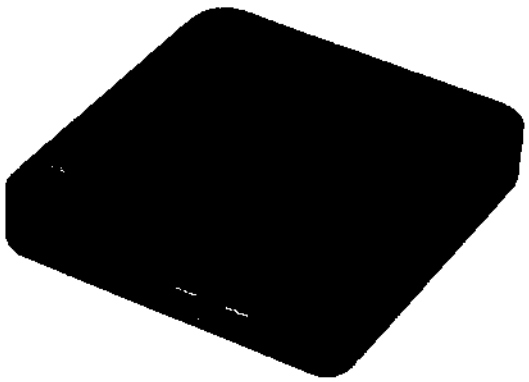
D-2/20

SERVICE MANUAL

US Model
Canadian Model
D-2
AEP Model
UK Model
E Model
Australian Model



Discman

SPECIFICATIONS

CD section

System	Compact disc digital audio system
Laser diode properties	Material: GaAlAs Wavelength: 780 nm Emission duration: Continuous Laser output: Less than 44.6 μW (This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.)
Frequency response	20–20,000 Hz: ±1 dB
Output (at 9 V input level)	Line output (stereo minijack) Output level 1 V rms at 47 kilohms Load impedance over 10 kilohms Headphones (stereo minijack) 9 mW + 9 mW at 32 ohms

General

Power requirements	Optional • DC IN 9 V jack accepts the Sony AC power adaptor (supplied) • DC IN 9 V accepts the Sony CPM-100P mount plate for use on 12 V car battery DC 6 V, four size AA (LR6) alkaline batteries
Power consumption	1.2 W DC
Dimension	Approx. 136×38×149 mm (5⅜×1½×6 in.) (w/h/d) incl. projecting parts and controls
Weight	Approx. 450 g (1 lb) net Approx. 545 g (1 lb 3 oz) incl. batteries
Supplied accessories	Connecting cord (1) Carrying belt (1) AC power adaptor (1)

CAUTION

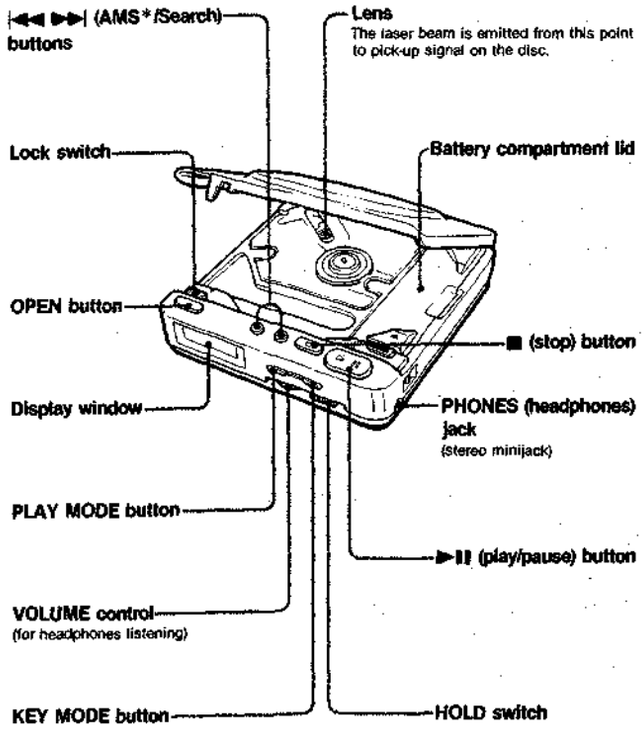
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

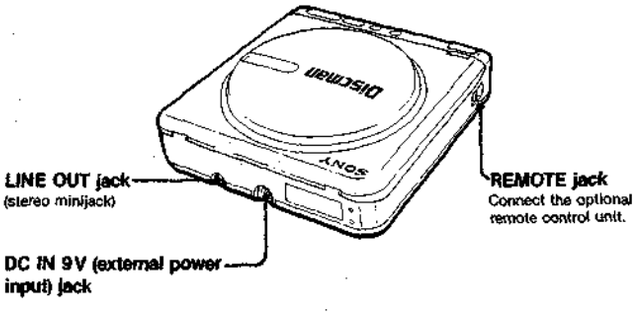
COMPACT DISC COMPACT PLAYER

SONY®

TABLE OF CONTENTS

SECTION 1
GENERAL





*AMS is an abbreviation for Automatic Music Sensor.

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.

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.

SECTION 2
SERVICING NOTES

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.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270℃ during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

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

Before Replacing the Optical Block

Please be sure to check thoroughly the parameters as par the "Optical Block Checking Procedures" (Part No. : 9-960-027-11) issued separately before replacing the optical block. Note and specifications required to check are given below.

- FOK output : IC501 ⑨ pin
  When checking FOK, remove the lead wire to disc motor and unsolder and open IC801 ㉒ pin (FOK).
- S carve P-to-P value : 3Vp-p
  When checking S carve P-to-P value, remove the lead wire to disc motor.
- Adjusted part for focus gain adjustment : RV501
- RF signal P-to-P value : 0.7 – 1.25Vp-p
- Traverse signal P-to-P value : 1.5Vp-p
- The repairing grating holder is impossible.
- Adjusted part for tracking gain adjustment : RV502

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 25cm away from the objective lens.

Laser Diode Check Procedure

The laser diode on this set will not emit unless the top panel is closed and S801 (leaf SW type) is turned on. The laser diode will always emit even if focus search is not performed in service mode.
The laser diode is checked using the current value which flows to the laser diode inside the optical pick-up block.

Procedure 1 (service mode or normal operation)

Check the laser diode emission with the eye.

1. Open upper panel.
2. S801 on as Fig. 1.
   (In service mode, this operation is not necessary.)
3. Press the ▶II key.
   (In service mode, this operation is not necessary.)
4. Observe the objective lens and confirm that the laser diode is emitting light. At this time, the laser diode goes on about 10 seconds due to focus serarch. If it does not, APC circuit or optical pick-up block is defective.

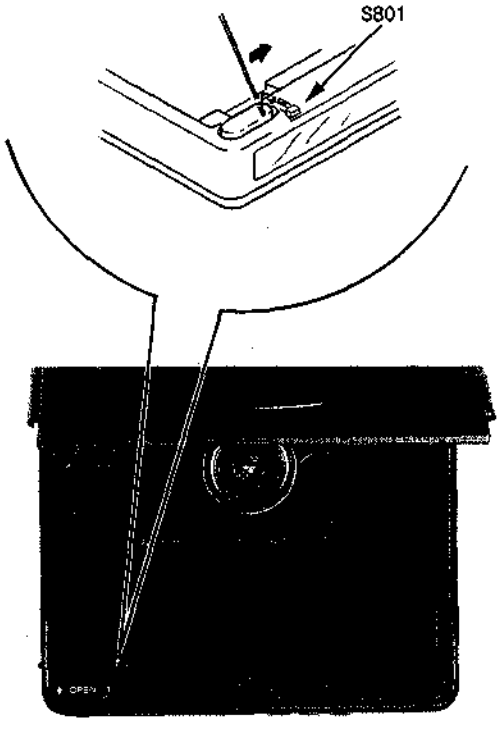
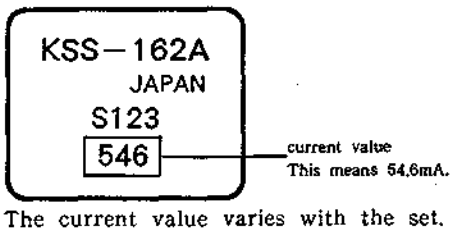


Fig.1 Turning S801 on

Procedrue 2 (service mode or normal operation)

Check by the current with flows in the laser diode.

1. Close the top panel.
2. Remove the main board and read the current value on the label affixed to the UPF.
   (Label on optical pick-up block)



   The current value varies with the set.
3. Connect a VOM as shown in Fig. 2.
4. Press the ▶II key.
5. Calculate the current by the VOM reading.
   VOM reading (V) ÷10=current (A)
   ex. VOM reading=0.56V
   0.56÷10=0.056 (A) =56 (mA)
6. Confirm that the ammeter reading is within the range given below.
   value on label±5 mA (25℃)
   variation relative to temperature : 0.4mA/℃
   (Current increases when temperature rises and decreases when it drops.)

If the value is more than the range give, APC circuit has been defective or the laser diode has deteriorated.
If it is less, APC circuit or optical pick-up block is defective.

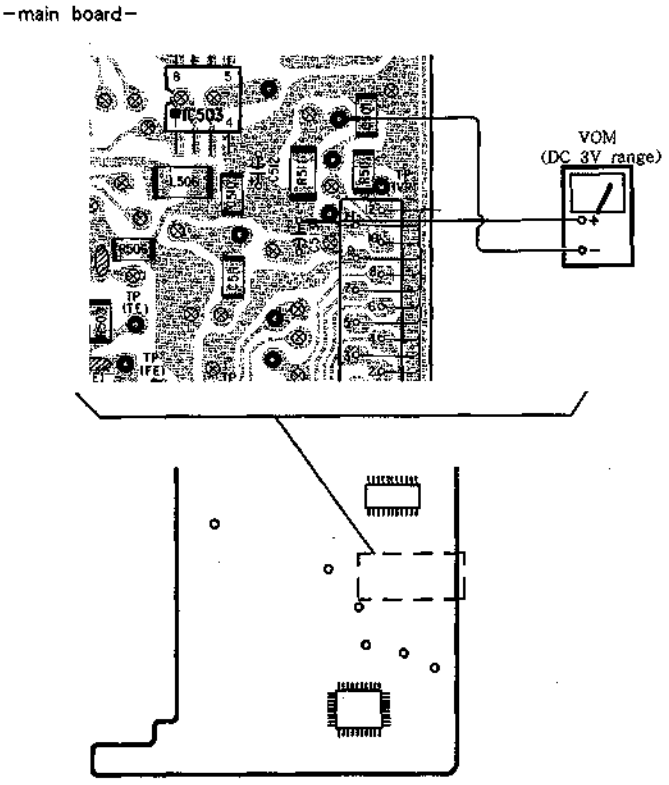


Fig.2 VOM Connection

SERVICE MODE (service program)

This set has built-in service program in the microcomputer as usual sets.
The operation method of service program is explained below.

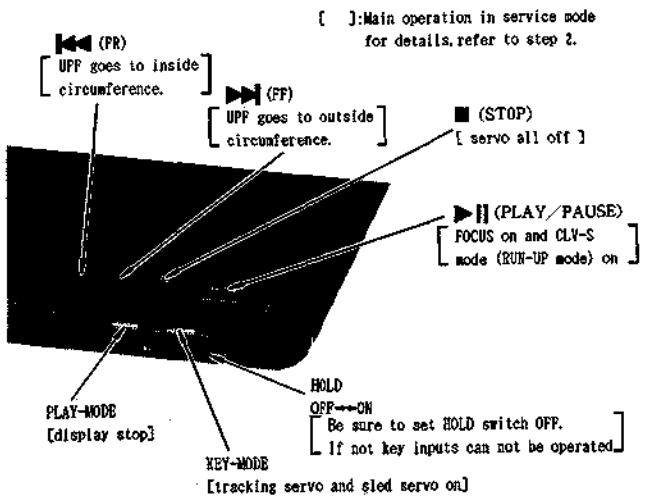


Fig.3 Key Positions

• Step 1 (Service Mode setting method)

1. Turn the HOLD switch OFF with the external power supply not plugged in (no power applied to set) and press the ⏯ key.
2. Solder jumper TEST terminal.
   (IC801 pin㉔(TEST) is grounded.)
3. Plug in external power supply.
   This puts the set into service mode.

• Step 2 (Service Mode operation)

1. When service mode is set, the display will change 6 times, and those 6 changes will be repeated over and over.
   With this the LCD display should be present in service mode. Even if LCD dose not display, other operations will be performed.
2. When ⏭ or ⏮ key is pressed, the UPF moves to the inside or outside circumference. Tracking servo and sled servo go off when this is done, so press KEY-MODE to turn on the tracking servo if necessary.
3. When PLAY-MODE is pressed, the display stops. When PLAY-MODE is released, the display continues to change. This allows check of each segment.
4. When ⏯ Key is pressed, CLV-S (pull-in mode) starts while performing focus search. When there is no disc installed, focus search is repeated several times while disc motor is rotating.
5. When KEY-MODE is pressed, tracking servo, sled servo and CLV-A (servo during PLAY) go ON.
6. When 4 and 5 are performed, the disc begins to play. At this time, the top panel should be closed and S801 are to be ON. A sound is not produced as muting is ON.
7. All servo (focus, tracking, sled and spindle) go off when ■ key is pressed.

• Step 3 (Service Mode release)

1. First be sure to unplug the external power supply, then remove the solder jumper TEST terminal.
2. The set will now operated normally.

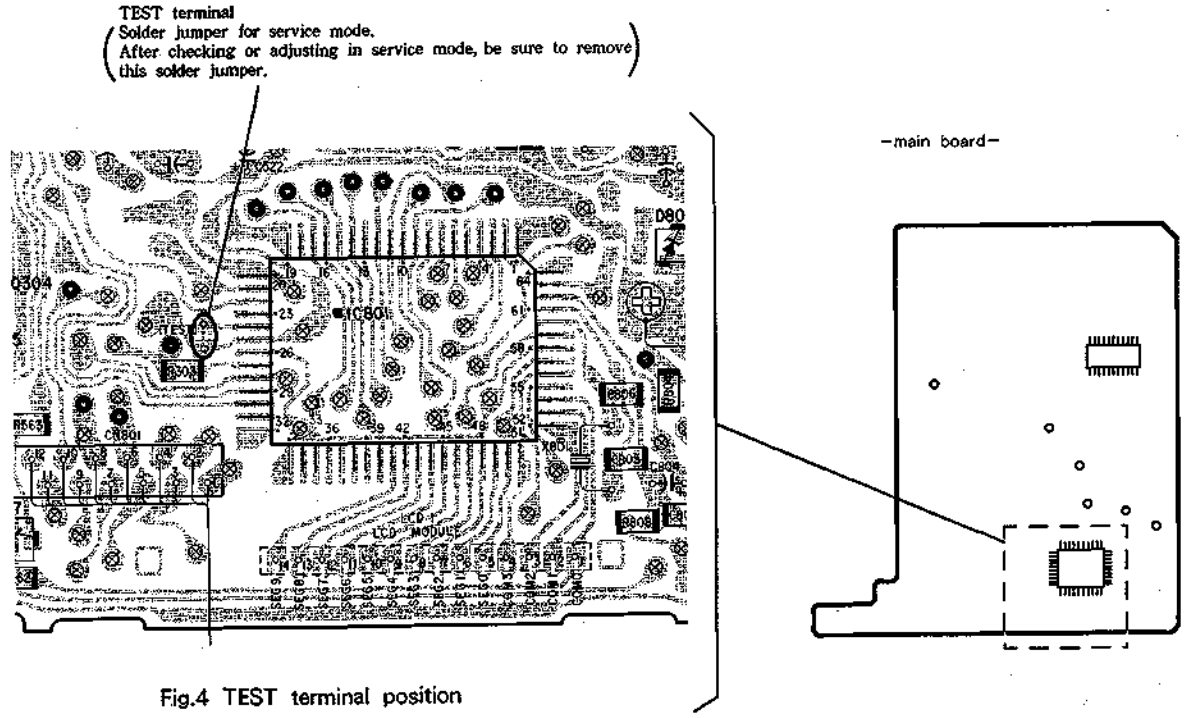


Fig.4 TEST terminal position

SECTION 3
ELECTRICAL ADJUSTMENTS

Notes on Adjustment

1. Perform adjustments except for RECHARGEABLE VOLTAGE ADJUSTMENT in service mode.
   Be sure to release service mode after completing adjustment.
   (Refer to "Service Mode (service program)" on page 5.)
2. Perform adjustments in the order given.
3. Use YEDS-18 disc (part No. : 3-702-101-01) unless otherwise indicated.
4. Power supply voltage : DC 9V
   HOLD switch : OFF

PREPARATION

Put the set into service mode (See page 5.) and perform the following checks. Repair if there are any abnormalities.

• Sled Motor Check

1. Press the OPEN button and open the top panel.
2. Press the ⏭, ⏮ keys and make sure that the opticl pick-up block moves smoothly, without catching, from the inmost → outmost → inmost circumference.
   ⏭ : opticl pick-up block moves outward
   ⏮ : opticl pick-up block moves inward

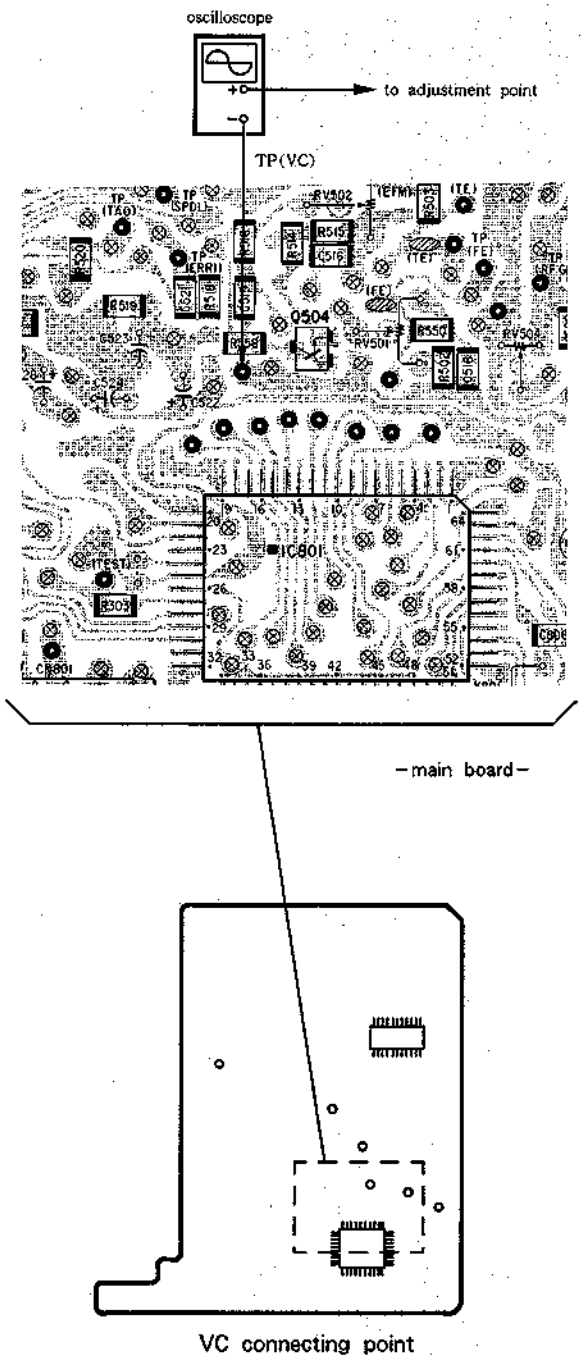
• Focus Search Check

1. Press the OPEN button and open the top panel.
2. Press the ⏯ key. (Focus search is performed continuously.)
3. Observe the opticl pick-up block objective lens and check that it moves smoothly up and down with no catching or noises.
4. Press the ■ key.
   Check that focus search operation stops. If it does not, press the ■ key again.

VC (1/2 Vcc) Connecting Point

FOCUS BIAS ADJUSTMENT
TRACKING BALANCE ADJUSTMENT

When the adjustments above are performed, connect the ⊖ side of oscilloscope to the point below.

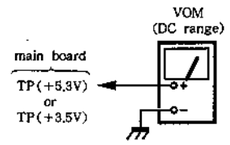


VC connecting point

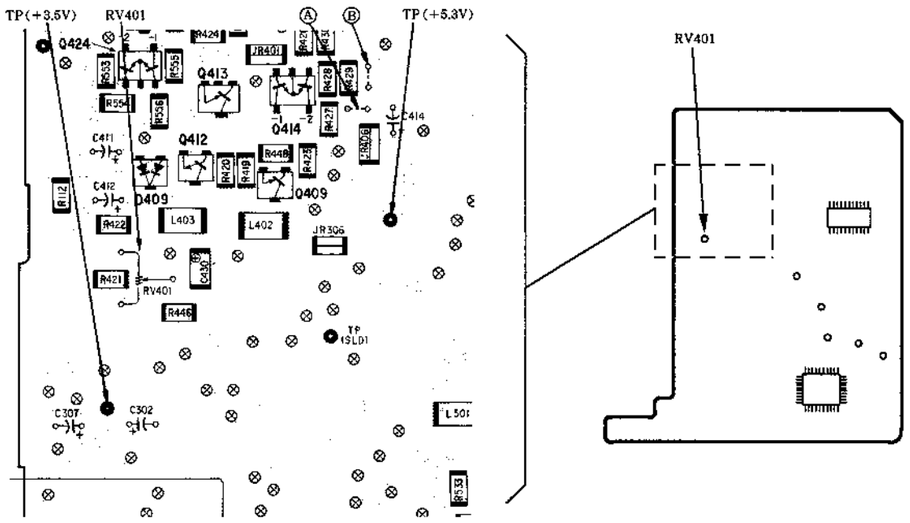
5.3V Adjustment

Adjustment Procedure :

1. Put the set into service mode (see page 5).
2. Connect the VOM to main board test point TP(+5.3V).
3. Adjust RV401 for 5.2V–5.3V reading on the VOM.
4. After adjustment, release service mode (see page 5).



Adjustment Location : main board



3.5V Adjustment

Adjustment Procedure :

1. Put the set into service mode (see page 5).
2. Connect the VOM to main board test point TP (+3.5V).
3. Adjust the pattern connection (Ⓐ or Ⓑ) to obtain 3.45V to 3.6V reading on the VOM.

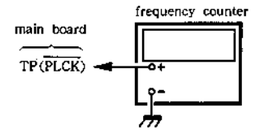
pattern connection		VOM reading
A	B	
○	×	down
×	×	↕
×	○	↕
○	○	up

○ : short × : open

4. After adjustment, release service mode (see page 5).

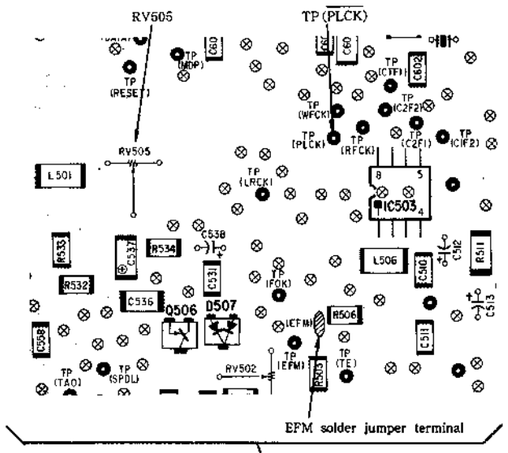
PLL Free Run Frequency Check and Adjustment

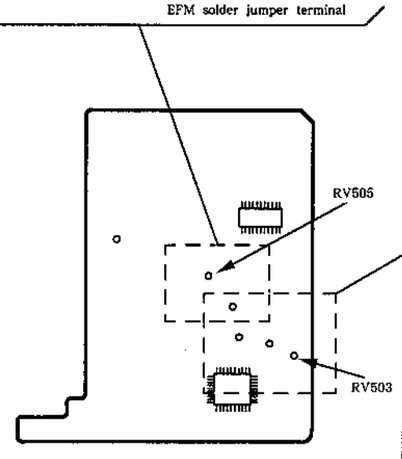
Check/Adjustment Procedure :



1. Disconnect EFM solder jumper terminal in the diagram below.
2. Connect a frequency counter to main board test point TP(PLCK).
3. Put the set into service mode (See page 5).
4. Check that the frequency counter reading is 4.31±0.01 MHz. If not, adjust RV505 so that it is 4.31±0.01MHz.
5. After adjustment, release service mode (see page 5).
6. Short the jumper terminal disconnected in step 1.

Check/Adjustment Location : main board



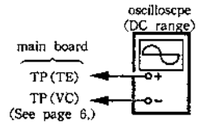


Tracking Balance Adjustment

Conditions :

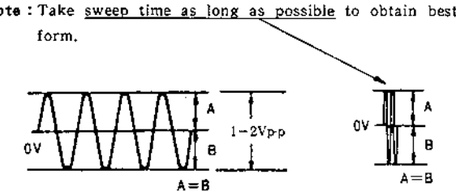
The set should be placed either horizontally.

Adjustment Procedure :



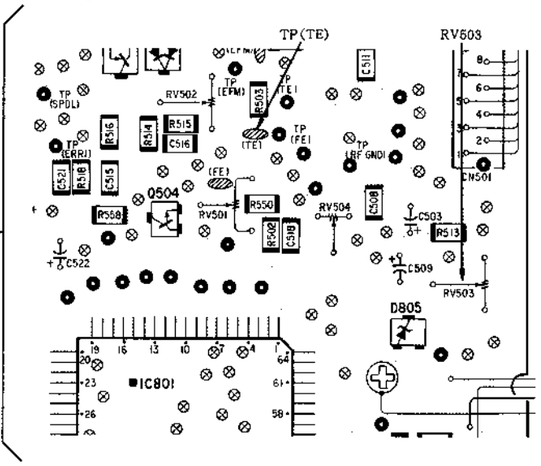
1. Connect the oscilloscope to main board TP(TE).
2. Put the set into service mode (See page 5.)
3. Press the ⏭ and ⏮ keys to move the optic pick-up block to the center.
4. Insert the disc (YEDS-18) and close the top panel.
5. Press the ⏯ key.
   (It will go from focus search to focus on, and CLV pull-in mode state. Tracking and sled are OFF.)
6. Adjust RV503 so that the oscilloscope wavaform is symmetrical on the top and bottom in relation to 0V.

Note : Take sweep time as long as possible to obtain best waveform.



7. Unplug the external power supply to stop spindle motor from rotating.
8. After adjustment, release service mode (see page 5).

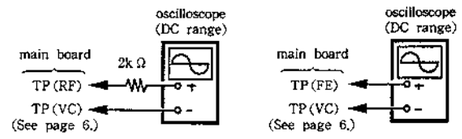
Adjustment Location : main board



Focus Bias Adjustment

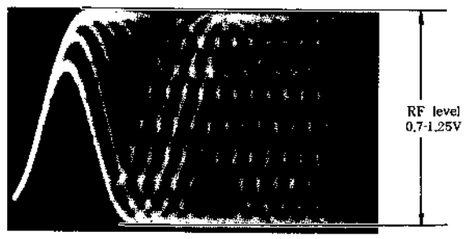
Conditions :
The set should be placed either horizontally.

Adjustment Procedure :



1. Put the set into service mode (See page 5).
2. Connect the oscilloscope to main board test point TP(RF).
3. Press the ⏭ and ⏮ key to move the optical pick-up block to the center.(Move the optical pick-up block to the music area on the disc to enable easy visibility of the eye pattern).
4. Insert the disc (YEDS-18) and close the top panel.
5. Press the ⏯ key.
   (It will go from focus search to focus on, and CLV pull-in mode state.Tracking and sled are OFF.)
6. Press the KEY-MODE button (Tracking and sled go ON.)
7. Adjust RV504 so that the oscilloscope waveform eye pattern is good. A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.

• RF Signal Reference Waveform (eye pattern)
VOLT/DIV : 200mV
TIME/DIV : 500nS



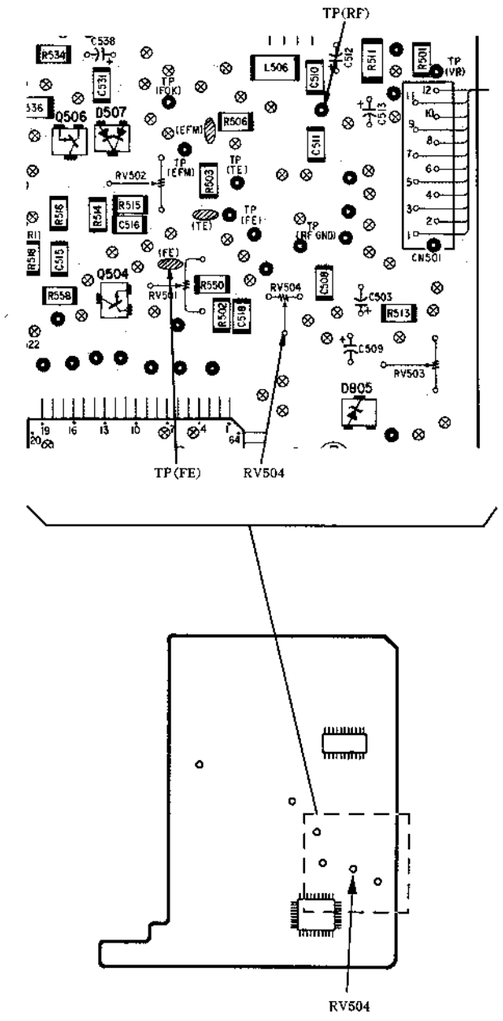
When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

8. Unplug the external power supply to stop spindle motor from rotating.
9. Remove the disc and connect the oscilloscope to main board TP (FE).
10. Adjust RV503 again refering to the table followed.

voltage of TP (FE)	adjustment
more than +100mV	Not adjust again.
+50 to 100mV	Adjust RV503 again for +100mV reading on oscilloscpe
less than +50mV	Not adjust again.

11. After adjustment, release service mode (see page 6).

Adjustment Location : main board



Reference

Focus/Tracking Gain Adjustment
A frequency responce analyzer or CD jig 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 perfrom this adjustment.

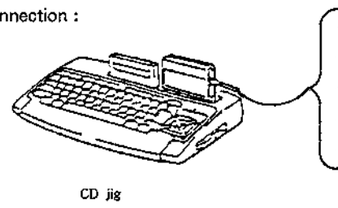
Focus/tracking gain determines the pick-up followup (vertical and horizontal) relative to mechanical noise and metchnical shock when the 2-axis device operate.
However, as these reciprocate, the adjustment is at the point where both are satisfied.
- When gain is high, the noise when the 2-axis device operates increases.
- When gain is low, it is more susceptible to mechanical shock and skipping occurs more easily.

This adjustment is to be performed when replacing the following parts :
- UPF (optical pick-up block)
- RV501 (focus gain volume)
- RV502 (tracking gain volume)

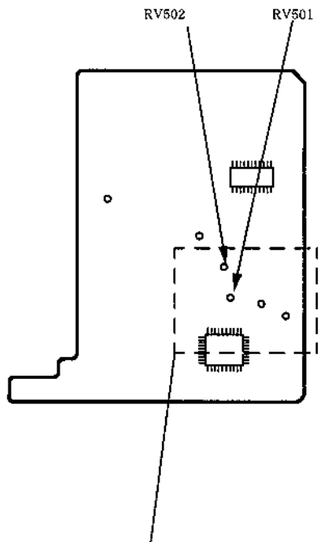
On this set, it is very difficult to simplify this adjustment. For those sets on which symptoms such as "occasional skipping" are hard to discover, or it is hard to tell if the set has been repaired, use the CD jig and perform this adjustment. Refer to the diagram below for connection of the CD jig. The adjustment procedure is described in the separate CD jig Instruction Manual.

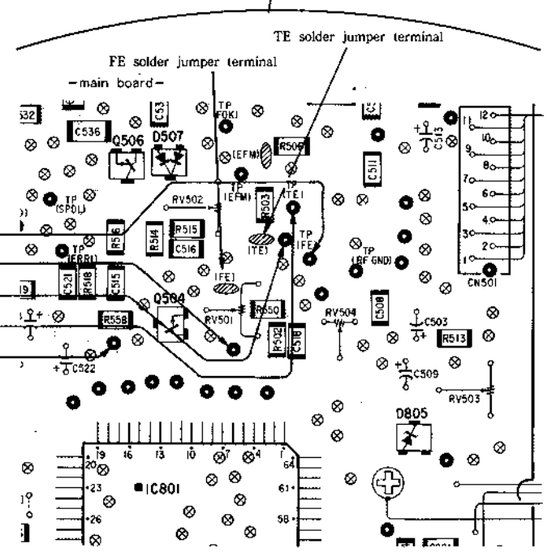
Please be careful no to move RV501 (focus gain volume), RV502 (tracking gain volume) ordinarily.

CD jig connection :



Remove the solder jumpers at the TE and FE locations and connect the CD jig.

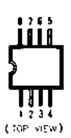




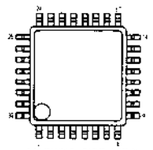
SECTION 4
DIAGRAMS

4-1. SEMICONDUCTOR LEAD LAYOUTS

BA10358F
NJM2903M
NJM4506M



CXA1271Q



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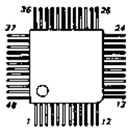
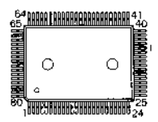
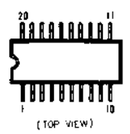


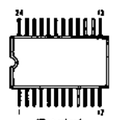
CXD1130Q



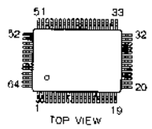
CXD1161M-3



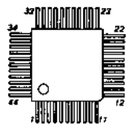
CXK5816M-10L
M51568FP



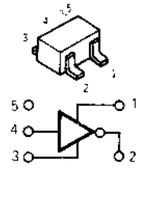
CXP5024-063Q



MPC1715FU

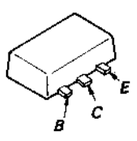


TC7S04F

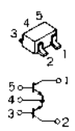


2SA812
2SB815
2SC2712
2SD596
DTA124EK
DTA144TK
DTC114TK
DTC144TK

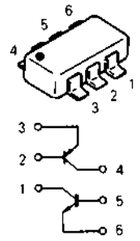
2SB1120
2SD999



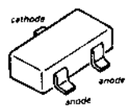
FMW1



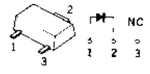
IMD3



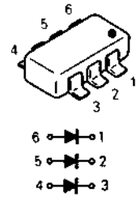
1S2837



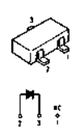
E10QS04



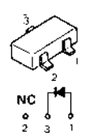
IMN10



RD5.6M-B2
RD7.5M-B1
RD10M-B2
RD12M-B2
SB01-05CP



SB05-05CP



Note on Printed Wiring Boards:

- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ⊗ : Through hole.
- ▒ : Pattern on the side which is seen.
- ▒ : Pattern of the rear side.
- ⊗—⊗ : Through hole to SIDE A and SIDE B indicate to jointed number and connection.

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- % : indicates tolerance.

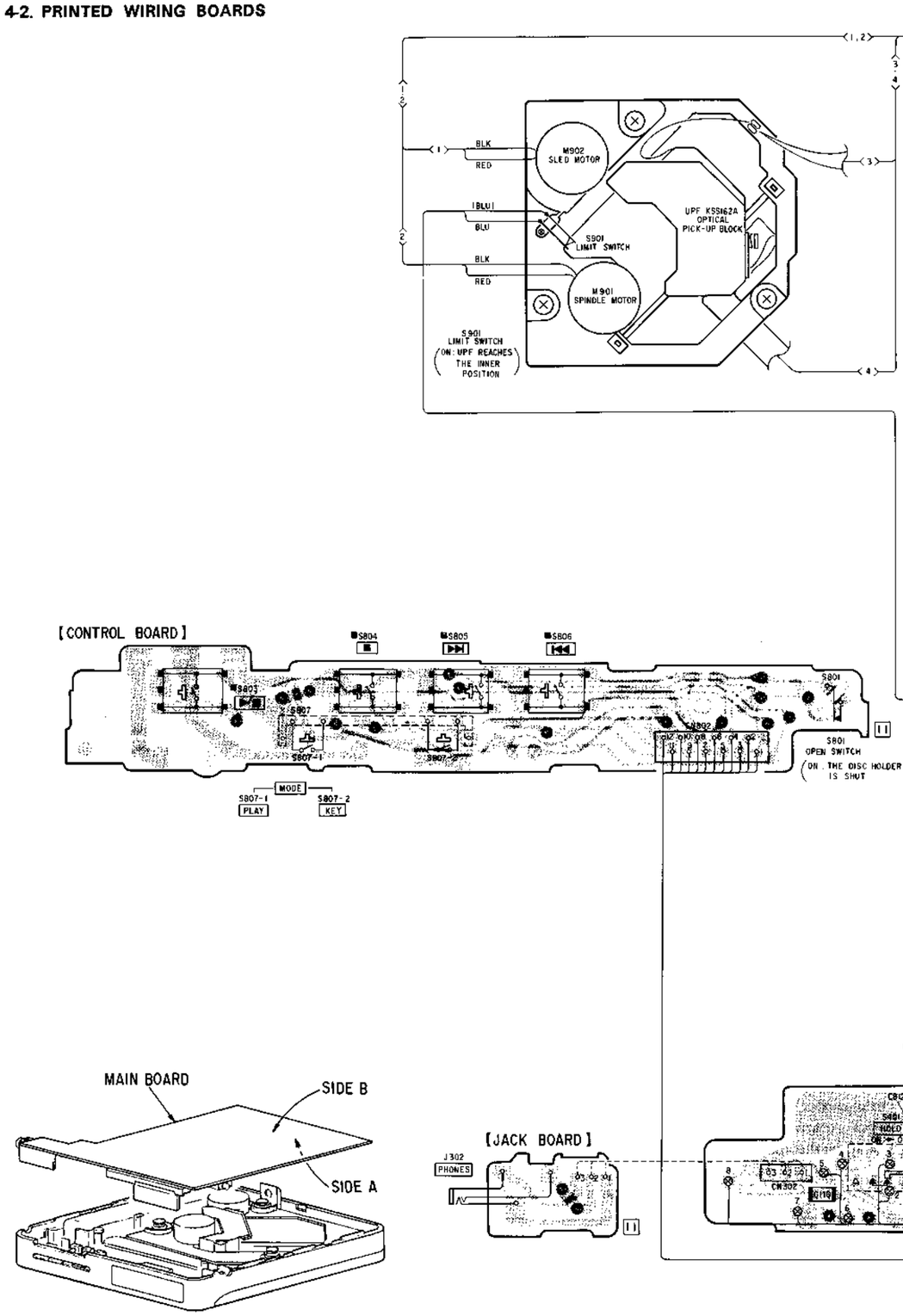
Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

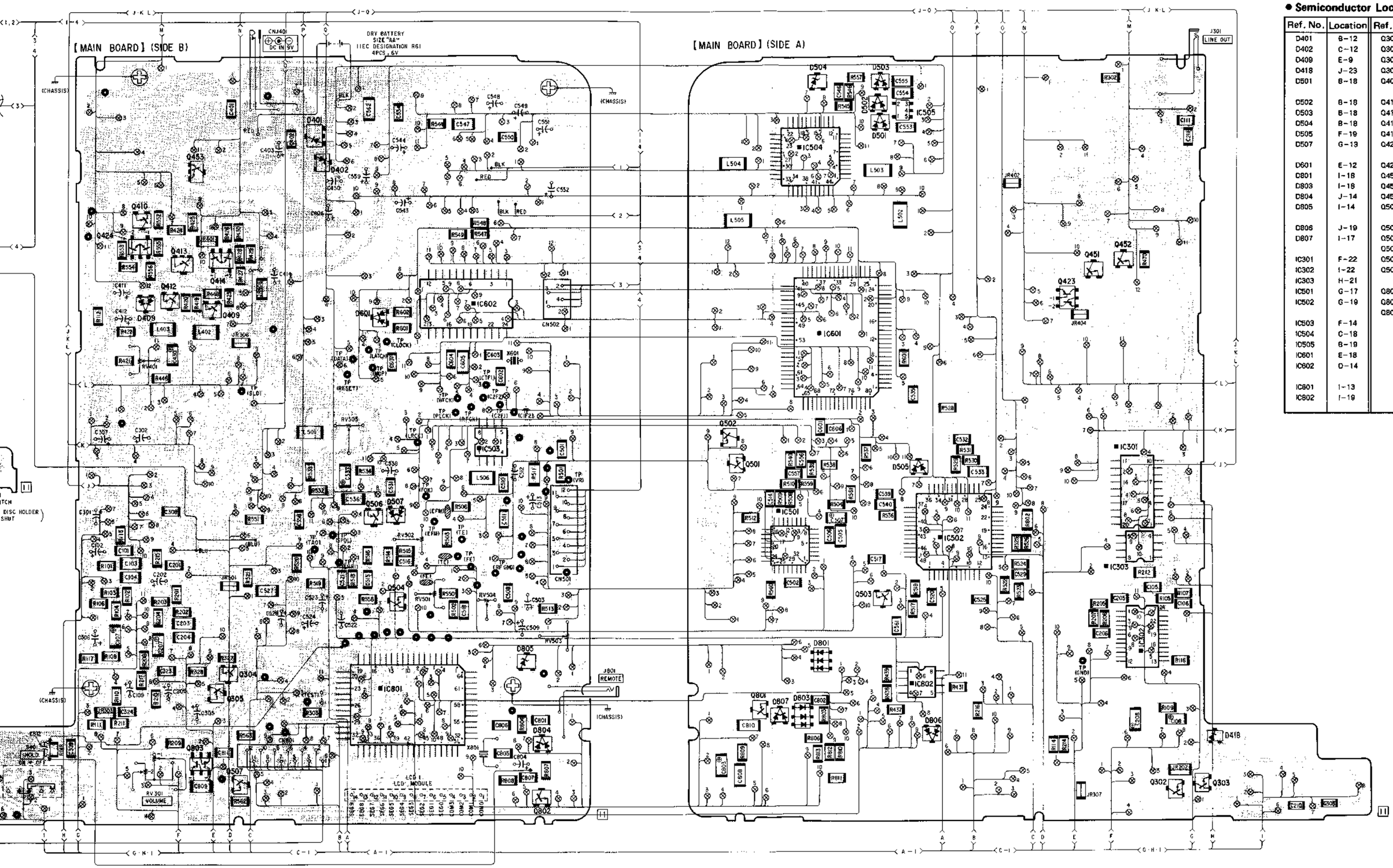
- Switch

Ref. No.	Switch	Position
S401	HOLD	OFF
S801	OPEN SWITCH	ON
S803	▶II	OFF
S804	■	OFF
S805	▶▶I	OFF
S806	I◀◀	OFF
S807-1	PLAY MODE	OFF
S807-2	KEY MODE	OFF
S901	LIMIT SWITCH	OFF

- ▬▬ : B+ Line
- ▭ : adjustment for repair.
- Power voltage is dc 9V and fed with regulated dc power supply from external power voltage jack.
- Voltage and waveforms are dc with respect to ground in service mode. (See page 5 for set up of service mode.)
  no mark : STOP Conditions
  ( ) : PLAY Conditions
- Voltages are taken with a VOM (50 kΩ/V).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ▱▱ : CD

4-2. PRINTED WIRING BOARDS





● Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D401	B-12	Q302	J-22
D402	C-12	Q303	J-23
D409	E-9	Q304	I-11
D418	J-23	Q305	I-11
D501	B-18	Q409	E-11
D502	B-18	Q410	C-9
D503	B-18	Q412	D-10
D504	B-18	Q413	D-10
D505	F-19	Q414	D-10
D507	G-19	Q423	D-21
D601	E-12	Q424	D-9
D801	I-18	Q451	D-21
D803	I-18	Q452	D-21
D804	J-14	Q453	C-10
D805	I-14	Q501	F-17
D806	J-19	Q502	F-17
D807	I-17	Q503	H-18
		Q504	H-13
IC301	F-22	Q506	G-12
IC302	I-22	Q507	J-11
IC303	H-21		
IC501	G-17	Q801	I-17
IC502	G-19	Q802	K-14
		Q803	J-10
IC503	F-14		
IC504	C-18		
IC505	B-19		
IC601	E-18		
IC602	D-14		
IC801	I-13		
IC802	I-19		

4-3. SCHEMATIC DIAGRAM

12 13 14 15 16 17 18 19 20 21 22 23

A B C D E F G H I J K L M N O

IC601
CXD1130Q
SIGNAL PROCESSOR

IC602
LC3516AML-15
RAM

IC301
CXD1116M
D/A CONVERTER

IC303
NJM4560M
AUDIO AMP

IC302
MS1568F
AUDIO AMP

IC801
CXP5024-063Q
SYSTEM CONTROL
/LCD DRIVE

X601 16.9344MHz

RV301
VOLUME

Q303 2SD1048 MUTING
Q304 2SD1048 MUTING
Q302 2SD1048 MUTING
Q507 DTC144TK MUTING
Q803 IMD3T108 MUTE SWITCH
Q801 DTA124EK INVERTER
Q802 2SD596 RESET
Q305 2SD1048 MUTING

D601 IS2837
D807 1S2837
D804 1S2837
D806 1S2837
D418 RD5.6M
D805 RD12M
D801 IMN10T109
D803 IMN10T108

J301 LINE OUT
J302 PHONES
J801 REMOTE
CN302
CN801
CN802

[JACK BOARD]

[CONTROL BOARD]
S801 OPEN SWITCH (ON : THE DISC HOLDER IS SHUT)
S401 HOLD ON ↔ OFF
S803
S804
S805
S806
S807-1 PLAY-MODE
S807-2 KEY-MODE

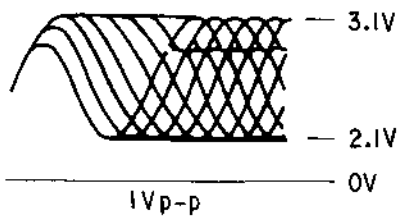
LCD1
LCD MODULE

4-4. WAVE FORMS

1 PLAY:

APPROX. 300mVp-p

2 PLAY:

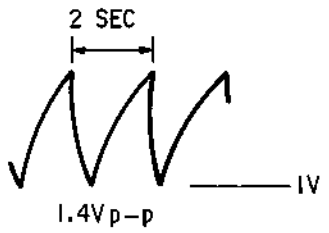


1Vp-p

3 PLAY:

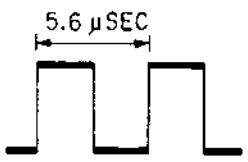
APPROX. 600mVp-p

4 DURING FOCUS SEARCH



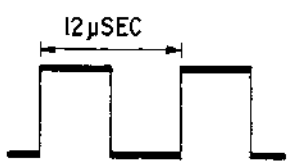
1.4Vp-p

5



3.6Vp-p

6

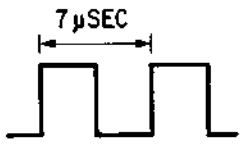


3.6Vp-p

7

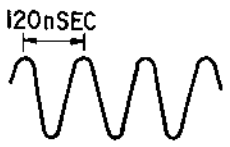
3.4Vp-p

8



3.6Vp-p

9



1.5Vp-p

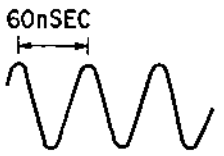
10

1.25Vp-p

11

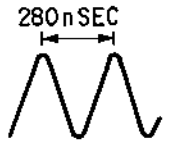
2.5Vp-p

12



2Vp-p

13

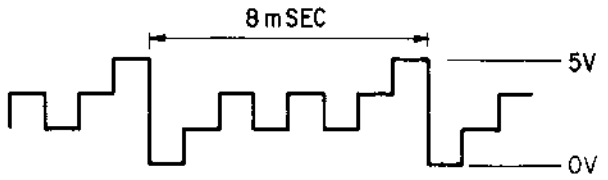


3.6Vp-p

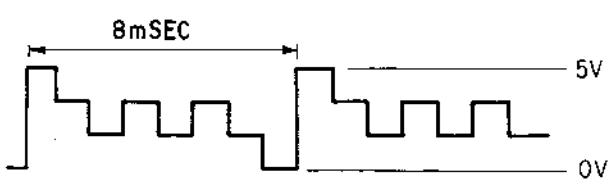
14

4Vp-p

15



16



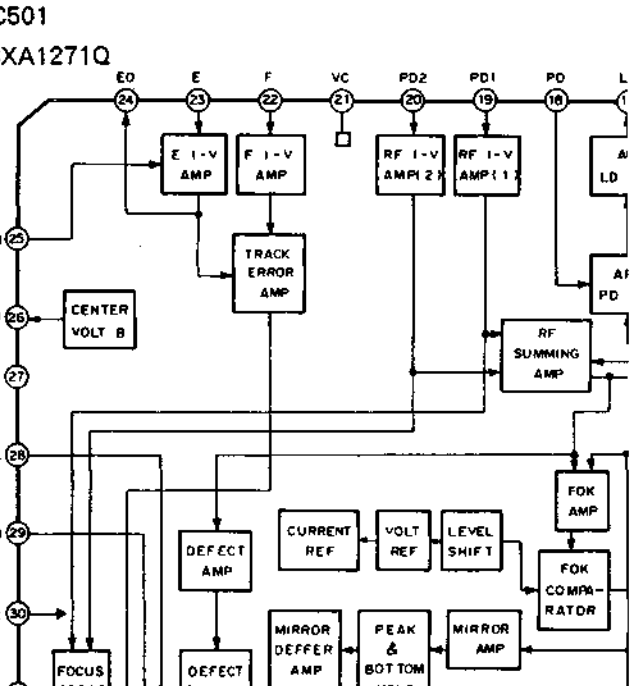
4-5. IC BLOCK DIAGRAM

IC501

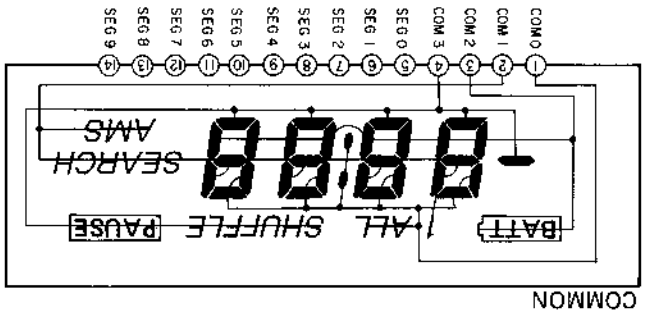
CXA1271Q

IC502

CXA1272Q-Z

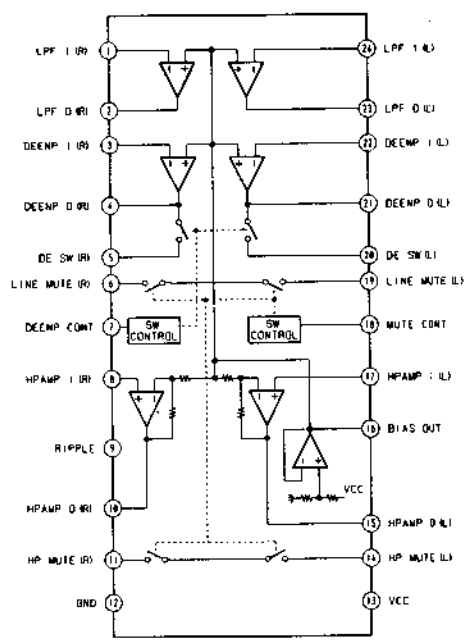


4-6. LCD MODULE



IC302

M51568FP

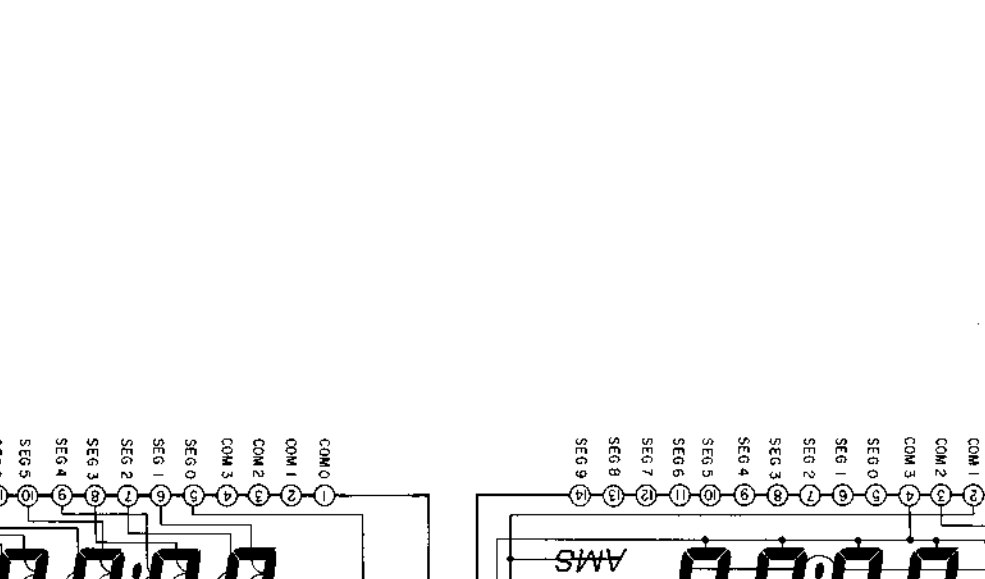


IC504

MPC1715

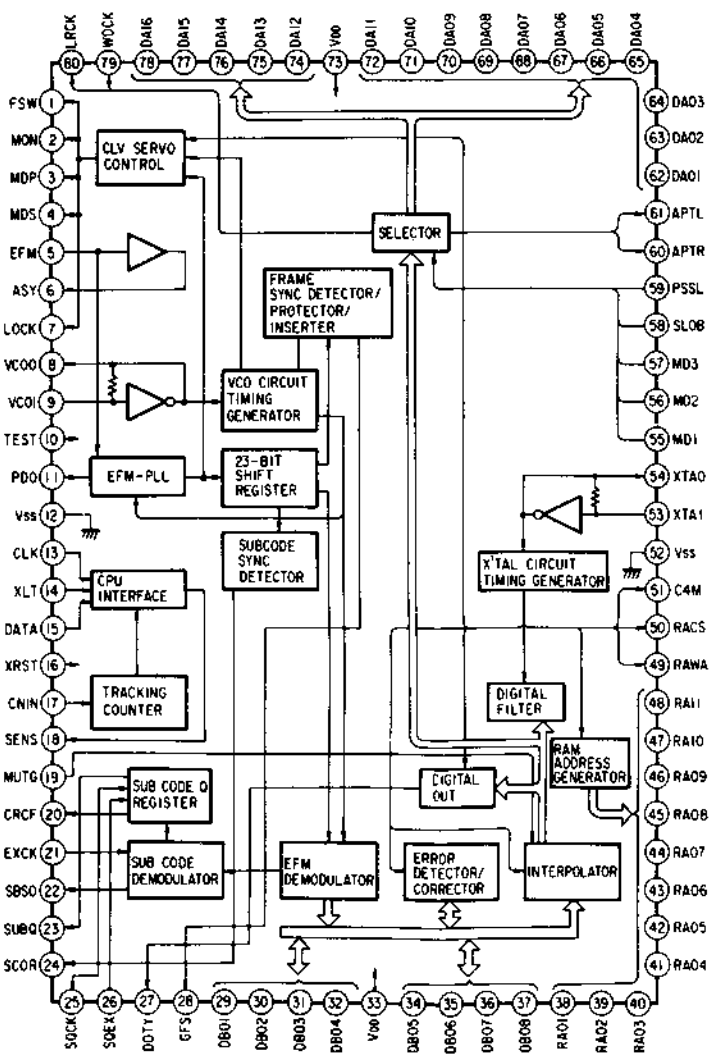
IC301

CXD1161M



IC601

CXD1130Q



SECTION 5
EXPLODED VIEWS

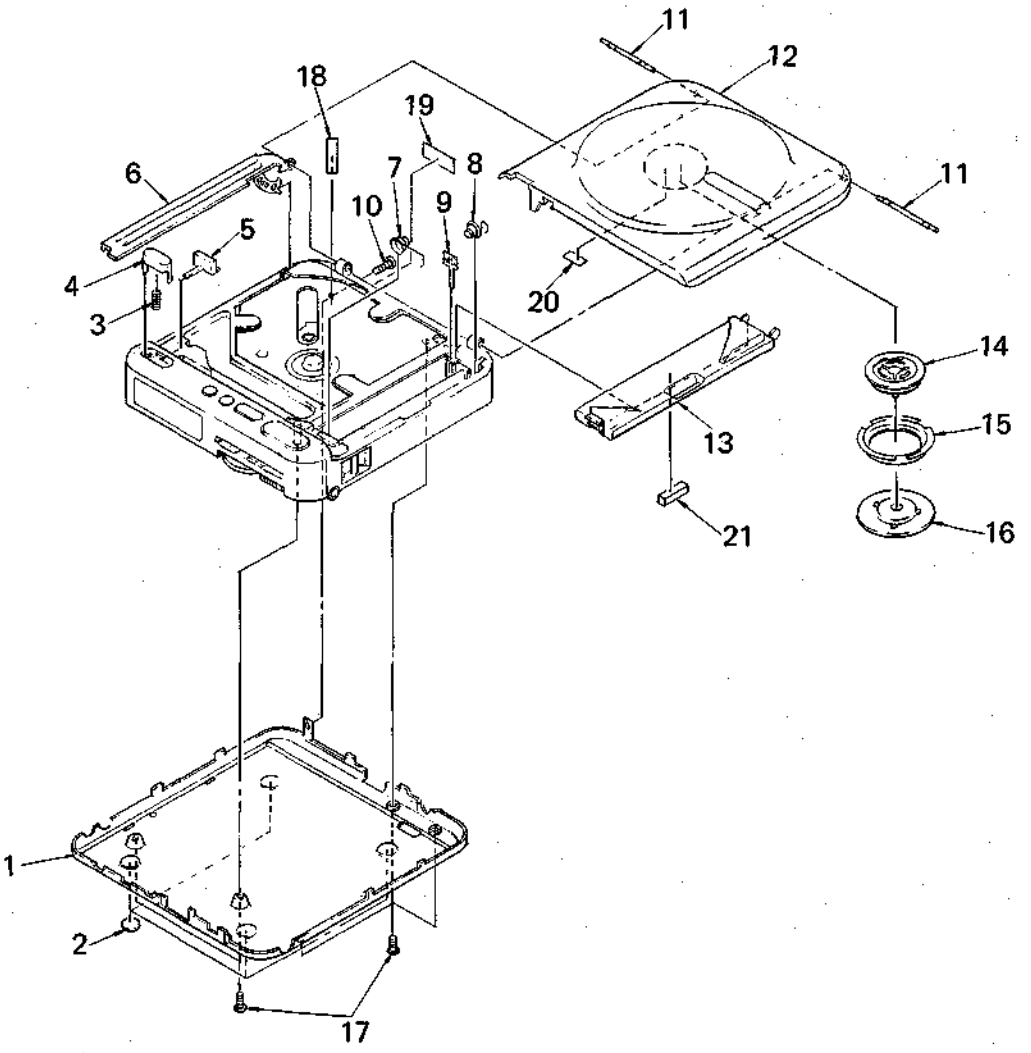
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts Example:
  (RED) ... KNOB, BALANCE (WHITE)
  ↑ ↑
  Cabinet's Color Parts' Color

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

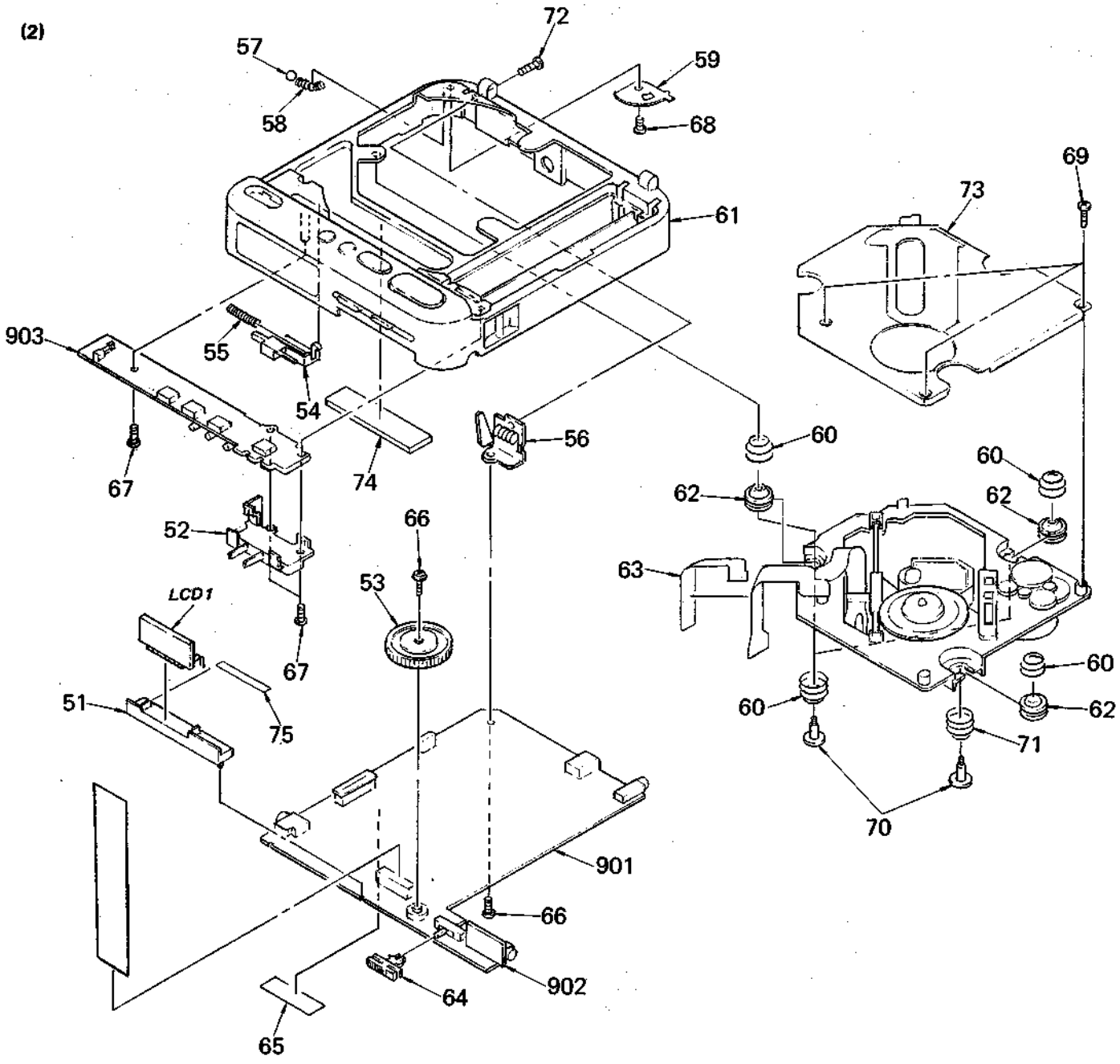
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

(1)



No.	Part No.	Description	Remarks
1	X-4924-724-1	(BLACK)...PANEL ASSY, BOTTOM	
	X-4924-725-1	(WHITE)...PANEL ASSY (W), BOTTOM	
2	4-912-641-11	FOOT, RUBBER	
3	4-926-634-01	SPRING, COMPRESSION	
4	4-926-617-01	(BLACK)...BUTTON (OPEN)	
	4-926-617-11	(WHITE)...BUTTON (OPEN)	
5	4-926-618-01	KNOB (SAFETY)	
6	4-926-611-01	ARM, SWITCHING	
7	2-298-630-01	SPRING (RIGHT)	
8	4-926-627-01	SPRING (A)	
9	3-881-922-11	BOARD, TERMINAL	
10	3-703-816-51	(BLACK)...SCREW (M1.4X3.5), SPECIAL HEAD	
	3-703-816-52	(WHITE)...SCREW (M1.4X3.5), SPECIAL HEAD	
11	4-926-626-01	SHAFT, FULCRUM	
12	X-4924-722-1	(BLACK)...LID ASSY, UPPER	
	X-4924-727-1	(WHITE)...LID ASSY (W), UPPER	
13	4-926-619-01	(BLACK)...LID, BATTERY CASE	
	4-926-619-11	(WHITE)...LID, BATTERY CASE	
14	4-926-608-01	PLATE (M), CHUCK	
15	4-926-609-01	RETAINER, CHUCK PLATE	
16	A-3039-708-A	PLATE ASSY, CHUCK	
17	4-908-792-61	(WHITE)...SCREW (B2X6), TAPPING, P1	
	4-908-792-71	(BLACK)...SCREW (B2X6), TAPPING, P1	
18	4-908-711-03	(BLACK).....LABEL CAUTION, LENS	
	4-908-711-13	(WHITE).....LABEL CAUTION, LENS	
19	*4-926-655-01	(D-20: BLACK)....LABEL MODEL, NUMBER (UK)	
	*4-926-655-11	(D-20: WHITE).....LABEL MODEL, NUMBER (UK)	
20	3-682-518-00	CUSHION	
21	*4-908-075-21	CUSHION	

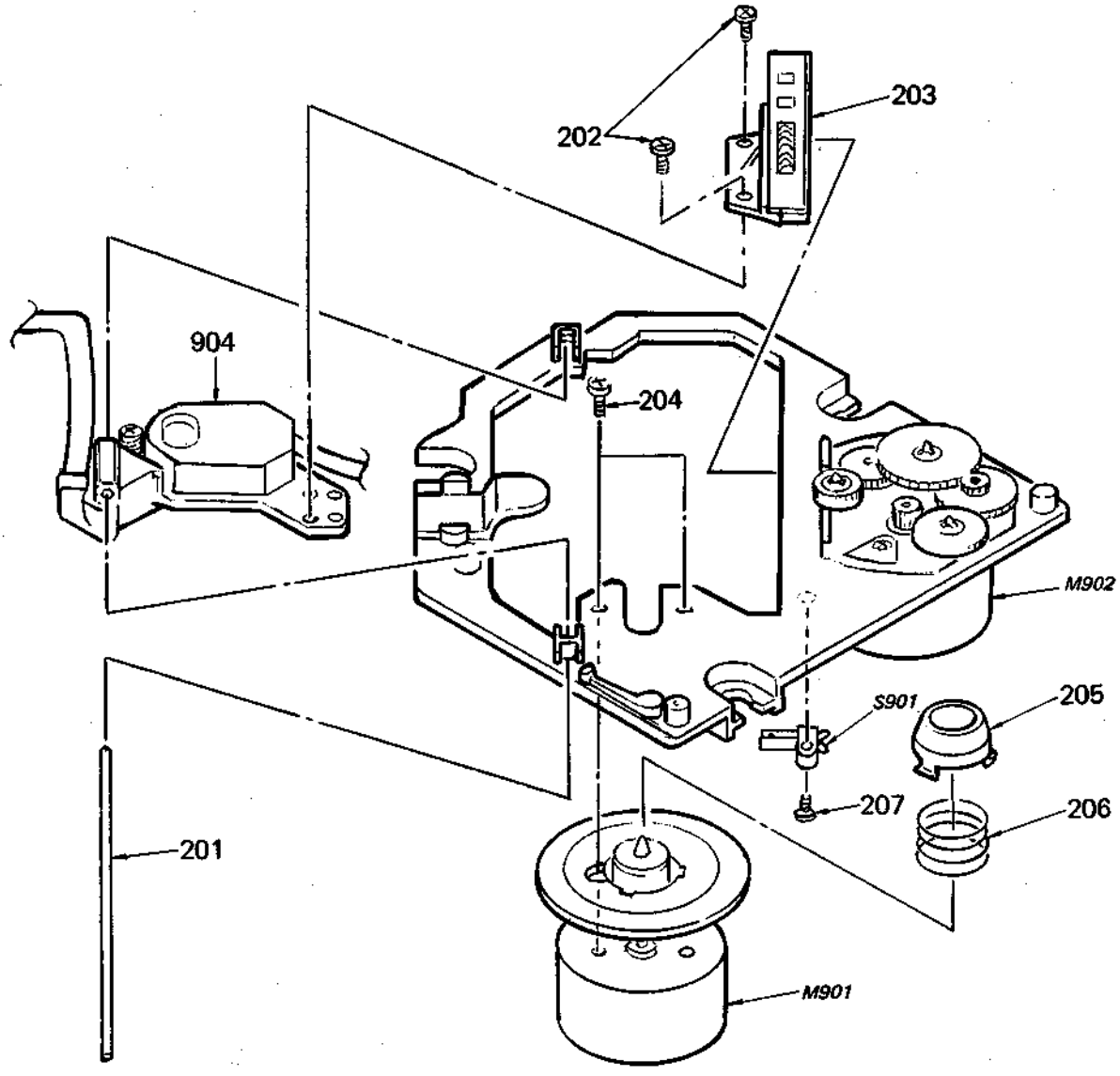
(2)



No.	Part No.	Description	Remarks
51	*4-926-610-01	HOLDER, LCD	
52	4-926-636-01	SUPPORT, JACK	
53	4-924-732-01	KNOB (VOLUME)	
54	4-926-613-01	CLAW, LID LOCK	
55	4-926-635-01	SPRING, COMPRESSION	
56	*X-4924-723-1	SPRING ASSY	
57	7-671-113-02	STEEL BALL 3.0	
58	4-926-633-01	SPRING, COMPRESSION	
59	4-926-612-01	RETAINER, BALL	
60	4-924-710-01	SPRING, COMPRESSION	
61	X-4924-721-1	(BLACK)...CABINET ASSY	
	X-4924-726-1	(WHITE)...CABINET ASSY (W)	
62	4-924-705-01	INSULATOR	
63	*4-924-761-01	SHEET, PROTECTION	
64	4-924-724-01	KNOB (HOLD)	
65	3-831-441-XX	CUSHION, SPEAKER	
66	3-335-797-21	SCREW (M1.4X3), TOOTHED LOCK	

No.	Part No.	Description	Remarks
67	4-908-792-61	(WHITE)...SCREW (B2X6), TAPPING, P1	
	4-908-792-71	(BLACK)...SCREW (B2X6), TAPPING, P1	
68	4-908-792-01	SCREW (B2X3), TAPPING, P1	
69	3-893-942-01	(BLACK)...SCREW (1.7X4), TAPPING (B)	
	3-893-942-31	(WHITE)...SCREW (1.7X4), TAPPING (B)	
70	4-926-718-01	SCREW	
71	4-926-659-01	SPRING, COMPRESSION	
72	3-331-047-07	(BLACK)...SCREW (M1.4X5.5), SPECIAL HEAD	
	3-331-047-08	(WHITE)...SCREW (M1.4X5.5), SPECIAL HEAD	
73	4-924-735-01	(BLACK)...COVER, MD	
	4-924-735-11	(WHITE)...COVER, MD	
74	*4-924-789-01	SHEET, BLIND	
75	4-926-657-11	PLATE, FIXED, LCD	
901	A-3015-671-A	PC BOARD ASSY, MAIN	
902	*1-627-307-11	PC BOARD, JACK	
903	*1-627-305-11	PC BOARD, CONTROL	
LCD1	1-808-443-11	DISPLAY PANEL, LIQUID CRYSTAL	

(3) MECHANISM SECTION (KSM-162AAN)



No.	Part No.	Description	Remarks
201	2-641-534-01	SHAFT	
202	7-627-852-18	SCREW, PRECISION +P 1.7X4 TYPE3	
203	X-2641-523-1	RACK ASSY	
204	7-627-552-88	SCREW, PRECISION +P 1.7X2.2	
205	2-641-539-01	RING, CENTER	
206	2-641-524-01	SPRING (A), COMPRESSION	
207	7-685-103-19	SCREW +P 2X5 TYPE2 NON-SLIT	
904	⚠8-848-081-21	PICKUP, OPTICAL KSS-162A	
M901	X-2641-521-1	MOTOR ASSY, T.T.	
M902	X-2641-525-1	MOTOR ASSY	
S901	1-570-112-11	SWITCH, LEAF (LIMIT SWITCH)	

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.

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

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.

Ref.No.	Part No.	Description			
901	A-3015-671-A	PC BOARD ASSY, MAIN			
902	*1-627-307-11	PC BOARD, JACK			
903	*1-627-305-11	PC BOARD, CONTROL			
904	⚠8-848-081-21	DEVICE, OPTICAL KSS-162A			
C101	1-163-086-00	CERAMIC CHIP	3PF	0.25PF	50V
C102	1-126-157-11	ELECT	10MF	20%	16V
C103	1-163-212-00	CERAMIC CHIP	0.002MF	5%	50V
C104	1-163-205-00	CERAMIC CHIP	0.001MF	5%	50V
C105	1-163-111-00	CERAMIC CHIP	56PF	5%	50V
C106	1-163-013-00	CERAMIC CHIP	0.0022MF	10%	50V
C107	1-135-099-00	TANTAL. CHIP	2.2MF	20%	6.3V
C108	1-135-099-00	TANTAL. CHIP	2.2MF	20%	6.3V
C109	1-124-584-00	ELECT	100MF	20%	10V
C110	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C111	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C201	1-163-086-00	CERAMIC CHIP	3PF	0.25PF	50V
C202	1-126-157-11	ELECT	10MF	20%	16V
C203	1-163-212-00	CERAMIC CHIP	0.002MF	5%	50V
C204	1-163-205-00	CERAMIC CHIP	0.001MF	5%	50V
C205	1-163-111-00	CERAMIC CHIP	56PF	5%	50V
C206	1-163-013-00	CERAMIC CHIP	0.0022MF	10%	50V
C207	1-135-099-00	TANTAL. CHIP	2.2MF	20%	6.3V
C208	1-135-099-00	TANTAL. CHIP	2.2MF	20%	6.3V
C209	1-124-584-00	ELECT	100MF	20%	10V
C210	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C211	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C301	1-124-584-00	ELECT	100MF	20%	10V
C302	1-124-584-00	ELECT	100MF	20%	10V
C303	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C305	1-126-157-11	ELECT	10MF	20%	16V
C306	1-124-584-00	ELECT	100MF	20%	10V
C307	1-124-584-00	ELECT	100MF	20%	10V
C308	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C309	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C323	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C324	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C401	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C402	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C403	1-126-357-11	ELECT	150MF	20%	16V
C406	1-124-584-00	ELECT	100MF	20%	10V
C411	1-126-157-11	ELECT	10MF	20%	16V
C412	1-126-094-11	ELECT	4.7MF	20%	16V
C414	1-126-157-11	ELECT	10MF	20%	16V
C430	1-135-099-00	TANTAL. CHIP	2.2MF	20%	6.3V
C450	1-124-257-00	ELECT	2.2MF	20%	16V
C501	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C502	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C503	1-124-431-00	ELECT	33MF	20%	4V
C505	1-163-078-11	CERAMIC CHIP	0.033MF	10%	25V
C506	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C507	1-135-070-00	TANTAL. CHIP	0.1MF	20%	35V
C508	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C509	1-124-431-00	ELECT	33MF	20%	4V
C510	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C511	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C512	1-124-584-00	ELECT	100MF	20%	10V
C513	1-124-431-00	ELECT	33MF	20%	4V
C514	1-163-095-00	CERAMIC CHIP	12PF	5%	50V
C515	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C516	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C517	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C518	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V
C519	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C520	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C521	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C522	1-124-239-00	ELECT	6.8MF	20%	25V
C523	1-124-239-00	ELECT	6.8MF	20%	25V
C524	1-126-153-11	ELECT	22MF	20%	6.3V
C525	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C527	1-163-081-00	CERAMIC CHIP	0.22MF		25V
C528	1-126-153-11	ELECT	22MF	20%	6.3V
C529	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C531	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C532	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C533	1-162-638-11	CERAMIC CHIP	1MF		16V
C534	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C535	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C536	1-163-078-11	CERAMIC CHIP	0.033MF	10%	25V
C537	1-135-145-11	TANTAL. CHIP	0.47MF	20%	25V
C538	1-124-434-00	ELECT	220MF	20%	4V
C539	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V
C540	1-162-637-11	CERAMIC CHIP	0.47MF		16V
C543	1-124-255-00	ELECT	1MF	20%	50V
C544	1-126-157-11	ELECT	10MF	20%	16V
C546	1-163-986-00	CERAMIC CHIP	0.027MF	10%	25V
C547	1-162-638-11	CERAMIC CHIP	1MF		16V
C548	1-126-162-11	ELECT	3.3MF	20%	50V
C549	1-126-157-11	ELECT	10MF	20%	16V
C550	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C551	1-126-157-11	ELECT	10MF	20%	16V
C552	1-124-255-00	ELECT	1MF	20%	50V
C553	1-162-638-11	CERAMIC CHIP	1MF		16V

Ref.No.	Part No.	Description		
C554	1-162-637-11	CERAMIC CHIP 0.47MF		16V
C555	1-163-081-00	CERAMIC CHIP 0.22MF		25V
C556	1-163-143-00	CERAMIC CHIP 0.0012MF	10%	50V
C557	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V
C558	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C559	1-124-584-00	ELECT 100MF	20%	10V
C561	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C562	1-162-638-11	CERAMIC CHIP 1MF		16V
C601	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C602	1-163-101-00	CERAMIC CHIP 22PF	5%	50V
C603	1-163-101-00	CERAMIC CHIP 22PF	5%	50V
C604	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C605	1-162-638-11	CERAMIC CHIP 1MF		16V
C606	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
C607	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V
C801	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
C802	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C803	1-135-099-00	TANTAL. CHIP 2.2MF	20%	6.3V
C804	1-124-257-00	ELECT 2.2MF	20%	50V
C805	1-163-113-00	CERAMIC CHIP 68PF	5%	50V
C806	1-163-113-00	CERAMIC CHIP 68PF	5%	50V
C807	1-163-021-00	CERAMIC CHIP 0.01MF	10%	50V
C808	1-162-638-11	CERAMIC CHIP 1MF		16V
C809	1-135-092-21	TANTAL. CHIP 3.3MF	20%	16V
C810	1-162-638-11	CERAMIC CHIP 1MF		16V
C811	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C812	1-126-157-11	ELECT 10MF	20%	16V
CN501	1-566-976-11	SOCKET, CONNECTOR 12P		
CN502	1-565-309-11	CONNECTOR, FLEXIBLE 4P		
CN801	1-563-589-11	CONNECTOR, FLEXIBLE 12P		
CN802	1-563-615-11	CONNECTOR, FLEXIBLE 12P		
CNJ401	1-562-961-11	JACK (DC IN 9V)		
D401	8-719-200-36	DIODE E1QQS04		
D402	8-719-106-22	DIODE RD7.5M-B1		
D409	8-719-938-75	DIODE SB05-05CP		
D418	8-719-105-91	DIODE RD5.6M-B2		
D501	8-719-938-72	DIODE SB01-05CP		
D502	8-719-938-72	DIODE SB01-05CP		
D503	8-719-938-72	DIODE SB01-05CP		
D504	8-719-106-53	DIODE RD10M-B2		
D505	8-719-100-05	DIODE 1S2837		
D507	8-719-100-05	DIODE 1S2837		
D601	8-719-100-05	DIODE 1S2837		
D801	8-719-951-22	DIODE IMN10		
D803	8-719-951-22	DIODE IMN10		
D804	8-719-100-05	DIODE 1S2837		
D805	8-719-106-71	DIODE RD12M-B2		

Ref.No.	Part No.	Description			
D806	8-719-100-05	DIODE 1S2837			
D807	8-719-100-05	DIODE 1S2837			
IC301	8-759-805-34	IC CXD1161M-3			
IC302	8-759-630-75	IC M51568FP			
IC303	8-759-745-64	IC NJM4560M			
IC501	8-752-033-55	IC CXA1271Q			
IC502	8-752-033-54	IC CXA1272Q-Z			
IC503	8-759-970-89	IC BA10358F			
IC504	8-759-030-17	IC MPC1715FU			
IC505	8-759-230-43	IC TC7S04F			
IC601	8-759-947-03	IC CXD1130Q			
IC602	8-752-320-44	IC CXK5816M-10L			
IC801	8-752-806-14	IC CXP5024-063Q			
IC802	8-759-700-07	IC NJM2903M			
J301	1-565-310-11	JACK (LINE OUT)			
J302	1-565-311-11	JACK (PHONES)			
J801	1-562-870-31	JACK (REMOTE)			
JR202	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR303	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR306	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR307	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR401	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR402	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR404	1-216-295-00	METAL GLAZE	0	5%	1/10W
JR406	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR501	1-216-295-00	METAL GLAZE	0	5%	1/10W
L402	1-412-038-11	INDUCTOR CHIP 100UH			
L403	1-412-037-11	INDUCTOR CHIP 47UH			
L501	1-412-036-11	INDUCTOR CHIP 10UH			
L502	1-412-039-51	INDUCTOR CHIP 100UH			
L503	1-412-038-11	INDUCTOR CHIP 100UH			
L504	1-412-038-11	INDUCTOR CHIP 100UH			
L505	1-412-039-51	INDUCTOR CHIP 100UH			
L506	1-412-036-11	INDUCTOR CHIP 10UH			
LCD1	1-808-443-11	DISPLAY PANEL, LIQUID CRYSTAL			
M901	X-2641-521-1	MOTOR ASSY, T.T.			
M902	X-2641-525-1	MOTOR ASSY			
Q302	8-729-159-64	TRANSISTOR 2SD596			
Q303	8-729-159-64	TRANSISTOR 2SD596			
Q304	8-729-159-64	TRANSISTOR 2SD596			
Q305	8-729-159-64	TRANSISTOR 2SD596			
Q409	8-729-100-76	TRANSISTOR 2SA812			
Q410	8-729-800-68	TRANSISTOR 2SB815			
Q412	8-729-159-64	TRANSISTOR 2SD596			
Q413	8-729-806-75	TRANSISTOR 2SB1120			
Q414	8-729-903-10	TRANSISTOR FMW1			

Ref.No.	Part No.	Description
Q423	8-729-907-28	TRANSISTOR IMD3
Q424	8-729-903-10	TRANSISTOR FMW1
Q451	8-729-199-92	TRANSISTOR 2SD999
Q452	8-729-199-92	TRANSISTOR 2SD999
Q453	8-729-199-92	TRANSISTOR 2SD999
Q501	8-729-100-76	TRANSISTOR 2SA812
Q502	8-729-159-64	TRANSISTOR 2SD596
Q503	8-729-902-99	TRANSISTOR DTC114TK
Q504	8-729-271-23	TRANSISTOR 2SC2712
Q506	8-729-903-29	TRANSISTOR DTA144TK
Q507	8-729-903-30	TRANSISTOR DTC144TK
Q801	8-729-901-05	TRANSISTOR DTA124EK
Q802	8-729-159-64	TRANSISTOR 2SD596
Q803	8-729-907-28	TRANSISTOR IMD3
R101	1-216-329-11	METAL GLAZE 5.1K 1% 1/10W
R102	1-216-336-11	METAL GLAZE 47K 1% 1/10W
R103	1-216-333-11	METAL GLAZE 15K 1% 1/10W
R104	1-218-160-11	METAL GLAZE 43K 1% 1/10W
R105	1-216-328-11	METAL GLAZE 4.3K 1% 1/10W
R106	1-216-333-11	METAL GLAZE 15K 1% 1/10W
R107	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W
R108	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
R109	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R110	1-216-009-00	METAL GLAZE 22 5% 1/10W
R111	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R112	1-216-033-00	METAL GLAZE 220 5% 1/10W
R114	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
R115	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R116	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R117	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R201	1-216-329-11	METAL GLAZE 5.1K 1% 1/10W
R202	1-216-336-11	METAL GLAZE 47K 1% 1/10W
R203	1-216-333-11	METAL GLAZE 15K 1% 1/10W
R204	1-218-160-11	METAL GLAZE 43K 1% 1/10W
R205	1-216-328-11	METAL GLAZE 4.3K 1% 1/10W
R206	1-216-333-11	METAL GLAZE 15K 1% 1/10W
R207	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W
R208	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
R209	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R210	1-216-009-00	METAL GLAZE 22 5% 1/10W
R211	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R212	1-216-182-00	METAL GLAZE 220 5% 1/8W
R214	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
R215	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R216	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R217	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R302	1-216-298-00	METAL GLAZE 2.2 5% 1/10W

Ref.No.	Part No.	Description
R303	1-216-121-00	METAL GLAZE 1M 5% 1/10W
R327	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W
R328	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W
R419	1-216-045-00	METAL GLAZE 680 5% 1/10W
R420	1-216-041-00	METAL GLAZE 470 5% 1/10W
R421	1-216-092-00	METAL GLAZE 62K 5% 1/10W
R422	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W
R423	1-216-045-00	METAL GLAZE 680 5% 1/10W
R424	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R425	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R426	1-216-033-00	METAL GLAZE 220 5% 1/10W
R427	1-216-056-00	METAL GLAZE 2K 5% 1/10W
R428	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
R429	1-216-095-00	METAL GLAZE 82K 5% 1/10W
R430	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
R431	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R437	1-216-686-11	METAL CHIP 30K 0.50% 1/10W
R438	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W
R439	1-216-694-11	METAL CHIP 62K 0.50% 1/10W
R446	1-216-009-00	METAL GLAZE 22 5% 1/10W
R448	1-216-041-00	METAL GLAZE 470 5% 1/10W
R480	1-216-025-00	METAL GLAZE 100 5% 1/10W
R501	1-216-024-00	METAL GLAZE 91 5% 1/10W
R502	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W
R503	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R504	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R506	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R508	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W
R509	1-216-077-00	METAL GLAZE 15K 5% 1/10W
R510	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R511	1-216-150-00	METAL GLAZE 10 5% 1/8W
R512	1-216-085-00	METAL GLAZE 33K 5% 1/10W
R513	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R514	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R515	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R516	1-216-121-00	METAL GLAZE 1M 5% 1/10W
R517	1-216-093-00	METAL GLAZE 68K 5% 1/10W
R518	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R519	1-216-119-00	METAL GLAZE 820K 5% 1/10W
R520	1-216-095-00	METAL GLAZE 82K 5% 1/10W
R521	1-216-095-00	METAL GLAZE 82K 5% 1/10W
R522	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R523	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W
R524	1-216-089-00	METAL GLAZE 47K 5% 1/10W
R525	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R526	1-216-114-00	METAL GLAZE 510K 5% 1/10W

Ref.No.	Part No.	Description			
R528	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R529	1-216-686-11	METAL CHIP	30K	0.50%	1/10W
R530	1-216-686-11	METAL CHIP	30K	0.50%	1/10W
R531	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R532	1-216-103-00	METAL GLAZE	180K	5%	1/10W
R533	1-216-062-00	METAL GLAZE	3.6K	5%	1/10W
R534	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R536	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R537	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R538	1-216-094-00	METAL GLAZE	75K	5%	1/10W
R539	1-216-094-00	METAL GLAZE	75K	5%	1/10W
R540	1-216-086-00	METAL GLAZE	36K	5%	1/10W
R544	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R545	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R546	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R547	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R548	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R549	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R550	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R551	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R552	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R553	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R554	1-216-033-00	METAL GLAZE	220	5%	1/10W
R555	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R556	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R557	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R558	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R559	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R560	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W
R561	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R562	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R563	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R601	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R602	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R801	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R802	1-216-238-00	METAL GLAZE	47K	5%	1/8W
R803	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R804	1-216-041-00	METAL GLAZE	470	5%	1/10W
R806	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R807	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R808	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R809	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R810	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R811	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R812	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R813	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R818	1-216-121-00	METAL GLAZE	1M	5%	1/10W

Ref.No.	Part No.	Description
RV301	1-237-092-11	RES, VAR, CARBON 10K/10K (VOLUME)
RV401	1-228-993-00	RES, ADJ, CARBON 5K
RV501	1-228-996-00	RES, ADJ, CARBON 50K
RV502	1-228-996-00	RES, ADJ, CARBON 50K
RV503	1-228-995-00	RES, ADJ, CARBON 20K
RV504	1-230-526-11	RES, ADJ, METAL GLAZE 47K
RV505	1-228-990-00	RES, ADJ, CARBON 1K
S401	1-571-177-11	SWITCH, SLIDE (HOLD)
S801	1-554-911-11	SWITCH, LEAF (OPEN SWITCH)
S803	1-554-371-51	SWITCH, TACT (PLAY/PAUSE)
S804	1-554-371-51	SWITCH, TACT (STOP)
S805	1-554-371-51	SWITCH, TACT (FF)
S806	1-554-371-51	SWITCH, TACT (FR)
S807	1-571-484-11	SWITCH, KEY BOARD (PLAY MODE/KEY MODE)
S901	1-570-112-11	SWITCH, LEAF (LIMIT)
X601	1-567-737-11	VIBRATOR, CRYSTAL 16.9344MHz
X801	1-567-094-00	VIBRATOR, CERAMIC 3.58MHz

ACCESSORY & PACKING MATERIAL

⚠	1-463-694-11	(Canadian).....ADAPTOR, AC (AC-930A)
⚠	1-463-700-11	(UK).....ADAPTOR, AC (AC-930A)
⚠	1-463-701-11	(Austrarian)...ADAPTOR, AC (AC-930A)
⚠	1-463-702-11	(E).....ADAPTOR, AC (AC-950W)
⚠	1-463-705-11	(AEP).....ADAPTOR, AC (AC-940AEP)
⚠	1-463-968-11	(US).....ADAPTOR, AC (AC-940)
⚠	1-526-565-00	(E).....AC PLUG ADAPTOR
	1-555-658-21	CORD, CONNECTION
	3-786-277-11	(AEP,UK,E,Austrarian)..MANUAL, INSTRUCTION
	3-786-277-21	(US,Canadian)..MANUAL, INSTRUCTION
	3-786-277-31	(Canadian).....MANUAL, INSTRUCTION
	3-786-277-41	(AEP).....MANUAL, INSTRUCTION
	3-786-356-11	(UK)...INSTRUCTION
*	4-920-407-01	BAG, PROTECTION
	4-924-126-01	BELT, CARRYING
	8-952-266-89	(UK)...HEADPHONE MDR-A10L/A SET

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.