	7-685-870-01	SCREW +BVTT 3X5 (S)	
#13	7-621-259-39	SCREW +P 2.6X5	
#14	7-621-775-20	SCREW +2.6X5	

CFD-10/10L

SONY[®] SERVICE MANUAL

US Model
CFD-10(Made in China)

US Model
Canadian Model
CFD-10(Made in Korea)

US Model
Canadian Model
Central and South
America Model
Australian Model
Taiwan Model

CFD-10(Made in Malaysia)

AEP Model
CFD-10/10L(Made in Malaysia)

UK Model
CFD-10L(Made in Malaysia)

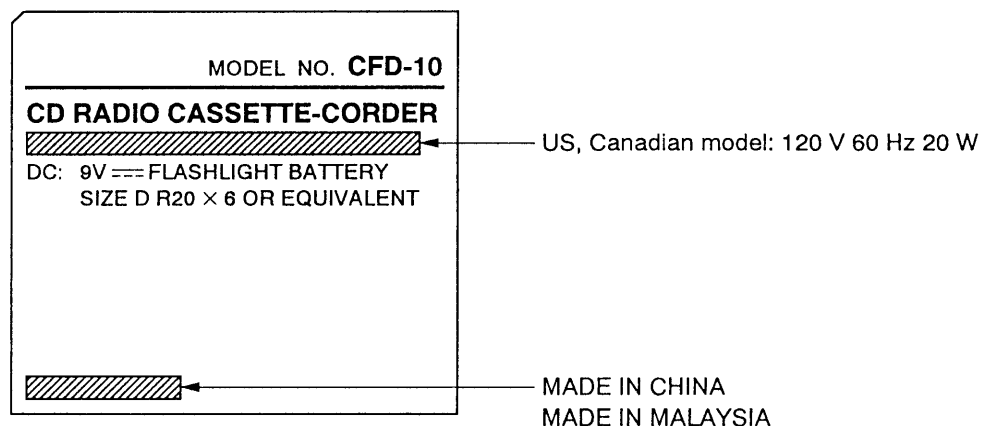
SUPPLEMENT-1

File this supplement with the service manual.

- Subject:**
1. Addition of the made in china type for US model.
 2. Addition of the made in malaysia type for canadian model.

MODEL IDENTIFICATION

— Model Number Label — Carved on rear cabinet



1. Addition of the made in china type for US model

US model made in china is almost same as US model made in korea.

This manual contains only the points which differ from US model made in korea.

For the informations not contained in this manual, please refer to CFD-10/10L service manuals (9-957-793-00) previously issued.

Page	Ref. No.	US Model (Made in Korea)		US Model (Made in China)	
		Part No.	Description	Part No.	Description
34	*	A-3275-839-A	CD MAIN BOARD, COMPLETE	A-3269-057-A	CD MAIN BOARD, COMPLETE
40	* *CNJ304	A-3275-839-A 1-569-200-11	CD MAIN BOARD, COMPLETE HOUSING, CONNECTOR 7P	A-3269-057-A 1-691-564-11	CD MAIN BOARD, COMPLETE HOUSING, CONNECTOR 7P
43	*	3-389-238-01 3-756-465-61	INDIVIDUAL CARTON MANUAL, INSTRUCTION (ENGLISH)	3-909-566-01 3-757-357-71	INDIVIDUAL CARTON MANUAL, INSTRUCTION (ENGLISH)

NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

2. Addition of the made in malaysia type for canadian model

Canadian model made in malaysia is almost same as central and south america model made in malaysia.

This manual contains only the points which differ from central and south america model made in malaysia.

For the informations not contained in this manual, please refer to CFD-10/10L service manuals (9-957-793-00) previously issued.

Page	Ref. No.	Central and South America Model		Canadian Model	
		Part No.	Description	Part No.	Description
59	SP901 SP902	1-504-237-21 1-504-237-21	SPEAKER (10CM) SPEAKER (10CM)	1-504-237-11 1-504-237-11	SPEAKER (10CM) SPEAKER (10CM)
60	*	1-647-148-21	POWER BOARD	1-647-148-11	POWER BOARD
70	* △CNJ901	1-647-148-21 1-526-818-11	POWER BOARD INLET, AC	1-647-148-11 1-540-009-11	POWER BOARD INLET, AC
73	SP901 SP902	1-504-237-21 1-504-237-21	SPEAKER (10CM) SPEAKER (10CM)	1-504-237-11 1-504-237-11	SPEAKER (10CM) SPEAKER (10CM)
74	△ *	1-557-287-11 3-907-314-01 3-756-465-81	CORD, POWER INDIVIDUAL CARTON MANUAL, INSTRUCTION (SPANISH)	1-690-952-21 3-389-239-01 3-756-465-31	CORD, POWER INDIVIDUAL CARTON MANUAL, INSTRUCTION (FRENCH)

NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

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

Les composants identifiés par une marque △ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Printing Method for Large Sized Documents Such As Circuit Diagrams

Printing the page that exceeds A4-size two pages (or letter size) is possible by specifying the print range. (Acrobat Reader Version 4.0 or later)

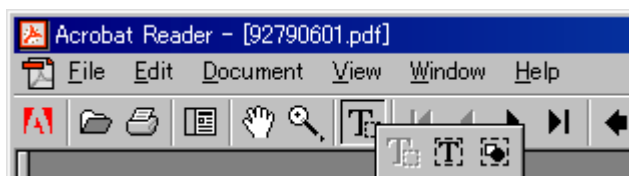
1. The enlarged print is made, if a smaller range than A4 size is specified and the A4 size is selected as a print paper.
2. Almost real sized print is made, if the range is specified, meeting the print paper size.
3. The reduced print is made, if a larger range than the print paper size is specified.

Printing by Specifying a Range

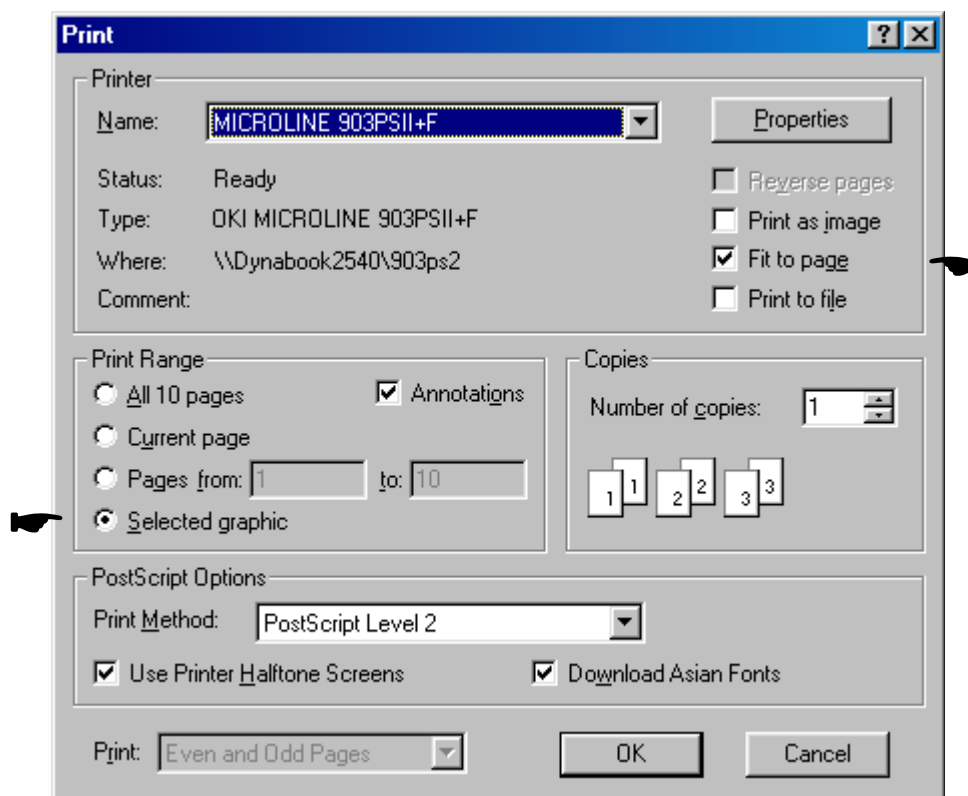
In printing out the drawings such as a schematic diagram and a printed wiring board larger than the printed paper size, they can be printed by specifying the range. (Acrobat Reader Version 4.0 or later)

1. Display the page to be printed.
2. From the File menu, select [Page Setup] and set the paper size.
3. From the Command bar, select [Graphic Select Tool].

(Keep pressing  , select )



4. Dragging the cursor, enclose the range on the page to be printed.
5. From the File menu, select [Print] and make sure that the [Selected Graphic] is already checked. Also, if [Fit to page] is checked, the selected range is enlarged or reduced (and rotated as necessary) meeting the paper size.



6. To cancel the printed range, click an arbitrary position on the screen.

REVISION HISTORY

Clicking the version allows you to jump to the revised page.

Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

[illegible]